

RSX-11M-PLUS
Information Directory
and Master Index

Order No. AA-H426D-TC

RSX-11M-PLUS Version 3.0

First Printing, December 1979

Revised, March 1982

Revised, April 1983

Revised, July 1985

The information in this document is subject to change without notice and should not be construed as a commitment by Digital Equipment Corporation. Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

The software described in this document is furnished under a license and may be used or copied only in accordance with the terms of such license.

No responsibility is assumed for the use or reliability of software on equipment that is not supplied by Digital Equipment Corporation or its affiliated companies.

Copyright ©1979, 1982, 1983, 1985 by Digital Equipment Corporation

All Rights Reserved.

The postpaid READER'S COMMENTS form on the last page of this document requests the user's critical evaluation to assist in preparing future documentation.

The following are trademarks of Digital Equipment Corporation:

DEC	EduSystem	UNIBUS
DEC/CMS	IAS	VAX
DEC/MMS	MASSBUS	VAXcluster
DECnet	MicroPDP-11	VMS
DECsystem-10	Micro/RSX	VT
DECSYSTEM-20	PDP	
DECUS	PDT	
DECwriter	RSTS	digital
DIBOL	RSX	

ZK-2636

This document was prepared using an in-house documentation production system. All page composition and make-up was performed by T_EX, the typesetting system developed by Donald E. Knuth at Stanford University. T_EX is a registered trademark of the American Mathematical Society.

HOW TO ORDER ADDITIONAL DOCUMENTATION

In Continental USA and Puerto Rico call 800-258-1710

In New Hampshire, Alaska, and Hawaii call 603-884-6660

In Canada call 613-234-7726 (Ottawa-Hull)
800-267-6146 (all other Canadian)

DIRECT MAIL ORDERS (USA & PUERTO RICO)*

Digital Equipment Corporation
P.O. Box CS2008
Nashua, New Hampshire 03061

*Any prepaid order from Puerto Rico must be placed
with the local Digital subsidiary (809-754-7575)

DIRECT MAIL ORDERS (CANADA)

Digital Equipment of Canada Ltd.
940 Belfast Road
Ottawa, Ontario K1G 4C2
Attn: A&SG Business Manager

DIRECT MAIL ORDERS (INTERNATIONAL)

Digital Equipment Corporation
A&SG Business Manager
c/o Digital's local subsidiary or
approved distributor

Internal orders should be placed through the Software Distribution Center (SDC), Digital Equipment Corporation, Northboro, Massachusetts 01532

Contents

Preface

v

Chapter 1 Overview of the RSX-11M-PLUS Documentation Set

1.1	Getting Started	1-1
1.2	How the Manuals are Organized	1-1
1.3	Intended Reading Audiences for RSX-11M-PLUS Manuals	1-3
1.4	RSX-11M-PLUS Documentation Descriptions	1-5
1.4.1	Volume 1: Introduction	1-5
1.4.1.1	RSX-11M-PLUS Software Product Description	1-5
1.4.1.2	RSX-11M-PLUS Information Directory and Master Index	1-5
1.4.1.3	RSX-11M-PLUS Release Notes	1-5
1.4.1.4	Introduction to RSX-11M-PLUS	1-5
1.4.2	Volume 2: Operation	1-6
1.4.2.1	RSX-11M-PLUS System Generation and Installation Guide	1-6
1.4.2.2	RSX-11M/M-PLUS MCR Operations Manual	1-6
1.4.2.3	RSX-11M/M-PLUS Indirect Command Processor Manual	1-6
1.4.2.4	RSX-11M-PLUS Command Language Manual	1-6
1.4.2.5	RSX-11M/M-PLUS Batch and Queue Operations Manual	1-6
1.4.3	Volume 3: Utilities	1-6
1.4.3.1	RSX-11M/M-PLUS Utilities Manual	1-7
1.4.3.2	EDT Editor Manual	1-7
1.4.4	Volume 4: Program Development	1-7
1.4.4.1	RSX-11M/M-PLUS Guide to Program Development	1-8
1.4.4.2	PDP-11 MACRO-11 Language Reference Manual	1-8
1.4.4.3	IAS/RSX-11 System Library Routines Reference Manual	1-8
1.4.4.4	RSX-11M/M-PLUS and Micro/RSX Debugging Reference Manual	1-8
1.4.4.5	RSX-11M/M-PLUS and Micro/RSX Task Builder Manual	1-8
1.4.4.6	RSX-11M/M-PLUS and Micro/RSX Executive Reference Manual	1-9
1.4.5	Volume 5: I/O Development	1-9
1.4.5.1	RSX-11M/M-PLUS and Micro/RSX I/O Operations Reference Manual	1-9
1.4.5.2	RSX-11M-PLUS Guide to Writing an I/O Driver	1-9
1.4.5.3	RSX-11M/M-PLUS I/O Drivers Reference Manual	1-9

1.4.6	Volume 6: System Management and Maintenance	1-9
1.4.6.1	RSX-11M/M-PLUS System Management Guide	1-10
1.4.6.2	RSX-11M/M-PLUS Error Logging Manual	1-10
1.4.6.3	RSX-11M/M-PLUS and Micro/RSX Crash Dump Analyzer Reference Manual	1-10
1.4.7	Volume 7: PDP-11 Record Management Services	1-11
1.4.7.1	RSX-11M/M-PLUS RMS-11: An Introduction	1-11
1.4.7.2	RSX-11M/M-PLUS RMS-11 User's Guide	1-11
1.4.7.3	RSX-11M/M-PLUS RMS-11 Utilities	1-11
1.4.7.4	RSX-11M/M-PLUS RMS-11 Macro Programmer's Guide	1-12
1.4.8	RSX-11M-PLUS Mini-Reference	1-12
1.4.9	EDT Editor Reference Card	1-12
1.4.10	PDP-11 Programming Card	1-13
1.5	RSX-11S Documentation	1-13

Chapter 2 The RSX-11M-PLUS Master Index

2.1	Introduction to the Master Index	2-1
2.1.1	Format of the Master Index	2-1
2.1.2	Manuals Included in the Master Index	2-1

Figures

1-1	Suggested Reading Sequence for RSX-11M-PLUS Manuals	1-2
-----	---	-----

Tables

1-1	RSX-11M-PLUS Documentation Set Kit Number QR500-GZ	1-3
2-1	Abbreviated Titles for Manuals in the RSX-11M-PLUS Master Index	2-1

Preface

Manual Objectives

The *RSX-11M-PLUS Information Directory and Master Index* introduces the RSX-11M-PLUS documentation set. It describes all the RSX-11M-PLUS manuals and contains a Master Index that is useful for referring to topics described in manuals in the documentation set. The descriptions of the manuals are intentionally brief; refer to the prefaces of individual manuals for additional information. Read the Information Directory before you read other manuals in the documentation set or use the system.

Intended Audience

The *RSX-11M-PLUS Information Directory and Master Index* is intended for all users of the RSX-11M-PLUS operating system. No previous knowledge of the system is required.

Structure of This Manual

The first chapter of this manual briefly describes the manuals in the documentation set. It identifies the type of users that are likely to be interested in particular manuals, and suggests a sequence for reading them. The second chapter of this manual contains a Master Index which includes index entries for all the manuals in the documentation set.

Associated Manuals

The next manual you should read in this documentation set is the *RSX-11M-PLUS Release Notes*, which will give you important information on the RSX-11M-PLUS software and documentation.

Chapter 1

Overview of the RSX-11M-PLUS Documentation Set

1.1 Getting Started

Your kit contains an RSX-11M-PLUS baseline system that is ready to run on your PDP-11 processor. You will use this baseline system to generate an RSX-11M-PLUS system, tailored to your own particular hardware and software requirements.

Before beginning system generation, you should become familiar with your RSX-11M-PLUS hardware configuration and with this documentation set, and you should thoroughly read the *RSX-11M-PLUS Release Notes* and the *RSX-11M-PLUS System Generation and Installation Guide*. You will then be prepared to choose among the options offered during system generation.

Figure 1-1 outlines a suggested sequence for reading the manuals in your documentation set. The sequence begins with introductory and more general manuals and proceeds to advanced manuals that assume a greater understanding of the system.

1.2 How the Manuals are Organized

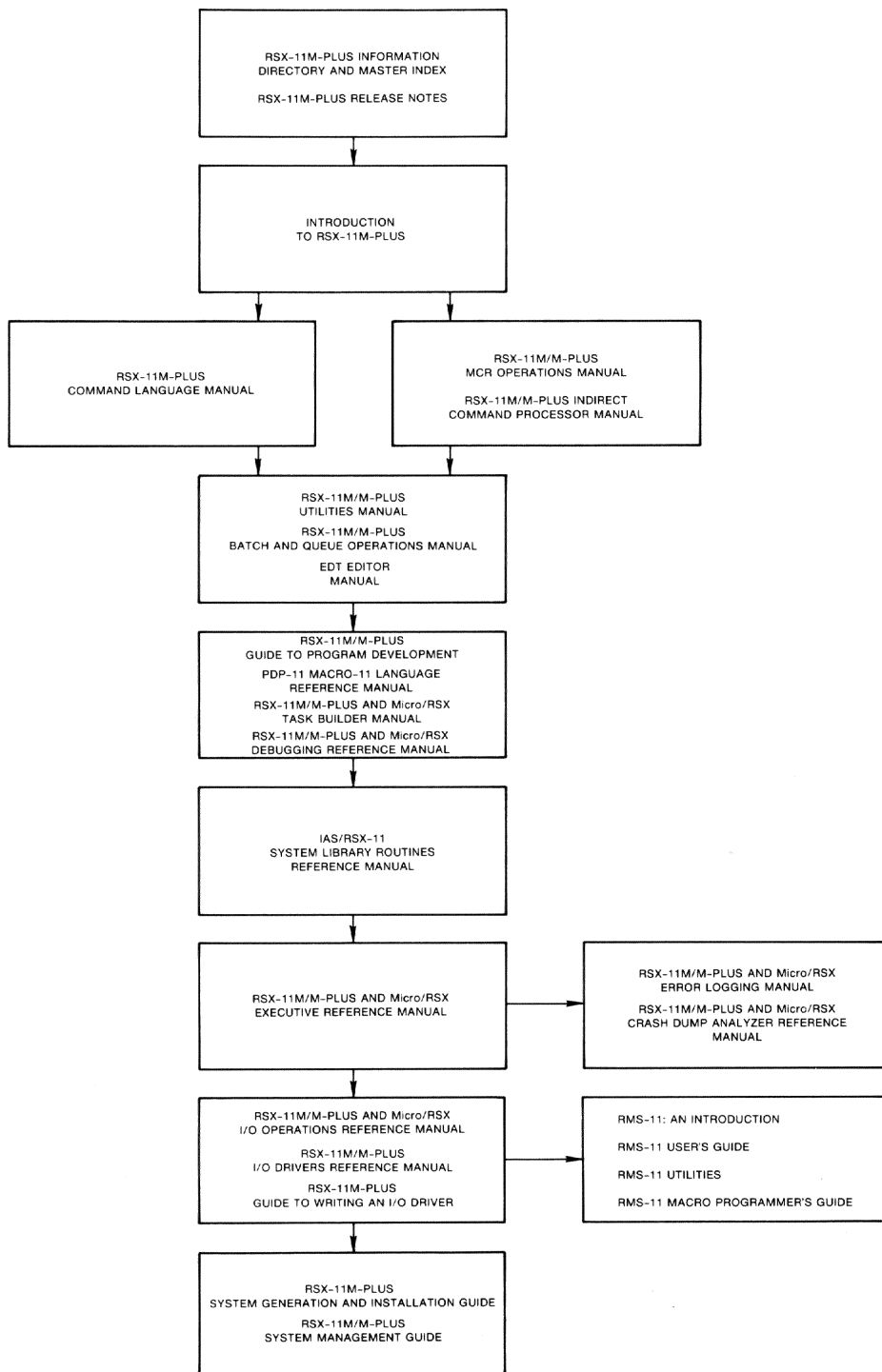
The RSX-11M-PLUS manuals are organized into seven volumes:

- Introduction
- Operation
- Utilities
- Program Development
- I/O Development
- System Management and Maintenance
- PDP-11 Record Management Services

Each volume consists of one or more three-ring binders, and each binder contains one or more manuals. Refer to Table 1-1 for a complete list of the manuals.

The *EDT Editor Reference Card* and the *PDP-11 Programming Card* are packaged separately. The *RSX-11M-PLUS Mini-Reference* is also separate, coming with its own small binder.

Figure 1-1: Suggested Reading Sequence for RSX-11M-PLUS Manuals



ZK-170-81

1.3 Intended Reading Audiences for RSX-11M-PLUS Manuals

Table 1-1 lists the intended reading audience for each document in your set. The audience is divided into the loosely defined groups listed as follows (and indicated in Table 1-1 by an X in one or more of the columns):

- US The user: anyone who types at a terminal on an RSX-11M-PLUS operating system
- AP The applications programmer: anyone who uses the PDP-11 MACRO-11 assembly language or a high-level language to develop programs for user applications
- SP The system programmer: anyone who uses PDP-11 MACRO-11 to maintain, modify, and develop software used by the applications programmer or the user
- SM The system manager: the person familiar with and responsible for overall operation of an RSX-11M-PLUS system and its associated hardware

Table 1-1: RSX-11M-PLUS Documentation Set Kit Number QR500-GZ

Title and Order Number	US	AP	SP	SM
Handy Reference Materials				
RSX-11M-PLUS Mini-Reference AV-H435D-TC	X	X	X	X
EDT Editor Reference Card AV-J756A-TC	X	X	X	X
PDP-11 Programming Card EH-S1046-78		X	X	X
Volume 1: Introduction				
RSX-11M-PLUS Software Product Description AE-H862M-TC	X	X	X	X
RSX-11M-PLUS Information Directory and Master Index AA-H426D-TC	X	X	X	X
RSX-11M-PLUS Release Notes AA-H427D-TC	X	X	X	X
Introduction to RSX-11M-PLUS AA-FD03A-TC	X	X	X	X
Volume 2: Operation				
RSX-11M-PLUS System Generation and Installation Guide AA-H431D-TC			X	X
RSX-11M/M-PLUS MCR Operations Manual AA-FD10A-TC	X	X	X	X
RSX-11M/M-PLUS Indirect Command Processor Manual AA-FD05A-TC	X	X	X	X
RSX-11M-PLUS Command Language Manual AA-FD04A-TC	X	X	X	X
RSX-11M/M-PLUS Batch and Queue Operations Manual AA-L671A-TC	X	X	X	X

Table 1-1 (Cont.): RSX-11M-PLUS Documentation Set Kit Number QR500-GZ

Title and Order Number	US	AP	SP	SM
Volume 3: Utilities				
RSX-11M/M-PLUS Utilities Manual AA-FD13A-TC	X	X	X	X
EDT Editor Manual AA-M476A-TK	X	X	X	X
Volume 4: Program Development				
RSX-11M/M-PLUS Guide to Program Development AA-L676A-TC		X	X	X
PDP-11 MACRO-11 Language Reference Manual AA-V027A-TC		X	X	X
IAS/RSX-11 System Library Routines Reference Manual AA-5580B-TC		X	X	
RSX-11M/M-PLUS and Micro/RSX Debugging Reference Manual AA-EZ50A-TC		X	X	X
RSX-11M/M-PLUS and Micro/RSX Task Builder Manual AA-AB46A-TC		X	X	X
RSX-11M/M-PLUS and Micro/RSX Executive Reference Manual AA-FR95A-TC		X	X	
Volume 5: I/O Development				
RSX-11M/M-PLUS and Micro/RSX I/O Operations Reference Manual AA-FD14A-TC		X	X	
RSX-11M-PLUS Guide to Writing an I/O Driver AA-H267B-TC		X	X	
RSX-11M/M-PLUS I/O Drivers Reference Manual AA-FD09A-TC			X	
Volume 6: System Management and Maintenance				
RSX-11M/M-PLUS System Management Guide AA-FD12A-TC			X	X
RSX-11M/M-PLUS Error Logging Manual AA-L674B-TC			X	X
RSX-11M/M-PLUS and Micro/RSX Crash Dump Analyzer Reference Manual AA-FD11A-TC			X	X
Volume 7: PDP-11 Record Management Services				
RSX-11M/M-PLUS RMS-11: An Introduction AA-L682A-TC	X	X	X	X
RSX-11M/M-PLUS RMS-11 User's Guide AA-L669A-TC		X		X

Table 1-1 (Cont.): RSX-11M-PLUS Documentation Set Kit Number QR500-GZ

Title and Order Number	US	AP	SP	SM
RSX-11M/M-PLUS RMS-11 Utilities AA-L670A-TC	X	X	X	X
RSX-11M/M-PLUS RMS-11 Macro Programmer's Guide AA-L668A-TC		X	X	

1.4 RSX-11M-PLUS Documentation Descriptions

The following sections contain brief descriptions of the volumes and the individual manuals in the RSX-11M-PLUS documentation set. For a complete description of any manual, read its preface.

1.4.1 Volume 1: Introduction

This volume includes manuals that introduce the RSX-11M-PLUS documentation set and operating system.

1.4.1.1 RSX-11M-PLUS Software Product Description

The Software Product Description (SPD) concisely describes the software features and system environment of RSX-11M-PLUS. It identifies the required and optional hardware and software along with the available training credits and additional services. It includes information on installation requirements and software product support, and gives ordering information.

1.4.1.2 RSX-11M-PLUS Information Directory and Master Index

This manual orients the reader to the RSX-11M-PLUS documentation set. It includes descriptions of the manuals, a suggested sequence for reading the manuals, the intended reading audience for each, and a Master Index to the documentation set. The Master Index is composed of all the topics in the indexes for the individual manuals, without abridgement, and identifies the manual(s) and page number(s) you need for information on a topic.

1.4.1.3 RSX-11M-PLUS Release Notes

This manual contains a summary description of new software features for this release as well as an overview of new device support. It also provides information about the operating system that is not documented in other manuals in the documentation set. Read the *RSX-11M-PLUS Release Notes* before generating and using your system.

1.4.1.4 Introduction to RSX-11M-PLUS

This tutorial manual is a simple, step-by-step introduction to the RSX-11M-PLUS operating systems for new users. In an interactive terminal session, new users can log in and practice using DIGITAL Command Language, the interactive text editor EDT, and program development facilities, on prepared demonstration files. After guiding the user through the practice session, the manual discusses some general system concepts and features. It also has a useful glossary that defines system terms in some detail.

1.4.2 Volume 2: Operation

The operation volume contains manuals that explain how to generate and install your RSX-11M-PLUS Version 3.0 system. It also documents the Monitor Console Routine (MCR), the DIGITAL Command Language (DCL), and batch and queue operations.

1.4.2.1 RSX-11M-PLUS System Generation and Installation Guide

This manual is a step-by-step guide to the system generation (SYSGEN) procedure. It includes instructions for copying the distribution kit onto the system disk and then generating an RSX-11M-PLUS system tailored to your needs. This manual also includes information on applying updates.

1.4.2.2 RSX-11M/M-PLUS MCR Operations Manual

MCR is a command line interpreter, an interface for communication between you and the RSX-11M-PLUS operating system. This manual describes MCR commands and their formats and tells you how to use MCR. File ownership and file protection are explained. An alphabetical list of MCR and Task Termination Notification program (TKTN) messages is given in an appendix.

1.4.2.3 RSX-11M/M-PLUS Indirect Command Processor Manual

The Indirect Command Processor (Indirect) allows you to process files that contain Indirect, MCR, DCL, or utility commands. These commands are executed as though they had been entered from a terminal. This manual describes the Indirect commands, symbols, and functions, and presents actual examples.

1.4.2.4 RSX-11M-PLUS Command Language Manual

The DIGITAL Command Language (DCL) is a command line interpreter, that provides direct, transparent access to most common MCR and utility functions. This manual is organized by system functions; it gives full descriptions of all DCL commands, with examples and notes on their usage. Also included is a quick reference guide to DCL commands and qualifiers.

1.4.2.5 RSX-11M/M-PLUS Batch and Queue Operations Manual

This manual explains the use of the Queue Manager (QMG) to control print and batch queue functions, and describes in detail the QMG commands that control these functions. The manual also explains the Batch Processor and describes batch commands and syntax. Error messages are explained in the appendix, and there is a glossary of terms.

1.4.3 Volume 3: Utilities

This volume contains two manuals, the *RSX-11M/M-PLUS Utilities Manual* and the *EDT Editor Manual*. The *RSX-11M/M-PLUS Utilities Manual* describes utilities that allow you to manipulate different kinds of files and their contents and to perform operations on supported media. The *EDT Editor Manual* describes the function and operation of the interactive text editor EDT.

1.4.3.1 RSX-11M/M-PLUS Utilities Manual

This manual explains each utility's use, describes its commands and switches, and gives detailed command formats and syntax rules. It describes the functions and operations of the following RSX-11M/M-PLUS utility programs:

- Line Text Editor (EDI)—A line-oriented, interactive editor used to create and maintain text and source files.
- Peripheral Interchange Program (PIP)—Copies files and performs file control functions.
- File Transfer Utility Program (FLX)—A file transfer and format conversion program that transfers files among DOS-11, RT-11, and Files-11 volumes.
- Disk Volume Formatter Utility (FMT)—Formats and verifies several types of Files-11 disks.
- Bad Block Locator Utility (BAD)—Determines the number and location of bad blocks on a volume.
- Backup and Restore Utility (BRU)—Backs up files from a Files-11 volume to one or more backup volumes, and retrieves them as needed.
- Disk Save and Compress Utility Program (DSC)—Copies Files-11 disk files to tape or disk, and from DSC-created tape back to disk. (The function of the DSC utility is similar to that of the BRU utility.)
- File Structure Verification Utility (VFY)—Verifies the consistency and validity of the file structure on a Files-11 volume.
- Librarian Utility Program (LBR)—A library maintenance program that creates and modifies library files.
- File Dump Utility Program (DMP)—A file listing program that allows you to examine the contents of a single file or a volume of files.
- File Compare Utility (CMP)—Compares two text files, record by record, and lists the differences between them.
- Source Language Input Program (SLP)—A noninteractive editing program that is used to maintain and edit source files.
- Object Module Patch Utility (PAT)—Updates, or patches, relocatable binary object modules.
- Task/File Patch Program (ZAP)—A patch utility that examines and directly modifies locations in a task image file or data file.

1.4.3.2 EDT Editor Manual

This manual explains how to use the interactive text editor EDT to create and update ASCII text files. It explains the command line, keypad editing, line editing, nokeypad editing, and the redefining of keys. It also presents sample editing sessions.

1.4.4 Volume 4: Program Development

The first manual in this volume gives an overview of the program development process. The remaining manuals further explain the process by describing the MACRO-11 assembly language, I/O operations, system library routines, the On-Line Debugging Tool, the Task Builder, and the Executive.

1.4.4.1 RSX-11M/M-PLUS Guide to Program Development

This manual is a step-by-step guide to program development for the beginning MACRO-11 programmer. The manual describes the hardware and software necessary for program development and explains how to create, assemble, task build, debug, and maintain MACRO-11 programs. It also introduces the use of the Librarian Utility Program (LBR) for creating and maintaining user, macro, and object libraries. A brief description of FORTRAN program development is included to help orient the FORTRAN programmer. Examples are given for all steps in the program development process.

This guide is intended to be used together with other, more advanced manuals until you become familiar with the process; then, it can serve as a refresher.

1.4.4.2 PDP-11 MACRO-11 Language Reference Manual

This manual describes how to use the MACRO-11 Assembler to code MACRO-11 programs. It includes descriptions of MACRO-11 features, directives for conditional assembly and program sectioning, and user-defined and system macro libraries. It also documents RSX-11M-PLUS operating procedures and error messages. Before reading the *MACRO-11 Language Reference Manual*, you should be familiar with your PDP-11 processor and the related terminology, as presented in the *PDP-11 Processor Handbook*.

1.4.4.3 IAS/RSX-11 System Library Routines Reference Manual

This manual describes register handling and arithmetic routines, input and output data conversion routines, output formatting routines, and dynamic memory management and virtual memory management routines. For the more experienced programmer, a list of summary procedures is included.

1.4.4.4 RSX-11M/M-PLUS and Micro/RSX Debugging Reference Manual

This manual describes the use of the On-Line Debugging Tool (ODT) for debugging a task. Actual ODT command sequences are given, followed by explanatory text. The manual also describes procedures for debugging supervisor-mode libraries.

Before reading this manual, you should be familiar with the MACRO-11 assembly language and the Task Builder.

1.4.4.5 RSX-11M/M-PLUS and Micro/RSX Task Builder Manual

This manual describes the concepts and capabilities of the RSX-11M/M-PLUS and Micro/RSX Task Builder (TKB), the linker that produces executable task images (programs that are ready to be installed and run). It contains both programmer reference and operating information, including Task Builder allocation of virtual address space, resolution of global symbols, overlaying capability, the building of shared regions, instruction- and data-space tasks, supervisor-mode libraries, multiuser tasks, and cluster libraries.

Before reading this manual, you should be familiar with the procedures described in the *RSX-11M/M-PLUS MCR Operations Manual* or the *RSX-11M-PLUS Command Language Manual*, and the programming concepts discussed in the *RSX-11M/M-PLUS Guide to Program Development*.

1.4.4.6 RSX-11M/M-PLUS and Micro/RSX Executive Reference Manual

This manual describes the Executive services available for user tasks and the Executive (system) directives you need to obtain them. You must know how to develop user programs in MACRO-11 or in a high-level language such as FORTRAN to be able to use the Executive services.

1.4.5 Volume 5: I/O Development

This volume consists of manuals that describe the writing and the function of I/O drivers on an RSX-11M-PLUS system.

1.4.5.1 RSX-11M/M-PLUS and Micro/RSX I/O Operations Reference Manual

This manual provides reference material on RSX-11M-PLUS File Control Services (FCS). It explains how to use FCS to create, use, and delete files under program control. You should be familiar with MACRO-11 or FORTRAN program development procedures before using FCS.

The manual also describes the following:

- The Get Command Line subroutine (GCML)—Provides a device-independent interface for user programs retrieving command lines from either a terminal or a disk file.
- The Command String Interpreter (CSI)—Parses command lines containing file specifications and switches.
- The Table-Driven Parser (TPARS)—Parses command lines at two levels: a syntactical level and a semantic level. It is generated by parse tables created by the user.

Descriptions of ANSI magnetic tape support, unlabeled tape support, and the MAG SET command are included.

1.4.5.2 RSX-11M-PLUS Guide to Writing an I/O Driver

This guide is an aid in writing an I/O driver to service a peripheral device for which DIGITAL does not supply a driver. It documents changes to system data structures made to accommodate the Error Logger and alternate CLI support. Tables are included to aid you in determining the device mask word for user-written drivers, and an appendix describes the conversion of drivers from RSX-11M to RSX-11M-PLUS.

Before you read this manual, you should fully understand the operation of the device for which you require a driver. You must also be familiar with your PDP-11 processor, its peripheral devices, and the software supplied with the RSX-11M-PLUS system.

1.4.5.3 RSX-11M/M-PLUS I/O Drivers Reference Manual

This manual describes the functions of all DIGITAL-supplied I/O drivers. It provides the data needed by the experienced programmer who wants the advantages in space and time of interfacing with I/O drivers directly.

This manual describes the Files-11 Ancillary Control Processor (F11ACP) and the Magnetic Tape Ancillary Control Processor (MTAACP) and documents the queue I/O requests performed by these processors.

1.4.6 Volume 6: System Management and Maintenance

This volume consists of three manuals that describe how to operate your system correctly and effectively. The manuals describe system management programs and the RSX-11M/M-PLUS Error Logging system. They also explain how to use the Crash Dump Analyzer and how to retrieve information to determine the causes of system crashes.

1.4.6.1 RSX-11M/M-PLUS System Management Guide

This manual documents the following programs that the system manager can use to test, monitor, maintain, and customize an RSX-11M-PLUS operating system:

- Account File Maintenance Program (ACNT)—Creates and maintains accounts on multiuser protection systems.
- Console Logger (CODRV and COT)—Handles I/O to the console output device and records system messages at a terminal and/or in a log file.
- I/O Exerciser (IOX)—Detects and diagnoses I/O problems on tape and disk units.
- Bad Block Replacement Control Task (RCT)—Performs bad block handling and recovery on Mass Storage Control Protocol devices (MSCP).
- Resource Monitoring Display (RMD)—Displays information about the tasks currently active on the system and the system's available resources.
- System Shutdown Task (SHUTUP)—Shuts down the system in an orderly fashion.
- Virtual Monitor Console Routine (VMR)—A subset of MCR commands that you can use to alter a system image file.
- Shuffler (SHF)—Compresses space in system-controlled partitions when a memory allocation failure occurs.
- System Configuration Services (CON and HRC)—Reconfigure an RSX-11M-PLUS system in order to bypass faulty hardware elements and isolate the system from their effects.

The manual includes information on pool monitoring support and the PMT program; how to set up and run the Queue Manager; how to extend and alter DCL; how to write command line interpreters (CLIs); Resource Accounting; queue optimization; shadow recording; and disk data caching. The Serial Despooler and RSX-11M-PLUS system conventions are described in separate appendixes.

1.4.6.2 RSX-11M/M-PLUS Error Logging Manual

This manual explains the RSX-11M/M-PLUS Error Logging system, a combination of tasks that collect and report information about hardware-related events on an RSX-11M-PLUS system. The Error Logging system allows you to generate event reports in brief or full format, including information on the state of the system or hardware when the event occurred.

The manual includes chapters on the following:

- The Error Log Task (ERRLOG) and the Error Log Interface (ELI)—ERRLOG obtains error information from the Executive and drivers and writes the information into the error log file. ELI sends user commands to ERRLOG.
- The Report Generator (RPT)—Generates Error Log Reports from the error log file.
- The Control File Language compiler (CFL)—Updates and modifies DIGITAL-supplied control file modules, or adds error logging support for non-DIGITAL devices.

1.4.6.3 RSX-11M/M-PLUS and Micro/RSX Crash Dump Analyzer Reference Manual

This manual explains how to use the Crash Dump Analyzer (CDA) to determine the causes of system crashes. It contains operating instructions, descriptions of CDA switches and error messages, examples of CDA output listings, and an explanation of how to interpret the output listings. The manual also includes system symbolic and data structure macro definitions.

1.4.7 Volume 7: PDP-11 Record Management Services

This volume is composed of a set of manuals that describes the PDP-11 Record Management Services (RMS-11). For information on where the RMS-11 files and utilities can be found on the RSX-11M-PLUS distribution kit, see the *RSX-11M-PLUS System Generation and Installation Guide*.

1.4.7.1 RSX-11M/M-PLUS RMS-11: An Introduction

This manual introduces the major concepts of RMS-11: record formats, file organizations, and record access modes. It introduces the RMS-11 operations and utility programs, and defines the key terms necessary to understand RMS-11 capabilities and functions.

The manual is intended for all users of RMS-11, including both MACRO-11 and high-level language programmers. Nonprogramming users, programming users who are new to RSX-11M/M-PLUS, and RSX-11M/M-PLUS programmers who are new to RMS-11 should find this document especially useful.

The manual does not provide reference or usage information. You should read this manual before reading the other RMS-11 manuals.

1.4.7.2 RSX-11M/M-PLUS RMS-11 User's Guide

This manual is a guide to using RMS-11 in file and task design for application programs written in either MACRO-11 or high-level languages. It is intended for application programmers who want to achieve optimal performance either with a new application they are writing or with an existing application that no longer performs satisfactorily.

The manual first presents general design considerations to help users select the appropriate file organization for their applications. Then the details of file structure, design, and processing are discussed for each of the three RMS-11 file organizations: sequential, relative, and indexed. Finally, the manual describes techniques that can be used to optimize application program performance, regardless of file organization.

Note that only MACRO-11 programmers can use the full set of RMS-11 capabilities. Subsets of those capabilities are available to high-level language programmers. Programmers who are writing applications in high-level languages should consult their language documentation for details on RMS-11 support.

1.4.7.3 RSX-11M/M-PLUS RMS-11 Utilities

This reference manual describes the utility programs supported by RMS-11. It is intended for users such as high-level language programmers and nonprogramming users (system managers and operators, for example), who either do not require or do not have access to the full set of RMS-11 capabilities.

The RMS-11 utility programs are the following:

- RMS-11 File Design Utility (RMSDES)—An interactive utility for designing and creating sequential, relative, and indexed files.
- RMS-11 Indexed File Load Utility (RMSIFL)—Reads records from an RMS-11 file of any kind of organization and loads them into an indexed file, optimizing all indexes, both primary and alternates (if any).
- RMS-11 File Conversion Utility (RMSCNV)—Reads records from an RMS-11 file of any organization and loads them into another RMS-11 file of any organization. Note that RMSCNV, unlike RMSIFL, optimizes only the primary index when it loads an indexed file.

- **RMS-11 File Display Utility (RMSDSP)**—Produces a concise description of any RMS-11 file, including backup files.
- **RMS-11 File Back-Up Utility (RMSBCK)**—Transfers the contents of an RMS-11 file to another file, on another device, to preserve it in case the original file is lost or damaged.
- **RMS-11 File Restoration Utility (RMSRST)**—Restores files that were backed up by RMSBCK, so that they can be accessed by user programs.

The manual also documents RMSDEF, which has been superseded by RMSDES.

1.4.7.4 RSX-11M/M-PLUS RMS-11 Macro Programmer's Guide

This document is a reference manual describing the macros and symbols that make up the interface between a MACRO-11 program and the RMS-11 operation routines. It is intended for both MACRO-11 programmers and high-level language programmers who want to use the full set of RMS-11 capabilities in a MACRO-11 subprogram.

The manual presents such programming considerations as how to use RMS-11 macros and symbols in a MACRO-11 program, how to use the directory and file operations to process directories and files, and how to use the stream operations and record or block operations to process records or blocks. Detailed reference information is provided on each RMS-11 operation macro, the control blocks it uses, the options that can be specified in each control block field, and the values returned in control block fields. A summary of each control block, field, value, and mask is also provided.

In addition, the manual describes the RMS-11 completion codes, fatal error codes, and assembly-time messages.

1.4.8 RSX-11M-PLUS Mini-Reference

This small manual is a convenient reference for all system users. It includes sections on the Monitor Console Routine (MCR), the DIGITAL Command Language (DCL), the Task Builder (TKB), the RSX-11M/M-PLUS utilities, the On-Line Debugging Tool (ODT), the Error Logging system, the Batch Processor, the Queue Manager (QMG), the I/O error codes, the directive error codes, the Executive directive summary, the RMS-11 utilities, and the RMS-11 error codes. The manual also includes Radix-50 conversion tables and the ASCII character set.

1.4.9 EDT Editor Reference Card

This reference card describes keypad editing for the DIGITAL VT52 and VT100 video terminals. It presents common keyboard functions and gives instructions for beginning and ending an editing session. Keypad diagrams for the VT52 and VT100 terminals are included.

1.4.10 PDP-11 Programming Card

This card includes programming information on the following topics:

- PDP-11 addressing modes
- Single-operand instructions
- Double-operand instructions
- Processor register addresses
- Device register addresses
- 7-bit ASCII code
- Bootstrap loader starting addresses and device vectors

1.5 RSX-11S Documentation

The RSX-11S operating system is an optional, separately purchased product, supported by the RSX-11M-PLUS system. Included with the RSX-11S software is the RSX-11S documentation set. Some of the manuals in the documentation set describe the features and capabilities of the RSX-11S operating system, while others describe the host system.

The RSX-11S documentation set is fully described in the *RSX-11M/RSX-11S Information Directory and Master Index*. It is important that you thoroughly read the *RSX-11M/RSX-11S Release Notes* before reading the other manuals in the RSX-11S documentation set and generating your RSX-11S system.

Chapter 2

The RSX-11M-PLUS Master Index

2.1 Introduction to the Master Index

The Master Index is a comprehensive index to the entire documentation set. The indexes of the individual manuals have been compiled into the Master Index without abridgement.

The Master Index is valuable to new users who are not sure which manual contains the information they need. It is valuable to all users as an index to topics that are discussed (or might logically be discussed) in more than one manual.

2.1.1 Format of the Master Index

Each entry in the Master Index is followed by the title of the manual it is referencing. For example, the complete title *RSX-11M/M-PLUS MCR Operations Manual* is abbreviated to "MCR." The titles of all manuals are in italics. See the next section for a list of the abbreviated titles.

2.1.2 Manuals Included in the Master Index

Table 2-1 contains a list of all the manuals included in the Master Index. The Abbreviated Title column lists the shortened titles of manuals appearing in the Master Index, whereas the Complete Title column lists the full titles of manuals. Note that indexes for the *EDT Editor Manual* and the *RSX-11M-PLUS Release Notes* are not included in the Master Index.

Table 2-1: Abbreviated Titles for Manuals in the RSX-11M-PLUS Master Index

Abbreviated Title	Complete Title
Batch and Queue	<i>RSX-11M/M-PLUS Batch and Queue Operations Manual</i>
Command Language	<i>RSX-11M-PLUS Command Language Manual</i>
CDA	<i>RSX-11M/M-PLUS and Micro/RSX Crash Dump Analyzer Reference Manual</i>
Debugging	<i>RSX-11M/M-PLUS and Micro/RSX Debugging Reference Manual</i>
Error Logging	<i>RSX-11M/M-PLUS Error Logging Manual</i>
Executive	<i>RSX-11M/M-PLUS and Micro/RSX Executive Reference Manual</i>
Indirect	<i>RSX-11M/M-PLUS Indirect Command Processor Manual</i>

Table 2-1 (Cont.): Abbreviated Titles for Manuals in the RSX-11M-PLUS Master Index

Abbreviated Title	Complete Title
Introduction	<i>Introduction to RSX-11M-PLUS</i>
I/O Drivers	<i>RSX-11M/M-PLUS I/O Drivers Reference Manual</i>
I/O Operations	<i>RSX-11M/M-PLUS and Micro/RSX I/O Operations Reference Manual</i>
MACRO-11	<i>PDP-11 MACRO-11 Language Reference Manual</i>
MCR	<i>RSX-11M/M-PLUS MCR Operations Manual</i>
Program Development	<i>RSX-11M/M-PLUS Guide to Program Development</i>
RMS-11 Introduction	<i>RSX-11M/M-PLUS RMS-11:An Introduction</i>
RMS-11 User's Guide	<i>RSX-11M/M-PLUS RMS-11 User's Guide</i>
RMS-11 Utilities	<i>RSX-11M/M-PLUS RMS-11 Utilities</i>
RMS-11 Macro	<i>RSX-11M/M-PLUS RMS-11 Macro Programmer's Guide</i>
System Generation	<i>RSX-11M-PLUS System Generation and Installation Guide</i>
System Library	<i>IAS/RSX-11 System Library Routines Reference Manual</i>
System Management	<i>RSX-11M/M-PLUS System Management Guide</i>
Task Builder	<i>RSX-11M/M-PLUS Task Builder Manual</i>
Utilities	<i>RSX-11M/M-PLUS Utilities Manual</i>
Writing I/O Driver	<i>RSX-11M-PLUS Guide to Writing an I/O Driver</i>

Master Index

A

A/D channel
 read (ICDRV/ISDRV), *I/O Drivers*, 19-13

A/D conversion
 control word (UDDRV), *I/O Drivers*, 16-5
 control word processing (ICDRV/ISDRV), *I/O Drivers*, 19-15

A/D converter
 function code list, *I/O Drivers*, B-7
 UDDRV, *I/O Drivers*, 16-8

A/D input (ICDRV/ISDRV), *I/O Drivers*, 19-13

AA11-K D/A converter, *I/O Drivers*, 23-2

AAV11-A D/A converter, *I/O Drivers*, 23-2

/ABAUD keyword
 SET command (MCR), *MCR*, 3-202
 SET command (VMR), *System Management*, 10-53

Abbreviation
 commands, *Introduction*, 1-9
 DCL, *Command Language*, 1-12, 9-1
 caution, *Command Language*, 1-23

ABO
 See ABORT command

ABODF\$, CDA, B-3, C-3 *Writing I/O Driver*, A-3

Abort
 CTRL/C (TTDRV), *I/O Drivers*, 2-68
 task
 CRDRV, *I/O Drivers*, 11-10
 DTDRV, *I/O Drivers*, 6-8

Abort

 task (cont'd.)
 LPDRV, *I/O Drivers*, 10-7
 tape driver, *I/O Drivers*, 8-16
 VT11/GRDRV, *I/O Drivers*, 21-4

 TKB
 during input, *Task Builder*, 12-5

ABORT command, *Command Language*, 7-17 to 7-20, 9-1 *Debugging*, 1-5
 Introduction, 1-14, 5-13

 IOX, *System Management*, 4-24

 Shadow Recording, *System Management*, 18-7

ABORT command (MCR), *MCR*, 1-6, 3-3
 error messages, *MCR*, 3-4
 examples, *MCR*, 3-4
 format, *MCR*, 3-3
 keywords
 /PMD, *MCR*, 3-4
 /TERM, *MCR*, 3-4
 parameters, *MCR*, 3-4

Aborting tasks
 CTRL/C, *Command Language*, 3-20

ABORT option, *Task Builder*, 12-5

Abort Task directive, *Executive*, 5-8

ABRT\$ directive, *Executive*, 5-8

Absolute
 address, *Debugging*, 2-2
 address mode, *MACRO-11*, 5-7
 assembled from relative, *MACRO-11*, 6-19

 binary output
 controlling, *MACRO-11*, 6-19
 expression, *MACRO-11*, 3-17
 location, *Debugging*, 2-5, 4-4, 9-9
 program section, *MACRO-11*, 6-42, 6-44, 6-45

- ABSOLUTE argument, *MACRO-11*, 8-8
- Absolute program section
 - See .ASECT directive
- ABSPAT option, *Task Builder*, 12-6
- ABS symbolic argument, *MACRO-11*, 6-19, 6-42
- /AB switch
 - ZAP utility, *Utilities*, 15-2
- Acceptance routine, *Writing I/O Driver*, 1-13
- Accepting message (LRDRV), *I/O Drivers*, 14-10
- Access, *RMS-11 Introduction*, 1-1
 - RMS-11 User's Guide*, 1-7
 - See also Access mode
 - See also Block access
 - See also Random access
 - See also Sequential access
 - See also Shared access
- direct
 - See Random access
- requested
 - See FAC field in FAB
- shared, *I/O Operations*, 2-15
 - RMS-11 Introduction*, 2-4, 4-3
 - See also Access sharing
 - See also SHR field in FAB
- read, *I/O Operations*, 1-13
- write, *I/O Operations*, 1-12
- stream, *RMS-11 Introduction*, 4-3
- Access-code
 - grouping program section, *Task Builder*, 10-36, 11-60
- Access control, *RMS-11 User's Guide*, 1-9
- Access control parameter (F11ACP), *I/O Drivers*, C-6
- Access declaration, *RMS-11 User's Guide*, 2-6
 - indexed files, *RMS-11 User's Guide*, 7-1
 - read/write, *RMS-11 User's Guide*, 2-6
 - read-only, *RMS-11 User's Guide*, 2-6
 - relative files, *RMS-11 User's Guide*, 4-6
 - sequential files, *RMS-11 User's Guide*, 3-6
- /ACCESS keyword
 - INITVOLUME command, *MCR*, 3-100
- Access mode, *RMS-11 Introduction*, 3-1, 3-11, 3-13 *RMS-11 Macro*, 4-4
 - See also Random access
 - See also Sequential access
 - and file organization, *RMS-11 Introduction*, 3-13
- block, *RMS-11 Introduction*, 3-11, 3-12, 3-14, 4-7 *RMS-11 User's Guide*, 1-20, 3-6
 - See also BKT field in RAB
- sequential, *RMS-11 Introduction*, 3-12
- VBN, *RMS-11 Introduction*, 3-12
- FIND operation
 - indexed files, *RMS-11 User's Guide*, 7-3
 - relative files, *RMS-11 User's Guide*, 4-8
 - sequential files, *RMS-11 User's Guide*, 3-7
- GET operation
 - indexed files, *RMS-11 User's Guide*, 7-5
 - relative files, *RMS-11 User's Guide*, 4-10
 - sequential files, *RMS-11 User's Guide*, 3-9
- key, *RMS-11 Introduction*, 3-12
- PUT operation
 - indexed files, *RMS-11 User's Guide*, 7-6
 - relative files, *RMS-11 User's Guide*, 4-11
 - sequential files, *RMS-11 User's Guide*, 3-10
- random
 - by key, *RMS-11 User's Guide*, 1-12
 - by VBN, *RMS-11 User's Guide*, 1-20
 - to indexed files, *RMS-11 Introduction*, 3-15
 - to relative files, *RMS-11 Introduction*, 3-15
 - to sequential files, *RMS-11 Introduction*, 3-14
- record, *RMS-11 Introduction*, 3-11, 3-13, 4-5 *RMS-11 User's Guide*, 1-12
 - See also RAC field in RAB

- Access mode
 - record (cont'd.)
 - FIND operations, RMS-11
 - Introduction*, 4-6
 - GET operations, RMS-11
 - Introduction*, 4-6
 - key, RMS-11 *Introduction*, 3-12
 - PUT operations, RMS-11
 - Introduction*, 4-6
 - RFA, RMS-11 *Introduction*, 3-11
 - sequential, RMS-11 *Introduction*, 3-11
 - RFA, RMS-11 *Introduction*, 3-11
 - sequential, RMS-11 *Introduction*, 3-11
 - blocks, RMS-11 *User's Guide*, 1-20
 - records, RMS-11 *User's Guide*, 1-12
 - to indexed files, RMS-11
 - Introduction*, 3-14
 - to relative files, RMS-11
 - Introduction*, 3-14
 - to sequential files, RMS-11
 - Introduction*, 3-14
 - switching, RMS-11 *Introduction*, 3-13
- Access path
 - switching between, *Writing I/O Driver*, 1-11
- Access sharing, RMS-11 *Introduction*, 2-4, 4-3
 - See also Shared access
 - read, RMS-11 *Introduction*, 3-5, 3-6
 - write, RMS-11 *Introduction*, 3-6
- Access stream, RMS-11 *User's Guide*, 1-15
 - multiple
 - and shared access, RMS-11 *User's Guide*, 2-9, 2-10
 - indexed files, RMS-11 *User's Guide*, 7-10
 - relative files, RMS-11 *User's Guide*, 4-15
 - sequential files, RMS-11 *User's Guide*, 3-15
- Access types, MCR, 2-3, 3-94, 3-148, 3-149, 3-213
- ACCOUN symbol, *Indirect*, 2-17
- Account
 - and UFD, MCR, 2-2
 - and UIC, MCR, 2-2
 - creating, MCR, 2-24
 - protecting, MCR, 3-241
- Account file
 - on distribution kit, *System Generation*, 4-5
 - on pregenerated kit, *System Generation*, 5-33
- Account File Maintenance Program
 - See ACNT
- Accounting
 - SYSGEN question, *System Generation*, 3-27
- Accounting block offsets, *Writing I/O Driver*, A-4
- Accounting Startup Transaction Block, *System Management*, 17-25
- Accumulation fields
 - See ACNDF\$
- ACD
 - See ANCILLARY CONTROL DRIVER command
- \$ACHCK routine, *Writing I/O Driver*, 7-7
- \$ACHKB routine, *Writing I/O Driver*, 7-7
- ACHN\$ directive, *Executive*, 5-10
- ACNDF\$, CDA, C-5 *Writing I/O Driver*, A-4 to A-9
- ACNT, *Command Language*, 3-10 to 3-12, 4-2 MCR, 2-24, 3-240 *System Management*, 1-1, 2-1
- account entry
 - contents, *System Management*, 2-1
 - deleting, *System Management*, 2-9
 - examining, *System Management*, 2-5
 - listing, *System Management*, 2-8
 - modifying, *System Management*, 2-7
- account file
 - copying, *System Management*, 2-3
 - extending, *System Management*, 2-3
 - maximum number of entries, *System Management*, 2-3
 - RSX11.SYS, *System Management*, 2-3
 - sorting, *System Management*, 2-10
- changing password, *System Management*, 2-1

ACNT (cont'd.)

- copying account file, *System Management*, 2-3
- error messages, *System Management*, 2-11
- ESCAPE key, *System Management*, 2-3
- invoking, *System Management*, 2-2
- options, *System Management*, 2-2
 - Add, *System Management*, 2-3
 - Create, *System Management*, 2-3
 - Delete, *System Management*, 2-9
 - Examine, *System Management*, 2-5
 - Exit, *System Management*, 2-11
 - List, *System Management*, 2-8
 - Modify, *System Management*, 2-7
 - Sort, *System Management*, 2-10
- password encryption, *System Management*, 2-1
- protection
 - restoring, *System Management*, 2-3

ACP, Command Language, 5-4, 5-53 MCR, 3-70, 3-141 *System Generation*, C-5

definition, *System Generation*, 1-8

error return, *I/O Drivers*, C-14

- IE.ABO, *I/O Drivers*, C-14
- IE.ALC, *I/O Drivers*, C-14
- IE.ALN, *I/O Drivers*, C-14
- IE.BAD, *I/O Drivers*, C-14
- IE.BDR, *I/O Drivers*, C-14
- IE.BTP, *I/O Drivers*, C-15
- IE.BVR, *I/O Drivers*, C-15
- IE.BYT, *I/O Drivers*, C-15
- IE.CKS, *I/O Drivers*, C-15
- IE.CLO, *I/O Drivers*, C-15
- IE.DFU, *I/O Drivers*, C-15
- IE.DUP, *I/O Drivers*, C-15
- IE.EOF, *I/O Drivers*, C-15
- IE.HFU, *I/O Drivers*, C-16
- IE.IFC, *I/O Drivers*, C-16
- IE.IFU, *I/O Drivers*, C-16
- IE.LCK, *I/O Drivers*, C-16
- IE.LUN, *I/O Drivers*, C-16
- IE.NOD, *I/O Drivers*, C-16
- IE.NSF, *I/O Drivers*, C-16
- IE.OFL, *I/O Drivers*, C-16
- IE.PRI, *I/O Drivers*, C-17
- IE.RER, *I/O Drivers*, C-17
- IE.SNC, *I/O Drivers*, C-17
- IE.SPC, *I/O Drivers*, C-17

ACP

error return (cont'd.)

- IE.SQC, *I/O Drivers*, C-17
- IE.WAC, *I/O Drivers*, C-17
- IE.WAT, *I/O Drivers*, C-17
- IE.WER, *I/O Drivers*, C-18
- IE.WLK, *I/O Drivers*, C-18

Files-11, MCR, 3-94, 3-141, 3-146, 3-150, 3-208

for foreign files, MCR, 3-151

magnetic tape, MCR, 3-141

QIO\$ function

- closing a file, *I/O Drivers*, C-13
 - creating a file, *I/O Drivers*, C-12
 - deleting a file, *I/O Drivers*, C-13
 - extending a file, *I/O Drivers*, C-13
 - opening a file, *I/O Drivers*, C-13
 - using, *I/O Drivers*, C-12
- ### QIO\$ interface, *I/O Drivers*, C-1
- ### specifying APR, *Task Builder*, 10-5, 11-11
- ### specifying task, *Task Builder*, 10-5, 11-11

ACP function mask, *Writing I/O Driver*, 4-19, 4-20

/ACP keyword

MOUNT command (MCR), MCR, 3-145

ACS

See ALLOCATE CHECKPOINT SPACE command

ACSUB, *System Management*, 17-17

/AC switch, *Task Builder*, 10-5

ACT

See ACTIVE command

ACTDFS\$, *Writing I/O Driver*, A-10

ACTFIL option, *Task Builder*, 12-7

Action routine, *I/O Operations*, 7-5

calling, *I/O Operations*, 7-6

using, *I/O Operations*, 7-6

ACTION statement, *Error Logging*, 5-30

ACTIVE command, MCR, 1-7, 3-14

examples, MCR, 3-14

format, MCR, 3-14

keywords

/ALL, MCR, 3-14

/TERM, MCR, 3-14

Active job

definition, *Batch and Queue*, 4-1

Active Page Register

See APR

Active task, *Command Language*, 7-1
to 7-2

address of TCB, CDA, 3-21

AST queue, CDA, 3-23

attribute bits, CDA, 3-22

blocking bits, CDA, 3-21

dump, CDA, 3-21

AST queue, CDA, 3-21

Offspring Control Block, CDA,
3-21

receive-by-reference queue,
CDA, 3-21

receive queue, CDA, 3-21

MCR, CDA, 3-26

name, CDA, 3-21

Offspring Control Block, CDA, 3-23

partition, CDA, 3-21

receive-by-reference queue, CDA,
3-24

receive queue, CDA, 3-23

state bits, CDA, 3-22

task image, CDA, 3-21

ACTIVE TASK LIST command, MCR,
1-7, 3-31

example, MCR, 3-33

format, MCR, 3-33

Activity report

IOX, *System Management*, 4-20,
4-42

/ACT switch, CDA, 2-4, 2-5

AD01 A/D converter, *I/O Drivers*,
15-1

See also AFC11/AD01

conversion number restriction, *I/O
Drivers*, 15-11

AD11-K converter, *I/O Drivers*, 23-2

ADC: subroutine

read single A/D channel (LSDRV),
I/O Drivers, 17-12

ADD & PRINT command

EDI utility, *Utilities*, 2-12, 2-28

ADD command

EDI utility, *Utilities*, 2-11, 2-27

Addition operator, *MACRO-11*, 3-2,
3-5

Add option

ACNT, *System Management*, 2-3

Address

See also RFA

absolute, *Debugging*, 2-2, 5-6

assigning, *Task Builder*, 2-1

Address (cont'd.)

assignment

DRS11, *I/O Drivers*, 19-2

DSS11, *I/O Drivers*, 19-2

ICR11, *I/O Drivers*, 19-1

ICS11, *I/O Drivers*, 19-1

concepts, *Task Builder*, 2-12, 2-14
to 2-19

constraint

DRS11, *I/O Drivers*, 19-2

DSS11, *I/O Drivers*, 19-2

convention

IAD-IA A/D converter, *I/O
Drivers*, 19-4

logical, *Task Builder*, 2-13

multicast mode (XEDRV), *I/O
Drivers*, 13-2

pairs Ethernet XEDRV, *I/O Drivers*,
13-3

physical, *Task Builder*, 2-12

physical mode (XEDRV), *I/O
Drivers*, 13-2

record, *RMS-11 User's Guide*, 1-9

relationship (ICDRV/ISDRV), *I/O
Drivers*, 19-7

relative, *Debugging*, 2-2

format, *Debugging*, 2-2

relocatable, *Debugging*, 2-2, 5-6,
9-12 *Introduction*, 5-5

calculating, *Debugging*, 2-9, 7-1

space, *Task Builder*, 2-13

logical, *Task Builder*, 2-13

physical and virtual, *Task
Builder*, 2-14

translation, *Task Builder*, 2-22

virtual, *Task Builder*, 2-13

virtual and logical, *Task Builder*,
2-22

transfer, *Task Builder*, A-6

virtual, *Task Builder*, 2-12

virtual space

allocation diagram to create ODL
file, *Task Builder*, 3-36

cotree and main tree, *Task
Builder*, 3-40

disk-resident overlay, *Task
Builder*, 3-1, 3-2, 3-3

division, *Task Builder*, 2-17

layout, *Task Builder*, 2-17

memory and overlaid task, *Task
Builder*, 3-11 to 3-14

memory-resident overlay, *Task
Builder*, 3-6

Address
 virtual space (cont'd.)
 overlay, *Task Builder*, 3-5, 3-6, 3-33, 3-34, 3-35
 overlay tree, *Task Builder*, 3-24
 reducing usage, *Task Builder*, 3-1

Address boundary
 See ZAP utility

Address doubleword, *Writing I/O Driver*, 7-1, 7-2

Address expression
 See Expression

Addressing
 22-bit (LADRV), *I/O Drivers*, 22-36

Address mapping, *Executive*, 3-2

Address mode, *MACRO-11*, 5-1 to 5-10
 absolute, *MACRO-11*, 5-7
 autodecrement, *MACRO-11*, 5-5
 autodecrement deferred, *MACRO-11*, 5-5
 autoincrement, *MACRO-11*, 5-3
 autoincrement deferred, *MACRO-11*, 5-4
 immediate, *MACRO-11*, 5-6, 5-7
 index, *MACRO-11*, 5-5
 index deferred, *MACRO-11*, 5-6
 register, *MACRO-11*, 5-2
 register deferred, *MACRO-11*, 5-3
 relative, *MACRO-11*, 5-8
 relative deferred, *MACRO-11*, 5-9
 summary, *MACRO-11*, B-2

Address space
 logical, *Executive*, 3-2
 virtual, *Executive*, 3-2

Address window
 creating, *Executive*, 5-43
 deleting, *Executive*, 5-69
 mapping to region, *Executive*, 5-122
 unmapping, *Executive*, 5-254
 virtual, *Executive*, 3-3

Addr parameter
 DIR\$ macro, *I/O Drivers*, 1-15

ADINP: subroutine
 initiate single analog output (K-series), *I/O Drivers*, 23-8

ADJLPS: subroutine
 adjust buffer pointer (LSDRV), *I/O Drivers*, 17-13
 use in input/output (LSDRV), *I/O Drivers*, 17-36

ADS: subroutine error, *I/O Drivers*, 17-32

ADSWP: subroutine
 initiate synchronous A/D sweep (K-series), *I/O Drivers*, 23-8
 synchronous A/D sweep (LADRV), *I/O Drivers*, 22-3

ADV11-A D/A converter, *I/O Drivers*, 23-2

Advance driver feature, *Writing I/O Driver*, 1-16, 2-4

ADVANCE key (EDT), *Introduction*, 2-6

/ADV switch, *CDA*, 2-4, 2-5

Adwell parameter
 XRATE: subroutine
 K-series, *I/O Drivers*, 23-30
 LADRV, *I/O Drivers*, 22-26

A error, *MACRO-11*, 3-10, 3-13, 3-16, 5-10, 6-25, 6-26, 6-28, 6-29, 6-32, 6-33, 6-38, 6-40, 6-42, 6-44, 6-47, 6-51, 6-56, 7-12, 7-13, 7-14, 7-19
 macro definition, *MACRO-11*, 7-2
 summary, *MACRO-11*, D-1 to D-3

AFC11
 channel number, identical, *I/O Drivers*, 15-10
 sampling rate, *I/O Drivers*, 15-11

AFC11/AD01
 AIRD/AIRDW subroutine, *I/O Drivers*, 15-5
 AISQ/AISQW subroutine, *I/O Drivers*, 15-5, 15-6
 ASADLN subroutine, *I/O Drivers*, 15-5, 15-7
 ASAFLN subroutine, *I/O Drivers*, 15-5, 15-7
 assign LUN to AD01, *I/O Drivers*, 15-5
 assign LUN to AFC11, *I/O Drivers*, 15-5
 asynchronous process control, *I/O Drivers*, 15-3
 control buffer, *I/O Drivers*, 15-10
 converter programming hint, *I/O Drivers*, 15-10
 data buffer, *I/O Drivers*, 15-10
 FORTRAN interface, *I/O Drivers*, 15-3
 values, *I/O Drivers*, 15-9
 FORTRAN subroutine summary, *I/O Drivers*, 15-4
 functional capacity, *I/O Drivers*, 15-10
 gain range, *I/O Drivers*, 15-10

- AFC11/AD01 (cont'd.)
 - I/O status block, *I/O Drivers*, 15-4
 - input analog data, *I/O Drivers*, 15-5, 15-7
 - input random analog data, *I/O Drivers*, 15-5
 - multi-sample mode, *I/O Drivers*, 15-10
 - read sequential analog input, *I/O Drivers*, 15-6
 - read sequential input, *I/O Drivers*, 15-5
 - single-sample mode, *I/O Drivers*, 15-10
 - standard QIO\$, *I/O Drivers*, 15-2
 - synchronous process control, *I/O Drivers*, 15-3
- AFC11 A/D converter, *I/O Drivers*, 15-1
 - See also AFC11/AD01
- /AFF keyword
 - INSTALL command (MCR), *MCR*, 3-117
 - INSTALL command (VMR), *System Management*, 10-22
 - OPENREGISTER command, *MCR*, 3-165
 - SET command (VMR), *System Management*, 10-54
- /AF switch
 - PRI command, *Batch and Queue*, 2-6
 - QUE /MOD command, *Batch and Queue*, 2-20
- /AFTER qualifier
 - PRINT command, *Batch and Queue*, 2-6
 - SET QUEUE command, *Batch and Queue*, 2-20
- AID field in ALL block, *RMS-11 Macro*, 2-12
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - CREATE operation, *RMS-11 Macro*, 5-9, 5-16
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - ENTER operation, *RMS-11 Macro*, 5-35
 - ERASE operation, *RMS-11 Macro*, 5-40
 - EXTEND operation, *RMS-11 Macro*, 5-46, 5-47
 - offset, *RMS-11 Macro*, 6-2
- AID field in ALL block (cont'd.)
 - OPEN operation, *RMS-11 Macro*, 5-73
 - PARSE operation, *RMS-11 Macro*, 5-86
 - REMOVE operation, *RMS-11 Macro*, 5-102
 - RENAME operation, *RMS-11 Macro*, 5-108
 - SEARCH operation, *RMS-11 Macro*, 5-116
 - summary, *RMS-11 Macro*, 6-3
- AIRD/AIRDW
 - AFC11/AD01 converter, *I/O Drivers*, 15-5
 - analog input (ICDRV/ISDRV), *I/O Drivers*, 19-39
 - random input analog data (UDDRV), *I/O Drivers*, 16-17
- AISQ/AISQW
 - AFC11/AD01 converter, *I/O Drivers*, 15-5, 15-6
 - analog input (ICDRV/ISDRV), *I/O Drivers*, 19-43
 - sequential channel, *I/O Drivers*, 19-42
 - specified channel sequence, *I/O Drivers*, 19-43
 - read sequential analog input channel (UDDRV), *I/O Drivers*, 16-18
- \$ALBLK (Allocate block), *System Library*, 8-9
- \$\$ALER program section, *Task Builder*, 5-55
 - reserved name, *Task Builder*, E-2
- ALERR module, *Task Builder*, 5-55
- Alignment
 - See also ALN field in ALL block
 - RMSDEF utility, *RMS-11 Utilities*, A-14
- ALL
 - See ALLOCATE command (MCR)
- ALL block, *RMS-11 Introduction*, 4-8
 - chaining to FAB, *RMS-11 Macro*, 2-12
 - declaring, *RMS-11 Macro*, 2-8
 - initializing, *RMS-11 Macro*, 2-9
 - summary, *RMS-11 Macro*, 6-2
- All devices switch
 - See /ADV switch
- /ALL keyword
 - ACTIVE command, *MCR*, 3-14
 - ASSIGN command (MCR), *MCR*, 3-29

- /ALL keyword (cont'd.)
 - DEFINE LOGICALS command (MCR), MCR, 3-68
- ALLOCATE CHECKPOINT SPACE
 - command, MCR, 1-6, 3-11
 - error messages, MCR, 3-12
 - examples, MCR, 3-12
 - format, MCR, 3-11
 - keyword
 - /BLKS, MCR, 3-11
- ALLOCATE command, *Command Language*, 5-11, 5-45 to 5-47, 9-2
- ALLOCATE command (MCR), MCR, 1-8, 3-16
 - allocating private device, MCR, 2-13
 - error messages, MCR, 3-17
 - examples, MCR, 3-17
 - format, MCR, 3-16
 - keywords
 - /TERM, MCR, 3-16
 - /TYPE, MCR, 3-16
 - parameters, MCR, 3-16
- Allocated device, *Command Language*, 5-10 to 5-11
- Allocate Device Transaction Block, *System Management*, 17-27
- /ALLOCATE switch
 - BAD utility, *Utilities*, 6-5
- Allocation, *RMS-11 User's Guide*, 1-19
 - See also ALQ field in ALL block
 - See also ALQ field in FAB
 - indexed files, *RMS-11 User's Guide*, 6-22
 - DEQ, *RMS-11 User's Guide*, 6-26
 - initial, *RMS-11 User's Guide*, 6-22
 - relative files, *RMS-11 User's Guide*, 4-3
 - DEQ, *RMS-11 User's Guide*, 4-4
 - initial, *RMS-11 User's Guide*, 4-3
- RMSDEF utility
 - data, *RMS-11 Utilities*, A-16
 - file, *RMS-11 Utilities*, A-14
- RMSDES utility
 - areas, *RMS-11 Utilities*, 2-10, 2-25
- RMSDSP utility
 - displaying, *RMS-11 Utilities*, 5-4
- sequential files, *RMS-11 User's Guide*, 3-4

- Allocation
 - sequential files (cont'd.)
 - initial, *RMS-11 User's Guide*, 3-4
 - task memory, *Task Builder*, 2-6
 - XAB
 - See ALL block
- ALLOCATION attribute
 - RMSDES utility
 - area section, *RMS-11 Utilities*, 2-44
 - file section, *RMS-11 Utilities*, 2-31
- /ALLOC keyword
 - USER FILE DIRECTORY command, MCR, 3-280
- /ALL switch, CDA, 2-4, 2-5
- ALN field in ALL block
 - CREATE operation, *RMS-11 Macro*, 5-17
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - EXTEND operation, *RMS-11 Macro*, 5-47
 - offset, *RMS-11 Macro*, 6-2
 - OPEN operation, *RMS-11 Macro*, 5-79
 - RSTS/E, *RMS-11 Macro*, D-4
 - summary, *RMS-11 Macro*, 6-4
- \$ALOCB routine, *Writing I/O Driver*, 7-8
- ALPHAN symbol, *Indirect*, 2-10
- ALQ0 field in ALL block
 - offset, *RMS-11 Macro*, 6-2
- ALQ1 field in ALL block
 - offset, *RMS-11 Macro*, 6-2
- ALQ field in ALL block
 - CREATE operation, *RMS-11 Macro*, 5-16, 5-21
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - EXTEND operation, *RMS-11 Macro*, 5-47
 - offset, *RMS-11 Macro*, 6-2
 - OPEN operation, *RMS-11 Macro*, 5-79
 - RSTS/E, *RMS-11 Macro*, D-4
 - summary, *RMS-11 Macro*, 6-5
- ALQ field in FAB
 - CREATE operation, *RMS-11 Macro*, 5-16, 5-21
 - EXTEND operation, *RMS-11 Macro*, 5-46, 5-47
 - offset, *RMS-11 Macro*, 6-22

ALQ field in FAB (cont'd.)
 OPEN operation, *RMS-11 Macro*, 5-78
 summary, *RMS-11 Macro*, 6-25
 ALSCT FORTRAN subroutine, *Task Builder*, 5-63, 5-64, 5-65
 \$ALSVB (Allocate small virtual block), *System Library*, 8-18
 /AL switch, *Task Builder*, 10-6
 ALT
 See ALTER command
 ALTER command (MCR), *MCR*, 1-7, 3-19
 examples, *MCR*, 3-20
 format, *MCR*, 3-19
 keywords
 /PRI, *MCR*, 3-19
 /RPRI, *MCR*, 3-19
 /TERM, *MCR*, 3-19
 parameters, *MCR*, 3-19
 ALTER command (VMR), *System Management*, 10-8
 definition, *System Management*, 10-8
 example, *System Management*, 10-8
 format, *System Management*, 10-8
 keyword
 /PRI, *System Management*, 10-8
 parameters, *System Management*, 10-8
 Alternate CLI
 SYSGEN question, *System Generation*, 3-28
 Alternate index
 See also Index
 RMSIFL utility, *RMS-11 Utilities*, 3-11, 3-12
 Alternate key, *RMS-11 Introduction*, 3-7 *RMS-11 User's Guide*, 1-7, 1-11
 RMSDEF utility
 defining, *RMS-11 Utilities*, A-11
 RMSIFL utility
 allocating file space, *RMS-11 Utilities*, 3-13
 sorting, *RMS-11 Utilities*, 3-11
 Alternate key files (RMSIFL)
 device allocation, *RMS-11 Utilities*, 3-7
 Alternate support (ICS11), *I/O Drivers*, 19-3
 Alter Priority directive, *Executive*, 5-13
 Altmode line terminator (half-duplex), *I/O Drivers*, 3-25
 ALTMOD symbol, *Indirect*, 2-10
 ALTP\$ directive, *Executive*, 5-13
 ALUN\$ directive, *Executive*, 5-15
 example, *I/O Drivers*, 1-17
 LUN assignment, *I/O Drivers*, 1-4
 ALUN\$ directive summary, *I/O Operations*, C-1
 ALUN\$ macro, *I/O Drivers*, 1-14, 1-16
 \$\$ALVC program section, *Task Builder*, 7-10
 reserved name, *Task Builder*, E-2
 \$\$ALVD program section, *Task Builder*, 7-10
 reserved name, *Task Builder*, E-2
 \$\$ALVI program section, *Task Builder*, 7-10
 reserved name, *Task Builder*, E-2
 \$ALVRT (Allocate virtual memory), *System Library*, 8-16
 AM11-K multiple gain multiplexer, *I/O Drivers*, 23-2
 AMA symbolic argument, *MACRO-11*, 6-19
 American National Standards Institute
 See ANSI
 Analog input (ICDRV/ISDRV), *I/O Drivers*, 19-39
 example, *I/O Drivers*, 19-40
 sequential channel, *I/O Drivers*, 19-42
 specified channel, *I/O Drivers*, 19-39, 19-43
 Analog output (ICDRV/ISDRV), *I/O Drivers*, 19-15
 multichannel, *I/O Drivers*, 19-44
 Analysis listings, *CDA*, 1-1, 1-6, 1-8, 3-1 to 3-57
 interpreting, *CDA*, 4-1
 Analysis routines switch
 See /ALL switch
 Analysis switches, *CDA*, 2-3 to 2-8
 ANALYZE/CRASH_DUMP command, *CDA*, 1-8
 error messages, *CDA*, A-1
 examples, *CDA*, 2-23
 format, *CDA*, 2-13
 input to, *CDA*, 2-14
 qualifiers, *CDA*, 2-14 to 2-23
 specification, *CDA*, 2-14
 ANALYZE/MEDIA command, *Command Language*, 5-11, 5-19 to 5-25

- ANALYZE command
 - ANALYZE/CRASH_DUMP, *Command Language*, 9-2 to 9-3
 - ANALYZE/MEDIA, *Command Language*, 9-3
- /ANCILLARY_PROCESSOR qualifier, *Task Builder*, 11-11
- ANCILLARY CONTROL DRIVER
 - command, MCR, 1-6, 3-8
 - examples, MCR, 3-9
 - format, MCR, 3-8
 - functions, MCR, 3-8
- Ancillary Control Processor
 - See ACP
- ANSI
 - file name, MCR, 2-5
 - magnetic tape, MCR, 2-5
- ANSI file name, *Command Language*, 1-15
- /ANSI keyword
 - SET command (MCR), MCR, 3-203
 - SET command (VMR), *System Management*, 10-54
- ANSI magnetic tape, RMS-11 Macro, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-118
- RMSBCK utility, RMS-11 Utilities, 6-1, 6-8
- RMSDSP utility, RMS-11 Utilities, 5-3
- ANSI tape standard, *I/O Operations*, G-1
- ANSLIB.OLB (ANSI Magnetic Tape library), *Program Development*, 1-11
- Answer speed (TTDRV)
 - determine, modem, *I/O Drivers*, 2-83
- AO/AOW (ICDRV/ISDRV)
 - analog output
 - multichannel, *I/O Drivers*, 19-44
- AO/AOW (UDDRV)
 - analog output, *I/O Drivers*, 16-19
- AO/AOW routine
 - analog output
 - multichannel (ICDRV/ISDRV), *I/O Drivers*, 19-44
- AOP field in ALL block
 - CREATE operation, RMS-11 Macro, 5-17, 5-18
 - AOP field in ALL block (cont'd.)
 - DISPLAY operation, RMS-11 Macro, 5-30
 - EXTEND operation, RMS-11 Macro, 5-47
 - offset, RMS-11 Macro, 6-2
 - OPEN operation, RMS-11 Macro, 5-79
 - RSTS/E, RMS-11 Macro, D-4
 - summary
 - XB\$CTG mask, RMS-11 Macro, 6-6
 - XB\$HRD mask, RMS-11 Macro, 6-7
- AP command
 - EDI utility, *Program Development*, 2-17 Utilities, 2-12, 2-28
- Apostrophe operator (')
 - See Operator
- Append
 - file open, *I/O Operations*, 2-15
- APPEND command, *Command Language*, 4-65 to 4-67, 9-4
- /APPEND qualifier
 - BRU utility, *Utilities*, 7-12
- /APPEND switch
 - DSC utility, *Utilities*, 8-9
- Append switch, *Error Logging*, 2-3, 2-8
 - Delete subswitch, *Error Logging*, 2-3, 2-8
- Application, *Introduction*, 6-2 RMS-11
 - User's Guide*, 1-13
 - See also Designing applications optimization, RMS-11 *User's Guide*, 2-11
- Applications Processor
 - See also QMG
 - definition, *Batch and Queue*, 4-1
- APR, *Task Builder*, 2-15 Writing I/O
 - Driver, 1-2, 1-3
 - changing mapping, *Executive*, 5-130
 - getting information, *Executive*, 5-130
 - I- and D-space
 - allocation in multiuser task, *Task Builder*, 9-3
 - relocatable region
 - specifying, *Task Builder*, 5-7
 - resident common
 - system-owned, *Task Builder*, 12-13

APR

- resident library
 - system-owned, *Task Builder*, 12-13
 - specifying for ACP, *Task Builder*, 10-5, 11-11
 - supervisor mode, *Task Builder*, 8-2, 8-4
- /AP switch, *Error Logging*, 2-3, 2-8
- PIP utility, *Utilities*, 3-14
- RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-7, 4-13, 4-15
- AR11, *I/O Drivers*, 17-2
 - See also LSDRV
- AR11 clock sampling rate (LSDRV), *I/O Drivers*, 17-33
- Architecture
 - control file module, *Error Logging*, 4-1
 - error log control file, *Error Logging*, 4-1
- Area, *RMS-11 User's Guide*, 6-10
 - See also ALL block
 - alignment
 - See ALN field in ALL block
 - allocation
 - See ALQ field in ALL block
 - bucket size
 - See BKZ field in ALL block
 - contiguity, *RMS-11 User's Guide*, 6-13
 - See also XB\$CTG mask in AOP field
 - count
 - See NOA field in SUM block
 - default extension size
 - See DEQ field in ALL block
 - definition, *RMS-11 User's Guide*, 5-2
 - description, obtaining
 - See also DISPLAY operation
 - extending allocation
 - See EXTEND operation
 - identifier
 - See AID field in ALL block
 - location
 - See LOC field in ALL block
 - multiarea indexed files, *RMS-11 User's Guide*, 6-12
 - RMSDEF utility
 - defining, *RMS-11 Utilities*, A-13
 - RMSDES utility, *RMS-11 Utilities*, 2-10, 2-25

Area

- RMSDES utility (cont'd.)
 - defining, *RMS-11 Utilities*, 2-1, 2-42
 - and BUCKET_SIZE attribute, *RMS-11 Utilities*, 2-32
 - and DATA_AREA attribute, *RMS-11 Utilities*, 2-40
 - and INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - and LEVEL1_INDEX_AREA, *RMS-11 Utilities*, 2-41
 - and SIZE attribute, *RMS-11 Utilities*, 2-36
 - by default, *RMS-11 Utilities*, 2-43
 - explicitly, *RMS-11 Utilities*, 2-43
 - defining by default, *RMS-11 Utilities*, 2-17, 2-38
 - CREATE command, *RMS-11 Utilities*, 2-8, 2-28
 - SET ALL command, *RMS-11 Utilities*, 2-14
 - defining explicitly, *RMS-11 Utilities*, 2-17
 - numbering, *RMS-11 Utilities*, 2-8, 2-28, 2-43
 - single-area indexed files, *RMS-11 User's Guide*, 6-11
- Area information (RMSDSP)
 - displaying, *RMS-11 Utilities*, 5-4
- Area number (RMSDEF), *RMS-11 Utilities*, A-16
- A register, *Debugging*, 2-6, 5-3, 6-2, 9-10
- Arg1 parameter
 - CALLS calling macro (LADRV), *I/O Drivers*, 22-27
 - CALLS macro (K-series), *I/O Drivers*, 23-31
- ARGCHA routine, *Executive*, 1-12
- Argument
 - macro call, *MACRO-11*, 7-4, 7-5
 - macro definition, *MACRO-11*, 7-4, 7-5, 7-6
 - dummy, *MACRO-11*, 7-2
 - passing in macro definition, *MACRO-11*, 7-7
 - register, *Debugging*, 2-6, 5-3
 - separator, *Debugging*, 2-5, 9-8
- Arithmetic
 - calculations, *Debugging*, 7-1

- Arithmetic
 - extended
 - specifying, *Task Builder*, 10-16, 11-16
 - operator, *Indirect*, 2-22
 - See also Operator
- Array
 - area
 - mapped, *Task Builder*, 5-64
 - declaration
 - mapped, *Task Builder*, A-10
 - set for buffered sweep (K-series), *I/O Drivers*, 23-28
 - virtual, *Task Builder*, 12-42, 12-43
 - example, *Task Builder*, 12-42, 12-43
- Arrow keys (EDT), *Introduction*, 2-5
- Arv parameter
 - device-specific function (UDDRV), *I/O Drivers*, 16-4
 - ICDRV/ISDRV, *I/O Drivers*, 19-9
 - IO.CTI function (ICDRV/ISDRV), *I/O Drivers*, 19-21
- ASADLN (AFC11/AD01 converter), *I/O Drivers*, 15-5, 15-7
- ASAFLN (AFC11/AD01 converter), *I/O Drivers*, 15-5, 15-7
- ASARLN: subroutine
 - assign LUN to AR0: (LSDRV), *I/O Drivers*, 17-14
- ASCII
 - character set, MCR, 3-153 MACRO-11, A-1 to A-3
 - command option, MCR, 2-6
 - conversion characters, MACRO-11, 6-25, 6-26
 - displaying, *Debugging*, 4-6
 - number conversion
 - ASCII to Radix-50 (\$CAT5), *System Library*, 4-6
 - ASCII with blanks to Radix-50 (\$CAT5B), *System Library*, 4-8
 - decimal to binary (\$CDTB), *System Library*, 4-4
 - decimal to binary double-word (.DD2CT), *System Library*, 4-1
 - octal to binary (\$COTB), *System Library*, 4-5
 - octal to binary double-word (.OD2CT), *System Library*, 4-2
 - operator, *Debugging*, 2-7
- ASCII
 - operator (cont'd.)
 - byte mode, *Debugging*, 4-6, 9-10
 - word mode, *Debugging*, 4-6, 9-10
 - task name, MCR, 2-6
 - .ASCII directive, MACRO-11, 6-26 to 6-28
 - ASCII stream file
 - RMSCNV utility, *RMS-11 Utilities*, 4-3, 4-8
 - RMSIFL utility, *RMS-11 Utilities*, 3-1
 - .ASCIZ directive, MACRO-11, 6-28
 - .ASCPP routine, convert UIC to binary, *I/O Operations*, 4-8
 - .ASECT directive, MACRO-11, 3-11, 6-46
 - ASG option, *Task Builder*, 12-8
 - ASG TKB option
 - LUN assignment, *I/O Drivers*, 1-4
 - .ASK directive, *Indirect*, 2-33
 - .ASKN directive, *Indirect*, 2-35
 - .ASKS directive, *Indirect*, 2-38
 - ASLSLN: subroutine
 - assign LUN to LS0: (LSDRV), *I/O Drivers*, 17-13
 - .ASLUN routine, assign LUN, *I/O Operations*, 4-11, 4-16
- ASN
 - See ASSIGN command
- ASR-33, *I/O Drivers*, 2-3
- ASR-33/35 Teletypewriter, *I/O Drivers*, 3-2
- ASR-35, *I/O Drivers*, 2-3
- Assembler
 - address mode summary, MACRO-11, B-2
 - character set, MACRO-11, 3-1, 3-2, 3-3
 - coding standard, MACRO-11, E-1 to E-16
 - directive, general, MACRO-11, 6-1, 6-2, 6-3
 - summary table, MACRO-11, 6-1, 6-2, 6-3
 - directive summary, MACRO-11, B-3 to B-8
 - error
 - See A error
 - error code summary, MACRO-11, D-1 to D-5

- Assembler (cont'd.)
 - error message, *MACRO-11*, 8-19, 8-20, 8-21
 - file specification, *MACRO-11*, 8-3, 8-4, 8-5
 - switch, *MACRO-11*, 8-6
 - listing symbols, *MACRO-11*, 4-1
 - obsolete functions, *MACRO-11*, I-1
 - operating hints, *MACRO-11*, F-1
 - operating procedures, *MACRO-11*, 8-1
 - pass 1, *MACRO-11*, 1-1, 1-2
 - pass 2, *MACRO-11*, 1-2
 - position independent code, *MACRO-11*, G-1
 - special character summary, *MACRO-11*, B-1
 - statement format, *MACRO-11*, 2-1
 - version number, *MACRO-11*, 6-4
 - work file, *MACRO-11*, F-1
- Assembling listings
 - Executive SYSGEN question, *System Generation*, 3-67
- Assembly, *RMS-11 Macro*, 2-20
 - language, *Program Development*, 1-4 to 1-5
 - See also *MACRO-11*
 - listing
 - examining at a terminal, *Program Development*, 3-6
 - formatting, *Program Development*, 2-6
 - generating, *Program Development*, 3-4 to 3-6
 - page break, *Program Development*, 2-6
 - printing, *Program Development*, 3-8 to 3-9
 - spooling, *Program Development*, 3-8, 3-9
 - table of contents, *Program Development*, 2-6
 - terminal format, *Program Development*, 2-6
- Assembly language interface (*ICDRV/ISDRV*), *I/O Drivers*, 19-8
- ASSIGN/QUEUE command
 - DCL, *System Management*, 7-9
 - MCR, *System Management*, 7-9
- Assign Channel directive, *Executive*, 5-10
- ASSIGN command, *Command Language*, 5-16, 5-26 to 5-33, 9-4
 - ASSIGN/QUEUE, *Command Language*, 9-4
 - ASSIGN/REDIRECT, *Command Language*, 5-34 to 5-36, 9-5
 - ASSIGN/TASK, *Command Language*, 7-44 to 7-45, 9-5
 - in logical name translation, *I/O Operations*, 4-9
 - LUN assignment, *I/O Drivers*, 1-4
 - LUN redirection, *I/O Drivers*, 1-3
- ASSIGN command (MCR), *MCR*, 1-6, 3-20
 - and logical devices, *MCR*, 2-12
 - and pseudo devices, *MCR*, 2-10
 - error messages, *MCR*, 3-30
 - examples, *MCR*, 3-26, 3-28, 3-29
 - formats, *MCR*, 3-25, 3-27, 3-29
 - keywords
 - /ALL, *MCR*, 3-29
 - /FINAL, *MCR*, 3-26
 - /GBL, *MCR*, 3-26, 3-28, 3-29
 - /GR, *MCR*, 3-26, 3-28, 3-29
 - /LOGIN, *MCR*, 3-26, 3-28
 - /SYSTEM, *MCR*, 3-26, 3-28
 - /TERM, *MCR*, 3-28, 3-29
- ASSIGN command (VMR), *System Management*, 10-9
 - definition, *System Management*, 10-9
 - examples, *System Management*, 10-10
 - formats, *System Management*, 10-9
 - keywords
 - /GBL, *System Management*, 10-10
 - /SYSTEM, *System Management*, 10-10
 - parameters, *System Management*, 10-9
- Assign LUN
 - to AR0: (*LSDRV*), *I/O Drivers*, 17-14
 - to LS0: (*LSDRV*), *I/O Drivers*, 17-13
- Assign LUN directive, *Executive*, 5-15
- Assignment operator
 - See Direct assignment operator
- Assignments
 - See also Logical assignment
 - logical device, *MCR*, 2-12, 3-20

Assignments (cont'd.)

- logical name, *MCR*, 3-21
 - global, *MCR*, 3-21, 3-64
 - group, *MCR*, 3-21, 3-64
 - local, *MCR*, 3-21, 3-64
 - login, *MCR*, 3-21, 3-64
 - task, *MCR*, 2-12

Assignment statement

- See Direct assignment statement

Assign table dump, *CDA*, 3-1, 3-17

- logical device names, *CDA*, 3-17
- physical device names, *CDA*, 3-17

/AS switch

- DMP utility, *Utilities*, 11-3

AST, *Executive*, 2-5, 2-7 *I/O Drivers*,

- 1-9 *MCR*, 1-3, 2-16 *Writing I/O Driver*, 1-14

- blocking, *I/O Drivers*, 1-11

- disabling recognition, *Executive*, 5-64

- enabling recognition, *Executive*, 5-76

- event flag, using, *I/O Drivers*, 1-11

- interrupt routine, *I/O Drivers*, 1-11

- IO.ATA function (TTDRV), *I/O Drivers*, 2-20

- operation (half-duplex), *I/O Drivers*, 3-9

- processing, *I/O Drivers*, 1-11

- queue, *I/O Drivers*, 1-11

recognition

- disable, *I/O Drivers*, 1-11

- enable, *I/O Drivers*, 1-11

service

- exit routine, *I/O Drivers*, 1-12

- termination, *I/O Drivers*, 1-24

- service routine, *Executive*, 2-8 *MCR*, 3-3

- FORTTRAN, *Executive*, 1-20

- specifying, *Executive*, 5-207

- terminating, *Executive*, 5-17

specifying

- Floating Point Processor

- exception, *Executive*, 5-200

- for CLI, *Executive*, 5-182

- power recovery, *Executive*, 5-210

- receive-by-reference, *Executive*, 5-231

- receive data, *Executive*, 5-222

- requested exit, *Executive*, 5-224

AST

unsolicited input

- half-duplex, *I/O Drivers*, 3-9, 3-34

- TTDRV, *I/O Drivers*, 2-12, 2-17

Ast2 parameter (TTDRV)

- general, *I/O Drivers*, 2-10

- IO.ATA function, *I/O Drivers*, 2-21

Asterisk (*), *MCR*, 2-7

- See also Autoload indicator

- See also Wildcard

cross-reference

- of overlaid task, *Task Builder*, 4-12

- cross-reference listing, *Task Builder*, 10-12, 11-23, 11-24

- EDI utility, *Program Development*, 2-10

- PIP utility, *Program Development*, 3-10

Asterisk separator (*)

- See Separator

Ast parameter

- device-specific (half-duplex), *I/O Drivers*, 3-7

- general (TTDRV), *I/O Drivers*, 2-10

- I/O completion, *I/O Drivers*, 1-36

- IO.ATA function (TTDRV), *I/O Drivers*, 2-20

- IO.ATT function, *I/O Drivers*, 1-27

- IO.CCO function (TTDRV), *I/O Drivers*, 2-23

- IO.DET function, *I/O Drivers*, 1-28

- IO.EIO function (TTDRV), *I/O Drivers*, 2-26

- IO.GTS function (TTDRV), *I/O Drivers*, 2-33

- IO.HNG function (TTDRV), *I/O Drivers*, 2-35

- IO.KIL, *I/O Drivers*, 1-29

- IO.RAL function (TTDRV), *I/O Drivers*, 2-36

- IO.RLB function, *I/O Drivers*, 1-30

- IO.RNE function (TTDRV), *I/O Drivers*, 2-38

- IO.RPR function (TTDRV), *I/O Drivers*, 2-41

- IO.RST function (TTDRV), *I/O Drivers*, 2-43

- IO.RTT function (TTDRV), *I/O Drivers*, 2-45

- IO.RVB function, *I/O Drivers*, 1-31

- Ast parameter (cont'd.)
 - IO.SMC function (TTDRV), *I/O Drivers*, 2-59
 - IO.WAL function (TTDRV), *I/O Drivers*, 2-47
 - IO.WBT function (TTDRV), *I/O Drivers*, 2-49
 - IO.WLB function, *I/O Drivers*, 1-32
 - IO.WVB function, *I/O Drivers*, 1-33
 - IO.XCL function (XEDRV), *I/O Drivers*, 13-17
 - IO.XIN function (XEDRV), *I/O Drivers*, 13-10
 - IO.XOP function (XEDRV), *I/O Drivers*, 13-6
 - IO.XRC function (XEDRV), *I/O Drivers*, 13-14
 - IO.XSC function (XEDRV), *I/O Drivers*, 13-7
 - IO.XTL function (XEDRV), *I/O Drivers*, 13-18
 - IO.XTM function (XEDRV), *I/O Drivers*, 13-11
 - QIO\$ basic syntax, *I/O Drivers*, 1-5, 1-9
 - SF.GMC function (TTDRV), *I/O Drivers*, 2-51
 - standard function (UNIBUS switch driver), *I/O Drivers*, 24-2
- AST Service Exit directive, *Executive*, 5-17
- AST service routine, *I/O Operations*, 2-45, 2-46
- ASTX\$\$ directive, *Executive*, 5-17 *I/O Drivers*, 1-12
- ASTX\$\$ macro, *I/O Drivers*, 1-14, 1-24
- ASUDLN: subroutine
 - assign LUN (UDDRV), *I/O Drivers*, 16-20
- \$ASUMR routine, *Writing I/O Driver*, 7-9
 - calling from driver, *Writing I/O Driver*, 7-4
- a symbol, *Debugging*, 2-1
- ASYN argument to RAB\$B macro, *RMS-11 Macro*, 2-8
- RSTS/E, *RMS-11 Macro*, D-4
- Asynchronous multiplexer (communication driver), *I/O Drivers*, 12-1
- Asynchronous I/O (XEDRV), *I/O Drivers*, 13-21
- Asynchronous operation, *RMS-11 Introduction*, 4-4
 - See also RB\$ASY mask in ROP field
 - RAB declaration, *RMS-11 Macro*, 2-8
 - waiting for
 - See WAIT operation
- Asynchronous process control
 - ICDRV/ISDRV, *I/O Drivers*, 19-35
 - UDDRV, *I/O Drivers*, 16-15
- Asynchronous System Trap
 - See AST
- Asynchronous trap, *I/O Drivers*, 1-10, 1-11
- AT., *Indirect*, 2-2
- ATL
 - See ACTIVE TASK LIST command
 - /ATL switch, *CDA*, 2-4, 2-5
- ATRG\$ directive, *Executive*, 5-19
- At sign (@), *Indirect*, 1-1, 2-1, 2-2
 - command, *Debugging*, 2-5, 4-4, 9-9
 - cross-reference
 - of overlaid task, *Task Builder*, 4-12
 - cross-reference listing, *Task Builder*, 10-12, 10-13, 11-23, 11-24
 - indirect file, *Task Builder*, 1-11
 - ODT, *Program Development*, 5-8
- Attach
 - device, *I/O Drivers*, 1-27
 - PPDRV, *I/O Drivers*, 18-5
 - terminal (VTDRV), *I/O Drivers*, 4-4
 - terminal function (TTDRV), *I/O Drivers*, 2-20
 - unmounted channel (communication driver), *I/O Drivers*, 12-5
 - unmounted volume (DTDRV), *I/O Drivers*, 6-2
- Attach mode, *Indirect*, 2-47
- Attach Region directive, *Executive*, 5-19
- Attribute, *RMS-11 Introduction*, 3-15, 4-3, 5-1 *RMS-11 User's Guide*, 1-2, 1-18 *RMS-11 Utilities*, 2-1
- block spanning, *RMS-11 User's Guide*, 1-19
- bucket size, *RMS-11 User's Guide*, 1-19
- contiguity, *RMS-11 User's Guide*, 1-19
- file allocation, *RMS-11 User's Guide*, 1-19

- Attribute (cont'd.)
 - file organization, *RMS-11 User's Guide*, 1-18
 - file specification, *RMS-11 User's Guide*, 1-18
 - keys, *RMS-11 User's Guide*, 1-19
 - MRN, *RMS-11 User's Guide*, 1-19
 - .NAME directive
 - DSK, *Task Builder*, 3-28
 - GBL, *Task Builder*, 3-28
 - NODSK, *Task Builder*, 3-28
 - NOGBL, *Task Builder*, 3-28
 - placement control, *RMS-11 User's Guide*, 1-19
 - protection, *RMS-11 User's Guide*, 1-18
 - record format, *RMS-11 User's Guide*, 1-18
 - record-output handling, *RMS-11 User's Guide*, 1-19
 - record size, *RMS-11 User's Guide*, 1-18
 - RMSDES utility, *RMS-11 Utilities*, 2-29
 - clearing, *RMS-11 Utilities*, 2-6, 2-22, 2-25
 - individual values, *RMS-11 Utilities*, 2-26
 - sections, *RMS-11 Utilities*, 2-26
 - displaying, *RMS-11 Utilities*, 2-15, 2-26
 - individual values, *RMS-11 Utilities*, 2-26
 - sections, *RMS-11 Utilities*, 2-27
 - informational, *RMS-11 Utilities*, 2-1, 2-17, 2-29
 - resetting, *RMS-11 Utilities*, 2-21
 - RMS-11, *RMS-11 Utilities*, 2-1, 2-17, 2-29
 - setting, *RMS-11 Utilities*, 2-13
 - from a data file, *RMS-11 Utilities*, 2-25
 - from a description file, *RMS-11 Utilities*, 2-24
 - individual values, *RMS-11 Utilities*, 2-21
 - setting sections, *RMS-11 Utilities*, 2-21
 - RMSDSP utility, *RMS-11 Utilities*, 5-1
- Attribute buffer (F11ACP)
 - address, *I/O Drivers*, C-5
- Attribute list (F11ACP), *I/O Drivers*, C-2
- Attribute size, *I/O Drivers*, C-4
- Attribute type (F11ACP), *I/O Drivers*, C-3
 - file characteristic, *I/O Drivers*, C-3
 - file name, *I/O Drivers*, C-3
 - file owner, *I/O Drivers*, C-3
 - file protection, *I/O Drivers*, C-3
 - file type, *I/O Drivers*, C-3
 - placement control, *I/O Drivers*, C-4
 - read file header, *I/O Drivers*, C-4
 - record I/O area, *I/O Drivers*, C-3
 - revision number, *I/O Drivers*, C-4
 - statistics block, *I/O Drivers*, C-4
 - version number, *I/O Drivers*, C-4
- Audit trail
 - See SLP utility
- /AU switch
 - SLP utility, *Utilities*, 13-15
- Autobaud detection, *MCR*, 3-202
- Autobaud speed detection (TTDRV), *I/O Drivers*, 2-83
- Auto-call
 - enabling for modem (TTDRV), *I/O Drivers*, 2-52
- Autoconfigure
 - definition, *System Generation*, 1-8
 - description, *System Generation*, 3-6
 - device support, *System Generation*, E-1
 - hardware support, *System Generation*, 3-10
 - overriding, *System Generation*, 3-9, 3-18
 - remark, *System Generation*, 3-9
 - restriction, *System Generation*, 3-7, 3-12
 - sample output, *System Generation*, 3-7
 - SYSGEN question, *System Generation*, 3-18
- Autodecrement address mode, *MACRO-11*, 5-5
- Autodecrement deferred address mode, *MACRO-11*, 5-5
- Autodecrement indicator, *MACRO-11*, 3-2
- Autoincrement address mode, *MACRO-11*, 5-3
- Autoincrement deferred address mode, *MACRO-11*, 5-4

- Autoincrement indicator, *MACRO-11*, 3-2
- Autoload, *Task Builder*, 4-1
 - applying indicator
 - cotree root, *Task Builder*, 4-2
 - .FCTR label name, *Task Builder*, 4-3
 - file name, *Task Builder*, 4-2
 - portions of ODL tree, *Task Builder*, 4-2
 - program section name, *Task Builder*, 4-3
 - segment name, *Task Builder*, 4-3
 - code sequence, *Task Builder*, 4-5
 - conventional task, *Task Builder*, 4-5
 - data segment, *Task Builder*, 4-6
 - error handling, *Task Builder*, 4-11
 - indicator, *Task Builder*, 4-2
 - efficiently placed, *Task Builder*, 4-6
 - making program section, *Task Builder*, 4-3
 - path load, *Task Builder*, 4-3, 4-4
 - specifying, *Task Builder*, 4-1
 - vector, *Task Builder*, 4-4, 4-5, B-15, B-16
 - eliminating unnecessary, *Task Builder*, 4-6
 - format
 - conventional task, *Task Builder*, 4-4
 - I- and D-space, *Task Builder*, 4-4, 4-5
 - I- and D-space, *Task Builder*, 7-8, 7-10
- Autoloadable
 - file, *Task Builder*, 4-2
- Autoloadable library
 - internal symbol, *Task Builder*, A-27
- AUTOMCALL argument, *MACRO-11*, 8-9
- AUTO module, *Task Builder*, 5-54
- \$\$AUTO program section, *Task Builder*, 5-54, 5-55
 - reserved name, *Task Builder*, E-2
- AUTOT module, *Task Builder*, 5-54
- AVERAGE.FTN source code, *Program Development*, 7-3
- /AVO keyword
 - SET command (MCR), *MCR*, 3-204

- /AVO keyword (cont'd.)
 - SET command (VMR), *System Management*, 10-54

B

- Backing up volume
 - See BRU utility
 - See DSC utility
- Backslash (\)
 - ODT, *Program Development*, 5-5
- Backslash operator (\)
 - See Operator
- BACKSPACE key, *Command Language*, 3-14 *Introduction*, 1-6
- /BACKUP_SET qualifier
 - BRU utility, *Utilities*, 7-13
- Backup and Restore Utility
 - See BACKUP command
 - See BRU utility
- BACKUP command, *Command Language*, 5-90 to 5-128, 9-5 to 9-6
 - backing up
 - Files-11, *Command Language*, 5-90
 - foreign volume, *Command Language*, 5-90
 - command line, *Command Language*, 5-91
 - error messages, *Command Language*, 5-103 to 5-128
 - examples, *Command Language*, 5-101 to 5-103
 - qualifiers, *Command Language*, 5-91
 - disk processing, *Command Language*, 5-100
 - display, *Command Language*, 5-99
 - initialization, *Command Language*, 5-95 to 5-98
 - selective backup and restore, *Command Language*, 5-93 to 5-95
 - tape control, *Command Language*, 5-98 to 5-99
 - verification, *Command Language*, 5-99
 - restoring
 - Files-11, *Command Language*, 5-90
 - foreign, *Command Language*, 5-90

- Backup copy, of generated system, *System Generation*, 4-3
- Backup date
 - RMSRST utility, *RMS-11 Utilities*, 7-8, 7-10
- BACKUP key (EDT), *Introduction*, 2-6
- Backup switch, *Error Logging*, 2-3, 2-9
- Backus-Naur Form metalanguage, *System Management*, 12-6
- Bad block, *Command Language*, 5-11, 5-19 to 5-25, 5-74
 - bad block replacement functions, *System Management*, 5-1
 - descriptor file, MCR, 3-102
 - detection, *System Management*, 5-1, 5-3
 - handling
 - MSCP disks, *System Management*, 5-3
 - information
 - DSC utility, *Utilities*, 8-9
 - initializing, MCR, 3-100, 3-102
 - listing
 - IOX, *System Management*, 4-26
 - locating
 - BAD utility, *Utilities*, 6-1
 - FMT utility, *Utilities*, 5-1
 - VFY utility, *Utilities*, 9-7
 - notification, *System Management*, 5-1, 5-3
 - processing, MCR, 3-100
 - BAD utility, *Utilities*, 6-3
 - BRU utility, *Utilities*, 7-24
 - recovery techniques, *System Management*, 5-1
 - removing from testing
 - IOX, *System Management*, 4-25
 - replacement, *System Management*, 5-1, 5-3 to 5-4
 - partial, *System Management*, 5-4
 - revectoring, *System Management*, 5-1, 5-4
 - specifying
 - IOX, *System Management*, 4-25
- Bad block file header, *I/O Operations*, E-2
- Bad Block Locator Utility
 - See BAD utility
- Bad Block Replacement Control Task, *System Management*, 1-2
 - See also RCT
- BADBLOCKS
 - display command, *System Management*, 4-26
 - IOX command, *System Management*, 4-25
 - parameter command, *System Management*, 4-25
- Badge Reader hint (TTDRV), *I/O Drivers*, 2-82
- /BAD keyword
 - INITVOLUME command, MCR, 3-100
 - options, MCR, 3-100
 - AUTO, MCR, 3-101
 - MAN, MCR, 3-101
 - NOAUTO, MCR, 3-101
 - OVR, MCR, 3-101
- /BAD qualifier
 - BRU utility, *Utilities*, 7-13, 7-24
 - options, *Utilities*, 7-25
- Bad sector, track (disk driver), *I/O Drivers*, 5-12
- /BAD switch
 - DSC utility, *Utilities*, 8-9
 - FMT utility, *Utilities*, 5-7
- BAD utility
 - bad block descriptor entry, *Utilities*, 6-4
 - bad block processing, *Utilities*, 6-3
 - command line, *Utilities*, 6-1
 - device support, *Utilities*, 6-9
 - device verifying, *Utilities*, 6-3
 - error message, *Utilities*, 6-10
 - indirect command file, *Utilities*, 6-2
 - INI command, *Utilities*, 6-4
 - programming consideration, *Utilities*, 6-5
 - switch, *Utilities*, 6-5
 - stand-alone, *Utilities*, 6-8
 - summary, *Utilities*, 6-1
 - task, *Utilities*, 6-5
- Baseline system
 - definition, *System Generation*, 1-8
 - description, *System Generation*, 3-12
 - device configuration, *System Generation*, 3-12
 - terminal configuration, *System Generation*, 3-13
- Base priority for nonprivileged tasks, *System Management*, 13-13
- /BASIC qualifier, *Task Builder*, 11-12
- BASLIN symbol, *Indirect*, 2-10
- /BA switch, *Error Logging*, 2-3, 2-9
 - DMP utility, *Utilities*, 11-3

- Batch job
 - stopping, *Command Language*, 4-96
- Batch log, *Introduction*, 4-6
- Batch processing, *Command Language*, 1-21
 - Introduction*, 4-1, 4-5 to 4-6
 - System Management*, 7-1
- Batch processor
 - initialization, *System Management*, 7-11
 - DCL command, *System Management*, 7-11
 - MCR command, *System Management*, 7-11
 - installation, *System Management*, 7-9, 7-10
 - SYSGEN question, *System Generation*, 3-27
- Batch processor prototype task
 - See BPR
- Batch queue, *System Management*, 7-12
 - assignment
 - DCL command, *System Management*, 7-13
 - MCR command, *System Management*, 7-13
- Baud rate
 - automatic detection of, MCR, 3-202
 - list (TTDRV), *I/O Drivers*, 2-57
 - receive, MCR, 3-254
 - remote terminal
 - setting, MCR, 3-247
 - setting, MCR, 3-254
 - split, modem support (TTDRV), *I/O Drivers*, 2-83
 - transmit, MCR, 3-254
 - valid, MCR, 3-254
- BC, *System Management*, 12-27
- B command, *Debugging*, 2-8, 3-1, 3-2, 9-11
 - ODT, *Program Development*, 5-6
- B condition test argument, MACRO-11, 6-52
- BCT, *System Management*, 12-28
- BDB pool, RMS-11 Macro, 2-8
- /BD switch
 - RMSRST utility, RMS-11 *Utilities*, 7-8, 7-10
- Beep, *Command Language*, 3-24
- BEGIN command
 - EDI utility, *Program Development*, 2-14
 - Utilities*, 2-28
- .BEGIN directive, *Indirect*, 2-4, 2-40

- Begin-End block, *Indirect*, 2-4
 - beginning, *Indirect*, 2-40
 - ending, *Indirect*, 2-51
 - processing
 - terminating, *Indirect*, 2-54
- BEGIN-END statement, *Error Logging*, 5-36
- Bell, *Command Language*, 3-24
- B error, MACRO-11, 6-37
 - summary, MACRO-11, D-3
- BEX symbolic argument, MACRO-11, 6-11
- /BF switch
 - SLP utility, *Utilities*, 13-15
- Bias value, *Debugging*, 2-3
 - Trace program, *Debugging*, 10-3
- BID field in FAB
 - offset, RMS-11 Macro, 6-22
 - summary
 - FB\$BID code, RMS-11 Macro, 6-26
- BID field in RAB
 - offset, RMS-11 Macro, 6-115
 - summary
 - RB\$BID code, RMS-11 Macro, 6-116
- BINARY argument, MACRO-11, 8-9, 8-11
- Binary conversion
 - binary byte to octal (\$CBTMG), *System Library*, 5-9
 - binary date to decimal (\$CDBAT), *System Library*, 5-2
 - binary to signed decimal (\$CBDSG), *System Library*, 5-4
 - binary to signed octal (\$CBOSG), *System Library*, 5-8
 - binary to unsigned decimal (\$CBDMG), *System Library*, 5-3
 - binary to unsigned octal (\$CBOMG), *System Library*, 5-7
 - double-precision binary to decimal (\$CDDMG), *System Library*, 5-5
 - general purpose binary to ASCII (\$CBTA), *System Library*, 5-10
- Binary key
 - See also XB\$BN2 mask in DTP field
 - See also XB\$BN4 mask in DTP field
 - 2-byte unsigned, RMS-11 *User's Guide*, 6-5

- Binary key (cont'd.)
 - 4-byte unsigned, *RMS-11 User's Guide*, 6-5
- Binary operator, *MACRO-11*, 3-5, 3-6
 - See also Operator, logical
 - evaluation of multiple, *MACRO-11*, 3-6
 - precedence with unary, *MACRO-11*, 3-16
- Binary output
 - controlling absolute, *MACRO-11*, 6-19
 - enabling and disabling, *MACRO-11*, 6-20
- Binary output file size switch
 - See /MEMSIZ switch
- Binary prompt (TTDRV), *I/O Drivers*, 2-12, 2-26, 2-41
- Binary to ASCII conversion
 - UIC, *I/O Operations*, 4-8
- BIN symbolic argument, *MACRO-11*, 6-11
- Bit, *RMS-11 Introduction*, 2-1
- Bit Clear
 - See BC
- Bit Clear Test
 - See BCT
- Bit density, *MCR*, 3-147
 - diskette, *MCR*, 3-102
 - magnetic tape, *MCR*, 3-102
- Bit map
 - index file, *I/O Operations*, E-2
- Bit Set
 - See B
- Bit Set Test
 - See BST
- BKS field in FAB
 - CREATE operation, *RMS-11 Macro*, 5-17
 - offset, *RMS-11 Macro*, 6-24
 - OPEN operation, *RMS-11 Macro*, 5-78
 - RSTS/E, *RMS-11 Macro*, D-3
 - summary, *RMS-11 Macro*, 6-27
- BKT field in RAB, *RMS-11 Macro*, 4-6, 4-12, 4-13
 - FIND operation, *RMS-11 Macro*, 5-50, 5-52, 5-55
 - GET operation, *RMS-11 Macro*, 5-61, 5-65, 5-68
 - offset, *RMS-11 Macro*, 6-115
 - PUT operation, *RMS-11 Macro*, 5-93, 5-96
- BKT field in RAB (cont'd.)
 - READ operation, *RMS-11 Macro*, 5-98, 5-100
 - SPACE operation, *RMS-11 Macro*, 5-120
 - summary, *RMS-11 Macro*, 6-117
 - WRITE operation, *RMS-11 Macro*, 5-127, 5-129
- BKZ field in ALL block
 - CREATE operation, *RMS-11 Macro*, 5-17
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - offset, *RMS-11 Macro*, 6-2
 - OPEN operation, *RMS-11 Macro*, 5-79
 - RSTS/E, *RMS-11 Macro*, D-3, D-4
 - summary, *RMS-11 Macro*, 6-8
- Blank
 - ignoring in command line, *I/O Operations*, 7-8
- Blank disk, *Command Language*, 5-11 to 5-13
- Blank line, *MACRO-11*, 2-1
- Blank media requirement, *System Generation*, 2-2
- BLDLAINIT.CMD, on pregenerated kit, *System Generation*, 5-46
- BLK
 - See BLOCK command
- .BLKB directive, *MACRO-11*, 6-38
- \$BLKC1 routine, *Writing I/O Driver*, 7-10
- \$BLKC2 routine, *Writing I/O Driver*, 1-16, 7-10
- \$BLKCK routine, *Writing I/O Driver*, 1-15, 7-10
- Blkh parameter
 - standard function (disk driver), *I/O Drivers*, 5-7
- Blkl parameter
 - standard function (disk driver), *I/O Drivers*, 5-7
- /BLKMOD keyword
 - SET command (*MCR*), *MCR*, 3-205
 - SET command (*VMR*), *System Management*, 10-55
- /BLKS keyword
 - ALLOCATE CHECKPOINT SPACE command, *MCR*, 3-11
- .BLKW directive, *MACRO-11*, 6-38
- BLN field in ALL block
 - offset, *RMS-11 Macro*, 6-2

- BLN field in ALL block
 - summary (cont'd.)
 - XB\$LAL code, RMS-11 Macro, 6-9
- BLN field in DAT block
 - offset, RMS-11 Macro, 6-14
 - summary
 - XB\$DTL code, RMS-11 Macro, 6-15
- BLN field in FAB
 - offset, RMS-11 Macro, 6-22
 - summary
 - FB\$BLN code, RMS-11 Macro, 6-28
- BLN field in KEY block
 - offset, RMS-11 Macro, 6-67
 - summary
 - XB\$KYL code, RMS-11 Macro, 6-69
- BLN field in PRO block
 - offset, RMS-11 Macro, 6-108
 - summary
 - XB\$PRL code, RMS-11 Macro, 6-109
- BLN field in RAB
 - offset, RMS-11 Macro, 6-115
 - summary, RMS-11 Macro, 6-118
- BLN field in SUM block
 - offset, RMS-11 Macro, 6-145
 - summary
 - XB\$SML code, RMS-11 Macro, 6-146
- Block, RMS-11 Introduction, 2-3
 - RMS-11 User's Guide, 1-16
 - See also Control block
 - access
 - initialization, I/O Operations, 2-12
 - READ\$ macro, I/O Operations, 2-12
 - WRITE\$ macro, I/O Operations, 2-12
 - allocating
 - VFY utility, Utilities, 9-8
 - boundary, I/O Operations, 2-6
 - buffer
 - initialize FDB, I/O Operations, 2-18
 - pool space, FSR, I/O Operations, 2-39
 - label, Task Builder, 2-8
 - length (CTDRV), I/O Drivers, 9-8
 - locating
 - See SPACE operation

- Block (cont'd.)
 - locking, I/O Operations, 2-17, 2-46
 - enable, I/O Operations, 2-16
 - locking (F11ACP), I/O Drivers, C-6, C-8
 - logical, I/O Operations, 5-2 RMS-11 Introduction, 2-3
 - magnetic tape
 - user definable, RMS-11 Introduction, 2-4
 - reading
 - See READ operation
 - recovering lost
 - VFY utility, Utilities, 9-7
 - size
 - block I/O, I/O Operations, 2-12
 - reset, CLOSE\$ macro, I/O Operations, 2-19
 - size (tape driver), I/O Drivers, 8-15
 - no-label tape, I/O Drivers, 8-18
 - size, magnetic tape
 - See BLS field in FAB
 - spanning, RMS-11 Introduction, 4-2
 - RMS-11 User's Guide, 1-16, 1-19, 3-1
 - variable-length records, RMS-11 User's Guide, 2-16
 - statistics
 - address, I/O Operations, 3-12
 - tape
 - override size, I/O Operations, 2-18
 - unlocking, I/O Operations, 2-47
 - verifying
 - VFY utility, Utilities, 9-7
 - virtual, I/O Operations, 5-2 RMS-11 Introduction, 2-3
 - writing
 - See WRITE operation
- BLOCK_SPAN attribute
 - RMSDES utility, RMS-11 Utilities, 2-37
- Block access, RMS-11 Introduction, 3-11, 3-12, 3-14, 4-7 RMS-11 User's Guide, 1-20, 3-6
 - See also Shared access
 - remote, RMS-11 User's Guide, B-3
 - sequential, RMS-11 Introduction, 3-12
 - VBN, RMS-11 Introduction, 3-12
- Block access mode
 - See also BKT field in RAB

Block access mode (cont'd.)
RMSCNV utility, *RMS-11 Utilities*,
4-1

Block boundary
crossing, record attribute, *I/O Operations*, 3-9
fixed-length record
PUT\$ macro, *I/O Operations*,
3-29
FSR block buffer, *I/O Operations*,
3-28
RMSDEF utility, *RMS-11 Utilities*,
A-9
variable-length record
PUT\$ macro, *I/O Operations*,
3-29

BLOCK command, MCR, 1-7, 3-34
examples, MCR, 3-34
format, MCR, 3-34
keyword
/TERM, MCR, 3-34
parameters, MCR, 3-34

Block context, *RMS-11 Introduction*,
4-7 *RMS-11 Macro*, 4-12
readable block, *RMS-11 Introduction*,
4-7
writable block, *RMS-11 Introduction*,
4-7

Block-declaration macro, *RMS-11 Macro*, 2-8, 2-9

Blocked record
See FB\$BLK mask in RAT field

Block I/O, *I/O Operations*, 2-10
block size, *I/O Operations*, 2-12
buffer, *I/O Operations*, 2-12
completion event flag, *I/O Operations*, 2-13
I/O status block, *I/O Operations*,
2-13
operation, *I/O Operations*, 1-7
operation, FD.RWM parameter, *I/O Operations*, 3-6
request, record attribute, *I/O Operations*, 3-9

Block mode
EDI utility, *Program Development*,
1-3

Block number switch
See /BL switch

BLOCK ON/OFF command
EDI utility, *Utilities*, 2-28

Block operation, *RMS-11 Introduction*,
4-7 *RMS-11 Macro*, 4-14

Block operation macro, *RMS-11 Macro*,
1-2

declaring, *RMS-11 Macro*, C-3

Block processing, *RMS-11 Introduction*,
4-1, 4-7 *RMS-11 Macro*, 4-11

Block size
override, *I/O Operations*, 3-10

Block stream, *RMS-11 Macro*, 4-11

BLS field in FAB
CREATE operation, *RMS-11 Macro*,
5-15

offset, *RMS-11 Macro*, 6-24

OPEN operation, *RMS-11 Macro*,
5-79

summary, *RMS-11 Macro*, 6-29

/BL switch, CDA, 2-10

CMP utility, *Utilities*, 12-2

DMP utility, *Utilities*, 11-4

DSC utility, *Utilities*, 8-12

FLX utility, *Utilities*, 4-6

PIP utility, *Utilities*, 3-11

RMSCNV utility, *RMS-11 Utilities*,
4-8

\$BLXIO routine, *Writing I/O Driver*,
7-11

BOO

See BOOT command

Bootblock, writing, *System Generation*,
4-2

BOOT command, MCR, 1-6, 2-8, 3-35

error messages, MCR, 3-37

example, MCR, 3-37

format, MCR, 3-35

parameters, MCR, 3-35

/BOOT keyword

SAVE command (VMR), *System Management*, 10-47

Bootstrap

hardware definition, *System Generation*, 1-11

software definition, *System Generation*, 1-13

system, MCR, 3-35

mapped, MCR, 3-36

unmapped, MCR, 3-36

unsaved, MCR, 3-36

Bootstrap block, *I/O Operations*, E-1

^B operator, *MACRO-11*, 3-5, 6-32

/BOT keyword

SET command (VMR), *System Management*, 10-55 to 10-56

BOTTOM command

EDI utility, *Utilities*, 2-12, 2-29

BOTTOM key (EDT), *Introduction*, 2-6
 BPA field in FAB, *RMS-11 Macro*, 2-7, 3-5
 CLOSE operation, *RMS-11 Macro*, 5-4
 CREATE operation, *RMS-11 Macro*, 5-13
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-42
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-74
 PARSE operation, *RMS-11 Macro*, 5-87
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-110
 SEARCH operation, *RMS-11 Macro*, 5-117
 summary, *RMS-11 Macro*, 6-30
 BPI
 See Bit density
 BPR, *System Management*, 7-2
 BPR.TSK, *System Management*, 7-10
 BPS field in FAB, *RMS-11 Macro*, 2-7, 3-5
 CLOSE operation, *RMS-11 Macro*, 5-4
 CREATE operation, *RMS-11 Macro*, 5-13
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-42
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-74
 PARSE operation, *RMS-11 Macro*, 5-87
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-110
 SEARCH operation, *RMS-11 Macro*, 5-117
 summary, *RMS-11 Macro*, 6-31
 /BP switch
 RMSDSP utility, *RMS-11 Utilities*, 5-3, 5-4
 BPT trap instruction, *Debugging*, 8-5

Branch
 instruction
 address calculation, *MACRO-11*, 5-10
 location, *Debugging*, 2-6, 9-9
 offset, *Debugging*, 4-5, 7-1
 calculating, *Debugging*, 4-5
 Breakpoint, *Debugging*, 3-1, 3-3, 8-7, 9-13
 address register, *Debugging*, 2-7, 3-1, 5-4, 9-10
 clearing, *Debugging*, 3-2
 inserting with OPEN, *Debugging*, 8-7
 inserting with ZAP utility, *Debugging*, 8-8
 instruction register, *Debugging*, 2-7, 5-4, 9-10
 proceed count, *Debugging*, 3-4
 register, *Debugging*, 2-7, 5-4, 9-10
 removing, *Debugging*, 2-8, 3-2, 9-11
 setting, *Debugging*, 2-8, 3-1
 in a driver, *Writing I/O Driver*, 6-5
 XDT, *Debugging*, 9-2
 setting in a task, *Program Development*, 5-6
 Breakpoint register, *Program Development*, 5-6
 BREAKPOINT TO EXECUTIVE
 DEBUGGING TOOL command, *MCR*, 1-8, 3-38
 error message, *MCR*, 3-38
 example, *MCR*, 3-38
 format, *MCR*, 3-38
 Breakthrough write
 half-duplex, *I/O Drivers*, 3-16
 multi-echo (half-duplex), *I/O Drivers*, 3-16
 privileged task (TTDRV), *I/O Drivers*, 2-17
 TTDRV, *I/O Drivers*, 2-16, 2-17, 2-48, 2-49
 B register, *Debugging*, 2-7, 5-4, 9-10
 Brief format report, *Error Logging*, 3-11
 /BRIEF qualifier
 SHOW QUEUE command, *Batch and Queue*, 2-15
 BRK command, *Debugging*, 8-7

BRK command (cont'd.)

See also BREAKPOINT TO
EXECUTIVE DEBUGGING
TOOL command

BRO

See BROADCAST command

BROADCAST command, *Command
Language*, 3-32 to 3-35, 9-7
Introduction, 3-8

BROADCAST command (MCR), *MCR*,
1-8, 3-39

and indirect command file, *MCR*,
3-39

error messages, *MCR*, 3-42

examples, *MCR*, 3-41

formats, *MCR*, 3-39

message formats, *MCR*, 3-41

option, *MCR*, 3-40

/BRO keyword

SET command (*MCR*), *MCR*, 3-205

SET command (*VMR*), *System
Management*, 10-56

/BR switch

PIP utility, *Utilities*, 3-25

QUE /LI command, *Batch and
Queue*, 2-15

BRUSYS system, *System Generation*,
2-7

BRU utility, *MCR*, 3-116, 3-188
Utilities, 7-1

See also BACKUP command

bad block processing, *Utilities*, 7-24

command line, *Utilities*, 7-5

parameter, *Utilities*, 7-6

command qualifier

description, *Utilities*, 7-12

function, *Utilities*, 7-11

summary, *Utilities*, 7-8

data transfer, *Utilities*, 7-26

device information, *Utilities*, 7-1

device support, *Utilities*, 7-5

disk initialization, *Utilities*, 7-17

disk initialization values, *System
Generation*, 2-11

error message, *Utilities*, 7-34

example, *Utilities*, 7-28

file creation date, *Utilities*, 7-27

file revision date, *Utilities*, 7-27

file treatment, *Utilities*, 7-26

file header, *Utilities*, 7-27

file synonym, *Utilities*, 7-27

lost file, *Utilities*, 7-27

/HEADERS qualifier, *System
Generation*, 2-11

BRU utility (cont'd.)

/MAX qualifier, *System Generation*,
2-11

stand-alone, *Utilities*, 7-22

booting, *Utilities*, 7-23

CNF and, *Utilities*, 7-22

locating, *Utilities*, 7-23

system image copying, *Utilities*,
7-26

BS, *System Management*, 12-27

/BS keyword

MOUNT command (*MCR*), *MCR*,
3-146

/BS switch

FLX utility, *Utilities*, 4-6

PIP utility, *Utilities*, 3-15

BST, *System Management*, 12-28

Bucket, *RMS-11 Introduction*, 4-2

continuation, *RMS-11 User's Guide*,
5-5

fill number, *RMS-11 Introduction*,
4-2

populating indexed files, *RMS-
11 User's Guide*, 6-27

fill number, data

See DFL field in KEY block

fill number, honoring

See RB\$LOA mask in ROP field

fill number, index

See IFL field in KEY block

high-key value, *RMS-11 User's
Guide*, 5-5, 5-6

I/O units, *RMS-11 User's Guide*,
1-16

index, *RMS-11 User's Guide*, 5-6

locking, *RMS-11 Introduction*, 4-3
and shared access, *RMS-11
User's Guide*, 2-7

FIND operation, *RMS-11 User's
Guide*, 2-8

GET operation, *RMS-11 User's
Guide*, 2-8

relative files, *RMS-11 User's Guide*,
4-1

RMSCNV utility, *RMS-11 Utilities*,
4-10

size

See BKS field in FAB

See BKZ field in ALL block

BUCKET_SIZE attribute

RMSDES utility

area section, *RMS-11 Utilities*,
2-43, 2-45

- BUCKET_SIZE attribute
 - RMSDES utility (cont'd.)
 - file section, *RMS-11 Utilities*, 2-32
- Bucket format
 - indexed files, *RMS-11 User's Guide*, 5-2
- Bucket size, *RMS-11 User's Guide*, 1-19
 - calculation
 - alternate indexes, *RMS-11 User's Guide*, 6-19
 - primary index, *RMS-11 User's Guide*, 6-15
 - indexed files, *RMS-11 User's Guide*, 6-15
 - relative files, *RMS-11 User's Guide*, 4-2
 - RMSDEF utility, *RMS-11 Utilities*, A-15
- Bucket splitting, *RMS-11 User's Guide*, 5-11
 - RRV, *RMS-11 User's Guide*, 5-12
- Buf0 parameter
 - SETIBF: subroutine
 - K-series, *I/O Drivers*, 23-29
 - LADRV, *I/O Drivers*, 22-24
- Bufadd parameter
 - device-specific function
 - receive (LRDRV), *I/O Drivers*, 14-9
- Buffer
 - attribute, address, *I/O Drivers*, C-5
 - auxilliary characteristic, zero size, *I/O Drivers*, 13-21
 - cache, *RMS-11 User's Guide*, 4-15
 - circular
 - processing (UDDRV), *I/O Drivers*, 16-34
 - read counter data (ICDRV/ISDRV), *I/O Drivers*, 19-58
 - read interrupt data (ICDRV/ISDRV), *I/O Drivers*, 19-53
 - terminal input (ICDRV/ISDRV), *I/O Drivers*, 19-62
 - connect
 - receive counter data (ICDRV/ISDRV), *I/O Drivers*, 19-56
 - receive interrupt data (ICDRV/ISDRV), *I/O Drivers*, 19-51
- Buffer
 - connect (cont'd.)
 - terminal interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-60
 - control (AFC11/AD01 converter), *I/O Drivers*, 15-10
 - data (AFC11/AD01 converter), *I/O Drivers*, 15-10
 - diagnostic (XEDRV), *I/O Drivers*, 13-19
 - disconnect from counter interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-59
 - disconnect from digital interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-56
 - display (GRDRV), *I/O Drivers*, 21-4
 - FSR block
 - locate mode, *I/O Operations*, 3-23
 - space allocation, *I/O Operations*, 2-20
 - full
 - escape sequence (TTDRV), *I/O Drivers*, 2-74
 - half-duplex, *I/O Drivers*, 3-26
 - I/O, *RMS-11 User's Guide*, 1-14
 - size, *RMS-11 User's Guide*, 2-5
 - intermediate (TTDRV), *I/O Drivers*, 2-80
 - item list 1
 - structure (TTDRV), *I/O Drivers*, 2-30
 - TTDRV, *I/O Drivers*, 2-30
 - item list 2
 - IO.EIO function (TTDRV), *I/O Drivers*, 2-32
 - structure (TTDRV), *I/O Drivers*, 2-32
 - load microcode
 - IO.LOD function LADRV, *I/O Drivers*, 22-29
 - management
 - call RLSBUF (LADRV), *I/O Drivers*, 22-33
 - device queue (LADRV), *I/O Drivers*, 22-32
 - input sweep (LADRV), *I/O Drivers*, 22-33
 - K-series, *I/O Drivers*, 23-32
 - LADRV, *I/O Drivers*, 22-32
 - LSDRV, *I/O Drivers*, 17-35

Buffer

- management (cont'd.)
 - output sweep (LADRV), *I/O Drivers*, 22-33
 - overrun (LADRV), *I/O Drivers*, 22-33
 - task queue (LADRV), *I/O Drivers*, 22-32
- maximum size (XEDRV), *I/O Drivers*, 13-21
- minimum size (XEDRV), *I/O Drivers*, 13-21
- multiple, *I/O Operations*, 2-19
 - RMS-11 *User's Guide*, 2-18, 3-15, 4-15
 - count, *I/O Operations*, 3-10
 - type, *I/O Operations*, 2-19
- output
 - putting data into (LSDRV), *I/O Drivers*, 17-22
- override checkpoint (half-duplex), *I/O Drivers*, 3-30
- pointer, adjusting (LSDRV), *I/O Drivers*, 17-13
- pool, private (TTDRV), *I/O Drivers*, 2-79
- pool space, FSR, *I/O Operations*, 2-39
- position, losing (half-duplex), *I/O Drivers*, 3-29
- protocol/address pair (XEDRV), *I/O Drivers*, 13-8
- read
 - destination address (XEDRV), *I/O Drivers*, 13-16
 - Ethernet address (XEDRV), *I/O Drivers*, 13-14
 - protocol type (XEDRV), *I/O Drivers*, 13-15
- read character from terminal (ICDRV/ISDRV), *I/O Drivers*, 19-61
- received character (TTDRV), *I/O Drivers*, 2-78
- record
 - See RBF field in RAB
 - maximum size, *Task Builder*, 12-25
- remove from device queue (K-series), *I/O Drivers*, 23-26
- set
 - characteristic (XEDRV), *I/O Drivers*, 13-7

Buffer

- set (cont'd.)
 - destination address (XEDRV), *I/O Drivers*, 13-12
 - multicast address (XEDRV), *I/O Drivers*, 13-9
 - protocol type (XEDRV), *I/O Drivers*, 13-12
 - size, remote line (TTDRV), *I/O Drivers*, 2-83
 - special user
 - sample of driver handling, *Writing I/O Driver*, 8-12 to 8-26
 - specifying number, *I/O Operations*, 2-20
 - task, checkpointing (TTDRV), *I/O Drivers*, 2-78
 - task record, *I/O Operations*, 3-23
 - locate mode, *I/O Operations*, 3-29
 - PUT\$ macro, *I/O Operations*, 3-28
 - text, *Program Development*, 1-3
 - type-ahead (TTDRV), *I/O Drivers*, 2-78
 - user, *RMS-11 User's Guide*, 1-14
 - See also UBF field in RAB
 - variable length (half-duplex), *I/O Drivers*, 3-29
 - width (half-duplex), *I/O Drivers*, 3-29
- Buffer boundary, locate mode, *I/O Operations*, 3-24
- Buffer count
 - default, *I/O Operations*, 2-20
 - multiple, *I/O Operations*, 2-19
- Buffer descriptor, task, *I/O Operations*, 3-10
- Buffered I/O, *Writing I/O Driver*, 1-14
- Buffer flush routine, *I/O Operations*, 4-32
- Buffering
 - big, *I/O Operations*, 1-11
 - multiple
 - performance, *I/O Operations*, 1-10
 - record I/O, *I/O Operations*, 1-10
 - received character (half-duplex), *I/O Drivers*, 3-30
- Buffer pool, *RMS-11 Macro*, 3-5

- BUFFERSIZE command
 - IOX, *System Management*, 4-27
- Buffer space
 - statistics
 - with PARAMETERLIST, *System Management*, 4-44
- /BUFFERS qualifier
 - BRU utility, *Utilities*, 7-14
- /BUF keyword
 - SET command (MCR), MCR, 3-206
 - SET command (VMR), *System Management*, 10-57
- Buf parameter
 - GLUN\$ macro, *I/O Drivers*, 1-21
- Bufptr parameter
 - IO.STA function (LADRV), *I/O Drivers*, 22-30
- Bufs parameter
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-5
- Bugcheck facility, CDA, 1-5
 - Debugging*, 9-4
 - error code definitions, CDA, D-1
- BUILD command, *System Management*, 15-7
- Build file
 - modifying
 - to improve performance, *Task Builder*, F-1, F-5
- Building tasks, *RMS-11 User's Guide*, 1-13
 - See also Task builder
- Bus switch, *Writing I/O Driver*, 1-16
- Buzz, *Command Language*, 3-24
- BYE command, MCR, 1-8, 3-43
 - error message, MCR, 3-44
 - example, MCR, 3-44
 - format, MCR, 3-44
 - keywords, MCR, 3-43
- /BY switch
 - DMP utility, *Utilities*, 11-5
- Byte, *RMS-11 Introduction*, 2-1
- .BYTE directive, MACRO-11, 6-23, 6-24
- Byte location
 - displaying, *Debugging*, 4-2, 4-3
 - opening, *Debugging*, 4-2, 4-3
- Byte mode
 - changing to word mode, *Debugging*, 4-3
- operator
 - ASCII, *Debugging*, 2-7, 9-10
 - octal, *Debugging*, 2-8, 4-2, 9-11

C

- C.DATI (XEDRV)
 - destination address, *I/O Drivers*, 13-12
 - multicast address, *I/O Drivers*, 13-10
 - protocol/address buffer, *I/O Drivers*, 13-9
 - protocol type, *I/O Drivers*, 13-13
 - read
 - destination address, *I/O Drivers*, 13-16
 - Ethernet address, *I/O Drivers*, 13-15
 - protocol type, *I/O Drivers*, 13-15
 - set characteristic buffer, *I/O Drivers*, 13-8
- C.DATO (XEDRV)
 - destination address, *I/O Drivers*, 13-12
 - multicast address, *I/O Drivers*, 13-10
 - protocol/address buffer, *I/O Drivers*, 13-9
 - protocol type, *I/O Drivers*, 13-13
 - read
 - Ethernet address, *I/O Drivers*, 13-15
 - protocol type, *I/O Drivers*, 13-15
 - set characteristic buffer, *I/O Drivers*, 13-8
- C.STAT (XEDRV)
 - destination address, *I/O Drivers*, 13-12
 - multicast address, *I/O Drivers*, 13-10
 - protocol/address buffer, *I/O Drivers*, 13-9
 - protocol type, *I/O Drivers*, 13-13
 - read
 - destination address, *I/O Drivers*, 13-16
 - Ethernet address, *I/O Drivers*, 13-15
 - protocol type, *I/O Drivers*, 13-15
 - set characteristic buffer, *I/O Drivers*, 13-8

- C.TYP (XEDRV)
 - multicast address, *I/O Drivers*, 13-10
 - protocol/address buffer, *I/O Drivers*, 13-9
 - protocol type, *I/O Drivers*, 13-13
 - read
 - destination address, *I/O Drivers*, 13-16
 - Ethernet address, *I/O Drivers*, 13-15
 - protocol type, *I/O Drivers*, 13-15
 - set characteristic buffer, *I/O Drivers*, 13-8
 - set destination address, *I/O Drivers*, 13-12
- \$C5TA (Radix-50 to ASCII), *System Library*, 5-11
- Cache, *RMS-11 User's Guide*, 4-15
 - indexed files, *RMS-11 User's Guide*, 7-9
- Cache data
 - See Data caching
- /CACHE keyword
 - MOUNT command (MCR), *MCR*, 3-146
 - SET command (MCR), *MCR*, 3-207
- Calculating file work space (RMSIFL), *RMS-11 Utilities*, 3-12
- Call
 - operation routine, *RMS-11 Macro*, 2-13
 - arguments in memory, *RMS-11 Macro*, 2-14
 - macro argument, *RMS-11 Macro*, 2-13
- CALL ABORT, *Executive*, 5-8
- CALL ACHN, *Executive*, 5-10
- CALL ALTPRI, *Executive*, 5-13
- CALL ASNLUN, *Executive*, 5-15
- CALL ATRG, *Executive*, 5-19
- CALL CANALL, *Executive*, 5-60
- CALL CANMT, *Executive*, 5-36
- CALL CLREF, *Executive*, 5-31
- CALL CNCT, *Executive*, 5-38
- CALL CNCTN, *Executive*, 5-38
- CALL CPR, *Executive*, 5-41
- CALL CRAW, *Executive*, 5-44
- CALL CRELOG, *Executive*, 5-32
- CALL CRELON, *Executive*, 5-32
- CALL CRGF, *Executive*, 5-48
- CALL CRRG, *Executive*, 5-50
- CALL CRVT, *Executive*, 5-58
- CALL DECLAR, *Executive*, 5-61
- CALL DELLOG, *Executive*, 5-62
- CALL DELLON, *Executive*, 5-62
- CALL DISCKP, *Executive*, 5-66
- CALL DSASTR, *Executive*, 5-64
- CALL DTRG, *Executive*, 5-67
- CALL ELAW, *Executive*, 5-69
- CALL ELGF, *Executive*, 5-71
- CALL ELVT, *Executive*, 5-73
- CALL EMST, *Executive*, 5-75
- CALL ENACKP, *Executive*, 5-77
- CALL ENASTR, *Executive*, 5-76
- CALL EXIT, *Executive*, 5-81
- CALL EXITIF, *Executive*, 5-78
- CALL EXST, *Executive*, 5-82
- CALL EXTTSK, *Executive*, 5-84
- CALL FEAT, *Executive*, 5-86
- CALL FSSFSS, *Executive*, 5-89
- CALL GETCII, *Executive*, 5-96
- CALL GETDDS, *Executive*, 5-100
- CALL GETLUN, *Executive*, 5-103
- CALL GETMCR, *Executive*, 5-106
- CALL GETPAR, *Executive*, 5-111
- CALL GETREG, *Executive*, 5-113
- CALL GETTIM, *Executive*, 5-117
- CALL GETTSK, *Executive*, 5-119
- CALL GMCX, *Executive*, 5-108
- CALL GTCMCI, *Executive*, 5-92
- CALL INASTR, *Executive*, 5-64
- CALL macro, special purpose (K-series), *I/O Drivers*, 23-31
- CALL MAP, *Executive*, 5-122
- CALL MARK, *Executive*, 5-125
- CALL op code, standard (K-series), *I/O Drivers*, 23-31
- CALL PRSFCS, *Executive*, 5-135
- CALL PRSRMS, *Executive*, 5-139
- CALL PWRUP, *Executive*, 5-210
- CALL QIO, *Executive*, 5-143
- CALL RCST, *Executive*, 5-149
- CALL RCTLOG, *Executive*, 5-159
- CALL RCTLON, *Executive*, 5-159
- CALL READEF, *Executive*, 5-156, 5-157, 5-158
- CALL READSW, *Executive*, 5-115
- CALL RECEIV, *Executive*, 5-151
- CALL RECOEX, *Executive*, 5-153
- CALL REQUES, *Executive*, 5-167
- CALL RESUME, *Executive*, 5-176
- CALL RMAF, *Executive*, 5-162
- CALL RPOI, *Executive*, 5-163
- CALL RREF, *Executive*, 5-170
- CALL RRST, *Executive*, 5-173

CALL RUN, *Executive*, 5-177

CALLS

- calling macro example (LADRV),
 I/O Drivers, 22-28
- special calling macro (LADRV), *I/O Drivers*, 22-27

CALLS argument, *MACRO-11*, 8-11

CALL SDR, *Executive*, 5-192

CALL SDRCN, *Executive*, 5-192

CALL SDRP, *Executive*, 5-195

CALL SEND, *Executive*, 5-187

CALL SETCLI, *Executive*, 5-185

CALL SETDDS, *Executive*, 5-189

CALL SETEF, *Executive*, 5-199

CALL SETTIM, *Executive*, 5-235

CALL SMSG, *Executive*, 5-202

CALL SNXC, *Executive*, 5-205

CALL SPAWN, *Executive*, 5-212

CALL SPAWNN, *Executive*, 5-212

CALL SREA, *Executive*, 5-224

CALL SREF, *Executive*, 5-228

CALL SREX, *Executive*, 5-224

CALL STAF, *Executive*, 5-234

CALL START, *Executive*, 5-177

CALL statement, *Error Logging*, 5-33

CALL STLOR, *Executive*, 5-238

CALL STLORS, *Executive*, 5-238

CALL STOP, *Executive*, 5-240

CALL STOPFR, *Executive*, 5-241

CALL SUSPND, *Executive*, 5-209

CALL TFEA, *Executive*, 5-248

CALL TRALOG, *Executive*, 5-250

CALL TRALON, *Executive*, 5-250

CALL ULGF, *Executive*, 5-253

CALL UNMAP, *Executive*, 5-254

CALL USTP, *Executive*, 5-256

CALL VRCD, *Executive*, 5-257

CALL VRCS, *Executive*, 5-259

CALL VRCX, *Executive*, 5-261

CALL VSDA, *Executive*, 5-263

CALL VSRC, *Executive*, 5-265

CALL VSRCN, *Executive*, 5-265

CALL WAIT, *Executive*, 5-125

CALL WAITFR, *Executive*, 5-272

CALL WFLOR, *Executive*, 5-270

CALL WFLORS, *Executive*, 5-270

CALL WFSNE, *Executive*, 5-268

CALL WTQIO, *Executive*, 5-147

CAN

- See CANCEL command

CANCEL command, *Command Language*, 7-23, 9-7

CANCEL command (MCR), *MCR*, 1-7, 3-45, 3-180

- example, *MCR*, 3-46
- format, *MCR*, 3-45
- parameters, *MCR*, 3-45

CANCEL command (VMR), *System Management*, 10-11

- definition, *System Management*, 10-11
- example, *System Management*, 10-11
- format, *System Management*, 10-11
- parameter, *System Management*, 10-11

Cancel CTRL/O (TTDRV), *I/O Drivers*, 2-12

Cancel I/O, *I/O Drivers*, 1-29

- entry point, *Writing I/O Driver*, 4-64, 4-65
- overview, *Writing I/O Driver*, 2-5
- VTDRV, *I/O Drivers*, 4-4

Cancel Mark Time Requests directive, *Executive*, 5-36

Cancel Scheduled Initiation Requests directive, *Executive*, 5-60

CAPS LOCK key, *Command Language*, 3-15

CARD_FORMAT argument, *MACRO-11*, 8-9

Card reader

- format
 - sequence number as comment, *MACRO-11*, 6-19
 - function code list, *I/O Drivers*, B-7

Card reader (CM/CR11)

- SYSGEN question, *System Generation*, 3-46

Card reader (CRDRV), *I/O Drivers*, 11-1

- check
 - pick, *I/O Drivers*, 11-5
 - read, *I/O Drivers*, 11-5
 - recovery, *I/O Drivers*, 11-4
 - stack, *I/O Drivers*, 11-6
- console message, *I/O Drivers*, 11-4
- control character, *I/O Drivers*, 11-8, 11-9
- format
 - alphameric, *I/O Drivers*, 11-9
 - binary, *I/O Drivers*, 11-9
 - data, *I/O Drivers*, 11-9
 - function, *I/O Drivers*, 11-8
 - indicator, *I/O Drivers*, 11-5

Card reader (CRDRV) (cont'd.)
 input card limitation, *I/O Drivers*, 11-9
 input error, *I/O Drivers*, 11-3
 programming hint, *I/O Drivers*, 11-9
 ready, *I/O Drivers*, 11-4
 switch, *I/O Drivers*, 11-5
 power, *I/O Drivers*, 11-5
 reset, *I/O Drivers*, 11-6
 stop, *I/O Drivers*, 11-6
 Card Reader Spooling Transaction Block, *System Management*, 17-31
 CARRIAGE_CONTROL attribute
 RMSDES utility, *RMS-11 Utilities*, 2-37
 RMSDEF utility, *RMS-11 Utilities*, A-9
 Carriage-control, *I/O Operations*, 2-6, 2-7
 See also RAT field in FAB
 record attribute, *I/O Operations*, 3-8
 word, record attribute, *I/O Operations*, 3-9
 Carriage-control device
 See FB\$CCL mask in DEV field
 Carriage return
 automatic
 half-duplex, *I/O Drivers*, 3-29, 3-31
 TTDRV, *I/O Drivers*, 2-76
 CTRL/R (TTDRV), *I/O Drivers*, 2-70
 TTDRV, *I/O Drivers*, 2-69
 Carriage-return carriage control
 See FB\$CR mask in RAT field
 CASE_MATCH argument, *MACRO-11*, 8-9
 Case control, *MACRO-11*, 6-19
 Case conversion (half-duplex), *I/O Drivers*, 3-15
 CASE statement, *Error Logging*, 5-34
 Cassette, *RMS-11 Macro*, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-118
 capacity (CTDRV), *I/O Drivers*, 9-1
 function code list, *I/O Drivers*, B-7
 /CA switch
 RMSCNV utility, *RMS-11 Utilities*, 4-8
 \$CAT5 (ASCII to Radix-50), *System Library*, 4-6
 \$CAT5B (ASCII with blanks to Radix-50), *System Library*, 4-8
 Catchall task, *Indirect*, 2-2
 CBD
 See Common Block Directory
 See COMMON BLOCK DIRECTORY command
 \$CBDAT (Binary date to decimal), *System Library*, 5-2
 \$CBDMG (Binary to unsigned decimal), *System Library*, 5-3
 \$CBDSG (Binary to signed decimal), *System Library*, 5-4
 CBM, *System Management*, 12-29
 \$CBOMG (Binary to unsigned octal), *System Library*, 5-7
 \$CBOSG (Binary to signed octal), *System Library*, 5-8
 Cb parameter
 device-specific function
 tape driver, *I/O Drivers*, 8-8
 VTDRV, *I/O Drivers*, 4-3
 IO.STC function (VTDRV), *I/O Drivers*, 4-5
 /CB switch
 CMP utility, *Utilities*, 12-2
 \$CBTA (General purpose binary to ASCII), *System Library*, 5-10
 \$CBTMG (Binary byte to octal), *System Library*, 5-9
 CC command
 EDI utility, *Utilities*, 2-30
 /CC keyword
 MOUNT command (MCR), *MCR*, 3-147
 CCML\$ macro, *I/O Operations*, 6-12
 /CC switch, *Task Builder*, 10-7
 CDA, *Error Logging*, 1-1
 analysis listing, *CDA*, 1-1, 1-6, 1-8, 3-1 to 3-57
 command line, *CDA*, 2-1 to 2-13
 binary file, *CDA*, 2-2
 crash input file, *CDA*, 2-3
 default, *CDA*, 2-12
 format, *CDA*, 2-1
 in indirect command file, *CDA*, 1-8
 list file, *CDA*, 2-1
 symbol file, *CDA*, 2-2
 function, *CDA*, 1-1
 generating, *CDA*, 1-1
 input to, *CDA*, 1-1, 1-3
 messages, *CDA*, A-1

CDA (cont'd.)
 running, CDA, 1-7
 as installed task, CDA, 1-7
 as uninstalled task, CDA, 1-8
 switches, CDA, 2-3 to 2-13
 system requirements, CDA, 1-1
 CD command
 EDI utility, *Utilities*, 2-30
 \$CDDMG (Double-precision binary to decimal), *System Library*, 5-5
 CDR symbolic argument, *MACRO-11*, 6-19
 /CD switch
 PIP utility, *Utilities*, 3-16
 RMSBCK utility, *RMS-11 Utilities*, 6-8, 6-9
 \$CDTB (Decimal to binary), *System Library*, 4-4
 CDT field in DAT block
 DISPLAY operation, *RMS-11 Macro*, 5-32
 offset, *RMS-11 Macro*, 6-14
 OPEN operation, *RMS-11 Macro*, 5-81
 RSTS/E, *RMS-11 Macro*, D-4
 summary, *RMS-11 Macro*, 6-16
 CE.ACN address protocol/pair (XEDRV), *I/O Drivers*, 13-9
 CE.IUM address protocol/pair (XEDRV), *I/O Drivers*, 13-9
 CE.MCE multicast error (XEDRV), *I/O Drivers*, 13-10
 CE.NMA multicast error (XEDRV), *I/O Drivers*, 13-10
 CE.PCN protocol usage conflict (XEDRV), *I/O Drivers*, 13-9
 CE.RES error code (XEDRV), *I/O Drivers*, 13-8
 CE.RTL error code (XEDRV), *I/O Drivers*, 13-8
 CE.RTS error code (XEDRV), *I/O Drivers*, 13-8
 Cell, *RMS-11 Introduction*, 3-5
 relative files, *RMS-11 User's Guide*, 4-1
 sequential files, *RMS-11 User's Guide*, 3-2
 Central buffer pool, *RMS-11 Macro*, 3-5
 Central Processing Unit
 See CPU
 CEX, *System Generation*, 5-47
 CFL, *Error Logging*, 1-1, 1-3, 1-5, 5-1

CFL
 declaration
 conditional, *Error Logging*, 5-29, 5-30
 data item, *Error Logging*, 5-26
 definition, *Error Logging*, 5-3
 scope, *Error Logging*, 5-26
 variable, *Error Logging*, 5-26
 definition, *Error Logging*, 4-2, 5-2
 expression
 conditionals in, *Error Logging*, 5-2
 list handling, *Error Logging*, 5-39
 intermediate form modules, *Error Logging*, 5-1
 lexical conditionals, *Error Logging*, 5-36
 signalling, *Error Logging*, 5-40
 spaces and tabs in text, *Error Logging*, 5-2
 statement
 ACTION, *Error Logging*, 5-30
 BEGIN-END, *Error Logging*, 5-36
 CALL, *Error Logging*, 5-33
 CASE, *Error Logging*, 5-34
 CONTROL, *Error Logging*, 5-32
 CRASH, *Error Logging*, 5-41
 DECLARE, *Error Logging*, 5-27
 DECODE, *Error Logging*, 5-32
 DECREMENT, *Error Logging*, 5-31
 DYNAMIC TABLE, *Error Logging*, 5-37
 ENABLE, *Error Logging*, 5-40
 FILE, *Error Logging*, 5-37, 5-38
 FIND, *Error Logging*, 5-39
 IF-THEN-ELSE, *Error Logging*, 5-34
 INCREMENT, *Error Logging*, 5-31
 LEAVE, *Error Logging*, 5-35
 LIST, *Error Logging*, 5-39
 LITERAL, *Error Logging*, 5-33
 MESSAGE, *Error Logging*, 5-41
 MODULE, *Error Logging*, 5-32
 PACKET, *Error Logging*, 5-28
 POINTER, *Error Logging*, 5-38, 5-39
 PRINT FORMATTING, *Error Logging*, 5-41
 PROCEDURE, *Error Logging*, 5-33, 5-34

CFL

statement (cont'd.)

- PUT, *Error Logging*, 5-39
- RETURN, *Error Logging*, 5-33
- SEARCH, *Error Logging*, 5-40
- SELECT, *Error Logging*, 5-34, 5-35
- SET, *Error Logging*, 5-31
- SIGNAL, *Error Logging*, 5-40, 5-41
- SIGNAL STOP, *Error Logging*, 5-41
- SUBPACKET, *Error Logging*, 5-29
- TABLE, *Error Logging*, 5-37
- WHILE/UNTIL/DO, *Error Logging*, 5-35
- WRITE, *Error Logging*, 5-31
- WRITE GROUP, *Error Logging*, 5-31

table structure, *Error Logging*, 5-36

user interface

- command mode, *Error Logging*, 5-43
- option mode, *Error Logging*, 5-43

CFL command line

- DEVSM1, *Error Logging*, 4-36

CFL command mode, *Error Logging*, 5-43

CFL comments, *Error Logging*, 5-3

CFL data type

- ASCII, *Error Logging*, 5-5
- automatic conversion, *Error Logging*, 5-4
- binary byte, *Error Logging*, 5-4
- bit, *Error Logging*, 5-4, 5-7
- expression, *Error Logging*, 5-4
- logical, *Error Logging*, 5-4
- numeric, *Error Logging*, 5-5
 - attribute option, *Error Logging*, 5-5
- byte, *Error Logging*, 5-5
- default, *Error Logging*, 5-5
- longword, *Error Logging*, 5-5
- quadword, *Error Logging*, 5-5
- radix option, *Error Logging*, 5-5
- value, *Error Logging*, 5-5
- word, *Error Logging*, 5-5
- numeric field, *Error Logging*, 5-7
- numeric literal, *Error Logging*, 5-6
- pointer, *Error Logging*, 5-7
- RSXTIME, *Error Logging*, 5-7
- string, *Error Logging*, 5-4

CFL data type

string (cont'd.)

- numeric value, *Error Logging*, 5-4
- VMSTIME, *Error Logging*, 5-7
- CFL expression, *Error Logging*, 5-9
 - definition, *Error Logging*, 5-3
 - logical operators, *Error Logging*, 5-10
 - numeric operators, *Error Logging*, 5-13, 5-14, 5-15
 - relational operators, *Error Logging*, 5-11 to 5-13
 - string operators, *Error Logging*, 5-9

CFL file

- command, *Error Logging*, 5-3
- error, *Error Logging*, 5-4
- input, *Error Logging*, 5-3
- report, *Error Logging*, 5-3
- user, *Error Logging*, 5-3

CFL function

- %CND, *Error Logging*, 5-17
- %CNV, *Error Logging*, 5-17, 5-18
- %CNV\$RSXTIME, *Error Logging*, 5-19
- %CNV\$STRING, *Error Logging*, 5-19
- %CNV\$VMSTIME, *Error Logging*, 5-19
- %COD, *Error Logging*, 5-19
- %COM, *Error Logging*, 5-20
- %CTL, *Error Logging*, 5-21
- format, *Error Logging*, 5-16
- %LOK, *Error Logging*, 5-21
- %PKT, *Error Logging*, 5-22
- %RPT, *Error Logging*, 5-22
- %STR, *Error Logging*, 5-23, 5-24
- %TIM, *Error Logging*, 5-25
- %USR, *Error Logging*, 5-25

CFL literals, *Error Logging*, 5-9

CFL named variable, *Error Logging*, 5-8

- CONTEXT, *Error Logging*, 5-8
- COUNT, *Error Logging*, 5-9
- LENGTH, *Error Logging*, 5-8
- POINTER, *Error Logging*, 5-8

CFL operands

- literals, *Error Logging*, 5-9
- variables, *Error Logging*, 5-9

CFL operator precedence, *Error Logging*, 5-15

CFL option mode, *Error Logging*, 5-43

CFL primitives, *Error Logging*, 5-1

CFL statement

CFL statement (cont'd.)
 definition, *Error Logging*, 5-3
 \$CFORK, *Writing I/O Driver*, 1-17
 .CHAIN directive, *Indirect*, 2-41
 Changeable key, *RMS-11 Introduction*,
 3-10 *RMS-11 User's Guide*, 6-9
 See XB\$CHG mask in FLG field
 CHANGE command
 EDI utility, *Program Development*,
 2-16, 7-5 *Utilities*, 2-12, 2-29
 EDT editor, *Introduction*, 2-5
 Change mode (EDT)
 See character mode
 CHANGES attribute
 RMSDES utility, *RMS-11 Utilities*,
 2-40
 Channel
 assignment (ICDRV/ISDRV), *I/O*
 Drivers, 19-6
 definition
 multi-access (XEDRV), *I/O*
 Drivers, 13-23
 ICDRV/ISDRV, *I/O Drivers*, 19-7
 identical number (AFC11), *I/O*
 Drivers, 15-10
 read A/D (ICDRV/ISDRV), *I/O*
 Drivers, 19-13
 set information (K-series), *I/O*
 Drivers, 23-28
 Character, *Debugging*, 2-4
 control
 CRDRV, *I/O Drivers*, 11-8,
 11-9
 half-duplex, *I/O Drivers*, 3-21,
 3-26
 TTDRV, *I/O Drivers*, 2-68
 conversion to 16-bit value, *MACRO-*
 11, 6-25
 delimiting, *MACRO-11*, 3-3
 echo
 half-duplex, *I/O Drivers*, 3-14
 IO.RAL function (half-duplex),
 I/O Drivers, 3-14
 generating printable, *MACRO-11*,
 6-26, 6-27, 6-28
 illegal, *MACRO-11*, 3-3
 legal label, *MACRO-11*, 2-3
 padding (tape driver), *I/O Drivers*,
 8-18
 pass-through, *MCR*, 3-241, 3-250
 receive buffer (TTDRV), *I/O Drivers*,
 2-78
 separating, *MACRO-11*, 3-3
 special, *MACRO-11*, 3-1, 3-2, 3-3

Character (cont'd.)
 string packing, *MACRO-11*, 6-29,
 6-30
 translation, *MCR*, 3-8 to 3-10,
 3-152
 unprocessed (TTDRV), *I/O Drivers*,
 2-58
 unsolicited
 input (half-duplex), *I/O Drivers*,
 3-34
 programming use (half-duplex),
 I/O Drivers, 3-11
 stack operation (half-duplex),
 I/O Drivers, 3-11
 wildcard, *MCR*, 2-7
 Characteristic
 buffer
 XEDRV, *I/O Drivers*, 13-7
 zero size, *I/O Drivers*, 13-21
 clearing on remote (TTDRV), *I/O*
 Drivers, 2-83
 multiple (VTDRV), *I/O Drivers*, 4-6
 name
 SF.GMC function (half-duplex),
 I/O Drivers, 3-11
 SF.SMC function (half-duplex),
 I/O Drivers, 3-16
 obtaining (tape driver), *I/O Drivers*,
 8-8
 physical (disk driver), *I/O Drivers*,
 5-2
 resetting, importance of (tape driver),
 I/O Drivers, 8-15
 return (half-duplex), *I/O Drivers*,
 3-11
 set
 Ethernet, *I/O Drivers*, 13-7
 multiple (TTDRV), *I/O Drivers*,
 2-59
 protocol/address (XEDRV), *I/O*
 Drivers, 13-8
 tape driver, *I/O Drivers*, 8-10
 terminal (VTDRV), *I/O Drivers*,
 4-7
 XEDRV multicast address, *I/O*
 Drivers, 13-9
 setting, side-effect
 half-duplex, *I/O Drivers*, 3-33
 TTDRV, *I/O Drivers*, 2-62
 table
 terminal (half-duplex), *I/O*
 Drivers, 3-12
 VTDRV, *I/O Drivers*, 4-7

- Characteristic
 - terminal
 - get multiple (TTDRV), *I/O Drivers*, 2-18, 2-51
 - set multiple (TTDRV), *I/O Drivers*, 2-18
 - terminal-dependent (half-duplex), *I/O Drivers*, 3-5
 - word (half-duplex), *I/O Drivers*, 3-4
- Character mode (EDT), *Introduction*, 2-3 to 2-5
- Character-oriented interface (communication driver), *I/O Drivers*, 12-1
- Character set
 - ASCII, *MACRO-11*, A-1, A-2, A-3
 - legal, *MACRO-11*, 3-1, 3-2, 3-3
 - Radix-50, *MACRO-11*, A-4, A-5
- Character translation
 - SYSGEN question, *System Generation*, 3-30
- CHAR key (EDT), *Introduction*, 2-6
- Checkpoint
 - area
 - task image, *Task Builder*, B-9
 - dynamic common regions, *System Management*, 14-2
 - file, *MCR*, 3-11
 - primary, *MCR*, 3-12
 - size, *MCR*, 3-12
 - space
 - allocating, *MCR*, 3-11, 3-117, 3-119, 3-182 *Task Builder*, 10-6, 10-10, 11-13 to 11-14
 - static common regions, *System Management*, 14-2
 - task, *MCR*, 2-20, 3-11, 3-31, 3-182 *System Management*, 14-2
- Checkpointable task
 - fixing, *System Management*, 10-18
- Checkpoint Common Region directive, *Executive*, 5-41
- Checkpoint file header, *I/O Operations*, E-2
- Checkpointing, *Introduction*, 6-6
 - System Generation*, C-1 *System Management*, 10-22, 10-28
 - buffer override (half-duplex), *I/O Drivers*, 3-30
 - common, *System Management*, 10-28
 - during prompt (TTDRV), *I/O Drivers*, 2-14, 2-27, 2-40

- Checkpointing (cont'd.)
 - during read (TTDRV), *I/O Drivers*, 2-27
 - dynamic space allocation, *System Generation*, C-6
 - task
 - half-duplex, *I/O Drivers*, 3-14
 - VTDRV, *I/O Drivers*, 4-5
 - task buffer (TTDRV), *I/O Drivers*, 2-78
 - terminal input
 - half-duplex, *I/O Drivers*, 3-32, 3-35
 - TTDRV, *I/O Drivers*, 2-82
 - /CHECKPOINT qualifier, *Task Builder*, 11-13 to 11-14
- Check recovery (CRDRV), *I/O Drivers*, 11-4
- Checksum
 - calculating
 - SLP utility, *Utilities*, 13-3
 - file content validating
 - PAT utility, *Utilities*, 14-6
- Checksum value, *I/O Operations*, 5-4
- Chna parameter
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-6
- Chnd parameter
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-6
- Chn parameter (ICDRV/ISDRV), *I/O Drivers*, 19-9
 - IO.SAO function, *I/O Drivers*, 19-16
- CINT\$, *Executive*, 5-21 *Writing I/O Driver*, 1-1
- Circumflex (^)
 - cross-reference listing, *Task Builder*, 10-12, 10-13, 11-23, 11-24
 - global cross-reference
 - of an overlaid task, *Task Builder*, 4-13
- Circumflex command (^), *Debugging*, 2-5, 4-2, 4-4, 9-9
- CIS
 - See Commercial Instruction Set
- \$CKBFB routine, *Writing I/O Driver*, 7-12
- \$CKBFI routine, *Writing I/O Driver*, 7-12
- \$CKBFR routine, *Writing I/O Driver*, 7-12
- \$CKBFW routine, *Writing I/O Driver*, 7-12

- Ckcsr parameter
 - IO.CLK function (LADRV), *I/O Drivers*, 22-29
- /CKP keyword
 - INSTALL command (MCR), *MCR*, 3-117
 - INSTALL command (VMR), *System Management*, 10-22
 - RUN command (MCR), *MCR*, 3-182
- CL:, *MCR*, 2-10, 2-11
- CL: pseudo device, *Command Language*, 5-6, 5-7
- CL command
 - EDI utility, *Utilities*, 2-29
- CLEAR command, *System Management*, 15-8
 - RMSDES utility, *RMS-11 Utilities*, 2-6, 2-18, 2-25, 2-26
 - and PROTECTION attribute, *RMS-11 Utilities*, 2-33
 - defining areas by default, *RMS-11 Utilities*, 2-44
 - in indirect command file, *RMS-11 Utilities*, 2-4
 - with CREATE, *RMS-11 Utilities*, 2-8, 2-28
 - with SAVE, *RMS-11 Utilities*, 2-27
- Clear Event Flag directive, *Executive*, 5-31
- Clearing attributes (RMSDES)
 - See Attribute, clearing
- Clear OOB (TTDRV), *I/O Drivers*, 2-61
- CLEF\$ directive, *Executive*, 5-31
- /CLE keyword SWITCH REGISTER, *MCR*, 3-274
- CLI, *Command Language*, 1-1
 - Introduction*, 1-4
 - System Management*, 1-3, 10-23, 11-1, 11-3
 - See also COMMAND LINE
 - INTERPRETER command
 - See also DCL
 - See also MCR
 - adding to account entry, *System Management*, 2-3
 - alternate
 - SYSGEN question, *System Generation*, 3-28
 - changing, *System Management*, 2-7
 - commands, *MCR*, 1-8

CLI (cont'd.)

- continuation lines, *System Management*, 11-8
- data structures, *MCR*, 3-48
- DCL, *MCR*, 3-56
- Program Development*, 1-1 to 1-3
- default, *MCR*, 3-79
- definition, *Batch and Queue*, 4-2
- disabling, *MCR*, 3-49
- displaying, *System Management*, 2-5, 2-8
- eliminating, *MCR*, 3-48
- examples, *System Management*, 11-10, 11-15
- FORTTRAN, *System Management*, 11-15 to 11-19
- MACRO-11, *System Management*, 11-10 to 11-14
- Executive directives, *System Management*, 11-3
- getting information, *Executive*, 5-96
- in account entry, *System Management*, 2-1
- interaction with system, *System Management*, 11-3
- login, *MCR*, 3-79
- MCR*, *Program Development*, 1-1 to 1-3
- System Management*, 2-3, 11-2
- mode, *Indirect*, 2-48
- multi-CLI support, *System Management*, 2-1, 2-3, 2-7
- prompting, *System Management*, 11-7, 11-8
- prompts
 - CTRL/C, *System Management*, 11-7
 - task-exit, *System Management*, 11-8
- prompt string, *MCR*, 3-49
- receiving system message, *Executive*, 5-92
- retrieving command buffer, *Executive*, 5-92
- serial command processing, *System Management*, 11-8
- setting up, *Executive*, 5-185
- spawning, *Executive*, 4-5
- specifying ASTs, *Executive*, 5-182
- symbol, *Indirect*, 2-18
- system messages to, *System Management*, 11-5

- CLI (cont'd.)
 - task, MCR, 3-49 *System Management*, 10-23
 - task names, *System Management*, 11-4
 - writing, *System Management*, 11-2, 11-3
- CLI dispatcher task, *System Management*, 12-5
- /CLI keyword
 - HELP command, MCR, 3-87
 - INSTALL command (MCR), MCR, 3-117
 - INSTALL command (VMR), *System Management*, 10-23
 - SET command (MCR), MCR, 3-209
- \$CLINS routine, *Writing I/O Driver*, 7-13
- CLI parser block dump, CDA, 3-31
- /CLI switch, CDA, 2-4, 2-6
 - Indirect, *Indirect*, 2-4, 2-27
- CLKDF\$, CDA, B-4, C-12 *Writing I/O Driver*, A-11
- Clock
 - interrupt, MCR, 3-180
 - system
 - SYSGEN question, *System Generation*, 3-33
- Clock, compute rate and preset (K-series), *I/O Drivers*, 23-30
- CLOCKA: subroutine
 - set clock A rate
 - K-series, *I/O Drivers*, 23-11
 - LADRV, *I/O Drivers*, 22-7
- Clock B, control (K-series), *I/O Drivers*, 23-12
- CLOCKB: subroutine
 - control clock B
 - K-series, *I/O Drivers*, 23-12
 - LADRV, *I/O Drivers*, 22-7
- Clock queue, *Command Language*, 7-13 to 7-16, 7-23, 9-36 MCR, 2-11
 - control block
 - offset definitions, *Writing I/O Driver*, A-11
 - deleting entry, *Command Language*, 7-23
 - displaying, *Command Language*, 7-73 MCR, 3-55
 - dump, CDA, 3-50
 - switch
 - See /CLQ switch
- CLOCK QUEUE command, MCR, 1-7, 3-55
 - example, MCR, 3-55
 - format, MCR, 3-55
- Clock start command (LADRV), *I/O Drivers*, 22-29
- CLOG\$ directive, *Executive*, 5-32
- CLON\$ directive, *Executive*, 5-32
- Close
 - line (XEDRV), *I/O Drivers*, 13-17
 - relay (LSDRV), *I/O Drivers*, 17-4
- CLOSE\$ example, *I/O Operations*, 5-9
- CLOSE\$ macro, *I/O Operations*, 3-1
 - block size reset, *I/O Operations*, 2-19
 - file processing, *I/O Operations*, 3-20
 - file processing completion, *I/O Operations*, 2-8
 - format, file processing, *I/O Operations*, 3-20
- CLOSE & DELETE command
 - EDI utility, *Utilities*, 2-30
- CLOSE command
 - EDI utility, *Utilities*, 2-27, 2-29
- .CLOSE directive, *Indirect*, 2-42
- \$CLOSE macro, *RMS-11 Macro*, 5-3
- CLOSE operation, *RMS-11*
 - Introduction*, 4-2 *RMS-11 Macro*, 3-8 *RMS-11 User's Guide*, 1-18
 - BDB requirement, *RMS-11 Macro*, 2-8
 - \$CLOSE macro, *RMS-11 Macro*, 5-3
 - I/O buffer requirement, *RMS-11 Macro*, 2-7
 - wildcard loop, *RMS-11 Macro*, 3-10
- CLOSES command
 - See CLOSE SECONDARY command
- CLOSE SECONDARY command
 - EDI utility, *Utilities*, 2-30
- CLQ
 - See CLOCK QUEUE command
- /CLQ switch, CDA, 2-4, 2-6
- CLSTR option, *Task Builder*, 12-9, 12-10
- CLUSTER_SIZE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-31
- Cluster library, *Task Builder*, 5-44
 - See also Library
- Cluster size
 - See RTV field in FAB

- CM/CR11 card reader
 - SYSGEN question, *System Generation*, 3-46
- \$C macro form, *Executive*, 1-6
 - processing errors, *Executive*, 1-7
- /CMD keyword
 - RUN command (MCR), *MCR*, 3-182
- CMKT\$ directive, *Executive*, 5-36
- \$CMPAL
 - completion routine, *Task Builder*, 8-8
- \$CMPCS
 - completion routine, *Task Builder*, 8-8, 8-12, 8-13, 8-14
- CMPCS module, *Task Builder*, 8-8, 8-12, 8-13
- CMPT option, *Task Builder*, 8-4, 8-8, 12-11
 - supervisor mode library, *Task Builder*, 8-8
 - use in CSM library, *Task Builder*, 8-8
- /CMP switch
 - DSC utility, *Utilities*, 8-14
- CMP utility
 - command line, *Utilities*, 12-1
 - error message, *Utilities*, 12-6
 - output file format, *Utilities*, 12-4
 - switch, *Utilities*, 12-2
 - default, *Utilities*, 12-4
- /CM switch, *Task Builder*, 10-8
 - SLP utility, *Utilities*, 13-15
- CNCT\$ directive, *Executive*, 5-38
- %CND function, *Error Logging*, 5-17
- CND symbolic argument, *MACRO-11*, 6-12
- CNF, *System Generation*, 2-7
 - DSC64K.SYS and
 - See DSC utility
 - stand-alone BRU and
 - See BRU utility
 - switches, *System Generation*, 2-8
- .CNF module, *Error Logging*, 4-1
- Cn parameter (ICDRV/ISDRV), *I/O Drivers*, 19-9
 - IO.LTI function, *I/O Drivers*, 19-26
- %CNV\$RSXTIME, *Error Logging*, 5-19
- %CNV\$STRING, *Error Logging*, 5-19
- %CNV\$VMSTIME, *Error Logging*, 5-19
- %CNV function, *Error Logging*, 5-17, 5-18
- CO:, *Command Language*, 5-6, 5-7
 - MCR, 2-11, 3-188 *System Management*, 3-1
 - as pseudo device, *System Management*, 3-1
 - attaching, *System Management*, 3-3
 - detaching, *System Management*, 3-3
 - monitoring status, *System Management*, 3-6
 - reading from, *System Management*, 3-3
 - redirecting, *System Management*, 3-7
- COBOL carriage control, *I/O Operations*, 2-6
- COBOL command, *Introduction*, 5-10
- %COD, *Error Logging*, 5-19
- /CODE[:DATA_SPACE] qualifier, *Task Builder*, 11-15
- /CODE[:EAE] qualifier, *Task Builder*, 11-16
- /CODE[:FPP] qualifier, *Task Builder*, 11-17
- /CODE[:PIC] qualifier, *Task Builder*, 11-18
 - use in region, *Task Builder*, 5-3 to 5-6
- /CODE[:POSITION_INDEPENDENT] qualifier, *Task Builder*, 11-19
- Code and mask symbol
 - declaring
 - ALL block, *RMS-11 Macro*, C-3, C-4
 - DAT block, *RMS-11 Macro*, C-3, C-4
 - FAB, *RMS-11 Macro*, C-1
 - KEY block, *RMS-11 Macro*, C-3, C-4
 - NAM block, *RMS-11 Macro*, C-2
 - PRO block, *RMS-11 Macro*, C-3, C-4
 - RAB, *RMS-11 Macro*, C-2
 - SUM block, *RMS-11 Macro*, C-3, C-4
 - XAB, *RMS-11 Macro*, C-4
 - value
 - ALL block, *RMS-11 Macro*, 6-2
 - DAT block, *RMS-11 Macro*, 6-14
 - FAB, *RMS-11 Macro*, 6-22
 - KEY block, *RMS-11 Macro*, 6-67

- Code and mask symbol
 - value (cont'd.)
 - NAM block, *RMS-11 Macro*, 6-94
 - PRO block, *RMS-11 Macro*, 6-108
 - RAB, *RMS-11 Macro*, 6-115
 - SUM block, *RMS-11 Macro*, 6-145
- Code sharing, *MACRO-11*, 6-45
- Code symbol
 - See Code and mask symbol
- COD field in ALL block
 - offset, *RMS-11 Macro*, 6-2
 - summary
 - XB\$ALL code, *RMS-11 Macro*, 6-10
- COD field in DAT block
 - offset, *RMS-11 Macro*, 6-14
 - summary
 - XB\$DAT code, *RMS-11 Macro*, 6-17
- COD field in KEY block
 - offset, *RMS-11 Macro*, 6-67
 - summary
 - XB\$KEY code, *RMS-11 Macro*, 6-70
- COD field in PRO block
 - offset, *RMS-11 Macro*, 6-108
 - summary
 - XB\$PRO code, *RMS-11 Macro*, 6-110
- COD field in SUM block
 - offset, *RMS-11 Macro*, 6-145
 - summary
 - XB\$SUM code, *RMS-11 Macro*, 6-147
- Coding standard, *MACRO-11*, E-1 to E-16
- Coding TPARS, *I/O Operations*, 7-1
- CODRV, *System Management*, 3-1
- Colon (:), *Command Language*, 1-14
- %COM, *Error Logging*, 5-20
- Command, *Introduction*, 1-1
 - See also individual command entries
 - See also RMSDES
 - at sign (@), *Debugging*, 2-5, 4-4, 9-9
 - B, *Debugging*, 2-8, 9-11
 - circumflex (^), *Debugging*, 2-5, 4-2, 4-4, 9-9
 - command line interpreter, *MCR*, 1-8
 - D, *Debugging*, 2-8, 9-12

- Command (cont'd.)
 - description
 - format, *MCR*, 3-1
 - name, *MCR*, 3-2
 - E, *Debugging*, 2-9, 6-2
 - equal sign (=), *Debugging*, 2-8, 7-2, 9-11
 - F, *Debugging*, 2-9, 6-4
 - G, *Debugging*, 2-9, 8-6, 9-12
 - I, *Debugging*, 2-9, 9-12
 - informational, *MCR*, 1-7
 - initialization, *MCR*, 1-6
 - K, *Debugging*, 2-9, 9-12
 - L, *Debugging*, 2-10, 6-4, 9-13
 - left-angle bracket (<), *Debugging*, 2-6, 9-9
 - Line feed, *Debugging*, 2-5, 4-3, 9-8
 - multiuser protection, *MCR*, 1-8
 - N, *Debugging*, 2-10, 6-2
 - O, *Debugging*, 2-10, 7-1, 9-13
 - P, *Debugging*, 2-10, 8-7, 9-13
 - privileged, *MCR*, 2-19
 - privilege status, *MCR*, 3-2
 - R, *Debugging*, 2-11, 9-13
 - Return, *Debugging*, 2-5, 4-2, 9-8
 - right-angle bracket (>), *Debugging*, 2-6, 9-9
 - RMSDES utility, *RMS-11 Utilities*, 2-1, 2-4
 - S, *Debugging*, 2-11, 9-1, 9-14
 - summary, *Batch and Queue*, 4-1
 - summary of MCR, *MCR*, 1-5 to 1-8
 - system maintenance, *MCR*, 1-8
 - task control, *MCR*, 1-7
 - U, *Debugging*, 2-11
 - underscore (_), *Debugging*, 2-5, 4-4, 9-9
 - V, *Debugging*, 2-11
 - W, *Debugging*, 2-11, 6-2
 - X
 - ODT, *Debugging*, 1-4, 2-12
 - XDT, *Debugging*, 9-1, 9-14
 - Z, *Debugging*, 2-12
- Command file, *Command Language*, 6-6
 - close, *I/O Operations*, 6-12
 - comment, *Task Builder*, 1-14
 - indirect, *Task Builder*, 1-11, 3-30
 - See also Indirect command file
 - interaction with indirect, *Task Builder*, 1-12, 1-13
 - level of indirection, *Task Builder*, 1-13
 - option, *Task Builder*, 1-14

- Command file (cont'd.)
 - reset scan macro, *I/O Operations*, 6-12
 - with ODL, *Task Builder*, 3-30
- Command format
 - MAC task, *MACRO-11*, 8-4 to 8-7
- COMMAND key (EDT), *Introduction*, 2-8, 2-16
- Command Language Interpreter
 - See CLI
- Command library, *Indirect*, 2-28
 - default file type, *Indirect*, 2-28
 - DIGITAL-supplied, *Indirect*, 2-29
- Command line, *MCR*, 1-1 to 1-2
 - comments, *MCR*, 1-4
 - compressing, *MCR*, 1-2
 - continuing, *MCR*, 1-2, 2-4
 - file specifications
 - VMR, *System Management*, 10-5
 - format, *MCR*, 3-2 *Task Builder*, 1-2
 - Utilities*, 1-4
 - VMR, *System Management*, 10-4
 - ignoring blanks and tabs, *I/O Operations*, 7-8
 - length, *Command Language*, 3-13
 - MCR*, 2-4
 - LINK command, *Task Builder*, 1-5
 - form, *Task Builder*, 1-3
 - input file, *Task Builder*, 1-4
 - map file, *Task Builder*, 1-5, 1-6
 - symbol definition file, *Task Builder*, 1-6
 - multiline input, *Task Builder*, 1-7
 - LINK command, *Task Builder*, 1-8
 - TKB, *Task Builder*, 1-7
 - output file interpretation, *Task Builder*, 1-8
 - parameters, *MCR*, 1-1, 1-2
 - parsing, *Indirect*, 2-75 *I/O Operations*, 7-1 *MCR*, 1-2
 - processing, *I/O Operations*, 6-1
 - MCR*, 1-5
 - quotation marks, *MCR*, 1-2
 - rejected, *System Management*, 10-94
 - special characters, *MCR*, 1-2
 - syntax
 - command names, *System Management*, 10-4
 - VMR, *System Management*, 10-4
 - abbreviating commands, *System Management*, 10-4

- Command line
 - syntax (cont'd.)
 - command parameters, *System Management*, 10-4
 - comments, *System Management*, 10-5
 - keywords, *System Management*, 10-4
 - keyword values, *System Management*, 10-5
 - terminating, *MCR*, 1-2
 - terminating character, *Task Builder*, 1-7, 1-11, 1-12
 - UFD convention, *Task Builder*, 1-15, 1-16
 - VMR
 - components, *System Management*, 10-4
- Command Line Interpreter
 - See CLI
- COMMAND LINE INTERPRETER
 - command, *MCR*, 1-8, 3-48
 - error messages, *MCR*, 3-53 to 3-54
 - examples, *MCR*, 3-52
 - formats, *MCR*, 3-48
 - keywords
 - /DISABLE, *MCR*, 3-48
 - /ELIM, *MCR*, 3-48
 - /ENABLE, *MCR*, 3-49
 - /INIT, *MCR*, 3-49
 - /MESSAGE, *MCR*, 3-52
 - /UNOVR, *MCR*, 3-52
 - parameters, *MCR*, 3-48
 - subkeywords
 - /CPR, *MCR*, 3-50
 - /CTRLC, *MCR*, 3-49
 - /DISABLE, *MCR*, 3-50
 - /DPR, *MCR*, 3-50
 - /LGO, *MCR*, 3-50
 - /MESSAGE, *MCR*, 3-51
 - /NULL, *MCR*, 3-51
 - /PRIV, *MCR*, 3-51
 - /PROMPT, *MCR*, 3-51
 - /QUIET, *MCR*, 3-51
 - /RESTRICT, *MCR*, 3-51
 - /SNGL, *MCR*, 3-51
 - /TASK, *MCR*, 3-52
- Command Line Interpreter switch
 - See /CLI switch
- Command procedure
 - invoking, *Indirect*, 2-29
 - universal library, *Indirect*, 2-28

- Command sequence
 - simple, *Task Builder*, 1-2
- Command string
 - RMSBCK utility, *RMS-11 Utilities*, 6-2, 6-3
 - RMSCNV utility, *RMS-11 Utilities*, 4-3, 4-4
 - RMSDEF utility, *RMS-11 Utilities*, A-5
 - RMSDSP utility, *RMS-11 Utilities*, 5-2, 5-3
 - RMSIFL utility, *RMS-11 Utilities*, 3-2, 3-3
 - checking, *RMS-11 Utilities*, 3-9
 - RMSRST utility, *RMS-11 Utilities*, 7-2, 7-3
- Command String Interpreter
 - See CSI
- COMMAN symbol, *Indirect*, 2-25
- Comma operator (,), *Task Builder*, 3-49
 - See also ODL operator
- Comma separator (,)
 - See Separator
- Comment, *Indirect*, 1-7, 2-4
 - block directive, *MACRO-11*, 6-18
 - card reader format, *MACRO-11*, 6-19
 - command file, *Task Builder*, 1-14
 - delimiter, *MACRO-11*, 3-2
 - field, *MACRO-11*, 2-1, 2-4, 2-5
- COMMENTS argument, *MACRO-11*, 8-11
- Comments in command lines, *Command Language*, 1-18
- Commercial Instruction Set, *MACRO-11*, C-3, C-4
- Common, *Task Builder*, 5-1, 5-28 to 5-32
 - See also Region
 - allocation diagram, *Task Builder*, 5-21
 - assigning reference, *Task Builder*, 5-24
 - building
 - linking task, *Task Builder*, 5-22 to 5-24
 - building and linking, *Task Builder*, 5-16, 5-18, 5-19, 5-20
 - to device, *Task Builder*, 5-28 to 5-32
 - checkpointing, *MCR*, 3-122 *System Management*, 10-28
 - definition, *Task Builder*, 2-18

- Common (cont'd.)
 - device, *MCR*, 3-125, 3-238 *Task Builder*, 5-28 to 5-32
 - See also Device common
 - example map, *Task Builder*, 5-30
 - directive
 - fixing, *System Management*, 10-19
 - displaying, *Command Language*, 7-74 to 7-75
 - establishing offset, *Task Builder*, 5-29
 - installing, *MCR*, 3-122
 - RSX-11M, *Task Builder*, 5-2, 5-3, 5-22
 - RSX-11M-PLUS, *Task Builder*, 5-2, 5-3, 5-22
 - linking to region, *Task Builder*, 5-16
 - MACRO-11
 - building and linking, *Task Builder*, 5-18, 5-19, 5-20
 - See also Region
 - map, *Task Builder*, 5-20, 5-21
 - of linking task, *Task Builder*, 5-25
 - memory image, *MCR*, 3-125
 - name, *MCR*, 3-170
 - partition, *MCR*, 3-169 *System Management*, 14-1
 - read/write, *MCR*, 3-169
 - read-only, *MCR*, 3-169
 - program section
 - building a linking task, *Task Builder*, 5-24
 - protecting, *System Management*, 10-25
 - read/write
 - checkpointing, *MCR*, 3-122
 - read-only
 - installing, *MCR*, 3-122
 - region, *MCR*, 3-75
 - accessing, *MCR*, 3-120
 - displaying, *MCR*, 3-46
 - installed, *MCR*, 3-119
 - protecting, *MCR*, 3-119
 - removing, *MCR*, 3-175
 - status, *MCR*, 3-46
 - status bits, *MCR*, 3-46
 - synchronizing, *MCR*, 3-121
 - tasks, *MCR*, 3-47
 - unfixing, *MCR*, 3-284
 - reinstalling, *MCR*, 3-125
 - resident, *Task Builder*, 5-1, 5-2

- Common
 - resident (cont'd.)
 - declaring, *Task Builder*, 12-12, 12-24, 12-30
 - name block data, *Task Builder*, B-8
 - specifying, *Task Builder*, 10-9, 11-65
 - status flags, *Command Language*, 7-74 to 7-75
 - synchronizing task use, *System Management*, 10-27
 - task sharing, *System Management*, 10-27
 - unfixing, *System Management*, 10-92
- Common (UDDRV)
 - creating global, *I/O Drivers*, 16-12
 - linking task, *I/O Drivers*, 16-14
 - referencing global, *I/O Drivers*, 16-12
- Common Block Directory, *MCR*, 3-116
 - displaying, *MCR*, 3-46
 - removing regions, *MCR*, 3-175
- COMMON BLOCK DIRECTORY
 - command, *MCR*, 1-7, 3-46
 - examples, *MCR*, 3-47
 - format, *MCR*, 3-46
 - keyword
 - /TASKS, *MCR*, 3-46
 - parameters, *MCR*, 3-46
- Common Block Directory dump, *CDA*, 3-36
- Common event flag, *Executive*, 2-2
 - reading, *Executive*, 5-158
- COMMON option, *Task Builder*, 12-12, 12-13, 12-24
 - shared region use, *Task Builder*, 5-15
- Common region
 - checkpointing, *Executive*, 5-41
- Communication
 - driver, *I/O Drivers*, 12-1
 - example, *I/O Drivers*, 12-13
 - programming hint, *I/O Drivers*, 12-11
 - function code list, *I/O Drivers*, B-8
 - link
 - function code list, *I/O Drivers*, B-12
 - mode
 - setting full-duplex (communication driver), *I/O Drivers*, 12-7
- Communication
 - set operation
 - IO.SYN function (communication driver), *I/O Drivers*, 12-7
- Communications
 - SYSGEN question, *System Generation*, 3-26
- Communications device
 - SYSGEN question, *System Generation*, 3-62
- Communications Executive
 - See CEX
- COMPAREDATA YES/NO command
 - IOX, *System Management*, 4-28
- \$COMPARE macro, *RMS-11 Macro*, 2-16
 - example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
- /COMPARE qualifier
 - BRU utility, *Utilities*, 7-14
- Compatibility mode
 - See VAX-11 RSX
- /COMPATIBLE qualifier, *Task Builder*, 11-20
- Compiler, *Introduction*, 5-3
 - See also High-level language
- conditional
 - literal declaration, *Error Logging*, 4-12
- Complement
 - See One's or Two's complement
- Completion
 - handler, *RMS-11 Macro*, 2-17
 - return macro
 - declaring, *RMS-11 Macro*, C-2
 - routine
 - \$CMPAL, *Task Builder*, 8-2, 8-8
 - \$CMPCS, *Task Builder*, 8-2, 8-8, 8-12, 8-13
 - definition, *Task Builder*, A-11
 - identification, *Task Builder*, A-11
 - name, *Task Builder*, A-11
 - supervisor mode library, *Task Builder*, 8-1, 8-2, 8-7, 8-8
 - user-written, *Task Builder*, 8-21
 - symbol
 - declaring, *RMS-11 Macro*, C-3
- Completion status
 - See STS field in FAB
 - See STS field in RAB
 - See STV field in FAB
 - See STV field in RAB

- Complex relocation, *MACRO-11*, 4-1
 - Task Builder*, A-22
 - entry, *Task Builder*, A-23
 - operation code, *Task Builder*, A-22
- Compound test, *Indirect*, 2-64
- Compression, *RMS-11 User's Guide*, 5-10, 5-16, 6-7, 6-9
 - RMSIFL utility, *RMS-11 Utilities*, 3-11
- Computational function, *Error Logging*, 5-20
- COM symbolic argument, *MACRO-11*, 6-11
- CON, *I/O Drivers*, 13-5
 - See also CONFIGURATION command (VMR)
 - command descriptions, *System Management*, 15-7 to 15-28
 - commands
 - BUILD, *System Management*, 15-5, 15-7
 - CLEAR, *System Management*, 15-5
 - DISPLAY, *System Management*, 15-5, 15-9
 - ESTATUS, *System Management*, 15-5, 15-12
 - HELP, *System Management*, 15-5, 15-14
 - IDENT, *System Management*, 15-5, 15-15
 - LINK, *System Management*, 15-5, 15-16
 - LIST, *System Management*, 15-5, 15-17
 - OFFLINE, *System Management*, 15-5, 15-19
 - OFFLINE MEMORY, *System Management*, 15-21
 - ONLINE, *System Management*, 15-6, 15-22
 - ONLINE MEMORY, *System Management*, 15-24
 - SET, *System Management*, 15-6, 15-25
 - SWITCH, *System Management*, 15-6, 15-27
 - UNLINK, *System Management*, 15-6, 15-28
 - command summary, *System Management*, 15-5
 - error messages, *System Management*, 15-37 to 15-39

- CON
 - error messages (cont'd.)
 - format, *System Management*, 15-37
 - invoking, *System Management*, 15-4
 - indirect command files, *System Management*, 15-4
 - /CONCATENATE qualifier, *Task Builder*, 11-21
 - CONCATENATION CHARACTER command
 - EDI utility, *Utilities*, 2-30
 - Concatenation indicator, *MACRO-11*, 3-3
 - Concurrent I/O, *Writing I/O Driver*, 1-13
 - Conditional assembly, *MACRO-11*, 6-50 to 6-54, 6-56
 - block, *MACRO-11*, 7-3
 - directive, *MACRO-11*, 6-50 to 6-54, 6-55, 6-56
 - case sensitivity control, *MACRO-11*, 6-19
 - nested, *MACRO-11*, 6-52
 - immediate, *MACRO-11*, 6-56
 - Conditional assembly directive, *Writing I/O Driver*, 4-2
 - Conditional declaration, *Error Logging*, 5-30
 - Conditional fork, *Writing I/O Driver*, 1-17, 1-18
 - necessity, *Writing I/O Driver*, 1-17
 - Conditional function, *Error Logging*, 5-17
 - CONDITIONALS argument, *MACRO-11*, 8-11
 - CONFIG symbol, *Indirect*, 2-18
 - Configuration
 - of devices in IOX, *System Management*, 4-29
 - peripheral
 - choosing at system generation, *Writing I/O Driver*, 5-10 to 5-11
 - worksheet, *System Generation*, A-1 to A-8
 - Configuration (UDDRV), *I/O Drivers*, 16-10
 - UDCOM.MAC, *I/O Drivers*, 16-10
 - UDCOM.MAC symbol, *I/O Drivers*, 16-10
 - CONFIGURATION command (VMR), *System Management*, 10-12

- CONFIGURATION command (VMR)
 - (cont'd.)
 - definition, *System Management*, 10-12
 - examples, *System Management*, 10-13 to 10-16
 - formats, *System Management*, 10-12
 - keywords
 - CONTROLLERS, *System Management*, 10-13
 - CPU, *System Management*, 10-13
 - FULL, *System Management*, 10-13
 - UNITS, *System Management*, 10-13
 - parameters, *System Management*, 10-12
- Configuration Program
 - See CNF
- CONFIGURE command
 - IOX, *System Management*, 4-29
- Connect
 - function (UNIBUS switch driver), *I/O Drivers*, 24-4
 - task (LRDRV), *I/O Drivers*, 14-10
 - UNIBUS to another CPU (UNIBUS switch driver), *I/O Drivers*, 24-5
- Connect directive, *Executive*, 5-38
- Connectivity mask, *Writing I/O Driver*, 1-17
- \$CONNECT macro, *RMS-11 Macro*, 5-6
- CONNECT operation, *RMS-11 Introduction*, 4-4 *RMS-11 User's Guide*, 1-15
 - BDB requirement, *RMS-11 Macro*, 2-8
 - block stream, *RMS-11 Macro*, 4-13
 - \$CONNECT macro, *RMS-11 Macro*, 5-6
 - I/O buffer requirement, *RMS-11 Macro*, 2-7
 - indexed files, *RMS-11 User's Guide*, 7-2
 - IRAB requirement, *RMS-11 Macro*, 2-5
 - key buffer requirement, *RMS-11 Macro*, 2-6
 - record stream, *RMS-11 Macro*, 4-8
 - relative files, *RMS-11 User's Guide*, 4-7
- CONNECT operation (cont'd.)
 - sequential files, *RMS-11 User's Guide*, 3-7
- Connect to Interrupt Vector directive, *Executive*, 5-21
- Console driver
 - SYSGEN question, *System Generation*, 3-27
- Console Logger, *System Management*, 1-1, 3-1
 - communication with, *System Management*, 3-2
 - task communication, *System Management*, 3-2
 - user communication, *System Management*, 3-2
- Console Logging
 - CO:
 - writing to, *System Management*, 3-2
 - commands, *System Management*, 3-3
 - error messages, *System Management*, 3-11
 - installing COT..., *System Management*, 3-2
 - loading CODRV, *System Management*, 3-2
 - log file
 - disabling, *System Management*, 3-5
 - reassigning, *System Management*, 3-5
 - multiple commands, *System Management*, 3-6
 - reading log file, *System Management*, 3-8
 - sample session, *System Management*, 3-8
 - starting, *System Management*, 3-4
 - stopping, *System Management*, 3-4
- Console Output Device
 - See CO:
- Console switch register
 - obtaining contents, *Executive*, 5-115
- Console terminal
 - disabling, *System Management*, 3-5
 - display, *System Management*, 3-4
 - reassigning, *System Management*, 3-5
- Constant register
 - See C register
- CON symbolic argument, *MACRO-11*, 6-42

- Contact interrupt
 - digital input (UDDRV), *I/O Drivers*, 16-6
- Container file
 - RMSBCK utility, *RMS-11 Utilities*, 6-1, 6-3, 6-7
 - RMSDSP utility, *RMS-11 Utilities*, 5-1, 5-3, 5-4
 - detailed display, *RMS-11 Utilities*, 5-4
 - RMSRST utility, *RMS-11 Utilities*, 7-3, 7-9, 7-10
- CON task, *Writing I/O Driver*, 1-18, 5-2, 5-7, 5-8, 5-9
- overview, *Writing I/O Driver*, 1-18
- CONTENTS argument, *MACRO-11*, 8-11
- Context, *RMS-11 Introduction*, 4-5
 - RMS-11 User's Guide*, 1-9, 1-15
 - block, *RMS-11 Introduction*, 4-7
 - readable block, *RMS-11 Introduction*, 4-7
 - writable block, *RMS-11 Introduction*, 4-7
 - block stream, *RMS-11 Macro*, 4-12
- CONNECT operation, *RMS-11 User's Guide*, 3-7, 4-7, 7-2
- current record, *RMS-11 Introduction*, 4-5
 - RMS-11 User's Guide*, 1-9, 1-15
- DELETE operation, *RMS-11 User's Guide*, 4-7, 7-3
- DISCONNECT operation, *RMS-11 User's Guide*, 3-7, 4-8
- FIND operation, *RMS-11 User's Guide*, 3-8, 4-8, 7-3
- FLUSH operation, *RMS-11 User's Guide*, 3-9, 4-10, 7-5
- GET operation, *RMS-11 User's Guide*, 3-10, 4-11, 7-5
- next record, *RMS-11 Introduction*, 4-5
 - RMS-11 User's Guide*, 1-9, 1-15
- PUT operation, *RMS-11 User's Guide*, 3-11, 4-11, 7-6
- record stream, *RMS-11 Macro*, 4-3
- REWIND operation, *RMS-11 User's Guide*, 3-11, 4-12, 7-6
- TRUNCATE operation, *RMS-11 User's Guide*, 3-12
- UPDATE operation, *RMS-11 User's Guide*, 3-13, 4-12, 7-6
- Context block, *Executive*, 5-101, 5-190
- Contiguity, *RMS-11 User's Guide*, 1-19
 - See also FB\$CTG mask in FOP field
 - See also XB\$CTG mask in AOP field
 - indexed files, *RMS-11 User's Guide*, 6-13
 - relative files, *RMS-11 User's Guide*, 4-4
 - RMSCNV utility, *RMS-11 Utilities*, 4-2
 - RMSDEF utility, *RMS-11 Utilities*, A-15
 - RMSIFL utility, *RMS-11 Utilities*, 3-1, 3-6
 - sequential files, *RMS-11 User's Guide*, 3-4
 - virtual, *RMS-11 Introduction*, 2-3
- CONTIGUOUS attribute
 - RMSDES utility
 - area section, *RMS-11 Utilities*, 2-46
 - file section, *RMS-11 Utilities*, 2-35
- Contiguous KRB and SCB, *Writing I/O Driver*, 2-2, 4-53
- Continuation bucket, *RMS-11 User's Guide*, 5-5
- Continuation line, *MCR*, 1-2
 - CLI, System Management*, 11-8
- CONTINUE command, *Command Language*, 7-21 to 7-22, 9-7
 - Shadow Recording, System Management*, 18-8
- Contradictory Bit Mask
 - See CBM
- Control
 - character, *MCR*, 2-15 to 2-18
 - IOX command
 - category, *System Management*, 4-3
 - key, *MCR*, 2-15
- CONTROL_C command
 - CONTROL_C YES/NO command
 - IOX, System Management*, 4-32
- IOX
 - effect on CTRL/C, *System Management*, 4-32
- CONTROL_FIELD_SIZE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-37
- CONTROL_P
 - See CTRL/P
- Control and status register
 - See CSR

- Control block, *RMS-11 Introduction*, 4-7 *RMS-11 Macro*, 1-2 *RMS-11 User's Guide*, 1-14
 - chaining, *RMS-11 Macro*, 2-12
 - declaring, *RMS-11 Macro*, 2-8
 - examining, *RMS-11 Macro*, 2-15
 - field
 - See Field
 - initializing, *RMS-11 Macro*, 2-8
 - setting up, *RMS-11 Macro*, 2-10
 - summary, *RMS-11 Introduction*, 4-8
- Control character
 - half-duplex, *I/O Drivers*, 3-17, 3-21, 3-26
 - TTDRV
 - escape sequence, *I/O Drivers*, 2-74
- Control file
 - universal library, *Error Logging*, 5-1
- Control File Language compiler
 - See CFL
- Control file module, *Error Logging*, 1-3
 - architecture, *Error Logging*, 4-1, 4-2
 - compilation path, *Error Logging*, 4-11
 - CPU level module, *Error Logging*, 4-7
 - data subpacket, *Error Logging*, 4-3
 - definition, *Error Logging*, 4-1
 - device ID subpacket, *Error Logging*, 4-3
 - device operation subpacket, *Error Logging*, 4-3
 - DEVSM1, *Error Logging*, 4-7
 - DEVUDA, *Error Logging*, 4-7
 - Dispatch, *Error Logging*, 4-3
 - dispatching, *Error Logging*, 4-1
 - DMPALL, *Error Logging*, 4-8
 - E1134, *Error Logging*, 4-8
 - E1144, *Error Logging*, 4-8
 - E117X, *Error Logging*, 4-8
 - E11XX, *Error Logging*, 4-8
 - ERRORM, *Error Logging*, 4-7
 - EUNKWN, *Error Logging*, 4-8
 - FM1NM1, *Error Logging*, 4-6
 - FM1WM1, *Error Logging*, 4-6
 - FM2CM1, *Error Logging*, 4-6
 - FM3CM1, *Error Logging*, 4-6
 - FM4NM1, *Error Logging*, 4-6
 - FM4WM1, *Error Logging*, 4-6
 - FMTNP1, *Error Logging*, 4-7
 - format, *Error Logging*, 5-1
- Control file module (cont'd.)
 - header subpacket, *Error Logging*, 4-3
 - INITM1, *Error Logging*, 4-7
 - interaction of interface, *Error Logging*, 4-13
 - literal declaration, *Error Logging*, 4-12
 - naming conventions, *Error Logging*, 4-1
 - non-DIGITAL device module, *Error Logging*, 4-1
 - options, *Error Logging*, 4-12
 - PARS1M, *Error Logging*, 4-4
 - PARS2M, *Error Logging*, 4-4
 - PARS3M, *Error Logging*, 4-4
 - PARSEM, *Error Logging*, 4-4
 - program control flow, *Error Logging*, 4-10
 - PRS2AM, *Error Logging*, 4-4
 - PRS2BM, *Error Logging*, 4-4
 - recompilation, *Error Logging*, 4-13
 - SELTM1, *Error Logging*, 4-4
 - task subpacket, *Error Logging*, 4-3
- Control function mask, *Writing I/O Driver*, 4-19, 4-20
- Control key
 - See CTRL key
 - See also individual control (CTRL) keys
- Controller, *Writing I/O Driver*, 1-4
 - access, *Writing I/O Driver*, 1-10
 - delayed, *Writing I/O Driver*, 1-11
 - dual support, *Writing I/O Driver*, 1-11
 - access list, *Writing I/O Driver*, 2-2
 - access restriction (ICDRV/ISDRV), *I/O Drivers*, 19-32
 - allowing parallel operations, *Writing I/O Driver*, 2-2
 - assignment, *Writing I/O Driver*, 1-11
 - busy/not busy, *Writing I/O Driver*, 1-11, 1-12
 - configuration status for, *Writing I/O Driver*, 2-2
- DECTape
 - SYSGEN question, *System Generation*, 3-48
- DECTape II
 - SYSGEN question, *System Generation*, 3-50

Controller (cont'd.)

- defining type, *Writing I/O Driver*, 2-1
- definition (XEDRV), *I/O Drivers*, 13-23
- DEUNA
 - SYSGEN question, *System Generation*, 3-65
- group number, *Writing I/O Driver*, 1-7
- I/O count, *Writing I/O Driver*, 1-12, 1-13
- interrupts, *Writing I/O Driver*, 1-11
- interrupt vector, *Writing I/O Driver*, 1-7
- LA180
 - SYSGEN question, *System Generation*, 3-51
- 2-level controllers, *Writing I/O Driver*, 1-13
- location of a CSR for a, *Writing I/O Driver*, 2-2
- LP11
 - SYSGEN question, *System Generation*, 3-51
- LS11
 - SYSGEN question, *System Generation*, 3-51
- LV11
 - SYSGEN question, *System Generation*, 3-51
- maintaining hardware-specific information for, *Writing I/O Driver*, 2-2
- making accessible, *Writing I/O Driver*, 5-6
- MSCP-type
 - SYSGEN question, *System Generation*, 3-44
- name, *Writing I/O Driver*, 2-1
- number, *Writing I/O Driver*, 1-5
- placing on line, *Writing I/O Driver*, 5-7
- reassignment, *Writing I/O Driver*, 1-11
 - and load sharing, *Writing I/O Driver*, 1-11
- RH-type
 - SYSGEN question, *System Generation*, 3-34
- RK11
 - SYSGEN question, *System Generation*, 3-40
- RK611/711

Controller

- RK611/711 (cont'd.)
 - SYSGEN question, *System Generation*, 3-41
- RL11/RLV11
 - SYSGEN question, *System Generation*, 3-42
- RP11
 - SYSGEN question, *System Generation*, 3-43
- RX11
 - SYSGEN question, *System Generation*, 3-49
- RX211/RXV21
 - SYSGEN question, *System Generation*, 3-50
- status, *Writing I/O Driver*, 1-11
- subcontroller device, *Writing I/O Driver*, 1-13
 - block, *Writing I/O Driver*, 1-13
- supporting more than one device, *Writing I/O Driver*, 1-12
- TC11
 - SYSGEN question, *System Generation*, 3-48
- TM/TMA/TMB11
 - SYSGEN question, *System Generation*, 3-53
- TMSCP-type
 - SYSGEN question, *System Generation*, 3-46
- TU58
 - SYSGEN question, *System Generation*, 3-50
- universal digital, *I/O Drivers*, 16-1
- Controller failures, *System Management*, 15-32
- Controller mnemonic format, *System Generation*, 3-34
- Controller Request Block
 - See KRB
- Controller request queue, *Writing I/O Driver*, 1-11, 2-2
- Controller status change
 - entry point, *Writing I/O Driver*, 4-66, 4-67, 4-68
 - overview, *Writing I/O Driver*, 2-6
- Controller status extension 2, *Writing I/O Driver*, 4-42
- Controller status extension 3, *Writing I/O Driver*, 4-41
- Controller status word, *Writing I/O Driver*, 4-48

- Controller table
 - See CTB
- Controller Table Block, MCR, 3-132
- Controller table status byte, *Writing I/O Driver*, 4-58
- /CONTROL qualifier
 - SET TERMINAL command, *Command Language*, 3-40
- Control section
 - name, *Task Builder*, A-5
- CONTROL statement, *Error Logging*, 5-32
- Control task
 - tape, *I/O Operations*, G-11
- Control-Z mode, *Indirect*, 2-47
- Conversion
 - A/D control word
 - AFC11/AD01 converter, *I/O Drivers*, 15-3
 - UDDRV, *I/O Drivers*, 16-5
 - A/D input to floating point (K-series), *I/O Drivers*, 23-13
 - case (half-duplex), *I/O Drivers*, 3-15
 - software (ICDRV/ISDRV), *I/O Drivers*, 19-80
 - affected feature, *I/O Drivers*, 19-80
 - module support, *I/O Drivers*, 19-80
 - switch gain A/D
 - to floating-point (LSDRV), *I/O Drivers*, 17-15
 - UIC, ASCII/binary, *I/O Operations*, 4-7, 4-8
 - unsigned integer (K-series), *I/O Drivers*, 23-21
- Conversion routine, *Writing I/O Driver*, 1-15
- CONVERT command, *Command Language*, 4-55 to 4-61, 9-7
- Converter
 - A/D (UDDRV), *I/O Drivers*, 16-8
 - A/D terminal output (ICDRV/ISDRV), *I/O Drivers*, 19-32
 - ICS11 A/D (UDDRV), *I/O Drivers*, 16-8
- Convert UIC
 - binary to ASCII, *I/O Operations*, 4-8
- COP, *System Management*, 12-30
- °C operator, *MACRO-11*, 3-5, 6-35, 6-36
- /COPIES file qualifier
 - PRINT command, *Batch and Queue*, 2-6
 - SET QUEUE command, *Batch and Queue*, 2-21
- Copy
 - backup of generated system, *System Generation*, 4-3
 - distribution kit, *System Generation*, 2-6 to 2-26
 - for Update, *System Generation*, 2-29
 - on line, *System Generation*, 2-15 to 2-20
 - on VAX/VMS host with VAX-11 RSX, *System Generation*, 2-21 to 2-26
 - stand alone, *System Generation*, 2-7 to 2-15
 - magnetic tape kit
 - on line, *System Generation*, 2-16 to 2-18
 - stand alone, *System Generation*, 2-8 to 2-12
 - under VAX-11 RSX, *System Generation*, 2-22 to 2-24
 - pregenerated kit
 - RL02 kit to DU-type disk, *System Generation*, 5-2
 - RL02 kit to RL02 disk, *System Generation*, 5-2
 - RK07 disk kit
 - on line, *System Generation*, 2-18 to 2-20
 - stand alone, *System Generation*, 2-12 to 2-15
 - under VAX-11 RSX, *System Generation*, 2-24 to 2-26
- COPY command, *Command Language*, 4-47 to 4-51, 9-8 *Introduction*, 3-4 *System Management*, 9-7
 - DCL, *Program Development*, 4-3
- COPY command EDT editor, *Introduction*, 2-15
- COPY key, *Command Language*, 3-16
- /CO switch, *Task Builder*, 10-9
- CMP utility, *Utilities*, 12-2
- file
 - PRI command, *Batch and Queue*, 2-6
 - QUE /MOD command, *Batch and Queue*, 2-21
- FLX utility, *Utilities*, 4-6

- /CO switch (cont'd.)
 - job
 - PRI command, *Batch and Queue*, 2-4
 - QUE /MOD command, *Batch and Queue*, 2-20
 - LBR utility, *Utilities*, 10-10
 - PIP utility, *Utilities*, 3-11
 - COT..., *System Management*, 3-1
 - \$COTB (Octal to binary), *System Library*, 4-5
 - Cotree, *Task Builder*, 3-31, 3-33
 - and main tree
 - virtual address space, *Task Builder*, 3-40
 - global symbol resolution, *Task Builder*, 3-17
 - null root, *Task Builder*, 3-31
 - ODL statement
 - from allocation diagram, *Task Builder*, 3-40
 - overlay, *Task Builder*, 3-34, 3-35
 - segment
 - affecting symbol search, *Task Builder*, 10-19, 11-33
 - loading, *Task Builder*, 4-3
 - summary, *Task Builder*, 3-51
 - virtual address space, *Task Builder*, 3-32
- Counter
 - disconnect interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-22
 - location
 - definition, *Task Builder*, A-17
 - modification, *Task Builder*, A-18
 - routine (ICDRV/ISDRV), *I/O Drivers*, 19-58
- COUNTER argument, *MACRO-11*, 8-11
- Counter module, W734 (UDDRV), *I/O Drivers*, 16-7
- /CPB switch, *CDA*, 2-4, 2-6
- CPCR\$ directive, *Executive*, 5-41
- /CP switch, *Task Builder*, 10-10
- CPU (Central Processing Unit), *Introduction*, 6-5, 6-6
- CPU affinity
 - removing, *Executive*, 5-162
 - setting, *Executive*, 5-233
- /CPU keyword
 - OPENREGISTER command, *MCR*, 3-165
- CPU-level
 - dispatching module, *Error Logging*, 4-11
- Cpu parameter (UNIBUS switch driver)
 - device-specific, *I/O Drivers*, 24-4
 - IO.CON function, *I/O Drivers*, 24-5
- CR11, *I/O Drivers*, 11-1
- Crash, *Command Language*, 9-2 to 9-3
 - Introduction*, 1-17
 - cause
 - determining, *CDA*, 4-1
 - HALT instruction, *CDA*, 1-2
 - infinite loop, *CDA*, 1-2
 - processor trap, *CDA*, 1-2
 - restart procedure, *CDA*, 1-3
 - dump
 - obtaining, *CDA*, 1-2
- /CRASHDEV keyword
 - SET command (MCR), *MCR*, 3-209
- Crash dump analysis, *Writing I/O Driver*, 6-1
 - See also *CDA*
- Crash Dump Analyzer
 - See *CDA*
- Crash dump binary file, *CDA*, 1-3, 1-6, 2-2
- Crash dump device, *CDA*, 1-1, 1-3
 - and drivers, *CDA*, 1-4
 - changing, *CDA*, 1-4
 - displaying, *CDA*, 1-5
 - on pregenerated kit, *System Generation*, 5-46
 - restrictions, *CDA*, 1-2
 - specifying, *CDA*, 1-4, 1-5, 2-2
 - SYSGEN question, *System Generation*, 3-32
 - valid for Micro/RXS system, *CDA*, 1-2
 - valid for pregenerated RSX-11M-PLUS system, *CDA*, 1-2
 - valid for RSX-11M/M-PLUS system, *CDA*, 1-2
- Crash dump driver
 - and devices, *CDA*, 1-4
 - loadable, *CDA*, 1-1, 1-3 to 1-7
 - loading, *CDA*, 1-4
 - unloading, *CDA*, 1-5
- Crash dump listing
 - See also *Analysis listings*
 - interpreting, *CDA*, 4-1 to 4-3
 - mapping data, *CDA*, 4-1
 - stack depth, *CDA*, 4-2

- Crash dump routine
 - See Executive crash dump routine
- Crash notification device, CDA, 1-1, 1-2, 1-3
- Crash Recovery Transaction Block, *System Management*, 17-25
- CRASH statement, *Error Logging*, 5-41
- \$CRAVL, CDA, 3-15, 3-45
- CRAW\$ directive, *Executive*, 5-44
- CRE argument to ORG\$ macro, *RMS-11 Macro*, 2-3
- Create access
 - volume, MCR, 3-96, 3-106, 3-151
- Create Address Window directive, *Executive*, 5-43
- CREATE command, *Command Language*, 4-15 to 4-16, 9-9
 - Introduction*, 2-1, 3-4
- CREATE/DIRECTORY, *Command Language*, 4-17 to 4-19, 9-9
- RMSDES utility, *RMS-11 Utilities*, 2-7, 2-18, 2-28, 2-31
 - and INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - and LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - defining areas by default, *RMS-11 Utilities*, 2-44
 - defining areas explicitly, *RMS-11 Utilities*, 2-43
 - key numbering, *RMS-11 Utilities*, 2-38
 - setting attributes, *RMS-11 Utilities*, 2-21
 - with GET, *RMS-11 Utilities*, 2-10, 2-25
- /CREATED qualifier
 - BRU utility, *Utilities*, 7-14
- Create Group Global Event Flags
 - directive, *Executive*, 5-48
- Create Logical Name directive, *Executive*, 5-32
- \$CREATE macro, *RMS-11 Macro*, 5-9
- CREATE operation, *RMS-11 Introduction*, 4-2 *RMS-11 Macro*, 3-7 *RMS-11 User's Guide*, 1-18
 - and shared access, *RMS-11 User's Guide*, 2-6
- BDB requirement, *RMS-11 Macro*, 2-8
- \$CREATE macro, *RMS-11 Macro*, 5-9
- CREATE operation (cont'd.)
 - declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
 - I/O buffer requirement, *RMS-11 Macro*, 2-7
 - IFAB requirement, *RMS-11 Macro*, 2-5
 - remote access, *RMS-11 User's Guide*, B-2, B-3
 - wildcard loop, *RMS-11 Macro*, 3-10
- Create option
 - ACNT, *System Management*, 2-3
- Create Region directive, *Executive*, 5-50
- Create Virtual Terminal directive, *Executive*, 5-54
- Creating
 - macro library, *Program Development*, 6-1, 6-2, 6-3
 - object library, *Program Development*, 6-4 to 6-6
 - object module
 - FORTRAN IV, *Program Development*, 7-5
 - MACRO-11, *Program Development*, 3-4 to 3-6
 - source file
 - FORTRAN IV, *Program Development*, 7-2, 7-3
 - MACRO-11, *Program Development*, 2-12
 - skeleton, *Program Development*, 2-12
 - task image, *Program Development*, 1-6, 4-1, 4-2, 7-5, 7-6
- Creating files
 - See also Data file (RMSDES)
 - RMSDEF utility, *RMS-11 Utilities*, A-19
- Creation date
 - See CDT field in DAT block
 - RMSBCK utility, *RMS-11 Utilities*, 6-8
- CREF processor, *MACRO-11*, 8-16
- C register, *Debugging*, 2-6, 5-3, 9-10
 - indicator, *Debugging*, 2-8, 7-3, 9-12
- /CRE keyword
 - FLA command, MCR, 3-77
- CRF symbolic argument, *MACRO-11*, 6-19
- CRF utility, *Program Development*, 1-8
 - assembly cross-reference, *Program Development*, 3-7, 3-8
 - data processing, *Utilities*, B-1

- CRF utility (cont'd.)
 - error message, *Utilities*, B-5
 - global cross-reference, *Program Development*, 4-5, 4-6
 - MACRO-11/Task Builder, *Utilities*, B-1
 - SEND packet, *Utilities*, B-4
 - switch, *Utilities*, B-1
 - symbol table file, *Utilities*, B-3
 - task, MACRO-11, 8-16
- CRGF\$ directive, *Executive*, 5-48
- Cross-reference
 - global
 - of overlaid task, *Task Builder*, 4-12, 4-13
 - listing
 - specifying, *Task Builder*, 10-11
- /CROSS_REFERENCE qualifier, MACRO-11, 8-8 *Task Builder*, 11-22
- .CROSS directive, MACRO-11, 6-21, 6-22
- Cross-reference
 - directive, MACRO-11, 6-21, 6-22
 - listing, MACRO-11, 3-12
 - assembly, *Program Development*, 3-7, 3-8
 - asterisk in, MACRO-11, 8-17
 - controlling output in, MACRO-11, 6-19
 - equal sign in, MACRO-11, 8-17
 - generating, MACRO-11, 8-16, 8-17
 - global, *Program Development*, 4-5, 4-6
 - number sign in, MACRO-11, 8-17
 - specifying, *Task Builder*, 11-22
- Cross-Reference Processor
 - See CRF utility
- \$CRPKT, *Error Logging*, 4-23
- CRRG\$ directive, *Executive*, 5-50
- /CR switch, MACRO-11, 8-7 *Task Builder*, 10-11, 10-12, 10-13
 - CRF utility, *Utilities*, B-1
 - LBR utility, *Utilities*, 10-12
- /CRT keyword
 - SET command (MCR), *MCR*, 3-210
 - SET command (VMR), *System Management*, 10-57
- CRT rubout (TTDRV), *I/O Drivers*, 2-18
- CRVT\$ directive, *Executive*, 5-58
- .CSECT directive, MACRO-11, 3-11, 6-46
- CSI, *I/O Operations*, 6-1
 - control block bit values
 - definition, *I/O Operations*, 6-14
 - control block offsets
 - definition, *I/O Operations*, 6-14
 - expand file specification, *I/O Operations*, 6-19
 - initialize control block, *I/O Operations*, 6-19
 - parse file specification, *I/O Operations*, 6-19
 - routine, *I/O Operations*, 6-14
 - run-time macros, *I/O Operations*, 6-19
- CSI\$1 macro, command syntax analyzer, *I/O Operations*, 6-19
- CSI\$2 macro
 - command semantic parser, *I/O Operations*, 6-20
 - initialize control block, *I/O Operations*, 6-19
 - parse file specification, *I/O Operations*, 6-19
- CSI\$4 macro
 - command semantic parser, *I/O Operations*, 6-22
 - expand file specification, *I/O Operations*, 6-19
- CSI\$ macro, *I/O Operations*, 6-14, 6-15
- CSI\$ND macro, *I/O Operations*, 6-24
 - define end of descriptor table, *I/O Operations*, 6-31
- CSI\$SV macro, *I/O Operations*, 6-23
 - create switch value descriptor table entry, *I/O Operations*, 6-28
- CSI\$SW macro, *I/O Operations*, 6-23
 - create switch descriptor table entry, *I/O Operations*, 6-24
- CSI macro, switch definition, *I/O Operations*, 6-23
- CSM library
 - dispatching, *Task Builder*, 8-19
 - linking task
 - example, *Task Builder*, 8-14, 8-15, 8-16
 - supervisor mode, *Task Builder*, 8-7
 - building, *Task Builder*, 8-7, 8-8
 - .STB file, *Task Builder*, 8-9
- Csm parameter (ICDRV/ISDRV), *I/O Drivers*, 19-10

- Csm parameter (ICDRV/ISDRV)
 - (cont'd.)
 - IO.LDI function, *I/O Drivers*, 19-25
- CSM routine, *Task Builder*, 8-12
- CSR, *Writing I/O Driver*, 1-1
 - accessing, *Writing I/O Driver*, 1-1
 - address
 - boot device, MCR, 3-190
 - BRUSYS default, *System Generation*, 2-8
 - determining, *System Generation*, 3-34
 - floating
 - assignment algorithm, *System Generation*, E-2
 - saving, MCR, 3-190
 - address space, *Writing I/O Driver*, 1-1
 - assignment
 - error, *Writing I/O Driver*, 5-8
 - setting, *Writing I/O Driver*, 5-6
 - definition, *System Generation*, 1-8
 - determining, *System Generation*, 2-1
- CSR definition (XEDRV), *I/O Drivers*, 13-23
- /CSR keyword
 - SAVE command (MCR), MCR, 3-190
- CSRQ\$ directive, *Executive*, 5-60
- /CSR switch
 - BAD utility, *Utilities*, 6-8
 - DSC utility, *Utilities*, 8-21
- /CS switch
 - PAT utility, *Utilities*, 14-6
 - SLP utility, *Utilities*, 13-15
- /CTB
 - use in LOAD, *Writing I/O Driver*, 5-14
- CTB, *Writing I/O Driver*, 1-4
 - See also Controller Table Block
 - composite arrangement, *Writing I/O Driver*, 2-15
 - definition, *Writing I/O Driver*, 1-4
 - details, *Writing I/O Driver*, 4-53, 4-55 to 4-59
 - format, *Writing I/O Driver*, 4-55 to 4-59
 - layout, *Writing I/O Driver*, 4-55
 - overview, *Writing I/O Driver*, 2-1
 - requirement, *Writing I/O Driver*, B-3
 - system list, *Writing I/O Driver*, 2-1
 - use in handling interrupts, *Writing I/O Driver*, 2-1

- CTB (cont'd.)
 - use in LOAD, *Writing I/O Driver*, 5-15
 - validation during LOAD, *Writing I/O Driver*, 5-12
- CTBDF\$, CDA, C-14 *Writing I/O Driver*, A-12
- /CTB keyword
 - LOAD command (MCR), MCR, 3-132
 - LOAD command (VMR), *System Management*, 10-33
- CTDI: routine
 - connect buffer to receive interrupt data (ICDRV/ISDRV), *I/O Drivers*, 19-51
- CTDI: subroutine
 - connect contact interrupt (UDDRV), *I/O Drivers*, 16-20
- CTDRV, *I/O Drivers*, 9-1
 - error recovery, *I/O Drivers*, 9-6
 - programming hint, *I/O Drivers*, 9-7
 - tape structure, *I/O Drivers*, 9-6
- %CTL, *Error Logging*, 5-21
- \$CTLST symbol, *Writing I/O Driver*, 2-1, 2-15
- /CTL switch, CDA, 2-5, 2-6
- CTRL/C, *Command Language*, 3-20, 7-18 to 7-20 *Introduction*, 1-3
 - fig. MCR, 1-3, 2-17 *Program Development*, 1-2
 - half-duplex, *I/O Drivers*, 3-21
 - ignored, *I/O Drivers*, 3-15
 - MCR, *I/O Drivers*, 3-9
 - read all, *I/O Drivers*, 3-14
 - invoking CLI prompt, MCR, 3-49
 - ODT, *Debugging*, 1-5
- CTRL/C abort
 - SYSGEN question, *System Generation*, 3-28
- CTRL/C character
 - TTDRV, *I/O Drivers*, 2-68
 - abort, *I/O Drivers*, 2-68
 - abort task, *I/O Drivers*, 2-16
 - directed to task, *I/O Drivers*, 2-68
 - excluding, *I/O Drivers*, 2-16
 - hold screen mode, *I/O Drivers*, 2-68
 - pass to task, *I/O Drivers*, 2-13
 - terminate read, *I/O Drivers*, 2-68
 - TF.RPT, *I/O Drivers*, 2-14
 - TF.RST, *I/O Drivers*, 2-14

- CTRL/C character
 - TTDRV (cont'd.)
 - unsolicited input, *I/O Drivers*, 2-13
- CTRL/G, *Command Language*, 3-24
- CTRL/I, *Command Language*, 3-24
 - MCR, 2-17
 - half-duplex, *I/O Drivers*, 3-21
- CTRL/I character
 - TTDRV, *I/O Drivers*, 2-69
- CTRL/J, *Debugging*, 4-3
 - half-duplex, *I/O Drivers*, 3-21
- CTRL/J character
 - TTDRV, *I/O Drivers*, 2-69
- CTRL/K, *Command Language*, 3-24
 - MCR, 2-17
 - half-duplex, *I/O Drivers*, 3-21
- CTRL/K character
 - TTDRV, *I/O Drivers*, 2-69
- CTRL/L, *Command Language*, 3-23
 - MCR, 2-17
 - half-duplex, *I/O Drivers*, 3-21
- CTRL/L character
 - TTDRV, *I/O Drivers*, 2-69
- CTRL/M, *Command Language*, 3-24
 - half-duplex, *I/O Drivers*, 3-21
- CTRL/M character
 - TTDRV, *I/O Drivers*, 2-69
- CTRL/O, *Command Language*, 3-21
 - Introduction*, 1-14 MCR, 2-17
 - Program Development*, 3-7
 - half-duplex, *I/O Drivers*, 3-22
 - AST, *I/O Drivers*, 3-9
 - cancel, *I/O Drivers*, 3-14, 3-16
 - read all, *I/O Drivers*, 3-14
 - unattached terminal, *I/O Drivers*, 3-22
- XDT, *Debugging*, 9-13
- CTRL/O character
 - TTDRV, *I/O Drivers*, 2-69
 - cancel, *I/O Drivers*, 2-12, 2-16, 2-17, 2-23, 2-26, 2-48, 2-50
 - cancel on write breakthrough, *I/O Drivers*, 2-24
 - cancel prior to TF.RPR, *I/O Drivers*, 2-27
 - IO.RPR, *I/O Drivers*, 2-40
 - pass to task, *I/O Drivers*, 2-13
 - prompt, *I/O Drivers*, 2-14
 - state, *I/O Drivers*, 2-57
 - TF.RPR, *I/O Drivers*, 2-14
 - TF.RPT, *I/O Drivers*, 2-14
 - TF.RST, *I/O Drivers*, 2-14
- CTRL/P, *System Management*, 9-3, 9-7

- CTRL/Q, *Command Language*, 3-21
 - MCR, 2-18 *Program Development*, 3-7
 - half-duplex, *I/O Drivers*, 3-22
 - AST, *I/O Drivers*, 3-9
 - read all, *I/O Drivers*, 3-14
- CTRL/Q character
 - TTDRV
 - pass to task, *I/O Drivers*, 2-13
 - resume output, *I/O Drivers*, 2-70
 - state, *I/O Drivers*, 2-57
 - TF.RPT, *I/O Drivers*, 2-14
 - TF.RST, *I/O Drivers*, 2-14
- CTRL/R, *Command Language*, 3-23
 - Introduction*, 1-8 MCR, 2-18
 - half-duplex, *I/O Drivers*, 3-22
 - IO.RNE function, *I/O Drivers*, 3-14
- CTRL/R character
 - TTDRV, *I/O Drivers*, 2-70
 - automatic redisplay, *I/O Drivers*, 2-16
 - carriage return, *I/O Drivers*, 2-70
 - input redisplay, *I/O Drivers*, 2-17
 - line feed, *I/O Drivers*, 2-70
 - prompt, *I/O Drivers*, 2-14
 - read no echo, *I/O Drivers*, 2-13
 - read no filter, *I/O Drivers*, 2-14
 - redisplay
 - write breakthrough, *I/O Drivers*, 2-24
 - retype, *I/O Drivers*, 2-17
 - TF.RPR, *I/O Drivers*, 2-14, 2-28
 - TF.RST, *I/O Drivers*, 2-14
 - CTRL/S, *Command Language*, 3-21
 - MCR, 2-18 *Program Development*, 3-7
 - half-duplex, *I/O Drivers*, 3-22
 - AST, *I/O Drivers*, 3-9
 - cancel, *I/O Drivers*, 3-16
 - CTRL/C restart output, *I/O Drivers*, 3-21
 - read all, *I/O Drivers*, 3-14
 - CTRL/S character
 - TTDRV, *I/O Drivers*, 2-70
 - break-through write, *I/O Drivers*, 2-17
 - pass to task, *I/O Drivers*, 2-13
 - state, *I/O Drivers*, 2-57

- CTRL/S character
 - TTDRV (cont'd.)
 - suspend output, *I/O Drivers*, 2-70
 - TF.RPT (TTDRV), *I/O Drivers*, 2-14
 - TF.RST, *I/O Drivers*, 2-14
- CTRL/U, *Command Language*, 3-22
 - Introduction*, 1-8 MCR, 2-18
 - Program Development*, 5-3
 - half-duplex, *I/O Drivers*, 3-22
 - ODT, *Debugging*, 2-8
- CTRL/U character
 - TTDRV, *I/O Drivers*, 2-70
 - delete start of line, *I/O Drivers*, 2-70
 - prompt, *I/O Drivers*, 2-14
 - read no filter, *I/O Drivers*, 2-14
 - TF.RPR, *I/O Drivers*, 2-14, 2-28
 - TF.RST, *I/O Drivers*, 2-14
- CTRL/X, *Command Language*, 3-23
 - MCR, 2-18
- CTRL/X character
 - TTDRV, *I/O Drivers*, 2-70, 2-73
 - clear typeahead, *I/O Drivers*, 2-70
- CTRL/Z, *Command Language*, 3-22
 - Introduction*, 1-8, 1-9 MCR, 2-18
 - effect on Task Builder, *Task Builder*, 12-5
 - half-duplex, *I/O Drivers*, 3-22
 - read all, *I/O Drivers*, 3-14
 - RMSBCK utility, *RMS-11 Utilities*, 6-2
 - RMSCNV utility, *RMS-11 Utilities*, 4-4
 - file terminator, *RMS-11 Utilities*, 4-8
 - RMSDEF utility, *RMS-11 Utilities*, A-5
 - RMSDES utility, *RMS-11 Utilities*, 2-2, 2-9, 2-18
 - RMSDSP utility, *RMS-11 Utilities*, 5-2
 - RMSIFL utility, *RMS-11 Utilities*, 3-2
 - RMSRST utility, *RMS-11 Utilities*, 7-2
- CTRL/Z character
 - TTDRV, *I/O Drivers*, 2-70, 2-73
 - exit task, *I/O Drivers*, 2-70
 - pass to task, *I/O Drivers*, 2-13
 - TF.RPT, *I/O Drivers*, 2-14
- CTRL character
 - allowed
 - escape sequence (half-duplex), *I/O Drivers*, 3-26
 - half-duplex, *I/O Drivers*, 3-17
 - CTRL key, *Command Language*, 3-20
 - See also individual CTRL keys
 - .CTRL routine, control device, *I/O Operations*, 4-31
 - .CTRL routine, tape, *I/O Operations*, 5-7
 - CTTI:, connect buffer
 - receive counter data (ICDRV/ISDRV), *I/O Drivers*, 19-56
 - CTTI: subroutine
 - connect timer interrupt (UDDRV), *I/O Drivers*, 16-21
 - CTTY:, connect buffer
 - terminal interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-60
 - CTX field in FAB, *RMS-11 Macro*, 2-18
 - offset, *RMS-11 Macro*, 6-22
 - summary, *RMS-11 Macro*, 6-32
 - CTX field in RAB, *RMS-11 Macro*, 2-18
 - offset, *RMS-11 Macro*, 6-115
 - summary, *RMS-11 Macro*, 6-119
 - Current location counter, *MACRO-11*, 2-2, 3-12, 3-13, 3-15, 3-17, 6-11, 6-37, 6-43
 - example usage, *MACRO-11*, 3-14
 - indicator for, *MACRO-11*, 3-2
 - Current location indicator (.), *Debugging*, 7-3, 9-8
 - Current-record context, *RMS-11 Macro*, 4-3
 - See also Context
 - Current task priority
 - pointer to, *CDA*, 3-20
 - Cursor, *Introduction*, 1-3 fig.
 - Cursor control
 - direct (half-duplex), *I/O Drivers*, 3-34
 - terminal-independent (TTDRV), *I/O Drivers*, 2-18, 2-80
 - Cursor position (TTDRV)
 - restore, *I/O Drivers*, 2-13, 2-27, 2-46, 2-48
 - save, *I/O Drivers*, 2-13, 2-27, 2-46, 2-48
 - CUT key (EDT), *Introduction*, 2-8

CVADF: subroutine
 convert A/D input to floating point
 K-series, *I/O Drivers*, 23-13
 LADRV, *I/O Drivers*, 22-9
 \$CVLBN routine, *Writing I/O Driver*,
 7-14
 \$CVLOK (Page lock), *System Library*,
 8-22
 \$CVRL (Virtual to real address), *System
 Library*, 8-24
 CVSWG: subroutine
 convert switch gain A/D (LSDRV),
 I/O Drivers, 17-15
 \$CVTUC (Uppercase text), *System
 Library*, 6-1
 Cylinder, *RMS-11 Introduction*, 2-1
 See also Placement control
 Cylinder number, *Writing I/O Driver*,
 1-15
 Cylinder Scan
 definition, *Writing I/O Driver*, 1-15

D

D.xpax offsets
 in DCB, *Writing I/O Driver*, 4-16 to
 4-18
 D\$CUIC, *Indirect*, 2-5
 DA11-B parallel interface (commu-
 nication driver), *I/O Drivers*,
 12-2
 DAN field in KEY block
 CREATE operation, *RMS-11 Macro*,
 5-19
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 offset, *RMS-11 Macro*, 6-67
 OPEN operation, *RMS-11 Macro*,
 5-80
 summary, *RMS-11 Macro*, 6-71
 DAP (data access protocol)
 See DECnet
 DAPRES
 remote access code, *RMS-11 User's
 Guide*, B-1
 /DA switch, *Error Logging*, 3-5, 3-8
 Task Builder, 10-14
 DASWP: subroutine
 initiate synchronous D/A sweep
 K-series, *I/O Drivers*, 23-14
 LADRV, *I/O Drivers*, 22-9
 \$DAT (Date conversion), *System
 Library*, 6-2

Data
 adjacency in memory, *Task Builder*,
 2-27
 segment
 autoloadable, *Task Builder*, 4-7
 sending to task, *Executive*, 5-192,
 5-265
 structure
 building, *Task Builder*, 2-1
 overlay, *Task Builder*, 3-18
 transfer
 checking, *MCR*, 3-265
 DATA_AREA attribute
 RMSDES utility, *RMS-11 Utilities*,
 2-40
 DATA_FILL attribute
 RMSDES utility, *RMS-11 Utilities*,
 2-40
 Data access protocol (DAP)
 See DECnet
 Data area number
 See DAN field in KEY block
 Data base, *Writing I/O Driver*, 1-18
 assembling
 during system generation,
 Writing I/O Driver, 5-3
 code
 bit symbols, *Writing I/O Driver*,
 4-30, 4-31
 converting RSX-11M to RSX-11M-
 PLUS, *Writing I/O Driver*,
 B-1, B-2
 defining CTB, *Writing I/O
 Driver*, B-3
 SCB requirements, *Writing I/O
 Driver*, B-2
 creating source code, *Writing I/O
 Driver*, 4-2
 defining link word for, *Writing I/O
 Driver*, 4-3
 details of structures, *Writing I/O
 Driver*, 4-31 to 4-37, 4-39,
 4-49 to 4-53
 driver
 sample code, *Writing I/O
 Driver*, 8-1, 8-2, 8-3
 structures, *Writing I/O Driver*,
 2-1, 2-3
 global label, *Writing I/O Driver*,
 4-2
 \$USRTB, *Writing I/O Driver*,
 4-3

- Data base
 - global label (cont'd.)
 - \$xxDCB, *Writing I/O Driver*, 4-3
 - labeling of data structures, *Writing I/O Driver*, 4-2
 - loadable, *Writing I/O Driver*, 1-19, 4-3
 - incorporating, *Writing I/O Driver*, 5-1
 - module
 - inserting into library, *Writing I/O Driver*, 5-4
 - overlay, *Task Builder*, B-15
 - I- and D-space task, *Task Builder*, B-16
 - overview of structures, *Writing I/O Driver*, 2-2, 2-3
 - owning CTB, *Writing I/O Driver*, 2-1
 - programming
 - requirements, *Writing I/O Driver*, 4-2 to 4-3
 - resident, *Writing I/O Driver*, 1-19, 4-3
 - incorporating, *Writing I/O Driver*, 5-1
 - linking to CTB, *Writing I/O Driver*, 4-3
 - structures
 - augmented, *Writing I/O Driver*, 1-13
 - composite arrangement, *Writing I/O Driver*, 2-11
 - conventional, *Writing I/O Driver*, 1-13
 - ordering of, *Writing I/O Driver*, 4-2
 - typical arrangements, *Writing I/O Driver*, 2-6, 2-7, 2-8
 - validation during LOAD, *Writing I/O Driver*, 5-12
- Data block
 - dequeueing, *Executive*, 5-149, 5-151, 5-153, 5-257, 5-259, 5-261
 - local, *Program Development*, 2-8
 - queueing, *Executive*, 5-187, 5-263
- Data caching, MCR, 3-146 to 3-147, 3-207 to 3-209
 - options, MCR, 3-146, 3-207
 - region, MCR, 3-146, 3-207
 - specifying partition, MCR, 3-146, 3-207
- .DATA directive, *Indirect*, 2-43
- Data file
 - RMSDES utility, *RMS-11 Utilities*, 2-3, 2-17, 2-24
 - creating, *RMS-11 Utilities*, 2-3, 2-7, 2-28
 - GET command, *RMS-11 Utilities*, 2-10
- Data format
 - ANSI tape, *I/O Operations*, 1-7
 - file device, *I/O Operations*, 1-6
 - input
 - Task Builder, *Task Builder*, A-1 to A-32
- Data integrity checking
 - RMSBCK utility, *RMS-11 Utilities*, 6-6, 6-7, 6-9
 - RMSRST utility, *RMS-11 Utilities*, 7-6, 7-8, 7-11
- Data mode, *Indirect*, 2-47
- Data packet
 - sending, *Executive*, 5-202
- Data parameter
 - immediate device-specific function (LSDRV), *I/O Drivers*, 17-3
- Data record, *RMS-11 Introduction*, 3-7
 - RMS-11 User's Guide*, 5-2
- Dataset descriptor, *I/O Operations*, 2-28
 - address, initialization, *I/O Operations*, 2-14
 - as data structure, *I/O Operations*, 1-4
 - definition, *I/O Operations*, 1-3
 - general description, *I/O Operations*, 1-5
 - OFNB\$x macro, *I/O Operations*, 3-17
- pointer
 - definition, *I/O Operations*, 1-3
 - file-open, *I/O Operations*, 2-14
 - initialization, *I/O Operations*, 2-14
 - specifying, *I/O Operations*, 2-28
- Data sharing, *MACRO-11*, 6-45
- Data space, *Debugging*, 7-2, 9-3
 - Executive*, 3-1
 - command, *Debugging*, 2-8, 9-12
 - enabling, *Debugging*, 1-3
 - mapping, *Executive*, 3-3
 - moving data, *Executive*, 5-133
- Data storage, *RMS-11 Introduction*, 2-1
 - and file organization, *RMS-11 User's Guide*, 2-5

- Data storage (cont'd.)
 - control in assembly language, *Program Development*, 1-4, 1-5
 - directive, *Program Development*, 1-4, 1-5
 - MACRO-11 definition, *Program Development*, 2-8
 - program section, *Program Development*, 2-8
- Data storage directive, *MACRO-11*, 6-23 to 6-39
- Data structure, *Writing I/O Driver*, 1-13
 - definitions, *Writing I/O Driver*, A-1 to A-71
 - memory management directive, *Executive*, 3-11
- Data terminal emulation
 - See DTE
- Data Terminal Emulator
 - See DTE
- Data transfer, *Writing I/O Driver*, 1-14
 - BRU utility, *Utilities*, 7-26
 - DSC utility, *Utilities*, 8-24
 - FLX utility, *Utilities*, 4-1
- Data type
 - keys, *RMS-11 User's Guide*, 6-3
 - and segmenting, *RMS-11 User's Guide*, 6-7
 - 2-byte-signed integer, *RMS-11 User's Guide*, 6-3
 - 4-byte signed integer, *RMS-11 User's Guide*, 6-4
 - 2-byte unsigned binary, *RMS-11 User's Guide*, 6-5
 - 4-byte unsigned binary, *RMS-11 User's Guide*, 6-5
 - packed decimal, *RMS-11 User's Guide*, 6-6
 - string, *RMS-11 User's Guide*, 6-3
 - key values, *RMS-11 Introduction*, 3-7
- DAT block, *RMS-11 Introduction*, 4-8
 - chaining to FAB, *RMS-11 Macro*, 2-12, 2-13
 - declaring, *RMS-11 Macro*, 2-8
 - initializing, *RMS-11 Macro*, 2-9
 - summary, *RMS-11 Macro*, 6-14
- Date, *Command Language*, 1-13
 - See also DAT block
 - displaying, *System Management*, 10-90
- Date (cont'd.)
 - setting, *System Management*, 10-90
- XAB
 - See DAT block
- Date conversion
 - date (\$DAT), *System Library*, 6-2
- Date-related qualifier (DCL), *Command Language*, 4-9
- Date switch, *Error Logging*, 3-5, 3-8
- DATE symbol, *Indirect*, 2-18
- DBS field in KEY block
 - DISPLAY operation, *RMS-11 Macro*, 5-31
 - offset, *RMS-11 Macro*, 6-68
 - OPEN operation, *RMS-11 Macro*, 5-80
 - summary, *RMS-11 Macro*, 6-72
- /DB switch
 - SLP utility, *Utilities*, 13-15
- \$\$DBTS program section
 - reserved name, *Task Builder*, E-2
- DB-type disk
 - SYSGEN question, *System Generation*, 3-36
- DCB
 - ASCII device name, *Writing I/O Driver*, 4-17
 - composite arrangement, *Writing I/O Driver*, 2-11
 - creating mask words in, *Writing I/O Driver*, 4-21
 - definition, *Writing I/O Driver*, 1-4
 - details, *Writing I/O Driver*, 4-16, 4-17, 4-18
 - driver dispatch table pointer, *Writing I/O Driver*, 4-18
 - driver-specific function masks, *Writing I/O Driver*, 4-18 to 4-26
 - establishing characteristics for, *Writing I/O Driver*, 2-7
 - establishing I/O function masks, *Writing I/O Driver*, 4-22
 - fields, *Writing I/O Driver*, 4-16, 4-17, 4-18
 - format, *Writing I/O Driver*, 4-16, 4-17, 4-18
 - labeling, *Writing I/O Driver*, 4-3
 - length of UCB, *Writing I/O Driver*, 4-18
 - linking to next DCB, *Writing I/O Driver*, 4-16
 - list of, *Writing I/O Driver*, 2-3

DCB (cont'd.)

- means to access Driver Dispatch Table, *Writing I/O Driver*, 2-2
- number of units stored, *Writing I/O Driver*, 4-3
- overview, *Writing I/O Driver*, 2-2, 2-3
- pointer to first UCB, *Writing I/O Driver*, 4-17
- unit number range, *Writing I/O Driver*, 4-18
- validation during LOAD, *Writing I/O Driver*, 5-13

DCBDFS, CDA, B-6, C-15 *Writing I/O Driver*, A-13

/DCB switch, CDA, 2-5, 2-6

DCL, *Command Language*, 1-1, 9-1
Introduction, 1-1, 1-10, 3-1, 5-1
MCR, 3-56 *Program Development*, 1-1 to 1-3
RMS-11 *User's Guide*, B-2
System Management, 11-2, 11-5, 11-8

See also DIGITAL COMMAND LANGUAGE command

building, *System Management*, 12-1
command, *Command Language*, 1-12

interpretation, *System Management*, 12-5

mapping to MCR, *System Management*, 12-21

command line, *Command Language*, 1-7 to 1-8

conventional installation, *System Management*, 12-2

correcting errors, *Command Language*, 1-20 to 1-21

definition, *Batch and Queue*, 4-2

deleting files, *System Management*, 9-7

device and volume control commands, *Command Language*, 1-5

file control commands, *Command Language*, 1-4

functional grouping, *Command Language*, 1-2

IFORM, *System Management*, 12-24

installation, *System Management*, 12-1

alternatives, *System Management*, 12-2

catchall task, *System Management*, 12-3

DCL

installation (cont'd.)

MCR task, *System Management*, 12-3

intermediate form

See IFORM

MCR fallthrough, *System Management*, 12-4

parser process, *System Management*, 12-5

parser table example, *System Management*, 12-21

program development commands, *Command Language*, 1-6

RSX-11M-PLUS and VAX/VMS, *Command Language*, 1-23

SET and SHOW commands, *Command Language*, 1-3

SET commands, *System Management*, 12-3

SYSGEN question, *System Generation*, 3-28

system control commands, *Command Language*, 1-7

task, *System Management*, 12-1, 12-3, 12-5

task building, *System Management*, 12-4

first task build, *System Management*, 12-4

second task build, *System Management*, 12-5

task control commands, *Command Language*, 1-6

telephone number

specifying, *System Management*, 9-4

terminal emulation

specifying, *System Management*, 9-3 to 9-5

transferring files, *System Management*, 9-7

translator process, *System Management*, 12-5

DCL command

linking

ODT, *Debugging*, 1-3

ODTID, *Debugging*, 1-3

supervisor libraries, *Debugging*, 1-4

DCL command table, *System Management*, 12-7

constructing, *System Management*, 12-6

DCL command table (cont'd.)
 example, *System Management*, 12-46 to 12-48
 interpreting, *System Management*, 12-18
 modifying, *System Management*, 12-8
 DCL error message, *Command Language*, 10-1 to 10-18
 /DCL keyword
 HELP command, MCR, 3-87
 SET command (MCR), MCR, 3-211
 DCL Master Command Table
 See DCL MCT
 DCL MCT, *System Management*, 12-9
 DCL task, *System Management*, 1-4, 12-1, 12-3, 12-5
 adding commands, *System Management*, 12-8
 definition, *System Management*, 12-1
 deleting commands, *System Management*, 12-13
 modifying commands, *System Management*, 12-13
 overlay, *System Management*, 12-10
 PT/TT, *System Management*, 12-12
 file, *System Management*, 12-9
 D command, *Debugging*, 2-8, 9-12
 /DC switch
 DMP utility, *Utilities*, 11-5
 .DD2CT (Decimal to binary double-word), *System Library*, 4-1
 DDDRV, *I/O Drivers*, 7-1
 \$DDIV (Double-precision divide), *System Library*, 3-3
 DDS
 See Default directory string
 /DD switch
 PIP utility, *Utilities*, 3-16
 DDT\$ macro call
 arguments, *Writing I/O Driver*, 4-5, 4-6
 use of, *Writing I/O Driver*, 4-4
 DD-type magnetic tape
 SYSGEN question, *System Generation*, 3-50
 DEA
 See DEALLOCATE command
 \$DEACB routine, *Writing I/O Driver*, 7-15
 Deaccess lock (F11ACP), *I/O Drivers*, C-6

DEALLOCATE command, *Command Language*, 5-48 to 5-49, 9-9
 DEALLOCATE command (MCR), MCR, 1-8, 3-57
 example, MCR, 3-57
 format, MCR, 3-57
 parameters, MCR, 3-57
 Deallocate Device Transaction Block, *System Management*, 17-28
 Deallocation entry point, *Writing I/O Driver*, 4-66
 DEASSIGN command, *Command Language*, 5-37 to 5-40, 9-9
 DEASSIGN/QUEUE, *Command Language*, 9-10
 DEB
 See DEBUG command
 \$DEBUG, *I/O Operations*, 7-2
 DEBUG command, *Command Language*, 7-46 to 7-47, 9-10
 RSX-11M-PLUS and Micro/RSX, *Debugging*, 1-5
 DEBUG command (MCR), MCR, 3-58
 error messages, MCR, 3-59
 examples, MCR, 3-58
 format, MCR, 3-58
 parameter, MCR, 3-58
 Debugging
 aid, MCR, 3-58
 including, *Task Builder*, 10-14, 11-25 to 11-26
 introduction, *Program Development*, 1-6, 1-7
 MACRO-11 source file, *Program Development*, 3-3, 3-4
 task, MCR, 3-58
 Program Development, 4-9, 5-1, 5-2, 7-7, 7-8, 7-9
 tool
 See ODT
 using map, *Program Development*, 5-2, 5-8
 /DEBUG qualifier, *Task Builder*, 11-25 to 11-26
 Debug routine, *I/O Operations*, 7-6
 .DEC directive, *Indirect*, 2-44
 Decimal conversion
 decimal to binary (\$CDTB), *System Library*, 4-4
 decimal to binary double-word (.DD2CT), *System Library*, 4-1
 Decimal mode, *Indirect*, 2-48

- Decimal number, *Command Language*, 1-13
 - packing, *MACRO-11*, 6-31
- Decimal version numbers
 - SYSGEN question, *System Generation*, 3-29
- /DEC keyword
 - SET command (MCR), *MCR*, 3-211
 - SET command (VMR), *System Management*, 10-57
- DECL\$S directive, *Executive*, 5-61
- Declaration flag byte
 - symbol, *Task Builder*, A-7
- Declare Significant Event directive, *Executive*, 5-61
- DECLARE statement, *Error Logging*, 5-26, 5-27
- DECnet, *RMS-11 User's Guide*, B-1
 - and CREATE operations, *RMS-11 User's Guide*, B-2, B-3
 - and ERASE operations, *RMS-11 User's Guide*, B-2
 - and file organization, *RMS-11 User's Guide*, B-3
 - and OPEN operations, *RMS-11 User's Guide*, B-2, B-3
 - block access, *RMS-11 User's Guide*, B-3
 - CEX on pregenerated kit, *System Generation*, 5-47
 - DAPRES resident library, *RMS-11 User's Guide*, B-1
 - disk-resident overlaid code, *RMS-11 User's Guide*, B-1
- FALs
 - on different systems, *RMS-11 User's Guide*, B-3
- file specification, *RMS-11 User's Guide*, B-2
 - default, *RMS-11 User's Guide*, B-2
 - node, *RMS-11 User's Guide*, B-2
 - quoted string, *RMS-11 User's Guide*, B-2
- I/O buffers, *RMS-11 User's Guide*, B-3
 - indexed files, *RMS-11 User's Guide*, B-3
 - relative files, *RMS-11 User's Guide*, B-3
 - sequential files, *RMS-11 User's Guide*, B-3
- DECnet (cont'd.)
 - limitations on functions, *RMS-11 User's Guide*, B-1
 - pool use on pregenerated kit, *System Generation*, 5-47
 - SYSGEN question, *System Generation*, 3-26
- DECnet Remote Terminal Facility
 - See RMT
- DECnet software, *Command Language*, 1-16
- DECODE statement, *Error Logging*, 5-32
- DECREMENT statement, *Error Logging*, 5-31
- DEctape, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-42, 5-77, 5-88, 5-104, 5-111, 5-117
 - exercising
 - IOX, *System Management*, 4-2
 - function code list, *I/O Drivers*, B-8
 - GLUN\$ macro, *I/O Drivers*, 6-1
 - I/O function, *I/O Drivers*, 6-2, 6-3
 - I/O status return, *I/O Drivers*, 6-4
 - programming hint, *I/O Drivers*, 6-7
 - recovery, *I/O Drivers*, 6-6
 - reverse read, *I/O Drivers*, 6-7
 - reverse speed, *I/O Drivers*, 6-7
 - reverse write, *I/O Drivers*, 6-7
 - select recovery, *I/O Drivers*, 6-7
 - task aborting, *I/O Drivers*, 6-8
 - transfer length, *I/O Drivers*, 6-7
- DEctape controller
 - SYSGEN question, *System Generation*, 3-48
- DEctape file structure, *I/O Operations*, 5-1
- DEctape II, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-42, 5-77, 5-88, 5-104, 5-111, 5-117
- DEctape II controller
 - SYSGEN question, *System Generation*, 3-50
- Dedicated mode (LADRV), *I/O Drivers*, 22-1
- DEF\$SZ argument, *RMS-11 Macro*, C-1
- DEFAULT symbol, *Indirect*, 2-10
- Default, *Introduction*, 1-12 to 1-13, 3-9 *RMS-11 User's Guide*, 2-2
 - compilers, *RMS-11 User's Guide*, 2-2
- DEQ, *RMS-11 User's Guide*, 4-4

- Default
 - device
 - VMR, *System Management*, 10-5
 - directory
 - VMR, *System Management*, 10-6
 - file specification, *Command Language*, 4-4 to 4-6 RMS-11 *User's Guide*, B-2
 - file type
 - MACRO-11, *Program Development*, 3-5
 - TKB, *Program Development*, 4-1
 - VMR, *System Management*, 10-6
 - operating system, RMS-11 *User's Guide*, 2-2
 - RMSDES utility, RMS-11 *Utilities*, 2-21
 - switch
 - modifying, *Task Builder*, F-7, F-8 to F-11
 - system library search
 - MACRO-11, *Program Development*, 1-5, 1-10, 2-7
 - TKB, *Program Development*, 1-11, 4-2
 - task building, *Task Builder*, 1-1
 - transfer (starting) address, *Program Development*, 4-8
 - version number
 - VMR, *System Management*, 10-6
 - VMR
 - file name, *System Management*, 10-6
- /DEFAULT_LIBRARY qualifier, *Task Builder*, 11-27
- Default directory string, *Executive*, 5-101, 5-190 *Indirect*, 2-18, 2-21
 - retrieving, *Executive*, 5-100
 - setting, *Executive*, 5-189
- Default extension quantity
 - See DEQ
- Default extension size
 - See DEQ field in ALL block
 - See DEQ field in FAB
- Default Filename Block
 - See DFNB
- Default fill character, *Error Logging*, 5-6
- Default LUN (ICDRV/ISDRV), *I/O Drivers*, 19-38
- Default print field width, *Error Logging*, 5-6
- Default radix, *Error Logging*, 5-6
 - MACRO-11, 3-14
- Default register definition, MACRO-11, 3-10
- Default string
 - See DNA field in FAB
- Deferred addressing indicator, MACRO-11, 3-2
- Deferred address mode
 - autodecrement, MACRO-11, 5-5
 - autoincrement, MACRO-11, 5-4
 - index, MACRO-11, 5-6
 - register, MACRO-11, 5-3
 - relative, MACRO-11, 5-9
- Deferred write, RMS-11 *User's Guide*, 2-17
 - See also FB\$DFW mask in FOP field and mass insertion, RMS-11 *User's Guide*, 6-29
- indexed files, RMS-11 *User's Guide*, 7-8
- relative files, RMS-11 *User's Guide*, 4-14
- sequential files, RMS-11 *User's Guide*, 3-14
- /DE file switch
 - PRI command, *Batch and Queue*, 2-6
- DEFINE command, *Command Language*, 5-14, 5-41 to 5-44, 9-10
- Defined report string
 - user, *Error Logging*, 3-21
- DEFINE LOGICALS command (MCR), MCR, 1-6, 3-63
 - error messages, MCR, 3-69
 - examples, MCR, 3-66, 3-67, 3-68
 - format, MCR, 3-67, 3-68
 - formats, MCR, 3-65
 - keywords
 - /ALL, MCR, 3-68
 - /FINAL, MCR, 3-66
 - /GBL, MCR, 3-66, 3-67, 3-68
 - /GR, MCR, 3-66, 3-67, 3-68
 - /SYSTEM, MCR, 3-67, 3-68
 - /TERM, MCR, 3-67, 3-68
- DEFINITIONS argument, MACRO-11, 8-11
- /DEF keyword
 - SET command (MCR), MCR, 3-212
- DEL argument to ORG\$ macro, RMS-11 *Macro*, 2-3
- DELAY directive, *Indirect*, 2-45

- DEL C key (EDT), *Introduction*, 2-7
- DELET\$ macro, *I/O Operations*, 3-1, 3-42
 - format
 - file operations, *I/O Operations*, 3-42
- Delete
 - character (half-duplex), *I/O Drivers*, 3-15
 - escape sequence, *I/O Drivers*, 3-25
 - key (TTDRV), *I/O Drivers*, 2-71
 - read no filter (TTDRV), *I/O Drivers*, 2-14
 - TF.RST (TTDRV), *I/O Drivers*, 2-14
- DELETE/REMOTE command, *System Management*, 9-7
- DELETE & PRINT command
 - EDI utility, *Utilities*, 2-14, 2-31
- DELETE/ENTRY command, *Introduction*, 3-13
- Delete access, MCR, 2-3
 - common region, MCR, 3-120
 - file, MCR, 3-149, 3-213
 - UFD, MCR, 3-281
 - volume, MCR, 3-94, 3-96, 3-106, 3-151
- DELETE command, *Command Language*, 4-40 to 4-43, 9-11
 - Introduction*, 3-4 to 3-5, 3-7
 - System Management*, 9-7
- DELETE/DIRECTORY, *Command Language*, 4-20, 9-11
- DELETE/ENTRY, *Command Language*, 4-86 to 4-87, 9-11
- DELETE/JOB, *Command Language*, 4-86 to 4-87, 9-12
- DELETE/PROCESSOR, *Command Language*, 9-12
- DELETE/QUEUE, *Command Language*, 9-12
 - EDI utility, *Utilities*, 2-13, 2-31
 - example, *Batch and Queue*, 2-11
 - format, *Batch and Queue*, 2-10
- DELETE command EDT editor, *Introduction*, 2-13
- /DELETE file qualifier
 - PRINT command, *Batch and Queue*, 2-6
 - SET QUEUE command, *Batch and Queue*, 2-21
- DELETE key, *Command Language*, 3-14
 - Introduction*, 1-6 to 1-8 MCR, 2-16
- Delete Logical Name directive, *Executive*, 5-62
- \$DELETE macro, *RMS-11 Macro*, 5-25
- Delete mode, *Indirect*, 2-48
- DELETE operation, *RMS-11 Introduction*, 4-4
 - RMS-11 Macro*, 4-11
 - RMS-11 User's Guide*, 1-15
 - and key position, *RMS-11 User's Guide*, 6-7
 - and shared access, *RMS-11 User's Guide*, 2-6
 - compressing records, *RMS-11 User's Guide*, 5-10, 5-16, 6-7, 6-9
 - declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
 - deferred write, *RMS-11 User's Guide*, 7-9
 - \$DELETE macro, *RMS-11 Macro*, 5-25
 - duplicate keys, *RMS-11 User's Guide*, 6-9
 - indexed files, *RMS-11 User's Guide*, 5-15, 7-3, 7-9
 - optimizing, *RMS-11 User's Guide*, 6-7
 - relative files, *RMS-11 User's Guide*, 4-7
- Delete option
 - ACNT, *System Management*, 2-9
- DELETESYS.CMD
 - on pregenerated kit, *System Generation*, 5-8, 5-15
- Deleting text (EDT), *Introduction*, 2-7, 2-13
- Deletion, file marked for
 - See FB\$MKD mask in FOP field
- /DEL file switch
 - QUE /MOD command, *Batch and Queue*, 2-21
- Delimiter, *Program Development*, 2-16
- Delimiting character, *MACRO-11*, 3-3
- DEL L key (EDT), *Introduction*, 2-7
- DEL W key (EDT), *Introduction*, 2-7
- Density
 - See also Bit density
 - bit 11 characteristic (tape driver), *I/O Drivers*, 8-9
 - parameter, device-specific (disk driver), *I/O Drivers*, 5-9

Density (cont'd.)

selection (tape driver), *I/O Drivers*, 8-16

tape

in IOX, *System Management*, 4-33

DENSITY command

IOX, *System Management*, 4-33

/DENSITY qualifier

BRU utility, *Utilities*, 7-14

/DENSITY switch

FMT utility, *Utilities*, 5-8

/DENS keyword

HOME command, *MCR*, 3-93

INITVOLUME command, *MCR*, 3-102

MOUNT command (*MCR*), *MCR*, 3-147

SAVE command (*VMR*), *System Management*, 10-48

/DENS switch, *CDA*, 2-10

DMP utility, *Utilities*, 11-5

DSC utility, *Utilities*, 8-14

Depth

indexed files, *RMS-11 User's Guide*, 5-5

DEQ

indexed files, *RMS-11 User's Guide*, 6-26

relative files, *RMS-11 User's Guide*, 4-4

default, *RMS-11 User's Guide*, 4-4

RMSDEF utility, *RMS-11 Utilities*, A-15

DEQ field in ALL block

CREATE operation, *RMS-11 Macro*, 5-17

DISPLAY operation, *RMS-11 Macro*, 5-30

offset, *RMS-11 Macro*, 6-2

OPEN operation, *RMS-11 Macro*, 5-79

RSTS/E, *RMS-11 Macro*, D-4

summary, *RMS-11 Macro*, 6-11

DEQ field in FAB

CREATE operation, *RMS-11 Macro*, 5-17

offset, *RMS-11 Macro*, 6-22

OPEN operation, *RMS-11 Macro*, 5-74, 5-78

summary, *RMS-11 Macro*, 6-33

D error, *MACRO-11*, 2-3

summary, *MACRO-11*, D-3

Description file

RMSDES utility, *RMS-11 Utilities*, 2-3, 2-13, 2-17, 2-24

EXIT command, *RMS-11 Utilities*, 2-10

GET command, *RMS-11 Utilities*, 2-10

SAVE command, *RMS-11 Utilities*, 2-27

Descriptor

region, *Task Builder*, B-15, B-17, B-21, B-22

segment, *Task Builder*, B-15 to B-20

window, *Task Builder*, B-15, B-17, B-20, B-21

DESELECT command

IOX, *System Management*, 4-35

Design buffer

RMSDES utility, *RMS-11 Utilities*, 2-1

using, *RMS-11 Utilities*, 2-16

Design buffer sections (RMSDES)

See Section

Designing applications, *RMS-11 User's Guide*, 2-1

considerations, *RMS-11 User's Guide*, 2-2

ease of design, *RMS-11 User's Guide*, 2-10

shared access, *RMS-11 User's Guide*, 2-5

space, *RMS-11 User's Guide*, 2-4, 8-1

speed, *RMS-11 User's Guide*, 2-3, 8-1

when to design, *RMS-11 User's Guide*, 2-2

Designing files, *RMS-11 Introduction*, 3-15

See also Indexed file organization

See also Relative file organization

See also Sequential file organization

indexed, *RMS-11 User's Guide*, 6-1

relative, *RMS-11 User's Guide*, 4-2

sequential, *RMS-11 User's Guide*, 3-3

Design session

RMSDES utility, *RMS-11 Utilities*, 2-1

resuming, *RMS-11 Utilities*, 2-22

Despooler

definition, *Batch and Queue*, 4-3

- Despool prototype task
 - See LPP
- /DE switch, *Error Logging*, 3-5, 3-8
 - FLX utility, *Utilities*, 4-7
 - Indirect, *Indirect*, 2-29
 - LBR utility, *Utilities*, 10-13
 - PIP utility, *Utilities*, 3-17
 - RMSIFL utility, *RMS-11 Utilities*, 3-7, 3-10, 3-14
 - VFY utility, *Utilities*, 9-4
- Detach mode, *Indirect*, 2-47
- Detach Region directive, *Executive*, 5-67
- \$DEUMR routine, *Writing I/O Driver*, 7-16
 - calling from driver, *Writing I/O Driver*, 7-4
- DEUNA driver
 - See XEDRV
- DEUNA Ethernet controller
 - SYSGEN question, *System Generation*, 3-65
- DEV
 - See DEVICES command
- DEV command
 - disk data caching, *System Management*, 19-15
- DEV-ctl parameter
 - IO.XOP function (XEDRV), *I/O Drivers*, 13-6
- DEV field in FAB, *RMS-11 Macro*, 3-1, 3-2
 - CREATE operation, *RMS-11 Macro*, 5-20
 - ENTER operation, *RMS-11 Macro*, 5-37
 - ERASE operation, *RMS-11 Macro*, 5-42, 5-43
 - offset, *RMS-11 Macro*, 6-24
 - OPEN operation, *RMS-11 Macro*, 5-77
 - PARSE operation, *RMS-11 Macro*, 5-88
 - REMOVE operation, *RMS-11 Macro*, 5-104
 - RENAME operation, *RMS-11 Macro*, 5-111
 - SEARCH operation, *RMS-11 Macro*, 5-117, 5-118
 - summary, *RMS-11 Macro*, 6-34
- \$DEVHD routine, *Writing I/O Driver*, 2-3, 2-11
- Device, *Introduction*, 1-5, 1-11, 3-10, 6-7
 - MCR, 2-10 to 2-14
 - RMS-11 Introduction*, 2-1
 - Writing I/O Driver*, 1-1
 - See also Controller
 - See also Disk
 - See also Line interface
 - See also Line printer
 - See also Magnetic tape
 - See also Medium
 - See also Multiplexer
 - accessing, MCR, 3-141
 - adding after SYSGEN, *System Generation*, 4-8
 - restrictions, *System Generation*, 4-10
 - address, *Writing I/O Driver*, 1-1
 - allocated, *Command Language*, 5-10 to 5-11
 - allocating, MCR, 2-13, 3-16
 - and record formats, *RMS-11 User's Guide*, 2-15
 - assigned controller, *Writing I/O Driver*, 1-18
 - assignment, *Task Builder*, 12-8
 - attached, MCR, 3-173
 - attaching, *I/O Drivers*, 1-27
 - bootable, MCR, 3-35
 - busy/not busy, *Writing I/O Driver*, 1-13
 - changing CSR and vector with CNF, *System Generation*, 2-8
 - characteristic (tape driver), *I/O Drivers*, 8-3
 - characteristics
 - See also DEV field in FAB
 - setting, MCR, 3-197
 - common, MCR, 3-238
 - Task Builder*, 5-30, 5-32
 - building and linking, *Task Builder*, 5-28 to 5-32
 - configuration
 - in baseline, *System Generation*, 3-12
 - on pregenerated kits, *System Generation*, 5-45
 - configured on-line, *Writing I/O Driver*, 1-13
 - control
 - LUN register, *Debugging*, 2-7, 5-4, 6-2

Device

- controller
 - overlapped-seek support, *MCR*, 3-236
- crash dump, *CDA*, 1-1
- crash notification, *CDA*, 1-1
 - See also Crash notification device
- deallocating, *MCR*, 2-13, 3-16, 3-57
- default, *MCR*, 3-212
- detaching, *I/O Drivers*, 1-28
- disconnecting (communication driver), *I/O Drivers*, 12-7
- disk, *RMS-11 Introduction*, 2-1
- displaying, *MCR*, 3-60
 - attributes, *Command Language*, 5-135
- driver, *RMS-11 Introduction*, 2-1
 - See also Driver
 - building, *MCR*, 3-134
 - loadable, *MCR*, 3-166
 - loading, *MCR*, 3-132
 - mapping, *MCR*, 3-132
 - nonresident, *MCR*, 3-132
 - vectoring, *MCR*, 3-132, 3-134
- driver, loading
 - on pregenerated kit, *System Generation*, 5-41
- dual-access
 - SYSGEN* question, *System Generation*, 3-36, 3-37, 3-41
- dual-access capability, *Writing I/O Driver*, 1-17
- error logging, *Error Logging*, 2-4
 - control file module, *Error Logging*, 2-4, 2-5
- errors
 - error logging, *Error Logging*, 1-6
 - hardware register contents, *Error Logging*, 1-6
- exercising
 - examples
 - RL02*, *System Management*, 4-10
- fairness-count, *MCR*, 3-235
- Files-11*, *MCR*, 2-1
- file-structured, *MCR*, 3-141
- fixed media, *CDA*, 1-3, 1-5
- generic name, *Writing I/O Driver*, 2-3
- getting information, *Executive*, 5-103
- I/O requests
 - redirecting, *MCR*, 3-173

Device (cont'd.)

- identifier, *MCR*, 2-10
 - See also DVI field in NAM block information, *Indirect*, 2-87
- initializing (communication driver), *I/O Drivers*, 12-7
- interrupt, *Writing I/O Driver*, 1-5
- invalid crash dump, *CDA*, 1-3, 1-5
- IOX
 - adding, *System Management*, 4-29
 - displaying, *System Management*, 4-29
 - exercising
 - steps, *System Management*, 4-2
 - status during exercise, *System Management*, 4-60
 - testing
 - removing, *System Management*, 4-35
 - time of, *System Management*, 4-57
- LA-type
 - SYSGEN* question, *System Generation*, 3-55
- list, *MCR*, 3-144
- list of supported, *I/O Drivers*, 1-43
- logical, *Command Language*, 5-9 to 5-10, 5-26 to 5-33, 5-37 to 5-40, 5-129 to 5-131
 - assignment, *Command Language*, 5-9
- logical name, *Command Language*, 5-9 to 5-10 *Indirect*, 2-89
- magnetic tape, *RMS-11 Introduction*, 2-4
- making accessible, *Writing I/O Driver*, 5-6
- mnemonic, *System Generation*, 2-3
- mounted, *MCR*, 3-62
- MU-type
 - SYSGEN* question, *System Generation*, 3-46
- name, *MCR*, 2-4
 - assigning logical, *MCR*, 2-12
 - displaying, *MCR*, 3-60
 - logical, *CDA*, 3-17
 - nonphysical, *I/O Drivers*, 1-20
 - physical, *CDA*, 3-17 *I/O Drivers*, 1-18, 1-20
 - pseudo, *I/O Drivers*, 1-20
- non-file-structured, *MCR*, 3-141
- nonshared, *MCR*, 3-142

Device (cont'd.)

- null, MCR, 2-11 *System Management*, 10-39
- off-line, MCR, 3-62 *System Management*, 10-17
- on-line, MCR, 3-62
- PCL11
 - SYSGEN question, *System Generation*, 3-63
- peripheral, *Introduction*, 6-1, 6-7
 - MCR, 2-10
- placing off line, *System Management*, 15-3
- placing on line, *System Management*, 15-3
- private, MCR, 2-13, 3-246
 - deallocating, MCR, 3-16, 3-57
 - displaying, MCR, 3-246
- privileged status, MCR, 2-13
- pseudo, *Introduction*, 3-11
 - MCR, 2-10 to 2-11, 3-173
 - System Generation*, B-3 *System Management*, 10-3
- public, MCR, 2-13, 3-62, 3-142
 - dismounting, MCR, 2-13
 - displaying, MCR, 3-245, 3-246
 - setting, MCR, 3-245
- queuing I/O request, *Executive*, 5-143, 5-147
- REASSIGN command, *I/O Drivers*, 1-20
- REDIRECT command, *I/O Drivers*, 1-20
- redirecting, *System Management*, 10-39
- redirecting restrictions, *System Management*, 10-39
- registers, *Writing I/O Driver*, 1-1, 1-2, 4-50
- removing, *System Management*, 10-93
 - attached device, *System Management*, 10-93
- saving system image, MCR, 3-187
- sequential, MCR, 3-141
- setting attributes, *Command Language*, 5-132
- shadow, MCR, 3-70
- shared, MCR, 3-142
- spooled, MCR, 3-173
- storage of static characteristics,
 - Writing I/O Driver*, 2-3
- subcontroller, *Writing I/O Driver*, 1-13

Device (cont'd.)

- support
 - BAD utility, *Utilities*, 6-9
 - BRU utility, *Utilities*, 7-5
 - by Autoconfigure, *System Generation*, 3-10, E-1
 - DSC utility, *Utilities*, 8-4
 - FLX utility, *Utilities*, 4-2
 - FMT utility, *Utilities*, 5-5
 - on pregenerated kit, *System Generation*, 5-43
 - on RSX-11M-PLUS, *System Generation*, B-1 to B-3
- switch, CDA, 2-6 *Error Logging*, 3-5, 3-8
- system, CDA, 1-5
- system default
 - adding to account entry, *System Management*, 2-3
 - changing, *System Management*, 2-7
 - displaying, *System Management*, 2-5, 2-8
 - in account entry, *System Management*, 2-1
- TI:
 - pseudo, *I/O Drivers*, 1-21
 - virtual, *I/O Drivers*, 1-21
- time-out, *Writing I/O Driver*, 2-5
 - entry point, *Writing I/O Driver*, 4-65
- time out (half-duplex), *I/O Drivers*, 3-19
- unit number, CDA, 1-4
- unit-record, *RMS-11 Introduction*, 3-5
- unowned, *Command Language*, 5-10 to 5-11 MCR, 2-13
- user's default, MCR, 2-11
- valid crash dump, CDA, 1-2, 1-5
- verifying
 - BAD utility, *Utilities*, 6-3
- Device context, *System Management*, 15-3
- Device Control Block
 - See DCB
- Device controller dump, CDA, 3-51
 - common interrupt address, CDA, 3-51
- Controller Request Block, CDA, 3-52
- controller status, CDA, 3-52
- Controller Table, CDA, 3-51

- Device controller switch
 - See /CTL switch
- Device control routine, *I/O Operations*, 4-31
- Device driver
 - testing, *Indirect*, 2-63
 - without error logging, *Error Logging*, 1-3
- Device I/O activity, *Error Logging*, 1-1
- Device information
 - .PRSDV routine, *I/O Operations*, 4-16
- Device information dump, CDA, 3-38
 - control processing flags, CDA, 3-39
 - device characteristics word, CDA, 3-39
 - Device Control Block, CDA, 3-42
 - I/O request packet, CDA, 3-42
 - Status Control Block, CDA, 3-42
 - terminal status word, CDA, 3-38
 - UCB extension, CDA, 3-42
- Device information table, *Error Logging*, 4-34
 - ALTPRINTNAME field, *Error Logging*, 4-35
 - DISPNAME field, *Error Logging*, 4-35
 - DRIVETYPE field, *Error Logging*, 4-36
 - MASSBUSFLAG field, *Error Logging*, 4-36
 - MNEMONIC field, *Error Logging*, 4-35
 - PRINTNAME field, *Error Logging*, 4-35
 - SIZE field, *Error Logging*, 4-36
- Device interrupt address
 - overview, *Writing I/O Driver*, 2-6
- Device interrupt vector, *Writing I/O Driver*, 2-4
- Device-level module, *Error Logging*, 4-11
 - adding to system, *Error Logging*, 4-25
 - addition to device information table, *Error Logging*, 4-34
 - bit-to-text translation, *Error Logging*, 4-30
 - coroutine, *Error Logging*, 4-30
 - device data declaration, *Error Logging*, 4-26
 - device name, *Error Logging*, 4-26
 - error type, *Error Logging*, 4-30
 - EUNKWN, *Error Logging*, 4-37

- Device-level module (cont'd.)
 - exit, *Error Logging*, 4-31
 - * flag, *Error Logging*, 4-28
 - intermodule variable, *Error Logging*, 4-29
 - local work variable, *Error Logging*, 4-29
 - MASSBUS, *Error Logging*, 4-33, 4-34
 - module statement, *Error Logging*, 4-26
 - Non-MASSBUS, *Error Logging*, 4-33, 4-34
 - notes, *Error Logging*, 4-31
 - procedure statement, *Error Logging*, 4-26
 - register definitions, *Error Logging*, 4-27
 - subpacket statement, *Error Logging*, 4-26
- Device module
 - EML11, *Error Logging*, 4-8
 - ERK05, *Error Logging*, 4-8
 - ERK67, *Error Logging*, 4-8
 - ERL12, *Error Logging*, 4-8
 - ERM05, *Error Logging*, 4-8
 - ERM23, *Error Logging*, 4-8
 - ERM80, *Error Logging*, 4-8
 - ERP07, *Error Logging*, 4-8
 - ERP23, *Error Logging*, 4-8
 - ERP456, *Error Logging*, 4-8
 - ERS11, *Error Logging*, 4-9
 - ERS34, *Error Logging*, 4-9
 - ERX01, *Error Logging*, 4-9
 - ERX02, *Error Logging*, 4-9
 - ET0310, *Error Logging*, 4-9
 - ET1645, *Error Logging*, 4-9
 - ETA11, *Error Logging*, 4-9
 - ETC11, *Error Logging*, 4-9
 - ETS11, *Error Logging*, 4-9
 - ETSV05, *Error Logging*, 4-9
 - ETU58, *Error Logging*, 4-9
 - ETU77, *Error Logging*, 4-9
 - MSCP60, *Error Logging*, 4-9
 - MSCP80, *Error Logging*, 4-9
 - MSCPAT, *Error Logging*, 4-9
 - MSCPE, *Error Logging*, 4-9
 - MSCPEN, *Error Logging*, 4-9
 - MSCPSD, *Error Logging*, 4-9
 - MSCPTO, *Error Logging*, 4-9
- Device name field, *I/O Operations*, 2-34
- Device name string descriptor, *I/O Operations*, 2-29

Device notation format, *System Generation*, 3-34
 /DEVICE qualifier
 PRINT command, *Batch and Queue*, 2-6
 SHOW QUEUE command, *Batch and Queue*, 2-15
 DEVICES command (MCR), *MCR*, 1-7, 3-60
 examples, *MCR*, 3-60
 formats, *MCR*, 3-60
 keyword
 /LOG, *MCR*, 3-60
 parameters, *MCR*, 3-60
 DEVICES command (VMR), *System Management*, 10-16
 definition, *System Management*, 10-16
 example, *System Management*, 10-16
 format, *System Management*, 10-16
 notes, *System Management*, 10-17
 parameter, *System Management*, 10-16
 Device-specific QIO\$ (LADDRV), *I/O Drivers*, 22-28
 Device Statistics Block, *System Management*, 17-31
 Device statistics example
 Resource Accounting, *System Management*, 17-7
 Device unit failures, *System Management*, 15-32
 /DEV keyword
 DISMOUNT command (MCR), *MCR*, 3-71
 Dev parameter
 ALUN\$ macro, *I/O Drivers*, 1-17
 DEVSM1, *Error Logging*, 4-7, 4-18, 4-34, 4-36
 SLP, *Error Logging*, 4-36
 /DEV switch, *CDA*, 2-5, 2-6
 \$\$DEVT program section
 reserved name, *Task Builder*, E-2
 DEVUDA, *Error Logging*, 4-7
 DF condition test argument, *MACRO-11*, 6-52
 DFDI: routine
 disconnect buffer from digital interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-56
 DFDI: subroutine
 disconnect contact interrupt (UDDRV), *I/O Drivers*, 16-22
 DFIN\$G argument, *RMS-11 Macro*, C-1
 DFIN\$L argument, *RMS-11 Macro*, C-1
 DFL
 See DEFINE LOGICALS command
 DFL field in KEY block
 CREATE operation, *RMS-11 Macro*, 5-20
 DISPLAY operation, *RMS-11 Macro*, 5-31
 offset, *RMS-11 Macro*, 6-67
 OPEN operation, *RMS-11 Macro*, 5-80
 summary, *RMS-11 Macro*, 6-73
 DFNB, *I/O Operations*, 2-31, 3-17
 as data structure, *I/O Operations*, 1-4
 definition, *I/O Operations*, 1-2
 FNBLK\$ macro, *I/O Operations*, 2-31
 OFNB\$x macro, *I/O Operations*, 3-17
 specifying, *I/O Operations*, 2-28
 /DF switch
 LBR utility, *Utilities*, 10-14
 PIP utility, *Utilities*, 3-18
 DFTI: routine
 disconnect buffer from counter interrupt, *I/O Drivers*, 19-59
 DFTI: subroutine
 disconnect timer interrupt (UDDRV), *I/O Drivers*, 16-23
 DFTY: circular buffer
 terminal input (ICDRV/ISDRV), *I/O Drivers*, 19-62
 /DG switch
 LBR utility, *Utilities*, 10-15
 DH11, *I/O Drivers*, 3-31
 remote (half-duplex), *I/O Drivers*, 3-33
 remote line (TTDRV), *I/O Drivers*, 2-83
 TTDRV, *I/O Drivers*, 2-81
 DH11 line multiplexer
 SYSGEN question, *System Generation*, 3-57
 DHU11/DHV11 line multiplexer
 SYSGEN question, *System Generation*, 3-58
 DHV11 (TTDRV), *I/O Drivers*, 2-81

- DI/DIW: subroutine
 - read contact sense fields (UDDRV),
I/O Drivers, 16-23
- DI/DIW input routine
 - digital sense multiple field
(ICDRV/ISDRV), I/O Drivers,
19-47, 19-48
- Diagnostic
 - buffer
 - p5 address, I/O Drivers, 13-19
 - p6 size, I/O Drivers, 13-19
 - XEDRV, I/O Drivers, 13-19
 - function
 - IO.DGN (DDDRV), I/O Drivers,
7-4
 - IO.XRC, I/O Drivers, 13-19,
13-20
 - IO.XTM, I/O Drivers, 13-19,
13-20
 - no data transfer (XEDRV), I/O
Drivers, 13-21
 - request block (XEDRV), I/O Drivers,
13-19
 - user-mode function, I/O Drivers,
1-34, 1-35
- Diagnostic error message, *System
Management*, 10-94
- Diagnostic exit, *Task Builder*, 10-54,
11-28
- Diagnostic run
 - FORTAN IV source file, *Program
Development*, 7-3, 7-4
 - MACRO-11 source file, *Program
Development*, 3-1, 3-2
- Diagnostics Loader task
 - See DLD
- Dial-up line
 - baud rate
 - SYSGEN question, *System
Generation*, 3-57, 3-59,
3-61
 - modem support
 - SYSGEN question, *System
Generation*, 3-61
 - SYSGEN question, *System
Generation*, 3-57, 3-58
- DIC, *Executive*, 1-2
 - list, *Executive*, C-1
- DID field in NAM block
 - CREATE operation, *RMS-11 Macro*,
5-10, 5-21
 - ENTER operation, *RMS-11 Macro*,
5-36, 5-37
- DID field in NAM block (cont'd.)
 - ERASE operation, *RMS-11 Macro*,
5-41, 5-42
 - offset, *RMS-11 Macro*, 6-94
 - OPEN operation, *RMS-11 Macro*,
5-73, 5-77
 - PARSE operation, *RMS-11 Macro*,
5-87
 - REMOVE operation, *RMS-11 Macro*,
5-103, 5-105
 - RENAME operation, *RMS-11 Macro*,
5-109, 5-110, 5-111
 - RSTS/E, *RMS-11 Macro*, D-4
 - SEARCH operation, *RMS-11 Macro*,
5-116, 5-118
 - summary, *RMS-11 Macro*, 6-95
- DIF condition test argument, *MACRO-
11*, 6-52
- DIFFERENCES command, *Command
Language*, 4-68 to 4-73, 9-12
- DIGITAL Command Language
 - See DCL
- DIGITAL COMMAND LANGUAGE
 - command, *MCR*, 1-8, 3-56
 - examples, *MCR*, 3-56
 - format, *MCR*, 3-56
- Digital controller, universal, I/O
Drivers, 16-1
- Digital input (K-series), I/O Drivers,
23-16
- DIGITAL Multinational Character Set,
MCR, 3-8
- Digital output (K-series), I/O Drivers,
23-20
- Digital start event (K-series), I/O
Drivers, 23-16
- DIGITAL-supplied driver, *System
Generation*, 1-8
- DIGO: subroutine
 - digital start event (K-series), I/O
Drivers, 23-16
- DINP: subroutine
 - digital input (K-series), I/O Drivers,
23-16
- DIR\$ macro, *Executive*, 1-6 I/O
Drivers, 1-14, 1-15
 - example, I/O Drivers, 1-16
 - format, I/O Drivers, 1-15
- DIR attribute, *System Management*,
12-31
- Direct access
 - See also Random access
 - error (UDDRV), I/O Drivers, 16-16

- Direct access (cont'd.)
 - I/O page (UDDRV), *I/O Drivers*, 16-3
 - physical address (ICDRV/ISDRV), *I/O Drivers*, 19-74
- Direct-access label, *Indirect*, 2-31
- Direct assignment
 - operator, *MACRO-11*, 3-1, 3-2, 3-9
 - statement, *MACRO-11*, 3-6 to 3-9, 3-13
- Directive
 - assembler, *Program Development*, 1-5
 - function, *MACRO-11*, 6-18 to 6-22
 - summary, *MACRO-11*, B-3 to B-8
 - comment block, *MACRO-11*, 6-18
 - conditional assembly, *MACRO-11*, 6-50 to 6-54, 6-55, 6-56
 - conventions, *Executive*, 5-6
 - cross-reference, *MACRO-11*, 6-21, 6-22
 - data storage, *MACRO-11*, 6-23 to 6-39
 - DIC list, *Executive*, C-1
 - file control, *MACRO-11*, 6-57, 6-58
 - general assembler, *MACRO-11*, 6-1, 6-2, 6-3
 - summary table, *MACRO-11*, 6-1, 6-2, 6-3
 - immediate conditional assembly, *MACRO-11*, 6-56
 - Indirect*, *Indirect*, 1-4, 2-3, 2-30
 - Introduction*, 4-2 to 4-3
 - function, *Indirect*, 2-3
 - summary, *Indirect*, 2-5
 - listing control, *MACRO-11*, 6-3 to 6-18
 - arguments for, *MACRO-11*, 6-10, 6-11, 6-12
 - macro, *MACRO-11*, 7-1
 - macros, *Executive*, 1-4
 - memory management, *Executive*, 3-1
 - data structures, *Executive*, 3-11
 - summary, *Executive*, 3-9
 - .NAME, *Task Builder*, 3-28
 - attributes, *Task Builder*, 3-28
 - example use, *Task Builder*, 3-29
 - ODL, *Task Builder*, 3-23, 3-24
 - .END, *Task Builder*, 3-23, 3-24
 - .FCTR, *Task Builder*, 3-23, 3-25
 - .NAME, *Task Builder*, 3-23

- Directive
 - ODL (cont'd.)
 - .PSECT, *Task Builder*, 3-23
 - .ROOT, *Task Builder*, 3-23, 3-24
 - processing, *Executive*, 1-2
 - program identification, *MACRO-11*, 6-16, 6-17
 - program sectioning, *MACRO-11*, 6-40 to 6-48
 - .PSECT, *Task Builder*, 3-29
 - rejecting, *Executive*, 1-2
 - summary, *Executive*, A-1
 - symbol control, *MACRO-11*, 6-48, 6-49
 - system, *Program Development*, 1-9, 1-10
 - terminating, *MACRO-11*, 6-39
 - unconditional assembly, *MACRO-11*, 6-53
 - use, *Program Development*, 2-3, 2-5, 2-6
 - use of parentheses, *Task Builder*, 3-24
 - version number, *MACRO-11*, 6-16, 6-17
- directive
 - macro
 - \$C form, *Executive*, 1-6
 - \$ form, *Executive*, 1-5
 - naming conventions, *Executive*, 1-5
 - \$S form, *Executive*, 1-6
 - Directive condition, *I/O Drivers*, 1-37
 - Directive Identification Code
 - See DIC
 - Directive Parameter Block
 - See DPB
 - Directive status, *I/O Drivers*, 1-37
 - Directive status code, *Indirect*, 2-15
 - list, *Executive*, B-1
 - Directive Status Word
 - See DSW
 - Directive summary
 - I/O related, *I/O Operations*, C-1
 - Directory, *Command Language*, 4-1, 4-3 *Introduction*, 1-11
 - See also UFD
 - count
 - legal values, *MCR*, 3-95
 - maximum, *MCR*, 3-104
 - specifying, *MCR*, 3-104, 3-150
 - creating, *Command Language*, 4-17
 - creating files, *MCR*, 2-2

Directory (cont'd.)
 data caching, MCR, 3-146, 3-207
 default, *Command Language*, 4-4
 MCR, 3-212
 set, *Command Language*, 4-100
 show, *Command Language*,
 4-104
 deleting, *Command Language*, 4-20
 MCR, 2-2
 file, *I/O Operations*, 5-2
 format, MCR, 2-4
 identification information
 .PARSE routine, *I/O Operations*,
 4-13
 .PRSDI routine, *I/O Operations*,
 4-16
 library, *Command Language*, 7-28 to
 7-32, 8-10 MCR, 3-182
 displaying, *Command Language*,
 8-12
 setting, *Command Language*,
 8-11
 list, *Command Language*, 4-31
 listing, *Program Development*, 3-9
 login, MCR, 3-79
 maintenance, *Command Language*,
 4-30
 named, *Command Language*, 4-100
 MCR, 2-4
 nonamed, MCR, 2-4
 numbered, *Command Language*,
 4-100 MCR, 2-4
 group number, MCR, 2-4
 member number, MCR, 2-4
 protection, *Command Language*,
 4-13, 4-18, 4-111 to 4-114
 default, *Command Language*,
 4-115 to 4-117
 purging, *Program Development*, 3-9,
 3-10
 specification, MCR, 2-4
 structure, *I/O Operations*, 5-3
 syntax, MCR, 2-4
 system, *Command Language*, 7-28 to
 7-32, 8-10 MCR, 3-182
 terminal
 default, MCR, 2-7
 wildcard context
 See WDI field in NAM block
 wildcard operation
 See NB\$WCH mask in FNB field
 DIRECTORY command, *Command*
Language, 4-31 to 4-39, 9-13
Introduction, 1-11, 3-6

DIRECTORY command (cont'd.)
 DCL, *Program Development*, 3-9
 Directory entry
 creating
 See ENTER operation
 deleting
 See REMOVE operation
 .REMOV routine, *I/O*
 Operations, 4-20
 inserting
 .ENTER routine, *I/O Operations*,
 4-19
 locating
 .FIND routine, *I/O Operations*,
 4-17
 replacing
 See RENAME operation
 routine, *I/O Operations*, 4-17
 Directory identification
 FNB (F11ACP), *I/O Drivers*, C-7
 Directory operation, RMS-11
 Introduction, 4-1 RMS-11 Macro,
 3-5 RMS-11 User's Guide, 1-17
 See also Operation
 Directory operation macro, RMS-11
 Macro, 1-2
 declaring, RMS-11 Macro, C-2
 Directory processing, RMS-11 Macro,
 3-1
 /DIRECTORY qualifier
 BRU utility, *Utilities*, 7-15
 Directory record
 declare global symbol, *Task Builder*,
 A-2
 end of global symbol, *Task Builder*,
 A-11
 global symbol
 end, *Task Builder*, A-11
 internal symbol, *Task Builder*, A-24
 relocation, *Task Builder*, A-12
 Directory string
 default
 read, *I/O Operations*, 4-2
 write, *I/O Operations*, 4-3
 descriptor, *I/O Operations*, 2-29
 routine
 default, *I/O Operations*, 4-2
 DIRECT symbol, *Indirect*, 2-18
 /DIR keyword
 FIX-IN-MEMORY command (VMR),
 System Management, 10-19
 DIRSYM.MAC, *Executive*, 4-3
 Disable AST Recognition directive,
 Executive, 5-64

- Disable Checkpointing directive,
 - Executive*, 5-66
- DISABLE directive, *Indirect*, 2-46
- /DISABLE keyword
 - COMMAND LINE INTERPRETER command, *MCR*, 3-48
- /DISABLE subkeyword, *MCR*, 3-50
- Disconnect
 - digital interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-20
 - UNIBUS switch driver, *I/O Drivers*, 24-5
- \$DISCONNECT macro, *RMS-11 Macro*, 5-27
- DISCONNECT operation, *RMS-11 Introduction*, 4-4 *RMS-11 User's Guide*, 1-15
 - block stream, *RMS-11 Macro*, 4-14
- \$DISCONNECT macro, *RMS-11 Macro*, 5-27
 - indexed files, *RMS-11 User's Guide*, 7-3
 - record stream, *RMS-11 Macro*, 4-9
 - relative files, *RMS-11 User's Guide*, 4-8
 - sequential files, *RMS-11 User's Guide*, 3-7
- Disk, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-42, 5-77, 5-88, 5-104, 5-111, 5-117
 - See also Medium
 - backing up
 - BRU utility, *Utilities*, 7-1
 - DSC utility, *Utilities*, 8-1
 - block
 - random or sequential IOX, *System Management*, 4-51
 - testing range display IOX, *System Management*, 4-52
 - testing range for NFS volumes IOX, *System Management*, 4-52
 - characteristics
 - displaying, *MCR*, 3-60
 - comparing
 - DSC utility, *Utilities*, 8-14
 - compressing
 - DSC utility, *Utilities*, 8-3
 - conventional backup
 - BRU utility, *Utilities*, 7-4

- Disk
 - copying
 - BRU utility, *Utilities*, 7-1
 - DSC utility, *Utilities*, 8-1
 - DB-type
 - SYSGEN question, *System Generation*, 3-36
 - dismounting, *MCR*, 3-70
 - displaying free space
 - PIP utility, *Utilities*, 3-23
 - VFY utility, *Utilities*, 9-5
 - DK-type
 - SYSGEN question, *System Generation*, 3-40
 - DL-type
 - SYSGEN question, *System Generation*, 3-42
 - DM-type
 - SYSGEN question, *System Generation*, 3-41
 - DP-type
 - SYSGEN question, *System Generation*, 3-43
 - drive, *RMS-11 Introduction*, 2-1
 - DR-type
 - SYSGEN question, *System Generation*, 3-36
 - DS-type
 - SYSGEN question, *System Generation*, 3-37
 - DU-type
 - SYSGEN question, *System Generation*, 3-45
 - DX-type
 - SYSGEN question, *System Generation*, 3-49
 - DY-type
 - SYSGEN question, *System Generation*, 3-50
 - EM-type
 - SYSGEN question, *System Generation*, 3-38
 - examining data
 - DMP utility, *Utilities*, 11-1
 - exercising (IOX), *System Management*, 4-2
 - examples
 - NFS volume, *System Management*, 4-15
 - RL02, *System Management*, 4-10
- Files-11

Disk

- Files-11
 - IOX, *System Management*, 4-8
- testing
 - IOX, *System Management*, 4-65
- formatting
 - FLX utility, *Utilities*, 4-4
 - FMT utility, *Utilities*, 5-1
- full backup
 - BRU utility, *Utilities*, 7-3
- function code list, *I/O Drivers*, B-9
- home block, MCR, 3-93
- image backup
 - BRU utility, *Utilities*, 7-4
- initialization values, *System Generation*, 2-11
- initializing, MCR, 3-99
 - BRU utility, *Utilities*, 7-2, 7-17
- locating bad block
 - BAD utility, *Utilities*, 6-1
- ML11
 - SYSGEN question, *System Generation*, 3-38
- mounting
 - BRU utility, *Utilities*, 7-2
- power fail, *I/O Drivers*, 1-43
- private, *Program Development*, 1-12
- public, *Program Development*, 1-12
- RA60/80/81
 - SYSGEN question, *System Generation*, 3-45
- RC25
 - SYSGEN question, *System Generation*, 3-45
- RD51/52/53
 - SYSGEN question, *System Generation*, 3-45
- recovering
 - lost block
 - VFY utility, *Utilities*, 9-7
 - space
 - DSC utility, *Utilities*, 8-3
- restoring
 - BRU utility, *Utilities*, 7-1
- RK05
 - SYSGEN question, *System Generation*, 3-40
- RK05F
 - SYSGEN question, *System Generation*, 3-40

Disk

- RK06/07
 - SYSGEN question, *System Generation*, 3-41
- RL01/RL02
 - SYSGEN question, *System Generation*, 3-42
- RM02/03/05/80
 - SYSGEN question, *System Generation*, 3-36
- RP02/RPR02/RP03
 - SYSGEN question, *System Generation*, 3-43
- RP04/05/06
 - SYSGEN question, *System Generation*, 3-36
- RP07
 - SYSGEN question, *System Generation*, 3-36
- RS03/04
 - SYSGEN question, *System Generation*, 3-37
- RX01
 - SYSGEN question, *System Generation*, 3-49
- RX02
 - SYSGEN question, *System Generation*, 3-50
- RX50
 - SYSGEN question, *System Generation*, 3-45
- selective backup
 - BRU utility, *Utilities*, 7-3
- spinning down, MCR, 3-71
- structure, RMS-11 *Introduction*, 2-1
 - cylinder, RMS-11 *Introduction*, 2-1
 - platter, RMS-11 *Introduction*, 2-1
 - sector, RMS-11 *Introduction*, 2-1
 - track, RMS-11 *Introduction*, 2-1
- swapping, *System Generation*, C-2
- testing
 - selecting random testing
 - IOX, *System Management*, 4-51
 - skipping blocks
 - IOX, *System Management*, 4-41
- transferring data
 - DSC utility, *Utilities*, 8-25
- verifying, *Utilities*, 9-1
 - block
 - VFY utility, *Utilities*, 9-7

- Disk-resident
 - overlay, *Task Builder*, 3-1, 3-2
 - loading, *Task Builder*, 4-1
 - remote access code, *RMS-11 User's Guide*, B-1
 - structure, *Task Builder*, 3-2
- Disk Data Caching, *System Management*, 19-1
 - Data Cache Manager, *System Management*, 19-3
 - DCL commands, *System Management*, 19-6 to 19-10
 - features, *System Management*, 19-1
 - I/O operations, *System Management*, 19-1
 - including in system, *System Management*, 19-3
 - MCR commands, *System Management*, 19-10 to 19-16
 - options, *System Management*, 19-7, 19-10
 - region, *System Management*, 19-3
- Disk data caching, *System Management*, 1-5
 - including in system, *System Management*, 19-1
 - SYSGEN support, *System Generation*, 3-27
- Disk driver, *I/O Drivers*, 5-1
 - physical characteristic, *I/O Drivers*, 5-2
 - programming hint, *I/O Drivers*, 5-12
 - QIO\$ macro, *I/O Drivers*, 5-6
- /DIS keyword
 - SWITCH REGISTER command, *MCR*, 3-274
- Disk file structure, *I/O Operations*, 5-1
- Disk image, *Task Builder*, 2-8
 - conventional task, *Task Builder*, 7-5
- Disk Save and Compress Utility Program
 - See DSC utility
- Disk space recovery
 - See also DELETESYS.CMD
 - after SYSGEN, *System Generation*, 4-3
 - on pregenerated kit, *System Generation*, 5-46
- Disk Volume Formatter Utility
 - See FMT utility
- Dismount (RC25), *I/O Drivers*, 5-14
- DISMOUNT command, *Command Language*, 5-12, 5-13, 5-68 to 5-72, 9-14
- DISMOUNT command (MCR), *MCR*, 1-6, 3-70
 - error messages, *MCR*, 3-72
 - examples, *MCR*, 3-72
 - formats, *MCR*, 3-70
 - keywords
 - /DEV, *MCR*, 2-13, 3-71
 - /LOCK, *MCR*, 3-71
 - /TERM, *MCR*, 3-71
 - /USER, *MCR*, 3-71
 - parameters, *MCR*, 3-70
 - shadow device, *MCR*, 3-70
- Dismount Device Transaction Block, *System Management*, 17-29
- Dispatching
 - event-level, *Error Logging*, 4-16
- Dispatch module, *Error Logging*, 4-3, 4-11
 - subpacket definition, *Error Logging*, 4-69 to 4-71
- Dispatch module path
 - brief report, *Error Logging*, 4-15
 - full report, *Error Logging*, 4-15
 - no report, *Error Logging*, 4-15
 - register report, *Error Logging*, 4-15
- Dispatch procedure, *Error Logging*, 4-10
- Displaced relocation
 - internal, *Task Builder*, A-15
- Display
 - graphic driver, *I/O Drivers*, 21-1
 - in LED lights (LSDRV), *I/O Drivers*, 17-21
- IOX
 - bad blocks list, *System Management*, 4-26
 - commands as a category, *System Management*, 4-3
 - continuing
 - with PROCEED, *System Management*, 4-50
 - status during exercise, *System Management*, 4-60
 - signed integer (LSDRV), *I/O Drivers*, 17-4
- DISPLAY command, *System Management*, 15-9
- Shadow Recording, *System Management*, 18-9

Display information (RMSDSP),
 RMS-11 Utilities, 5-1
 allocation information, *RMS-11 Utilities*, 5-4
 area information, *RMS-11 Utilities*, 5-4
 attributes, *RMS-11 Utilities*, 5-4
 examples, *RMS-11 Utilities*, 5-5
 key information, *RMS-11 Utilities*, 5-4
 Displaying attributes (RMSDES)
 See Attribute
 Displaying time, *Command Language*, 8-4
 \$DISPLAY macro, *RMS-11 Macro*, 5-29
 RSTS/E, *RMS-11 Macro*, D-4
 Display mode, *Indirect*, 2-48
 DISPLAY operation, *RMS-11 Introduction*, 4-2 *RMS-11 Macro*, 3-7 *RMS-11 User's Guide*, 1-18
 BDB requirement, *RMS-11 Macro*, 2-8
 \$DISPLAY macro, *RMS-11 Macro*, 5-29
 I/O buffer requirement, *RMS-11 Macro*, 2-7
 wildcard loop, *RMS-11 Macro*, 3-10
 /DISPLAY qualifier
 BRU utility, *Utilities*, 7-16
 Distributed I/O, *Writing I/O Driver*, 1-16
 Distribution kit
 See also Pregenerated kit
 backup sets, *System Generation*, 2-4
 contents, *System Generation*, 2-3
 copying, *System Generation*, 2-6 to 2-26
 on line, *System Generation*, 2-15 to 2-20
 on VAX/VMS host with VAX-11 RSX, *System Generation*, 2-21 to 2-26
 stand alone, *System Generation*, 2-7 to 2-15
 definition, *System Generation*, 1-1
 label, *System Generation*, 2-4
 magnetic tape, *System Generation*, 2-4
 RK07, *System Generation*, 2-4
 RL02, *System Generation*, 2-3
 types, *System Generation*, 2-3
 Update, *System Generation*, 2-4
 /DI switch
 CMP utility, *Utilities*, 12-3
 FLX utility, *Utilities*, 4-7
 DISWP: subroutine
 initiating synchronous digital input sweep
 K-series, *I/O Drivers*, 23-17
 LADRV, *I/O Drivers*, 22-12
 \$DIV (Integer divide), *System Library*, 3-2
 Divide routine
 divide (\$DIV), *System Library*, 3-2
 double-precision divide (\$DDIV), *System Library*, 3-3
 Division operator, *MACRO-11*, 3-2, 3-5
 DJ11, *I/O Drivers*, 3-31
 TTDRV, *I/O Drivers*, 2-81
 DJ11 line multiplexer
 SYSGEN question, *System Generation*, 3-60
 DK-type disk
 SYSGEN question, *System Generation*, 3-40
 DL11, *I/O Drivers*, 3-31
 interrupt enable (half-duplex), *I/O Drivers*, 3-34
 TTDRV, *I/O Drivers*, 2-81
 DL11/DLV11 line interface
 SYSGEN question, *System Generation*, 3-55
 DL11-E
 asynchronous interface (communication driver), *I/O Drivers*, 12-2
 remote line (TTDRV), *I/O Drivers*, 2-83
 serial asynchronous interface (communication driver), *I/O Drivers*, 12-2
 DLD, *System Management*, 15-34
 how to use, *System Management*, 15-34 to 15-37
 .DLFNB routine, delete file by filename block, *I/O Operations*, 4-30
 DLOG\$ directive, *Executive*, 5-62
 DLON\$ directive, *Executive*, 5-62
 /DL switch, *Task Builder*, 10-15
 DL-type disk
 SYSGEN question, *System Generation*, 3-42
 DLX (XEDRV)
 definition, *I/O Drivers*, 13-23

DLX (XEDRV) (cont'd.)
 incompatibility, *I/O Drivers*, 13-21
 DLXDFS macro (XEDRV), *I/O Drivers*, 13-4
 DM11-BB, *I/O Drivers*, 3-31
 DM11-BB line interface
 SYSGEN question, *System Generation*, 3-58
 DMAP attribute, *System Management*, 12-32
 DMC11 (communication driver)
 message send, *I/O Drivers*, 12-13
 powerfail, *I/O Drivers*, 12-12
 serial synchronous interface, *I/O Drivers*, 12-2
 synchronous line interface, *I/O Drivers*, 12-3
 DMC11 line interface
 SYSGEN question, *System Generation*, 3-63
 DMO
 See DISMOUNT command
 DMPALL, *Error Logging*, 4-8
 /DMP switch, *CDA*, 2-5, 2-6
 DMP utility
 command line, *Utilities*, 11-2
 error message, *Utilities*, 11-12
 example, *Utilities*, 11-8
 mode
 device, *Utilities*, 11-2
 file, *Utilities*, 11-1
 switch, *Utilities*, 11-3
 DMR11 line interface
 SYSGEN question, *System Generation*, 3-63
 DM-type disk
 SYSGEN question, *System Generation*, 3-41
 \$DMUL (Double-precision multiply), *System Library*, 3-3
 DNA (XEDRV), *I/O Drivers*, 13-23
 DNA field in FAB, *RMS-11 Macro*, 3-3
 CREATE operation, *RMS-11 Macro*, 5-10
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-41
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-87
 DNA field in FAB (cont'd.)
 REMOVE operation, *RMS-11 Macro*, 5-103
 RENAME operation, *RMS-11 Macro*, 5-109, 5-110
 summary, *RMS-11 Macro*, 6-35
 DNS field in FAB, *RMS-11 Macro*, 3-3
 CREATE operation, *RMS-11 Macro*, 5-10
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-41
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-87
 REMOVE operation, *RMS-11 Macro*, 5-103
 RENAME operation, *RMS-11 Macro*, 5-109, 5-110
 summary, *RMS-11 Macro*, 6-36
 /DNS switch
 FLX utility, *Utilities*, 4-7
 DOL/DOLW: subroutine
 latch or unlatch fields (UDDRV), *I/O Drivers*, 16-24
 DOL/DOLW routine
 multiple bistable digital output field (ICDRV/ISDRV), *I/O Drivers*, 19-45, 19-46
 Dollar sign (\$), *Debugging*, 2-6, 5-1, 9-10
 in file specification, *MCR*, 2-7
 ODT, *Program Development*, 5-6, 5-7, 5-8
 specifying directory, *MCR*, 3-182
 DOM/DOMW
 momentary digital output multiple field (ICDRV/ISDRV), *I/O Drivers*, 19-49
 DOM/DOMW: subroutine
 pulse fields (UDDRV), *I/O Drivers*, 16-25
 ^D operator, *MACRO-11*, 3-5, 6-32
 DOS-11
 device support
 FLX utility, *Utilities*, 4-1
 file copying
 FLX utility, *Utilities*, 4-3
 volume
 deleting
 FLX utility, *Utilities*, 4-10

- DOS-11
 - volume (cont'd.)
 - directory listing
 - FLX utility, *Utilities*, 4-8
 - initializing
 - FLX utility, *Utilities*, 4-10
 - /DO switch
 - FLX utility, *Utilities*, 4-4
- DOSWP: subroutine
 - initiating synchronous digital output sweep
 - K-series, *I/O Drivers*, 23-19
 - LADRV, *I/O Drivers*, 22-14
- Dot (.) indicator
 - See Register indicator
- Double ASCII character indicator,
 - MACRO-11, 3-2
- Double-precision divide (\$DDIV),
 - System Library*, 3-3
- Double-precision multiply (\$DMUL),
 - System Library*, 3-3
- Double-precision routine, *System Library*, 3-2
- Double quote character, MACRO-11, 6-25
- Double space
 - TTDRV, *I/O Drivers*, 2-75
 - VFC (half-duplex), *I/O Drivers*, 3-27
 - VFC (LPDRV), *I/O Drivers*, 10-6
- Doubleword
 - address, *Writing I/O Driver*, 7-1, 7-2
- DOUT: subroutine
 - digital output (K-series), *I/O Drivers*, 23-20
- DP11 (communication driver)
 - baud rate, *I/O Drivers*, 12-3
 - serial synchronous interface, *I/O Drivers*, 12-2
 - synchronous line interface, *I/O Drivers*, 12-3
- DPB, *Executive*, 1-2 *I/O Drivers*, 1-12, 1-14, 1-15 *Writing I/O Driver*, 4-11
 - details, *Writing I/O Driver*, 4-14, 4-15
 - diagnostic, *I/O Drivers*, 1-35
 - diagnostic word data, *I/O Drivers*, 1-34
 - dynamic creation, *I/O Drivers*, 1-14
 - example, *I/O Drivers*, 1-12
 - format, *Writing I/O Driver*, 4-14, 4-15
- DPB (cont'd.)
 - I/O function allowances, *Writing I/O Driver*, 4-19
 - usage in creating I/O packet, *Writing I/O Driver*, 3-2
- \$DPB\$\$, *Executive*, 1-6
- DP command
 - EDI utility, *Program Development*, 2-17 *Utilities*, 2-14, 2-31
- Dp parameter
 - device-specific function (UDDRV), *I/O Drivers*, 16-5
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.MLO function, *I/O Drivers*, 19-17
 - IO.MSO function, *I/O Drivers*, 19-16
- /DPRO keyword
 - SET command (MCR), *MCR*, 3-213
- DP-type disk
 - SYSGEN question, *System Generation*, 3-43
- DQ11 (communication driver)
 - baud rate, *I/O Drivers*, 12-3
 - serial synchronous interface, *I/O Drivers*, 12-2
 - sync character, *I/O Drivers*, 12-3
 - synchronous line interface, *I/O Drivers*, 12-3
- DR11-K digital I/O interface, *I/O Drivers*, 23-2
- DRDSP
 - directive dispatcher, *Writing I/O Driver*, 3-2
- D register, *Debugging*, 2-7, 5-4, 6-2
- DRERR\$ macro
 - I/O completion code, *I/O Drivers*, 1-37
- DRGIN.MAC, *Executive*, 1-24
- Drive, *RMS-11 Introduction*, 2-1
- Driver, *Writing I/O Driver*, 1-2
 - acceptance routine, *Writing I/O Driver*, 1-13
 - accessing a controller, *Writing I/O Driver*, 1-17
 - advanced features, *Writing I/O Driver*, 1-7, 1-10, 1-11, 1-13, 1-14, 1-15, 1-16, 2-4
 - assembling
 - during system generation, *Writing I/O Driver*, 5-3
 - building
 - loadable, *Writing I/O Driver*, 5-2

Driver

- building (cont'd.)
 - resident, *Writing I/O Driver*, 5-2
- code, *Writing I/O Driver*, 1-3, 1-19
 - creating, *Writing I/O Driver*, 4-4
 - definition, *Writing I/O Driver*, 1-5
 - function, *Writing I/O Driver*, 4-4
 - general description, *Writing I/O Driver*, 4-4
 - requirements, *Writing I/O Driver*, 4-59
 - usage of symbolic offsets, *Writing I/O Driver*, 4-59
- conversion routine, *Writing I/O Driver*, 1-15
- converting RSX-11M to RSX-11M-PLUS
 - adding \$GTPKT, *Writing I/O Driver*, B-4
 - adding the DDT\$ macro call, *Writing I/O Driver*, B-4
 - conditional symbols, *Writing I/O Driver*, B-4
 - handling function codes, *Writing I/O Driver*, B-6
 - interrupt entry point, *Writing I/O Driver*, B-6
 - LBN conversion, *Writing I/O Driver*, B-6
 - modifying the driver code, *Writing I/O Driver*, B-4
 - reconfiguration support, *Writing I/O Driver*, B-5
 - using \$CVLBN, *Writing I/O Driver*, B-6
 - using INTSV\$, *Writing I/O Driver*, B-6
 - volume valid processing, *Writing I/O Driver*, B-5
- data base, *Writing I/O Driver*, 1-4, 1-18
 - linkages, *Writing I/O Driver*, 1-18
- data structure, *Writing I/O Driver*, 1-4, 4-27
 - accessing, *Writing I/O Driver*, 4-2
 - details, *Writing I/O Driver*, 4-10

Driver

- data structure (cont'd.)
 - symbolic offsets, *Writing I/O Driver*, 4-2
- DDT\$ macro call
 - arguments, *Writing I/O Driver*, 4-5, 4-6
 - placement of, *Writing I/O Driver*, 4-5, 4-6
- debugging, *Debugging*, 9-2 *Writing I/O Driver*, 1-20, 6-1 to 6-6, 6-8, 6-10 to 6-13
 - using CDA, *Writing I/O Driver*, 6-1
 - using XDT, *Writing I/O Driver*, 6-1
- defining labels, *Writing I/O Driver*, 4-60
- definition, *System Generation*, 1-8
- details of code, *Writing I/O Driver*, 4-59 to 4-70
- dual access, *Writing I/O Driver*, 1-12
- entry points, *Writing I/O Driver*, 1-4, 2-4
 - See also Driver entry point
- executable instructions, *Writing I/O Driver*, 1-4
- executing on correct processor, *Writing I/O Driver*, 1-18
- Executive
 - choosing options, *Writing I/O Driver*, 5-9, 5-10, 5-11
- Executive services, *Writing I/O Driver*, 3-4 to 3-6
- for NPR devices (on PDP-11), *Writing I/O Driver*, 7-2
- full-duplex, *Writing I/O Driver*, 4-13
- GTPKT\$ macro call
 - arguments, *Writing I/O Driver*, 4-7
 - placement of, *Writing I/O Driver*, 4-7
- handling full-duplex operations, *Writing I/O Driver*, 1-13
- handling multiple I/O requests, *Writing I/O Driver*, 1-13
- I/O packet, *Writing I/O Driver*, 1-4
- I/O queue
 - placement of I/O packet, *Writing I/O Driver*, 4-11

Driver

- I/O request
 - function codes for, *Writing I/O Driver*, 4-13
 - processing, *Writing I/O Driver*, 1-15, 1-16
- I/O requirements, *Writing I/O Driver*, 4-19
- incorporating, *Writing I/O Driver*, 1-18, 1-19, 5-1
 - at system generation, *Writing I/O Driver*, 5-1
 - guidelines for, *Writing I/O Driver*, 5-1
 - loadable, *Writing I/O Driver*, 5-1
 - resident, *Writing I/O Driver*, 5-1
- initiating I/O, *Writing I/O Driver*, 1-17
- interrupt handling, *Writing I/O Driver*, 1-8
- interrupt level, *Writing I/O Driver*, 1-6, 1-8
- interrupts, *Writing I/O Driver*, 7-1
- INTSV\$ macro call
 - arguments, *Writing I/O Driver*, 4-8
 - placement of, *Writing I/O Driver*, 4-8
- loadable
 - data base, *Writing I/O Driver*, 5-1 to 5-2
 - definition, *Writing I/O Driver*, 1-2
 - entry points for LOAD and UNLOAD, *Writing I/O Driver*, 4-9
 - incorporating, *Writing I/O Driver*, 1-18, 5-1, 5-2
 - rebuilding and reincorporating a, *Writing I/O Driver*, 6-13
 - SYSGEN question, *System Generation*, 3-25
 - with loadable data base, *Writing I/O Driver*, 1-19
 - with resident data base, *Writing I/O Driver*, 1-19
- loading, *Writing I/O Driver*, 5-5
- loading on pregenerated kit, *System Generation*, 5-41
- macro call, *Writing I/O Driver*, 4-4, 4-5

Driver (cont'd.)

- mapping with Executive, *Writing I/O Driver*, 1-2, 1-3
- modifying data in UCB, *Writing I/O Driver*, 2-3
- module
 - inserting into library, *Writing I/O Driver*, 5-4
- partition, *Writing I/O Driver*, 5-5
- predriver initiation, *Writing I/O Driver*, 3-2
- process, *Writing I/O Driver*, 1-11
 - definition, *Writing I/O Driver*, 1-5
- processing
 - I/O request, *Writing I/O Driver*, 1-4, 3-3
 - interrupts, *Writing I/O Driver*, 1-6
- programming
 - conventions, *Writing I/O Driver*, 4-1
 - requirements, *Writing I/O Driver*, 4-4 to 4-9
- protocol, *Writing I/O Driver*, 1-8, 4-1
- requesting I/O packet, *Writing I/O Driver*, 1-5, 1-17
- resident, *Writing I/O Driver*, 1-18
 - definition, *Writing I/O Driver*, 1-2
 - incorporating, *Writing I/O Driver*, 1-18, 5-1, 5-2
 - with resident data base, *Writing I/O Driver*, 1-19
- sample source code, *Writing I/O Driver*, 8-3 to 8-12
- servicing
 - I/O request, *Writing I/O Driver*, 1-4
- specifying as loadable, *Writing I/O Driver*, 4-9
- standards, *Writing I/O Driver*, 4-1
- system generation, *Writing I/O Driver*, 5-4, 5-5
 - dialogue summary, *Writing I/O Driver*, 5-9
 - effect, *Writing I/O Driver*, 5-3
- system macro call
 - arguments, *Writing I/O Driver*, 4-5
 - general functions, *Writing I/O Driver*, 4-5

- Driver (cont'd.)
 - taskbuilding, *Writing I/O Driver*, 5-4, 5-5
 - terminal, extended I/O
 - SYSGEN question, *System Generation*, 3-30
 - type, *Writing I/O Driver*, 1-2
 - UMR procedures, *Writing I/O Driver*, 7-2 to 7-5
 - user-supplied
 - SYSGEN question, *System Generation*, 3-65
 - XDT support, *Writing I/O Driver*, 6-1
- Driver Dispatch Table, *Writing I/O Driver*, 4-4
 - address of routines, *Writing I/O Driver*, 1-4
 - entry points, *Writing I/O Driver*, 2-4
 - association of, *Writing I/O Driver*, 4-60
 - format, *Writing I/O Driver*, 4-60
 - generation of, *Writing I/O Driver*, 4-4
 - from DDT\$, *Writing I/O Driver*, 4-60
 - labels required, *Writing I/O Driver*, 4-60
 - layout, *Writing I/O Driver*, 4-61
 - linking to the driver code and data base, *Writing I/O Driver*, 4-60
- Driver entry point, *Writing I/O Driver*, 2-4, 4-62
 - block check and conversion, *Writing I/O Driver*, 4-62
 - cancel I/O, *Writing I/O Driver*, 4-62, 4-64, 4-65
 - controller status change, *Writing I/O Driver*, 4-62, 4-66, 4-67, 4-68
 - deallocation, *Writing I/O Driver*, 4-66
 - device time-out, *Writing I/O Driver*, 4-62, 4-65
 - I/O initiation, *Writing I/O Driver*, 4-62, 4-63, 4-64
 - interrupt, *Writing I/O Driver*, 4-62, 4-69, 4-70
 - next command, *Writing I/O Driver*, 4-65
 - power failure, *Writing I/O Driver*, 4-62, 4-66
 - queue optimization, *Writing I/O Driver*, 4-65
- Driver entry point (cont'd.)
 - standard labels, *Writing I/O Driver*, 4-62
 - unit status change, *Writing I/O Driver*, 4-62, 4-68, 4-69
- Drive serial numbers
 - significant numbers, *Error Logging*, B-1
- DRQIO
 - performing redirect algorithm, *Writing I/O Driver*, 3-2
- \$DRQRQ routine, *Writing I/O Driver*, 1-15
 - locating the conversion routine, *Writing I/O Driver*, 1-15
- DRS11, *I/O Drivers*, 19-1
 - addressing, *I/O Drivers*, 19-8
 - sample configuration, *I/O Drivers*, 19-7
- DRS: subroutine
 - synchronous digital input sweep (LSDRV), *I/O Drivers*, 17-15
- DR-type disk
 - SYSGEN question, *System Generation*, 3-36
- DRV11 digital I/O interface, *I/O Drivers*, 23-2
- /DRV keyword
 - OPENREGISTER command, *MCR*, 3-166
- .DSABL directive, *MACRO-11*, 6-19, 6-20, 6-21
 - arguments for, *MACRO-11*, 6-19, 6-20, 6-21
- /DSABLE qualifier, *MACRO-11*, 8-8
- DSAR\$\$ directive, *Executive*, 5-64
 - I/O Drivers*, 1-11
- DSCP\$\$ directive, *Executive*, 5-66
- DSC utility
 - bad block information, *Utilities*, 8-9
 - command line, *Utilities*, 8-5
 - parameter, *Utilities*, 8-5
 - stand-alone, *Utilities*, 8-21
 - data transfer, *Utilities*, 8-24
 - device support, *Utilities*, 8-4
 - error message, *Utilities*, 8-28
 - file label, *Utilities*, 8-8
 - initiating, *Utilities*, 8-5
 - operation overview, *Utilities*, 8-19
 - stand-alone
 - command line, *Utilities*, 8-21
 - DSC64K.SYS, *Utilities*, 8-23
 - CNF and, *Utilities*, 8-24
 - DSCSYS.SYS, *Utilities*, 8-19

- DSC utility (cont'd.)
 - switch, *Utilities*, 8-6
 - on-line, *Utilities*, 8-9
 - stand-alone
 - DSC64K.SYS, *Utilities*, 8-24
 - DSCSYS.SYS, *Utilities*, 8-20
 - summary, *Utilities*, 8-7, 8-20
 - terminating, *Utilities*, 8-5
- DSP1M1
 - subpacket definition, *Error Logging*, 4-72
- DSP1P1
 - subpacket definition, *Error Logging*, 4-72
- DSP2M1
 - subpacket definition, *Error Logging*, 4-73
- DSP2P1
 - subpacket definition, *Error Logging*, 4-73
- DSP3M1
 - subpacket definition, *Error Logging*, 4-73
- DSP3P1
 - subpacket definition, *Error Logging*, 4-73
- DSP4M1
 - subpacket definition, *Error Logging*, 4-74
- DSP4P1
 - subpacket definition, *Error Logging*, 4-74
- DSP5M1
 - subpacket definition, *Error Logging*, 4-74
- DSP5P1
 - subpacket definition, *Error Logging*, 4-74
- DSP6M1
 - subpacket definition, *Error Logging*, 4-74
- DSP6P1
 - subpacket definition, *Error Logging*, 4-74
- DSP7M1
 - subpacket definition, *Error Logging*, 4-75
- DSP7P1
 - subpacket definition, *Error Logging*, 4-75
- D-space
 - See Data space
- DSPPAT option, *Task Builder*, 12-14
- DSR
 - See Pool
- DSS11, *I/O Drivers*, 19-1
 - addressing, *I/O Drivers*, 19-8
 - configuration
 - hardware, *I/O Drivers*, 19-1
 - sample, *I/O Drivers*, 19-7
- /DS switch, *MACRO-11*, 8-6
- DS-type disk
 - SYSGEN question, *System Generation*, 3-37
- \$DSW, *Executive*, 1-2
- DSW, *Executive*, 1-2
- DSW\$ status code return, *I/O Drivers*, 1-37
- DSW register, *Debugging*, 5-3
 - See also W register
- D symbolic argument, *MACRO-11*, 6-41
- DT07 bus switch, *Writing I/O Driver*, 1-16
- DT07 UNIBUS switch, *I/O Drivers*, 24-1
- DTE, *System Management*, 1-3, 9-1
- DTP field in KEY block
 - CREATE operation, *RMS-11 Macro*, 5-18
 - DISPLAY operation, *RMS-11 Macro*, 5-31
 - offset, *RMS-11 Macro*, 6-67
 - OPEN operation, *RMS-11 Macro*, 5-80
 - summary, *RMS-11 Macro*, 6-74
- DTRG\$ directive, *Executive*, 5-67
- DT-type magnetic tape
 - SYSGEN question, *System Generation*, 3-49
- DU11 (communication driver)
 - serial synchronous interface, *I/O Drivers*, 12-2
 - sync character, *I/O Drivers*, 12-3
 - synchronous line interface, *I/O Drivers*, 12-3
- Dual access, *Writing I/O Driver*, 1-11
 - operation of, *Writing I/O Driver*, 2-10
- Dual-access device
 - definition, *System Generation*, 1-9
 - SYSGEN question, *System Generation*, 3-36, 3-37, 3-41
- Dual-access support, *Writing I/O Driver*, 1-11

- Dummy argument, *MACRO-11*, 7-2
- Dump
 - See also PMD
 - See also Snapshot dump
 - memory, *Task Builder*, D-11
- Dumping file
 - DMP utility, *Utilities*, 11-1
 - /DUMP switch, *CDA*, 2-5, 2-6
- DUP11 (communication driver)
 - serial synchronous interface, *I/O Drivers*, 12-2
 - synchronous line interface, *I/O Drivers*, 12-4
- DUP11 line interface
 - SYSGEN question, *System Generation*, 3-64
- Duplicate key, *RMS-11 Introduction*, 3-10 *RMS-11 User's Guide*, 6-8
 - See also XB\$DUP mask in FLG field
- DUPLICATES attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-40, 2-42
 - area section, *RMS-11 Utilities*, 2-44
- DU-type disk
 - SYSGEN question, *System Generation*, 3-45
- DV.UMD bit
 - UCB, set for diagnostic, *I/O Drivers*, 1-34
- DVB field in KEY block
 - DISPLAY operation, *RMS-11 Macro*, 5-31
 - offset, *RMS-11 Macro*, 6-68
 - OPEN operation, *RMS-11 Macro*, 5-80
 - summary, *RMS-11 Macro*, 6-75
- DVI field in NAM block, *RMS-11 Macro*, 3-3
 - CREATE operation, *RMS-11 Macro*, 5-10, 5-21
 - ENTER operation, *RMS-11 Macro*, 5-36, 5-37
 - ERASE operation, *RMS-11 Macro*, 5-41, 5-42
 - offset, *RMS-11 Macro*, 6-94
 - OPEN operation, *RMS-11 Macro*, 5-73, 5-77
 - PARSE operation, *RMS-11 Macro*, 5-88
 - REMOVE operation, *RMS-11 Macro*, 5-103, 5-105
- DVI field in NAM block (cont'd.)
 - RENAME operation, *RMS-11 Macro*, 5-109, 5-110, 5-111
 - SEARCH operation, *RMS-11 Macro*, 5-116
 - summary, *RMS-11 Macro*, 6-96
- \$DVMSG routine, *Writing I/O Driver*, 7-17
- /DV switch
 - VFY utility, *Utilities*, 9-5
- Dwell parameter
 - XRATE: subroutine
 - K-series, *I/O Drivers*, 23-30
 - LADRV, *I/O Drivers*, 22-26
- DX-type disk
 - SYSGEN question, *System Generation*, 3-49
- Dynamic checkpoint space allocation, *System Generation*, C-6
- Dynamic common region
 - checkpointing, *System Management*, 14-2
 - shuffling, *System Management*, 14-4
- Dynamic memory, *System Generation*, C-3
- Dynamic region, *Executive*, 3-5 *Task Builder*, 5-40 to 5-44
 - creating, *Executive*, 5-50
- Dynamic storage region
 - See Pool
- DYNAMIC TABLE statement, *Error Logging*, 5-37
- DY-type disk
 - SYSGEN question, *System Generation*, 3-50
- DZ11
 - half-duplex
 - remote line, *I/O Drivers*, 3-33
 - serial line multiplexer, *I/O Drivers*, 3-31
 - with modem, *I/O Drivers*, 3-33
- TTDRV
 - remote serial line, *I/O Drivers*, 2-83
 - serial line multiplexer, *I/O Drivers*, 2-82
 - serial line with modem, *I/O Drivers*, 2-83
- DZ11/DZQ11/DZV11 line multiplexer
 - SYSGEN question, *System Generation*, 3-61

E

E1134, *Error Logging*, 4-8
E1144, *Error Logging*, 4-8
E117X, *Error Logging*, 4-8
E11XX, *Error Logging*, 4-8
/EA switch, *Task Builder*, 10-16
EBCDIC
 character set, *MCR*, 3-153
/EBC keyword
 SET command (MCR), *MCR*, 3-215
 SET command (VMR), *System Management*, 10-57
Echo, *Introduction*, 1-5
Echo, multiple (half-duplex), *I/O Drivers*, 3-16
/ECHO keyword
 SET command (MCR), *MCR*, 3-216
 SET command (VMR), *System Management*, 10-58
Echo loops, *System Management*, 9-4
E command, *Debugging*, 2-9, 6-2, 6-3
ED command
 EDI utility, *Utilities*, 2-32
EDI (Line Text Editor), *Command Language*, 4-28
EDIT command, *Command Language*, 4-21 to 4-30
 Introduction, 3-6
 EDIT/EDI, *Command Language*, 4-28 to 4-30, 9-15
 EDIT/EDT, *Command Language*, 4-22 to 4-25, 9-14
 EDIT/SLP, *Command Language*, 4-26 to 4-28, 9-14
 /RECOVER qualifier, *Command Language*, 4-23
 /OUTPUT qualifier, *Introduction*, 5-8
/EDIT keyword
 SET command (MCR), *MCR*, 3-217
 SET command (VMR), *System Management*, 10-58
Editor
 EDI utility, *Utilities*, 2-1
 text, *Program Development*, 1-3, 1-4
 See also EDI utility
 See also EDT editor
EDI utility, *Program Development*, 1-3, 1-4
 abbreviating
 strings, *Program Development*, 2-16

EDI utility
 altering
 text, *Program Development*, 7-5
 asterisk (*), *Program Development*, 2-10
 block mode, *Program Development*, 1-3
CHANGE command, *Program Development*, 7-5
character erase, *Utilities*, 2-6
command
 basic, *Utilities*, 2-9
 detailed reference summary, *Utilities*, 2-27
 device output, *Utilities*, 2-26
 file I/O, *Utilities*, 2-25
 function summary, *Utilities*, 2-20
 locator, *Utilities*, 2-22
 macro, *Utilities*, 2-25
 set up, *Utilities*, 2-21
 summary, *Utilities*, 2-10
 text manipulation, *Utilities*, 2-23 to 2-24
 text modification, *Utilities*, 2-23 to 2-24
commands, *Program Development*, 2-12 to 2-18
 AP command, *Program Development*, 2-17
 BEGIN, *Program Development*, 2-14
 CHANGE, *Program Development*, 2-16
 DP command, *Program Development*, 2-17
 END, *Program Development*, 2-14
EXIT
 closing file, *Program Development*, 2-10
 creating new file, *Program Development*, 2-12, 2-18
INSERT, *Program Development*, 2-18
LIST, *Program Development*, 2-13
LOCATE, *Program Development*, 2-14, 2-18
PLOCATE, *Program Development*, 2-15
RENEW, *Program Development*, 2-15

- EDI utility
 - commands (cont'd.)
 - TYPE, *Program Development*, 2-13, 2-14
 - TYPE command, *Program Development*, 2-17
 - control mode, *Utilities*, 2-3
 - convention
 - command, *Utilities*, 2-8
 - terminal, *Utilities*, 2-6
 - correcting
 - source file error, *Program Development*, 7-4, 7-5
 - task error, *Program Development*, 4-9, 7-9
 - creating
 - file, *Program Development*, 2-9, 2-10, 2-12, 7-2, 7-3
 - deleting
 - characters, *Program Development*, 2-17
 - lines, *Program Development*, 2-17
 - displaying text, *Program Development*, 2-13
 - ellipsis, *Program Development*, 2-16
 - error message, *Utilities*, 2-56
 - command level information, *Utilities*, 2-57
 - fatal, *Utilities*, 2-64
 - file access, *Utilities*, 2-60
 - requiring EDI restart, *Utilities*, 2-61
 - ESCAPE key, *Program Development*, 2-13
 - example, *Utilities*, 2-51
 - EXIT command
 - closing file, *Program Development*, 7-7
 - creating new file, *Program Development*, 7-5
 - file specification
 - default, *Utilities*, 2-2
 - format, *Utilities*, 2-2
 - initiating (invoking), *Utilities*, 2-1
 - input
 - initial, *Program Development*, 2-9, 7-3
 - terminating, *Program Development*, 2-10
 - INSERT command, *Program Development*, 7-7
- EDI utility
 - inserting
 - characters, *Program Development*, 2-17
 - lines, *Program Development*, 2-9, 2-18
 - insert mode, *Program Development*, 2-18
 - line erase, *Utilities*, 2-7
 - LOCATE command, *Program Development*, 7-4, 7-5, 7-7
 - locating text, *Program Development*, 2-14, 2-15, 7-4, 7-5
 - paging, *Utilities*, 2-5
 - positioning line pointer, *Program Development*, 2-14, 2-15
 - RETURN key, *Program Development*, 2-9, 2-10, 2-13, 2-18, 7-7
 - Utilities*, 2-7
 - slash (/), *Program Development*, 2-16
 - text access mode, *Utilities*, 2-3
 - block mode, *Utilities*, 2-4
 - line-by-line mode, *Utilities*, 2-4
 - text file
 - creating, *Utilities*, 2-2
 - input, *Utilities*, 2-6
 - output, *Utilities*, 2-6
 - secondary, *Utilities*, 2-6
 - text modification, *Program Development*, 2-16
 - usage notes, *Utilities*, 2-50
 - \$EDMSG (Edit message), *System Library*, 6-5
 - EDT Editor, *Command Language*, 4-22
 - EDIT command, *Command Language*, 9-14
 - EDT editor, *Introduction*, 2-2 *Program Development*, 1-3
 - Best reference, *EDT Editor Manual*
 - EDT field in DAT block
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - offset, *RMS-11 Macro*, 6-14
 - OPEN operation, *RMS-11 Macro*, 5-81
 - summary, *RMS-11 Macro*, 6-18
 - EDT field in NAM block
 - RSX-11, *RMS-11 Macro*, D-4
 - EDTINI.EDT file, *Introduction*, 2-2
 - E error, *MACRO-11*, 6-39
 - summary, *MACRO-11*, D-3
 - Efn parameter
 - general (TTDRV), *I/O Drivers*, 2-10

- Efn parameter (cont'd.)
 - IO.ATA function (TTDRV), *I/O Drivers*, 2-20
 - IO.ATT function, *I/O Drivers*, 1-27
 - IO.CCO function (TTDRV), *I/O Drivers*, 2-23
 - IO.DET function, *I/O Drivers*, 1-28
 - IO.EIO function (TTDRV), *I/O Drivers*, 2-26
 - IO.GTS function (TTDRV), *I/O Drivers*, 2-33
 - IO.HNG function (TTDRV), *I/O Drivers*, 2-35
 - IO.KIL function, *I/O Drivers*, 1-29
 - IO.RAL function (TTDRV), *I/O Drivers*, 2-36
 - IO.RLB function, *I/O Drivers*, 1-30
 - IO.RNE function (TTDRV), *I/O Drivers*, 2-38
 - IO.RPR function (TTDRV), *I/O Drivers*, 2-40
 - IO.RST function (TTDRV), *I/O Drivers*, 2-43
 - IO.RTT function (TTDRV), *I/O Drivers*, 2-45
 - IO.RVB function, *I/O Drivers*, 1-31
 - IO.SMC function (TTDRV), *I/O Drivers*, 2-59
 - IO.WAL function (TTDRV), *I/O Drivers*, 2-47
 - IO.WBT function (TTDRV), *I/O Drivers*, 2-49
 - IO.WLB function, *I/O Drivers*, 1-32
 - IO.WVB function, *I/O Drivers*, 1-33
 - IO.XCL function (XEDRV), *I/O Drivers*, 13-17
 - IO.XIN function (XEDRV), *I/O Drivers*, 13-10
 - IO.XOP function (XEDRV), *I/O Drivers*, 13-6
 - IO.XRC function (XEDRV), *I/O Drivers*, 13-14
 - IO.XSC function (XEDRV), *I/O Drivers*, 13-7
 - IO.XTL function (XEDRV), *I/O Drivers*, 13-18
 - IO.XTM function (XEDRV), *I/O Drivers*, 13-11
 - QIO\$ basic syntax, *I/O Drivers*, 1-7
 - SF.GMC function (TTDRV), *I/O Drivers*, 2-51
 - WTSE\$ macro, *I/O Drivers*, 1-25
- Elapsed time
 - between events (LSDRV), *I/O Drivers*, 17-7
- ELAW\$ directive, *Executive*, 5-69
- Element
 - extended arithmetic
 - specifying, *Task Builder*, 11-16
- Elevator
 - definition, *Writing I/O Driver*, 1-15
- ELGF\$ directive, *Executive*, 5-71
- ELI, *Error Logging*, 1-1
 - Append switch, *Error Logging*, 2-3, 2-8
 - Delete subswitch, *Error Logging*, 2-3, 2-8
 - /AP switch, *Error Logging*, 2-3, 2-8
 - Backup switch, *Error Logging*, 2-3, 2-9
 - /BA switch, *Error Logging*, 2-3, 2-9
 - error messages
 - console terminal, *Error Logging*, 2-11
 - user terminal, *Error Logging*, 2-11
 - file naming switch, *Error Logging*, 2-8
 - Hard error limit switch, *Error Logging*, 2-3, 2-7
 - /HL switch, *Error Logging*, 2-3, 2-7
 - installing
 - privileged, *Error Logging*, 2-1
 - startup command file, *Error Logging*, 2-1
 - invoking, *Error Logging*, 2-2
 - privileged, *Error Logging*, 2-1
 - Limit switch, *Error Logging*, 2-3, 2-6
 - /LIM switch, *Error Logging*, 2-3, 2-6
 - /LOG switch, *Error Logging*, 2-2, 2-3, 2-4, 2-5, 2-8
 - Log switch, *Error Logging*, 2-3, 2-4, 2-5, 2-8
 - error limiting and, *Error Logging*, 2-2
 - New version subswitch, *Error Logging*, 2-3, 2-6
 - No limit subswitch, *Error Logging*, 2-3, 2-5, 2-6
 - No limit switch, *Error Logging*, 2-3, 2-6
 - /NOLIM switch, *Error Logging*, 2-3, 2-6
 - /NOLOG switch, *Error Logging*, 2-4
 - No log switch, *Error Logging*, 2-4

- ELI (cont'd.)
 - nonprivileged command, *Error Logging*, 2-2
 - privileged commands, *Error Logging*, 2-2
 - Reset switch, *Error Logging*, 2-4, 2-7
 - /RE switch, *Error Logging*, 2-7
 - /R switch, *Error Logging*, 2-4
 - Show switch, *Error Logging*, 2-2, 2-4, 2-10, 2-11
 - /SH switch, *Error Logging*, 2-4, 2-10, 2-11
 - /SL switch, *Error Logging*, 2-4, 2-7
 - Soft error limit switch, *Error Logging*, 2-4, 2-7
 - subswitch summary, *Error Logging*, 2-3
 - switch functions, *Error Logging*, 2-1
 - switch summary, *Error Logging*, 2-3
 - Switch switch, *Error Logging*, 2-4, 2-8
 - Delete subswitch, *Error Logging*, 2-4, 2-9
 - New version subswitch, *Error Logging*, 2-4, 2-9
 - /SW switch, *Error Logging*, 2-4, 2-8
 - using ERRLOG defaults, *Error Logging*, 2-2
- ELI command
 - reset limit, *Error Logging*, 1-4
- Eliminate Address Window directive, *Executive*, 5-69
- Eliminate Group Global Event Flags directive, *Executive*, 5-71
- Eliminate Virtual Terminal directive, *Executive*, 5-73
- /ELIM keyword
 - CLI command, *MCR*, 3-48
 - FLA command, *MCR*, 3-77
- ELI show switch
 - QIO count, *Error Logging*, 2-11
- ELI switches
 - type
 - display, *Error Logging*, 2-2
 - file naming, *Error Logging*, 2-2
 - limiting, *Error Logging*, 2-2
 - logging, *Error Logging*, 2-2
- Ellipsis
 - EDI utility, *Program Development*, 2-16
- /EL switch, *Task Builder*, 10-17
- ELVT\$ directive, *Executive*, 5-73
- Emit Status directive, *Executive*, 5-75
- EML11, *Error Logging*, 4-8
- EMST\$ directive, *Executive*, 5-75
- EMT 377 instruction, *Executive*, 1-1
- EMT trap instruction, *Debugging*, 8-5, 9-5
- EM-type disk
 - SYSGEN question, *System Generation*, 3-38
- .ENABL directive, *MACRO-11*, 6-19, 6-20, 6-21
 - arguments for, *MACRO-11*, 6-19, 6-20, 6-21
- Enable AST Recognition directive, *Executive*, 5-76
- Enable Checkpointing directive, *Executive*, 5-77
- .ENABLE directive, *Indirect*, 2-47
- .ENABLE GLOBAL directive, *Indirect*, 2-4
- /ENABLE keyword, *MCR*, 3-49
- /ENABLE qualifier, *MACRO-11*, 8-8
- ENABLE statement, *Error Logging*, 5-40
- ENAR\$\$ directive, *Executive*, 5-76
 - I/O Drivers, 1-11
- Encoding function, *Error Logging*, 5-19
- ENCP\$\$ directive, *Executive*, 5-77
- .ENDC directive, *MACRO-11*, 6-51
- END command
 - EDI utility, *Program Development*, 2-14 *Utilities*, 2-31
- .END directive, *Indirect*, 2-4, 2-51 *MACRO-11*, 6-39 *Program Development*, 2-7, 3-4, 4-3, 4-8
 - Task Builder*, 3-23, 3-24
 - summary, *Task Builder*, 3-50
- .ENDM directive, *MACRO-11*, 7-2
- End-of-block indicator
 - sequential files, *RMS-11 User's Guide*, 3-2
- End-of-file
 - See also EOF
 - label (tape), *I/O Operations*, G-9
 - READ\$ macro, *I/O Operations*, 3-36
 - sequential files, *RMS-11 User's Guide*, 3-2
- End of global symbol directory, *Task Builder*, A-11
- End-of-module
 - record, *Task Builder*, A-24, A-30
 - record format, *Task Builder*, A-32

- End-of-tape
 - See EOT
- End-of-tape handling, *I/O Operations*, G-10
- End-of-volume label (tape), *I/O Operations*, G-8
- .ENDR directive, *MACRO-11*, 7-19
- /EN switch, *MACRO-11*, 8-6
 - PIP utility, *Utilities*, 3-19
 - QUE /DEL command, *Batch and Queue*, 2-10
 - QUE /LI command, *Batch and Queue*, 2-16
- ENTER key, *Command Language*, 3-14
- \$ENTER macro, *RMS-11 Macro*, 5-35
 - RSTS/E, *RMS-11 Macro*, D-4
- ENTER operation, *RMS-11 Introduction*, 4-1 *RMS-11 Macro*, 3-5
 - BDB requirement, *RMS-11 Macro*, 2-8
 - \$ENTER macro, *RMS-11 Macro*, 5-35
 - I/O buffer requirement, *RMS-11 Macro*, 2-7
 - IFAB requirement, *RMS-11 Macro*, 2-5
 - wildcard loop, *RMS-11 Macro*, 3-10
- .ENTER routine, insert directory entry, *I/O Operations*, 4-19
- Entry number
 - QMG, *Command Language*, 4-86
- Entry point, *Program Development*, 6-5, 6-6
 - definition, program, *MACRO-11*, 6-39
 - symbol, *MACRO-11*, 6-49
 - table, *Program Development*, 6-5, 6-9, 6-10
 - zero entry points, *Program Development*, 6-7
- Entry procedure, *Error Logging*, 4-10
- /ENTRY qualifier
 - DELETE command, *Batch and Queue*, 2-10
 - SHOW QUEUE command, *Batch and Queue*, 2-16
- EOF
 - IO.SPF function (CTDRV), *I/O Drivers*, 9-7
- /EOF switch
 - PIP utility, *Utilities*, 3-21
- EOF symbol, *Indirect*, 2-10
- EOL key (EDT), *Introduction*, 2-6
- /EO switch
 - RMSCNV utility, *RMS-11 Utilities*, 4-8
- EOT
 - logical (CTDRV), *I/O Drivers*, 9-6, 9-8
 - read (PRDRV), *I/O Drivers*, 18-5
- EPKDF.MAC, *Error Logging*, 4-16
- EPKDF\$, CDA, B-13, C-17 *Writing I/O Driver*, A-14 to A-20
- EPMDF\$ macro (XEDRV), *I/O Drivers*, 13-4
- /EP switch
 - LBR utility, *Utilities*, 10-16
- EQ condition test argument, *MACRO-11*, 6-51
- Equal sign (=)
 - DCL, *Command Language*, 1-14
- Equal sign command (=), *Debugging*, 2-8, 9-11
 - ZAP utility, *Utilities*, 15-17
- Equal sign operator (=)
 - See Operator
- ER\$CUR
 - DELETE operation, *RMS-11 User's Guide*, 4-7
 - TRUNCATE operation, *RMS-11 User's Guide*, 3-12
 - UPDATE operation, *RMS-11 User's Guide*, 3-12, 4-12, 7-6
- ER\$DEL
 - FIND operation, *RMS-11 User's Guide*, 4-8, 7-3
 - GET operation, *RMS-11 User's Guide*, 4-11, 7-5
- ER\$EOF
 - FIND operation, *RMS-11 User's Guide*, 3-8, 4-8, 7-3
 - GET operation, *RMS-11 User's Guide*, 3-10, 4-10, 7-5
 - PUT operation, *RMS-11 User's Guide*, 3-11
- ER\$-family symbol
 - declaring, *RMS-11 Macro*, C-3
 - value, *RMS-11 Macro*, A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, A-12, A-13, A-14, A-15, A-16, A-17
- ER\$IOP
 - UPDATE operation, *RMS-11 User's Guide*, 3-12

ER\$KEY
 FIND operation, *RMS-11 User's Guide*, 3-8
 GET operation, *RMS-11 User's Guide*, 3-10
ER\$MRN
 FIND operation, *RMS-11 User's Guide*, 4-8
 GET operation, *RMS-11 User's Guide*, 4-10
ER\$NEF
 PUT operation, *RMS-11 User's Guide*, 3-10
ER\$RAC
 PUT operation, *RMS-11 User's Guide*, 3-10
ER\$REX
 PUT operation, *RMS-11 User's Guide*, 4-11
ER\$RFA
 FIND operation, *RMS-11 User's Guide*, 3-8, 7-3
 GET operation, *RMS-11 User's Guide*, 3-10, 7-5
ER\$RFM
 UPDATE operation, *RMS-11 User's Guide*, 3-12
ER\$RLK
 and shared access, *RMS-11 User's Guide*, 2-10
ER\$RNF
 FIND operation, *RMS-11 User's Guide*, 4-8, 7-3
 GET operation, *RMS-11 User's Guide*, 4-10, 4-11, 7-5
ER\$RSZ
 UPDATE operation, *RMS-11 User's Guide*, 3-12
Erase (tape driver), *I/O Drivers*, 8-8
 data security, *I/O Drivers*, 8-8
ERASE command
 EDI utility, *Utilities*, 2-32
 .ERASE directive, *Indirect*, 2-52
 \$ERASE macro, *RMS-11 Macro*, 5-40
 example, *RMS-11 Macro*, 7-11
ERASE operation, *RMS-11 Introduction*, 4-2 *RMS-11 Macro*, 3-7 *RMS-11 User's Guide*, 1-18
 BDB requirement, *RMS-11 Macro*, 2-8
 \$ERASE macro, *RMS-11 Macro*, 5-40
 I/O buffer requirement, *RMS-11 Macro*, 2-7
ERASE operation (cont'd.)
 IFAB requirement, *RMS-11 Macro*, 2-5
 remote access, *RMS-11 User's Guide*, B-2
 wildcard loop, *RMS-11 Macro*, 3-9, 3-10
 nonselective, *RMS-11 Macro*, 3-10
 selective, *RMS-11 Macro*, 3-11
E register, *Debugging*, 2-7, 5-4
ERK05, *Error Logging*, 4-8
ERK67, *Error Logging*, 4-8
ERL12, *Error Logging*, 4-8
ERLCFL Report Messages, *Error Logging*, 5-44
ERLCNF Report Messages, *Error Logging*, 3-22
 fatal, *Error Logging*, 3-22
 information, *Error Logging*, 3-27
ERLRPT Report Messages, *Error Logging*, 3-28
 control file, *Error Logging*, 3-28
/ERL switch
 FMT utility, *Utilities*, 5-8
ERM05, *Error Logging*, 4-8
ERM23, *Error Logging*, 4-8
ERM23 device-level module, *Error Logging*, 4-37 to 4-49
ERM80, *Error Logging*, 4-8
ERP07, *Error Logging*, 4-8
ERP23, *Error Logging*, 4-8
ERP456, *Error Logging*, 4-8
ERR attribute, *System Management*, 12-31
ERRCTL symbol, *Indirect*, 2-11
ERRDEFINE.CFS, *Error Logging*, 3-20
ERRLOG, *Error Logging*, 1-1
 backup file, *Error Logging*, 1-4, 2-9
 defaults, *Error Logging*, 2-2
 ELI commands, *Error Logging*, 1-3, 1-4
 installing
 privileged, *Error Logging*, 2-1
 log file, *Error Logging*, 1-4
 mandatory installation, *Error Logging*, 2-1
ERRLOG.ULB, *Error Logging*, 3-2
 module addition, *Error Logging*, 4-36
 tuning, *Error Logging*, A-1
ERRLOGETC.ULG, *Error Logging*, 4-36

ERRLOG Messages, *Error Logging*,
2-12

ERRNUM symbol, *Indirect*, 2-12

Error

See also Error messages

See also Message

ADS: subroutine, *I/O Drivers*,
17-32

assembly-time, *RMS-11 Macro*, 2-20

condition (PPDRV/PRDRV), *I/O
Drivers*, 18-4

correcting, *Command Language*,
1-20

data

ICAR register, *I/O Drivers*,
19-73

ICSR register, *I/O Drivers*,
19-73

detection, *Debugging*, A-1

hard receive (TTDRV), *I/O
Drivers*, 2-18, 2-77

ICDRV/ISDRV, *I/O Drivers*,
19-70

error codes, *Debugging*, 9-6, A-2

exit TKB command, *Task Builder*,
12-5

facility codes, *Debugging*, 9-6

fatal, *RMS-11 Macro*, 2-15

handler, *RMS-11 Macro*, 2-17

handling

\$ALERR entry, *Task Builder*,
4-11

for autoloading, *Task Builder*, 4-11

for manual load, *Task Builder*,
4-11

overlay, *Task Builder*, 4-11

hardware, Ethernet, *I/O Drivers*,
13-3

interrupt disable (ICDRV/ISDRV),
I/O Drivers, 19-32

log file, *MCR*, 3-273

message, *MCR*, A-1 to A-35

messages, *Task Builder*, H-1 to
H-11

recovery

CTDRV, *I/O Drivers*, 9-6

ICDRV/ISDRV, *I/O Drivers*,
19-70

reporting

disable (ICDRV/ISDRV), *I/O
Drivers*, 19-32

Error

reporting (cont'd.)

hardware enable

(ICDRV/ISDRV), *I/O
Drivers*, 19-33

retry (tape driver), *I/O Drivers*,
8-14

select (tape driver), *I/O Drivers*,
8-14

serial line (ICDRV/ISDRV), *I/O
Drivers*, 19-71

SYSGEN, *System Generation*, 3-3

system initialization, *System
Generation*, 4-12

task image, *Debugging*, A-2

T-bit, *Debugging*, 9-4

/ERROR_LIMIT qualifier, *Task Builder*,
11-28

Error code, *RMS-11 User's Guide*, 3-7,
4-7, 7-2

assembler

summary, *MACRO-11*, D-1 to
D-5

block locking, *I/O Operations*, 2-48

definitions, *CDA*, D-1

file operations, *I/O Operations*, I-1

RMSIFL utility

sort routine, *RMS-11 Utilities*,
D-1

shared file, *I/O Operations*, 2-48

.ERROR directive, *MACRO-11*, 7-15

Error limit, *Error Logging*, 1-4

altering

IOX, *System Management*, 4-36

device mount, *Error Logging*, 2-6

logging and, *Error Logging*, 2-6

notification, *Error Logging*, 1-4

reset, *Error Logging*, 1-4, 2-7

reset counts, *Error Logging*, 2-6

system reboot, *Error Logging*, 2-6

ERRORLIMIT command

IOX, *System Management*, 4-36

Error log

command packet, *Error Logging*, 1-4

control file, *Error Logging*, 1-3

architecture, *Error Logging*, 4-1

definition, *Error Logging*, 4-1

devices, *Error Logging*, 2-4

file, *Error Logging*, 1-1

definition, *Error Logging*, 4-2

format, *Error Logging*, 5-1

naming, *Error Logging*, 2-8

RPT, *Error Logging*, 1-3

packet, *Error Logging*, 1-1

- Error log
 - packet (cont'd.)
 - command, *Error Logging*, 1-3
 - creation, *Error Logging*, 4-23
 - definition, *Error Logging*, 4-2
 - ERRSEQ, *Error Logging*, 1-3
 - format, *Error Logging*, 1-4, 5-1, C-1
 - packet number
 - definition, *Error Logging*, 1-3
 - processing, *Error Logging*, 5-1
 - queue, *Error Logging*, 4-24
 - removed from queue, *Error Logging*, 4-25
 - SMSG\$, *Error Logging*, 1-4
 - structure, *Error Logging*, 4-3
 - unsolicited interrupt, *Error Logging*, 4-23
 - packet number, *Error Logging*, 3-1
 - report
 - context information, *Error Logging*, 1-5
 - subpacket
 - definition, *Error Logging*, 4-2
 - system
 - task interaction, *Error Logging*, 1-2
- Error log buffer
 - address of, CDA, 3-19
- Error Logger, *Executive*, 5-202 *System Management*, 15-30
 - See also ERRLOG
- Error logging
 - device errors, *Error Logging*, 1-6
 - executive support, *Error Logging*, 1-6
 - device errors, *Error Logging*, 1-6
 - device timeouts, *Error Logging*, 1-6
 - memory errors, *Error Logging*, 1-6
 - unexpected traps or interrupts, *Error Logging*, 1-6
 - interrupt timeouts, *Error Logging*, 1-6
 - memory errors, *Error Logging*, 1-6
 - support on Non-DIGITAL device, *Error Logging*, 4-19
 - device level module, *Error Logging*, 4-19
 - driver, *Error Logging*, 4-19
 - universal library entry, *Error Logging*, 4-19
- Error logging (cont'd.)
 - unexpected traps or interrupts, *Error Logging*, 1-6
 - unknown device
 - See EUNKWN
 - unused vectors, *Error Logging*, 1-6
- Error logging devices
 - control file module, *Error Logging*, 2-4, 2-5
- Error Logging System
 - CDA, *Error Logging*, 1-1
 - Control File Language compiler, *Error Logging*, 1-1
 - device I/O activity, *Error Logging*, 1-1
 - Error logger, *Error Logging*, 1-1
 - Error log interface, *Error Logging*, 1-1
 - executive routines, *Error Logging*, 1-1
 - hard error, *Error Logging*, 1-3
 - mass storage device errors, *Error Logging*, 1-1
 - memory errors, *Error Logging*, 1-1
 - operating system failure, *Error Logging*, 1-1
 - Report generator, *Error Logging*, 1-1
 - soft error, *Error Logging*, 1-3
- Error Log Interface
 - See ELI
- Error log packet dump, CDA, 1-9, 3-1, 3-19
- Error log report generator, MCR, 3-273
- ERRORM, *Error Logging*, 4-7
- Error messages, CDA, A-1 *Indirect*, A-1 *Introduction*, 1-1
 - BACKUP command, *Command Language*, 5-103 to 5-128
 - BAD utility, *Utilities*, 6-10
 - BRU utility, *Utilities*, 7-34
 - CMP utility, *Utilities*, 12-6
 - CRF utility, *Utilities*, B-5
 - DCL, *Command Language*, 10-1 to 10-18
 - DMP utility, *Utilities*, 11-12
 - DSC utility, *Utilities*, 8-28
 - EDI utility, *Utilities*, 2-56
 - FLX utility, *Utilities*, 4-17
 - FMT utility, *Utilities*, 5-10
 - format, *System Management*, 10-94
 - FORTTRAN IV, *Program Development*, 7-4

Error messages (cont'd.)

- INITIALIZE command, *Command Language*, 5-82 to 5-85
- INSTALL command, *Command Language*, 7-33 to 7-38
- IOX, *System Management*, 4-68
- LBR utility, *Utilities*, 10-33
- LIBRARY command, *Command Language*, 6-57 to 6-62
- MACRO-11, *MACRO-11*, 8-19 to 8-21 *Program Development*, 3-5
- MOUNT command, *Command Language*, 5-64 to 5-67
- ODT, *Program Development*, 5-3
- PAT utility, *Utilities*, 14-7
- PIP utility, *Utilities*, 3-43
- SLP utility, *Utilities*, 13-20
- TKB, *Program Development*, 4-2
- TKTN, *Program Development*, 4-8
- VFY utility, *Utilities*, 9-11
- VMR, *System Management*, 10-94 to 10-112
 - diagnostic, *System Management*, 10-94
 - fatal, *System Management*, 10-94
 - format, *System Management*, 10-94
 - unmarked, *System Management*, 10-94
- ZAP utility, *Utilities*, 15-23

ERROR module, *Error Logging*, 4-19

Error notice

- macro definition, *MACRO-11*, 7-15, 7-16

Error processing, *Indirect*, 2-11, 2-67

Error report

- data compare
 - IOX, *System Management*, 4-21
- directing to device
 - IOX, *System Management*, 4-42
- disabling
 - IOX, *System Management*, 4-54
- enabling
 - IOX, *System Management*, 4-54
- I/O error
 - IOX, *System Management*, 4-22
- types
 - IOX, *System Management*, 4-54

Error return, *Executive*, 1-3

- ACP, *I/O Drivers*, C-14
- communication driver, *I/O Drivers*, 12-8
- CRDRV, *I/O Drivers*, 11-3, 11-7

Error return (cont'd.)

- CTDRV, *I/O Drivers*, 9-4
- GCMLD\$ macro, *I/O Operations*, 6-5
- GRDRV, *I/O Drivers*, 21-3
- ICDRV/ISDRV, *I/O Drivers*, 19-12
- IE.IFC, *I/O Operations*, 2-49
- IE.LCK, *I/O Operations*, 2-49
- IE.ULK, *I/O Operations*, 2-49
- IE.WAC, *I/O Operations*, 2-48
- LPDRV, *I/O Drivers*, 10-4
- LSDRV, *I/O Drivers*, 17-29
- PPDRV/PRDRV, *I/O Drivers*, 18-3
- receiver (LRDRV), *I/O Drivers*, 14-11
- tape driver, *I/O Drivers*, 8-10
- transmitter (LRDRV), *I/O Drivers*, 14-6
- UDDRV, *I/O Drivers*, 16-31
- UNIBUS switch driver, *I/O Drivers*, 24-7
- XEDRV, *I/O Drivers*, 13-5
 - IO.XCL function, *I/O Drivers*, 13-18
 - IO.XIN function, *I/O Drivers*, 13-11
 - IO.XRC function, *I/O Drivers*, 13-16
 - IO.XTL function, *I/O Drivers*, 13-18
 - IO.XTM function, *I/O Drivers*, 13-13

Error routine

- file macro, *I/O Operations*, 3-2

Error sequence number

- See ERRSEQ

/ERRORS qualifier

- BRU utility, *Utilities*, 7-16

Error type definition, *Error Logging*, 1-5

Err parameter

- ASTX\$ macro, *I/O Drivers*, 1-24
- DIR\$ macro, *I/O Drivers*, 1-15

ERRSEQ

- Append switch, *Error Logging*, 1-3
- change, *Error Logging*, 1-3
- RMD use, *Error Logging*, 1-3

ERRSEV symbol, *Indirect*, 2-12

ERS11, *Error Logging*, 4-9

ERS34, *Error Logging*, 4-9

ERSEEN symbol, *Indirect*, 2-10

/ER switch

- RMSIFL utility, *RMS-11 Utilities*, 3-5, 3-6

- ERX01, *Error Logging*, 4-9
- ERX02, *Error Logging*, 4-9
- ESA field in NAM block, *RMS-11 Macro*, 3-3, 3-9
 - CREATE operation, *RMS-11 Macro*, 5-10
 - ENTER operation, *RMS-11 Macro*, 5-36
 - ERASE operation, *RMS-11 Macro*, 5-42
 - offset, *RMS-11 Macro*, 6-94
 - OPEN operation, *RMS-11 Macro*, 5-74
 - PARSE operation, *RMS-11 Macro*, 5-87
 - REMOVE operation, *RMS-11 Macro*, 5-104
 - RENAME operation, *RMS-11 Macro*, 5-110
 - SEARCH operation, *RMS-11 Macro*, 5-116
 - summary, *RMS-11 Macro*, 6-97
- Escape character
 - line terminator (half-duplex), *I/O Drivers*, 3-25
- ESCAPE command
 - EDI utility, *Utilities*, 2-14, 2-32
- ESCAPE key, *Command Language*, 3-14 MCR, 2-15
 - EDI utility, *Program Development*, 2-13
 - requesting list of options
 - ACNT, *System Management*, 2-3
- Escape mode, *Indirect*, 2-48
- Escape sequence
 - half-duplex, *I/O Drivers*, 3-23
 - allowed control character, *I/O Drivers*, 3-26
 - characteristic, *I/O Drivers*, 3-25
 - definition, *I/O Drivers*, 3-23
 - echo, *I/O Drivers*, 3-25
 - exception, *I/O Drivers*, 3-27
 - full buffer, *I/O Drivers*, 3-26
 - prerequisite, *I/O Drivers*, 3-25
 - recognition, *I/O Drivers*, 3-11, 3-32
 - syntax violation, *I/O Drivers*, 3-25
 - unsolicited input, *I/O Drivers*, 3-25
 - syntax exception (TTDRV), *I/O Drivers*, 2-75
- Escape sequence (cont'd.)
 - TTDRV, *I/O Drivers*, 2-72
 - characteristic, *I/O Drivers*, 2-74
 - control character, *I/O Drivers*, 2-74
 - control character error, *I/O Drivers*, 2-74
 - DELETE character, *I/O Drivers*, 2-74
 - format, *I/O Drivers*, 2-72
 - full buffer, *I/O Drivers*, 2-74
 - handling, *I/O Drivers*, 2-17
 - interrupt, *I/O Drivers*, 2-17
 - prerequisite, *I/O Drivers*, 2-73
 - recognition, *I/O Drivers*, 2-12
 - RUBOUT character, *I/O Drivers*, 2-74
 - syntax violation, *I/O Drivers*, 2-74
- Escape-sequence mode, *Indirect*, 2-48
- ESCAPE symbol, *Indirect*, 2-10
- ESC command
 - RMSDES utility, *RMS-11 Utilities*, 2-9, 2-21
- ESC key
 - half-duplex, *I/O Drivers*, 3-23, 3-24
 - TTDRV, *I/O Drivers*, 2-71
- /ESCSEQ keyword
 - SET command (MCR), *MCR*, 3-217
 - SET command (VMR), *System Management*, 10-58
- ESL field in NAM block
 - CREATE operation, *RMS-11 Macro*, 5-21
 - ENTER operation, *RMS-11 Macro*, 5-37
 - ERASE operation, *RMS-11 Macro*, 5-42
 - offset, *RMS-11 Macro*, 6-94
 - OPEN operation, *RMS-11 Macro*, 5-77
 - PARSE operation, *RMS-11 Macro*, 5-88
 - REMOVE operation, *RMS-11 Macro*, 5-105
 - RENAME operation, *RMS-11 Macro*, 5-111
 - SEARCH operation, *RMS-11 Macro*, 5-116
 - summary, *RMS-11 Macro*, 6-98
- ESS field in NAM block
 - CREATE operation, *RMS-11 Macro*, 5-10

ESS field in NAM block (cont'd.)
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-42
 offset, *RMS-11 Macro*, 6-94
 OPEN operation, *RMS-11 Macro*, 5-74
 PARSE operation, *RMS-11 Macro*, 5-87
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-110
 summary, *RMS-11 Macro*, 6-99
 ESTATUS command, *System Management*, 15-12
 /EST keyword
 RUN command (MCR), *MCR*, 3-178, 3-182
 ET0310, *Error Logging*, 4-9
 ET1645, *Error Logging*, 4-9
 ETA11, *Error Logging*, 4-9
 ETC11, *Error Logging*, 4-9
 Ethernet (XEDRV)
 address
 auxilliary buffer, *I/O Drivers*, 13-12
 device consideration, *I/O Drivers*, 13-2
 hardware error, *I/O Drivers*, 13-3
 LF\$DEF protocol, *I/O Drivers*, 13-3
 LF\$EXC protocol, *I/O Drivers*, 13-3
 message, *I/O Drivers*, 13-2
 message padding, *I/O Drivers*, 13-3
 protocol
 LF\$DEF, *I/O Drivers*, 13-3
 LF\$EXC, *I/O Drivers*, 13-3
 receive, *I/O Drivers*, 13-3
 transmit, *I/O Drivers*, 13-3
 ETS11, *Error Logging*, 4-9
 ETSV05, *Error Logging*, 4-9
 ETU58, *Error Logging*, 4-9
 ETU77, *Error Logging*, 4-9
 EUNKWN, *Error Logging*, 4-8, 4-19, 4-37
 .EVEN assembler directive
 control block alignment, *RMS-11 Macro*, 2-8
 pool alignment, *RMS-11 Macro*, 2-4
 .EVEN directive, *MACRO-11*, 6-37
 Event
 definition, *Error Logging*, 1-3, 4-2
 significant, *I/O Drivers*, 1-9, 1-36

Event declaration, significant, *I/O Drivers*, 1-13
 Event flag, *Executive*, 2-2 *I/O Drivers*, 1-9 *MCR*, 3-58
 ast, *I/O Drivers*, 1-11
 clearing polarity, *Executive*, 5-31
 common, *Executive*, 2-2 *I/O Drivers*, 1-9, 1-10
 creating, *MCR*, 3-77
 displaying, *Command Language*, 6-65
 eliminating, *MCR*, 3-77
 group global, *Executive*, 2-2 *I/O Drivers*, 1-9 *MCR*, 3-77
 creating, *Executive*, 5-48
 on Micro/RSX, *Executive*, 2-4
 decrementing use count, *Executive*, 5-253
 deleting, *Executive*, 5-71
 on Micro/RSX, *Executive*, 2-4
 displaying on Micro/RSX, *Executive*, 2-4
 eliminating, *Executive*, 5-253
 I/O coordination, *I/O Operations*, 2-43
 I/O synchronization, *I/O Operations*, 3-10
 IOX, *System Management*, 4-66
 local, *MCR*, 3-77
 none, *I/O Drivers*, 1-8
 number, *I/O Drivers*, 1-9
 reading, *Executive*, 5-156, 5-158
 setting, *Command Language*, 6-63 to 6-64 *Executive*, 5-199
 task, *I/O Drivers*, 1-9
 testing, *Executive*, 2-3, 5-157
 UIC, *MCR*, 3-77
 wait after I/O, *I/O Drivers*, 1-15
 wait for single, *I/O Drivers*, 1-24
 Event-level dispatching, *Error Logging*, 4-16
 control information, *Error Logging*, 4-17
 CPU-detected errors, *Error Logging*, 4-17
 device control information, *Error Logging*, 4-17
 device errors, *Error Logging*, 4-17
 device information, *Error Logging*, 4-17

- Event-level dispatching (cont'd.)
 - dispatcher module, *Error Logging*, 4-18
 - error log control code, *Error Logging*, 4-17
 - event code, *Error Logging*, 4-18
 - event type, *Error Logging*, 4-18
 - format, *Error Logging*, 4-18
 - system control information, *Error Logging*, 4-17
- EVNDF\$, CDA, B-14, C-25
- EXACT_POSITIONING attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-47
- Examine option
 - ACNT, *System Management*, 2-5
- Example
 - Brief format report, *Error Logging*, 3-13, 3-14
 - device information table, *Error Logging*, 4-34
 - ERM23, *Error Logging*, 4-26
 - ERM23 device-level module, *Error Logging*, 4-37 to 4-49
 - ERM23 notes file, *Error Logging*, 4-31
 - error log packet format, *Error Logging*, 5-2
 - error log subpacket format, *Error Logging*, 5-2
 - Full format report, *Error Logging*, 3-16, 3-17
 - notes module, *Error Logging*, 4-67, 4-68
 - NRM23 notes module, *Error Logging*, 4-67, 4-68
 - register report, *Error Logging*, 3-19
 - RM02/03
 - register printing, *Error Logging*, 4-27
 - RM02/03 module, *Error Logging*, 4-38 to 4-49
 - RM03 module, *Error Logging*, 4-13
 - RMS-11 MACRO-11 programs, *RMS-11 Macro*, 7-1
 - RMSBCK utility, *RMS-11 Utilities*, 6-10
 - RMSCNV utility, *RMS-11 Utilities*, 4-16
 - RMSDES utility, *RMS-11 Utilities*, 2-47
 - RMSDSP utility, *RMS-11 Utilities*, 5-5
- Example (cont'd.)
 - RMSIFL utility, *RMS-11 Utilities*, 3-14
 - RMSRST utility, *RMS-11 Utilities*, 7-12
- Exception code
 - RMSIFL utility, *RMS-11 Utilities*, 3-6
- Exception record
 - RMSIFL utility, *RMS-11 Utilities*, 3-5, 3-6, 3-10
- Exclamation point operator (!), *Task Builder*, 3-49
 - See also ODL operator
- /EXCLUDE qualifier
 - BRU utility, *Utilities*, 7-16
- /EXCLUDE qualifier (DCL), *Command Language*, 4-9
- /EXECUTABLE qualifier, *Task Builder*, 11-29 to 11-30
- EXECUTE command
 - IOX, *System Management*, 4-37
- Execution
 - termination of task
 - IOX, *System Management*, 4-24
- Execution mode
 - entering
 - IOX, *System Management*, 4-61
 - IOX, *System Management*, 4-18
- Executive, *Introduction*, 5-1, 6-3, 6-5, 6-6
 - Writing I/O Driver*, 1-2
 - Best reference, *Executive*
 - calling the driver, *Writing I/O Driver*, 1-17
 - coroutine
 - \$INTSV, *Writing I/O Driver*, 1-6
 - definition, *System Generation*, 1-9
 - DIC list, *Executive*, C-1
 - directive, MCR, 3-140
 - aborting tasks, MCR, 3-5
 - directive dispatcher
 - DRDSP, *Writing I/O Driver*, 3-2
 - directive status code list, *Executive*, B-1
 - directive summary, *Executive*, A-1
 - dispatching to correct driver routine, *Writing I/O Driver*, 2-1
 - distributing I/O requests, *Writing I/O Driver*, 1-17
 - fast-mapping, MCR, 3-118
 - Full-functionality, *System Generation*, 1-10

Executive (cont'd.)

- interrupt exit routine, *Writing I/O Driver*, 1-6
- interrupts
 - handling, *Writing I/O Driver*, 2-1
- interrupt save routine, *Writing I/O Driver*, 1-6, 1-7
- library, *Program Development*, 1-11
 - macro, *Program Development*, 1-9, 1-10
- loadable device driver, MCR, 3-132
- macro library
 - EXEMC.MLB, *Writing I/O Driver*, 5-3
- mapping, *Writing I/O Driver*, 1-3
- modifying data in UCB, *Writing I/O Driver*, 2-3
- module
 - DVINT, *Writing I/O Driver*, 1-12
- options for driver, *Writing I/O Driver*, 5-9, 5-10, 5-11
- partition
 - extended, MCR, 3-133
- performing processor specific functions, *Writing I/O Driver*, 1-16
- predriver initiation, *Writing I/O Driver*, 1-4
- priority range, MCR, 3-257
- queuing to the driver, *Writing I/O Driver*, 1-4
- request queue for controller, *Writing I/O Driver*, 1-11
- round-robin scheduling, MCR, 3-248
- routines
 - handling, *Writing I/O Driver*, 1-5, 1-6
- service routine, *Writing I/O Driver*, 1-2, 1-3
- stack and register dump, *Writing I/O Driver*, 6-11
- swapping interval, MCR, 3-256
- symbol
 - \$CTLST, *Writing I/O Driver*, 2-15
- tables
 - logical device, MCR, 2-13
 - physical device, MCR, 2-13
- task
 - aborting, MCR, 3-3
 - active, MCR, 2-23

Executive

task (cont'd.)

- allocating space, MCR, 2-20
 - checkpointing, MCR, 2-20
 - dormant, MCR, 2-23
 - header, MCR, 3-122
 - loading, MCR, 3-116
 - priority, MCR, 2-21
 - running, MCR, 1-5, 2-23, 3-116
 - User-tailored, *System Generation*, 1-13
- Executive crash dump routine, CDA, 1-1, 1-2, 1-3
- building, CDA, 1-1
- Executive data space
- SYSGEN question, *System Generation*, 3-23
- Executive data space support, *System Management*, 10-3
- Executive Debugging Tool, MCR, 3-36
- See also XDT
 - invoking, MCR, 3-38
- Executive error logging support, *Error Logging*, 1-6
- Executive-level dispatching, *Executive*, 5-5
- Executive pool monitor code, *System Management*, 13-1
- Executive routines, *Writing I/O Driver*, 1-12, 1-15, 4-41
- See also Executive services
 - error collection
 - device registers, *Error Logging*, 1-3
 - \$GTPKT, *Writing I/O Driver*, 1-5, 1-13
 - \$IODON, *Writing I/O Driver*, 1-9
- Executive Send Message directive
- See SMSG\$
- Executive services
- summaries of technically used, *Writing I/O Driver*, 7-5 to 7-40
- Executive symbol table, CDA, 1-1, 2-2, 2-17
- switch
 - See /STB switch
- EXELIB.OLB (Executive library), *Program Development*, 1-11
- EXELIB.OLB file, *Writing I/O Driver*, A-1
- EXEMC.MLB (Executive macro library), *Program Development*, 1-9 to 1-10
- EXEMC.MLB file, *Writing I/O Driver*, A-1

EXIF\$ directive, *Executive*, 5-78
 Existence indicator (ICDRV/ISDRV),
 I/O Drivers, 19-18
 EXIT\$S directive, *Executive*, 5-80
 Program Development, 2-7
 EXIT & DELETE command
 EDI utility, *Utilities*, 2-32
 EXIT command
 EDI utility, *Program Development*,
 2-10, 2-12, 2-18, 7-5, 7-7
 Utilities, 2-14, 2-27, 2-32
 EDT editor, *Introduction*, 2-8
 IOX, *System Management*, 4-38
 RMSDES utility, *RMS-11 Utilities*,
 2-3, 2-9, 2-18, 2-27
 Exit command
 ODT, *Debugging*, 2-12
 XDT, *Debugging*, 9-14
 .EXIT directive, *Indirect*, 2-54
 Exit If directive, *Executive*, 5-78
 Exit on diagnostic, *Task Builder*, 10-54,
 11-28
 Exit option
 ACNT, *System Management*, 2-11
 Exit status, *Indirect*, 2-12
 value, *Indirect*, 2-12
 Exit Status Code
 definition, *Batch and Queue*, 4-4
 /EXIT switch, *CDA*, 2-10, 2-11
 Exit switch
 See /EXIT switch
 Exit with Status directive, *Executive*,
 5-82
 Expanded string
 See ESA field in NAM block
 EXPANSIONS argument, *MACRO-11*,
 8-11
 /EXP keyword
 LOAD command (MCR), *MCR*,
 3-133
 .EXPLG module
 logical name expansion, *I/O*
 Operations, 4-15
 Expression, *Debugging*, 2-3
 absolute, *MACRO-11*, 3-17
 address, *Debugging*, 2-2
 complex relocatable, *MACRO-11*,
 3-18
 evaluating, *Debugging*, 2-3, 7-2
 MACRO-11, 3-16 to 3-18
 external, *MACRO-11*, 3-17
 format, *Debugging*, 2-3
 illegal, *Debugging*, 2-8, 9-11
 Expression (cont'd.)
 indicator
 immediate, *MACRO-11*, 3-2
 Radix-50
 evaluating, *Debugging*, 7-4
 register address, *Debugging*, 2-6,
 9-10
 relocatable, *MACRO-11*, 3-17
 EXST\$ directive, *Executive*, 5-82
 EXSTAT symbol, *Indirect*, 2-12
 EXSTRI symbol, *Indirect*, 2-18
 /EX switch
 LBR utility, *Utilities*, 10-18
 PIP utility, *Utilities*, 3-21
 Extend access, *MCR*, 2-3
 common region, *MCR*, 3-120
 file, *MCR*, 3-149, 3-213
 UFD, *MCR*, 3-281
 volume, *MCR*, 3-94
 Extend control parameter (F11ACP),
 I/O Drivers, C-5
 Extended arithmetic
 specifying, *Task Builder*, 10-16
 Extended attribute block
 See XAB
 Extended I/O (TTDRV), *I/O Drivers*,
 2-18, 2-25
 Extended User Control Block
 See UCB
 \$EXTEND macro, *RMS-11 Macro*, 5-46
 RSTS/E, *RMS-11 Macro*, D-4
 EXTEND operation, *RMS-11*
 Introduction, 4-2 *RMS-11 Macro*,
 3-8 *RMS-11 User's Guide*, 1-18
 and shared access, *RMS-11 User's*
 Guide, 2-6
 BDB requirement, *RMS-11 Macro*,
 2-8
 \$EXTEND macro, *RMS-11 Macro*,
 5-46
 I/O buffer requirement, *RMS-11*
 Macro, 2-7
 wildcard loop, *RMS-11 Macro*, 3-10
 /EXTEND qualifier
 BRU utility, *Utilities*, 7-16
 .EXTEND routine (disk driver), *I/O*
 Drivers, 5-8
 Extend Task directive, *Executive*, 5-84
 improving performance, *Task*
 Builder, F-2
 Extension
 default, *I/O Operations*, 2-20

EXTENSION attribute
 RMSDES utility
 area section, *RMS-11 Utilities*, 2-45
 file section, *RMS-11 Utilities*, 2-32
 EXTENSIONS argument, *MACRO-11*, 8-11
 Extent
 data caching, *MCR*, 3-146, 3-208
 External expression, *MACRO-11*, 3-17
 External file (RMSDES)
 See Data file, Description file
 External header, *Writing I/O Driver*, 6-8
 /EXTERNAL qualifier, *Task Builder*, 11-31
 External symbol
 See Global symbol
 EXTK\$ directive, *Executive*, 5-84
 /EXT keyword
 HOME command, *MCR*, 3-94
 INITVOLUME command, *MCR*, 3-102
 .EXTND routine, extend file, *I/O Operations*, 4-28
 EXT SCT option, *Task Builder*, 12-15
 \$EXTSK (Extend task), *System Library*, 8-13
 EXTTSK option, *Task Builder*, 12-16

F

F\$-family macro, *RMS-11 Macro*, 2-9
 declaring, *RMS-11 Macro*, C-1
 example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
 F.ACTL field, number of retrieval pointers, *I/O Operations*, A-9
 F.ALOC field, number of blocks allocated for extend, *I/O Operations*, A-7
 F.BBFS field, block buffer size, *I/O Operations*, A-8
 F.BDB field, block buffer descriptor block address, *I/O Operations*, A-9
 F.BGBC field, big-buffer block count, *I/O Operations*, A-8
 F.BKDN field, AST service routine address, *I/O Operations*, A-6
 F.BKDS field, block I/O buffer descriptor, *I/O Operations*, A-6

F.BKEF field, block I/O event flag, *I/O Operations*, A-7
 F.BKP1 field, FCS internal control bits, *I/O Operations*, A-8
 F.BKST field, I/O status block address, *I/O Operations*, A-6
 F.BKVD field, user virtual block number, *I/O Operations*, A-8
 F.CHR field, volume characteristics byte, *I/O Operations*, A-9
 F.CNTG field, number of blocks to be allocated, *I/O Operations*, A-6
 F.DFNB field, default filename block pointer, *I/O Operations*, A-7
 F.DSPT field, dataset descriptor pointer, *I/O Operations*, A-7
 F.EFBK field, end-of-file block number, *I/O Operations*, A-4
 F.EFN field, record I/O event flag, *I/O Operations*, A-7
 F.EOBB field, end-of-block buffer, *I/O Operations*, A-6
 F.ERR1 field, F.ERR extension, *I/O Operations*, A-8
 F.ERR field, error return code byte, *I/O Operations*, A-8
 F.EXT field, FDB extension address, *I/O Operations*, A-9
 F.FACC field, file access byte, *I/O Operations*, A-7
 F.FFBK field, first free byte in last block, *I/O Operations*, A-4
 F.FLG field, flag byte, *I/O Operations*, A-9
 F.FNB field, filename block offset, *I/O Operations*, A-9
 F.HIBK field, highest allocated virtual block number, *I/O Operations*, A-4
 F.LUN field
 FDB, *I/O Operations*, 4-17
 F.LUN field, LUN for FDB, *I/O Operations*, A-7
 F.MBC1 field, number of buffers in use, *I/O Operations*, A-8
 F.MBCT field, number of multiple buffers, *I/O Operations*, A-8
 F.MBFG field, multibuffer flag word, *I/O Operations*, A-8
 F.NRBD field, next record buffer descriptor, *I/O Operations*, A-6
 F.NREC field, address of next record in block, *I/O Operations*, A-6

- F.OVBS field, override block buffer size,
I/O Operations, A-6
- F.RACC field, record access byte, *I/O Operations*, A-4
- F.RATT field, record attribute byte,
I/O Operations, A-4
- F.RCNM field, random access record
number, *I/O Operations*, A-6
- F.RCTL field, device characteristic byte
.PARSE routine, *I/O Operations*,
4-13
- F.RCTL field, device characteristics
byte, *I/O Operations*, A-5
- F.RSIZ field, reocrd-size word, *I/O Operations*, A-4
- F.RTYP field, record-type byte, *I/O Operations*, A-3
- F.SEQN field, sequence number, *I/O Operations*, A-9
- F.STBK field, statistics block address,
I/O Operations, A-6
- F.URBD field, user record buffer
descriptor, *I/O Operations*, A-6
- F.VBN field, virtual block number, *I/O Operations*, A-8
- F.VBSZ, device buffer size word
.PARSE routine, *I/O Operations*,
4-13
- F.VBSZ field, device buffer size word,
I/O Operations, A-8
- F1.xxx bit, *I/O Drivers*, 2-34, 3-13
- F11ACP, RMS-11 *Introduction*, 2-1
SYSGEN question, *System Generation*, 3-28
- F11ACP stall I/O performance (disk
driver), *I/O Drivers*, 5-13
- F11DF\$, CDA, C-28 *Writing I/O Driver*, A-21 to A-24
- F11TBL\$, CDA, B-17
- F2.xxx bit, *I/O Drivers*, 2-34, 3-13
- F4POTS.OLB (FORTRAN IV and
FORTRAN IV-PLUS library),
Program Development, 1-11
- F4PRES
building, *Task Builder*, 5-56
- FA.DLK value, not lock file, *I/O Operations*, 2-16
- FA.EXL value, block locking, *I/O Operations*, 2-17
- FA.LKL value, block locking, *I/O Operations*, 2-17
- FA.NSP value, open file no supersede,
I/O Operations, 3-19
- FA.POS value, file position on close,
I/O Operations, 2-16
- FA.RWD value, rewind on close or
open, *I/O Operations*, 2-16
- FA.SHR value, open file shared access,
I/O Operations, 3-19
- FA.TMP value, open temporary file,
I/O Operations, 3-19
- FAB, RMS-11 *Introduction*, 4-8
chaining to RAB, RMS-11 *Macro*,
2-13
declaring, RMS-11 *Macro*, 2-8
initializing, RMS-11 *Macro*, 2-9
summary, RMS-11 *Macro*, 6-22
- FAB\$B macro, RMS-11 *Macro*, 2-8,
C-1
example, RMS-11 *Macro*, 7-3, 7-7,
7-11, 7-15
- FAB\$BT macro, RMS-11 *Macro*, C-1
- FAB\$E macro, RMS-11 *Macro*, 2-9
declaring, RMS-11 *Macro*, C-1
example, RMS-11 *Macro*, 7-3, 7-7,
7-11, 7-15
- FAB field in RAB, RMS-11 *Macro*, 4-2
chaining FAB to RAB, RMS-11
Macro, 2-13
- CONNECT operation, RMS-11
Macro, 5-6
offset, RMS-11 *Macro*, 6-115
summary, RMS-11 *Macro*, 6-120
- FABOF\$ macro, RMS-11 *Macro*, C-1
- FAC field in FAB
CREATE operation, RMS-11 *Macro*,
5-14
offset, RMS-11 *Macro*, 6-22
- OPEN operation, RMS-11 *Macro*,
5-75
summary, RMS-11 *Macro*, 6-37
- Facilities-declaration macro, RMS-11
Macro, 2-2
declaring, RMS-11 *Macro*, C-2
- FAL, RMS-11 *User's Guide*, B-1
- RSTS/E, RMS-11 *User's Guide*, B-1,
B-3
- RSX-11M/M-PLUS, RMS-11 *User's Guide*, B-3
- VAX/VMS, RMS-11 *User's Guide*,
B-3
- FALSE symbol, *Indirect*, 2-11
- Fast deletion
See RB\$FDL mask in ROP field
- Fast mapping, *Executive*, 3-20 *System Management*, 10-23

Fast mapping (cont'd.)
 high-level language, *Executive*, 3-22
 MACRO-11, *Executive*, 3-21
 status returns, *Executive*, 3-23
 /FAST qualifier, *Task Builder*, 11-32
 Fast Task Builder
 See FTB
 /FA switch
 FLX utility, *Utilities*, 4-5
 Fatal error, *RMS-11 Macro*, 2-15
 Fatal error message, *System Management*, 10-94
 Fault
 codes, *Writing I/O Driver*, 6-10
 isolation, *Writing I/O Driver*, 6-8
 tracing, *Writing I/O Driver*, 6-8, 6-12, 6-13
 Fault isolation, *System Management*, 15-31
 Writing I/O Driver, 6-5, 6-7
 FB\$BID code in BID field
 summary, *RMS-11 Macro*, 6-26
 value, *RMS-11 Macro*, 6-22
 FB\$BLK mask in RAT field
 CREATE operation, *RMS-11 Macro*, 5-11
 OPEN operation, *RMS-11 Macro*, 5-78
 summary, *RMS-11 Macro*, 6-60
 value, *RMS-11 Macro*, 6-23
 FB\$BLN code in BLN field
 summary, *RMS-11 Macro*, 6-28
 value, *RMS-11 Macro*, 6-22
 FB\$CCL mask in DEV field, *RMS-11 Macro*, 3-1
 CREATE operation, *RMS-11 Macro*, 5-20
 ENTER operation, *RMS-11 Macro*, 5-37
 ERASE operation, *RMS-11 Macro*, 5-42
 OPEN operation, *RMS-11 Macro*, 5-77
 PARSE operation, *RMS-11 Macro*, 5-88
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-111
 SEARCH operation, *RMS-11 Macro*, 5-117
 value, *RMS-11 Macro*, 6-24

FB\$CR mask in RAT field
 CREATE operation, *RMS-11 Macro*, 5-12
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
 FB\$CTG mask in FOP field
 CREATE operation, *RMS-11 Macro*, 5-18
 EXTEND operation, *RMS-11 Macro*, 5-46
 OPEN operation, *RMS-11 Macro*, 5-78
 RSTS/E, *RMS-11 Macro*, D-4
 summary, *RMS-11 Macro*, 6-40
 value, *RMS-11 Macro*, 6-23
 FB\$DEL mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
 FB\$DFW mask in FOP field
 CREATE operation, *RMS-11 Macro*, 5-15
 OPEN operation, *RMS-11 Macro*, 5-76
 summary, *RMS-11 Macro*, 6-41
 value, *RMS-11 Macro*, 6-23
 FB\$DLK mask in FOP field
 CREATE operation, *RMS-11 Macro*, 5-15
 OPEN operation, *RMS-11 Macro*, 5-76
 summary, *RMS-11 Macro*, 6-42
 value, *RMS-11 Macro*, 6-23
 FB\$-family symbol
 declaring, *RMS-11 Macro*, C-1
 FB\$FID mask in FOP field, *RMS-11 Macro*, 3-7, 3-9, 3-10, 3-11
 CREATE operation, *RMS-11 Macro*, 5-10
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-41
 OPEN operation, *RMS-11 Macro*, 5-73, 5-74
 REMOVE operation, *RMS-11 Macro*, 5-103
 RENAME operation, *RMS-11 Macro*, 5-109, 5-110
 summary, *RMS-11 Macro*, 6-43
 value, *RMS-11 Macro*, 6-23

FB\$FIX code in RFM field
 CREATE operation, *RMS-11 Macro*, 5-11
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
FB\$FTN mask in RAT field
 CREATE operation, *RMS-11 Macro*, 5-12
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
FB\$GET mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
FB\$GET mask in SHR field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
FB\$IDX code in ORG field
 CREATE operation, *RMS-11 Macro*, 5-11
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
FB\$MDI mask in DEV field, *RMS-11 Macro*, 3-1
 CREATE operation, *RMS-11 Macro*, 5-20
 ENTER operation, *RMS-11 Macro*, 5-37
 ERASE operation, *RMS-11 Macro*, 5-42
 OPEN operation, *RMS-11 Macro*, 5-77
 PARSE operation, *RMS-11 Macro*, 5-88
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-111
 SEARCH operation, *RMS-11 Macro*, 5-117
 value, *RMS-11 Macro*, 6-24
FB\$MKD mask in FOP field
 CREATE operation, *RMS-11 Macro*, 5-11
 summary, *RMS-11 Macro*, 6-44
FB\$MKD mask in FOP field (cont'd.)
 value, *RMS-11 Macro*, 6-23
FB\$NEF mask in FOP field
 OPEN operation, *RMS-11 Macro*, 5-76
 RSTS/E, *RMS-11 Macro*, D-4
 summary, *RMS-11 Macro*, 6-45
 value, *RMS-11 Macro*, 6-23
FB\$NIL mask in SHR field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
FB\$POS mask in FOP field
 CREATE operation, *RMS-11 Macro*, 5-15
 summary, *RMS-11 Macro*, 6-46
 value, *RMS-11 Macro*, 6-23
FB\$PRN mask in RAT field
 CREATE operation, *RMS-11 Macro*, 5-12
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
FB\$PUT mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
FB\$REA mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
FB\$REC mask in DEV field, *RMS-11 Macro*, 3-1, 3-2
 CREATE operation, *RMS-11 Macro*, 5-20
 ENTER operation, *RMS-11 Macro*, 5-37
 ERASE operation, *RMS-11 Macro*, 5-42, 5-43
 OPEN operation, *RMS-11 Macro*, 5-77
 PARSE operation, *RMS-11 Macro*, 5-88
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-111

FB\$REC mask in DEV field (cont'd.)
 SEARCH operation, *RMS-11 Macro*,
 5-117, 5-118
 value, *RMS-11 Macro*, 6-24
 FB\$REL code in ORG field
 CREATE operation, *RMS-11 Macro*,
 5-11
 OPEN operation, *RMS-11 Macro*,
 5-78
 value, *RMS-11 Macro*, 6-23
 FB\$RWC mask in FOP field
 CLOSE operation, *RMS-11 Macro*,
 5-4
 CREATE operation, *RMS-11 Macro*,
 5-15
 OPEN operation, *RMS-11 Macro*,
 5-77
 SEARCH operation, *RMS-11 Macro*,
 5-117
 summary, *RMS-11 Macro*, 6-47
 value, *RMS-11 Macro*, 6-23
 FB\$RWO mask in FOP field
 CREATE operation, *RMS-11 Macro*,
 5-15
 OPEN operation, *RMS-11 Macro*,
 5-76
 SEARCH operation, *RMS-11 Macro*,
 5-117
 summary, *RMS-11 Macro*, 6-48
 value, *RMS-11 Macro*, 6-23
 FB\$SDI mask in DEV field, *RMS-11*
 Macro, 3-2
 CREATE operation, *RMS-11 Macro*,
 5-20
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-77
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-104
 RENAME operation, *RMS-11 Macro*,
 5-111
 SEARCH operation, *RMS-11 Macro*,
 5-118
 value, *RMS-11 Macro*, 6-24
 FB\$SEQ code in ORG field
 CREATE operation, *RMS-11 Macro*,
 5-11
 OPEN operation, *RMS-11 Macro*,
 5-78

FB\$SEQ code in ORG field (cont'd.)
 value, *RMS-11 Macro*, 6-23
 FB\$SQD mask in DEV field, *RMS-11*
 Macro, 3-2
 CREATE operation, *RMS-11 Macro*,
 5-20
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-77
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-104
 RENAME operation, *RMS-11 Macro*,
 5-111
 SEARCH operation, *RMS-11 Macro*,
 5-118
 value, *RMS-11 Macro*, 6-24
 FB\$STM code in RFM field
 CREATE operation, *RMS-11 Macro*,
 5-11
 OPEN operation, *RMS-11 Macro*,
 5-78
 value, *RMS-11 Macro*, 6-23
 FB\$SUP mask in FOP field
 CREATE operation, *RMS-11 Macro*,
 5-10
 summary, *RMS-11 Macro*, 6-49
 value, *RMS-11 Macro*, 6-23
 FB\$TMD mask in FOP field
 CREATE operation, *RMS-11 Macro*,
 5-11
 value, *RMS-11 Macro*, 6-23
 FB\$TMP mask in FOP field
 CREATE operation, *RMS-11 Macro*,
 5-11
 summary, *RMS-11 Macro*, 6-50
 value, *RMS-11 Macro*, 6-23
 FB\$TRM mask in DEV field, *RMS-11*
 Macro, 3-1
 CREATE operation, *RMS-11 Macro*,
 5-20
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-42
 OPEN operation, *RMS-11 Macro*,
 5-77
 PARSE operation, *RMS-11 Macro*,
 5-88

FB\$TRM mask in DEV field (cont'd.)
 REMOVE operation, *RMS-11 Macro*, 5-104
 RENAME operation, *RMS-11 Macro*, 5-111
 SEARCH operation, *RMS-11 Macro*, 5-117
 value, *RMS-11 Macro*, 6-24
 FB\$TRN mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
 FB\$UDF code in RFM field
 CREATE operation, *RMS-11 Macro*, 5-11
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
 FB\$UPD mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
 FB\$UPI mask in SHR field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 RSX-11, *RMS-11 Macro*, D-4
 value, *RMS-11 Macro*, 6-22
 FB\$VAR code in RFM field
 CREATE operation, *RMS-11 Macro*, 5-11
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
 FB\$VFC code in RFM field
 CREATE operation, *RMS-11 Macro*, 5-11
 OPEN operation, *RMS-11 Macro*, 5-78
 value, *RMS-11 Macro*, 6-23
 FB\$WRI mask in SHR field
 CREATE operation, *RMS-11 Macro*, 5-14
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
 FB\$WRT mask in FAC field
 CREATE operation, *RMS-11 Macro*, 5-14

FB\$WRT mask in FAC field (cont'd.)
 OPEN operation, *RMS-11 Macro*, 5-75
 value, *RMS-11 Macro*, 6-22
 \$FBCAL macro, *RMS-11 Macro*, C-2
 /FB switch
 FLX utility, *Utilities*, 4-5
 FCB
 See File Control Block
 F command, *Debugging*, 2-9, 6-4
 FCPLRG
 See F11ACP
 FCPMDL
 See F11ACP
 FCS, *I/O Operations*, 1-1
 data structure
 general, *I/O Operations*, 1-4
 definition, *System Generation*, 1-9
 file access method, *I/O Operations*, 1-6
 I/O macro, *I/O Operations*, 2-1
 important characteristic, *I/O Operations*, 1-3
 impure area, *I/O Operations*, 2-38
 library
 FCSFSL, *System Generation*, 3-73
 FCSRES, *System Generation*, 3-73
 on pregenerated kit, *System Generation*, 5-41
 library options, *I/O Operations*, K-1
 macro
 FDB information, *I/O Operations*, 2-2
 .MCALL directive, *I/O Operations*, 2-2
 sequential file compatibility, *RMS-11 User's Guide*, 3-2
 string
 processing, *Executive*, 5-135
 term definition, *I/O Operations*, 1-2
 with Task Builder, *I/O Operations*, 1-1
 FCS.OBJ FCS library, *I/O Operations*, K-1
 FCSFSL
 definition, *System Generation*, 1-10
 on pregenerated kit, *System Generation*, 5-41
 tasks supplied, *System Generation*, 4-6
 FCSMBF.OBJ FCS library, *I/O Operations*, K-1

- FCSMTA.OBJ FCS library, *I/O Operations*, K-1
- FCSRES
 - definition, *System Generation*, 1-10
 - non-memory-resident, *Task Builder*, 5-56
 - on pregenerated kit, *System Generation*, 5-41
 - overlaid, *Task Builder*, 5-55
 - SYSGEN question, *System Generation*, 3-24
 - tasks supplied, *System Generation*, 4-6
 - types, *Task Builder*, 5-55
- FCSRES routines, *I/O Operations*, 1-20
- /FC switch
 - FLX utility, *Utilities*, 4-7
- .FCTR directive, *Task Builder*, 3-23, 3-25
 - allocation diagram
 - creating, *Task Builder*, 3-38, 3-39
 - argument, *Task Builder*, 3-26
 - library modules, *Task Builder*, 3-26
 - library to resolve references, *Task Builder*, 3-26
 - named input file, *Task Builder*, 3-26
 - program section name, *Task Builder*, 3-26
 - segment name, *Task Builder*, 3-27
 - autoloadable
 - making first component, *Task Builder*, 4-3
 - summary, *Task Builder*, 3-50
 - use of label, *Task Builder*, 3-25
- .FCTYP routine, assembly parameters, *I/O Operations*, K-1
- FD.BLK parameter
 - record attribute, *I/O Operations*, 2-6
 - block boundary crossing, *I/O Operations*, 3-9
- FD.CR parameter
 - record attribute, *I/O Operations*, 2-6
 - line-feed character, *I/O Operations*, 3-8
- FD.FTN parameter, *I/O Operations*, 3-8
- FD.INS parameter
 - sequential file, *I/O Operations*, 2-10
 - sequential mode, *I/O Operations*, 3-6, 3-9
- FD.PLC parameter
 - locate mode, *I/O Operations*, 2-10, 3-6, 3-9
 - move mode, *I/O Operations*, 2-10
- FD.PRN parameter
 - record attribute, *I/O Operations*, 2-6
 - carriage-control word, *I/O Operations*, 3-9
- FD.RAH parameter, read-ahead
 - operation, *I/O Operations*, 3-12
- FD.RAH value, read-ahead, *I/O Operations*, 2-19
- FD.RAN parameter
 - random access, *I/O Operations*, 2-10, 3-9
 - random record I/O, *I/O Operations*, 3-6
- FD.RTN, record attribute, *I/O Operations*, 2-6
- FD.RWM parameter
 - block I/O operation, *I/O Operations*, 3-6
 - record access, *I/O Operations*, 2-10
 - record attribute
 - process with block I/O, *I/O Operations*, 3-9
- FD.WBH parameter, write-behind
 - operation, *I/O Operations*, 3-12
- FD.WBH value, write behind, *I/O Operations*, 2-19
- FDAT\$A macro, *I/O Operations*, 2-5
- FDAT\$R macro, *I/O Operations*, 2-21
- FDB, *I/O Operations*, 2-3
 - address, run-time macro, *I/O Operations*, 2-24
 - allocate file block, *I/O Operations*, 2-8
 - as data structure, *I/O Operations*, 1-4
 - block I/O, *I/O Operations*, 2-10
 - block locking, *I/O Operations*, 2-17
 - block size reset, *I/O Operations*, 2-19
 - carriage control, *I/O Operations*, 2-7
 - definition, *I/O Operations*, 1-2
 - description, *I/O Operations*, 1-5

- FDB (cont'd.)
 - extension, logical name translation, *I/O Operations*, 4-15
 - F.LUN field, *I/O Operations*, 4-17
 - F.xxxx field, *I/O Operations*, A-3
 - file identification, *I/O Operations*, 3-10
 - GET\$ macro, *I/O Operations*, 3-23
 - initialization, *I/O Operations*, 2-3
 - initialize block access, *I/O Operations*, 2-21
 - initialize block buffer, *I/O Operations*, 2-18, 2-22
 - initialize block buffer size, *I/O Operations*, 2-18
 - initialize file attribute, *I/O Operations*, 2-5, 2-21
 - initialize file-open section, *I/O Operations*, 2-14, 2-22
 - initialize record access, *I/O Operations*, 2-10, 2-21
 - initial values, *I/O Operations*, 2-1
 - largest record size, *I/O Operations*, 2-8
 - lun specification, *I/O Operations*, 3-10
 - macro
 - global symbol, *I/O Operations*, 2-26
 - local symbol, *I/O Operations*, 2-27
 - run-time exceptions, *I/O Operations*, 2-22
 - run-time initialization, *I/O Operations*, 2-21
 - multiple buffering, *I/O Operations*, 2-19
 - type, *I/O Operations*, 2-19
 - offset, global/local, *I/O Operations*, 2-25
 - OPEN\$x macro requirement, *I/O Operations*, 3-7
 - PUT\$ macro operation, *I/O Operations*, 3-27
 - record I/O, *I/O Operations*, 2-10
 - record size, *I/O Operations*, 3-9
 - sequence number field, *I/O Operations*, 2-7
 - space allocation, *I/O Operations*, 2-5
 - WRITE\$ macro, *I/O Operations*, 3-39
- FDBDF\$ macro, FDB space allocation, *I/O Operations*, 2-5
- FDBF\$A macro, *I/O Operations*, 2-18
 - example, *I/O Operations*, 2-21
- FDBF\$R macro, *I/O Operations*, 2-22
- FDBK\$A macro
 - block access initialization, *I/O Operations*, 2-12
 - example, *I/O Operations*, 2-13
 - record access, block I/O, *I/O Operations*, 2-12
- FDBK\$R macro, initialize block access, *I/O Operations*, 2-21
- FDOP\$A macro, *I/O Operations*, 2-14
 - example, *I/O Operations*, 2-17
- FDOP\$R macro, initialize file-open section, *I/O Operations*, 2-22
- FDRC\$A macro, *I/O Operations*, 2-10
 - example, *I/O Operations*, 2-10
- FDRC\$R macro, initialize record access, *I/O Operations*, 2-21
- /FDX keyword
 - SET command (MCR), *MCR*, 3-218
 - SET command (VMR), *System Management*, 10-59
- FEAT\$ directive, *Executive*, 5-86
- \$FETCH macro, *RMS-11 Macro*, 2-15
 - example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
- FF command
 - EDI utility, *Utilities*, 2-34
- /FF switch
 - CMP utility, *Utilities*, 12-3
- FID field in NAM block
 - CREATE operation, *RMS-11 Macro*, 5-21
 - ENTER operation, *RMS-11 Macro*, 5-36
 - ERASE operation, *RMS-11 Macro*, 5-41, 5-42
 - offset, *RMS-11 Macro*, 6-94
 - OPEN operation, *RMS-11 Macro*, 5-73, 5-77
 - REMOVE operation, *RMS-11 Macro*, 5-105
 - RENAME operation, *RMS-11 Macro*, 5-111
 - SEARCH operation, *RMS-11 Macro*, 5-118
 - summary, *RMS-11 Macro*, 6-100
- Field, *RMS-11 Macro*, 1-2
 - clearing bits in, *RMS-11 Macro*, 2-11
 - comparing value, *RMS-11 Macro*, 2-16

Field (cont'd.)

- copying value from, *RMS-11 Macro*, 2-15
- copying value into, *RMS-11 Macro*, 2-10
- examining, *RMS-11 Macro*, 2-15
- initializing, *RMS-11 Macro*, 2-8
- mnemonic, *RMS-11 Macro*, 1-2
- setting bits in, *RMS-11 Macro*, 2-11
- setting up, *RMS-11 Macro*, 2-10
- testing bits in, *RMS-11 Macro*, 2-17

Field-access macro

- \$COMPARE, *RMS-11 Macro*, 2-16
- declaring, *RMS-11 Macro*, C-2
- \$FETCH, *RMS-11 Macro*, 2-15
- \$OFF, *RMS-11 Macro*, 2-11
- \$SET, *RMS-11 Macro*, 2-11
- \$STORE, *RMS-11 Macro*, 2-10
- \$TESTBITS, *RMS-11 Macro*, 2-17

Field-initialization macro, *RMS-11*

Macro, 2-9

declaring

- ALL block, *RMS-11 Macro*, C-3
- DAT block, *RMS-11 Macro*, C-3
- FAB, *RMS-11 Macro*, C-1
- KEY block, *RMS-11 Macro*, C-3
- NAM block, *RMS-11 Macro*, C-2
- PRO block, *RMS-11 Macro*, C-3
- RAB, *RMS-11 Macro*, C-2
- SUM block, *RMS-11 Macro*, C-3

Field-offset symbol

declaring

- ALL block, *RMS-11 Macro*, C-3, C-4
- DAT block, *RMS-11 Macro*, C-3, C-4
- FAB, *RMS-11 Macro*, C-1
- KEY block, *RMS-11 Macro*, C-3, C-4
- NAM block, *RMS-11 Macro*, C-2
- PRO block, *RMS-11 Macro*, C-3, C-4
- RAB, *RMS-11 Macro*, C-2
- SUM block, *RMS-11 Macro*, C-3, C-4
- XAB, *RMS-11 Macro*, C-4

value

- ALL block, *RMS-11 Macro*, 6-2
- DAT block, *RMS-11 Macro*, 6-14
- FAB, *RMS-11 Macro*, 6-22
- KEY block, *RMS-11 Macro*, 6-67

Field-offset symbol

value (cont'd.)

- NAM block, *RMS-11 Macro*, 6-94
- PRO block, *RMS-11 Macro*, 6-108
- RAB, *RMS-11 Macro*, 6-115
- SUM block, *RMS-11 Macro*, 6-145

Field size symbols, file operation, *I/O Operations*, J-1

Field terminator, *MACRO-11*, 3-2

/FI file switch

- QUE /MOD command, *Batch and Queue*, 2-21

FILATR symbol, *Indirect*, 2-19

File, *Introduction*, 2-1, 3-1 *RMS-11 Introduction*, 1-1 *RMS-11 User's Guide*, 1-2

See also Account file

See also Indexed file organization

See also Relative file organization

See also Sequential file organization

access, *MCR*, 2-3, 2-6, 3-122

- method, *FCS, I/O Operations*, 1-6

- optimizing, *I/O Operations*, 2-34

access requested

- See FAC field in FAB

access shared

- See SHR field in FAB

alignment

- See ALN field in ALL block

allocation

- See ALQ field in ALL block

- See ALQ field in FAB

and directory, *MCR*, 2-2

appending, *Command Language*, 4-65

- PIP utility, *Utilities*, 3-14

area

- See ALL block

assembler work, *MACRO-11*, F-1

attributes, *RMS-11 Introduction*, 5-1

- RMS-11 User's Guide*, 1-2

- setting, *Command Language*, 4-105

attribute size (F11ACP), *I/O Drivers*, C-4

backing up, *RMS-11 Introduction*, 5-3

File

- bucket size
 - See BKZ field in ALL block
- close current command, *I/O Operations*, 6-12
- close indirect command, *I/O Operations*, 6-12
- closing, *I/O Operations*, 3-20
 - See also CLOSE operation
- closing temporary, *I/O Operations*, 3-13
- cluster size
 - See RTV field in FAB
- command
 - comment, *Task Builder*, 1-14
 - level of indirection, *Task Builder*, 1-13
 - option, *Task Builder*, 1-14
- comparing, *Command Language*, 4-68
 - CMP utility, *Utilities*, 12-1
- content, MCR, 2-5
- contiguity
 - See FB\$CTG mask in FOP field
 - See XB\$CTG mask in AOP field
- contiguous, *Introduction*, 5-6
- control directive, MACRO-11, 6-57, 6-58
- copying, *Command Language*, 4-47
 - See also File transferring
 - BRU utility, *Utilities*, 7-1
 - DOS-11, *Utilities*, 4-3
 - DSC utility, *Utilities*, 8-1
 - Files-11, *Utilities*, 3-8
 - FLX utility, *Utilities*, 4-3
 - PIP utility, *Utilities*, 3-8
 - RT-11, *Utilities*, 4-3
- count
 - calculating maximum, MCR, 3-105
- creating, *Command Language*, 4-15, 4-21 RMS-11 *Introduction*, 5-1, 5-2
 - See also CREATE operation
 - EDI utility, *Utilities*, 2-2
 - FO.WRT value, *I/O Operations*, 3-19
 - source, *Program Development*, 2-9, 2-10
 - temporary, *I/O Operations*, 3-13
 - mark for deletion, *I/O Operations*, 3-14

File

- creation date
 - See CDT field in DAT block
- date
 - See DAT block
- declaring number of active, *Task Builder*, 12-7
- default extension size
 - See DEQ field in ALL block
 - See DEQ field in FAB
- delete routine, *I/O Operations*, 4-29, 4-30
- deleting, *Command Language*, 4-40
 - I/O Operations*, 3-42
 - See also ERASE operation
 - PIP utility, *Utilities*, 3-17
- deleting routine, *I/O Operations*, 4-29
- deleting with wildcard, MCR, 2-7
- design, RMS-11 *Introduction*, 3-15, 5-1
- device
 - data format, *I/O Operations*, 1-6
- directory, *I/O Operations*, 5-2
- directory listing, *Program Development*, 3-9
- displaying, RMS-11 *Introduction*, 5-3
 - block number
 - PIP utility, *Utilities*, 3-25
- dumping
 - DMP utility, *Utilities*, 11-1
- editing, *Command Language*, 4-21
 - EDI utility, *Utilities*, 2-1
 - recovering, *Command Language*, 4-23
 - source, *Program Development*, 2-9 to 2-18
- EDTINI.EDT, *Introduction*, 2-2
- extend
 - routine, *I/O Operations*, 4-28
 - WRITE\$ macro, *I/O Operations*, 3-39
- extending, MCR, 3-102
- extending allocation
 - See EXTEND operation
- FORTTRAN direct access
 - See FLX utility
- header
 - allocating, MCR, 3-103
 - calculating preallocated, MCR, 3-104
 - contents, MCR, 2-2

File

- header (cont'd.)
 - initializing, *MCR*, 3-103
 - maximum per volume, *MCR*, 3-103
- identification in FNB (F11ACP), *I/O Drivers*, C-7
- identifier
 - See FID field in NAM block
- index, *I/O Operations*, 5-2, E-1
 - listing contents
 - VFY utility, *Utilities*, 9-6
- indirect command, *Task Builder*, 1-11
 - See also Indirect
 - See also Indirect command file
- input
 - designating as debugging aid, *Task Builder*, 10-14, 11-25, 11-26
 - designating as library file, *Task Builder*, 10-23, 11-39
 - directing selective symbol search, *Task Builder*, 10-48, 10-49, 10-50, 11-61, 11-62, 11-63
 - including content of in map, *Task Builder*, 10-26
 - processing to reduce overhead, *Task Builder*, F-6
 - specifying as default library, *Task Builder*, 10-15, 11-27
- internal file identifier
 - See IFI field in FAB
- library
 - declaring, *Task Builder*, 10-23, 11-39
 - LBR utility, *Utilities*, 10-2
- LINK command input, *Task Builder*, 1-4
- list, *Command Language*, 4-31
- listing, *Program Development*, 3-6
 - FLX utility, *Utilities*, 4-7
 - LBR utility, *Utilities*, 10-21
 - PIP utility, *Utilities*, 3-24
- loading, *RMS-11 Introduction*, 5-2
- location, *Command Language*, 4-2
 - MCR*, 2-3
 - See also LOC field in ALL block
- locked, *I/O Operations*, 2-16
- locking
 - See FB\$DLK mask in FOP field
- lost
 - recovering
 - VFY utility, *Utilities*, 9-6

File (cont'd.)

- MACRO-11 default specification, *MACRO-11*, 8-3 to 8-6
- making autoloading
 - using name, *Task Builder*, 4-2
- map
 - LINK command, *Task Builder*, 1-5, 1-6
 - printing, *Task Builder*, 1-3
 - in LINK command, *Task Builder*, 1-6, 1-7
- mark for delete, *I/O Operations*, 3-14
- maximum per volume
 - calculating, *MCR*, 3-104
- merging
 - PIP utility, *Utilities*, 3-9
- multiple, operation, *I/O Operations*, 5-6
- name, *Introduction*, 3-1
 - specifying, *MCR*, 2-4
- name block
 - See FNB
 - See NAM block
- name block pointer, *I/O Drivers*, C-6
- name in FNB (F11ACP), *I/O Drivers*, C-7
- no lock on close, *I/O Operations*, 2-16
- non-RMS-11, *RMS-11 Introduction*, 3-4
- object, *Introduction*, 5-4
- ODL
 - creating using diagram, *Task Builder*, 3-35 to 3-40
- omitting specific output, *Task Builder*, 1-3
- open
 - at one time, *Task Builder*, 12-7
 - by filename block, *I/O Operations*, 3-16
 - by ID, *I/O Operations*, 3-14
 - for append
 - FO.APD value, *I/O Operations*, 3-19
 - for modify, *I/O Operations*, 3-19
 - for read, *I/O Operations*, 3-19
 - for shared access
 - FA.SHR value, *I/O Operations*, 3-19
 - for update and extend, *I/O Operations*, 3-19

File

- open (cont'd.)
 - for write
 - FO.WRT value, *I/O Operations*, 3-19
 - on LP: for printing, *I/O Operations*, 8-3
 - processing, *I/O Operations*, 3-3
- opening
 - See also OPEN operation
 - for reading, *Indirect*, 2-73
 - temporary, *I/O Operations*, 3-13
 - mark for deletion, *I/O Operations*, 3-14
- open temporary
 - FA.TMP value, *I/O Operations*, 3-19
- organization
 - See ORG field in FAB
- output
 - omitting specific, *Task Builder*, 1-3
- owner, *Command Language*, 4-2
 - See also PRG field in PRO block
- ownership, MCR, 2-2, 2-3
 - PIP utility, *Utilities*, 3-11
- position on close, *I/O Operations*, 2-16
- printing, *Command Language*, 4-76
 - Program Development*, 3-8 to 3-9
- processing, *RMS-11 Introduction*, 4-1 *RMS-11 User's Guide*, 1-16
- protection, *Command Language*, 4-10 to 4-12, 9-31 *Introduction*, 3-4, 6-4 MCR, 2-3, 2-6, 3-122, 3-148, 3-152, 3-214, 3-241
 - See also PRO field in PRO block
- default, MCR, 3-103
 - setting, *Command Language*, 4-115 to 4-117
 - showing, *Command Language*, 4-118
 - specifying, MCR, 3-102
- Files-11
 - PIP utility, *Utilities*, 3-29
- setting, *Command Language*, 4-111 to 4-114
- purging, *Command Language*, 4-44
 - Program Development*, 3-9, 3-10
- PIP utility, *Utilities*, 3-31

File (cont'd.)

- record access initialization, *I/O Operations*, 2-21
- record-output characteristic
 - See RAT field in FAB
- recovering lost file
 - VFY utility, *Utilities*, 9-6
- renaming, *Command Language*, 4-52
 - I/O Operations*, 4-26
 - See also RENAME operation
- PIP utility, *Utilities*, 3-33
- restoring, *RMS-11 Introduction*, 5-3
- revision date
 - See RDT field in DAT block
- revision number
 - See RVN field in DAT block
- saving
 - BRU utility, *Utilities*, 7-1
 - DSC utility, *Utilities*, 8-1
- sequenced, *I/O Operations*, 2-6
 - reading, *I/O Operations*, 2-7
 - writing, *I/O Operations*, 2-7
- shared access, *I/O Operations*, 1-12
- single, operation, *I/O Operations*, 5-6
- source, *Introduction*, 5-5
 - editing, *Command Language*, 4-26
- specification, *Introduction*, 1-12 to 1-13 *RMS-11 Introduction*, 4-1
 - Utilities*, 1-4
- specification string
 - See FNA field in FAB
- default
 - See DNA field in FAB
- parsing
 - See FNB field in NAM block
- spooling, *Program Development*, 1-8 to 3-8, 3-9
 - PIP utility, *Utilities*, 3-38
- startup command, *Introduction*, 2-2
- .STB, *Task Builder*, 5-10
 - I- and D-space task, *Task Builder*, 7-8
- overlaid region, *Task Builder*, 5-13, 5-14
- overlaid region global symbol, *Task Builder*, 5-13, 5-14
- shared region, *Task Builder*, 5-13, 5-14
- use of /CO/LI/PI switch, *Task Builder*, 5-10

string

- See FNA field in FAB

File (cont'd.)

- structure, *RMS-11 Introduction*, 3-1
- supersession
 - See FB\$SUP mask in FOP field
- symbol definition
 - LINK command, *Task Builder*, 1-6
- task, *Introduction*, 2-1, 5-6
 - LINK command, *Task Builder*, 1-5
- testing for, *Indirect*, 2-89
- text, *Introduction*, 2-1
- transferring, *System Management*, 9-1, 9-3, 9-5 to 9-8
 - FLX utility, *Utilities*, 4-1
 - Professional Personal Computer systems, *System Management*, 9-1
 - VAX-11 RSX systems, *System Management*, 9-1, 9-5
- truncate routine, *I/O Operations*, 4-29
- truncating, *I/O Operations*, 2-11
 - See also TRUNCATE operation
- PIP utility, *Utilities*, 3-40
- type, *Introduction*, 2-1 MCR, 2-5, 2-8
 - conventional, MCR, 2-8
 - default, MCR, 2-8
- type FNB (F11ACP), *I/O Drivers*, C-7
- typing, *Command Language*, 4-62
- universal library
 - See Universal library file
- unlocking, *Command Language*, 4-74
- updating
 - PAT utility, *Utilities*, 14-1
 - PIP utility, *Utilities*, 3-42
 - SLP utility, *Utilities*, 13-1
 - ZAP utility, *Utilities*, 15-1
- validating contents
 - PAT utility, *Utilities*, 14-6
- version number, *Command Language*, 4-3 MCR, 2-5
 - default, *Command Language*, 4-4
- version number in FNB (F11ACP), *I/O Drivers*, C-7
- wildcard context
 - See WCC field in NAM block
- wildcard operation
 - See NB\$WCH mask in FNB field

File

- wildcard search
 - See SEARCH operation
- window
 - mapping, MCR, 3-155
- FILE.MAC source code, *Program Development*, 2-19, 2-20
- /FILE_POSITION file qualifier
 - SET QUEUE command, *Batch and Queue*, 2-21
- /FILE_POSITION qualifier
 - DELETE command, *Batch and Queue*, 2-11
- FILEA.MAC source code, *Program Development*, 2-21, 2-22
- File access block
 - See FAB
- File access listener
 - See FAL
- File allocation
 - See Allocation
- File attribute, *Indirect*, 2-19
 - See also Attribute
- initialize, *I/O Operations*, 2-5
 - run-time, *I/O Operations*, 2-21
- RMSDSP utility
 - indexed file
 - detailed display, *RMS-11 Utilities*, 5-4
 - specifying tape, *I/O Operations*, G-17
- FILEB.MAC source code, *Program Development*, 2-23, 2-24
- File back-up date
 - See Back-up date
- File block
 - access initialization, *I/O Operations*, 2-12
 - run time, *I/O Operations*, 2-21
 - allocation, *I/O Operations*, 2-8
 - buffer initialization, *I/O Operations*, 2-18
 - run time, *I/O Operations*, 2-22
 - locking, *I/O Operations*, 2-17
- File characteristic
 - system-controlled
 - SC.BAD, bad data block, *I/O Operations*, F-4
 - SC.MDL, file marked for delete, *I/O Operations*, F-4
 - user-controlled
 - UC.CON, contiguous file, *I/O Operations*, F-4

- File characteristic
 - user-controlled (cont'd.)
 - UC.DLK, file improperly closed, *I/O Operations*, F-4
- FILE command
 - EDI utility, *Utilities*, 2-33
- File Compare Utility
 - See CMP utility
- File contiguity
 - See Contiguity
- File Control Block, MCR, 3-104, 3-156
 - Writing I/O Driver*, 2-14
- File control block
 - See FCB
- File control processor, RMS-11
 - Introduction*, 2-1, 4-3 RMS-11
 - User's Guide*, 1-16
 - retrieval pointers, RMS-11 *User's Guide*, 8-2
- File control routine, *I/O Operations*, 4-1
- File Control Services
 - See FCS
- File Descriptor Block
 - See FDB
- File Dump Utility
 - See DMP utility
- File extension
 - default, *I/O Operations*, 2-20
 - default size, *I/O Operations*, 2-9
 - size, *I/O Operations*, 2-8
 - virtual block, *I/O Operations*, 2-9
- File header block, *I/O Operations*, 5-3, E-2
 - format, *I/O Operations*, F-1
 - H.XXXX field, *I/O Operations*, F-1
 - header area
 - file characteristics, *I/O Operations*, F-4
 - file owner information, *I/O Operations*, F-3
 - file protection code, *I/O Operations*, F-4
 - identification area, *I/O Operations*, F-4
 - creation date, *I/O Operations*, F-5
 - creation time, *I/O Operations*, F-5
 - expiration date, *I/O Operations*, F-5
 - filename, *I/O Operations*, F-4
 - filetype, *I/O Operations*, F-4
- File header block
 - identification area (cont'd.)
 - file version number, *I/O Operations*, F-4
 - revision date, *I/O Operations*, F-4
 - revision number, *I/O Operations*, F-4
 - revision time, *I/O Operations*, F-5
 - map area, *I/O Operations*, F-5
 - tape, *I/O Operations*, G-10
 - user file, *I/O Operations*, E-2
- File header block, H.XXXX field, *I/O Operations*, F-2
- File header block, I.XXXX field, *I/O Operations*, F-2
- File header block, M.XXXX field, *I/O Operations*, F-2, F-3
- File header label
 - ANSI, *I/O Operations*, 5-4
 - tape, *I/O Operations*, G-3
 - HDR1, *I/O Operations*, G-4
 - HDR2, *I/O Operations*, G-5
 - HDR3, *I/O Operations*, G-6
- File I/O
 - coordination, *I/O Operations*, 2-42
 - status block, *I/O Operations*, 2-44
- File identification, *I/O Operations*, 5-3
 - FDB, *I/O Operations*, 3-10
 - field, *I/O Operations*, 2-34
- File Identification Block (F11ACP), *I/O Drivers*, C-2
- File identifier
 - processing by Files-11 (tape), *I/O Operations*, G-7
- File label
 - tape, *I/O Operations*, G-1
- File macro, *I/O Operations*, 3-1
 - access privileges, *I/O Operations*, 3-3
 - error routine, *I/O Operations*, 3-2
- File name, *Command Language*, 4-3
 - default, *Indirect*, 2-5
 - .PARSE routine, *I/O Operations*, 4-14
 - .PRSFN routine, *I/O Operations*, 4-16
 - tape
 - Radix-50 conversion, *I/O Operations*, 4-19
- Filename block
 - See also FNB
 - default, *I/O Operations*, 2-31, 3-17

- Filename block
 - default (cont'd.)
 - file-open, *I/O Operations*, 2-14
 - initialization, *I/O Operations*, 2-15
 - OFNB\$x macro, *I/O Operations*, 3-17
 - specifying, *I/O Operations*, 2-28
 - default directory information
 - .GTDID routine, *I/O Operations*, 4-21
 - delete file, *I/O Operations*, 4-30
 - directory information
 - .GTDIR routine, *I/O Operations*, 4-20
 - initializing, *I/O Operations*, 2-35
 - local offset definition, *I/O Operations*, 2-33
 - manually initializing, *I/O Operations*, 2-36
 - N.DID field
 - .PARSE routine, *I/O Operations*, 4-13
 - N.DVNM field, *I/O Operations*, 4-17
 - N.NEXT
 - .PARSE routine, *I/O Operations*, 4-15
 - N.STAT word
 - .PARSE routine, *I/O Operations*, 4-15
 - NBOF\$L macro, *I/O Operations*, 2-33
 - NMBLK\$ macro, *I/O Operations*, 2-31
 - OPEN\$x macro, *I/O Operations*, 2-35
 - open file by, *I/O Operations*, 3-16
 - .PARSE routine
 - disk, *I/O Operations*, 4-11
 - N.DID field, *I/O Operations*, 4-13
 - N.FID field, *I/O Operations*, 4-13
 - tape, *I/O Operations*, 4-11
- Filename block routine, *I/O Operations*, 4-8, 4-20
- Filename string descriptor, *I/O Operations*, 2-29
- File number, *I/O Operations*, 5-3
- File open
 - append, *I/O Operations*, 2-15
 - by ID, *I/O Operations*, 2-34
- File open (cont'd.)
 - for file access, *I/O Operations*, 3-18
 - lock on close, *I/O Operations*, 2-16
 - modify, *I/O Operations*, 2-15
 - no supersede, *I/O Operations*, 2-15, 3-18, 3-19
 - read access, *I/O Operations*, 2-15
 - shared access, *I/O Operations*, 2-15
 - tape position, *I/O Operations*, 2-16
 - temporary, *I/O Operations*, 2-15
 - update, *I/O Operations*, 2-15
 - write access, *I/O Operations*, 2-15
- File operation, *RMS-11 Introduction*, 4-2 *RMS-11 Macro*, 3-6 *RMS-11 User's Guide*, 1-18
- See also Operation
- File operation, error codes, *I/O Operations*, 1-1
- File operation macro, *RMS-11 Macro*, 1-2
 - declaring, *RMS-11 Macro*, C-2
- File organization, *Command Language*, 4-1 *RMS-11 Introduction*, 3-1, 3-4 *RMS-11 User's Guide*, 1-11, 1-18
- See also Indexed file organization
- See also Relative file organization
- See also Sequential file organization
- and data storage, *RMS-11 User's Guide*, 2-5
- and file design, *RMS-11 User's Guide*, 2-11
- and optimizations, *RMS-11 User's Guide*, 8-2
- and record formats, *RMS-11 User's Guide*, 1-20, 2-15
- random access
 - to indexed files, *RMS-11 Introduction*, 3-15
 - to relative files, *RMS-11 Introduction*, 3-15
 - to sequential files, *RMS-11 Introduction*, 3-14
- RMSDEF utility, *RMS-11 Utilities*, A-8
- selection, *RMS-11 User's Guide*, 2-11
- sequential access
 - to indexed files, *RMS-11 Introduction*, 3-14
 - to relative files, *RMS-11 Introduction*, 3-14
 - to sequential files, *RMS-11 Introduction*, 3-14
- File owner word, *I/O Operations*, 4-5

- File owner word (cont'd.)
 - read, *I/O Operations*, 4-7
 - write, *I/O Operations*, 4-7
- FILE PLACEMENT attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-30
- File pointer routine, *I/O Operations*, 4-21
- File position
 - by byte, *I/O Operations*, 2-11
 - save, *I/O Operations*, 4-24
 - to byte
 - .POINT routine, *I/O Operations*, 4-22
 - to record
 - .POSRC routine, *I/O Operations*, 4-22
- File processing, *RMS-11 Macro*, 3-1
- File processing completion
 - CLOSE\$ macro, *I/O Operations*, 2-8
- File protection word, *I/O Operations*, 4-4, 4-5
- FILER2 symbol (RSX-11M-PLUS only), *Indirect*, 2-15
- File random I/O, *I/O Operations*, 2-20
- File read-ahead
 - FD.RAH parameter, *I/O Operations*, 3-12
- File record
 - attribute, *I/O Operations*, 2-6
- File rename routine, *I/O Operations*, 4-26
- File revision date
 - See Revision date
- FILERR symbol, *Indirect*, 2-13
- Files-11, *Command Language*, 5-4
 - MCR, 2-1
 - disk
 - selecting for testing
 - IOX, *System Management*, 4-39, 4-65
 - file
 - copying
 - FLX utility, *Utilities*, 4-2
 - PIP utility, *Utilities*, 3-8
 - protection
 - PIP utility, *Utilities*, 3-29
 - verifying structure, *Utilities*, 9-1
 - file name, MCR, 2-5
 - volume
 - backing up, *Command Language*, 5-90

- Files-11
 - volume (cont'd.)
 - dismounting, MCR, 3-70
 - home block, MCR, 3-93
 - initializing, *Command Language*, 5-73 MCR, 3-99
 - label, MCR, 3-70
 - mounting, MCR, 3-142
 - protecting, MCR, 3-148, 3-151
 - protecting with TEMPORARYFILE
 - IOX, *System Management*, 4-63
 - restoring, *Command Language*, 5-90
 - selecting, *System Management*, 4-7
 - types, MCR, 2-1
 - volume exercise
 - example
 - IOX, *System Management*, 4-10
- Files-11 ACP
 - See F11ACP
- FILES11 command
 - IOX
 - default parameters, *System Management*, 4-39
- Files-11 structure, *I/O Operations*, 5-1
- File sequence number, *I/O Operations*, 2-7, 5-3
- File Set Identifier, MCR, 3-143, 3-144, 3-150, 3-151, 3-154
- File sharing
 - See Shared access
- File size
 - specifying in blocks, *System Management*, 4-63
- File space (RMSIFL)
 - calculating, *RMS-11 Utilities*, 3-12
- File space preallocation, *I/O Operations*, 2-20
- Filespec
 - See file specification
- File specification, *Command Language*, 4-2 to 4-4 *Introduction*, 1-12 to 1-13 MCR, 2-4 *RMS-11 Introduction*, 4-1 *RMS-11 User's Guide*, 1-18, 1-19
 - See also File
 - See also Infile
 - See also Outfile
 - convention, *Task Builder*, 1-15, 1-16, 1-19

File specification (cont'd.)

- default, *MCR*, 2-7, 3-35 *Task Builder*, 1-15, 1-16
- node, *RMS-11 User's Guide*, B-2
- defaults, *Command Language*, 4-4 to 4-6
- definition, *I/O Operations*, 1-3
- device, *I/O Operations*, 1-14
 - .PRSDV routine, *I/O Operations*, 4-16
- directory, *I/O Operations*, 1-14
 - .PRSDI routine, *I/O Operations*, 4-16
- dynamic processing
 - SYSLIB, *I/O Operations*, 2-34
- examples, *MCR*, 2-9
- Files-11
 - assigning logical name, *MCR*, 3-21
- format, *Command Language*, 4-2
 - MCR*, 2-4
- fully qualified, *RMS-11 Macro*, 3-4
- generation, *I/O Operations*, 1-17
- input, *MCR*, 2-4
- logical name expanding, *I/O Operations*, 4-10
- logical name merging, *I/O Operations*, 4-10
- logical name parsing, *I/O Operations*, 4-10
- magnetic tape, *I/O Operations*, 1-16, 1-17
- merged string, *RMS-11 Macro*, 3-3
- name, *I/O Operations*, 1-15
- node, *RMS-11 User's Guide*, B-2
- parsing
 - See PARSE operation
- processing, *Executive*, 5-10
- quoted string, *RMS-11 User's Guide*, B-2
- remote, *RMS-11 User's Guide*, B-2
- RMSBCK utility, *RMS-11 Utilities*, 6-9
- RMSDEF utility, *RMS-11 Utilities*, A-7
- RMSRST utility, *RMS-11 Utilities*, 7-10
- scanning, *Executive*, 5-89
- syntax description, *I/O Operations*, 1-13
- type, *I/O Operations*, 1-15
- UIC, *MCR*, 2-6

File specification

- unit
 - .PRSDV routine, *I/O Operations*, 4-16
- version, *I/O Operations*, 1-16
- VMR
 - components, *System Management*, 10-5
 - defaults, *System Management*, 10-5
 - device name, *System Management*, 10-5
 - directory, *System Management*, 10-6
 - named, *System Management*, 10-6
 - file name, *System Management*, 10-6
 - file type, *System Management*, 10-6
 - format, *System Management*, 10-5
 - /IM switch, *System Management*, 10-7
 - specifying, *System Management*, 10-5
 - version number, *System Management*, 10-6
- wildcard, *Command Language*, 4-6 to 4-8 *RMS-11 Introduction*, 4-1
- RMS-11 Macro*, 3-8
- within program, *I/O Operations*, 2-27

File Specification Scanner directive, *Executive*, 5-89

/FILES qualifier

- SHOW QUEUE command, *Batch and Queue*, 2-15

FILE statement, *Error Logging*, 5-37, 5-38

File Storage Region

- See FSR

File structure, *I/O Operations*, 5-1

- See also Structure
- tape, *I/O Operations*, G-9
- user, *I/O Operations*, 5-2
- virtual blocks, *I/O Operations*, 5-2

File-structured device

- exercising
 - IOX, *System Management*, 4-3

File Structure Verification Utility

- See VFY utility

File system options, *System Generation*, C-5

File trailer label (tape), *I/O Operations*, G-9

File Transfer Utility
See FLX utility

File type, *Command Language*, 4-3
Introduction, 2-1
default, *Command Language*, 4-4, 4-5 to 4-6
.FTN, *Program Development*, 7-3, 7-4
.LST, *Program Development*, 3-4, 6-11, 7-3, 7-4
.MAC, *Program Development*, 3-1
.MAP, *Program Development*, 4-6
.MLB, *Program Development*, 6-1
.OBJ, *Program Development*, 3-4, 7-5
.OLB, *Program Development*, 6-4
.PARSE routine, *I/O Operations*, 4-14
.PMD, *Program Development*, 5-10
.PRSFN routine, *I/O Operations*, 4-16
.TSK, *Program Development*, 4-1

File version
.PARSE routine, *I/O Operations*, 4-14
.PRSFN routine, *I/O Operations*, 4-16

File window in secondary pool
SYSGEN question, *System Generation*, 3-29

File window pointer
number, *I/O Operations*, 2-16

/FIL keyword
HELP command, MCR, 3-87

Fill command
See F command

Fill number
data bucket
See DFL field in KEY block
index bucket
See IFL field in KEY block
RMSCNV utility, *RMS-11 Utilities*, 4-10
RMSDEF utility, *RMS-11 Utilities*, A-16
RMSIFL utility, *RMS-11 Utilities*, 3-6

Fill size
See Bucket fill number

FILSPC symbol, *Indirect*, 2-20

/FINAL keyword
ASSIGN command (MCR), MCR, 3-26
DEFINE LOGICALS command (MCR), MCR, 3-66

FIN argument to ORG\$ macro, *RMS-11 Macro*, 2-3

FIND command
EDI utility, *Utilities*, 2-33
EDT editor, *Introduction*, 2-13

FIND key (EDT), *Introduction*, 2-7

\$FIND macro
key access, *RMS-11 Macro*, 5-51
RFA access, *RMS-11 Macro*, 5-54
sequential access, *RMS-11 Macro*, 5-49

FIND NEXT key (EDT), *Introduction*, 2-8

FIND operation, *RMS-11 Introduction*, 4-4
RMS-11 Macro, 4-10
RMS-11 User's Guide, 1-15
access modes, *RMS-11 Introduction*, 4-6
and bucket locking, *RMS-11 User's Guide*, 2-8
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-16
declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 7-9

\$FIND macro
key access, *RMS-11 Macro*, 5-51
RFA access, *RMS-11 Macro*, 5-54
sequential access, *RMS-11 Macro*, 5-49

indexed files, *RMS-11 User's Guide*, 7-3
key access, *RMS-11 User's Guide*, 7-3
random by key, *RMS-11 User's Guide*, 5-13
RFA access, *RMS-11 User's Guide*, 7-3
sequential access, *RMS-11 User's Guide*, 5-17, 7-3

key access, *RMS-11 User's Guide*, 1-15

relative files, *RMS-11 User's Guide*, 4-8

FIND operation
 relative files (cont'd.)
 key access, *RMS-11 User's Guide*, 4-8
 RFA access, *RMS-11 User's Guide*, 4-8
 sequential access, *RMS-11 User's Guide*, 4-8
 RFA access, *RMS-11 User's Guide*, 1-15
 sequential access, *RMS-11 User's Guide*, 1-15
 sequential files, *RMS-11 User's Guide*, 3-7
 key access, *RMS-11 User's Guide*, 3-7
 RFA access, *RMS-11 User's Guide*, 3-7
 sequential access, *RMS-11 User's Guide*, 3-7
 .FIND routine, find directory entry, *I/O Operations*, 4-17
 FIND statement, *Error Logging*, 5-39
 FINIT\$ macro
 FSR initialization
 run-time, *I/O Operations*, 2-40
 .FINIT routine, initialize before .PARSE routine, *I/O Operations*, 4-11
 /FI switch
 DMP utility, *Utilities*, 11-5
 PIP utility, *Utilities*, 3-22
 QUE /DEL command, *Batch and Queue*, 2-11
 FIX
 See FIX command
 See FIX-IN MEMORY command
 FIX command, *Command Language*, 7-41 to 7-42, 9-15
 Fixed control area
 RMSDEF utility, *RMS-11 Utilities*, A-8
 Fixed-control-size
 See FSZ field in FAB
 Fixed-length record
 PUT\$ macro
 block boundary, *I/O Operations*, 3-29
 block buffer, *I/O Operations*, 3-29
 Fixed-length record format, *RMS-11 Introduction*, 3-2 *RMS-11 User's Guide*, 1-11, 2-15
 See also FB\$FIX code in RFM field

Fixing
 directive common, *System Management*, 10-19
 FIX-IN-MEMORY command (MCR),
 MCR, 1-7, 3-75
 error messages, MCR, 3-76
 examples, MCR, 3-76
 format, MCR, 3-75
 keywords
 /REG, MCR, 3-75
 /RON, MCR, 3-75
 FIX-IN-MEMORY command (VMR),
 System Management, 10-18
 definition, *System Management*, 10-18
 examples, *System Management*, 10-19
 format, *System Management*, 10-18
 keywords
 /DIR, *System Management*, 10-19
 /NSF, *System Management*, 10-19
 /REG, *System Management*, 10-19
 /RON, *System Management*, 10-19
 parameter, *System Management*, 10-18
 /FIX keyword
 INSTALL command (VMR), *System Management*, 10-23
 FLA
 See GROUP GLOBAL EVENT
 FLAGS command
 Flag
 See also Event flag
 group global event, MCR, 3-77
 /FLAG_PAGE qualifier
 PRINT command, *Batch and Queue*, 2-5
 Flag page, *Command Language*, 4-78 to 4-79
 Flagwd parameter
 device-specific function
 transmit (LRDRV), *I/O Drivers*, 14-4
 FLG field in KEY block
 CREATE operation, *RMS-11 Macro*, 5-19
 DISPLAY operation, *RMS-11 Macro*, 5-31
 offset, *RMS-11 Macro*, 6-67

- FLG field in KEY block (cont'd.)
 - OPEN operation, *RMS-11 Macro*, 5-80
 - summary
 - XB\$CHG mask, *RMS-11 Macro*, 6-76
 - XB\$DUP mask, *RMS-11 Macro*, 6-77
 - XB\$NUL mask, *RMS-11 Macro*, 6-78
- Floating CSR address, *System Generation*, E-1
 - assignment algorithm, *System Generation*, E-2
 - worksheet
 - blank, *System Generation*, E-5 to E-6
 - completed example, *System Generation*, E-7 to E-8
 - format, *System Generation*, E-3
 - instructions, *System Generation*, E-4
- Floating-point
 - directive, *MACRO-11*, 6-35
 - .FLT2, *MACRO-11*, 6-35
 - .FLT4, *MACRO-11*, 6-35
 - number, *MACRO-11*, 6-33, 6-34
 - operation code, *MACRO-11*, C-4, C-5
 - processor, *MACRO-11*, 3-14
 - rounding, *MACRO-11*, 6-34
 - controlling, *MACRO-11*, 6-19
 - truncation, *MACRO-11*, 6-34
 - controlling, *MACRO-11*, 6-19
 - unary operator, *MACRO-11*, 6-35, 6-36
- Floating Point Processor
 - specifying, *Task Builder*, 10-18, 11-17
 - SYSGEN question, *System Generation*, 3-32
- Floating vector, *System Generation*, E-1
 - /FL switch
 - PRI command, *Batch and Queue*, 2-5
- FLT16: subroutine
 - convert unsigned integer to real constant
 - K-series, *I/O Drivers*, 23-21
 - LADRV, *I/O Drivers*, 22-17
 - .FLT2 directive, *MACRO-11*, 6-35
 - .FLT4 directive, *MACRO-11*, 6-35
 - Flush buffer routine, *I/O Operations*, 4-32
 - \$FLUSH macro, *RMS-11 Macro*, 5-56
 - FLUSH operation, *RMS-11 Introduction*, 4-4 *RMS-11 User's Guide*, 1-15
 - \$FLUSH macro, *RMS-11 Macro*, 5-56
 - indexed files, *RMS-11 User's Guide*, 7-5
 - record stream, *RMS-11 Macro*, 4-8
 - relative files, *RMS-11 User's Guide*, 4-10
 - sequential files, *RMS-11 User's Guide*, 3-9
 - .FLUSH routine, flush buffer, *I/O Operations*, 4-32
 - FLX utility, *MCR*, 2-2
 - cassette, *Utilities*, 4-13
 - input file, *Utilities*, 4-15
 - multivolume support, *Utilities*, 4-14
 - output file, *Utilities*, 4-14
 - TA11/TU60 support, *Utilities*, 4-13
 - command line, *Utilities*, 4-2
 - device support, *Utilities*, 4-2
 - DOS-11 volume, *Utilities*, 4-8
 - deleting, *Utilities*, 4-10
 - directory listing, *Utilities*, 4-8
 - initializing, *Utilities*, 4-10
 - valid, *Utilities*, 4-1
 - error message, *Utilities*, 4-17
 - file
 - deleting, *Utilities*, 4-7
 - Files-11, *Utilities*, 4-2
 - specifying, *Utilities*, 4-2
 - FORTTRAN direct access file, *Utilities*, 4-16
 - paper tape support, *Utilities*, 4-15
 - RT-11 volume, *Utilities*, 4-10
 - deleting, *Utilities*, 4-12
 - directory listing, *Utilities*, 4-10
 - initializing, *Utilities*, 4-12
 - valid, *Utilities*, 4-2
 - switch, *Utilities*, 4-3
 - control, *Utilities*, 4-6
 - transfer mode, *Utilities*, 4-4
 - volume format, *Utilities*, 4-4
 - volume
 - directory listing, *Utilities*, 4-7
 - file deletion, *Utilities*, 4-7
 - file transfer, *Utilities*, 4-4
 - formatting, *Utilities*, 4-4
 - initializing, *Utilities*, 4-2

FLX utility (cont'd.)
 wildcard, *Utilities*, 4-3
 Flying installs, *System Management*, 12-4
 FM1WM1, *Error Logging*, 4-6
 FM2CM1, *Error Logging*, 4-6
 FM3CM1, *Error Logging*, 4-6
 FM4NM1, *Error Logging*, 4-6
 FM4WM1, *Error Logging*, 4-6
 /FMAP keyword
 INSTALL command (MCR), *MCR*, 3-118
 INSTALL command (VMR), *System Management*, 10-23
 FMASK symbol, *Indirect*, 2-20
 FMS-11 interface, *Indirect*, 2-55
 FMTBUF option, *Task Builder*, 12-17
 FMTNP1, *Error Logging*, 4-7
 FMT utility
 command line, *Utilities*, 5-1
 device support, *Utilities*, 5-5
 error message, *Utilities*, 5-10
 indirect command file, *Utilities*, 5-9
 initiating, *Utilities*, 5-1
 operation mode, *Utilities*, 5-2
 switch, *Utilities*, 5-7
 summary, *Utilities*, 5-1
 terminating, *Utilities*, 5-2
 FN1NM1, *Error Logging*, 4-6
 FNA field in FAB, *RMS-11 Macro*, 3-3
 CREATE operation, *RMS-11 Macro*, 5-10
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-41
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-87
 REMOVE operation, *RMS-11 Macro*, 5-103
 RENAME operation, *RMS-11 Macro*, 5-109, 5-110
 summary, *RMS-11 Macro*, 6-38
 FNB
 definition, *I/O Operations*, 1-2
 N.XXXX field, *I/O Operations*, B-1
 FNB (F11ACP), *I/O Drivers*, C-6
 directory identification, *I/O Drivers*, C-7
 file identification, *I/O Drivers*, C-7
 file name, *I/O Drivers*, C-7

FNB (F11ACP) (cont'd.)
 file type, *I/O Drivers*, C-7
 file version number, *I/O Drivers*, C-7
 pointer, *I/O Drivers*, C-6
 status word, *I/O Drivers*, C-7
 wildcard context, *I/O Drivers*, C-7
 FNB field in NAM block, *RMS-11 Macro*, 3-3, 3-9, 3-10
 CREATE operation, *RMS-11 Macro*, 5-21
 ENTER operation, *RMS-11 Macro*, 5-37, 5-38
 ERASE operation, *RMS-11 Macro*, 5-41, 5-43
 offset, *RMS-11 Macro*, 6-94
 OPEN operation, *RMS-11 Macro*, 5-81
 PARSE operation, *RMS-11 Macro*, 5-88
 REMOVE operation, *RMS-11 Macro*, 5-103, 5-105
 RENAME operation, *RMS-11 Macro*, 5-109, 5-111, 5-112
 SEARCH operation, *RMS-11 Macro*, 5-116, 5-118
 summary, *RMS-11 Macro*, 6-101
 NB\$WCH mask, *RMS-11 Macro*, 6-102
 wildcard loop, *RMS-11 Macro*, 3-10
 Fnc parameter
 QIO\$ basic syntax, *I/O Drivers*, 1-6
 \$FNDDPG (Find page), *System Library*, 8-27
 \$FNERL, *Error Logging*, 4-22
 FNS field in FAB, *RMS-11 Macro*, 3-3
 CREATE operation, *RMS-11 Macro*, 5-10
 ENTER operation, *RMS-11 Macro*, 5-36
 ERASE operation, *RMS-11 Macro*, 5-41
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-87
 REMOVE operation, *RMS-11 Macro*, 5-103
 RENAME operation, *RMS-11 Macro*, 5-109, 5-110
 summary, *RMS-11 Macro*, 6-39
 FO.APD value, open file for append, *I/O Operations*, 3-19

FO.MFY value, open file for modify,
I/O Operations, 3-19
 FO.RD value, open file for read, *I/O
 Operations*, 3-19
 FO.UPD value, open file for update and
 extend, *I/O Operations*, 3-19
 FO.WRT value
 open file for write and create, *I/O
 Operations*, 3-19
 /FO job switch
 QUE /MOD command, *Batch and
 Queue*, 2-20
 ^F operator, *MACRO-11*, 3-5, 6-35,
 6-36
 FOP field in FAB, *RMS-11 Macro*, 3-7,
 3-9, 3-10, 3-11
 CLOSE operation, *RMS-11 Macro*,
 5-4
 CREATE operation, *RMS-11 Macro*,
 5-10, 5-11, 5-15, 5-18
 ENTER operation, *RMS-11 Macro*,
 5-36
 ERASE operation, *RMS-11 Macro*,
 5-41
 EXTEND operation, *RMS-11 Macro*,
 5-46
 offset, *RMS-11 Macro*, 6-23
 OPEN operation, *RMS-11 Macro*,
 5-73, 5-74, 5-76, 5-77, 5-78
 REMOVE operation, *RMS-11 Macro*,
 5-103
 RENAME operation, *RMS-11 Macro*,
 5-109, 5-110
 SEARCH operation, *RMS-11 Macro*,
 5-117
 summary
 FB\$CTG mask, *RMS-11 Macro*,
 6-40
 FB\$DFW mask, *RMS-11 Macro*,
 6-41
 FB\$DLK mask, *RMS-11 Macro*,
 6-42
 FB\$FID mask, *RMS-11 Macro*,
 6-43
 FB\$MKD mask, *RMS-11 Macro*,
 6-44
 FB\$NEF mask, *RMS-11 Macro*,
 6-45
 FB\$POS mask, *RMS-11 Macro*,
 6-46
 FB\$RWC mask, *RMS-11 Macro*,
 6-47

FOP field in FAB
 summary (cont'd.)
 FB\$RWO mask, *RMS-11 Macro*,
 6-48
 FB\$SUP mask, *RMS-11 Macro*,
 6-49
 FB\$TMP mask, *RMS-11 Macro*,
 6-50
 FORATT symbol, *Indirect*, 2-16
 FOR command
 MCR, *Program Development*, 7-1,
 7-4
 FOR compiler task, *Program
 Development*, 7-1
 creating object module, *Program
 Development*, 7-5
 /D_LINES, *Program Development*,
 7-7
 /DE, *Program Development*, 7-7
 debugging statements, *Program
 Development*, 7-7
 diagnostic run, *Program
 Development*, 7-3, 7-4
 FOR command
 MCR, *Program Development*,
 7-1, 7-4
 FORTRAN command
 DCL, *Program Development*,
 7-1, 7-3
 .FTN file type, *Program
 Development*, 7-3, 7-4
 /LIST, *Program Development*, 7-3,
 7-7
 /NOBJECT, *Program Development*,
 7-3
 /OBJECT, *Program Development*,
 7-3, 7-7
 /FOREIGN qualifier
 MOUNT command, *Command
 Language*, 5-4, 5-10, 5-11,
 5-13, 5-53
 Foreign volume
 See Volume
 \$FORK1 routine, *Writing I/O Driver*,
 7-19
 Fork block, *Writing I/O Driver*, 1-17
 storage area, *Writing I/O Driver*,
 4-39
 /FOR keyword
 MOUNT command (MCR), *MCR*,
 3-148
 Fork list
 head of (\$FRKHD), *Writing I/O
 Driver*, 2-14

- Fork process, *Writing I/O Driver*, 1-9, 1-14, 1-18
 - definition, *Writing I/O Driver*, 1-8
- \$FORK routine, *Writing I/O Driver*, 1-8, 1-9, 1-18, 7-18
 - driver use in I/O processing, *Writing I/O Driver*, 3-5
- Form
 - special hardcopy, *Batch and Queue*, 1-2
- Format
 - See also Record format
 - assembler listing, *MACRO-11*, 6-4
 - control directive, *MACRO-11*, 6-13, 6-14
 - line printer, *MACRO-11*, 6-5, 6-6
 - teleprinter, *MACRO-11*, 6-7, 6-8
 - assembler statement, *MACRO-11*, 2-1
 - control, *MACRO-11*, 2-5
- FORTTRAN IV
 - statement, *Program Development*, 7-3
- MACRO-11
 - source file, *Program Development*, 2-1 to 2-3
 - skeleton, *Program Development*, 2-4
 - statement, *Program Development*, 2-3
 - macro definition, *MACRO-11*, 7-4
 - memory listing, *Debugging*, 6-5
 - overall
 - internal symbol, *Task Builder*, A-25
 - PSW, *Debugging*, B-1
 - source line, *MACRO-11*, 2-5
 - Trace program listing, *Debugging*, 10-2
- FORMAT attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-36
- Format module, *Error Logging*, 4-11
- Format register
 - See F register
- Format switch, *Error Logging*, 3-5
 - full report, *Error Logging*, 3-15
 - no report, *Error Logging*, 3-19
 - register report, *Error Logging*, 3-18
- Formatter, TM02/03 (cont'd.)
 - SYSGEN question, *System Generation*, 3-38
- Formatting volume
 - FLX utility, *Utilities*, 4-4
 - FMT utility, *Utilities*, 5-1
- .FORM directive, *Indirect*, 2-55
 - commands, *Indirect*, 2-55
 - parameters, *Indirect*, 2-56
 - demonstrating, *Indirect*, 2-57
- Form feed, *Command Language*, 3-23
- Form feed (TTDRV), *I/O Drivers*, 2-69
- FORM FEED command
 - EDI utility, *Utilities*, 2-34
- /FORMFEED keyword
 - SET command (MCR), *MCR*, 3-219
 - SET command (VMR), *System Management*, 10-59
- Forms
 - definition, *Batch and Queue*, 4-4
- /FORMS qualifier
 - PRINT command, *Batch and Queue*, 2-5
 - QUE /LI command, *Batch and Queue*, 2-16
 - SET QUEUE command, *Batch and Queue*, 2-20
- FOROTS.OLB (FORTRAN IV and FORTRAN IV-PLUS library), *Program Development*, 1-11
- FORTTRAN
 - AST service routine, *Executive*, 1-20
 - common block
 - overlays, *Task Builder*, 3-18
 - ICDRV/ISDRV
 - I/O status return, *I/O Drivers*, 19-35
 - optional argument, *I/O Drivers*, 19-37
 - interface
 - AFC11/AD01 converter, *I/O Drivers*, 15-3
 - K-series, *I/O Drivers*, 23-7
 - LADRV, *I/O Drivers*, 22-2
 - LSDRV, *I/O Drivers*, 17-9
 - routine (ICDRV/ISDRV), *I/O Drivers*, 19-34
 - routine list (K-series), *I/O Drivers*, 23-7
 - status return value list (UDDRV), *I/O Drivers*, 16-33
 - status value (LSDRV), *I/O Drivers*, 17-33
 - UDDRV, *I/O Drivers*, 16-14

- FORTTRAN
 - interface (cont'd.)
 - values
 - AFC11/AD01 converter, *I/O Drivers*, 15-9
 - UDDRV, *I/O Drivers*, 16-33
 - manual load calling sequence, *Task Builder*, 4-9, 4-10
 - for I- and D-space task, *Task Builder*, 4-10, 4-11
 - run-time support
 - virtual program section, *Task Builder*, 5-61, 5-64
 - sample program (K-series), *I/O Drivers*, 23-33
 - completion routine, *I/O Drivers*, 23-35
 - with event flag, *I/O Drivers*, 23-34
 - subroutine
 - LADRV, *I/O Drivers*, 22-3
 - LSDRV, *I/O Drivers*, 17-11
 - UDDRV, *I/O Drivers*, 16-16
 - FORTTRAN carriage-control
 - record attribute, *I/O Operations*, 3-8
 - FORTTRAN command, *Introduction*, 5-10
 - DCL, *Program Development*, 7-1, 7-3
 - FORTTRAN IV
 - See also FOR compiler task
 - compiler task, *Program Development*, 7-1
 - formatting source statements, *Program Development*, 7-3
 - library, *Program Development*, 1-11
 - source file
 - blank line, *Program Development*, 7-3
 - comment line, *Program Development*, 7-3
 - specifying OTS to TKB, *Program Development*, 7-5
 - FORTTRAN IV-PLUS
 - library, *Program Development*, 1-11
 - FORTTRAN-style carriage control
 - See FB\$FTN mask in RAT field
 - FORTTRAN subroutine
 - integer arguments, *Executive*, 1-11
 - list, *Executive*, 1-13
 - unavailable, *Executive*, 1-19
 - Forward reference, *MACRO-11*, 3-8 to 3-10, 3-13
 - /FO switch
 - PIP utility, *Utilities*, 3-11
 - PRI command, *Batch and Queue*, 2-5
 - QUE /LI command, *Batch and Queue*, 2-16
 - RMSCNV utility, *RMS-11 Utilities*, 4-9, 4-15
 - Four-byte signed integer key, *RMS-11 User's Guide*, 6-4
 - Four-byte unsigned binary key, *RMS-11 User's Guide*, 6-5
 - /FPRO keyword
 - HOME command, *MCR*, 3-94
 - INITVOLUME command, *MCR*, 3-102
 - MOUNT command (*MCR*), *MCR*, 3-148
 - /FP switch, *Task Builder*, 10-18
 - FPT symbolic argument, *MACRO-11*, 6-19
 - \$FREE macro, *RMS-11 Macro*, 5-58
 - FREE operation, *RMS-11 Introduction*, 4-4 *RMS-11 User's Guide*, 1-15
 - and shared access, *RMS-11 User's Guide*, 2-10
 - block stream, *RMS-11 Macro*, 4-13
 - \$FREE macro, *RMS-11 Macro*, 5-58
 - record stream, *RMS-11 Macro*, 4-9
 - Free-space list for pool, *RMS-11 Macro*, 2-19
 - F register, *Debugging*, 2-6, 5-3, 9-10
 - \$FRKHD symbol, *Writing I/O Driver*, 2-14
 - /FR switch
 - PIP utility, *Utilities*, 3-23
 - RMSRST utility, *RMS-11 Utilities*, 7-7
 - VFY utility, *Utilities*, 9-5
 - FSR
 - as data structure, *I/O Operations*, 1-4
 - definition, *I/O Operations*, 1-3
 - general description, *I/O Operations*, 1-5
 - increasing size
 - FORTTRAN, *I/O Operations*, 2-42
 - MACRO-11, *I/O Operations*, 2-41

FSR
 initialization
 FINIT\$ macro, *I/O Operations*, 2-40
 FSRSZ\$ macro, *I/O Operations*, 2-37
 record I/O, *I/O Operations*, 2-38
 multiple buffering, *I/O Operations*, 2-38

fsr
 INITIALIZATION, *I/O Operations*, 2-37
 \$\$FSR1, *I/O Operations*, 1-5
 \$\$FSR1 program section
 reserved name, *Task Builder*, E-3
 \$\$FSR2
 default UIC, *I/O Operations*, 4-4
 file owner word, *I/O Operations*, 4-5
 file protection word, *I/O Operations*, 4-4
 general description, *I/O Operations*, 1-6

FSR block buffer
 block boundary, *I/O Operations*, 3-28
 locate mode, *I/O Operations*, 3-23, 3-29
 pool space, *I/O Operations*, 2-39
 space allocation, *I/O Operations*, 2-20

.FSRPT
 low-memory context, *Task Builder*, B-10
 reserved global symbol, *Task Builder*, E-1

FSRSZ\$ macro, FSR initialization, *I/O Operations*, 2-37

FSS\$ directive, *Executive*, 5-89

/F switch, *Error Logging*, 3-5

FSZ field in FAB
 CREATE operation, *RMS-11 Macro*, 5-11
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-78
 summary, *RMS-11 Macro*, 6-51

FTB, *Program Development*, 4-4
 description, *Task Builder*, G-1, G-2
 speed of, *Task Builder*, G-2
 supported feature, *Task Builder*, G-1, G-2
 supported option, *Task Builder*, G-2
 supported switch, *Task Builder*, G-1

FTB (cont'd.)
 unsupported feature, *Task Builder*, G-1, G-2

.FTN file type, *Program Development*, 7-3, 7-4
 See also FOR compiler task
 /FULL_SEARCH qualifier, *Task Builder*, 11-33

Full-duplex
 considerations (communication driver), *I/O Drivers*, 12-11
 mode
 setting (communication driver), *I/O Drivers*, 12-7
 operation (TTDRV), *I/O Drivers*, 2-79

Full-duplex I/O, *Writing I/O Driver*, 1-13

Full-duplex terminal driver, *System Management*, 10-50
 GET/SET option, *System Management*, 10-50

Full format report, *Error Logging*, 3-15
 context information, *Error Logging*, 1-5
 device error, *Error Logging*, 1-5
 device supplied information, *Error Logging*, 1-5
 * flag, *Error Logging*, 1-5
 I/O operation, *Error Logging*, 1-5

Full-functionality Executive
 definition, *System Generation*, 1-10
 features, *System Generation*, 3-21
 SYSGEN question, *System Generation*, 3-21

/FULL qualifier
 SHOW QUEUE command, *Batch and Queue*, 2-15

Function
 Task Builder, *Task Builder*, 2-1 to 2-28

Function commands
 IOX category, *System Management*, 4-3

Function directive, assembler, *MACRO-11*, 6-18 to 6-22

Function mask
 ACP, *Writing I/O Driver*, 4-19, 4-20
 building for mask word, *Writing I/O Driver*, 4-21
 control, *Writing I/O Driver*, 4-19, 4-20

Function mask (cont'd.)
 establishing, *Writing I/O Driver*, 4-22
 layout, *Writing I/O Driver*, 4-19, 4-20
 legal
 details, *Writing I/O Driver*, 4-19, 4-20
 no-op, *Writing I/O Driver*, 4-19, 4-20
 Function switches, *CDA*, 2-9 to 2-12
 /FU switch, *Task Builder*, 10-19
 LBR utility, *Utilities*, 10-21
 PIP utility, *Utilities*, 3-25
 QUE /LI command, *Batch and Queue*, 2-15
 RMSDSP utility, *RMS-11 Utilities*, 5-2, 5-4

G

Gain range (AFC11/AD01 converter), *I/O Drivers*, 15-10
 Gather interevent time data (K-series), *I/O Drivers*, 23-21
 GBLDEF option, *Task Builder*, 12-18
 GBLINC option, *Task Builder*, 12-19
 /GBL keyword
 ASSIGN command (MCR), *MCR*, 3-26, 3-28, 3-29
 ASSIGN command (VMR), *System Management*, 10-10
 DEFINE LOGICALS command (MCR), *MCR*, 3-66, 3-67, 3-68
 GBLPAT option, *Task Builder*, 12-20
 See also *TKB*
 GBLREF option, *Task Builder*, 12-21
 GBL symbolic argument, *MACRO-11*, 6-21, 6-41
 GBLXCL option, *Task Builder*, 8-4, 12-22
 use in CSM library, *Task Builder*, 8-8, 8-9, 8-17
 GCCIS\$ directive, *Executive*, 5-93
 GCII\$ directive, *Executive*, 5-96
 GCML, *I/O Operations*, 6-1, 6-2
 control block
 allocate, *I/O Operations*, 6-3
 define bit values, *I/O Operations*, 6-5
 define offsets, *I/O Operations*, 6-5
 initialize, *I/O Operations*, 6-3

GCML (cont'd.)
 routine, run-time error, *I/O Operations*, 6-9
 usage, *I/O Operations*, 6-13
 GCML\$ macro, *I/O Operations*, 6-9
 GCMLB\$ macro, *I/O Operations*, 6-3
 GCMLD\$ macro, *I/O Operations*, 6-5
 G command, *Debugging*, 2-9, 3-2, 3-4, 8-6, 9-12
 ODT, *Program Development*, 5-6, 5-8
 GDIR\$ directive, *Executive*, 5-100
 General Information Directive, *Executive*, 1-24
 General register, *Debugging*, 5-1
 contents, *Debugging*, 5-2
 examining, *Debugging*, 5-1
 setting, *Debugging*, 5-1
 Generic match, *RMS-11 Introduction*, 3-12
 GET\$ macro, *I/O Operations*, 1-8, 3-1
 example, *I/O Operations*, 3-22
 FD.RWM parameter, record I/O, *I/O Operations*, 2-10
 FDB, file processing, *I/O Operations*, 3-23
 file processing, *I/O Operations*, 3-21
 locate mode, *I/O Operations*, 3-23
 move mode, *I/O Operations*, 3-23
 format, file processing, *I/O Operations*, 3-21
 GET\$R macro, *I/O Operations*, 3-1
 file processing
 read logical record, random mode, *I/O Operations*, 3-24
 GET\$S macro, *I/O Operations*, 3-1
 file processing
 read logical record, sequential mode, *I/O Operations*, 3-26
 GETADR subroutine, *Executive*, 1-12
 GET argument to ORG\$ macro, *RMS-11 Macro*, 2-3
 Get buffer status (K-series), *I/O Drivers*, 23-23
 GET command
 RMSDES utility, *RMS-11 Utilities*, 2-10, 2-17, 2-24
 and PROTECTION attribute, *RMS-11 Utilities*, 2-33

- GET command
 - RMSDES utility (cont'd.)
 - with SAVE, *RMS-11 Utilities*, 2-28
- Get Command for Command Interpreter directive, *Executive*, 5-92
- Get Command Interpreter Information directive, *Executive*, 5-96
- Get command line
 - See also GCML
- Get command line macro, *I/O Operations*, 6-9
- Get Default Directory directive, *Executive*, 5-100
- \$GETGSA macro, *RMS-11 Macro*, 2-19
- Get LUN Information directive, *Executive*, 5-103
- \$GET macro
 - key access, *RMS-11 Macro*, 5-63
 - RFA access, *RMS-11 Macro*, 5-67
 - sequential access, *RMS-11 Macro*, 5-60
- Get Mapping Context directive, *Executive*, 5-108
- Get MCR Command Line directive, *Executive*, 5-106
- GET operation, *RMS-11 Introduction*, 4-4 *RMS-11 Macro*, 4-10 *RMS-11 User's Guide*, 1-15
 - access modes, *RMS-11 Introduction*, 4-6
 - and bucket locking, *RMS-11 User's Guide*, 2-8
 - and shared access, *RMS-11 User's Guide*, 2-6, 2-10
 - and stream records, *RMS-11 User's Guide*, 2-16, 2-17
 - declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
 - deferred write, *RMS-11 User's Guide*, 7-9
- \$GET macro
 - key access, *RMS-11 Macro*, 5-63
 - RFA access, *RMS-11 Macro*, 5-67
 - sequential access, *RMS-11 Macro*, 5-60
- indexed files, *RMS-11 User's Guide*, 7-5, 7-9
 - key access, *RMS-11 User's Guide*, 7-5

- GET operation
 - indexed files (cont'd.)
 - random by key, *RMS-11 User's Guide*, 5-13
 - RFA access, *RMS-11 User's Guide*, 7-5
 - sequential access, *RMS-11 User's Guide*, 5-17, 7-5
 - key access, *RMS-11 User's Guide*, 1-15
 - locate mode, *RMS-11 User's Guide*, 3-14
 - indexed files, *RMS-11 User's Guide*, 7-8
 - relative files, *RMS-11 User's Guide*, 4-13
 - move mode
 - indexed files, *RMS-11 User's Guide*, 7-7
 - relative files, *RMS-11 User's Guide*, 4-12
 - sequential files, *RMS-11 User's Guide*, 3-13
 - relative files, *RMS-11 User's Guide*, 4-10
 - key access, *RMS-11 User's Guide*, 4-10
 - RFA access, *RMS-11 User's Guide*, 4-10
 - sequential access, *RMS-11 User's Guide*, 4-10
 - RFA access, *RMS-11 User's Guide*, 1-15
 - sequential access, *RMS-11 User's Guide*, 1-15
 - sequential files, *RMS-11 User's Guide*, 3-9
 - key access, *RMS-11 User's Guide*, 3-9
 - RFA access, *RMS-11 User's Guide*, 3-9
 - sequential access, *RMS-11 User's Guide*, 3-9
- Get Partition Parameters directive, *Executive*, 5-111
- Get Region Parameters directive, *Executive*, 5-113
- Get Sense Switches directive, *Executive*, 5-115
- Get-space routine, *RMS-11 Macro*, 2-18
 - example, *RMS-11 Macro*, 7-18
- macro
 - declaring, *RMS-11 Macro*, C-2

- Get-space routine (cont'd.)
 - RMS-11-supplied, *RMS-11 Macro*, 2-4
- Get Task Parameters directive, *Executive*, 5-119
- Get terminal support, *I/O Drivers*, 3-13
- Get Time Parameters directive, *Executive*, 5-117
- GFB, *Executive*, 5-48, 5-71, 5-253
- \$\$\$GLB, *Executive*, 1-8
- Global
 - additive
 - relocation, *Task Builder*, A-16
 - cross-reference listing, *Program Development*, 4-5, 4-6
 - default
 - disabling in MACRO-11, *Program Development*, 3-1, 3-2
 - expression evaluation, MACRO-11, 3-17
 - label, MACRO-11, 6-49
 - reference, MACRO-11, 6-49
 - relocation, *Task Builder*, A-15
 - additive displaced, *Task Builder*, A-17
 - displaced, *Task Builder*, A-16
 - symbol, MACRO-11, 3-7
 - address of ODT SST routine, *Task Builder*, 12-26
 - autoloadable segment, *Task Builder*, 4-7
 - cross-reference listing, *Task Builder*, 10-12, 10-13, 11-23, 11-24
 - declaration directory record, *Task Builder*, A-2
 - definition, MACRO-11, 3-1, 3-2, 3-8, 6-49
 - deleting definition, *Indirect*, 2-52
 - directory, MACRO-11, 1-2
 - directory record format, *Task Builder*, A-4
 - end of directory record, *Task Builder*, A-11
 - entry point, *Program Development*, 6-5, 6-6, 6-10
 - from the default library, *Task Builder*, 3-18
 - internal, *Task Builder*, A-28
 - label, MACRO-11, 2-2

- Global
 - symbol (cont'd.)
 - name, *Task Builder*, A-6
 - name entry, *Task Builder*, A-6
 - resolution, *Program Development*, 4-2, 6-8, 6-9
 - Task Builder*, 2-7, 2-8
 - default library, *Task Builder*, 3-18
 - undefined, *Program Development*, 6-8, 6-9
 - Task Builder*, 2-7
 - undefined reference, MACRO-11, 6-21
- GLOBAL argument, MACRO-11, 8-9
- Global common (UDDRV)
 - creating, *I/O Drivers*, 16-12
 - referencing, *I/O Drivers*, 16-12
- Global logical assignment, *MCR*, 3-20
- Global mode, *Indirect*, 2-48
- /GLOBALS qualifier, *Task Builder*, 11-34
- Global switch
 - RMSBCK utility, *RMS-11 Utilities*, 6-5
 - RMSIFL utility, *RMS-11 Utilities*, 3-5
 - RMSRST utility, *RMS-11 Utilities*, 7-5
- Global symbol, *Program Development*, 1-4, 1-5
 - definition
 - See also .GLOBL directive
 - entry point, *Program Development*, 1-4
- Global symbol, FDB macro, *I/O Operations*, 2-26
- .GLOBL directive, MACRO-11, 3-7, 6-49
- GLUN\$ directive, *Executive*, 5-103
- GLUN\$ directive summary, *I/O Operations*, C-1
- GLUN\$ macro, *I/O Drivers*, 1-14, 1-21
 - buffer (TTDRV), *I/O Drivers*, 2-7
 - example, *I/O Drivers*, 1-21, 1-24
 - get information
 - AFC11/AD01 converter, *I/O Drivers*, 15-2
 - communication driver, *I/O Drivers*, 12-4
 - CRDRV, *I/O Drivers*, 11-1
 - CTDRV, *I/O Drivers*, 9-1
 - DDDRV, *I/O Drivers*, 7-1

GLUN\$ macro
 get information (cont'd.)
 disk driver, *I/O Drivers*, 5-5
 DTDRV, *I/O Drivers*, 6-1
 GRDRV, *I/O Drivers*, 21-1
 half-duplex, *I/O Drivers*, 3-4
 ICDRV/ISDRV, *I/O Drivers*, 19-8
 LADRV, *I/O Drivers*, 22-2
 LPDRV, *I/O Drivers*, 10-3
 LRDRV, *I/O Drivers*, 14-2
 LSDRV, *I/O Drivers*, 17-2
 PPDRV/PRDRV, *I/O Drivers*, 18-1
 tape driver, *I/O Drivers*, 8-5
 TTDRV, *I/O Drivers*, 2-7
 UDDRV, *I/O Drivers*, 16-3
 UNIBUS switch driver, *I/O Drivers*, 24-2
 VTDRV, *I/O Drivers*, 4-1
 information returned, *I/O Drivers*, 1-21
 information table (TTDRV), *I/O Drivers*, 2-7
 GMCR\$ directive, *Executive*, 5-106
 GMCR\$ directive summary, *I/O Operations*, C-1
 GMCX\$ directive, *Executive*, 5-109
 \$GNCAL macro, *RMS-11 Macro*, C-2
 Go command
 See G command
 GOLD key (EDT), *Introduction*, 2-3
 .GOSUB directive, *Indirect*, 2-58
 .GOTO directive, *Indirect*, 2-59
 GPRT\$ directive, *Executive*, 5-111
 GRDRV, *I/O Drivers*, 21-1
 function code list, *I/O Drivers*, B-9
 programming hint, *I/O Drivers*, 21-3
 GREG\$ directive, *Executive*, 5-113
 G register, *Debugging*, 2-7, 5-4, 9-10
 /GR keyword
 ASSIGN command (MCR), *MCR*, 3-26, 3-28, 3-29
 DEFINE LOGICALS command (MCR), *MCR*, 3-66, 3-67, 3-68
 /GRO keyword
 HELP command, *MCR*, 3-87
 Group event flag dump, *CDA*, 1-9
 Group global event flag, *Executive*, 2-2
 creating, *Executive*, 5-48
 on Micro/RSX, *Executive*, 2-4
 Group global event flag (cont'd.)
 decrementing use count, *Executive*, 5-253
 deleting, *Executive*, 5-71
 on Micro/RSX, *Executive*, 2-4
 displaying on Micro/RSX, *Executive*, 2-4
 eliminating, *Executive*, 5-253
 reading, *Executive*, 5-158
 Group Global Event Flag Control Block
 See GFB
 Group global event flag dump, *CDA*, 3-1, 3-18
 GROUP GLOBAL EVENT FLAGS
 command, *MCR*, 1-6, 3-77
 error messages, *MCR*, 3-78
 examples, *MCR*, 3-77
 format, *MCR*, 3-77
 keywords
 /CRE, *MCR*, 3-77
 /ELIM, *MCR*, 3-77
 Group logical assignment, *MCR*, 3-20
 GSA\$ macro, *RMS-11 Macro*, 2-18
 example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
 \$GSPKT routine, *Writing I/O Driver*, 1-13, 1-14, 7-21, 7-22
 GSSW\$S directive, *Executive*, 5-115
 \$GTBYT routine, *Writing I/O Driver*, 7-20
 GT condition test argument, *MACRO-11*, 6-51
 \$GTCOR (Get core), *System Library*, 8-11
 .GTDID routine, *I/O Operations*, 4-20
 default directory information, *I/O Operations*, 4-21
 .GTDIR routine, *I/O Operations*, 4-20
 insert directory information, *I/O Operations*, 4-20
 GTHIST: subroutine
 gather interevent time data (K-series), *I/O Drivers*, 23-21
 GTIM\$ directive, *Executive*, 5-117
 GTPKT\$ macro call
 arguments, *Writing I/O Driver*, 4-7
 \$GTPKT routine, *Writing I/O Driver*, 1-5, 1-13, 1-16, 7-21, 7-22
 usage in driver code, *Writing I/O Driver*, 3-5
 GTSK\$ directive, *Executive*, 5-119
 \$GTWRK routine, *Writing I/O Driver*, 7-23

H

- H.CKSM, checksum word, *I/O Operations*, F-3
- H.FLEV, structure level, *I/O Operations*, F-1
- H.FNUM, file number, *I/O Operations*, F-1
- H.FOWN, offset to file owner, *I/O Operations*, F-1
- H.FPRO, file protection code, *I/O Operations*, F-1
- H.FSEQ, file sequence number, *I/O Operations*, F-1
- H.IDOF, header area, *I/O Operations*, F-1
- H.MPOF, map area offset, *I/O Operations*, F-1
- H.PROG, member number, *I/O Operations*, F-1
- H.PROJ, group number, *I/O Operations*, F-1
- H.SCHA, system-controlled file characteristics, *I/O Operations*, F-2
- H.UCHA, user-controlled file characteristics, *I/O Operations*, F-1
- H.UFAT, user file attributes, *I/O Operations*, F-2
- Half-duplex
 - considerations (communication driver), *I/O Drivers*, 12-11
 - hold-screen mode, *I/O Drivers*, 3-21
 - programming hint, *I/O Drivers*, 3-31
 - set mode (communication driver), *I/O Drivers*, 12-7
- Hard error, *System Management*, 15-30
 - definition, *Error Logging*, 1-3
 - limit switch, *Error Logging*, 2-3, 2-7
- Hard location
 - See XB\$HRD mask in AOP field
- Hardware
 - program development, *Program Development*, 1-12
- Hardware bootstrap, *System Generation*, 1-11
- Hardware configuration
 - ICR11, *I/O Drivers*, 19-1
 - ICS11, *I/O Drivers*, 19-1
 - K-series, *I/O Drivers*, 23-2
- Hardware configuration (cont'd.)
 - relationship to structures at block level, *Writing I/O Driver*, 2-1
- Hardware faults, *System Management*, 15-29
 - intermittent failures, *System Management*, 15-30
 - media failures, *System Management*, 15-29
 - transient failures, *System Management*, 15-29
- Hardware interrupt
 - processing, *Executive*, 5-21
- /HDR3 keyword
 - MOUNT command (MCR), *MCR*, 3-149
- HDRDF\$, CDA, B-21, C-33 *Writing I/O Driver*, A-25, A-26
- /HDR switch, CDA, 2-5, 2-6
- /HD switch, *Task Builder*, 10-20
 - DMP utility, *Utilities*, 11-5
 - VFY utility, *Utilities*, 9-5
- Header, *Task Builder*, 2-8, 2-9
 - excluding task, *Task Builder*, 10-20, 11-35
- I- and D-space task, *Task Builder*, 7-10
- task
 - fixed part, *Task Builder*, B-11
 - variable part, *Task Builder*, B-12
 - vector extension area, *Task Builder*, B-13
 - task image, *Task Builder*, B-10
- Header, page, *MACRO-11*, 6-4
- Header area, *I/O Operations*, 5-3
 - file header block, *I/O Operations*, F-3
 - file characteristics, *I/O Operations*, F-4
 - file number, *I/O Operations*, F-3
 - file owner information, *I/O Operations*, F-3
 - file protection code, *I/O Operations*, F-4
 - file sequence number, *I/O Operations*, F-3
 - identification area, *I/O Operations*, F-3
 - map area offset, *I/O Operations*, F-3
 - structure level, *I/O Operations*, F-3

- Header area
 - user file attributes
 - file characteristics, *I/O Operations*, F-4
- Header block
 - file, *I/O Operations*, 5-3
- /HEADER qualifier, *Task Builder*, 11-35
- /HEADERS qualifier
 - BRU utility, *System Generation*, 2-11
 - Utilities, 7-16
- \$HEADR, *Writing I/O Driver*, 6-7, 6-9
 - pointer to first word of task header, *Writing I/O Driver*, 6-8
- HEL
 - See HELLO command
- HELLO command, *Introduction*, 1-4
 - MCR, 1-8, 3-79
 - error messages, MCR, 3-84
 - examples, MCR, 3-83
 - formats, MCR, 3-81
- Hello OOB (TTDRV), *I/O Drivers*, 2-61
- HELP
 - getting, *Command Language*, 3-25 to 3-28
 - RMSBCK utility, *RMS-11 Utilities*, 6-4
 - RMSCNV utility, *RMS-11 Utilities*, 4-5
 - RMSDEF utility, *RMS-11 Utilities*, A-5
 - RMSDES utility, *RMS-11 Utilities*, 2-2, 2-11
 - RMSDSP utility, *RMS-11 Utilities*, 5-3
 - RMSIFL utility, *RMS-11 Utilities*, 3-3
 - RMSRST utility, *RMS-11 Utilities*, 7-3
- HELP command, *Command Language*, 1-10 to 1-12, 3-25 to 3-28, 9-16
 - Introduction*, 1-10, 1-11, 3-9 MCR, 1-8, 3-87 *System Management*, 15-14
 - EDT editor, *Introduction*, 2-5, 2-10
 - error messages, MCR, 3-91
 - examples, MCR, 3-90
 - formats, MCR, 3-87, 3-88
 - IOX, *System Management*, 4-40
 - keywords
 - /CLI, MCR, 3-87
 - /DCL, MCR, 3-87
 - /FIL, MCR, 3-87
- HELP command
 - keywords (cont'd.)
 - /GRO, MCR, 3-87
 - /LOC, MCR, 3-87
 - /MCR, MCR, 3-88
 - /OUT, MCR, 3-88
 - qualifiers, MCR, 3-87, 3-88
- Help file, *Command Language*, 3-28 to 3-31 MCR, 3-87 to 3-93 *System Generation*, 4-5
 - format, MCR, 3-88
 - qualifiers, MCR, 3-88
 - writing, *Command Language*, 3-28
- Help paragraph
 - SYSGEN question, *System Generation*, 3-3
- /HFILL keyword
 - SET command (MCR), MCR, 3-220
 - SET command (VMR), *System Management*, 10-59
- /HF switch
 - DMP utility, *Utilities*, 11-6
- /HHT keyword
 - SET command (MCR), MCR, 3-221
 - SET command (VMR), *System Management*, 10-59
- High-key value
 - buckets, *RMS-11 User's Guide*, 5-5, 5-6
- /HIGH keyword
 - LOAD command (MCR), MCR, 3-133
- High-level language, *Introduction*, 5-10 to 5-11 *RMS-11 Introduction*, 4-7, 5-1
 - access streams, *RMS-11 User's Guide*, 1-15
 - and file design, *RMS-11 User's Guide*, 1-19
 - and remote access, *RMS-11 User's Guide*, B-1
 - and shared access, *RMS-11 User's Guide*, 2-7
 - bucket size, *RMS-11 User's Guide*, 6-21
 - defaults, *RMS-11 User's Guide*, 2-2
 - file and directory operations, *RMS-11 User's Guide*, 3-15, 4-15, 7-10
 - file operations, *RMS-11 User's Guide*, 8-2
 - key characteristics, *RMS-11 User's Guide*, 6-8
 - keys, *RMS-11 User's Guide*, 6-7

- High-level language (cont'd.)
 - locate mode, *RMS-11 User's Guide*, 3-14, 4-13
 - overlay program, *Task Builder*, 3-40, 3-41
 - restrictions, *Executive*, 1-10 *RMS-11 User's Guide*, 1-13, 1-15, 2-1
 - subroutine, *Executive*, 1-9
 - error conditions, *Executive*, 1-19
 - optional arguments, *Executive*, 1-10
 - specifying task names, *Executive*, 1-11
 - support, *Executive*, 1-10
- High limit register
 - See H register
- High pool, *System Management*, 13-3, 13-4
 - event, *System Management*, 13-2
- High-speed device, *Writing I/O Driver*, 1-16
- HIST: subroutine
 - histogram sampling (LSDRV), *I/O Drivers*, 17-17
- Histogram sampling (LSDRV), *I/O Drivers*, 17-17
- HLP attribute, *System Management*, 12-32
- /HL switch, *Error Logging*, 2-3, 2-7
- HOLD/ENTRY command, *Introduction*, 3-14
- HOLD command
 - format
 - entry number, *Batch and Queue*, 2-22
 - job name, *Batch and Queue*, 2-22
 - HOLD/ENTRY, *Command Language*, 4-97, 9-16
 - HOLD/JOB, *Command Language*, 4-97, 9-16
- /HOLD keyword
 - BYE command, MCR, 3-43
 - SET command (MCR), MCR, 3-222
- /HOLD qualifier
 - PRINT command, *Batch and Queue*, 2-4
- HOLD SCREEN key, *Command Language*, 3-16 *Introduction*, 1-14
- Hold-screen mode (half-duplex), *I/O Drivers*, 3-21
- HOM
 - See HOME command
- Home block, *I/O Operations*, E-1
 - access types, MCR, 3-94
 - changing, MCR, 3-93
 - initializing, MCR, 3-93
 - task
 - installing, MCR, 3-93
- HOME command, MCR, 1-6, 3-93
 - error messages, MCR, 3-97
 - example, MCR, 3-97
 - format, MCR, 3-93
 - keywords
 - /DENS, MCR, 3-93
 - /EXT, MCR, 3-94
 - /FPRO, MCR, 3-94
 - /LRU, MCR, 3-94
 - /MXF, MCR, 3-95
 - /NAME, MCR, 3-95
 - /OVR, MCR, 3-95
 - /OWNER, MCR, 3-95
 - /POS, MCR, 3-95
 - /PRO, MCR, 3-96
 - /UIC, MCR, 3-96
 - /VI, MCR, 3-96
 - /WIN, MCR, 3-97
- /HOST keyword
 - SET command (MCR), MCR, 3-223
- Host system, *Task Builder*, C-1 to C-5
 - building a task for another system, *Task Builder*, C-1
 - definition, *System Generation*, 1-11
 - description, *Task Builder*, C-1, C-2
 - on line, *System Generation*, 2-6
 - stand alone, *System Generation*, 2-6
 - transferring
 - example, *Task Builder*, C-3 to C-5
 - to target, *Task Builder*, C-2
- /HO switch
 - PRI command, *Batch and Queue*, 2-4
- HRC, *System Management*, 15-2
 - error messages, *System Management*, 15-39 to 15-42
 - format, *System Management*, 15-37
- H register, *Debugging*, 2-6, 5-3, 6-1, 9-10
- /HSYNC keyword
 - SET command (MCR), MCR, 3-223
 - SET command (VMR), *System Management*, 10-60

HWDDF\$, CDA, B-23, C-35 *Writing I/O Driver*, A-27 to A-30
 /HX switch
 DMP utility, *Utilities*, 11-6
 Hyphen operator (-), *Task Builder*, 3-49
 See also ODL operator

I

I- and D-space
 specifying, *Task Builder*, 10-21, 11-15
 I.CRDT, creation date, *I/O Operations*, F-2
 I.CRTI, creation time, *I/O Operations*, F-2
 I.EXDT, expiration date, *I/O Operations*, F-2
 I.FNAM, identification area, *I/O Operations*, F-2
 I.FTYP, file type, *I/O Operations*, F-2
 I.FVER, file version number, *I/O Operations*, F-2
 I.RVDT, revision date, *I/O Operations*, F-2
 I.RVNO, revision number, *I/O Operations*, F-2
 I.RVTI, revision time, *I/O Operations*, F-2
 I.xpxx offsets
 in I/O packet, *Writing I/O Driver*, 4-11 to 4-14
 I/O, *RMS-11 Introduction*, 2-1
 and performance, *RMS-11 User's Guide*, 2-3
 and record operations, *RMS-11 User's Guide*, 5-17
 asynchronous (XEDRV), *I/O Drivers*, 13-21
 asynchronous process control (AFC11/AD01 converter), *I/O Drivers*, 15-3
 attach device, *I/O Drivers*, 1-27
 block operation, *I/O Operations*, 1-7
 buffer
 disable (VTDRV), *I/O Drivers*, 4-5
 enable (VTDRV), *I/O Drivers*, 4-5
 cancel, *I/O Drivers*, 1-29
 VTDRV, *I/O Drivers*, 4-4

I/O (cont'd.)
 cancel in-progress, *Writing I/O Driver*, 2-5
 completion, *I/O Drivers*, 1-8, 1-9, 1-11, 1-36
 completion status (VTDRV), *I/O Drivers*, 4-5, 4-6
 coordination
 event flag, *I/O Operations*, 2-43
 file operation, *I/O Operations*, 2-42
 data-transfer mode, *I/O Operations*, 1-9
 detach device, *I/O Drivers*, 1-28
 device-dependent, *I/O Drivers*, 1-1
 directive
 condition, *I/O Drivers*, 1-37
 status, *I/O Drivers*, 1-37
 directive summary, *I/O Operations*, C-1
 error
 DTDRV, *I/O Drivers*, 6-6
 status list, *I/O Drivers*, B-1
 extended
 subfunction modifier (TTDRV), *I/O Drivers*, 2-25
 TTDRV, *I/O Drivers*, 2-18, 2-25
 failure, *I/O Drivers*, 1-37
 function support
 F11ACP, *I/O Drivers*, C-1
 MTAACP, *I/O Drivers*, C-1
 high-speed device, *Writing I/O Driver*, 1-14
 in progress
 disk driver, *I/O Drivers*, 5-7
 DTDRV, *I/O Drivers*, 6-2
 issuing, *I/O Drivers*, 1-4
 kill I/O, *I/O Drivers*, 1-29
 locate mode, *I/O Operations*, 1-9, 1-10
 macro
 QIO\$C form, *I/O Drivers*, 1-14
 QIO\$ form, *I/O Drivers*, 1-13
 QIO\$S form, *I/O Drivers*, 1-13
 move mode, *I/O Operations*, 1-9
 outstanding, before LUN
 reassignment, *I/O Drivers*, 1-3
 overlapped (disk driver), *I/O Drivers*, 5-8
 overview, *I/O Drivers*, 1-1 *Writing I/O Driver*, 3-4
 packet, *I/O Drivers*, 1-13

I/O (cont'd.)

- paging operations, *RMS-11 User's Guide*, 8-2
- preparation, FCS macro, *I/O Operations*, 2-1
- processing requirements, *Writing I/O Driver*, 1-15
- read logical block, *I/O Drivers*, 1-30
- read virtual block, *I/O Drivers*, 1-30
- record
 - big buffering, *I/O Operations*, 1-11
 - multiple buffering, *I/O Operations*, 1-10
- record operation, *I/O Operations*, 1-8
- related macro, *I/O Drivers*, 1-13
 - form, *I/O Drivers*, 1-13
- request, issuing, *I/O Drivers*, 1-14
- return code, *I/O Drivers*, 1-36
- rundown (ICDRV/ISDRV), *I/O Drivers*, 19-33
- second status word (tape driver), *I/O Drivers*, 8-13
- slow-speed device, *Writing I/O Driver*, 1-14
- stall (RC25), *I/O Drivers*, 5-12
- standard function, *I/O Drivers*, 1-25
 - as a NOP, *I/O Drivers*, 1-26
 - code list, *I/O Drivers*, B-7
- subsystem, industrial control
 - See ICDRV
 - See ISDRV
- success, *I/O Drivers*, 1-37
 - status list, *I/O Drivers*, B-5
- synchronization, *I/O Operations*, 1-7
 - event flag, *I/O Operations*, 2-18, 3-10
- synchronous process control (AFC11/AD01 converter), *I/O Drivers*, 15-3
- terminating (tape driver), *I/O Drivers*, 8-6
- transfer length, write block (DTDRV), *I/O Drivers*, 6-7
- unrecoverable error (DTDRV), *I/O Drivers*, 6-6
- wait for completion
 - block I/O, *I/O Operations*, 3-40

I/O (cont'd.)

- window turning, *RMS-11 User's Guide*, 8-2
- write logical block, *I/O Drivers*, 1-31, 1-32
- I/O buffer, *RMS-11 Introduction*, 4-2
 - RMS-11 User's Guide*, 1-14
 - application design, *RMS-11 User's Guide*, 2-5
 - remote access, *RMS-11 User's Guide*, B-3
 - indexed files, *RMS-11 User's Guide*, B-3
 - relative files, *RMS-11 User's Guide*, B-3
 - sequential files, *RMS-11 User's Guide*, B-3
- I/O buffer pool, *RMS-11 Macro*, 2-6
- I/O count, *Writing I/O Driver*, 1-12
- I/O data base structure
 - composite arrangement, *Writing I/O Driver*, 2-11
 - typical arrangements, *Writing I/O Driver*, 2-7, 2-8, 2-10
- I/O data structure
 - details, *Writing I/O Driver*, 4-10
 - overview, *Writing I/O Driver*, 2-1, 2-2, 2-3
 - typical arrangements, *Writing I/O Driver*, 2-6
- I/O error code, *Indirect*, 2-13
- I/O error report
 - IOX, *System Management*, 4-22
- I/O exercise
 - steps, *System Management*, 4-2
 - termination, *System Management*, 4-24
- I/O Exerciser
 - See IOX
- I/O finish
 - See \$IOFIN routine
- I/O function
 - code, basic syntax, *I/O Drivers*, 1-6
 - code, identical, *I/O Drivers*, 1-7
 - code, list, *I/O Drivers*, B-7
 - definition of types, *Writing I/O Driver*, 3-3
 - introduction, *I/O Drivers*, 1-1
 - mask values, *Writing I/O Driver*, 4-23
 - mask word bit settings, *Writing I/O Driver*, 4-24, 4-25, 4-26
 - summary, *I/O Drivers*, A-1

- I/O function
 - summary (cont'd.)
 - analog-to-digital, *I/O Drivers*, A-1
 - card reader, *I/O Drivers*, A-1
 - cassette, *I/O Drivers*, A-1
 - communication driver, *I/O Drivers*, A-2
 - DEctape, *I/O Drivers*, A-2
 - DEctape II, *I/O Drivers*, A-2
 - DEUNA, *I/O Drivers*, A-3
 - disk, *I/O Drivers*, A-3
 - F11ACP, *I/O Drivers*, C-8
 - graphics, *I/O Drivers*, A-3
 - industrial control, *I/O Drivers*, A-4
 - lab peripheral accelerator, *I/O Drivers*, A-5
 - lab peripheral system, *I/O Drivers*, A-5
 - line printer, *I/O Drivers*, A-6
 - magnetic tape, *I/O Drivers*, A-6
 - MTAACP, *I/O Drivers*, C-10
 - paper tape, *I/O Drivers*, A-6
 - parallel communication, *I/O Drivers*, A-7
 - terminal, *I/O Drivers*, A-7
 - UNIBUS switch, *I/O Drivers*, A-9
 - universal digital controller, *I/O Drivers*, A-9
 - virtual terminal, *I/O Drivers*, A-10
- I/O function mask
 - establishing, *Writing I/O Driver*, 4-22
- I/O initiation
 - entry point, *Writing I/O Driver*, 4-63, 4-64
 - sample use of alternative, *Writing I/O Driver*, 8-12 to 8-26
 - overview, *Writing I/O Driver*, 2-5
- I/O macro
 - AST service routine, *I/O Operations*, 2-45, 2-46
 - FCS, *I/O Operations*, 2-1
 - FDB, *I/O Operations*, 2-2
- I/O packet, *Writing I/O Driver*, 1-4, 8-16, 8-25
 - building, *Writing I/O Driver*, 4-11
 - composite arrangement, *Writing I/O Driver*, 2-13, 2-14

- I/O packet (cont'd.)
 - creation of, *Writing I/O Driver*, 3-2
 - current address, *Writing I/O Driver*, 4-40
 - fields, *Writing I/O Driver*, 4-11, 4-12, 4-13, 4-14
 - handling before it is queued, *Writing I/O Driver*, 8-12 to 8-15, 8-17 to 8-24, 8-26
 - layout, *Writing I/O Driver*, 4-11
- I/O page, *Writing I/O Driver*, 1-3
 - access (ICDRV/ISDRV), *I/O Drivers*, 19-76
 - accessing, MCR, 3-238
 - direct access (UDDRV), *I/O Drivers*, 16-3
 - direct access procedure (UDDRV), *I/O Drivers*, 16-9
 - global definition (ICDRV/ISDRV), *I/O Drivers*, 19-77
 - overmapping, MCR, 3-183
 - specifying, MCR, 3-238 *Task Builder*, 10-22, 11-38
 - subpartition, MCR, 3-267
- I/O parameter
 - basic, *I/O Drivers*, 1-5
- I/O program example, *I/O Operations*, D-1
- I/O queue
 - listhead, *Writing I/O Driver*, 4-39
- I/O Queue Optimization, *System Management*, 1-5, 16-1
 - Cylinder Scan, *System Management*, 16-1, 16-4
 - default, *System Management*, 16-3
 - Elevator, *System Management*, 16-1
 - Elevator Method, *System Management*, 16-4
 - error messages, *System Management*, 16-4
 - fairness count, *System Management*, 16-1
 - adjustment, *System Management*, 16-3
 - initiating, *System Management*, 16-1
 - Nearest Cylinder, *System Management*, 16-1, 16-4
 - optimization status, *System Management*, 16-2
 - optimization types, *System Management*, 16-1
 - selecting method, *System Management*, 16-3

- I/O queue optimization
 - Cylinder Scan, *Writing I/O Driver*, 1-15
 - Elevator, *Writing I/O Driver*, 1-15
 - Nearest Cylinder, *Writing I/O Driver*, 1-15
- I/O request, *Writing I/O Driver*, 1-4, 1-5, 1-15
 - completing process for an, *Writing I/O Driver*, 3-4
 - flow of, *Writing I/O Driver*, 3-1, 3-2, 3-3, 3-4
 - issuing I/O for an, *Writing I/O Driver*, 3-4
 - queuing, *Executive*, 5-143, 5-147
- I/O status, *I/O Drivers*, 1-36
 - block, *I/O Drivers*, 1-8, 1-11, 1-36, 1-38
 - AFC11/AD01 converter, *I/O Drivers*, 15-4, 15-8
 - communication driver, *I/O Drivers*, 12-8
 - CRDRV, *I/O Drivers*, 11-3
 - different content (TTDRV), *I/O Drivers*, 2-51, 2-59
 - error test, *I/O Drivers*, 1-39
 - example, *I/O Drivers*, 1-39
 - first word (LSDRV), *I/O Drivers*, 17-10
 - first word content
 - K-series, *I/O Drivers*, 23-32
 - LADRV, *I/O Drivers*, 22-31
 - UDDRV, *I/O Drivers*, 16-15
 - FORTAN (ICDRV/ISDRV), *I/O Drivers*, 19-35, 19-36
 - GRDRV, *I/O Drivers*, 21-3
 - half-duplex, *I/O Drivers*, 3-13, 3-15, 3-16, 3-17, 3-18, 3-26
 - importance (LSDRV), *I/O Drivers*, 17-34
 - K-series, *I/O Drivers*, 23-6, 23-32
 - LADRV, *I/O Drivers*, 22-2, 22-30
 - LPDRV, *I/O Drivers*, 10-5
 - LRDRV, *I/O Drivers*, 14-4, 14-5, 14-11
 - LSDRV, *I/O Drivers*, 17-9, 17-31, 17-34
 - PPDRV/PRDRV, *I/O Drivers*, 18-3

- I/O status
 - block
 - status (TTDRV), *I/O Drivers*, 2-63
 - second word (LSDRV), *I/O Drivers*, 17-31
 - SF.GMC different (TTDRV), *I/O Drivers*, 2-51, 2-59
 - UDDRV, *I/O Drivers*, 16-7, 16-15, 16-16, 16-31
 - UNIBUS switch driver, *I/O Drivers*, 24-6, 24-7
 - VTDRV, *I/O Drivers*, 4-7
 - 4-word (LADRV), *I/O Drivers*, 22-31
 - XEDRV, *I/O Drivers*, 13-18
- code, *I/O Drivers*, 1-37
 - binary value, *I/O Drivers*, 1-37
- code list, *I/O Drivers*, B-1
- condition, *I/O Drivers*, 1-38
 - table, *I/O Drivers*, 1-40
- CRDRV, *I/O Drivers*, 11-7
- return
 - completion, *I/O Drivers*, 1-36
 - DDDRV, *I/O Drivers*, 7-4
 - disk driver, *I/O Drivers*, 5-9
 - DTDRV, *I/O Drivers*, 6-4
 - summary (ICDRV/ISDRV), *I/O Drivers*, 19-36
 - TTDRV, *I/O Drivers*, 2-63
 - VTDRV, *I/O Drivers*, 4-5
- word
 - CTDRV, *I/O Drivers*, 9-6
 - tape driver, *I/O Drivers*, 8-13
- word 1 (ICDRV/ISDRV), *I/O Drivers*, 19-36
- I/O status block
 - block I/O, *I/O Operations*, 2-13
 - defined in task, *I/O Operations*, 2-45
 - file I/O, *I/O Operations*, 2-44
- I/O subfunction
 - bit, *I/O Drivers*, 1-26
 - example, *I/O Drivers*, 1-26
 - unsupported, *I/O Drivers*, 1-26
 - summary, terminal, *I/O Drivers*, A-8
- I/O technique, *RMS-11 User's Guide*, 2-17
 - deferred write, *RMS-11 User's Guide*, 2-17
 - indexed files, *RMS-11 User's Guide*, 7-8

I/O technique
 indexed files (cont'd.)
 deferred write, *RMS-11 User's Guide*, 7-8
 multiple access streams, *RMS-11 User's Guide*, 7-10
 multiple buffers, *RMS-11 User's Guide*, 7-9
 sequential reads, *RMS-11 User's Guide*, 7-10
 mass insertion, *RMS-11 User's Guide*, 2-18
 MBC, *RMS-11 User's Guide*, 2-17
 multiple buffers, *RMS-11 User's Guide*, 2-18
 relative files, *RMS-11 User's Guide*, 4-14
 deferred write, *RMS-11 User's Guide*, 4-14
 multiple access streams, *RMS-11 User's Guide*, 4-15
 multiple buffers, *RMS-11 User's Guide*, 4-15
 sequential files, *RMS-11 User's Guide*, 3-14
 deferred write, *RMS-11 User's Guide*, 3-14
 MBC, *RMS-11 User's Guide*, 3-15
 multiple access streams, *RMS-11 User's Guide*, 3-15
 multiple buffers, *RMS-11 User's Guide*, 3-15
 I/O unit, *RMS-11 User's Guide*, 1-14
 blocks, *RMS-11 User's Guide*, 1-16
 buckets, *RMS-11 User's Guide*, 1-16
 IAD-IA A/D converter
 address convention, *I/O Drivers*, 19-4
 Iadj parameter
 ADJLPS: subroutine (LSDRV), *I/O Drivers*, 17-13
 I- and D-space
 See Data space
 See Instruction space
 See Task
 IAN field in KEY block
 CREATE operation, *RMS-11 Macro*, 5-19
 DISPLAY operation, *RMS-11 Macro*, 5-31
 offset, *RMS-11 Macro*, 6-67
 OPEN operation, *RMS-11 Macro*, 5-80
 IAN field in KEY block (cont'd.)
 summary, *RMS-11 Macro*, 6-79
 IAS symbol, *Indirect*, 2-11
 IBFSTS: subroutine
 get buffer status
 K-series, *I/O Drivers*, 23-23
 LADRV, *I/O Drivers*, 22-17
 IBS field in KEY block
 DISPLAY operation, *RMS-11 Macro*, 5-31
 offset, *RMS-11 Macro*, 6-68
 OPEN operation, *RMS-11 Macro*, 5-80
 summary, *RMS-11 Macro*, 6-80
 lbufno parameter
 IGTBUF: subroutine
 K-series, *I/O Drivers*, 23-24
 LADRV, *I/O Drivers*, 22-18
 INXTBF: subroutine
 K-series, *I/O Drivers*, 23-24
 LADRV, *I/O Drivers*, 22-19
 IWTBUF: subroutine
 K-series, *I/O Drivers*, 23-25
 LADRV, *I/O Drivers*, 22-19
 IWTBUF: subroutine (K-series), *I/O Drivers*, 23-25
 lbuf parameter
 ADJLPS: subroutine (LSDRV), *I/O Drivers*, 17-13
 ADSWP: subroutine
 K-series, *I/O Drivers*, 23-9
 LADRV, *I/O Drivers*, 22-4
 CTDI: subroutine (UDDRV), *I/O Drivers*, 16-21
 CTTI: subroutine (UDDRV), *I/O Drivers*, 16-22
 DASWP: subroutine
 K-series, *I/O Drivers*, 23-14
 LADRV, *I/O Drivers*, 22-9
 DISWP: subroutine
 K-series, *I/O Drivers*, 23-17
 LADRV, *I/O Drivers*, 22-12
 DOSWP: subroutine
 K-series, *I/O Drivers*, 23-19
 LADRV, *I/O Drivers*, 22-14
 DRS: subroutine (LSDRV), *I/O Drivers*, 17-16
 GTHIST: subroutine (K-series), *I/O Drivers*, 23-21
 HIST: subroutine (LSDRV), *I/O Drivers*, 17-17
 IBFSTS: subroutine
 K-series, *I/O Drivers*, 23-23
 LADRV, *I/O Drivers*, 22-17

Ibuf parameter (cont'd.)

IGTBUF: subroutine
 K-series, *I/O Drivers*, 23-24
 LADRV, *I/O Drivers*, 22-18
INXTBF: subroutine
 K-series, *I/O Drivers*, 23-24
 LADRV, *I/O Drivers*, 22-19
IRDB: subroutine (LSDRV), *I/O Drivers*, 17-21
ISTADC: subroutine (K-series), *I/O Drivers*, 23-28
IWTBUF: subroutine
 K-series, *I/O Drivers*, 23-25
 LADRV, *I/O Drivers*, 22-19
LPSTP: subroutine (LSDRV), *I/O Drivers*, 17-22
PUTD: subroutine (LSDRV), *I/O Drivers*, 17-22
RLSBUF: subroutine
 K-series, *I/O Drivers*, 23-26
 LADRV, *I/O Drivers*, 22-22
RMVBUF: subroutine
 K-series, *I/O Drivers*, 23-26
 LADRV, *I/O Drivers*, 22-22
RTS: subroutine (LSDRV), *I/O Drivers*, 17-23
SDAC: subroutine (LSDRV), *I/O Drivers*, 17-25
SDO: subroutine (LSDRV), *I/O Drivers*, 17-27
SETADC: subroutine (LADRV), *I/O Drivers*, 22-23
SETIBF: subroutine
 K-series, *I/O Drivers*, 23-28
 LADRV, *I/O Drivers*, 22-24
STPSWP: subroutine
 K-series, *I/O Drivers*, 23-29
 LADRV, *I/O Drivers*, 22-25
ICAR register
 content, *I/O Drivers*, 19-74
 error data, *I/O Drivers*, 19-73
ICB, *Writing I/O Driver*, 1-2, 1-6, 1-12, 1-18, 2-4
 number of controllers allowed, *Writing I/O Driver*, 1-7
 pool size
 SYSGEN question, *System Generation*, 3-25
ICDRV/ISDRV
 driver functions, *I/O Drivers*, 19-4
 task functions, *I/O Drivers*, 19-4
.ICF module, *Error Logging*, 4-1

Ichan parameter

ADC: subroutine (LSDRV), *I/O Drivers*, 17-12
ADINP: subroutine (K-series), *I/O Drivers*, 23-8
RTS: subroutine (LSDRV), *I/O Drivers*, 17-24
SDAC: subroutine (LSDRV), *I/O Drivers*, 17-26

Ichn parameter

ADSWP: subroutine
 K-series, *I/O Drivers*, 23-11
 LADRV, *I/O Drivers*, 22-6
DASWP: subroutine
 K-series, *I/O Drivers*, 23-15
 LADRV, *I/O Drivers*, 22-11
ISTADC: subroutine (K-series), *I/O Drivers*, 23-28
SETADC: subroutine (LADRV), *I/O Drivers*, 22-23

ICLOKB: subroutine

 read 16-bit clock (K-series), *I/O Drivers*, 23-23

Icntrl parameter

SCOPE: subroutine (K-series), *I/O Drivers*, 23-27

I command, *Debugging*, 2-9, 9-12

Icont parameter

AIRD/AIRDW subroutine (UDDRV), *I/O Drivers*, 16-18
AISQ/AISQW subroutine (UDDRV), *I/O Drivers*, 16-18
AO/AOW subroutine (UDDRV), *I/O Drivers*, 16-19
DI/DIW: subroutine (UDDRV), *I/O Drivers*, 16-23
DOL/DOLW: subroutine (UDDRV), *I/O Drivers*, 16-24
DOM/DOMW: subroutine (UDDRV), *I/O Drivers*, 16-25

Icos parameter

RDWD: subroutine (UDDRV), *I/O Drivers*, 16-30

ICP

 See Indirect

Ic parameter

device-specific function (UDDRV), *I/O Drivers*, 16-4
ICDRV/ISDRV, *I/O Drivers*, 19-10
 IO.ITI function, *I/O Drivers*, 19-22
 IO.LTI function, *I/O Drivers*, 19-26

ICR11, *I/O Drivers*, 19-1

- ICR common block
 - linking task, *I/O Drivers*, 19-76
- ICR register
 - read direct access sample subroutine, *I/O Drivers*, 19-78
- ICS/ICR-DSS/DR
 - function code list, *I/O Drivers*, B-10
- ICS11, *I/O Drivers*, 16-1, 19-1
- ICS11 A/D converter (UDDRV), *I/O Drivers*, 16-8
- ICS common block
 - linking task, *I/O Drivers*, 19-76
- ICS register
 - read direct access sample subroutine, *I/O Drivers*, 19-78
- ICSR register
 - content, *I/O Drivers*, 19-73
 - error data, *I/O Drivers*, 19-73
- Ict parameter (UDDRV)
 - RDCS: subroutine, *I/O Drivers*, 16-27
 - RDDI: subroutine, *I/O Drivers*, 16-28
- Idata parameter
 - AIRD/AIRDW subroutine (UDDRV), *I/O Drivers*, 16-18
 - AISQ/AISQW subroutine (UDDRV), *I/O Drivers*, 16-18
 - AO/AOW subroutine (UDDRV), *I/O Drivers*, 16-19
 - DI/DIW: subroutine (UDDRV), *I/O Drivers*, 16-23
 - DOL/DOLW: subroutine (UDDRV), *I/O Drivers*, 16-24
 - DOM/DOMW: subroutine (UDDRV), *I/O Drivers*, 16-25
 - DOUT: subroutine (K-series), *I/O Drivers*, 23-21
- IDB pool, *RMS-11 Macro*, 2-5
- Idec parameter
 - LED: subroutine (LSDRV), *I/O Drivers*, 17-21
- IDENT command, *System Management*, 15-15
- .IDENT directive, *MACRO-11*, 6-16, 6-17 *Program Development*, 2-5
- Identification area, *I/O Operations*, 5-4
 - file header block, *I/O Operations*, F-4
 - creation date, *I/O Operations*, F-5

- Identification area
 - file header block (cont'd.)
 - creation time, *I/O Operations*, F-5
 - expiration date, *I/O Operations*, F-5
 - filename, *I/O Operations*, F-4
 - filetype, *I/O Operations*, F-4
 - file version number, *I/O Operations*, F-4
 - revision date, *I/O Operations*, F-4
 - revision number, *I/O Operations*, F-4
 - revision time, *I/O Operations*, F-5
- IDENT option, *Task Builder*, 12-23
- IDIR: subroutine
 - read digital input (LSDRV), *I/O Drivers*, 17-19
- Idir parameter
 - IDIR: subroutine (LSDRV), *I/O Drivers*, 17-19
- IDN condition test argument, *MACRO-11*, 6-52
- IDOR: subroutine
 - write digital output (LSDRV), *I/O Drivers*, 17-20
- Id parameter
 - device-specific function
 - transmit (LRDRV), *I/O Drivers*, 14-4
- Idsc parameter
 - LAMSKS: subroutine (LADRV), *I/O Drivers*, 22-21
- /ID switch, *Task Builder*, 10-21
- DMP utility, *Utilities*, 11-6
- FLX utility, *Utilities*, 4-7
- PIP utility, *Utilities*, 3-23
- RMSBCK utility, *RMS-11 Utilities*, 6-4, 6-5
- RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-9
- RMSDEF utility, *RMS-11 Utilities*, A-5
- RMSDSP utility, *RMS-11 Utilities*, 5-3, 5-5
- RMSIFL utility, *RMS-11 Utilities*, 3-3, 3-5
- RMSRST utility, *RMS-11 Utilities*, 7-3, 7-5
- Idsw parameter
 - LAMSKS: subroutine (LADRV), *I/O Drivers*, 22-21

Idwell parameter

ADSWP: subroutine (LADRV), *I/O Drivers*, 22-5

DASWP: subroutine (LADRV), *I/O Drivers*, 22-10

DISWP: subroutine (LADRV), *I/O Drivers*, 22-13

DOSWP: subroutine (LADRV), *I/O Drivers*, 22-15

IDX argument to ORG\$ macro, *RMS-11 Macro*, 2-3

Idx parameter

DOM/DOMW: subroutine (UDDRV), *I/O Drivers*, 16-25

IE.ABO error return, *I/O Drivers*, 1-40
ACP, *I/O Drivers*, C-14

AFC11/AD01 converter, *I/O Drivers*, 15-8

communication driver, *I/O Drivers*, 12-10

CRDRV, *I/O Drivers*, 11-7

CTDRV, *I/O Drivers*, 9-4

disk driver, *I/O Drivers*, 5-10

DTDRV, *I/O Drivers*, 6-4

FORTTRAN interface value
(AFC11/AD01 converter),
I/O Drivers, 15-9

GRDRV, *I/O Drivers*, 21-3

half-duplex, *I/O Drivers*, 3-18

ICDRV/ISDRV, *I/O Drivers*, 19-13

LPDRV, *I/O Drivers*, 10-5

LSDRV, *I/O Drivers*, 17-29

PPDRV/PRDRV, *I/O Drivers*, 18-3
receiver (LRDRV), *I/O Drivers*, 14-12

tape driver, *I/O Drivers*, 8-10

transmitter (LRDRV), *I/O Drivers*, 14-8

TTDRV, *I/O Drivers*, 2-63

UDDRV, *I/O Drivers*, 16-31

UNIBUS switch driver, *I/O Drivers*, 24-7

VTDRV, *I/O Drivers*, 4-8

XEDRV, *I/O Drivers*, 13-16, 13-19
initialize line error

IO.XIN function, *I/O Drivers*, 13-11

transmit line error, *I/O Drivers*, 13-13

IE.ADP error return, *I/O Drivers*, 1-37

FORTTRAN interface value
(AFC11/AD01 converter),
I/O Drivers, 15-9

IE.ADP error return (cont'd.)

ICDRV/ISDRV, *I/O Drivers*, 19-12

IE.ALC error return, ACP, *I/O Drivers*, C-14

IE.ALN error return, *I/O Drivers*, 1-40
disk driver, *I/O Drivers*, 5-10

DTDRV, *I/O Drivers*, 6-4

XEDRV, *I/O Drivers*, 13-5

IE.ALN error return, ACP, *I/O Drivers*, C-14

IE.BAD error return, *I/O Drivers*, 1-40
AFC11/AD01 converter, *I/O Drivers*, 15-8

FORTTRAN interface value

(AFC11/AD01 converter),
I/O Drivers, 15-9

half-duplex, *I/O Drivers*, 3-18

ICDRV/ISDRV

IO.LDI function, *I/O Drivers*, 19-26

IO.RBC function, *I/O Drivers*, 19-14

LSDRV, *I/O Drivers*, 17-29

receiver (LRDRV), *I/O Drivers*, 14-11

transmitter (LRDRV), *I/O Drivers*, 14-7

TTDRV, *I/O Drivers*, 2-63

UDDRV, *I/O Drivers*, 16-31

UNIBUS switch driver, *I/O Drivers*, 24-7

VTDRV, *I/O Drivers*, 4-9

IE.BAD error return, ACP, *I/O Drivers*, C-14

IE.BBE error return, *I/O Drivers*, 1-40
disk driver, *I/O Drivers*, 5-10

receiver (LRDRV), *I/O Drivers*, 14-12

tape driver, *I/O Drivers*, 8-10

transmitter (LRDRV), *I/O Drivers*, 14-8

IE.BCC error return

communication driver, *I/O Drivers*, 12-9

TTDRV, *I/O Drivers*, 2-64

IE.BDR error return, ACP, *I/O Drivers*, C-14

IE.BLK error return, *I/O Drivers*, 1-40
disk driver, *I/O Drivers*, 5-10

DTDRV, *I/O Drivers*, 6-4

IE.BTP error return, ACP, *I/O Drivers*, C-15

IE.BVR error return, ACP, *I/O Drivers*, C-15

- IE.BYT error return, *I/O Drivers*, 1-41
 - AFC11/AD01 converter, *I/O Drivers*, 15-8
 - disk driver, *I/O Drivers*, 5-10
 - DTDRV, *I/O Drivers*, 6-4
 - FORTAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
- ICDRV/ISDRV
 - IO.CCI function, *I/O Drivers*, 19-20
 - IO.CTI function, *I/O Drivers*, 19-21
 - IO.CTY function, *I/O Drivers*, 19-23
 - IO.RAD function, *I/O Drivers*, 19-29
 - IO.RBC function, *I/O Drivers*, 19-14
 - LSDRV, *I/O Drivers*, 17-29
 - tape driver, *I/O Drivers*, 8-10
 - UDDRV, *I/O Drivers*, 16-32
- IE.BYT error return, ACP, *I/O Drivers*, C-15
- IE.CKS error return, ACP, *I/O Drivers*, C-15
- IE.CLO error return, ACP, *I/O Drivers*, C-15
- IE.CNR error return
 - communication driver, *I/O Drivers*, 12-9
 - GRDRV, *I/O Drivers*, 21-3
 - UNIBUS switch driver, *I/O Drivers*, 24-7
- IE.CON error return
 - ICDRV/ISDRV
 - IO.CCI function, *I/O Drivers*, 19-20
 - IO.CTI function, *I/O Drivers*, 19-21
 - IO.CTY function, *I/O Drivers*, 19-23
 - IO.DCI function, *I/O Drivers*, 19-21
 - IO.DTI function, *I/O Drivers*, 19-23
 - IO.DTY function, *I/O Drivers*, 19-24
 - UDDRV, *I/O Drivers*, 16-32
- IE.DAA error return, *I/O Drivers*, 1-41
 - CRDRV, *I/O Drivers*, 11-7
 - CTDRV, *I/O Drivers*, 9-4

- IE.DAA error return (cont'd.)
 - half-duplex, *I/O Drivers*, 3-19
 - LPDRV, *I/O Drivers*, 10-5
 - PPDRV/PRDRV, *I/O Drivers*, 18-3
 - receiver (LRDRV), *I/O Drivers*, 14-12
 - tape driver, *I/O Drivers*, 8-11
 - TTDRV, *I/O Drivers*, 2-64
 - UNIBUS switch driver, *I/O Drivers*, 24-7
- IE.DAO error return
 - communication driver, *I/O Drivers*, 12-9
 - CTDRV, *I/O Drivers*, 9-4
 - FORTAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - LSDRV, *I/O Drivers*, 17-29
 - tape driver, *I/O Drivers*, 8-11
 - TTDRV, *I/O Drivers*, 2-64
 - XEDRV, *I/O Drivers*, 13-17
- IE.DFU error return, ACP, *I/O Drivers*, C-15
- IE.DNA error return, *I/O Drivers*, 1-41
 - CRDRV, *I/O Drivers*, 11-7
 - CTDRV, *I/O Drivers*, 9-4
 - GRDRV, *I/O Drivers*, 21-3
 - half-duplex, *I/O Drivers*, 3-19
 - LPDRV, *I/O Drivers*, 10-5
 - PPDRV/PRDRV, *I/O Drivers*, 18-3
 - receiver (LRDRV), *I/O Drivers*, 14-12
 - tape driver, *I/O Drivers*, 8-11
 - TTDRV, *I/O Drivers*, 2-64
 - UNIBUS switch driver, *I/O Drivers*, 24-7
- IE.DNR error return, *I/O Drivers*, 1-41
 - AFC11/AD01 converter, *I/O Drivers*, 15-8
 - communication driver, *I/O Drivers*, 12-9
 - CTDRV, *I/O Drivers*, 9-4
 - DDDRV, *I/O Drivers*, 7-5
 - diagnostic, device not ready, *I/O Drivers*, 1-35
 - disk driver, *I/O Drivers*, 5-10
 - DTDRV, *I/O Drivers*, 6-4
 - FORTAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - half-duplex, *I/O Drivers*, 3-19
 - ICDRV/ISDRV, *I/O Drivers*, 19-13

- IE.DNR error return
 - ICDRV/ISDRV (cont'd.)
 - IO.RBC function, *I/O Drivers*, 19-14
 - LSDRV, *I/O Drivers*, 17-29
 - power fail, *I/O Drivers*, 1-43
 - PPDRV/PRDRV, *I/O Drivers*, 18-3
 - receiver (LRDRV), *I/O Drivers*, 14-11
 - tape driver, *I/O Drivers*, 8-11
 - transmitter (LRDRV), *I/O Drivers*, 14-7
 - TTDRV, *I/O Drivers*, 2-64
 - UDDRV, *I/O Drivers*, 16-32
- IE.DOA error return
 - receiver (LRDRV), *I/O Drivers*, 14-12
- IE.DUN error return (VTDRV), *I/O Drivers*, 4-9
- IE.DUP error return, ACP, *I/O Drivers*, C-15
- IE.EOF error return, *I/O Drivers*, 1-41
 - CRDRV, *I/O Drivers*, 11-7
 - CTDRV, *I/O Drivers*, 9-5
 - half-duplex, *I/O Drivers*, 3-18
 - PPDRV/PRDRV, *I/O Drivers*, 18-3
 - tape driver, *I/O Drivers*, 8-11
 - TTDRV, *I/O Drivers*, 2-65
 - VTDRV, *I/O Drivers*, 4-9
- IE.EOF error return, ACP, *I/O Drivers*, C-15
- IE.EOT error return
 - CTDRV, *I/O Drivers*, 9-5
 - tape driver, *I/O Drivers*, 8-11
- IE.EOV error return
 - tape driver, *I/O Drivers*, 8-12
- IE.FHE error return, *I/O Drivers*, 1-41
 - DDDRV, *I/O Drivers*, 7-5
 - disk driver, *I/O Drivers*, 5-10
 - receiver (LRDRV), *I/O Drivers*, 14-12
 - tape driver, *I/O Drivers*, 8-12
- IE.FLG error return
 - transmitter (LRDRV), *I/O Drivers*, 14-8
- IE.FLN error return
 - IO.FLN function (ICDRV/ISDRV), *I/O Drivers*, 19-33
- IE.HFU error return, ACP, *I/O Drivers*, C-16
- IE.IEF error return, *I/O Drivers*, 1-38
 - FORTTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
- IE.IEF error return (cont'd.)
 - GRDRV, *I/O Drivers*, 21-3
 - ICDRV/ISDRV, *I/O Drivers*, 19-12
 - IO.CCI function, *I/O Drivers*, 19-20
 - IO.CTI function, *I/O Drivers*, 19-22
 - IO.CTY function, *I/O Drivers*, 19-23
 - IO.LDI function, *I/O Drivers*, 19-26
 - IO.LKE function, *I/O Drivers*, 19-28
 - IO.LTI function, *I/O Drivers*, 19-26
 - IO.LTY function, *I/O Drivers*, 19-27
 - LSDRV, *I/O Drivers*, 17-30
 - UDDRV, *I/O Drivers*, 16-32
- IE.IES error return
 - half-duplex, *I/O Drivers*, 3-19
 - TTDRV, *I/O Drivers*, 2-65
- IE.IFC error return, *I/O Drivers*, 1-41
 - AFC11/AD01 converter, *I/O Drivers*, 15-9
 - communication driver, *I/O Drivers*, 12-10
 - CRDRV, *I/O Drivers*, 11-7
 - CTDRV, *I/O Drivers*, 9-5
 - DDDRV, *I/O Drivers*, 7-5
 - disk driver, *I/O Drivers*, 5-11
 - DTDRV, *I/O Drivers*, 6-4
 - FORTTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - GRDRV, *I/O Drivers*, 21-3
 - half-duplex, *I/O Drivers*, 3-19
 - ICDRV/ISDRV, *I/O Drivers*, 19-13
 - IO.LKE function, *I/O Drivers*, 19-28
 - IO.UER function, *I/O Drivers*, 19-31
 - LPDRV, *I/O Drivers*, 10-5
 - LSDRV, *I/O Drivers*, 17-30
 - PPDRV/PRDRV, *I/O Drivers*, 18-4
 - receiver (LRDRV), *I/O Drivers*, 14-12
 - tape driver, *I/O Drivers*, 8-12
 - transmitter (LRDRV), *I/O Drivers*, 14-8
 - TTDRV, *I/O Drivers*, 2-65
 - UDDRV, *I/O Drivers*, 16-32
 - UNIBUS switch driver, *I/O Drivers*, 24-7

IE.IFC error return (cont'd.)

VTDRV, *I/O Drivers*, 4-8, 4-9

XEDRV, *I/O Drivers*, 13-5, 13-13,
13-17, 13-18

IO.XIN function, *I/O Drivers*,
13-11

IE.IFC error return, ACP, *I/O Drivers*,
C-16

IE.IFU error return, ACP, *I/O Drivers*,
C-16

IE.ILU error return, *I/O Drivers*, 1-38
FORTRAN interface value

(AFC11/AD01 converter),
I/O Drivers, 15-9

ICDRV/ISDRV, *I/O Drivers*, 19-12

IE.LCK error return, ACP, *I/O Drivers*,
C-16

IE.LUN error return, ACP, *I/O Drivers*,
C-16

IE.MOD error return

ICDRV/ISDRV

IO.CTY function, *I/O Drivers*,
19-23

IO.ITI function, *I/O Drivers*,
19-22

IO.LDI function, *I/O Drivers*,
19-26

IO.LTI function, *I/O Drivers*,
19-27

IO.LTY function, *I/O Drivers*,
19-27

IO.MLO function, *I/O Drivers*,
19-17

IO.MSO function, *I/O Drivers*,
19-16

IO.SAO function, *I/O Drivers*,
19-16

IO.UDI function, *I/O Drivers*,
19-30

IO.UTI function, *I/O Drivers*,
19-31

IO.UTY function, *I/O Drivers*,
19-31

IO.WLB function, *I/O Drivers*,
19-32

UDDRV, *I/O Drivers*, 16-32

IE.NLK error return

ICDRV/ISDRV

IO.NLK function, *I/O Drivers*,
19-30

IO.RAD function, *I/O Drivers*,
19-29

IO.UDI function, *I/O Drivers*,
19-30

IE.NLK error return

ICDRV/ISDRV (cont'd.)

IO.UER function, *I/O Drivers*,
19-31

IO.UTI function, *I/O Drivers*,
19-31

IO.UTY function, *I/O Drivers*,
19-31

IE.NLN error return, *I/O Drivers*,
1-42

disk driver, *I/O Drivers*, 5-11

DTDRV, *I/O Drivers*, 6-5

XEDRV, *I/O Drivers*, 13-13, 13-17,
13-18

IO.XIN function, *I/O Drivers*,
13-11

IE.NOD error return, *I/O Drivers*,
1-42

CRDRV, *I/O Drivers*, 11-7

disk driver, *I/O Drivers*, 5-11

DTDRV, *I/O Drivers*, 6-5

FORTRAN interface value
(AFC11/AD01 converter),
I/O Drivers, 15-9

half-duplex, *I/O Drivers*, 3-19

ICDRV/ISDRV, *I/O Drivers*, 19-13

IO.LDI function, *I/O Drivers*,
19-26

IO.LKE function, *I/O Drivers*,
19-28

IO.LTI function, *I/O Drivers*,
19-27

IO.LTY function, *I/O Drivers*,
19-27

LSDRV, *I/O Drivers*, 17-30

TTDRV, *I/O Drivers*, 2-65

UNIBUS switch driver, *I/O Drivers*,
24-8

IE.NOD error return, ACP, *I/O*
Drivers, C-16

IE.NSF error return

XEDRV, *I/O Drivers*, 13-5

IE.NSF error return, ACP, *I/O Drivers*,
C-16

IE.NST error return

ICDRV/ISDRV

IO.LDI function, *I/O Drivers*,
19-26

IO.LKE function, *I/O Drivers*,
19-28

IO.LTY function, *I/O Drivers*,
19-27

IO.UDI function, *I/O Drivers*,
19-30

- IE.NST error return
 - ICDRV/ISDRV (cont'd.)
 - IO.UER function, *I/O Drivers*, 19-31
 - IO.UTI function, *I/O Drivers*, 19-31
 - IO.UTY function, *I/O Drivers*, 19-31
- IE.NTR error return
 - receiver (LRDRV), *I/O Drivers*, 14-12
- IE.OFL error return, *I/O Drivers*, 1-42
 - AFC11/AD01 converter, *I/O Drivers*, 15-9
 - communication driver, *I/O Drivers*, 12-10
 - CRDRV, *I/O Drivers*, 11-8
 - CTDRV, *I/O Drivers*, 9-5
 - disk driver, *I/O Drivers*, 5-11
 - DTDRV, *I/O Drivers*, 6-5
 - half-duplex, *I/O Drivers*, 3-20
 - ICDRV/ISDRV, *I/O Drivers*, 19-13
 - LPDRV, *I/O Drivers*, 10-5
 - LSDRV, *I/O Drivers*, 17-30
 - PPDRV/PRDRV, *I/O Drivers*, 18-4
 - tape driver, *I/O Drivers*, 8-12
 - TTDRV, *I/O Drivers*, 2-65
 - UDDRV, *I/O Drivers*, 16-32
 - UNIBUS switch driver, *I/O Drivers*, 24-8
- IE.OFL error return, ACP, *I/O Drivers*, C-16
- IE.ONP error return
 - FORTTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - LSDRV, *I/O Drivers*, 17-30
- IE.OVR error return, *I/O Drivers*, 1-42
 - disk driver, *I/O Drivers*, 5-11
 - DTDRV, *I/O Drivers*, 6-5
- IE.PES error return
 - half-duplex, *I/O Drivers*, 3-20
 - TTDRV, *I/O Drivers*, 2-65
- IE.PRI error return, *I/O Drivers*, 1-42
 - disk driver, *I/O Drivers*, 5-11
 - DTDRV, *I/O Drivers*, 6-5
 - FORTTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - half-duplex, *I/O Drivers*, 3-20
 - ICDRV/ISDRV
 - IO.CCI function, *I/O Drivers*, 19-20
- IE.PRI error return
 - ICDRV/ISDRV (cont'd.)
 - IO.CTI function, *I/O Drivers*, 19-22
 - IO.FLN function, *I/O Drivers*, 19-33
 - IO.ONL function, *I/O Drivers*, 19-33
 - LSDRV, *I/O Drivers*, 17-30
 - TTDRV, *I/O Drivers*, 2-65
 - UDDRV, *I/O Drivers*, 16-33
 - XEDRV, *I/O Drivers*, 13-19
- IE.PRI error return, ACP, *I/O Drivers*, C-17
- IE.REJ error return
 - transmitter (LRDRV), *I/O Drivers*, 14-8
- IE.RER error return, ACP, *I/O Drivers*, C-17
- IE.RSU error return
 - communication driver, *I/O Drivers*, 12-10
 - FORTTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - half-duplex, *I/O Drivers*, 3-20
 - ICDRV/ISDRV
 - IO.LDI function, *I/O Drivers*, 19-26
 - IO.LKE function, *I/O Drivers*, 19-28
 - IO.LTI function, *I/O Drivers*, 19-27
 - IO.LTY function, *I/O Drivers*, 19-27
 - LSDRV, *I/O Drivers*, 17-30, 17-31
 - IO.ADS function, *I/O Drivers*, 17-31
 - IO.HIS function, *I/O Drivers*, 17-31
 - IO.MDA function, *I/O Drivers*, 17-31
 - IO.MDI function, *I/O Drivers*, 17-31
 - IO.MDO function, *I/O Drivers*, 17-31
 - IO.SDO function, *I/O Drivers*, 17-31
- IE.SDP error return, *I/O Drivers*, 1-38
 - FORTTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 - ICDRV/ISDRV, *I/O Drivers*, 19-13

IE.SNC error return, ACP, *I/O Drivers*, C-17
 IE.SPC error return, *I/O Drivers*, 1-42
 AFC11/AD01 converter, *I/O Drivers*, 15-9
 communication driver, *I/O Drivers*, 12-10
 CRDRV, *I/O Drivers*, 11-8
 CTDRV, *I/O Drivers*, 9-5
 disk driver, *I/O Drivers*, 5-11
 DTDRV, *I/O Drivers*, 6-5
 FORTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 GRDRV, *I/O Drivers*, 21-3
 half-duplex, *I/O Drivers*, 3-20
 ICDRV/ISDRV
 IO.CCI function, *I/O Drivers*, 19-20
 IO.CTI function, *I/O Drivers*, 19-22
 IO.CTY function, *I/O Drivers*, 19-23
 IO.RAD function, *I/O Drivers*, 19-29
 LPDRV, *I/O Drivers*, 10-5
 LSDRV, *I/O Drivers*, 17-30
 PPDRV/PRDRV, *I/O Drivers*, 18-4
 receiver (LRDRV), *I/O Drivers*, 14-12
 tape driver, *I/O Drivers*, 8-12
 transmitter (LRDRV), *I/O Drivers*, 14-8
 TTDRV, *I/O Drivers*, 2-66
 IO.ATA function, *I/O Drivers*, 2-21
 UDDRV, *I/O Drivers*, 16-33
 UNIBUS switch driver, *I/O Drivers*, 24-8
 VTDRV, *I/O Drivers*, 4-8
 XEDRV, *I/O Drivers*, 13-13, 13-17, 13-19
 IE.SPC error return, ACP, *I/O Drivers*, C-17
 IE.SQC error return, ACP, *I/O Drivers*, C-17
 IE.TMO error return
 communication driver, *I/O Drivers*, 12-10
 DDDRV, *I/O Drivers*, 7-5
 UNIBUS switch driver, *I/O Drivers*, 24-8
 XEDRV, *I/O Drivers*, 13-17

IE.ULN error return, *I/O Drivers*, 1-38
 FORTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 ICDRV/ISDRV, *I/O Drivers*, 19-13
 IE.UPN error return, *I/O Drivers*, 1-38
 FORTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 VTDRV, *I/O Drivers*, 4-8
 IE.VER error return, *I/O Drivers*, 1-43
 communication driver, *I/O Drivers*, 12-10
 CTDRV, *I/O Drivers*, 9-5
 DDDRV, *I/O Drivers*, 7-5
 disk driver, *I/O Drivers*, 5-11
 DTDRV, *I/O Drivers*, 6-6
 PPDRV/PRDRV, *I/O Drivers*, 18-4
 tape driver, *I/O Drivers*, 8-13
 transmitter (LRDRV), *I/O Drivers*, 14-8
 TTDRV, *I/O Drivers*, 2-66
 IE.WAC error return, ACP, *I/O Drivers*, C-17
 IE.WAT error return, ACP, *I/O Drivers*, C-17
 IE.WCK error return, *I/O Drivers*, 1-43
 disk driver, *I/O Drivers*, 5-12
 IE.WER error return, ACP, *I/O Drivers*, C-18
 IE.WLK error return, *I/O Drivers*, 1-43
 CTDRV, *I/O Drivers*, 9-5
 DDDRV, *I/O Drivers*, 7-5
 disk driver, *I/O Drivers*, 5-12
 tape driver, *I/O Drivers*, 8-13
 IE.WLK error return, ACP, *I/O Drivers*, C-18
 Iefn parameter
 ADSWP: subroutine
 K-series, *I/O Drivers*, 23-10
 LADRV, *I/O Drivers*, 22-5
 DASWP: subroutine
 K-series, *I/O Drivers*, 23-15
 LADRV, *I/O Drivers*, 22-10
 DISWP: subroutine
 K-series, *I/O Drivers*, 23-18
 LADRV, *I/O Drivers*, 22-13
 DOSWP: subroutine
 K-series, *I/O Drivers*, 23-20
 LADRV, *I/O Drivers*, 22-15

- Iefn parameter (cont'd.)
 - DRS: subroutine (LSDRV), I/O Drivers, 17-16
 - GTHIST: subroutine (K-series), I/O Drivers, 23-22
 - HIST: subroutine (LSDRV), I/O Drivers, 17-18
 - IWTBUF: subroutine
 - K-series, I/O Drivers, 23-25
 - LADRV, I/O Drivers, 22-19
 - RTS: subroutine (LSDRV), I/O Drivers, 17-24
 - SDAC: subroutine (LSDRV), I/O Drivers, 17-26
 - SDO: subroutine (LSDRV), I/O Drivers, 17-28
- Iemc parameter
 - LAMSKS: subroutine (LADRV), I/O Drivers, 22-21
- Iemw parameter
 - LAMSKS: subroutine (LADRV), I/O Drivers, 22-21
- I error, MACRO-11, 6-26, 6-28, 6-29
 - summary, MACRO-11, D-3
- Iev parameter (UDDRV)
 - CTDI: subroutine, I/O Drivers, 16-21
 - CTTI: subroutine, I/O Drivers, 16-22
- IFAB pool, RMS-11 Macro, 2-5
- .IFACT directive, Indirect, 2-61
- .IFDF directive, Indirect, 2-61
- .IF directive, Indirect, 2-60 MACRO-11, 6-51 to 6-55
 - condition test argument, MACRO-11, 6-51, 6-52
- .IFDISABLED directive, Indirect, 2-62
- .IFENABLED directive, Indirect, 2-62
- .IFF directive, Indirect, 2-63 MACRO-11, 6-53, 6-54, 6-55
- IFI field in FAB
 - CLOSE operation, RMS-11 Macro, 5-3, 5-4
 - CONNECT operation, RMS-11 Macro, 5-6
 - CREATE operation, RMS-11 Macro, 5-20
 - DISPLAY operation, RMS-11 Macro, 5-30
 - EXTEND operation, RMS-11 Macro, 5-46
 - offset, RMS-11 Macro, 6-22
 - OPEN operation, RMS-11 Macro, 5-77
- IFI field in FAB (cont'd.)
 - summary, RMS-11 Macro, 6-52
- .IFINS directive, Indirect, 2-62
- IFLA.TMP (RMSIFL), RMS-11 Utilities, 3-11
 - allocating space, RMS-11 Utilities, 3-13
- IFLA1.TMP (RMSIFL), RMS-11 Utilities, 3-12
 - allocating space, RMS-11 Utilities, 3-14
- Iflag parameter
 - ADINP: subroutine (K-series), I/O Drivers, 23-8
 - ISTADC: subroutine (K-series), I/O Drivers, 23-28
 - SETADC: subroutine (LADRV), I/O Drivers, 22-23
 - XRATE: subroutine
 - K-series, I/O Drivers, 23-30
 - LADRV, I/O Drivers, 22-26
- IFL field in KEY block
 - CREATE operation, RMS-11 Macro, 5-20
 - DISPLAY operation, RMS-11 Macro, 5-31
 - offset, RMS-11 Macro, 6-67
 - OPEN operation, RMS-11 Macro, 5-80
 - summary, RMS-11 Macro, 6-81
- .IFLOA directive, Indirect, 2-63
- IFLP.TMP (RMSIFL), RMS-11 Utilities, 3-10
 - allocating space, RMS-11 Utilities, 3-13
- .IFNACT directive, Indirect, 2-61
- .IFNDF directive, Indirect, 2-61
- .IFNINS directive, Indirect, 2-62
- .IFNLOA directive, Indirect, 2-63
- IFORM, System Management, 12-24
- .IFT directive, Indirect, 2-63 MACRO-11, 6-53, 6-54, 6-55
- .IFTF directive, MACRO-11, 6-53, 6-54
- IF-THEN-ELSE statement, Error Logging, 5-34
- Igain parameter
 - ADC: subroutine (LSDRV), I/O Drivers, 17-12
- IGTBUF: subroutine
 - return buffer number
 - K-series, I/O Drivers, 23-24
 - LADRV, I/O Drivers, 22-17
- IHAR\$ directive, Executive, 5-64
- .IIF directive, MACRO-11, 6-56

Ilen parameter (LSDRV)
 DRS: subroutine, *I/O Drivers*, 17-16
 HIST: subroutine, *I/O Drivers*, 17-18
 RTS: subroutine, *I/O Drivers*, 17-23
 SDAC: subroutine, *I/O Drivers*, 17-25
 SDO: subroutine, *I/O Drivers*, 17-27
 Illegal character, *MACRO-11*, 3-3
 Image
 disk, *Task Builder*, 2-8
 memory, *Task Builder*, 2-9
 task
 See Task image
 /IMAGE qualifier
 BRU utility, *Utilities*, 7-17
 Imask parameter (LSDRV)
 DRS: subroutine, *I/O Drivers*, 17-17
 IDOR: subroutine, *I/O Drivers*, 17-20
 SDO: subroutine, *I/O Drivers*, 17-28
 Immediate address mode, *MACRO-11*, 5-6, 5-7
 Immediate conditional assembly, *MACRO-11*, 6-56
 Immediate expression indicator, *MACRO-11*, 3-2
 Imode parameter
 DRS: subroutine (LSDRV), *I/O Drivers*, 17-16
 HIST: subroutine (LSDRV), *I/O Drivers*, 17-18
 IDOR: subroutine (LSDRV), *I/O Drivers*, 17-20
 RTS: subroutine (LSDRV), *I/O Drivers*, 17-23
 SDAC: subroutine (LSDRV), *I/O Drivers*, 17-25
 SDO: subroutine (LSDRV), *I/O Drivers*, 17-27
 Imod parameter (UDDRV)
 RDTI: subroutine, *I/O Drivers*, 16-29
 RDWD: subroutine, *I/O Drivers*, 16-29
 RSTI: subroutine, *I/O Drivers*, 16-30
 Imod parameter (UDDRV) (cont'd.)
 SCTI: subroutine, *I/O Drivers*, 16-30
 Implicit .WORD directive, *MACRO-11*, 2-1, 2-4, 6-25
 Imsk parameter
 DOL/DOLW: subroutine (UDDRV), *I/O Drivers*, 16-24
 /IM switch
 FLX utility, *Utilities*, 4-5
 RMSCNV utility, *RMS-11 Utilities*, 4-9
 VMR
 definition, *System Management*, 10-7, 10-47
 relationship to symbol definition file, *System Management*, 10-7
 uses, *System Management*, 10-7
 .INC directive, *Indirect*, 2-65
 /INC keyword
 INSTALL command (MCR), *MCR*, 3-118
 INSTALL command (VMR), *System Management*, 10-24
 RUN command (MCR), *MCR*, 3-183
 INCLUDE command EDT editor, *Introduction*, 2-16
 .INCLUDE directive, *MACRO-11*, 6-58
 Include OOB (TTDRV), *I/O Drivers*, 2-61
 /INCLUDE qualifier, *Task Builder*, 11-36 to 11-37
 Inc parameter
 ISTADC: subroutine (K-series), *I/O Drivers*, 23-28
 SETADC: subroutine (LADRV), *I/O Drivers*, 22-23
 Incremental reorganization, *RMS-11 User's Guide*, 5-12
 INCREMENT statement, *Error Logging*, 5-31
 Indefinite repeat block, *MACRO-11*, 7-3, 7-16 to 7-19
 Index, *RMS-11 Introduction*, 3-7
 See also KEY block
 alternate
 bucket size calculation, *RMS-11 User's Guide*, 6-19
 level 0, *RMS-11 User's Guide*, 5-5
 SIDRs, *RMS-11 User's Guide*, 5-5

Index (cont'd.)

- area bucket size
 - See IBS field in KEY block
- area number (higher levels)
 - See IAN field in KEY block
- area number (lowest level)
 - See LAN field in KEY block
- count
 - See NOK field in SUM block
- data bucket size
 - See DBS field in KEY block
- data bucket VBN
 - See DVB field in KEY block
- depth, *RMS-11 User's Guide*, 5-5
- description, obtaining
 - See DISPLAY operation
- level count
 - See LVL field in KEY block
- levels, *RMS-11 User's Guide*, 5-4, 5-6
 - data, *RMS-11 User's Guide*, 5-5
- primary
 - bucket size calculation, *RMS-11 User's Guide*, 6-15
 - level 0, *RMS-11 User's Guide*, 5-5
- reference number
 - See REF field in KEY block
- root, *RMS-11 User's Guide*, 5-5
- root bucket VBN
 - See RVB field in KEY block
- INDEX_AREA attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-41
- INDEX_FILL attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-41
- Index address mode, *MACRO-11*, 5-5
- Index bucket, *RMS-11 User's Guide*, 5-6
- Index deferred address mode, *MACRO-11*, 5-6
- Indexed file organization, *RMS-11 Introduction*, 3-6 *RMS-11 User's Guide*, 1-5
 - See also Index
 - See also FB\$IDX code
 - access declarations, *RMS-11 User's Guide*, 7-1
 - allocation, *RMS-11 User's Guide*, 6-22
 - DEQ, *RMS-11 User's Guide*, 6-26

Indexed file organization

- allocation (cont'd.)
 - initial, calculation, *RMS-11 User's Guide*, 6-22
- alternate key, *RMS-11 Introduction*, 3-7 *RMS-11 User's Guide*, 1-11
- and remote access, *RMS-11 User's Guide*, B-3
- areas, *RMS-11 User's Guide*, 5-2, 6-10
 - multiarea files, *RMS-11 User's Guide*, 6-12
 - single-area files, *RMS-11 User's Guide*, 6-11
- bucket fill size, *RMS-11 User's Guide*, 6-27
- bucket format, *RMS-11 User's Guide*, 5-2
- bucket size, *RMS-11 User's Guide*, 6-15
 - calculation, alternate indexes, *RMS-11 User's Guide*, 6-19
 - calculation, primary index, *RMS-11 User's Guide*, 6-15
- bucket splitting, *RMS-11 User's Guide*, 5-11
- changeable keys, *RMS-11 Introduction*, 3-10
- compressing deleted records, *RMS-11 User's Guide*, 5-10, 5-16, 6-7, 6-9
- CONNECT operation, *RMS-11 User's Guide*, 7-2
- contiguity, *RMS-11 User's Guide*, 6-13
- data level, *RMS-11 User's Guide*, 5-5
- data records, *RMS-11 Introduction*, 3-7 *RMS-11 User's Guide*, 5-2
- declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
- deferred write, *RMS-11 User's Guide*, 7-8
- DELETE operation, *RMS-11 User's Guide*, 5-15, 6-7, 7-3, 7-9
 - duplicate keys, *RMS-11 User's Guide*, 6-9
- depth, *RMS-11 User's Guide*, 5-5
- design, *RMS-11 User's Guide*, 5-1, 6-1
 - allocation, *RMS-11 User's Guide*, 6-22
 - areas, *RMS-11 User's Guide*, 6-10

Indexed file organization

design (cont'd.)

- bucket size, *RMS-11 User's Guide*, 6-15
- keys, *RMS-11 User's Guide*, 6-2
- placement control, *RMS-11 User's Guide*, 6-13
- populating files, *RMS-11 User's Guide*, 6-26
- record format, *RMS-11 User's Guide*, 6-1
- record size, *RMS-11 User's Guide*, 6-1
- directory operations, *RMS-11 User's Guide*, 7-10
- DISCONNECT operation, *RMS-11 User's Guide*, 7-3
- duplicate keys, *RMS-11 Introduction*, 3-10
- file operations, *RMS-11 User's Guide*, 7-10
- FIND operation, *RMS-11 User's Guide*, 7-3, 7-9
 - random by key, *RMS-11 User's Guide*, 5-13
 - sequential access, *RMS-11 User's Guide*, 5-17
- FLUSH operation, *RMS-11 User's Guide*, 7-5
- GET operation, *RMS-11 User's Guide*, 7-5, 7-7, 7-8, 7-9
 - random by key, *RMS-11 User's Guide*, 5-13
 - sequential access, *RMS-11 User's Guide*, 5-17
- I/O techniques, *RMS-11 User's Guide*, 7-8
- incremental reorganization, *RMS-11 User's Guide*, 5-12
- index, *RMS-11 Introduction*, 3-7
- index buckets, *RMS-11 User's Guide*, 5-6
- index levels, *RMS-11 User's Guide*, 5-4, 5-6
- index records, *RMS-11 Introduction*, 3-7 *RMS-11 User's Guide*, 5-2, 5-6
- keys, *RMS-11 Introduction*, 3-6 *RMS-11 User's Guide*, 1-5, 6-2
 - changeable, *RMS-11 User's Guide*, 6-9
 - characteristics, *RMS-11 User's Guide*, 6-8

Indexed file organization

keys (cont'd.)

- data type, *RMS-11 Introduction*, 3-7 *RMS-11 User's Guide*, 6-3
- duplicates, *RMS-11 User's Guide*, 6-8
- null, *RMS-11 User's Guide*, 6-10
- number of, *RMS-11 User's Guide*, 6-2
- position, *RMS-11 User's Guide*, 6-7
- size, *RMS-11 User's Guide*, 6-6
- level 0
 - alternate indexes, *RMS-11 User's Guide*, 5-5
 - primary indexes, *RMS-11 User's Guide*, 5-5
- locate mode, *RMS-11 User's Guide*, 7-7
- mass insertion, *RMS-11 User's Guide*, 6-28
- move mode, *RMS-11 User's Guide*, 7-7
- multiple access streams, *RMS-11 User's Guide*, 7-10
- multiple buffers, *RMS-11 User's Guide*, 7-9
- null keys, *RMS-11 Introduction*, 3-10
- placement control, *RMS-11 User's Guide*, 6-13
- populating files, *RMS-11 User's Guide*, 6-26
- primary key order, *RMS-11 User's Guide*, 6-27
- random insertions, *RMS-11 User's Guide*, 6-27
- primary key, *RMS-11 Introduction*, 3-7 *RMS-11 User's Guide*, 1-11
- prologue, *RMS-11 User's Guide*, 5-2
- PUT operation, *RMS-11 User's Guide*, 6-7, 7-5, 7-7, 7-9
 - duplicate keys, *RMS-11 User's Guide*, 6-9
 - mass insertion, *RMS-11 User's Guide*, 7-9
 - random by key, *RMS-11 User's Guide*, 5-10
- random access, *RMS-11 User's Guide*, 5-7, 6-12
- record operations, *RMS-11 User's Guide*, 7-1

- Indexed file organization
 - record operations (cont'd.)
 - random access, *RMS-11 User's Guide*, 5-9
 - sequential access, *RMS-11 User's Guide*, 5-16
 - record transfer modes, *RMS-11 User's Guide*, 7-6
 - locate mode, *RMS-11 User's Guide*, 7-7
 - move mode, *RMS-11 User's Guide*, 7-7
 - REWIND operation, *RMS-11 User's Guide*, 7-6
 - root, *RMS-11 User's Guide*, 1-7, 5-5
 - search times, *RMS-11 User's Guide*, 5-8
 - segmented keys, *RMS-11 Introduction*, 3-10
 - sequential reads, *RMS-11 User's Guide*, 7-10
 - shared access, *RMS-11 User's Guide*, 7-1
 - block access, *RMS-11 User's Guide*, 7-1
 - record access, *RMS-11 User's Guide*, 7-1
 - sharing declarations, *RMS-11 User's Guide*, 7-1
 - stream operations, *RMS-11 User's Guide*, 7-1
 - structure
 - conceptual, *RMS-11 User's Guide*, 5-4
 - physical, *RMS-11 User's Guide*, 5-2
 - tree structure, *RMS-11 Introduction*, 3-7
 - UPDATE operation, *RMS-11 User's Guide*, 5-14, 7-6, 7-7, 7-8, 7-9
 - changeable keys, *RMS-11 User's Guide*, 6-10
 - duplicate keys, *RMS-11 User's Guide*, 6-9
- Index file, *I/O Operations*, 5-2 MCR, 3-103
 - bit map, *I/O Operations*, E-2
 - format, *I/O Operations*, E-1
 - header, *I/O Operations*, E-2
 - allocating, MCR, 3-103
 - listing contents
 - VFY utility, *Utilities*, 9-6
- Index record, *RMS-11 Introduction*, 3-7
 - RMS-11 User's Guide*, 5-2, 5-6
- Indicator
 - See Register indicator
- Indirect, *Command Language*, 1-22 *Indirect*, 1-1, 2-1
 - bookIntroduction4-1
- Indirect command file, *Indirect*, 1-2, 2-1 *Utilities*, 1-9
 - BAD utility, *Utilities*, 6-2
 - block-structuring, *Indirect*, 2-4
 - chaining, *Indirect*, 2-41
 - CLI, *Indirect*, 2-2
 - default file type, *Indirect*, 2-2
 - nesting, *Indirect*, 2-2
 - definition, *Batch and Queue*, 4-5
 - deleting, *Indirect*, 2-29, 2-48
 - examples, *Indirect*, 1-7, 2-96
 - FMT utility, *Utilities*, 5-9
 - formatting, *Indirect*, 2-30
 - IOX, *System Management*, 4-6
 - RMSBCK utility, *RMS-11 Utilities*, 6-2
 - RMSCNV utility, *RMS-11 Utilities*, 4-4
 - RMSDEF utility, *RMS-11 Utilities*, A-1, A-2, A-5, A-6, A-19
 - RMSDES utility, *RMS-11 Utilities*, 2-3
 - comments, *RMS-11 Utilities*, 2-4
 - RMSDSP utility, *RMS-11 Utilities*, 5-2
 - RMSIFL utility, *RMS-11 Utilities*, 3-2
 - RMSRST utility, *RMS-11 Utilities*, 7-2
 - searching for, *Indirect*, 2-5
 - SLP utility, *Utilities*, 13-8
 - task, *Indirect*, 2-1
 - default file type, *Indirect*, 2-2
 - nesting, *Indirect*, 2-2
 - tracing, *Indirect*, 2-27, 2-49
 - using task name, *Indirect*, 2-5
 - VMR, *System Management*, 10-3
 - levels allowed, *System Management*, 10-4
 - requirements, *System Management*, 10-3
 - specifying, *System Management*, 10-4
 - ZAP utility, *Utilities*, 15-6
- Indirect command file processing
 - delaying, *Indirect*, 2-45
 - interrupting, *Indirect*, 2-77

Indirect command file processing

(cont'd.)

suspending, *Indirect*, 2-94
terminating, *Indirect*, 2-54, 2-66,
2-84

Indirect Command Processor

See *Indirect*

Ind parameter

ADSWP: subroutine (LADRV), *I/O Drivers*, 22-6

CLOCKA: subroutine

K-series, *I/O Drivers*, 23-11

LADRV, *I/O Drivers*, 22-7

CLOCKB: subroutine

K-series, *I/O Drivers*, 23-13

LADRV, *I/O Drivers*, 22-8

DASWP: subroutine (LADRV), *I/O Drivers*, 22-11

DINP: subroutine (K-series), *I/O Drivers*, 23-17

DISWP: subroutine (LADRV), *I/O Drivers*, 22-14

DOSWP: subroutine (LADRV), *I/O Drivers*, 22-16

INXTBF: subroutine

K-series, *I/O Drivers*, 23-24

LADRV, *I/O Drivers*, 22-19

ISTADC: subroutine (K-series), *I/O Drivers*, 23-28

LAMSKS: subroutine (LADRV), *I/O Drivers*, 22-21

RLSBUF: subroutine

K-series, *I/O Drivers*, 23-26

LADRV, *I/O Drivers*, 22-22

RMVBUF: subroutine

K-series, *I/O Drivers*, 23-26

LADRV, *I/O Drivers*, 22-22

SETADC: subroutine (LADRV), *I/O Drivers*, 22-23

SETIBF: subroutine

K-series, *I/O Drivers*, 23-29

LADRV, *I/O Drivers*, 22-24

STPSWP: subroutine

K-series, *I/O Drivers*, 23-30

LADRV, *I/O Drivers*, 22-25

Industrial control subsystem

See *ICDRV*

See *ISDRV*

/INDX keyword

INITVOLUME command, *MCR*,
3-103

Infile

RMSBCK utility, *RMS-11 Utilities*,
6-3

Infile (cont'd.)

RMSCNV utility, *RMS-11 Utilities*,
4-5

RMSDSP utility, *RMS-11 Utilities*,
5-3

RMSIFL utility, *RMS-11 Utilities*,
3-3

RMSRST utility, *RMS-11 Utilities*,
7-3

/INF keyword

INITVOLUME command, *MCR*,
3-103

Informational commands, *MCR*, 1-7

Information record

text, *Task Builder*, A-11

Inhibit AST Recognition directive,
Executive, 5-64

INI

See *INITVOLUME* command

\$INIBF routine, *Writing I/O Driver*,
1-14, 7-24

\$INIDM (Initialize memory), *System Library*, 7-2

\$INISI routine, *Writing I/O Driver*,
1-6

Initial allocation

indexed files, *RMS-11 User's Guide*,
6-22

relative files, *RMS-11 User's Guide*,
4-3

sequential files, *RMS-11 User's Guide*, 3-4

Initial argument indicator, *MACRO-11*,
3-2

Initial expression indicator, *MACRO-11*, 3-2

Initialization

field, *RMS-11 Macro*, 2-9

Initialization commands, *MCR*, 1-6

Initialize

MACRO-11 source module (K-series), *I/O Drivers*, 23-31

timer module

SCTI: subroutine (UDDRV), *I/O Drivers*, 16-30

INITIALIZE command, *Command*

Language, 5-4, 5-11, 5-13, 5-73 to
5-85, 9-16

error messages, *Command Language*,
5-82 to 5-85

INITIALIZE/PROCESSOR

input, *Command Language*, 9-17

output, *Command Language*,
9-18

INITIALIZE command (cont'd.)
 INITIALIZE/QUEUE, *Command Language*, 9-18
 INITIALIZE/UPDATE, *Command Language*, 5-86 to 5-89, 9-18
 Initialize LPA11
 IO.INI function (LADRV), *I/O Drivers*, 22-29
 /INITIALIZE qualifier
 BRU utility, *Utilities*, 7-17
 Initial register indicator, *MACRO-11*, 3-2
 /INIT keyword, *MCR*, 3-49
 subkeywords, *MCR*, 3-49 to 3-52
 INITL module
 errors from, *Writing I/O Driver*, 6-3
 INITM1, *Error Logging*, 4-7
 INITS macro
 calling example (LADRV), *I/O Drivers*, 22-28
 special calling (LADRV), *I/O Drivers*, 22-27
 special purpose (K-series), *I/O Drivers*, 23-31
 INITVOLUME command, *MCR*, 1-6, 3-99
 default file protection, *MCR*, 2-3
 error messages, *MCR*, 3-108 to 3-116
 examples, *MCR*, 3-107
 format, *MCR*, 3-99
 keywords
 /ACCESS, *MCR*, 3-100
 /BAD, *MCR*, 3-100
 /DENS, *MCR*, 3-102
 /EXT, *MCR*, 3-102
 /FPRO, *MCR*, 3-102
 /INDX, *MCR*, 3-103
 /INF, *MCR*, 3-103
 /LRU, *MCR*, 3-104
 /MXF, *MCR*, 3-105
 /OWNER, *MCR*, 3-105
 /POS, *MCR*, 3-106
 /PRO, *MCR*, 3-106
 /UIC, *MCR*, 3-107
 /WIN, *MCR*, 3-107
 parameters, *MCR*, 3-99
 \$INIVM (Initialize virtual memory), *System Library*, 8-5
 Inm parameter (UDDRV)
 AIRD/AIRDW subroutine, *I/O Drivers*, 16-17
 AISQ/AISQW subroutine, *I/O Drivers*, 16-18
 Inm parameter (UDDRV) (cont'd.)
 AO/AOW subroutine, *I/O Drivers*, 16-19
 DI/DIW: subroutine, *I/O Drivers*, 16-23
 DOL/DOLW: subroutine, *I/O Drivers*, 16-24
 DOM/DOMW: subroutine, *I/O Drivers*, 16-25
 Input, *Introduction*, 1-3 fig.
 ADJLPS: subroutine, use of, *I/O Drivers*, 17-36
 analog (ICDRV/ISDRV), *I/O Drivers*, 19-39, 19-40
 sequential channel, *I/O Drivers*, 19-42
 specified channel, *I/O Drivers*, 19-39
 buffer, intermediate (TTDRV), *I/O Drivers*, 2-80
 checkpoint, terminal (TTDRV), *I/O Drivers*, 2-82
 data format
 Task Builder, *Task Builder*, A-1 to A-32
 default read (TTDRV), *I/O Drivers*, 2-13
 digital (ICDRV/ISDRV), *I/O Drivers*, 19-47
 interrupt single-point, *I/O Drivers*, 19-48
 sense multiple field, *I/O Drivers*, 19-47, 19-48
 line, delete start (TTDRV), *I/O Drivers*, 2-70
 parameter
 DINP: subroutine (K-series), *I/O Drivers*, 23-17
 random analog data (UDDRV), *I/O Drivers*, 16-17
 unsolicited (TTDRV), *I/O Drivers*, 2-55, 2-68
 notification, *I/O Drivers*, 2-13
 Input/output
 See *I/O*
 Input file switch
 RMSBCK utility, *RMS-11 Utilities*, 6-8
 RMSIFL utility, *RMS-11 Utilities*, 3-7
 RMSRST utility, *RMS-11 Utilities*, 7-8
 /INQUIRE keyword
 SET command (*MCR*), *MCR*, 3-225

- /INQUIRE qualifier
 - SET TERMINAL command, *Command Language*, 3-41
- INS, *I/O Drivers*, 13-5
 - See INSTALL command
- INSERT command
 - EDI utility, *Program Development*, 2-18, 7-7 *Utilities*, 2-15
 - EDT editor, *Introduction*, 2-12
- Inserting
 - characters in a line, *Program Development*, 2-17
 - code in the source file, *Program Development*, 2-18
 - lines in a file, *Program Development*, 2-9, 2-18
 - modules in a library, *Program Development*, 6-9, 6-10
- Inserting text (EDT), *Introduction*, 2-6
- INSTALL command, *Command Language*, 7-28 to 7-38, 9-19
 - Introduction*, 5-8
 - error messages, *Command Language*, 7-33 to 7-38
- INSTALL command (MCR), *MCR*, 1-6, 3-116
 - format, *MCR*, 3-116
 - installing task, *MCR*, 2-21, 2-23
 - keywords
 - /AFF, *MCR*, 3-117
 - /CKP, *MCR*, 3-117
 - /CLI, *MCR*, 3-117
 - /FMAP, *MCR*, 3-118
 - /INC, *MCR*, 3-118
 - /IOP, *MCR*, 3-118
 - /PAR, *MCR*, 3-119
 - /PMD, *MCR*, 3-119
 - /PRI, *MCR*, 3-119
 - /ROPAR, *MCR*, 3-120
 - /SEC, *MCR*, 3-120
 - /SLV, *MCR*, 3-120
 - /SYNC, *MCR*, 3-121
 - /TASK, *MCR*, 3-121
 - /TIME, *MCR*, 3-121
 - /UIC, *MCR*, 3-121
 - /WB, *MCR*, 3-122
 - /XHR, *MCR*, 3-122
 - parameters, *MCR*, 3-116
- INSTALL command (VMR), *System Management*, 10-21
 - definition, *System Management*, 10-21

- INSTALL command (VMR) (cont'd.)
 - examples, *System Management*, 10-30 to 10-31
 - format, *System Management*, 10-21
 - keywords
 - /AFF, *System Management*, 10-22, 10-25
 - /CKP, *System Management*, 10-22
 - /CLI, *System Management*, 10-23
 - /FIX, *System Management*, 10-23
 - /FMAP, *System Management*, 10-23
 - /INC, *System Management*, 10-24
 - /IOP, *System Management*, 10-24
 - /PMD, *System Management*, 10-25
 - /PRI, *System Management*, 10-25
 - /PRO, *System Management*, 10-25
 - /RON, *System Management*, 10-26
 - /ROPAR, *System Management*, 10-26
 - /SEC, *System Management*, 10-27
 - /SLV, *System Management*, 10-27
 - /SYNC, *System Management*, 10-27
 - /TASK, *System Management*, 10-27
 - /UIC, *System Management*, 10-28
 - /WB, *System Management*, 10-28
 - /XHR, *System Management*, 10-28
 - notes, *System Management*, 10-31 to 10-32
 - parameters, *System Management*, 10-21
- Installed task, *Command Language*, 7-1 to 7-2, 7-3, 7-12 to 7-16
- Installing task, *Command Language*, 7-28 to 7-38
- Instruction data space, *MCR*, 3-167
- Instruction set
 - commercial, *MACRO-11*, C-3, C-4

- Instruction set (cont'd.)
 - floating-point, *MACRO-11*, C-4, C-5
 - PDP-11, *MACRO-11*, C-1, C-2
- Instruction space, *Debugging*, 3-2, 7-2, 9-3 *Executive*, 3-1
 - command, *Debugging*, 2-9, 9-12
 - enabling, *Debugging*, 1-3
 - mapping, *Executive*, 3-3
 - moving data, *Executive*, 5-133
- /IN switch
 - LBR utility, *Utilities*, 10-19
- Integer key
 - See also XB\$IN2 mask in DTP field
 - See also XB\$IN4 mask in DTP field
 - 2-byte signed, *RMS-11 User's Guide*, 6-3
 - 4-byte signed, *RMS-11 User's Guide*, 6-4
- Integer routine
 - divide (\$DIV), *System Library*, 3-2
 - multiply (\$MUL), *System Library*, 3-1
- Interactive mode
 - IOX, *System Management*, 4-19
- Interactive terminal
 - definition, *Batch and Queue*, 4-5
- Interface
 - character-oriented (communication driver), *I/O Drivers*, 12-1
 - line driver, *I/O Drivers*, 12-1
 - message-oriented (communication driver), *I/O Drivers*, 12-1
 - status value, FORTRAN (LSDRV), *I/O Drivers*, 17-33
 - terminal (TTDRV), *I/O Drivers*, 2-81
- INTERLEAVE command
 - IOX, *System Management*, 4-41
- Intermittent failures, *System Management*, 15-30
- Intermodule variable, *Error Logging*, 4-29
 - block number, *Error Logging*, 4-29
 - cylinder error, *Error Logging*, 4-29
 - declaration, *Error Logging*, 4-14
 - device function, *Error Logging*, 4-29
 - drive serial number, *Error Logging*, 4-29
 - drive type, *Error Logging*, 4-29
 - error type, *Error Logging*, 4-29, 4-30
 - group error, *Error Logging*, 4-29
 - head error, *Error Logging*, 4-29
 - MASSBUS, *Error Logging*, 4-33
- Intermodule variable (cont'd.)
 - Non-MASSBUS, *Error Logging*, 4-33
 - physical unit number, *Error Logging*, 4-29
 - sector error, *Error Logging*, 4-29
- Internal displaced relocation, *Task Builder*, A-15
- Internal file identifier
 - See IFI field in FAB
- Internal register, *Debugging*, 5-2
 - accessing, *Debugging*, 5-2
- Internal stream identifier
 - See ISI field in RAB
- Internal symbol
 - directory record, *Task Builder*, A-24
 - name entry, *Task Builder*, A-5
 - overall format, *Task Builder*, A-25
 - start-of-segment, *Task Builder*, A-26
- Internal vertical format (TTDRV), *I/O Drivers*, 2-76
- Interrupt, *Writing I/O Driver*, 1-1
 - addresses
 - overview, *Writing I/O Driver*, 2-6
 - clock, *MCR*, 3-180
 - connect contact
 - CTDI: subroutine (UDDRV), *I/O Drivers*, 16-20
 - connect digital (ICDRV/ISDRV), *I/O Drivers*, 19-19
 - connect terminal (ICDRV/ISDRV), *I/O Drivers*, 19-23
 - connect timer
 - CTTI: subroutine (UDDRV), *I/O Drivers*, 16-21
 - connect-to directive, *Writing I/O Driver*, 1-1
 - contact
 - digital input (UDDRV), *I/O Drivers*, 16-6
 - counter
 - disconnect buffer (ICDRV/ISDRV), *I/O Drivers*, 19-59
 - link task (ICDRV/ISDRV), *I/O Drivers*, 19-26
 - counter disconnect (ICDRV/ISDRV), *I/O Drivers*, 19-22
 - counter module
 - connect (ICDRV/ISDRV), *I/O Drivers*, 19-21
 - definition, *System Generation*, 1-11

Interrupt

digital

- disconnect buffer
(ICDRV/ISDRV), *I/O Drivers*, 19-56
- link task (ICDRV/ISDRV), *I/O Drivers*, 19-25
- unlink task (ICDRV/ISDRV), *I/O Drivers*, 19-30
- digital changed state point read
(ICDRV/ISDRV), *I/O Drivers*, 19-54
- digital data
 - read (ICDRV/ISDRV), *I/O Drivers*, 19-52, 19-53
 - read full word (ICDRV/ISDRV), *I/O Drivers*, 19-55
- digital single-point (ICDRV/ISDRV), *I/O Drivers*, 19-48
- disable error (ICDRV/ISDRV), *I/O Drivers*, 19-32
- disconnect contact
 - DRDI: subroutine (UDDRV), *I/O Drivers*, 16-22
- disconnect digital (ICDRV/ISDRV), *I/O Drivers*, 19-20
- disconnect timer
 - DRTI: subroutine (UDDRV), *I/O Drivers*, 16-23
- dispatching, *Writing I/O Driver*, 1-7
 - for common interrupt devices, *Writing I/O Driver*, 1-12
 - overview, *Writing I/O Driver*, 2-6
- entry address, *Writing I/O Driver*, 2-4
- entry point, *Writing I/O Driver*, 4-69 to 4-70
- for overlapped seek, *Writing I/O Driver*, 1-12
- handling, *Writing I/O Driver*, 1-5, 1-7, 1-8, 1-9, 1-12
- link task (ICDRV/ISDRV), *I/O Drivers*, 19-27
- link task (ICDRV/ISDRV), *I/O Drivers*, 19-64, 19-66
- protocol, *Writing I/O Driver*, 1-6, 1-9
- read contact change data
 - RDCS: subroutine (UDDRV), *I/O Drivers*, 16-26

Interrupt

read contact data

- RDDI: subroutine (UDDRV), *I/O Drivers*, 16-27
- read contact point
 - RCIPT: subroutine (UDDRV), *I/O Drivers*, 16-25
- read timer data
 - RDTI: subroutine (UDDRV), *I/O Drivers*, 16-28
- read word contact data
 - RDWD: subroutine (UDDRV), *I/O Drivers*, 16-29
- service routine, *Writing I/O Driver*, 1-5, 1-6
- task
 - remove link (ICDRV/ISDRV), *I/O Drivers*, 19-68
 - remove link example (ICDRV/ISDRV), *I/O Drivers*, 19-69
 - unlink error (ICDRV/ISDRV), *I/O Drivers*, 19-31
- terminal
 - connect buffer (ICDRV/ISDRV), *I/O Drivers*, 19-60
 - unlink task (ICDRV/ISDRV), *I/O Drivers*, 19-31
- unlink (ICDRV/ISDRV), *I/O Drivers*, 19-30
- unlink counter (ICDRV/ISDRV), *I/O Drivers*, 19-30
- unlink task (ICDRV/ISDRV), *I/O Drivers*, 19-29
- unsolicited
 - processing (ICDRV/ISDRV), *I/O Drivers*, 19-64
 - task activate (ICDRV/ISDRV), *I/O Drivers*, 19-24
- unsolicited data
 - continual monitoring (ICDRV/ISDRV), *I/O Drivers*, 19-51
- unsolicited processing (ICDRV/ISDRV), *I/O Drivers*, 19-17
- vector, MCR, 3-132 *Writing I/O Driver*, 1-1, 1-12

Interrupt Control Block

See ICB

Interrupting function (ICDRV/ISDRV), *I/O Drivers*, 19-5

Interrupt processing, *Debugging*, 8-3 by driver, *Writing I/O Driver*, 3-4

- Interrupt save
 - See \$INTSV routine
- Interrupt Service Routine
 - See ISR
- Interrupt timeouts
 - error logging, *Error Logging*, 1-6
- Interrupt vector, highest address
 - SYSGEN question, *System Generation*, 3-66
- Intersystem file transfer, RMS-11
 - Utilities*, 1-2, 6-1
 - RMSCNV utility, *RMS-11 Utilities*, 4-1
 - RMSRST utility, *RMS-11 Utilities*, 7-1, 7-10
 - /FR switch, *RMS-11 Utilities*, 7-7
 - version number conversion, *RMS-11 Utilities*, 7-5
- Interval
 - reschedule, *MCR*, 3-180
- Interval report
 - IOX, *System Management*, 4-20
- Int parameter
 - immediate device-specific function (LSDRV), *I/O Drivers*, 17-3
- Introduction
 - Task Builder, *Task Builder*, 1-1 to 1-19
- \$INTSI routine, *Writing I/O Driver*, 1-7
- INTSV\$ macro call
 - arguments, *Writing I/O Driver*, 4-8
- INTSV\$ routine, *Writing I/O Driver*, 7-25
- \$INTSV routine, *Writing I/O Driver*, 1-6, 1-7
- \$INTXT routine, *Writing I/O Driver*, 1-6, 7-26
- Invalid Login Transaction Block, *System Management*, 17-27
- Invoking
 - interactively, *Indirect*, 1-10, 2-96
 - RMSBCK utility, *RMS-11 Utilities*, 6-2
 - RMSCNV utility, *RMS-11 Utilities*, 4-3
 - RMSDEF utility, *RMS-11 Utilities*, A-5
 - RMSDES utility, *RMS-11 Utilities*, 2-2
 - RMSDSP utility, *RMS-11 Utilities*, 5-2
- Invoking (cont'd.)
 - RMSIFL utility, *RMS-11 Utilities*, 3-2
 - RMSRST utility, *RMS-11 Utilities*, 7-2
- /INVOLUME qualifier
 - BRU utility, *Utilities*, 7-17
- INXTBF: subroutine
 - set next buffer
 - K-series, *I/O Drivers*, 23-24
 - LADRV, *I/O Drivers*, 22-18
- IO.ACE function
 - F11ACP, *I/O Drivers*, C-9
 - MTAACP, *I/O Drivers*, C-10
- IO.ACP function (MTAACP), *I/O Drivers*, C-12
- IO.ACR function
 - F11ACP, *I/O Drivers*, C-8
 - MTAACP, *I/O Drivers*, C-10
- IO.ACW function
 - F11ACP, *I/O Drivers*, C-8
 - MTAACP, *I/O Drivers*, C-10
- IO.ADS function
 - ADC: subroutine error (LSDRV), *I/O Drivers*, 17-32
 - IO.RSU return (LSDRV), *I/O Drivers*, 17-31
 - synchronous (LSDRV), *I/O Drivers*, 17-6
- IO.APV function (MTAACP), *I/O Drivers*, C-12
- IO.ATA function
 - half-duplex, *I/O Drivers*, 3-9
 - TTDRV, *I/O Drivers*, 2-20
- IO.ATF function, receive (LRDRV), *I/O Drivers*, 14-10
- IO.ATT function
 - GLUN\$, before (RX02), *I/O Drivers*, 5-12
 - (GRDRV), *I/O Drivers*, 21-2
 - standard function, *I/O Drivers*, 1-27
 - TF.ESQ, with (half-duplex), *I/O Drivers*, 3-11
 - UNIBUS switch driver, *I/O Drivers*, 24-2, 24-3
 - VTDRV, *I/O Drivers*, 4-4
- IO.ATX function, transmitter (LRDRV), *I/O Drivers*, 14-5
- IO.BLS function (DDDRV), *I/O Drivers*, 7-4
- IO.CCI function (ICDRV/ISDRV), *I/O Drivers*, 19-19

- IO.CCO function
 - half-duplex, *I/O Drivers*, 3-11
 - TTDRV, *I/O Drivers*, 2-23
 - VFC (TTDRV), *I/O Drivers*, 2-75
- IO.CLK function (LADRV), *I/O Drivers*, 22-29
- IO.CNT function (GRDRV), *I/O Drivers*, 21-2
- IO.CON function
 - device-specific (UNIBUS switch driver), *I/O Drivers*, 24-4
 - GRDRV, *I/O Drivers*, 21-2
- IO.CRE function
 - F11ACP, *I/O Drivers*, C-8
 - MTAACP, *I/O Drivers*, C-11
- IO.CRX function, receive (LRDRV), *I/O Drivers*, 14-10
- IO.CSR function
 - device-specific (UNIBUS switch driver), *I/O Drivers*, 24-6
- IO.CTI function
 - ICDRV/ISDRV, *I/O Drivers*, 19-21
 - UDDRV, *I/O Drivers*, 16-8
- IO.CTY function (ICDRV/ISDRV), *I/O Drivers*, 19-23
- IO.DAC function
 - F11ACP, *I/O Drivers*, C-9
 - MTAACP, *I/O Drivers*, C-10
- IO.DCI function (ICDRV/ISDRV), *I/O Drivers*, 19-20
- IO.DEL function (F11ACP), *I/O Drivers*, C-8
- IO.DET function
 - GRDRV, *I/O Drivers*, 21-2
 - standard function, *I/O Drivers*, 1-28
 - UNIBUS switch driver, *I/O Drivers*, 24-2, 24-3
 - VTDRV, *I/O Drivers*, 4-4
- IO.DGN function
 - diagnostic (DDDRV), *I/O Drivers*, 7-4
- IO.DIS function
 - device-specific (UNIBUS switch driver), *I/O Drivers*, 24-5
 - GRDRV, *I/O Drivers*, 21-2
- IO.DPT function
 - device-specific (UNIBUS switch driver), *I/O Drivers*, 24-5
- IO.DRX function, receive (LRDRV), *I/O Drivers*, 14-11
- IO.DSE function (tape driver), *I/O Drivers*, 8-8
- IO.DTI function
 - ICDRV/ISDRV, *I/O Drivers*, 19-22
 - UDDRV, *I/O Drivers*, 16-8
- IO.DTY function (ICDRV/ISDRV), *I/O Drivers*, 19-24
- IO.EIO function (TTDRV), *I/O Drivers*, 2-25
 - item list 1 buffer, *I/O Drivers*, 2-30
 - item list 2 buffer, *I/O Drivers*, 2-32
 - remote terminal, *I/O Drivers*, 2-25
- IO.ENA function
 - F11ACP, *I/O Drivers*, C-9
 - MTAACP, *I/O Drivers*, C-10
- IO.ERS function (tape driver), *I/O Drivers*, 8-8
- IO.EXT function (F11ACP), *I/O Drivers*, C-9
- IO.FDX function (communication driver), *I/O Drivers*, 12-7
- IO.FLN function (ICDRV/ISDRV), *I/O Drivers*, 19-32
- IO.FNA function
 - F11ACP, *I/O Drivers*, C-9
 - MTAACP, *I/O Drivers*, C-10
- IO.GTS function
 - half-duplex, *I/O Drivers*, 3-13
 - support returned (TTDRV), *I/O Drivers*, 2-34
 - TTDRV, *I/O Drivers*, 2-18, 2-33
 - VTDRV, *I/O Drivers*, 4-6
- IO.HDX function, set mode (communication driver), *I/O Drivers*, 12-7
- IO.HIS function (LSDRV)
 - IO.RSU return, *I/O Drivers*, 17-31
 - synchronous, *I/O Drivers*, 17-7
- IO.HNG function (TTDRV), *I/O Drivers*, 2-35
- IO.INI function (LADRV), *I/O Drivers*, 22-29
- IO.INL function
 - communication driver, *I/O Drivers*, 12-7
 - after sync, *I/O Drivers*, 12-12
- IO.ITI function (ICDRV/ISDRV), *I/O Drivers*, 19-22
- IO.KIL function
 - CRDRV, *I/O Drivers*, 11-2
 - DTDRV, *I/O Drivers*, 6-2
 - GRDRV, *I/O Drivers*, 21-2
 - I/O in progress (CTDRV), *I/O Drivers*, 9-3
 - ICDRV/ISDRV, *I/O Drivers*, 19-33
 - LPDRV, *I/O Drivers*, 10-4

- IO.KIL function (cont'd.)
 - standard function, *I/O Drivers*, 1-29
 - tape driver, *I/O Drivers*, 8-6
 - time required (half-duplex), *I/O Drivers*, 3-32
 - UDDRV, *I/O Drivers*, 16-3
 - UNIBUS switch driver, *I/O Drivers*, 24-3
 - VTDRV, *I/O Drivers*, 4-4
- IO.KIL function (PPDRV/PRDRV), *I/O Drivers*, 18-2
- IO.LDI function (ICDRV/ISDRV), *I/O Drivers*, 19-25
- IO.LED function, immediate (LSDRV), *I/O Drivers*, 17-4
- IO.LKE function (ICDRV/ISDRV), *I/O Drivers*, 19-27
- IO.LOD function (LADRV), *I/O Drivers*, 22-29
- IO.LTI function (ICDRV/ISDRV), *I/O Drivers*, 19-26
- IO.LTY function (ICDRV/ISDRV), *I/O Drivers*, 19-27
- IO.MDA function (LSDRV)
 - IO.RSU return, *I/O Drivers*, 17-31
 - synchronous, *I/O Drivers*, 17-8
- IO.MDI function (LSDRV)
 - IE.RSU return, *I/O Drivers*, 17-31
 - synchronous, *I/O Drivers*, 17-8
- IO.MDO function (LSDRV)
 - IO.RSU return, *I/O Drivers*, 17-31
 - synchronous, *I/O Drivers*, 17-8
- IO.MLO function (ICDRV/ISDRV), *I/O Drivers*, 19-17
- IO.MSO function (ICDRV/ISDRV), *I/O Drivers*, 19-16
- IO.NLK function (ICDRV/ISDRV), *I/O Drivers*, 19-30
- IO.ONL function (ICDRV/ISDRV), *I/O Drivers*, 19-33
- IO.RAD function (ICDRV/ISDRV), *I/O Drivers*, 19-28
- IO.RAL function
 - Badge Reader (TTDRV), *I/O Drivers*, 2-82
 - character echo (half-duplex), *I/O Drivers*, 3-14
 - half-duplex, *I/O Drivers*, 3-14
 - TTDRV, *I/O Drivers*, 2-36
- IO.RAT function
 - F11ACP, *I/O Drivers*, C-9
 - MTAACP, *I/O Drivers*, C-11
- IO.RBC function (ICDRV/ISDRV), *I/O Drivers*, 19-13
- IO.REL function, immediate (LSDRV), *I/O Drivers*, 17-4
- IO.RLB function
 - communication driver, *I/O Drivers*, 12-7
 - ignore prompt (TTDRV), *I/O Drivers*, 2-27
 - standard function, *I/O Drivers*, 1-30
 - tape driver, *I/O Drivers*, 8-7
 - VTDRV, *I/O Drivers*, 4-4
- IO.RLC function (DDDRV), *I/O Drivers*, 7-4
- IO.RNA function (F11ACP), *I/O Drivers*, C-9
- IO.RNE function
 - Badge Reader (TTDRV), *I/O Drivers*, 2-82
 - half-duplex, *I/O Drivers*, 3-14
 - TTDRV, *I/O Drivers*, 2-38
- IO.RNS function (communication driver), *I/O Drivers*, 12-7
- IO.RPR!TF.XOF function (half-duplex), *I/O Drivers*, 3-15
- IO.RPR function
 - allowed subfunction bit (half-duplex), *I/O Drivers*, 3-14
 - half-duplex, *I/O Drivers*, 3-14, 3-15
 - TTDRV, *I/O Drivers*, 2-40
 - VFC (TTDRV), *I/O Drivers*, 2-75
 - VTDRV, *I/O Drivers*, 4-7
- IO.RST function
 - half-duplex, *I/O Drivers*, 3-15
 - TTDRV, *I/O Drivers*, 2-43
 - successful completion, *I/O Drivers*, 2-43
- IO.RTF function, receive (LRDRV), *I/O Drivers*, 14-10
- IO.RTT function (TTDRV), *I/O Drivers*, 2-45
- IO.RVB function
 - F11ACP, *I/O Drivers*, C-9
 - MTAACP, *I/O Drivers*, C-11
 - open file (DTDRV), *I/O Drivers*, 6-3
 - operation (disk driver), *I/O Drivers*, 5-8
 - standard function, *I/O Drivers*, 1-30
 - VTDRV, *I/O Drivers*, 4-4

- IO.RWD function (tape driver), *I/O Drivers*, 8-7
- IO.RWU function (tape driver), *I/O Drivers*, 8-7
- IO.SAO function (ICDRV/ISDRV), *I/O Drivers*, 19-15
- IO.SDI function, immediate (LSDRV), *I/O Drivers*, 17-4
- IO.SDO function (LSDRV)
 - IE.RSU return, *I/O Drivers*, 17-31
 - immediate, *I/O Drivers*, 17-4
- IO.SEC function
 - GLUN\$, before (RX02), *I/O Drivers*, 5-12
 - tape driver, *I/O Drivers*, 8-8
 - transmitter (LRDRV), *I/O Drivers*, 14-5
- IO.SMC function (TTDRV), *I/O Drivers*, 2-59
- IO.SMO function (tape driver), *I/O Drivers*, 8-10
- IO.SPB function, space (CTDRV), *I/O Drivers*, 9-7
- IO.SPF function
 - EOF (CTDRV), *I/O Drivers*, 9-7
 - space (CTDRV), *I/O Drivers*, 9-7
- IO.STA function, data transfer start (LADRV), *I/O Drivers*, 22-30
- IO.STC function
 - LRDRV
 - transmitter, *I/O Drivers*, 14-5
 - mode parameter, *I/O Drivers*, 14-6
 - state parameter, *I/O Drivers*, 14-6
 - VTDRV, *I/O Drivers*, 4-5
- IO.STP function
 - data transfer stop (LADRV), *I/O Drivers*, 22-30
 - device-specific (LSDRV), *I/O Drivers*, 17-9
 - GRDRV, *I/O Drivers*, 21-2
- IO.SWI function
 - device-specific (UNIBUS switch driver), *I/O Drivers*, 24-6
- IO.SYN function (communication driver), *I/O Drivers*, 12-8
 - set operation, *I/O Drivers*, 12-7
 - with IO.INL, *I/O Drivers*, 12-12
- IO.TRM function (communication driver), *I/O Drivers*, 12-7
- IO.UDI function (ICDRV/ISDRV), *I/O Drivers*, 19-30
- IO.UER function (ICDRV/ISDRV), *I/O Drivers*, 19-31
- IO.ULK function (F11ACP), *I/O Drivers*, C-9
- IO.UTI function (ICDRV/ISDRV), *I/O Drivers*, 19-30
- IO.UTY function (ICDRV/ISDRV), *I/O Drivers*, 19-31
- IO.WAL function
 - half-duplex, *I/O Drivers*, 3-16
 - TTDRV, *I/O Drivers*, 2-47
- IO.WBT function
 - half-duplex, *I/O Drivers*, 3-16
 - TTDRV, *I/O Drivers*, 2-49
 - VFC (TTDRV), *I/O Drivers*, 2-75
- IO.WLB function
 - ICDRV/ISDRV, *I/O Drivers*, 19-32
 - ignore prompt (TTDRV), *I/O Drivers*, 2-27
 - standard function, *I/O Drivers*, 1-31, 1-32
 - VFC (TTDRV), *I/O Drivers*, 2-75
 - VTDRV, *I/O Drivers*, 4-4
- IO.WLC function (DDDRV), *I/O Drivers*, 7-4
- IO.WNS function (communication driver), *I/O Drivers*, 12-8
- IO.WVB function
 - F11ACP, *I/O Drivers*, C-9
 - open file (DTDRV), *I/O Drivers*, 6-3
 - operation (disk driver), *I/O Drivers*, 5-8
 - use (half-duplex), *I/O Drivers*, 3-32
 - VFC (TTDRV), *I/O Drivers*, 2-75
 - VTDRV, *I/O Drivers*, 4-4
- IO.XCL function (XEDRV), *I/O Drivers*, 13-4, 13-17
 - error return, *I/O Drivers*, 13-18
 - status return, *I/O Drivers*, 13-18
 - syntax, *I/O Drivers*, 13-17
- IO.XIN function (XEDRV), *I/O Drivers*, 13-4, 13-10
 - error return, *I/O Drivers*, 13-11
 - status return, *I/O Drivers*, 13-11
 - syntax, *I/O Drivers*, 13-10
- IO.XOP function (XEDRV), *I/O Drivers*, 13-4, 13-6
 - syntax, *I/O Drivers*, 13-6
- IO.XRC function (XEDRV), *I/O Drivers*, 13-4, 13-13
 - diagnostic, *I/O Drivers*, 13-19
 - error return, *I/O Drivers*, 13-16

- IO.XRC function (XEDRV) (cont'd.)
 - status return, *I/O Drivers*, 13-16
 - syntax, *I/O Drivers*, 13-13
- IO.XSC function (XEDRV), *I/O Drivers*, 13-4, 13-7
 - syntax, *I/O Drivers*, 13-7
- IO.XTL function (XEDRV), *I/O Drivers*, 13-18
 - error return, *I/O Drivers*, 13-18
 - status return, *I/O Drivers*, 13-18
 - syntax, *I/O Drivers*, 13-18
- IO.XTM function (XEDRV), *I/O Drivers*, 13-4, 13-11
 - diagnostic, *I/O Drivers*, 13-19
 - error return, *I/O Drivers*, 13-13
 - status return, *I/O Drivers*, 13-13
 - syntax, *I/O Drivers*, 13-11
- /IO_PAGE qualifier, *Task Builder*, 11-38
- \$IOALT routine, *Writing I/O Driver*, 1-13, 1-15, 7-27
 - driver use in I/O processing, *Writing I/O Driver*, 3-5, 3-6
- \$\$IOB1 program section
 - reserved name, *Task Builder*, E-3
- \$\$IOB2 program section
 - reserved name, *Task Builder*, E-3
- \$IODON routine, *Writing I/O Driver*, 1-9, 1-13, 7-27
 - driver use in I/O processing, *Writing I/O Driver*, 3-5, 3-6
- IOERR\$ macro, *I/O Drivers*, 1-8
 - I/O completion code, *I/O Drivers*, 1-37
- \$IOFIN routine, *Writing I/O Driver*, 1-13, 1-14, 3-3, 7-28
- /IOP keyword
 - INSTALL command (MCR), *MCR*, 3-118
 - INSTALL command (VMR), *System Management*, 10-24
 - RUN command (MCR), *MCR*, 3-183
- IOSB
 - validity checks, *Writing I/O Driver*, 3-2
- Iosb parameter (K-series)
 - DINP: subroutine, *I/O Drivers*, 23-17
 - DOUT: subroutine, *I/O Drivers*, 23-21
 - SCOPE: subroutine, *I/O Drivers*, 23-27
- IOT trap instruction, *Debugging*, 8-5, 9-4
- Iout parameter
 - DOUT: subroutine (K-series), *I/O Drivers*, 23-21
- IOX, *System Management*, 1-1
 - command
 - LOOPBACK, *System Management*, 4-43
 - parameter list
 - Files-11, *System Management*, 4-8
 - command mode, *System Management*, 4-18
 - commands
 - ABORT, *System Management*, 4-24
 - BADBLOCKS, *System Management*, 4-25
 - BUFFERSIZE, *System Management*, 4-27
 - categories, *System Management*, 4-3
 - COMPAREDATA YES/NO, *System Management*, 4-28
 - CONFIGURE, *System Management*, 4-29
 - CONTROL_C YES/NO, *System Management*, 4-32
 - CTRL/C, *System Management*, 4-32
 - DENSITY, *System Management*, 4-33
 - descriptions, *System Management*, 4-22
 - DESELECT, *System Management*, 4-35
 - ERRORLIMIT, *System Management*, 4-36
 - EXECUTE, *System Management*, 4-37
 - EXIT, *System Management*, 4-38
 - files, *System Management*, 4-6
 - FILES11, *System Management*, 4-39
 - HELP, *System Management*, 4-40
 - in interactive mode, *System Management*, 4-19
 - INTERLEAVE, *System Management*, 4-41
 - LOGFILE, *System Management*, 4-42

IOX

commands (cont'd.)

- parameter
 - by device type, *System Management*, 4-9
 - with FILES11, *System Management*, 4-8
 - with SELECT, *System Management*, 4-9
 - with VERIFY, *System Management*, 4-9
- PARAMETERLIST, *System Management*, 4-44
- parameter list
 - for NFS volumes, *System Management*, 4-9
- PATTERN, *System Management*, 4-48
- PRINTSUMMARY, *System Management*, 4-49
- PROCEED, *System Management*, 4-50
- RANDOM, *System Management*, 4-51
- RANGE, *System Management*, 4-52
- RECORDS, *System Management*, 4-53
- REPORTERRORS YES/NO, *System Management*, 4-54
- RESTART, *System Management*, 4-55
- RETRIES, *System Management*, 4-56
- RUNTIME, *System Management*, 4-57
- SELECT, *System Management*, 4-58
- SPY, *System Management*, 4-60
- START, *System Management*, 4-61
- SUMMARYTIME, *System Management*, 4-62
- syntax, *System Management*, 4-22
- TEMPORARYFILE, *System Management*, 4-63
- VERIFY, *System Management*, 4-64
- VOLUMECHECK, *System Management*, 4-65
- WAIT, *System Management*, 4-66

IOX

commands (cont'd.)

- WRITECHECK, *System Management*, 4-67
- considerations for, *System Management*, 4-1
- controlling with CTRL/C, *System Management*, 4-32
- data
 - compare error report, *System Management*, 4-21
 - pattern checking, *System Management*, 4-28
 - transfer size of, *System Management*, 4-27
- DECtape exercising, *System Management*, 4-2
- defaults
 - changing during task build, *System Management*, 4-22
- device
 - exercising steps, *System Management*, 4-2
 - status display, *System Management*, 4-60
 - testing
 - time of, *System Management*, 4-57
- disk exercising, *System Management*, 4-2
- error messages, *System Management*, 4-68
- execution mode, *System Management*, 4-18
 - entering, *System Management*, 4-18
- exercise parameters
 - general list, *System Management*, 4-8
- exiting, *System Management*, 4-38
- file-structured exercising, *System Management*, 4-3
- increment, *System Management*, 4-5
- indirect command files, *System Management*, 4-6
- installation
 - on RSX-11M, *System Management*, 4-4
 - on RSX-11M-PLUS, *System Management*, 4-4
- interleaving with Executive, *System Management*, 4-66
- interval report output frequency, *System Management*, 4-62

IOX (cont'd.)

- invoking
 - on RSX-11M, *System Management*, 4-5
 - on RSX-11M-PLUS, *System Management*, 4-5
 - when installed, *System Management*, 4-5
 - when not installed, *System Management*, 4-5
 - with an increment, *System Management*, 4-5
 - without an increment, *System Management*, 4-5
- nonfile-structured exercising, *System Management*, 4-3
- output type
 - activity report, *System Management*, 4-20
 - interval report, *System Management*, 4-20
 - summary report, *System Management*, 4-20
- parameter
 - command exercising magnetic tape, *System Management*, 4-12
 - exercising
 - device-dependent exercise, *System Management*, 4-8
 - Files-11 volumes, *System Management*, 4-10
 - NFS volume, *System Management*, 4-15
 - general list of exercise parameters, *System Management*, 4-8
 - overriding default
 - FILES11, *System Management*, 4-39
 - SELECT, *System Management*, 4-58
 - showing default with
 - PARAMETERLIST, *System Management*, 4-44
- parameter command category, *System Management*, 4-3
- pattern
 - altering test, *System Management*, 4-48
 - displaying test, *System Management*, 4-48

IOX (cont'd.)

- restarting, *System Management*, 4-55
 - running steps, *System Management*, 4-1
 - selecting
 - NFS volume, *System Management*, 4-8
 - starting, *System Management*, 4-61
 - task-build file
 - location of, *System Management*, 4-22
 - task termination, *System Management*, 4-18
 - termination, *System Management*, 4-38
 - using PROCEED, *System Management*, 4-50
 - test configuration, *System Management*, 4-29
 - adding units, *System Management*, 4-6
 - displaying, *System Management*, 4-6
 - setting up, *System Management*, 4-6
 - testing
 - removing devices from, *System Management*, 4-35
 - wait-for-event flag, *System Management*, 4-66
 - write-check, *System Management*, 4-67
- IP11 industrial I/O subsystem
- SYSGEN question, *System Generation*, 3-31
- IP11 power fail
- SYSGEN question, *System Generation*, 3-31
- Iprset parameter
- ADSWP: subroutine (K-series), *I/O Drivers*, 23-10
 - CLOCKA: subroutine
 - K-series, *I/O Drivers*, 23-11
 - LADRV, *I/O Drivers*, 22-7
 - CLOCKB: subroutine
 - K-series, *I/O Drivers*, 23-12
 - LADRV, *I/O Drivers*, 22-8
 - DASWP: subroutine (K-series), *I/O Drivers*, 23-15
 - DISWP: subroutine (K-series), *I/O Drivers*, 23-18
 - DOSWP: subroutine (K-series), *I/O Drivers*, 23-19

Iprset parameter (cont'd.)
 GTHIST: subroutine (K-series), *I/O Drivers*, 23-22
 XRATE: subroutine
 K-series, *I/O Drivers*, 23-30
 LADRV, *I/O Drivers*, 22-26
 /IP switch, *Task Builder*, 10-22
 Ipt parameter (UDDRV)
 RCIPT: subroutine, *I/O Drivers*, 16-25
 RDSCS: subroutine, *I/O Drivers*, 16-27
 RDDI: subroutine, *I/O Drivers*, 16-28
 IQ.Q function (disk driver), *I/O Drivers*, 5-8
 IQ.UMD bit
 diagnostic function, *I/O Drivers*, 1-34
 IQ.X function (disk driver), *I/O Drivers*, 5-8
 IRAB pool, *RMS-11 Macro*, 2-5
 Irate parameter
 CLOCKA: subroutine
 K-series, *I/O Drivers*, 23-11
 LADRV, *I/O Drivers*, 22-7
 CLOCKB: subroutine
 K-series, *I/O Drivers*, 23-12
 LADRV, *I/O Drivers*, 22-8
 DRS: subroutine (LSDRV), *I/O Drivers*, 17-16
 HIST: subroutine (LSDRV), *I/O Drivers*, 17-18
 RTS: subroutine (LSDRV), *I/O Drivers*, 17-24
 SDAC: subroutine (LSDRV), *I/O Drivers*, 17-26
 SDO: subroutine (LSDRV), *I/O Drivers*, 17-28
 XRATE: subroutine
 K-series, *I/O Drivers*, 23-30
 LADRV, *I/O Drivers*, 22-26
 Irbuf parameter
 IO.INI function (LADRV), *I/O Drivers*, 22-29
 IRDB: subroutine
 read data from input buffer (LSDRV), *I/O Drivers*, 17-20
 I register, *Debugging*, 2-7, 5-4, 9-10
 Irel parameter
 RELAY: subroutine (LSDRV), *I/O Drivers*, 17-22
 .IRPC directive, *MACRO-11*, 7-18
 .IRP directive, *MACRO-11*, 7-17
 IS.CC status return (TTDRV), *I/O Drivers*, 2-66
 IS.CR status return, *I/O Drivers*, 1-39
 half-duplex, *I/O Drivers*, 3-18
 TTDRV, *I/O Drivers*, 2-66
 VTDRV, *I/O Drivers*, 4-6
 IS.ESC status return, *I/O Drivers*, 1-39
 half-duplex, *I/O Drivers*, 3-18
 VTDRV, *I/O Drivers*, 4-6
 IS.ESQ status return
 half-duplex, *I/O Drivers*, 3-18
 TTDRV, *I/O Drivers*, 2-66
 VTDRV, *I/O Drivers*, 4-6
 IS.PND status return, *I/O Drivers*, 1-40
 AFC11/AD01 converter, *I/O Drivers*, 15-8
 communication driver, *I/O Drivers*, 12-8
 CRDRV, *I/O Drivers*, 11-7
 CTDRV, *I/O Drivers*, 9-4
 disk driver, *I/O Drivers*, 5-9
 DTDRV, *I/O Drivers*, 6-4
 FORTRAN interface value (AFC11/AD01 converter), *I/O Drivers*, 15-9
 half-duplex, *I/O Drivers*, 3-18
 LPDRV, *I/O Drivers*, 10-5
 LSDRV, *I/O Drivers*, 17-29
 PPDRV/PRDRV, *I/O Drivers*, 18-3
 tape driver, *I/O Drivers*, 8-10
 TTDRV, *I/O Drivers*, 2-66
 UDDRV, *I/O Drivers*, 16-31
 UNIBUS switch driver, *I/O Drivers*, 24-7
 IS.RDD status return (disk driver), *I/O Drivers*, 5-10
 IS.SEC status return (TTDRV), *I/O Drivers*, 2-66
 IS.SUC status return
 UNIBUS switch driver, *I/O Drivers*, 24-7
 IS.SUC success return, *I/O Drivers*, 1-37, 1-40
 AFC11/AD01 converter, *I/O Drivers*, 15-8
 communication driver, *I/O Drivers*, 12-8
 CRDRV, *I/O Drivers*, 11-7
 CTDRV, *I/O Drivers*, 9-4
 DDDRV, *I/O Drivers*, 7-5

IS.SUC success return (cont'd.)
 diagnostic success, *I/O Drivers*,
 1-35
 disk driver, *I/O Drivers*, 5-9
 DTDRV, *I/O Drivers*, 6-4
 FORTRAN interface value
 (AFC11/AD01 converter),
 I/O Drivers, 15-9
 GRDRV, *I/O Drivers*, 21-3
 half-duplex, *I/O Drivers*, 3-18
 ICDRV/ISDRV, *I/O Drivers*, 19-12
 IO.CCI function, *I/O Drivers*,
 19-20
 IO.CTI function, *I/O Drivers*,
 19-21
 IO.CTY function, *I/O Drivers*,
 19-23
 IO.DCI function, *I/O Drivers*,
 19-21
 IO.DTI function, *I/O Drivers*,
 19-23
 IO.DTY function, *I/O Drivers*,
 19-24
 IO.FLN function, *I/O Drivers*,
 19-33
 IO.ITI function, *I/O Drivers*,
 19-22
 IO.KIL function, *I/O Drivers*,
 19-33
 IO.LDI function, *I/O Drivers*,
 19-26
 IO.LKE function, *I/O Drivers*,
 19-28
 IO.LTI function, *I/O Drivers*,
 19-26
 IO.LTY function, *I/O Drivers*,
 19-27
 IO.MLO function, *I/O Drivers*,
 19-17
 IO.MSO function, *I/O Drivers*,
 19-16
 IO.NLK function, *I/O Drivers*,
 19-30
 IO.ONL function, *I/O Drivers*,
 19-33
 IO.RAD function, *I/O Drivers*,
 19-29
 IO.RBC function, *I/O Drivers*,
 19-14
 IO.SAO function, *I/O Drivers*,
 19-16
 IO.UDI function, *I/O Drivers*,
 19-30

IS.SUC success return
 ICDRV/ISDRV (cont'd.)
 IO.UER function, *I/O Drivers*,
 19-31
 IO.UTI function, *I/O Drivers*,
 19-31
 IO.UTY function, *I/O Drivers*,
 19-31
 IO.WLB function, *I/O Drivers*,
 19-32
 initialize line
 IO.XIN function, *I/O Drivers*,
 13-11
 load microcode (XEDRV), *I/O*
 Drivers, 13-18
 LPDRV, *I/O Drivers*, 10-5
 LSDRV, *I/O Drivers*, 17-29
 PPDRV/PRDRV, *I/O Drivers*, 18-3
 receive message status (XEDRV),
 I/O Drivers, 13-16
 receiver (LRDRV), *I/O Drivers*,
 14-11
 tape driver, *I/O Drivers*, 8-10
 transmit line message status
 (XEDRV), *I/O Drivers*, 13-13
 transmitter (LRDRV), *I/O Drivers*,
 14-7
 TTDRV, *I/O Drivers*, 2-67
 UDDRV, *I/O Drivers*, 16-31
 VTDRV, *I/O Drivers*, 4-6, 4-8, 4-9
 XEDRV, *I/O Drivers*, 13-5, 13-18
 IS.TMO status return (TTDRV), *I/O*
 Drivers, 2-67
 IS.TNC status return (LRDRV)
 receiver, *I/O Drivers*, 14-11
 transmitter, *I/O Drivers*, 14-7
 Isb parameter
 ADC: subroutine (LSDRV), *I/O*
 Drivers, 17-12
 ADJLPS: subroutine (LSDRV), *I/O*
 Drivers, 17-13
 AIRD/AIRDW subroutine (UDDRV),
 I/O Drivers, 16-18
 AISQ/AISQW subroutine (UDDRV),
 I/O Drivers, 16-19
 AO/AOW subroutine (UDDRV),
 I/O Drivers, 16-20
 ASARLN: subroutine (LSDRV), *I/O*
 Drivers, 17-14
 ASLSLN: subroutine (LSDRV), *I/O*
 Drivers, 17-14
 CTDI: subroutine (UDDRV), *I/O*
 Drivers, 16-21

Isb parameter (cont'd.)

CTTI: subroutine (UDDRV), *I/O Drivers*, 16-22
DFTI: subroutine (UDDRV), *I/O Drivers*, 16-23
DI/DIW: subroutine (UDDRV), *I/O Drivers*, 16-24
DOL/DOLW: subroutine (UDDRV), *I/O Drivers*, 16-24
DOM/DOMW: subroutine (UDDRV), *I/O Drivers*, 16-25
DRS: subroutine (LSDRV), *I/O Drivers*, 17-17
DSDI: subroutine (UDDRV), *I/O Drivers*, 16-23
general (TTDRV), *I/O Drivers*, 2-10
HIST: subroutine (LSDRV), *I/O Drivers*, 17-18
I/O completion, *I/O Drivers*, 1-36
IDIR: subroutine (LSDRV), *I/O Drivers*, 17-19
IDOR: subroutine (LSDRV), *I/O Drivers*, 17-20
IO.ATA function (TTDRV), *I/O Drivers*, 2-20
IO.ATT function, *I/O Drivers*, 1-27
IO.CCO function (TTDRV), *I/O Drivers*, 2-23
IO.DET function, *I/O Drivers*, 1-28
IO.EIO function (TTDRV), *I/O Drivers*, 2-26
IO.GTS function (TTDRV), *I/O Drivers*, 2-33
IO.HNG function (TTDRV), *I/O Drivers*, 2-35
IO.KIL function, *I/O Drivers*, 1-29
IO.RAL function (TTDRV), *I/O Drivers*, 2-36
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-38
IO.RPR function (TTDRV), *I/O Drivers*, 2-40
IO.RST function (TTDRV), *I/O Drivers*, 2-43
IO.RTT function (TTDRV), *I/O Drivers*, 2-45
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-59
IO.WAL function (TTDRV), *I/O Drivers*, 2-47
IO.WBT function (TTDRV), *I/O Drivers*, 2-49

Isb parameter (cont'd.)

IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
LED: subroutine (LSDRV), *I/O Drivers*, 17-21
omitted, *I/O Drivers*, 1-39
QIO\$ basic syntax, *I/O Drivers*, 1-8
RCIPT: subroutine (UDDRV), *I/O Drivers*, 16-26
RELAY: subroutine (LSDRV), *I/O Drivers*, 17-22
RSTI: subroutine (UDDRV), *I/O Drivers*, 16-30
RTS: subroutine (LSDRV), *I/O Drivers*, 17-24
SCTI: subroutine (UDDRV), *I/O Drivers*, 16-31
SDAC: subroutine (LSDRV), *I/O Drivers*, 17-26
SDO: subroutine (LSDRV), *I/O Drivers*, 17-28
SF.GMC function (TTDRV), *I/O Drivers*, 2-51
ISI field in RAB, *RMS-11 Macro*, 4-2
CONNECT operation, *RMS-11 Macro*, 5-7
DELETE operation, *RMS-11 Macro*, 5-25
DISCONNECT operation, *RMS-11 Macro*, 5-27
FIND operation, *RMS-11 Macro*, 5-49, 5-51, 5-54
FLUSH operation, *RMS-11 Macro*, 5-56
FREE operation, *RMS-11 Macro*, 5-58
GET operation, *RMS-11 Macro*, 5-60, 5-63, 5-67
NXTVOL operation, *RMS-11 Macro*, 5-70
offset, *RMS-11 Macro*, 6-115
PUT operation, *RMS-11 Macro*, 5-91, 5-95
READ operation, *RMS-11 Macro*, 5-98, 5-100
REWIND operation, *RMS-11 Macro*, 5-114
SPACE operation, *RMS-11 Macro*, 5-120
summary, *RMS-11 Macro*, 6-121
TRUNCATE operation, *RMS-11 Macro*, 5-122
UPDATE operation, *RMS-11 Macro*, 5-124

ISI field in RAB (cont'd.)
 WAIT operation, *RMS-11 Macro*,
 5-126
 WRITE operation, *RMS-11 Macro*,
 5-127, 5-129
 I-space
 See Instruction space
 ISR, *Executive*, 5-21
 Istart parameter (LSDRV)
 DRS: subroutine, *I/O Drivers*,
 17-17
 HIST: subroutine, *I/O Drivers*,
 17-19
 RTS: subroutine, *I/O Drivers*,
 17-24
 SDAC: subroutine, *I/O Drivers*,
 17-26
 SDO: subroutine, *I/O Drivers*,
 17-28
 ISTAT\$ macro, *I/O Operations*, 7-1,
 7-2
 Istate parameter
 RELAY: subroutine (LSDRV), *I/O*
 Drivers, 17-22
 Istat parameter
 IBFSTS: subroutine
 K-series, *I/O Drivers*, 23-23
 LADRV, *I/O Drivers*, 22-17
 Istop parameter (LSDRV)
 DRS: subroutine, *I/O Drivers*,
 17-17
 HIST: subroutine, *I/O Drivers*,
 17-19
 RTS: subroutine, *I/O Drivers*,
 17-24
 SDAC: subroutine, *I/O Drivers*,
 17-27
 SDO: subroutine, *I/O Drivers*,
 17-28
 Ist parameter
 RDWD: subroutine (UDDRV), *I/O*
 Drivers, 16-30
 Isw parameter
 ASUDLN: subroutine (UDDRV),
 I/O Drivers, 16-20
 I symbolic argument, *MACRO-11*,
 6-41
 Isz parameter (UDDRV)
 CTDI: subroutine, *I/O Drivers*,
 16-21
 CTTI: subroutine, *I/O Drivers*,
 16-22
 ITBDF\$, *CDA*, B-26 *Writing I/O*
 Driver, A-31
 Item terminator, *MACRO-11*, 3-2
 Itim parameter
 ICLOKB: subroutine (K-series), *I/O*
 Drivers, 23-23
 Itm parameter
 RDTI: subroutine (UDDRV), *I/O*
 Drivers, 16-29
 Iunit parameter
 DIGO: subroutine (K-series), *I/O*
 Drivers, 23-16
 DINP: subroutine (K-series), *I/O*
 Drivers, 23-16
 DISWP: subroutine
 K-series, *I/O Drivers*, 23-18
 LADRV, *I/O Drivers*, 22-14
 DOSWP: subroutine
 K-series, *I/O Drivers*, 23-20
 LADRV, *I/O Drivers*, 22-16
 DOUT: subroutine (K-series), *I/O*
 Drivers, 23-20
 LAMSKS: subroutine (LADRV), *I/O*
 Drivers, 22-21
 SCOPE: subroutine (K-series), *I/O*
 Drivers, 23-27
 Iun parameter
 ASARLN: subroutine (LSDRV), *I/O*
 Drivers, 17-14
 ASLSLN: subroutine (LSDRV), *I/O*
 Drivers, 17-14
 ASUDLN: subroutine (UDDRV),
 I/O Drivers, 16-20
 Ival parameter
 ADINP: subroutine (K-series), *I/O*
 Drivers, 23-8
 CVADF: subroutine
 K-series, *I/O Drivers*, 23-13
 LADRV, *I/O Drivers*, 22-9
 CVSWG: subroutine (LSDRV), *I/O*
 Drivers, 17-15
 FLT16: subroutine
 K-series, *I/O Drivers*, 23-21
 LADRV, *I/O Drivers*, 22-17
 IDIR: subroutine (LSDRV), *I/O*
 Drivers, 17-19
 IRDB: subroutine (LSDRV), *I/O*
 Drivers, 17-21
 LED: subroutine (LSDRV), *I/O*
 Drivers, 17-21
 PUTD: subroutine (LSDRV), *I/O*
 Drivers, 17-22
 RDCS: subroutine (UDDRV), *I/O*
 Drivers, 16-27

Ival parameter (cont'd.)
RDDI: subroutine (UDDRV), *I/O Drivers*, 16-28

SCTI: subroutine (UDDRV), *I/O Drivers*, 16-31

Iv parameter
CTTI: subroutine (UDDRV), *I/O Drivers*, 16-22

Ivrn parameter (UDDRV)
RDTI: subroutine, *I/O Drivers*, 16-29
RDWD: subroutine, *I/O Drivers*, 16-30

Iwhen parameter
STPSWP: subroutine
K-series, *I/O Drivers*, 23-29
LADRV, *I/O Drivers*, 22-25

IWTBUF: subroutine
wait for buffer
K-series, *I/O Drivers*, 23-25
LADRV, *I/O Drivers*, 22-19

J

Job
deleting, *Batch and Queue*, 2-10
holding, *Batch and Queue*, 2-1
modifying, *Batch and Queue*, 2-1
releasing, *Batch and Queue*, 2-1
/JOB_PAGE qualifier
PRINT command, *Batch and Queue*, 2-6

/JOBCOUNT job qualifier
SET QUEUE command, *Batch and Queue*, 2-20
/JOBCOUNT qualifier
PRINT command, *Batch and Queue*, 2-3

Jobname= switch
PRI command, *Batch and Queue*, 2-4

Jobname parameter
DELETE command, *Batch and Queue*, 2-10

Jobname switch
QUE /LI command, *Batch and Queue*, 2-16

/JO switch
PRI command, *Batch and Queue*, 2-6

K

K.STS, *Writing I/O Driver*, 4-48

K.xpxx offsets
in KRB, *Writing I/O Driver*, 4-47, 4-48, 4-50, 4-51, 4-52
KBF field in RAB, *RMS-11 Macro*, 4-5
FIND operation, *RMS-11 Macro*, 5-52
GET operation, *RMS-11 Macro*, 5-63
offset, *RMS-11 Macro*, 6-115
PUT operation, *RMS-11 Macro*, 5-96
summary, *RMS-11 Macro*, 6-122

K command, *Debugging*, 2-9, 7-1, 9-12
ZAP utility, *Utilities*, 15-16
KDA50 disk controller, *I/O Drivers*, 5-4

/KDS switch, *CDA*, 2-5, 2-6

Kernel data space
dump, *CDA*, 3-53
switch

See /KDS switch
Kernel instruction space
dump, *CDA*, 3-53
switch

See /KIS switch
Kernel Mapping Register switch
See /KMR switch

Kernel stack dump, *CDA*, 3-1, 3-5
Key, *RMS-11 Introduction*, 3-6 *RMS-11 User's Guide*, 1-5, 1-19, 6-2
alternate, *RMS-11 Introduction*, 3-7
RMS-11 User's Guide, 1-7, 1-11

buffer address
See KBF field in RAB

buffer size
See KSZ field in RAB

changeable, *RMS-11 Introduction*, 3-10
See also XB\$CHG mask in FLG field

characteristics, *RMS-11 User's Guide*, 6-8

See also FLG field in KEY block
changeable, *RMS-11 User's Guide*, 6-9

duplicates, *RMS-11 User's Guide*, 6-8

null, *RMS-11 User's Guide*, 6-10

data type, *RMS-11 Introduction*, 3-7
RMS-11 User's Guide, 6-3

See also DTP field in KEY block
2-byte signed integer, *RMS-11 User's Guide*, 6-3

Key

- data type (cont'd.)
 - 4-byte signed integer, *RMS-11 User's Guide*, 6-4
 - 2-byte unsigned binary, *RMS-11 User's Guide*, 6-5
 - 4-byte unsigned binary, *RMS-11 User's Guide*, 6-5
 - packed decimal, *RMS-11 User's Guide*, 6-6
 - string, *RMS-11 User's Guide*, 6-3
- duplicate, *RMS-11 Introduction*, 3-10
 - See also XB\$DUP mask in FLG field
- match criterion, *RMS-11 Introduction*, 3-12
 - See also RB\$KGE mask in ROP field
 - See also RB\$KGT mask in ROP field
- name
 - See KNM field in KEY block
- null, *RMS-11 Introduction*, 3-10
 - See also NUL field in KEY block
- number of, *RMS-11 User's Guide*, 6-2
- position, *RMS-11 User's Guide*, 6-7
- primary, *RMS-11 Introduction*, 3-7
 - RMS-11 User's Guide*, 1-7, 1-11
- reference
 - See KRF field in RAB
- RMSDES utility
 - numbering, *RMS-11 Utilities*, 2-8, 2-28, 2-38
- segment, *RMS-11 Introduction*, 3-10
 - RMS-11 User's Guide*, 6-7
- segment, position
 - See POS field in KEY block
- segment, size
 - See SIZ field in KEY block
- segment count
 - See NSG field in KEY block
- size, *RMS-11 User's Guide*, 6-6
 - See also TKS field in KEY block
- special
 - table (TTDRV), *I/O Drivers*, 2-71
- special (TTDRV), *I/O Drivers*, 2-68
- XAB
 - See KEY block

KEY block, *RMS-11 Introduction*, 4-8

KEY block (cont'd.)

- chaining to FAB, *RMS-11 Macro*, 2-12, 2-13
- declaring, *RMS-11 Macro*, 2-8
- initializing, *RMS-11 Macro*, 2-9
- summary, *RMS-11 Macro*, 6-67

Keyboard, *Command Language*, 3-13 to 3-18

- keys table, *Command Language*, 3-16 to 3-18
- VT200-series terminal, *Command Language*, 3-1

Key buffer pool, *RMS-11 Macro*, 2-6

Key information

- RMSDSP utility
 - displaying, *RMS-11 Utilities*, 5-4

Key name

- RMSCNV utility, *RMS-11 Utilities*, 4-10

Key of reference

- RMSCNV utility, *RMS-11 Utilities*, 4-10, 4-16
- RMSIFL utility, *RMS-11 Utilities*, 3-8, 3-9

Keypad, *Command Language*, 3-18 to 3-19

- alternate, *Command Language*, 3-18 to 3-19
- editing
 - VT100-series terminal, *Command Language*, 3-18
 - VT200-series terminal, *Command Language*, 3-19

Keypad (EDT), *Introduction*, 2-3, 2-3 fig.

Key record access, *RMS-11 Introduction*, 3-12

- See also RB\$KEY code in RAC field to indexed files, *RMS-11 User's Guide*, 5-7, 5-9
- to relative files, *RMS-11 User's Guide*, 4-1
- to sequential files, *RMS-11 User's Guide*, 3-2

Keyword

- See also individual keyword entries
- function, *MCR*, 1-4
- position, *MCR*, 1-4
- syntax, *MCR*, 1-4

Keyword recognition, transition table, *I/O Operations*, 7-9

KILL command

- EDI utility, *Utilities*, 2-34

- /KIS switch, CDA, 2-5, 2-6
- KMC-11 auxiliary processor, *I/O Drivers*, 10-2
- /KMR switch, CDA, 2-10, 2-11
- /KNLD keyword
 - OPENREGISTER command, *MCR*, 3-166
- /KNL keyword
 - OPENREGISTER command, *MCR*, 3-166
- KNM field in KEY block
 - CREATE operation, *RMS-11 Macro*, 5-18
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - offset, *RMS-11 Macro*, 6-68
 - OPEN operation, *RMS-11 Macro*, 5-74
 - summary, *RMS-11 Macro*, 6-82
- /KN switch
 - RMSCNV utility, *RMS-11 Utilities*, 4-10, 4-16
- Kount parameter
 - DIGO: subroutine (K-series), *I/O Drivers*, 23-16
 - GTHIST: subroutine (K-series), *I/O Drivers*, 23-22
- KRB, *Writing I/O Driver*, 1-4, 1-13
 - access queue in the, *Writing I/O Driver*, 2-2, 2-15
 - combined with SCB, *Writing I/O Driver*, 2-2, 4-53
 - layout, *Writing I/O Driver*, 4-54
 - composite arrangement, *Writing I/O Driver*, 2-15
 - configuration status in the, *Writing I/O Driver*, 2-2
 - contiguous with SCB, *Writing I/O Driver*, 2-7, 4-3
 - controller status register, *Writing I/O Driver*, 4-50
 - defining start of addresses, *Writing I/O Driver*, 4-3
 - definition, *Writing I/O Driver*, 1-4
 - details, *Writing I/O Driver*, 4-45, 4-47 to 4-53
 - format, *Writing I/O Driver*, 4-47 to 4-53
 - layout, *Writing I/O Driver*, 4-46
 - overview, *Writing I/O Driver*, 2-1, 2-2
 - subsets, *Writing I/O Driver*, 1-13

- KRB (cont'd.)
 - use in determining interrupting unit, *Writing I/O Driver*, 2-2
- KRB1, *Writing I/O Driver*, 1-13
- KRBDF\$, CDA, C-41 *Writing I/O Driver*, A-32, A-33
- KRF field in RAB, *RMS-11 Macro*, 4-5
 - CONNECT operation, *RMS-11 Macro*, 5-7
 - FIND operation, *RMS-11 Macro*, 5-51
 - GET operation, *RMS-11 Macro*, 5-63
 - offset, *RMS-11 Macro*, 6-115
 - REWIND operation, *RMS-11 Macro*, 5-114
 - summary, *RMS-11 Macro*, 6-123
- /KR switch
 - RMSCNV utility, *RMS-11 Utilities*, 4-10, 4-16
 - RMSIFL utility, *RMS-11 Utilities*, 3-8, 3-9
- K-Series
 - on pregenerated kit, *System Generation*, 5-46
- K-series
 - supported hardware, *I/O Drivers*, 23-1
- KSR-33/35 Teletypewriter, *I/O Drivers*, 3-2
- Ksubr parameter
 - CALLS macro (K-series), *I/O Drivers*, 23-31
- k symbol, *Debugging*, 2-1
- KSZ field in RAB, *RMS-11 Macro*, 4-5, 4-6
 - FIND operation, *RMS-11 Macro*, 5-52
 - GET operation, *RMS-11 Macro*, 5-63
 - offset, *RMS-11 Macro*, 6-115
 - PUT operation, *RMS-11 Macro*, 5-96
 - summary, *RMS-11 Macro*, 6-124
- KW11-K dual programmable real-time clock, *I/O Drivers*, 23-3

L

- L.STS, *Writing I/O Driver*, 4-58
- L.xpdx offsets
 - in CTB, *Writing I/O Driver*, 4-55, 4-56, 4-58, 4-59
- LA100 DECprinter, *I/O Drivers*, 2-4

LA120 DECwriter, *I/O Drivers*, 2-4, 3-3
 LA12 portable terminal, *I/O Drivers*, 2-4
 LA12 teletypewriter, *I/O Drivers*, 2-4
 LA180 DECprinter, *I/O Drivers*, 10-3
 LA180 line printer controller
 SYSGEN question, *System Generation*, 3-51
 LA180S DECprinter, *I/O Drivers*, 2-4, 3-3
 LA30 DECwriter, *I/O Drivers*, 2-4, 3-2
 LA30-P, *I/O Drivers*, 3-30
 LA34 DECwriter, *I/O Drivers*, 2-4
 LA36 DECwriter, *I/O Drivers*, 2-4, 3-2
 LA36 terminal, *Introduction*, 1-1 fig., 1-2
 LA38 DECwriter, *I/O Drivers*, 2-4
 LA50 personal printer, *I/O Drivers*, 2-5
 Label, *Indirect*, 1-5 RMS-11
 Introduction, 2-5
 block, *Task Builder*, 2-8
 group, *Task Builder*, B-1
 branching to, *Indirect*, 2-59
 defining, *Indirect*, 2-31
 direct-access, *Indirect*, 2-31
 field, *MACRO-11*, 2-1, 2-2, 2-3
 legal character in, *MACRO-11*, 2-3
 multiple definition, *MACRO-11*, 2-3
 terminator, *MACRO-11*, 3-1
 /LABEL keyword
 MOUNT command (MCR), *MCR*, 3-149
 Labels
 Indirect, *Introduction*, 4-3
 Laboratory device, *Command Language*, 5-5
 Laboratory peripheral (K-series), *I/O Drivers*, 23-1
 Laboratory peripheral accelerator driver (LADRV), *I/O Drivers*, 22-1
 Laboratory peripheral system (LPS11)
 See LSDRV
 LAINIT
 microcode loader (LADRV), *I/O Drivers*, 22-34
 Lamskb parameter
 LAMSKS: subroutine (LADRV), *I/O Drivers*, 22-20

Lamskb parameter
 SETIBF: subroutine
 K-series, *I/O Drivers*, 23-29
 LADRV, *I/O Drivers*, 22-24
 LAMSKS: subroutine
 set masks buffer (LADRV), *I/O Drivers*, 22-20
 LAN field in KEY block
 CREATE operation, *RMS-11 Macro*, 5-19
 DISPLAY operation, *RMS-11 Macro*, 5-31
 offset, *RMS-11 Macro*, 6-67
 OPEN operation, *RMS-11 Macro*, 5-80
 summary, *RMS-11 Macro*, 6-83
 Language
 assembly, *Program Development*, 1-4 to 1-5
 See also *MACRO-11*
 high-level
 overlay program, *Task Builder*, 3-40
 Latch
 unlatch fields
 DOL/DOLW: subroutine (UDDRV), *I/O Drivers*, 16-24
 Latching digital output (UDDRV), *I/O Drivers*, 16-8
 LAT terminal server
 SYSGEN question, *System Generation*, 3-26
 LA-type device
 SYSGEN question, *System Generation*, 3-55
 LB:, *Command Language*, 5-6, 5-7
 MCR, 2-7, 2-11, 3-35, 3-188
 LBLDF\$ macro, *Task Builder*, B-1
 LBN, *RMS-11 Introduction*, 2-4
 RMS-11 User's Guide, 8-2 *System Management*, 5-2, 10-31 *Writing I/O Driver*, 1-15
 See also *Logical Block Number*
 See also *Placement control*
 Lbn parameter
 device-specific function
 DDDRV, *I/O Drivers*, 7-4
 DTDRV, *I/O Drivers*, 6-3
 standard function
 DDDRV, *I/O Drivers*, 7-3
 DTDRV, *I/O Drivers*, 6-3

LBR

object module library, *Program Development*, 6-4 to 6-6

LBR utility, *Program Development*, 1-9

adding a module to a library,
Program Development, 6-9,
6-10

combining library function, *Utilities*,
10-32

command line, *Utilities*, 10-8

/COMPRESS, *Program Development*,
6-10

/CR, *Program Development*, 6-2,
6-5

/CREATE, *Program Development*,
6-1, 6-4, 6-5

default, *Utilities*, 10-8

efficiency, *Program Development*,
1-9

error message, *Utilities*, 10-33

/FULL, *Program Development*, 6-11

/INSERT, *Program Development*,
6-9, 6-10

LBR command

MCR, *Program Development*,
1-9, 6-2

LBR command line

device-level module, *Error Logging*, 4-37

DEVSM1, *Error Logging*, 4-36

/LE, *Program Development*, 6-11,
6-12

LIBRARY command

DCL, *Program Development*,
1-9, 6-1

library file

creating, *Utilities*, 10-12

deleting, *Utilities*, 10-13

format, *Utilities*, 10-2

inserting module, *Utilities*,
10-20

listing, *Utilities*, 10-21

replacing module, *Utilities*,
10-23

spooling, *Utilities*, 10-29

/LIST, *Program Development*, 6-9,
6-11

listing information, *Program Development*, 6-11, 6-12

/MACRO, *Program Development*,
6-1, 6-2

macro library, *Program Development*,
6-1, 6-2, 6-3

LBR utility (cont'd.)

module name requirement, *Error Logging*, 4-17

/NAMES, *Program Development*,
6-11

/OBJECT, *Program Development*,
6-2, 6-4, 6-5

.OLB file type, *Program Development*, 6-4

/REPLACE, *Program Development*,
6-9, 6-10

replacing a module in a library,
Program Development, 6-10,
6-11

restriction, *Utilities*, 10-8

/RP, *Program Development*, 6-10,
6-11

/-SP, *Program Development*, 6-11

switch, *Utilities*, 10-9

universal library

replacing module, *Utilities*,
10-27

universal library file

inserting module, *Utilities*,
10-20

LBR utility command

MCR, *Program Development*, 6-2

/LB switch, *Task Builder*, 10-23, 10-24

DMP utility, *Utilities*, 11-6

Indirect, *Indirect*, 2-28

Lbuf parameter

ADSWP: subroutine

K-series, *I/O Drivers*, 23-9

LADRV, *I/O Drivers*, 22-4

DASWP: subroutine

K-series, *I/O Drivers*, 23-14

LADRV, *I/O Drivers*, 22-9

DISWP: subroutine

K-series, *I/O Drivers*, 23-17

LADRV, *I/O Drivers*, 22-12

DOSWP: subroutine

K-series, *I/O Drivers*, 23-19

LADRV, *I/O Drivers*, 22-14

GTHIST: subroutine (K-series), *I/O Drivers*, 23-21

LCBDF\$, *CDA*, B-27, C-43 *Writing I/O Driver*, A-34

LC command

EDI utility, *Utilities*, 2-35

LCH field in FAB, *RMS-11 Macro*, 3-2

CREATE operation, *RMS-11 Macro*,
5-13

ENTER operation, *RMS-11 Macro*,
5-36

- LCH field in FAB (cont'd.)
 - ERASE operation, *RMS-11 Macro*, 5-42
 - offset, *RMS-11 Macro*, 6-24
 - OPEN operation, *RMS-11 Macro*, 5-74
 - PARSE operation, *RMS-11 Macro*, 5-87
 - REMOVE operation, *RMS-11 Macro*, 5-104
 - RENAME operation, *RMS-11 Macro*, 5-110
 - SEARCH operation, *RMS-11 Macro*, 5-117
 - summary, *RMS-11 Macro*, 6-53
- \$LCKPG (Lock page), *System Library*, 8-30
- LCL symbolic argument, *MACRO-11*, 6-41
- LCM symbolic argument, *MACRO-11*, 6-19
- L command, *Debugging*, 2-10, 6-4, 9-13
- /LC switch
 - DMP utility, *Utilities*, 11-6
- LC symbolic argument, *MACRO-11*, 6-19
- LD\$xx symbol, *Writing I/O Driver*, 4-9
- Ldelay parameter
 - ADSWP: subroutine
 - K-series, *I/O Drivers*, 23-10
 - LADRV, *I/O Drivers*, 22-6
 - DASWP: subroutine
 - K-series, *I/O Drivers*, 23-15
 - LADRV, *I/O Drivers*, 22-11
 - DISWP: subroutine
 - K-series, *I/O Drivers*, 23-18
 - DISWP: subroutine (LADRV), *I/O Drivers*, 22-13
 - DOSWP: subroutine
 - K-series, *I/O Drivers*, 23-20
 - LADRV, *I/O Drivers*, 22-16
- /LD switch
 - PIP utility, *Utilities*, 3-17
- LD symbolic argument, *MACRO-11*, 6-12
- LEAVE statement, *Error Logging*, 5-35
- LE condition test argument, *MACRO-11*, 6-51
- LED: subroutine
 - display in LED lights (LSDRV), *I/O Drivers*, 17-21
- Left-angle bracket command (<), *Debugging*, 2-6, 4-5, 9-9
- Legal function mask
 - details, *Writing I/O Driver*, 4-19, 4-20
- /LE job switch
 - QUE /MOD command, *Batch and Queue*, 2-20
- /LENGTH job qualifier
 - SET QUEUE command, *Batch and Queue*, 2-20
- /LENGTH qualifier
 - BRU utility, *Utilities*, 7-18
 - PRINT command, *Batch and Queue*, 2-5
- L error, *MACRO-11*, 2-1
 - summary, *MACRO-11*, D-4
- /LE switch
 - LBR utility, *Utilities*, 10-21
 - PRI command, *Batch and Queue*, 2-5
- Level
 - indexed files, *RMS-11 User's Guide*, 5-4
 - data, *RMS-11 User's Guide*, 5-5
 - level 0, alternate indexes, *RMS-11 User's Guide*, 5-5
 - level 0, primary indexes, *RMS-11 User's Guide*, 5-5
- LEVEL1_INDEX_AREA attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-41
- Level count
 - listing, *MACRO-11*, 6-9, 6-10
- Lexical conditionals, *Error Logging*, 5-36
- /LI:P switch
 - QUE /LI command, *Batch and Queue*, 2-15 to 2-16
- LIBR
 - linking to region, *Task Builder*, 5-15
 - option, *Task Builder*, 12-12, 12-13, 12-24
 - shared region use, *Task Builder*, 5-15
- Librarian Utility Program
 - See LBR utility
- Library, *Command Language*, 6-38 to 6-40
 - See also Macro, Object, OTS
 - autoloadable
 - internal symbol, *Task Builder*, A-27

Library

- autoloadable (cont'd.)
 - symbol, *Task Builder*, A-26
- cluster, *Task Builder*, 5-44
 - building, *Task Builder*, 5-45, 5-49 to 5-53
 - building rule 1: overlay, *Task Builder*, 5-45
 - building rule 2: reference, *Task Builder*, 5-46
 - building rule 3: .STB file, *Task Builder*, 5-47
 - building rule 4: stack, *Task Builder*, 5-48
 - building rule 5: PIC, *Task Builder*, 5-48
 - building rule 6: trap, *Task Builder*, 5-48
 - building rule summary, *Task Builder*, 5-45
 - example, *Task Builder*, 5-49
 - overlay description, *Task Builder*, 5-52, 5-53
 - overlay run-time support, *Task Builder*, 5-53, 5-54
 - resolving interlibrary reference, *Task Builder*, 5-52
- converting SCAL to CSM, *Task Builder*, 8-19
- CSM
 - use of CMPRT option, *Task Builder*, 8-8
 - use of GBLXCL option, *Task Builder*, 8-8, 8-9, 8-17
 - use of RESSUP option, *Task Builder*, 8-9, 8-18, 8-19, 8-20
 - use of SUPLIB option, *Task Builder*, 8-9, 8-19
- declaring, *Task Builder*, 10-23, 11-39
- default
 - controlling symbol search, *Task Builder*, 10-15, 10-19, 11-27, 11-33
 - global symbol resolution, *Task Builder*, 3-18
 - specifying, *Task Builder*, 10-15, 11-27
 - system search
 - TKB, *Program Development*, 4-2
- DIGITAL-supplied, *Program Development*, 1-9

Library (cont'd.)

- directory, MCR, 3-117, 3-182
- extending, *Task Builder*, 10-17
- F4PRES
 - building, *Task Builder*, 5-56
- FCSRES
 - non-memory-resident, *Task Builder*, 5-56
 - overlaid, *Task Builder*, 5-55
 - task linking alternatives, *Task Builder*, 5-57, 5-58, 5-59
- file
 - declaring, *Task Builder*, 10-23, 11-39
- linking
 - CLSTR option, *Task Builder*, 12-9, 12-10
 - resident to supervisor mode, *Task Builder*, 8-20
- macro, *Command Language*, 6-40
 - Program Development*, 6-1 to 6-3
- maintenance, *Program Development*, 6-10, 6-11
- modules
 - .FCTR directive, *Task Builder*, 3-26
- object module, *Command Language*, 6-39
 - Program Development*, 6-4 to 6-6
 - designating in TKB, *Program Development*, 6-6 to 6-9
 - placing in overlay structure, *Task Builder*, 10-24, 11-39
 - system, *Program Development*, 1-11
 - using to resolve undefined global symbols, *Program Development*, 6-8, 6-9
- obtaining information about a user, *Program Development*, 6-11, 6-12
- OTS, *Program Development*, 7-2
- overlay
 - high-level language, *Task Builder*, 3-40
- region, *Task Builder*, 2-19
 - specifying, *Task Builder*, 10-25
- relocation
 - resident, *Task Builder*, A-23
- resident, *Task Builder*, 5-1, 5-3
 - building and linking, *Task Builder*, 5-33 to 5-39

Library

- resident (cont'd.)
 - data in task image, *Task Builder*, B-4, B-5, B-6
 - declaring, *Task Builder*, 12-12, 12-24, 12-30
 - installing, *MCR*, 3-116
 - label block 0, *Task Builder*, B-7
 - label block 1, *Task Builder*, B-9
 - label block 2, *Task Builder*, B-9
 - label block 3, *Task Builder*, B-9
 - name block data, *Task Builder*, B-8
 - relocation, *Task Builder*, A-23
 - search, *Task Builder*, 10-23, 11-39
- resolving references
 - .FCTR directive, *Task Builder*, 3-26
- restriction in I- and D-space task, *Task Builder*, 7-8
- search
 - MACRO-11, *Program Development*, 1-5, 1-10, 2-7
 - TKB, *Program Development*, 1-11
- specifying, *Task Builder*, 11-66
- squeezing, *Program Development*, 6-3
- supervisor mode, *Task Builder*, 2-23
 - building, *Task Builder*, 8-7
 - building the referencing task, *Task Builder*, 8-7
 - building with relevant option, *Task Builder*, 8-4, 8-7
 - completion routine, *Task Builder*, 8-1, 8-2, 8-8, 8-21
 - converting SCAL to CSM, *Task Builder*, 8-19
 - data, *Task Builder*, 8-4
 - definition, *Task Builder*, 8-1
 - description, *Task Builder*, 8-1 to 8-21
 - example, *Task Builder*, 8-10 to 8-16
 - linking, *Task Builder*, 8-9, 8-20
 - linking a resident, *Task Builder*, 8-20
 - linking task, *Task Builder*, 8-9, 8-10, 8-11
 - linking to SYSLIB, *Task Builder*, 8-2, 8-9, 8-10, 8-11, 8-14 to 8-18

Library

- supervisor mode (cont'd.)
 - linking with relevant option, *Task Builder*, 8-4, 8-8, 8-9
 - mapping, *Task Builder*, 8-2
 - conventional task, *Task Builder*, 8-3, 8-5
 - with I- and D-space task, *Task Builder*, 8-6
 - mode switching, *Task Builder*, 8-1, 8-7
 - comparison, *Task Builder*, 8-1
 - method, *Task Builder*, 8-1, 8-19
 - vector, *Task Builder*, 8-1
 - \$MSDS directive, *Task Builder*, 8-2
 - \$MSDS directive restriction, *Task Builder*, 8-2
 - multiple, *Task Builder*, 8-20
 - overlaid, *Task Builder*, 8-21
 - overlay restriction, *Task Builder*, 8-21
 - parameter passing, *Task Builder*, 8-2
 - restrictions on content, *Task Builder*, 8-2
 - using as resident, *Task Builder*, 8-20
 - using system supplied vector, *Task Builder*, 8-19
 - with I- and D-space task, *Task Builder*, 8-4
 - your own completion routine, *Task Builder*, 8-21
 - your own vector, *Task Builder*, 8-21
- SYSLIB
 - replacing as default, *Task Builder*, 10-23, 11-39
- system
 - macro (RSXMAC.SML), *Program Development*, 1-5
 - type of FCSRES, *Task Builder*, 5-55
 - universal, *Command Language*, 6-40
- LIBRARY command
 - LIBRARY/REMOVE, *Command Language*, 6-54
- LIBRARY command, *Command Language*, 6-38 to 6-62, 9-19
- DCL, *Program Development*, 1-9, 6-1
- See also LBR utility

LIBRARY command (cont'd.)
 error messages, *Command Language*,
 6-57 to 6-62
 LIBRARY/COMPRESS, *Command Language*, 6-40 to 6-41, 9-20
 LIBRARY/CREATE, *Command Language*, 6-42 to 6-44, 9-20
 LIBRARY/DELETE, *Command Language*, 6-45 to 6-46, 9-20
 LIBRARY/EXTRACT, *Command Language*, 6-46 to 6-47, 9-20
 LIBRARY/INSERT, *Command Language*, 6-47 to 6-49, 9-21
 LIBRARY/LIST, *Command Language*, 6-50 to 6-54, 9-21
 LIBRARY/REMOVE, *Command Language*, 9-21
 LIBRARY/REPLACE, *Command Language*, 6-55 to 6-56, 9-21
 /SQUEEZE qualifier, *Command Language*, 6-44
 .LIBRARY directive, *MACRO-11*, 6-57
 Library directory, *Command Language*, 7-28 to 7-32
 displaying, *Command Language*, 8-12
 setting, *Command Language*, 8-11
 Library file
 See also LBR utility
 macro
 force search of, *MACRO-11*, 6-20
 including in assembly, *MACRO-11*, 8-6
 Library files, *Command Language*, 6-4 to 6-5
 Library option, *FCS, I/O Operations*, K-1
 /LIBRARY qualifier, *MACRO-11*, 8-12
 Task Builder, 11-39 to 11-40
 Library routine
 communication between, *System Library*, 1-1 to 1-2
 placement of, *System Library*, 1-2
 search of, *System Library*, 1-2
 storage, *System Library*, 1-2
 LIBUIC
 See Library directory
 /LIBUIC keyword
 SET command (MCR), *MCR*, 3-225
 SET command (VMR), *System Management*, 10-60
 LIBUIC symbol (RSX-11M-PLUS only), *Indirect*, 2-20

LI command
 EDI utility, *Utilities*, 2-35
 .LIMIT directive, *MACRO-11*, 6-39
 Limit register, *Debugging*, 5-3
 /LIMIT switch, *CDA*, 2-10, 2-11
 Limit switch, *Error Logging*, 2-3, 2-6
 /LIM switch, *Error Logging*, 2-3, 2-6
 Line
 dial-up, *MCR*, 3-247
 local, *MCR*, 3-248
 displaying, *MCR*, 3-248
 multiple
 TKB input, *Task Builder*, 1-7, 1-8
 remote, *MCR*, 3-202, 3-247
 terminal
 parallel processing, *MCR*, 3-252
 serial processing, *MCR*, 3-251
 TKB input, *Task Builder*, 1-7
 LINE CHANGE command
 EDI utility, *Utilities*, 2-35
 Line continuation, *Command Language*, 1-18
 Line definition (XEDRV), *I/O Drivers*, 13-23
 Line feed
 CTRL/R (TTDRV), *I/O Drivers*, 2-70
 Line-feed character
 record attribute, *I/O Operations*, 3-8
 Line feed command, *Debugging*, 2-5, 4-3, 9-8
 LINE FEED key
 closing location
 ODT, *Program Development*, 5-5, 5-7
 displaying word on stack
 ODT, *Program Development*, 5-8
 opening location
 ODT, *Program Development*, 5-5, 5-7
 Line frequency
 SYSGEN question, *System Generation*, 3-33
 Line interface
 DL11/DLV11
 SYSGEN question, *System Generation*, 3-55
 DM11-BB
 SYSGEN question, *System Generation*, 3-58

- Line interface (cont'd.)
 - DMC11
 - SYSGEN question, *System Generation*, 3-63
 - DMR11
 - SYSGEN question, *System Generation*, 3-63
 - DUP11
 - SYSGEN question, *System Generation*, 3-64
 - TT-type
 - SYSGEN question, *System Generation*, 3-56
- LINE key (EDT), *Introduction*, 2-6
- Line mode (EDT), *Introduction*, 2-4, 2-9
- Line-number item
 - internal symbol, *Task Builder*, A-29, A-30
- Line printer
 - definition, *Batch and Queue*, 4-5
 - LA180 controller
 - SYSGEN question, *System Generation*, 3-51
 - listing format, *MACRO-11*, 6-5, 6-6
 - LP11 controller
 - SYSGEN question, *System Generation*, 3-51
 - LP-type
 - SYSGEN question, *System Generation*, 3-51
 - LS11 controller
 - SYSGEN question, *System Generation*, 3-51
 - LV11 controller
 - SYSGEN question, *System Generation*, 3-51
 - physical feature list, *I/O Drivers*, 10-1
 - type
 - SYSGEN question, *System Generation*, 3-52
- Line printer controller
 - See *Controller*
- Line printer driver
 - See *LPDRV*
- /LINES keyword
 - SET command (MCR), *MCR*, 3-226
 - SET command (VMR), *System Management*, 10-61
- Lines per page switch
 - See */LINES switch*
- /LINES switch, *CDA*, 2-10, 2-11
- Line terminators, *Command Language*, 3-14
- Line Text Editor
 - See *EDI utility*
- LINK command, *Command Language*, 6-10 to 6-37, 9-22 to 9-23
 - Debugging*, 1-3 *Introduction*, 5-3, 5-6 *System Management*, 15-16
 - command line
 - syntax, *Task Builder*, 11-1, 11-2
 - DCL, *Program Development*, 1-5, 4-1, 5-1, 5-9, 6-7
 - See also *TKB*
 - debugger
 - specifying, *Debugging*, 10-1
 - description, *Command Language*, 6-15
 - examples, *Command Language*, 6-34 to 6-36
 - introduction, *Command Language*, 6-10 to 6-15
 - option, *Command Language*, 6-31
 - /OVERLAY_DESCRIPTION
 - qualifier, *Command Language*, 6-6, 6-23
 - qualifier, *Command Language*, 6-16 to 6-30
 - qualifiers
 - abbreviation, *Task Builder*, 11-3
 - list, *Task Builder*, 1-8
 - /DEBUG, *Debugging*, 10-1
 - description, *Task Builder*, 11-1 to 11-77
 - designation, *Task Builder*, 11-3
 - overriding, *Task Builder*, 11-3
 - summary table, *Task Builder*, 11-3 to 11-10
- Linker, *MACRO-11*, 1-2, 2-2
- Linking
 - ODT
 - from DCL, *Debugging*, 1-3
 - from MCR, *Debugging*, 1-2
 - to enable instruction and data space features, *Debugging*, 1-3
 - overview of, *MACRO-11*, 4-1
- LIST command, *System Management*, 15-17
 - EDI utility*, *Program Development*, 2-13
- List command
 - See *L command*

.LIST directive, *MACRO-11*, 6-9 to 6-14
arguments for, *MACRO-11*, 6-10, 6-11, 6-12

Listing

assembly, *Program Development*, 3-4, 3-5
control, *Program Development*, 1-4, 1-5, 2-6
directory, *Program Development*, 3-9
examining at a terminal, *Program Development*, 3-6, 7-4
format of, *MACRO-11*, 6-4
FORTRAN IV, *Program Development*, 7-5
global cross-reference, *Program Development*, 4-5, 4-6 *Task Builder*, 10-11, 11-22
printing, *Program Development*, 3-8 to 3-9
sample assembly, *MACRO-11*, H-1, H-2, H-3
spooling, *Program Development*, 3-8, 3-9
use in debugging, *Program Development*, 5-4
wide
specifying, *Task Builder*, 10-52, 11-77

LISTING_DIRECTIVES argument, *MACRO-11*, 8-11

Listing control

See also .LIST or .NLIST directive
comment block, *MACRO-11*, 6-18
directive, *MACRO-11*, 6-3 to 6-18
arguments for, *MACRO-11*, 6-11, 6-12
.IDENT, *MACRO-11*, 6-16, 6-17
.LIST, *MACRO-11*, 6-9 to 6-14
.NLIST, *MACRO-11*, 6-9 to 6-14
.PAGE, *MACRO-11*, 6-17, 6-18
.REM, *MACRO-11*, 6-18
.SBTTL, *MACRO-11*, 6-15, 6-16
.TITLE, *MACRO-11*, 6-15
level count, *MACRO-11*, 6-9, 6-10
MAC task command, *MACRO-11*, 8-6, 8-7
page ejection, *MACRO-11*, 6-17
switch, *MACRO-11*, 8-6, 8-7
/CR, *MACRO-11*, 8-7
/LI, *MACRO-11*, 8-6
/NL, *MACRO-11*, 8-6

Listing control

switch (cont'd.)
/NOSP, *MACRO-11*, 8-7
/SP, *MACRO-11*, 8-7

Listing control directive
arguments for, *MACRO-11*, 6-10

Listing file

FLX utility, *Utilities*, 4-7
PIP utility, *Utilities*, 3-24

Listing level count, *MACRO-11*, 6-9, 6-10

LIST ON PSEUDO DEVICE command

EDI utility, *Utilities*, 2-36

LIST ON TERMINAL command

EDI utility, *Utilities*, 2-35

List option

ACNT, *System Management*, 2-8

/LIST qualifier, *MACRO-11*, 8-10

LIST statement, *Error Logging*, 5-39

/LIST switch

BAD utility, *Utilities*, 6-5

.LIST TTM directive, *Program*

Development, 2-6

/LI switch, *MACRO-11*, 8-6 *Task*

Builder, 10-25

See also /LIST switch

CMP utility, *Utilities*, 12-3

FLX utility, *Utilities*, 4-7

LBR utility, *Utilities*, 10-21

PIP utility, *Utilities*, 3-24

/BR, *Utilities*, 3-25

/FU, *Utilities*, 3-25

/TB, *Utilities*, 3-26

QUE /LI command, *Batch and*

Queue, 2-15

VFY utility, *Utilities*, 9-6

ZAP utility, *Utilities*, 15-2

Literal declaration, *Error Logging*, 4-12

Literal record

format

internal symbol, *Task Builder*, A-31

internal symbol, *Task Builder*, A-30

LITERAL statement, *Error Logging*, 5-33

LN01 laser printer, *I/O Drivers*, 10-3

LNK:, link task to interrupt

(ICDRV/ISDRV), *I/O Drivers*, 19-64, 19-66

/LN switch

CMP utility, *Utilities*, 12-3

LOA, *I/O Drivers*, 13-5

See LOAD command

- Load
 - asynchronous example, *Task Builder*, 4-10
 - manual
 - calling sequence, *Task Builder*, 4-7, 4-8
 - FORTTRAN calling sequence, *Task Builder*, 4-9, 4-10, 4-11
 - MACRO-11 calling sequence, *Task Builder*, 4-7, 4-8, 4-9
 - path
 - autoload, *Task Builder*, 4-3, 4-4
 - Loadable crash dump driver
 - See Crash dump driver
 - Loadable data base
 - See Data base
 - Loadable driver
 - See Driver
 - Loadable driver restriction (half-duplex), *I/O Drivers*, 3-35
 - Load buffer LPA-11 microcode (LADRV), *I/O Drivers*, 22-29
 - LOAD command, *Writing I/O Driver*, 1-18, 1-19, 1-20, 5-2
 - allowances, *Writing I/O Driver*, 1-7
 - Executive operation for driver, *Writing I/O Driver*, 5-11
 - operation, *Writing I/O Driver*, 5-11
 - overview, *Writing I/O Driver*, 1-18
 - use of /CTB, *Writing I/O Driver*, 5-14
 - LOAD command (MCR), *MCR*, 1-6, 3-132
 - format, *MCR*, 3-132
 - keywords
 - /CTB, *MCR*, 3-132
 - /EXP, *MCR*, 3-133
 - /HIGH, *MCR*, 3-133
 - /PAR, *MCR*, 3-133
 - /SIZE, *MCR*, 3-133
 - /VEC, *MCR*, 3-133
 - parameters, *MCR*, 3-132
 - LOAD command (VMR), *System Management*, 10-33
 - definition, *System Management*, 10-33
 - examples, *System Management*, 10-34
 - format, *System Management*, 10-33
 - keywords
 - /CTB, *System Management*, 10-33
- LOAD command (VMR)
 - keywords (cont'd.)
 - /PAR, *System Management*, 10-33
 - /SIZE, *System Management*, 10-34
 - /VEC, *System Management*, 10-34
 - notes, *System Management*, 10-34
 - parameters, *System Management*, 10-33
- Loading
 - mechanism
 - overlay, *Task Builder*, 3-16
- Load microcode (XEDRV), *I/O Drivers*, 13-18
- LOAD module, *Task Builder*, 5-55
- \$\$LOAD program section, *Task Builder*, 5-55
 - reserved name, *Task Builder*, E-3
- \$LOAD routine
 - manual load, *Task Builder*, 4-7
- Load sharing, *Writing I/O Driver*, 1-11
- LOC0 field in ALL block
 - offset, *RMS-11 Macro*, 6-2
- LOC1 field in ALL block
 - offset, *RMS-11 Macro*, 6-2
- LOCAL argument, *MACRO-11*, 8-9
- Local data block, *Program Development*, 2-8
- Local event flag
 - reading, *Executive*, 5-158
- Local logical assignment, *MCR*, 3-20
- Local macro, *Program Development*, 2-8
 - definitions, *Program Development*, 2-8
- LOCAL symbol, *Indirect*, 2-11
- Local symbol, *MACRO-11*, 3-11, 3-12
 - Program Development*, 1-4, 1-5
 - automatic creation, *MACRO-11*, 7-8, 7-9
 - block, *MACRO-11*, 3-11, 3-12
 - enabling, *MACRO-11*, 6-19, 6-20
 - definitions, *Program Development*, 2-7, 2-8
 - deleting definition, *Indirect*, 2-52
 - FDB macro, *I/O Operations*, 2-27
 - treatment as user-defined, *MACRO-11*, 3-7

LOCATE command

EDI utility, *Program Development*,
2-14, 2-18, 7-4, 7-5, 7-7
Utilities, 2-15, 2-36

Locate mode, *I/O Operations*, 1-9,
1-10, 2-10 RMS-11 *Introduction*,
4-6

See also RB\$LOC mask in ROP field
file processing, *I/O Operations*,
3-29

FSR block buffer, *I/O Operations*,
3-29

GET\$ macro, *I/O Operations*, 3-21,
3-23

indexed files, RMS-11 *User's Guide*,
7-7

PUT\$ macro, *I/O Operations*, 3-26,
3-30

record attribute, *I/O Operations*,
3-9

relative files, RMS-11 *User's Guide*,
4-13

sequential files, RMS-11 *User's*
Guide, 3-14

task record buffer, *I/O Operations*,
3-29

Location

See also LOC field in ALL block

absolute, *Debugging*, 2-5, 4-4, 9-9

altering, *Debugging*, 4-1

branch, *Debugging*, 4-5

closing, *Debugging*, 4-2

displaying, *Debugging*, 4-1

format, *Debugging*, 4-1

hard

See XB\$HRD mask in AOP field

indicator, *Debugging*, 7-3

opening, *Debugging*, 4-1

ASCII, *Debugging*, 4-6

branch offset, *Debugging*, 4-5

byte, *Debugging*, 4-2

next sequential, *Debugging*, 4-3

preceding, *Debugging*, 4-4

Radix-50, *Debugging*, 4-7

word, *Debugging*, 4-2

PC-relative, *Debugging*, 4-4

reopening last opened, *Debugging*,
4-2

returning from, *Debugging*, 4-5

RMSDEF utility, RMS-11 *Utilities*,
A-14

Location counter, *Program*

Development, 1-4, 1-5

See also Current location counter

Location counter (cont'd.)

control directive, *MACRO-11*, 6-36

definition, *Task Builder*, A-17

modification, *Task Builder*, A-18

use in debugging, *Program*
Development, 5-3, 5-4

Location indicator

See Register indicator

LOC field in ALL block

CREATE operation, RMS-11 *Macro*,
5-17

EXTEND operation, RMS-11 *Macro*,
5-47

offset, RMS-11 *Macro*, 6-2

RSTS/E, RMS-11 *Macro*, D-4

summary, RMS-11 *Macro*, 6-12

/LOC keyword

HELP command, MCR, 3-87

Locking, file

See FB\$DLK mask in FOP field

Locking buckets, RMS-11 *Introduction*,
4-3

/LOCK keyword

DISMOUNT command (MCR),
MCR, 3-71

MOUNT command (MCR), MCR,
3-149

options

/Nounload, MCR, 3-71

/Unload, MCR, 3-71

/Virtual, MCR, 3-71

LOC symbolic argument, *MACRO-11*,
6-11

LOG

See LOGIN command

LOGDEV symbol, *Indirect*, 2-21

\$LOGGER, *Error Logging*, 4-23

LOGFILE YES/NO command

IOX, *System Management*, 4-42

Logging in, *Introduction*, 1-4 to 1-5

Logical/physical association, *I/O*
Drivers, 1-2

Logical AND, *MACRO-11*, 3-2, 3-5

System Management, 12-27

special meaning, *MACRO-11*, 6-52

Logical assignment, MCR, 3-20 to
3-30, 3-63 to 3-69

assigning, MCR, 3-25, 3-26

deleting, MCR, 3-21, 3-25, 3-27,
3-28

displaying, MCR, 3-29

global, MCR, 2-12, 3-20, 3-64

group, MCR, 2-12, 3-20, 3-64

local, MCR, 2-12, 3-20, 3-64

- Logical assignment (cont'd.)
 - login, *MCR*, 2-12, 3-20, 3-64
 - system, *MCR*, 3-20
 - tables, *MCR*, 3-64
 - task, *MCR*, 2-12, 3-20
- Logical block, *I/O Operations*, 5-2
 - RMS-11 Introduction*, 2-3
 - file device, *I/O Operations*, 1-7
 - read (TTDRV), *I/O Drivers*, 2-43
- Logical Block Number, *MCR*, 3-103, 3-116, 3-189
 - See also LBN
- Logical channel number
 - See LCH field in FAB
- Logical device, *Command Language*, 5-6, 5-9 to 5-10
 - assigning, *Command Language*, 5-26 to 5-33
 - assignment, *Command Language*, 5-9
 - deleting, *Command Language*, 5-37 to 5-40
 - displaying, *Command Language*, 5-129 to 5-131
- Logical device assignment, *CDA*, 3-17
 - Indirect*, 2-89 *MCR*, 2-12, 3-20 to 3-30
 - device name tables, *MCR*, 3-20
- Logical device name, *CDA*, 3-17
 - Command Language*, 5-9 to 5-10
 - MCR*, 2-12
 - assigning, *MCR*, 3-20
 - syntax, *MCR*, 2-12, 3-20
- Logical end-of-file directive (/), *Indirect*, 2-66
- Logical I/O, *I/O Drivers*, 1-2
- Logical inclusive OR operator, *MACRO-11*, 3-2, 3-5
 - special meaning, *MACRO-11*, 6-52
- Logical name, *Command Language*, 5-6
 - I/O Operations*, 1-18
 - assigning, *Command Language*, 5-26 to 5-33
 - creating, *Executive*, 5-32
 - defining, *Command Language*, 5-41 to 5-44
 - deleting, *Command Language*, 5-37 to 5-40 *Executive*, 5-62
 - description, *Command Language*, 5-14 to 5-18
 - displaying, *Command Language*, 5-15, 5-129 to 5-131
 - format, *Command Language*, 5-16
 - specifying, *I/O Operations*, 1-19
- Logical name (cont'd.)
 - SYSGEN* question, *System Generation*, 3-24
 - tables, *Command Language*, 5-15
 - translating, *Executive*, 5-250
 - iteratively, *Executive*, 5-159
 - translation, *Command Language*, 5-17
 - using, *I/O Operations*, 1-19
- Logical name assignment, *MCR*, 3-20, 3-21, 3-63 to 3-69
 - deleting, *MCR*, 3-65, 3-67
 - displaying, *MCR*, 3-65, 3-68
 - expanding, *Indirect*, 2-92
 - global, *MCR*, 3-21, 3-63, 3-64
 - group, *MCR*, 3-21, 3-63, 3-64
 - local, *MCR*, 3-63, 3-64
 - login, *MCR*, 3-21
 - tables, *MCR*, 3-22, 3-63 to 3-64
 - task, *MCR*, 3-20
 - translation, *MCR*, 3-64
 - using, *Indirect*, 2-2
- Logical name table, *Command Language*, 5-15
- Logical name translation, *I/O Operations*, 4-9
 - ASSIGN* command, *I/O Operations*, 4-9
 - expanding file specification string, *I/O Operations*, 4-10
 - FDB extension, *I/O Operations*, 4-15
 - iterative, *I/O Operations*, 4-9
 - merging file specification, *I/O Operations*, 4-10
 - name expansion
 - .EXPLG* module, *I/O Operations*, 4-15
 - parse file specification, *I/O Operations*, 4-10
 - .PARSE* routine
 - device and unit, *I/O Operations*, 4-12
 - process, *I/O Operations*, 4-10
 - .PRSDV* routine, *I/O Operations*, 4-16
- Logical operator, *Indirect*, 2-22
 - See also Operator, binary
- Logical OR
 - changing mode (XEDRV), *I/O Drivers*, 13-20
- Logical page
 - definition, *Batch and Queue*, 4-5
- Logical symbol, *Indirect*, 2-9

Logical symbol (cont'd.)
 defining, *Indirect*, 2-33
 setting, *Indirect*, 2-80
 testing, *Indirect*, 2-61, 2-63
 Logical test, *Indirect*, 2-60
 Logical unit, *I/O Drivers*, 1-2
 Logical unit number, MCR, 2-10, 3-36, 3-172
 See also LOGICAL UNIT NUMBERS command
 See LUN
 assigning, MCR, 2-10
 reassigning, MCR, 3-172
 LOGICAL UNIT NUMBERS command (MCR), MCR, 1-7, 3-140
 error messages, MCR, 3-140
 example, MCR, 3-140
 format, MCR, 3-140
 LOGICAL UNIT NUMBERS command (VMR), *System Management*, 10-35
 definition, *System Management*, 10-35
 example, *System Management*, 10-35
 format, *System Management*, 10-35
 parameter, *System Management*, 10-35
 Logical Unit Table
 See LUT
 Login
 default logical device, MCR, 3-79
 default logical directory, MCR, 3-79
 logical assignment, MCR, 3-20
 UIC, MCR, 2-6
 LOGIN.CMD
 on pregenerated kit, *System Generation*, 5-36
 LOGIN command, *Command Language*, 3-4 to 3-8, 9-23 *Introduction*, 1-4 to 1-5 MCR, 1-8, 3-79 *System Management*, 9-6
 error messages, MCR, 3-84
 examples, MCR, 3-83
 password, *Command Language*, 3-4
 UIC, *Command Language*, 3-4
 /LOGIN keyword
 ASSIGN command (MCR), MCR, 3-26, 3-28
 Login message file
 BATCH.TXT, *System Generation*, 4-5
 LOGIN.TXT, *System Generation*, 4-4
 Login Transaction Block, *System Management*, 17-30
 /LOG keyword
 DEVICES command (MCR), MCR, 3-60
 /LOGON keyword
 SET command (MCR), MCR, 3-226
 SET command (VMR), *System Management*, 10-61
 LOGOUT.CMD
 on pregenerated kit, *System Generation*, 5-37
 LOGOUT command, *Command Language*, 3-9 to 3-10, 5-14, 7-20, 9-23 *Introduction*, 1-16
 System Management, 9-3, 9-7
 /LOG switch, *Error Logging*, 2-3, 2-5, 2-8
 New version subswitch, *Error Logging*, 2-3, 2-6
 No limit subswitch, *Error Logging*, 2-3, 2-5, 2-6
 LOGTST
 ERROR routines, *Error Logging*, 4-23
 LOGUIC symbol, *Indirect*, 2-21
 /LO job switch
 QUE /MOD command, *Batch and Queue*, 2-20
 %LOK, *Error Logging*, 5-21
 LONG qualifier, *Task Builder*, 11-41 to 11-48
 Lookahead function, *Error Logging*, 5-21
 Loop, *Debugging*, 3-4
 LOOPBACK
 parameter command, *System Management*, 4-43
 /LO switch
 Indirect, *Indirect*, 2-4, 2-29
 RMSCNV utility, *RMS-11 Utilities*, 4-10
 RMSIFL utility, *RMS-11 Utilities*, 3-6
 Vfy utility, *Utilities*, 9-6
 Low core memory
 dump, CDA, 1-9, 3-1, 3-20
 labels, CDA, 3-20
 LOWER_CASE argument, *MACRO-11*, 8-10
 Lowercase conversion (half-duplex), *I/O Drivers*, 3-15
 Lowercase mode, *Indirect*, 2-48

- /LOWERCASE qualifier
 - PRINT command, *Batch and Queue*, 2-4
 - SET QUEUE command, *Batch and Queue*, 2-20
- /LOWER keyword
 - SET command (MCR), *MCR*, 3-226
 - SET command (VMR), *System Management*, 10-61
- Low limit register
 - See L register
- Low-memory context, *Task Builder*, B-10
- Low pool, *System Management*, 13-3, 13-4
 - event, *System Management*, 13-2
- /LOW switch
 - PRI command, *Batch and Queue*, 2-4
- Low-traffic sync (communication driver), *I/O Drivers*, 12-12
- LP11 line printer, *I/O Drivers*, 10-2
- LP11 line printer controller
 - SYSGEN question, *System Generation*, 3-51
- LPA11
 - 22-bit addressing, *I/O Drivers*, 22-36
 - data transfer start (LADRV), *I/O Drivers*, 22-30
 - data transfer stop (LADRV), *I/O Drivers*, 22-30
 - initialize, *I/O Drivers*, 22-29
 - IO.STA function (LADRV), *I/O Drivers*, 22-30
 - IO.STP function (LADRV), *I/O Drivers*, 22-30
 - sample program, *I/O Drivers*, 22-37
- LPA11-K, *Writing I/O Driver*, 1-13, 1-14
- LPA11K
 - function code list, *I/O Drivers*, B-11
- LPA11-K laboratory subsystem
 - microcode version, *System Generation*, 3-71
 - on pregenerated kit, *System Generation*, 5-46
 - SYSGEN question, *System Generation*, 3-55
- Lpast parameter
 - device-specific function (GRDRV), *I/O Drivers*, 21-2
- LP command
 - EDI utility, *Utilities*, 2-36
- LPDRV, *I/O Drivers*, 10-1
 - programming hint, *I/O Drivers*, 10-7
- Lpef parameter
 - device-specific function (GRDRV), *I/O Drivers*, 21-2
- LPP, *System Management*, 7-2
- LPS11, *I/O Drivers*, 17-2
 - See also LSDRV
- LPS11/AR11 comparison, *I/O Drivers*, 17-1
- LPS11 clock
 - sampling rate (LSDRV), *I/O Drivers*, 17-33
- LPS function code list, *I/O Drivers*, B-11
- LPSTP: subroutine
 - stop synchronous function (LSDRV), *I/O Drivers*, 17-22
- LP-type line printer
 - SYSGEN question, *System Generation*, 3-52
- LQP02, *I/O Drivers*, 2-4
- LRDRV
 - transmit, device-specific QIO\$, *I/O Drivers*, 14-3
- L register, *Debugging*, 2-6, 5-3, 6-1, 9-10
- LRL field in FAB
 - CREATE operation, *RMS-11 Macro*, 5-20
 - offset, *RMS-11 Macro*, 6-24
 - OPEN operation, *RMS-11 Macro*, 5-79
 - summary, *RMS-11 Macro*, 6-54
- /LRU keyword
 - HOME command, *MCR*, 3-94
 - INITVOLUME command, *MCR*, 3-104
 - MOUNT command (MCR), *MCR*, 3-150
- LS11 line printer, *I/O Drivers*, 10-2
- LS11 line printer controller
 - SYSGEN question, *System Generation*, 3-51
- LSB symbolic argument, *MACRO-11*, 6-19, 6-20

LSDRV

- measuring elapsed time, *I/O Drivers*, 17-7
- programming hint, *I/O Drivers*, 17-33
- return data, *I/O Drivers*, 17-7
- SYSGEN option, *I/O Drivers*, 17-1
- .LST file type, *Program Development*, 3-4, 6-11, 7-3, 7-4
- .LST module, *Error Logging*, 4-1
- Lsubr parameter
 - CALLS calling macro (LADRV), *I/O Drivers*, 22-27
- LUN, *Command Language*, 5-6, 5-8 to 5-9, 7-44 to 7-45, 7-68 to 7-70 *I/O Drivers*, 1-2 *Task Builder*, 12-41
 - See also Logical unit number
 - See also LOGICAL UNIT NUMBERS command
 - ASUDLN: subroutine (UDDRV), *I/O Drivers*, 16-20
- assigning, *Executive*, 5-10, 5-15 *I/O Drivers*, 1-16
 - to physical device, *Task Builder*, 12-8
 - to AR0: (LSDRV), *I/O Drivers*, 17-14
 - to LS0: (LSDRV), *I/O Drivers*, 17-13
- assigning default
 - ICDRV/ISDSV, *I/O Drivers*, 19-38
- assignment
 - ALUN\$ directive, *I/O Drivers*, 1-4
 - ASSIGN command, *I/O Drivers*, 1-4
 - change, *I/O Drivers*, 1-4
 - dynamic change, *I/O Drivers*, 1-4
 - REASSIGN command, *I/O Drivers*, 1-4
- default by TKB, *Program Development*, 4-4, 4-5
- get information, *I/O Drivers*, 1-21
- AFC11/AD01 converter, *I/O Drivers*, 15-2
- communication driver, *I/O Drivers*, 12-4
- CRDRV, *I/O Drivers*, 11-1
- CTDRV, *I/O Drivers*, 9-1
- DDDRV, *I/O Drivers*, 7-1
- disk driver, *I/O Drivers*, 5-5
- DTDRV, *I/O Drivers*, 6-1

LUN

- get information (cont'd.)
 - GRDRV, *I/O Drivers*, 21-1
 - half-duplex, *I/O Drivers*, 3-4
 - ICDRV/ISDRV, *I/O Drivers*, 19-8
 - LADRV, *I/O Drivers*, 22-2
 - LPDRV, *I/O Drivers*, 10-3
 - LRDRV, *I/O Drivers*, 14-2
 - receive, *I/O Drivers*, 14-2
 - transmit, *I/O Drivers*, 14-2
 - LSDRV, *I/O Drivers*, 17-2
 - PPDRV/PRDRV, *I/O Drivers*, 18-1
 - tape driver, *I/O Drivers*, 8-5
 - TTDRV, *I/O Drivers*, 2-7
 - UDDRV, *I/O Drivers*, 16-3
 - UNIBUS switch driver, *I/O Drivers*, 24-2
 - VTDRV, *I/O Drivers*, 4-1
- identical
 - IO.DET/IO.ATT, *I/O Drivers*, 1-28
- information table, *I/O Drivers*, 1-21
- logical/physical association, *I/O Drivers*, 1-16
- number, *I/O Drivers*, 1-7
- physical
 - logical, *I/O Drivers*, 1-21
- QIO\$ basic syntax, *I/O Drivers*, 1-5
- reassigning, *I/O Drivers*, 1-3
- redirection
 - ASSIGN command, *I/O Drivers*, 1-3
- table, *I/O Drivers*, 1-3 *Task Builder*, B-9, B-10
- table entry, *Task Builder*, B-14
- valid number, *I/O Drivers*, 1-3
- LUN, assign with .ASLUN routine, *I/O Operations*, 4-16
- Lun parameter
 - AIRD/AIRDW subroutine (UDDRV), *I/O Drivers*, 16-18
 - AISQ/AISQW subroutine (UDDRV), *I/O Drivers*, 16-19
 - ALUN\$, *I/O Drivers*, 1-17
 - AO/AOW subroutine (UDDRV), *I/O Drivers*, 16-20
 - ASARLN: subroutine (LSDRV), *I/O Drivers*, 17-14
 - ASLSLN: subroutine (LSDRV), *I/O Drivers*, 17-14

Lun parameter (cont'd.)

ASUDLN: subroutine (UDDRV),
I/O Drivers, 16-20
CLOCKA: subroutine
K-series, I/O Drivers, 23-11
LADRV, I/O Drivers, 22-7
CLOCKB: subroutine
K-series, I/O Drivers, 23-13
LADRV, I/O Drivers, 22-8
CTDI: subroutine (UDDRV), I/O
Drivers, 16-21
CTTI: subroutine (UDDRV), I/O
Drivers, 16-22
DFTI: subroutine (UDDRV), I/O
Drivers, 16-23
DI/DIW: subroutine (UDDRV), I/O
Drivers, 16-24
DOL/DOLW: subroutine (UDDRV),
I/O Drivers, 16-24
DOM/DOMW: subroutine (UDDRV),
I/O Drivers, 16-25
DSDI: subroutine (UDDRV), I/O
Drivers, 16-23
general (TTDRV), I/O Drivers, 2-11
GLUN\$ macro, I/O Drivers, 1-21
IO.ATA function (TTDRV), I/O
Drivers, 2-20
IO.ATT function, I/O Drivers, 1-27
IO.CCO function (TTDRV), I/O
Drivers, 2-23
IO.DET function, I/O Drivers, 1-28
IO.EIO function (TTDRV), I/O
Drivers, 2-26
IO.GTS function (TTDRV), I/O
Drivers, 2-33
IO.HNG function (TTDRV), I/O
Drivers, 2-35
IO.KIL function, I/O Drivers, 1-29
IO.RAL function (TTDRV), I/O
Drivers, 2-36
IO.RLB function, I/O Drivers, 1-30
IO.RNE function (TTDRV), I/O
Drivers, 2-38
IO.RPR function (TTDRV), I/O
Drivers, 2-40
IO.RST function (TTDRV), I/O
Drivers, 2-43
IO.RTT function (TTDRV), I/O
Drivers, 2-45
IO.RVB function, I/O Drivers, 1-31
IO.SMC function (TTDRV), I/O
Drivers, 2-59
IO.WAL function (TTDRV), I/O
Drivers, 2-47

Lun parameter (cont'd.)

IO.WBT function (TTDRV), I/O
Drivers, 2-49
IO.WLB function, I/O Drivers, 1-32
IO.WVB function, I/O Drivers, 1-33
IO.XCL function (XEDRV), I/O
Drivers, 13-17
IO.XIN function (XEDRV), I/O
Drivers, 13-10
IO.XOP function (XEDRV), I/O
Drivers, 13-6
IO.XRC function (XEDRV), I/O
Drivers, 13-14
IO.XSC function (XEDRV), I/O
Drivers, 13-7
IO.XTL function (XEDRV), I/O
Drivers, 13-18
IO.XTM function (XEDRV), I/O
Drivers, 13-11
LAMSKS: subroutine (LADRV), I/O
Drivers, 22-20
QIO\$ basic syntax, I/O Drivers, 1-7
RCIPT: subroutine (UDDRV), I/O
Drivers, 16-26
RSTI: subroutine (UDDRV), I/O
Drivers, 16-30
SCTI: subroutine (UDDRV), I/O
Drivers, 16-31
SF.GMC function (TTDRV), I/O
Drivers, 2-51
LUT, I/O Drivers, 1-7 Writing I/O
Driver, 2-11, 3-2
contents, I/O Drivers, 1-3
defined, I/O Drivers, 1-3
specifying, I/O Drivers, 1-3
LV11 line printer, I/O Drivers, 10-2
LV11 line printer controller
SYSGEN question, System
Generation, 3-51
LVL field in KEY block
DISPLAY operation, RMS-11 Macro,
5-32
offset, RMS-11 Macro, 6-67
OPEN operation, RMS-11 Macro,
5-80
summary, RMS-11 Macro, 6-84
/LW switch
DMP utility, Utilities, 11-7
LX:, Error Logging, 3-2

M

M.CTSZ, retrieval pointer block count
field size, I/O Operations, F-2

M.EFNU, extension file number, *I/O Operations*, F-2
 M.EFSQ, extension file sequence number, *I/O Operations*, F-2
 M.ERVN, extension relative volume number, *I/O Operations*, F-2
 M.ESQN, map area, *I/O Operations*, F-2
 M.LBSZ, retrieval pointer logical block number field size, *I/O Operations*, F-2
 M.MAX, available retrieval pointer words, *I/O Operations*, F-3
 M.RTRV, retrieval pointer start, *I/O Operations*, F-3
 M.USE, retrieval pointer word count, *I/O Operations*, F-3
 MAC command
 MCR, *Program Development*, 1-4, 3-1, 3-5, 6-3
 See also MACRO-11
 .MAC file type, *Program Development*, 3-1
 Machine code, binary, *Introduction*, 5-4, 5-5
 Macro, *Introduction*, 5-11 RMS-11 *Introduction*, 4-7
 See also MACRO-11
 call
 cross-reference of symbols, *Program Development*, 3-7, 3-8
 resolution, *Program Development*, 1-4, 1-10, 2-7
 unrecognized, *Program Development*, 2-7
 directive
 See .MACRO directive
 global symbol, *I/O Operations*, 2-26
 LBLDF\$, *Task Builder*, B-1
 library, *Program Development*, 6-1, 6-2, 6-3
 adding modules, *Program Development*, 6-9, 6-10
 creating a user, *Program Development*, 6-1, 6-2, 6-3
 definitions, *Program Development*, 6-3, 6-4
 DIGITAL-supplied, *Program Development*, 1-9

Macro
 library (cont'd.)
 listing information, *Program Development*, 6-11, 6-12
 replacing modules, *Program Development*, 6-10, 6-11
 search of system, *Program Development*, 1-5, 1-10, 2-7
 library directive
 See .MCALL directive
 local symbol, *I/O Operations*, 2-27
 run-time
 exceptions, *I/O Operations*, 2-22
 FDB address, *I/O Operations*, 2-24
 initialization, *I/O Operations*, 2-21
 SNAP\$, *Task Builder*, D-6
 SNPBK\$, *Task Builder*, D-6
 SNPDF\$, *Task Builder*, D-6
 symbol
 definition, *Program Development*, 1-4, 1-10, 2-7, 6-4
 Macro, CALL (K-series), *I/O Drivers*, 23-31
 Macro, CALLS (LADRV), *I/O Drivers*, 22-27
 Macro, INITS
 K-series, *I/O Drivers*, 23-31
 LADRV, *I/O Drivers*, 22-27
 MACRO-11, *Program Development*, 1-5 RMS-11 *User's Guide*, 1-13
 address mode summary, MACRO-11, B-2
 assembler, *Introduction*, 5-4
 assembling source file, *Program Development*, 3-1, 3-2
 calling sequence
 manual load, *Task Builder*, 4-7
 I- and D-space task, *Task Builder*, 4-8, 4-9
 coding standard, MACRO-11, E-1 to E-16
 /CR, *Program Development*, 1-8, 3-8
 /CROSS_REFERENCE, *Program Development*, 1-8, 3-7
 cross-reference listing, *Program Development*, 1-5, 1-7, 3-7, 3-8
 data storage
 definition, *Program Development*, 2-8

MACRO-11 (cont'd.)

- default search of system library,
Program Development, 1-5,
1-10, 2-7
- defining local symbols, *Program
Development*, 2-7, 2-8
- directives, *Program Development*,
1-4, 1-5
- directive summary, MACRO-11, B-3
to B-8
- /DISABLE:GLOBAL, *Program
Development*, 3-1
- disabling global default, *Program
Development*, 3-1, 3-2
- /DS:GBL, *Program Development*,
3-1
- error, *Program Development*, 3-2,
3-3, 3-4
- error code
 - A, *Program Development*, 3-2,
3-3
 - E, *Program Development*, 3-4
 - Q, *Program Development*, 3-4
 - U, *Program Development*, 3-3
- error code summary, MACRO-11,
D-1 to D-5
- error message, MACRO-11, 8-19, 8-
20, 8-21 *Program Development*,
3-2, 3-5
- file specification, MACRO-11, 8-3,
8-4, 8-5
 - switch, MACRO-11, 8-6
- /LIBRARY, *Program Development*,
6-3
- /LIST, *Program Development*, 3-1,
3-4, 3-5, 3-7
- listing, *Program Development*, 3-4,
3-5
 - generation, *Program
Development*, 3-6
- location counter, *Program
Development*, 1-4, 1-5
- MAC command
 - MCR, *Program Development*,
1-4, 3-1, 3-5, 6-3
- macro
 - cross-reference, *Program
Development*, 3-7, 3-8
 - directive, MACRO-11, 7-1
 - expansion, MACRO-11, 7-1
 - terminating, MACRO-11,
7-3
 - expansion listing, MACRO-11,
6-9

MACRO-11

- macro (cont'd.)
 - keyword indicator, MACRO-11,
3-1
 - library
 - force search of, MACRO-11,
6-20
 - including in assembly,
MACRO-11, 8-6
 - library usage, *Program
Development*, 6-3, 6-4
 - name, MACRO-11, 7-1
 - nesting, MACRO-11, 7-3
 - symbol, MACRO-11, 3-6
 - Program Development*, 1-4,
2-7, 6-4
 - symbol table, MACRO-11, 3-6,
3-7
- macro call, MACRO-11, 7-1, 7-4
 - argument in, MACRO-11, 7-4,
7-5
 - format, MACRO-11, 7-4
 - numeric argument indicator,
MACRO-11, 3-3
 - unary operator in, MACRO-11,
7-5
- MACRO command
 - DCL, *Program Development*,
1-4, 3-1, 3-4, 6-3
- macro definition
 - argument concatenation,
MACRO-11, 7-10, 7-11
 - argument in, MACRO-11, 7-4,
7-5, 7-6
 - argument limit, MACRO-11,
7-8
 - argument passing, MACRO-11,
7-7
 - deletion, MACRO-11, 7-21
 - dummy argument, MACRO-11,
7-2
 - error notice, MACRO-11, 7-15,
7-16
 - format, MACRO-11, 7-4
 - keyword argument, MACRO-11,
7-9
 - name, MACRO-11, 7-2
 - nesting, MACRO-11, 7-3, 7-5,
7-6
 - single argument, MACRO-11,
7-16
 - special characters in, MACRO-
11, 7-6

MACRO-11

MAC task

- command format, *MACRO-11*, 8-4 to 8-7
- cross-reference listing, *MACRO-11*, 8-16
- error message, *MACRO-11*, 8-19, 8-20, 8-21
- listing control, *MACRO-11*, 8-6, 8-7
- running by indirect command, *MACRO-11*, 8-3
- running directly, *MACRO-11*, 8-2
- /ML, *Program Development*, 6-3, 6-4
- /NOBJECT, *Program Development*, 3-1
- /OBJECT, *Program Development*, 3-4
- object module, *Program Development*, 3-4, 3-5, 3-6
- obsolete functions, *MACRO-11*, I-1
- operating hints, *MACRO-11*, F-1
- operating procedures, *MACRO-11*, 8-1
- position independent code, *MACRO-11*, G-1
- source file, *Program Development*, 2-2
 - cross-referencing symbols
 - CRF utility, *Utilities*, B-1
 - format, *Program Development*, 2-1 to 2-3
 - skeleton, *Program Development*, 2-4
- source input, *Program Development*, 1-4
- /-SP, *Program Development*, 3-5, 3-8
- special character summary, *MACRO-11*, B-1
- statement format, *MACRO-11*, 2-1
 - Program Development*, 2-3
- support routine (LADRV), *I/O Drivers*, 22-26
- symbol
 - cross-reference, *Program Development*, 3-7, 3-8
 - evaluation, *Program Development*, 1-4, 3-1, 3-2, 6-4
- table of contents generation, *Program Development*, 2-6

MACRO-11 (cont'd.)

- work file, *MACRO-11*, F-1
- MACRO-11 Assembler*, *Introduction*, 5-10
- MACRO-11 interface*
 - K-series, *I/O Drivers*, 23-31
 - LADRV, *I/O Drivers*, 22-26
- Macro call
 - See .MCALL directive
- MACRO CALL command
 - EDI utility, *Utilities*, 2-37
- MACRO command, *Introduction*, 5-4
 - MACRO-11*, 8-8 to 8-12
 - DCL, *Program Development*, 1-4, 3-1, 3-4, 6-3
 - See also *MACRO-11*
 - EDI utility, *Utilities*, 2-36
- Macro-declaration macro, *RMS-11 Macro*, 2-2
- Macro definition, *MACRO-11*, 7-1 to 7-4
 - attribute, *MACRO-11*, 7-11 to 7-14
- .MACRO directive, *MACRO-11*, 7-1, 7-2, 7-10
- MACRO EXECUTE command
 - EDI utility, *Utilities*, 2-38
- \$ macro form, *Executive*, 1-5
- MACRO IMMEDIATE command
 - EDI utility, *Utilities*, 2-38
- Macro library, *Command Language*, 6-40
 - RMSMAC.MLB, *RMS-11 Macro*, 2-20
 - RSTS/E, *RMS-11 Macro*, D-3
- Macro Metalanguage
 - See MML
- MAC task, *Program Development*, 1-4
 - See also *MACRO-11*
- MAG, *I/O Operations*, G-11
- Magnetic tape, *RMS-11 Introduction*, 2-4 *RMS-11 Macro*, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-118
 - See also *Medium*
 - See also *Tape*
 - ANSI, *RMS-11 Macro*, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-118
- blank, *Command Language*, 5-13
- DD-type
 - SYSGEN question, *System Generation*, 3-50

Magnetic tape

density

displaying in IOX, *System Management*, 4-33

specifying in IOX, *System Management*, 4-33

dismounting, MCR, 3-71

driver, *I/O Drivers*, 8-1

DT-type

SYSGEN question, *System Generation*, 3-49

error retries, *System Management*, 4-56

exercise

example, *System Management*, 4-12

using SELECT, *System Management*, 4-12

function code list, *I/O Drivers*, B-12

initializing, MCR, 3-99

kit

contents, *System Generation*, 2-5

copying

on line, *System Generation*, 2-16 to 2-18

stand alone, *System Generation*, 2-8 to 2-12

under VAX-11 RSX, *System Generation*, 2-22 to 2-24

label, MCR, 3-71, 3-100 RMS-11 *Introduction*, 2-5

MM-type

SYSGEN question, *System Generation*, 3-38

mounting, *Command Language*, 5-62 to 5-67 MCR, 3-143

MS-type

SYSGEN question, *System Generation*, 3-48

MT-type

SYSGEN question, *System Generation*, 3-53

new, *Command Language*, 5-13

P/OS, RMS-11 Macro, D-3

positioning

See FB\$NEF mask in FOP field

See FB\$POS mask in FOP field

See RB\$EOF mask in ROP field

preparing for use, *Command Language*, 5-13

Magnetic tape (cont'd.)

record, MCR, 3-152

records tested, *System Management*, 4-53

rewind-after-closing

See FB\$RWC mask in FOP field

rewind-before-creating

See FB\$RWO mask in FOP field

rewind-before-opening

See FB\$RWO mask in FOP field

RMSBCK utility, *RMS-11 Utilities*, 6-7

multivolume, *RMS-11 Utilities*, 6-9

RMSCNV utility, *RMS-11 Utilities*, 4-8

RMSDEF utility, *RMS-11 Utilities*, A-8, A-10

RMSDES utility, *RMS-11 Utilities*, 2-34

RMSDSP utility, *RMS-11 Utilities*, 5-3

RMSRST utility, *RMS-11 Utilities*, 7-8, 7-9

TA11 cassette

SYSGEN question, *System Generation*, 3-47

tape mark, *RMS-11 Introduction*, 2-5

TE16

SYSGEN question, *System Generation*, 3-38

testing

altering record count, *System Management*, 4-53

TK25

SYSGEN question, *System Generation*, 3-48

TK50

SYSGEN question, *System Generation*, 3-46

TS11

SYSGEN question, *System Generation*, 3-48

TSV05

SYSGEN question, *System Generation*, 3-48

TU16/45/77

SYSGEN question, *System Generation*, 3-38

TU58

SYSGEN question, *System Generation*, 3-50

Magnetic tape
 TU80
 SYSGEN question, *System Generation*, 3-48
 TU81
 SYSGEN question, *System Generation*, 3-46
 volume, *RMS-11 Introduction*, 2-5
 labeled, *Command Language*, 1-15
 Magnetic tape block size
 See BLS field in FAB
 Magtape
 See Magnetic tape
 MAGTAPE_BLOCK_SIZE attribute
 RMSDES utility, *RMS-11 Utilities*, 2-34
 MAG task error messages, *I/O Operations*, G-15
 .MAIN. default name, *MACRO-11*, 6-15
 /MAIN keyword
 SET command (MCR), *MCR*, 3-227
 SET command (VMR), *System Management*, 10-61 to 10-63
 Maintenance function (ICDRV/ISDRV), *I/O Drivers*, 19-32, 19-69
 Manual load
 error handling, *Task Builder*, 4-11
 /MANUAL switch
 BAD utility, *Utilities*, 6-6
 FMT utility, *Utilities*, 5-8
 Map
 common, *Task Builder*, 5-20, 5-21
 debugging use, *Program Development*, 5-2, 5-8
 examining at terminal, *Program Development*, 4-6
 file, *Task Builder*, 1-1
 adding cross-reference, *Task Builder*, 10-11, 11-22
 content, *Task Builder*, 10-37 to 10-44, 11-41 to 11-48
 description, *Task Builder*, 10-37 to 10-44, 11-41 to 11-48
 example, *Task Builder*, 10-37 to 10-44, 11-41 to 11-48
 general, *Task Builder*, 10-37 to 10-44, 11-41 to 11-48
 inhibiting spooling, *Task Builder*, 10-46, 11-55
 LINK command, *Task Builder*, 1-5, 1-6
 printing, *Task Builder*, 1-3

Map
 file (cont'd.)
 LINK command, *Task Builder*, 1-6, 1-7
 specifying, *Task Builder*, 10-26, 11-41, 11-49
 full, *Program Development*, 4-7
 generating, *Program Development*, 4-5, 4-6, 4-7
 including SYSLIB contribution, *Task Builder*, 10-26
 microcode loader, *System Generation*, 3-71
 multiuser task, *Task Builder*, 9-7
 nonprivileged task build, *System Generation*, 3-75
 overlaid I- and D-space task, *Task Builder*, 7-11 to 7-15
 privileged task, *Task Builder*, 6-10, 6-11
 privileged task build, *System Generation*, 3-71
 reducing width, *Program Development*, 4-5, 4-6
 region, *Task Builder*, 5-20, 5-21
 resident region
 including symbol definition, *Task Builder*, 10-26
 short
 specifying, *Task Builder*, 10-37
 spooling to print, *Task Builder*, 10-46, 11-55
 stack limits, *Program Development*, 5-8
 standard, *Program Development*, 4-5, 4-6
 task
 I- and D-space, *Task Builder*, 7-8
 linked to a common, *Task Builder*, 5-25
 MAP\$ directive, *Executive*, 5-123
 Map Address Window directive, *Executive*, 5-122
 Map area, *I/O Operations*, 5-4
 file header block, *I/O Operations*, F-5
 MAP attributes, *System Management*, 12-33 to 12-34
 secondary mappings, *System Management*, 12-35
 .MAP file type, *Program Development*, 4-6

- Mapped array
 - area, *Task Builder*, 5-61, 5-63
 - declaration, *Task Builder*, A-10
 - declaration entry, *Task Builder*, A-10
- Mapped region
 - declaring address window, *Task Builder*, 12-45
- MAPPED symbol, *Indirect*, 2-11
- Mapped system, *Task Builder*, 2-13
 - definition, *System Generation*, 1-11
- Mapping, *Executive*, 3-2
 - conventional task
 - linked to region
 - I- and D-space system, *Task Builder*, 7-3
 - supervisor mode library, *Task Builder*, 2-24, 2-25
 - data space, *Executive*, 3-3
 - I- and D-space task, *Task Builder*, 7-3, 7-4
 - I- and D-space system, *Task Builder*, 7-4
 - instruction space, *Executive*, 3-3
 - privileged tasks, *Executive*, 3-19
 - supervisor mode, *Task Builder*, 2-23
 - task, *Task Builder*, 2-14
 - window concept, *Task Builder*, 2-21, 2-22, 2-23
 - window-to-region
 - returning current assignment, *Executive*, 5-108
- Mapping table format (ICDRV/ISDRV), *I/O Drivers*, 19-77
- /MAP qualifier, *Task Builder*, 11-49
 - designation, *Task Builder*, 11-2
- Map Supervisor D-Space directive, *Executive*, 5-130
- Mark file for delete, *I/O Operations*, 4-29
- Mark-for-deletion
 - See FB\$MKD mask in FOP field
- .MARK routine, save file position, *I/O Operations*, 4-24
- Mark Time directive, *Executive*, 5-125
- Mark time request
 - canceling, *Executive*, 5-36
- Mask parameter
 - DIGO: subroutine (K-series), *I/O Drivers*, 23-16
 - DINP: subroutine (K-series), *I/O Drivers*, 23-17
 - DOU: subroutine (K-series), *I/O Drivers*, 23-20
- Mask parameter (cont'd.)
 - immediate device-specific function (LSDRV), *I/O Drivers*, 17-3
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-6
- Mask register
 - See M register
- Mask symbol
 - See Code and mask symbol
- Mask word
 - creating, *Writing I/O Driver*, 4-21
 - I/O function, *Writing I/O Driver*, 4-21
- MASSBUS
 - controller, *Writing I/O Driver*, 1-13
 - mixed device, *Writing I/O Driver*, 1-12
- Mass insertion, *RMS-11 User's Guide*, 2-18, 7-9
 - See also RB\$MAS mask in ROP field
 - populating indexed files, *RMS-11 User's Guide*, 6-28
 - RMSCNV utility, *RMS-11 Utilities*, 4-10
- Mass Storage Control Protocol
 - See MSCP
- Mass-storage device, *RMS-11 Introduction*, 2-1
 - errors, *Error Logging*, 1-1
- Master Command Table
 - See MCT
- Master File Directory, *I/O Operations*, 5-2 MCR, 2-2, 3-94, 3-103, 3-104, 3-150, 3-280
 - See also MFD
- /MA switch, *Task Builder*, 10-26
 - RMSCNV utility, *RMS-11 Utilities*, 4-10
- Match criterion, *RMS-11 Introduction*, 3-12
 - See also RB\$KGE mask in ROP field
 - See also RB\$KGT mask in ROP field
 - random access, *RMS-11 User's Guide*, 5-13
- MAX_RECORD_NUMBER attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-34
- MAXBUF option, *Task Builder*, 12-25
- /MAXEXT keyword
 - SET command (MCR), *MCR*, 3-229
 - SET command (VMR), *System Management*, 10-63
- /MAXIMUM qualifier
 - BRU utility, *Utilities*, 7-18

- Maximum record number
 - See MRN
 - RMSDEF utility, *RMS-11 Utilities*, A-9
- Maximum record size
 - RMSDEF utility, *RMS-11 Utilities*, A-9
- /MAXPKT keyword
 - SET command (MCR), *MCR*, 3-230
- /MAX qualifier
 - BRU utility, *System Generation*, 2-11
- MBC, *RMS-11 User's Guide*, 2-17
 - sequential files, *RMS-11 User's Guide*, 3-15
- MBC field in RAB
 - CONNECT operation, *RMS-11 Macro*, 5-6
 - offset, *RMS-11 Macro*, 6-115
 - summary, *RMS-11 Macro*, 6-125
- MBF field in RAB
 - CONNECT operation, *RMS-11 Macro*, 5-6
 - offset, *RMS-11 Macro*, 6-115
 - summary, *RMS-11 Macro*, 6-126
- .MBLUN
 - reserved global symbol, *Task Builder*, E-1
- /MB switch
 - CMP utility, *Utilities*, 12-3
- Mbuf parameter
 - IO.LOD function (LADRV), *I/O Drivers*, 22-30
- .MCALL
 - for QIO, *I/O Drivers*, 1-4
- .MCALL assembler directive, *Executive*, 1-5 *RMS-11 Macro*, 2-2
- .MCALL directive, *I/O Drivers*, 1-16
 - I/O Operations*, 2-2 *MACRO-11*, 7-20 *Program Development*, 1-10, 2-6, 2-7, 3-3
 - using with user macro library, *Program Development*, 6-3, 6-4
- .MCALL macro, *I/O Drivers*, 1-14
 - example, *I/O Drivers*, 1-16
- MC command
 - EDI utility, *Utilities*, 2-37
- MCL symbolic argument, *MACRO-11*, 6-20
- M command
 - EDI utility, *Utilities*, 2-38
- MCR, *Command Language*, 1-1 to 1-2
 - Introduction*, 1-4, 5-1 *Program Development*, 1-1, 1-2, 1-3 *System Management*, 11-1, 11-2
 - CLI default, *System Management*, 2-3
 - command, *Command Language*, 1-12
 - interface, *MCR*, 1-5
 - keywords, *MCR*, 1-4
 - prompt, *MCR*, 1-3, 2-17
 - See also Prompt
 - summary of commands, *MCR*, 1-5 to 1-8
 - transferring files, *System Management*, 9-5 to 9-7
 - translator table example, *System Management*, 12-21
- MCR CLI command, *System Management*, 11-5
- MCR command, *Command Language*, 9-24 *System Management*, 12-3
- linking
 - ODT, *Debugging*, 1-2
 - ODTID, *Debugging*, 1-3
 - supervisor libraries, *Debugging*, 1-4
- /MCR keyword
 - HELP command, *MCR*, 3-88
 - SET command (MCR), *MCR*, 3-231
- MCR mode, *Indirect*, 2-48
- MCR QMG commands
- MCR UFDs, *System Management*, B-3t
- MCR Unit Control Block, *CDA*, 3-26
- /MC switch
 - Indirect*, *Indirect*, 2-27
- MC symbolic argument, *MACRO-11*, 6-11
- MCT
 - contents, *System Management*, 12-7
- .MDELETE directive, *MACRO-11*, 7-21
- /MD switch
 - DMP utility, *Utilities*, 11-7
- MD symbolic argument, *MACRO-11*, 6-11
- MEB symbolic argument, *MACRO-11*, 6-11
- Media, *Introduction*, 6-8
 - failures, *System Management*, 15-29
- Medium
 - and I/O time, *RMS-11 User's Guide*, 2-3

Medium (cont'd.)
 and record formats and
 file organizations, *RMS-11 User's Guide*, 1-20
 and variable-length format, *RMS-11 User's Guide*, 2-15
 disk
 retrieval pointers, *RMS-11 User's Guide*, 8-2
 usage, *RMS-11 User's Guide*, 8-3
 placement control, *RMS-11 User's Guide*, 6-13
 sequential files, *RMS-11 User's Guide*, 3-3
 Memory, *Introduction*, 6-5 *System Management*, 14-1
 address, *MCR*, 3-164
 allocation
 file
 See Map file
 I- and D-space task, *Task Builder*, 7-8, 7-9, 7-10
 task, *Task Builder*, 2-6
 compacting space
 See SHF
 compaction, *System Generation*, C-2
 dump, *Task Builder*, D-11
 dynamic, *MCR*, 3-118, 3-132, 3-183
 System Generation, C-3
 E command, *Debugging*, 6-2
 examining memory location
 XDT, *Debugging*, 9-3
 F command, *Debugging*, 6-4
 fill command, *Debugging*, 2-9
 fixing tasks in, *MCR*, 3-75
 H register, *Debugging*, 2-6
 image, *Task Builder*, 2-9
 layout
 unmapped system, *Task Builder*, 2-15
 L command, *Debugging*, 6-4
 limit register, *Debugging*, 5-3, 6-1
 list command, *Debugging*, 2-10
 listing
 format, *Debugging*, 6-5
 location
 closing, *MCR*, 3-165
 displaying, *MCR*, 3-164
 inserting values in, *MCR*, 3-164
 opening, *MCR*, 3-164
 L register, *Debugging*, 2-6

Memory
 management
 specifying for target system, *Task Builder*, 10-27, 11-50
 mapping, *MCR*, 2-20
 N command, *Debugging*, 6-2
 parity support, *System Generation*, C-4
 partition, *Introduction*, 6-5 *MCR*, 2-20 *System Generation*, C-1
 physical
 disk-resident overlay, *Task Builder*, 3-3
 memory-resident overlay, *Task Builder*, 3-6
 overlay, *Task Builder*, 3-5, 3-6, 3-33, 3-34, 3-35
 reducing
 to build a task, *Task Builder*, F-4
 usage, *Task Builder*, 3-1
 resident overlay structure, *Task Builder*, 3-6
 saving
 overlaid task, *Task Builder*, 3-9, 3-10
 search command, *Debugging*, 2-9, 2-10, 2-11, 6-2
 size
 SYSGEN question, *System Generation*, 3-32
 W command, *Debugging*, 6-2
 /MEMORY_MANAGEMENT qualifier, *Task Builder*, 11-50
 Memory allocation, *MACRO-11*, 6-46
 Memory allocation file
 See Map
 Memory dump, *Task Builder*, D-1
 Memory errors, *Error Logging*, 1-1
 error logging, *Error Logging*, 1-6
 Memory management, *System Library*, 7-1
 See also Virtual memory management
 core blocks release (\$RLCB), *System Library*, 7-4
 core blocks request (\$RQCB), *System Library*, 7-3
 directives, *Executive*, 3-1
 data structures, *Executive*, 3-11
 summary, *Executive*, 3-9
 fixing tasks, *System Management*, 10-18, 10-23

Memory management (cont'd.)

- initialize (\$INIDM), *System Library*, 7-2
- use by task, *Task Builder*, 2-15
- Memory Management Unit, *Task Builder*, 2-14
- Memory-resident
 - overlay, *Task Builder*, 3-1
 - loading, *Task Builder*, 4-1
- /MEMSIZ switch, *CDA*, 2-10, 2-11
- MEMSIZ symbol, *Indirect*, 2-16
- Merged string, *RMS-11 Macro*, 3-3
- Merging file
 - PIP utility, *Utilities*, 3-9
- M error, *MACRO-11*, 2-3, 3-1, 3-2, 3-8
 - summary, *MACRO-11*, D-4
- /MESSAGE
 - keyword
 - CLI command, *MCR*, 3-52
 - subkeyword
 - CLI command, *MCR*, 3-52
- Message
 - assembly-time, *RMS-11 Macro*, B-1
 - completion returns, *RMS-11 Macro*, A-1
 - diagnostic
 - eliminating, *Task Builder*, 10-30, 11-76
 - error, *MCR*, A-1 to A-35 *Task Builder*, H-1 to H-11
 - virtual memory system, *Task Builder*, F-5
 - fatal error completions, *RMS-11 Macro*, A-16
 - formatting, *System Library*, 6-1
 - ASCII string, *System Library*, 6-7
 - carriage return/line feed
 - insertion, *System Library*, 6-9
 - date conversion (\$DAT), *System Library*, 6-2
 - edit directive (\$EDMSG), *System Library*, 6-5
 - extended ASCII, *System Library*, 6-8
 - field mark, *System Library*, 6-12
 - file name string, *System Library*, 6-11
 - form feed insertion, *System Library*, 6-8
 - general, *System Library*, 6-5
 - space insertion, *System Library*, 6-10

Message

- formatting (cont'd.)
 - length of, *System Library*, 6-12
 - time conversion (\$TIM), *System Library*, 6-3
 - uppercase text (\$CVTUC), *System Library*, 6-1
- inhibiting system queuing, *Task Builder*, 10-35, 11-57
- invocation, *Debugging*, 1-4
- RMSBCK utility, *RMS-11 Utilities*, C-1
- RMSCNV utility, *RMS-11 Utilities*, C-1
- RMSDEF utility, *RMS-11 Utilities*, A-20
- RMSDES utility, *RMS-11 Utilities*, 2-52
- RMSDSP utility, *RMS-11 Utilities*, C-1
- RMSIFL utility, *RMS-11 Utilities*, C-1
- RMSRST utility, *RMS-11 Utilities*, C-1
- system service, *MCR*, 3-273
- Message-oriented driver, *I/O Drivers*, 12-1
- Message-oriented interface (communication driver), *I/O Drivers*, 12-1
- Messages
 - ERLCFL, *Error Logging*, 5-44
- MESSAGE statement, *Error Logging*, 5-41
- /ME switch
 - PIP utility, *Utilities*, 3-9, 3-28
- ME symbolic argument, *MACRO-11*, 6-11
- Metalanguage, *System Management*, 12-13
 - category references, *System Management*, 12-14
 - exclusive-OR, *System Management*, 12-15
 - optional syntax indicators, *System Management*, 12-15
 - production rule, *System Management*, 12-14
 - adjective, *System Management*, 12-14
 - subject, *System Management*, 12-14

Metalanguage (cont'd.)

- syntax tree, *System Management*, 12-14
- .MEXIT directive, *MACRO-11*, 7-3
- MFD, *Command Language*, 4-1, 4-2, 5-12 *I/O Operations*, 5-2
 - See also Master File Directory
- MFD header, *I/O Operations*, E-2
- MFT, *System Management*, 9-1
- MFT command, *System Management*, 9-5 to 9-7
- /MH switch
 - LBR utility, *Utilities*, 10-22
- Micro/R SX
 - Advanced Programmer's Kit, *CDA*, 1-1, 1-3
- Micro/R SX File Transfer Utility
 - See MFT
- Microcode loading
 - LADRV, *I/O Drivers*, 22-34
 - LPA11 (LADRV), *I/O Drivers*, 22-34
 - XEDRV, *I/O Drivers*, 13-18
- Minus sign operator (-), *MACRO-11*, 3-4
 - See also Operator
- Mixed MASSBUS
 - configuration, *Error Logging*, 4-33
 - definition, *System Generation*, 1-11
 - SYSGEN question, *System Generation*, 3-35
- MK11 memory box failures, *System Management*, 15-33
- MK: pseudo device, *Command Language*, 5-6, 5-7
- ML-11, *I/O Drivers*, 5-4
- ML11 disk
 - SYSGEN question, *System Generation*, 3-38
- /ML assembler switch, *RMS-11 Macro*, 2-20
- .MLB file type, *Program Development*, 6-1
- /ML switch, *MACRO-11*, 8-6, 8-7
 - RMSCNV utility, *RMS-11 Utilities*, 4-11
- MML, *System Management*, 12-16
 - features, *System Management*, 12-6 to 12-7
 - literals, *System Management*, 12-20
 - nonliterals, *System Management*, 12-19
 - parser functions, *System Management*, 12-20

MML

- parser functions (cont'd.)
 - handling of literals, *System Management*, 12-20
 - handling of nonliterals, *System Management*, 12-19
- translator functions, *System Management*, 12-20
 - handling of literals, *System Management*, 12-20
 - handling of nonliterals, *System Management*, 12-19
- /MM switch, *Task Builder*, 10-27
- MM-type magnetic tape
 - SYSGEN question, *System Generation*, 3-38
- Mnemonic
 - device, *System Generation*, 2-3
- Mn parameter
 - device-specific function (UDDRV), *I/O Drivers*, 16-4
- ICDRV/ISDRV, *I/O Drivers*, 19-10
- IO.ITI function, *I/O Drivers*, 19-22
- Mode
 - See Access mode
 - See Address mode
 - See Record transfer mode
 - change (XEDRV), *I/O Drivers*, 13-20
 - compatibility
 - task, *Task Builder*, 10-8, 11-20
 - default bit (XEDRV), *I/O Drivers*, 13-21
 - maintenance (communication driver), *I/O Drivers*, 12-7
 - set (communication driver), *I/O Drivers*, 12-7
 - user, *Debugging*, 9-2
- Modem
 - TTDRV, *I/O Drivers*, 2-83
 - autobaud, *I/O Drivers*, 2-83
 - auto-call enable, *I/O Drivers*, 2-52
 - default answer speed, *I/O Drivers*, 2-18, 2-83
 - DZ11 remote line, *I/O Drivers*, 2-83
 - set answer speed, *I/O Drivers*, 2-83
 - with DZ11 (half-duplex), *I/O Drivers*, 3-33

Mode parameter

ADSWP: subroutine

K-series, *I/O Drivers*, 23-9

LADRV, *I/O Drivers*, 22-4

CLOCKB: subroutine

K-series, *I/O Drivers*, 23-13

LADRV, *I/O Drivers*, 22-8

DASWP: subroutine

K-series, *I/O Drivers*, 23-14

LADRV, *I/O Drivers*, 22-9

device-specific (communication driver), *I/O Drivers*, 12-6

device-specific function

transmit (LRDRV), *I/O Drivers*, 14-5

DISWP: subroutine

K-series, *I/O Drivers*, 23-17

LADRV, *I/O Drivers*, 22-12

DOSWP: subroutine

K-series, *I/O Drivers*, 23-19

LADRV, *I/O Drivers*, 22-15

GTHIST: subroutine (K-series), *I/O Drivers*, 23-22

IO.CLK function (LADRV), *I/O Drivers*, 22-29

IO.STC function

transmitter (LRDRV), *I/O Drivers*, 14-6

Mode switching

to supervisor mode, *Task Builder*, 8-18

vector

supervisor mode library, *Task Builder*, 8-1, 8-19

Modify option

ACNT, *System Management*, 2-7

Modularity

program, *MACRO-11*, 6-43

Module

accessing (UDDRV), *I/O Drivers*, 16-2

addressing (ICDRV/ISDRV), *I/O Drivers*, 19-6

calls in overlay, *Task Builder*, 3-16

common in root

improving performance, *Task Builder*, F-6

concatenated object

using to reduce overhead, *Task Builder*, F-4, F-6

extracting from library, *Task Builder*, 10-23, 11-39

interrupt connect (ICDRV/ISDRV), *I/O Drivers*, 19-21

Module (cont'd.)

linked

mapped, *Task Builder*, 2-3

unmapped, *Task Builder*, 2-3

name, *Task Builder*, A-4

internal symbol, *Task Builder*, A-27, A-28

name entry format, *Task Builder*, A-4

object, *Task Builder*, 1-1

concatenating, *Task Builder*, 10-7, 11-21

extracting by name, *Task Builder*, F-4

linking, *Task Builder*, 2-1 to 2-8

placing in segment

reducing overhead, *Task Builder*, F-4, F-6

record

end, *Task Builder*, A-24

served (UDDRV), *I/O Drivers*, 16-2

supported (ICDRV/ISDRV), *I/O Drivers*, 19-3

Module name, *Program Development*, 2-3, 2-5, 6-5, 6-6, 6-7

table, *Program Development*, 6-9, 6-10

macro library, *Program Development*, 6-2, 6-3

object library, *Program Development*, 6-5, 6-7

MODULE statement, *Error Logging*, 5-32

Module version, *Program Development*, 2-5

.MOLUN

reserved global symbol, *Task Builder*, E-1

Monitor Console Routine

See MCR

MOU

See MOUNT command

/MOU keyword

SAVE command (MCR), *MCR*, 3-190

MOUNT/CACHE command

disk data caching, *System Management*, 19-6, 19-10

MOUNT command, Command

Language, 5-12, 5-13, 5-50 to 5-67, 9-24 to 9-25

error messages, *Command Language*, 5-64 to 5-67

MOUNT command (cont'd.)

qualifiers

/FOREIGN, *Command Language*,
5-4, 5-10, 5-11, 5-13, 5-53

/NOLABEL, *Command
Language*, 5-4, 5-58

/NOSHAREABLE, *Command
Language*, 5-55

/SHAREABLE, *Command
Language*, 5-14, 5-55

MOUNT command (MCR), MCR, 1-6,
3-141

formats, MCR, 3-142, 3-144

keywords

/ACP, MCR, 3-145

/BS, MCR, 3-146

/CACHE, MCR, 3-146

/CC, MCR, 3-147

/DENS, MCR, 3-147

/FOR, MCR, 2-14, 3-148

/FPRO, MCR, 3-148

/LOCK, MCR, 3-149

/LRU, MCR, 3-150

/[NO]HDR3, MCR, 3-149

/[NO]LABEL, MCR, 3-149

/[NO]SHARE, MCR, 3-152

/[NO]WAIT, MCR, 3-154

/[NO]WRITE, MCR, 3-155

/OVR, MCR, 3-150

/OVRACC, MCR, 3-151

/OVREXP, MCR, 3-151

/OVRFSID, MCR, 3-151

/PARM, MCR, 3-151

/PRO, MCR, 3-151

/PUB, MCR, 3-152

/RS, MCR, 3-152

/TR, MCR, 3-152

/UIC, MCR, 3-153

/UNL, MCR, 3-153

/VI, MCR, 3-153

/VOL, MCR, 3-154

/WIN, MCR, 3-155

parameters, MCR, 3-142

volume

accessing, MCR, 2-13

mounting, MCR, 2-3

Mount Device Transaction Block,
System Management, 17-28

/MOUNTED qualifier

BRU utility, *Utilities*, 7-18

Mounted volume, *Command Language*,
5-10 to 5-11

MOVE command EDT editor,
Introduction, 2-15

Move mode, *I/O Operations*, 1-9

RMS-11 Introduction, 4-6

GET\$ macro, *I/O Operations*, 3-21,
3-23

indexed files, *RMS-11 User's Guide*,
7-7

PUT\$ macro, *I/O Operations*, 3-26,
3-28

relative files, *RMS-11 User's Guide*,
4-12

sequential files, *RMS-11 User's
Guide*, 3-13

Move to/from User/Supervisor I/D-
Space directive, *Executive*, 5-133

Moving text (EDT), *Introduction*, 2-8,
2-15

/MP switch, *Task Builder*, 10-28

\$MPUB1 routine, *Writing I/O Driver*,
7-30

\$MPUBM routine, *Writing I/O Driver*,
7-29

M register, *Debugging*, 2-6, 5-3, 6-2

.MRKDL routine, mark temporary file
for delete, *I/O Operations*, 4-29

\$\$MRKS program section, *Task Builder*,
5-54

reserved name, *Task Builder*, E-3

MRKT\$ directive, *Executive*, 5-125

MRL field in KEY block

DISPLAY operation, *RMS-11 Macro*,
5-32

offset, *RMS-11 Macro*, 6-68

OPEN operation, *RMS-11 Macro*,
5-80

summary, *RMS-11 Macro*, 6-85

MRN, *RMS-11 User's Guide*, 1-19

relative files, *RMS-11 User's Guide*,
4-4, 4-5

MRN field in FAB

CREATE operation, *RMS-11 Macro*,
5-13

offset, *RMS-11 Macro*, 6-24

OPEN operation, *RMS-11 Macro*,
5-79

summary, *RMS-11 Macro*, 6-55

MRS field in FAB

CREATE operation, *RMS-11 Macro*,
5-12

offset, *RMS-11 Macro*, 6-24

OPEN operation, *RMS-11 Macro*,
5-79

summary, *RMS-11 Macro*, 6-56

- MS.ADS address silo, transmitter (LRDRV), *I/O Drivers*, 14-5
- MS.AUT auto addressing, transmitter (LRDRV), *I/O Drivers*, 14-5
- MSCP
 - controller
 - SYSGEN question, *System Generation*, 3-44
 - disk
 - SYSGEN question, *System Generation*, 3-45
- MSCP60, *Error Logging*, 4-9
- MSCP80, *Error Logging*, 4-9
- MSCPAT, *Error Logging*, 4-9
- MSCP disks
 - configuration, *System Management*, 5-2
- MSCPE, *Error Logging*, 4-9
- MSCPEN, *Error Logging*, 4-9
- MSCPSD, *Error Logging*, 4-9
- MSCPTO, *Error Logging*, 4-9
- MSDS\$ directive, *Executive*, 5-131
- MS-type magnetic tape
 - SYSGEN question, *System Generation*, 3-48
- m symbol, *Debugging*, 2-1
- MTADF\$, CDA, B-28, C-44 *Writing I/O Driver*, A-35 to A-38
- MT-type magnetic tape
 - SYSGEN question, *System Generation*, 3-53
- \$MUL (Integer multiply), *System Library*, 3-1
- Multiblock count
 - See MBC
 - See MBC field in RAB
- Multibuffer count
 - See MBF field in RAB
- Multidirectory device
 - See FB\$MDI mask in DEV field
- Multiple access operation
 - data base structures, *Writing I/O Driver*, 2-8, 2-10
- Multiple access streams
 - and shared access, *RMS-11 User's Guide*, 2-9, 2-10
 - indexed files, *RMS-11 User's Guide*, 7-10
 - relative files, *RMS-11 User's Guide*, 4-15
 - sequential files, *RMS-11 User's Guide*, 3-15
- Multiple areas
 - RMSDES utility, *RMS-11 Utilities*, 2-7, 2-43
- Multiple buffers, *RMS-11 User's Guide*, 2-18
 - indexed files, *RMS-11 User's Guide*, 7-9
 - relative files, *RMS-11 User's Guide*, 4-15
 - sequential files, *RMS-11 User's Guide*, 3-15
- Multiple controller, *Writing I/O Driver*, 1-7
- Multiple definition error
 - See M error
- Multiple expression, *MACRO-11*, 2-4
- Multiple file systems, *System Generation*, C-5
- Multiple keys
 - RMSDES utility, *RMS-11 Utilities*, 2-7, 2-38
- Multiple label, *MACRO-11*, 2-2
- Multiple parameters, *Command Language*, 1-14
- Multiple symbol, *MACRO-11*, 2-4
- Multiplexer, MCR, 3-247, 3-254
 - asynchronous (communication driver), *I/O Drivers*, 12-1
- DH11
 - SYSGEN question, *System Generation*, 3-57
- DHU11/DHV11
 - SYSGEN question, *System Generation*, 3-58
- DJ11
 - SYSGEN question, *System Generation*, 3-60
- DZ11/DZQ11/DZV11
 - SYSGEN question, *System Generation*, 3-61
- Multiplication operator, *MACRO-11*, 3-2, 3-5
- Multiply routine
 - double-precision multiply (\$DMUL), *System Library*, 3-3
 - multiply (\$MUL), *System Library*, 3-1
- Multiprocessor system
 - task issuing I/O request, *Writing I/O Driver*, 1-16
- Multiprogramming, MCR, 2-21
- Multirequest mode (LADRV), *I/O Drivers*, 22-1

Multistream line printer spooling,
 System Management, 7-1
 Multiuser protection
 and devices, *MCR*, 2-13
 commands, *MCR*, 1-8
 system, *MCR*, 2-6
 Multiuser system, *Introduction*, 6-2
 Multiuser task
 as an overlaid task, *Task Builder*,
 9-2
 building, *Task Builder*, 9-5
 declaring read-only partition, *Task*
 Builder, 12-35
 defined, *Task Builder*, 9-1
 description, *Task Builder*, 9-1, 9-7
 disk image, *Task Builder*, 9-2
 example, *Task Builder*, 9-5, 9-6, 9-7
 example map, *Task Builder*, 9-7, 9-8
 I- and D-space, *Task Builder*, 9-3
 APR allocation, *Task Builder*,
 9-3
 building, *Task Builder*, 9-4
 program section, *Task Builder*,
 9-3
 program section allocation, *Task*
 Builder, 9-4
 window, *Task Builder*, 9-5
 program section allocation, *Task*
 Builder, 9-1, 9-2
 specifying, *Task Builder*, 10-29,
 11-67
 TKB command sequence, *Task*
 Builder, 9-7
 window block assignment, *Task*
 Builder, 9-1, 9-3
 /MU switch, *Task Builder*, 10-29
 Mutiple file operation, *I/O Operations*,
 5-6
 Mutiprocessor systems
 stand-alone maintenance, *System*
 Management, 15-34
 MU-type device
 SYSGEN question, *System*
 Generation, 3-46
 MVT\$ directive, *Executive*, 5-133
 /MXF keyword
 HOME command, *MCR*, 3-95
 INITVOLUME command, *MCR*,
 3-105

N

N\$-family macro, *RMS-11 Macro*, 2-9
 declaring, *RMS-11 Macro*, C-2

N\$-family macro (cont'd.)
 example, *RMS-11 Macro*, 7-3, 7-7,
 7-11, 7-15
 N.ANM1 field, ANSI filename string,
 I/O Operations, B-4
 N.ANM2 field, remainder of ANSI
 filename string, *I/O Operations*,
 B-4
 N.DID field, .PARSE routine, *I/O*
 Operations, 4-13
 N.DID field, directory identification,
 I/O Operations, B-2
 N.DVNM field, *I/O Operations*, 4-17
 N.DVNM field, ASCII device name,
 I/O Operations, B-2
 N.DVNM field, ASCII tape device
 name, *I/O Operations*, B-4
 N.FID field
 .FIND routine, *I/O Operations*,
 4-17
 .PARSE routine, *I/O Operations*,
 4-13
 N.FID field, file identification, *I/O*
 Operations, B-1, B-4
 N.FNAM field, file name, *I/O*
 Operations, B-1
 N.FTYP field, file type, *I/O Operations*,
 B-1
 N.FVER field, file version number, *I/O*
 Operations, B-1
 N.FVER field, tape file version number,
 I/O Operations, B-4
 N.NEXT field, context for next .FIND,
 I/O Operations, B-2
 N.NEXT field, tape context for next
 .FIND, *I/O Operations*, B-4
 N.OVPT
 low-memory context, *Task Builder*,
 B-10
 reserved global symbol, *Task*
 Builder, E-1
 N.STAT field, filename block status
 word, *I/O Operations*, B-1
 N.STAT field, tape filename block
 status word, *I/O Operations*, B-4
 N.UNIT field
 FNB (tape), *I/O Operations*, B-4
 N.UNIT field, unit number field, *I/O*
 Operations, B-2
 NO parameter
 RLSBUF: subroutine
 K-series, *I/O Drivers*, 23-26
 LADRV, *I/O Drivers*, 22-22

NAM\$B macro, *RMS-11 Macro*, 2-8, C-2
 example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15

NAM\$E macro, *RMS-11 Macro*, 2-9
 declaring, *RMS-11 Macro*, C-2
 example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15

NAM block, *RMS-11 Introduction*, 4-8
 chaining to FAB, *RMS-11 Macro*, 2-12
 declaring, *RMS-11 Macro*, 2-8
 identification by
 See FB\$FID mask in FOP field
 initializing, *RMS-11 Macro*, 2-9
 summary, *RMS-11 Macro*, 6-94

Name
 format
 internal symbol, *Task Builder*, A-32
 global symbol, *Task Builder*, A-6

/NAME:jobname qualifier
 PRINT command, *Batch and Queue*, 2-4

NAME attribute
 RMSDES utility
 file section, *RMS-11 Utilities*, 2-31
 key section, *RMS-11 Utilities*, 2-38

/NAMED_DIRECTORY qualifier
 SET DEFAULT command, *Command Language*, 4-100 to 4-101

.NAME directive, *Task Builder*, 3-23, 3-28
 attribute
 DSK, *Task Builder*, 3-28
 GBL, *Task Builder*, 3-28
 NODSK, *Task Builder*, 3-28
 NOGBL, *Task Builder*, 3-28
 example use, *Task Builder*, 3-29
 summary, *Task Builder*, 3-51

/NAMED keyword
 SET command (MCR), *MCR*, 3-231

Named variable, *Error Logging*, 5-8

/NAME keyword
 HOME command, *MCR*, 3-95

/NAME qualifier
 SHOW QUEUE command, *Batch and Queue*, 2-16

NAM field in FAB
 chaining NAM block to FAB, *RMS-11 Macro*, 2-12

NAM field in FAB (cont'd.)
 CREATE operation, *RMS-11 Macro*, 5-9
 ENTER operation, *RMS-11 Macro*, 5-35
 ERASE operation, *RMS-11 Macro*, 5-40
 offset, *RMS-11 Macro*, 6-24
 OPEN operation, *RMS-11 Macro*, 5-72
 PARSE operation, *RMS-11 Macro*, 5-86
 REMOVE operation, *RMS-11 Macro*, 5-102
 RENAME operation, *RMS-11 Macro*, 5-108
 SEARCH operation, *RMS-11 Macro*, 5-116
 summary, *RMS-11 Macro*, 6-57

NAMOF\$ macro, *RMS-11 Macro*, C-2

.NARG directive, *MACRO-11*, 7-11
 example, *MACRO-11*, 7-12

NB\$DEV mask in FNB field
 CREATE operation, *RMS-11 Macro*, 5-21
 ENTER operation, *RMS-11 Macro*, 5-37
 ERASE operation, *RMS-11 Macro*, 5-43
 OPEN operation, *RMS-11 Macro*, 5-81
 PARSE operation, *RMS-11 Macro*, 5-88
 REMOVE operation, *RMS-11 Macro*, 5-105
 RENAME operation, *RMS-11 Macro*, 5-111
 value, *RMS-11 Macro*, 6-94

NB\$DIR mask in FNB field
 CREATE operation, *RMS-11 Macro*, 5-21
 ENTER operation, *RMS-11 Macro*, 5-37
 ERASE operation, *RMS-11 Macro*, 5-43
 OPEN operation, *RMS-11 Macro*, 5-81
 PARSE operation, *RMS-11 Macro*, 5-88
 REMOVE operation, *RMS-11 Macro*, 5-105
 RENAME operation, *RMS-11 Macro*, 5-111
 value, *RMS-11 Macro*, 6-94

NB\$-family symbol
 declaring, *RMS-11 Macro*, C-2
 NB\$NAM mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation
 (set if NB\$QUO is set), *RMS-11*
 Macro, 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB\$NOD mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB\$QUO mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94

NB\$TYP mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation
 (set if NB\$QUO is set), *RMS-11*
 Macro, 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB\$VER mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 RSX-11, *RMS-11 Macro*, D-3, D-4
 value, *RMS-11 Macro*, 6-94
 NB\$WCH mask in FNB field, *RMS-11*
 Macro, 3-9, 3-10
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-38
 ERASE operation, *RMS-11 Macro*,
 5-41, 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-103, 5-105
 RENAME operation, *RMS-11 Macro*,
 5-109, 5-112
 SEARCH operation, *RMS-11 Macro*,
 5-116, 5-118
 summary, *RMS-11 Macro*, 6-102
 value, *RMS-11 Macro*, 6-94

NB\$WCH mask in FNB field (cont'd.)
 wildcard loop, *RMS-11 Macro*, 3-10
 NB\$WDI mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB\$WNA mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB\$WTY mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB\$WVE mask in FNB field
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-37
 ERASE operation, *RMS-11 Macro*,
 5-43
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-88
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-111
 value, *RMS-11 Macro*, 6-94
 NB condition test argument, *MACRO-*
 11, 6-52
 NBOF\$L macro, *I/O Operations*, 2-33
 Nbs parameter
 device-specific function (tape driver),
 I/O Drivers, 8-8
 Nbuf parameter
 ADSWP: subroutine (K-series), *I/O*
 Drivers, 23-9
 DASWP: subroutine
 K-series, *I/O Drivers*, 23-14
 LADRV, *I/O Drivers*, 22-9
 DISWP: subroutine
 K-series, *I/O Drivers*, 23-17
 LADRV, *I/O Drivers*, 22-12
 DOSWP: subroutine
 K-series, *I/O Drivers*, 23-19
 LADRV, *I/O Drivers*, 22-14
 DRS: subroutine (LSDRV), *I/O*
 Drivers, 17-17
 GTHIST: subroutine (K-series), *I/O*
 Drivers, 23-22
 HIST: subroutine (LSDRV), *I/O*
 Drivers, 17-18
 RTS: subroutine (LSDRV), *I/O*
 Drivers, 17-24
 SDAC: subroutine (LSDRV), *I/O*
 Drivers, 17-26
 SDO: subroutine (LSDRV), *I/O*
 Drivers, 17-28
 Nbu parameter
 ADSWP: subroutine (LADRV), *I/O*
 Drivers, 22-4
 Nchan parameter (LSDRV)
 RTS: subroutine, *I/O Drivers*,
 17-24
 SDAC: subroutine, *I/O Drivers*,
 17-26

- Nchn parameter
 - ADSWP: subroutine
 - K-series, *I/O Drivers*, 23-11
 - LADRV, *I/O Drivers*, 22-6
 - DASWP: subroutine
 - K-series, *I/O Drivers*, 23-15
 - LADRV, *I/O Drivers*, 22-11
 - DISWP: subroutine (LADRV), *I/O Drivers*, 22-14
 - DOSWP: subroutine (LADRV), *I/O Drivers*, 22-16
 - ISTADC: subroutine (K-series), *I/O Drivers*, 23-28
 - SETADC: subroutine (LADRV), *I/O Drivers*, 22-23
- .NCHR directive, *MACRO-11*, 7-13
- N command, *Debugging*, 2-10, 6-2, 6-3
- NCT (TTDRV), *I/O Drivers*, 2-18
- NDF condition test argument, *MACRO-11*, 6-52
- Nearest Cylinder
 - definition, *Writing I/O Driver*, 1-15
- NE condition test argument, *MACRO-11*, 6-51
- N error, *MACRO-11*, 3-15
 - summary, *MACRO-11*, D-4
- Nes parameter
 - device-specific function (tape driver), *I/O Drivers*, 8-8
- Nested conditional assembly directive, *MACRO-11*, 6-52
- Nesting
 - macro definition, *MACRO-11*, 7-5, 7-6
- NETNOD symbol, *Indirect*, 2-21
- /NETUIC keyword
 - SET command (MCR), *MCR*, 3-234
 - SET command (VMR), *System Management*, 10-63
- NETUIC symbol, *Indirect*, 2-21
- Network, *Command Language*, 1-16
 - connecting to, *MCR*, 3-247
 - dial-up, *MCR*, 3-247
- Network Command Terminal
 - See NCT
- Network facilities
 - RMSCNV utility, *RMS-11 Utilities*, 4-1
- /NEW_VERSION qualifier
 - BRU utility, *Utilities*, 7-19
- New disk, *Command Language*, 5-11 to 5-13
- Newval parameter
 - IDOR: subroutine (LSDRV), *I/O Drivers*, 17-20
- NEXT & PRINT command
 - EDI utility, *Utilities*, 2-16, 2-39
- NEXT command
 - EDI utility, *Utilities*, 2-16, 2-39
- Next command entry point, *Writing I/O Driver*, 4-65
- Next-record context, *RMS-11 Macro*, 4-3
 - See also Context
- NFS
 - exercise example, *System Management*, 4-15
 - testing range of blocks, *System Management*, 4-52
 - volume
 - altering range of test blocks, *System Management*, 4-52
 - displaying range of test blocks, *System Management*, 4-52
 - error retries, *System Management*, 4-56
 - selecting with SELECT, *System Management*, 4-58
 - selecting with VERIFY, *System Management*, 4-8, 4-64
- NI definition (XEDRV), *I/O Drivers*, 13-23
- NL: pseudo device, *Command Language*, 5-7
- NLDRV, *I/O Drivers*, 20-1
 - example, *I/O Drivers*, 20-1
 - function, *I/O Drivers*, 20-1
- .NLIST BEX directive, *Program Development*, 2-6
- .NLIST directive, *MACRO-11*, 6-9 to 6-14
 - arguments for, *MACRO-11*, 6-10, 6-11, 6-12
- /NL switch, *MACRO-11*, 8-6
- .NLUNS
 - reserved global symbol, *Task Builder*, E-1
- NMBLK\$ macro
 - default filename block, *I/O Operations*, 2-31
 - example, *I/O Operations*, 2-33
- NML11, *Error Logging*, 4-9
- /NM switch, *Task Builder*, 10-30
 - PIP utility, *Utilities*, 3-28

- /[NO]CV switch
 - RMSRST utility, *RMS-11 Utilities*, 7-5, 7-10
- /[NO]QU switch
 - RMSBCK utility, *RMS-11 Utilities*, 6-5, 6-6, 6-7, 6-10
 - RMSRST utility, *RMS-11 Utilities*, 7-6, 7-7, 7-8, 7-12
- NOA field in SUM block
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - offset, *RMS-11 Macro*, 6-145
 - OPEN operation, *RMS-11 Macro*, 5-81
 - summary, *RMS-11 Macro*, 6-148
- NO attribute, *System Management*, 12-36
- /NOCEX keyword
 - SET command (MCR), *MCR*, 3-234
- /NOCONTROL qualifier
 - SET TERMINAL command, *Command Language*, 3-40
- .NOCROSS directive, *MACRO-11*, 6-21, 6-22
- Node, *Command Language*, 1-16
 - remote file specification, *RMS-11 User's Guide*, B-2
- No echo (half-duplex), *I/O Drivers*, 3-14
- /NOER switch
 - RMSIFL utility, *RMS-11 Utilities*, 3-6
- /NOINITIALIZE qualifier
 - BRU utility, *Utilities*, 7-19
- NOK field in SUM block
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - offset, *RMS-11 Macro*, 6-145
 - OPEN operation, *RMS-11 Macro*, 5-81
 - summary, *RMS-11 Macro*, 6-149
- /NOLABEL qualifier
 - MOUNT command, *Command Language*, 5-4, 5-58
- Nolabel tape block size (tape driver), *I/O Drivers*, 8-18
- No limit switch, *Error Logging*, 2-3, 2-6
- /NOLIM switch, *Error Logging*, 2-3, 2-6
- /NOLOG switch, *Error Logging*, 2-3
- No log switch, *Error Logging*, 2-3
- /NOLO job switch
 - QUE /MOD command, *Batch and Queue*, 2-21
- /NOLOW switch
 - PRI command, *Batch and Queue*, 2-4
- /NONAMED_DIRECTORY qualifier
 - SET DEFAULT command, *Command Language*, 4-100 to 4-101
- Nonexternal header, *Writing I/O Driver*, 6-8
- Non-file-structured exercising
 - IOX, *System Management*, 4-3
- Non-pool-resident, *Writing I/O Driver*, 6-8
 - header, *Writing I/O Driver*, 6-9
- Nonprivileged task
 - rebuilding, *System Generation*, 4-10
 - types supplied, *System Generation*, 3-73
- Nonrecoverable errors, *System Management*, 15-30
- Non-RMS-11 files, *RMS-11 Introduction*, 3-4
- Nonsense interrupt logging, *Error Logging*, 4-22
- No-op function mask, *Writing I/O Driver*, 4-19, 4-20
- /NOPRESERVE qualifier
 - BRU utility, *Utilities*, 7-19
- NOSAV symbolic argument, *MACRO-11*, 6-42
- NO SCROLL key, *Command Language*, 3-16 *Introduction*, 1-14
- /NOSERIAL qualifier
 - SET TERMINAL command, *Command Language*, 3-49
- /NOSHAREABLE qualifier
 - MOUNT command, *Command Language*, 5-55
- No sharing
 - sharing declaration, *RMS-11 User's Guide*, 2-7
- /NOSO switch
 - RMSIFL utility, *RMS-11 Utilities*, 3-8, 3-9, 3-10
- No spool switch
 - See /-SP switch
- /NOSP switch, *MACRO-11*, 8-7
- /NOSUPERSEDE qualifier
 - BRU utility, *Utilities*, 7-19
- Notes module
 - exit, *Error Logging*, 4-33
 - heading, *Error Logging*, 4-32

Notes module (cont'd.)

- MODULE statement, *Error Logging*, 4-32
- NML11, *Error Logging*, 4-9
- note name, *Error Logging*, 4-32
- NRK67, *Error Logging*, 4-9
- NRM05, *Error Logging*, 4-9
- NRM23, *Error Logging*, 4-9
- NT0310, *Error Logging*, 4-9
- NTS11, *Error Logging*, 4-9
- print declaration, *Error Logging*, 4-32
- print number, *Error Logging*, 4-33
- PROCEDURE statement, *Error Logging*, 4-32
- unknown note, *Error Logging*, 4-33
- user written, *Error Logging*, 4-31
- /NOVERIFY switch
 - FMT utility, *Utilities*, 5-8
- .NOVLY
 - reserved global symbol, *Task Builder*, E-1
- /NOWCHK switch
 - BAD utility, *Utilities*, 6-9
- NOWIDE argument, *MACRO-11*, 8-11, 8-12
- N parameter
 - RMVBUF: subroutine
 - K-series, *I/O Drivers*, 23-26
 - LADRV, *I/O Drivers*, 22-22
- NP command
 - EDI utility, *Utilities*, 2-16, 2-39
- NPR device
 - drivers for (on PDP-11), *Writing I/O Driver*, 7-2
- NRK67, *Error Logging*, 4-9
- NRM05, *Error Logging*, 4-9
- NRM23, *Error Logging*, 4-9
- NRZI even parity (tape driver), *I/O Drivers*, 8-16
- /NSF keyword
 - FIX-IN-MEMORY command (VMR), *System Management*, 10-19
- NSG field in KEY block
 - DISPLAY operation, *RMS-11 Macro*, 5-31
 - offset, *RMS-11 Macro*, 6-68
 - OPEN operation, *RMS-11 Macro*, 5-81
 - summary, *RMS-11 Macro*, 6-86
- \$NSIER, *Error Logging*, 4-22
- /NS switch
 - SLP utility, *Utilities*, 13-16

.NSTBL

- reserved global symbol, *Task Builder*, E-1
- n symbol, *Debugging*, 2-1
- NT0310, *Error Logging*, 4-9
- NTS11, *Error Logging*, 4-9
- .NTYPE directive, *MACRO-11*, 7-14
- NUL field in KEY block
 - CREATE operation, *RMS-11 Macro*, 5-19
 - DISPLAY operation, *RMS-11 Macro*, 5-31
 - offset, *RMS-11 Macro*, 6-67
 - OPEN operation, *RMS-11 Macro*, 5-80
 - summary, *RMS-11 Macro*, 6-87
- Null
 - segment
 - ODL, *Task Builder*, 3-31
- NULL_KEY attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-39
- NULL_VALUE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-39
- Null device, *MCR*, 2-11 *System Management*, 10-39
- Null device driver
 - See NLDRV
- Null key, *RMS-11 Introduction*, 3-10
 - RMS-11 User's Guide*, 6-10
 - See also NUL field in KEY block
 - See also XB\$NUL mask in FLG field
- Number, *Command Language*, 1-13
 - floating-point, *MACRO-11*, 6-33, 6-34
 - MACRO-11* treatment, *MACRO-11*, 3-14
 - one's complement, *MACRO-11*, 6-35, 6-36
 - one-word floating-point, *MACRO-11*, 6-35, 6-36
 - packing decimal, *MACRO-11*, 6-31
 - radix control, *MACRO-11*, 6-31, 6-32
 - two's complement operator, *MACRO-11*, 3-4
- Number of arguments
 - See .NARG directive
- Number sign (#)
 - cross-reference listing, *Task Builder*, 10-12, 10-13, 11-23, 11-24
- NUMBER symbol, *Indirect*, 2-11

- Numeric control
 - operator, *MACRO-11*, 6-33
 - temporary operator, *MACRO-11*, 6-35, 6-36
- Numeric conversion function, *Error Logging*, 5-17, 5-18
- Numeric directive, *MACRO-11*, 6-33
- Numeric expression, *Indirect*, 2-22
- Numeric symbol, *Indirect*, 2-9, 2-22
 - comparing, *Indirect*, 2-60
 - decrementing, *Indirect*, 2-44
 - defining, *Indirect*, 2-35
 - incrementing, *Indirect*, 2-65
 - radix, *Indirect*, 2-23
 - setting, *Indirect*, 2-82
 - setting, *Indirect*, 2-81
 - substituting, *Indirect*, 2-23
 - testing, *Indirect*, 2-61
- Numeric to ASCII, *System Library*, 5-1
 - See also ASCII number conversion
 - binary byte to octal (*\$CBTMG*), *System Library*, 5-9
 - binary date to decimal (*\$CBDAT*), *System Library*, 5-2
 - binary to signed decimal (*\$CBDSG*), *System Library*, 5-4
 - binary to signed octal (*\$CBOSG*), *System Library*, 5-8
 - binary to unsigned decimal (*\$CBDMG*), *System Library*, 5-3
 - binary to unsigned octal (*\$CBOMG*), *System Library*, 5-7
 - double-precision binary to decimal (*\$CDDMG*), *System Library*, 5-5
 - general purpose binary to ASCII (*\$CBTA*), *System Library*, 5-10
 - Radix-50 to ASCII (*\$C5TA*), *System Library*, 5-11
- Num parameter
 - immediate device-specific function (*LSDRV*), *I/O Drivers*, 17-3
- /NU switch
 - FLX utility, *Utilities*, 4-7
- /NV subswitch
 - PIP utility, *Utilities*, 3-20
- /NV switch
 - PIP utility, *Utilities*, 3-12
- NXT field in ALL block
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - CREATE operation, *RMS-11 Macro*, 5-9

- NXT field in ALL block (cont'd.)
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - ENTER operation, *RMS-11 Macro*, 5-35
 - ERASE operation, *RMS-11 Macro*, 5-40
 - EXTEND operation, *RMS-11 Macro*, 5-46
 - offset, *RMS-11 Macro*, 6-2
 - OPEN operation, *RMS-11 Macro*, 5-73
 - PARSE operation, *RMS-11 Macro*, 5-86
 - REMOVE operation, *RMS-11 Macro*, 5-102
 - RENAME operation, *RMS-11 Macro*, 5-108
 - SEARCH operation, *RMS-11 Macro*, 5-116
 - summary, *RMS-11 Macro*, 6-13
- NXT field in DAT block
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - CREATE operation, *RMS-11 Macro*, 5-9
 - DISPLAY operation, *RMS-11 Macro*, 5-30
 - ENTER operation, *RMS-11 Macro*, 5-35
 - ERASE operation, *RMS-11 Macro*, 5-40
 - EXTEND operation, *RMS-11 Macro*, 5-46
 - offset, *RMS-11 Macro*, 6-14
 - OPEN operation, *RMS-11 Macro*, 5-73
 - PARSE operation, *RMS-11 Macro*, 5-86
 - REMOVE operation, *RMS-11 Macro*, 5-102
 - RENAME operation, *RMS-11 Macro*, 5-108
 - SEARCH operation, *RMS-11 Macro*, 5-116
 - summary, *RMS-11 Macro*, 6-19
- NXT field in KEY block
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - CREATE operation, *RMS-11 Macro*, 5-9
 - DISPLAY operation, *RMS-11 Macro*, 5-30

NXT field in KEY block (cont'd.)
 ENTER operation, *RMS-11 Macro*, 5-35
 ERASE operation, *RMS-11 Macro*, 5-40
 EXTEND operation, *RMS-11 Macro*, 5-46
 offset, *RMS-11 Macro*, 6-67
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-86
 REMOVE operation, *RMS-11 Macro*, 5-102
 RENAME operation, *RMS-11 Macro*, 5-108
 SEARCH operation, *RMS-11 Macro*, 5-116
 summary, *RMS-11 Macro*, 6-88
 NXT field in PRO block
 CLOSE operation, *RMS-11 Macro*, 5-3
 CREATE operation, *RMS-11 Macro*, 5-9
 DISPLAY operation, *RMS-11 Macro*, 5-30
 ENTER operation, *RMS-11 Macro*, 5-35
 ERASE operation, *RMS-11 Macro*, 5-40
 EXTEND operation, *RMS-11 Macro*, 5-46
 offset, *RMS-11 Macro*, 6-108
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-86
 REMOVE operation, *RMS-11 Macro*, 5-102
 RENAME operation, *RMS-11 Macro*, 5-108
 SEARCH operation, *RMS-11 Macro*, 5-116
 summary, *RMS-11 Macro*, 6-111
 NXT field in SUM block
 CLOSE operation, *RMS-11 Macro*, 5-3
 CREATE operation, *RMS-11 Macro*, 5-9
 DISPLAY operation, *RMS-11 Macro*, 5-30
 ENTER operation, *RMS-11 Macro*, 5-35

NXT field in SUM block (cont'd.)
 ERASE operation, *RMS-11 Macro*, 5-40
 EXTEND operation, *RMS-11 Macro*, 5-46
 offset, *RMS-11 Macro*, 6-145
 OPEN operation, *RMS-11 Macro*, 5-73
 PARSE operation, *RMS-11 Macro*, 5-86
 REMOVE operation, *RMS-11 Macro*, 5-102
 RENAME operation, *RMS-11 Macro*, 5-108
 SEARCH operation, *RMS-11 Macro*, 5-116
 summary, *RMS-11 Macro*, 6-150
 NXT field in XAB
 chaining XABs to FAB, *RMS-11 Macro*, 2-12
 NXTSYM symbol, *Indirect*, 2-21
 \$NXTVOL macro, *RMS-11 Macro*, 5-70
 RSTS/E, *RMS-11 Macro*, D-4
 NXTVOL operation, *RMS-11 Introduction*, 4-4
 \$NXTVOL macro, *RMS-11 Macro*, 5-70
 record stream, *RMS-11 Macro*, 4-9

O

O\$-family symbol
 declaring
 ALL block, *RMS-11 Macro*, C-3, C-4
 DAT block, *RMS-11 Macro*, C-3, C-4
 FAB field offset, *RMS-11 Macro*, C-1
 KEY block, *RMS-11 Macro*, C-3, C-4
 NAM block field offset, *RMS-11 Macro*, C-2
 PRO block, *RMS-11 Macro*, C-3, C-4
 RAB, *RMS-11 Macro*, C-2
 SUM block, *RMS-11 Macro*, C-3, C-4
 XAB, *RMS-11 Macro*, C-4
 value
 ALL block, *RMS-11 Macro*, 6-2
 DAT block, *RMS-11 Macro*, 6-14

- O\$-family symbol
 - value (cont'd.)
 - FAB, *RMS-11 Macro*, 6-22, 6-23, 6-24
 - KEY block, *RMS-11 Macro*, 6-67, 6-68
 - NAM block, *RMS-11 Macro*, 6-94
 - PRO block, *RMS-11 Macro*, 6-108
 - RAB, *RMS-11 Macro*, 6-115
 - SUM block, *RMS-11 Macro*, 6-145
- /OA switch
 - RMSRST utility, *RMS-11 Utilities*, 7-9, 7-10
- \$\$OBF1 program section
 - reserved name, *Task Builder*, E-3
- \$\$OBF2 program section
 - reserved name, *Task Builder*, E-3
- OBJECT_BINARY argument, *MACRO-11*, 8-11
- Object code
 - assembling, *RMS-11 User's Guide*, 1-13
 - compiling, *RMS-11 User's Guide*, 1-13
 - patching, *Task Builder*, 12-6
- Object file, *Command Language*, 6-1, 6-3, 6-4, 6-10
- Object library
 - adding modules, *Program Development*, 6-9, 6-10
 - creating a user, *Program Development*, 6-4, 6-5, 6-6
 - default search of system, *Program Development*, 1-11, 4-2
 - DIGITAL-supplied, *Program Development*, 1-10, 1-11
 - dual use, *Program Development*, 6-8, 6-9
 - listing information, *Program Development*, 6-11, 6-12
 - OTS, *Program Development*, 7-1, 7-2
 - using to resolve undefined global symbols, *Program Development*, 6-8, 6-9
- Object module, *Introduction*, 5-3, 5-4, 5-9 *Task Builder*, 1-1
 - concatenated, *Program Development*, 4-3, 4-4
 - content, *Task Builder*, A-1
 - default name, *MACRO-11*, 6-15

- Object module (cont'd.)
 - format, *Task Builder*, A-3
 - FORTTRAN IV, *Program Development*, 7-5, 7-6
 - input to TKB, *Program Development*, 4-1
 - library
 - See *Library*
 - See *SYSLIB.OLB*
 - linking, *Task Builder*, 2-1 to 2-8
 - MACRO-11, *Program Development*, 1-4, 3-4, 3-5, 3-6
 - name, *MACRO-11*, 1-2
 - name assignment, *MACRO-11*, 6-15
 - overriding definition, *Task Builder*, 12-18
 - patching
 - PAT utility, *Utilities*, 14-1
 - selective global symbol
 - using SS to include, *Task Builder*, 10-48, 10-49, 10-50, 11-61, 11-62, 11-63
 - storing in library
 - LBR utility, *Utilities*, 10-19
 - system library, *Introduction*, 5-9
- Object module library, *Command Language*, 6-39 *I/O Drivers*, 1-7
- Object Module Patch Utility
 - See *PAT utility*
- /OBJECT qualifier, *MACRO-11*, 8-10
- Object Time System
 - See *OTS*
- .OBJ file type, *Program Development*, 3-4, 7-5
- O command, *Debugging*, 2-10, 7-1, 9-13
 - ZAP utility, *Utilities*, 15-17
- OCOP, *System Management*, 12-30
- Octal conversion
 - octal to binary (\$COTB), *System Library*, 4-5
 - octal to binary double-word (.OD2CT), *System Library*, 4-2
- Octal number, *Command Language*, 1-13
- Octal operator, *Debugging*, 2-3, 2-7, 2-8
 - byte mode, *Debugging*, 9-11
 - word mode, *Debugging*, 9-11
- OCTAL symbol, *Indirect*, 2-11
- /OCT switch
 - DMP utility, *Utilities*, 11-7

- .OD2CT (Octal to binary double-word),
 System Library, 4-2
- .ODD directive, *MACRO-11*, 6-37
- ODL
 - autoload indicator, *Task Builder*,
 4-2
 - directive, *Task Builder*, 3-23
 - .END, *Task Builder*, 3-23, 3-24
 - example use of .NAME, *Task
Builder*, 3-29
 - .FCTR, *Task Builder*, 3-23, 3-25
 - introduction, *Task Builder*, 3-23
 - .NAME, *Task Builder*, 3-23,
 3-28
 - .NAME attributes, *Task Builder*,
 3-28
 - .PSECT, *Task Builder*, 3-23,
 3-29
 - .ROOT, *Task Builder*, 3-23,
 3-24
 - efficiently placing in
 autoload indicator, *Task Builder*,
 4-6
 - enabling operator
 - memory-resident overlay, *Task
Builder*, 10-34, 11-58
 - file, *Task Builder*, 3-49
 - creating
 - start of procedure, *Task
Builder*, 3-36
 - with allocation diagram,
 Task Builder, 3-35 to
 3-40
 - declaring, *Task Builder*, 10-28,
 11-53
 - .FCTR statement
 - creating from allocation
 diagram, *Task Builder*,
 3-38, 3-39
 - .ROOT directive
 - creating from allocation
 diagram, *Task Builder*,
 3-37
 - virtual address space
 - allocation diagram, *Task
Builder*, 3-36
 - introduction, *Task Builder*, 3-23 to
 3-31
 - multiple tree
 - defining structure, *Task Builder*,
 3-30 to 3-35
 - example, *Task Builder*, 3-31,
 3-32

- ODL
 - multiple tree (cont'd.)
 - structure, *Task Builder*, 3-30 to
 3-35
 - operator
 - comma (,), *Task Builder*, 3-24
 - exclamation point (!), *Task
Builder*, 3-24, 3-27
 - hyphen (-), *Task Builder*, 3-24
 - introduction, *Task Builder*, 3-24
 - statement
 - cotree
 - from allocation diagram,
 Task Builder, 3-40
 - summary, *Task Builder*, 3-49, 3-50,
 3-51
 - tree
 - defining, *Task Builder*, 3-49
 - using indirect file, *Task Builder*,
 3-30
- .ODL file type, *Command Language*,
 6-5
- ODT, MCR, 3-58 *Program
Development*, 1-6, 1-7
 - at sign (@), *Program Development*,
 5-8
 - backslash (\), *Program Development*,
 5-5
 - B command, *Program Development*,
 5-6
 - breakpoint register, *Program
Development*, 5-6
 - changing location contents, *Program
Development*, 5-7
 - correcting input, *Program
Development*, 5-3
 - disabling, *System Management*, 9-4
 - dollar sign (\$), *Program
Development*, 5-6, 5-7, 5-8
 - error conditions in task, *Program
Development*, 5-8
 - examining locations, *Program
Development*, 5-4, 5-5
 - exiting, *Debugging*, 1-4
 - forming address, *Program
Development*, 5-4
 - G command, *Program Development*,
 5-6, 5-8
 - including in a task, *Program
Development*, 5-1, 5-2
 - invoking, *Debugging*, 1-4
 - LINE FEED key, *Program
Development*, 5-5, 5-7, 5-8
 - linking, *Debugging*, 1-2

- ODT (cont'd.)
 - map use, *Program Development*, 5-2
 - ODT.OBJ file, *Program Development*, 5-1
 - overview, *Debugging*, 1-1
 - P command, *Program Development*, 5-7
 - question mark (?), *Program Development*, 5-3
 - R command, *Program Development*, 5-3
 - relocation register, *Program Development*, 5-2, 5-3, 5-4
 - RETURN key, *Program Development*, 5-8
 - setting breakpoints, *Program Development*, 5-6
 - setting up a task with, *Program Development*, 1-7
 - slash (/), *Program Development*, 5-4
 - source listing use, *Program Development*, 5-4
 - SST within, *Program Development*, 5-8
 - terminating task execution, *Program Development*, 5-8
 - underline (—), *Program Development*, 5-2
 - X command, *Program Development*, 5-8
 - ZAP utility, *Utilities*, 15-1
- ODTID module, *Debugging*, 1-3
- .ODTL1
 - reserved global symbol, *Task Builder*, E-1
- .ODTL2
 - reserved global symbol, *Task Builder*, E-1
- ODT vector, *Task Builder*, 12-26
- ODTV option, *Task Builder*, 12-26
- O error, *MACRO-11*, 6-39, 6-53, 7-3, 7-12, 7-14, 7-21
 - summary, *MACRO-11*, D-4
- Offline, place unit (ICDRV/ISDRV), *I/O Drivers*, 19-70
- OFFLINE command, *System Management*, 15-19
- OFFLINE MEMORY, *System Management*, 15-21
- \$OFF macro, *RMS-11 Macro*, 2-11
- Offset, *Debugging*, 2-3
 - branch, *Debugging*, 7-1
 - calculating, *Debugging*, 2-10, 7-1, 9-13
- Offset
 - calculating (cont'd.)
 - instruction and data space, *Debugging*, 7-2
 - negative, *Debugging*, 7-2
 - PC-relative, *Debugging*, 7-1, 9-13
 - positive, *Debugging*, 7-2
- Offset mode, *CDA*, 3-1
- Offspring task
 - enable (VTDRV), *I/O Drivers*, 4-5
- offspring task
 - VTDRV, *I/O Drivers*, 4-1
- OFID\$ macro, *I/O Operations*, 3-1
- OFID\$x macro, file processing, *I/O Operations*, 3-14
- OFLIN: place unit offline (ICDRV/ISDRV), *I/O Drivers*, 19-70
- OFNB\$ macro, *I/O Operations*, 3-1
- OFNB\$x macro
 - dataset descriptor, *I/O Operations*, 3-17
 - default filename block, *I/O Operations*, 3-17
 - file processing, *I/O Operations*, 3-16
- .OLB file type, *Program Development*, 6-4
 - See also LBR utility
- OLRDF\$, *CDA*, C-47 *Writing I/O Driver*, A-39 to A-45
- One's complement operator, *MACRO-11*, 3-5, 6-35, 6-36
- .ONERR directive, *Indirect*, 2-67
- One-word floating-point number, *MACRO-11*, 6-35, 6-36
- ONLIN: place unit online (ICDRV/ISDRV), *I/O Drivers*, 19-70
- Online, place unit (ICDRV/ISDRV), *I/O Drivers*, 19-70
- ONLINE command, *System Management*, 15-22
- On-Line Debugging Tool
 - See ODT
- ONLINE MEMORY, *System Management*, 15-24
- On-line system
 - definition, *System Generation*, 1-11
- OOB (TTDRV)
 - clear, *I/O Drivers*, 2-61
 - hello, *I/O Drivers*, 2-61
 - include, *I/O Drivers*, 2-61
- ^O operator, *MACRO-11*, 3-5, 6-32

- Op code
 - See Operation code
- OP command
 - EDI utility, *Utilities*, 2-39
- OPE
 - See OPENREGISTER command
- /OPE keyword
 - OPENREGISTER command, *MCR*, 3-166
- OPEN\$
 - example, *I/O Operations*, 5-9
 - macro, *I/O Operations*, 3-1
 - macro, file processing, *I/O Operations*, 3-18
- OPEN\$R
 - example, *I/O Operations*, 5-8
 - macro, shared access, *I/O Operations*, 1-13
- OPEN\$x macro
 - file processing, *I/O Operations*, 3-2, 3-7
 - format, file operations, *I/O Operations*, 3-5
- .OPENA directive, *Indirect*, 2-71
- OPEN command, *Debugging*, 8-7
- .OPEN directive, *Indirect*, 2-69
- Open file
 - by filename block, *I/O Operations*, 3-16
 - by ID, *I/O Operations*, 2-34, 3-14
 - existing, *I/O Operations*, 3-9
 - for access, *I/O Operations*, 3-18
 - for modify, *I/O Operations*, 3-19
 - for read, *I/O Operations*, 3-19
 - for update and extend, *I/O Operations*, 3-19
 - new, *I/O Operations*, 3-9
 - no supersede, *I/O Operations*, 3-18, 3-19
 - processing, *I/O Operations*, 3-3
- Open line (XEDRV), *I/O Drivers*, 13-6
- OPEN LINE key (EDT), *Introduction*, 2-7
- \$OPEN macro, *RMS-11 Macro*, 5-72
- RSTS/E, *RMS-11 Macro*, D-4
- OPEN operation, *RMS-11 Introduction*, 4-2 *RMS-11 Macro*, 3-7 *RMS-11 User's Guide*, 1-18
- BDB requirement, *RMS-11 Macro*, 2-8
- I/O buffer requirement, *RMS-11 Macro*, 2-7
- OPEN operation (cont'd.)
 - IFAB requirement, *RMS-11 Macro*, 2-5
 - \$OPEN macro, *RMS-11 Macro*, 5-72
 - remote access, *RMS-11 User's Guide*, B-2, B-3
 - wildcard loop, *RMS-11 Macro*, 3-10, 3-11
- .OPENR directive, *Indirect*, 2-73
- OPENREGISTER command, *MCR*, 1-8, 3-164
- format, *MCR*, 3-164
- keywords
 - /AFF, *MCR*, 3-165
 - /CPU, *MCR*, 3-165
 - /KNL, *MCR*, 3-166
 - /KNLD, *MCR*, 3-166
- parameters, *MCR*, 3-164
- Open relay (LSDRV), *I/O Drivers*, 17-4
- OPEN SECONDARY command
 - EDI utility, *Utilities*, 2-39
- Operand field, *MACRO-11*, 2-1, 2-4
- separator, *MACRO-11*, 3-2
- Operating mode
 - disabling, *Indirect*, 2-46
 - enabling, *Indirect*, 2-47
 - initial setting, *Indirect*, 2-47
 - list, *Indirect*, 2-47
 - testing, *Indirect*, 2-62
- Operating system, *Introduction*, 1-1, 5-1 *RMS-11 User's Guide*, 1-13
- See also System
- allocating system resources, *RMS-11 User's Guide*, 8-3
- block locking, *RMS-11 User's Guide*, 3-6
- compatibility, *RMS-11 User's Guide*, 3-4
- defaults, *RMS-11 User's Guide*, 2-2
- failure, *Error Logging*, 1-1
- FALs, *RMS-11 User's Guide*, B-3
- multiuser, *Introduction*, 6-2
- protection codes
 - and shared access, *RMS-11 User's Guide*, 2-5
- real-time, *Introduction*, 6-2
- remote access
 - RSTS/E, *RMS-11 User's Guide*, B-3
 - RSX-11M/M-PLUS, *RMS-11 User's Guide*, B-3
 - VAX/VMS, *RMS-11 User's Guide*, B-1, B-3

- Operating system (cont'd.)
 - return to, *Debugging*, 2-12
- Operation, *RMS-11 Introduction*, 4-1
 - RMS-11 Macro*, 1-2
 - asynchronous, *RMS-11 Introduction*, 4-4
 - block, *RMS-11 Introduction*, 4-7
 - directory, *RMS-11 Introduction*, 4-1
 - RMS-11 User's Guide*, 1-17
 - indexed files, *RMS-11 User's Guide*, 7-10
 - relative files, *RMS-11 User's Guide*, 4-15
 - sequential files, *RMS-11 User's Guide*, 3-15
- file, *RMS-11 Introduction*, 4-2
 - RMS-11 User's Guide*, 1-18
 - indexed files, *RMS-11 User's Guide*, 7-10
 - optimizations, *RMS-11 User's Guide*, 8-2
 - relative files, *RMS-11 User's Guide*, 4-15
 - sequential files, *RMS-11 User's Guide*, 3-15
- from high-level languages, *RMS-11 Introduction*, 4-7
- optimizations, *RMS-11 User's Guide*, 8-2
- record, *RMS-11 Introduction*, 4-4
 - RMS-11 User's Guide*, 1-10, 1-15
 - and I/O costs, *RMS-11 User's Guide*, 5-17
 - and indexed files, *RMS-11 User's Guide*, 5-9, 5-16, 7-1
 - optimizations, *RMS-11 User's Guide*, 8-2
 - relative files, *RMS-11 User's Guide*, 4-7
 - sequential files, *RMS-11 User's Guide*, 3-7
- routine
 - calling, *RMS-11 Macro*, 2-13
 - return, *RMS-11 Macro*, 2-14
- stream, *RMS-11 Introduction*, 4-4
 - RMS-11 User's Guide*, 1-15
 - indexed files, *RMS-11 User's Guide*, 7-1
 - relative files, *RMS-11 User's Guide*, 4-7
 - sequential files, *RMS-11 User's Guide*, 3-7
- Operation (cont'd.)
 - synchronous, *RMS-11 Introduction*, 4-4
 - using, *RMS-11 Macro*, 2-9
- Operation code
 - comercial instruction, *MACRO-11*, C-3, C-4
 - floating-point, *MACRO-11*, C-4, C-5
 - PDP-11, *MACRO-11*, C-1, C-2, C-3
- Operation macro, *RMS-11 Macro*, 1-2, 2-9
- Operator, *Debugging*, 2-3, 2-4
 - See SLP utility
 - apostrophe ('), *Debugging*, 2-7, 4-6, 9-10
 - arithmetic, *Indirect*, 2-22
 - ASCII
 - byte mode, *Debugging*, 4-6
 - word mode, *Debugging*, 4-6
 - backslash (\), *Debugging*, 2-8, 4-2, 4-3, 9-11
 - binary, *MACRO-11*, 3-5, 3-6
 - addition, *MACRO-11*, 3-5
 - division, *MACRO-11*, 3-5
 - evaluation of multiple, *MACRO-11*, 3-6
 - logical AND, *MACRO-11*, 3-5
 - logical inclusive OR, *MACRO-11*, 3-5
 - multiplication, *MACRO-11*, 3-5
 - precedence with unary, *MACRO-11*, 3-16
 - subtraction, *MACRO-11*, 3-5
 - byte mode
 - ASCII, *Debugging*, 2-7, 9-10
 - octal, *Debugging*, 2-8, 4-2, 9-11
 - equal sign (=), *Debugging*, 7-2
 - field, *MACRO-11*, 2-1, 2-3, 2-4
 - logical, *Indirect*, 2-22
 - minus sign (-), *Debugging*, 2-3, 2-4, 9-8
 - ODL, *Task Builder*, 3-24
 - comma (,), *Task Builder*, 3-24
 - exclamation point (!), *Task Builder*, 3-24, 3-27
 - hyphen (-), *Task Builder*, 3-24
 - introduction, *Task Builder*, 3-24
 - percent sign (%), *Debugging*, 2-7, 4-7, 9-11
 - plus sign (+), *Debugging*, 2-3, 2-4, 9-8
 - quotation mark ("), *Debugging*, 2-7, 4-6, 9-10

Operator (cont'd.)

- Radix-50
 - word mode, *Debugging*, 4-7
- slash (/), *Debugging*, 2-7, 4-2, 4-3, 9-11
- space, *Debugging*, 9-8
- unary, *MACRO-11*, 3-4
 - binary radix control, *MACRO-11*, 3-5, 6-32
 - decimal radix control, *MACRO-11*, 3-5, 6-32
 - evaluation of multiple, *MACRO-11*, 3-4
 - macro call use, *MACRO-11*, 7-5
 - minus, *MACRO-11*, 3-4
 - numeric control, *MACRO-11*, 6-33, 6-35
 - octal radix control, *MACRO-11*, 3-5, 6-32
 - one's complement, *MACRO-11*, 3-5, 6-35, 6-36
 - one-word floating-point, *MACRO-11*, 3-5, 6-35, 6-36
 - plus, *MACRO-11*, 3-4
 - precedence over binary, *MACRO-11*, 3-16
- Radix-50 control, *MACRO-11*, 3-5, 6-30
- radix control, *MACRO-11*, 6-31, 6-32, 6-33
- two's complement, *MACRO-11*, 3-4
- universal, *MACRO-11*, 3-5
- word mode
 - ASCII, *Debugging*, 2-7, 9-10
 - octal, *Debugging*, 2-7, 4-2, 9-11
 - Radix-50, *Debugging*, 2-7, 9-11

Opn parameter

- device-specific function (UDDRV), *I/O Drivers*, 16-4
- ICDRV/ISDRV, *I/O Drivers*, 19-10
- IO.MLO function, *I/O Drivers*, 19-17
- IO.MSO function, *I/O Drivers*, 19-16

OPNS\$ macro, *I/O Operations*, 3-1

OPNS\$R macro, shared access, *I/O Operations*, 1-12

OPNS\$x macro, file processing, *I/O Operations*, 3-13

OPNT\$D macro, *I/O Operations*, 3-14

OPNT\$ macro, *I/O Operations*, 3-1

OPNT\$W macro, file processing, *I/O Operations*, 3-13

Optimization

- allocating system resources, *RMS-11 User's Guide*, 8-3
- application design, *RMS-11 User's Guide*, 2-11
- DELETE operation, *RMS-11 User's Guide*, 6-7
- disk usage, *RMS-11 User's Guide*, 8-3
- operations, *RMS-11 User's Guide*, 8-2
- program development, *RMS-11 User's Guide*, 8-1
- PUT operation, *RMS-11 User's Guide*, 6-7
- virtual-to-logical block mapping, *RMS-11 User's Guide*, 8-2
- window turning, *RMS-11 User's Guide*, 8-3

Option

See also specific options

category, *Task Builder*, 12-1

CMPRT

- supervisor mode, *Task Builder*, 8-8

- use in CSM library, *Task Builder*, 8-8

description, *Task Builder*, 12-1 to 12-45

entering, *Task Builder*, 1-9, 1-10, 1-11

FTB supported, *Task Builder*, G-2

GBLXCL

- use in CSM library, *Task Builder*, 8-8, 8-9, 8-17

general form, *Task Builder*, 1-9

indirect command file, *Task Builder*, 1-14

input

- LINK command line, *Task Builder*, 1-9, 1-10

- TKB command line, *Task Builder*, 1-9

linking to a region, *Task Builder*, 5-15

RESLIB

- supervisor mode library, *Task Builder*, 8-20

RESSUP

- supervisor mode library, *Task Builder*, 8-7, 8-9

Option

RESSUP (cont'd.)

use in CSM library, *Task Builder*,
8-9, 8-18, 8-19, 8-20

separation of argument list, *Task
Builder*, 1-11

summary, *Task Builder*, 12-2, 12-3,
12-4

SUPLIB

supervisor mode library, *Task
Builder*, 8-7, 8-9

use in CSM library, *Task Builder*,
8-9, 8-19

supported by FTB, *Task Builder*,
G-2

Task Builder, *Task Builder*, 1-9

usage

virtual section, *Task Builder*,
5-61, 5-62

/OPTION qualifier, *Task Builder*,
11-51 to 11-52

/OPT keyword

SET command (MCR), *MCR*, 3-235

SET command (VMR), *System
Management*, 10-64

ORG\$ macro, *RMS-11 Macro*, 2-2

Organization

See File organization

See ORG field in FAB

ORGANIZATION attribute

RMSDES utility, *RMS-11 Utilities*,
2-31

ORG field in FAB

CREATE operation, *RMS-11 Macro*,
5-11

offset, *RMS-11 Macro*, 6-23

OPEN operation, *RMS-11 Macro*,
5-78

summary, *RMS-11 Macro*, 6-58

OTS

library, *Program Development*, 7-1,
7-2

usage to extend record buffer, *Task
Builder*, 12-17

\$OTSV

low-memory context, *Task Builder*,
B-10

reserved global symbol, *Task
Builder*, E-2

Outfile

RMSBCK utility, *RMS-11 Utilities*,
6-3

RMSCNV utility, *RMS-11 Utilities*,
4-4

Outfile (cont'd.)

RMSDSP utility, *RMS-11 Utilities*,
5-3

RMSIFL utility, *RMS-11 Utilities*,
3-3

RMSRST utility, *RMS-11 Utilities*,
7-3

Output

ADJLPS: subroutine, use of, *I/O
Drivers*, 17-36

analog (UDDRV), *I/O Drivers*,
16-19

analog multichannel (ICDRV/ISDRV),
I/O Drivers, 19-44

buffer, intermediate (TTDRV), *I/O
Drivers*, 2-80

byte, high-order bit (half-duplex),
I/O Drivers, 3-33

digital

bistable multiple field
(ICDRV/ISDRV), *I/O
Drivers*, 19-45, 19-46

bistable multipoint
(ICDRV/ISDRV), *I/O
Drivers*, 19-17

multipoint momentary
(ICDRV/ISDRV), *I/O
Drivers*, 19-16

initiating

single analog (K-series), *I/O
Drivers*, 23-8

synchronous A/D (LSDRV),
I/O Drivers, 17-25

synchronous digital (LSDRV),
I/O Drivers, 17-27

latching digital (UDDRV), *I/O
Drivers*, 16-8

momentary

multiple field (ICDRV/ISDRV),
I/O Drivers, 19-49

prompting, VFC (half-duplex), *I/O
Drivers*, 3-28

remote terminal (ICDRV/ISDRV),
I/O Drivers, 19-50

resuming by CTRL/Q (TTDRV),
I/O Drivers, 2-70

suppressing (TTDRV), *I/O Drivers*,
2-69

suspending by CTRL/S (TTDRV),
I/O Drivers, 2-70

terminal (ICDRV/ISDRV), *I/O
Drivers*, 19-32

- Output file switches
 - RMSBCK utility, *RMS-11 Utilities*, 6-6
 - RMSIFL utility, *RMS-11 Utilities*, 3-5
 - RMSRST utility, *RMS-11 Utilities*, 7-7
- Output listing limit switch
 - See /LIMIT switch
- OUTPUT ON/OFF command
 - EDI utility, *Utilities*, 2-40
- /OUTVOLUME qualifier
 - BRU utility, *Utilities*, 7-20
- OVCTC module, *Task Builder*, 5-54
- OVCTL module, *Task Builder*, 5-54
- OVCTR module, *Task Builder*, 5-54
- OVDAT module, *Task Builder*, 5-54
- \$\$OVDT program section, *Task Builder*, 5-54
 - reserved name, *Task Builder*, E-3
- Overflow mode, *Indirect*, 2-49
- Overhead, system
 - half-duplex, *I/O Drivers*, 3-14
 - TF.RPR (TTDRV), *I/O Drivers*, 2-14
- Overlapped I/O (disk driver), *I/O Drivers*, 5-8
- Overlapped I/O completion, *System Generation*, C-7
- Overlapped Seek I/O, *Writing I/O Driver*, 1-11
 - data base structures, *Writing I/O Driver*, 2-8
 - data transfers, *Writing I/O Driver*, 1-10
 - difficulty factor, *Writing I/O Driver*, 1-10
 - executing parallel operations, *Writing I/O Driver*, 1-10
- Overlay, MCR, 1-5
 - allocation diagram
 - creating ODL file, *Task Builder*, 3-35 to 3-40
 - and disk usage, *RMS-11 User's Guide*, 8-4
 - autoload vector, *Task Builder*, 3-21
 - building, *Task Builder*, 3-41 to 3-48
 - memory-resident
 - for region, *Task Builder*, 5-10
 - capability, *Task Builder*, 3-1
 - choosing a memory-resident, *Task Builder*, 3-14
 - cotree, *Task Builder*, 3-34, 3-35

- Overlay (cont'd.)
 - data base, *Task Builder*, B-15
 - I- and D-space task, *Task Builder*, B-16
 - data caching, MCR, 3-146, 3-208
 - data structure, *Task Builder*, 3-19
 - linked into root, *Task Builder*, 3-20, 3-21
 - defining a multiple tree, *Task Builder*, 3-31, 3-32
 - description
 - effect on performance, *Task Builder*, F-4
 - disk-resident, *Task Builder*, 3-1, 3-2
 - defined, *Task Builder*, 4-1
 - effect of virtual address space, *Task Builder*, 3-1, 3-2, 3-3
 - effect on memory, *Task Builder*, 3-1, 3-2, 3-3
 - effect
 - physical memory, *Task Builder*, 3-5, 3-6
 - virtual address space, *Task Builder*, 3-5, 3-6
 - error handling, *Task Builder*, 4-11
 - example of building, *Task Builder*, 3-41 to 3-48
 - high-level language, *Task Builder*, 3-40
 - considerations, *Task Builder*, 3-41
 - I- and D-space task, *Task Builder*, 3-21, 3-22, 7-5
 - disk image, *Task Builder*, 7-7
 - program section, *Task Builder*, 7-6
 - I- and D-space task vector
 - region, *Task Builder*, 5-13, 5-14
 - introduction, *Task Builder*, 2-9
 - loading
 - asynchronously, *Task Builder*, 4-8, 4-10
 - disk-resident, *Task Builder*, 4-1
 - mechanism, *Task Builder*, 3-16
 - memory-resident, *Task Builder*, 4-1
 - method, *Task Builder*, 4-1
 - synchronously, *Task Builder*, 4-8, 4-9
 - memory-resident, MCR, 3-183 *Task Builder*, 3-1, 3-6
 - conserving physical memory, *Task Builder*, 3-14
 - defined, *Task Builder*, 4-1

Overlay

- memory-resident (cont'd.)
 - effect on physical memory, *Task Builder*, 3-6
 - effect on virtual address space, *Task Builder*, 3-6
 - region, *Task Builder*, 5-10
 - virtual address space, *Task Builder*, 3-14
- multiuser task, *Task Builder*, 9-2
- operator
 - enabling recognition, *Task Builder*, 10-34, 11-58
 - suppression of a memory-resident, *Task Builder*, 10-34, 11-58
- path loading, *Task Builder*, 4-4
- physical memory, *Task Builder*, 3-33, 3-34, 3-35
- program section
 - specifying, *Task Builder*, 3-19
- region
 - autoload vector, *Task Builder*, 5-13, 5-14
 - building, *Task Builder*, 5-10
 - descriptor, *Task Builder*, 3-20, 3-21
 - example of building, *Task Builder*, 5-11
 - global symbols in .STB file, *Task Builder*, 5-13, 5-14
 - restriction, *Task Builder*, 5-14
 - .STB file, *Task Builder*, 5-13, 5-14
 - vectors in I- and D-space task, *Task Builder*, 5-13, 5-14
- run-time, *Task Builder*, 3-19
 - comparison of sizes in routine, *Task Builder*, 4-16, 4-17
 - module, *Task Builder*, 4-16, 5-54, 5-55
 - routine, *Task Builder*, 3-19, 4-14 to 4-17
 - support requirement, *Task Builder*, 5-14, 5-53
- run-time module
 - ALERR, *Task Builder*, 4-17
 - AUTO, *Task Builder*, 4-16
 - AUTOT, *Task Builder*, 4-16
 - LOAD, *Task Builder*, 4-17
 - OVCTC, *Task Builder*, 4-16
 - OVCTL, *Task Builder*, 4-16
 - OVCTR, *Task Builder*, 4-16
 - OVDAT, *Task Builder*, 4-16

Overlay

- run-time module (cont'd.)
 - OVIDC, *Task Builder*, 4-16
 - OVIDL, *Task Builder*, 4-16
 - OVIDR, *Task Builder*, 4-16
- run-time program section
 - \$\$ALERR, *Task Builder*, 4-17
 - \$\$AUTO, *Task Builder*, 4-16, 4-17
 - \$\$LOAD, *Task Builder*, 4-17
 - \$\$MRKS, *Task Builder*, 4-16
 - \$\$OVDT, *Task Builder*, 4-16
 - \$\$PDLS, *Task Builder*, 4-16
 - \$\$RDSG, *Task Builder*, 4-16
 - \$\$RTQ, *Task Builder*, 4-16
 - \$\$RTR, *Task Builder*, 4-16
 - \$\$RTS, *Task Builder*, 4-16
 - \$\$SGD0, *Task Builder*, 4-16
 - \$\$SGD2, *Task Builder*, 4-16
- segment, *Task Builder*, B-14
 - alignment, *Task Builder*, 10-8, 11-20
 - arrangement, *Task Builder*, 3-15
 - descriptor, *Task Builder*, 3-20, 3-21
 - processing order, *Task Builder*, 3-17
- structure, *Task Builder*, 3-49
 - ambiguously defined symbol, *Task Builder*, 3-16
 - considerations in creating, *Task Builder*, 3-1
 - most effective, *Task Builder*, 3-2, 3-3
 - multiple tree, *Task Builder*, 3-18
 - multiply defined symbol, *Task Builder*, 3-16
 - specifying library search, *Task Builder*, 10-23, 11-39
- symbol resolution, *Task Builder*, 3-16
- task, *Task Builder*, 3-7
 - global cross-reference, *Task Builder*, 4-12, 4-13
 - memory resident, *Task Builder*, 3-9
 - segment call, *Task Builder*, 3-10
 - virtual address space, *Task Builder*, 3-10
- tree
 - calling segment, *Task Builder*, 4-4
 - for I- and D-space task, *Task Builder*, 7-6

- Overlay
 - tree (cont'd.)
 - path, *Task Builder*, 3-15
 - root, *Task Builder*, 3-15
 - vector
 - region, *Task Builder*, 5-13, 5-14
 - virtual
 - address space, *Task Builder*, 3-33, 3-34, 3-35, 3-48
 - and memory, *Task Builder*, 3-11 to 3-14
 - window
 - block, *Task Builder*, 3-48
 - descriptor, *Task Builder*, 3-20, 3-21
- /OVERLAY_DESCRIPTION qualifier, *Task Builder*, 11-53
- LINK command, *Command Language*, 6-6, 6-23
- OVERLAY command
 - EDI utility, *Utilities*, 2-40
- Overlay Description Language
 - See ODL
- Overlay description operator
 - See ODL
 - See Operator
- Overlay files, *Command Language*, 6-5 to 6-6
- Overprint
 - TTDRV, *I/O Drivers*, 2-76
 - VFC (half-duplex), *I/O Drivers*, 3-28
 - VFC (LPDRV), *I/O Drivers*, 10-7
- /OVERRIDE switch
 - BAD utility, *Utilities*, 6-6
- OVIDC module, *Task Builder*, 5-54
- OVIDL module, *Task Builder*, 5-54
- OVIDR module, *Task Builder*, 5-54
- /OVLP keyword
 - SET command (MCR), *MCR*, 3-236
- /OVRACC keyword
 - MOUNT command (MCR), *MCR*, 3-151
- /OVREXP keyword
 - MOUNT command (MCR), *MCR*, 3-151
- /OVRFSID keyword
 - MOUNT command (MCR), *MCR*, 3-151
- /OVR keyword
 - HOME command, *MCR*, 3-95
 - MOUNT command (MCR), *MCR*, 3-150

- \$\$OVR program section
 - reserved name, *Task Builder*, E-3
- /OVR switch
 - FMT utility, *Utilities*, 5-9
- OVR symbolic argument, *MACRO-11*, 6-42
- Owner, file
 - See PRG field in PRO block
- /OWNER_UIC qualifier
 - SHOW QUEUE command, *Batch and Queue*, 2-16
- OWNER attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-34
- Owner ID field
 - tape, *I/O Operations*, G-2
- /OWNER keyword
 - HOME command, *MCR*, 3-95
 - INITVOLUME command, *MCR*, 3-105

P

- P\$BDB macro
 - argument computation, *RMS-11 Macro*, 2-8
 - format, *RMS-11 Macro*, 2-4
- P\$BUF macro
 - argument computation, *RMS-11 Macro*, 2-7
 - format, *RMS-11 Macro*, 2-4
- P\$FAB macro
 - argument computation, *RMS-11 Macro*, 2-5
 - format, *RMS-11 Macro*, 2-4
- P\$-family macro
 - declaring, *RMS-11 Macro*, C-2
- P\$IDX macro
 - argument computation, *RMS-11 Macro*, 2-5
 - format, *RMS-11 Macro*, 2-4
- P\$RAB macro
 - argument computation, *RMS-11 Macro*, 2-5
 - format, *RMS-11 Macro*, 2-4
- P\$RABX macro
 - argument computation, *RMS-11 Macro*, 2-5, 2-6
 - format, *RMS-11 Macro*, 2-4
- P1 parameter (XEDRV)
 - IO.XIN function, *I/O Drivers*, 13-10
 - IO.XOP function, *I/O Drivers*, 13-6

- P1 parameter (XEDRV) (cont'd.)
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XSC function, *I/O Drivers*, 13-7
 - IO.XTM function, *I/O Drivers*, 13-11
- P2 parameter (XEDRV)
 - IO.XOP function, *I/O Drivers*, 13-6
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XSC function, *I/O Drivers*, 13-7
 - IO.XTM function, *I/O Drivers*, 13-11
- P3 parameter (XEDRV)
 - IO.XOP function, *I/O Drivers*, 13-6
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XTM function, *I/O Drivers*, 13-11
- P4 parameter (XEDRV)
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XTM function, *I/O Drivers*, 13-11
- P5 parameter (XEDRV)
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XTM function, *I/O Drivers*, 13-12
- P6 parameter (XEDRV)
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XTM function, *I/O Drivers*, 13-12
- Packed decimal key, *RMS-11 User's Guide*, 6-6
 - See also XB\$PAC mask in DTP field
- .PACKED directive, *MACRO-11*, 6-31
- Packet information function, *Error Logging*, 5-22
- Packet number, *Error Logging*, 3-1
- Packet number switch, *Error Logging*, 3-5, 3-8
- Packet selection switches, *Error Logging*, 3-8
- PACKET statement, *Error Logging*, 5-28
- Packing decimal number, *MACRO-11*, 6-31
- Padding
 - character (tape driver), *I/O Drivers*, 8-18
 - Ethernet message (XEDRV), *I/O Drivers*, 13-3
- Padding character
 - RMSCNV utility, *RMS-11 Utilities*, 4-12
 - RMSIFL utility, *RMS-11 Utilities*, 3-6
- /PAGE_COUNT qualifier
 - PRINT command, *Batch and Queue*, 2-4
 - SET QUEUE command, *Batch and Queue*, 2-20
- Page Address Register
 - See PAR
- PAGE command
 - EDI utility, *Utilities*, 2-41
- Page Description Register
 - See PDR
- .PAGE directive, *MACRO-11*, 6-17, 6-18 *Program Development*, 2-6
- Page eject
 - TTDRV, *I/O Drivers*, 2-75
 - VFC (half-duplex), *I/O Drivers*, 3-27
 - VFC (LPDRV), *I/O Drivers*, 10-6
- Page ejection, *MACRO-11*, 6-17
- PAGE FIND command
 - EDI utility, *Utilities*, 2-41
- Page header, *MACRO-11*, 6-4
- PAGE key (EDT), *Introduction*, 2-6
- PAGE LOCATE command
 - EDI utility, *Utilities*, 2-41
- Paging, *RMS-11 User's Guide*, 8-2
 - memory
 - See Virtual memory management
- /PA job switch
 - QUE /MOD command, *Batch and Queue*, 2-20
- Paper tape
 - PC11 reader/punch
 - SYSGEN question, *System Generation*, 3-54
 - PR11 reader
 - SYSGEN question, *System Generation*, 3-54
- PAR, *Task Builder*, 2-15 *Writing I/O Driver*, 1-2
 - See PARTITION DEFINITIONS command
- Parallel communication link driver
 - See PCL11
- Parallel unit operation
 - data base structures, *Writing I/O Driver*, 2-8

- Parameter
 - displaying system, *Command Language*, 8-8 to 8-10
- IOX
 - command category, *System Management*, 4-3
 - exercising
 - device-dependent exercise, *System Management*, 4-8
 - Files-11 volumes, *System Management*, 4-10
 - magnetic tape, *System Management*, 4-12
 - NFS volume, *System Management*, 4-15
 - list of exercise parameters, *System Management*, 4-8
 - overriding default
 - FILES11, *System Management*, 4-39
 - SELECT, *System Management*, 4-58
 - showing default with
 - PARAMETERLIST, *System Management*, 4-44
- QIO\$ basic syntax
 - function-dependent, *I/O Drivers*, 1-6
 - optional, *I/O Drivers*, 1-6
 - required argument, *I/O Drivers*, 1-6
 - setting system, *Command Language*, 8-5 to 8-7
- Parameter2 parameter (TTDRV)
 - general, *I/O Drivers*, 2-11
 - IO.ATA function, *I/O Drivers*, 2-21
- PARAMETERLIST command
 - IOX, *System Management*, 4-44
 - displaying buffer space, *System Management*, 4-44
 - displaying defaults, *System Management*, 4-44
- Parent/offspring tasking, *Executive*, 4-1
 - chaining, *Executive*, 4-2, 5-163, 5-195
 - connecting, *Executive*, 4-1, 5-265
 - directives, *Executive*, 4-1
 - requesting task, *Executive*, 5-212, 5-265
 - returning status, *Executive*, 4-3
 - sending data, *Executive*, 5-265
- Parent/offspring tasking (cont'd.)
 - sending send-data packet, *Executive*, 5-195
 - spawning, *Executive*, 4-1, 4-5
 - synchronizing, *Executive*, 5-38
- Parentheses
 - in overlay, *Task Builder*, 3-49
 - with ODL, *Task Builder*, 3-24
- Parent task (VTDRV), *I/O Drivers*, 4-1
- Parity, vertical (communication driver), *I/O Drivers*, 12-12
- Parity checking, *MCR*, 3-239
- /PARITY keyword
 - SET command (MCR), *MCR*, 3-239
 - SET command (VMR), *System Management*, 10-66 to 10-67
- Parity support, *System Generation*, C-4
- /PAR keyword
 - INSTALL command (MCR), *MCR*, 3-119
 - LOAD command (MCR), *MCR*, 3-133
 - LOAD command (VMR), *System Management*, 10-33
 - RUN command (MCR), *MCR*, 3-183
 - SET command (MCR), *MCR*, 3-237
 - SET command (VMR), *System Management*, 10-64 to 10-66
- /PARM keyword
 - MOUNT command (MCR), *MCR*, 3-151
- PAR option, *Task Builder*, 12-27, 12-28
 - building region, *Task Builder*, 5-2
- PARS1M, *Error Logging*, 4-4
- PARS2M, *Error Logging*, 4-4
- PARS3M, *Error Logging*, 4-4
- Parse block
 - format, *Executive*, 5-90
 - returning, *Executive*, 5-89, 5-135, 5-139
- .PARSE directive, *Indirect*, 2-75
- Parse FCS directive, *Executive*, 5-135
- PARSEM, *Error Logging*, 4-4
- \$PARSE macro, *RMS-11 Macro*, 5-86
 - example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
- PARSE operation, *RMS-11 Introduction*, 4-1 *RMS-11 Macro*, 3-6
 - BDB requirement, *RMS-11 Macro*, 2-8

PARSE operation (cont'd.)

- I/O buffer requirement, RMS-11
Macro, 2-7
- IFAB requirement, RMS-11 Macro,
2-5
- \$PARSE macro, RMS-11 Macro,
5-86
- wildcard initialization, RMS-11
Macro, 3-9
- Parse RMS directive, *Executive*, 5-139
- .PARSE routine
 - device and unit translation, I/O
Operations, 4-12
 - logical name translation, I/O
Operations, 4-11
- Parser processing, *System Management*,
12-19
- Parser program
 - TPARS, I/O Operations, 7-12
 - processing steps, I/O
Operations, 7-14
- Parsing
 - command line, I/O Operations, 7-1
 - complex command lines, I/O
Operations, 7-19
 - UFD, I/O Operations, 7-14
- /PAR switch, CDA, 2-5, 2-8
- Partition
 - See also Subpartition
 - address, MCR, 2-20
 - accessing, MCR, 3-166
 - base address, CDA, 3-21
 - cache
 - specifying, MCR, 3-146, 3-207
 - common, MCR, 3-116, 3-169
System Management, 14-1
 - common block, *System Management*,
10-31
 - creating, MCR, 3-237 *System*
Management, 10-54
 - declaring, *Task Builder*, 12-27
 - defining, MCR, 3-267
 - definition, MCR, 2-20 *System*
Management, 14-1
 - displaying, MCR, 3-169, 3-237
 - eliminating, MCR, 3-267
 - fragmentation, *System Management*,
14-3
 - GEN, MCR, 3-119, 3-133
 - getting parameters, *Executive*, 5-
111
 - information, *Indirect*, 2-91
 - loading device driver, MCR, 3-133
 - main, *System Management*, 19-4

Partition (cont'd.)

- mapped system, MCR, 2-20
 - memory
 - displaying, *Command Language*,
7-52 to 7-54
 - setting, *Command Language*,
7-48 to 7-51
 - modifying, *System Management*,
10-55
 - name, CDA, 3-21 MCR, 2-20,
3-169
 - naming, MCR, 3-119
 - naming for target system, *Task*
Builder, C-1
 - option, *Task Builder*, 12-27
 - overriding, *System Management*,
10-24
 - PCB address, CDA, 3-21
 - region, *System Management*, 10-18
Task Builder, 5-29
 - requirement
 - region, *Task Builder*, 5-2
 - shared region, *Task Builder*, 5-3
 - size, MCR, 2-20, 3-169, 3-237
 - improving performance, *Task*
Builder, F-2
 - setting, MCR, 3-259
 - specifying for region, *Task Builder*,
5-29
 - status flags, CDA, 3-33
 - system, MCR, 3-183, 3-267
 - system-controlled, MCR, 2-20, 3-
118, 3-169 *System Management*,
14-1
 - task
 - allocating, MCR, 2-20
 - fixing, MCR, 3-76
 - installing, MCR, 3-183
 - relationship between, MCR,
2-20
 - type, MCR, 2-20, 3-169 *System*
Management, 10-65
 - DEV, MCR, 3-237
 - DIAG, MCR, 3-238
 - SYS, MCR, 3-237
 - unmapped system, MCR, 2-20
 - user, MCR, 3-267
 - user-controlled, MCR, 2-20, 3-169
System Management, 14-1
- Partition Control Block, MCR, 3-31,
3-134
- See also PCB
- address, MCR, 3-46, 3-169

PARTITION DEFINITIONS command
 (MCR), *MCR*, 1-7, 3-169
 display, *MCR*, 3-169
 format, *MCR*, 3-170
 PARTITION DEFINITIONS command
 (VMR), *System Management*,
 10-36
 definition, *System Management*,
 10-36
 example, *System Management*, 10-
 36
 format, *System Management*, 10-36
 Partition display
 contents, *System Management*, 10-
 36
 symbol meaning, *System*
Management, 10-36
 Partition information dump
 attachment descriptor, *CDA*, 3-34
 individual, *CDA*, 3-33
 system, *CDA*, 3-31
 wait queue, *CDA*, 3-34
 /PASS option, *MACRO-11*, I-1
 Password, *Command Language*, 3-4
Introduction, 1-5, 3-10
 account, *MCR*, 3-240
 adding to account entry, *System*
Management, 2-3
 changing, *Command Language*, 3-11
MCR, 2-24 *System Management*,
 2-1, 2-7
 characters, *System Management*, 2-3
 contained in account entry, *System*
Management, 2-1
 displaying, *System Management*,
 2-5, 2-8
 encryption, *MCR*, 3-240
 maximum length, *MCR*, 3-240
 task, *MCR*, 3-240
 /PASSWORD keyword
 SET command (*MCR*), *MCR*, 3-240
 PASTE command
 EDI utility, *Utilities*, 2-42
 PASTE key (EDT), *Introduction*, 2-8
 /PASTHRU keyword
 SET command (*MCR*), *MCR*, 3-241
 SET command (*VMR*), *System*
Management, 10-67
 /PA switch
 PRI command, *Batch and Queue*,
 2-4

Patch
 declaring object level, *Task Builder*,
 12-6
 D-space, *Task Builder*, 12-14
 global relative, *Task Builder*, 12-20
 Patching
 object module
 See *PAT* utility
 source file
 See *SLP* utility
 task image file
 See *ZAP* utility
 Patch level
 RMSBCK utility, *RMS-11 Utilities*,
 6-5
 RMSCNV utility, *RMS-11 Utilities*,
 4-9
 RMSDEF utility, *RMS-11 Utilities*,
 A-5
 RMSDSP utility, *RMS-11 Utilities*,
 5-5
 RMSIFL utility, *RMS-11 Utilities*,
 3-5
 RMSRST utility, *RMS-11 Utilities*,
 7-5
 Path load, *Task Builder*, 4-3, 4-4
 See also *Overlay*
 autoload, *Task Builder*, 4-3, 4-4
 example, *Task Builder*, 4-4
 Pattern
 IOX
 altering test, *System*
 Management, 4-48
 displaying test, *System*
 Management, 4-48
 PATTERN command
 IOX, *System Management*, 4-48
 /PATTERN switch
 BAD utility, *Utilities*, 6-6
 PAT utility
 checksum, *Utilities*, 14-6
 command line, *Utilities*, 14-1
 error message, *Utilities*, 14-7
 file
 correction, *Utilities*, 14-3
 input, *Utilities*, 14-3
 Task Builder, *Utilities*, 14-4
 validating file content, *Utilities*,
 14-6
 .PAUSE directive, *Indirect*, 2-77
 Pbn parameter
 device-specific (disk driver), *I/O*
Drivers, 5-9

PC

See Program counter

PC11 paper tape reader/punch

SYSGEN question, *System Generation*, 3-54

PCB, CDA, 3-33

See Partition Control Block

address, CDA, 3-31

composite arrangement, *Writing I/O Driver*, 2-11

pointer to, CDA, 3-33

switches

/PAR, CDA, 2-5, 2-8

/PCB, CDA, 2-5, 2-8

PCBDF\$, CDA, B-31, C-55 *Writing*

I/O Driver, A-46 to A-49

/PCB switch, CDA, 2-5, 2-8

PC correction

internal symbol, *Task Builder*, A-29, A-30

PCL11

hardware, *I/O Drivers*, 14-1

receiver driver, *I/O Drivers*, 14-1

transmitter driver, *I/O Drivers*, 14-1

PCL11, parallel communication link

driver, *I/O Drivers*, 14-1

See also LRDRV

PCL11 receiver/transmitter

SYSGEN question, *System Generation*, 3-63

P command, *Debugging*, 2-10, 3-3, 3-4, 8-7, 9-13

ODT, *Program Development*, 5-7

PC-relative

location, *Debugging*, 2-5, 4-4

offset, *Debugging*, 2-10, 7-1, 9-13

\$\$PDLS program section, *Task Builder*, 5-54

reserved name, *Task Builder*, E-3

PDR, *Task Builder*, 2-15 *Writing I/O Driver*, 1-2

/PD switch

RMSCNV utility, *RMS-11 Utilities*, 4-12

RMSIFL utility, *RMS-11 Utilities*, 3-6, 3-7, 3-11

Percent sign (%)

See also Wildcard

in register expression, *MACRO-11*, 5-2

percent sign operator (%)

See Operator

Performance

See Speed

improving TKB, *Task Builder*, F-1 to F-11

stall I/O (disk driver), *I/O Drivers*, 5-13

Peripheral configuration

choosing at system generation,

Writing I/O Driver, 5-10 to 5-11

Peripheral device, *Command Language*, 5-1 to 5-11

See also Device

Peripheral Interchange Program

See PIP utility

Peripheral support routine (K-series), *I/O Drivers*, 23-1

Permanent symbol table, *MACRO-11*, 3-6, 3-7

summary, *MACRO-11*, C-1 to C-7

P error, *MACRO-11*, 3-12, 3-14, 6-20, 6-38, 7-16

summary, *MACRO-11*, D-4

PF command

EDI utility, *Utilities*, 2-41

PFC\$ directive, *Executive*, 5-135

Physical/logical association, *I/O Drivers*, 1-2

Physical device names, CDA, 3-17

Physical I/O, *I/O Drivers*, 1-2

Physical memory switch

See /DUMP switch

PIC (Position Independent Code), *MACRO-11*, G-1 to G-4

PIP/ENTER command (RMSBCK), *RMS-11 Utilities*, 6-3

PIP utility, *Introduction*, 5-1 MCR, 2-2 *Program Development*, 1-8 *RMS-11 Utilities*, 5-2

accessing files, MCR, 2-3

account file

copying, *System Management*, 2-3

extending, *System Management*, 2-3

asterisk (*), *Program Development*, 3-10

cleaning up a UFD, *Program Development*, 3-9, 3-10

command functions, *Utilities*, 3-8

copying Files-11 file, *Utilities*, 3-8

file control, *Utilities*, 3-14

command line, *Utilities*, 3-1

PIP utility (cont'd.)

- creating a concatenated object
 - module, *Program Development*, 4-3, 4-4
- deleting directory, *MCR*, 2-2
- deleting files, *MCR*, 2-2
- error code, *Utilities*, 3-53
- error message, *Utilities*, 3-43
- examining listing at terminal,
 - Program Development*, 3-6, 4-6, 7-4
- file
 - deleting, *Utilities*, 3-17
 - listing, *Utilities*, 3-24
 - merging, *Utilities*, 3-9
 - protecting, *Utilities*, 3-29
 - purging, *Utilities*, 3-31
 - renaming, *Utilities*, 3-33
 - spooling, *Utilities*, 3-38
- file specification, *Utilities*, 3-1
 - default, *Utilities*, 3-1 to 3-2
 - wildcard, *Utilities*, 3-7
- /LI, *Program Development*, 3-9
- /ME, *Program Development*, 4-3, 4-4
- printing listing, *Program Development*, 3-8 to 3-9
- /PU, *Program Development*, 3-10
- /SP, *Program Development*, 3-8
- spooling listing, *Program Development*, 3-8, 3-9
- subswitch, *Utilities*, 3-14
 - description, *Utilities*, 3-6
 - merge, *Utilities*, 3-11
 - summary, *Utilities*, 3-3
- switch, *Utilities*, 3-14
 - description, *Utilities*, 3-5
 - summary, *Utilities*, 3-3
- UFD creating, *Utilities*, 3-41
- wildcard, *Utilities*, 3-7
- /PI switch, *Task Builder*, 10-31
- \$PKAVL, *CDA*, 3-45
- %PKT, *Error Logging*, 5-22
- PKTDF\$, *CDA*, B-33, C-60 *Writing I/O Driver*, A-50 to A-55
- Placement control, *RMS-11 User's Guide*, 1-17, 1-19
 - calculating starting LBN, *RMS-11 User's Guide*, 6-14
 - cylinder, *RMS-11 User's Guide*, 6-13, 6-14
 - indexed files, *RMS-11 User's Guide*, 6-13

Placement control (cont'd.)

- RMSBCK utility, *RMS-11 Utilities*, 6-1
- RMSDEF utility, *RMS-11 Utilities*, A-14
- RMSRST utility, *RMS-11 Utilities*, 7-1
- sector, *RMS-11 User's Guide*, 6-14
- track, *RMS-11 User's Guide*, 6-13, 6-14
- Placement control (F11ACP), *I/O Drivers*, C-7
- PLAS
 - fixing tasks, *System Management*, 10-23
- Platter, *RMS-11 Introduction*, 2-1
- PL command
 - EDI utility, *Utilities*, 2-41
- /PLCTL keyword
 - SET command (*MCR*), *MCR*, 3-243
 - SET command (*VMR*), *System Management*, 10-68
- PLOCATE command
 - EDI utility, *Program Development*, 2-15
- Plus sign operator (+), *MACRO-11*, 3-4
 - See also Operator
- PMD, *MCR*, 3-3 *Program Development*, 1-7
 - enabling with TKB, *Program Development*, 5-9
 - generating, *MCR*, 3-119
 - requesting, *MCR*, 3-184
 - task, *MCR*, 3-184 *Task Builder*, D-1
 - content, *Task Builder*, D-3 to D-6
 - example, *Task Builder*, D-3 to D-6
 - installation for timely operation, *Task Builder*, D-1
 - specifying, *Task Builder*, 10-32, 11-54
- .PMD file type, *Program Development*, 5-10
- /PMD keyword
 - ABORT command (*MCR*), *MCR*, 3-4
 - INSTALL command (*MCR*), *MCR*, 3-119
 - INSTALL command (*VMR*), *System Management*, 10-25
 - RUN command (*MCR*), *MCR*, 3-184

- /PM switch, *Task Builder*, 10-32
- PMT, MCR, 3-243 *System Management*, 1-4, 13-1
 - abortable tasks, *System Management*, 13-7
 - aborting, *System Management*, 13-11 to 13-12
 - action, *System Management*, 13-11
 - activation, *System Management*, 13-3
 - conditions affecting, *System Management*, 13-3
 - controlling pool use, *System Management*, 13-11
 - defaults
 - extreme fragmentation, *System Management*, 13-6
 - high pool state, *System Management*, 13-5
 - low pool state, *System Management*, 13-5
 - functions, *System Management*, 13-3
 - installation, *System Management*, 13-3
 - messages, *System Management*, 13-8
 - output
 - example of extreme fragmentation, *System Management*, 13-9 to 13-10
 - low pool state, *System Management*, 13-6
 - task-build options, *System Management*, 13-10
 - timing, *System Management*, 13-10
- PNC symbolic argument, *MACRO-11*, 6-20
- Pn parameter
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.LDI function, *I/O Drivers*, 19-25
 - IO.RLB function, *I/O Drivers*, 1-30
 - IO.RVB function, *I/O Drivers*, 1-31
 - IO.WLB function, *I/O Drivers*, 1-32
 - IO.WVB function, *I/O Drivers*, 1-33
- Pnt parameter
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-5
- POINTER statement, *Error Logging*, 5-38, 5-39
- .POINT routine
 - file byte position, *I/O Operations*, 2-11

- .POINT routine (cont'd.)
 - position file to byte, *I/O Operations*, 4-22
- Pol parameter
 - immediate device-specific function (LSDRV), *I/O Drivers*, 17-3
- Pool, *System Generation*, C-3
 - See also Get-space routine
 - bit map, *CDA*, 3-15
 - buffer descriptor block, *RMS-11 Macro*, 2-8
 - conditions, *System Management*, 13-2
 - largest fragment increases, *System Management*, 13-5
 - largest fragment too small, *System Management*, 13-4
 - declaring space, *RMS-11 Macro*, 2-4
 - definition, *System Generation*, 1-12 *System Management*, 13-1
 - displaying, *Command Language*, 8-15 to 8-18
 - dump, *CDA*, 3-45
 - fragmentation, *System Management*, 13-1
 - free, *CDA*, 3-15
 - free-space list, *RMS-11 Macro*, 2-19
 - I/O buffer, *RMS-11 Macro*, 2-6
 - index descriptor block, *RMS-11 Macro*, 2-5
 - installing headers in, MCR, 3-122
 - internal FAB, *RMS-11 Macro*, 2-5
 - internal RAB, *RMS-11 Macro*, 2-5
 - key buffer, *RMS-11 Macro*, 2-6
 - largest fragment, *CDA*, 3-15
 - limit
 - displaying, MCR, 3-244
 - setting, MCR, 3-243
 - number of unallocated fragments, *CDA*, 3-15
 - primary
 - installing tasks, MCR, 3-31
 - secondary
 - displaying, MCR, 3-251
 - installing tasks, MCR, 3-31, 3-120
 - percent in use, MCR, 3-251
 - saving, MCR, 3-187
 - secondary pool dump, *CDA*, 3-45
 - size, *CDA*, 3-15
 - displaying, MCR, 3-244
 - setting, MCR, 3-244
 - smallest possible block, *CDA*, 3-15

- Pool
 - space
 - allocating, *MCR*, 3-267
 - total free bytes, *CDA*, 3-15
 - use by DECnet on pregenerated kit, *System Generation*, 5-47
 - POOL\$B macro, *RMS-11 Macro*, 2-4, C-2
 - POOL\$E macro, *RMS-11 Macro*, 2-4
 - declaring, *RMS-11 Macro*, C-2
 - Pool, buffer, private (TTDRV), *I/O Drivers*, 2-79
 - Pool-declaration macro, *RMS-11 Macro*, 2-4
 - declaring, *RMS-11 Macro*, C-2
 - Pool fragment size, *System Management*, 13-13
 - /POOL keyword
 - SET command (*MCR*), *MCR*, 3-244
 - SET command (*VMR*), *System Management*, 10-69
 - Pool limits, *System Management*, 13-12
 - high, *System Management*, 13-12
 - low, *System Management*, 13-12
 - Pool monitoring interface
 - functions, *System Management*, 13-2
 - Pool Monitoring Support, *System Management*, 1-4
 - receiving, *System Management*, 13-1
 - Pool Monitor Task
 - See *PMT*
 - Pool-resident, *Writing I/O Driver*, 6-8
 - header, *Writing I/O Driver*, 6-9
 - /POOLSIZE keyword
 - SET command (*VMR*), *System Management*, 10-69
 - Pool statistics dump, *CDA*, 3-1, 3-15
 - /POOL switch, *CDA*, 2-5, 2-8
 - Populating indexed files, *RMS-11 User's Guide*, 6-26
 - primary key order, *RMS-11 User's Guide*, 6-27
 - random insertions, *RMS-11 User's Guide*, 6-27
 - bucket fill size, *RMS-11 User's Guide*, 6-27
 - mass insertion, *RMS-11 User's Guide*, 6-28
- Port parameter
 - UNIBUS switch driver
 - device-specific, *I/O Drivers*, 24-4
 - IO.DPT function, *I/O Drivers*, 24-6
- Ports, *Writing I/O Driver*, 1-11
 - switching between, *Writing I/O Driver*, 1-12
- POS0 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS1 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS2 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS3 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS4 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS5 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS6 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS7 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- POS field in KEY block
 - CREATE operation, *RMS-11 Macro*, 5-18
 - DISPLAY operation, *RMS-11 Macro*, 5-31
 - offset, *RMS-11 Macro*, 6-68
 - OPEN operation, *RMS-11 Macro*, 5-80
 - summary, *RMS-11 Macro*, 6-89
- POSITION attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-46
- Position independent code, *MACRO-11*, G-1 to G-4
- Positioning
 - magnetic tape
 - See *FB\$NEF* mask in FOP field
 - See *FB\$POS* mask in FOP field
- /POSITION qualifier
 - BRU utility, *Utilities*, 7-20
- Position tape (DDDRV), *I/O Drivers*, 7-4
- Position to next file
 - tape, *I/O Operations*, 5-5
- .POSIT routine, return record position, *I/O Operations*, 4-24
- /POS keyword
 - HOME command, *MCR*, 3-95
 - INITVOLUME command, *MCR*, 3-106
- .POSRC routine, position file to record, *I/O Operations*, 4-22
- Postmortem Dump
 - See *PMD*

- /POSTMORTEM qualifier, *Task Builder*, 11-54
- Powerfail
 - disk, *I/O Drivers*, 1-43
 - DMC11 (communication driver), *I/O Drivers*, 12-12
 - QIO\$, valid (TM11), *I/O Drivers*, 8-15
 - recovery
 - tape driver, *I/O Drivers*, 8-15
 - UNIBUS switch driver, *I/O Drivers*, 24-6
 - tape, *I/O Drivers*, 1-43
- Power failure
 - entry point, *Writing I/O Driver*, 4-66
 - overview, *Writing I/O Driver*, 2-6
- Power recovery (ICDRV/ISDRV), *I/O Drivers*, 19-72
- Power switch (CRDRV), *I/O Drivers*, 11-5
- .PPASC routine, convert UIC to ASCII, *I/O Operations*, 4-8
- PPDRV, *I/O Drivers*, 18-1
- PPDRV/PRDRV, programming hint, *I/O Drivers*, 18-5
- Pp parameter
 - device-specific function (UDDRV), *I/O Drivers*, 16-5
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.MLO function, *I/O Drivers*, 19-17
- PR11 paper tape reader
 - SYSGEN question, *System Generation*, 3-54
- PR:0 privileged task, *Task Builder*, 6-2
- PR:4 privileged task, *Task Builder*, 6-2
- PR:5 privileged task, *Task Builder*, 6-2
- Pradd parameter
 - device-specific
 - half-duplex, *I/O Drivers*, 3-7
 - VTDRV, *I/O Drivers*, 4-4
- TTDRV
 - general, *I/O Drivers*, 2-11
 - IO.RPR function, *I/O Drivers*, 2-41
- PRDRV, *I/O Drivers*, 18-1
- Predefined syntax elements, *System Management*, 12-40
 - basic data types, *System Management*, 12-40 to 12-41
 - common command elements, *System Management*, 12-42 to 12-43

- Predefined syntax elements (cont'd.)
 - program control elements, *System Management*, 12-46
 - special parser elements, *System Management*, 12-43 to 12-45
 - special translator elements, *System Management*, 12-45 to 12-46
- Predriver initiation
 - processing during, *Writing I/O Driver*, 3-2, 3-3, 3-4
- Pregenerated kit
 - account file, *System Generation*, 5-33
 - BLDLAINIT.CMD, *System Generation*, 5-46
 - changing crash device, *System Generation*, 5-46
 - configuration file statement, *System Generation*, 5-21 to 5-32
 - copying, *System Generation*, 5-2
 - example, *System Generation*, 5-16 to 5-20
 - RL02 kit to DU-type disk, *System Generation*, 5-9 to 5-16
 - RL02 kit to RL02 disk, *System Generation*, 5-3 to 5-9
 - creating system management files, *System Generation*, 5-37
 - DECnet, *System Generation*, 5-47
 - definition, *System Generation*, 1-1
 - DELETESYS.CMD, *System Generation*, 5-8, 5-15
 - deleting unused system, *System Generation*, 5-5
 - detailed description, *System Generation*, 5-42
 - device configuration, *System Generation*, 5-45
 - Executive features included, *System Generation*, 5-42
 - hardware support, *System Generation*, 5-43
 - installation, *System Generation*, 5-2
 - kit contents, *System Generation*, 5-1
 - K-Series device, *System Generation*, 5-46
 - LOGIN.CMD, *System Generation*, 5-36
 - LOGOUT.CMD, *System Generation*, 5-37
 - LPA11-K laboratory subsystem, *System Generation*, 5-46
 - overview, *System Generation*, 5-1

- Pregenerated kit (cont'd.)
 - recovering disk space, *System Generation*, 5-46
 - restrictions, *System Generation*, 5-44
 - RMS-11, *System Generation*, 5-40
 - setting crash device, *System Generation*, 5-46
 - set-up information, *System Generation*, 5-21
 - startup procedure, *System Generation*, 5-21
 - error message, *System Generation*, 5-32
 - troubleshooting, *System Generation*, 5-33
 - device configuration, *System Generation*, 5-33
 - SYSLOGIN.CMD, *System Generation*, 5-34
 - functions, *System Generation*, 5-35
 - SYSLOGOUT.CMD, *System Generation*, 5-36
 - system images, description of, *System Generation*, 5-5
 - system management
 - help files, *System Generation*, 5-38 to 5-40
 - tasks supplied, *System Generation*, 5-40
 - PREPGEN
 - definition, *System Generation*, 1-12
 - description, *System Generation*, 3-6
 - SYSGEN question, *System Generation*, 3-18
 - Preset parameter
 - IO.CLK function (LADRV), *I/O Drivers*, 22-29
 - PRG field in PRO block
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - offset, *RMS-11 Macro*, 6-108
 - OPEN operation, *RMS-11 Macro*, 5-81
 - RSTS/E, *RMS-11 Macro*, D-4
 - summary, *RMS-11 Macro*, 6-112
 - PRI command
 - file switches, *Batch and Queue*, 2-3
 - format, *Batch and Queue*, 2-3
 - job switches, *Batch and Queue*, 2-3
 - /PRI keyword
 - ALTER command (MCR), *MCR*, 3-19
 - ALTER command (VMR), *System Management*, 10-8
 - INSTALL command (MCR), *MCR*, 3-119
 - INSTALL command (VMR), *System Management*, 10-25
 - RUN command (MCR), *MCR*, 3-184
 - Primary index
 - See also Index
 - RMSCNV utility, *RMS-11 Utilities*, 4-1
 - RMSIFL utility, *RMS-11 Utilities*, 3-10, 3-11
 - Primary key, *RMS-11 Introduction*, 3-7
 - RMS-11 User's Guide*, 1-7, 1-11
 - RMSCNV utility, *RMS-11 Utilities*, 4-1, 4-16
 - RMSDEF utility
 - definition, *RMS-11 Utilities*, A-10
 - RMSIFL utility, *RMS-11 Utilities*, 3-5, 3-6
 - sorting, *RMS-11 Utilities*, 3-9
 - Primary RBNs, *System Management*, 5-4
 - Primary UNIBUS run, *Writing I/O Driver*, 1-17
 - Print
 - open file on LP:, *I/O Operations*, 8-3
 - PRINT\$ macro, *I/O Operations*, 8-1
 - error handling, *I/O Operations*, 8-3
 - PRINT command, *Batch and Queue*, 1-3, 2-2 *Command Language*, 4-76 to 4-85, 9-25 *I/O Operations*, 8-3
 - command qualifiers, *Batch and Queue*, 2-3
 - DCL, *Program Development*, 1-12, 3-8
 - definition, *Batch and Queue*, 4-6
 - EDI utility, *Utilities*, 2-17, 2-42
 - examples, *Batch and Queue*, 2-7
 - file qualifiers, *Batch and Queue*, 2-3
 - format, *Batch and Queue*, 2-3
 - MCR, *Program Development*, 3-9
 - processing, *Batch and Queue*, 1-4 to 1-6
- Print Despooler Transaction Block, *System Management*, 17-30
- .PRINT directive, *MACRO-11*, 7-15

Printer, *Program Development*, 1-12
 RMS-11 Macro, 3-1, 5-20, 5-37,
 5-42, 5-77, 5-88, 5-104, 5-111,
 5-117
 stopping, *Command Language*, 4-96
 /PRINTER_PORT keyword
 SET command (MCR), *MCR*, 3-242
 SET command (VMR), *System
 Management*, 10-69
 /PRINTER qualifier, *Task Builder*,
 11-55
 PRINT FORMATTING statement,
 Error Logging, 5-41
 keyword string, *Error Logging*, 5-41,
 5-42
 Print job
 definition, *Batch and Queue*, 4-7
 queued by system tasks
 maps, logs, listings, *Batch and
 Queue*, 2-12
 PIP, *Batch and Queue*, 2-12
 queued by user tasks
 .PRINT, *Batch and Queue*, 2-13
 PRINT command, *Batch and
 Queue*, 2-13
 stopping, *Command Language*, 4-96
 submission notification, *Batch and
 Queue*, 2-2
 Print processor, *Batch and Queue*, 1-3
 See also Despooler
 definition, *Batch and Queue*, 4-6
 print processors
 installation
 DCL command, *System
 Management*, 7-6
 MCR command, *System
 Management*, 7-6
 /PRINT qualifier
 SHOW QUEUE command, *Batch
 and Queue*, 2-16
 print queue
 initialization
 DCL command, *System
 Management*, 7-5
 MCR command, *System
 Management*, 7-5
 .PRINT routine, error handling, *I/O
 Operations*, 8-3
 .PRINT subroutine, *I/O Operations*,
 8-1
 PRINTSUMMARY command
 IOX, *System Management*, 4-49

/PRIO job switch
 QUE /MOD command, *Batch and
 Queue*, 2-20
 PRI option, *Task Builder*, 12-29
 Priority, *Introduction*, 6-4
 definition, *Batch and Queue*, 4-7
 task, *Command Language*, 7-71 to
 7-72
 declaring, *Task Builder*, 12-29
 /PRIORITY qualifier
 PRINT command, *Batch and Queue*,
 2-5
 SET QUEUE command, *Batch and
 Queue*, 2-20
 /PRIO switch
 PRI command, *Batch and Queue*,
 2-5
 Pri parameter
 IO.ATT function, *I/O Drivers*, 1-27
 IO.DET function, *I/O Drivers*, 1-28
 IO.KIL function, *I/O Drivers*, 1-29
 IO.RLB function, *I/O Drivers*, 1-30
 IO.RVB function, *I/O Drivers*, 1-31
 IO.WLB function, *I/O Drivers*, 1-32
 IO.WVB function, *I/O Drivers*, 1-33
 QIO\$ basic syntax, *I/O Drivers*, 1-8
 TTDRV
 general, *I/O Drivers*, 2-11
 IO.ATA function, *I/O Drivers*,
 2-20
 IO.CCO function, *I/O Drivers*,
 2-23
 IO.EIO function, *I/O Drivers*,
 2-26
 IO.GTS function, *I/O Drivers*,
 2-33
 IO.HNG function, *I/O Drivers*,
 2-35
 IO.RAL function, *I/O Drivers*,
 2-36
 IO.RNE function, *I/O Drivers*,
 2-38
 IO.RPR function, *I/O Drivers*,
 2-40
 IO.RST function, *I/O Drivers*,
 2-43
 IO.RTT function, *I/O Drivers*,
 2-45
 IO.SMC function, *I/O Drivers*,
 2-59
 IO.WAL function, *I/O Drivers*,
 2-47
 IO.WBT function, *I/O Drivers*,
 2-49

- Pri parameter
 - TTDRV (cont'd.)
 - SF.GMC function, *I/O Drivers*, 2-51
- Private buffer pool
 - See BPA field in FAB
 - See BPS field in FAB
- Private device, *Command Language*, 5-45 to 5-49
- Private volume, *Command Language*, 5-10 to 5-11, 5-45 to 5-49, 5-55
- Privilege
 - privileged task, *Introduction*, 6-4
 - privileged user, *Introduction*, 6-4
- Privilege 0 task, *Task Builder*, 6-4, 6-5
 - uses, *Task Builder*, 6-5
- Privilege 4 task, *Task Builder*, 6-4, 6-5
 - uses, *Task Builder*, 6-5
- Privilege 5 task, *Task Builder*, 6-4, 6-5, 6-6
 - uses, *Task Builder*, 6-5
- /PRIVILEGED qualifier, *Task Builder*, 6-2, 11-56
- Privileged task, *Task Builder*, 2-26
 - accessing
 - Executive, *Task Builder*, 6-4
 - I/O page, *Task Builder*, 6-4
 - access right
 - establishing, *Task Builder*, 10-33
 - building, *Task Builder*, 6-6 to 6-11
 - compared with nonprivileged, *Task Builder*, 6-1
 - description, *Task Builder*, 6-1, 6-11
 - establishing access right, *Task Builder*, 11-56
 - examining unit control block, *Task Builder*, 6-7, 6-8, 6-9, 6-10, 6-11
 - example, *Task Builder*, 6-7 to 6-11
 - examining unit control block, *Task Builder*, 6-6
 - hazards, *Task Builder*, 6-1, 6-2
 - I- and D-space system, *Task Builder*, 6-11, 6-12
 - LINK command sequence, *Task Builder*, 6-10
 - logging off, *Task Builder*, 6-1
 - MAC command sequence, *Task Builder*, 6-9
 - map, *Task Builder*, 6-10, 6-11
 - mapped system, *Task Builder*, 6-1
 - mapping, *Task Builder*, 6-2, 6-3
- Privileged task mapping (cont'd.)
 - I- and D-space system, *Task Builder*, 6-12, 6-13
 - PR:0, *Task Builder*, 6-2, 6-4, 6-5
 - PR:4, *Task Builder*, 6-2, 6-4, 6-5
 - PR:4 mapping, *Task Builder*, 6-4
 - PR:5, *Task Builder*, 6-2, 6-4, 6-5, 6-6
 - PR:5 mapping, *Task Builder*, 6-4
 - specifying, *Task Builder*, 2-26, 6-2, 10-33, 11-56
 - TKB command sequence, *Task Builder*, 6-9
 - trap, *Task Builder*, 6-1, 6-2
 - virtual address space
 - example, *Task Builder*, 6-11
- Privileged user input
 - rejection of, *System Management*, 10-50
- Privilege status, *MCR*, 2-6, 3-2
- PRIVIL symbol, *Indirect*, 2-11
- /PRIV keyword
 - SET command (MCR), *MCR*, 3-244
 - SET command (VMR), *System Management*, 10-70
- PRJ field in PRO block
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - offset, *RMS-11 Macro*, 6-108
 - OPEN operation, *RMS-11 Macro*, 5-81
 - RSTS/E, *RMS-11 Macro*, D-4
 - summary, *RMS-11 Macro*, 6-113
- PRMS\$ directive, *Executive*, 5-139
- PRO/RMS-11
 - contrasted with RSTS/E RMS-11, *RMS-11 Macro*, D-1
 - contrasted with RSX-11 RMS-11, *RMS-11 Macro*, D-3
- PRO attribute, *System Management*, 12-37
- PRO block, *RMS-11 Introduction*, 4-8
 - chaining to FAB, *RMS-11 Macro*, 2-12, 2-13
 - declaring, *RMS-11 Macro*, 2-8
 - initializing, *RMS-11 Macro*, 2-9
 - summary, *RMS-11 Macro*, 6-108
- PROCEDURE statement, *Error Logging*, 5-33, 5-34
- PROCEED command
 - IOX, *System Management*, 4-50

- Proceed command
 - See P command
- Proceed count, *Debugging*, 3-4
 - register, *Debugging*, 5-4
- Process control
 - asynchronous
 - AFC11/AD01 converter, *I/O Drivers*, 15-3
 - ICDRV/ISDRV, *I/O Drivers*, 19-35
 - UDDRV, *I/O Drivers*, 16-15
 - synchronous
 - AFC11/AD01 converter, *I/O Drivers*, 15-3
 - ICDRV/ISDRV, *I/O Drivers*, 19-35
 - UDDRV, *I/O Drivers*, 16-15
- Processing
 - RMSBCK utility, *RMS-11 Utilities*, 6-8
 - data integrity checking, *RMS-11 Utilities*, 6-9
 - explicit/implicit filespec, *RMS-11 Utilities*, 6-9
 - extended diagnostic messages, *RMS-11 Utilities*, 6-10
 - summary listing, *RMS-11 Utilities*, 6-10
 - RMSCNV utility, *RMS-11 Utilities*, 4-14
 - input file organization, *RMS-11 Utilities*, 4-16
 - output file organization, *RMS-11 Utilities*, 4-15
 - RMSDEF utility, *RMS-11 Utilities*, A-1
 - RMSIFL utility, *RMS-11 Utilities*, 3-9
 - building alternate indexes, *RMS-11 Utilities*, 3-12
 - command string checking, *RMS-11 Utilities*, 3-9
 - loading output file, *RMS-11 Utilities*, 3-10
 - reading and sorting input, *RMS-11 Utilities*, 3-9
 - sorting alternate key files, *RMS-11 Utilities*, 3-11
 - summary, *RMS-11 Utilities*, 3-1
 - terminating, *RMS-11 Utilities*, 3-12
 - RMSRST utility, *RMS-11 Utilities*, 7-9

- Processing
 - RMSRST utility (cont'd.)
 - data integrity checking, *RMS-11 Utilities*, 7-11
 - explicit/implicit filespec, *RMS-11 Utilities*, 7-10
 - extended diagnostic messages, *RMS-11 Utilities*, 7-11
 - restoration account, *RMS-11 Utilities*, 7-10
 - summary listing, *RMS-11 Utilities*, 7-12
- Processing blocks, *RMS-11 Introduction*, 4-1, 4-7 *RMS-11 User's Guide*, 1-20
- Processing files, *RMS-11 Introduction*, 4-1 *RMS-11 User's Guide*, 1-16
 - indexed files, *RMS-11 User's Guide*, 7-10
 - relative files, *RMS-11 User's Guide*, 4-15
 - sequential files, *RMS-11 User's Guide*, 3-15
- Processing records, *RMS-11 Introduction*, 4-1, 4-3 *RMS-11 User's Guide*, 1-10, 1-15
 - indexed files, *RMS-11 User's Guide*, 7-1
 - relative files, *RMS-11 User's Guide*, 4-7
 - sequential files, *RMS-11 User's Guide*, 3-7
- Processor
 - floating point
 - SYSGEN question, *System Generation*, 3-32
 - halt
 - tracing fault, *Writing I/O Driver*, 6-11
 - loop
 - tracing fault, *Writing I/O Driver*, 6-12
 - memory size
 - SYSGEN question, *System Generation*, 3-32
 - support on RSX-11M-PLUS, *System Generation*, 3-21
 - type
 - SYSGEN question, *System Generation*, 3-21
- Processor clock, *Debugging*, 8-9
 - turning off, *Debugging*, 9-3
- Processor failures, *System Management*, 15-32

- Processor-specific functions, *Writing I/O Driver*, 1-17
- Processor states, *Debugging*, 8-2
 - priority, *Debugging*, 8-3
- Processor Status Word, CDA, 3-2
 - MCR, 3-31, 3-58
 - See also PSW
- Processor traps
 - XDT, *Debugging*, 8-5
- Professional Personal Computer
 - file transfer, *System Management*, 9-1
- PRO field in PRO block
 - CLOSE operation, *RMS-11 Macro*, 5-3
 - CREATE operation, *RMS-11 Macro*, 5-11
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - offset, *RMS-11 Macro*, 6-108
 - OPEN operation, *RMS-11 Macro*, 5-81
 - RSTS/E, *RMS-11 Macro*, D-4
 - summary, *RMS-11 Macro*, 6-114
- Program, *Introduction*, 5-2
 - development, *Task Builder*, 1-1
 - advanced, *Program Development*, 1-6
 - conventions, *System Library*, 1-1
 - entry point definition, *MACRO-11*, 6-39
 - limit, *Task Builder*, A-18
 - modularity, *MACRO-11*, 6-43
 - section
 - directive
 - See also .PSECT directive
 - sectioning, *Program Development*, 1-4, 1-5, 2-5, 2-8, 2-9
 - transfer address, *MACRO-11*, 6-39
 - user
 - breakpoints
 - setting, *Program Development*, 5-6
 - FORTAN IV, *Program Development*, 7-3
 - library, *Program Development*, 6-1
 - macro symbol, *Program Development*, 6-4
 - definition placement, *Program Development*, 1-5

- Program
 - user (cont'd.)
 - module
 - name, *Program Development*, 2-3, 2-5
 - version, *Program Development*, 2-5
 - object library routines, *Program Development*, 6-6
 - overview of development, *Program Development*, 1-13, 1-14
 - section definition, *Program Development*, 2-8, 2-9
 - system routines, *Program Development*, 1-11
 - version
 - identification, *Task Builder*, A-10
 - version number
 - See Version identifier
 - virtual section
 - building a task using, *Task Builder*, 5-66, 5-67
 - creating, *Task Builder*, 5-66, 5-67
- Program counter, CDA, 3-2 MCR, 3-31 *MACRO-11*, 5-1
 - definition, *MACRO-11*, 3-10
 - value, *Program Development*, 4-8
- Program development, *Command Language*, 6-1 to 6-37
 - optimizing, *RMS-11 User's Guide*, 8-1
- Program example I/O, *I/O Operations*, D-1
- Program identification directive, *MACRO-11*, 6-16, 6-17
- Program interface subroutine (LADRV), *I/O Drivers*, 22-2
- Programming hint
 - AFC11/AD01 converter, *I/O Drivers*, 15-10
 - communication driver, *I/O Drivers*, 12-11
 - CRDRV, *I/O Drivers*, 11-9
 - CTDRV, *I/O Drivers*, 9-7
 - disk driver, *I/O Drivers*, 5-12
 - DTDRV, *I/O Drivers*, 6-7
 - GRDRV, *I/O Drivers*, 21-3
 - half-duplex, *I/O Drivers*, 3-31
 - LPDRV, *I/O Drivers*, 10-7
 - LSDRV, *I/O Drivers*, 17-33
 - PPDRV/PRDRV, *I/O Drivers*, 18-5

Programming hint (cont'd.)
 tape driver, *I/O Drivers*, 8-15
 TTDRV, *I/O Drivers*, 2-82
 UDDRV, *I/O Drivers*, 16-34
 XEDRV, *I/O Drivers*, 13-20
 Programming sequence (XEDRV), *I/O Drivers*, 13-4
 Programming standard, *MACRO-11*, E-1 to E-16
 Program section, *Task Builder*, 2-2, 5-60
 See also individual program section names
 absolute, *MACRO-11*, 6-42, 6-44, 6-45
 access-code, *Task Builder*, 2-4, 2-5
 additive displaced relocation, *Task Builder*, A-21
 additive relocation, *Task Builder*, A-20
 adjacency requirement, *Task Builder*, 10-47, 11-64
 allocation, *Task Builder*, 2-2, 2-4 to 2-8
 allocation-code, *Task Builder*, 2-4, 2-5, 2-6
 \$\$ALVC, *Task Builder*, 7-10
 \$\$ALVD, *Task Builder*, 7-10
 \$\$ALVI, *Task Builder*, 7-10
 attribute, *Task Builder*, 2-2, 2-4
 .BLK, *Task Builder*, 2-3
 context saving, *MACRO-11*, 6-47, 6-48
 creating, *MACRO-11*, 6-43, 6-44
 directive, *MACRO-11*, 6-40 to 6-48
 .ASECT, *MACRO-11*, 6-46, 6-47
 .CSECT, *MACRO-11*, 6-46, 6-47
 .PSECT, *MACRO-11*, 6-40 to 6-45
 .RESTORE, *MACRO-11*, 6-47, 6-48
 .SAVE, *MACRO-11*, 6-47, 6-48
 displaced relocation, *Task Builder*, A-19
 extension, *Task Builder*, 12-15
 I- and D-space task
 overlay, *Task Builder*, 7-5, 7-6
 item
 internal symbol, *Task Builder*, A-29
 length, *Task Builder*, 2-2, 2-4
 limit on quantity, *MACRO-11*, 6-43

Program section (cont'd.)
 local symbol block control, *MACRO-11*, 6-19, 6-20
 making autoloading, *Task Builder*, 4-3
 multiuser task
 I- and D-space, *Task Builder*, 9-3
 name, *Task Builder*, 2-2, 2-3, 2-4, A-7
 applying autoloading indicator, *Task Builder*, 4-3
 conflict, *Task Builder*, 5-8, 5-39, 5-40
 entry, *Task Builder*, A-8
 .FCTR directive argument, *Task Builder*, 3-26
 flag byte, *Task Builder*, A-8, A-9
 resolution, *Task Builder*, 5-8, 5-39
 restriction, *Task Builder*, 5-8
 named in region, *Task Builder*, 5-14
 naming
 table, *System Library*, 1-3
 ordering, *Task Builder*, 5-8, 10-36, 10-47, 11-60, 11-64
 overlay
 allocation, *Task Builder*, 3-19
 run-time, *Task Builder*, 5-54, 5-55
 PSECT, *Task Builder*, 2-3
 relocatable, *MACRO-11*, 6-44, 6-45
 relocation, *Task Builder*, A-19
 relocation-code, *Task Builder*, 2-4
 resolution, *Task Builder*, 3-19
 resolving name, *Task Builder*, 5-40
 save, *Task Builder*, 2-4, 2-6
 scope-code, *Task Builder*, 2-4, 2-5, 2-7
 segregating, *Task Builder*, 10-36, 10-47, 11-60, 11-64
 sequential ordering, *Task Builder*, 10-36, 10-47, 11-60, 11-64
 shared region, *Task Builder*, 5-8
 specifying in overlay, *Task Builder*, 3-19, 3-29
 table, *MACRO-11*, 1-1
 TPARS, *I/O Operations*, 7-10
 type-code, *Task Builder*, 2-5, 2-7
 unnamed, *Task Builder*, 2-3
 virtual, *Task Builder*, 5-60
 allocating physical memory, *Task Builder*, 5-63

Program section

virtual (cont'd.)

- attaching virtual attribute, *Task Builder*, 5-63
- building a task using, *Task Builder*, 5-65
- creating, *Task Builder*, 5-63, 5-65
- FORTTRAN run-time support, *Task Builder*, 5-61, 5-64
- option usage, *Task Builder*, 5-60, 5-61, 5-62
- run time support, *Task Builder*, 5-61
- specifying, *Task Builder*, 12-44
 - base address, *Task Builder*, 5-64
 - length, *Task Builder*, 5-60
 - physical size, *Task Builder*, 5-60
 - window size, *Task Builder*, 5-60
- support, *Task Builder*, 5-64

/PRO keyword

- HOME command, *MCR*, 3-96
- INITVOLUME command, *MCR*, 3-106
- INSTALL command (VMR), *System Management*, 10-25
- MOUNT command (MCR), *MCR*, 3-151
- USER FILE DIRECTORY command, *MCR*, 3-281

Prologue, *RMS-11 Introduction*, 3-15

RMS-11 User's Guide, 1-19

- indexed files, *RMS-11 User's Guide*, 5-2
- relative files, *RMS-11 User's Guide*, 4-1

Prologue version number

See PVN field in SUM block

Prompt, *Command Language*, 1-8

Introduction, 1-3 fig., 1-9

- binary (TTDRV), *I/O Drivers*, 2-41
- checkpointing (TTDRV), *I/O Drivers*, 2-14, 2-40
- CLI string, *MCR*, 3-49
- CTRL/O (TTDRV), *I/O Drivers*, 2-14
- default, *MCR*, 2-14
- explicit, *Introduction*, 1-4
- ignoring
 - response (half-duplex), *I/O Drivers*, 3-14

Prompt

ignoring (cont'd.)

- TTDRV, *I/O Drivers*, 2-14, 2-40
- MCR, *MCR*, 1-3, 2-14, 2-16
- ODT, *Debugging*, 1-4
- pass all (TTDRV), *I/O Drivers*, 2-26
- read with (TTDRV), *I/O Drivers*, 2-18
- redisplay (TTDRV), *I/O Drivers*, 2-28
- RMSBCK utility, *RMS-11 Utilities*, 6-2
- RMSCNV utility, *RMS-11 Utilities*, 4-3
- RMSDES utility, *RMS-11 Utilities*, 2-2
 - conditional, *RMS-11 Utilities*, 2-1, 2-13, 2-15, 2-17, 2-29
- RMSDSP utility, *RMS-11 Utilities*, 5-2
- RMSIFL utility, *RMS-11 Utilities*, 3-2
- RMSRST utility, *RMS-11 Utilities*, 7-2
- send and read (TTDRV), *I/O Drivers*, 2-40
- send pass all (TTDRV), *I/O Drivers*, 2-12
- task, *MCR*, 2-14
- XDT, *Debugging*, 9-4

Prompting

- CLI, *System Management*, 11-7, 11-8

Prompting output

- TTDRV, *I/O Drivers*, 2-76
- VFC (half-duplex), *I/O Drivers*, 3-28
- VFC (LPDRV), *I/O Drivers*, 10-7

Protection, *Command Language*, 4-9 to 4-14, 4-111 to 4-118, 9-31 *RMS-11 User's Guide*, 1-18

- account, *MCR*, 2-24, 3-241
- code
 - UIC, *MCR*, 2-3
- common region, *MCR*, 3-119
- directory, *Command Language*, 4-13, 4-18
- file, *Command Language*, 4-10 to 4-12, 9-31 *MCR*, 3-148, 3-152, 3-214 *System Management*, 2-3
- See also PRO field in PRO block

- Protection
 - file
 - setting, *Command Language*, 4-115 to 4-117
 - showing, *Command Language*, 4-118
 - setting, *Command Language*, 4-111 to 4-114
 - specifying, *Command Language*, 5-97
 - specifying default, *MCR*, 3-102
 - magnetic tape, *MCR*, 3-151
 - multiuser, *MCR*, 2-6, 2-12, 2-24, 3-79
 - multiuser commands, *MCR*, 1-8
 - RMSDEF utility, *RMS-11 Utilities*, A-18
 - RMSRST utility, *RMS-11 Utilities*, 7-7
 - UIC, *MCR*, 3-185
 - volume, *Command Language*, 4-13 to 4-14 *MCR*, 3-148, 3-151
 - specifying, *Command Language*, 5-76
- XAB
 - See *PRO* block
- PROTECTION attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-33
- Protection code
 - file
 - PIP utility, *Utilities*, 3-26
- Protection mask, *System Management*, 10-25
- /PROTECTION qualifier
 - BRU utility, *Utilities*, 7-20
- Protection UIC, *System Management*, 10-25
- Protocol
 - Ethernet
 - LF\$DEF, *I/O Drivers*, 13-3
 - LF\$EXC, *I/O Drivers*, 13-3
 - type definition (XEDRV), *I/O Drivers*, 13-23
- Prototype task
 - fixing, *System Management*, 10-18
- Prototype tasks, *System Management*, 10-27
- PRS2AM, *Error Logging*, 4-4
- PRS2BM, *Error Logging*, 4-4
- .PRSDI routine, fill in directory information, *I/O Operations*, 4-16
- .PRSDV routine, fill in device/unit information, *I/O Operations*, 4-16
- .PRSFN routine, fill in file name, type, version, *I/O Operations*, 4-16
- Prsize parameter
 - device-specific
 - half-duplex, *I/O Drivers*, 3-7
 - VTDRV, *I/O Drivers*, 4-4
 - TTDRV
 - general, *I/O Drivers*, 2-11
 - IO.RPR function, *I/O Drivers*, 2-41
- /PR switch, *Task Builder*, 6-2, 10-33
- PIP utility, *Utilities*, 3-29
- PRT...
 - See *Serial Despooler Task*
- PRT error messages, *System Management*, A-2
- PRT task, *System Management*, 1-6
- PSECT
 - See *.PSECT* directive
 - See *Program* section
- .PSECT directive, *MACRO-11*, 3-11, 6-40, 6-41, 6-42, 6-43, 6-44, 6-45
- Program Development*, 2-8, 2-9
- Task Builder*, 3-23, 3-29
- See also *Program* section
- summary, *Task Builder*, 3-50
- symbolic argument, *MACRO-11*, 6-40, 6-41, 6-42
- Pseudo device, *Command Language*, 3-2, 5-1, 5-6 to 5-8
- Introduction*, 3-11 *MCR*, 2-10 to 2-11
- See also *Device*
- CL:, *Command Language*, 5-6, 5-7
- CO:, *Command Language*, 5-6, 5-7
- installing from, *System Management*, 10-3
- LB:, *Command Language*, 5-6, 5-7
- MK:, *Command Language*, 5-6, 5-7
- names, *MCR*, 2-10
- NL:, *Command Language*, 5-7
- RD:, *Command Language*, 5-7
- SP:, *Command Language*, 5-7
- SY:, *Command Language*, 5-7
- TI:, *Command Language*, 5-7, 5-8
- VT:, *Command Language*, 5-7, 5-8
- WK:, *Command Language*, 5-7, 5-8
- PSW, *Debugging*, B-1
- Executive*, 1-2
- format, *Debugging*, B-1
- register, *Debugging*, 2-6, 5-3
- /P switch, *Error Logging*, 3-5, 3-8

- \$PTBYT routine, *Writing I/O Driver*, 7-31
- .PTLUN
 - reserved global symbol, *Task Builder*, E-2
- \$PTWRD routine, *Writing I/O Driver*, 7-32
- /PUB keyword
 - MOUNT command (MCR), *MCR*, 3-152
 - SET command (MCR), *MCR*, 3-245
 - SET command (VMR), *System Management*, 10-70
- Public device, *Command Language*, 5-14
- Public volume, *Command Language*, 5-10 to 5-11, 5-55
- Pulse fields
 - DOM/DOMW: subroutine (UDDRV), *I/O Drivers*, 16-25
- PURGE command, *Command Language*, 4-44 to 4-46, 9-26 *Introduction*, 3-7
 - DCL, *Program Development*, 3-9
- /PU switch
 - PIP utility, *Utilities*, 3-31
- PUT\$ macro, *I/O Operations*, 1-8, 3-1, 3-28
 - FD.RWM parameter
 - record I/O, *I/O Operations*, 2-10
 - FDB, file processing, *I/O Operations*, 3-27
 - file processing
 - locate mode, *I/O Operations*, 3-29
 - write logical record, *I/O Operations*, 3-26
 - file truncate, *I/O Operations*, 2-11
 - fixed-length record, *I/O Operations*, 3-28
 - block boundary, *I/O Operations*, 3-29
 - block buffer, *I/O Operations*, 3-29
 - format, *I/O Operations*, 3-26
 - locate mode, *I/O Operations*, 3-26, 3-30
 - move mode, *I/O Operations*, 3-26, 3-28
 - no truncate, *I/O Operations*, 2-10
 - sequenced record, *I/O Operations*, 3-26
- PUT\$ macro (cont'd.)
 - task record buffer, *I/O Operations*, 3-28
 - variable-length record, *I/O Operations*, 3-28
 - block boundary, *I/O Operations*, 3-29
- PUT\$R macro, *I/O Operations*, 3-1
 - example, *I/O Operations*, 3-31
 - file processing
 - write logical record, random mode, *I/O Operations*, 3-30
 - random mode
 - locate mode execution, *I/O Operations*, 3-31
- PUT\$\$ macro, *I/O Operations*, 3-1
 - file processing
 - write logical record, sequential mode, *I/O Operations*, 3-33
- PUT argument to ORG\$ macro, *RMS-11 Macro*, 2-3
- PUTD: subroutine
 - put data into output buffer (LSDRV), *I/O Drivers*, 17-22
- \$PUT macro
 - key access, *RMS-11 Macro*, 5-95
 - sequential access, *RMS-11 Macro*, 5-91
- PUT operation, *RMS-11 Introduction*, 4-4 *RMS-11 Macro*, 4-10 *RMS-11 User's Guide*, 1-15
 - access modes, *RMS-11 Introduction*, 4-6
 - and key position, *RMS-11 User's Guide*, 6-7
 - and shared access, *RMS-11 User's Guide*, 2-6
 - and stream records, *RMS-11 User's Guide*, 2-17
 - declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
 - deferred write, *RMS-11 User's Guide*, 7-9
 - duplicate keys, *RMS-11 User's Guide*, 6-9
 - indexed files, *RMS-11 User's Guide*, 7-5, 7-9
 - key access, *RMS-11 User's Guide*, 5-10, 7-6
 - mass insertion, *RMS-11 User's Guide*, 7-9

PUT operation
 indexed files (cont'd.)
 sequential access, *RMS-11 User's Guide*, 5-17, 7-6
 initial allocation, *RMS-11 User's Guide*, 4-4
 key access, *RMS-11 User's Guide*, 1-15
 locate mode, *RMS-11 User's Guide*, 3-14
 move mode
 indexed files, *RMS-11 User's Guide*, 7-7
 relative files, *RMS-11 User's Guide*, 4-12
 sequential files, *RMS-11 User's Guide*, 3-13
 optimizing, *RMS-11 User's Guide*, 6-7
 \$PUT macro
 key access, *RMS-11 Macro*, 5-95
 sequential access, *RMS-11 Macro*, 5-91
 relative files, *RMS-11 User's Guide*, 4-11
 key access, *RMS-11 User's Guide*, 4-11
 sequential access, *RMS-11 User's Guide*, 4-11
 sequential access, *RMS-11 User's Guide*, 1-15
 sequential files, *RMS-11 User's Guide*, 3-10
 key access, *RMS-11 User's Guide*, 3-10
 sequential access, *RMS-11 User's Guide*, 3-10
 PUT statement, *Error Logging*, 4-31, 5-39
 PVN field in SUM block
 DISPLAY operation, *RMS-11 Macro*, 5-32
 offset, *RMS-11 Macro*, 6-145
 OPEN operation, *RMS-11 Macro*, 5-81
 summary, *RMS-11 Macro*, 6-151

Q

Q.xpdx offsets
 in I/O packet, *Writing I/O Driver*, 4-15, 4-16
 \$QERMV, *Error Logging*, 4-25

Q error, *MACRO-11*, 3-16, 6-28, 6-29, 6-33, 6-37, 7-8
 summary, *MACRO-11*, D-4
 \$QINSP routine, *Writing I/O Driver*, 7-33
 QIO\$
 ACP interface, *I/O Drivers*, C-1
 device-specific (TTDRV), *I/O Drivers*, 2-17
 directive error status list, *I/O Drivers*, B-5
 directive success status list, *I/O Drivers*, B-7
 parameter list (F11ACP), *I/O Drivers*, C-2
 QIO\$C macro, *I/O Drivers*, 1-15
 QIO\$ directive, *Executive*, 5-143
 QIO\$ directive summary, *I/O Operations*, C-1
 QIO\$ function
 ACP
 closing a file, *I/O Drivers*, C-13
 creating a file, *I/O Drivers*, C-12
 deleting a file, *I/O Drivers*, C-13
 extending a file, *I/O Drivers*, C-13
 opening a file, *I/O Drivers*, C-13
 using, *I/O Drivers*, C-12
 device-specific
 half-duplex, *I/O Drivers*, 3-9
 UNIBUS switch driver, *I/O Drivers*, 24-4
 standard (UNIBUS switch driver), *I/O Drivers*, 24-2
 summary (ICDRV/ISDRV), *I/O Drivers*, 19-8
 TTDRV, *I/O Drivers*, 2-18
 QIO\$ macro, *I/O Drivers*, 1-14
 communication driver, *I/O Drivers*, 12-5
 CRDRV, *I/O Drivers*, 11-2
 CTDRV, *I/O Drivers*, 9-2
 DDDRV, *I/O Drivers*, 7-2
 device-specific function
 AFC11/AD01 converter, *I/O Drivers*, 15-2
 communication driver, *I/O Drivers*, 12-5
 CRDRV, *I/O Drivers*, 11-3
 CTDRV, *I/O Drivers*, 9-3

QIO\$ macro

device-specific function (cont'd.)

- DDDRV, *I/O Drivers*, 7-3
- disk driver, *I/O Drivers*, 5-8
- DTDRV, *I/O Drivers*, 6-3
- DUDRV, *I/O Drivers*, 5-9
- GRDRV, *I/O Drivers*, 21-2
- half-duplex, *I/O Drivers*, 3-7
- immediate (LSDRV), *I/O Drivers*, 17-3
- LADRV, *I/O Drivers*, 22-28
- list TTDRV, *I/O Drivers*, 2-19
- receive (LRDRV), *I/O Drivers*, 14-9
- synchronous (LSDRV), *I/O Drivers*, 17-4
- tape driver, *I/O Drivers*, 8-6, 8-7
- transmit (LRDRV), *I/O Drivers*, 14-3
- TTDRV, *I/O Drivers*, 2-8, 2-9, 2-17
- UDDRV, *I/O Drivers*, 16-3
- VTDRV, *I/O Drivers*, 4-3, 4-5
- XEDRV, *I/O Drivers*, 13-4, 13-6
- disk driver, *I/O Drivers*, 5-6
- DTDRV, *I/O Drivers*, 6-2
- event flag, *I/O Drivers*, 1-4
- Executive function, *I/O Drivers*, 1-4
- format, basic, *I/O Drivers*, 1-5, 1-6
- general (XEDRV), *I/O Drivers*, 13-4
- GRDRV, *I/O Drivers*, 21-2
- half-duplex, *I/O Drivers*, 3-6
- introduction, *I/O Drivers*, 1-1
- IO.ATT function, *I/O Drivers*, 1-27
- IO.DET function, *I/O Drivers*, 1-28
- IO.KIL function, *I/O Drivers*, 1-29
- IO.RLB function, *I/O Drivers*, 1-30
- IO.RVB function, *I/O Drivers*, 1-30
- IO.WLB function, *I/O Drivers*, 1-31
- IO.WVB function, *I/O Drivers*, 1-32
- issuing hint (tape driver), *I/O Drivers*, 8-17
- library (XEDRV), *I/O Drivers*, 13-4
- LPDRV, *I/O Drivers*, 10-4
- LSDRV, *I/O Drivers*, 17-2
- null argument, *I/O Drivers*, 1-5
- omitting comma in syntax, *I/O Drivers*, 1-6
- power fail, *I/O Drivers*, 1-43
- PPDRV/PRDRV, *I/O Drivers*, 18-2

QIO\$ macro

standard function

- AFC11/AD01 converter, *I/O Drivers*, 15-2
- communication driver, *I/O Drivers*, 12-5
- CRDRV, *I/O Drivers*, 11-2
- CTDRV, *I/O Drivers*, 9-2
- DDDRV, *I/O Drivers*, 7-2
- disk driver, *I/O Drivers*, 5-6
- DTDRV, *I/O Drivers*, 6-2
- GRDRV, *I/O Drivers*, 21-2
- half-duplex, *I/O Drivers*, 3-6
- LPDRV, *I/O Drivers*, 10-4
- LSDRV, *I/O Drivers*, 17-2
- receive (LRDRV), *I/O Drivers*, 14-8
- tape driver, *I/O Drivers*, 8-5
- transmit (LRDRV), *I/O Drivers*, 14-3
- TTDRV, *I/O Drivers*, 2-8, 2-9
- UDDRV, *I/O Drivers*, 16-3
- VTDRV, *I/O Drivers*, 4-2, 4-4
- XEDRV, *I/O Drivers*, 13-6
- standard I/O format (TTDRV), *I/O Drivers*, 2-8
- subfunction use (half-duplex), *I/O Drivers*, 3-9
- syntax element, *I/O Drivers*, 1-6
- tape driver, *I/O Drivers*, 8-5
- TTDRV, *I/O Drivers*, 2-8
- UDDRV, *I/O Drivers*, 16-3
- UNIBUS switch, *I/O Drivers*, 24-2
- valid powerfail (TM11), *I/O Drivers*, 8-15
- VTDRV, *I/O Drivers*, 4-2
- XEDRV, *I/O Drivers*, 13-3, 13-6
- QIO\$S macro, *I/O Drivers*, 1-15
- QIO\$ syntax
 - P1,P2,...,P6 parameter, *I/O Drivers*, 1-9
- QIO DEUNA driver
 - See XEDRV
- QIO directive
 - building I/O packet, *Writing I/O Driver*, 4-11
 - creating DPB, *Writing I/O Driver*, 3-2
 - directive dispatching, *Writing I/O Driver*, 3-2
- QIO Directive Parameter Block (QIO DPB), *Writing I/O Driver*, 4-12, 4-15 to 4-16

QIO execution routine, *I/O Operations*, 4-26

QIOMAC.MAC error codes, *I/O Operations*, 1-1

QIO request, *Writing I/O Driver*, 2-11

QIOW\$ directive, *Executive*, 5-147

QIOW\$ directive summary, *I/O Operations*, C-2

QIOW\$ macro, *I/O Drivers*, 1-14, 1-15

format, *I/O Drivers*, 1-15

task synchronization, *I/O Drivers*, 1-5

QMG, *Batch and Queue*, 1-1 *Command Language*, 1-21, 4-85 to 4-98

Program Development, 1-12

System Management, 1-2, 7-1

commands, *System Management*, 7-14

ASSIGN/QUEUE, *System Management*, 7-23

DCL format, *System Management*, 7-14

DEASSIGN/QUE, *System Management*, 7-23

DELETE, *System Management*, 7-21

DELETE/QUEUE, *System Management*, 7-21

DELETE PROCESSOR, *System Management*, 7-21

INITIALIZE, *System Management*, 7-14

INITIALIZE/PROCESSOR, *System Management*, 7-16

INITIALIZE/QUEUE, *System Management*, 7-14

MCR format, *System Management*, 7-14

START, *System Management*, 7-27

START/PROCESSOR, *System Management*, 7-30

START/QUEUE, *System Management*, 7-27

START/QUEUE/MANAGER, *System Management*, 7-27

STOP, *System Management*, 7-24

STOP/ABORT, *System Management*, 7-26

STOP/PROCESSOR, *System Management*, 7-25

QMG

commands (cont'd.)

STOP/QUEUE, *System Management*, 7-24

STOP/QUEUE/MANAGER, *System Management*, 7-24

definition, *Batch and Queue*, 4-7

dequeueing jobs, *Batch and Queue*, 2-1

entry number, *Command Language*, 4-86

installation, *System Management*, 7-2 to 7-9

output, *Batch and Queue*, 1-3

queuing jobs, *Batch and Queue*, 2-1

special applications, *Batch and Queue*, 1-2

starting, *System Management*, 7-4

DCL command, *System Management*, 7-4

MCR command, *System Management*, 7-4

SYSGEN question, *System Generation*, 3-27

QMGCLI, *System Management*, 7-1

Q register, *Debugging*, 2-6, 5-3, 7-2, 9-10

indicator, *Debugging*, 2-11, 7-3, 9-13

\$QTRAN, *System Management*, 17-17

\$QTRAN1, *System Management*, 17-18

\$QTRAN2, *System Management*, 17-19

QUA attribute, *System Management*, 12-38

Qualifier, *Command Language*, 1-9

See also specific qualifiers

BRU utility, *Utilities*, 7-12

command, *CDA*, 2-14 to 2-17

DCL, *Introduction*, 3-1

description, *Task Builder*, 11-10

MACRO command, *MACRO-11*, 8-8

Qualifiers

crash-input, *CDA*, 2-17 to 2-23

Quantity register

See Q register

QUE /DEL command

format, *Batch and Queue*, 2-10

QUE /HO command

format

entry number, *Batch and Queue*, 2-22

job name, *Batch and Queue*, 2-22

QUE /LI:DEV command
 format, *Batch and Queue*, 2-18
 QUE /LI command, *Batch and Queue*, 2-14
 batch queue, *Batch and Queue*, 1-9
 display, *Batch and Queue*, 2-16 to 2-17
 format, *Batch and Queue*, 2-15
 print queue, *Batch and Queue*, 1-9
 QUE /LI display, *Batch and Queue*, 1-10
 switches, *Batch and Queue*, 2-15
 QUE /MOD command
 example, *Batch and Queue*, 2-21
 file format
 switches, *Batch and Queue*, 2-19
 job format
 switches, *Batch and Queue*, 2-19
 QUE /REL command
 format
 entry number, *Batch and Queue*, 2-23
 job name, *Batch and Queue*, 2-23
 \$QUEBF routine, *Writing I/O Driver*, 1-14
 Query mode
 RMSBCK utility, *RMS-11 Utilities*, 6-5, 6-6, 6-7, 6-10
 RMSRST utility, *RMS-11 Utilities*, 7-6, 7-7, 7-8, 7-11
 Question mark (?)
 ODT, *Program Development*, 5-3
 user input error, *Debugging*, A-1
 Queue, *Batch and Queue*, 1-1
 assignments, *Batch and Queue*, 1-2
 definition, *Batch and Queue*, 4-7
 device
 definition, *Batch and Queue*, 4-3
 device-specific, *Batch and Queue*, 1-2, 4-3
 disk file
 definition, *Batch and Queue*, 4-7
 displaying information, *Batch and Queue*, 2-1
 general, *Batch and Queue*, 1-2, 4-5
 job
 holding, *Batch and Queue*, 2-1
 releasing, *Batch and Queue*, 2-1

Queue
 job
 altering, *Batch and Queue*, 2-1
 PRINT
 definition, *Batch and Queue*, 4-7
 Queue I/O Request and Wait directive, *Executive*, 5-147
 Queue I/O Request directive, *Executive*, 5-143
 Queue management subsystem, *System Management*, 7-1 to 7-2
 Queue Manager
 See QMG
 Queuenam parameter
 DELETE command, *Batch and Queue*, 2-10
 Queuenam switch
 PRI command, *Batch and Queue*, 2-4
 Queue optimization, MCR, 3-235
 Writing I/O Driver, 1-15
 algorithms, MCR, 3-235
 entry point, *Writing I/O Driver*, 4-65
 fairness-count, MCR, 3-235
 /QUEUE qualifier
 PRINT command, *Batch and Queue*, 2-4
 Quiet mode, *Indirect*, 2-49
 QUIT command
 EDT editor, *Introduction*, 2-8, 2-9
 RMSDES utility, *RMS-11 Utilities*, 2-2, 2-12, 2-18
 Quotation mark operator (")
 See Operator
 Quote character, *MACRO-11*, 6-25
 Quoted string, *Command Language*, 1-15
 remote file specification, *RMS-11 User's Guide*, B-2
 QUPKT, *Error Logging*, 4-24

R

R\$-family macro, *RMS-11 Macro*, 2-9
 declaring, *RMS-11 Macro*, C-2
 R.FIX
 file attribute, *I/O Operations*, 2-5
 parameter, fixed-length records, *I/O Operations*, 3-8
 R.SEQ
 file attribute, *I/O Operations*, 2-6

R.SEQ (cont'd.)
 parameter, sequenced records, *I/O Operations*, 3-8

R.VAR
 file attribute, *I/O Operations*, 2-6
 parameter, variable-length records, *I/O Operations*, 3-8

/R5 switch
 DMP utility, *Utilities*, 11-7

RA60/80/81 disk
 SYSGEN question, *System Generation*, 3-45

RA60 disk, *I/O Drivers*, 5-4
 RA80 disk, *I/O Drivers*, 5-4
 RA81 disk, *I/O Drivers*, 5-4

RAB, *RMS-11 Introduction*, 4-8
 declaring, *RMS-11 Macro*, 2-8
 initializing, *RMS-11 Macro*, 2-9
 summary, *RMS-11 Macro*, 6-115

RAB\$B macro, *RMS-11 Macro*, 2-8, C-2

RAB\$BT macro, *RMS-11 Macro*, C-2

RAB\$E macro, *RMS-11 Macro*, 2-9
 declaring, *RMS-11 Macro*, C-2

RABOF\$ macro, *RMS-11 Macro*, C-2

RAC field in RAB, *RMS-11 Macro*, 4-4, 4-5, 4-6
 FIND operation, *RMS-11 Macro*, 5-49, 5-51, 5-54
 GET operation, *RMS-11 Macro*, 5-60, 5-63, 5-67
 offset, *RMS-11 Macro*, 6-115
 PUT operation, *RMS-11 Macro*, 5-91, 5-95
 summary, *RMS-11 Macro*, 6-127

.RAD50 directive, *MACRO-11*, 6-29, 6-30

RAD50 symbol, *Indirect*, 2-11

Radix-50
 character set, *Debugging*, 7-4
 MACRO-11, A-4, A-5
 conversion
 ASCII to Radix-50 (\$CAT5), *System Library*, 4-6
 ASCII with blanks to Radix-50 (\$CAT5B), *System Library*, 4-8
 Radix-50 to ASCII (\$C5TA), *System Library*, 5-11
 displaying, *Debugging*, 4-7
 evaluating, *Debugging*, 7-4
 numeric equivalents, *Debugging*, 7-4
 opening, *Debugging*, 4-7

Radix-50 (cont'd.)
 operator, *Debugging*, 2-7
 word mode, *Debugging*, 4-7, 9-11
 separator (*), *Debugging*, 2-4, 7-4, 9-8
 temporary operator, *MACRO-11*, 6-30

Radix control, *MACRO-11*, 3-14, 6-31, 6-33
 temporary operator, *MACRO-11*, 6-31, 6-32

Radix default, *MACRO-11*, 3-14

.RADIX directive, *MACRO-11*, 3-14, 6-32, 6-33

Random access, *I/O Operations*, 2-10
RMS-11 Introduction, 2-4
RMS-11 User's Guide, 1-7, 1-9
 by key, *RMS-11 Introduction*, 3-12
RMS-11 User's Guide, 1-12
 FIND, *RMS-11 User's Guide*, 1-15
 GET, *RMS-11 User's Guide*, 1-15
 match criterion, *RMS-11 Introduction*, 3-12
 PUT, *RMS-11 User's Guide*, 1-15
 by RFA, *RMS-11 Introduction*, 3-11
 FIND, *RMS-11 User's Guide*, 1-15
 GET, *RMS-11 User's Guide*, 1-15
 by VBN, *RMS-11 Introduction*, 3-12
RMS-11 User's Guide, 1-20
 match criteria, *RMS-11 User's Guide*, 5-13
 to indexed files, *RMS-11 User's Guide*, 5-7, 5-9, 6-12
 to relative files, *RMS-11 User's Guide*, 4-1
 to sequential files, *RMS-11 User's Guide*, 3-2

Random access mode, *I/O Operations*, 3-23

Random access mode, record attribute, *I/O Operations*, 3-9

RANDOM command
 IOX, *System Management*, 4-51

Random I/O, *I/O Operations*, 2-20

Random mode
 PUT\$R macro
 locate mode execution, *I/O Operations*, 3-31

Random mode (cont'd.)
 write logical record, *I/O Operations*,
 3-30

Range
 Trace program, *Debugging*, 10-3

Range (EDT), *Introduction*, 2-10 to
 2-12

RANGE command
 IOX, *System Management*, 4-52

/RA switch
 RMSBCK utility, *RMS-11 Utilities*,
 6-6, 6-7, 6-9
 RMSRST utility, *RMS-11 Utilities*,
 7-7, 7-11

RAT field in FAB
 CREATE operation, *RMS-11 Macro*,
 5-11, 5-12
 offset, *RMS-11 Macro*, 6-23
 OPEN operation, *RMS-11 Macro*,
 5-78
 summary, *RMS-11 Macro*, 6-59
 FB\$BLK mask, *RMS-11 Macro*,
 6-60

RB\$ASY mask in ROP field, *RMS-11
 Macro*, 4-1
 CONNECT operation, *RMS-11
 Macro*, 5-7
 DELETE operation, *RMS-11 Macro*,
 5-25
 DISCONNECT operation, *RMS-11
 Macro*, 5-27
 FIND operation, *RMS-11 Macro*,
 5-49, 5-51, 5-54
 FLUSH operation, *RMS-11 Macro*,
 5-56
 FREE operation, *RMS-11 Macro*,
 5-58
 GET operation, *RMS-11 Macro*,
 5-60, 5-63, 5-67
 NXTVOL operation, *RMS-11 Macro*,
 5-70
 PUT operation, *RMS-11 Macro*,
 5-91, 5-95
 READ operation, *RMS-11 Macro*,
 5-98, 5-100
 REWIND operation, *RMS-11 Macro*,
 5-114
 RSTS/E, *RMS-11 Macro*, D-4
 SPACE operation, *RMS-11 Macro*,
 5-120
 summary, *RMS-11 Macro*, 6-131
 TRUNCATE operation, *RMS-11
 Macro*, 5-122

RB\$ASY mask in ROP field (cont'd.)
 UPDATE operation, *RMS-11 Macro*,
 5-124
 value, *RMS-11 Macro*, 6-115
 WRITE operation, *RMS-11 Macro*,
 5-127, 5-129

RB\$BID code in BID field
 summary, *RMS-11 Macro*, 6-116
 value, *RMS-11 Macro*, 6-115

RB\$BLL code in BLN field
 RSTS/E, *RMS-11 Macro*, D-4
 value, *RMS-11 Macro*, 6-115

RB\$BLN code in BLN field
 value, *RMS-11 Macro*, 6-115

RB\$EOF mask in ROP field
 CONNECT operation, *RMS-11
 Macro*, 5-7
 summary, *RMS-11 Macro*, 6-132
 value, *RMS-11 Macro*, 6-115

RB\$-family symbol
 declaring, *RMS-11 Macro*, C-2

RB\$FDL mask in ROP field
 DELETE operation, *RMS-11 Macro*,
 5-25
 summary, *RMS-11 Macro*, 6-133
 value, *RMS-11 Macro*, 6-115

RB\$KEY code in RAC field, *RMS-11
 Macro*, 4-5
 FIND operation, *RMS-11 Macro*,
 5-51
 GET operation, *RMS-11 Macro*,
 5-63
 PUT operation, *RMS-11 Macro*,
 5-95
 value, *RMS-11 Macro*, 6-115

RB\$KGE mask in ROP field, *RMS-11
 Macro*, 4-5, 4-6
 FIND operation, *RMS-11 Macro*,
 5-52
 GET operation, *RMS-11 Macro*,
 5-64
 summary, *RMS-11 Macro*, 6-134
 value, *RMS-11 Macro*, 6-115

RB\$KGT mask in ROP field, *RMS-11
 Macro*, 4-5, 4-6
 FIND operation, *RMS-11 Macro*,
 5-52
 GET operation, *RMS-11 Macro*,
 5-64
 summary, *RMS-11 Macro*, 6-135
 value, *RMS-11 Macro*, 6-115

RB\$LOA mask in ROP field
 PUT operation, *RMS-11 Macro*,
 5-92, 5-96

RB\$LOA mask in ROP field (cont'd.)
 summary, *RMS-11 Macro*, 6-136
 UPDATE operation, *RMS-11 Macro*, 5-124
 value, *RMS-11 Macro*, 6-115
 RB\$LOC mask in ROP field, *RMS-11 Macro*, 4-7
 CONNECT operation, *RMS-11 Macro*, 5-6
 GET operation, *RMS-11 Macro*, 5-61, 5-64, 5-68
 PUT operation, *RMS-11 Macro*, 5-92
 summary, *RMS-11 Macro*, 6-137
 value, *RMS-11 Macro*, 6-115
 RB\$MAS mask in ROP field
 PUT operation, *RMS-11 Macro*, 5-92
 summary, *RMS-11 Macro*, 6-138
 value, *RMS-11 Macro*, 6-115
 RB\$RFA code in RAC field, *RMS-11 Macro*, 4-6
 FIND operation, *RMS-11 Macro*, 5-54
 GET operation, *RMS-11 Macro*, 5-67
 value, *RMS-11 Macro*, 6-115
 RB\$SEQ code in RAC field, *RMS-11 Macro*, 4-4
 FIND operation, *RMS-11 Macro*, 5-49
 GET operation, *RMS-11 Macro*, 5-60
 PUT operation, *RMS-11 Macro*, 5-91
 value, *RMS-11 Macro*, 6-115
 RB\$UIF mask in ROP field, *RMS-11 Macro*, 4-4
 PUT operation, *RMS-11 Macro*, 5-92, 5-96
 summary, *RMS-11 Macro*, 6-139
 value, *RMS-11 Macro*, 6-115
 \$RBCAL macro, *RMS-11 Macro*, C-3
 RBF field in RAB, *RMS-11 Macro*, 4-7, 4-13
 CONNECT operation, *RMS-11 Macro*, 5-7
 GET operation, *RMS-11 Macro*, 5-61, 5-65, 5-68
 offset, *RMS-11 Macro*, 6-115
 PUT operation, *RMS-11 Macro*, 5-92, 5-93, 5-95
 READ operation, *RMS-11 Macro*, 5-99, 5-101
 RBF field in RAB (cont'd.)
 summary, *RMS-11 Macro*, 6-128
 UPDATE operation, *RMS-11 Macro*, 5-124
 WRITE operation, *RMS-11 Macro*, 5-127, 5-129
 RBNs, *System Management*, 5-2
 primary
 secondary
 status codes, *System Management*, 5-2 to 5-3
 RC25 disk, *I/O Drivers*, 5-4
 SYSGEN question, *System Generation*, 3-45
 RCIPT: routine
 digital input interrupt single-point (ICDRV/ISDRV), *I/O Drivers*, 19-48
 RCIPT: subroutine
 read contact interrupt point (UDDRV), *I/O Drivers*, 16-25
 RCLOKB: subroutine
 read 16-bit clock (K-series), *I/O Drivers*, 23-25
 RCML\$ macro, *I/O Operations*, 6-12
 Rcnt parameter
 device-specific (UNIBUS switch driver), *I/O Drivers*, 24-4
 R command, *Debugging*, 2-11, 9-13
 ZAP utility, *Utilities*, 15-18
 RCST\$ directive, *Executive*, 5-149
 RCST\$ directive summary, *I/O Operations*, C-2
 /RC switch
 DMP utility, *Utilities*, 11-7
 RMSBCK utility, *RMS-11 Utilities*, 6-7, 6-9
 RMSRST utility, *RMS-11 Utilities*, 7-8, 7-11
 Vfy utility, *Utilities*, 9-7
 RCT, *System Management*, 5-1, 5-5
 See also Bad Block Replacement Control Task
 and Error Logger, *System Management*, 5-5
 installation, *System Management*, 5-2
 RCVD\$ directive, *Executive*, 5-151
 RCVD\$ directive summary, *I/O Operations*, C-3
 RCVX\$ directive, *Executive*, 5-153
 RCVX\$ directive summary, *I/O Operations*, C-3
 RD51/52/53 disk

RD51/52/53 disk (cont'd.)
 SYSGEN question, *System Generation*, 3-45
 RD51 disk, *I/O Drivers*, 5-5
 RD52 disk, *I/O Drivers*, 5-5
 RD:, *Command Language*, 5-7 *System Management*, 15-1
 RDACT: routine
 ICDRV/ISDRV
 read activation data, *I/O Drivers*, 19-66
 read activation data example, *I/O Drivers*, 19-68
 RDAF\$ directive, *Executive*, 5-156 *I/O Drivers*, 1-7
 RDB, *Executive*, 3-11
 assigning values, *Executive*, 3-19
 format, *Executive*, 3-11
 generating, *Executive*, 3-13, 3-14
 RDBBK\$, *Executive*, 3-13
 RDBDF\$, *Executive*, 3-13
 RDCS: changed state
 read interrupt point (ICDRV/ISDRV), *I/O Drivers*, 19-54
 RDCS: subroutine
 read contact interrupt change data (UDDRV), *I/O Drivers*, 16-26
 RDDI: circular buffer
 read interrupt data (ICDRV/ISDRV), *I/O Drivers*, 19-53
 RDDI: subroutine
 read contact interrupt data (UDDRV), *I/O Drivers*, 16-27
 RDEF\$ directive, *Executive*, 5-157
 .RDFDR routine, read \$\$FSR2 default directory string, *I/O Operations*, 4-2
 .RDFPP routine, read \$\$FSR2 default file protection word, *I/O Operations*, 4-5
 .RDFUI routine, read default UIC, *I/O Operations*, 4-3, 4-4
 \$RDPAG (Read page), *System Library*, 8-26
 \$\$RDSG program section, *Task Builder*, 5-54
 reserved name, *Task Builder*, E-3
 /RD switch
 RMSBCK utility, *RMS-11 Utilities*, 6-8, 6-9
 RDT field in DAT block
 DISPLAY operation, *RMS-11 Macro*, 5-32
 offset, *RMS-11 Macro*, 6-14
 RDT field in DAT block (cont'd.)
 OPEN operation, *RMS-11 Macro*, 5-81
 RSTS/E, *RMS-11 Macro*, D-4
 summary, *RMS-11 Macro*, 6-20
 RDTI: circular buffer
 read counter data (ICDRV/ISDRV), *I/O Drivers*, 19-58
 RDTI: subroutine
 read timer interrupt data (UDDRV), *I/O Drivers*, 16-28
 RDTY: terminal buffer
 read character (ICDRV/ISDRV), *I/O Drivers*, 19-61
 RDWD: digital interrupt data
 read full word (ICDRV/ISDRV), *I/O Drivers*, 19-55
 RDWD: subroutine
 read word contact interrupt data (UDDRV), *I/O Drivers*, 16-29
 RDXF\$ directive, *Executive*, 5-158 *I/O Drivers*, 1-7
 REA
 See REASSIGN command
 Read
 A/D channel, timed interval (LSDRV), *I/O Drivers*, 17-6
 activation data (ICDRV/ISDRV), *I/O Drivers*, 19-66
 example, *I/O Drivers*, 19-68
 after prompt
 TTDRV, *I/O Drivers*, 2-14, 2-18, 2-27, 2-40
 VTDRV, *I/O Drivers*, 4-7
 all characters (TTDRV), *I/O Drivers*, 2-13, 2-26, 2-36, 2-39, 2-42, 2-44, 2-46
 check (CRDRV), *I/O Drivers*, 11-5
 checkpointing (TTDRV), *I/O Drivers*, 2-14
 contact interrupt change data
 RDCS: subroutine (UDDRV), *I/O Drivers*, 16-26
 contact interrupt data
 RDDI: subroutine (UDDRV), *I/O Drivers*, 16-27
 contact interrupt point
 RCIPT: subroutine (UDDRV), *I/O Drivers*, 16-25
 contact sense fields
 DI/DIW: subroutine (UDDRV), *I/O Drivers*, 16-23
 converting lowercase (TTDRV), *I/O Drivers*, 2-13, 2-27

Read (cont'd.)

- DDDRV, *I/O Drivers*, 7-4
- default input (TTDRV), *I/O Drivers*, 2-13, 2-27
- destination address (XEDRV), *I/O Drivers*, 13-16
- digital interrupt data (ICDRV/ISDRV), *I/O Drivers*, 19-52
- direct access sample subroutine
 - ICS/ICR register, *I/O Drivers*, 19-78
- end-of-tape (PRDRV), *I/O Drivers*, 18-5
- error (tape driver), *I/O Drivers*, 8-14
- Ethernet address (XEDRV), *I/O Drivers*, 13-14
- full word
 - digital interrupt data (ICDRV/ISDRV), *I/O Drivers*, 19-55
- logical block, *I/O Drivers*, 1-30
 - special terminator (TTDRV), *I/O Drivers*, 2-43
 - TTDRV, *I/O Drivers*, 2-13
- logical block (communication driver), *I/O Drivers*, 12-7
- multiple A/D channel (ICDRV/ISDRV), *I/O Drivers*, 19-13
- no echo
 - TF.RNE (TTDRV), *I/O Drivers*, 2-37
 - TTDRV, *I/O Drivers*, 2-13, 2-27, 2-29, 2-38, 2-42, 2-44, 2-46
- no filter (TTDRV), *I/O Drivers*, 2-14, 2-27
- nondestructive
 - NFS volumes, *System Management*, 4-64
- pass through (TTDRV), *I/O Drivers*, 2-14, 2-28
- process escape sequence (TTDRV), *I/O Drivers*, 2-13, 2-27
- protocol type (XEDRV), *I/O Drivers*, 13-15
- reverse (DTDRV), *I/O Drivers*, 6-7
- RSTI: counter module (ICDRV/ISDRV), *I/O Drivers*, 19-58
- sequential analog input channel (UDDRV), *I/O Drivers*, 16-18

Read (cont'd.)

- single A/D channel (LSDRV), *I/O Drivers*, 17-12
- special terminator (TTDRV), *I/O Drivers*, 2-14, 2-28, 2-42
 - TF.RNE, *I/O Drivers*, 2-37
- sync character (communication driver), *I/O Drivers*, 12-7
- tape driver, *I/O Drivers*, 8-7
- terminator (TTDRV)
 - CTRL/C, *I/O Drivers*, 2-68
 - no echo, *I/O Drivers*, 2-15
 - table, *I/O Drivers*, 2-15, 2-45
- time out
 - TF.TMO (TTDRV), *I/O Drivers*, 2-37
 - TTDRV, *I/O Drivers*, 2-15, 2-28, 2-42, 2-44, 2-46
- timer interrupt data
 - RDTI: subroutine (UDDRV), *I/O Drivers*, 16-28
- timer module
 - RSTI: subroutine (UDDRV), *I/O Drivers*, 16-30
- virtual block, *I/O Drivers*, 1-30
- word contact interrupt data
 - RDWD: subroutine (UDDRV), *I/O Drivers*, 16-29

Read/write

- access, *MACRO-11*, 6-40
- access declaration, *RMS-11 User's Guide*, 2-6
- sharing declaration, *RMS-11 User's Guide*, 2-7

Read 16-bit clock (K-series), *I/O Drivers*, 23-23, 23-25

Read \$\$FSR2, default directory string, *I/O Operations*, 4-2

READ\$ macro, *I/O Operations*, 1-7, 3-1

- block access, *I/O Operations*, 2-12
- end-of-file, *I/O Operations*, 3-36
- example, *I/O Operations*, 3-35
- FD.RWM parameter
 - block I/O, *I/O Operations*, 2-10
- FDB, file operation, *I/O Operations*, 3-36
- file processing
 - read virtual block, *I/O Operations*, 3-33
- format
 - file processing, *I/O Operations*, 3-34

- READ\$ macro (cont'd.)
 - virtual block number, *I/O Operations*, 3-34
- Readable-block context, *RMS-11 Macro*, 4-12
- Read access, *MCR*, 2-3
 - common region, *MCR*, 3-119
 - file, *MCR*, 3-148, 3-213
 - file open, *I/O Operations*, 2-15
 - shared, *I/O Operations*, 1-13
 - UFD, *MCR*, 3-281
 - volume, *MCR*, 3-94, 3-96, 3-106, 3-151
- Read access (F11ACP), *I/O Drivers*, C-8
- Read-ahead file processing, *I/O Operations*, 2-19
- Read All Event Flags directive, *Executive*, 5-156
- READ command
 - EDI utility, *Utilities*, 2-42
- Read counter data
 - circular buffer (ICDRV/ISDRV), *I/O Drivers*, 19-58
- Read data (LSDRV)
 - from input buffer, *I/O Drivers*, 17-20
 - from input register, *I/O Drivers*, 17-4
 - timed intervals, *I/O Drivers*, 17-8
- Read default UIC, *I/O Operations*, 4-4
- Read digital input (LSDRV), *I/O Drivers*, 17-19
- .READ directive, *Indirect*, 2-78
- Read Event Flag directive, *Executive*, 5-157
- Read Extended Event Flags directive, *Executive*, 5-158
- Read file owner word, *I/O Operations*, 4-7
- Read file protection word
 - default, *I/O Operations*, 4-5
- Read interrupt data
 - circular buffer (ICDRV/ISDRV), *I/O Drivers*, 19-53
- Read interrupt point
 - changed state (ICDRV/ISDRV), *I/O Drivers*, 19-54
- Read logical record
 - file processing, *I/O Operations*, 3-21
- Read logical record
 - random mode
 - file processing, *I/O Operations*, 3-24
 - sequential mode, *I/O Operations*, 3-26
- \$READ macro
 - sequential access, *RMS-11 Macro*, 5-98
 - VCN access, *RMS-11 Macro*, 5-100
- Read-only
 - access declaration, *RMS-11 User's Guide*, 2-6
 - sharing declaration, *RMS-11 User's Guide*, 2-7
- Read-only access, *MACRO-11*, 6-40
- READ operation, *RMS-11 Introduction*, 4-7 *RMS-11 Macro*, 4-14
 - access modes, *RMS-11 Introduction*, 4-7
- \$READ macro
 - sequential access, *RMS-11 Macro*, 5-98
 - VCN access, *RMS-11 Macro*, 5-100
- Read virtual block
 - file processing, *I/O Operations*, 3-33
- Ready recovery
 - LPDRV, *I/O Drivers*, 10-6
 - PPDRV, *I/O Drivers*, 18-4
- Real-time system, *Introduction*, 6-2
- REASSIGN command
 - device, *I/O Drivers*, 1-20
 - LUN assignment, *I/O Drivers*, 1-4
- REASSIGN command (MCR), *MCR*, 1-7, 3-172
 - error messages, *MCR*, 3-172
 - examples, *MCR*, 3-172
 - format, *MCR*, 3-172
 - parameters, *MCR*, 3-172
- REASSIGN command (VMR), *System Management*, 10-38
 - definition, *System Management*, 10-38
 - examples, *System Management*, 10-38
 - format, *System Management*, 10-38
 - parameters, *System Management*, 10-38
- Receive
 - error detection, hard (TTDRV), *I/O Drivers*, 2-77

Receive (cont'd.)
 message (XEDRV), *I/O Drivers*, 13-13
 standard QIO\$ (LRDRV), *I/O Drivers*, 14-8
 XEDRV
 Ethernet, *I/O Drivers*, 13-3
 Receive By Reference directive,
 Executive, 5-170
 Receive By Reference or Stop directive,
 Executive, 5-173
 Receive-by-reference queue packet
 dequeuing, *Executive*, 5-170, 5-173
 inserting, *Executive*, 5-228
 Receive counter data
 connect buffer (ICDRV/ISDRV),
 I/O Drivers, 19-56
 Receive Data directive, *Executive*,
 5-151
 Receive Data or Exit directive,
 Executive, 5-153
 Receive Data or Stop directive,
 Executive, 5-149
 Receive interrupt data
 connect buffer (ICDRV/ISDRV),
 I/O Drivers, 19-51
 /RECEIVE qualifier, *Task Builder*,
 11-57
 Receiver disconnect (LRDRV), *I/O*
 Drivers, 14-11
 Receive speed (TTDRV), *I/O Drivers*,
 2-56
 Reconfiguration components, *System*
 Management, 15-1
 CON, *System Management*, 15-1
 HRC, *System Management*, 15-1
 RD:, *System Management*, 15-1
 Reconfiguration driver
 See RD:
 Reconfiguration services, *System*
 Management, 1-4, 15-1
 initiating, *System Management*, 15-4
 system faults, *System Management*,
 15-29
 Reconfiguration task
 See HRC
 Record, *RMS-11 Introduction*, 1-1
 RMS-11 User's Guide, 1-1
 See also Access mode
 See also Record format
 blocked
 See FB\$BLK mask in RAT field
 buffer address
 See RBF field in RAB

Record (cont'd.)
 data, *RMS-11 Introduction*, 3-7
 RMS-11 User's Guide, 5-2
 deleting
 See DELETE operation
 deleting, fast
 See RB\$FDL mask in ROP field
 fast deletion
 See RB\$FDL mask in ROP field
 fixed-length
 PUT\$ macro, *I/O Operations*,
 3-28
 R.FIX parameter, *I/O*
 Operations, 3-8
 format
 See RFM field in FAB
 index, *RMS-11 Introduction*, 3-7
 RMS-11 User's Guide, 5-2, 5-6
 locating
 See FIND operation
 longest
 See LRL field in FAB
 moving, *Command Language*, 4-55
 processing, *RMS-11 Introduction*,
 4-1, 4-3 *RMS-11 User's Guide*,
 1-15
 reading, *Indirect*, 2-78
 See also GET operation
 replacing
 See UPDATE operation
 sequenced
 PUT\$ macro, *I/O Operations*,
 3-26
 R.SEQ parameter, *I/O*
 Operations, 3-8
 size
 See RSZ field in RAB
 update existing
 See RB\$UIF mask in ROP field
 variable-length, *I/O Operations*, 1-6
 PUT\$ macro, *I/O Operations*,
 3-28
 R.VAR parameter, *I/O*
 Operations, 3-8
 writing
 See PUT operation
 Record access, *RMS-11 User's Guide*,
 1-12
 See also Shared access
 Record access block
 See RAB field in RAB
 Record access initialization, *I/O*
 Operations, 2-10

- Record access mode
 - See Access mode
- Record attribute, *I/O Operations*, 2-6, 3-8
 - FD.BLK parameter
 - block boundary crossing, *I/O Operations*, 3-9
 - FD.CR, *I/O Operations*, 2-6
 - FD.CR parameter
 - line-feed character, *I/O Operations*, 3-8
 - FD.FTN parameter
 - FORTTRAN carriage-control, *I/O Operations*, 3-8
 - FD.RAN parameter
 - random access mode, *I/O Operations*, 3-9
 - FD.RPN parameter
 - carriage-control word, *I/O Operations*, 3-9
 - locate mode, *I/O Operations*, 3-9
 - sequential mode, *I/O Operations*, 3-9
 - FD.RTN, *I/O Operations*, 2-6
 - FD.RWM parameter
 - process with block I/O, *I/O Operations*, 3-9
- Record buffer
 - task
 - locate mode, *I/O Operations*, 3-29
- Record context, *RMS-11 Macro*, 4-3
- Record file address
 - See RFA
 - See RFA field in RAB
- Record format, *RMS-11 Introduction*, 3-1 *RMS-11 User's Guide*, 1-11, 1-18
 - and file organizations, *RMS-11 User's Guide*, 1-20, 2-15
 - indexed files, *RMS-11 User's Guide*, 6-1
 - relative files, *RMS-11 User's Guide*, 4-2
 - RMSCNV utility, *RMS-11 Utilities*, 4-14
 - RMSDEF utility, *RMS-11 Utilities*, A-8
 - sequential files, *RMS-11 User's Guide*, 3-3
 - tape, *I/O Operations*, 5-4
- Record I/O, *I/O Operations*, 2-10
 - FSR, *I/O Operations*, 2-38

- Record I/O (cont'd.)
 - FSRZ
 - multiple buffering, *I/O Operations*, 2-38
 - locate mode, FD.PLC parameter, *I/O Operations*, 3-6
 - macro, *I/O Operations*, 2-10
 - mode, *I/O Operations*, 1-9
 - multiple buffering, *I/O Operations*, 1-10
 - operation, *I/O Operations*, 1-8
 - random, FD.RAN parameter, *I/O Operations*, 3-6
 - synchronization, event flag, *I/O Operations*, 2-18
- Record length
 - longest
 - See LRL field in FAB
 - maximum
 - See MRL field in FAB
- Record Management Services
 - See RMS-11
- Record number
 - maximum
 - See MRN field in FAB
- Record operation, *RMS-11 Introduction*, 4-4 *RMS-11 Macro*, 4-9 *RMS-11 User's Guide*, 1-15
- Record operation macro, *RMS-11 Macro*, 1-2
 - declaring, *RMS-11 Macro*, C-3
- Record-oriented device
 - See FB\$REC mask in DEV field
- Record-output characteristic
 - See RAT field in FAB
- Record-output handling, *RMS-11 User's Guide*, 1-19
- Record processing, *RMS-11 Macro*, 4-3
- Record reference vector
 - See RRV
- RECORDS command
 - IOX, *System Management*, 4-53
- Record size, *RMS-11 User's Guide*, 1-18
 - FDB, *I/O Operations*, 3-9
 - fixed length, *I/O Operations*, 2-8
 - indexed files, *RMS-11 User's Guide*, 6-1
 - largest, *I/O Operations*, 2-8
 - relative files, *RMS-11 User's Guide*, 4-2
 - sequential files, *RMS-11 User's Guide*, 3-2

Record size (cont'd.)

UPDATE operation, *RMS-11 User's Guide*, 2-16

Record stream, *RMS-11 Macro*, 4-3

Record transfer mode, *RMS-11*

Introduction, 4-6

indexed files, *RMS-11 User's Guide*, 7-6

locate mode, *RMS-11 Introduction*, 4-6

move mode, *RMS-11 Introduction*, 4-6

relative files, *RMS-11 User's Guide*, 4-12

sequential files, *RMS-11 User's Guide*, 3-13

Recoverable errors, *System Management*, 15-30

/RECOVER qualifier

EDIT command, *Command Language*, 4-23

Recovery

check (CRDRV), *I/O Drivers*, 11-4

DTDRV, *I/O Drivers*, 6-6

select, *I/O Drivers*, 6-7

Recursive Translation of Logical Name directive, *Executive*, 5-159

RED

See REDIRECT command

Redirect algorithm, *Writing I/O Driver*, 3-2

REDIRECT command

device, *I/O Drivers*, 1-20

REDIRECT command (MCR), *MCR*, 1-6, 3-173

and pseudo devices, *MCR*, 2-10

error messages, *MCR*, 3-173

examples, *MCR*, 3-173

format, *MCR*, 3-173

parameters, *MCR*, 3-173

REDIRECT command (VMR), *System Management*, 10-39

definition, *System Management*, 10-39

examples, *System Management*, 10-39

format, *System Management*, 10-39

parameters, *System Management*, 10-39

restrictions, *System Management*, 10-39

Redundancy checking (communication driver), *I/O Drivers*, 12-11

Reentry vector register

See X register

Reference

search, *Debugging*, 6-3

REF field in KEY block, *RMS-11 Macro*, 2-13

CLOSE operation, *RMS-11 Macro*, 5-3

CREATE operation, *RMS-11 Macro*, 5-9, 5-18

DISPLAY operation, *RMS-11 Macro*, 5-30

ENTER operation, *RMS-11 Macro*, 5-35

ERASE operation, *RMS-11 Macro*, 5-40

EXTEND operation, *RMS-11 Macro*, 5-46

offset, *RMS-11 Macro*, 6-67

OPEN operation, *RMS-11 Macro*, 5-73, 5-74

PARSE operation, *RMS-11 Macro*, 5-86

REMOVE operation, *RMS-11 Macro*, 5-102

RENAME operation, *RMS-11 Macro*, 5-108

SEARCH operation, *RMS-11 Macro*, 5-116

summary, *RMS-11 Macro*, 6-90

Region, *Executive*, 3-4

absolute, *Task Builder*, 5-8, 5-9, 5-10

building precautions, *Task Builder*, 5-10

mapping, *Task Builder*, 5-8, 5-9

specifying, *Task Builder*, 5-10

symbol definition file, *Task Builder*, 5-10

address

accessing, *MCR*, 3-166

allocation

diagram, *Task Builder*, 5-21

window block, *Task Builder*, 5-26

APR

specifying, *Task Builder*, 5-7

assigning reference, *Task Builder*, 5-24

attaching, *Executive*, 3-8, 5-19

building, *Task Builder*, 5-18

and linking, *Task Builder*, 5-18, 5-19, 5-20

Region

- building
 - interaction of, *Task Builder*, 5-3
 - use of, *Task Builder*, 5-3
- linking task, *Task Builder*, 5-22 to 5-24
- option, *Task Builder*, 5-18, 5-19
- procedure, *Task Builder*, 5-18 to 5-20
- with PAR option, *Task Builder*, 5-2
- /CO/LI/PI switch, *Task Builder*, 5-6
- /CODE:PIC qualifier, *Task Builder*, 5-3 to 5-6
- common, *MCR*, 3-75
 - accessing, *MCR*, 3-120
 - installed, *MCR*, 3-119
 - protecting, *MCR*, 3-119
 - status, *MCR*, 3-46
 - synchronizing, *MCR*, 3-121
 - tasks, *MCR*, 3-47
 - unfixing, *MCR*, 3-284
- data caching, *MCR*, 3-146, 3-207
- definition, *Task Builder*, 2-17
- descriptor, *Task Builder*, B-15, B-17, B-21, B-22
- descriptor in overlay, *Task Builder*, 3-20, 3-21
- detaching, *Executive*, 5-67
- disk data cache, *System Management*, 19-3
 - extent, *System Management*, 19-3
 - format, *System Management*, 19-4
- dynamic, *Executive*, 3-5 *Task Builder*, 2-19, 5-40 to 5-44
 - building a task that creates, *Task Builder*, 5-40 to 5-44
 - creating, *Executive*, 5-50
- dynamic storage, *System Management*, 10-69
- fixing, *System Management*, 10-19
- getting parameters, *Executive*, 5-113
- installing
 - RSX-11M, *Task Builder*, 5-2, 5-3, 5-22
 - RSX-11M-PLUS, *Task Builder*, 5-2, 5-3, 5-22
- library, *Task Builder*, 2-19

Region (cont'd.)

- linked to a region, *Task Builder*, 5-26, 5-27
- linking, *Task Builder*, 5-15, 5-16, 5-28
 - .STB file, *Task Builder*, 5-15
- map, *Task Builder*, 5-20, 5-21
- mapping of an absolute, *Task Builder*, 5-8, 5-9
- memory-resident overlaid, *Task Builder*, 5-10
 - building, *Task Builder*, 5-10
 - example of building, *Task Builder*, 5-11
- number and size, *Task Builder*, 5-18
- overlaid, *Task Builder*, 5-10
 - autoload, *Task Builder*, 5-14
 - autoload vector, *Task Builder*, 5-13, 5-14
- FTB and old library, *Task Builder*, 5-14
- global symbols in .STB file, *Task Builder*, 5-13, 5-14
- I- and D-space task vector, *Task Builder*, 5-13, 5-14
- named program section, *Task Builder*, 5-14
- options, *Task Builder*, 5-12, 5-13, 5-15
- reference inclusion, *Task Builder*, 5-12
- run-time support, *Task Builder*, 5-14
- .STB file, *Task Builder*, 5-13, 5-14
- symbol declaration, *Task Builder*, 5-12
- symbol inclusion, *Task Builder*, 5-12
 - vector, *Task Builder*, 5-13, 5-14
- partition, *Task Builder*, 5-29
 - requirements, *Task Builder*, 5-2
- program section, *Task Builder*, 5-8
 - building a linking task, *Task Builder*, 5-24
- protecting, *Executive*, 3-8
- read/write access, *System Management*, 10-26
- read-only, *System Management*, 10-26
- relocatable, *Task Builder*, 5-6
 - mapping, *Task Builder*, 5-6
 - specifying, *Task Builder*, 5-7

Region

- relocatable (cont'd.)
 - specifying APR, *Task Builder*, 5-7
 - .STB file, *Task Builder*, 5-10
- removing, MCR, 3-175
- resident relocatable, *Task Builder*, 5-6
- resolving program section name, *Task Builder*, 5-39, 5-40
- shareable, *Executive*, 3-5
- /SHAREABLE:COMMON qualifier, *Task Builder*, 5-3 to 5-6
- /SHAREABLE:LIBRARY qualifier, *Task Builder*, 5-3 to 5-6
- shared, *Executive*, 3-6 *Task Builder*, 2-19, 5-1
 - autoload vector, *Task Builder*, 5-14
 - /CO/LI/PI switch, *Task Builder*, 5-6
- defined, *Task Builder*, 5-1
- partition requirement, *Task Builder*, 5-3
- restrictions for overlaid, *Task Builder*, 5-14
- specifying
 - partition, *Task Builder*, 5-29
 - position-independent, *Task Builder*, 10-9, 10-31, 11-18, 11-65, 11-66
- static common, *Executive*, 3-4
- .STB file, *Task Builder*, 5-4, 5-6
 - for an absolute, *Task Builder*, 5-10, 5-14
 - using /CO/LI/PI switch, *Task Builder*, 5-4
- symbol definition file, *Task Builder*, 5-10
- symbol exclusion, *Task Builder*, 5-13
- symbol resolution, *Task Builder*, 5-12, 5-13
- task, *Executive*, 3-4 *Task Builder*, 2-18
- task building option, *Task Builder*, 5-15
- unfixing, *System Management*, 10-92
- window, *Task Builder*, 5-17, 5-26
- with linked task
 - I- and D-space system, *Task Builder*, 7-3

Region Definition Block
See RDB

- Region ID, *Executive*, 3-5
 - determining, *Executive*, 5-19
- ReGIS character set, MCR, 3-246
- /REGIS keyword
 - SET command (MCR), MCR, 3-246
 - SET command (VMR), *System Management*, 10-70
- Register, *Debugging*, 2-6, 5-1
 - A, *Debugging*, 2-6, 5-3, 6-2, 9-10
 - address expression, *Debugging*, 5-1
 - address mode, MACRO-11, 5-2
 - deferred, MACRO-11, 5-3
 - B, *Debugging*, 2-7, 5-4, 9-10
 - clearing, *Debugging*, 3-2
 - breakpoint, *Program Development*, 5-6
 - address, *Debugging*, 5-4, 9-10
 - instruction, *Debugging*, 5-4, 9-10
 - proceed count, *Debugging*, 5-4, 9-10
 - C, *Debugging*, 2-6, 5-3, 9-10
 - indicator, *Debugging*, 9-12
- cache control, CDA, 3-3
- conventions
 - at system state, *Writing I/O Driver*, 7-1
- D, *Debugging*, 2-7, 5-4, 6-2
- definition
 - control, MACRO-11, 6-20, 6-21
 - default, MACRO-11, 3-10
- E, *Debugging*, 2-7, 5-4
- error, CDA, 3-2
- expression, MACRO-11, 5-2
- F, *Debugging*, 2-6, 4-1, 5-3, 9-10
- G, *Debugging*, 2-7, 5-4, 9-10
- general, CDA, 3-2 *Debugging*, 5-1, 9-10
 - contents, *Debugging*, 5-2
 - examining, *Debugging*, 5-1
 - setting, *Debugging*, 5-1
- H, *Debugging*, 2-6, 5-3, 6-1, 9-10
- handling
 - control swapping, *System Library*, 2-2
 - save all registers (\$SAVAL), *System Library*, 2-2
 - save registers 0-2 (\$SAVVR), *System Library*, 2-4
 - save registers 1-5 (.SAVR1), *System Library*, 2-5
 - save registers 3-5 (\$SAVRG), *System Library*, 2-3

Register (cont'd.)

- I, *Debugging*, 2-7, 5-4, 9-10
- indicator, *Debugging*, 2-3, 2-8, 2-11
 - C register, *Debugging*, 2-3, 7-3, 9-12
 - current location (.), *Debugging*, 2-3, 7-3, 9-8
 - Q register, *Debugging*, 2-3, 7-3, 9-13
- internal, *Debugging*, 5-2
 - accessing, *Debugging*, 5-2
- L, *Debugging*, 2-6, 5-3, 6-1, 9-10
- M, *Debugging*, 2-6, 5-3, 6-2
- memory management, CDA, 3-2
- memory operations, *Debugging*, 6-1
- memory system error, CDA, 3-2
- page
 - address, CDA, 3-2
 - description, CDA, 3-2
- percent sign (%) in expression, MACRO-11, 5-2
- Q, *Debugging*, 2-6, 5-3, 7-2, 9-10
 - indicator, *Debugging*, 9-13
- R, *Debugging*, 2-7, 5-5, 9-10
 - clearing, *Debugging*, 2-11, 5-6, 9-13
 - setting, *Debugging*, 2-11, 5-6, 9-13
- relocation, *Program Development*, 5-2, 5-3, 5-4
- report, *Error Logging*, 3-18
- S, *Debugging*, 2-6, 5-3, 9-10
- search limit, *Debugging*, 6-1
- set, *Debugging*, 5-4
- symbol, MACRO-11, 3-10
- term indicator, MACRO-11, 3-2
- UNIBUS mapping, CDA, 3-2
- V, *Debugging*, 2-7, 5-5
- volatile, CDA, 3-1, 3-3
 - See also Volatile registers
- W, *Debugging*, 2-6, 5-3
- X, *Debugging*, 2-6, 5-3, 5-6
- XDT internal, *Debugging*, 9-10
- REGISTER_DEFINITIONS argument, MACRO-11, 8-10
- Register access (ICDRV/ISDRV), *I/O Drivers*, 19-4
 - direct function, *I/O Drivers*, 19-4
- /REG keyword
 - FIX-IN-MEMORY command (MCR), MCR, 3-75
 - FIX-IN-MEMORY command (VMR), *System Management*, 10-19

/REG keyword (cont'd.)

- REMOVE command (VMR), *System Management*, 10-40
- UNFIX command (MCR), MCR, 3-284
- UNFIX command (VMR), *System Management*, 10-92
- REG symbolic argument, MACRO-11, 6-20, 6-21
- Rejecting message (LRDRV), *I/O Drivers*, 14-10
- /RE job switch
 - QUE /MOD command, *Batch and Queue*, 2-21
- REL argument to ORG\$ macro, RMS-11 Macro, 2-3
- Relative address, CDA, 3-1 *Debugging*, 2-2
 - format, *Debugging*, 2-2
- Relative address mode, MACRO-11, 5-8
 - assemble as absolute, MACRO-11, 6-19
- Relative branch location, *Debugging*, 2-6, 4-5, 9-9
- Relative deferred address mode, MACRO-11, 5-9
- Relative file organization, RMS-11 *Introduction*, 3-5 RMS-11 *User's Guide*, 1-4, 1-11
 - See also FB\$REL code
- access declarations, RMS-11 *User's Guide*, 4-6
- allocation
 - DEQ, RMS-11 *User's Guide*, 4-4
 - initial, RMS-11 *User's Guide*, 4-3
- and remote access, RMS-11 *User's Guide*, B-3
- buckets, RMS-11 *User's Guide*, 4-1
- cells, RMS-11 *Introduction*, 3-5 RMS-11 *User's Guide*, 4-1
- CONNECT operation, RMS-11 *User's Guide*, 4-7
- contiguity, RMS-11 *User's Guide*, 4-4
- declaring with ORG\$ macro, RMS-11 Macro, 2-3
- deferred write, RMS-11 *User's Guide*, 4-14
- DELETE operation, RMS-11 *User's Guide*, 4-7
- design, RMS-11 *User's Guide*, 4-1

Relative file organization

design (cont'd.)

- allocation, *RMS-11 User's Guide*, 4-3
- bucket size, *RMS-11 User's Guide*, 4-2
- MRN, *RMS-11 User's Guide*, 4-5
- record format, *RMS-11 User's Guide*, 4-2
- directory operations, *RMS-11 User's Guide*, 4-15
- DISCONNECT operation, *RMS-11 User's Guide*, 4-8
- file operations, *RMS-11 User's Guide*, 4-15
- FIND operation, *RMS-11 User's Guide*, 4-8
- FLUSH operation, *RMS-11 User's Guide*, 4-10
- GET operation, *RMS-11 User's Guide*, 4-10, 4-12, 4-13
- I/O techniques, *RMS-11 User's Guide*, 4-14
- MRN, *RMS-11 User's Guide*, 4-4
- multiple access streams, *RMS-11 User's Guide*, 4-15
- multiple buffers, *RMS-11 User's Guide*, 4-15
- prologue, *RMS-11 User's Guide*, 4-1
- PUT operation, *RMS-11 User's Guide*, 4-11, 4-12
- random access
 - by key, *RMS-11 User's Guide*, 4-1
 - by RFA, *RMS-11 User's Guide*, 4-1
- record operations, *RMS-11 User's Guide*, 4-7
- record size, *RMS-11 User's Guide*, 4-2
- record transfer modes, *RMS-11 User's Guide*, 4-12
 - move mode, *RMS-11 User's Guide*, 4-12
- REWIND operation, *RMS-11 User's Guide*, 4-12
- RRN, *RMS-11 Introduction*, 3-6
- sequential access, *RMS-11 User's Guide*, 4-1
- shared access, *RMS-11 User's Guide*, 4-6
 - block access, *RMS-11 User's Guide*, 4-6

Relative file organization

shared access (cont'd.)

- record access, *RMS-11 User's Guide*, 4-6
- sharing declarations, *RMS-11 User's Guide*, 4-6
- stream operations, *RMS-11 User's Guide*, 4-7
- structure, *RMS-11 User's Guide*, 4-1
 - conceptual, *RMS-11 User's Guide*, 4-1
- UPDATE operation, *RMS-11 User's Guide*, 4-12, 4-13
- Relative record number
 - See BKT field in RAB
 - See RRN
- Relay, latch output (LSDRV), *I/O Drivers*, 17-22
- RELAY: subroutine
 - latch output relay (LSDRV), *I/O Drivers*, 17-22
- RELEASE command
 - format
 - entry number, *Batch and Queue*, 2-23
 - job name, *Batch and Queue*, 2-23
 - RELEASE/ENTRY, *Command Language*, 4-98, 9-26
 - RELEASE/JOB, *Command Language*, 4-98, 9-27
- Release data buffer (K-series), *I/O Drivers*, 23-26
- Relocatable
 - address, *Debugging*, 2-2, 5-6, 9-12
 - calculating, *Debugging*, 2-9, 7-1
 - expression, *MACRO-11*, 3-17
 - program section, *MACRO-11*, 6-44, 6-45
 - region
 - See Region
 - symbol, *Task Builder*, A-27
- relocatable
 - complex
 - expression, *MACRO-11*, 3-18
- Relocation
 - bias, *MACRO-11*, 2-2, 3-17, 3-18, 4-1
 - complex, *MACRO-11*, 4-1 *Task Builder*, A-22
 - entry, *Task Builder*, A-23
 - operation code, *Task Builder*, A-22

Relocation (cont'd.)

- directory command byte, *Task Builder*, A-13
 - directory record, *Task Builder*, A-12
 - entry, *Task Builder*, A-12, A-13
 - format, *Task Builder*, A-14
 - displaced
 - global, *Task Builder*, A-16
 - global, *Task Builder*, A-15
 - additive, *Task Builder*, A-16
 - additive displaced, *Task Builder*, A-17
 - internal, *Task Builder*, A-14
 - displaced, *Task Builder*, A-15
 - library
 - resident, *Task Builder*, A-23
 - overview, *MACRO-11*, 4-1
 - program section, *Task Builder*, A-19
 - additive, *Task Builder*, A-20
 - additive displaced, *Task Builder*, A-21
 - displaced, *Task Builder*, A-19
 - resident library, *Task Builder*, A-23
 - task
 - mapped system, *Task Builder*, 2-16
- ## Relocation register, *Program Development*, 5-2, 5-3, 5-4
- See also R register
- \$RELOC** routine, *Writing I/O Driver*, 7-34
- \$RELOP** routine, *Writing I/O Driver*, 7-35
- Rel parameter
 - immediate device-specific function (LSDRV), *I/O Drivers*, 17-3
- REL symbolic argument, *MACRO-11*, 6-42
- ## REM
- See REMOVE command
- .REM** directive, *MACRO-11*, 6-18
- /REMOTE** keyword
 - SET command (MCR), *MCR*, 3-247
 - SET command (VMR), *System Management*, 10-71 to 10-72
- Remote line
 - clearing characteristic (TTDRV), *I/O Drivers*, 2-83
- Remote operation
 - P/OS, *RMS-11 Macro*, D-3
- Remote site powerfail (ICDRV/ISDRV), *I/O Drivers*, 19-71
- Remote terminal
 - IO.EIO (TTDRV), *I/O Drivers*, 2-25

Remote terminal (cont'd.)

- monitor example (ICDRV/ISDRV), *I/O Drivers*, 19-62
- Remove Affinity directive, *Executive*, 5-162
- REMOVE command, *Command Language*, 7-39 to 7-40, 9-27
- REMOVE command (MCR), *MCR*, 1-7, 3-175, 3-180
 - error messages, *MCR*, 3-176
 - example, *MCR*, 3-175
 - format, *MCR*, 3-175
 - parameter, *MCR*, 3-175
- REMOVE command (VMR), *System Management*, 10-40
 - definition, *System Management*, 10-40
 - examples, *System Management*, 10-40
 - format, *System Management*, 10-40
 - keyword
 - /REG, *System Management*, 10-40
 - notes, *System Management*, 10-40
 - parameters, *System Management*, 10-40
- \$REMOVE** macro, *RMS-11 Macro*, 5-102
- RSTS/E, *RMS-11 Macro*, D-4
- REMOVE operation, *RMS-11 Introduction*, 4-1 *RMS-11 Macro*, 3-6
 - BDB requirement, *RMS-11 Macro*, 2-8
 - I/O buffer requirement, *RMS-11 Macro*, 2-7
 - IFAB requirement, *RMS-11 Macro*, 2-5
- \$REMOVE** macro, *RMS-11 Macro*, 5-102
- wildcard loop, *RMS-11 Macro*, 3-9, 3-10
 - nonselective, *RMS-11 Macro*, 3-10
 - selective, *RMS-11 Macro*, 3-11
- .REMOVE** routine, delete directory entry, *I/O Operations*, 4-20
- RENAME command, *Command Language*, 4-52 to 4-54, 9-27 *Introduction*, 3-7
- \$RENAME** macro, *RMS-11 Macro*, 5-108
 - example, *RMS-11 Macro*, 7-15

RENAME operation, *RMS-11*
 Introduction, 4-1 *RMS-11 Macro*,
 3-6
 BDB requirement, *RMS-11 Macro*,
 2-8
 I/O buffer requirement, *RMS-11*
 Macro, 2-7
 IFAB requirement, *RMS-11 Macro*,
 2-5
 \$RENAME macro, *RMS-11 Macro*,
 5-108
 wildcard loop, *RMS-11 Macro*, 3-9,
 3-10
 nonselective, *RMS-11 Macro*,
 3-10
 selective, *RMS-11 Macro*, 3-11
 .RENAME routine, rename file, *I/O*
 Operations, 4-26
 RENEW command
 EDI utility, *Program Development*,
 2-15 *Utilities*, 2-19, 2-43
 Repeat block
 indefinite, *MACRO-11*, 7-3, 7-16 to
 7-19
 Repeating code block, *MACRO-11*,
 7-19
 REPEAT key, *Command Language*,
 3-15
 Replacement blocks
 See RBNs
 Report
 interval
 output frequency, *System*
 Management, 4-62
 Report control function, *Error Logging*,
 5-22
 REPORTERRORS YES/NO command
 IOX, *System Management*, 4-54
 Report Generator
 See also RPT
 Report switch, *Error Logging*, 3-6, 3-20
 .REPT directive, *MACRO-11*, 7-19
 \$REQU1 routine, *Writing I/O Driver*,
 7-36
 \$REQUE routine, *Writing I/O Driver*,
 7-36
 Request and Pass Offspring Information
 directive, *Executive*, 5-163
 REQUEST command, *Command*
 Language, 3-36 to 3-37, 9-27
 Request Task directive, *Executive*,
 5-167
 R error, *MACRO-11*, 3-10

R error (cont'd.)
 summary, *MACRO-11*, D-4
 RES
 See RESUME command
 Reschedule interval, *System*
 Management, 10-43
 RESCOM
 linking to region, *Task Builder*, 5-15
 option, *Task Builder*, 12-30, 12-31
 shared region use, *Task Builder*,
 5-15
 RESEQUENCE command EDT editor,
 Introduction, 2-12, 2-13
 Reserved symbol, *Indirect*, 2-25
 MACRO-11, 2-3, 3-1, 3-7
 See also Permanent Symbol Table
 description, *Task Builder*, E-1 to E-4
 Reset counter initial value
 SCTI: (ICDRV/ISDRV), *I/O Drivers*,
 19-59
 RESET key (EDT), *Introduction*, 2-8
 Reset switch, *Error Logging*, 2-4, 2-7
 Reset switch (CRDRV), *I/O Drivers*,
 11-6
 Resident
 common
 name block data, *Task Builder*,
 B-8
 driver
 See Driver
 library
 name block data, *Task Builder*,
 B-8
 relocation, *Task Builder*, A-23
 memory
 for TKB performance, *Task*
 Builder, F-2, F-3
 overlay operator
 enabling recognition, *Task*
 Builder, 10-34, 11-58
 region
 map file
 including symbol definition,
 Task Builder, 10-26
 using to reduce overhead, *Task*
 Builder, F-4
 /RESIDENT_OVERLAYS qualifier,
 Task Builder, 11-58
 Resident data base
 See Data base
 RESLIB
 linking to region, *Task Builder*, 5-15
 option, *Task Builder*, 12-30, 12-31,
 12-32

RESLIB

option (cont'd.)
shared region use, *Task Builder*,
5-15

supervisor mode library, *Task
Builder*, 8-20

Resource Accounting, *Command
Language*, 3-9, 3-12 to 3-13,
9-35 MCR, 2-6, 3-121 *System
Management*, 1-5, 17-1

See also Transaction file

commands, *System Management*,
17-4

SET ACCOUNTING, *System
Management*, 17-4, 17-8

SHOW ACCOUNTING/DATATRIEVE,
System Management, 17-3,
17-17

SHOW ACCOUNTING/INFORMATION,
System Management, 17-3,
17-11

SHOW ACCOUNTING/TRANSACTION_
FILE, *System Management*,
17-3, 17-12

START/ACCOUNTING, *System
Management*, 17-4, 17-5

STOP/ACCOUNTING, *System
Management*, 17-4, 17-10

device statistics example, *System
Management*, 17-7

interface for creating transactions

\$QTRAN, *System Management*,
17-17

\$QTRAN1, *System Management*,
17-18

\$QTRAN2, *System Management*,
17-19

messages, *System Management*,
17-40

privileged task interface, *System
Management*, 17-21

scan rate, *System Management*, 17-6

secondary pool, *System Management*,
17-5

statistics scan, *System Management*,
17-6

SYSGEN question, *System
Generation*, 3-27

system resources, *System
Management*, 17-39

system statistics, *System
Management*, 17-5

task accounting, *System
Management*, 17-6

Resource Accounting (cont'd.)

user-written analysis programs,
System Management, 17-3

using DATATRIEVE-11 for an
accounting report, *System
Management*, 17-16

Resource Monitoring Display

See RMD

RESSUP

option, *Task Builder*, 8-4, 8-9,
12-33, 12-34

supervisor mode library, *Task
Builder*, 8-7, 8-9

use in CSM library, *Task Builder*,
8-9, 8-18, 8-19, 8-20

/RES switch

PRI command, *Batch and Queue*,
2-5

RESTART command

IOX, *System Management*, 4-55

/RESTART qualifier

PRINT command, *Batch and Queue*,
2-5

SET QUEUE command, *Batch and
Queue*, 2-21

.RESTORE directive, *MACRO-11*,
3-11, 6-47, 6-48

Resultant string

See RSA field in NAM block

RESUME command, MCR, 1-7, 3-177

error messages, MCR, 3-177

example, MCR, 3-177

format, MCR, 3-177

keyword

/TERM, MCR, 3-177

parameter, MCR, 3-177

Resume Task directive, *Executive*,
5-176

/RE switch

PIP utility, *Utilities*, 3-33

VFY utility, *Utilities*, 9-7

Retadd parameter

device-specific function

receive (LRDRV), *I/O Drivers*,
14-9

transmit (LRDRV), *I/O Drivers*,
14-4

RETRIES command

IOX, *System Management*, 4-56

Retries parameter

device-specific function

transmit (LRDRV), *I/O Drivers*,
14-4

- Retrieval pointer, *RMS-11 User's Guide*, 8-2
 - in memory, *RMS-11 User's Guide*, 8-2
 - on disk, *RMS-11 User's Guide*, 8-2
- Retrieval pointer count
 - See RTV field in FAB
- Retry count parameter (UNIBUS switch driver)
 - IO.CON function, *I/O Drivers*, 24-4
- Retry procedure (tape driver), *I/O Drivers*, 8-14
- /RETRY switch
 - BAD utility, *Utilities*, 6-6
- Return
 - operation, from, *RMS-11 Macro*, 2-14
- Return, automatic carriage (half-duplex), *I/O Drivers*, 3-31
- Return buffer number (K-series), *I/O Drivers*, 23-24
- Return character (TTDRV), *I/O Drivers*, 2-69
- RETURN command
 - EDI utility, *Utilities*, 2-19, 2-43
- Return command, *Debugging*, 2-5, 4-2, 9-8
- .RETURN directive, *Indirect*, 2-79
- Return from completion handler, *RMS-11 Macro*, 2-18
- RETURN key, *Command Language*, 3-13 to 3-14, 3-24 *Introduction*, 1-3 fig. MCR, 2-15
 - closing location
 - ODT, *Program Development*, 5-5, 5-8
 - displaying new line
 - EDI utility, *Program Development*, 2-13
 - entering text
 - EDI utility, *Program Development*, 2-9
 - half-duplex, *I/O Drivers*, 3-23, 3-24
 - terminating input
 - EDI utility, *Program Development*, 2-9, 2-10, 2-18, 7-7
 - TTDRV, *I/O Drivers*, 2-71
- \$RETURN macro, *RMS-11 Macro*, 2-18
- RETURN statement, *Error Logging*, 4-31, 5-33

- RETYPE command
 - EDI utility, *Utilities*, 2-19, 2-43
- Revector control tables, *System Management*, 5-2
- Reverse
 - operation (DTDRV), *I/O Drivers*, 6-8
 - speed
 - DTDRV, *I/O Drivers*, 6-7
- /REVISED qualifier
 - BRU utility, *Utilities*, 7-21
- Revision date
 - See RDT field in DAT block
 - RMSBCK utility, *RMS-11 Utilities*, 6-8
- Revision number
 - See RVN field in DAT block
- Rewind
 - importance (CTDRV), *I/O Drivers*, 9-7
 - on close or open, *I/O Operations*, 2-16
 - tape driver, *I/O Drivers*, 8-7
 - volume, *I/O Operations*, 5-5
- REWIND_MAGTAPE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-34
- \$REWIND macro, *RMS-11 Macro*, 5-114
 - RSTS/E magtape device, *RMS-11 Macro*, D-4
- REWIND operation, *RMS-11 Introduction*, 4-4 *RMS-11 User's Guide*, 1-15
 - indexed files, *RMS-11 User's Guide*, 7-6
 - record stream, *RMS-11 Macro*, 4-9
 - relative files, *RMS-11 User's Guide*, 4-12
 - \$REWIND macro, *RMS-11 Macro*, 5-114
 - sequential files, *RMS-11 User's Guide*, 3-11
- /REWIND qualifier
 - BRU utility, *Utilities*, 7-21
- RF11 disk controller, *I/O Drivers*, 5-1
- RFA, *RMS-11 Introduction*, 3-11, 3-15
 - relative files, *RMS-11 User's Guide*, 4-1
 - sequential files, *RMS-11 User's Guide*, 3-2
- RFA field in RAB, *RMS-11 Macro*, 4-6

- RFA field in RAB (cont'd.)
 - CONNECT operation, RMS-11 Macro, 5-7
 - FIND operation, RMS-11 Macro, 5-50, 5-52, 5-54
 - GET operation, RMS-11 Macro, 5-61, 5-65, 5-67
 - offset, RMS-11 Macro, 6-115
 - PUT operation, RMS-11 Macro, 5-93, 5-96
 - READ operation, RMS-11 Macro, 5-99, 5-101
 - summary, RMS-11 Macro, 6-129
 - WRITE operation, RMS-11 Macro, 5-128, 5-130
- RFA record access
 - See also RB\$RFA code in RAC field to relative files, RMS-11 User's Guide, 4-1
 - to sequential files, RMS-11 User's Guide, 3-2
- RFM field in FAB
 - CREATE operation, RMS-11 Macro, 5-11
 - offset, RMS-11 Macro, 6-23
 - OPEN operation, RMS-11 Macro, 5-78
 - summary, RMS-11 Macro, 6-61
- .RFOWN routine, read \$\$FSR2 file
 - owner word, I/O Operations, 4-7
- \$\$RGDS program section
 - reserved name, Task Builder, E-3
- RHB field in RAB, RMS-11 Macro, 4-7
 - GET operation, RMS-11 Macro, 5-61, 5-64, 5-68
 - offset, RMS-11 Macro, 6-115
 - PUT operation, RMS-11 Macro, 5-92, 5-96
 - summary, RMS-11 Macro, 6-130
 - UPDATE operation, RMS-11 Macro, 5-124
- RH controller
 - SYSGEN question, System Generation, 3-34
- Right-angle bracket command (>), Debugging, 2-6, 4-5, 9-9
- RK05 disk, I/O Drivers, 5-3
 - SYSGEN question, System Generation, 3-40
- RK05F disk, I/O Drivers, 5-3
 - SYSGEN question, System Generation, 3-40
- RK06/07 disk
 - SYSGEN question, System Generation, 3-41
- RK06 disk, I/O Drivers, 5-3
- RK07 disk, I/O Drivers, 5-3
- RK07 disk kit
 - contents, System Generation, 2-6
 - copying
 - on line, System Generation, 2-18 to 2-20
 - stand alone, System Generation, 2-12 to 2-15
 - under VAX-11 RSX, System Generation, 2-24 to 2-26
- RK11 controller
 - SYSGEN question, System Generation, 3-40
- RK11 disk controller, I/O Drivers, 5-3
- RK611/711 controller
 - SYSGEN question, System Generation, 3-41
- RK611 disk controller, I/O Drivers, 5-3
- RL01/02 disk
 - SYSGEN question, System Generation, 3-42
- RL01 disk, I/O Drivers, 5-3
- RL02 disk, I/O Drivers, 5-3
- RL02 exercise
 - IOX, System Management, 4-10
- RL11/RLV11 controller
 - SYSGEN question, System Generation, 3-42
- RL11 disk controller, I/O Drivers, 5-3
- Rlast parameter
 - RCLOCKB: subroutine (K-series), I/O Drivers, 23-25
- \$RLCB (Release core block), System Library, 7-4
- \$RLCB system routine, RMS-11 Macro, 2-20
- RLOG\$ directive, Executive, 5-159
- RLON\$ directive, Executive, 5-159
- RLSBUF: subroutine
 - release data buffer (K-series), I/O Drivers, 23-26
 - release data buffer (LADRV), I/O Drivers, 22-21
- RLSCT FORTRAN subroutine, Task Builder, 5-64, 5-65
- RM02/03/05/80 disk
 - SYSGEN question, System Generation, 3-36

- RM02/03 module, *Error Logging*, 4-37 to 4-49
- RM02/03 notes module, *Error Logging*, 4-67, 4-68
- RM02 disk, *I/O Drivers*, 5-3
- RM03 disk, *I/O Drivers*, 5-3
- RM05 disk, *I/O Drivers*, 5-3
- RM80 disk, *I/O Drivers*, 5-3
- RMAF\$S directive, *Executive*, 5-162
- RMD, *System Management*, 1-2, 6-1
 - Active Task Display, *System Management*, 6-8
 - altering
 - from MCR, *System Management*, 6-9
 - altering from setup page, *System Management*, 6-8
 - Active Task List Page, *System Management*, 6-1
 - cached device
 - Detailed Statistics Page, *System Management*, 6-1
 - cache region
 - detailed statistics
 - altering from MCR, *System Management*, 6-18
 - detailed statistics display, *System Management*, 6-16
 - altering from setup page, *System Management*, 6-17
 - general statistics
 - altering from MCR, *System Management*, 6-16
 - general statistics display, *System Management*, 6-14
 - altering from setup page, *System Management*, 6-15
 - General Statistics Page, *System Management*, 6-1
 - displaying disk data cache statistics, *System Management*, 19-12, 19-14
 - display pages, *System Management*, 6-1
 - displays available on RSX-11M-PLUS, *System Management*, 6-11
 - error messages, *System Management*, 6-18
 - Help display, *System Management*, 6-3

- RMD (cont'd.)
 - Help Page, *System Management*, 6-1
 - I/O Counts Display
 - altering
 - from MCR, *System Management*, 6-12
 - from setup page, *System Management*, 6-12
 - I/O Counts Page, *System Management*, 6-1
 - installation, *System Management*, 6-2
 - MCR INSTALL command, *System Management*, 6-2
 - RSX-11M-PLUS systems, *System Management*, 6-2
 - RSX-11M systems, *System Management*, 6-2
 - invoking, *System Management*, 6-2
 - memory display, *System Management*, 6-4
 - FREE command, *System Management*, 6-7
 - modifying, *System Management*, 6-7
 - RATE command, *System Management*, 6-7
 - Memory Page, *System Management*, 6-1
 - pages, *System Management*, 6-1
 - running on a slaved terminal, *System Management*, 6-3
 - setup command, *System Management*, 6-2
 - setup pages, *System Management*, 6-2
 - System Statistics Display, *System Management*, 6-13
 - altering
 - from MCR, *System Management*, 6-14
 - from setup page, *System Management*, 6-14
 - System Statistics Page, *System Management*, 6-1
 - task-build command file
 - altering, *System Management*, 6-18
 - Task Header Display, *System Management*, 6-9
 - altering
 - from MCR, *System Management*, 6-11

RMD

Task Header Display (cont'd.)
from setup page, *System Management*, 6-10
contents, *System Management*, 6-10

Task Header Page, *System Management*, 6-1
using at terminals, *System Management*, 6-2

RMDEMO, *Introduction*, 6-9

RMS-11

installing libraries and utilities,
System Generation, 4-4
introductory information
Best reference, *RMS-11 Introduction*
library, *Program Development*, 1-9, 1-11
on pregenerated kit, *System Generation*, 5-40
reference information
Best reference, *RMS-11 Macro*
user information
Best reference, *RMS-11 User's Guide*

utilities

Best reference, *RMS-11 Utilities*

RMS-11 File Back-Up Utility

See RMSBCK

RMS-11 File Conversion Utility

See RMSCNV

RMS-11 File Definition Utility

See RMSDEF

RMS-11 File Design Utility

See RMSDES

RMS-11 File Display Utility

See RMSDSP

RMS-11 File Restoration Utility

See RMSRST

RMS-11 Indexed File Load Utility

See RMSIFL

RMS-11 string

processing, *Executive*, 5-139

RMSBCK utility, *RMS-11 Introduction*, 5-3
RMS-11 Utilities, 1-1, 3-3, 4-5, 5-1, 6-1, 7-1, 7-5, 7-9, 7-10

backup file contents, *RMS-11 Utilities*, 6-1

backup medium, *RMS-11 Utilities*, 6-3

/CD switch, *RMS-11 Utilities*, 6-8, 6-9

RMSBCK utility (cont'd.)

command string, *RMS-11 Utilities*, 6-2, 6-3

container file, *RMS-11 Utilities*, 6-1

data integrity checking, *RMS-11 Utilities*, 6-6, 6-7, 6-9

examples, *RMS-11 Utilities*, 6-10

global switches, *RMS-11 Utilities*, 6-5

HELP, *RMS-11 Utilities*, 6-4

/ID switch, *RMS-11 Utilities*, 6-4, 6-5

indirect command file, *RMS-11 Utilities*, 6-2

input file switches, *RMS-11 Utilities*, 6-8

intersystem file transfer, *RMS-11 Utilities*, 1-2

invoking, *RMS-11 Utilities*, 6-2

magnetic tape, *RMS-11 Utilities*, 6-7

multivolume, *RMS-11 Utilities*, 6-9

messages, *RMS-11 Utilities*, C-1

/[NO]QU switch, *RMS-11 Utilities*, 6-5, 6-6, 6-7, 6-10

output file switches, *RMS-11 Utilities*, 6-6

processing, *RMS-11 Utilities*, 6-8

data integrity checking, *RMS-11 Utilities*, 6-9

explicit/implicit filespec, *RMS-11 Utilities*, 6-9

extended diagnostic messages, *RMS-11 Utilities*, 6-10

summary listing, *RMS-11 Utilities*, 6-10

prompt, *RMS-11 Utilities*, 6-2

query mode, *RMS-11 Utilities*, 6-5, 6-6, 6-7, 6-10

/RA switch, *RMS-11 Utilities*, 6-6, 6-7, 6-9

/RC switch, *RMS-11 Utilities*, 6-7, 6-9

/RD switch, *RMS-11 Utilities*, 6-8, 6-9

/RW switch, *RMS-11 Utilities*, 6-7

/SL switch, *RMS-11 Utilities*, 6-6, 6-10

summary listing, *RMS-11 Utilities*, 6-10

/SU switch, *RMS-11 Utilities*, 6-7

terminating, *RMS-11 Utilities*, 6-2

RMSCNV utility, *RMS-11 Introduction*,
 5-2 *RMS-11 Utilities*, 1-1, 3-1, 4-1
 /AP switch, *RMS-11 Utilities*, 4-5,
 4-7, 4-13, 4-15
 ASCII stream files, *RMS-11 Utilities*,
 4-3, 4-8
 block mode, *RMS-11 Utilities*, 4-1
 /BL switch, *RMS-11 Utilities*, 4-8
 /CA switch, *RMS-11 Utilities*, 4-8
 command string, *RMS-11 Utilities*,
 4-3, 4-4
 CTRL/Z
 file terminator, *RMS-11 Utilities*,
 4-8
 /EO switch, *RMS-11 Utilities*, 4-8
 examples, *RMS-11 Utilities*, 4-16
 /FO switch, *RMS-11 Utilities*, 4-9,
 4-15
 HELP, *RMS-11 Utilities*, 4-5
 /ID switch, *RMS-11 Utilities*, 4-5,
 4-9
 /IM switch, *RMS-11 Utilities*, 4-9
 indirect command file, *RMS-11*
 Utilities, 4-4
 intersystem file transfer, *RMS-11*
 Utilities, 1-2, 4-1
 invoking, *RMS-11 Utilities*, 4-3
 key name, *RMS-11 Utilities*, 4-10
 key of reference, *RMS-11 Utilities*,
 4-10
 /KN switch, *RMS-11 Utilities*, 4-10,
 4-16
 /KR switch, *RMS-11 Utilities*, 4-10,
 4-16
 /LO switch, *RMS-11 Utilities*, 4-10
 mass-insertion mode, *RMS-11*
 Utilities, 4-10
 /MA switch, *RMS-11 Utilities*, 4-10
 messages, *RMS-11 Utilities*, C-1
 /ML switch, *RMS-11 Utilities*, 4-11
 network facilities, *RMS-11 Utilities*,
 4-1
 /PD switch, *RMS-11 Utilities*, 4-12
 processing, *RMS-11 Utilities*, 4-14
 input file organization, *RMS-11*
 Utilities, 4-16
 output file organization, *RMS-11*
 Utilities, 4-15
 prompt, *RMS-11 Utilities*, 4-3
 /SL switch, *RMS-11 Utilities*, 4-12
 summary listing, *RMS-11 Utilities*,
 4-12
 supersession, *RMS-11 Utilities*, 4-13

RMSCNV utility (cont'd.)
 /SU switch, *RMS-11 Utilities*, 4-5,
 4-7, 4-13, 4-15
 terminating, *RMS-11 Utilities*, 4-4
 /TR switch, *RMS-11 Utilities*, 4-13
 /WF switch, *RMS-11 Utilities*, 4-14
 RMSDEF utility, *RMS-11 Utilities*, 1-1,
 A-1
 alignment, *RMS-11 Utilities*, A-14
 allocation
 data, *RMS-11 Utilities*, A-16
 file, *RMS-11 Utilities*, A-14
 alternate key, definition, *RMS-11*
 Utilities, A-11
 area definition, *RMS-11 Utilities*,
 A-13
 area numbers, *RMS-11 Utilities*,
 A-16
 block boundaries, *RMS-11 Utilities*,
 A-9
 bucket size, *RMS-11 Utilities*, A-15
 carriage control, *RMS-11 Utilities*,
 A-9
 command string, *RMS-11 Utilities*,
 A-5
 contiguity, *RMS-11 Utilities*, A-15
 default extension quantity, *RMS-11*
 Utilities, A-15
 file creation, *RMS-11 Utilities*, A-19
 file organization, *RMS-11 Utilities*,
 A-8
 file specification, *RMS-11 Utilities*,
 A-7
 fill numbers, *RMS-11 Utilities*, A-16
 fixed control area, *RMS-11 Utilities*,
 A-8
 HELP, *RMS-11 Utilities*, A-5
 /ID switch, *RMS-11 Utilities*, A-5
 indirect command file, *RMS-11*
 Utilities, A-1, A-2, A-5, A-6,
 A-19
 invoking, *RMS-11 Utilities*, A-5
 location, *RMS-11 Utilities*, A-14
 magnetic tape, *RMS-11 Utilities*,
 A-8, A-10
 maximum record number, *RMS-11*
 Utilities, A-9
 maximum record size, *RMS-11*
 Utilities, A-9
 messages, *RMS-11 Utilities*, A-20
 placement control, *RMS-11 Utilities*,
 A-14
 primary key, definition, *RMS-11*
 Utilities, A-10

RMSDEF utility (cont'd.)

- processing, *RMS-11 Utilities*, A-1
- protection, *RMS-11 Utilities*, A-18
- record format, *RMS-11 Utilities*, A-8
- terminating, *RMS-11 Utilities*, A-5
- RMSDES utility, *RMS-11 Introduction*, 5-1 *RMS-11 Utilities*, 1-1, 2-1, 4-2, 5-1
- allocation
 - areas, *RMS-11 Utilities*, 2-10, 2-25
- areas
 - defining, *RMS-11 Utilities*, 2-1, 2-42, B-1
 - and BUCKET_SIZE attribute, *RMS-11 Utilities*, 2-32
 - and DATA_AREA attribute, *RMS-11 Utilities*, 2-40
 - and INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - and LEVEL1_INDEX_AREA, *RMS-11 Utilities*, 2-41
 - and SIZE attribute, *RMS-11 Utilities*, 2-36
 - by default, *RMS-11 Utilities*, 2-43
 - explicitly, *RMS-11 Utilities*, 2-43
 - defining by default, *RMS-11 Utilities*, 2-17, 2-38
 - CREATE command, *RMS-11 Utilities*, 2-8
 - SET ALL command, *RMS-11 Utilities*, 2-14
 - defining explicitly, *RMS-11 Utilities*, 2-17
 - numbering, *RMS-11 Utilities*, 2-8, 2-28, 2-43
- attributes, *RMS-11 Utilities*, 2-29
 - clearing, *RMS-11 Utilities*, 2-22, 2-25
 - clearing individual values, *RMS-11 Utilities*, 2-26
 - clearing sections, *RMS-11 Utilities*, 2-26
 - displaying, *RMS-11 Utilities*, 2-15, 2-26
 - displaying individual values, *RMS-11 Utilities*, 2-26
 - displaying sections, *RMS-11 Utilities*, 2-27
 - informational, *RMS-11 Utilities*, 2-1, 2-17, 2-29

RMSDES utility

attributes (cont'd.)

- resetting, *RMS-11 Utilities*, 2-21
- RMS-11*, *RMS-11 Utilities*, 2-1, 2-17, 2-29
- setting, *RMS-11 Utilities*, 2-13
- setting from data file, *RMS-11 Utilities*, 2-25
- setting from description file, *RMS-11 Utilities*, 2-24
- setting individual values, *RMS-11 Utilities*, 2-21
- setting sections, *RMS-11 Utilities*, 2-21
- CLEAR command, *RMS-11 Utilities*, 2-6, 2-18, 2-25, 2-26
 - and PROTECTION attribute, *RMS-11 Utilities*, 2-33
 - defining areas by default, *RMS-11 Utilities*, 2-44
 - in indirect command file, *RMS-11 Utilities*, 2-4
 - with CREATE, *RMS-11 Utilities*, 2-8, 2-28
 - with SAVE, *RMS-11 Utilities*, 2-27
- clearing attributes, *RMS-11 Utilities*, 2-6
- commands, *RMS-11 Utilities*, 2-4
- CREATE command, *RMS-11 Utilities*, 2-7, 2-18, 2-28, 2-31
 - and INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - and LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - defining areas by default, *RMS-11 Utilities*, 2-44
 - defining areas explicitly, *RMS-11 Utilities*, 2-43
 - key numbering, *RMS-11 Utilities*, 2-38
 - setting attributes, *RMS-11 Utilities*, 2-21
 - with GET, *RMS-11 Utilities*, 2-10, 2-25
- creating data files, *RMS-11 Utilities*, 2-28
- CTRL/Z command, *RMS-11 Utilities*, 2-2, 2-9, 2-18
- data file, *RMS-11 Utilities*, 2-3, 2-17, 2-24

RMSDES utility
 data file (cont'd.)
 creating, *RMS-11 Utilities*, 2-3,
 2-7, 2-28
 GET command, *RMS-11 Utilities*, 2-10
 defaults, *RMS-11 Utilities*, 2-21
 defining areas by default
 CREATE command, *RMS-11 Utilities*, 2-28
 description file, *RMS-11 Utilities*,
 2-3, 2-17, 2-24
 EXIT command, *RMS-11 Utilities*, 2-10
 GET command, *RMS-11 Utilities*, 2-10
 SAVE command, *RMS-11 Utilities*, 2-27
 saving the design, *RMS-11 Utilities*, 2-13
 design buffer, *RMS-11 Utilities*, 2-1
 using, *RMS-11 Utilities*, 2-16
 design session, *RMS-11 Utilities*,
 2-1
 resuming, *RMS-11 Utilities*,
 2-22
 ESC command, *RMS-11 Utilities*,
 2-9, 2-21
 examples, *RMS-11 Utilities*, 2-47
 EXIT command, *RMS-11 Utilities*,
 2-3, 2-9, 2-18, 2-27
 GET command, *RMS-11 Utilities*,
 2-10, 2-17, 2-24
 and PROTECTION attribute,
 RMS-11 Utilities, 2-33
 with SAVE, *RMS-11 Utilities*,
 2-28
 HELP command, *RMS-11 Utilities*,
 2-11
 indirect command file, *RMS-11 Utilities*, 2-3
 comments, *RMS-11 Utilities*,
 2-4
 invoking, *RMS-11 Utilities*, 2-2
 keys
 numbering, *RMS-11 Utilities*,
 2-8, 2-28, 2-38
 magnetic tape, *RMS-11 Utilities*,
 2-34
 messages, *RMS-11 Utilities*, 2-52
 multiple areas, *RMS-11 Utilities*,
 2-7, 2-43
 multiple keys, *RMS-11 Utilities*,
 2-7, 2-38

RMSDES utility (cont'd.)
 prompt, *RMS-11 Utilities*, 2-2
 conditional, *RMS-11 Utilities*,
 2-1, 2-13, 2-14, 2-15, 2-17,
 2-21, 2-29
 QUIT command, *RMS-11 Utilities*,
 2-2, 2-12, 2-18
 SAVE command, *RMS-11 Utilities*,
 2-13, 2-18, 2-27
 setting attributes, *RMS-11 Utilities*, 2-21
 saving the design, *RMS-11 Utilities*,
 2-13, 2-22, 2-27
 sections, design buffer, *RMS-11 Utilities*, 2-1, 2-16, 2-29
 area section, *RMS-11 Utilities*,
 2-29, 2-42
 file section, *RMS-11 Utilities*,
 2-29, 2-31
 key section, *RMS-11 Utilities*,
 2-29, 2-38
 key segments, *RMS-11 Utilities*,
 2-41
 record section, *RMS-11 Utilities*,
 2-29, 2-36
 system section, *RMS-11 Utilities*,
 2-29, 2-30
 SET command, *RMS-11 Utilities*,
 2-13, 2-17, 2-20, 2-33
 allocation, *RMS-11 Utilities*,
 2-10
 and INDEX_AREA attribute,
 RMS-11 Utilities, 2-41
 and LEVEL1_INDEX_AREA
 attribute, *RMS-11 Utilities*,
 2-41
 and PROTECTION attribute,
 RMS-11 Utilities, 2-33
 defining areas by default,
 RMS-11 Utilities, 2-17,
 2-43
 defining areas explicitly, *RMS-11 Utilities*, 2-43
 with GET, *RMS-11 Utilities*,
 2-25
 SHOW ALL command, *RMS-11 Utilities*, 2-4
 defining areas by default,
 RMS-11 Utilities, 2-17
 defining areas explicitly, *RMS-11 Utilities*, 2-43
 setting attributes, *RMS-11 Utilities*, 2-21

RMSDES utility (cont'd.)

- SHOW command, *RMS-11 Utilities*, 2-15, 2-18, 2-26
 - allocation, *RMS-11 Utilities*, 2-10
 - and PROTECTION attribute, *RMS-11 Utilities*, 2-33
 - with GET, *RMS-11 Utilities*, 2-25
- SHOW ID command, *RMS-11 Utilities*, 2-16
- terminating, *RMS-11 Utilities*, 2-2, 2-9, 2-12
- version, *RMS-11 Utilities*, 2-16
- RMSDSP utility, *RMS-11 Introduction*, 5-3 *RMS-11 Utilities*, 1-1, 5-1, 6-3, 7-5, 7-10
- ANSI-standard tape, *RMS-11 Utilities*, 5-3
- /BP switch, *RMS-11 Utilities*, 5-3, 5-4
- command string, *RMS-11 Utilities*, 5-2, 5-3
- container file, *RMS-11 Utilities*, 5-1, 5-3, 5-4
 - detailed display, *RMS-11 Utilities*, 5-4
- display information, *RMS-11 Utilities*, 5-1
- examples, *RMS-11 Utilities*, 5-5
- /FU switch, *RMS-11 Utilities*, 5-2, 5-4
- HELP, *RMS-11 Utilities*, 5-3
- /ID switch, *RMS-11 Utilities*, 5-3, 5-5
- indirect command file, *RMS-11 Utilities*, 5-2
- intersystem file transfer, *RMS-11 Utilities*, 1-2
- invoking, *RMS-11 Utilities*, 5-2
- magtape allocation information, *RMS-11 Utilities*, 5-2
- messages, *RMS-11 Utilities*, C-1
- mounting tapes, *RMS-11 Utilities*, 5-3
- prompt, *RMS-11 Utilities*, 5-2
- switches, *RMS-11 Utilities*, 5-3, 5-4
- terminating, *RMS-11 Utilities*, 5-2
- RMSIFL utility, *RMS-11 Introduction*, 5-2 *RMS-11 Utilities*, 1-1, 3-1, 4-1, 4-2
 - calculating file work space, *RMS-11 Utilities*, 3-12

RMSIFL utility (cont'd.)

- command string, *RMS-11 Utilities*, 3-2, 3-3
- /DE switch, *RMS-11 Utilities*, 3-7, 3-10, 3-14
- /ER switch, *RMS-11 Utilities*, 3-5, 3-6
- examples, *RMS-11 Utilities*, 3-14
- global switch, *RMS-11 Utilities*, 3-5
- HELP, *RMS-11 Utilities*, 3-3
- /ID switch, *RMS-11 Utilities*, 3-3, 3-5
- indirect command file, *RMS-11 Utilities*, 3-2
- input file switches, *RMS-11 Utilities*, 3-7
- invoking, *RMS-11 Utilities*, 3-2
- /KR switch, *RMS-11 Utilities*, 3-8, 3-9
- /LO switch, *RMS-11 Utilities*, 3-6
- messages, *RMS-11 Utilities*, C-1
- /NOER switch, *RMS-11 Utilities*, 3-6
- /NOSO switch, *RMS-11 Utilities*, 3-8, 3-9, 3-10
- output file switches, *RMS-11 Utilities*, 3-5
- /PD switch, *RMS-11 Utilities*, 3-6, 3-7, 3-11
- processing, *RMS-11 Utilities*, 3-9
 - building alternate indexes, *RMS-11 Utilities*, 3-12
 - command string checking, *RMS-11 Utilities*, 3-9
 - loading output file, *RMS-11 Utilities*, 3-10
 - reading and sorting input, *RMS-11 Utilities*, 3-9
 - sorting alternate key files, *RMS-11 Utilities*, 3-11
 - summary, *RMS-11 Utilities*, 3-1
 - terminating, *RMS-11 Utilities*, 3-12
- prompt, *RMS-11 Utilities*, 3-2
- sort error codes, *RMS-11 Utilities*, D-1
- sort work files, *RMS-11 Utilities*, 3-1, 3-7, 3-12, 3-13
- switches, *RMS-11 Utilities*, 3-3, 3-5
- terminating, *RMS-11 Utilities*, 3-2
- /TR switch, *RMS-11 Utilities*, 3-7, 3-11

RMSLIB.OLB (Record Management Services library), *Program Development*, 1-11

RMSMAC.MLB, *RMS-11 Macro*, 2-20

RSTS/E, *RMS-11 Macro*, D-3

RMSMAC.MLB (Record Management Services Library), *Program Development*, 1-9

RMSRES
and I/O paging operations, *RMS-11 User's Guide*, 8-2

RMSRST utility, *RMS-11 Introduction*, 5-3 *RMS-11 Utilities*, 1-1, 4-2, 5-4, 6-1, 6-3, 6-8, 7-1
/BD switch, *RMS-11 Utilities*, 7-8, 7-10
command string, *RMS-11 Utilities*, 7-2, 7-3
data integrity checking, *RMS-11 Utilities*, 7-6, 7-8, 7-11
examples, *RMS-11 Utilities*, 7-12
/FR switch, *RMS-11 Utilities*, 7-7
global switches, *RMS-11 Utilities*, 7-5
HELP, *RMS-11 Utilities*, 7-3
/ID switch, *RMS-11 Utilities*, 7-3, 7-5
indirect command file, *RMS-11 Utilities*, 7-2
input file switches, *RMS-11 Utilities*, 7-8
intersystem file transfer, *RMS-11 Utilities*, 1-2, 7-1, 7-10
/FR switch, *RMS-11 Utilities*, 7-7
version number conversion, *RMS-11 Utilities*, 7-5
invoking, *RMS-11 Utilities*, 7-2
messages, *RMS-11 Utilities*, C-1
/[NO]CV switch, *RMS-11 Utilities*, 7-5, 7-10
/[NO]QU switch, *RMS-11 Utilities*, 7-6, 7-7, 7-8, 7-12
/OA switch, *RMS-11 Utilities*, 7-9, 7-10
output file switches, *RMS-11 Utilities*, 7-7
processing, *RMS-11 Utilities*, 7-9
data integrity checking, *RMS-11 Utilities*, 7-11
explicit/implicit filespec, *RMS-11 Utilities*, 7-10

RMSRST utility
processing (cont'd.)
extended diagnostic messages, *RMS-11 Utilities*, 7-11
restoration account, *RMS-11 Utilities*, 7-10
summary listing, *RMS-11 Utilities*, 7-12
prompt, *RMS-11 Utilities*, 7-2
query mode, *RMS-11 Utilities*, 7-6, 7-7, 7-8, 7-11
/RA switch, *RMS-11 Utilities*, 7-7, 7-11
/RC switch, *RMS-11 Utilities*, 7-8, 7-11
/SE switch, *RMS-11 Utilities*, 7-3, 7-9
/SL switch, *RMS-11 Utilities*, 7-6, 7-12
summary listing, *RMS-11 Utilities*, 7-12
/SU switch, *RMS-11 Utilities*, 7-8
terminating, *RMS-11 Utilities*, 7-2
\$RMSTAT macro, *RMS-11 Macro*, C-3
/RM switch
PIP utility, *Utilities*, 3-35
RMT, *System Management*, 11-2
RMVBUF: subroutine
remove buffer from device queue
K-series, *I/O Drivers*, 23-26
LADRV, *I/O Drivers*, 22-22
/RNDC keyword
SET command (MCR), *MCR*, 3-248
SET command (VMR), *System Management*, 10-72
/RNDH keyword
SET command (MCR), *MCR*, 3-249
SET command (VMR), *System Management*, 10-72
/RNDL keyword
SET command (MCR), *MCR*, 3-249
SET command (VMR), *System Management*, 10-72
/RON keyword
FIX-IN-MEMORY command (MCR), *MCR*, 3-75
FIX-IN-MEMORY command (VMR), *System Management*, 10-19
INSTALL command (VMR), *System Management*, 10-26
UNFIX command (MCR), *MCR*, 3-284
UNFIX command (VMR), *System Management*, 10-92

- \$RONLY
 - state table, *I/O Operations*, 7-2
- Root, *RMS-11 User's Guide*, 1-7
 - cotree, *Task Builder*, 3-31
 - indexed files, *RMS-11 User's Guide*, 5-5
 - null, *Task Builder*, 3-31
 - ODL, *Task Builder*, 3-31
 - segment, *Task Builder*, B-14
 - structure
 - overlay, *Task Builder*, 3-21
- .ROOT directive, *Task Builder*, 3-23, 3-24
 - allocation diagram
 - creating, *Task Builder*, 3-37
 - argument, *Task Builder*, 3-26
 - summary, *Task Builder*, 3-50
- /ROPAR keyword
 - INSTALL command (MCR), *MCR*, 3-120
 - INSTALL command (VMR), *System Management*, 10-26
 - RUN command (MCR), *MCR*, 3-184
- ROPAR option, *Task Builder*, 12-35
- ^R operator, *MACRO-11*, 3-5, 6-30
- ROP field in RAB, *RMS-11 Macro*, 4-1, 4-4, 4-5, 4-6, 4-7
 - CONNECT operation, *RMS-11 Macro*, 5-6, 5-7
 - DELETE operation, *RMS-11 Macro*, 5-25
 - DISCONNECT operation, *RMS-11 Macro*, 5-27
 - FIND operation, *RMS-11 Macro*, 5-49, 5-51, 5-52, 5-54
 - FLUSH operation, *RMS-11 Macro*, 5-56
 - FREE operation, *RMS-11 Macro*, 5-58
 - GET operation, *RMS-11 Macro*, 5-60, 5-61, 5-63, 5-64, 5-67, 5-68
 - NXTVOL operation, *RMS-11 Macro*, 5-70
 - offset, *RMS-11 Macro*, 6-115
 - PUT operation, *RMS-11 Macro*, 5-91, 5-92, 5-95, 5-96
 - READ operation, *RMS-11 Macro*, 5-98, 5-100
 - REWIND operation, *RMS-11 Macro*, 5-114

- ROP field in RAB (cont'd.)
 - SPACE operation, *RMS-11 Macro*, 5-120
 - summary
 - RB\$ASY mask, *RMS-11 Macro*, 6-131
 - RB\$EOF mask, *RMS-11 Macro*, 6-132
 - RB\$FDL mask, *RMS-11 Macro*, 6-133
 - RB\$KGE mask, *RMS-11 Macro*, 6-134
 - RB\$KGT mask, *RMS-11 Macro*, 6-135
 - RB\$LOA mask, *RMS-11 Macro*, 6-136
 - RB\$LOC mask, *RMS-11 Macro*, 6-137
 - RB\$MAS mask, *RMS-11 Macro*, 6-138
 - RB\$UIF mask, *RMS-11 Macro*, 6-139
 - TRUNCATE operation, *RMS-11 Macro*, 5-122
 - UPDATE operation, *RMS-11 Macro*, 5-124
 - WRITE operation, *RMS-11 Macro*, 5-127, 5-129
- /RO switch, *Task Builder*, 10-34
 - ZAP utility, *Utilities*, 15-2
- RO symbolic argument, *MACRO-11*, 6-40
- Round-robin scheduler, *System Generation*, C-3
- Routine
 - completion
 - See Completion routine
- RP02/RPR02/RP03 disk
 - SYSGEN question, *System Generation*, 3-43
- RP02 disk, *I/O Drivers*, 5-1
- RP03 disk, *I/O Drivers*, 5-1
- RP04/05/06
 - SYSGEN question, *System Generation*, 3-36
- RP04 disk, *I/O Drivers*, 5-3
- RP05 disk, *I/O Drivers*, 5-3
- RP06 disk, *I/O Drivers*, 5-3
- RP07 disk
 - SYSGEN question, *System Generation*, 3-36
- RP11 controller
 - SYSGEN question, *System Generation*, 3-43

- RP11 disk controller, *I/O Drivers*, 5-1
- /RPA keyword
 - SET command (MCR), *MCR*, 3-250
 - SET command (VMR), *System Management*, 10-73
- RPOI\$ directive, *Executive*, 5-164
- /RPRI keyword
 - ALTER command (MCR), *MCR*, 3-19
- /RP switch
 - LBR utility, *Utilities*, 10-23
- %RPT, *Error Logging*, 5-22
- RPT, *Error Logging*, 1-1
 - command line, *Error Logging*, 3-2
 - input file, *Error Logging*, 3-2
 - multiple qualifiers, *Error Logging*, 3-3
 - report file, *Error Logging*, 3-2
 - switches, *Error Logging*, 3-2
 - universal library, *Error Logging*, 3-2
 - control function, *Error Logging*, 5-21
 - /DA switch, *Error Logging*, 3-5, 3-8
 - Date switch, *Error Logging*, 3-5, 3-8
 - default file specification, *Error Logging*, 3-3
 - /DE switch, *Error Logging*, 3-5, 3-8
 - Device switch, *Error Logging*, 3-5, 3-8
 - multiple qualifiers, *Error Logging*, 3-4
 - error log control file, *Error Logging*, 1-4
 - error log file, *Error Logging*, 1-4
 - error log packet, *Error Logging*, 1-4
 - number, *Error Logging*, 3-1
 - error type definition, *Error Logging*, 1-5
 - Format switch, *Error Logging*, 3-5, 3-11
 - brief report, *Error Logging*, 3-11
 - full report, *Error Logging*, 3-15
 - no report, *Error Logging*, 3-19
 - register report, *Error Logging*, 3-18
 - /F switch, *Error Logging*, 3-5, 3-11
 - information required, *Error Logging*, 3-2
 - format selection, *Error Logging*, 3-2
 - packet selection, *Error Logging*, 3-2

- RPT (cont'd.)
 - installation, *Error Logging*, 3-1
 - interpreter, *Error Logging*, 5-1
 - Packet number switch, *Error Logging*, 3-5, 3-8
 - multiple qualifiers, *Error Logging*, 3-4
 - /P switch, *Error Logging*, 3-5, 3-8
 - report information selection, *Error Logging*, 1-4, 1-5
 - Report switch, *Error Logging*, 3-6, 3-20
 - report switch
 - format packet, *Error Logging*, 3-5
 - select packet, *Error Logging*, 3-5
 - /R switch, *Error Logging*, 3-6, 3-20
 - Serial number switch, *Error Logging*, 3-6, 3-9
 - multiple qualifiers, *Error Logging*, 3-4
 - /SE switch, *Error Logging*, 3-6, 3-9
 - subswitch summary, *Error Logging*, 3-5
 - switch summary, *Error Logging*, 3-5
 - /T switch, *Error Logging*, 3-7, 3-9
 - Type switch, *Error Logging*, 3-7, 3-9
 - multiple qualifiers, *Error Logging*, 3-4
 - Volume label switch, *Error Logging*, 3-7, 3-10
 - /V switch, *Error Logging*, 3-7, 3-10
 - Width switch, *Error Logging*, 3-7, 3-21
 - /W switch, *Error Logging*, 3-7, 3-21
- RPTBLD.BLD file, *Error Logging*, 3-2
- RPT command line
 - default, *Error Logging*, 3-4
 - Date switch, *Error Logging*, 3-4
 - Device switch, *Error Logging*, 3-4
 - Format switch, *Error Logging*, 3-4
 - Packet switch, *Error Logging*, 3-4
 - Type switch, *Error Logging*, 3-4
 - Width switch, *Error Logging*, 3-4
- \$RQCB (Request core blocks), *System Library*, 7-3
- \$RQCB system routine, *RMS-11 Macro*, 2-20
- \$RQCNC, *Writing I/O Driver*, 4-41
- \$RQCND, *Writing I/O Driver*, 4-41

RQST\$ directive, *Executive*, 5-167
 \$RQVCB (Request virtual core block),
 System Library, 8-20
 RREF\$ directive, *Executive*, 5-170
 R register, *Debugging*, 2-7, 5-5, 9-10
 clearing, *Debugging*, 2-11, 5-6, 9-13
 setting, *Debugging*, 2-11, 5-6, 9-13
 RRN, *RMS-11 Introduction*, 3-12, 3-14,
 3-15
 See also BKT field in RAB
 relative files, *RMS-11 Introduction*,
 3-6 *RMS-11 User's Guide*, 4-1
 sequential files, *RMS-11 Introduction*,
 3-5 *RMS-11 User's Guide*, 3-2
 RREST\$ directive, *Executive*, 5-173
 RRV, *RMS-11 User's Guide*, 5-12, 5-16
 RS03/04 disk
 SYSGEN question, *System*
 Generation, 3-37
 RS03 disk, *I/O Drivers*, 5-1
 RS04 disk, *I/O Drivers*, 5-1
 RS11 disk, *I/O Drivers*, 5-1
 RSA field in NAM block, *RMS-11*
 Macro, 3-9
 offset, *RMS-11 Macro*, 6-94
 SEARCH operation, *RMS-11 Macro*,
 5-116
 summary, *RMS-11 Macro*, 6-103
 RSEF\$ directive, *I/O Drivers*, 1-7
 /RSI keyword
 RUN command (MCR), *MCR*,
 3-180, 3-181
 RUN command (VMR), *System*
 Management, 10-44
 /RS keyword
 MOUNT command (MCR), *MCR*,
 3-152
 RSL field in NAM block
 CREATE operation, *RMS-11 Macro*,
 5-21
 ENTER operation, *RMS-11 Macro*,
 5-38
 ERASE operation, *RMS-11 Macro*,
 5-43
 offset, *RMS-11 Macro*, 6-94
 OPEN operation, *RMS-11 Macro*,
 5-81
 PARSE operation, *RMS-11 Macro*,
 5-87
 REMOVE operation, *RMS-11 Macro*,
 5-105
 RENAME operation, *RMS-11 Macro*,
 5-112
 RSL field in NAM block (cont'd.)
 SEARCH operation, *RMS-11 Macro*,
 5-116, 5-117
 summary, *RMS-11 Macro*, 6-104
 RSS field in NAM block
 offset, *RMS-11 Macro*, 6-94
 SEARCH operation, *RMS-11 Macro*,
 5-116
 summary, *RMS-11 Macro*, 6-105
 /RS switch
 FLX utility, *Utilities*, 4-4
 SLP utility, *Utilities*, 13-16
 RSTI: read counter module
 (ICDRV/ISDRV), *I/O Drivers*,
 19-58
 RSTI: subroutine
 read timer module (UDDRV), *I/O*
 Drivers, 16-30
 RSTS/E RMS-11
 contrasted with PRO/RMS-11,
 RMS-11 Macro, D-1
 contrasted with RSX-11 RMS-11,
 RMS-11 Macro, D-3
 remote access, *RMS-11 User's Guide*,
 B-3
 RSUM\$ directive, *Executive*, 5-176
 /R switch, *Error Logging*, 2-4, 2-7, 3-6,
 3-20
 RSX11.SYS, *System Management*, 2-3
 RSX11D symbol, *Indirect*, 2-11
 RSX11M.STB
 See *Executive* symbol table
 RSX-11M/M-PLUS RMS-11
 contrasted with PRO/RMS-11,
 RMS-11 Macro, D-3
 contrasted with RSTS/E RMS-11,
 RMS-11 Macro, D-3
 remote access, *RMS-11 User's Guide*,
 B-3
 RSX-11M-PLUS Operating System,
 Command Language, 1-1
 RSXASM.CMD file, *Writing I/O Driver*,
 5-3
 RSXMAC.SML, *Executive*, 1-5
 RSXMAC.SML (System macro library),
 Program Development, 1-5 to 2-7
 RSXTIME, *Error Logging*, 5-7
 RSZ field in RAB, *RMS-11 Macro*, 4-7,
 4-13
 GET operation, *RMS-11 Macro*,
 5-61, 5-65, 5-68
 offset, *RMS-11 Macro*, 6-115
 PUT operation, *RMS-11 Macro*,
 5-92, 5-95

RSZ field in RAB (cont'd.)
 READ operation, *RMS-11 Macro*, 5-99, 5-101
 summary, *RMS-11 Macro*, 6-140
 UPDATE operation, *RMS-11 Macro*, 5-124
 WRITE operation, *RMS-11 Macro*, 5-127, 5-129
 RT01 Alphanumeric Display Terminal, *I/O Drivers*, 3-3
 RT02, *I/O Drivers*, 2-82
 RT02 Alphanumeric Display Terminal, *I/O Drivers*, 2-5
 RT02-C Badge Reader, *I/O Drivers*, 3-32
 RT-11
 device support
 FLX utility, *Utilities*, 4-2
 file copying
 FLX utility, *Utilities*, 4-3
 volume
 deleting
 FLX utility, *Utilities*, 4-12
 directory listing
 FLX utility, *Utilities*, 4-10
 initializing
 FLX utility, *Utilities*, 4-12
 RTO/RTOW routine
 remote terminal output
 (ICDRV/ISDRV), *I/O Drivers*, 19-50
 \$\$RTQ program section, *Task Builder*, 5-54
 reserved name, *Task Builder*, E-3
 \$\$RTR program section, *Task Builder*, 5-54
 reserved name, *Task Builder*, E-4
 RTS: subroutine
 initiate synchronous A/D sample
 (LSDRV), *I/O Drivers*, 17-23
 \$\$RTS program section, *Task Builder*, 5-54
 reserved name, *Task Builder*, E-4
 /RT switch
 FLX utility, *Utilities*, 4-4
 RTV field in FAB
 CREATE operation, *RMS-11 Macro*, 5-13
 offset, *RMS-11 Macro*, 6-23
 OPEN operation, *RMS-11 Macro*, 5-75
 RSTS/E, *RMS-11 Macro*, D-3
 summary, *RMS-11 Macro*, 6-62

RUBOUT character
 CRT (TTDRV), *I/O Drivers*, 2-18
 Rubout character
 escape sequence (half-duplex), *I/O Drivers*, 3-25
 LPDRV, *I/O Drivers*, 10-7
 RUBOUT key
 half-duplex, *I/O Drivers*, 3-23, 3-24
 TTDRV, *I/O Drivers*, 2-71
 Run-time support
 overlaid region, *Task Builder*, 5-14
 autoload, *Task Builder*, 5-14
 autoload call overhead, *Task Builder*, 5-14
 FTB and old library, *Task Builder*, 5-14
 named program section, *Task Builder*, 5-14
 RUN\$ directive, *Executive*, 5-178
 RUN command, *Command Language*, 7-5 to 7-16, 9-28 *Introduction*, 3-9, 5-7, 5-11 *Program Development*, 4-7, 5-2, 7-6
 installed task, *Command Language*, 7-12 to 7-16
 introduction, *Command Language*, 7-5 to 7-7
 /TASK_NAME qualifier, *Introduction*, 5-11
 uninstalled task, *Command Language*, 7-8 to 7-12
 RUN command (MCR), *MCR*, 1-8, 3-178
 error messages, *MCR*, 3-186
 examples, *MCR*, 3-185
 formats, *MCR*, 3-178
 installing task, *MCR*, 2-23
 keywords
 /CKP, *MCR*, 3-182
 /CMD, *MCR*, 3-182
 /EST, *MCR*, 3-178, 3-182
 /INC, *MCR*, 3-183
 /IOP, *MCR*, 3-183
 /PAR, *MCR*, 3-183
 /PMD, *MCR*, 3-184
 /PRI, *MCR*, 3-184
 /ROPAR, *MCR*, 3-184
 /RSI, *MCR*, 3-180, 3-181
 /SLV, *MCR*, 3-184
 /TASK, *MCR*, 3-184
 /TIME, *MCR*, 3-185
 /UIC, *MCR*, 3-179, 3-180, 3-185

RUN command (MCR)

options

- absolute time, MCR, 3-178
- immediate, MCR, 3-178
- install-run-remove, MCR, 2-21, 2-23, 3-140, 3-178
- synchronized, MCR, 3-178
- time increment, MCR, 3-178
- prototype task, MCR, 3-178

RUN command (VMR), *System Management*, 10-42

definition, *System Management*, 10-42

formats, *System Management*, 10-42 to 10-46

keywords

/RSI, *System Management*, 10-44

/UIC, *System Management*, 10-44

parameters, *System Management*, 10-42

restriction, *System Management*, 10-42

time options, *System Management*, 10-42

Running VMR, *System Management*, 10-2

Run Task directive, *Executive*, 5-177

RUNTIME command

IOX, *System Management*, 4-57

Run-time initialization

FSR

FINIT\$ macro, *I/O Operations*, 2-40

RUX50 Unibus interface, *I/O Drivers*, 5-5

RVB field in KEY block

DISPLAY operation, *RMS-11 Macro*, 5-31

offset, *RMS-11 Macro*, 6-68

OPEN operation, *RMS-11 Macro*, 5-80

summary, *RMS-11 Macro*, 6-91

RVN field in DAT block

DISPLAY operation, *RMS-11 Macro*, 5-32

offset, *RMS-11 Macro*, 6-14

OPEN operation, *RMS-11 Macro*, 5-81

RSTS/E, *RMS-11 Macro*, D-4

summary, *RMS-11 Macro*, 6-21

RVN field in NAM block

RSX-11, *RMS-11 Macro*, D-4

/RW switch

DMP utility, *Utilities*, 11-7

DSC utility, *Utilities*, 8-15

FLX utility, *Utilities*, 4-8

PIP utility, *Utilities*, 3-36

RMSBCK utility, *RMS-11 Utilities*, 6-7

RW symbolic argument, *MACRO-11*, 6-40

RX01 disk, *I/O Drivers*, 5-3

SYSGEN question, *System Generation*, 3-49

RX02 disk, *I/O Drivers*, 5-4

SYSGEN question, *System Generation*, 3-50

RX11 controller

SYSGEN question, *System Generation*, 3-49

RX11 disk controller, *I/O Drivers*, 5-3

RX180 disk drive, *I/O Drivers*, 5-5

RX211/RXV21 controller

SYSGEN question, *System Generation*, 3-50

RX211 disk controller, *I/O Drivers*, 5-4

RX50 disk, *I/O Drivers*, 5-5

SYSGEN question, *System Generation*, 3-45

S

S.BFHD, FSR block buffer header size, *I/O Operations*, J-1

S.FATT, FDB file attribute area size, *I/O Operations*, J-1

S.FDB, FDB size, *I/O Operations*, J-1

S.FNAM, file name size, *I/O Operations*, J-1

S.FNB, filename block size in bytes, *I/O Operations*, J-1

S.FNBW, filename block size in words, *I/O Operations*, J-1

S.FNTY, file name and type size, *I/O Operations*, J-1

S.FSR2, FSR2 (impure area) size, *I/O Operations*, J-1

S.FTYP, file type size, *I/O Operations*, J-1

S.HDHD, header area size, *I/O Operations*, F-2

S.IDHD, identification area size, *I/O Operations*, F-2

S.MPHD, map area size, *I/O Operations*, F-3

S.NFEN, complete file name size, *I/O Operations*, J-1

S.ST2, *Writing I/O Driver*, 4-42

S.ST3, *Writing I/O Driver*, 4-41

S.STS, *Writing I/O Driver*, 4-41

S.xpdx offsets
in SCB, *Writing I/O Driver*, 4-39 to 4-45

SAB, *Writing I/O Driver*, A-5
Resource Accounting, *System Management*, 17-11

\$SAHDB, *Writing I/O Driver*, 6-9, 6-10
contains an unknown value, *Writing I/O Driver*, 6-8

\$SAHPT, *Writing I/O Driver*, 6-9
pointer to first word of task header, *Writing I/O Driver*, 6-8

Sample
initiate synchronous A/D (LSDRV), *I/O Drivers*, 17-23

Sample configuration
increasing system throughput, *System Management*, 15-19

Sampling rate (AFC11), *I/O Drivers*, 15-11

SAV
See SAVE command

\$SAVAL (Save all registers), *System Library*, 2-2 Task Builder, 5-40

SAVE command
EDI utility, *Utilities*, 2-44
RMSDES utility, *RMS-11 Utilities*, 2-13, 2-18, 2-27
setting attributes, *RMS-11 Utilities*, 2-21

SAVE command (MCR), *MCR*, 1-8, 3-187
error messages, *MCR*, 3-191
examples, *MCR*, 3-191
format, *MCR*, 3-189
keywords
/CSR, *MCR*, 3-190
/MOU, *MCR*, 3-190
/SFILE, *MCR*, 3-190
/WB, *MCR*, 3-190

SAVE command (VMR), *System Management*, 10-47
definition, *System Management*, 10-47
example, *System Management*, 10-48
format, *System Management*, 10-47

SAVE command (VMR) (cont'd.)
keywords
/BOOT, *System Management*, 10-47
/DENS, *System Management*, 10-48
notes, *System Management*, 10-48
parameters, *System Management*, 10-47

Saved answer file
comment line, *System Generation*, 3-5
content, *System Generation*, 3-5
default names, *System Generation*, 3-5
definition, *System Generation*, 1-12
description, *System Generation*, 3-5
incomplete, *System Generation*, 3-6
SYSGEN question, *System Generation*, 3-17

.SAVE directive, *MACRO-11*, 6-47, 6-48

Saved stack pointer, *CDA*, 3-20

Saved system
backing up, *System Generation*, 4-3
definition, *System Generation*, 1-12
/SAVE qualifier, *Task Builder*, 11-59

Saving the design
See also Description file
RMSDES utility, *RMS-11 Utilities*, 2-22, 2-27

.SAVR1 (Save registers 1-5), *System Library*, 2-5

\$SAVRG (Save registers 3-5), *System Library*, 2-3

\$SAVSP, *Writing I/O Driver*, 6-9
pointer to first word of task header, *Writing I/O Driver*, 6-8

SAV symbolic argument, *MACRO-11*, 6-42

\$SAVVR (Save registers 0-2), *System Library*, 2-4

/SB switch
DMP utility, *Utilities*, 11-8
PIP utility, *Utilities*, 3-37

.SBTTL directive, *MACRO-11*, 6-15, 6-16 *Program Development*, 2-6

SC.MDL, bad data block
user-controlled file characteristic, *I/O Operations*, F-4

SC.MDL, file marked for delete
user-controlled file characteristic, *I/O Operations*, F-4

SCAA\$ directive, *Executive*, 5-182

SCAL\$S directive, *Executive*, 5-183
 SCAL to CSM library
 converting, *Task Builder*, 8-19
 Scan rate
 Resource Accounting, *System Management*, 17-6
 SCB, *Writing I/O Driver*, 1-13, 2-2
 adding KRB, *Writing I/O Driver*, B-2
 address for KRB, *Writing I/O Driver*, 2-3
 changes for converting a driver, *Writing I/O Driver*, B-2
 combined with KRB, *Writing I/O Driver*, 4-53
 layout, *Writing I/O Driver*, 4-54
 composite arrangement, *Writing I/O Driver*, 2-13, 2-14
 contiguous with KRB, *Writing I/O Driver*, 2-7, 4-3
 details, *Writing I/O Driver*, 4-37, 4-39 to 4-44
 format, *Writing I/O Driver*, 4-39 to 4-44
 KRB addresses for, *Writing I/O Driver*, 4-45
 layout, *Writing I/O Driver*, 4-38
 linking to fork blocks, *Writing I/O Driver*, 2-3
 overview, *Writing I/O Driver*, 2-3
 parallel operations, *Writing I/O Driver*, 2-3
 pointer
 to currently assigned KRB, *Writing I/O Driver*, 4-44
 to head of queue for I/O requests, *Writing I/O Driver*, 2-3
 validation during LOAD, *Writing I/O Driver*, 5-13, 5-14
 SCBDF\$, CDA, B-39, C-66 *Writing I/O Driver*, A-56, A-57
 /SCB switch, CDA, 2-5, 2-6
 SC command
 EDI utility, *Utilities*, 2-44
 SCLI\$ directive, *Executive*, 5-185
 S command, *Debugging*, 2-11, 3-4, 9-1, 9-14
 SCOPE: subroutine
 control scope (K-series), *I/O Drivers*, 23-27

Scratch disk
 formatting, *Command Language*, 5-11
 preparing for use, *Command Language*, 5-11 to 5-13
 SCTI: routine
 resetting counter initial value (ICDRV/ISDRV), *I/O Drivers*, 19-59
 SCTI: subroutine
 initializing timer module (UDDRV), *I/O Drivers*, 16-30
 SDAC: subroutine
 initiating synchronous A/D output (LSDRV), *I/O Drivers*, 17-25
 SDAT\$ directive, *Executive*, 5-187
 SDAT\$ directive summary, *I/O Operations*, C-3
 SDIR\$ directive, *Executive*, 5-189
 SDO: subroutine
 initiating synchronous digital output (LSDRV), *I/O Drivers*, 17-27
 SDRCS\$ directive, *Executive*, 5-192
 SDRCS\$ directive summary, *I/O Operations*, C-3
 SDRP\$ directive, *Executive*, 5-196
 SDRP\$ directive summary, *I/O Operations*, C-4
 /SD switch
 PIP utility, *Utilities*, 3-37
 SE.ATA error return (TTDRV), *I/O Drivers*, 2-67
 SE.BIN error return
 half-duplex, *I/O Drivers*, 3-20
 TTDRV, *I/O Drivers*, 2-67
 SE.FIX error return (TTDRV), *I/O Drivers*, 2-67
 SE.IAA error return (TTDRV), *I/O Drivers*, 2-67
 SE.NAT error return (TTDRV), *I/O Drivers*, 2-67
 SE.NIH error return
 half-duplex, *I/O Drivers*, 3-20
 TTDRV, *I/O Drivers*, 2-67
 VTDRV, *I/O Drivers*, 4-8, 4-9
 SE.NSC error return (TTDRV), *I/O Drivers*, 2-67
 SE.SPD error return (TTDRV), *I/O Drivers*, 2-67
 SE.UPN error return (TTDRV), *I/O Drivers*, 2-67
 SE.VAL error return
 half-duplex, *I/O Drivers*, 3-20
 TTDRV, *I/O Drivers*, 2-67

Search

- argument register, *Debugging*, 2-6, 5-3, 6-2
- byte, *Debugging*, 6-3
- command, *Debugging*, 6-2
 - E, *Debugging*, 6-3
 - N, *Debugging*, 6-3
 - W, *Debugging*, 6-3
- limit register, *Debugging*, 6-1
- mask register, *Debugging*, 2-6, 5-3, 6-2
- memory
 - command, *Debugging*, 2-9, 2-10
 - reference, *Debugging*, 6-3
 - word, *Debugging*, 6-3
- SEARCH & CHANGE command
 - EDI utility, *Utilities*, 2-44
- \$SEARCH macro, *RMS-11 Macro*, 5-116
 - example, *RMS-11 Macro*, 7-7, 7-15
- SEARCH operation, *RMS-11 Introduction*, 4-1
 - BDB requirement, *RMS-11 Macro*, 2-8
 - I/O buffer requirement, *RMS-11 Macro*, 2-7
 - IFAB requirement, *RMS-11 Macro*, 2-5
 - \$SEARCH macro, *RMS-11 Macro*, 5-116
 - wildcard loop, *RMS-11 Macro*, 3-9
 - explicit, *RMS-11 Macro*, 3-11
 - implicit, *RMS-11 Macro*, 3-9, 3-10
- SEARCH statement, *Error Logging*, 5-40
- Search time
 - indexed files, *RMS-11 User's Guide*, 5-8
- /SEC keyword
 - INSTALL command (MCR), *MCR*, 3-120
 - INSTALL command (VMR), *System Management*, 10-27
- Secondary file
 - closing, *Indirect*, 2-42
 - opening, *Indirect*, 2-69
 - for appending, *Indirect*, 2-71
 - outputting data to, *Indirect*, 2-43
- Secondary index data record
 - See *SIDR*
- Secondary pool
 - dump, *CDA*, 3-45

Secondary pool (cont'd.)

- Resource Accounting, *System Management*, 17-5
- switch
 - See /SECPOL switch
- Secondary RBNs, *System Management*, 5-4
- Secondary UNIBUS run, *Writing I/O Driver*, 1-17
- /SECPOL keyword
 - SET command (MCR), *MCR*, 3-251
 - SET command (VMR), *System Management*, 10-73
- /SECPOL switch, *CDA*, 2-8
- Section, design buffer
 - RMSDES utility, *RMS-11 Utilities*, 2-1, 2-16, 2-29
 - area section, *RMS-11 Utilities*, 2-29, 2-42
 - file section, *RMS-11 Utilities*, 2-29, 2-31
 - key section, *RMS-11 Utilities*, 2-29, 2-38
 - key segments, *RMS-11 Utilities*, 2-41
 - record section, *RMS-11 Utilities*, 2-29, 2-36
 - system section, *RMS-11 Utilities*, 2-29, 2-30
- SECT key (EDT), *Introduction*, 2-6
- Sector, *RMS-11 Introduction*, 2-1
 - See also *Placement control*
- Security information
 - DELET\$ macro, *I/O Operations*, 3-42
- SEG0_POSITION attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-42
- Segment
 - autoloadable
 - data, *Task Builder*, 4-6
 - defining, *Task Builder*, 4-3
 - global symbol, *Task Builder*, 4-7
 - call, *Task Builder*, 3-10
 - to up-tree, *Task Builder*, 4-4
 - definition, *Task Builder*, 3-1
 - descriptor, *Task Builder*, B-15 to B-20
 - I- and D-space, *Task Builder*, 7-10
 - I- and D-space task, *Task Builder*, 7-10
 - overlay, *Task Builder*, 3-20, 3-21

Segment (cont'd.)
 global symbol
 autoload, *Task Builder*, 4-7
 limiting number
 reducing overhead, *Task Builder*, F-4
 loading
 as part of cotree, *Task Builder*, 4-3
 when called, *Task Builder*, 4-6, 4-7
 load list, *Task Builder*, B-9
 mapping, *Task Builder*, 2-10, 2-11
 disk-resident, *Task Builder*, 2-10
 memory-resident, *Task Builder*, 2-11
 multiple
 global symbol, *Task Builder*, 3-16
 global symbol resolution, *Task Builder*, 3-17
 overlay, *Task Builder*, 3-5
 symbol resolution, *Task Builder*, 3-16
 name
 applying autoload indicator, *Task Builder*, 4-3
 .FCTR directive argument, *Task Builder*, 3-27
 null
 ODL, *Task Builder*, 3-31
 overlay
 arrangement, *Task Builder*, 3-15
 root structure, *Task Builder*, 3-21
 symbol processing, *Task Builder*, 3-17
 processing order, *Task Builder*, 3-17
 single
 overlay, *Task Builder*, 3-4, 3-8
 up-tree
 I- and D-space, *Task Builder*, 3-22
Segmented key, *RMS-11 Introduction*, 3-10 *RMS-11 User's Guide*, 6-7
SEGN_LENGTH attribute
 RMSDES utility, *RMS-11 Utilities*, 2-42
SEGN_POSITION attribute
 RMSDES utility, *RMS-11 Utilities*, 2-42
/SEGREGATE qualifier, *Task Builder*, 11-60
SELECT command
 IOX, *System Management*, 4-58
Select error (tape driver), *I/O Drivers*, 8-14
/SELECTIVE_SEARCH qualifier, *Task Builder*, 11-61 to 11-63
SELECT key (EDT), *Introduction*, 2-8
SELECT PRIMARY command
 EDI utility, *Utilities*, 2-45
Select recovery (tape driver), *I/O Drivers*, 8-14
SELECT SECONDARY command
 EDI utility, *Utilities*, 2-46
SELECT statement, *Error Logging*, 5-34, 5-35
SELTM1, *Error Logging*, 4-4
Semicolon (;)
 for comment, *Task Builder*, 1-14
Semicolon separator (;)
 See Separator
Send, Request, and Connect directive, *Executive*, 5-192
Send By Reference directive, *Executive*, 5-228
Send Data directive, *Executive*, 5-187
Send Data Request and Pass Offspring Control Block directive, *Executive*, 5-195
SEND directive
 enabling for your task, *Task Builder*, 10-35, 11-57
Send Message directive, *Executive*, 5-202
Send Next Command directive, *Executive*, 5-205
Send XOFF (TTDRV), *I/O Drivers*, 2-16, 2-29, 2-37, 2-42, 2-44
Sense status (LRDRV), *I/O Drivers*, 14-5
Separating character, *MACRO-11*, 3-3
Separator
 argument (,), *Debugging*, 2-4, 9-8
 argument (;), *Debugging*, 2-5
 Radix-50 (*), *Debugging*, 2-4, 7-4, 9-8
SEQ argument to ORG\$ macro, *RMS-11 Macro*, 2-3
SEQ symbolic argument, *MACRO-11*, 6-10
SEQUENCE_NUMBERS argument, *MACRO-11*, 8-11
Sequenced mode
 GET\$, *I/O Operations*, 3-21

Sequential access, *RMS-11 Introduction*, 2-4, 2-5 *RMS-11 User's Guide*, 1-7, 1-8

block, *RMS-11 Introduction*, 3-12 *RMS-11 User's Guide*, 1-20
See also BKT field in RAB

FIND, *RMS-11 User's Guide*, 1-15

GET, *RMS-11 User's Guide*, 1-15

PUT, *RMS-11 User's Guide*, 1-15

record, *RMS-11 Introduction*, 3-11 *RMS-11 User's Guide*, 1-12
See also RB\$SEQ code in RAC field

to indexed files, *RMS-11 User's Guide*, 5-16

to relative files, *RMS-11 User's Guide*, 4-1

to sequential files, *RMS-11 User's Guide*, 3-2

Sequential device
See FB\$SQD mask in DEV field

Sequential file, *I/O Operations*, 2-10

Sequential file organization, *RMS-11 Introduction*, 3-4 *RMS-11 User's Guide*, 1-3, 1-11
See also FB\$SEQ code

access declarations, *RMS-11 User's Guide*, 3-6

allocation
initial, *RMS-11 User's Guide*, 3-4

and remote access, *RMS-11 User's Guide*, B-3

cells, *RMS-11 User's Guide*, 3-2

CONNECT operation, *RMS-11 User's Guide*, 3-7

declaring with ORG\$ macro, *RMS-11 Macro*, 2-3

deferred write, *RMS-11 User's Guide*, 3-14

design, *RMS-11 User's Guide*, 3-1
allocation, *RMS-11 User's Guide*, 3-4
contiguity, *RMS-11 User's Guide*, 3-4
medium, *RMS-11 User's Guide*, 3-3
record format, *RMS-11 User's Guide*, 3-3

directory operations, *RMS-11 User's Guide*, 3-15

DISCONNECT operation, *RMS-11 User's Guide*, 3-7

Sequential file organization (cont'd.)

end-of-block indicators, *RMS-11 User's Guide*, 3-2

end-of-file, *RMS-11 User's Guide*, 3-2

FCS-11 compatibility, *RMS-11 User's Guide*, 3-2

file operations, *RMS-11 User's Guide*, 3-15

FIND operation, *RMS-11 User's Guide*, 3-7

FLUSH operation, *RMS-11 User's Guide*, 3-9

GET operation, *RMS-11 User's Guide*, 3-9, 3-13, 3-14

I/O techniques, *RMS-11 User's Guide*, 3-14

MBC, *RMS-11 User's Guide*, 3-15

multiple access streams, *RMS-11 User's Guide*, 3-15

multiple buffers, *RMS-11 User's Guide*, 3-15

PUT operation, *RMS-11 User's Guide*, 3-10, 3-13

random access
by key, *RMS-11 User's Guide*, 3-2
by RFA, *RMS-11 User's Guide*, 3-2

record operations, *RMS-11 User's Guide*, 3-7

record size, *RMS-11 User's Guide*, 3-2

record transfer modes, *RMS-11 User's Guide*, 3-13
locate mode, *RMS-11 User's Guide*, 3-14, 4-13
move mode, *RMS-11 User's Guide*, 3-13, 3-14

REWIND operation, *RMS-11 User's Guide*, 3-11

RRN, *RMS-11 Introduction*, 3-5

sequential access, *RMS-11 User's Guide*, 3-2

shared access, *RMS-11 User's Guide*, 3-5
block access, *RMS-11 User's Guide*, 3-6
record access, *RMS-11 User's Guide*, 3-6
record structured files, *RMS-11 User's Guide*, 3-6
with undefined records, *RMS-11 User's Guide*, 3-6

- Sequential file organization (cont'd.)
 - sharing declarations, *RMS-11 User's Guide*, 3-6
 - stream operations, *RMS-11 User's Guide*, 3-7
 - structure, *RMS-11 User's Guide*, 3-1
 - conceptual, *RMS-11 User's Guide*, 3-2
 - physical, *RMS-11 User's Guide*, 3-1
 - TRUNCATE operation, *RMS-11 User's Guide*, 3-12
 - UPDATE operation, *RMS-11 User's Guide*, 3-12, 3-13, 3-14
- Sequential mode
 - FD.INS parameter, *I/O Operations*, 3-6
 - record attribute, *I/O Operations*, 3-9
 - write logical record, *I/O Operations*, 3-33
- /SEQUENTIAL qualifier, *Task Builder*, 11-64
- Serial
 - number switch, *Error Logging*, 3-6, 3-9
 - operations
 - single controller, *Writing I/O Driver*, 2-7
 - unit operation
 - data base structures, *Writing I/O Driver*, 2-7
 - multiple units per controller, *Writing I/O Driver*, 2-7
- Serial, nondisk device (RMSIFL), *RMS-11 Utilities*, 3-1, 3-12
- Serial command processing
 - CLI, *System Management*, 11-8
- Serial Despooler
 - See PRT
- Serial Despooler Task
 - error messages, *System Management*, A-2
 - receive queue operation, *System Management*, A-1
 - task-build information, *System Management*, A-1
 - text requirements, *System Management*, A-1
- /SERIAL keyword
 - SET command (MCR), *MCR*, 3-251
 - SET command (VMR), *System Management*, 10-73
- Serial line error (ICDRV/ISDRV), *I/O Drivers*, 19-71
- /SERIAL qualifier
 - SET TERMINAL command, *Command Language*, 3-49
- Serviced modules (UDDRV), *I/O Drivers*, 16-2
- Service routine, *Writing I/O Driver*, 1-2
 - See also Executive services
 - summaries of Executive, *Writing I/O Driver*, 3-5, 3-6, 7-5 to 7-40
- /SE switch, *Error Logging*, 3-6, 3-9
- Task Builder*, 10-35
- RMSRST utility, *RMS-11 Utilities*, 7-3, 7-9
- SET /PLCTL command, *System Management*, 13-12
- SET ACCOUNTING
 - Resource Accounting, *System Management*, 17-4
- Set Accounting Transaction Block, *System Management*, 17-26
- SETADC: subroutine
 - set channel information
 - K-series, *I/O Drivers*, 23-28
 - LADRV, *I/O Drivers*, 22-22
- Set Affinity directive, *Executive*, 5-233
- Set clock A rate (K-series), *I/O Drivers*, 23-11
- SET command, *Introduction*, 1-15
 - System Management*, 15-25
 - See also individual SET commands
- disk data caching, *System Management*, 19-16
- I/O Queue Optimization, *System Management*, 16-1
- RMSDES utility, *RMS-11 Utilities*, 2-13, 2-17, 2-20, 2-33
 - allocation, *RMS-11 Utilities*, 2-10
 - and INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - and LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
 - and PROTECTION attribute, *RMS-11 Utilities*, 2-33
 - defining areas by default, *RMS-11 Utilities*, 2-17, 2-43
 - defining areas explicitly, *RMS-11 Utilities*, 2-43

SET command

RMSDES utility (cont'd.)

with GET, *RMS-11 Utilities*,
2-25

SET [DAY]TIME, *Command Language*, 8-2, 9-29

SET DEBUG, *Command Language*,
1-19, 9-29

SET DEFAULT, *Command Language*,
4-100 to 4-103, 9-29 In
troduction, 3-9

/NAMED_DIRECTORY
qualifier, *Command Language*, 4-100 to 4-101
/NONAMED_DIRECTORY
qualifier, *Command Language*, 4-100 to 4-101

SET DEVICE, *Command Language*,
5-132 to 5-134, 9-29

SET FILE, *Command Language*,
4-105 to 4-107, 9-30

SET GROUPFLAGS, *Command Language*, 6-63 to 6-64, 9-30

SET HOST, *Command Language*,
1-16, 9-30

SET LIBRARY/DIRECTORY,
Command Language, 8-11, 9-31

SET PARTITION, *Command Language*, 7-48 to 7-51, 9-31

SET PASSWORD, *Command Language*, 3-11 to 3-12, 9-31
Int roduction, 3-10

SET PRIORITY, *Command Language*,
7-71 to 7-72, 9-31

SET PROTECTION, *Command Language*, 4-111 to 4-114, 9-31

SET PROTECTION/DEFAULT,
Command Language, 4-115 to
4-117, 9-32

SET QUEUE, *Command Language*,
4-92 to 4-95 *Introduction*, 3-13

SET QUEUE/ENTRY, *Command Language*, 9-32

SET QUEUE/JOB, *Command Language*, 9-32

SET SYSTEM, *Command Language*,
8-5 to 8-7, 9-33

SET TERMINAL command,
Introduction, 1-15

SET UIC, *Command Language*,
4-108 to 4-109, 9-35

SET command (MCR), MCR, 1-6,
3-197

SET command (MCR) (cont'd.)

error messages, MCR, 3-268 to
3-272

format, MCR, 3-198

keywords

/BUF, MCR, 3-206

/CLI, MCR, 3-118, 3-209

/CRASHDEV, MCR, 3-209

/DCL, MCR, 3-211

/DEF, MCR, 3-212

/HFILL, MCR, 3-220

/HOST, MCR, 3-223

/INQUIRE, MCR, 3-225

/LIBUIC, MCR, 3-225

/LINES, MCR, 3-226

list, MCR, 3-199t to 3-202t

/MAXEXT, MCR, 3-229

/MAXPKT, MCR, 3-230

/MCR, MCR, 3-231

/NETUIC, MCR, 3-234

/[NO]ABAUD, MCR, 3-202

/[NO]ANSI, MCR, 3-203

/[NO]AVO, MCR, 3-204

/[NO]BLKMOD, MCR, 3-205

/[NO]BRO, MCR, 3-205

/[NO]CACHE, MCR, 3-207

/[NO]CRT, MCR, 3-210

/[NO]DEC, MCR, 3-211

/[NO]DPRO, MCR, 2-3, 3-213

/[NO]EBC, MCR, 3-215

/[NO]ECHO, MCR, 3-216

/[NO]EDIT, MCR, 3-217

/[NO]ESCSEQ, MCR, 3-217

/[NO]FDX, MCR, 3-218

/[NO]FORMFEED, MCR, 3-219

/[NO]HHT, MCR, 3-221

/[NO]HOLD, MCR, 2-17,
3-222

/[NO]HSYNC, MCR, 3-223

/[NO]LOGON, MCR, 3-226

/[NO]LOWER, MCR, 3-226

/[NO]MAIN, MCR, 3-227

/[NO]NAMED, MCR, 3-231

/[NO]OPT, MCR, 3-235

/[NO]OVLP, MCR, 3-236

/[NO]PAR, MCR, 3-237

/[NO]PARITY, MCR, 3-239

/[NO]PASTHRU, MCR, 3-241

/[NO]PRINTER_PORT, MCR,
3-242

/[NO]PRIV, MCR, 2-19, 3-244

/[NO]PUB, MCR, 2-13, 3-245

/[NO]REGIS, MCR, 3-246

/[NO]REMOTE, MCR, 3-247

SET command (MCR)

keywords (cont'd.)

/[NO]RPA, MCR, 3-250
/[NO]SLAVE, MCR, 2-19,
3-252
/[NO]SUB, MCR, 3-255
/[NO]TTSYNC, MCR, 3-261
/[NO]TYPEAHEAD, MCR,
3-261
/[NO]VFILL, MCR, 3-264
/[NO]WCHK, MCR, 3-265
/[NO]WRAP, MCR, 3-266
/NOCEX, MCR, 3-234
/PASSWORD, MCR, 3-240
/PLCTL, MCR, 3-243
/POOL, MCR, 3-244
/RND, MCR, 3-248
/RNDH, MCR, 3-249
/RNDL, MCR, 3-249
/SECPOL, MCR, 3-251
/SPEED, MCR, 3-254
/SWPC, MCR, 3-256
/SYSUIC, MCR, 3-182, 3-257
/TERM, MCR, 3-258
/TOP, MCR, 3-259
/UIC, MCR, 2-6, 3-263

nonprivileged options, MCR, 3-197

privileged options, MCR, 3-197

SET command (VMR), *System
Management*, 10-50

definition, *System Management*,
10-50

examples, *System Management*,
10-83 to 10-87

Executive features, *System
Management*, 10-50

format, *System Management*, 10-50

keywords

/AFF, *System Management*,
10-54
/BOT, *System Management*,
10-55 to 10-56
/BUF, *System Management*,
10-57
/HFILL, *System Management*,
10-59
/LIBUIC, *System Management*,
10-60
/LINES, *System Management*,
10-61
/MAXEXT, *System Management*,
10-63
/NETUIC, *System Management*,
10-63

SET command (VMR)

keywords (cont'd.)

/[NO]ABAUD, *System
Management*, 10-53
/[NO]ANSI, *System
Management*, 10-54
/[NO]AVO, *System Management*,
10-54
/[NO]BLKMOD, *System
Management*, 10-55
/[NO]BRO, *System Management*,
10-56
/[NO]CRT, *System Management*,
10-57
/[NO]DEC, *System Management*,
10-57
/[NO]EBC, *System Management*,
10-57
/[NO]ECHO, *System
Management*, 10-58
/[NO]EDIT, *System Management*,
10-58
/[NO]ESCSEQ, *System
Management*, 10-58
/[NO]FDX, *System Management*,
10-59
/[NO]FORMFEED, *System
Management*, 10-59
/[NO]HHT, *System Management*,
10-59
/[NO]HSYNC, *System
Management*, 10-60
/[NO]LOGON, *System
Management*, 10-61
/[NO]LOWER, *System
Management*, 10-61
/[NO]MAIN, *System
Management*, 10-61 to
10-63
/[NO]OPT, *System Management*,
10-64
/[NO]PAR, *System Management*,
10-64 to 10-66
/[NO]PARITY, *System
Management*, 10-66 to
10-67
/[NO]PASTHRU, *System
Management*, 10-67
/[NO]PRINTER_PORT, *System
Management*, 10-69
/[NO]PRIV, *System
Management*, 10-70
/[NO]PUB, *System Management*,
10-70

SET command (VMR)

keywords (cont'd.)

- /[NO]REGIS, *System Management*, 10-70
- /[NO]REMOTE, *System Management*, 10-71 to 10-72
- /[NO]RPA, *System Management*, 10-73
- /[NO]SERIAL, *System Management*, 10-73
- /[NO]SLAVE, *System Management*, 10-74
- /[NO]SOFT, *System Management*, 10-74
- /[NO]SUB, *System Management*, 10-76 to 10-77
- /[NO]TTSYNC, *System Management*, 10-80
- /[NO]TYPEAHEAD, *System Management*, 10-80 to 10-81
- /[NO]VFILL, *System Management*, 10-81
- /[NO]WCHK, *System Management*, 10-81
- /[NO]WRAP, *System Management*, 10-82 to 10-83
- /PLCTL, *System Management*, 10-68
- /POOL, *System Management*, 10-69
- /POOLSIZE, *System Management*, 10-69
- /RND, *System Management*, 10-72
- /RNDH, *System Management*, 10-72
- /RNDL, *System Management*, 10-72
- /SECPOL, *System Management*, 10-73
- /SPEED, *System Management*, 10-75
- /SWPC, *System Management*, 10-77
- /SWPR, *System Management*, 10-77
- /SYSUIC, *System Management*, 10-77
- /TERM, *System Management*, 10-78 to 10-79

SET command (VMR)

keywords (cont'd.)

- /TOP, *System Management*, 10-79 to 10-80
- /UIC, *System Management*, 10-81
- keyword table, *System Management*, 10-51 to 10-53
- parameter, *System Management*, 10-51
- uses, *System Management*, 10-50
- Set Command Line Interpreter
 - directive, *Executive*, 5-185
- Set counter
 - initial value (ICDRV/ISDRV), *I/O Drivers*, 19-22
- .SETD directive, *Indirect*, 2-82
- Set Default Directory directive,
 - Executive*, 5-189
- Set Event Flag directive, *Executive*, 5-199
- SETF\$ directive, *Executive*, 5-199
- .SETF directive, *Indirect*, 2-80
- \$SETGSA macro, *RMS-11 Macro*, 2-18
- SET HOST/DTE command, *System Management*, 9-3 to 9-5, 9-6
- SETIBF: subroutine
 - set array for buffered sweep
 - K-series, *I/O Drivers*, 23-28
 - LADRV, *I/O Drivers*, 22-23
- /SET keyword
 - SWITCH REGISTER command,
 - MCR, 3-274
- .SETL directive, *Indirect*, 2-80
- \$SET macro, *RMS-11 Macro*, 2-11
- Set mode
 - half-duplex (communication driver),
 - I/O Drivers*, 12-7
 - IO.HDX function (communication driver), *I/O Drivers*, 12-7
- .SETN directive, *Indirect*, 2-81
- Set next buffer (K-series), *I/O Drivers*, 23-24
- .SETO directive, *Indirect*, 2-82
- Set operational characteristic (LRDRV),
 - I/O Drivers*, 14-5
- SET PASSWORD command, *System Management*, 2-1
- SET QUEUE command
 - example, *Batch and Queue*, 2-21
 - file format
 - qualifiers, *Batch and Queue*, 2-19

SET QUEUE command

job format

qualifiers, *Batch and Queue*,
2-19

.SETS directive, *Indirect*, 2-83

SET statement, *Error Logging*, 5-31

Set System Time directive, *Executive*,
5-235

.SETT directive, *Indirect*, 2-80

SET TERMINAL command, *Command
Language*, 3-20, 3-38 to 3-52,
9-33 to 9-35 *System Management*,
9-3

qualifiers

/CONTROL, *Command
Language*, 3-40

/INQUIRE, *Command Language*,
3-41

/NOCONTROL, *Command
Language*, 3-40

/NOSERIAL, *Command
Language*, 3-49

/SERIAL, *Command Language*,
3-49

Setting attributes (RMSDES)

See Attribute

Setting time, *Command Language*, 8-2

SF.GMC function

half-duplex, *I/O Drivers*, 3-11

TTDRV, *I/O Drivers*, 2-18, 2-51

VTDRV, *I/O Drivers*, 4-6

SF.SMC function

half-duplex, *I/O Drivers*, 3-15

TTDRV, *I/O Drivers*, 2-18, 2-59

VTDRV, *I/O Drivers*, 4-7

/SFILE keyword

SAVE command (MCR), *MCR*,
3-190

SFPA\$ directive, *Executive*, 5-200

/SF switch

DMP utility, *Utilities*, 11-8

\$\$SGD0 program section, *Task Builder*,
5-54

reserved name, *Task Builder*, E-4

\$\$SGD1 program section

reserved name, *Task Builder*, E-4

\$\$SGD2 program section, *Task Builder*,
5-54

reserved name, *Task Builder*, E-4

/SG switch, *Task Builder*, 10-36

Shadow Recording, *System
Management*, 1-5

Bad block handling, *System
Management*, 18-10

Shadow Recording (cont'd.)

commands, *System Management*,
18-4

ABORT, *System Management*,
18-4, 18-7

CONTINUE, *System
Management*, 18-4, 18-8

DISPLAY, *System Management*,
18-4, 18-9

START, *System Management*,
18-4, 18-5

STOP, *System Management*,
18-4, 18-6

controlling, *System Management*,
18-4

error messages, *System Management*,
18-11

preparation, *System Management*,
18-2

primary disk errors, *System
Management*, 18-10

secondary disk errors, *System
Management*, 18-10

simultaneous disk errors, *System
Management*, 18-11

uses, *System Management*, 18-1

Shadow recording

SYSGEN question, *System
Generation*, 3-26

/SHAREABLE[:COMMON] qualifier,
Task Builder, 11-65

use in region, *Task Builder*, 5-3 to
5-6

/SHAREABLE[:LIBRARY] qualifier,
Task Builder, 11-66

use in region, *Task Builder*, 5-3 to
5-6

/SHAREABLE[:TASK] qualifier, *Task
Builder*, 11-67

/SHAREABLE qualifier

MOUNT command, *Command
Language*, 5-14, 5-55

Shareable region, *Executive*, 3-5

Shareable volume, *Command Language*,
5-10 to 5-11, 5-55

Shared access, *RMS-11 Introduction*,
2-4 *RMS-11 User's Guide*, 1-17

See also Access sharing

See also SHR field in FAB

access declarations, *RMS-11 User's
Guide*, 2-6

read/write, *RMS-11 User's
Guide*, 2-6

Shared access

- access declarations (cont'd.)
 - read-only, *RMS-11 User's Guide*, 2-6

- and high-level languages, *RMS-11 User's Guide*, 2-7

- application design consideration, *RMS-11 User's Guide*, 2-5

- bucket locking, *RMS-11 User's Guide*, 2-7

- deferred write
 - to relative files, *RMS-11 User's Guide*, 4-14

- file, *I/O Operations*, 1-12

- file open, *I/O Operations*, 2-15, 3-13

- multiple access streams, *RMS-11 User's Guide*, 2-9, 2-10

- programming considerations, *RMS-11 User's Guide*, 2-10

- sharing declarations, *RMS-11 User's Guide*, 2-7

 - no sharing, *RMS-11 User's Guide*, 2-7

 - read/write, *RMS-11 User's Guide*, 2-7

 - read-only, *RMS-11 User's Guide*, 2-7

- system protection codes, *RMS-11 User's Guide*, 2-5

- to indexed files, *RMS-11 User's Guide*, 7-1

 - block access, *RMS-11 User's Guide*, 7-1

 - record access, *RMS-11 User's Guide*, 7-1

- to relative files, *RMS-11 User's Guide*, 4-6

 - block access, *RMS-11 User's Guide*, 4-6

 - record access, *RMS-11 User's Guide*, 4-6

- to sequential files, *RMS-11 User's Guide*, 3-5

 - record structured, *RMS-11 User's Guide*, 3-6

 - with undefined records, *RMS-11 User's Guide*, 3-6

- Shared region, *Executive*, 3-6 *Task Builder*, 5-1

 - See also Region

- /SHARE keyword

 - MOUNT command (MCR), *MCR*, 3-152

Sharing

- See Shared access

- Sharing code or data, *MACRO-11*, 6-45

- Sharing declaration, *RMS-11 User's Guide*, 2-7

 - indexed files, *RMS-11 User's Guide*, 7-1

 - no sharing, *RMS-11 User's Guide*, 2-7

 - read/write, *RMS-11 User's Guide*, 2-7

 - read-only, *RMS-11 User's Guide*, 2-7

 - relative files, *RMS-11 User's Guide*, 4-6

 - sequential files, *RMS-11 User's Guide*, 3-6

- SHDDF\$, *CDA*, C-69 *Writing I/O Driver*, A-58, A-59

- SHF, *System Management*, 1-4

 - algorithms

 - first pass, *System Management*, 14-5

 - second pass, *System Management*, 14-6

 - conventions, *System Management*, 14-1

 - installation, *System Management*, 14-3

 - monitoring with RMD, *System Management*, 14-4

 - overhead, *System Management*, 14-3

 - performance, *System Management*, 14-3

 - removal, *System Management*, 14-5

 - shuffling

 - dynamic common regions, *System Management*, 14-5

 - fixed tasks, *System Management*, 14-5

 - partition sections, *System Management*, 14-5

 - static common regions, *System Management*, 14-5

 - size, *System Management*, 14-3

- \$SHFCT

 - changing contents, *System Management*, 14-3

- \$SHFTM, *System Management*, 14-3

- SHIFT key, *Command Language*, 3-15

SHOW ACCOUNTING/INFORMATION
 Resource Accounting, *System Management*, 17-3
 SHOW ACCOUNTING/TRANSACTION_ FILE
 Resource Accounting, *System Management*, 17-3
 SHOW ACCOUNTING commands, *System Management*, 17-11
 SHOW ALL command
 RMSDES utility
 defining areas by default, *RMS-11 Utilities*, 2-17
 defining areas explicitly, *RMS-11 Utilities*, 2-43
 SHOW CACHE command
 disk data caching, *System Management*, 19-8
 SHOW command, *Introduction*, 1-9
 See also individual SHOW commands
 RMSDES utility, *RMS-11 Utilities*, 2-15, 2-18, 2-26
 allocation, *RMS-11 Utilities*, 2-10
 and PROTECTION attribute, *RMS-11 Utilities*, 2-33
 SHOW ALL, *RMS-11 Utilities*, 2-4
 setting attributes, *RMS-11 Utilities*, 2-21
 with GET, *RMS-11 Utilities*, 2-25
 SHOW ACCOUNTING, *Command Language*, 9-35
 SHOW ASSIGNMENTS, *Command Language*, 5-15, 5-129 to 5-131, 9-36
 SHOW CACHE, *Command Language*, 9-36
 SHOW CLOCK_QUEUE, *Command Language*, 7-73, 9-36
 SHOW COMMON, *Command Language*, 7-74 to 7-75, 9-36
 SHOW [DAY]TIME, *Command Language*, 8-4, 9-37
 SHOW DEFAULT, *Command Language*, 4-104, 9-37
 Introduction, 1-13, 3-10
 SHOW DEVICES, *Command Language*, 5-5, 5-135 to 5-138, 9-37
 Introduction, 3-10

SHOW command (cont'd.)
 SHOW GROUPFLAGS, *Command Language*, 6-65
 SHOW HOST, *Command Language*, 1-17, 9-37
 SHOW LIBRARY, *Command Language*, 8-12, 9-37
 SHOW LOGICALS, *Command Language*, 5-15, 5-129 to 5-131, 9-38
 SHOW MEMORY, *Command Language*, 8-15 to 8-18, 9-38
 Introduction, 6-9
 SHOW PARTITIONS, *Command Language*, 7-52 to 7-54, 9-38
 SHOW PROCESSOR, *Command Language*, 4-91, 9-38
 SHOW PROTECTION, *Command Language*, 4-118, 9-39
 SHOW QUEUE, *Command Language*, 4-88 to 4-90, 9-39
 Introduction, 3-13
 SHOW SYSTEM, *Command Language*, 8-8 to 8-10, 9-40
 SHOW TASKS, *Command Language*, 7-55 to 7-70, 9-40
 SHOW TASKS/ACTIVE, *Command Language*, 7-55 to 7-60
 SHOW TASKS/DYNAMIC, *Command Language*, 7-64 to 7-68, 9-40
 SHOW TASKS/INSTALLED, *Command Language*, 7-60 to 7-63
 SHOW TASKS/INSTALLED/DEVICE, *Command Language*, 7-63 to 7-64
 SHOW TASKS/LOGICAL_UNITS, *Command Language*, 7-68 to 7-70
 SHOW TASKS command, *Introduction*, 1-16, 5-4
 SHOW TERMINAL, *Command Language*, 3-53 to 3-61, 9-41 to 9-42
 Introduction, 1-15
 SHOW TIME command, *Introduction*, 1-9, 3-11
 SHOW UIC, *Command Language*, 4-110, 9-42
 SHOW USERS, *Command Language*, 8-13 to 8-14, 9-43
 Introduction, 1-16, 3-11

- SHOW DEVICE command
 - disk data caching, *System Management*, 19-9
- SHOW ID command
 - RMSDES utility, *RMS-11 Utilities*, 2-16
- SHOW PROCESSOR command
 - format, *Batch and Queue*, 2-18
 - /SHOW qualifier, *MACRO-11*, 8-11
- SHOW QUEUE command, *Batch and Queue*, 2-14
 - batch queue, *Batch and Queue*, 1-9
 - display, *Batch and Queue*, 2-16 to 2-17
 - format, *Batch and Queue*, 2-15
 - print queue, *Batch and Queue*, 1-9
 - qualifiers, *Batch and Queue*, 2-15
- SHOW QUEUE display, *Batch and Queue*, 1-10
- /Show switch, *Error Logging*, 2-10, 2-11
- Show switch, *Error Logging*, 2-4
- SHR field in FAB
 - CREATE operation, *RMS-11 Macro*, 5-14
 - offset, *RMS-11 Macro*, 6-22
- OPEN operation, *RMS-11 Macro*, 5-75
- READ operation, *RMS-11 Macro*, 5-99, 5-101
- summary, *RMS-11 Macro*, 6-63
- WRITE operation, *RMS-11 Macro*, 5-127, 5-129
- /SH switch, *Error Logging*, 2-4, 2-10, 2-11 *Task Builder*, 10-37
- Shuffler
 - See SHF
- Shutdown
 - RSX-11M-PLUS system
 - example, *System Management*, 8-7
 - procedure, *System Management*, 8-6
 - RSX-11M system
 - example, *System Management*, 8-5
 - procedure, *System Management*, 8-4
- SHUTUP
 - examples
 - RSX-11M, *System Management*, 8-2
 - RSX-11M-PLUS, *System Management*, 8-2
- SHUTUP (cont'd.)
 - input, *System Management*, 8-2
 - invoking, *System Management*, 8-1
 - output, *System Management*, 8-2
 - prerequisites to running, *System Management*, 8-1
- SHUTUP.CMD, *System Management*, 8-3
 - example of file, *System Management*, 8-4
- SHUTUP program, *System Management*, 1-3, 8-1
- SIDR, *RMS-11 User's Guide*, 5-5, 7-9
 - changeable keys, *RMS-11 User's Guide*, 6-10
 - duplicate keys, *RMS-11 User's Guide*, 6-8, 6-9
- Signalling
 - definition, *Error Logging*, 5-40
- SIGNAL statement, *Error Logging*, 5-40, 5-41
- SIGNAL STOP statement, *Error Logging*, 5-41
- Significant event, *Executive*, 2-1
 - Introduction, 6-6
 - declaring, *Executive*, 5-61, 5-125, 5-187
 - list, *Executive*, 2-1
- Single ASCII character indicator, *MACRO-11*, 3-3
- Single-directory device
 - See FB\$SDI mask in DEV field
- Single file operation, *I/O Operations*, 5-6
- Single-precision routine
 - See Integer routine
- Single space
 - TTDRV, *I/O Drivers*, 2-75
 - VFC
 - half-duplex, *I/O Drivers*, 3-27
 - LPDRV, *I/O Drivers*, 10-6
- SIZ0 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- SIZ1 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- SIZ2 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- SIZ3 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- SIZ4 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- SIZ5 field in KEY block
 - offset, *RMS-11 Macro*, 6-68

- SIZ6 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- SIZ7 field in KEY block
 - offset, *RMS-11 Macro*, 6-68
- Sizeb parameter
 - device-specific function (UDDRV),
I/O Drivers, 16-4
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.CCI function, *I/O Drivers*,
19-19
 - IO.CTI function, *I/O Drivers*,
19-21
 - IO.CTY function, *I/O Drivers*,
19-23
 - IO.WLB function, *I/O Drivers*,
19-32
- SIZE attribute
 - RMSDES utility, *RMS-11 Utilities*,
2-36
- SIZE command
 - EDI utility, *Utilities*, 2-46
- /SIZE keyword
 - LOAD command (MCR), *MCR*,
3-133
 - LOAD command (VMR), *System
Management*, 10-34
- Size parameter
 - device-specific
 - AFC11/AD01 converter, *I/O
Drivers*, 15-3
 - communication driver, *I/O
Drivers*, 12-6
 - CRDRV, *I/O Drivers*, 11-3
 - DDDRV, *I/O Drivers*, 7-4
 - disk driver, *I/O Drivers*, 5-9
 - DTDRV, *I/O Drivers*, 6-3
 - GRDRV, *I/O Drivers*, 21-2
 - half-duplex, *I/O Drivers*, 3-7
 - receiving (LRDRV), *I/O Drivers*,
14-9
 - tape driver, *I/O Drivers*, 8-8
 - transmitting (LRDRV), *I/O
Drivers*, 14-4
 - UDDRV, *I/O Drivers*, 16-5
 - VTDRV, *I/O Drivers*, 4-3
 - F11ACP, *I/O Drivers*, C-5
 - general (TTDRV), *I/O Drivers*, 2-11
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.CCO function (TTDRV), *I/O
Drivers*, 2-23
 - IO.EIO function (TTDRV), *I/O
Drivers*, 2-26
 - IO.GTS function (TTDRV), *I/O
Drivers*, 2-33
- Size parameter (cont'd.)
 - IO.RAL function (TTDRV), *I/O
Drivers*, 2-36
 - IO.RBC function (ICDRV/ISDRV),
I/O Drivers, 19-14
 - IO.RLB function, *I/O Drivers*, 1-30
 - IO.RNE function (TTDRV), *I/O
Drivers*, 2-38
 - IO.RPR function (TTDRV), *I/O
Drivers*, 2-41
 - IO.RST function (TTDRV), *I/O
Drivers*, 2-44
 - IO.RTT function (TTDRV), *I/O
Drivers*, 2-46
 - IO.RVB function, *I/O Drivers*, 1-31
 - IO.SMC function (TTDRV), *I/O
Drivers*, 2-60
 - IO.WAL function (TTDRV), *I/O
Drivers*, 2-47
 - IO.WBT function (TTDRV), *I/O
Drivers*, 2-50
 - IO.WLB function, *I/O Drivers*, 1-32
 - IO.WVB function, *I/O Drivers*, 1-33
 - SF.GMC function (TTDRV), *I/O
Drivers*, 2-51
 - standard function
 - communication driver, *I/O
Drivers*, 12-5
 - CRDRV, *I/O Drivers*, 11-2
 - CTDRV, *I/O Drivers*, 9-3
 - DDDRV, *I/O Drivers*, 7-3
 - disk driver, *I/O Drivers*, 5-7
 - DTDRV, *I/O Drivers*, 6-3
 - LPDRV, *I/O Drivers*, 10-4
 - PPDRV/PRDRV, *I/O Drivers*,
18-2
 - tape driver, *I/O Drivers*, 8-6
 - synchronous QIO\$ function
(LSDRV), *I/O Drivers*, 17-5
- SIZ field in KEY block
 - CREATE operation, *RMS-11 Macro*,
5-18
 - DISPLAY operation, *RMS-11 Macro*,
5-31
 - offset, *RMS-11 Macro*, 6-68
 - OPEN operation, *RMS-11 Macro*,
5-80
 - summary, *RMS-11 Macro*, 6-92
- Skeleton source file
 - MACRO-11, *Program Development*,
2-4
- Slash (/)
 - EDI utility, *Program Development*,
2-16

Slash (/) (cont'd.)

ODT, *Program Development*, 5-4

Slash operator

See also Operator

double (/ /), *Task Builder*, 1-12,
1-13, 1-17

single (/), *Task Builder*, 1-7, 1-11,
1-12, 1-13, 1-17

/SLAVE keyword

SET command (MCR), *MCR*, 3-252

SET command (VMR), *System
Management*, 10-74

/SLAVE qualifier, *Task Builder*, 11-68

/SLOW qualifier, *Task Builder*, 11-69

Slow Task Builder

See Slow TKB

Slow TKB, *Task Builder*, F-4

to improve performance, *Task
Builder*, F-11

SLP, *Command Language*, 4-26

SLP utility

audit trail, *Utilities*, 13-16

changing value, *Utilities*, 13-17

deleting, *Utilities*, 13-19

setting

length, *Utilities*, 13-17

position, *Utilities*, 13-17

suppressing, *Utilities*, 13-18

checksum, *Utilities*, 13-3

edit command line, *Utilities*, 13-5

edit commands, *Utilities*, 13-5

error message, *Utilities*, 13-20

file

input, *Utilities*, 13-2

listing, *Utilities*, 13-3

output, *Utilities*, 13-3

processing, *Utilities*, 13-4

source

creating, *Utilities*, 13-14

updating, *Utilities*, 13-9

indirect command file, *Utilities*,
13-8

initiating (invoking), *Utilities*, 13-1

operator, *Utilities*, 13-9

switch, *Utilities*, 13-14

/SL switch, *Error Logging*, 2-4, 2-7
Task Builder, 10-45

CMP utility, *Utilities*, 12-3

RMSBCK utility, *RMS-11 Utilities*,
6-6, 6-10

RMSCNV utility, *RMS-11 Utilities*,
4-12

RMSRST utility, *RMS-11 Utilities*,
7-6, 7-12

/SL switch (TKB), *System Management*,
10-27

\$\$SLVC program section

reserved name, *Task Builder*, E-4

/SLV keyword

INSTALL command (MCR), *MCR*,
3-120

INSTALL command (VMR), *System
Management*, 10-27

and /SL switch (TKB), *System*

Management, 10-27

and prototype tasks, *System*

Management, 10-27

RUN command (MCR), *MCR*,
3-184

\$S macro form, *Executive*, 1-6

processing errors, *Executive*, 1-7

SMSG\$, *Error Logging*, 1-4

SMSG\$ directive, *Executive*, 5-202

SMSG\$ directive summary, *I/O*

Operations, C-4

\$SNAP, *Program Development*, 1-7,
1-8, 5-9, 5-10

subset of Postmortem Dump Task,
Program Development, 5-9,
5-10

SNAP\$ macro, *Task Builder*, D-6

format, *Task Builder*, D-8, D-9

Snapshot dump, *Task Builder*, D-2,
D-6, D-11

See also \$SNAP

call to, *Task Builder*, D-10

example, *Task Builder*, D-9, D-10,
D-11

macro, *Task Builder*, D-2

SNPBK\$, *Task Builder*, D-5

macro format

for creating, *Task Builder*, D-6,
D-7

SNPBK\$ macro, *Task Builder*, D-6

format, *Task Builder*, D-7

SNPDF\$ macro, *Task Builder*, D-6

SNXC\$ directive, *Executive*, 5-205

Soft error, *System Management*, 15-30

definition, *Error Logging*, 1-3

limit switch, *Error Logging*, 2-4, 2-7

/SOFT keyword

SET command (MCR), *MCR*, 3-253

SET command (VMR), *System
Management*, 10-74

Software bootstrap, *System Generation*,
1-13

- Sorting (RMSIFL)
 - alternate key, *RMS-11 Utilities*, 3-11, 3-12, 3-13
 - alternate key files, *RMS-11 Utilities*, 3-7
 - bypassing primary key sort, *RMS-11 Utilities*, 3-8, 3-9
 - input file organization, *RMS-11 Utilities*, 3-9
 - primary key, *RMS-11 Utilities*, 3-9
 - work files, *RMS-11 Utilities*, 3-7, 3-13
- Sort option
 - ACNT, *System Management*, 2-10
- Sort routine error code
 - RMSIFL utility, *RMS-11 Utilities*, D-1
- Sort work files (RMSIFL), *RMS-11 Utilities*, 3-1, 3-10, 3-12
 - allocating space
 - primary key sort, *RMS-11 Utilities*, 3-13
 - device allocation, *RMS-11 Utilities*, 3-7
- SOURCE argument, *MACRO-11*, 8-11
- SOURCE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-30
- Source file, *Command Language*, 6-1, 6-3 *Introduction*, 5-3, 5-4, 5-5
 - See also SLP utility
 - case control in, *MACRO-11*, 6-19
- FORTTRAN IV
 - adding debugging statements, *Program Development*, 7-7
 - blank line, *Program Development*, 7-3
 - comment line, *Program Development*, 7-3
 - creating, *Program Development*, 7-2, 7-3
 - editing, *Program Development*, 7-4, 7-5, 7-7, 7-9
- MACRO-11
 - assembling, *Program Development*, 3-1, 3-2
 - creating from a skeleton, *Program Development*, 2-12
 - editing, *Program Development*, 2-13 to 2-18
 - error, *Program Development*, 3-2, 3-3, 3-4
 - format, *Program Development*, 2-1 to 2-3
- Source file
 - MACRO-11 (cont'd.)
 - skeleton, *Program Development*, 2-4
 - inserting lines, *Program Development*, 2-18
 - listing, *Program Development*, 3-4, 3-5, 3-6
 - macro library call, *Program Development*, 6-3, 6-4
 - preface, *Program Development*, 2-1
 - terminating input in, *MACRO-11*, 6-39
- Source language, *Introduction*, 5-3
- Source Language Input Program
 - See SLP utility
- Source line format, *MACRO-11*, 2-5
- SP: pseudo device, *Command Language*, 5-7
- Space
 - application design consideration, *RMS-11 User's Guide*, 2-4, 8-1
 - data storage, *RMS-11 User's Guide*, 2-5
 - I/O buffer size, *RMS-11 User's Guide*, 2-5
 - task size, *RMS-11 User's Guide*, 2-5
- Space function (CTDRV), *I/O Drivers*, 9-7
- \$SPACE macro, *RMS-11 Macro*, 5-120
- RSTS/E, *RMS-11 Macro*, D-4
- SPACE operation, *RMS-11 Introduction*, 4-7 *RMS-11 Macro*, 4-14
 - access modes, *RMS-11 Introduction*, 4-7
 - \$SPACE macro, *RMS-11 Macro*, 5-120
- Space operator
 - See Operator
- SPACE symbol, *Indirect*, 2-16
- Spacing
 - abort
 - tape driver, *I/O Drivers*, 8-16
 - TK50, *I/O Drivers*, 8-16
 - end-of-volume (tape driver), *I/O Drivers*, 8-16
- Spanning blocks, *RMS-11 Introduction*, 4-2 *RMS-11 User's Guide*, 1-16, 1-19, 3-1
- variable-length records, *RMS-11 User's Guide*, 2-16
- Spawn directive, *Executive*, 5-212

Spawning, *Executive*, 4-5
 SP command
 EDI utility, *Utilities*, 2-45
 SPEA\$ directive, *Executive*, 5-207
 Special character, MACRO-11, 3-1,
 3-2, 3-3
 assembler
 summary, MACRO-11, B-1
 key, MCR, 2-15 to 2-18
 state table, *I/O Operations*, 7-8
 Special key
 table (TTDRV), *I/O Drivers*, 2-71
 Special keys
 VT100-series terminal, *Command Language*, 3-19
 VT200-series terminal, *Command Language*, 3-19
 VT52 terminal, *Command Language*, 3-19
 Special symbol, *Indirect*, 1-4, 2-9
 format, *Indirect*, 2-9
 Indirect, *Introduction*, 4-3
 logical, *Indirect*, 2-10
 numeric, *Indirect*, 2-11
 string, *Indirect*, 2-17
 type, *Indirect*, 2-9
 Specify Command Arrival AST
 directive, *Executive*, 5-182
 Specify Floating Point Processor
 Exception AST directive,
 Executive, 5-200
 Specify Parity Error AST directive,
 Executive, 5-207
 Specify Power Recovery AST directive,
 Executive, 5-210
 Specify Receive-By-Reference AST
 directive, *Executive*, 5-231
 Specify Receive Data AST directive,
 Executive, 5-222
 Specify Requested Exit AST directive,
 Executive, 5-224
 Specify SST Vector Table for Debugging
 Aid directive, *Executive*, 5-242
 Specify SST Vector Table for Task
 directive, *Executive*, 5-244
 Speed
 application design consideration,
 RMS-11 User's Guide, 2-3, 8-1
 /SPEED keyword
 SET command (MCR), MCR, 3-254
 SET command (VMR), *System Management*, 10-75
 SPND\$S directive, *Executive*, 5-209
 Spool
 definition, *Batch and Queue*, 4-8
 Spooled device, *Batch and Queue*, 1-3,
 2-1
 definition, *Batch and Queue*, 4-8
 line printer, *Batch and Queue*, 1-3
 output, *Batch and Queue*, 1-3
 Spooling, *I/O Operations*, 8-1
 file
 PIP utility, *Utilities*, 3-38
 library file
 LBR utility, *Utilities*, 10-29
 output, *Batch and Queue*, 2-1
 .PRINT subroutine, *I/O Operations*,
 8-1
 SPR, *Writing I/O Driver*, 1-20
 SPRA\$ directive, *Executive*, 5-210
 /-SP switch, CDA, 2-10, 2-12
 /SP switch, MACRO-11, 8-7 Task
 Builder, 10-46
 CMP utility, *Utilities*, 12-3
 DMP utility, *Utilities*, 11-8
 FLX utility, *Utilities*, 4-8
 LBR utility, *Utilities*, 10-29
 PIP utility, *Utilities*, 3-38
 SLP utility, *Utilities*, 13-15
 SPWN\$ directive, *Executive*, 5-212
 IOX
 in EXECUTE command, *System Management*, 4-37
 SPY command
 IOX, *System Management*, 4-60
 /SQ switch, *Task Builder*, 10-47
 SLP utility, *Utilities*, 13-16
 /SQUEEZE qualifier
 LIBRARY command, *Command Language*, 6-44
 SRC symbolic argument, MACRO-11,
 6-11
 SRDA\$ directive, *Executive*, 5-222
 SREA\$ directive, *Executive*, 5-224
 SREF\$ directive, *Executive*, 5-229
 S register, *Debugging*, 2-6, 5-3, 9-10
 SREX\$ directive, *Executive*, 5-224
 SRRA\$ directive, *Executive*, 5-231
 /SR switch
 PIP utility, *Utilities*, 3-39
 SRTI routine, *Task Builder*, 8-13
 SS.MAS state setting, transmitter
 (LRDRV), *I/O Drivers*, 14-4
 SS.NEU state setting, transmitter
 (LRDRV), *I/O Drivers*, 14-4

- SS command
 - EDI utility, *Utilities*, 2-46
- SSM
 - See SYSTEM SERVICE MESSAGE command
- /SS switch, *Task Builder*, 10-48, 10-49, 10-50
- LBR utility, *Utilities*, 10-29
- symbol definition file
 - reducing overhead, *Task Builder*, F-4
- SST, *Executive*, 2-5
 - ODT, *Program Development*, 5-8
 - relation to Postmortem Dump, *Program Development*, 1-7
 - role in task termination, *Program Development*, 4-8, 4-9
 - service routine, *Executive*, 2-6
 - specifying, *Executive*, 5-242, 5-244
 - stack content register, *Debugging*, 2-7, 5-4
 - vector
 - address
 - declaring, *Task Builder*, 12-29
 - handling, *Debugging*, 2-11
 - register, *Debugging*, 2-7, 5-5
 - XDT, *Debugging*, 8-4
- SST routine
 - interrupt, *I/O Drivers*, 1-11
- Stack
 - declaring size, *Task Builder*, 12-36
 - structure, *Writing I/O Driver*, 6-12
 - internal SST fault, *Writing I/O Driver*, 6-10, 6-11
 - supervisor mode, *Task Builder*, 8-19
- Stack and register dump
 - Executive*, *Writing I/O Driver*, 6-11
- Stack check, card reader (CRDRV), *I/O Drivers*, 11-6
- Stack Depth Indicator
 - See \$STKDP
- STACK option, *Task Builder*, 12-36
- Stack pointer
 - definition, *MACRO-11*, 3-10
 - kernel, *CDA*, 3-2, 3-5
 - user, *CDA*, 3-2
- Staddb parameter
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.WLB function, *I/O Drivers*, 19-32
- Stadd parameter
 - device-specific
 - AFC11/AD01 converter, *I/O Drivers*, 15-2
 - communication driver, *I/O Drivers*, 12-6
 - CRDRV, *I/O Drivers*, 11-3
 - DDDRV, *I/O Drivers*, 7-4
 - disk driver, *I/O Drivers*, 5-8
 - DTDRV, *I/O Drivers*, 6-3
 - GRDRV, *I/O Drivers*, 21-2
 - half-duplex, *I/O Drivers*, 3-8
 - receive (LRDRV), *I/O Drivers*, 14-9
 - tape driver, *I/O Drivers*, 8-8
 - transmit (LRDRV), *I/O Drivers*, 14-4
 - UDDRV, *I/O Drivers*, 16-4
 - VTDRV, *I/O Drivers*, 4-3
 - general (TTDRV), *I/O Drivers*, 2-11
 - ICDRV/ISDRV, *I/O Drivers*, 19-10
 - IO.CCI function (ICDRV/ISDRV), *I/O Drivers*, 19-19
 - IO.CCO function (TTDRV), *I/O Drivers*, 2-23
 - IO.CTI function (ICDRV/ISDRV), *I/O Drivers*, 19-21
 - IO.CTY function (ICDRV/ISDRV), *I/O Drivers*, 19-23
 - IO.EIO function (TTDRV), *I/O Drivers*, 2-26
 - IO.GTS function (TTDRV), *I/O Drivers*, 2-33
 - IO.RAD function (ICDRV/ISDRV), *I/O Drivers*, 19-28
 - IO.RAL function (TTDRV), *I/O Drivers*, 2-36
 - IO.RBC function (ICDRV/ISDRV), *I/O Drivers*, 19-14
 - IO.RLB function, *I/O Drivers*, 1-30
 - IO.RNE function (TTDRV), *I/O Drivers*, 2-38
 - IO.RPR function (TTDRV), *I/O Drivers*, 2-41
 - IO.RST function (TTDRV), *I/O Drivers*, 2-43
 - IO.RTT function (TTDRV), *I/O Drivers*, 2-45
 - IO.RVB function, *I/O Drivers*, 1-31
 - IO.SMC function (TTDRV), *I/O Drivers*, 2-60
 - IO.SPT function (LSDRV), *I/O Drivers*, 17-9

- Stadd parameter (cont'd.)
 - IO.WAL function (TTDRV), *I/O Drivers*, 2-47
 - IO.WBT function (TTDRV), *I/O Drivers*, 2-49
 - IO.WLB function, *I/O Drivers*, 1-32
 - IO.WVB, *I/O Drivers*, 1-33
 - SF.GMC function (half-duplex), *I/O Drivers*, 3-11
 - SF.GMC function (TTDRV), *I/O Drivers*, 2-51
- standard function
 - communication driver, *I/O Drivers*, 12-5
 - CRDRV, *I/O Drivers*, 11-2
 - CTDRV, *I/O Drivers*, 9-3
 - DDDRV, *I/O Drivers*, 7-3
 - disk driver, *I/O Drivers*, 5-7
 - DTDRV, *I/O Drivers*, 6-3
 - LPDRV, *I/O Drivers*, 10-4
 - PPDRV/PRDRV, *I/O Drivers*, 18-2
 - tape driver, *I/O Drivers*, 8-6
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-5
- STAF\$ directive, *Executive*, 5-234
- Stall I/O
 - F11ACP performance (disk driver), *I/O Drivers*, 5-13
 - RC25, *I/O Drivers*, 5-12
 - system performance (disk driver), *I/O Drivers*, 5-13
- Stand-alone system, *System Generation*, 1-13
- Standard function list (TTDRV), *I/O Drivers*, 2-19
- START/ACCOUNTING
 - Resource Accounting, *System Management*, 17-5
- START command, *Command Language*, 7-26, 9-43
 - IOX, *System Management*, 4-61
- Shadow Recording, *System Management*, 18-5
- START/PROCESSOR, *Command Language*, 9-43
- START/QUEUE, *Command Language*, 9-44
- START/QUEUE/MANAGER, *Command Language*, 9-44
- START/UNBLOCK, *Command Language*, 7-27, 9-44
- Start-of-segment symbol, *Task Builder*, A-26
- STARTUP.CMD, *System Management*, 7-1
- Startup command file, *Introduction*, 2-2
- Startup procedure
 - content, *System Generation*, 4-3
 - description, *System Generation*, 4-3
 - for pregenerated kit, *System Generation*, 5-21
- STARTUP.CMD, *System Generation*, 4-4
 - system, *System Generation*, 4-3
- STATE\$ macro, *I/O Operations*, 7-1, 7-2
- State change
 - read interrupt point (ICDRV/ISDRV), *I/O Drivers*, 19-54
- Statement
 - format, *MACRO-11*, 2-1
 - MACRO-11, *Program Development*, 1-4
 - format, *Program Development*, 2-3
- State parameter
 - device-specific function
 - transmit (LRDRV), *I/O Drivers*, 14-4
 - IO.STC function
 - transmitter (LRDRV), *I/O Drivers*, 14-6
- \$STATE program section, *I/O Operations*, 7-2
- State setting, transmitter (LRDRV), *I/O Drivers*, 14-4
- State table, *I/O Operations*, 7-1
 - arrangement of syntax types, *I/O Operations*, 7-7
 - initializing, *I/O Operations*, 7-2
 - rejecting transitions, *I/O Operations*, 7-18
 - special character, *I/O Operations*, 7-8
 - using subexpressions, *I/O Operations*, 7-18
- Static common region, *Executive*, 3-4
 - checkpointing, *System Management*, 14-2
 - resident common, *System Management*, 14-2
 - resident libraries, *System Management*, 14-2
 - shuffling, *System Management*, 14-4

- Static structure, *Writing I/O Driver*, 2-1
- Statistics block, *I/O Operations*, H-1
- Statistics scan
 - Resource Accounting, *System Management*, 17-6
- Stat parameter
 - device-specific (communication driver), *I/O Drivers*, 12-6
 - device-specific function (VTDRV), *I/O Drivers*, 4-3
- Status
 - completion (VTDRV), *I/O Drivers*, 4-6
 - end-of-volume
 - unlabeled tape (tape driver), *I/O Drivers*, 8-16
 - I/O, *I/O Drivers*, 1-36
 - I/O (CRDRV), *I/O Drivers*, 11-7
 - I/O completion (VTDRV), *I/O Drivers*, 4-5
 - I/O condition, *I/O Drivers*, 1-38
 - I/O directive, *I/O Drivers*, 1-37
 - IO.XOP function (XEDRV), *I/O Drivers*, 13-6
 - resetting transport (tape driver), *I/O Drivers*, 8-17
- Status block, I/O, *I/O Drivers*, 1-5, 1-8, 1-11, 1-26, 1-29, 1-36, 1-37, 1-38, 1-39
 - AFC11/AD01 converter, *I/O Drivers*, 15-4, 15-8
 - communication driver, *I/O Drivers*, 12-8
 - CRDRV, *I/O Drivers*, 11-3, 11-7
 - CTDRV, *I/O Drivers*, 9-4
 - DDDRV, *I/O Drivers*, 7-5
 - disk driver, *I/O Drivers*, 5-9, 5-10
 - DTDRV, *I/O Drivers*, 6-4
 - first word content
 - K-series, *I/O Drivers*, 23-32
 - LADRV, *I/O Drivers*, 22-31
 - UDDRV, *I/O Drivers*, 16-15
 - FORTAN (ICDRV/ISDRV), *I/O Drivers*, 19-35, 19-36
 - GRDRV, *I/O Drivers*, 21-3
 - half-duplex, *I/O Drivers*, 3-13, 3-15, 3-16, 3-17, 3-18, 3-26
 - K-series, *I/O Drivers*, 23-6, 23-32
 - LADRV, *I/O Drivers*, 22-2, 22-30
 - LPDRV, *I/O Drivers*, 10-5
 - LRDRV, *I/O Drivers*, 14-4, 14-5, 14-7, 14-11
- Status block, I/O (cont'd.)
 - LSDRV, *I/O Drivers*, 17-9, 17-10, 17-31, 17-34
 - PPDRV/PRDRV, *I/O Drivers*, 18-3
 - tape driver, *I/O Drivers*, 8-10, 8-11
 - TTDRV, *I/O Drivers*, 2-10, 2-43, 2-51, 2-59, 2-63, 2-75, 2-77, 2-80
 - UDDRV, *I/O Drivers*, 16-7, 16-15, 16-16, 16-31
 - UNIBUS switch driver, *I/O Drivers*, 24-6, 24-7
 - VTDRV, *I/O Drivers*, 4-7, 4-8, 4-9
 - 4-word (LADRV), *I/O Drivers*, 22-31
 - XEDRV, *I/O Drivers*, 13-6, 13-7, 13-10, 13-11, 13-14, 13-16, 13-17, 13-18
- Status code
 - ERROR
 - definition, *Batch and Queue*, 4-4
 - SEVERERROR
 - definition, *Batch and Queue*, 4-4
 - SUCCESS
 - definition, *Batch and Queue*, 4-4
 - WARNING
 - definition, *Batch and Queue*, 4-4
- Status code, binary value, *I/O Drivers*, 1-37
- Status Control Block
 - See SCB
- Status flags
 - common, *Command Language*, 7-74 to 7-75
 - task, *Command Language*, 7-57 to 7-59
- Status parameter (XEDRV)
 - IO.XCL function, *I/O Drivers*, 13-17
 - IO.XIN function, *I/O Drivers*, 13-10
 - IO.XRC function, *I/O Drivers*, 13-14
 - IO.XSC function, *I/O Drivers*, 13-7
 - IO.XTL function, *I/O Drivers*, 13-18
 - IO.XTM function, *I/O Drivers*, 13-11
- Status return
 - communication driver, *I/O Drivers*, 12-8
 - CRDRV, *I/O Drivers*, 11-3, 11-7
 - CTDRV, *I/O Drivers*, 9-4
 - DDDRV, *I/O Drivers*, 7-4

Status return (cont'd.)

- disk driver, *I/O Drivers*, 5-9
 - DTDRV, *I/O Drivers*, 6-4
 - FORTTRAN (ICDRV/ISDRV), *I/O Drivers*, 19-35
 - FORTTRAN, interface value list (UDDRV), *I/O Drivers*, 16-33
 - GRDRV, *I/O Drivers*, 21-3
 - half-duplex, *I/O Drivers*, 3-17
 - ICDRV/ISDRV, *I/O Drivers*, 19-12
 - IO.XCL function (XEDRV), *I/O Drivers*, 13-18
 - IO.XIN function (XEDRV), *I/O Drivers*, 13-11
 - IO.XRC function (XEDRV), *I/O Drivers*, 13-16
 - IO.XTL function (XEDRV), *I/O Drivers*, 13-18
 - IO.XTM function (XEDRV), *I/O Drivers*, 13-13
 - LPDRV, *I/O Drivers*, 10-4
 - LSDRV, *I/O Drivers*, 17-29
 - PPDRV/PRDRV, *I/O Drivers*, 18-3
 - receiver (LRDRV), *I/O Drivers*, 14-11
 - summary (ICDRV/ISDRV), *I/O Drivers*, 19-36
 - tape driver, *I/O Drivers*, 8-10
 - transmitter (LRDRV), *I/O Drivers*, 14-6
 - TTDRV, *I/O Drivers*, 2-63
 - UDDRV, *I/O Drivers*, 16-31
 - UNIBUS switch driver, *I/O Drivers*, 24-7
 - VTDRV, *I/O Drivers*, 4-7
 - word 1 (ICDRV/ISDRV), *I/O Drivers*, 19-36
 - XEDRV, *I/O Drivers*, 13-5
- Status word (F11ACP)
- FNB, *I/O Drivers*, C-7
- .STB file
- absolute region, *Task Builder*, 5-10
 - content, *Task Builder*, 5-6
 - excluding symbol, *Task Builder*, 12-22
 - for region, *Task Builder*, 5-4, 5-6
 - system-owned, *Task Builder*, 12-12
 - for user-owned region, *Task Builder*, 12-31
 - interaction of /CO/LI/PI switch, *Task Builder*, 5-4
 - LINK command, *Task Builder*, 1-6
 - program sections, *Task Builder*, 5-6

.STB file (cont'd.)

- reducing overhead, *Task Builder*, F-4
 - region
 - system-owned, *Task Builder*, 12-24
 - relocatable region, *Task Builder*, 5-10
 - supervisor mode library
 - system-owned, *Task Builder*, 12-37
 - user-owned, *Task Builder*, 12-33
 - symbol inclusion, *Task Builder*, 12-19
 - use of /CO/LI/PI switch, *Task Builder*, 5-6
 - /STB switch, CDA, 2-2, 2-10, 2-12
- Stcnta parameter
- device-specific
 - AFC11/AD01 converter, *I/O Drivers*, 15-3
 - device-specific function (UDDRV), *I/O Drivers*, 16-5
 - ICDRV/ISDRV, *I/O Drivers*, 19-11
 - IO.RBC function, *I/O Drivers*, 19-14
- STD, *Command Language*, 7-1 to 7-5
- See also *System Task Directory*
- /STD switch, CDA, 2-5, 2-8
- Step command
- See S command
- STIM\$ directive, *Executive*, 5-235
- \$STKDP, CDA, 4-2 *Debugging*, 8-3, 8-6, 9-1 *Writing I/O Driver*, 6-8, 6-11
- Stack Depth Indicator, *Writing I/O Driver*, 6-7
- STLO\$ directive, *Executive*, 5-238
- \$STMAP routine, *Writing I/O Driver*, 7-37
- calling from the driver, *Writing I/O Driver*, 7-3
- \$STMP1 routine, *Writing I/O Driver*, 7-38
- calling from the driver, *Writing I/O Driver*, 7-3
- STOP/ACCOUNTING
- Resource Accounting, *System Management*, 17-4
- STOP\$S directive, *Executive*, 5-240
- STOP/ABORT command, *Introduction*, 3-14

- Stop-bit synchronization, *Executive*, 2-12
 - directives, *Executive*, 2-13
- STOP command
 - Shadow Recording, *System Management*, 18-6
 - STOP/ABORT, *Command Language*, 4-96, 9-44
 - STOP/BLOCK, *Command Language*, 7-24 to 7-25, 9-44
 - STOP/PROCESSOR, *Command Language*, 9-45
 - STOP/QUEUE, *Command Language*, 9-45
 - STOP/QUEUE/MANAGER, *Command Language*, 9-45
- .STOP directive, *Indirect*, 2-84
- Stop directive, *Executive*, 5-240
- Stop for Logical OR of Event Flags directive, *Executive*, 5-238
- Stop for Single Event Flag directive, *Executive*, 5-241
- Stop I/O
 - in-progress request (LSDRV), *I/O Drivers*, 17-9
- Stop switch
 - card reader (CRDRV), *I/O Drivers*, 11-6
- Stop synchronous function (LSDRV), *I/O Drivers*, 17-22
- Storage
 - data, *RMS-11 Introduction*, 2-1
- Storage map, file header, *I/O Operations*, E-2
- \$STORE macro, *RMS-11 Macro*, 2-10
 - example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
- STPSWP: subroutine
 - stop sweep
 - K-series, *I/O Drivers*, 23-29
 - LADRV, *I/O Drivers*, 22-24
- %STR, *Error Logging*, 5-23, 5-24
- Stream, *RMS-11 Macro*, 4-2
 - See also Access stream
 - access, *RMS-11 Introduction*, 4-3
 - connecting
 - See CONNECT operation
 - disconnecting
 - See DISCONNECT operation
 - internal identifier
 - See ISI field in RAB
- Stream
 - writing buffers
 - See FLUSH operation
- Stream context
 - advancing to next volume
 - See NXTVOL operation
 - rewinding
 - See REWIND operation
- Stream operation, *RMS-11 Introduction*, 4-4 *RMS-11 User's Guide*, 1-15
 - See also Operation
 - block stream, *RMS-11 Macro*, 4-13
 - record stream, *RMS-11 Macro*, 4-8
- Stream operation macro, *RMS-11 Macro*, 1-2
 - declaring, *RMS-11 Macro*, C-3
- Stream record format, *RMS-11 Introduction*, 3-4 *RMS-11 User's Guide*, 1-11, 2-16
 - See also FB\$STM code in RFM field terminators, *RMS-11 Introduction*, 3-4 *RMS-11 User's Guide*, 2-16
- String
 - quoted, *Command Language*, 1-15
- String constant, *Indirect*, 2-24
- String conversion function, *Error Logging*, 5-19
- String expression, *Indirect*, 2-24
- String handling function, *Error Logging*, 5-23, 5-24
- String key, *RMS-11 User's Guide*, 6-3
 - See also XB\$STG mask in DTP field segmented, *RMS-11 User's Guide*, 6-7
- String symbol, *Indirect*, 2-9, 2-24
 - comparing, *Indirect*, 2-60
 - defining, *Indirect*, 2-38
 - setting, *Indirect*, 2-83
 - testing, *Indirect*, 2-61
- STRLEN symbol, *Indirect*, 2-16
- Structure
 - indexed files
 - conceptual, *RMS-11 User's Guide*, 5-4
 - physical, *RMS-11 User's Guide*, 5-2
 - relative files, *RMS-11 User's Guide*, 4-1
 - conceptual, *RMS-11 User's Guide*, 4-1
 - sequential files, *RMS-11 User's Guide*, 3-1
 - conceptual, *RMS-11 User's Guide*, 3-2

Structure

- sequential files (cont'd.)
 - physical, *RMS-11 User's Guide*, 3-1
- TKB
 - size, *Task Builder*, F-3
- STSE\$ directive, *Executive*, 5-241 I/O Drivers, 1-10
- STS field in FAB, *RMS-11 Macro*, 2-14, 3-5
 - CLOSE operation, *RMS-11 Macro*, 5-4
 - CREATE operation, *RMS-11 Macro*, 5-21
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - ENTER operation, *RMS-11 Macro*, 5-38
 - ERASE operation, *RMS-11 Macro*, 5-43
 - EXTEND operation, *RMS-11 Macro*, 5-47
 - offset, *RMS-11 Macro*, 6-22
 - OPEN operation, *RMS-11 Macro*, 5-82
 - PARSE operation, *RMS-11 Macro*, 5-89
 - REMOVE operation, *RMS-11 Macro*, 5-105
 - RENAME operation, *RMS-11 Macro*, 5-112
 - SEARCH operation, *RMS-11 Macro*, 5-118
 - summary, *RMS-11 Macro*, 6-64
- STS field in RAB, *RMS-11 Macro*, 2-14, 4-2
 - CONNECT operation, *RMS-11 Macro*, 5-8
 - DELETE operation, *RMS-11 Macro*, 5-26
 - DISCONNECT operation, *RMS-11 Macro*, 5-27
 - FIND operation, *RMS-11 Macro*, 5-50, 5-53, 5-55
 - FLUSH operation, *RMS-11 Macro*, 5-56
 - FREE operation, *RMS-11 Macro*, 5-58
 - GET operation, *RMS-11 Macro*, 5-62, 5-65, 5-68
 - NXTVOL operation, *RMS-11 Macro*, 5-70
 - offset, *RMS-11 Macro*, 6-115

STS field in RAB (cont'd.)

- PUT operation, *RMS-11 Macro*, 5-93, 5-97
- READ operation, *RMS-11 Macro*, 5-99, 5-101
- REWIND operation, *RMS-11 Macro*, 5-115
- SPACE operation, *RMS-11 Macro*, 5-120
- summary, *RMS-11 Macro*, 6-141
- TRUNCATE operation, *RMS-11 Macro*, 5-122
- UPDATE operation, *RMS-11 Macro*, 5-125
- WRITE operation, *RMS-11 Macro*, 5-128, 5-130
- STV field in FAB, *RMS-11 Macro*, 2-14, 3-5
 - CLOSE operation, *RMS-11 Macro*, 5-4
 - CREATE operation, *RMS-11 Macro*, 5-21
 - DISPLAY operation, *RMS-11 Macro*, 5-32
 - ENTER operation, *RMS-11 Macro*, 5-38
 - ERASE operation, *RMS-11 Macro*, 5-43
 - EXTEND operation, *RMS-11 Macro*, 5-47
 - offset, *RMS-11 Macro*, 6-22
 - OPEN operation, *RMS-11 Macro*, 5-82
 - PARSE operation, *RMS-11 Macro*, 5-89
 - REMOVE operation, *RMS-11 Macro*, 5-105
 - RENAME operation, *RMS-11 Macro*, 5-112
 - SEARCH operation, *RMS-11 Macro*, 5-118
 - summary, *RMS-11 Macro*, 6-65
- STV field in RAB, *RMS-11 Macro*, 2-14, 4-2
 - CONNECT operation, *RMS-11 Macro*, 5-8
 - DELETE operation, *RMS-11 Macro*, 5-26
 - DISCONNECT operation, *RMS-11 Macro*, 5-27
 - FIND operation, *RMS-11 Macro*, 5-50, 5-53, 5-55
 - FLUSH operation, *RMS-11 Macro*, 5-56

- STV field in RAB (cont'd.)
 - FREE operation, *RMS-11 Macro*, 5-58
 - GET operation, *RMS-11 Macro*, 5-62, 5-65, 5-68
 - NXTVOL operation, *RMS-11 Macro*, 5-70
 - offset, *RMS-11 Macro*, 6-115
 - PUT operation, *RMS-11 Macro*, 5-93, 5-97
 - READ operation, *RMS-11 Macro*, 5-99, 5-101
 - REWIND operation, *RMS-11 Macro*, 5-115
 - SPACE operation, *RMS-11 Macro*, 5-120
 - summary, *RMS-11 Macro*, 6-142
 - TRUNCATE operation, *RMS-11 Macro*, 5-122
 - UPDATE operation, *RMS-11 Macro*, 5-125
 - WRITE operation, *RMS-11 Macro*, 5-128, 5-130
- SU\$-family symbol
 - declaring, *RMS-11 Macro*, C-3
 - value, *RMS-11 Macro*, A-1
- Subconditional assembly, *MACRO-11*, 6-53, 6-54
- Subcontroller device, *Writing I/O Driver*, 1-13
 - block, *Writing I/O Driver*, 1-13
- Subexpression, parsing complex
 - command lines, *I/O Operations*, 7-19
- Subfunction (TTDRV)
 - allowed, *I/O Drivers*, 2-18
 - list
 - device-specific, *I/O Drivers*, 2-19
 - standard, *I/O Drivers*, 2-19
 - modifier, extended I/O, *I/O Drivers*, 2-25
- Subfunction bit
 - half-duplex, *I/O Drivers*, 3-8, 3-9, 3-10
 - TTDRV, *I/O Drivers*, 2-12
- /SUB keyword
 - SET command (MCR), *MCR*, 3-255
 - SET command (VMR), *System Management*, 10-76 to 10-77
- SUBMIT command, *Command Language*, 9-45 *Introduction*, 4-6
- Subpacket definition, *Error Logging*, 4-69
 - dispatch module, *Error Logging*, 4-69 to 4-71
 - DSP1M1, *Error Logging*, 4-72
 - DSP1P1, *Error Logging*, 4-72
 - DSP2M1, *Error Logging*, 4-73
 - DSP2P1, *Error Logging*, 4-73
 - DSP3M1, *Error Logging*, 4-73
 - DSP3P1, *Error Logging*, 4-73
 - DSP4M1, *Error Logging*, 4-74
 - DSP4P1, *Error Logging*, 4-74
 - DSP5M1, *Error Logging*, 4-74
 - DSP5P1, *Error Logging*, 4-74
 - DSP6M1, *Error Logging*, 4-74
 - DSP6P1, *Error Logging*, 4-74
 - DSP7M1, *Error Logging*, 4-75
 - DSP7P1, *Error Logging*, 4-75
- SUBPACKET statement, *Error Logging*, 5-29
- Subpartition
 - See also Partition
 - base address, *MCR*, 3-255
 - defining, *MCR*, 3-267
 - definition, *MCR*, 2-20
 - displaying, *MCR*, 3-256
 - eliminating, *MCR*, 3-256, 3-267
 - setting, *MCR*, 3-255
 - size, *MCR*, 3-255
 - task, *MCR*, 2-21
- Subroutine, *Introduction*, 5-8
 - calling, *Indirect*, 2-58
 - high-level language, *Executive*, 1-9
 - error conditions, *Executive*, 1-19
 - optional arguments, *Executive*, 1-10
 - specifying task names, *Executive*, 1-11
 - returning from, *Indirect*, 2-79
- Subroutine, synchronous (LSDRV), *I/O Drivers*, 17-10
- Subroutine linkage
 - standard (K-series), *I/O Drivers*, 23-31
 - standard MACRO-11 (LADRV), *I/O Drivers*, 22-27
- Subroutine linkage (K-series), *I/O Drivers*, 23-31
- SUBSTITUTE command EDT editor, *Introduction*, 2-15
- Substitution format control string, *Indirect*, 2-26

- Substitution mode
 - Indirect, *Indirect*, 1-3, 2-48
 - Introduction, 4-2
- Substring
 - searching, *Indirect*, 2-85
- Subtraction operator, *MACRO-11*, 3-2, 3-5
- Success
 - handler, *RMS-11 Macro*, 2-17
- Success return
 - LSDRV, *I/O Drivers*, 17-29
 - UDDRV, *I/O Drivers*, 16-31
- SUM block, *RMS-11 Introduction*, 4-8
 - chaining to FAB, *RMS-11 Macro*, 2-12
 - declaring, *RMS-11 Macro*, 2-8
 - initializing, *RMS-11 Macro*, 2-9
 - summary, *RMS-11 Macro*, 6-145
- .SUML1
 - reserved global symbol, *Task Builder*, E-2
- Summary listing
 - RMSBCK utility, *RMS-11 Utilities*, 6-10
 - RMSCNV utility, *RMS-11 Utilities*, 4-12
 - RMSRST utility, *RMS-11 Utilities*, 7-12
- Summary report
 - generated by PRINTSUMMARY, *System Management*, 4-49
 - IOX, *System Management*, 4-20
- SUMMARYTIME command
 - IOX, *System Management*, 4-62
- Summary XAB
 - See SUM block
- SUPERSEDE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-35
- /SUPERSEDE qualifier
 - BRU utility, *Utilities*, 7-21
- Supersession
 - See also FB\$SUP mask in FOP field
 - RMSBCK utility, *RMS-11 Utilities*, 6-7
 - RMSCNV utility, *RMS-11 Utilities*, 4-7, 4-13
 - RMSDEF utility, *RMS-11 Utilities*, A-7
 - RMSRST utility, *RMS-11 Utilities*, 7-8
- Supervisor Call directive, *Executive*, 5-183
- Supervisor library, *Debugging*, 1-4
 - install
 - READ/WRITE, *Debugging*, 1-4
- Supervisor mode, *Debugging*, 1-4, 3-2
 - Task Builder*, 2-23
 - command, *Debugging*, 2-12
 - debugging, *Debugging*, 1-4
 - library, *Task Builder*, 2-23
 - library routine, *Executive*, 3-1
 - calling, *Executive*, 5-183
 - mapping, *Task Builder*, 2-23, 2-24, 2-25
 - mode switching, *Task Builder*, 8-18
 - setting, *Debugging*, 2-12
 - stack, *Task Builder*, 8-19
- Supervisor mode library
 - See also Library
 - description, *Task Builder*, 8-1 to 8-21
 - SYSGEN question, *System Generation*, 3-24
- SUPLIB option, *Task Builder*, 12-37
 - supervisor mode library, *Task Builder*, 8-7, 8-9
 - use in CSM library, *Task Builder*, 8-9, 8-19
- Support
 - of ICS11 by ICDRV, *I/O Drivers*, 19-3
 - of ICS11 by UDDRV, *I/O Drivers*, 19-3
- Support routine
 - feature list (K-series), *I/O Drivers*, 23-3
 - generation (K-series), *I/O Drivers*, 23-4, 23-5
 - interface (K-series), *I/O Drivers*, 23-6
 - invoking (K-series), *I/O Drivers*, 23-31
 - MACRO-11 (LADRV), *I/O Drivers*, 22-26
 - program use (K-series), *I/O Drivers*, 23-5
 - use (K-series), *I/O Drivers*, 23-4
- Suspend directive, *Executive*, 5-209
- /SU switch
 - PIP utility, *Utilities*, 3-12
 - RMSBCK utility, *RMS-11 Utilities*, 6-7
 - RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-7, 4-13, 4-15

/SU switch (cont'd.)

RMSRST utility, *RMS-11 Utilities*, 7-8
SVDB\$ directive, *Executive*, 5-242
SVTK\$ directive, *Executive*, 5-244
Sw1 parameter
 device-specific function (VTDRV), *I/O Drivers*, 4-4
Sw2 parameter
 IO.STC function (VTDRV), *I/O Drivers*, 4-6
Sweep
 initiate A/D synchronous (K-series), *I/O Drivers*, 23-8
 stop (K-series), *I/O Drivers*, 23-29
Switch, *Indirect*, 2-27 MCR, 2-5
 See also individual switch entries
 See also Keyword
 analysis, *CDA*, 2-3 to 2-8
 argument, *MCR*, 2-6
 BAD utility, *Utilities*, 6-5
 BRU utility, *Utilities*, 7-12
 CMP utility, *Utilities*, 12-2
 conflict, *Task Builder*, 10-1
 CRF utility, *Utilities*, B-1
 cross-reference control, *MACRO-11*, 8-16, 8-17
 default
 modifying, *Task Builder*, F-7 to F-11
 description, *Task Builder*, 10-5 to 10-54
 designation, *Task Builder*, 10-1
 DMP utility, *Utilities*, 11-3
 DSC utility, *Utilities*, 8-9
 file specification, *MACRO-11*, 8-6, 8-7
 FLX utility, *Utilities*, 4-3
 FMT utility, *Utilities*, 5-7
 format, *MACRO-11*, 8-5, 8-6
 FTB supported, *Task Builder*, G-1
 function, *CDA*, 2-9 to 2-12
 function control, *MACRO-11*, 8-6, 8-7
 LBR utility, *Utilities*, 10-9
 listing control, *MACRO-11*, 8-6, 8-7
 macro library, *MACRO-11*, 8-6, 8-7
 modifying default, *Task Builder*, F-7 to F-11
 overriding, *Task Builder*, 10-1
 PAT utility, *Utilities*, 14-6
 PIP utility, *Utilities*, 3-14
 RMSBCK utility, *RMS-11 Utilities*, 6-4, 6-5

Switch (cont'd.)

RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-7
RMSDSP utility, *RMS-11 Utilities*, 5-3, 5-4
RMSIFL utility, *RMS-11 Utilities*, 3-3, 3-5
RMSRST utility, *RMS-11 Utilities*, 7-3, 7-5
SLP utility, *Utilities*, 13-14
summary, *Task Builder*, 10-2, 10-3, 10-4
 BAD, *Utilities*, A-12
 BRU, *Utilities*, A-13
 CMP, *Utilities*, A-22
 DMP, *Utilities*, A-20
 DSC, *Utilities*, A-16
 EDI, *Utilities*, A-1
 FLX, *Utilities*, A-9
 FMT, *Utilities*, A-11
 LBR, *Utilities*, A-18
 PAT, *Utilities*, A-24
 PIP, *Utilities*, A-5
 SLP, *Utilities*, A-23
 VFY, *Utilities*, A-17
 ZAP, *Utilities*, A-25
 syntax, *Task Builder*, 10-1
 VFY utility, *Utilities*, 9-4
 ZAP utility, *Utilities*, 15-2
SWITCH command, *System Management*, 15-27
Switching access modes, *RMS-11 Introduction*, 3-13
SWITCH REGISTER command, *MCR*, 1-8, 3-274
 examples, *MCR*, 3-274
 formats, *MCR*, 3-274
 keywords
 /CLE, *MCR*, 3-274
 /DIS, *MCR*, 3-274
 /SET, *MCR*, 3-274
 parameters, *MCR*, 3-274
Switch State directive, *Executive*, 5-246
Switch switch, *Error Logging*, 2-4, 2-8
 Delete subswitch, *Error Logging*, 2-4, 2-9
 New version subswitch, *Error Logging*, 2-4, 2-9
/SWPC keyword
 SET command (*MCR*), *MCR*, 3-256
 SET command (*VMR*), *System Management*, 10-77

/SWPR keyword
 SET command (VMR), *System Management*, 10-77

SWR
 See SWITCH REGISTER command

SWST\$ directive, *Executive*, 5-246

/SW switch, *Error Logging*, 2-4, 2-8

SY:, *Command Language*, 5-7 MCR, 2-4, 2-7, 2-11, 3-79, 3-212

user device logical, MCR, 3-21

SYDISK symbol, *Indirect*, 2-21

Symbol, *Indirect*, 1-3 RMS-11

Introduction, 4-7

affecting search, *Task Builder*, 2-7

code and mask, RMS-11

Introduction, 4-7

control directive, MACRO-11, 6-48, 6-49

cross-reference, *Program Development*, 3-7, 3-8

cross-reference listing, *Task Builder*, 10-12, 11-23, 11-24

control of, MACRO-11, 6-22

declaration flag byte, *Task Builder*, A-7

defining, *Indirect*, 2-4

definition

- ambiguous, *Task Builder*, 3-41
- including in SYSLIB.OLB (UDDRV), *I/O Drivers*, 16-12
- local (half-duplex), *I/O Drivers*, 3-13
- SYSLIB.OLB, *Task Builder*, 2-7

deleting definition, *Indirect*, 2-52

directory record

- declare global, *Task Builder*, A-2
- end of global, *Task Builder*, A-11
- internal, *Task Builder*, A-24

displaying, *Indirect*, 2-96

field-offset, RMS-11 *Introduction*, 4-7

full search in overlays

- specifying, *Task Builder*, 10-19, 11-33

global, *Introduction*, 5-5, 5-9

- MACRO-11, 1-2 *Program Development*, 1-5
- address of ODT SST routine, *Task Builder*, 12-26
- ambiguously defined in overlay, *Task Builder*, 3-16

Symbol

global (cont'd.)

- autoloadable segment, *Task Builder*, 4-7
- cross-reference listing, *Task Builder*, 10-12, 10-13, 11-23, 11-24
- declaring definition in task, *Task Builder*, 12-18
- default library resolution, *Task Builder*, 3-18
- definition, MACRO-11, 3-8, 6-49
- directory record, *Task Builder*, A-2
- format, *Task Builder*, A-4
- end of directory record, *Task Builder*, A-11
- entry point, *Program Development*, 1-4
- excluding in task, *Task Builder*, 12-22
- from the default library, *Task Builder*, 3-18
- internal, *Task Builder*, A-28
- multiply defined, *Task Builder*, 3-16
- name, *Task Builder*, A-6
- name entry, *Task Builder*, A-6
- overlaid region .STB file, *Task Builder*, 5-13, 5-14
- overlay search sequence, *Task Builder*, 3-17
- resolution, *Program Development*, 1-4, 1-5, 4-2 *Task Builder*, 3-16, 3-17
- cotree, *Task Builder*, 3-17
- resolution in multisegment task, *Task Builder*, 3-16
- search sequence in overlay, *Task Builder*, 3-16
- task inclusion, *Task Builder*, 12-19

internal

- autoloadable library, *Task Builder*, A-26, A-27
- end-of-module record format, *Task Builder*, A-32
- global, *Task Builder*, A-28
- line-number, *Task Builder*, A-29, A-30
- literal record, *Task Builder*, A-30

Symbol

- internal (cont'd.)
 - format, *Task Builder*, A-32
- module name, *Task Builder*, A-27, A-28
- name, *Task Builder*, A-30
 - format, *Task Builder*, A-32
 - item, *Task Builder*, A-30, A-31
- name entry, *Task Builder*, A-5
- overall format, *Task Builder*, A-24, A-25
- PC correlation, *Task Builder*, A-29, A-30
- program section item, *Task Builder*, A-29
- record, *Task Builder*, A-30
- relocatable/relocated, *Task Builder*, A-27
- start-of-segment, *Task Builder*, A-25, A-26
- task identification, *Task Builder*, A-26
- TKB generated, *Task Builder*, A-25
- local, *Introduction*, 5-5 *Program Development*, 1-4, 1-5, 2-7, 2-8
 - defining (TTDRV), *I/O Drivers*, 2-33
 - definition, *Program Development*, 2-7, 2-8
 - obtaining, *I/O Drivers*, 1-7
- macro
 - definition, *Program Development*, 1-4, 1-10, 2-7, 6-4
- MACRO-11 evaluation, *Program Development*, 1-4, 3-1, 3-2
- marking undefined reference, MACRO-11, 6-21
- name, *Indirect*, 2-9
- number of processed for
 - performance, *Task Builder*, F-3
- reserved, MACRO-11, 2-3, 3-1
- resolution
 - global, *Task Builder*, 2-7, 2-8
 - global in cotree, *Task Builder*, 3-17
 - multisegment task, *Task Builder*, 3-17
- search
 - selective, *Task Builder*, 10-48, 10-49, 10-50, 11-61, 11-62, 11-63

Symbol (cont'd.)

- substituting, *Indirect*, 2-25
- table, *Indirect*, 2-4, 2-25 MACRO-11, 1-1, 1-2
 - search order, MACRO-11, 3-7
- TKB, *Command Language*, 6-8
- TKB reserved, *Task Builder*, E-1 to E-4
- type, *Indirect*, 2-9
 - defining, *Indirect*, 2-9
 - logical, *Indirect*, 2-9
 - numeric, *Indirect*, 2-9
 - string, *Indirect*, 2-9
- undefined, MACRO-11, 3-8
 - global, *Task Builder*, 2-7
- user-defined, MACRO-11, 3-6, 3-7, 3-8
- using, *Indirect*, 2-9
- /SYMBOL_TABLE qualifier, *Task Builder*, 11-70
 - designation, *Task Builder*, 11-2
- Symbol-declaration macro, RMS-11 Macro, 2-2
- Symbol Definition File
 - /IM switch, *System Management*, 10-2
 - relationship to system image file, *System Management*, 10-1
 - specifying, *System Management*, 10-2
 - VMR requirements, *System Management*, 10-1
- Symbol definition file
 - See .STB file
- Symbolic offset, *Executive*, 1-7
- Symbolic offsets, *Writing I/O Driver*, A-1
 - usage, *Writing I/O Driver*, 4-2
- SYMBOLS argument, MACRO-11, 8-11
- SYM symbolic argument, MACRO-11, 6-12
- SYMTYP symbol, *Indirect*, 2-16
- SYN argument to RAB\$B macro, RMS-11 Macro, 2-8
- RSTS/E, RMS-11 Macro, D-4
- Sync character (communication driver), *I/O Drivers*, 12-8
 - specifying, *I/O Drivers*, 12-8
- Synchronous
 - D/A sweep (K-series), *I/O Drivers*, 23-14
 - digital input sweep
 - K-series, *I/O Drivers*, 23-17

Synchronous
 digital input sweep (cont'd.)
 LSDRV, *I/O Drivers*, 17-15
 digital output sweep (K-series), *I/O Drivers*, 23-19
 process control
 ICDRV/ISDRV, *I/O Drivers*, 19-35
 UDDRV, *I/O Drivers*, 16-15
 subroutine (LSDRV), *I/O Drivers*, 17-10
 trap, *I/O Drivers*, 1-10
Synchronous operation, RMS-11
 Introduction, 4-4
 See also RB\$ASY mask in ROP field
Synchronous system trap
 See SST
/SYNC keyword
 INSTALL command (MCR), *MCR*, 3-121
 INSTALL command (VMR), *System Management*, 10-27
Syn parameter
 device-specific (communication driver), *I/O Drivers*, 12-6
Syntax, *Introduction*, 1-12
 element, defining, *I/O Operations*, 7-2
 error
 See Q error
 LINK command line, *Task Builder*, 11-1, 11-2
 rule
 summary, *Task Builder*, 1-16 to 1-19
 state table, *I/O Operations*, 7-7
Syntax elements
 attributes, *System Management*, 12-26
SYS\$LOGIN
 user directory logical, *MCR*, 3-21
SYSDEV symbol, *Indirect*, 2-21
SYSGEN
 See also Pregenerated kit
 abnormal exit, *System Generation*, 3-6
 adding a device section, *System Generation*, 4-8
 Assembling the Executive and Drivers section, *System Generation*, 3-67 to 3-68
 autoconfigure, *System Generation*, 3-6

SYSGEN (cont'd.)
 baseline system, *System Generation*, 3-12
 Building the Executive and Drivers section, *System Generation*, 3-69 to 3-70
 Building the Nonprivileged Tasks section, *System Generation*, 3-73 to 3-76
 Building the Privileged Tasks section, *System Generation*, 3-71 to 3-72
 Changing system without, *System Generation*, 4-7
 Choosing Executive Options section, *System Generation*, 3-21 to 3-33
 Choosing Peripheral Configuration section, *System Generation*, 3-34 to 3-66
 Choosing SYSGEN Options section, *System Generation*, 3-16 to 3-20
 Creating Image File section, *System Generation*, 3-77 to 3-78
 definition, *System Generation*, 1-4
 error message, *System Generation*, 3-3
 error recovery, *System Generation*, 3-3
 example, *System Generation*, D-2 to D-52
 features, *System Generation*, 1-4
 help paragraph, *System Generation*, 3-3
 invoking, *System Generation*, 3-13
 making changes, *System Generation*, 3-4
 media requirement, *System Generation*, 2-2
 moving old system
 SYSGEN question, *System Generation*, 3-69
 preparation, *System Generation*, 2-1
 processor support on RSX-11M-PLUS, *System Generation*, 3-21
 question
 format, *System Generation*, 3-1
 sections, *System Generation*, 3-14
 restarting, *System Generation*, 3-20
 saved answer file, *System Generation*, 3-5
 sections, *System Generation*, 1-5 to 1-7

SYSGEN
 system
 setting up, *System Generation*, 4-3 to 4-6
 system generation, compared to, *System Generation*, 1-1
 terminal support
 SYSGEN question, *System Generation*, 3-56
 terms defined, *System Generation*, 1-7 to 1-14
 SYSGEN question
 default response, *System Generation*, 3-2
 example, *System Generation*, 3-2
 number format, *System Generation*, 3-1
 prompt format, *System Generation*, 3-1
 SYSID symbol, *Indirect*, 2-21
 SYSLIB
 including contribution in map, *Task Builder*, 10-26
 linking to
 by supervisor mode library, *Task Builder*, 8-2, 8-18
 supervisor mode library, *Task Builder*, 8-9, 8-10, 8-11, 8-14 to 8-17
 replacing as default, *Task Builder*, 10-23, 11-39
 SYSLIB.OLB, *Program Development*, 1-11
 for symbol definition, *Task Builder*, 2-7
 SYSLOGIN.CMD
 on pregenerated kit, *System Generation*, 5-34
 SYSLOGOUT.CMD
 on pregenerated kit, *System Generation*, 5-36
 /-SYS switch, CDA, 2-5, 2-8
 SYSTB.MAC file, *Writing I/O Driver*, 1-18
 System
 bootstrapping, MCR, 3-35
 restrictions, MCR, 3-36
 unsaved, MCR, 3-36
 with XDT, MCR, 3-36
 valid device, MCR, 3-35
 checkpoint file, MCR, 3-11
 data structures
 abort codes, *Writing I/O Driver*, A-3

System
 data structures (cont'd.)
 macro definitions, *Writing I/O Driver*, A-1 to A-71
 device, CDA, 1-5
 default, MCR, 3-79
 switches, CDA, 2-6
 directive, *Program Development*, 1-9, 1-10
 directory, MCR, 3-182
 displaying parameters, *Command Language*, 8-8 to 8-10
 host and target, *Task Builder*, C-1, C-2
 I/O data base
 main thread through, *Writing I/O Driver*, 2-1, 2-3
 identification, MCR, 3-79
 information, CDA, 3-1
 switch
 See /-SYS switch
 information dump, CDA, 1-8
 library
 contributions (in map), *Program Development*, 4-7
 macro (RSXMAC.SML), *Program Development*, 1-5, 1-9, 1-10
 contents, *Program Development*, 1-9
 search, *Program Development*, 1-5, 1-10, 2-7
 object (SYSLIB.OLB), *Program Development*, 1-11
 contents, *Program Development*, 1-11
 search, *Program Development*, 1-11, 4-2
 logical assignment, MCR, 3-20
 macro call, *Writing I/O Driver*, 4-5
 macro library, MACRO-11, 1-1
 See also .MCALL directive
 maintenance commands, MCR, 1-8
 mapped, MCR, 2-20, 3-164
 Task Builder, 2-14
 physical and virtual space, *Task Builder*, 2-14
 task relocation, *Task Builder*, 2-16
 UIC, MCR, 3-257
 name
 SYSGEN question, *System Generation*, 3-26

System (cont'd.)

- object library, *I/O Drivers*, 1-37
- object module library, *I/O Drivers*, 1-8 *Task Builder*, 2-7
 - See also *Library*
 - See also *SYSLIB.OLB*
- option
 - feature symbols, *Executive*, 5-86
 - testing, *Executive*, 5-86
- overhead (TTDRV)
 - IO.RPR, *I/O Drivers*, 2-40
 - TF.RPR, *I/O Drivers*, 2-14, 2-27
- parameter
 - changing after SYSGEN, *System Generation*, 4-8
- performance
 - stall I/O (disk driver), *I/O Drivers*, 5-13
- pool
 - dump, *CDA*, 3-45
 - switch
 - See */POOL switch*
- powerfail
 - recovery (UNIBUS switch driver), *I/O Drivers*, 24-6
- putting more than one on same volume, *System Generation*, 4-10 to 4-12
- required files, *System Generation*, 4-3
- requirements, *CDA*, 1-1
- saved
 - installing task, *MCR*, 3-116
- setting parameters, *Command Language*, 8-5 to 8-7
- setup
 - after SYSGEN, *System Generation*, 4-3 to 4-6
- stack, *Writing I/O Driver*, 6-11
- target
 - memory management, *Task Builder*, 10-27, 11-50
- task, *Program Development*, 1-1
- spawning, *Executive*, 4-5
- time
 - setting, *Executive*, 5-235
- trap, *Executive*, 2-5
- UIC, *MCR*, 2-3
- unmapped, *MCR*, 2-20, 2-21 *Task Builder*, 2-13, 2-14
- UIC, *MCR*, 3-257

System

- unsaved
 - installing task, *MCR*, 3-116
- /SYSTEM_LIBRARY_DISPLAY*
 - qualifier, *Task Builder*, 11-71
- System Account Block, *System Management*, 17-3, 17-24 *Writing I/O Driver*, A-5
- System clock
 - SYSGEN question, *System Generation*, 3-33
- System common, *CDA*, 3-6
 - active task, *CDA*, 3-6
 - alphabetized dump, *CDA*, 3-1, 3-9
 - boot device, *CDA*, 3-6
 - dump, *CDA*, 3-1, 3-9 to 3-14
 - stack depth indicator, *CDA*, 4-2
 - labels, *CDA*, 3-9 to 3-14
 - network UIC, *CDA*, 3-6
 - partition address, *CDA*, 3-6
 - stack depth, *CDA*, 3-6
 - system size, *CDA*, 3-6
 - TCB address, *CDA*, 3-6
 - UIC, *CDA*, 3-6
- System-controlled partition, *System Management*, 14-1
 - conventions, *System Management*, 14-2
 - definition, *System Management*, 14-2
 - extending memory for task, *Task Builder*, 12-16
 - fragmentation
 - causes of, *System Management*, 14-3
 - subpartitions of, *System Management*, 14-2
 - waiting tasks, *System Management*, 14-2
- System device
 - states, *System Management*, 15-2
- System directory, *Command Language*, 7-28 to 7-32, 8-10
- System disk
 - RMSBCK utility, *RMS-11 Utilities*, 6-1
 - RMSRST utility, *RMS-11 Utilities*, 7-1
- System faults, *System Management*, 15-29, 15-31
- System file names
 - conventions, *System Management*, B-4

- System file types, *System Management*, B-5t to B-6t
- System generation
 - and CDA, CDA, 1-1
 - definition, *System Generation*, 1-1
 - example, *System Generation*, D-2 to D-52
 - feature (half-duplex), *I/O Drivers*, 3-28
 - flow, *System Generation*, 1-2 to 1-4
 - glossary, *System Generation*, 1-7 to 1-14
 - incorporating a driver, *Writing I/O Driver*, 5-1
 - option (TTDRV), *I/O Drivers*, 2-17, 2-77
- System image
 - description of, *System Generation*, 5-5
 - file, *System Generation*, 3-77
 - location, MCR, 3-187
 - saving, MCR, 3-187
 - devices, MCR, 3-187
 - size, MCR, 3-187
 - transporting, MCR, 3-36, 3-190
- System Image File
 - assigning SY: and LB:, *System Management*, 10-1
 - bootstrap, *System Management*, 10-1
 - creating, *System Management*, 10-18
 - relationship to symbol definition file, *System Management*, 10-1
 - size, *System Management*, 10-18
 - VMR prompt, *System Management*, 10-3
- /SYSTEM keyword
 - ASSIGN command (VMR), *System Management*, 10-10
- System Macro Library, *Executive*, 1-5
 - I/O Drivers*, 1-4
- System reconfiguration, *System Management*, 15-1
- System recovery, *System Management*, 15-31
 - methods, *System Management*, 15-31
- SYSTEM SERVICE MESSAGE
 - command, *Error Logging*, 1-3
 - MCR, 1-8, 3-273
 - example, MCR, 3-273
 - format, MCR, 3-273

- System-state
 - register convention, *Writing I/O Driver*, 7-1
- System statistics
 - Resource Accounting, *System Management*, 17-5
- System status
 - displaying, *Command Language*, 8-15 to 8-18
- SYSTEM symbol, *Indirect*, 2-16
- System Task Directory, MCR, 1-5, 3-116, 3-182, 3-189
 - System Management*, 10-31
 - See also STD
 - dump, CDA, 3-44
 - installing task, MCR, 2-23, 3-179
 - removing task, MCR, 3-175
 - switch
 - See /STD switch
- System Time Change Transaction
 - Block, *System Management*, 17-29
- System UFDs, *System Management*, B-3t to B-4t
 - example, *System Management*, B-3
- System users
 - displaying, *Command Language*, 8-13 to 8-14
- /SYSUIC keyword
 - SET command (MCR), MCR, 3-257
 - SET command (VMR), *System Management*, 10-77
- SYSUIC symbol, *Indirect*, 2-21
- SYSVMR.CMD
 - definition, *System Generation*, 3-77
- SYTYP symbol, *Indirect*, 2-21
- SYUNIT symbol, *Indirect*, 2-16
- /SZ switch
 - LBR utility, *Utilities*, 10-30

T

- T-bit trace trap, *Task Builder*, 10-51, 11-75
- TA11 cassette
 - SYSGEN question, *System Generation*, 3-47
- TA11 tape cassette, *I/O Drivers*, 9-1
- TAB, *Writing I/O Driver*, A-5
 - Resource Accounting, *System Management*, 17-11
- Tab, *Command Language*, 3-24
 - ignoring in command line, *I/O Operations*, 7-8
 - vertical, *Command Language*, 3-24

- Tab character
 - half-duplex, *I/O Drivers*, 3-15
 - TTDRV, *I/O Drivers*, 2-69
 - vertical, *I/O Drivers*, 2-69
- TAB key, *Introduction*, 5-8
- Table
 - definition, *Error Logging*, 5-36
 - RPT use, *Error Logging*, 5-36
 - storage, *Task Builder*, F-2 to F-7
 - memory
 - improving performance, *Task Builder*, F-2
- Table Driven Parse
 - See TPARS
- Table of contents
 - sample listing, *MACRO-11*, 6-16
 - text generation, *MACRO-11*, 6-15
- Table parameter (TTDRV)
 - general, *I/O Drivers*, 2-11
 - IO.RTT function, *I/O Drivers*, 2-46
- TABLE statement, *Error Logging*, 5-37
- TAB ON/OFF command
 - EDI utility, *Utilities*, 2-46
- TAL
 - See TASKLIST-ATL command
- /TAL switch, *CDA*, 2-5, 2-8
- Tape
 - See also ANSI magnetic tape
 - See also Medium
 - ANSI file structure, *I/O Operations*, 5-1
 - backing up
 - BRU utility, *Utilities*, 7-1
 - comparing
 - DSC utility, *Utilities*, 8-14
 - control task, *I/O Operations*, G-11
 - conventional backup
 - BRU utility, *Utilities*, 7-4
 - copying
 - BRU utility, *Utilities*, 7-1
 - data format, *I/O Operations*, 1-7
 - density, *I/O Drivers*, 8-9
 - end-of-file label, *I/O Operations*, G-9
 - end-of-volume label, *I/O Operations*, G-8
 - file processing, *I/O Operations*, 5-4
 - fixed length records, *I/O Operations*, 1-7
 - formatting
 - FLX utility, *Utilities*, 4-4
 - full backup
 - BRU utility, *Utilities*, 7-3

- Tape (cont'd.)
 - logical EOT (CTDRV), *I/O Drivers*, 9-8
 - mounting
 - BRU utility, *Utilities*, 7-2
 - nolabel, block size (tape driver), *I/O Drivers*, 8-18
 - owner ID field, *I/O Operations*, G-2
 - position (DDDRV), *I/O Drivers*, 7-4
 - position, file open, *I/O Operations*, 2-16
 - positioning, *I/O Operations*, G-17
 - position to next file, *I/O Operations*, 5-5
 - power fail, *I/O Drivers*, 1-43
 - processing example, *I/O Operations*, 5-8
 - read, indirect command file, *I/O Operations*, G-19
 - record format, *I/O Operations*, 5-4
 - restoring
 - BRU utility, *Utilities*, 7-1
 - selective backup
 - BRU utility, *Utilities*, 7-3
 - setting block size
 - PIP utility, *Utilities*, 3-15
 - structure (CTDRV), *I/O Drivers*, 9-6
 - transferring data
 - DSC utility, *Utilities*, 8-26
 - translation, *I/O Operations*, G-17
 - unlabeled, *I/O Operations*, G-16
 - block size, *I/O Operations*, G-16
 - user file label, *I/O Operations*, G-9
 - user volume label, *I/O Operations*, G-3
 - variable length record, *I/O Operations*, 1-7
 - verifying
 - VFY utility, *Utilities*, 9-1
 - volume access, *I/O Operations*, 5-5
 - volume label, *I/O Operations*, G-1
- /TAPE_LABEL qualifier
 - BRU utility, *Utilities*, 7-21
- Tape density switch
 - See /DENS switch
- Tape driver, *I/O Drivers*, 8-1
 - consecutive tape mark, *I/O Drivers*, 8-17
 - device characteristic, *I/O Drivers*, 8-3
 - programming hint, *I/O Drivers*, 8-15

Tape driver (cont'd.)
 resetting transport status, *I/O Drivers*, 8-17

Tape file
 attributes, specifying, *I/O Operations*, G-17
 header block, *I/O Operations*, G-10
 header label, *I/O Operations*, G-3
 header label (HDR1), *I/O Operations*, G-4
 header label (HDR2), *I/O Operations*, G-5
 header label (HDR3), *I/O Operations*, G-6
 identifier processing, *I/O Operations*, G-7
 label, *I/O Operations*, G-1
 structure, *I/O Operations*, G-9

Tape handling
 end-of-tape, *I/O Operations*, G-10

Tape mark, *RMS-11 Introduction*, 2-5

Tape Mass Storage Control Protocol
 See TMSCP

Tape standard, ANSI, *I/O Operations*, G-1

TARGET attribute
 RMSDES utility, *RMS-11 Utilities*, 2-30

Target system, *Task Builder*, C-1 to C-5
 definition, *System Generation*, 1-13
 description, *Task Builder*, C-1, C-2
 disk
 definition, *System Generation*, 2-2
 types, *System Generation*, 2-2
 transferring
 example, *Task Builder*, C-3 to C-5
 task, *Task Builder*, C-1
 to host, *Task Builder*, C-2

TAS
 See TASKLIST command

Task, *Command Language*, 7-1
 Introduction, 5-1, 5-2
 abort, *Program Development*, 4-8
 aborted, MCR, 3-283
 aborting, *Command Language*, 7-17 to 7-20 *Executive*, 5-8, 5-224
 MCR, 2-24, 3-3
 CRDRV, *I/O Drivers*, 11-10
 DTDRV, *I/O Drivers*, 6-8
 LPDRV, *I/O Drivers*, 10-7
 tape driver, *I/O Drivers*, 8-16

Task
 aborting (cont'd.)
 VT11/GRDRV, *I/O Drivers*, 21-4

access
 system-owned common or library, *Task Builder*, 12-12, 12-24
 system-owned supervisor mode library, *Task Builder*, 12-37
 user-owned common, *Task Builder*, 12-30
 user-owned library, *Task Builder*, 12-30
 user-owned supervisor mode library, *Task Builder*, 12-33

accessing, MCR, 3-122

access rights, MCR, 2-20

access to commons, *System Management*, 10-25

activating, *Executive*, 5-167

activating, unsolicited interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-24

active, *Command Language*, 7-1 to 7-2 *Introduction*, 6-5 MCR, 1-5, 2-23, 3-14, 3-76
 displaying, *Command Language*, 7-55 to 7-60 MCR, 3-31
 dynamic display, *Command Language*, 7-64 to 7-68
 list, MCR, 3-31

active file
 declaring number, *Task Builder*, 12-7

additional memory, *Task Builder*, 12-16

address
 accessing, MCR, 3-166
 space
 allocating, MCR, 3-183
 windows
 declaring additional, *Task Builder*, 12-45

addressing, *Executive*, 3-1

after exit, *System Management*, 10-92

Ancillary Control Processor
 specifying, *Task Builder*, 10-5, 11-11

assigning physical device to LUN, *Task Builder*, 12-8

Task (cont'd.)

- attached, *MCR*, 1-3, 2-15, 2-19
- attaching slave attribute, *Task Builder*, 10-45, 11-68
- attributes
 - list of, *Task Builder*, 10-37, 11-41 to 11-49
- blocked, *I/O Drivers*, 1-10 *MCR*, 2-21, 3-283
 - priority, *MCR*, 3-34
- blocking, *Command Language*, 7-24 to 7-25 *Executive*, 5-270, 5-272
- breakpoints
 - setting, *Program Development*, 5-6
- building, *MCR*, 3-123 *Program Development*, 4-1, 7-6
 - command line, *Task Builder*, 1-2
 - default partition, *MCR*, 3-119
 - device driver, *MCR*, 3-134
 - for target system, *Task Builder*, C-1
 - header, *MCR*, 3-123
 - name, *MCR*, 3-121
- building time, *Task Builder*, F-2
- canceling, *MCR*, 3-45
- canceling time-synchronized requests, *Executive*, 5-60
- catchall, *MCR*, 3-179
- chaining, *Executive*, 4-2, 5-195
- changing
 - priority, *Executive*, 5-13
 - size, *Executive*, 5-84
 - state, *Executive*, 1-22, 1-24
- changing name, *Task Builder*, 12-38
- checkpoint (VTDRV), *I/O Drivers*, 4-5
- checkpointability
 - disabling, *Executive*, 5-66
 - enabling, *Executive*, 5-77
- checkpointable, *System Management*, 10-18 *Task Builder*, 10-6
 - specifying, *Task Builder*, 10-6, 10-10, 11-13, 11-14
- checkpointing, *MCR*, 2-20, 3-33, 3-75, 3-117, 3-118, 3-182 *System Management*, 10-22, 10-28 *Writing I/O Driver*, 1-14
- CLI
 - removing, *MCR*, 3-175
- common
 - fixing, *MCR*, 3-75
 - installing, *MCR*, 3-120, 3-184

Task

- common (cont'd.)
 - unfixing, *MCR*, 3-284
- common region
 - mapping count, *MCR*, 3-46
 - synchronizing, *MCR*, 3-121
- comparison
 - conventional and I- and D-space, *Task Builder*, 7-2
- completion routine, *Task Builder*, 12-11
- connecting, *Executive*, 4-1, 5-192, 5-265
- continuing, *Command Language*, 7-21 to 7-22
- control commands, *MCR*, 1-7
- conventional
 - autoload vector, *Task Builder*, B-17
 - disk image, *Task Builder*, 7-5
 - mapping compared to I- and D-space task, *Task Builder*, 7-2
- correcting, *Program Development*, 4-9
- CPU affinity
 - removing, *Executive*, 5-162
- creating, *MCR*, 2-21
 - dynamic region, *Task Builder*, 5-40 to 5-44
 - multiuser, *Task Builder*, 10-29, 11-67
- data
 - needed by system to install, *Task Builder*, B-1
 - task image, *Task Builder*, B-4, B-5, B-6
- debugging, *Executive*, 5-242 *MCR*, 3-58 *Program Development*, 4-9, 7-7, 7-8, 7-9
- declaring
 - execution priority, *Task Builder*, 12-29
 - maximum stack size, *Task Builder*, 12-36
 - number of LUNs, *Task Builder*, 12-41
 - object-level patch, *Task Builder*, 12-6
 - ODT SST vector, *Task Builder*, 12-26
- decrementing I/O count, *Writing I/O Driver*, 1-14

Task (cont'd.)

- default conditions, *Program Development*, 4-4, 4-5, 4-7, 4-8
- definition, *MCR*, 2-19
- delaying, *Executive*, 5-125
- detaching from region, *Executive*, 5-67
- device independence, *MCR*, 2-12
- disable offspring (VTDRV), *I/O Drivers*, 4-5
- disk image, *Task Builder*, 2-8
- displaying, *MCR*, 3-275
- dormant, *Command Language*, 7-1
Introduction, 6-5 *MCR*, 2-23, 3-116
- D-space
 - overlay structure, *Task Builder*, 3-22
- dynamic memory, *MCR*, 3-183
- enabling
 - Postmortem Dump, *Task Builder*, 10-32, 11-54
 - T-bit trace trapping, *Task Builder*, 10-51, 11-75
- event driven, *I/O Drivers*, 1-11
- event flags, *MCR*, 3-77
- executing, *Command Language*, 7-5 to 7-16 *MCR*, 3-116
 - in parallel, *Indirect*, 2-95
 - resources, *MCR*, 3-117
- execution termination, *System Management*, 4-24
- exiting, *MCR*, 1-5
- exiting, CTRL/Z (TTDRV), *I/O Drivers*, 2-70
- exiting with status, *Executive*, 5-82
- extending, *MCR*, 3-118
 - memory, *Task Builder*, 12-16
 - program section, *Task Builder*, 12-15
 - to partition length, *Task Builder*, 12-16
- extension size, *System Management*, 10-24
- external header
 - specifying, *Task Builder*, 10-53, 11-31
- file
 - LINK command, *Task Builder*, 1-5
- file identification, *System Management*, 10-32

Task (cont'd.)

- fixed, *Debugging*, 5-6, 9-2 *System Management*, 10-18
- fixing, *Command Language*, 7-41 to 7-42
- fixing in memory, *MCR*, 3-75
 - restrictions, *MCR*, 3-75
- floating point processor in
 - specifying, *Task Builder*, 10-18, 11-17
- format buffer
 - declaring length, *Task Builder*, 12-17
- frequency of accessing data areas, *Writing I/O Driver*, 1-15
- getting parameters, *Executive*, 5-119
- global relative patch
 - declaring, *Task Builder*, 12-20
- global symbol
 - excluding, *Task Builder*, 12-22
 - including, *Task Builder*, 12-19
- global symbol definition
 - declaring, *Task Builder*, 12-18
- global symbol reference
 - declaring, *Task Builder*, 12-21
- header, *Task Builder*, 2-8, 2-9
 - allocating additional checkpoint space, *Task Builder*, 10-6, 11-14
 - checkpoint area within, *Task Builder*, B-9
 - controlling creation, *Task Builder*, 10-20, 11-35
 - external, *MCR*, 3-122
 - fixed part, *Task Builder*, B-11, B-12
 - I- and D-space, *Task Builder*, 7-10
 - installing, *MCR*, 3-122
 - options, *MCR*, 3-123
 - space for EAE context, *Task Builder*, 10-16, 11-16
 - space for floating-point context, *Task Builder*, 10-18, 11-17
 - variable part, *Task Builder*, B-12
- host to target system
 - transferring
 - example, *Task Builder*, C-3 to C-5
- I- and D-space, *Task Builder*, 2-27
 - autoload vector, *Task Builder*, 7-8, B-17, B-18

Task

I- and D-space (cont'd.)

- description, *Task Builder*, 7-1 to 7-15
 - differing from conventional task, *Task Builder*, 2-27
 - manual load calling sequence, *Task Builder*, 4-8, 4-9, 4-11
 - map, *Task Builder*, 7-8
 - mapping, *Task Builder*, 7-3, 7-4
 - compared with conventional mapping, *Task Builder*, 7-2
 - mapping summary, *Task Builder*, 7-2
 - memory allocation, *Task Builder*, 7-8, 7-9, 7-10
 - overlaid, *Task Builder*, 7-5
 - overlay region vector, *Task Builder*, 5-13, 5-14
 - overlay structure, *Task Builder*, 3-21, 3-22
 - program section in overlay, *Task Builder*, 7-5, 7-6
 - simplified mapping, *Task Builder*, 2-28
 - specifying, *Task Builder*, 10-21, 11-15
 - .STB file, *Task Builder*, 7-8
 - up-tree segment, *Task Builder*, 3-22
- ### identification
- for I- and D-space, *Task Builder*, 7-1
- ### identification change, *Task Builder*, 12-23
- ### identifying partition, *Task Builder*, 12-27
- ### image, *Introduction*, 5-3 *Program Development*, 1-6, 4-1, 7-6 *Task Builder*, B-1, B-14
- creating, *Program Development*, 4-1, 4-2, 7-5, 7-6
 - file structure description, *Task Builder*, B-1 to B-22
- ### on disk
- linked to overlaid library, *Task Builder*, B-2
 - nonoverlaid, *Task Builder*, B-2
 - overlaid, *Task Builder*, B-3
 - overlaid I- and D-space, *Task Builder*, B-4

Task (cont'd.)

- image file, *Introduction*, 5-6 MCR, 3-35, 3-116, 3-175, 3-179, 3-182, 3-187
 - creating, MCR, 2-21
 - installing, MCR, 2-21
 - patching
 - ZAP utility, *Utilities*, 15-1
 - STD entry, MCR, 1-5
 - including debugging aid (ODT), *Task Builder*, 10-14, 11-25, 11-26
 - inhibiting queuing message, *Task Builder*, 10-35, 11-57
- ### initiation
- ### IOX
- EXECUTE command, *System Management*, 4-37
- ### installation, *Command Language*, 7-28 to 7-38
- ### installed, *Command Language*, 7-1 to 7-2, 7-3, 7-12 to 7-16 MCR, 1-5
- blocking, MCR, 3-34
 - displaying, *Command Language*, 7-60 to 7-63 MCR, 3-276
 - removing, *Executive*, 1-24
- ### installed name
- declaring, *Task Builder*, 12-38
- ### installing, MCR, 1-5, 2-23, 3-116, 3-120 *System Generation*, 4-6
- on pregenerated kit, *System Generation*, 5-40
 - time limit, MCR, 3-121
- ### install options, *System Management*, 10-29
- ### label block, *Task Builder*, 2-8
- ### label block 0, *Task Builder*, B-7
- ### label block 1, *Task Builder*, B-9
- ### label block 2, *Task Builder*, B-9
- ### label block 3, *Task Builder*, B-9
- ### linking
- counter interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-26
 - digital interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-25
 - error interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-27
 - ICS/ICR common block, *I/O Drivers*, 19-76
 - supervisor mode library, *Task Builder*, 8-14, 8-15, 8-16

Task

- linking (cont'd.)
 - terminal interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-27
 - to interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-64, 19-66
 - to region, *Task Builder*, 5-15
 - to region in I- and D-space system, *Task Builder*, 7-3
 - to several libraries, *Task Builder*, 12-9, 12-10
- loading, *MCR*, 3-75
 - partition, *MCR*, 3-133
- logical assignment, *MCR*, 3-20
- logical unit number (LUN), *Task Builder*, 12-41
- macro calls, *Program Development*, 6-3, 6-4
- map, *Program Development*, 4-5
 - full, *Program Development*, 4-7
 - linked to a common, *Task Builder*, 5-25
 - standard, *Program Development*, 4-5, 4-6
- mapping, *MCR*, 3-118, 3-183 *Task Builder*, 2-14, 2-18, 2-19, 2-20 to 2-23
- maximum record buffer size
 - declaring, *Task Builder*, 12-25
- memory, *Task Builder*, 2-9
- memory allocation, *Task Builder*, 2-6
- memory management
 - use of, *Task Builder*, 2-15
- memory management support, *System Management*, 10-18
- memory-resident overlay operator
 - enabling, *Task Builder*, 10-34, 11-58
- memory-resident overlay segment
 - changing alignment, *Task Builder*, 10-8, 11-20
- multisegment
 - See also *Overlay*
 - global symbol resolution, *Task Builder*, 3-17
 - overlay, *Task Builder*, 3-5
- multiuser, *Task Builder*, 2-26
 - See also *Multiuser task*
 - declaring read-only partition, *Task Builder*, 12-35
 - specifying, *Task Builder*, 10-29, 11-67

Task (cont'd.)

- name, *Introduction*, 5-11
 - CLI, *System Management*, 11-4
- naming, *MCR*, 1-5, 2-14, 2-21, 2-22, 2-24, 3-121, 3-185
- nonprivileged, *MCR*, 2-20
 - definition, *System Generation*, 3-73
 - directive restrictions, *Executive*, 1-25
 - list, *System Generation*, 3-74
 - SYSGEN question, *System Generation*, 3-74
- object file, *MCR*, 2-21
- object library routines, *Program Development*, 6-6
- ODT vector, *Task Builder*, 12-26
- offspring, *Executive*, 4-1
- offspring (VTDRV), *I/O Drivers*, 4-1
- overlaid, *Task Builder*, 3-7
 - global cross-reference, *Task Builder*, 4-12, 4-13
- I- and D-space
 - disk image, *Task Builder*, 7-7
 - map, *Task Builder*, 7-11 to 7-15
 - tree, *Task Builder*, 7-6
 - virtual address, *Task Builder*, 7-6
- memory resident, *Task Builder*, 3-9
- memory saving, *Task Builder*, 3-9, 3-10
- segment call, *Task Builder*, 3-10
- virtual address space, *Task Builder*, 3-10
- overlay, *MCR*, 3-118
 - introduction, *Task Builder*, 2-9
- overlying, *Executive*, 3-1
- parent, *Executive*, 4-1
- parent (VTDRV), *I/O Drivers*, 4-1
- partition, *MCR*, 2-20
 - declaring, *Task Builder*, 12-27
 - installing, *MCR*, 3-183, 3-267
 - specifying size, *MCR*, 3-118, 3-183
 - system-controlled, *MCR*, 3-118
- patching
 - D-space, *Task Builder*, 12-14
 - I- space, *Task Builder*, 12-6
 - with object code, *Task Builder*, 12-6

Task (cont'd.)

- Postmortem Dump, *Task Builder*, D-1
- priority, MCR, 2-21, 3-257
 - altering, MCR, 3-3, 3-19
 - base, MCR, 3-243
 - running, MCR, 3-3, 3-19
 - setting, *Command Language*, 7-71 to 7-72
 - specifying, MCR, 3-119, 3-184
 - static, MCR, 3-19
- privileged, *Debugging*, 9-1 MCR, 2-20, 3-183
 - See also Privileged task
 - break through (TTDRV), *I/O Drivers*, 2-16
 - break-through write (TTDRV), *I/O Drivers*, 2-17
 - debugging with ZAP, *Debugging*, 8-8
 - mapping, *Executive*, 3-19, 5-246
- Processor Status Word, MCR, 3-58
- program section order
 - effect in creating, *Task Builder*, 10-36, 10-47, 11-60, 11-64
- prompt, MCR, 1-3, 2-14
- proper state to initiate buffered I/O, *Writing I/O Driver*, 1-14
- protecting, MCR, 3-122, 3-185
- prototype
 - installing, MCR, 3-121
- read activating data (ICDRV/ISDRV), *I/O Drivers*, 19-28
- reassigning, MCR, 3-172
- receiving next CLI command, *Executive*, 5-205
- reexecuting, *System Management*, 10-18
- relocation, *Task Builder*, 2-2
 - mapped system, *Task Builder*, 2-16
- remove interrupt link (ICDRV/ISDRV), *I/O Drivers*, 19-68
 - example, *I/O Drivers*, 19-69
- removing, *Command Language*, 7-39 to 7-40 MCR, 3-175 *System Management*, 10-18
- requesting, *Executive*, 5-167, 5-192, 5-195, 5-212, 5-265
- resident, *Introduction*, 6-5 MCR, 3-75

Task

- resident common
 - system-owned, *Task Builder*, 12-12, 12-24
- resident library
 - system-owned, *Task Builder*, 12-12, 12-24
- restrictions for fixing, *System Management*, 10-18
- resuming, *Executive*, 5-176 MCR, 3-177
- returning status, *Executive*, 4-3, 5-75
- running, *Executive*, 5-177
 - Introduction*, 5-2 MCR, 1-5, 2-11, 2-20, 2-24, 3-178 to 3-186 *Program Development*, 4-7, 4-8, 7-6
 - options
 - immediate, MCR, 3-186
 - install-run-remove, MCR, 3-186
 - reschedule interval, MCR, 3-180
 - UIC, MCR, 3-185
 - uninstalled, MCR, 3-179
- single segment
 - overlay, *Task Builder*, 3-4, 3-8
- size, MCR, 3-118 RMS-11 *User's Guide*, 2-5 *System Management*, 10-63
- slaved, MCR, 3-120, 3-184
 - specifying, *Task Builder*, 10-45, 11-68
- spawning, *Executive*, 4-1, 4-5 MCR, 2-23, 3-183, 3-186
- specifications
 - multiple, *Task Builder*, 1-11
- specifying
 - data space in I- and D-space, *Task Builder*, 7-4
 - KE11-A, *Task Builder*, 10-16, 11-16
- spooling print job, *I/O Operations*, 8-1
- SST, *Program Development*, 4-8
- SST vector address
 - declaring, *Task Builder*, 12-39
- stack size
 - declaring, *Task Builder*, 12-36
- starting, *Command Language*, 7-26
- status flags
 - displaying, MCR, 3-31
 - list of, MCR, 3-32 to 3-33

Task (cont'd.)

- stopping, *Executive*, 5-238, 5-240, 5-241
- structure, *RMS-11 User's Guide*, 1-13 *Task Builder*, 2-8
 - label block, *Task Builder*, 2-8
- subpartition, *MCR*, 2-21
- supervisor mode library, *Task Builder*, 12-33, 12-37
- suspending, *Executive*, 5-209, 5-268, 5-270, 5-272
- system, *MCR*, 3-257 *Program Development*, 1-1
 - library contributions, *Program Development*, 4-7
 - mapping status of, *Task Builder*, 10-26
- system size, *System Management*, 10-18
- terminal
 - attached, *MCR*, 2-19
 - slave, *MCR*, 2-19
- terminating, *Executive*, 5-78, 5-80
- termination, *Program Development*, 4-8
- testing, *Indirect*, 2-61, 2-62
- time-based schedule request
 - declaring UIC, *Task Builder*, 12-40
- time limit
 - specifying, *MCR*, 3-185
- traceable
 - specifying, *Task Builder*, 10-51, 11-75
- transfer (starting) address
 - default, *Program Development*, 4-3, 4-8
 - defining, *Program Development*, 2-7
- transferring command line, *Executive*, 5-106
- UIC, *MCR*, 3-263
 - declaring, *Task Builder*, 12-40
 - specifying, *MCR*, 3-122
- unblocked, *MCR*, 3-283
- unblocking, *Command Language*, 7-27
- unfixing, *MCR*, 3-284
- unfixing from memory, *System Management*, 10-92
- unlinking (ICDRV/ISDRV)
 - from all digital interrupt, *I/O Drivers*, 19-30

Task

- unlinking (ICDRV/ISDRV) (cont'd.)
 - from all interrupt, *I/O Drivers*, 19-30
 - from counter interrupt, *I/O Drivers*, 19-30
 - from error interrupt, *I/O Drivers*, 19-31
 - from interrupt, *I/O Drivers*, 19-29
 - from terminal interrupt, *I/O Drivers*, 19-31
 - unloading, *MCR*, 3-75
 - unstopping, *Executive*, 5-256
 - user
 - data space definition, *Task Builder*, 7-1
 - vector address
 - declaring system SST trap, *Task Builder*, 12-39
 - virtual program section
 - specifying, *Task Builder*, 12-44
 - window, *Task Builder*, 2-19 to 2-23
 - I- and D-space, *Task Builder*, 7-4
 - with external headers, *System Management*, 10-28
 - with resident headers, *System Management*, 10-28
 - XEDRV connection, *I/O Drivers*, 13-22
- Task/File Patch Program
See ZAP utility
- Task Account Block, *System Management*, 17-3, 17-22 *Writing I/O Driver*, A-5
- Task accounting
Resource Accounting, *System Management*, 17-6
- Task buffer descriptor, *I/O Operations*, 3-10
- Task build
See TKB
- Task Builder, *Introduction*, 5-6 to 5-7
RMS-11 User's Guide, 1-13
Best reference, *Task Builder*
See also Linker
See also TKB
and remote access code, *RMS-11 User's Guide*, B-1
- fast
See FTB

- Task-build file
 - location of IOX, *System Management*, 4-22
- Task Control Block, *System Management*, 10-31
 - See also TCB
- Task Control Block switch
 - See /ACT switch
 - See /ATL switch
- Task data space
 - dump, CDA, 3-53
 - switch
 - See /TDS switch
- Task dump, CDA, 3-48
 - window blocks, CDA, 3-48
- Task execution
 - aborting, *Debugging*, 1-5
 - beginning, *Debugging*, 2-9, 3-2, 9-12
 - continuing, *Debugging*, 2-10, 3-3
 - resuming, *Debugging*, 1-5, 3-4
- Task Exit directive, *Executive*, 5-80
- Task header, *Writing I/O Driver*, 6-9
 - composite arrangement, *Writing I/O Driver*, 2-13
 - dump, CDA, 3-28
 - Directive Status Word, CDA, 3-28
 - File Control Block, CDA, 3-29
 - Logical Unit Table, CDA, 3-28
 - Page Description Register, CDA, 3-29
 - swapping priority, CDA, 3-28
 - window blocks, CDA, 3-29
 - out-of-pool
 - SYSGEN question, *System Generation*, 3-23
 - pointers, *Writing I/O Driver*, 6-8
 - pointer to, CDA, 3-20
 - switch
 - See /HDR switch
- Task identification symbol, *Task Builder*, A-26
- Task image file (.TSK), *Command Language*, 6-1, 6-3, 6-10, 7-8 to 7-12
- Task instruction space
 - dump, CDA, 3-53
 - switch
 - See /TIS switch
- /TASK keyword
 - INSTALL command (MCR), MCR, 3-121
 - /TASK keyword (cont'd.)
 - INSTALL command (VMR), *System Management*, 10-27
 - RUN command (MCR), MCR, 3-184
- TASKLIST-ATL command, MCR, 1-7, 3-275
 - examples, MCR, 3-275
 - format, MCR, 3-275
 - parameters, MCR, 3-275
- TASKLIST command (MCR), MCR, 1-7, 3-276
 - error messages, MCR, 3-277
 - examples, MCR, 3-276
 - format, MCR, 3-276
 - parameters, MCR, 3-276
- TASKLIST command (VMR), *System Management*, 10-88
 - definition, *System Management*, 10-88
 - display contents, *System Management*, 10-88
 - examples, *System Management*, 10-88 to 10-89
 - format, *System Management*, 10-88
 - parameter, *System Management*, 10-88
- Task map, *Debugging*, 1-2, 1-3, 5-6
- Task name, *Command Language*, 7-2 to 7-5
- TASK option, *Task Builder*, 12-38
- Task option
 - list, *Executive*, 5-248
 - testing, *Executive*, 5-248
- /TASK qualifier, *Task Builder*, 11-72 to 11-73
 - designation, *Task Builder*, 11-2
- Task record buffer, *I/O Operations*, 3-23
- Task region, *Executive*, 3-4
- /TASKS keyword
 - COMMON BLOCK DIRECTORY command, MCR, 3-46
- Task status flags, *Command Language*, 7-57 to 7-59
- /TASK subkeyword, MCR, 3-52
- /TASK switch, CDA, 2-5, 2-8
- Task termination message, *Command Language*, 10-18 to 10-20
- Task Termination Notification program
 - See TKTN
- Task virtual address space switch, CDA, 2-8
- /TAS switch, CDA, 2-5, 2-8

- /TB switch
 - CMP utility, *Utilities*, 12-3
 - PIP utility, *Utilities*, 3-26
- TC.8BC characteristic (TTDRV), *I/O Drivers*, 2-55
- TC.ABD characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.ACD characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.ACR characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.ANI characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.ASP characteristic (TTDRV), *I/O Drivers*, 2-52, 2-56
 - baud rate, modem support, *I/O Drivers*, 2-83
- TC.AVO characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.BIN characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.BLK characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.CTS characteristic (TTDRV), *I/O Drivers*, 2-52, 2-57
- TC.DEC characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.DLU characteristic (TTDRV), *I/O Drivers*, 2-52
 - modem support, *I/O Drivers*, 2-83
- TC.EDT characteristic (TTDRV), *I/O Drivers*, 2-52
- TC.EPA characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.ESQ characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.FDX characteristic
 - TTDRV, *I/O Drivers*, 2-53
 - VTDRV, *I/O Drivers*, 4-7
- TC.HFF characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.HFL characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.HHT characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.HLD characteristic
 - half-duplex, *I/O Drivers*, 3-33
 - TTDRV, *I/O Drivers*, 2-53, 2-56
 - side effect, *I/O Drivers*, 2-62
- TC.HSY characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.ICS characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.ISL characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.LPP characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.MHU characteristic (TTDRV), *I/O Drivers*, 2-53
 - buffer, *I/O Drivers*, 2-60
 - processing, *I/O Drivers*, 2-60
- TC.NBR characteristic (TTDRV), *I/O Drivers*, 2-53
- TC.NEC characteristic
 - half-duplex
 - echo, solicited input, *I/O Drivers*, 3-14
 - TTDRV, *I/O Drivers*, 2-54
- TC.OOB characteristic (TTDRV), *I/O Drivers*, 2-54
 - buffer, *I/O Drivers*, 2-62
 - processing, *I/O Drivers*, 2-60, 2-61
- TC.PAR characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.PPT characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.PRI characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.PTH characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.RAT characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.RGS characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.RSP characteristic (TTDRV), *I/O Drivers*, 2-54, 2-56
- TC.SCP characteristic
 - TTDRV, *I/O Drivers*, 2-54
 - VTDRV, *I/O Drivers*, 4-7
- TC.SFC characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.SLV characteristic (TTDRV), *I/O Drivers*, 2-54
- TC.SMR characteristic
 - TTDRV, *I/O Drivers*, 2-54
 - side effect, *I/O Drivers*, 2-62
 - VTDRV, *I/O Drivers*, 4-7
- TC.SMR characteristic (half-duplex), *I/O Drivers*, 3-33
- TC.SSC characteristic (TTDRV), *I/O Drivers*, 2-54
 - buffer, *I/O Drivers*, 2-61
 - processing, *I/O Drivers*, 2-60
 - side effect, *I/O Drivers*, 2-62
- TC.TBF characteristic (TTDRV), *I/O Drivers*, 2-54, 2-58

TC.TBM characteristic (TTDRV), *I/O Drivers*, 2-55

TC.TBS characteristic (TTDRV), *I/O Drivers*, 2-55

TC.TLC characteristic (TTDRV), *I/O Drivers*, 2-55

TC.TMM characteristic (TTDRV), *I/O Drivers*, 2-55

TC.TPP characteristic
terminal type value (TTDRV), *I/O Drivers*, 2-56

TC.TSY characteristic (TTDRV), *I/O Drivers*, 2-55

TC.TTP characteristic
half-duplex, *I/O Drivers*, 3-12, 3-16
TTDRV, *I/O Drivers*, 2-55, 2-57
VTDRV, *I/O Drivers*, 4-7

TC.VFL characteristic (TTDRV), *I/O Drivers*, 2-55

TC.WID characteristic (TTDRV), *I/O Drivers*, 2-55

TC.XSP characteristic (TTDRV), *I/O Drivers*, 2-55, 2-56

TC11 controller
SYSGEN question, *System Generation*, 3-48

TC11 magnetic tape unit, *I/O Drivers*, 6-1

TCB, MCR, 3-31, 3-34 *Writing I/O Driver*, 1-14
address of, CDA, 3-21, 3-24
composite arrangement, *Writing I/O Driver*, 2-11
creating, MCR, 3-116
installing, MCR, 3-120
pointer to current, CDA, 3-20
removing, MCR, 3-116
saving, MCR, 3-189

TCBDF\$, CDA, B-41, C-71 *Writing I/O Driver*, A-60 to A-63

/TCB switch, CDA, 2-5, 2-8

/TDS switch, CDA, 2-5, 2-8

/TD switch
PIP utility, *Utilities*, 3-40

TDX, *Indirect*, 2-2

TE10 magnetic tape unit, *I/O Drivers*, 8-1

TE16 magnetic tape
SYSGEN question, *System Generation*, 3-38

TE16 magnetic tape unit, *I/O Drivers*, 8-1

Tef parameter
device-specific function
receive (LRDRV), *I/O Drivers*, 14-9

Telephone
dial command string, *System Management*, 9-4

Teleprinter listing format, *MACRO-11*, 6-7, 6-8
See also *Listing control*

Teletypewriter, *I/O Drivers*, 2-3

Temporary file
See *FB\$TMP* mask in *FOP* field

TEMPORARYFILE command
IOX, *System Management*, 4-63

Term
definition of, *MACRO-11*, 3-15, 3-16

Terminal, *Command Language*, 3-1 to 3-13 *Introduction*, 1-1, 1-5 *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-42, 5-77, 5-88, 5-104, 5-111, 5-117
attached, *Command Language*, 3-2
MCR, 2-19
half-duplex, *I/O Drivers*, 3-11
several (half-duplex), *I/O Drivers*, 3-34
VTDRV, *I/O Drivers*, 4-4

baud rate, *Indirect*, 2-16 *System Management*, 9-2
setting, MCR, 3-254

buffer, MCR, 3-261
read character (ICDRV/ISDRV), *I/O Drivers*, 19-61

characteristic
setting, *Command Language*, 3-38
showing, *Command Language*, 3-53

characteristics
get multiple
TTDRV, *I/O Drivers*, 2-51
VTDRV, *I/O Drivers*, 4-6
implicit (TTDRV), *I/O Drivers*, 2-57
return (half-duplex), *I/O Drivers*, 3-11

set
TTDRV, *I/O Drivers*, 2-59
VTDRV, *I/O Drivers*, 4-7

setting, *Command Language*, 9-33 MCR, 3-197, 3-202 to 3-267

Terminal

- characteristics (cont'd.)
 - showing, *Command Language*, 9-41
 - VTDRV, *I/O Drivers*, 4-6
- characteristic table
 - half-duplex, *I/O Drivers*, 3-12
 - TTDRV, *I/O Drivers*, 2-52
 - VTDRV, *I/O Drivers*, 4-7
- CLI
 - default, MCR, 3-79
- cursor control (TTDRV), *I/O Drivers*, 2-80
- definition of, MCR, 2-14
- detach (VTDRV), *I/O Drivers*, 4-4
- directory
 - default, MCR, 2-7
- disconnect (TTDRV), *I/O Drivers*, 2-35
- disconnect input (ICDRV/ISDRV), *I/O Drivers*, 19-24
- displaying, MCR, 3-60
- driver
 - extended I/O
 - SYSGEN question, *System Generation*, 3-30
 - full-duplex, MCR, 3-219
 - half-duplex, MCR, 3-258
- emulation, *System Management*, 9-1 to 9-5
- examining a listing, *Program Development*, 3-6, 3-7
- full-duplex operation (TTDRV), *I/O Drivers*, 2-79
- function code list, *I/O Drivers*, B-13
- get support
 - half-duplex, *I/O Drivers*, 3-13
 - TTDRV, *I/O Drivers*, 2-18, 2-33
 - return, *I/O Drivers*, 2-34
- hardcopy, *Introduction*, 1-1
- input
 - checkpointing
 - half-duplex, *I/O Drivers*, 3-32, 3-35
 - TTDRV, *I/O Drivers*, 2-82
 - line length (half-duplex), *I/O Drivers*, 3-2
- interface
 - See also *Line interface*
 - half-duplex, *I/O Drivers*, 3-30
 - support, *I/O Drivers*, 2-3
 - TTDRV, *I/O Drivers*, 2-81

Terminal (cont'd.)

- line truncation (half-duplex), *I/O Drivers*, 3-31
- monitoring many (TTDRV), *I/O Drivers*, 2-13
- multiplexer
 - See *Multiplexer*
- mute, *System Management*, 9-4
- nonprivileged, MCR, 2-19
- nonslaved, MCR, 3-253 *System Management*, 10-50
- numbers, MCR, 2-22
- output
 - controlling, *Program Development*, 3-7
- output (ICDRV/ISDRV), *I/O Drivers*, 19-32
 - A/D controller restriction, *I/O Drivers*, 19-32
- port, *System Management*, 9-1
- privilege status, MCR, 2-19, 3-80
- programming hint (TTDRV), *I/O Drivers*, 2-82
- prompt, MCR, 1-3
- read-pass-all, MCR, 3-250
- remote, MCR, 3-202
 - displaying, MCR, 3-247
 - setting, MCR, 3-247
- remote (ICDRV/ISDRV)
 - monitor example, *I/O Drivers*, 19-62
 - output, *I/O Drivers*, 19-50
- session
 - accounting, MCR, 3-79
- slave, MCR, 2-19
- slaved, *Command Language*, 3-2
 - MCR, 3-80 *System Management*, 10-50
 - displaying, MCR, 3-253
 - setting, MCR, 3-252
- speed
 - setting, MCR, 3-254
- status return (TTDRV), *I/O Drivers*, 2-63
- support, *I/O Drivers*, 3-13
 - ICDRV/ISDRV, *I/O Drivers*, 19-6
 - TTDRV, *I/O Drivers*, 2-2
 - VTDRV, *I/O Drivers*, 4-6
- suppressing output (TTDRV), *I/O Drivers*, 2-69
- synchronization
 - disabling, MCR, 3-261
 - setting, MCR, 3-261

- Terminal (cont'd.)
 - system generation feature (half-duplex), *I/O Drivers*, 3-28
 - task
 - attaching, MCR, 2-15, 2-19
 - displaying, MCR, 3-60
 - name, MCR, 2-21, 2-22
 - running, MCR, 1-5, 2-14
 - type, *Indirect*, 2-17 *Program Development*, 1-12
 - setting, MCR, 3-258
 - SYSGEN question, *System Generation*, 3-56, 3-58, 3-60, 3-61, 3-62
 - typeahead, *System Management*, 9-5
 - type value (TTDRV), *I/O Drivers*, 2-56
 - UIC, MCR, 2-6
 - unattached, MCR, 2-19
 - video, *Introduction*, 1-1
 - virtual, *I/O Drivers*, 4-1
 - creating, *Executive*, 5-54
 - deallocating, *Executive*, 5-73
 - function code list, *I/O Drivers*, B-15
 - VT100, *Introduction*, 1-1, 1-2, 1-2 fig.
 - VT100-series, *Command Language*, 3-18
 - special keys, *Command Language*, 3-19
 - VT200-series, *Command Language*, 3-19
 - special keys, *Command Language*, 3-19
 - VT220, *Introduction*, 1-1, 1-3, 1-3 fig.
 - VT52, *Command Language*, 3-19
 - special keys, *Command Language*, 3-19
 - write (half-duplex), *I/O Drivers*, 3-11
- Terminal argument indicator, *MACRO-11*, 3-2
- Terminal device
 - See FB\$TRM mask in DEV field
- Terminal driver, *I/O Drivers*, 3-1
 - full-duplex
 - See TTDRV
 - half-duplex
 - supported devices, *I/O Drivers*, 3-1
 - supported interface, *I/O Drivers*, 3-2
- Terminal driver (cont'd.)
 - virtual, *I/O Drivers*, 4-1
- Terminal emulation, *System Management*, 1-3
 - establishing, *System Management*, 9-3
 - terminating, *System Management*, 9-3
- Terminal expression indicator, *MACRO-11*, 3-2
- Terminal Operations commands, *Command Language*, 1-3
- Terminal register indicator, *MACRO-11*, 3-2
- Terminating
 - RMSBCK utility, *RMS-11 Utilities*, 6-2
 - RMSCNV utility, *RMS-11 Utilities*, 4-4
 - RMSDEF utility, *RMS-11 Utilities*, A-5
 - RMSDES utility, *RMS-11 Utilities*, 2-2, 2-9, 2-12
 - RMSDSP utility, *RMS-11 Utilities*, 5-2
 - RMSIFL utility, *RMS-11 Utilities*, 3-2
 - processing, *RMS-11 Utilities*, 3-12
 - RMSRST utility, *RMS-11 Utilities*, 7-2
- Terminating directive
 - See .END directive
- Terminator
 - stream records, *RMS-11 Introduction*, 3-4 *RMS-11 User's Guide*, 2-16
- /TERM keyword
 - ABORT command (MCR), MCR, 3-4
 - ACTIVE command, MCR, 3-14
 - ALLOCATE command (MCR), MCR, 3-16
 - ALTER command (MCR), MCR, 3-19
 - ASSIGN command (MCR), MCR, 3-28, 3-29
 - BLOCK command, MCR, 3-34
 - DEFINE LOGICALS command (MCR), MCR, 3-67, 3-68
 - DISMOUNT command (MCR), MCR, 3-71
 - RESUME command, MCR, 3-177
 - SET command (MCR), MCR, 3-258

/TERM keyword (cont'd.)

- SET command (VMR), *System Management*, 10-78 to 10-79
- UNBLOCK command, MCR, 3-283
- UNSTOP command, MCR, 3-287
- T error, MACRO-11, 3-15, 5-10, 6-23
 - summary, MACRO-11, D-4
- \$TESTBITS macro, RMS-11 Macro, 2-17
- Test configuration
 - IOX
 - pattern altering, *System Management*, 4-48
 - pattern displaying, *System Management*, 4-48
 - setup, *System Management*, 4-6
- .TESTDEVICE directive, *Indirect*, 2-87
- .TEST directive, *Indirect*, 2-85
- .TESTFILE directive, *Indirect*, 2-89
- Test for Specified System Feature
 - directive, *Executive*, 5-86
- Test for Specified Task Feature
 - directive, *Executive*, 5-248
- .TESTPARTITION directive, *Indirect*, 2-91
- TE trap, *Debugging*, 1-5
- Tevf parameter
 - device-specific function (UDDRV), *I/O Drivers*, 16-4
- ICDRV/ISDRV, *I/O Drivers*, 19-11
 - IO.CCI function, *I/O Drivers*, 19-19
 - IO.CTI function, *I/O Drivers*, 19-21
 - IO.CTY function, *I/O Drivers*, 19-23
 - IO.LDI function, *I/O Drivers*, 19-25
 - IO.LKE function, *I/O Drivers*, 19-28
 - IO.LTI function, *I/O Drivers*, 19-26
 - IO.LTY function, *I/O Drivers*, 19-27

Text

- buffer, *Program Development*, 1-3
- displaying on terminal, *Indirect*, 2-33, 2-35, 2-38
- editor, *Program Development*, 1-3, 1-4
 - See also EDI utility
 - See also EDT editor
- information record, *Task Builder*, A-11, A-12

Text

- information record (cont'd.)
 - format, *Task Builder*, A-12
- TF.AST subfunction (TTDRV), *I/O Drivers*, 2-12
- TF.BIN subfunction (TTDRV), *I/O Drivers*, 2-12
 - IO.EIO function, *I/O Drivers*, 2-26
 - IO.RPR function, *I/O Drivers*, 2-41
- TF.CCO subfunction (TTDRV), *I/O Drivers*, 2-12
 - IO.EIO function, *I/O Drivers*, 2-26
 - IO.WAL function, *I/O Drivers*, 2-48
 - IO.WBT function, *I/O Drivers*, 2-50
- TF.ESQ subfunction (TTDRV), *I/O Drivers*, 2-12
 - IO.ATA function, *I/O Drivers*, 2-22
- TF.NOT subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.ATA function, *I/O Drivers*, 2-20, 2-22
- TF.RAL subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.EIO function, *I/O Drivers*, 2-26
 - IO.RNE function, *I/O Drivers*, 2-39
 - IO.RPR function, *I/O Drivers*, 2-42
 - IO.RST function, *I/O Drivers*, 2-44
 - IO.RTT function, *I/O Drivers*, 2-46
- TF.RCU subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.EIO function, *I/O Drivers*, 2-27
 - IO.RTT function, *I/O Drivers*, 2-46
 - IO.WAL function, *I/O Drivers*, 2-48
 - IO.WBT function, *I/O Drivers*, 2-50
- TF.RDI subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.EIO function, *I/O Drivers*, 2-27
- TF.RES subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.EIO function, *I/O Drivers*, 2-27
- TF.RLB subfunction (TTDRV), *I/O Drivers*, 2-13
- TF.RLU subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.EIO function, *I/O Drivers*, 2-27
- TF.RNE subfunction (TTDRV), *I/O Drivers*, 2-13
 - IO.EIO function, *I/O Drivers*, 2-27
 - IO.RAL function, *I/O Drivers*, 2-37
 - IO.RPR function, *I/O Drivers*, 2-42
 - IO.RST function, *I/O Drivers*, 2-44
 - IO.RTT function, *I/O Drivers*, 2-46

- TF.RNF subfunction (TTDRV), *I/O Drivers*, 2-14
- IO.EIO function, *I/O Drivers*, 2-27
- TF.RPR subfunction (TTDRV), *I/O Drivers*, 2-14
 - ignore prompt, *I/O Drivers*, 2-27
 - IO.EIO function, *I/O Drivers*, 2-27
- TF.RPT subfunction (TTDRV), *I/O Drivers*, 2-14
 - IO.EIO function, *I/O Drivers*, 2-28
- TF.RST subfunction (TTDRV), *I/O Drivers*, 2-14
 - IO.EIO function, *I/O Drivers*, 2-28
 - IO.RAL function, *I/O Drivers*, 2-37
 - IO.RNE function, *I/O Drivers*, 2-39
 - IO.RPR function, *I/O Drivers*, 2-42
 - set TF.RNE subfunction, *I/O Drivers*, 2-14
- TF.RTT subfunction (TTDRV), *I/O Drivers*, 2-15
 - IO.EIO function, *I/O Drivers*, 2-28
 - with TF.RAL subfunction, *I/O Drivers*, 2-15
 - with TF.RNF subfunction, *I/O Drivers*, 2-15
 - with TF.TNE subfunction, *I/O Drivers*, 2-15
- TF.TMO subfunction (TTDRV), *I/O Drivers*, 2-15
 - IO.EIO function, *I/O Drivers*, 2-28
 - IO.RAL function, *I/O Drivers*, 2-37
 - IO.RNE function, *I/O Drivers*, 2-37, 2-39
 - IO.RPR function, *I/O Drivers*, 2-42
 - IO.RST function, *I/O Drivers*, 2-44
 - IO.RTT function, *I/O Drivers*, 2-46
- TF.TNE subfunction (TTDRV), *I/O Drivers*, 2-15
 - IO.EIO function, *I/O Drivers*, 2-29
- TF.WAL subfunction (TTDRV), *I/O Drivers*, 2-15
 - IO.CCO function, *I/O Drivers*, 2-24
 - IO.EIO function, *I/O Drivers*, 2-29
 - IO.WBT function, *I/O Drivers*, 2-50
- TF.WBT subfunction (TTDRV), *I/O Drivers*, 2-16
 - break-through write, *I/O Drivers*, 2-17, 2-24
 - IO.CCO function, *I/O Drivers*, 2-24
 - IO.EIO function, *I/O Drivers*, 2-29
 - IO.WAL function, *I/O Drivers*, 2-48
- TF.WIR subfunction (TTDRV), *I/O Drivers*, 2-16
 - IO.EIO function, *I/O Drivers*, 2-29
- TF.WLB subfunction (TTDRV), *I/O Drivers*, 2-16
- TF.XCC subfunction (TTDRV), *I/O Drivers*, 2-16
 - IO.ATA function, *I/O Drivers*, 2-20, 2-22
- TF.XOF subfunction (TTDRV), *I/O Drivers*, 2-16
 - IO.EIO function, *I/O Drivers*, 2-29
 - IO.RNE function, *I/O Drivers*, 2-39
 - IO.RPR function, *I/O Drivers*, 2-42
 - IO.RST function, *I/O Drivers*, 2-44
- TFEA\$ directive, *Executive*, 5-248
- Throughput
 - improving TKB, *Task Builder*, F-1 to F-11
 - overlay
 - high-level language, *Task Builder*, 3-40
- TL:., *Command Language*, 3-2, 5-7, 5-8
- MCR, 2-11
- Ticks parameter
 - synchronous QIO\$ function (LSDRV), *I/O Drivers*, 17-5
- TICLPP symbol, *Indirect*, 2-16
- TICWID symbol, *Indirect*, 2-16
- %TIM, *Error Logging*, 5-25
- TIM
 - See *TIME* command
- \$TIM (Time conversion), *System Library*, 6-3
- Time
 - displaying, *Command Language*, 8-4
 - System Management*, 10-90
 - getting parameters, *Executive*, 5-117
 - setting, *Command Language*, 8-2
 - Executive*, 5-235
 - System Management*, 10-90
- TIME command (MCR), *MCR*, 1-6, 3-278
 - examples, *MCR*, 3-279
 - format, *MCR*, 3-278
 - parameters, *MCR*, 3-278
- TIME command (VMR), *System Management*, 10-90
 - definition, *System Management*, 10-90
 - examples, *System Management*, 10-90

TIME command (VMR) (cont'd.)
 formats, *System Management*, 10-90
 notes, *System Management*, 10-91
 parameters, *System Management*, 10-90

Time conversion
 time (\$TIM), *System Library*, 6-3

Time handling function, *Error Logging*, 5-25

/TIME keyword
 INSTALL command (MCR), *MCR*, 3-121
 RUN command (MCR), *MCR*, 3-185

Time out
 count (TTDRV), *I/O Drivers*, 2-15
 LADRV, *I/O Drivers*, 22-35
 parameter (UNIBUS switch driver)
 IO.DPT function, *I/O Drivers*, 24-5
 read (TTDRV), *I/O Drivers*, 2-28
 unsolicited input (TTDRV), *I/O Drivers*, 2-17

Time-out
 count, *Writing I/O Driver*, 4-40
 entry point, *Writing I/O Driver*, 2-5

Timeout mode, *Indirect*, 2-49

Time parameter
 RCLOCKB: subroutine (K-series), *I/O Drivers*, 23-25

Timesharing, *Introduction*, 6-3

TIMOUT symbol, *Indirect*, 2-11

TISPED symbol, *Indirect*, 2-16

/TIS switch, *CDA*, 2-5, 2-8

.TITLE directive, *MACRO-11*, 6-15
Program Development, 2-3, 2-5, 6-7

TITYPE symbol, *Indirect*, 2-17

TK25 magnetic tape
 SYSGEN question, *System Generation*, 3-48

TK25 magnetic tape unit, *I/O Drivers*, 8-2

TK50 kit
 contents, *System Generation*, 2-5

TK50 magnetic tape
 SYSGEN question, *System Generation*, 3-46

TK50 magnetic tape unit, *I/O Drivers*, 8-2

TKB, *Command Language*, 6-1, 6-6 to 6-9, 9-22 to 9-23
MCR, 2-20, 3-3, 3-122, 3-183
Program Development, 1-5, 1-6

TKB (cont'd.)
 command line, *Task Builder*, 1-2
 /CR, *Program Development*, 1-8, 4-6, 5-2
 /CROSS_REFERENCE, *Program Development*, 1-8, 4-5, 5-1
 /DA, *Program Development*, 5-2
 /DA switch, *Debugging*, 10-1
 /DEBUG, *Program Development*, 5-1

debugger
 specifying, *Debugging*, 10-1

error, *Program Development*, 4-2, 4-8, 4-9

/FAST, *Program Development*, 4-4

fast version, *Program Development*, 4-4

function, *Task Builder*, 2-1 to 2-28

GBLPAT option, *Debugging*, 10-3

generating
 cross-reference listing, *Program Development*, 4-5, 4-6

map
 full, *Program Development*, 4-7
 standard, *Program Development*, 4-5, 4-6

/INCLUDE, *Program Development*, 6-7, 6-8, 6-9

input, *Program Development*, 1-5, 1-6

input file, *Command Language*, 6-3 to 6-6
 command, *Command Language*, 6-6
 library, *Command Language*, 6-4 to 6-5
 object, *Command Language*, 6-4, 6-10
 overlay, *Command Language*, 6-5 to 6-6

/LB, *Program Development*, 6-7, 6-8, 6-9, 7-8

/LIBRARY, *Program Development*, 6-8, 6-9, 7-8

LINK command
 DCL, *Program Development*, 1-5, 4-1, 5-1, 5-9, 6-7

linking
 ODT, *Debugging*, 1-2
 ODTID, *Debugging*, 1-3
 supervisor libraries, *Debugging*, 1-4

TKB (cont'd.)

- /LONG, Program Development, 4-7*
- /MA, Program Development, 4-7*
- /MAP, Program Development, 4-5, 4-7, 5-1, 5-9, 6-7, 6-8, 6-9*
- /NOTASK, Program Development, 4-5*
- /NOWIDE, Program Development, 4-5*
- object library
 - designation, *Program Development, 6-4, 6-5*
 - use, *Program Development, 6-8, 6-9*
- option, *Task Builder, 1-9*
 - restarting, *Task Builder, 12-5*
- output, *Program Development, 1-6*
- output file
 - task image, *Command Language, 6-10*
- PAT utility, *Utilities, 14-4*
- /PM, Program Development, 5-9*
- /POSTMORTEM, Program Development, 5-9*
- qualifiers, *Task Builder, 11-74*
- search of system library
 - default, *Program Development, 1-11*
- /-SH, Program Development, 4-7*
- slow
 - specifying, *Task Builder, 11-69*
 - to improve performance, *Task Builder, F-11*
- switch, *Task Builder, 10-1*
 - /CP, MCR, 3-117*
 - /DA, MCR, 3-59*
 - /IP, MCR, 3-118, 3-183*
 - /XH, MCR, 3-123*
- symbol, *Command Language, 6-8*
 - undefined, *Program Development, 4-2*
- /SYSTEM_LIBRARY_DISPLAY, Program Development, 4-7*
- /TASK, Program Development, 5-1, 6-7, 6-8, 6-9*
- task
 - object file, *MCR, 2-9, 2-21*
 - priority, *MCR, 2-21*
- task creation, *Command Language, 6-7*
- TKB command
 - MCR, Program Development, 1-5, 4-1, 5-2, 5-9, 6-7*

TKB

- transfer (starting) address
 - default, *Program Development, 4-3*
- UNITS option, *Debugging, 6-2*
- /-WI, Program Development, 4-6*
- TKB command
 - MCR, Program Development, 1-5, 4-1, 5-2, 5-9, 6-7*
 - See also TKB
- TKS field in KEY block
 - DISPLAY operation, *RMS-11 Macro, 5-31*
 - offset, *RMS-11 Macro, 6-68*
 - OPEN operation, *RMS-11 Macro, 5-81*
 - summary, *RMS-11 Macro, 6-93*
- \$TKTCB
 - pointer to current TCB, *Writing I/O Driver, 6-7*
- TKTN, *MCR, 3-3*
 - abort message, *Program Development, 4-8*
 - messages, *MCR, 3-5 to 3-8, A-1 to A-35*
 - format, *MCR, 3-5*
 - using with PMD, *Program Development, 1-7*
- TKTN message, *Command Language, 10-18 to 10-20*
- TLOG\$ directive, *Executive, 5-250*
- TLON\$ directive, *Executive, 5-250*
- TM/TMA/TMB11 controller
 - SYSGEN question, *System Generation, 3-53*
- TM02/03 formatter
 - SYSGEN question, *System Generation, 3-38*
- TM02 formatter, *I/O Drivers, 8-1*
- /TM02 switch
 - DSC utility, *Utilities, 8-22*
- TM03 formatter, *I/O Drivers, 8-1*
- Tmo parameter
 - device-specific function
 - half-duplex, *I/O Drivers, 3-8*
 - VTDRV, *I/O Drivers, 4-4*
 - TTDRV, *I/O Drivers, 2-11*
 - IO.RAL function, *I/O Drivers, 2-36*
 - IO.RNE function, *I/O Drivers, 2-38*
 - IO.RPR function, *I/O Drivers, 2-41*

- Tmo parameter
 - TTDRV (cont'd.)
 - IO.RST function, *I/O Drivers*, 2-44
 - IO.RTT function, *I/O Drivers*, 2-46
 - VTDRV, *I/O Drivers*, 4-4
- TMSCP controller
 - SYSGEN question, *System Generation*, 3-46
- Tname parameter (ICDRV/ISDRV), *I/O Drivers*, 19-11
 - IO.LDI function, *I/O Drivers*, 19-25
 - IO.LKE function, *I/O Drivers*, 19-27
 - IO.LTI function, *I/O Drivers*, 19-26
 - IO.LTY function, *I/O Drivers*, 19-27
 - IO.NLK function, *I/O Drivers*, 19-30
 - IO.UDI function, *I/O Drivers*, 19-30
 - IO.UER function, *I/O Drivers*, 19-31
 - IO.UTI function, *I/O Drivers*, 19-30
- TOC symbolic argument, *MACRO-11*, 6-12
- TOF command
 - EDI utility, *Utilities*, 2-19, 2-47
- TOP command
 - EDI utility, *Utilities*, 2-20, 2-47
- TOP key (EDT), *Introduction*, 2-6
- /TOP keyword
 - SET command (MCR), *MCR*, 3-259
 - SET command (VMR), *System Management*, 10-79 to 10-80
- TOP OF FILE command
 - EDI utility, *Utilities*, 2-19, 2-47
- Tout parameter
 - device-specific (UNIBUS switch driver), *I/O Drivers*, 24-4
- TPARS
 - built-in variable, *I/O Operations*, 7-5
 - coding, *I/O Operations*, 7-1, 7-7
 - command line parsing, *I/O Operations*, 7-1
 - creating parser program, *I/O Operations*, 7-12
 - invoking, *I/O Operations*, 7-11
 - macro, *I/O Operations*, 7-1
 - options word, *I/O Operations*, 7-11
 - programming examples, *I/O Operations*, 7-14
- TPARS (cont'd.)
 - program section, *I/O Operations*, 7-10
 - register usage, *I/O Operations*, 7-11
 - state table, *I/O Operations*, 7-1
 - subexpression, *I/O Operations*, 7-7
 - transition, *I/O Operations*, 7-1
- Trace mode, *Indirect*, 2-49
- Trace program, *Debugging*, 10-2
 - listing, *Debugging*, 10-2
 - format, *Debugging*, 10-2
- /TRACE qualifier, *Task Builder*, 11-75
- Tracing fault, *Writing I/O Driver*, 6-8, 6-12, 6-13
- Track, *RMS-11 Introduction*, 2-1
 - See also Placement control
- Track, bad sector (disk driver), *I/O Drivers*, 5-12
- TRAN\$ macro, *I/O Operations*, 7-1, 7-3
- Transaction Account Block, *System Management*, 17-3
- Transaction file
 - account block linkages, *System Management*, 17-38
 - account blocks, *System Management*, 17-11, 17-20
 - system account block (SAB), *System Management*, 17-11
 - task account block (TAB), *System Management*, 17-11
 - transaction account blocks, *System Management*, 17-11
 - user account block (UAB), *System Management*, 17-11
 - accumulation fields, *System Management*, 17-33
 - block diagrams, *System Management*, 17-22
 - card reader job data, *System Management*, 17-3
 - card reader spooling block, *System Management*, 17-36
 - crash recovery block, *System Management*, 17-35
 - DATATRIEVE-11, *System Management*, 17-16
 - device allocation, deallocation, or dismount data, *System Management*, 17-2
 - device mount data, *System Management*, 17-2
 - device statistics block, *System Management*, 17-37

- Transaction file (cont'd.)
 - device usage data, *System Management*, 17-3
 - disk accounting block, *System Management*, 17-36
 - example, *System Management*, 17-12
 - header area, *System Management*, 17-32
 - invalid login block, *System Management*, 17-36
 - login data, *System Management*, 17-2
 - offset definitions, *System Management*, 17-32
 - print despooler block, *System Management*, 17-36
 - print job data, *System Management*, 17-2
 - SAB, *Writing I/O Driver*, A-5
 - set accounting block, *System Management*, 17-35
 - size, *System Management*, 17-5
 - system account block (SAB), *System Management*, 17-35
 - system data, *System Management*, 17-2
 - system time change, *System Management*, 17-3
 - system time change block, *System Management*, 17-36
 - TAB, *Writing I/O Driver*, A-5
 - task data, *System Management*, 17-1
 - UAB, *Writing I/O Driver*, A-5
 - user account block, *System Management*, 17-33
 - user data, *System Management*, 17-1
- Transfer (starting) address
 - defining, *Program Development*, 2-7
 - system treatment of default, *Program Development*, 4-3, 4-8
- Transfer address, program, *MACRO-11*, 6-39
- Transfer address entry, *Task Builder*, A-6
- Transient failures, *System Management*, 15-29
- Transition table
 - recognition of keyword, *I/O Operations*, 7-9
- .TRANSLATE directive (RSX-11M-PLUS only), *Indirect*, 2-92
- Translate Logical Name String directive, *Executive*, 5-250
- Translator processing, *System Management*, 12-19
- Transmission, validation (communication driver), *I/O Drivers*, 12-11
- Transmit
 - auxilliary buffer (XEDRV), *I/O Drivers*, 13-12
 - line message (XEDRV), *I/O Drivers*, 13-11
 - message (LRDRV), *I/O Drivers*, 14-5
 - pad enable bit (XEDRV), *I/O Drivers*, 13-20
 - requirement (XEDRV), *I/O Drivers*, 13-13
 - set protocol type (XEDRV), *I/O Drivers*, 13-12
 - speed (TTDRV), *I/O Drivers*, 2-56
 - standard function (LRDRV), *I/O Drivers*, 14-3
 - timeslice constraints (LRDRV), *I/O Drivers*, 14-6
 - XEDRV, *Ethernet, I/O Drivers*, 13-3
- Transparent spooling, *System Management*, 7-1
- Trap, *Debugging*, 1-5, 2-11, 5-5, 8-4, A-2
 - See also SST
 - entry codes, *Debugging*, 8-5
 - handling, *Debugging*, 2-11, 5-5
 - instruction
 - BPT, *Debugging*, 8-5
 - EMT, *Debugging*, 8-5, 9-5
 - IOT, *Debugging*, 8-5, 9-4
 - TRAP, *Debugging*, 8-5
 - SST vector register, *Debugging*, 5-5
 - system, *I/O Drivers*, 1-10
 - asynchronous, *I/O Drivers*, 1-10, 1-11
 - synchronous, *I/O Drivers*, 1-10
- TRAP trap instruction, *Debugging*, 8-5
- Tree
 - applying autoloader indicator, *Task Builder*, 4-2
 - calling up-tree segments, *Task Builder*, 4-4
 - multiple
 - defined, *Task Builder*, 3-30 to 3-35
 - defining, *Task Builder*, 3-31, 3-32

- Tree
 - multiple (cont'd.)
 - example, *Task Builder*, 3-32
 - structure, *Task Builder*, 3-18, 3-32
 - overlay diagram
 - virtual address space, *Task Builder*, 3-24
 - structure
 - defining, *Task Builder*, 3-49
 - defining multiple, *Task Builder*, 3-31
 - multiple, *Task Builder*, 3-31
- Tree structure
 - indexed file organization, *RMS-11 Introduction*, 3-7
- /TR keyword
 - MOUNT command (MCR), *MCR*, 3-152
- .TRLUN
 - reserved global symbol, *Task Builder*, E-2
- .TRNCL routine, truncate file, *I/O Operations*, 4-29
- /TR switch, *Task Builder*, 10-51
 - Indirect, *Indirect*, 2-27
 - PIP utility, *Utilities*, 3-40
 - RMSCNV utility, *RMS-11 Utilities*, 4-13
 - RMSIFL utility, *RMS-11 Utilities*, 3-7, 3-11
 - SLP utility, *Utilities*, 13-15
- TRUE symbol, *Indirect*, 2-11
- \$TRUNCATE macro, *RMS-11 Macro*, 5-122
- Truncate mode, *Indirect*, 2-49
- TRUNCATE operation, *RMS-11 Introduction*, 4-4 *RMS-11 Macro*, 4-11 *RMS-11 User's Guide*, 1-15
 - and shared access, *RMS-11 User's Guide*, 2-6
 - sequential files, *RMS-11 User's Guide*, 3-12
- \$TRUNCATE macro, *RMS-11 Macro*, 5-122
- Truncation
 - byte storage, *MACRO-11*, 6-23
 - floating-point, *MACRO-11*, 6-34
 - print line (LPDRV), *I/O Drivers*, 10-7
 - RMSCNV utility, *RMS-11 Utilities*, 4-13
 - RMSIFL utility, *RMS-11 Utilities*, 3-7
- Truncation (cont'd.)
 - terminal line (half-duplex), *I/O Drivers*, 3-31
- TRUNCATION argument, *MACRO-11*, 8-10
- TS03 magnetic tape unit, *I/O Drivers*, 8-1
- TS11 magnetic tape
 - SYSGEN question, *System Generation*, 3-48
- TS11 magnetic tape unit, *I/O Drivers*, 8-1
- .TSK file type, *Program Development*, 4-1
- \$\$TSKP program section
 - reserved name, *Task Builder*, E-4
- /TSK switch, *CDA*, 2-8
- TSKV option, *Task Builder*, 12-39
- \$TSPAR routine, *Writing I/O Driver*, 7-39
- TST attribute, *System Management*, 12-39
- \$TSTBF routine, *Writing I/O Driver*, 1-14, 7-40
- TSV05 magnetic tape
 - SYSGEN question, *System Generation*, 3-48
- TSV05 magnetic tape unit, *I/O Drivers*, 8-2
- /T switch, *Error Logging*, 3-7, 3-9
- TTDRV, *I/O Drivers*, 2-1
 - features, *I/O Drivers*, 2-1
 - input line length, *I/O Drivers*, 2-3
 - interface support, *I/O Drivers*, 2-3
 - programming hint, *I/O Drivers*, 2-82
 - subfunction bit, *I/O Drivers*, 2-12
 - terminal support, *I/O Drivers*, 2-2
- TTM symbolic argument, *MACRO-11*, 6-12
- TTSYM
 - half-duplex, *I/O Drivers*, 3-8, 3-13
 - system module (TTDRV), *I/O Drivers*, 2-33
- TTSYNC (TTDRV), *I/O Drivers*, 2-70
- /TTSYNC keyword
 - SET command (MCR), *MCR*, 3-261
 - SET command (VMR), *System Management*, 10-80
- TT-type line interface
 - SYSGEN question, *System Generation*, 3-56
- TU10 magnetic tape unit, *I/O Drivers*, 8-1

- TU16/45/77 magnetic tape
 - SYSGEN question, *System Generation*, 3-38
- TU16 magnetic tape unit, *I/O Drivers*, 8-1
- TU45 magnetic tape unit, *I/O Drivers*, 8-1
- TU58 controller
 - SYSGEN question, *System Generation*, 3-50
- TU58 DECTAPE II, *I/O Drivers*, 7-1
- TU58 magnetic tape
 - SYSGEN question, *System Generation*, 3-50
- TU60 dual cassette transport, *I/O Drivers*, 9-1
- TU77 magnetic tape unit, *I/O Drivers*, 8-1
- TU80 magnetic tape
 - SYSGEN question, *System Generation*, 3-48
- TU80 magnetic tape unit, *I/O Drivers*, 8-1
- TU81 magnetic tape
 - SYSGEN question, *System Generation*, 3-46
- TU81 magnetic tape unit, *I/O Drivers*, 8-2
- Two's complement operator, *MACRO-11*, 3-4
- Two-byte signed integer key, *RMS-11 User's Guide*, 6-3
- Two-byte unsigned binary key, *RMS-11 User's Guide*, 6-5
- Typeahead buffer, *System Management*, 9-5
- Typeahead buffer (TTDRV), *I/O Drivers*, 2-78
- /TYPEAHEAD keyword
 - SET command (MCR), *MCR*, 3-261
 - SET command (VMR), *System Management*, 10-80 to 10-81
- TYPE attribute
 - RMSDES utility, *RMS-11 Utilities*, 2-38
- TYPE command, *Command Language*, 4-62 to 4-64, 9-46 *Introduction*, 1-12, 3-8
 - DCL, *Program Development*, 3-6, 4-6, 7-4
 - EDI utility, *Program Development*, 2-13, 2-14, 2-17 *Utilities*, 2-47

- /TYPE keyword
 - ALLOCATE command (MCR), *MCR*, 3-16
- Type switch, *Error Logging*, 3-7, 3-9
- U

- U.ST2, *Writing I/O Driver*, 4-32
- U.STS, *Writing I/O Driver*, 4-31
- U.xpdx offsets
 - in UCB, *Writing I/O Driver*, 4-27 to 4-37
- U\$\$NCT parameter (XEDRV), *I/O Drivers*, 13-2
- U\$\$NPC parameter (XEDRV), *I/O Drivers*, 13-2
- U\$\$NRS parameter (XEDRV), *I/O Drivers*, 13-2
- U\$\$NTS parameter (XEDRV), *I/O Drivers*, 13-2
- UAB, *Writing I/O Driver*, A-5
 - Resource Accounting, *System Management*, 17-11
- UBF field in RAB, *RMS-11 Macro*, 4-7, 4-13
 - CONNECT operation, *RMS-11 Macro*, 5-6
 - GET operation, *RMS-11 Macro*, 5-61, 5-64, 5-67
 - offset, *RMS-11 Macro*, 6-115
 - PUT operation, *RMS-11 Macro*, 5-92, 5-96
 - READ operation, *RMS-11 Macro*, 5-98, 5-100
 - summary, *RMS-11 Macro*, 6-143
- UC.CON, contiguous file
 - user-controlled file characteristic, *I/O Operations*, F-4
- UC.DLK, file improperly closed
 - user-controlled file characteristic, *I/O Operations*, F-4
- UCB, *MCR*, 3-116 *Writing I/O Driver*, 1-13, 1-14
 - association with SCB, *Writing I/O Driver*, 2-7
 - composite arrangement, *Writing I/O Driver*, 2-13
 - details, *Writing I/O Driver*, 4-27 to 4-37
 - device-dependent values, *Writing I/O Driver*, 4-29
 - device-specific characteristics, *Writing I/O Driver*, 4-32 to 4-35

UCB (cont'd.)
 disk geometry calculations, *Writing I/O Driver*, B-2
 enabling driver to access data structures, *Writing I/O Driver*, 2-3
 fields, *Writing I/O Driver*, 4-27
 format, *Writing I/O Driver*, 4-27 to 4-37
 layout, *Writing I/O Driver*, 4-28
 length, *Writing I/O Driver*, 4-3
 stored in DCB, *Writing I/O Driver*, 2-3
 ordering, *Writing I/O Driver*, 4-3
 overview, *Writing I/O Driver*, 2-3
 pointer
 to associated DCB, *Writing I/O Driver*, 4-29
 to I/O structures, *Writing I/O Driver*, 2-3
 to start of this UCB, *Writing I/O Driver*, 4-29
 table
 composite arrangement, *Writing I/O Driver*, 2-15
 validation during LOAD, *Writing I/O Driver*, 5-13
 UCBD\$, CDA, B-45, C-75 *Writing I/O Driver*, A-64 to A-71
 UCBSV
 usage in macro calls, *Writing I/O Driver*, 4-8
 /UCB switch, CDA, 2-5, 2-6
 U command, *Debugging*, 2-11
 UC ON/OFF command
 EDI utility, *Utilities*, 2-48
 UDA50 disk controller, *I/O Drivers*, 5-4
 UDC
 function code list, *I/O Drivers*, B-15
 UDC11, *I/O Drivers*, 16-1
 compatibility (ICDRV/ISDRV), *I/O Drivers*, 19-6
 creating driver, *I/O Drivers*, 16-1
 defining configuration (UDDRV), *I/O Drivers*, 16-10
 UDCOM.MAC
 defining configuration (UDDRV), *I/O Drivers*, 16-10
 UDDRV, *I/O Drivers*, 16-1
 numbering convention, *I/O Drivers*, 16-34

UDDRV (cont'd.)
 programming hint, *I/O Drivers*, 16-34
 U error, MACRO-11, 3-8, 3-9, 3-15, 6-20, 6-21, 7-20
 marking undefined symbol, MACRO-11, 6-21
 summary, MACRO-11, D-4
 UFD, *I/O Operations*, 5-2 MCR, 2-2, 3-1 *System Management*, B-1
 See also Directory
 See also USER FILE DIRECTORY command
 and UIC, MCR, 2-2
 command, MCR, 2-2
 contents, MCR, 2-2
 conventions, *System Management*, 1-6
 command line, *Task Builder*, 1-15, 1-16
 creating, MCR, 2-2
 PIP utility, *Utilities*, 3-41
 default, MCR, 2-2
 deleting, MCR, 2-2
 format, MCR, 2-2
 group number, MCR, 2-2 *System Management*, B-1
 Accounting tasks, *System Management*, B-2
 DCL files, *System Management*, B-1
 Executive files, *System Management*, B-1
 FCP files, *System Management*, B-1
 FCS files, *System Management*, B-2
 K-Series files, *System Management*, B-2
 Line printer despooler, *System Management*, B-2
 MCR files, *System Management*, B-1
 On-line configuration, *System Management*, B-2
 Privileged utility tasks, *System Management*, B-1
 Queue Manager files, *System Management*, B-2
 RMD files, *System Management*, B-1
 Shadow Recording, *System Management*, B-2

UFD

- group number (cont'd.)
 - SYSGEN Indirect command files,
System Management, B-2
- listing file
 - PIP utility, *Utilities*, 3-24
- member number, MCR, 2-2 *System Management*, B-2
- object modules, *System Management*, B-2
- SLP correction files, *System Management*, B-2
- Source modules, *System Management*, B-2
- validating, *Utilities*, 9-5
- UFD Group Number Identification Table, *System Management*, B-1t to B-2t
- UFD Member Number Identification Table, *System Management*, B-2t to B-3t
- /UFD qualifier
 - BRU utility, *Utilities*, 7-21
- /UF switch
 - PIP utility, *Utilities*, 3-41
- UIC, *Command Language*, 4-2, 4-108 to 4-110 *Introduction*, 3-10 *I/O Operations*, 5-2 MCR, 2-2, 2-6, 3-1, 3-81 *System Management*, 10-25
- and UFD, MCR, 2-2, 3-212, 3-280
- ASCII-binary conversion, *I/O Operations*, 4-7, 4-8
- authorized, *System Management*, 2-1
- contained in account entry, *System Management*, 2-1, 2-7, 2-9
- declaring in task, *Task Builder*, 12-40
- default, MCR, 2-6
- displaying, *System Management*, 2-5, 2-8
- distinction by password, *System Management*, 2-1
- event flags, MCR, 3-77
- group
 - access count, MCR, 3-77
- login, MCR, 2-6
- option, *Task Builder*, 12-40
- password, MCR, 3-79
- privilege status, MCR, 2-6
- protection, MCR, 2-6
- read/write defaults, *I/O Operations*, 4-3, 4-4

UIC (cont'd.)

- running tasks, MCR, 3-178
- symbol, *Indirect*, 2-21
- system task, MCR, 3-257
- task
 - specifying, MCR, 3-122
- terminal, MCR, 2-6
 - setting, MCR, 3-263
- user categories
 - group, MCR, 2-3
 - owner, MCR, 2-3
 - system, MCR, 2-3
 - world, MCR, 2-3
- volume
 - specifying, MCR, 3-153
- [uic] switch
 - QUE /LI command, *Batch and Queue*, 2-16
- /UIC keyword
 - HOME command, MCR, 3-96
 - INITVOLUME command, MCR, 3-107
 - INSTALL command (MCR), MCR, 3-121
 - INSTALL command (VMR), *System Management*, 10-28
 - MOUNT command (MCR), MCR, 3-153
 - RUN command (MCR), MCR, 3-178, 3-180, 3-185
 - RUN command (VMR), *System Management*, 10-44
 - SET command (MCR), MCR, 3-263
 - SET command (VMR), *System Management*, 10-81
- /UI switch
 - FLX utility, *Utilities*, 4-8
- \$ULA (Universal library), *System Library*, B-1
- ULGF\$\$ directive, *Executive*, 5-253
- UMAP\$ directive, *Executive*, 5-254
- UMDIO\$ diagnostic function, *I/O Drivers*, 1-34
- UMR, *Writing I/O Driver*, 7-3, 7-5
 - programming procedures, *Writing I/O Driver*, 7-2 to 7-5
 - SYSGEN question, *System Generation*, 3-55
- Unary operator, MACRO-11, 3-4
 - binary radix control, MACRO-11, 3-5
 - decimal radix control, MACRO-11, 3-5

Unary operator (cont'd.)
 evaluation of multiple, *MACRO-11*, 3-4
 macro call use, *MACRO-11*, 7-5
 octal radix control, *MACRO-11*, 3-5
 one's complement, *MACRO-11*, 3-5, 6-35, 6-36
 one-word floating-point, *MACRO-11*, 3-5, 6-35, 6-36
 precedence over binary, *MACRO-11*, 3-16
 Radix-50 control, *MACRO-11*, 3-5, 6-30
 radix control, *MACRO-11*, 6-31, 6-32, 6-33
 universal, *MACRO-11*, 3-3, 3-5

UNB
 See UNBLOCK command

UNBLOCK command, *MCR*, 1-8, 3-283
 examples, *MCR*, 3-283
 format, *MCR*, 3-283
 keyword
 /TERM, *MCR*, 3-283
 parameters, *MCR*, 3-283

Unconditional assembly, *MACRO-11*, 6-53

UND C key (EDT), *Introduction*, 2-7

Undefined record format, *RMS-11 Introduction*, 3-4 *RMS-11 User's Guide*, 1-11, 2-17
 See also FB\$UDF code in RFM field

Undefined symbol
 See also U error

Undeleting text (EDT), *Introduction*, 2-7

Underline (—)
 ODT, *Program Development*, 5-2

Underscore (—), *Command Language*, 1-14

Underscore command (—), *Debugging*, 2-5, 4-4, 9-9

UND L key (EDT), *Introduction*, 2-7

UND W key (EDT), *Introduction*, 2-7

Unexpected traps or interrupts, *Error Logging*, 1-6

UNF
 See UNFIX command

UNFIX command, *Command Language*, 7-43, 9-46

UNFIX command (MCR), *MCR*, 1-8, 3-284
 error messages, *MCR*, 3-284
 examples, *MCR*, 3-284

UNFIX command (MCR) (cont'd.)
 formats, *MCR*, 3-284
 keywords
 /REG, *MCR*, 3-284
 /RON, *MCR*, 3-284
 parameters, *MCR*, 3-284

UNFIX command (VMR), *System Management*, 10-92
 definition, *System Management*, 10-92
 example, *System Management*, 10-92
 format, *System Management*, 10-92
 keywords
 /REG, *System Management*, 10-92
 /RON, *System Management*, 10-92
 parameters, *System Management*, 10-92

UNIBUS
 run specifications, *MCR*, 3-117
 switched bus, *Writing I/O Driver*, 1-16

UNIBUS Mapping Register
 See UMR

UNIBUS Run Mask
 See URM

UNIBUS switch driver, *I/O Drivers*, 24-1

AST
 CPU disconnect, *I/O Drivers*, 24-3
 failed CPU response, *I/O Drivers*, 24-3
 other CPU connect, *I/O Drivers*, 24-3
 power failure, *I/O Drivers*, 24-3
 switched to other CPU, *I/O Drivers*, 24-3
 attaching task, *I/O Drivers*, 24-2
 error return, *I/O Drivers*, 24-7
 FORTRAN usage, *I/O Drivers*, 24-8
 function code list, *I/O Drivers*, B-15
 power-fail recovery, *I/O Drivers*, 24-6
 standard functions, *I/O Drivers*, 24-2
 status return, *I/O Drivers*, 24-7
 system power-fail recovery, *I/O Drivers*, 24-6

- UNIBUS switch driver (cont'd.)
 - use, *I/O Drivers*, 24-1
- Unit
 - assignment
 - improving performance, *Task Builder*, F-2, F-3
 - making accessible, *Writing I/O Driver*, 5-6
 - placing on line, *Writing I/O Driver*, 5-7
- Unit Control Block
 - See UCB
- Unit information
 - .PRSDV routine, *I/O Operations*, 4-16
- Unit number field, *I/O Operations*, 2-34
- Unit off-line (ICDRV/ISDRV), *I/O Drivers*, 19-72
- Unit-record device, RMS-11
 - Introduction, 3-5 RMS-11 Macro, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-117
 - RMSCNV utility, RMS-11 Utilities, 4-5
- UNITS option, *Task Builder*, 12-41
- Unit status
 - byte, *Writing I/O Driver*, 4-31
 - change
 - entry point, *Writing I/O Driver*, 4-68, 4-69
 - overview, *Writing I/O Driver*, 2-6
 - extension 2, *Writing I/O Driver*, 4-32
- /UNIT switch
 - DSC utility, *Utilities*, 8-22
- Universal library, *Command Language*, 6-40
 - command procedure, *Indirect*, 2-28
 - creating, *System Library*, B-1
 - file
 - inserting module
 - LBR utility, *Utilities*, 10-20
 - replacing module
 - LBR utility, *Utilities*, 10-27
- Universal unary operator
 - See Unary operator
- UNL
 - See UNLOAD command
- Unlabeled tape, *I/O Operations*, G-16
- Unlabeled tape, end-of-volume (tape driver), *I/O Drivers*, 8-16
- Unlabeled tape block size, *I/O Operations*, G-16
- UNLINK command, *System Management*, 15-28
- /UNL keyword
 - MOUNT command (MCR), MCR, 3-153
- UNLNK:
 - remove task interrupt link (ICDRV/ISDRV), *I/O Drivers*, 19-68
 - example, *I/O Drivers*, 19-69
- UNLOAD command (MCR), MCR, 1-8, 3-285
 - error messages, MCR, 3-285
 - example, MCR, 3-285
 - format, MCR, 3-285
 - keyword
 - /VEC, MCR, 3-285
 - parameter, MCR, 3-285
- UNLOAD command (VMR), *System Management*, 10-93
 - definition, *System Management*, 10-93
 - example, *System Management*, 10-93
 - format, *System Management*, 10-93
 - keyword
 - /VEC, *System Management*, 10-93
 - parameter, *System Management*, 10-93
 - restrictions, *System Management*, 10-93
- Unloading
 - LADRV, *I/O Drivers*, 22-35
 - tape driver, *I/O Drivers*, 8-7
- UNLOCK command, *Command Language*, 4-74 to 4-75, 9-47
- Unlock Group Global Event Flags directive, *Executive*, 5-253
- \$UNLPG (unlock page), *System Library*, 8-31
- Unmap Address Window directive, *Executive*, 5-254
- Unmapped system, *Task Builder*, 2-13, 2-14
- Unowned device, *Command Language*, 5-10 to 5-11
- UNS
 - See UNSTOP command
- UNSAVE command
 - EDI utility, *Utilities*, 2-48

- Unsaved system
 - bootstrapping and saving, *System Generation*, 4-1 to 4-2
 - definition, *System Generation*, 1-13
 - saving with /WB switch, *System Generation*, 4-2
- Unsolicited input time-out
 - SYSGEN question, *System Generation*, 3-30
- Unsolicited interrupt (ICDRV/ISDRV), *I/O Drivers*, 19-6
 - data, continual monitoring, *I/O Drivers*, 19-51
 - processing, *I/O Drivers*, 19-17, 19-18, 19-64
- UNSTOP command, MCR, 1-8, 3-287
 - examples, MCR, 3-287
 - format, MCR, 3-287
 - keywords
 - /TERM, MCR, 3-287
 - parameter, MCR, 3-287
- Unstop Task directive, *Executive*, 5-256
- /UN switch
 - PIP utility, *Utilities*, 3-42
- Unt parameter
 - ALUN\$ macro, *I/O Drivers*, 1-17
- UPD argument to ORG\$ macro, *RMS-11 Macro*, 2-3
- Update, *System Generation*, 2-26 to 2-39, 3-13
 - applying, *System Generation*, 2-29 to 2-36
 - on VAX/VMS host running VAX-11 RSX, *System Generation*, 2-30
 - contents, *System Generation*, 2-27
 - copying distribution kit, *System Generation*, 2-29
 - definition, *System Generation*, 1-13
 - errors during, *System Generation*, 2-36
 - functions, *System Generation*, 2-27 to 2-28
 - hardware requirement, *System Generation*, 2-28
 - kit, *System Generation*, 2-26
 - layered product files, *System Generation*, 2-38
 - magnetic tape kit
 - applying, *System Generation*, 2-32

- Update (cont'd.)
 - preparation, *System Generation*, 2-28
 - RK07 disk kit
 - applying, *System Generation*, 2-35
 - RL02 disk kit, *System Generation*, 2-38
 - types, *System Generation*, 2-26
- \$UPDATE macro, *RMS-11 Macro*, 5-124
- UPDATE operation, *RMS-11*
 - Introduction*, 4-4
 - RMS-11 Macro*, 4-11
 - RMS-11 User's Guide*, 1-15
 - and record size, *RMS-11 User's Guide*, 2-16
 - and shared access, *RMS-11 User's Guide*, 2-6, 2-10
 - and stream records, *RMS-11 User's Guide*, 2-17
 - changeable keys, *RMS-11 User's Guide*, 6-10
 - declaring with ORG\$ macro, *RMS-11 Macro*, 2-3
 - deferred write, *RMS-11 User's Guide*, 7-9
 - duplicate keys, *RMS-11 User's Guide*, 6-9
 - indexed files, *RMS-11 User's Guide*, 5-14, 7-6, 7-9
 - move mode, *RMS-11 User's Guide*, 3-14
 - indexed files, *RMS-11 User's Guide*, 7-7, 7-8
 - relative files, *RMS-11 User's Guide*, 4-12, 4-13
 - sequential files, *RMS-11 User's Guide*, 3-13
 - relative files, *RMS-11 User's Guide*, 4-12
 - sequential files, *RMS-11 User's Guide*, 3-12
 - \$UPDATE macro, *RMS-11 Macro*, 5-124
- /UPDATE switch
 - BAD utility, *Utilities*, 6-6
- Uppercase conversion (half-duplex), *I/O Drivers*, 3-15
- UPPERCASE ON/OFF command
 - EDI utility, *Utilities*, 2-48
- /UPPERCASE qualifier
 - PRINT command, *Batch and Queue*, 2-4

- /UPPERCASE qualifier (cont'd.)
 - SET QUEUE command, *Batch and Queue*, 2-21
- /UP switch
 - PIP utility, *Utilities*, 3-42
 - VFY utility, *Utilities*, 9-8
- URM, *Writing I/O Driver*, 1-16, 4-39
- User-mode I- and D-space
 - description, *Task Builder*, 7-1 to 7-15
- User Account Block, *System Management*, 17-3, 17-23
 - Writing I/O Driver*, A-5
- User buffer, *RMS-11 User's Guide*, 1-14
 - address
 - See UBF field in RAB
 - size
 - See USZ field in RAB
- USERCM, *Error Logging*, 3-2
- User-controlled partition, *System Management*, 14-1
- User data space
 - SYSGEN question, *System Generation*, 3-23
- User-defined switch string, *Error Logging*, 3-21
- User-defined symbol, *MACRO-11*, 3-6, 3-7, 3-8
 - table, *MACRO-11*, 2-2, 3-6, 3-7, 3-8, 3-15
- User file attributes
 - header area
 - file characteristics, *I/O Operations*, F-4
- User File Directory, *I/O Operations*, 5-2
 - See also Directory
 - See also UFD
- User File Directory (UFD)
 - See Directory
- USER FILE DIRECTORY command, MCR, 1-7, 3-280
 - error messages, MCR, 3-281
 - example, MCR, 3-281
 - format, MCR, 3-280
 - keywords
 - /ALLOC, MCR, 3-280
 - /PRO, MCR, 3-281
 - parameters, MCR, 3-280
- USER FILE DIRECTORY command (MCR)
 - creating UFD, MCR, 2-3
- User file label (tape), *I/O Operations*, G-9
- User groups, *System Management*, 10-26
- User I/O function, *Error Logging*, 5-25
- User Identification Code
 - See UIC
- Userid parameter
 - IO.STP function (LADRV), *I/O Drivers*, 22-30
- /USER keyword
 - DISMOUNT command (MCR), MCR, 3-71
- User mode, *Debugging*, 3-2
 - command, *Debugging*, 2-11
 - setting, *Debugging*, 2-11
- User-supplied driver
 - definition, *System Generation*, 1-13
 - SYSGEN question, *System Generation*, 3-65
- User-tailored Executive, *System Generation*, 1-13
- User volume label
 - tape, *I/O Operations*, G-3
- User-written encryption routines
 - support, *System Management*, 2-1
- .USLU1
 - reserved global symbol, *Task Builder*, E-2
- .USLU2
 - reserved global symbol, *Task Builder*, E-2
- %USR, *Error Logging*, 5-25
- \$USRTB global label, *Writing I/O Driver*, 4-3
- USTP\$ directive, *Executive*, 5-256
- USZ field in RAB, *RMS-11 Macro*, 4-7, 4-13
 - CONNECT operation, *RMS-11 Macro*, 5-6
 - GET operation, *RMS-11 Macro*, 5-61, 5-64, 5-67
 - offset, *RMS-11 Macro*, 6-115
 - PUT operation, *RMS-11 Macro*, 5-92, 5-96
 - READ operation, *RMS-11 Macro*, 5-98, 5-100
 - summary, *RMS-11 Macro*, 6-144
- Utilities, *Command Language*, 1-22
- Utility, *Introduction*, 5-1
 - RMS-11 Introduction*, 5-1
 - command line format, *Utilities*, 1-4

Utility

- editing
 - EDI utility, *Utilities*, 1-2
- file manipulation
 - FLX utility, *Utilities*, 1-2
 - PIP utility, *Utilities*, 1-2
- file specification
 - default, *Utilities*, 1-4
 - format, *Utilities*, 1-4
- indirect command file, *Utilities*, 1-9
- invoking, *Utilities*, 1-6
 - DCL, *Utilities*, 1-6
 - installed, *Utilities*, 1-7
 - MCR, *Utilities*, 1-6
 - uninstalled, *Utilities*, 1-9
- listed, *Utilities*, 1-1
- program maintenance, *Utilities*, 15-1
 - CMP utility, *Utilities*, 1-3
 - PAT utility, *Utilities*, 1-3
 - SLP utility, *Utilities*, 1-3
 - ZAP utility, *Utilities*, 1-4
- programming
 - DMP utility, *Utilities*, 1-3
 - LBR utility, *Utilities*, 1-3
- spawning, *Executive*, 4-5
- volume maintenance
 - BAD utility, *Utilities*, 1-2
 - BRU utility, *Utilities*, 1-3
 - DSC utility, *Utilities*, 1-3
 - FMT utility, *Utilities*, 1-2
 - VFY utility, *Utilities*, 1-3

Utility, RMS-11

- Best reference, *RMS-11 Utilities*

Utility programs, *Program Development*, 1-8, 1-9

V

Val parameter

- CVADF: subroutine
 - K-series, *I/O Drivers*, 23-13
 - LADRV, *I/O Drivers*, 22-9
- FLT16: subroutine
 - K-series, *I/O Drivers*, 23-21
 - LADRV, *I/O Drivers*, 22-17

Value parameter

- IO.SMC function (TTDRV), *I/O Drivers*, 2-60

Variable, *Debugging*, 2-1

- testing, *Indirect*, 2-85

Variable-length record

- block boundary
 - PUT\$ macro, *I/O Operations*, 3-29

Variable-length record format, *RMS-11 Introduction*, 3-2 *RMS-11 User's Guide*, 1-11, 2-15

- See also FB\$VAR code in RFM field and medium, *RMS-11 User's Guide*, 2-15

Variable Receive Data directive, *Executive*, 5-257

Variable Receive Data or Exit directive, *Executive*, 5-261

Variable Receive Data or Stop directive, *Executive*, 5-259

Variable Send, Request, and Connect directive, *Executive*, 5-265

Variable Send Data directive, *Executive*, 5-263

Variable with fixed control

- See VFC

Var parameter

- ADC: subroutine (LSDRV), *I/O Drivers*, 17-12

VARRAY option, *Task Builder*, 12-42, 12-43

VAX/VMS

- remote access, *RMS-11 User's Guide*, B-1, B-3

VAX/VMS DCL, *Command Language*, 1-23

VAX/VMS file transfer, *System Management*, 9-1, 9-5

VAX-11 RSX file transfer, *System Management*, 9-1, 9-5

VBN, *RMS-11 Introduction*, 2-4 *RMS-11 User's Guide*, 8-2

- See also BKT field in RAB areas, *RMS-11 User's Guide*, 6-10

VBN access, *RMS-11 Introduction*, 3-12, 4-7 *RMS-11 User's Guide*, 1-20

- See also BKT field in RAB

/VB switch

- CMP utility, *Utilities*, 12-3

VCB

- composite arrangement, *Writing I/O Driver*, 2-15

V command, *Debugging*, 2-11

- ZAP utility, *Utilities*, 15-17

/VEC keyword

- LOAD command (MCR), *MCR*, 3-133

- /VEC keyword (cont'd.)
 - LOAD command (VMR), *System Management*, 10-34
 - UNLOAD command (MCR), *MCR*, 3-285
 - UNLOAD command (VMR), *System Management*, 10-93
- /VEC switch
 - BAD utility, *Utilities*, 6-9
 - DSC utility, *Utilities*, 8-23
- Vector, *Writing I/O Driver*, 1-1
 - addresses
 - definition of in Driver Dispatch Table, *Writing I/O Driver*, 2-6
 - assignment
 - error, *Writing I/O Driver*, 5-8
 - setting, *Writing I/O Driver*, 5-6
 - autoload, *Task Builder*, 4-4, 4-5, B-15, B-16
 - conventional task, *Task Builder*, B-17
 - eliminating unnecessary, *Task Builder*, 4-6
 - I- and D-space, *Task Builder*, 7-10
 - I- and D-space format, *Task Builder*, 4-5
 - I- and D-space task, *Task Builder*, 7-8, B-17
 - overlay, *Task Builder*, 3-21
 - region, *Task Builder*, 5-14
 - definition, *System Generation*, 1-14
 - determining, *System Generation*, 2-1
 - floating
 - assignment algorithm, *System Generation*, E-1
 - interrupt, *Writing I/O Driver*, 1-1, 1-12
 - mode switching
 - supervisor mode library, *Task Builder*, 8-1, 8-19
 - ODT, *Task Builder*, 12-26
 - overlaid region
 - I- and D-space task, *Task Builder*, 5-13, 5-14
 - reentry register, *Debugging*, 5-3, 5-6
 - SST address, *Task Builder*, 12-29
 - task header
 - extension area format, *Task Builder*, B-13
- Vector address
 - BRUSYS default, *System Generation*, 2-8
- Verification
 - device
 - BAD utility, *Utilities*, 6-3
 - file structure
 - VFY utility, *Utilities*, 9-1
 - task image file content
 - See ZAP utility
- VERIFY command
 - IOX, *System Management*, 4-64
 - effect on NFS volume, *System Management*, 4-8
- VERIFY ON/OFF command
 - EDI utility, *Utilities*, 2-49
- /VERIFY qualifier
 - BRU utility, *Utilities*, 7-22
- /VERIFY switch
 - DSC utility, *Utilities*, 8-18
 - FMT utility, *Utilities*, 5-9
- Version identifier
 - See also .IDENT directive
 - assembler, *MACRO-11*, 6-4
 - standard, *MACRO-11*, E-14
- Version number
 - decimal
 - SYSGEN question, *System Generation*, 3-29
 - file, *Command Language*, 4-3
 - default, *Command Language*, 4-4
 - RMSBCK utility, *RMS-11 Utilities*, 6-5
 - RMSCNV utility, *RMS-11 Utilities*, 4-9
 - RMSDEF utility, *RMS-11 Utilities*, A-5
 - RMSDES utility, *RMS-11 Utilities*, 2-16
 - RMSDSP utility, *RMS-11 Utilities*, 5-5
 - RMSIFL utility, *RMS-11 Utilities*, 3-5
 - RMSRST utility, *RMS-11 Utilities*, 7-5
- Version number directive, *MACRO-11*, 6-16, 6-17
- VERSN symbol, *Indirect*, 2-22
- Vertical format control
 - See VFC
 - See Vfc parameter
- Vertical tab, *Command Language*, 3-24
- /VE switch
 - FLX utility, *Utilities*, 4-8

\$VEXT

- low-memory context, *Task Builder*, B-10
- reserved global symbol, *Task Builder*, E-2

VFC

- half-duplex, *I/O Drivers*, 3-27
- double space, *I/O Drivers*, 3-27
- format
 - internal vertical, *I/O Drivers*, 3-28
- overprint, *I/O Drivers*, 3-28
- page eject, *I/O Drivers*, 3-27
- prompting output, *I/O Drivers*, 3-28
- single-space, *I/O Drivers*, 3-27

LPDRV, I/O Drivers, 10-6

- character, *I/O Drivers*, 10-6
- double space, *I/O Drivers*, 10-6
- format, internal vertical, *I/O Drivers*, 10-7
- internal, *I/O Drivers*, 10-7
- overprint, *I/O Drivers*, 10-7
- page eject, *I/O Drivers*, 10-6
- prompting output, *I/O Drivers*, 10-7
- single space, *I/O Drivers*, 10-6

TTDRV, I/O Drivers, 2-75

- character table, *I/O Drivers*, 2-75

VFC carriage control

- See **FB\$PRN** mask in **RAT** field

VFC header buffer address

- See **RHB** field in **RAB**

Vfc parameter

- device-specific (half-duplex), *I/O Drivers*, 3-8
- QIO\$** macro (**VTDRV**), *I/O Drivers*, 4-4
- standard function (**LPDRV**), *I/O Drivers*, 10-4

TTDRV

- general, *I/O Drivers*, 2-11
- IO.CCO** function, *I/O Drivers*, 2-23
- IO.RPR** function, *I/O Drivers*, 2-41
- IO.WAL** function, *I/O Drivers*, 2-47
- IO.WBT** function, *I/O Drivers*, 2-50

VFC record format, RMS-11

- Introduction*, 3-2
- RMS-11 User's Guide*, 1-11, 2-16

VFC record format (cont'd.)

- See also **FB\$VFC** code in **RFM** field

/VFILL keyword

- SET** command (**MCR**), *MCR*, 3-264
- SET** command (**VMR**), *System Management*, 10-81

VFY utility

- command line, *Utilities*, 9-2
- error message, *Utilities*, 9-11
- file error reporting, *Utilities*, 9-8
- operation mode, *Utilities*, 9-3
- switch, *Utilities*, 9-4
- summary, *Utilities*, 9-4
- validity check, *Utilities*, 9-3

/VI keyword

- HOME** command, *MCR*, 3-96
- MOUNT** command (**MCR**), *MCR*, 3-153

\$VIRT, Task Builder, 12-42, 12-43

Virtual array, Task Builder, 12-42, 12-43

- example, *Task Builder*, 12-42, 12-43

Virtual block, RMS-11 Introduction, 2-3

- file device, *I/O Operations*, 1-7
- file extension, *I/O Operations*, 2-9

Virtual block number

- See also **BKT** field in **RAB**

- See also **VCN**

- READ\$** macro, *I/O Operations*, 3-34

- WRITE\$** macro, *I/O Operations*, 3-38

Virtual I/O, I/O Drivers, 1-2

Virtual MCR

- See **VMR**

Virtual memory management, System Library, 8-1

- See also **Memory management**

- address conversion (**\$CVRL**), *System Library*, 8-24

- \$ALBLK** routine, *System Library*, 8-10

- allocate (**\$ALVRT**), *System Library*, 8-16

- allocate small virtual block

- (**\$ALSVB**), *System Library*, 8-18

- \$ALSVB** routine, *System Library*, 8-19

- \$ALVRT** routine, *System Library*, 8-17

- core allocation, *System Library*, 8-8

Virtual memory management (cont'd.)

- core blocks request (\$RQVCB),
System Library, 8-20
- \$CVLOK routine, *System Library*,
8-24
- \$CVRL routine, *System Library*,
8-25
- error handling, *System Library*, 8-2
- \$EXTSK routine, *System Library*,
8-14
- find page (\$FNDPG), *System Library*,
8-27
- \$FNDPG routine, *System Library*,
8-28
- \$GTCOR routine, *System Library*,
8-12
- initialize (\$INIVM), *System Library*,
8-5
- \$IVIVM routine, *System Library*, 8-7
- \$LCKPG routine, *System Library*,
8-31
- library, *Program Development*, 1-11
- library file, *System Library*, 8-4
- lock page (\$LCKPG), *System Library*,
8-30
- memory storage
 - allocate block (\$ALBLK), *System Library*, 8-9
 - extend task (\$EXTSK), *System Library*, 8-13
 - get core (\$GTCOR), *System Library*, 8-11
- page lock (\$CVLOK), *System Library*,
8-22
- \$RDPAG routine, *System Library*,
8-27
- read page (\$RDPAG), *System Library*, 8-26
- \$RQVCB routine, *System Library*,
8-21
- task builder requirements, *System Library*, 8-3
- unlock page (\$UNLPG), *System Library*, 8-31
- \$UNLPG routine, *System Library*,
8-32
- write marked page (\$WRMPG),
System Library, 8-28
- write page (\$WRPAG), *System Library*, 8-14
- \$WRMPG routine, *System Library*,
8-29
- \$WRPAG routine, *System Library*,
8-15

Virtual Monitor Console Routine

See VMR

Virtual terminal

- creating, *Executive*, 5-54
- deallocating, *Executive*, 5-73
- default buffer
 - SYSGEN question, *System Generation*, 3-29
- SYSGEN question, *System Generation*, 3-29

Virtual-to-logical block mapping

- optimizations, *RMS-11 User's Guide*,
8-2

VMLIB.OLB (Virtual memory management library), *Program Development*, 1-11

VMR, *System Management*, 1-3

- changing system parameters, *System Generation*, 4-8

command

- abbreviations, *System Management*, 10-4
- descriptions, *System Management*, 10-7 to 10-93
- format, *System Management*, 10-7
- format, *System Management*, 10-4
- keywords, *System Management*, 10-4
- keyword values, *System Management*, 10-5
- names, *System Management*, 10-4
- parameters, *System Management*, 10-4
- syntax, *System Management*, 10-4
- types, *System Management*, 10-1
- comments, *System Management*, 10-5
- definition, *System Management*, 10-1
- diagnostic messages, *System Generation*, 3-78
- error messages, *System Management*, 10-94 to 10-112
- exiting, *System Management*, 10-3
- file specifications
 - components, *System Management*, 10-5

VMR

- file specifications
 - device, *System Management*, 10-5
 - directory, *System Management*, 10-6
 - file name, *System Management*, 10-6
 - file types, *System Management*, 10-6
 - version number, *System Management*, 10-6
- device name, *System Management*, 10-5
- directory, *System Management*, 10-6
- file names, *System Management*, 10-6
- file type, *System Management*, 10-6
- format, *System Management*, 10-5
- /IM switch, *System Management*, 10-7
- specifying, *System Management*, 10-5
- version number, *System Management*, 10-6
- version number range, *System Management*, 10-6
- indirect command file, *System Management*, 10-3
- installing from LB:, *System Management*, 10-3
- introduction, *System Management*, 10-1
- prompt, *System Management*, 10-3
- relationship to MCR, *System Management*, 10-1
- running, *System Management*, 10-2
- starting, *System Management*, 10-1, 10-2 to 10-4
- system image file
 - assigning SY: and LB:, *System Management*, 10-1
 - bootstrap, *System Management*, 10-1
 - relationship to symbol definition file, *System Management*, 10-1
- VMR commands
 - ALTER, *System Management*, 10-8
 - ASSIGN, *System Management*, 10-9

VMR commands (cont'd.)

- CANCEL, *System Management*, 10-11
- CONFIGURATION, *System Management*, 10-12
- DEVICES, *System Management*, 10-16
- FIX, *System Management*, 10-18
- INSTALL, *System Management*, 10-21
- LOAD, *System Management*, 10-33
- LUNS, *System Management*, 10-35
- PARTITION DEFINITIONS, *System Management*, 10-36
- REASSIGN, *System Management*, 10-38
- REDIRECT, *System Management*, 10-39
- REMOVE, *System Management*, 10-40
- RUN, *System Management*, 10-42
- SAVE, *System Management*, 10-47
- SET, *System Management*, 10-50
- TASKLIST, *System Management*, 10-88
- TIME, *System Management*, 10-90
- UNFIX, *System Management*, 10-92
- UNLOAD, *System Management*, 10-93
- VMSTIME, *Error Logging*, 5-7
- Volatile registers, *CDA*, 3-1
 - dump, *CDA*, 3-2 to 3-4
- /VOL keyword
 - MOUNT command (MCR), *MCR*, 3-154
- Volume, *Command Language*, 4-1, 5-1 to 5-11
 - accessing
 - dismounted, *MCR*, 3-142
 - advancing to next
 - See NDTVOL operation
 - allocating, *MCR*, 3-152
 - backing up
 - BRU utility, *Utilities*, 7-1
 - bit density, *MCR*, 3-147
 - compressing
 - DSC utility, *Utilities*, 8-3
 - DEctape
 - initializing, *MCR*, 3-99
 - default extend size, *I/O Operations*, 2-9
 - directories, *MCR*, 3-150
 - directory listing
 - FLX utility, *Utilities*, 4-7

Volume (cont'd.)

- dismounting, *MCR*, 3-70
- displaying free space
 - PIP utility, *Utilities*, 3-23
 - VFY utility, *Utilities*, 9-5
- displaying information, *MCR*, 3-153
- examining data
 - DMP utility, *Utilities*, 11-1
- file
 - deleting
 - FLX utility, *Utilities*, 4-7
 - recovering lost
 - VFY utility, *Utilities*, 9-6
 - transferring
 - FLX utility, *Utilities*, 4-4
- Files-11, *Command Language*, 5-4
 - MCR*, 2-1, 3-35
 - home block, *MCR*, 3-93
 - initializing, *MCR*, 3-99 to 3-116
 - protecting with TEMPORARYFILE, *System Management*, 4-63
- foreign, *MCR*, 2-1
 - accessing, *MCR*, 2-2
 - displaying information, *MCR*, 3-153
 - mounting, *MCR*, 2-2, 3-148, 3-151
- formatting
 - FLX utility, *Utilities*, 4-4
 - FMT utility, *Utilities*, 5-1
- home block, *MCR*, 3-149
- identifier, *MCR*, 3-144, 3-154
- index file
 - unlocking, *MCR*, 3-153
- initializing, *MCR*, 2-1
 - BRU utility, *Utilities*, 7-17
 - FLX utility, *Utilities*, 4-2
- label, *MCR*, 3-70, 3-100, 3-150
- listing file-ID
 - VFY utility, *Utilities*, 9-6
- locating bad block
 - BAD utility, *Utilities*, 6-1
 - FMT utility, *Utilities*, 5-1
 - VFY utility, *Utilities*, 9-7
- locking, *MCR*, 3-149
- magnetic tape, *RMS-11 Introduction*, 2-5
 - labelling, *MCR*, 3-147, 3-149
 - protecting, *MCR*, 3-151
 - record, *MCR*, 3-152
- mounted, *Command Language*, 5-10 to 5-11

Volume (cont'd.)

- mounting, *Command Language*, 5-50 to 5-67 *MCR*, 2-3, 3-141
- Files-11, *MCR*, 3-142
- foreign, *MCR*, 3-148
- magnetic tape, *MCR*, 3-142, 3-143
- nonprivileged, *MCR*, 3-142
- shared, *MCR*, 3-152
- mounting with ACP, *MCR*, 3-148, 3-149
- NFS
 - altering block range, *System Management*, 4-52
 - displaying block range, *System Management*, 4-52
 - error retries, *System Management*, 4-56
 - list of parameter commands for, *System Management*, 4-9
 - selecting
 - with IOX, *System Management*, 4-58
 - with VERIFY, *System Management*, 4-64
- nonshared, *MCR*, 3-142
- private, *Command Language*, 5-10 to 5-11, 5-45 to 5-49
 - mounting, *MCR*, 3-148
- protecting, *MCR*, 3-102, 3-151
- protection, *Command Language*, 4-13 to 4-14
- public, *Command Language*, 5-10 to 5-11 *MCR*, 3-142, 3-152
 - dismounting, *MCR*, 3-71
 - mounting, *MCR*, 3-152
 - setting, *MCR*, 3-152
- record type, *MCR*, 3-147
- recovering
 - lost block
 - VFY utility, *Utilities*, 9-7
 - lost file
 - VFY utility, *Utilities*, 9-6
 - space
 - DSC utility, *Utilities*, 8-3
- restoring
 - BRU utility, *Utilities*, 7-1
- selecting
 - Files-11 for IOX, *System Management*, 4-8
 - NFS for IOX, *System Management*, 4-8
- shareable, *Command Language*, 5-10 to 5-11

Volume (cont'd.)
 shared, *MCR*, 3-142
 UIC
 specifying, *MCR*, 3-153
 unloading, *MCR*, 3-149
 unmounted attach (DTDRV), *I/O Drivers*, 6-2
 verifying, *Utilities*, 9-1
 block
 VFY utility, *Utilities*, 9-7
 virtual, *MCR*, 3-149
 VOLUMECHECK command
 IOX, *System Management*, 4-65
 Volume Control Block
 See VCB
 Volume label
 tape, *I/O Operations*, G-1
 user, *I/O Operations*, G-3
 Volume label switch, *Error Logging*, 3-7
 Volume rewind, *I/O Operations*, 5-5
 Volume valid processing, *Writing I/O Driver*, 4-70
 Vout parameter (ICDRV/ISDRV), *I/O Drivers*, 19-11
 IO.SAO function, *I/O Drivers*, 19-16
 VRCD\$ directive, *Executive*, 5-257
 VRCD\$ directive summary, *I/O Operations*, C-5
 VRC\$ directive, *Executive*, 5-259
 VRC\$ directive summary, *I/O Operations*, C-5
 VRCX\$ directive, *Executive*, 5-261
 VRCX\$ directive summary, *I/O Operations*, C-5
 V register, *Debugging*, 2-7, 5-5
 VS60 graphic display, *I/O Drivers*, 21-1
 VS60 Graphics Display
 See GRDRV
 VSDA\$ directive, *Executive*, 5-263
 VSDA\$ directive summary, *I/O Operations*, C-6
 VSECT option, *Task Builder*, 12-44
 VSRC\$ directive, *Executive*, 5-265
 VSRC\$ directive summary, *I/O Operations*, C-6
 /V switch, *Error Logging*, 3-7
 VT05B terminal, *I/O Drivers*, 2-5, 3-3
 VT100 DECscope, *I/O Drivers*, 2-6, 3-4
 VT100-series terminal, *Command Language*, 3-18

VT100 terminal, *Introduction*, 1-1, 1-2, 1-2 fig.
 VT101 DECscope, *I/O Drivers*, 2-6
 VT102 DECscope, *I/O Drivers*, 2-6
 VT105 DECscope, *I/O Drivers*, 2-6
 VT11 graphic display, *I/O Drivers*, 21-1
 VT11 Graphics Display
 See GRDRV
 VT131 DECscope, *I/O Drivers*, 2-6
 VT200-series terminal, *Command Language*, 3-19
 keyboard, *Command Language*, 3-1
 VT220 terminal, *Introduction*, 1-1, 1-3, 1-3 fig. *I/O Drivers*, 2-6
 VT240 terminal, *I/O Drivers*, 2-6
 VT241 terminal, *I/O Drivers*, 2-7
 VT50H terminal, *I/O Drivers*, 2-5, 3-3
 VT50 terminal, *I/O Drivers*, 2-5, 3-3
 VT52 terminal, *Command Language*, 3-19 *I/O Drivers*, 2-5, 3-4
 VT55 terminal, *I/O Drivers*, 2-5, 3-4
 VT61 terminal, *I/O Drivers*, 2-6, 3-4
 VT: pseudo device, *Command Language*, 5-7, 5-8
 VTDV, *I/O Drivers*, 4-1

W

WAIT\$ macro
 file processing, *I/O Operations*, 3-1
 block I/O completion, *I/O Operations*, 3-40
 format
 file operations, *I/O Operations*, 3-40
 with READ\$ and WRITE\$, *I/O Operations*, 3-40
 with READ\$ or WRITE\$, *I/O Operations*, 3-33
 WAIT command
 IOX, *System Management*, 4-66
 .WAIT directive, *Indirect*, 2-94
 Wait for buffer (K-series), *I/O Drivers*, 23-25
 Wait for Logical OR of Event Flags directive, *Executive*, 5-270
 Wait for Significant Event directive, *Executive*, 5-268
 Wait for Single Event Flag directive, *Executive*, 5-272
 /WAIT keyword
 MOUNT command (*MCR*), *MCR*, 3-154

- \$WAIT macro, *RMS-11 Macro*, 5-126
- RSTS/E, *RMS-11 Macro*, D-4
- WAIT operation, *RMS-11 Introduction*, 4-4
 - block stream, *RMS-11 Macro*, 4-14
 - record stream, *RMS-11 Macro*, 4-9
 - \$WAIT macro, *RMS-11 Macro*, 5-126
- /WARNINGS qualifier, *Task Builder*, 11-76
- /WB keyword
 - INSTALL command (MCR), *MCR*, 3-118, 3-122
 - INSTALL command (VMR), *System Management*, 10-28
 - SAVE command (MCR), *MCR*, 3-190
- WCC field in NAM block
 - offset, *RMS-11 Macro*, 6-94
 - PARSE operation, *RMS-11 Macro*, 5-87
 - SEARCH operation, *RMS-11 Macro*, 5-116, 5-118
 - summary, *RMS-11 Macro*, 6-106
- /WCHK keyword
 - SET command (MCR), *MCR*, 3-265
 - SET command (VMR), *System Management*, 10-81
- /WCHK switch
 - BAD utility, *Utilities*, 6-9
- W command, *Debugging*, 2-11, 6-2, 6-3
- WDB, *Executive*, 3-11, 5-108
 - assigning values, *Executive*, 3-19
 - format, *Executive*, 3-16
 - generating, *Executive*, 3-17, 3-18
- WDBBK\$, *Executive*, 3-17
- WDBDF\$, *Executive*, 3-17
- .WDFPP routine, write \$\$FSR2 default file protection word, *I/O Operations*, 4-5
- .WDFR routine, write \$\$FSR2 default directory string, *I/O Operations*, 4-3
- .WDFUI routine, write default UIC, *I/O Operations*, 4-3, 4-4
- WDI field in NAM block
 - offset, *RMS-11 Macro*, 6-94
 - PARSE operation, *RMS-11 Macro*, 5-87
 - SEARCH operation, *RMS-11 Macro*, 5-116, 5-118
 - summary, *RMS-11 Macro*, 6-107
- /WD switch
 - DMP utility, *Utilities*, 11-8
- .WFOWN routine, write \$\$FSR2 file owner word, *I/O Operations*, 4-7
- /WF switch
 - RMSCNV utility, *RMS-11 Utilities*, 4-14
- WHILE/UNTIL/DO statement, *Error Logging*, 5-35
- WIDE argument, *MACRO-11*, 8-11, 8-12
- /WIDE qualifier, *Task Builder*, 11-77
- Width switch, *Error Logging*, 3-7, 3-21
- Wildcard, *Command Language*, 4-6
 - to 4-8 *Introduction*, 3-1 to 3-3
 - RMS-11 Introduction*, 4-1
- character, *MCR*, 2-7
- directory context
 - See WDI field in NAM block
- file context
 - See WCC field in NAM block
- file name, *I/O Operations*, 4-19
- file specification
 - BRU utility, *Utilities*, 7-7
 - FLX utility, *Utilities*, 4-3
 - PIP utility, *Utilities*, 3-7
- file type, *I/O Operations*, 4-19
- operation
 - See NB\$WCH mask in FNB field
- Wildcard context (F11ACP)
 - FNB, *I/O Drivers*, C-7
- Wildcard loop, *RMS-11 Macro*, 3-8
- Window, *RMS-11 User's Guide*, 8-2
 - Task Builder*, 2-19 to 2-23
- block, *Task Builder*, 2-19
 - composite arrangement, *Writing I/O Driver*, 2-14
 - for a region, *Task Builder*, 5-18
 - overlay, *Task Builder*, 3-48
- definition block, *Task Builder*, 2-21
- descriptor, *Task Builder*, B-15, B-17, B-20, B-21
 - overlay, *Task Builder*, 3-20, 3-21
- I- and D-space task, *Task Builder*, 7-4
 - option, *Task Builder*, 12-45
 - region, *Task Builder*, 5-17, 5-26
 - task, *Task Builder*, 2-19 to 2-23
 - turning, *RMS-11 User's Guide*, 8-2
 - optimizations, *RMS-11 User's Guide*, 8-3

- Window
 - wrap around
 - virtual section, *Task Builder*, 5-60
- Window Definition Block
 - See WDB
- Window pointer
 - number, *I/O Operations*, 2-16
- Window size parameter (F11ACP), *I/O Drivers*, C-6
- /WINDOWS qualifier
 - BRU utility, *Utilities*, 7-22
- /WIN keyword
 - HOME command, *MCR*, 3-97
 - INITVOLUME command, *MCR*, 3-107
 - MOUNT command (*MCR*), *MCR*, 3-155
- /WI switch, *Task Builder*, 10-52
- WK: pseudo device, *Command Language*, 5-7, 5-8
- /WLT switch
 - FMT utility, *Utilities*, 5-9
- \$\$WNDS program section
 - reserved name, *Task Builder*, E-4
- WNDWS option, *Task Builder*, 12-45
- Word, *RMS-11 Introduction*, 2-1
 - location
 - displaying, *Debugging*, 4-2, 4-3
 - opening, *Debugging*, 4-2, 4-3
 - underscore command (*—*), *Debugging*, 4-5
- .WORD directive, *MACRO-11*, 6-24, 6-25
 - implicit, *MACRO-11*, 2-1, 2-4, 6-25
- WORD key (EDT), *Introduction*, 2-6
- Word mode
 - changing to byte mode, *Debugging*, 4-3
 - operator
 - ASCII, *Debugging*, 2-7, 9-10
 - octal, *Debugging*, 2-7, 4-2, 9-11
 - Radix-50, *Debugging*, 2-7, 9-11
- Work file
 - access
 - system overhead, *Task Builder*, F-2, F-5 to F-7
 - assembler, *MACRO-11*, F-1
 - contiguity, *Task Builder*, F-3
 - parameters, *Task Builder*, F-2
 - performance, *Task Builder*, F-2
 - changing device to improve, *Task Builder*, F-2, F-5
 - reads, *Task Builder*, F-2
- Work file (cont'd.)
 - reducing size, *Task Builder*, F-5, F-6
 - reference, *Task Builder*, F-2
 - improving performance, *Task Builder*, F-6
 - size, *Task Builder*, F-2
 - writes, *Task Builder*, F-2
- Wraparound
 - automatic, remote line (TTDRV), *I/O Drivers*, 2-83
 - half-duplex, *I/O Drivers*, 3-29
 - output line, *I/O Drivers*, 3-29
- /WRAP keyword
 - SET command (*MCR*), *MCR*, 3-266
 - SET command (*VMR*), *System Management*, 10-82 to 10-83
- W register, *Debugging*, 2-6, 5-3
- Writable-block context, *RMS-11 Macro*, 4-12
- Write
 - all character
 - half-duplex, *I/O Drivers*, 3-16
 - TTDRV, *I/O Drivers*, 2-15, 2-24, 2-29, 2-50
 - block transfer length (DTDRV), *I/O Drivers*, 6-7
 - break-through
 - half-duplex, *I/O Drivers*, 3-16
 - multi-echo (half-duplex), *I/O Drivers*, 3-16
 - privileged (TTDRV), *I/O Drivers*, 2-16
 - TF.WBT (TTDRV), *I/O Drivers*, 2-24, 2-29
 - TTDRV, *I/O Drivers*, 2-16, 2-17, 2-24, 2-48, 2-49
 - DDDRV, *I/O Drivers*, 7-4
 - error (tape driver), *I/O Drivers*, 8-14
 - file owner word, *I/O Operations*, 4-7
 - logical block, *I/O Drivers*, 1-31, 1-32
 - TTDRV, *I/O Drivers*, 2-16, 2-47
 - no sync (communication driver), *I/O Drivers*, 12-8
 - NRZI (tape driver), *I/O Drivers*, 8-16
 - pass all (TTDRV), *I/O Drivers*, 2-29, 2-47
 - redisplay input (TTDRV), *I/O Drivers*, 2-16, 2-29
 - reverse (DTDRV), *I/O Drivers*, 6-7

- Write (cont'd.)
 - verify (CTDRV), *I/O Drivers*, 9-8
- Write \$\$FSR2
 - default directory string, *I/O Operations*, 4-3
- WRITE\$ macro, *I/O Operations*, 1-7, 3-1
 - block access, *I/O Operations*, 2-12
 - example, *I/O Operations*, 3-39
 - extending file, *I/O Operations*, 3-39
 - FD.RWM parameter
 - block I/O, *I/O Operations*, 2-10
 - FDB, *I/O Operations*, 3-39
 - file processing, *I/O Operations*, 3-37
 - write virtual block, *I/O Operations*, 3-37
 - format, *I/O Operations*, 3-37
 - virtual block number, *I/O Operations*, 3-38
- Write access, MCR, 2-3
 - common region, MCR, 3-119
 - file, MCR, 3-148, 3-213
 - file open, *I/O Operations*, 2-15
 - shared, *I/O Operations*, 1-12
 - UFD, MCR, 3-281
 - volume, MCR, 3-94, 3-96, 3-106, 3-151
- Write access (F11ACP), *I/O Drivers*, C-8
- Write-back cache data
 - preventing loss, *System Management*, 5-5
- Write-behind file processing, *I/O Operations*, 2-19
- Write-behind operation, FD.WBH parameter, *I/O Operations*, 3-12
- Write-check
 - enabling in IOX, *System Management*, 4-67
- WRITECHECK command
 - IOX, *System Management*, 4-67
- WRITE command
 - EDI utility, *Utilities*, 2-49
 - EDT editor, *Introduction*, 2-16
- Write data
 - into output register (LSDRV), *I/O Drivers*, 17-4
 - timed intervals, *I/O Drivers*, 17-8
 - to D/A converter
 - timed intervals (LSDRV), *I/O Drivers*, 17-8
- Write default UIC, *I/O Operations*, 4-4
- Write digital output (LSDRV), *I/O Drivers*, 17-20
- Write file protection word
 - default, *I/O Operations*, 4-5
- WRITE GROUP statement, *Error Logging*, 5-31
- Write image
 - clock control register (LADRV), *I/O Drivers*, 22-29
- /WRITE keyword
 - MOUNT command (MCR), MCR, 3-155
- Write logical record
 - file processing, *I/O Operations*, 3-26
 - random mode, *I/O Operations*, 3-30
 - sequential mode, *I/O Operations*, 3-33
- \$WRITE macro
 - sequential access, *RMS-11 Macro*, 5-127
 - VBN access, *RMS-11 Macro*, 5-129
- WRITE operation, *RMS-11 Introduction*, 4-7
 - RMS-11 Macro*, 4-14
 - access modes, *RMS-11 Introduction*, 4-7
 - and shared access, *RMS-11 User's Guide*, 2-6
- \$WRITE macro
 - sequential access, *RMS-11 Macro*, 5-127
 - VBN access, *RMS-11 Macro*, 5-129
- WRITE statement, *Error Logging*, 4-30, 5-31
- Write virtual block
 - file processing, *I/O Operations*, 3-37
- \$WRMPG (Write marked page), *System Library*, 8-28
- \$WRPAG (Write page), *System Library*, 8-14
- WSIG\$\$ directive, *Executive*, 5-268
- /W switch, *Error Logging*, 3-7, 3-21
- WTLO\$ directive, *Executive*, 5-270
- WTSE\$ directive, *Executive*, 5-272
 - I/O Drivers*, 1-4, 1-10
- WTSE\$ macro, *I/O Drivers*, 1-14, 1-15, 1-24
 - example, *I/O Drivers*, 1-25

X

X\$-family macro, RMS-11 Macro, 2-9
 declaring
 ALL block, RMS-11 Macro, C-3
 DAT block, RMS-11 Macro, C-3
 KEY block, RMS-11 Macro, C-3
 PRO block, RMS-11 Macro, C-3
 SUM block, RMS-11 Macro, C-3

XAB
 See also ALL block
 See also DAT block
 See also KEY block
 See also PRO block
 See also SUM block
 chaining to FAB, RMS-11 Macro, 2-12

XAB\$B macro, RMS-11 Macro, 2-8, C-3

XAB\$BT macro, RMS-11 Macro, C-4

XAB\$E macro, RMS-11 Macro, 2-9
 declaring, RMS-11 Macro, C-3

XAB field in FAB
 chaining XABs to FAB, RMS-11 Macro, 2-12

CLOSE operation, RMS-11 Macro, 5-3

CREATE operation, RMS-11 Macro, 5-9

DISPLAY operation, RMS-11 Macro, 5-29

ENTER operation, RMS-11 Macro, 5-35

ERASE operation, RMS-11 Macro, 5-40

EXTEND operation, RMS-11 Macro, 5-46
 offset, RMS-11 Macro, 6-24

OPEN operation, RMS-11 Macro, 5-73

PARSE operation, RMS-11 Macro, 5-86

REMOVE operation, RMS-11 Macro, 5-102

RENAME operation, RMS-11 Macro, 5-108

SEARCH operation, RMS-11 Macro, 5-116
 summary, RMS-11 Macro, 6-66

XABOF\$ macro, RMS-11 Macro, C-4

XB\$ALL code in COD field, RMS-11 Macro, 2-8
 summary, RMS-11 Macro, 6-10

XB\$ALL code in COD field (cont'd.)
 value, RMS-11 Macro, 6-2

XB\$BN2 code in DTP field
 CREATE operation, RMS-11 Macro, 5-18
 DISPLAY operation, RMS-11 Macro, 5-31
 OPEN operation, RMS-11 Macro, 5-80
 value, RMS-11 Macro, 6-67

XB\$BN4 code in DTP field
 CREATE operation, RMS-11 Macro, 5-18
 DISPLAY operation, RMS-11 Macro, 5-31
 OPEN operation, RMS-11 Macro, 5-80
 value, RMS-11 Macro, 6-67

XB\$CHG mask in FLG field
 CREATE operation, RMS-11 Macro, 5-19
 DISPLAY operation, RMS-11 Macro, 5-31
 OPEN operation, RMS-11 Macro, 5-80
 summary, RMS-11 Macro, 6-76
 value, RMS-11 Macro, 6-67

XB\$CTG mask in AOP field
 CREATE operation, RMS-11 Macro, 5-18
 EXTEND operation, RMS-11 Macro, 5-47
 OPEN operation, RMS-11 Macro, 5-79
 RSTS/E, RMS-11 Macro, D-4
 summary, RMS-11 Macro, 6-6
 value, RMS-11 Macro, 6-2

XB\$CYL mask in ALN field
 RSTS/E, RMS-11 Macro, D-3, D-4

XB\$DAT code in COD field, RMS-11 Macro, 2-8
 summary, RMS-11 Macro, 6-17
 value, RMS-11 Macro, 6-14

XB\$DTL code in BLN field
 summary, RMS-11 Macro, 6-15
 value, RMS-11 Macro, 6-14

XB\$DUP mask in FLG field
 CREATE operation, RMS-11 Macro, 5-19
 DISPLAY operation, RMS-11 Macro, 5-31
 OPEN operation, RMS-11 Macro, 5-80
 summary, RMS-11 Macro, 6-77

XB\$DUP mask in FLG field (cont'd.)
 value, *RMS-11 Macro*, 6-67
 XB\$-family symbol
 declaring
 ALL block, *RMS-11 Macro*, C-3,
 C-4
 DAT block, *RMS-11 Macro*,
 C-3, C-4
 KEY block, *RMS-11 Macro*, C-3,
 C-4
 PRO block, *RMS-11 Macro*,
 C-3, C-4
 SUM block, *RMS-11 Macro*,
 C-3, C-4
 XAB, *RMS-11 Macro*, C-4
 XB\$HRD mask in AOP field
 CREATE operation, *RMS-11 Macro*,
 5-17
 EXTEND operation, *RMS-11 Macro*,
 5-47
 OPEN operation, *RMS-11 Macro*,
 5-79
 RSTS/E, *RMS-11 Macro*, D-4
 RSX-11, *RMS-11 Macro*, D-4
 summary, *RMS-11 Macro*, 6-7
 value, *RMS-11 Macro*, 6-2
 XB\$IN2 code in DTP field
 CREATE operation, *RMS-11 Macro*,
 5-18
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 OPEN operation, *RMS-11 Macro*,
 5-80
 value, *RMS-11 Macro*, 6-67
 XB\$IN4 code in DTP field
 CREATE operation, *RMS-11 Macro*,
 5-18
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 OPEN operation, *RMS-11 Macro*,
 5-80
 value, *RMS-11 Macro*, 6-67
 XB\$INI mask in FLG field
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 OPEN operation, *RMS-11 Macro*,
 5-80
 value, *RMS-11 Macro*, 6-67
 XB\$KEY code in COD field, *RMS-11*
 Macro, 2-8
 summary, *RMS-11 Macro*, 6-70
 value, *RMS-11 Macro*, 6-67
 XB\$KYL code in BLN field
 summary, *RMS-11 Macro*, 6-69
 XB\$KYL code in BLN field (cont'd.)
 value, *RMS-11 Macro*, 6-67
 XB\$LAL code in BLN field
 summary, *RMS-11 Macro*, 6-9
 value, *RMS-11 Macro*, 6-2
 XB\$LBN mask in ALN field
 CREATE operation, *RMS-11 Macro*,
 5-17
 EXTEND operation, *RMS-11 Macro*,
 5-47
 RSTS/E, *RMS-11 Macro*, D-3, D-4
 value, *RMS-11 Macro*, 6-2
 XB\$NUL mask in FLG field
 CREATE operation, *RMS-11 Macro*,
 5-19
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 OPEN operation, *RMS-11 Macro*,
 5-80
 summary, *RMS-11 Macro*, 6-78
 value, *RMS-11 Macro*, 6-67
 XB\$PAC code in DTP field
 CREATE operation, *RMS-11 Macro*,
 5-18
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 OPEN operation, *RMS-11 Macro*,
 5-80
 value, *RMS-11 Macro*, 6-67
 XB\$PRL code in BLN field
 summary, *RMS-11 Macro*, 6-109
 value, *RMS-11 Macro*, 6-108
 XB\$PRO code in COD field, *RMS-11*
 Macro, 2-8
 summary, *RMS-11 Macro*, 6-110
 value, *RMS-11 Macro*, 6-108
 XB\$SML code in BLN field
 summary, *RMS-11 Macro*, 6-146
 value, *RMS-11 Macro*, 6-145
 XB\$STG code in DTP field
 CREATE operation, *RMS-11 Macro*,
 5-18
 DISPLAY operation, *RMS-11 Macro*,
 5-31
 OPEN operation, *RMS-11 Macro*,
 5-80
 value, *RMS-11 Macro*, 6-67
 XB\$SUM code in COD field, *RMS-11*
 Macro, 2-8
 summary, *RMS-11 Macro*, 6-147
 value, *RMS-11 Macro*, 6-145
 XB\$VBN mask in ALN field
 CREATE operation, *RMS-11 Macro*,
 5-17

XB\$VBN mask in ALN field (cont'd.)
 EXTEND operation, *RMS-11 Macro*, 5-47
 RSTS/E, *RMS-11 Macro*, D-3, D-4
 value, *RMS-11 Macro*, 6-2
 XBAOF\$ macro, *RMS-11 Macro*, C-4
 XBDOF\$ macro, *RMS-11 Macro*, C-4
 XBKOF\$ macro, *RMS-11 Macro*, C-4
 XBPOF\$ macro, *RMS-11 Macro*, C-4
 XBSOF\$ macro, *RMS-11 Macro*, C-4
 X command
 ODT, *Debugging*, 1-4, 2-12 *Program Development*, 5-8
 XDT, *Debugging*, 9-1, 9-14
 ZAP utility, *Utilities*, 15-16
 XDT, CDA, 1-2, 1-3, 1-6, 1-7
 Debugging, 8-1 *Writing I/O Driver*, 6-1, 6-2, 6-3, 6-5
 See also *Executive Debugging Tool BPT*
 inserting with OPEN, *Debugging*, 8-7
 restoring instruction, *Debugging*, 8-8
 setting, *Debugging*, 8-7
 bug check, *Debugging*, 9-4
 commands, *Debugging*, 9-8 *Writing I/O Driver*, 6-2
 debugging
 driver, *Debugging*, 9-2 *Writing I/O Driver*, 6-2, 6-4, 6-5
 privileged task, *Debugging*, 9-1
 entering, *Debugging*, 8-4
 BPT instruction, *Debugging*, 8-7
 BRK command, *Debugging*, 8-7
 from hung system, *Debugging*, 8-9
 virgin system boot, *Debugging*, 8-6
 examining memory location, *Debugging*, 9-3
 general operation, *Writing I/O Driver*, 6-4
 including in system, *Debugging*, 8-1
 loadable, *Debugging*, 8-2
 error code, *Debugging*, 9-5
 facility code, *Debugging*, 9-5
 operators, *Debugging*, 9-8
 restrictions, *Writing I/O Driver*, 6-3
 SST, *Debugging*, 8-4
 startup, *Writing I/O Driver*, 6-2
 SYSGEN question, *System Generation*, 3-31
 trap entry codes, *Debugging*, 8-5

XEDRV
 address pairs, *Ethernet, I/O Drivers*, 13-3
 asynchronous I/O, *I/O Drivers*, 13-21
 buffer
 diagnostic, *I/O Drivers*, 13-19
 maximum size, *I/O Drivers*, 13-21
 minimum size, *I/O Drivers*, 13-21
 protocol address pair, *I/O Drivers*, 13-8
 read destination address, *I/O Drivers*, 13-16
 read Ethernet address, *I/O Drivers*, 13-14
 read protocol type, *I/O Drivers*, 13-15
 set characteristic, *I/O Drivers*, 13-7
 set destination address, *I/O Drivers*, 13-12
 set multicast address, *I/O Drivers*, 13-9
 set protocol type, *I/O Drivers*, 13-12
 change mode, *I/O Drivers*, 13-20
 connecting to task, *I/O Drivers*, 13-22
 default mode bit, *I/O Drivers*, 13-21
 definition, *I/O Drivers*, 13-1
 definition macro
 DLXDF\$, *I/O Drivers*, 13-4
 EPMDF\$, *I/O Drivers*, 13-4
 diagnostic
 buffer, *I/O Drivers*, 13-19
 no data transfer, *I/O Drivers*, 13-21
 DLX incompatibility, *I/O Drivers*, 13-21
 driver installation, *I/O Drivers*, 13-5
 error return
 IO.XIN function, *I/O Drivers*, 13-11
 IO.XRC function, *I/O Drivers*, 13-16
 IO.XTM function, *I/O Drivers*, 13-13
 Ethernet
 address pairs, *I/O Drivers*, 13-3

XEDRV

Ethernet (cont'd.)

- device consideration, *I/O Drivers*, 13-2
- LF\$DEF protocol, *I/O Drivers*, 13-3
- LF\$EXC protocol, *I/O Drivers*, 13-3
- message, *I/O Drivers*, 13-2
- message padding, *I/O Drivers*, 13-3
- protocol, *I/O Drivers*, 13-3
- receive, *I/O Drivers*, 13-3
- set characteristic, *I/O Drivers*, 13-7
- transmit, *I/O Drivers*, 13-3
- function code, *I/O Drivers*, 13-4
- glossary, *I/O Drivers*, 13-23
- IO.XCL function, *I/O Drivers*, 13-4
- IO.XIN function, *I/O Drivers*, 13-4
- IO.XOP function, *I/O Drivers*, 13-4, 13-6
- IO.XRC function, *I/O Drivers*, 13-4, 13-13
- IO.XSC function, *I/O Drivers*, 13-4
- IO.XTL function, *I/O Drivers*, 13-18
- microcode, *I/O Drivers*, 13-4
- IO.XTM function, *I/O Drivers*, 13-4
- load, *I/O Drivers*, 13-5
- macro library
 - DEUNA.MLB, *I/O Drivers*, 13-4
- microcode loader
 - UML..., *I/O Drivers*, 13-5
- multicast address mode, *I/O Drivers*, 13-2
- open line, *I/O Drivers*, 13-6
- pad enable bit, transmit, *I/O Drivers*, 13-20
- physical address mode, *I/O Drivers*, 13-2
- programming hint, *I/O Drivers*, 13-20
- programming sequence, *I/O Drivers*, 13-4
- protocol, Ethernet, *I/O Drivers*, 13-3
- protocol/address pair
 - buffer, *I/O Drivers*, 13-8
- protocol address pair
 - buffer, *I/O Drivers*, 13-8
- QIO\$ macro, *I/O Drivers*, 13-3
- general, *I/O Drivers*, 13-4

XEDRV (cont'd.)

- QIO\$ macro library
 - EXEMC.MLB, *I/O Drivers*, 13-4
- read destination address
 - buffer, *I/O Drivers*, 13-16
- read Ethernet address
 - buffer, *I/O Drivers*, 13-14
- read protocol type
 - buffer, *I/O Drivers*, 13-15
- receive, Ethernet, *I/O Drivers*, 13-3
- receive message, *I/O Drivers*, 13-13
- set characteristic
 - buffer, *I/O Drivers*, 13-7
 - Ethernet, *I/O Drivers*, 13-7
- set destination address
 - buffer, *I/O Drivers*, 13-12
- set multicast address
 - buffer, *I/O Drivers*, 13-9
- set protocol type
 - buffer, *I/O Drivers*, 13-12
- status return, *I/O Drivers*, 13-5
 - IO.XIN function, *I/O Drivers*, 13-11
 - IO.XRC function, *I/O Drivers*, 13-16
 - IO.XTM function, *I/O Drivers*, 13-13
- task requirement, *I/O Drivers*, 13-2
- transmit, Ethernet, *I/O Drivers*, 13-3
- transmit line message
 - IO.XTM function, *I/O Drivers*, 13-11
- U\$\$NCT parameter, *I/O Drivers*, 13-2
- U\$\$NPC parameter, *I/O Drivers*, 13-2
- U\$\$NRS parameter, *I/O Drivers*, 13-2
- U\$\$NTS parameter, *I/O Drivers*, 13-2
- use, *I/O Drivers*, 13-1
- /XHR keyword
 - INSTALL command (MCR), *MCR*, 3-122
 - INSTALL command (VMR), *System Management*, 10-28
- /XH switch, *Task Builder*, 10-53
- XOFF, *I/O Drivers*, 3-15
 - send (TTDRV), *I/O Drivers*, 2-16, 2-29, 2-37, 2-42, 2-44
- XOFF bit (TTDRV), *I/O Drivers*, 2-70
- XON/XOFF protocol, *System Management*, 9-2

XON bit (TTDRV), *I/O Drivers*, 2-70
 .XQIO routine, execute QIO, *I/O Operations*, 4-26
 .XQT directive, *Indirect*, 2-95
 XRATE: subroutine
 compute clock rate and preset
 K-series, *I/O Drivers*, 23-30
 LADRV, *I/O Drivers*, 22-25
 X register, *Debugging*, 2-6, 5-3, 5-6
 x symbol, *Debugging*, 2-1
 /XT switch, *Task Builder*, 10-54
 xxCTB label, *Writing I/O Driver*, 4-60
 \$xxDCB
 global label, *Writing I/O Driver*, 4-3
 xxDRV.MAC file, *Writing I/O Driver*, 5-2
 xxDRVASM.CMD file, *Writing I/O Driver*, 5-3
 \$xxLOA label, *Writing I/O Driver*, 4-9, 4-61
 xxTAB.MAC file, *Writing I/O Driver*, 1-18, 5-2
 \$xxTBE label, *Writing I/O Driver*, 4-60
 \$xxTBL label, *Writing I/O Driver*, 4-60
 \$xxUNL label, *Writing I/O Driver*, 4-9, 4-61

Y

/@Y switch
 FMT utility, *Utilities*, 5-9

Z

ZAP utility
 address boundary
 displaying, *Utilities*, 15-3
 addressing mode, *Utilities*, 15-4
 command
 carriage return, *Utilities*, 15-7
 general purpose, *Utilities*, 15-7
 summary, *Utilities*, 15-15
 open/close location, *Utilities*, 15-7
 summary, *Utilities*, 15-11
 command line, *Utilities*, 15-6
 element, *Utilities*, 15-8
 debugging privileged task, *Debugging*, 8-8
 error message, *Utilities*, 15-23
 example, *Utilities*, 15-18
 indirect command file, *Utilities*, 15-6
 initiating (invoking), *Utilities*, 15-5

ZAP utility (cont'd.)
 inserting breakpoint, *Debugging*, 8-8
 location
 addressing, *Utilities*, 15-4
 closing, *Utilities*, 15-13
 contents
 changing, *Utilities*, 15-13
 displaying, *Utilities*, 15-12
 verifying, *Utilities*, 15-18
 opening, *Utilities*, 15-12
 specifying, *Utilities*, 15-10
 modifying system image, *Debugging*, 8-8
 ODT on-line debugger, *Utilities*, 15-1
 operating mode, *Utilities*, 15-2
 register
 setting value, *Utilities*, 15-18
 relocation biases, *Utilities*, 15-4
 switch, *Utilities*, 15-2
 task image file, *Utilities*, 15-3
 I- and D-space, *Utilities*, 15-3
 multiuser, *Utilities*, 15-3
 resident library, *Utilities*, 15-3
 terminating, *Utilities*, 15-5
 Z command, *Debugging*, 2-12
 Zero byte, appending to character string, *MACRO-11*, 6-28
 Z error, *MACRO-11*, 5-4
 summary, *MACRO-11*, D-5
 /ZE switch
 FLX utility, *Utilities*, 4-8

READER'S COMMENTS

Your comments and suggestions are welcome and will help us in our continuous effort to improve the quality and usefulness of our documentation and software.

Remember, the system includes information that you read on your terminal: help files, error messages, prompts, and so on. Please let us know if you have comments about this information, too.

Did you find this manual understandable, usable, and well organized? Please make suggestions for improvement.

Did you find errors in this manual? If so, specify the error and the page number.

What kind of user are you? ☐ Programmer ☐ Nonprogrammer

What do you use the system for? _____

Years of experience as a computer programmer/user: _____

Name _____ Date _____

Organization _____

Street _____

City _____ State _____ Zip Code _____
or Country

— — — Do Not Tear - Fold Here and Tape — — —

digital



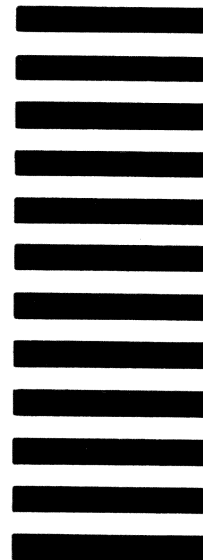
No Postage
Necessary
if Mailed in the
United States

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO.33 MAYNARD MASS.

POSTAGE WILL BE PAID BY ADDRESSEE

SSG PUBLICATIONS ZK1-3/J35
DIGITAL EQUIPMENT CORPORATION
110 SPIT BROOK ROAD
NASHUA, NEW HAMPSHIRE 03062-2698



— — — Do Not Tear - Fold Here — — —

Cut Along Dotted Line