MicroPower/Pascal Master Index

Order No. AA-KR46A-TC

SOFT // OTE

MicroPower/Pascal Master Index

Order No. AA-KR46A-TC

June 1987

This index includes entries for the MicroPower/Pascal manuals.

Revision/Update Information: This manual is new.

Operating System and Version: Micro/RSX Version 3.0

RSX-11M Version 4.2

RSX-11M-PLUS Version 3.0

RT-11 Version 5.2 VAX/VMS Version 4.0

Software Version: MicroPower/Pascal–Micro/RSX Version 2.4

MicroPower/Pascal-RSX Version 2.4 MicroPower/Pascal-RT Version 2.4 MicroPower/Pascal-VMS Version 2.4

First Printing, June 1987

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 ©1987 by Digital Equipment Corporation

All Rights Reserved.

The 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	PDP	UNIBUS
DECmate	P/OS	VAX
DECUS	Professional	VMS
DECwriter	Rainbow	VT
DIBOL	RSTS	Work Processor
MASSBUS	RSX	digital
MicroPower/Pascal	RT	argirar

ML-S757

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

Chapter 1

Introduction to the Master Index

The Master Index is a compilation of the indexes to the individual manuals in the MicroPower/Pascal Documentation Set for V2.4 of MicroPower/Pascal. Entries in the local indexes have been edited for consistency of style in the merged Master Index.

Each keyword or subentry in the Master Index is followed by an abbreviated book title and the chapter and page reference to the appearance of the topic in that book. For example, an entry in the Master Index might appear in the following way:

```
Counting semaphores, LG, 13-1
  conditional waiting, LG, 13-6
   creating, INTRO, 4-3; LG, 13-14,13-17
   definition, LG, 13-2; RSM, 2-39
   deleting, LG, 13-22
   format, RSM, 2-39
```

This entry indicates that you can find information about counting semaphores in the following manuals:

- MicroPower/Pascal Language Guide
- Introduction to MicroPower/Pascal
- MicroPower/Pascal Run-Time Services Manual

For more specific information about counting semaphores, see the subentries. Some subentries listed under counting semaphores are:

```
conditional waiting
creating
definition
deleting
format
```

The following table lists the abbreviated names used in the Master Index and the full title of each manual:

Abbreviation	Title of Manual
DUG	MicroPower/Pascal Debugger User's Guide
INTRO	Introduction to MicroPower/Pascal
IOSM	MicroPower/Pascal I/O Services Manual
LG	MicroPower/Pascal Language Guide
RSM	MicroPower/Pascal Run-Time Services Manual
RSX SUG	MicroPower/Pascal-RSX/VMS System User's Guide
RT SUG	MicroPower/Pascal-RT System User's Guide

	Address expressions (cont'd.)
©, DUG, 3-70	calculations, <i>DUG</i> , 2-5, 3-9, 3-10,
See also @ command, Indirect	3-64, 3-65
reference, SET ODT command,	debugging mode
LOG command	dependent, DUG, 2-3, 2-5
	independent, DUG, 2-3, 2-4
A	PASDBG commands, DUG, 2-3
A11-111	CANCEL BREAK, DUG, 3-3
Absolute value	CANCEL TRACE, DUG, 3-18
ABS function, LG, 8-3	CANCEL TRACE, Dug, 3-18 CANCEL WATCH, DUG, 3-20
ACCESS_SHARED_REGION	DEPOSIT, DUG, 3-20
procedure	EXAMINE, DUG, 3-41
error returns, LG, 18-5	
overview, LG, 18-3	SET BREAK, DUG, 3-56
semantics, LG, 18-4	SHOW STATEMENT, DUG, 3-125
syntax, RSM, 5-9; LG, 18-3	
ACP	radix operators, DUG, 2-5
See Ancillary Control Process (ACP)	tracepoints, DUG, 3-83
ACSR\$ primitive	watchpoints, DUG, 3-88
argument block, RSM, 3-14	Address parameter
description, RSM, 3-13	See Address expressions
error returns, RSM, 3-16	Address space, saving, RSX SUG, 6-4
restrictions, RSM, 3-14	AD driver
semantics, RSM, 3-15	features and capabilities, IOSM, 7-1
syntax, RSM, 3-14	Get Characteristics function, IOSM,
syntax example, RSM, 3-15	7-14
Active Page Register (APR), RSX SUG,	prefix file, IOSM, 7-15
6-4	status codes, IOSM, 7-15
mapping type, RSM, 2-26	ADPAR\$ macro (Return PAR address),
shared library, RT SUG, 6-4	IOSM, 15-3
Active tasks	ALLOCATE_PACKET procedure
specifying, LG, 9-6	error returns, LG, 14-7
Actual parameters	overview, LG, 14-6
default, LG, 6-24	semantics, LG, 14-6
subprograms, LG, 6-2	syntax, LG, 14-6
VAR semantics, LG, 6-25	ALLOCATE_REGION function
Actual value parameters	error returns, LG, 18-9
file variables, LG, 6-24	overview, LG, 18-7
Address expressions, DUG, 2-3	semantics, LG, 18-8
-	syntax, <i>RSM</i> , 5-8; <i>LG</i> , 18-7

Allocate memory	Application
NEW procedure, LG, 8-8	development (cont'd.)
Allocating variables	debug phase, RT SUG, 5-8;
subprogram blocks, LG, 6-15	RSX SUG, 5-8
ALPC\$ primitive	host system, INTRO, 1-2, 2-1
argument block, RSM, 3-18	initialization options, IOSM,
description, RSM, 3-17	B-15
error returns, RSM, 3-18	KXT11-CA memory configura-
restrictions, RSM, 3-18	tion steps, IOSM, B-12
semantics, RSM, 3-18	MERGE utility, RT SUG, 1-3
syntax, RSM, 3-17	MIB utility, RT SUG, 1-3
ALPK\$ primitive	MPBLD, RT SUG, 1-3
argument block, RSM, 3-20	overview, INTRO, 1-5, 6-1; RT
	SUG, 1-2
description, RSM, 3-19	
error returns, RSM, 3-20	partitioning, <i>IOSM</i> , B-10 PASDBG, <i>RT SUG</i> , 1-2
restrictions, RSM, 3-20	
semantics, RSM, 3-20	peripheral processor, IOSM,
syntax, RSM, 3-19	B-10
ALRG\$ primitive	rebuild phase, RSX SUG, 5-8
argument block, RSM, 3-22	RELOC utility, RT SUG, 1-3
description, RSM, 3-21	target system, INTRO, 1-2, 2-1
error returns, RSM, 3-23	tools, MicroPower/Pascal, IOSM
restrictions, RSM, 3-22	B-2
semantics, RSM, 3-22	tools, summary, IOSM, B-2
syntax, RSM, 3-21	execution
syntax example, RSM, 3-22	PASDBG, INTRO, 6-7
Analog to digital appropriate ICCM	loading
Analog-to-digital conversions, <i>IOSM</i> ,	bootable volume, RT SUG, 7-3
7-2 Ancillary Control Process (ACP)	bootstrap format, RT SUG, 7-2
Ancillary Control Process (ACP)	down-line <i>, INTRO, 7-6; RT</i> <i>SUG, 7</i> -1
FALACP, IOSM, 2-11	
features and capabilities, IOSM, 2-1	KXJ_LOAD <i>, IOSM,</i> B-68 KXT_LOAD <i>, IOSM,</i> B-68
file I/O, IOSM, 2-2	
prefix file, IOSM, 2-9	methods, RT SUG, 7-1 PASDBG, INTRO, 7-6; RT
status codes, IOSM, 2-7	SUG, 1-7
system process, INTRO, 1-5	
/A option	peripheral processor, <i>IOSM,</i> B-68
RELOC utility, RT SUG, 10-13	
Apostrophe CHAP englification IC 2.2	PROM chips, RT SUG, 7-6
CHAR specification, <i>LG</i> , 2-3 Application	PROM programmer format, RT SUG, 7-4
building, INTRO, 6-4; RT SUG,	_
2-5; RSX SUG, 1-3, 1-7, 2-7,	mapped COMM.SML, <i>RT SUG</i> , 3-3, 5-4
2-8 1-3, 1-7, 2-7,	configuration file, RT SUG, 3-3
procedure, DUG, 1-2	/M option, RT SUG, 4-4
development	Page Address Register (PAR), R
build cycle, RT SUG, 1-3	SUG, 3-5
build utilities, INTRO, 1-4; RT	RAM-only target, RT SUG, 3-5
SUG, 1-3	RELOC utility, RT SUG, 5-6
compiler, RT SUG, 1-2	ROM/RAM target, RT SUG, 3-5
configuration guidelines, IOSM,	shared library, RT SUG, 6-3
B-11	MIM file, RT SUG, 2-6; RSX SUG,
COPYB utility, RT SUG, 1-3	2-8
201 12 dding, 11 500, 1 5	- 3

Application (cont d.)	Al attribute (cont a.)
referencing processes, INTRO, 3-12	applicable entities, LG, F-1
stopping, DUG, 3-25	overview, LG, 10-5
unmapped	syntax, LG, 10-5
COMU.SML, RT SUG, 3-3, 5-4	Attributes
configuration file, RT SUG, 3-3	DATA_SPACE, INTRO, 3-10, 5-3
RAM-only target, RT SUG, 3-5	default, LG, 10-3
RELOC utility, RT SUG, 5-6	definition, LG, 1-4
ROM/RAM target, RT SUG,	EXTERNAL, INTRO, 3-12
3-5, 3-6	GLOBAL, INTRO, 3-12
shared library, RT SUG, 6-3	INITIALIZE, INTRO, 5-7
static process, RT SUG, 5-5	memory-mapping, LG, 10-4
/U option, RT SUG, 4-4	NAME, <i>INTRO</i> , 3-11, 3-13
Applications	overview, LG, 10-1
overview	PRIORITY, INTRO, 3-11, 5-3
peripheral processor, IOSM, B-1	RECORD data type, LG, 2-7
peripheral processor, IOSM, B-7	specifying, LG, 10-3
software configuration, IOSM, B-9	STACK_SIZE, INTRO, 3-10, 5-3
Arbiter process	syntax diagrams, LG, 10-3
application, IOSM, B-56	SYSTEM, INTRO, 5-3
communication with peripheral	
	TYPE definitions, LG, 4-3
processor, IOSM, B-9	usage summary, LG, F-1
configuration file, IOSM, B-56	VAR declarations, LG, 4-5
I/O page area, IOSM, B-9	Automatic self-tests
Arbiter processor	error reporting, IOSM, B-19
device drivers, IOSM, B-2	AUX files
LSI-11, IOSM, B-1	unresolved global references, RT
operating system environment,	SUG, 3-12
IOSM, B-2	Auxiliary output
peripheral processor relationship,	See AUX files
IOSM, B-2	D
Arctangent value	В
ARCTAN function, LG, 8-3	Polyco Navy Forms IC D 1
Arithmetic expressions	Bakus-Naur Form, LG, B-1
relational operators, LG, 3-12	Base type
Arithmetic operators, LG, 3-10	SET data type, LG, 2-15
Array data types	BEGIN delimiter, LG, 1-3
declaration, LG, 2-11	compound statements, LG, 5-5
declaring conformant, LG, 6-11	Binary
index, LG, 2-12	conversion function, LG, 9-38, 9-51
	notation, <i>LG</i> , 2-2
multidimensional, LG, 2-12	Binary semaphores, LG, 13-1
storage allocation rules, LG, E-4	as reply semaphore, LG, 14-58
ASCII character set, LG, 1-6, A-1	conditional waiting, LG, 13-6
Assembling user processes, RSX SUG,	creating, LG, 13-8, 13-11
5-3	creation, INTRO, 4-3
Assignment statements, LG, 5-2	definition, RSM, 2-39; LG, 13-2
file variables, LG, 2-16	deleting, LG, 13-22
Asynchronous I/O	format, RSM, 2-39
DDCMP, IOSM, 12-3	handshake mechanism, <i>INTRO</i> , 5-1
serial, IOSM, 3-2	
Asynchronous serial line	5-5, 5-7
down-line loading, INTRO, 2-2	initializing, LG, 13-28
AT attribute	interrupt vector, LG, 16-6

Binary semaphores (cont'd.)	Bootstrap (cont'd.)
interrupt vector disassociation, LG,	option
16-12	MIB command line, INTRO,
mutex, INTRO, 4-2	6-10
mutual exclusion, INTRO, 4-2	phase
reply semaphore, LG, 14-19, 14-26,	build cycle, RT SUG, 2-10
14-76	program
signaling, LG, 13-4, 13-32, 13-34	application installation, INTRO,
SIGNAL procedure, INTRO, 4-3	6-6
type code, LG, 13-26	requirements, target system, RT SUG
BIN function	11-12
error returns, <i>LG</i> , 9-39, 9-52	
overview input IC 9.38	software, secondary, RT SUG, 12-2
overview, input, LG, 9-38	Bootstrap loader
overview, output, <i>LG</i> , 9-51	radial serial protocol (RSP), IOSM,
BIT attribute	B-18
applicable entities, <i>LG</i> , F-1	TU58 DECtape II, IOSM, B-18
overview, LG, 10-6	/B option
syntax, LG, 10-6	memory requirements, RT SUG,
Blocked process, INTRO, 3-6, 4-4	3-10
\$BLXIO subroutine (Block move),	MIB utility, <i>RT SUG</i> , 3-9, 11-12
IOSM, 15-26	BOT
BOOLEAN data types, LG, 2-4	bootstrap file, RT SUG, 3-9
constants, LG, 3-3	DIGITAL-supplied, RT SUG, 3-10
storage allocation rules	Breakpoint number, DUG, 3-4
packed, <i>LG</i> , E-3	Breakpoints
unpacked, LG, E-2	used as address expressions, DUG,
Boolean expressions, LG, 3-13	2-4
relational operators, LG, 3-12	BREAK procedure
Boolean operands	error returns, LG, 9-11
evaluation order, LG, 3-16	overview, LG, 9-11
Boolean operators, LG, 3-13	syntax, LG, 9-11
Boot/Self-test switch, IOSM, B-14,	Buffering, hardware, IOSM, 3-22
B-15	Buffer variables
Bootable volume	file variables, LG, 2-16
application loading, RT SUG, 7-3	I/O server buffering, LG, 9-9
COPYB utility, RT SUG, 11-5, 11-12	Build cycle, INTRO, 2-7; RSX SUG,
nonremovable target medium, RT	1-3, 2-1
SUG, 12-3	application development, RT SUG,
Bootstrap	1-3
file	automated, RT SUG, 2-1; RSX SUG
See also BOT	2-1
installing, RSX SUG, 11-6	bootstrap phase, RT SUG, 2-10
MPBLD dialog, RT SUG, 2-10	COM file, RT SUG, 2-6
MPBUILD dialog, RSX SUG,	DBG file, RT SUG, 2-5, 3-8
2-12	Debugger Service Module (DSM), R
removing, RSX SUG, 11-6	SUG, 2-7
	dialog, RT SUG, 2-1
format	
application loading, RT SUG,	driver mapping, RT SUG, 2-10
7-2	errors, RT SUG, 2-11
hardware, primary, RT SUG, 12-2	example, INTRO, 7-1
load format	I&D-space separation, RT SUG, 6-3
MIM file, RT SUG, 11-3, 11-5;	kernel optimization, RT SUG, 3-12,
RSX SUG,11-3	5-8

Build cycle (cont'd.)	С
kernel phase, RT SUG, 1-5, 2-3, 2-6,	Calling
3-1	Calling functions, <i>LG</i> , 6-22
mapped kernel, RT SUG, 3-4	procedures, LG, 6-22
MERGE utility, RT SUG, 3-11, 9-6;	processes, LG, 6-22
RSX SUĞ, 9-6	CANCEL BREAK command, DUG, 3-3
MIB utility, RT SUG, 11-8; RSX	example, DUG, 3-4, 4-5
SUG, 11-7	CANCEL DO ALL command, DUG,
MPBLD, RT SUG, 1-7	3-5
partial, RT SUG, 2-2, 2-5; RSX SUG,	CANCEL MODE DSPACE command,
2-7	DUG, 3-6
PASDBG, RT SUG, 2-7	CANCEL MODE GLOBAL command,
PROM, RT SUG, 1-8	DUG, 3-7
RELOC utility, RT SUG, 10-3	CANCEL MODE ISPACE command,
repetitive, RT SUG, 4-7 shared libraries, RT SUG, 2-8, 6-6	DUG, 3-8
static process, RT SUG, 5-2	CANCEL MODE MACRO command,
STB file, RT SUG, 2-5	DUG, 3-9
supervisor-mode, RT SUG, 6-6	CANCEL MODE PASCAL command,
system processes, RT SUG, 4-1	DUG, 3-10
system-process phase, RT SUG, 1-5,	CANCEL MODE RELATIVE command,
2-3	DUG, 3-11
total, RT SUG, 2-1	CANCEL MODE SYMBOLS command,
transition point, RT SUG, 2-9; RSX	DUG, 3-12 CANCEL MODE TERSE command,
SUG, 2-11	DUG, 3-13
unmapped kernel, RT SUG, 3-4	CANCEL PROCESS command, DUG,
user input, RT SUG,1-7;RSX SUG,	3-14
1-7	CANCEL SCOPE command, DUG,
user-mode, RT SUG, 6-7	3-15
user processes, RT SUG, 5-1	CANCEL SOURCE command, DUG,
user-process phase, RT SUG, 1-6,	3-16
2-3, 2-9	CANCEL STEP command, DUG, 3-17
without debugging, RT SUG, 5-9 XD driver, RT SUG, B-1; RSX SUG,	CANCEL TRACE command, DUG,
B-1	3-18
YA driver, RT SUG, B-2; RSX SUG,	example, DUG, 3-19
B-2	CANCEL WATCH command, DUG,
Build utilities, INTRO, 6-4	3-20
application development, INTRO,	example, DUG, 3-21, 4-6
1-4	CANCEL WINDOW command, <i>DUG</i> , 3-22
functions, INTRO, 6-4	See also Windowing mode
MERGE, INTRO, 6-6; RT SUG, 2-2	CARS program examples, INTRO, 5-2
MIB, INTRO, 6-6; RT SUG, 2-2	to 5-7
overview, RT SUG, 1-3; RSX SUG,	CASE qualifier, <i>LG</i> , 2-9
1-3	CASE statement, LG, 5-3
RELOC, INTRO, 6-6; RT SUG, 2-2	CHECK option, LG, 5-3
BYTE attribute	CCND\$ primitive, RSM, 2-16, 6-14
applicable entities, LG, F-1	argument block, RSM, 3-25
overview, LG, 10-7	description, RSM, 3-24
syntax, LG, 10-7	error returns, RSM, 3-26
Bytes allocated SIZE function, <i>LG</i> , 8-12	implementation notes, RSM, 3-26
SIZE function, EO, 0-12	semantics, RSM, 3-25

CCND\$ primitive (cont'd.)	CINT\$ primitive (cont'd.)
syntax, RSM, 3-24	error returns, RSM, 3-32
Central Processing Unit (CPU)	Interrupt Service Routine (ISR), RSM
concurrent processes, INTRO, 3-1	7-7
interrupt processing, RSM, 7-3	restrictions, RSM, 3-30
priority levels, RSM, 7-5	semantics, RSM, 3-31
target system, INTRO, 4-1	syntax, RSM, 3-29
CHANGE_PRIORITY procedure	syntax, Rossi, 3-25 syntax example, RSM, 3-31
error returns, LG, 12-3	CLEAR WINDOW command, DUG,
overview, LG, 12-2	3-23
semantics, LG, 12-3	
	See also Windowing mode
syntax, LG, 12-2	example, DUG, 4-2
Characters	Clock service requests, LG, 19-1
ASCII set, <i>LG</i> , 1-6, A-1	GET_TIME procedure, LG, 19-3
comparing strings, LG, 3-13	SET_TIME procedure, LG, 19-5
packed array, LG, 2-14	SLEEP procedure, LG, 19-7
string types, LG, 2-3	Clock time record format, LG, 19-2
Character strings	Closed files, LG, 9-10
heap allocation, LG, H-1	CLOSE LOG command, DUG, 3-24
representation, LG, 2-3	See also @ command, LOG
Character value	command
CHR function, LG, 8-4	CLOSE procedure
CHAR data types, LG, 2-3	error returns, LG, 9-12
constants, LG, 3-3	file access method, LG, 9-4
storage allocation rules	overview, LG, 9-12
packed, LG, E-3	syntax, LG, 9-12
unpacked, LG, E-3	Cold start
CHECK_FREE_SPACE procedure	power failure, LG, 20-12
error returns, <i>LG</i> , 20-3	Collating sequence
overview, LG, 20-3	ASCII, LG, A-1
semantics, LG, 20-3	COM file
syntax, LG, 20-3	build cycle, RT SUG, 2-6
Checking rules	COMM.SML
compatible data types, LG, 2-21	system macro libraries, RT SUG,
data types, LG, 2-20	3-3, 4-4
identical data types, LG, 2-20	user processes, RT SUG, 5-4
CHECK option, LG, 2-6	
CASE statement, LG, 5-3	@ command, <i>DUG</i> , 3-2 Command files
Checksum	
calculating with DECprom, IOSM,	generated MDRID PT CLIC 1 7 2 6 2 10
B-67	MPBLD, RT SUG, 1-7, 2-6, 2-10
specifying ROM test, IOSM, B-17	MPBUILD, RSX SUG, 1-7, 2-8,
CHGP\$ primitive	2-12
argument block, RSM, 3-28	intermediate, RT SUG, 2-6; RSX
description, RSM, 3-27	SUG, 2-8
• · · · · · · · · · · · · · · · · · · ·	Command format
error returns, RSM, 3-28	MERGE, RSX SUG, 3-4, 4-5, 5-4
semantics, RSM, 3-28	MIB, RSX SUG, 3-8, 4-7, 5-7
static process, RSM, 2-4	Pascal, RSX SUG, 5-3
syntax, RSM, 3-27	RELOC, RSX SUG, 3-5, 4-6, 5-6
syntax example, RSM, 3-28	Command line, DUG, 2-2
CINT\$ primitive, RSM, 7-2	comment delimiters, RT SUG, 8-10
argument block, RSM, 3-31	RT-11 standard components, RT
description, RSM, 3-29	SUG, 8-2

Command option DO list, DUG, 3-59	Compiler, INTRO, 1-4, 6-3; RT SUG,
definition, DUG, 2-7, 2-8	1-2
example, <i>DUG</i> , 2-8, 3-94, 4-3	command line
order of execution, DUG, 2-7	examples, RT SUG, 8-3
Command reference, DUG, 3-1	definition, RT SUG, 8-1
Command register	diagnostic messages, RT SUG, 8-1
KW.DCO, IOSM, B-23	interface, primitive services, RSM,
Command String Interpreter (CSI)	3-1
command line format, RT SUG, 9-7	list options, RT SUG, 8-3
Comment delimiters	MPP.SAV, RT SUG, 8-2
command line, RT SUG, 8-10	options, RSX SUG, 8-3
Comments, LG, 1-9	CHECK, LG, 2-6
COMMON attribute	command line, RT SUG, 8-9;
region-sharing mode, LG, 18-10	RSX SUG, 8-10
Common region	execution statistics, RT SUG,
shared, LG, 18-10	8-11
<u> </u>	
Communication	hardware support, <i>RT SUG,</i> 8-13
displaying line speed, DUG, A-3	
Communication, interprocess, <i>INTRO</i> , 1-4	lines per page, RT SUG, 8-14
	MPBLD, RT SUG, 2-7
Communication Device I/O	MPBUILD, RSX SUG, 2-9
DECnet, IOSM, 13-6	NO prefix disabling, RT SUG,
Communication driver	8-10
features and capabilities, IOSM,	output code, RT SUG, 8-13
13-2	output lists, RT SUG, 8-13
Communication line	overview, RT SUG, 8-8
allocated, DUG, A-2	real-time interface, RT SUG,
definition, DUG, A-1	8-14
errors, DUG, A-4	run-time checks, RT SUG, 8-10
problems, DUG, A-4	source code, RT SUG, 8-10
protection codes, DUG, A-2	source program, RSX SUG, 8-9
required characteristics, DUG, A-1	suppress informational messages
setting line speed, DUG, A-3	RT SUG, 8-14
Communication support routines	suppress warning messages, RT
peripheral processor, IOSM, 13-33	SUG, 8-14
Comparing strings, LG, 3-13	symbolic debugging, RT SUG,
Compatibility rules	8-11
conformant arrays, LG, 6-12	unused declarations, RT SUG,
data type attributes, LG, 10-2	8-11
Compatible data types	warning messages, RT SUG,
checking rules, LG, 2-21	8-14
Compilation units	p-sects generated, RT SUG, 8-14
definition, LG, 1-4	requirements, RT SUG, 8-2
options, LG, C-1	run-time storage limitations, <i>LG</i> ,
overview, LG, 7-1	H-1
scope of identifiers, LG, 7-4	Compile-time
shared variables, LG, 7-3, 10-27	expressions, LG, 3-2
sharing declarations, LG, 7-3, 10-15,	options, LG, C-1
10-17	Compiling
sharing definitions, LG, 7-3, 10-15,	user processes, RT SUG, 5-3; RSX
10-17	<i>SUG</i> , 5-3
structure, LG, 7-1	Component size
	BITNEXT function, LG, 8-3

Component size (cont'd.)	COND_RECEIVE_ACK function
NEXT function, LG, 8-9	(cont'd.)
Component type	error returns, LG, 14-21
FILE data type, LG, 2-16	overview, LG, 14-19
Compound statement, LG, 5-5	semantics, LG, 14-21
format, LG, 5-5	syntax, LG, 14-19
COMU.SML	COND_RECEIVE function, INTRO,
system macro libraries, RT SUG,	4-9
3-3, 4-4	error returns, LG, 14-18
user processes, RT SUG, 5-4	overview, LG, 14-14
Concurrent design	packet format, LG, 14-14
example, INTRO, 4-12	semantics, LG, 14-17
flowcharts, INTRO, 6-3	syntax, <i>LG</i> , 14-14
parallel tasks, INTRO, 4-14	COND_SEND_ACK function
process synchronization, INTRO,	error returns, LG, 14-29
4-12	overview, LG, 14-26
separate tasks, INTRO, 6-3	semantics, LG, 14-28
Concurrent execution, <i>LG</i> , 1-3	syntax, LG, 14-27
advantages, INTRO, 1-2	COND_SEND function, INTRO, 4-8
multiple processes, INTRO, 1-2	error returns, LG, 14-25
Concurrent processes	overview, LG, 14-22
advantages, INTRO, 4-1	semantics, LG, 14-24
Central Processing Unit (CPU),	syntax, LG, 14-22
INTRO, 3-1	COND_SIGNAL function, INTRO, 4-4
conditions, INTRO, 4-1	error returns, LG, 13-5
COND_ALLOCATE_PACKET function	overview, LG, 13-4
error returns, LG, 14-9	semantics, LG, 13-5
overview, LG, 14-8	syntax, LG, 13-4
semantics, LG, 14-9	COND_WAIT function, INTRO, 4-4
syntax, LG, 14-8	
COND_GET_ELEMENT function,	error returns, LG, 13-7
	overview, LG, 13-6
INTRO, 4-6	semantics, LG, 13-7
error returns, LG, 15-5	syntax, LG, 13-6
overview, LG, 15-3	Configuration file, INTRO, 2-7, 3-3,
semantics, LG, 15-4	6-3, 6-10; RT SUG, 2-5; RSX
syntax, LG, 15-3	SUG, 1-4, 2-7
COND_GET_PACKET function	assembling, RT SUG, 3-3; RSX
error returns, LG, 14-11	SUG, 3-3
overview, LG, 14-10	CFDKTC.MAC, IOSM, B-39
semantics, LG, 14-11	creating, RSX SUG, 3-2
syntax, LG, 14-10	DEBUG option, INTRO, 6-7
COND_PUT_ELEMENT function,	DEBUG parameter, RT SUG, 5-8
INTRO, 4-6	DIGITAL-supplied, RT SUG, 3-3
error returns, LG, 15-8	distribution kit, INTRO, 6-3
overview, LG, 15-6	hardware characteristics, INTRO,
semantics, LG, 15-7	2-7
syntax, LG, 15-6	hardware macro
COND_PUT_PACKET function	FALCON, RSM, 4-6
error returns, LG. 14-13	KXJ11C, RSM, 4-8
overview, LG, 14-12	KXT11C, RSM, 4-9
semantics, LG, 14-13	MEMORY, RSM, 4-11
syntax, <i>LG</i> , 14-12	PROCESSOR, RSM, 4-16
COND_RECEIVE_ACK function	

Configuration file (cont'd.)	CONNECT_SEMAPHORE procedure
initialize macro, CONFIGURATION,	(cont'd.)
RSM, 4-4	overview, LG, 16-6
mapped applications, RT SUG, 3-3	semantics, LG, 16-9
MEMORY macro, RT SUG, 3-7	syntax, LG, 16-6
MIB utility, RT SUG, 11-8	Console ODT
MicroPower/Pascal sample, IOSM,	hardware setup, <i>IOSM</i> , B-19
B-39	Console ODT mode, DUG, B-6
obtaining data, LG, 20-9	
PACKETS parameter, RT SUG, 3-11	See also SET ODT command
	Constant, predefined
PRIMITIVES macro, RT SUG, 3-11	MAXINT, LG, 2-2
PROCESSOR macro, RT SUG, 6-2	Constant identifier
prototypes, CFDxxx.MAC, RSM, 4-3	CONST declaration, LG, 3-2
required macros, RSM, 4-3	rules, LG, 4-2
STRUCTURES parameter, RT SUG,	Constants
3-11	data type, <i>LG</i> , 1-2
system, RT SUG, 1-4	declaring, <i>LG</i> , 4-1
SYSTEM macro, RT SUG, 3-7	definition, LG, 1-2, 3-2
trap handler macro, TRAPS, RSM,	range of values, LG, 3-3
4-23	scalar, LG, 3-2, 3-3
unmapped applications, RT SUG,	specifying as external, LG, 10-15
3-3	specifying as global, LG, 10-17
Configuration information	string, LG, 2-14, 3-8
overview, RSM, 4-2	structured, LG, 3-2, 3-3
CONFIGURATION macro, IOSM, B-39	subprogram blocks, LG, 6-15
arguments, RSM, 4-4	CONST declaration, LG, 1-2, 4-1
description, RSM, 4-4	constant identifier, LG, 3-2
example, RSM, 4-4	heap allocation, LG, H-1
syntax, RSM, 4-4	CONTEXT attribute
Configuration macros	applicable entities, LG, F-1
device controller, IOSM, 14-5	overview, LG, 10-8
device driver, IOSM, 14-4	syntax, LG, 10-8
functions, RSM, 4-1	Control and Status Register (CSR)
overview, RSM, 4-1	accessing in mapped environment,
Configuration record format, LG, 20-9	LG, 10-13
Configuring memory, IOSM, B-11	/C option, RT SUG, 12-2
Conformant array declaration, LG,	KX device driver, <i>IOSM</i> , B-15
6-11	
CONNECT_EXCEPTION procedure,	Conversion functions
INTRO, 4-11; RSM, 2-16	BIN, LG, 9-38, 9-51
error returns, LG, 17-12	HEX, LG, 9-39, 9-52
overview, LG, 17-11	OCT, LG, 9-40, 9-52
	Conversions
semantics, LG, 17-12	analog-to-digital, IOSM, 7-2
syntax, LG, 17-11	COPBOT.PAS
CONNECT_INTERRUPT procedure,	See also COPYB utility
INTRO, 4-10; RSM, 7-2	copy bootstrap program, RT SUG,
error returns, LG, 16-4	12-3; RSX SUG, 12-4
overview, LG, 16-3	Copy array elements
semantics, LG, 16-4	PACK procedure, LG, 8-10
syntax, LG, 16-3	UNPACK procedure, LG, 8-14
CONNECT_SEMAPHORE procedure,	COPYB utility, RSX SUG, 1-3
INTRO, 4-10	See also COPBOT.PAS
error returns, LG, 16-9	

COPYB utility (cont'd.)	CREATE_COUNTING_SEMAPHORE_F
application development, RT SUG,	procedure
1-3	error returns, LG, 13-18
bootable volume, RT SUG, 1-8,	overview, LG, 13-17
11-5, 11-12	semantics, LG, 13-18
command line examples, RT SUG,	syntax, LG, 13-17
12-2; RSX SUĞ, 12-2	CRÉATE_COUNTING_SEMAPHORE
command line format, RT SUG, 12-2	function, INTRO, 4-3
functions, RT SUG, 12-1; RSX SUG,	error returns, LG, 13-15
12-1	overview, LG, 13-14
Copyright page	semantics, LG, 13-15
device driver, IOSM, 14-11	syntax, LG, 13-14
Cosine	CRÉATE_LOGICAL_NAME
COS function, LG, 8-5	procedure
Counter/Timer	error returns, LG, 20-6
support routines	overview, LG, 20-4
external pulses, IOSM, 6-21	semantics, LG, 20-5
KXT11–CA/KXJ11–CA, <i>IOSM</i> ,	syntax, LG, 20-4
6-9	CRÉATE_MUTEX procedure
linking counters, IOSM, 6-24	error returns, LG, 13-21
Counting semaphores, LG, 13-1	overview, LG, 13-20
conditional waiting, LG, 13-6	semantics, LG, 13-20
creating, INTRO, 4-3; LG, 13-14,	syntax, LG, 13-20
13-17	CRÉATE_QUEUE_SEMAPHORE_P
definition, RSM, 2-39; LG, 13-2	procedure
deleting, LG, 13-22	error returns, LG, 14-35
format, RSM, 2-39	overview, LG, 14-33
initializing, LG, 13-28	semantics, LG, 14-34
interrupt vector, LG, 16-6	syntax <i>, LG,</i> 14-33
interrupt vector disassociation, LG,	CRÉATE_QUEUE_SEMAPHORE
16-12	function, INTRO, 4-8
multiple processes, INTRO, 4-2	error returns, LG, 14-32
reply semaphore, LG, 14-19, 14-26,	overview, LG, 14-30
14-76	semantics, LG, 14-31
signaling, <i>LG</i> , 13-4, 13-32, 13-34	syntax, <i>LG</i> , 14-30
SIGNAL procedure, INTRO, 4-4	CREATE_RING_BUFFER_P procedure
type code, LG, 13-26	error returns, LG, 15-14
CPÚ	overview <i>, LG</i> , 15-12
See Central Processing Unit (CPU)	semantics, LG, 15-14
CR command, DUG, 3-25	syntax <i>, LG</i> , 15-12
CREATE_BINARY_SEMAPHORE_P	CREATE_RING_BUFFER function,
procedure	INTRO, 4-6
error returns, LG, 13-12	error returns, LG, 15-11
overview, LG, 13-11	overview, LG, 15-9
semantics, LG, 13-12	semantics, LG, 15-11
syntax, <i>LG</i> , 13-11	syntax, LG, 15-9
CREATE_BINARY_SEMAPHORE	CREATE_SHARED_REGION
function, INTRO, 4-3, 5-7	procedure
error returns, LG, 13-9	error returns, LG, 18-13
overview, LG, 13-8	overview, LG, 18-10
semantics, LG, 13-9	semantics, LG, 18-12
syntax, LG, 13-8	syntax <i>, RSM,</i> 5-9; <i>LG</i> , 18-11

CREATE WINDOW command, DUG,	CSI
2-13, 3-26	See Command String Interpreter
See also Windowing mode	(CSI)
example, DUG, 3-90, 4-2	CSR
	See Control and Status Register
Critical sections, DUG, B-3	(55%)
CRLN\$ primitive	(CSR)
argument block, RSM, 3-34	<ctrl a=""> command, DUG, 3-27</ctrl>
description, RSM, 3-33	<ctrl c=""> command, DUG, 3-28</ctrl>
error returns, RSM, 3-35	<ctrl o=""> command, DUG, 3-29</ctrl>
restrictions, RSM, 3-34	$\langle CTRL/Y \rangle$ command, <i>DUG</i> , 3-30
semantics, RSM, 3-35	C
syntax, RSM, 3-33	D
syntax example, RSM, 3-35	\$DALOC procedure, RSM, 2-49
CRPC\$ primitive, RSM, 2-4, 2-7, 3-11	DAPK\$ primitive
argument block, RSM, 3-39	
description, RSM, 3-36	argument block, RSM, 3-48
	description, RSM, 3-48
error returns, RSM, 3-40	error returns, RSM, 3-49
restrictions, RSM, 3-38	semantics, RSM, 3-49
semantics, RSM, 3-39	syntax, RSM, 3-48
syntax, RSM, 3-36	syntax example, RSM, 3-49
syntax example, <i>RSM</i> , 3-39	DATA_SPACE attribute, INTRO, 3-10
CRSR\$ primitive, RSM, 3-10	5-3
argument block, RSM, 3-42	applicable entities, LG, F-1
description, RSM, 3-41	overview, LG, 10-9
error returns, RSM, 3-44	syntax, LG, 10-9
implementation notes, RSM, 3-44	Data block records
restrictions, RSM, 3-42	
semantics, RSM, 3-43	Global Symbol Directory (GSD), RT
syntax, RSM, 3-42	SUG, 9-1
	Internal Symbol Directory (ISD), RT
syntax example, RSM, 3-43	SUG, 9-1
CRST\$ primitive, RSM, 3-10	Relocation Symbol Directory (RLD),
argument block, RSM, 3-47	RT SUG, 9-1
description, RSM, 3-45	TXT, RT SUG, 9-1
error returns, RSM, 3-47	Data blocks
restrictions, RSM, 3-47	object module, RT SUG, 9-1
semantics, RSM, 3-47	Data section
syntax, RSM, 3-45	impure declaration macro, IMPUR\$,
syntax example, RSM, 3-47	RSM, 3-93
CS driver	Data space
Disable Protocol function, IOSM,	determining macro, RESOURCES,
12-11	RSM, 4-19
down-line loading, RSX SUG, 13-6	Data structures
Enable Protocol function, IOSM,	accessing system, LG, 10-14, 10-30
12-11	binary semaphore, RSM, 2-39
features and capabilities, IOSM,	counting semaphore, RSM, 2-39
12-2	create primitive, CRST\$, RSM, 3-45
Get Characteristics function, IOSM,	
12-12	delete primitive, DLST\$, RSM, 3-66
	doubly-linked list, RSM, 2-47
prefix file, IOSM, 12-13	free-memory pool, RSM, 2-48
Read function, IOSM, 12-11	global, INTRO, 3-3
run-time support, RSX SUG, 13-4	header, RSM, 2-37
status codes, IOSM, 12-13	index, RSM, 3-8
Write function, IOSM, 12-11	

Data structures (cont'd.)	Data types (cont'd.)
kernel, INTRO, 3-3	pointer, LG, 2-1, 2-19
local, INTRO, 3-3	predefined identifiers, LG, G-1
logical-name structure, RSM, 2-44	predefined in PREDFL.PAS, LG,
message packet, RSM, 2-45	D-1
named	promotion rules, LG, 3-16
Structure Descriptor Block (SDB),	purpose, LG, 1-2
RSM, 3-9	REAL, <i>LG</i> , 2-6
names, RSM, 3-8	RECORD, <i>LG</i> , 2-7
queue semaphore, RSM, 2-40	scalar, LG, 2-1
return value primitive, GVAL\$, RSM,	SET, LG, 2-15
3-89	storage allocation rules, LG, E-1
ring buffers, INTRO, 4-6; RSM,	string, LG, 2-14
2-41	structured, LG, 2-1
run-time name, RSM, 2-36	subprogram blocks, LG, 6-15
semaphore, INTRO, 1-3, 4-2	TEXT file, LG, 2-18
Shared Region Descriptor (SRD),	UNSIGNED, LG, 2-3
RSM, 2-43	user-created, LG, 1-2 DBG files, INTRO, 7-1; RT SUG, 3-5;
system, RSM, 2-35	
typed, RSM, 2-36	DUG, 1-2 build cycle, RT SUG, 2-5, 3-8
type identification codes, LG, 13-26,	
14-47, 15-26	/D option, RT SUG, 5-6
unformatted, RSM, 2-45 unnamed	initializing, RSX SUG, 11-7
	LOAD command, DUG, 3-53
Structure Descriptor Block (SDB),	MIB utility, RT SUG, 3-8, 11-7
RSM, 3-9 Data transfers	MPBUILD, RSX SUG, 2-8
	PASDBG, RT SUG, 3-8
DMA Transfer Controller (DTC), IOSM, B-2	DCT-11 microprocessor
	general description, IOSM, B-4 DDCMP method
two-port RAM registers (TPR), IOSM, B-2	
Data transfers, asynchronous, INTRO,	down-line loading, <i>RSX SUG</i> , 13-4 DD driver
4-6	Get Characteristics function, <i>IOSM</i> ,
Data transmission	4-23
by reference, LG, 14-1	Logical Read function, IOSM, 4-21
by value, LG, 14-1	Logical Write function, IOSM, 4-21
Data type attributes	
compatibility rules, LG, 10-2	Physical Read function, <i>IOSM</i> , 4-22 Physical Write function, <i>IOSM</i> , 4-22
Data types	\$DDEXC subroutine (Report exception),
ARRAY, LG, 2-11	IOSM, 15-27
BOOLEAN, LG, 2-4	\$DDINI macro (Device driver
CHAR, LG, 2-3	initialization), IOSM, 15-28
checking rules, LG, 2-20	DEALLOCATE_PACKET procedure
constant, LG, 1-2	error returns, LG, 14-37
defining, LG, 4-3	overview, LG, 14-36
enumerated, LG, 2-4	semantics, LG, 14-36
FILE, LG, 2-16	syntax, LG, 14-36
function results, LG, 6-17	DEALLOCATE_REGION procedure
INTEGER, LG, 2-2	error returns, LG, 18-16
LONG_INTEGER, LG, 2-2	overview, LG, 18-14
mixing, type cast operator, LG, 3-17	semantics, LG, 18-15
overview, LG, 2-1	syntax, RSM, 5-9; LG, 18-14
PACKED modifier, LG, 2-1	Deallocate memory
· · - · · · · · · · · · · · · · · · · ·	

Deallocate memory (cont'd.)	DEBUG parameter (cont'd.)
DISPOSE procedure, LG, 8-5	SYSTEM configuration macro, RSX
Deallocating variables	SUG, 7-1
supbrogram blocks, LG, 6-15	SYSTEM macro, RT SUG, 3-12, 7-1
DEBUG argument	Debug phase
Debugger Service Module (DSM), <i>RT</i> SUG, 3-3	application development, <i>RT SUG</i> , 5-8
Debugger Debugger	Debug symbol information
See PASDBG	MPBUILD, RSX SUG, 2-8
Debugger Service Module (DSM),	Pascal programs, RSX SUG, 8-10
	Decimal notation, LG, 2-2
INTRO, 6-7; RT SUG, 3-8; RSX	Declarations
SUG, 2-8, 3-3, 7-1; DUG, 1-3,	device driver, IOSM, 14-12
3-85	
application loading, RT SUG, 7-1	subprograms, LG, 6-3
build cycle, RT SUG, 2-7	Declarations, unused
DEBUG argument, RT SUG, 3-3	compiler options, RT SUG, 8-11
target system, INTRO, 6-7	Declaration section, LG, 1-2
Debugger support	Pascal block, LG, 4-1
DBG files, DUG, 1-3	DECnet
kernel building, DUG, 1-3	communication device I/O, IOSM,
Debugger symbol table file	13-6
See DBG files	down-line loading, RSX SUG, 13-2
Debugging	DECnet node naming conventions, LG,
console ODT hardware setup, IOSM,	9-7
B-19	DECprom
hints, DUG, B-1	calculating ROM checksums, IOSM,
console ODT mode, DUG, B-6	B-67
critical sections, DUG, B-3	Default
FALCON and FALCON-PLUS	attributes, <i>LG</i> , 10-3
SBCs, DUG, B-7	parameters, LG, 6-24
race conditions, DUG, B-5	process descriptor, LG, 11-5
real-time errors, DUG, B-1	value parameters, LG, 6-6
setting watchpoints, DUG, B-2	DEFINE_STOP_FLAG procedure
minimum commands needed, DUG,	error returns, LG, 12-5
2-1	overview, LG, 12-4
modes	semantics, LG, 12-4
MACRO-11, <i>DUG</i> , 2-10	syntax, LG, 12-4
Pascal, DUG, 2-10	DEFINE command, DUG, 2-9
processes with shared libraries, RSX	DEFINE SYMBOL command, DUG,
SUG, 6-14	3-31, C-3
steps used, DUG, 1-4	example, DUG, 3-33
Debugging information, INTRO, 6-10	use with PF keys, DUG, 3-32
Debugging support	DELETE_FILE
build cycle, RSX SUG, 2-8	syntax, LG, 9-13
	DELETE_FILE procedure
Debug information file	error returns, LG, 9-13
See DBG files	overview, LG, 9-13
/DEBUG option	DELETE_LOGICAL_NAME procedure
configuration file, INTRO, 6-7	error returns, LG, 20-8
Pascal, RSX SUG, 8-10	overview, LG, 20-7
DEBUG parameter	semantics, LG, 20-8
configuration file, RT SUG, 5-8	syntax, LG, 20-7

DELETE_SHARED_REGION	Device driver (cont'd.)
procedure	CONNECT_INTERRUPT procedure,
error returns, LG, 18-18	INTRO, 4-10
overview, LG, 18-17	copyright page, IOSM, 14-11
semantics, LG, 18-18	declarations, IOSM, 14-12
syntax, RSM, 5-13; LG, 18-17	definition, RSM, 1-13
Delete Structure primitive, DLST\$,	device controller process, IOSM,
RSM, 3-66	14-15
Delimiters	error-processing routines, IOSM,
BEGIN, LG, 1-3	14-18
comment, LG, 1-9	errors
END, LG, 1-3	resource famine, IOSM, 14-19
DEPOSIT command, DUG, 3-34, 3-35	exception codes, IOSM, 14-18
example, DUG, 3-37, 4-9	externally defined symbols, IOSM,
DEQNA address	14-12
down-line loading, RSX SUG, 13-3	functional description, IOSM, 14-12
DESC parameter, INTRO, 4-3	impure-area definition, IOSM, 14-14
Descriptors	impure-area definition macro,
specifying, LG, 11-4	xxISZ\$ <i>, IOSM,</i> 14-9
unnamed structures, LG, 11-4	initialization process, IOSM, 14-14
use in real-time requests, LG, 11-4	Interrupt Service Routine (ISR), RSM
DESTROY_MUTEX procedure	7-2
error returns, LG, 13-25	invalid requests, IOSM, 14-18
overview, LG, 13-24	local macro definition, IOSM, 14-12
semantics, LG, 13-24	macros
syntax, LG, 13-24	compute bus extended address,
DESTROY procedure	IOSM, 15-23
error returns, <i>LG</i> , 13-23, 14-39,	define driver packet symbols,
15-16	IOSM, 15-7
overview, LG, 13-22, 14-38, 15-15	disable MMU context switch,
semantics, LG, 13-22, 14-38, 15-15	IOSM, 15-8
	enable MMU context switch,
syntax, LG, 13-22, 14-38, 15-15	
DEV_ACCESS attribute	IOSM, 15-11
applicable entities, <i>LG</i> , F-1	increment byte address, IOSM,
overview, LG, 10-13	15-14
syntax, LG, 10-13	increment word address, IOSM,
Device access	15-15
delayed, LG, 9-53	move address and PAR, IOSM,
process mapping, RSM, 2-30	15-19
Device controller	move byte, IOSM, 15-16
configuration macro, CTRCF\$, IOSM,	move byte (user-mode only),
14-5	IOSM, 15-17
errors	move word, IOSM, 15-20
nonrecoverable, IOSM,14-19	move word (mapped case only),
recoverable, IOSM, 14-19	IOSM, 15-18
Device controller process	move word (user-mode only),
device driver, <i>ÎOSM</i> , 14-15	IOSM, 15-21
Device driver, INTRO, 1-3, 2-5, 4-14;	read PAR or PDR register, IOSM
RSX SUG, 4-2	15-6
See also Device handler	remap virtual address, IOSM,
arbiter processor, IOSM, B-2	15-3
	return PAR address, IOSM, 15-3
configuration macro, DRVCF\$,	set priority level, IOSM, 15-22
IOSM, 14-4	oct priority level, 100111, 13-22

Device driver	Device name, parsing, IOSM, 2-10
macros (cont'd.)	Device register
write to PAR or PDR register,	VOLATILE attribute, LG, 10-40
IOSM, 15-10	Devices
mapped, RT SUG, 4-6	consolidating unused space, LG,
memory access privilege, LG, 10-14,	9-44
10-30	directory-structured, LG, 9-5
memory mapping, RSM, 2-31	specifying, LG, 9-5
module header, IOSM, 14-11	storing external files, LG, 9-5
object libraries, RT SUG, 1-4; RSX	storing files on directoried device,
SUG, 1-4	LG, 9-5
overview, RT SUG, 1-4; RSX SUG,	DEVICES macro, IOSM, B-39
1-4; IOSM, 14-1	arguments, RSM, 4-5
peripheral processor, IOSM, B-2	description, RSM, 4-4
prefix module, IOSM, 14-3	example, RSM, 4-5 interrupt vectors, RSM, 7-6
DYPFX.MAC, <i>IOSM</i> , 14-8 priority assignments, <i>IOSM</i> ,	syntax, RSM, 4-5
14-3	DEXC\$ primitive, RSM, 6-15
prefix modules, RT SUG, 1-4, 2-8;	argument block, RSM, 3-51
RSX SUG, 1-4, 2-10	description, RSM, 3-50
process definition, IOSM, 14-12	error returns, RSM, 3-51
pure-area definition, IOSM, 14-14	semantics, RSM, 3-51
reply subroutine, IOSM, 14-17	syntax, RSM, 3-50
sample MACRO-11 program, IOSM,	syntax example, RSM, 3-51
D-1	DFSPC\$ macro, <i>RSM</i> , 2-3, 2-7
source module, IOSM, 14-10	description, RSM, 3-52
subroutines	error returns, RSM, 3-55
allocate dynamic memory, <i>IOSM</i> ,	restrictions, RSM, 3-54
15-32	semantics, RSM, 3-54
allocate memory, IOSM, 15-29	syntax, RSM, 3-52
block move, <i>IOSM</i> , 15-26 deallocate dynamic memory,	syntax example, RSM, 3-54 Diagnostic messages
IOSM, 15-30	compiler, RT SUG, 8-1
initialize device driver, IOSM,	Dialog
15-28	MPBLD, RT SUG, 2-3, 2-5
initialize heap, IOSM, 15-31	MPBUILD, INTRO, 7-2
report exception, IOSM, 15-27	Digital Network Architecture (DNA)
save/restore registers, IOSM,	device I/O, IOSM, 13-6
15-34	DINT\$ primitive, RSM, 7-2
send device driver reply, IOSM,	argument block, RSM, 3-56
15-33	description, RSM, 3-56
system process, INTRO, 1-5, 3-2	error returns, RSM, 3-57
system processes, RT SUG, 4-2	restrictions, RSM, 3-56
termination procedure, IOSM, 14-18	semantics, RSM, 3-57
unmapped, RT SUG, 4-6	syntax, RSM, 3-56
user supplied, <i>RSX SUG</i> , 2-12 Device handler	syntax example, <i>RSM</i> , 3-57 Directives
See also Device driver	definition, LG, 6-19
Interrupt Service Routine (ISR),	EXTERNAL, LG, 6-20
INTRO, 4-10	FORWARD, LG, 6-19
Device I/O	SEQ11, LG, 6-20, 6-21
Digital Network Architecture (DNA),	subprograms, LG, 6-2
IOSM, 13-6	Directory-structured devices, LG, 9-5

Directory-structured devices (cont'd.)	DLRG\$ primitive (cont'd.)
initializing directory, LG, 9-22	semantics, RSM, 3-62
DISCONNECT_EXCÉPTION procedure	syntax, RSM, 3-61
error returns, LG, 17-15	syntax example, RSM, 3-62
overview, LG, 17-14	DLSR\$ primitive
semantics, LG, 17-14	argument block, RSM, 3-65
syntax, LG, 17-14	description, RSM, 3-64
DISCONNECT_INTERRUPT procedure	error returns, RSM, 3-65
error returns, LG, 16-11	restrictions, RSM, 3-65
overview, LG, 16-10	semantics, RSM, 3-65
semantics, LG, 16-10	syntax, RSM, 3-64
syntax, LG, 16-10	syntax, Rom, 5 or syntax example, RSM, 3-65
DISCONNECT_SEMAPHORE	DLST\$ primitive
procedure	argument block, RSM, 3-66
error returns, LG, 16-13	call, RSM, 3-66
overview, LG, 16-12	description, RSM, 3-66
compation IC 16.12	owner returns PSM 2.67
semantics, LG, 16-12	error returns, RSM, 3-67
syntax, LG, 16-12	semantics, RSM, 3-67
Disk drivers	syntax, RSM, 3-66
features and capabilities, IOSM, 4-2	syntax example, RSM, 3-67
prefix files, IOSM, 4-27	DMA I/O
status codes, IOSM, 4-25	KXT11–CA/KXJ11–CA, IOSM, 9-2
Diskette formatting procedure, LG,	DMA Transfer Controller (DTC)
9-19 Dial 1/O 100M 4.3	data transfers, <i>IOSM</i> , B-2
Disk I/O, IOSM, 4-3	DMA transfers
Displaying source lines, DUG, 2-13	parallel I/O, IOSM, 9-8, 9-21
Distribution kit	sample program, IOSM, 9-11
configuration file, INTRO, 6-3	serial line unit, IOSM, 9-8, 9-22
DL driver Get Characteristics function, <i>IOSM</i> ,	DO lists
4-12	See also Command option DO lists, Global DO lists
Logical Read function, IOSM, 4-10	definition, DUG, 2-7
Logical Write function, IOSM, 4-10	Dollar sign
Physical Read function, IOSM, 4-11	usage in identifiers, <i>LG</i> , 1-8
Physical Write function, IOSM, 4-11	/D option
DLLN\$ primitive, RSM, 3-10	debug symbol file, RT SUG, 5-6
argument block, RSM, 3-58	ISD records, RT SUG, 3-6
description, RSM, 3-58	MERGE utility, RT SUG, 3-4, 9-12
error returns, RSM, 3-59	object module, RT SUG, 5-5
semantics, RSM, 3-59	RELOC utility, RT SUG, 3-6, 10-14
syntax, RSM, 3-58	system processes, RT SUG, 4-5
syntax example, RSM, 3-59	user processes, RT SUG, 5-4
DLPC\$ primitive	Down-line loading, INTRO, 6-6
description, RSM, 3-60	asynchronous serial line, INTRO,
error returns, RSM, 3-60	2-2
semantics, RSM, 3-60	DDCMP method, RSX SUG, 13-4
syntax, RSM, 3-60	DECnet, RSX SUG, 13-2
DLRG\$ primitive	Ethernet, RSX SUG, 13-2
argument block, RSM, 3-62	hardware address, RSX SUG, 13-3
description, RSM, 3-61	PASDBG, RT SUG, 3-8, 7-1; RSX
error returns, RSM, 3-63	SUG, 7-1
implementation notes, RSM, 3-63	\$DRALR subroutine (Allocate memory),
restrictions, RSM, 3-62	IOSM, 15-29

	DV dwirrow (ann b'd)
\$DRDSP subroutine (Deallocate	DY driver (cont'd.)
dynamic memory), IOSM, 15-30	Physical Write function, <i>IOSM</i> , 4-15
\$DRHIN subroutine (Initialize heap),	format subfunctions, IOSM,
IOSM, 15-31	4-16
DRIVER attribute	Dynamic mapping
applicable entities, <i>LG</i> , F-1	primitive services, overview, RSM,
overview, LG, 10-14	5-1
syntax, LG, 10-14	Dynamic memory allocation
use in real-time requests, LG, 14-40	RAM, LG, 18-1, 18-7, 18-8, 18-14,
Driver mapping	18-16
build cycle, RT SUG, 2-10	requests, LG, 18-1
DRMAP\$ macro (Remap virtual	Dynamic process, INTRO, 3-1
address), IOSM, 15-3	create primitive, CRPC\$, RSM, 3-36
\$DRNEW subroutine (Allocate dynamic	CRPC\$ primitive, RSM, 2-4
memory), IOSM, 15-32	delete primitive, DLPC\$, RSM, 3-60
DRPAR\$ macro (Read PAR or PDR	general description, RSM, 2-4
register), IOSM, 15-6	PROCESS declaration, RSM, 2-4
\$DRPLY subroutine (Send device driver	program example, INTRO, 5-3, 5-5
reply), IOSM, 15-33	run-time name, RSM, 2-7
DRVDF\$ macro (Define driver packet	Dynamic RAM allocation
symbols), IOSM, 15-7	primitive services, overview, RSM,
DRVM.OBJ	5-1
object module libraries, RT SUG, 4-2	Dynamic variables, LG, 2-19
DRVM.OLB, DRVU.OLB, RSX SUG,	specifying, <i>LG</i> , 2-19
1-4	E
DRVM.OLJ, DRVU.OLJ, RT SUG, 1-4	
DRVU.OBJ	E (exponential) specifier, LG, 2-7
object module libraries, RT SUG, 4-2	EMPTY_BUFFER
DSCXW\$ macro (Disable MMU context	syntax, LG, 9-14
switch), IOSM, 15-8	EMPTY_BUFFER procedure
DSM Control of the Co	error returns, LG, 9-14
See Debugger Service Module (DSM)	overview, LG, 9-14
D-space .	ENCXW\$ macro (Enable MMU context
mapping	switch), IOSM, 15-11
I&D separation, RT SUG, 6-3	ENDCFG macro
DTC	description, RSM, 4-5
See DMA Transfer Controller (DTC)	syntax, RSM, 4-5
DU driver	END delimiter, LG, 1-3
Get Characteristics function, <i>IOSM</i> ,	compound statements, LG, 5-5
4-19	End-of-file (EOF)
Logical Read function, IOSM, 4-18	detecting, LG, 9-15
Logical Write function, IOSM, 4-18	End-of-line (EOLN)
DWPAR\$ macro (Write to PAR or PDR	detecting, LG, 9-17
register), IOSM, 15-10	Enumerated data types, LG, 2-4
Dyadic operators, LG, 3-10	ordinal values, LG, 2-5
Boolean operands, LG, 3-16	storage allocation rules
evaluation order, LG, 3-16	packed, LG, E-3
DY driver	
Get Characteristics function, IOSM,	unpacked <i>, LG,</i> E-3 EOF
4-17	
Logical Read function, IOSM, 4-13	See End-of-file (EOF)
Logical Write function, IOSM, 4-13	EOF function
Physical Read function, IOSM, 4-15	error returns, LG, 9-16
Injurear reduction, 100191, 4-10	overview, LG, 9-15

EOF function (cont'd.)	Event (cont'd.)
syntax, LG, 9-15	significant, INTRO, 3-6
EOLN	EXAMINE command, DUG, 3-40
See End-of-line (EOLN)	example, DUG, 2-4, 3-43, 3-62,
EOLN function	3-64, 3-65, 3-66, 3-67, 3-73,
error returns, LG, 9-17	3-138, 4-9
overview, LG, 9-17	Example
/E option	build cycle, INTRO, 7-1
RELOC utility, RT SUG, 10-15	CARS program, INTRO, 5-2
Equal sign	dynamic process, <i>INTRO</i> , 5-3, 5-5
string operator, LG, 3-13	
	partial build, INTRO, 7-7
Error information, extended, IOSM,	EXAMPLE command, DUG, 3-7
4-27, 6-45, 10-39	EXC.PAS, RSM, 6-3
Error messages	Exception codes
MPBLD, RT SUG, 2-11	device driver, IOSM, 14-18
Error-processing routines	value format, RSM, 6-10
device driver, IOSM, 14-18	Exception condition, RSM, 2-16
Error returns	codes, RSM, 6-2, 6-3
I/O requests, LG, 9-8	connect primitive, CCND\$, RSM,
primitive services, RSM, 3-6	3-24
real-time programming requests, LG,	declaring, LG, 17-20
11-5	declaring exception handler, <i>LG</i> ,
STATUS parameter, <i>LG</i> , 11-5	17-9
Errors	defined, INTRO, 4-10
automatic self-tests	dismiss primitive, DEXC\$, RSM,
reporting, IOSM,B-19	3-50
build cycle, RT SUG, 2-11	generation, INTRO, 4-10
device controller	management requests, LG, 17-1
nonrecoverable, IOSM, 14-19	process release, LG, 17-18
recoverable, IOSM, 14-19	report primitive, REXC\$, RSM,
device driver	3-130, 6-9
resource famine, IOSM, 14-19	report procedure, REPORT, RSM,
KXT11-CA	6-9
fatal, IOSM, B-16	service procedure, RSM, 6-17
self-tests	service routine, RSM, 6-16
reporting, IOSM, B-16	STATUS parameter, LG, 11-5
ES\$NOR success code, LG, 11-5	types, INTRO, 4-10, 4-12; RSM,
Escape sequence, INTRO, 5-3	6-2
ESTABLISH procedure, INTRO, 4-12	types and codes, LG, 17-3
error returns, LG, 17-17	wildcard group, LG, 17-12
	Exception dispatching
establish exception handler, <i>RSM</i> , 6-12	kernel, RSM, 6-12
establish exception procedure, RSM,	
6-17	Exception group
	managing exceptions, LG, 17-11
overview, LG, 17-16	specifying, LG, 10-18
semantics, LG, 17-17	Exception handler, INTRO, 4-11;
syntax, LG, 17-16	RSM, 2-16, 6-11, 6-14
Ethernet Poy Chic 12.2	CCND\$ primitive, RSM, 2-16
down-line loading, RSX SUG, 13-2	CONNECT_EXCEPTION procedure
Ethernet communication	RSM, 2-16
QN driver, IOSM, 13-3	exception queue, RSM, 6-14
Event, INTRO, 3-6	exception stack frame, RSM, 6-15
real-time, INTRO, 1-3	procedure, INTRO, 4-12

Exception handler (cont'd.)	EXTERNAL attribute (cont'd.)
process, INTRO, 4-11	subprogram declarations, LG, 7-2
Process Control Block (PCB), RSM,	syntax, LG, 10-15
6-12, 6-15	EXTERNAL directive, LG, 6-20, 6-21
process group codes, RSM, 6-14	subprogram declarations, LG, 7-2
process priority, RSM, 6-15	External files
REPORT statement, INTRO, 4-12	CLOSE procedure, LG, 9-12
set address primitive, SERA\$, RSM,	deleting named, LG, 9-13
3-145	named and unnamed, LG, 9-5
waiting for exceptions, LG, 17-24	renaming, LG, 9-41
Exception handling	sending form-feed to, LG, 9-29
MMU trap, RSM, 6-21	specifying, LG, 9-5
overview, RSM, 6-1	specifying size, <i>LG</i> , 9-25
Process Control Block (PCB), INTRO,	External file storage, LG, 9-5
4-11	External identifiers, LG, 7-3
Exception processing	External pulses
primitive services, RSM, 1-12	counter/timer support routines,
Exception reporting	IOSM, 6-21
REXC\$ primitive, RSM, 2-16	External subprograms, LG, 6-21
Exception stack frame, RSM, 6-11	F
format, RSM, 6-18	<u> </u>
Exception-type mask	FALACP, IOSM, 2-11
derivation, MACRO-11, RSM, 6-10	FALCON macro
derivation, Pascal, RSM, 6-11	arguments, RSM, 4-6
EXCEPTION-WAIT ACTIVE process	description, RSM, 4-6
state, RSM, 2-16	example, RSM, 4-7
Executable section	hardware assumptions, RSM, 4-7
subprogram blocks, LG, 6-15	restrictions, RSM, 4-7
Execution 1.2. IC 1.2.	syntax, <i>RSM</i> , 4-6
concurrent, INTRO, 1-2; LG, 1-3	FALSE Boolean values, LG, 2-4
advantages, INTRO, 1-2	string expressions, LG, 3-13
Execution priority	Features and capabilities
CHANGE_PRIORITY, LG, 12-2 Execution statistics	AD driver, IOSM, 7-1
compiler options, RT SUG, 8-11	Ancillary Control Process (ACP),
EXMSK\$ macro, RSM, 6-3	IOSM, 2-1
Exponential notation, LG, 2-6	communication driver, IOSM, 13-2
specifier, LG, 2-7	CS driver, IOSM, 12-2
Exponential value	disk drivers, IOSM, 4-2
EXP function, LG, 8-7	Instrument bus, IOSM, 10-1
Expressions	KW driver, IOSM, 8-1
compile-time, LG, 3-2	MU driver, IOSM, 5-1
definition, LG, 1-2, 3-1	Network Service Process (NSP),
function result, LG, 6-22	IOSM, 11-1
operands, LG, 3-1	parallel line driver, IOSM, 6-2
operators, LG, 3-1	QD driver, IOSM, 9-1
run-time, LG, 3-2	TT driver, IOSM, 3-1
Extended Instruction Set (EIS)	XE driver, IOSM, 10-3
hardware, RT SUG, 5-3	FIFO ordering
EXTERNAL attribute, INTRO, 3-12;	for packet queues, LG, 14-30, 14-33
LG, 6-21, 7-3	for ring buffers, <i>LG</i> , 15-9 File
applicable entities, LG, F-1	command, INTRO, 7-4
overview, LG, 10-15	configuration, INTRO, 6-3, 6-10
	Commentation, 1141 NO, 0-0, 0-10

File (cont'd.)	File variables (cont'd.)
memory image, INTRO, 6-6 object, INTRO, 6-3, 6-5, 6-6	disconnecting from a device, <i>LG</i> , 9-31
prefix, INTRO, 6-10	Get Characteristics request, IOSM,
source, INTRO, 7-1	11-6
File access methods	I/O servers, LG, 9-4
CLOSE procedure, LG, 9-4	INPUT, LG, 2-18
direct, LG, 9-4	OUTPUT, LG, 2-18
OPEN procedure, LG, 9-4	specifying to OPEN, LG, 9-24
overview, LG, 9-4	VAR parameters, LG, 6-25
sequential, LG, 9-4	FILSYS.OBJ, RT SUG, 5-4
update, LG, 9-4	shared library, RT SUG, 6-6
FILE data types, LG, 2-16	FILSYS.OLB, RSX SUG, 8-1
File I/O	FIND procedure
Ancillary Control Process (ACP),	error returns, LG, 9-18
IOSM, 2-2	overview, LG, 9-18
File options	syntax, LG, 9-18
/LIB, /LIST, /OBJ, /MAP, <i>RT SUG</i> ,	Fixed-point notation, LG, 2-6
2-3	Flowcharts
/LIB, /LIST, /OBJ, /MAP, /MAC,	concurrent design, INTRO, 6-3
/PAS, RSX SUG, 2-4	/F option
Files	RELOC utility, RT SUG, 10-16
closing, LG, 9-12	FORK\$ request
concepts of, LG, 9-10	call, <i>RSM</i> , 3-68
deleting, LG, 9-13	description, RSM, 3-68
DIGITAL-supplied	error returns, RSM, 3-69
%INCLŪDE, LG, I-1	Interrupt Service Routine (ISR), RSM
module, LG, I-1	7-10
external storage, LG, 9-5	restrictions, RSM, 3-69
opening for I/O, LG, 9-24	semantics, RSM, 3-69
organization, LG, 9-4	syntax, RSM, 3-68
positioning for input, LG, 9-18, 9-20	Fork block
predefined identifiers, LG, G-1	format, RSM, 7-10
preparing for input, LG, 9-42	Fork level
preparing for output, LG, 9-43	Interrupt Service Routine (ISR), RSM
protecting from deletion, LG, 9-30	7-2
purging, LG, 9-11	Fork routine
	example, RSM, 7-11
removing protection from, LG, 9-45	
specifying external, LG, 9-5	interrupt processing, RSM, 7-2
storing external directoried device,	Interrupt Service Routine (ISR), RSM
LG, 9-5	7-1, 7-10; IOSM, 14-17
writing, LG, 9-32	restrictions, RSM, 7-10
writing lines of data, LG, 9-48	Formal parameter list, LG, 6-6
File specifications	Formal parameters, LG, 6-5
specifying with logical names, LG,	declaring, LG, 6-14
20-1	declaring default values, LG, 6-24
File system interface, Pascal, IOSM,	declaring side effects, LG, 10-40
2-3	function identifiers, LG, 6-17
File variables	scope of identifiers, LG, 6-15
actual value parameters, LG, 6-24	subprograms, LG, 6-2
buffer variables, LG, 2-16	UNSAFE attribute, LG, 6-24
definition, LG, 2-16	FORMAT_RX02 procedure
	error returns, <i>LG</i> , 9-19

FORMAT_RX02 procedure (cont'd.)	Functions (cont'd.)
overview, LG, 9-19	Disable Clock
syntax, LG, 9-19	KW driver, IOSM, 8-17
Format subfunctions	Disable Portal
DY driver	QN driver, IOSM, 13-18
Physical Write function, IOSM,	Disable Protocol
4-16	CS driver, IOSM, 12-11
FOR statement, LG, 5-6	\$DMA, IOSM, 9-11
FORTRAN subprograms	\$DMA_ALLOCATE
calling sequence, LG, 6-21	QD driver, IOSM, 9-11
FORWARD directive, LG, 6-19	\$DMA_GET_STATUS
Free-memory pool, RSM, 2-48	QD driver, IOSM, 9-9
allocation algorithm, RSM, 2-49	\$DMA_SEARCH
deallocation procedure, RSM, 2-49	QD driver, IOSM, 9-6
	\$DMA_SEARCH_TRANSFER
Free-packet pool	
message packets, LG, 14-6	QD driver, IOSM, 9-7
Free-RAM lists	\$DMA_TRANSFER
kernel, RSM, 5-7	QD driver, IOSM, 9-4
Functional command groups, DUG,	DMA Complete
2-14	YK driver, IOSM, 6-41
Functional description	DMA Read
device driver, IOSM, 14-12	YK driver, IOSM, 6-41
FUNCTION declaration, LG, 1-2	DMA Write
Function identifiers, LG, 3-1, 3-8	YK driver, IOSM, 6-41
data type, LG, 1-2	Enable 1001 (10 25
definition, LG, 1-2	KK driver, IOSM, 13-25
establishing data type, LG, 1-2	KX driver, IOSM, 13-25
Function results	XA driver, IOSM, 6-30
data type, LG, 6-17	XP driver, <i>IOSM</i> , 13-19
Functions	XS driver, IOSM, 13-19
activating, LG, 6-22	Enable Clock
actual parameters, LG, 6-26	KW driver, IOSM, 8-15
Allocate Channel	Enable Portal
QD driver, IOSM, 9-24	QN driver, IOSM, 13-15
assigning values, <i>LG</i> , 6-17	Enable Protocol
Auxiliary Command	CS driver, IOSM, 12-11
XE driver, IOSM, 10-31	Enter, IOSM, 2-6
block, LG, 6-17	external, <i>LG</i> , 6-20
Clear Timer	Get Characteristics, IOSM, 2-5
YK driver, IOSM, 6-43	AD driver, IOSM, 7-14
Close, IOSM, 2-7	CS driver, IOSM, 12-12
concepts, LG, 6-1	DD driver, IOSM, 4-23
Deallocate Channel	DL driver, IOSM,4-12
QD driver, IOSM, 9-24	DU driver, IOSM, 4-19
default parameters, LG, 6-24	DY driver, IOSM, 4-17
definition, LG, 1-3	KK driver, IOSM, 13-24
Delete, IOSM, 2-7	KW driver, IOSM, 8-17
Disable	KX driver, IOSM, 13-24
KK driver, IOSM, 13-25	MU driver, IOSM, 5-12
KX driver, IOSM, 13-25	Network Service Process (NSP),
XA driver, IOSM, 6-31	IOSM, 11-4
XP driver, IOSM, 13-19	QD driver, IOSM, 9-22
XS driver, IOSM, 13-19	QN driver, IOSM, 13-18

Functions	Functions (cont'd.)
Get Characteristics (cont'd.)	predefined identifiers, LG, G-1
TT driver, IOSM, 3-10	Protect, IOSM, 2-7
VM driver, IOSM, 4-24	Purge, IOSM, 2-7
XA driver, IOSM, 6-30	Read
XD driver, IOSM, 4-20	CS driver, IOSM, 12-11
XE driver, IOSM, 10-25	KK driver, <i>IOSM</i> , 13-22
XP driver, IOSM, 13-20	KX driver, IOSM, 13-22
XS driver, IOSM, 13-20	MU driver, IOSM, 5-11
YA driver, IOSM, 6-32	QD driver, IOSM, 9-16
YB driver, IOSM, 6-36	QN driver, IOSM, 13-16
YF driver, IOSM, 6-37	TT driver, IOSM, 3-8
YK driver, IOSM, 6-39	XA driver, IOSM, 6-29
Get Control	XP driver, IOSM, 13-19
XE driver, IOSM, 10-33	XS driver, IOSM, 13-19
Go to Standby	YA driver, IOSM, 6-31
XE driver, IOSM, 10-33	YB driver, IOSM, 6-33
KK_READ_DATA, IOSM, 13-36	YF driver, IOSM, 6-36
KK_WRITE_DATA, IOSM, 13-36	YK driver, IOSM, 6-38
KX_READ_DATA, IOSM, 13-34	READ_PIO, IOSM, 6-9
KX_WRITE_DATA, IOSM, 13-35	Read Logical
Load Parallel Poll Register	converted data, IOSM, 7-13
XE driver, IOSM, 10-29	XE driver, IOSM, 10-23
Logical Read, IOSM, 2-5	Read Physical
DD driver, IOSM, 4-21	KW driver, IOSM, 8-13
DL driver, IOSM, 4-10	Read Timer
DU driver, IOSM, 4-18	YK driver, IOSM, 6-43
DY driver, IOSM, 4-13	Recognize Event
VM driver, IOSM, 4-24	XE driver, IOSM, 10-36
XD driver, IOSM, 4-19	Rename, IOSM, 2-7
Logical Write, IOSM, 2-5	Reposition Tape
DD driver, IOSM, 4-21	MU driver, IOSM, 5-12
DL driver, IOSM, 4-10	Request Service
DU driver, IOSM, 4-18	XE driver, IOSM, 10-32
DY driver, IOSM, 4-13	result, LG, 6-17
VM driver, IOSM, 4-24	Rewind Tape
XD driver, IOSM, 4-19	MU driver, IOSM, 5-13
Lookup, IOSM, 2-6	scope, LG, 6-17
Parallel Poll	Serial Poll
XE driver, IOSM, 10-29	XE driver, IOSM, 10-28
Parallel Poll Configure	SET_STATE
XE driver, IOSM, 10-30	XE driver, IOSM, 10-8
Pass Control	Set Characteristics, IOSM, 2-5
XE driver, IOSM, 10-33	configure device, IOSM, 7-11
passing identifiers, LG, 6-17	Network Service Process (NSP),
Physical Read, IOSM, 2-4	IOSM, 11-4
DD driver, IOSM, 4-22	TT driver, IOSM, 3-10
DL driver, IOSM, 4-11	XE driver, IOSM, 10-25
DY driver, IOSM, 4-15	YB driver, IOSM, 6-35
Physical Write, IOSM, 2-4	Set Event Mask
DD driver, IOSM, 4-22	XE driver, IOSM, 10-34
DL driver, IOSM, 4-11	Set Modem Semaphore
DY driver, IOSM, 4-15	TT driver, IOSM, 3-16

Functions	GELA\$ primitive (cont'd.)
Set Modem Semaphore (cont'd.)	implementation notes, RSM, 3-73
XP driver, IOSM, 13-21	restrictions, RSM, 3-71
XS driver, IOSM, 13-21	semantics, RSM, 3-72
Set Pattern	syntax, RSM, 3-70
YK driver, IOSM, 6-40	syntax example, RSM, 3-72
Set Timer	GELC\$ primitive
YK driver, IOSM, 6-42	argument block, RSM, 3-76
specifying as external, LG, 10-15	call, RSM, 3-75
specifying as global, LG, 10-17	description, RSM, 3-75
Stop	error returns, RSM, 3-77
XP driver, IOSM, 13-21	restrictions, RSM, 3-76
XS driver, IOSM, 13-21	semantics, RSM, 3-76
Stop Request	syntax, RSM, 3-75
TT driver, IOSM, 3-17	syntax example, RSM, 3-76
subprogram blocks, LG, 6-15	GELM\$ primitive
Unprotect, IOSM, 2-7	argument block, RSM, 3-79
Wait for Event	call, RSM, 3-78
XE driver, IOSM, 10-36	description, RSM, 3-78
Write	error returns, RSM, 3-80
CS driver, IOSM, 12-11	restrictions, RSM, 3-79
KK driver, IOSM, 13-22	semantics, RSM, 3-79
KX driver, IOSM, 13-22	syntax, RSM, 3-78
MU driver, IOSM, 5-11	syntax example, RSM, 3-79
QD driver, IOSM, 9-16	General mapping
QN driver, IOSM, 13-16	restriction on PCB access, LG, 17-24
TT driver, IOSM, 3-9	GET_CONFIG procedure
XA driver, IOSM, 6-29	error returns, LG, 20-11
XE driver, IOSM, 10-24	overview, LG, 20-9
XP driver, IOSM, 13-19	semantics, LG, 20-11
XS driver, IOSM, 13-19	syntax, LG, 20-9
YA driver, IOSM, 6-31	GET_ELEMENT_ANY function
YB driver, IOSM, 6-33	error returns, LG, 15-23
YF driver, IOSM, 6-36	overview, LG, 15-20
YK driver, IOSM, 6-38	semantics, LG, 15-22
Write IEEE Remote Messages XE driver, <i>IOSM</i> , 10-27	syntax, LG, 15-20
Write Tape Mark	GET_ELEMENT procedure, INTRO, 4-6
MU driver, IOSM, 5-13	conditional, INTRO, 4-6
Write with EOI Termination	error returns, LG, 15-19
XE driver, IOSM, 10-24	overview, LG, 15-17
YK_CLEAR_TIMER, IOSM, 6-21	semantics, LG, 15-18
YK_PORT_READ, IOSM, 6-10	syntax, <i>LG</i> , 15-17
YK_PORT_WRITE, IOSM, 6-11	GET_MAPPING procedure
YK_READ_TIMER, IOSM, 6-20	error returns, LG, 18-21
YK_SET_PATTERN, IOSM, 6-12	overview, LG, 18-19
YK_SET_TIMER, IOSM, 6-19	semantics, LG, 18-21
	syntax, LG, 18-19
G	GET_PACKET_ANY function
GELA\$ primitive	error returns, LG, 14-45
argument block, RSM, 3-72	overview, LG, 14-42
description, RSM, 3-70	semantics, LG, 14-44
error returns, RSM, 3-73	syntax, LG, 14-42

GEI_PACKEI procedure	GMAP\$ primitive
error returns, LG, 14-41	applications, RSM, 3-83
overview, LG, 14-40	argument block, RSM, 3-82
semantics, LG, 14-41	description, RSM, 3-81
syntax, LG, 14-40	error returns, RSM, 3-83
GET_STATE procedure	information returned format, RSM,
error returns, LG, 12-9	3-82
overview, LG, 12-6	restrictions, RSM, 3-81
semantics, LG, 12-8	semantics, RSM, 3-83
syntax, LG, 12-6	syntax, RSM, 3-81
GET_TIME procedure	syntax example, RSM, 3-83
error returns, LG, 19-4	GO command, DUG, 3-48
overview, LG, 19-3	example, DUG, 3-58, 3-68, 3-138,
semantics, LG, 19-3	4-4
syntax, LG, 19-3	/G option
GET_VALUE procedure	MIB utility, RT SUG, 11-13
error returns, <i>LG</i> , 13-27, 14-47,	RELOC utility, RT SUG, 10-16
15-26	GOTO statement, LG, 5-8
overview, LG, 13-26, 14-46, 15-25	subprogram blocks, LG, 6-15
semantics, LG, 13-27, 14-47, 15-26	Greater-than
syntax, LG, 13-26, 14-46, 15-25	
	string operator, LG, 3-13
Get Characteristics function	Greater-than-or-equal-to
file variable, IOSM, 11-6	string operator, LG, 3-13
\$SECTL Queue Semaphore, IOSM,	GROUP attribute
11-5	applicable entities, LG, F-1
Get element	overview, <i>LG</i> , 10-18
any primitive, GELA\$, RSM, 3-70	syntax, LG, 10-18
Get element primitive	GSD
basic, GELM\$, RSM, 3-78	See Global Symbol Directory (GSD)
conditional, GELC\$, RSM, 3-75	GTIM\$ primitive
GET procedure	argument block, RSM, 3-85
error returns, LG, 9-21	description, RSM, 3-84
I/O server buffering, LG, 9-9	error returns, RSM, 3-86
overview, LG, 9-20	restrictions, RSM, 3-85
syntax, LG, 9-20	semantics, RSM, 3-85
GLOBAL attribute, INTRO, 3-12; LG,	syntax, RSM, 3-85
6-21, 7-3	syntax example <i>, RSM,</i> 3-85
applicable entities, <i>LG</i> , F-1	GTST\$ primitive, RSM, 3-12
external subprograms, LG, 6-20	argument block, <i>RSM</i> , 3-88
overview, LG, 10-17	description, RSM, 3-87
syntax <i>, LG,</i> 10-17	error returns, RSM, 3-88
Global DO list, DUG, 3-59	semantics, RSM, 3-88
definition, DUG, 2-7	syntax, RSM, 3-87
example, DUG, 4-3	syntax example, RSM, 3-88
order of execution, DUG, 2-7	GVAL\$ primitive
Global identifiers, LG, 7-3	argument block, RSM, 3-90
Global references	description, RSM, 3-89
MERGE utility, RT SUG, 9-3; RSX	error returns, RSM, 3-92
SUG, 9-3	restrictions, RSM, 3-90
unresolved, RT SUG, 3-12	semantics, RSM, 3-90
Global Symbol Directory (GSD), RT	syntax, RSM, 3-89
SUG, 3-8	syntax example, RSM, 3-90
data block records, RT SUG, 9-1	Sylian Challest, 1011, 0 70
and block records, MI bad, 7-1	

Н	Host system, INTRO, 1-2; RT SUG,
Handshake mechanism	1-1, 1-2; RSX SUG, 1-1, 1-2;
binary semaphore, INTRO, 5-1, 5-5,	DUG, 1-1
5-7	application development, INTRO,
dynamic process, INTRO, 5-7	1-2, 2-1
static process, INTRO, 5-8	compiler limitations, LG, H-1
Hardware	features, INTRO, 2-2, 2-3, 2-4
buffering, IOSM, 3-22	hardware requirements, INTRO,
characteristics	2-2, 2-3, 2-4
configuration file, INTRO, 2-7	Micro/RSX, INTRO, 2-2
configuration	PASDBG, INTRO, 6-7
guidelines, IOSM, B-11	RSX-11M/M-PLUS, INTRO, 2-2
peripheral processor, IOSM, B-9	RT-11, INTRO, 2-3
exceptions	terminal line for debugging
argument lists, RSM, 6-19	assignment, DUG, A-2
characteristics, RSM, 6-1	errors, DUG, A-4
features	setting protection, DUG, A-2
KXT11-CA, IOSM, B-4	setting speed, DUG, A-3
jumper	VAX/VMŠ, ĪNTRO, 2-4
memory map, IOSM, B-19	1
TPR base address, IOSM, B-14	<u> </u>
overview	I/O
peripheral processor, IOSM, B-1	asynchronous DDCMP, IOSM, 12-3
setup	asynchronous serial, IOSM, 3-2
peripheral processor, IOSM,	buffers
B-14	buffer variable, LG, 9-9
stand-alone processor, IOSM,	purging, LG, 9-9, 9-14
B-14	concepts, LG, 9-1
support	delayed device access, LG, 9-53
compiler options, RT SUG, 8-13	device, disconnecting from file
Header	variable, LG, 9-31
data structures, RSM, 2-37	disk files, IOSM, 4-3
Heading	DMA transfers, IOSM, 9-2
Pascal block, LG, 4-1	file organization, LG, 9-4
Heap storage	file variables
CHECK_FREE_SPACE procedure,	default characteristics, LG, 9-10
LG, 20-3	instrument bus, IOSM, 10-4
compiler utilization, LG, H-1	page area, IOSM, B-9
dynamic variables, LG, 2-19	parallel lines, IOSM, 6-3
parent process, LG, 5-15	performing, IOSM, 1-7
recovering space, LG, 8-5	procedure interface, Pascal, IOSM,
HELP command, DUG, 3-49	3-4, 4-5, 5-8, 6-4, 7-3, 13-10
Hexadecimal	real-time clock, IOSM, 8-2
conversion function, LG, 9-39, 9-52	request/reply packets, IOSM, 1-10
notation, LG, 2-2	requests
HEX function	error returns, LG, 9-8
error returns, <i>LG</i> , 9-39, 9-52	%INCLUDE files, LG, 9-10
overview, input, LG, 9-39	server buffering, overview, LG, 9-9
overview, output, LG, 9-52	servers
/H option MIR utility PT SUC 11 12	buffer variable, LG, 9-9
MIB utility, RT SUG, 11-13	disconnecting from file variable,
Host/target communication line	LG, 9-12
See Communication line	

I/O	Identifiers (cont'd.)
servers (cont'd.)	predefined, LG, 1-8, G-1
file variables, LG, 9-4	record field, LG, 2-7
I/O buffer, LG, 9-9	scope, LG, 6-3, 6-15
specifying, LG, 9-5	user-defined, LG, 1-9
specification, OPEN procedure, <i>LG</i> ,	/IDS option
9-24	MPBUILD dialog, RSX SUG, 2-4
specifying devices, LG, 9-5	IF-THEN-ELSE statement, LG, 5-11
specifying external files, LG, 9-5	IF-THEN statement, LG, 5-9
summary of requests, LG, 9-1	IMPUR\$ macro, RSM, 2-25
system, initialization for file access,	description, RSM, 3-93
LG, 9-10	error returns, RSM, 3-93
system architecture, IOSM, 1-3	semantics, RSM, 3-93
terminology, LG, 9-2	syntax, RSM, 3-93
TMSCP tape files, <i>IOSM</i> , 5-2	Impure-area definition
I/O page	device driver, IOSM, 14-14
accessing in mapped environment,	Impure-area definition macro
LG, 10-13, 10-14, 10-30	device driver, IOSM, 14-9
I/O processing	
	Impure-data high segment, <i>RSM</i> , 2-24
Interrupt Service Routine (ISR), <i>RSM</i> , 7-3	
I&D-space, RT SUG, 6-1	%INCLUDE directive, <i>LG</i> , 7-5 %INCLUDE files
advantages, RT SUG, 6-2	I/O requests, LG, 9-10
restrictions, RT SUG, 6-2; RSX SUG,	supplied by DIGITAL, LG, I-1
6-2	INCLUDE files, Pascal
separation, RT SUG, 6-2; RSX SUG,	PREDFL.PAS, RSX SUG, 8-13
6-2	Indirect command files, DUG, 3-55
build cycle, RT SUG, 6-3; RSX SUG, 6-3	See also @ command, LOG command
kernel configuration, RSX SUG,	Indirect reference, DUG, 2-5, 2-6, 3-9,
6-1	3-10, 3-64, 3-65
memory mapping, RSM, 2-29	Informational message
RELOC utility, RT SUG, 6-3	suppression, RT SUG, 8-14
shared library, RT SUG, 6-2	Information record format, LG, 14-15
static process, RT SUG, 6-3	RECEIVE_ANY function, LG, 14-62
IBADR\$ macro (Increment byte	RECEIVE procedure, LG, 14-53
address), IOSM, 15-14	INIT_DIRECTORY procedure
ID_MAPPING record type, LG, 18-19	error returns, LG, 9-23
IDB	overview, LG, 9-22
See Interrupt Dispatch Block (IDB)	syntax, LG, 9-22
IDENT attribute	INIŤ_PRIORITY attribute
applicable entities, LG, F-1	applicable entities, LG, F-1
overview, LG, 10-19	overview, LG, 10-20
syntax, <i>LG</i> , 10-19	syntax, LG, 10-20
Identical data types	INIT_PROCESS_DESC procedure
checking rules, LG, 2-20	error returns, LG, 12-11
Identifiers	overview, LG, 12-10
character limit, <i>LG</i> , 1-8	semantics, LG, 12-10
compile-time limitations, LG, H-7	syntax, LG, 12-10
construction rules, LG, 1-8	INIT_STRUCTURE_DESC procedure
data types, <i>LG</i> , 1-2	error returns, <i>LG</i> , 13-29, 14-49,
function, LG, 3-1, 3-8	15-29
multiply declared, LG, 7-4	overview, LG, 13-28, 14-48, 15-28

INIT_STRUCTURE_DESC procedure	INTEGER data types (cont'd.)
(cont'd.)	constants, LG, 3-3
semantics, LG, 13-28, 14-48, 15-28	storage allocation rules
syntax, LG, 13-28, 14-48, 15-28	packed, LG, E-2
Initialization	unpacked, LG, E-1
priority, LG, 12-2	Integers
variables, LG, 3-5	conversion for input, LG, 9-38
Initialization options	conversion for output, LG, 9-51
selecting, IOSM, B-15	Interactive debugging
Initialization procedures, LG, 10-22	PASDBG, INTRO, 6-7
data structures, RSM, 2-3	Internal Symbol Directory (ISD), RT
declaring, LG, 10-22	SUG, 3-8
setting execution priority, LG, 10-20	data block records, RT SUG, 9-1
Initialization process	records, RT SUG, 3-6
device driver, IOSM, 14-14	Interprocess communication, INTRO,
INITIALIZE attribute, INTRO, 3-3, 5-7	1-4
applicable entities, LG, F-1	INTERRUPT command, DUG, 3-52
execution priority, LG, 12-2	Interrupt dismissal
overview, LG, 10-22	Interrupt Service Routine (ISR), RSM,
static process, RSM, 2-3	7-14
syntax, LG, 10-22	Interrupt Dispatch Block (IDB), RSM,
INITIALIZE command, DUG, 3-50	7-3
Input/output	CONNECT_INTERRUPT procedure,
See I/O	LG, 16-4
INPUT file variable, LG, 2-18	CONNECT_SEMAPHORE
default characteristics, LG, 9-10	procedure, LG, 16-9
Installing	DISCONNECT_INTERRUPT
bootstrap file, RSX SUG, 11-6	procedure, LG, 16-10
debug symbols	format, RSM, 7-4
shared library, RSX SUG, 11-7	initialization, RSM, 7-7
static process, RSX SUG, 11-7	overview, RSM, 7-3
shared libraries, RSX SUG, 11-6	Interrupt dispatcher
static processes, RSX SUG, 5-5, 11-6	entry points, RSM, 7-5
system processes, RSX SUG, 4-5	functions, RSM, 7-5
memory image, RSX SUG, 4-7	overview, RSM, 7-5
Instruction sequence	Interrupt handling, INTRO, 1-3, 4-10
process component, INTRO, 3-2,	Interrupt Service Routine (ISR),
3-3	INTRO, 4-10
Instruction set	kernel, INTRO, 3-4
target system, RT SUG, 5-4	overview, RSM, 7-1
Instrument bus	Interrupt management
features and capabilities, IOSM,	primitive services, RSM, 1-13
10-1	requests, LG, 16-1
I/O, IOSM, 10-4	Interrupt processing
Integer constants	fork routine, RSM, 7-2
binary notation, LG, 2-2	Interrupt Service Routine (ISR)
decimal notation, LG, 2-2	CINT\$ primitive, RSM, 7-7
hexadecimal notation, LG, 2-2	connect primitive, CINT\$, RSM,
octal notation, LG, 2-2	3-29
unsigned, LG, 2-3	device driver, INTRO, 4-15; RSM,
Integer conversion functions, LG, 9-38	7-1, 7-2
output, LG, 9-51	device handlers, INTRO, 4-10
INTEGER data types, LG, 2-2	
/1 , ",	

Interrupt Service Routine (ISR) (cont'd.)	I-space
disconnect primitive, DINT\$, RSM,	mapping (cont'd.)
3-56	I&D separation, RT SUG, 6-3
dismissing interrupts, RSM, 7-14	ISR
entering, RSM, 7-9	See Interrupt Service Routine (ISR)
enter normal state service, P7SYS\$,	IWADR\$ macro (Increment word
RSM, 3-111	address), IOSM, 15-15
example, RSM, 7-11	J
executing, RSM, 7-9	J
FORK\$ request, RSM, 3-68	J11 processor, RSX SUG, 6-1
fork routine, RSM, 7-1, 7-10; IOSM,	/J option
14-17	MERGE utility, RT SUG, 9-15
functions, RSM, 7-2	
I/O procressing, RSM, 7-3	RELOC utility, RT SUG, 10-16
interrupt handling, INTRO, 4-10	Jumper
	memory map, IOSM, B-19
interrupt vector disassociation, LG,	TPR base address, IOSM,B-14
16-10	I/
interrupt vectors, INTRO, 4-10; LG,	K
16-1	Kernel, INTRO, 1-5
mappable object, RSM, 2-26	
memory mapping, RSM, 2-33	accessing data space, LG, 10-14
overview, IOSM, 14-16	build cycle, RT SUG, 2-3; RSX SUG,
Pascal interface, RSM, 7-15	2-7, 2-8
Position Independent Code (PIC),	MIB utility, RSX SUG, 3-7
RSM, 7-2	data structures, INTRO, 3-3
Priority-7, RSM, 7-9	exception dispatching, RSM, 6-12
process priority, INTRO, 4-15	free-RAM lists, RSM, 5-7
	functions, RT SUG, 1-3; RSX SUG,
return conditions, RSM, 7-15	1-4
shared libraries, RSX SUG, 6-5	impure data segment, RSM, 2-48
undeclared interrupts, RSM, 7-6	interrupt dispatcher, RSM, 7-3
Interrupt vector, LG, 16-6, 16-10	interrupt handling, INTRO, 3-4
connecting a process, LG, 16-1	
connect primitive, CINT\$, RSM, 7-2	mapped
define macro, DEVICES, RSM, 4-4	relocating, RSX SUG, 3-6
disconnect primitive, DINT\$, RSM,	memory mapping, RSM, 2-28
7-2	merging
Interrupt Service Routine (ISR),	debugging, RSX SUG, 3-5
INTRO, 4-10; LG, 16-1	mapped target, RSX SUG, 3-4
semaphore, INTRO, 4-10	unmapped target, RSX SUG, 3-5
semaphore disassociation, LG, 16-12	MIM file, RT SUG, 2-1, 2-5; RSX
	SUG, 2-7, 3-7
system configuration file, RSM, 7-6	object libraries, RT SUG, 1-4; RSX
Invalid requests	SUG, 1-4
device driver, IOSM, 14-18	PAXM.OBJ, RT SUG, 3-4
/I option	PAXU.OBJ, RT SUG, 3-4
MERGE utility, RT SUG, 9-14	optimization, RT SUG, 3-11; RSX
RELOC utility, RT SUG, 10-16	
user processes, RT SUG, 5-4	SUG, 3-11
IOT instruction	build cycle, RT SUG, 3-12
kernel primitives, RSM, 3-2	organization, RSM, 1-2
ISD	phase
See Internal Symbol Directory (ISD)	build cycle, RT SUG, 2-5, 2-6,
I-space	3-1
mapping	

V1	VV /VV
Kernel	KX/KK protocol (cont'd.)
phase (cont'd.)	driver transactions, IOSM, B-24
MERGE utility, RT SUG, 3-4;	interface initialization, IOSM, B-34
RSX SUG, 3-4	KC.COM command field, IOSM,
primitive services, RSM, 1-2	B-28
IOT instruction, RSM, 3-2	KC.EOM bit, IOSM, B-32
process scheduler, INTRO, 3-4, 3-5,	KC.IDA bit, IOSM, B-30, B-31
3-6	KC.IDA command register bit, IOSM,
process synchronization, INTRO, 4-2	B-23 KC.IDR bit, <i>IOSM</i> , B-30, B-32
relocating	KC.IDR on it, 105M, b-32, b-32 KC.IDR command register bit, 10SM,
debugging, RSX SUG, 3-7	B-23
unmapped RAM-only target,	KC.LEN field, IOSM, B-30, B-32
RSX SUG, 3-6	KC.NOP no-op command, IOSM,
unmapped ROM/RAM target,	B-28
RSX SUG, 3-6	KC.VEC field, IOSM, B-30, B-32
symbol table	KC\$DI command, IOSM, B-30
creating, RSX SUG, 3-5	KC\$EI command, IOSM, B-30
system services, INTRO, 1-2, 3-4	KC\$GS command, IOSM, B-30
unmapped	KC\$RD command, IOSM, B-30
relocating, RSX SUG, 3-6	KC\$RSM command, IOSM, B-28
Key event, INTRO, 4-2	KC\$SS command, IOSM, B-30
KK_READ_DATA function, IOSM,	KC\$WD command, IOSM, B-31
13-36	KE\$ILC code, IOSM, B-33
KK_WRITE_DATA function, IOSM,	KE\$ILL code, IOSM, B-33
13-36	KE\$ILV code, IOSM, B-33
KK driver	KE\$NDA code, IOSM, B-33
Disable function, IOSM, 13-25	KE\$NDR code, IOSM, B-33
Enable function, IOSM, 13-25	KE\$OK code, IOSM, B-33
Get Characteristics function, IOSM,	KE\$OVR code, IOSM, B-33
13-24	KS.ALN field, IOSM, B-34
prefix file, IOSM, 13-29	KS.DA bit, IOSM, B-34
Read function, IOSM, 13-22	KS.DA status register bit, IOSM,
status codes, IOSM, 13-25	B-23
two-port RAM communication,	KS.DR bit, IOSM, B-33
IOSM, 13-5	KS.EOM bit, IOSM, B-34
Write function, IOSM, 13-22	KS.ERC field, IOSM, B-33
/K option	KS.ERR bit, IOSM, B-34
MIB utility, RT SUG, 3-7, 3-8, 11-13	KS.IEN bit, <i>IOSM</i> , B-30, B-34
KUI program, IOSM, B-18	KS.ON bit, IOSM, B-34
KW driver	KW.DCO register, IOSM, B-23
Disable Clock function, IOSM, 8-17	master/slave relationship, IOSM,
Enable Clock function, IOSM, 8-15	B-20
features and capabilities, IOSM, 8-1	message communication, IOSM,
Get Characteristics function, IOSM,	B-26
8-17	overview, IOSM, B-20
prefix file, IOSM, 8-18	status register definitions, IOSM,
Read Physical function, IOSM, 8-13	B-32
status codes, IOSM, 8-18	synchronizing operations, IOSM,
KX/KK protocol	B-27 VY DEAD DATA function IOSM
command register definitions, IOSM,	KX_READ_DATA function, IOSM, 13-34
B-28	13-34
concepts, IOSM, B-23	

KX_WRITE_DATA function, <i>IOSM</i> ,	KXT11-CA/KXJ11-CA
13-35	See Peripheral processor
KX device driver	KXT11C macro, IOSM, B-39
logical unit IDs, IOSM, B-37	arguments, RSM, 4-9
KX driver	
Control and Status Register (CSR),	description, RSM, 4-9
	syntax, RSM, 4-9
IOSM, B-15	KXT_LOAD routine
Disable function, IOSM, 13-25	application loading, IOSM, B-68
Enable function, IOSM, 13-25	loading KXT11–CA, IOSM, B-18
Get Characteristics function, IOSM,	MIM file, IOSM, B-68
13-24	program example, IOSM, B-69
prefix file, IOSM,13-29	user's interface, IOSM, B-68
Read function, IOSM, 13-22	doct o interface, 100112, 200
status codes, IOSM, 13-25	L
two-port RAM communication,	
IOSM, 13-5	LABEL declaration, LG, 1-2, 4-3
	Labels
Write function, IOSM, 13-22	subprogram blocks, LG, 6-15
KXJ11-CA	Language elements, LG, 1-6
See also Peripheral processor	Lazy lookahead I/O, LG, 9-53
application, IOSM, B-56	LED display, IOSM, B-19
configuration file, IOSM, B-56	
hardware features, IOSM, B-5	fatal errors, <i>IOSM</i> , B-16
shared memory, IOSM, B-54	Less-than
stand-alone operation, IOSM, B-2	string operator, LG, 3-13
KXJ11C macro	Less-than-or-equal-to
arguments, RSM, 4-8	string operator, LG, 3-13
	Lexical elements, LG, 1-6
description, RSM, 4-8	LIBNHD.OLB, LIBEIS.OLB,
syntax, RSM, 4-8	LIBFIS.OLB, LIBFPP.OLB, RSX
KXJ_DISABLE_SHARED procedure,	SUG, 8-1
IOSM, B-56	/LIB option
KXJ_ENABLE_SHARED procedure,	MPBLD dialog, RT SUG, 2-3
IOSM, B-55	
KXJ_LOAD routine	MPBUILD dialog, RSX SUG, 2-4
application loading, IOSM, B-68	shared libraries, RT SUG, 2-9
loading KXJ11-CA, IOSM, B-18	Libraries
MIM file, IOSM, B-68	DRVM.OLB, DRVU.OLB, RSX SUG,
user's interface, IOSM, B-68	1-4
KXT11-CA	DRVM.OLJ, DRVU.OLJ, RT SUG,
	1-4
See also Peripheral processor	LIBNHD.OLB, LIBEIS.OLB,
application loading, IOSM, B-68	LIBFIS.OLB, LIBFPP.OLB,
CSR assignments, IOSM, B-35	RSX SUG, 8-1
DCT-11 microprocessor features,	macro, RSX SUG, 3-3
IOSM, B-4	restriction, RSX SUG, 2-2
fatal error, IOSM, B-16	PAXM.OBJ, PAXU.OBJ, RT SUG,
hardware features, IOSM, B-4	
interrupt vector assignments, IOSM,	1-4
B-35	PAXM.OLB, PAXU.OLB, RSX SUG,
loading from arbiter, IOSM, B-18	1-4
memory	Lines per page
general description, IOSM, B-4	compiler options, RT SUG, 8-14
	Linking counters
memory configuration steps, <i>IOSM</i> ,	counter/timer support routines,
B-12	IOSM, 6-24
stand-alone operation, IOSM,B-2	,

/LIST option	Logical exclusive OR
MPBLD dialog, RT SUG, 2-3	UXOR function, LG, 8-17
MPBUILD dialog, RSX SUG, 2-4	Logical links
Lists	CLOSE procedure, LG, 9-12
doubly-linked, RSM, 2-47	specifying, LG, 9-6
singly-linked, RSM, 2-46	LOGICAL macro
LOAD/EXIT command	arguments, RSM, 4-11
PASDBG, RT SUG, 7-1	description, RSM, 4-11
LOAD command, DUG, 3-53	example, RSM, 4-11
example, DUG, 3-54, 3-55, 4-3	syntax, RSM, 4-11
Load format	Logical names
bootstrap, RSX SUG, 11-4	build-time macro, LOGICAL, RSM,
	4-11
PASDBG, RSX SUG, 11-3	
Loading	create primitive, CRLN\$, RSM, 3-33
down-line with DDCMP, RSX SUG,	creating, LG, 20-4
13-4	delete primitive, DLLN\$, RSM, 3-58
down-line with DECnet, RSX SUG,	deleting, LG, 20-7
13-2	device name, LG, 9-6
down-line with Ethernet, RSX SUG,	implicit translation, RSM, 3-10
13-2	node address, LG, 9-7
down-line with PASDBG, RSX SUG,	obtaining translation string, LG,
7-1	20-14
KXJ11-CA	process and structure names, LG,
KXJ_LOAD routine, IOSM, B-18	11-4
KXT11-CA	purpose, LG, 20-1
from arbiter, IOSM, B-18	translate primitive, TRLN\$, RSM,
from RT-11 and RSX-11	3-171
systems, IOSM, B-18	translation rules, RSM, 3-10
KXT_LOAD routine, IOSM,	Logical-name structure
B-18	definition, RSM, 2-44
TU58 DECtape II, IOSM, B-18	format, RSM, 2-44
Load map	Logical NOT
RELOC utility, RT SUG, 10-7	UNOT function, LG, 8-14
Local Pascal variables	
	Logical OR
setting watchpoints, DUG, 3-88, B-2	UOR function, LG, 8-16
LOCK_MUTEX procedure	Logical unit IDs
error returns, LG, 13-31	KX device driver, IOSM, B-37
overview, LG, 13-30	LONG_INTEGER data types, LG, 2-2
semantics, LG, 13-30	scalar constants, LG, 3-3
syntax, <i>LG</i> , 13-30	storage allocation rules, LG, E-2
LOG command	Loopback tests, IOSM, B-19
See also @ command, CLOSE LOG	/L option
command	RELOC utility, RT SUG, 10-17
create indirect command files, DUG,	Lowercase characters
3-2	process and structure names, LG,
definition, DUG, 3-55	11-4
Logical AND	LSI-11 bus, INTRO, 2-6
UAND function, LG, 8-14	LSI-11 systems
Logical device	adding peripheral processors, IOSM,
system libraries, RT SUG, 1-8	B-8
Logical device name TD: for debugging	arbiter processor, IOSM, B-1
assignment, DUG, A-2	Transfer Francisco V. 2001.1.
errors, DUG, A-4	
C. C	

M	Mapped-memory environment (cont'd.)
MAC file system configuration file, RT SUG, 2-5	obtaining mapping data, LG, 18-19 region-sharing, LG, 18-1, 18-3 saving context, LG, 18-30
/MAC option MPBLD dialog, RT SUG, 2-3 MPBUILD dialog, RSX SUG, 2-4 shared libraries, RT SUG, 2-9	specifying attributes, <i>LG</i> , 10-4 Mapped target DRVM.OBJ, <i>RT SUG</i> , 4-2 memory access, <i>RSM</i> , 2-26
MACRO-11 interface primitive services, <i>RSM</i> , 3-1	region allocation, RSM, 3-21 shared region, RSM, 3-13 Mapping information
MACRO-11 subprograms, LG, 6-21 MACRO-11 global symbols used as address expressions, DUG, 2-4	get primitive, GMAP\$, RSM, 3-81 Mapping modes, DUG, 2-11 Mapping record format, LG, 18-20
Macro calls DLST\$, RSM, 3-66 FORK\$, RSM, 3-68 GELC\$, RSM, 3-75 GELM\$, RSM, 3-78	Mapping type, RSM, 2-26 characteristics, RSM, 2-26 MAPW\$ primitive argument block, RSM, 3-98 description, RSM, 3-94
PELC\$, RSM, 3-102 PELM\$, RSM, 3-105 Macro definition, local	error returns, <i>RSM</i> , 3-100 implementation notes, <i>RSM</i> , 3-100 restrictions, <i>RSM</i> , 3-97
device driver, IOSM, 14-12 Macro libraries, RSX SUG, 3-3 MPBLD restriction on, RT SUG, 2-2 MPBLILD restriction, PSY SUG, 2-2	semantics, <i>RSM</i> , 3-98 syntax, <i>RSM</i> , 3-95 syntax example, <i>RSM</i> , 3-98 WPTR parameter, <i>RSM</i> , 3-97
MPBUILD restriction, <i>RSX SUG</i> , 2-2 MAP_WINDOW procedure error returns, <i>LG</i> , 18-27 overview, <i>LG</i> , 18-22 semantics, <i>LG</i> , 18-26	Map window primitive, MAPW\$, RSM, 3-94 MAXINT identifier predefined constant, LG, 2-2
syntax, RSM, 5-8; LG, 18-23 Map file creating, RSX SUG, 11-6 MIB utility, RT SUG, 11-7	Memory allocating physical, <i>LG</i> , 18-7 deallocating physical, <i>LG</i> , 18-14 dynamic allocation requests, <i>LG</i> ,
/MAP option MPBLD dialog, RT SUG, 2-3 MPBUILD dialog, RSX SUG, 2-4 system configuration file, RT SUG, 2-5	18-1 KXT11–CA configuration steps, IOSM, B-12 general description, IOSM, B-4 selecting maps, IOSM, B-11
Mappable object, RSM, 2-26 Mapped applications, RSX SUG, 4-5, 6-3 memory image, RSX SUG, 5-7 static processes	map configuration rules, <i>IOSM</i> , B-13 map layout, <i>IOSM</i> , B-12 region-sharing requests, <i>LG</i> , 18-1 system-common, <i>RSM</i> , 2-48 Memory access
relocating, RSX SUG, A-1 Mapped-memory environment accessing processes, LG, 11-4 allocating memory, LG, 18-7 attributes, LG, 10-13, 10-14, 10-30 deallocating memory, LG, 18-14 deallocating virtual addresses, LG, 18-32	unmapped target, RSM, 2-26 Memory configuration physical addresses, RSM, 2-23 Memory image, INTRO, 2-7 Memory Image Builder See MIB utility Memory image file See MIM files

Memory image module	MERGE utility (cont'd.)
See MIM files	kernel phase, RSX SUG, 3-4
Memory layout	debugging, RSX SUG, 3-5
RAM-only environment, RSM, 2-24	mapped target, RSX SUG, 3-4
ROM/RAM environment, RSM,	unmapped target, RSX SUG, 3-5
2-24	/M option, RT SUG, 9-15
Memory location	/N option, RT SUG, 9-14
	object library order, RSX SUG, 9-5
See Address expressions	// option, ŘT SUG, 9-16
MEMORY macro, IOSM, B-39	options, RSX SUG, 9-12
arguments, RSM, 4-12	debug symbols (/DE), RSX SUG,
configuration file, RT SUG, 3-7	9-13
description, RSM, 4-11 examples, RSM, 4-14	extract module (/LB:module:),
restrictions, RSM, 4-13	RSX SUG, 9-15
syntax, RSM, 4-12	include module (/IN), RSX SUG,
Memory management	9-14
target system, INTRO, 2-5	library file identification (/LB),
Memory map	RSX SUG, 9-15
jumper, IOSM, B-19	module name (/NM), RSX SUG,
TPR base address, IOSM, B-14	9-15
MIB utility, RT SUG, 11-15	supervisor-mode shared library
Memory mapping	(/SL), RSX SUG, 9-16
device driver, RSM, 2-31	user-mode shared library (/UL),
I&D-space separation, RSM, 2-29	RSX SUG, 9-16
Interrupt Service Routine (ISR), RSM,	version number (/VR), RSX SUG
2-33	9-16
Page Address Register (PAR), RT	overview, RT SUG, 9-1
SUG, 5-5	PAXM.OBJ, RT SUG, 3-4
privileged process, RSM, 2-32	PAXU.OBJ, RT SUG, 3-4
supervisor-mode, RSM, 2-34	/P option, RT SUG, 9-15
Memory partitioning	p-sect contributions, RT SUG, 9-3
program segments, RSM, 2-24	reference resolution, RT SUG, 9-4;
Memory requirements	RSX SUG, 9-4
/B option, RT SUG, 3-10	Relocation Symbol Directory (RLD)
Merged object module	records, RT SUG, 9-4
See MOB files	section maps, RT SUG, 9-10; RSX
MERGE utility, INTRO, 6-6; RT SUG,	SUG, 9-10
1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2	shared libraries, RT SUG, 6-6, 6-8,
build cycle, RT SUG, 3-11, 9-6; RSX	9-7; RSX SUG, 9-7 static process, RT SUG, 9-7; RSX
SÚG, 9-6	SUG, 9-7
command line examples, RT SUG,	system configuration file, RT SUG,
9-8; RSX SUG, 9-7, 9-8	9-6
command line format, RT SUG, 9-7;	/T option, <i>RT SUG</i> , 9-15
RSX SUG, 3-4, 4-5, 5-4	user processes, RT SUG, 5-5
/D option, <i>RT SUG</i> , 3-4, 9-12	/V option, RT SUG, 9-16
functions, RT SUG, 9-3; RSX SUG,	/X option, RT SUG, 9-16
9-3	Merging
global references, RT SUG, 9-3;	static processes, RSX SUG, 5-4
RSX SUG, 9-3	system configuration file, RSX SUG,
input file order, RSX SUG, 9-5	9-6
/I option, RT SUG, 9-14	Message data
/J option, RT SUG, 9-15	

primitive services, RSM, 1-8 AIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /MILE SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-1 IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 features, IOSM, B-2 features, IOSM, B-1 IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 features	Message data (cont'd.)	MIB utility (cont'd.)
Alsosage packet, RSM, 2-40 conditional allocation, RSM, 3-17 data area, INTRO, 4-7 deallocate primitive, DAPK\$, RSM, 3-48 definition, RSM, 2-45 free-packet pool, LG, 14-6 header, INTRO, 4-7 RECEIVE procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 synchronization, INTRO, 4-7 ring buffers, INTRO, 4-7 dessage transfers by reference, INTRO, 4-7 fing buffers, INTRO, 4-7 dessage transmission primitive services, RSM, 1-8 IB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8 BOT file, RT SUG, 11-9 command line format, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-17 hootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-18 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-12 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /H option, RT SUG, 11-16 MRBOOT program, RSX SUG, 13-3, 13-5 MKBOOT program, RSX SUG, 13-3, 13-5	receive any primitive, RCVA\$, RSM,	MIM file creation, RT SUG, 11-3
Message packet, RSM, 2-40 conditional allocation, RSM, 3-17 data area, INTRO, 4-7 deallocate primitive, DAPK\$, RSM, 3-48 definition, RSM, 2-45 format, RSM, 1-8 RECEIVE procedure, INTRO, 4-7 gueue semaphore, INTRO, 4-9 sunconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 tring buffers, INTRO, 4-7 by value, INTRO, 4-7 formation, INTRO, 4-7 fessage transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6 graph and the services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 11-7 bootstrap installation, RT SUG, 11-7 bootstrap premoval, RT SUG, 11-7 photostrap option, NTRO, 6-10 format, RT SUG, 3-9 build cycle, RT SUG, 11-8 bootstrap option, INTRO, 6-10 format, RT SUG, 3-9 build cycle, RT SUG, 11-9 command line examples, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line, RT SUG, 11-8 DBG file, RT SUG, 11-7 functions, RT SUG, 11-13 /H option, RT SUG, 11-13 /M Mill substill bootstrap (JB), RSX SUG, 11-15 small memory image (JCM), RSX SUG, 11-15 overview, RT SUG, 11-1 remove bootstrap (JRB), RSX SUG, 11-15 overview, RT SUG, 11-1 /P option, RT SUG, 11-1 /P option, RT SUG, 11-13 /P option, RT SUG, 11-13 /P option, RT SUG, 11-15 small memory image (JSM), RSX SUG, 11-15 overview, RT SUG, 11-1 /P option, RT SUG, 11-13 /P option, RT SUG, 11-13 /P option, RT SUG, 11-13 /P option, RT SUG, 11-14 /R option, RT SUG, 11-15 shared libraries, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 11-7 /S option, RT SUG, 3-7, 11-9, 11-12 /S option, RT SUG, 3-7, 11-9, 11-12 /S option, RT SUG, 3-7, 11-9, 11-12 /S option, RT SUG,		
conditional allocation, RSM, 3-17 data area, INTRO, 4-7 deallocate primitive, DAPK\$, RSM, 3-48 fere-packet pool, LG, 14-6 header, INTRO, 4-7 queue semaphore, INTRO, 4-9 SEND procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 younce, INTRO, 4-7 by value, INTRO, 4-7 tring buffers, INTRO, 4-7 tring buffers, INTRO, 4-7 synchronization, INTRO, 4-7 synchronization, INTRO, 4-7 synchronization, INTRO, 4-7 spessage transfers both fill the services, RSM, 1-8 (III) tring buffers, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 3-9 build cycle, RT SUG, 3-9 tootstrap option, INTRO, 6-10 format, RT SUG, 3-8 command line, RT SUG, 3-8 command line examples, RSX SUG, 11-9, 11-10 command line examples, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line examples, RSX SUG, 11-7 functions, RT SUG, 11-12 pGO file, RT SUG, 11-18 DBG file, RT SUG, 11-18 DBG file, RT SUG, 11-19 command line examples, RSX SUG, 11-7 functions, RT SUG, 11-12 pGO file, RT SUG, 11-15 pG file, RT SUG, 11-15 pH side format, RSX SUG, 11-15 poption, RT SUG, 11-15 ph side format, RSX SUG, 11-15 poption, RT SUG, 11-15 ph side format, RSX SUG, 11-15 poption, RT SUG, 11-15 ph side format, RSX SUG, 11-17 ph side format, RSX SUG, 11-18 ph side format, RSX SUG, 11-19 ph side format, RSX SUG, 11-10 ph side format, RSX		
data area, INTRO, 4-7 deallocate primitive, DAPK\$, RSM,		
deallocate primitive, DAPK\$, RSM, 3-48 definition, RSM, 2-45 format, RSM, 2-45 free-packet pool, LG, 14-6 header, INTRO, 4-7 queue semaphore, INTRO, 4-9 senconditional allocation, RSM, 3-19 dessage transfers by reference, INTRO, 4-7 ring buffers, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 dessage transmission primitive services, RSM, 1-8 dIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-8; RSX SUG, 11-17 command line, RT SUG, 3-9 command line, RT SUG, 11-9 command line RT SUG, 11-9 command line format, RSX SUG, 11-9 command line RT SUG, 11-8 DBG file, RT SUG, 11-10 command line format, RSX SUG, 11-12 (Rernel installation (/KI), RSX SUG, 11-13 remove bootstrap (/RB), RSX SUG, 11-15 small memory image (/SM), RSX SUG, 11-15 overview, RT SUG, 11-14 /R option, RT SUG, 11-15 shared libraries, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 4-7, 5-7 destage transmission primitive services, RSM, 1-8 HII utility, INTRO, 6-6; RT SUG, 11-7 mothers are removal, RT SUG, 11-8 small beotstrap (/RB), RSX SUG, 11-15 overview, RT SUG, 11-11 // poption, RT SUG, 11-13 // goption, RT SUG, 11-13 // soption, RT SUG, 11-13 // soption, RT SUG, 3-7, 11-9 // soption, RT SUG, 3-7, 11-9 // soption, RT SUG, 11-13 // soption, RT SUG, 11-13 // soption, RT SUG, 11-13 // soption, RT SUG, 11-11 // remove bootstrap (/RB), RSX SUG, 11-15 small memory image (/SM), RSX SUG, 11-15 small memory image (/SM), RSX SUG, 11-15 // soption, RT SUG, 11-14 // Roption, RT SUG, 11-14 // Roption, RT SUG, 11-15 // soption, RT SUG, 11-15 // soption, RT SUG, 11-14 // Roption, RT SUG, 11-14 // Roption, RT SUG, 11-14 // Roption, RT SUG, 11-14		
install bootstrap (/BS), RSX SUG definition, RSM, 2-45 free-packet pool, LG, 14-6 header, INTRO, 4-7 queue semaphore, INTRO, 4-9 SEND procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 sesage transfers by reference, INTRO, 4-7 tring buffers, INTRO, 4-7 gring buffers, INTRO, 4-7 dessage transmission primitive services, RSM, 1-8 dB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-8; RSX SUG, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 (G option, RT SUG, 11-13 /H option, RT SUG, 11-10 /H remove bootstrap (/RB), RSX SUG, 11-13 /H remove bootstrap (/RB), RSX SUG, 11-15 overview, RT SUG, 11-15 /P option, RT SUG, 11-14 //R option, RT SUG, 11-14 //R option, RT SUG, 11-15 //R option, RT SUG, 11-15 //S option, RT SUG, 11-15 //S option, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 4-6, 4-7; RSX SUG, 4-7 //S option, RT SUG, 11-8 //R option, RT SUG, 11-17 //S option, RT SUG, 11-1		
definition, RSM, 2-45 format, RSM, 2-45 format, RSM, 2-45 free-packet pool, LG, 14-6 header, INTRO, 4-7 queue semaphore, INTRO, 4-9 SEND procedure, INTRO, 4-9 sessage transfers by reference, INTRO, 4-7 ring buffers, INTRO, 4-7 ring buffers, INTRO, 4-7 Aessage transmission primitive services, RSM, 1-8 Iff utility, INTRO, 6-6, RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 command format, RSX SUG, 3-8 command format, RSX SUG, 3-8 command line examples, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-8 DBG file, RT SUG, 3-9 build cycle, RT SUG, 11-9 command line format, RSX SUG, 11-8 DBG file, RT SUG, 11-8 DBG file, RT SUG, 11-9 command line format, RSX SUG, 11-8 DBG file, RT SUG, 11-8 DBG file, RT SUG, 11-9 command line format, RSX SUG, 11-15 MBB utility, INTRO, 6-6 portion, RT SUG, 11-17 poption, RT SUG, 11-15 small memory image (/SM), RSX SUG, 11-15 overview, RT SUG, 11-1 //P option, RT SUG, 11-1 //P option, RT SUG, 11-13 //O option, RT SUG, 11-1 //P option, RT SUG, 11-13 //S option, RT SUG, 11-15 shared libraries, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 3-7, 11-9, 11-15 static process priority (/PR), RSX SUG, 11-15 overview, RT SUG, 11-13 // O option, RT SUG, 11-1 //P option, RT SUG, 11-1 //P option, RT SUG, 11-1 //P option, RT SUG, 11-15 small memory image (/SM), RSX SUG, 11-15 overview, RT SUG, 11-1 //P option, RT SUG		
format, RSM, 2-45 free-packet pool, LG, 14-6 header, INTRO, 4-7 queue semaphore, INTRO, 4-9 SEND procedure, INTRO, 4-9 unconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 ring buffers, INTRO, 4-7 ring buffers, INTRO, 4-7 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 AIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 BOPT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-9, 11-10 command line examples, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 11-13 DBG file, RT SUG, 11-15 DBG		
free-packet pool, LG, 14-6 header, INTRO, 4-7 queue semaphore, INTRO, 4-9 SEND procedure, INTRO, 4-9 sunconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 ring buffers, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 message transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 1-9 command line, RT SUG, 11-8 format, RT SUG, 11-9 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 11-13 DBG file, RT SUG, 11-15 DBG file, RT SUG, 11-2 Command line format, RSX SUG, 11-15 DBG file, RT SUG, 11-15 DBG file, RT SUG, 11-2 DBG file, RT SUG, 11-3 DBG file, RT		
header, INTRO, 4-7 queue semaphore, INTRO, 4-7 RECEIVE procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 unconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 ring buffers, INTRO, 4-7 flessage transmission primitive services, RSM, 1-8 III-7 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 3-9 build cycle, RT SUG, 3-9 build cycle, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command line examples, RSX SUG, 11-9, 11-10 command line examples, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 // G option, RT SUG, 11-13 // H option, RT SUG, 11-13 // H option, RT SUG, 11-13 // MRB orpogram, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3.		
queue semaphore, INTRO, 4-7 RECEIVE procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 unconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 ting buffers, INTRO, 4-7 ring buffers, INTRO, 4-7 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 command format, RSX SUG, 11-9 command line, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 11-15 //H option, RT SUG, 11-16 //H option, RT SUG, 11-17 //H option, RT SUG, 11-18 //H option, RT SUG, 11-19 //H option, RT SUG, 11-13 //H option, RT S		
RECEIVE procedure, INTRO, 4-9 SEND procedure, INTRO, 4-9 unconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 by value, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 MB utility, INTRO, 6-6; RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 command format, RSX SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command line examples, RSX SUG, 1-9 command line examples, RSX SUG, 11-9 command line examples, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-9 command line examples, RSX SUG, 11-17 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 11-13 //R SUG, 11-15 small memory image (/SM), RSX SUG, 11-15 overview, RT SUG, 11-1 //P option, RT SUG, 11-14 //R option, RT SUG, 11-14 //R option, RT SUG, 11-15 shared libraries, RT SUG, 11-15 shared libraries, RT SUG, 11-15 static process, RT SUG, 6-7, 6-8, 11-7 //S option, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration file, IOSM, B-2 sample memory image (/SM), RSX SUG, 11-15 overview, RT SUG, 11-13 //P option, RT SUG, 11-14 //R option, RT SUG, 11-13 //R option, RT SUG, 11-14 //R option, RT SUG, 11-15 shared libraries, RT SUG, 11-15 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal debugger See PASDBG Micro		
SEND procedure, INTRO, 4-9 unconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 ring buffers, INTRO, 4-7 fessage transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 command format, RSX SUG, 1-3, 2-0, 4-5 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line examples, RSX SUG, 1-7, 5-7 configuration file, RT SUG, 11-8 command line examples, RSX SUG, 11-9 command line examples, RSX SUG, 11-9 command line RT SUG, 11-8 command line RT SUG, 11-18 device drivers, IOSM, B-2 features, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal debugger See PASDBG MicroPower/Pascal debugger See PA		
unconditional allocation, RSM, 3-19 Message transfers by reference, INTRO, 4-7 by value, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 BOT file, RT SUG, 3-9 build cycle, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 11-9, 11-10 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 Goption, RT SUG, 11-13 // option, RT SUG, 11-13 // small memory image (/SM), RSX SUG, 11-15 overview, RT SUG, 11-1 // poption, RT SUG, 11-1 // poption, RT SUG, 11-14 // R option, RT SUG, 11-14 // R optio		
Message transfers by reference, INTRO, 4-7 by value, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 If utility, INTRO, 6-6, RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 JBOT file, RT SUG, 3-9 build cycle, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 11-9 format, RT SUG, 11-9 command line format, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-9 command line format, RSX SUG, 11-10 command line format, RSX SU		
by reference, INTRO, 4-7 by value, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 AIIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 command format, RSX SUG, 3-9 build cycle, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command line, RT SUG, 11-9 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 11-10 command line RT SUG, 11-8 DBG file, RT SUG, 11-8 DBG file, RT SUG, 11-18 DBG file, RT SUG, 11-8 DBG file, RT SUG, 11-18 DBG file, RT SUG, 11-18 DBG file, RT SUG, 11-8 DBG file, RT SUG, 11-18 DB		
by value, INTRO, 4-7 ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 11-9, 11-10 command line RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-13 /H option, RT SUG, 11-13 /H option, RT SUG, 11-13 // poption, RT SUG, 11-13 // soption, RT SUG, 11-14 /R option, RT SUG, 11-15 shared libraries, RT SUG, 6-7, 6-8, 11-7 /S option, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG MicroPower/Pascal configuration file, RT SUG, 1-6 IOSM, B-3 MicroPower, Pascal configuration file, RT SUG, 1-6 IOSM, B-2 sample KXT11-CA configuration file IOSM, B-3 build cycle, RT SUG, 1-6, 4-7; MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-3 bill device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-3 bill device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-3 bill device drivers, IOSM, B-2 sampl		
ring buffers, INTRO, 4-6 synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 BOP file, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 1-3 //S option, RT SUG, 11-13 //S option, RT SUG, 11-13 //R option, RT SUG, 11-13 //R option, RT SUG, 11-14 //R option, RT SUG, 11-15 shared libraries, RT SUG, 11-15 shared libraries, RT SUG, 11-15 shared libraries, RT SUG, 6-7, 6-8, 11-7 //R option, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static processes, RT SUG, 4-6, 4-7; Soption, RT SUG, 3-7, 11-9, 11-15 static processes, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 features, IOSM, B-1 IOSM, B-39 MicroPower/Pascal debugger See PASDBG MicroPower/Pascal device drivers, IOSM, B-2 featur		
synchronization, INTRO, 4-7 Message transmission primitive services, RSM, 1-8 MIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 11-13 //R option, RT SUG, 1-7 shared libraries, RT SUG, 3-7, 11-9, 11-15 shared libraries, RT SUG, 11-15 shared libraries, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-1 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
Message transmission primitive services, RSM, 1-8 All Butility, INTRO, 6-6; RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 11-13 Shared libraries, RT SUG, 6-7, 6-8, 11-7 //S option, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static processes, RT SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-9, 11-15 belief to processe, RT SUG, 3-7, 11-9, 11-15 static processes, RT SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-2 sample KXT11-CA configurati	ring buffers, INTRO, 4-6	
Message transmission primitive services, RSM, 1-8 All Butility, INTRO, 6-6; RT SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 11-13 Shared libraries, RT SUG, 6-7, 6-8, 11-7 //S option, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static processes, RT SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-9, 11-15 belief to processe, RT SUG, 3-7, 11-9, 11-15 static processes, RT SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-2 sample KXT11-CA configurati	synchronization, INTRO, 4-7	/R option, <i>RT SUG</i> , 11-15
primitive services, RSM, 1-8 AIB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /MILE SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 3-7, 11-9, 11-15 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-1 IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 features, IOSM, B-2 features, IOSM, B-1 IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 features	Message transmission	
MB utility, INTRO, 6-6; RT SUG, 1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 //G option, RT SUG, 11-13 //H option, RT SUG, 11-13 //K option, RT SUG, 11-13 //S option, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 features, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-1 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-1 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-1 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-1 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-1 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-11 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file. IOSM, B-11 device		11-7
1-3, 2-2, 3-2; RSX SUG, 1-3, 2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9, 11-12 BOT file, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7 Configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /H option, RT SUG, 11-13 static process, RT SUG, 5-5, 5-7, 11-6; RSX SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-2 features, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG MicroPower/Pascal device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG MicroPower/Pascal debugg		/S option, RT SUG, 3-7, 11-9, 11-15
2-2, 4-5 bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /H option, RT SUG, 11-13 I1-6; RSX SUG, 5-5 system processes, RT SUG, 4-6, 4-7; RSX SUG, 4-7 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 features, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,	1-3, 2-2, 3-2; RSX SUG, 1-3,	
bootstrap installation, RT SUG, 11-7 bootstrap removal, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line format, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-14 /MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-11 Mevice drivers, IOS		
bootstrap removal, RT SUG, 11-7 /B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
/B option, RT SUG, 3-9, 11-12 BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MicroPower/Pascal configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,	bootstrap removal, RT SUG, 11-7	
BOT file, RT SUG, 3-9 build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /H option, RT SUG, 11-13 configuration guidelines, IOSM, B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,	/B option, RT SUG. 3-9, 11-12	
build cycle, RT SUG, 11-8; RSX SUG, 11-7 command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 /H option, RT SUG, 11-13 B-11 device drivers, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,	BOT file RT SUG 3-9	
sug, 11-7 command format, RSX Sug, 3-8 command line, RT Sug, 5-7 bootstrap option, INTRO, 6-10 format, RT Sug, 11-9 command line examples, RSX Sug, 11-9, 11-10 command line format, RSX Sug, 4-7, 5-7 configuration file, RT Sug, 11-8 DBG file, RT Sug, 3-8 debug symbol file, RT Sug, 11-7 functions, RT Sug, 11-2; RSX Sug, 11-2 /G option, RT Sug, 11-13 /H option, RT Sug, 11-13 device drivers, IOSM, B-2 features, IOSM, B-2 feat		
command format, RSX SUG, 3-8 command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 features, IOSM, B-2 sample KXT11-CA configuration file IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
command line, RT SUG, 5-7 bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-12; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 sample KXT11-CA configuration file, IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
bootstrap option, INTRO, 6-10 format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 IOSM, B-39 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
format, RT SUG, 11-9 command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MicroPower/Pascal debugger See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
command line examples, RSX SUG, 11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 See PASDBG Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
11-9, 11-10 command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 Micro/RSX-11 operating system, LG, 1-1 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
command line format, RSX SUG, 4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7, 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
4-7, 5-7 configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MIM files, INTRO, 7-1; DUG, 1-2 bootstrap load format, RT SUG, 3-7 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		· · · · · · · · · · · · · · · · · · ·
configuration file, RT SUG, 11-8 DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 bootstrap load format, RT SUG, 3-7 11-3, 11-5 build cycle, RT SUG, 2-6 conversion MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
DBG file, RT SUG, 3-8 debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		
debug symbol file, RT SUG, 11-7 functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,	configuration file, KI SUG, 11-8	
functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 MKBOOT program, RSX SUG, 13-3, 13-5 MKB program, RSX SUG, 13-3,		11-3, 11-5
11-2 MKBOOT program, RSX SUG, /G option, RT SUG, 11-13 13-3, 13-5 /H option, RT SUG, 11-13 MKB program, RSX SUG, 13-3,		build cycle, RT SUG, 2-6
/G option, RT SUG, 11-13 13-3, 13-5 /H option, RT SUG, 11-13 MKB program, RSX SUG, 13-3,	functions, RT SUG, 11-2; RSX SUG,	
/G option, RT SUG, 11-13 13-3, 13-5 /H option, RT SUG, 11-13 MKB program, RSX SUG, 13-3,	11-2	MKBOOT program, RSX SUG,
/H option, RT SUG, 11-13 MKB program, RSX SUG, 13-3.		
kernel building RSX SUG. 3-7	/H option, RT SUG, 11-13	
13-3	kernel building, RSX SUG, 3-7	
	/K option, RT SUG, 3-7, 3-8, 11-13	
41 DE CITO 44 B	map file, RT SUG, 11-7	
map file, KI SUG, 11-7 hooting RSX SIIG 3-9		
DT CLIC 11 1F DCV	SÚG, 11-15	
memory map, RT SUG, 11-15; RSX debugging, RSX SUG, 3-8	MIM, RT SUG, 3-7	3-9
/K option, RT SUG, 3-7, 3-8, 11-13 creating, RSX SUG, 11-2	functions, RT SUG, 11-2; RSX SUG, 11-2 /G option, RT SUG, 11-13 /H option, RT SUG, 11-13 kernel building, RSX SUG, 3-7 /K option, RT SUG, 3-7, 3-8, 11-13	conversion MKBOOT program, RSX SUG 13-3, 13-5 MKB program, RSX SUG, 13-5 creating, RSX SUG, 11-2
		booting, RSX SUG, 3-9
DT CLIC 11 1F DCV	memory map, K1 30G, 11-15; K5X	
memory map, RT SUG, 11-15; RSX debugging, RSX SUG, 3-8		down-line loading, RSX SUG,
memory map, RT SUG, 11-15; RSX debugging, RSX SUG, 3-8 down-line loading, RSX SUG,	MIM, KI SUG, 3-/	3-9

MIM files	MPBLD (cont'd.)
creating (cont'd.)	command file generator, RT SUG,
ROM/RAM environment, RSX	1-7, 2-2, 2-6, 2-10
SUG, 3-10	dialog, RT SUG, 1-7, 2-3, 2-5
down-line loading, RT SUG, 7-1;	error messages, RT SUG, 2-11
RSX SUG, 7-1	limitations, RT SUG, 2-2
installing system processes, RSX	macro-library restriction, RT SUG,
SUG, 4-7	2-2
kernel, RT SUG, 2-1, 2-5; RSX SUG,	system processes, RT SUG, 2-3
3-7	system-process phase, RT SUG, 2-8
LOAD command, DUG, 3-53	user-process phase, RT SUG, 2-3,
MIB utility, RT SUG, 3-7, 11-3	2-9
names, RSX SUG, 4-7	MPBUILD, INTRO, 1-4, 6-1, 6-3
PASDBG load format, RT SUG, 3-7,	See also Application building
11-3	command file generator, INTRO,
PROM programmer format, RT SUG,	6-4
3-7, 11-3, 11-5	dialog, INTRO, 7-2
repeat build cycles, RT SUG, 4-7	invoking, INTRO, 7-2
ROM/RAM target, RT SUG, 3-11	versatile tool, INTRO, 6-4
Miscellaneous requests, LG, 20-1	MPBUILD procedure, RSX SUG, 1-3,
MKBOOT program MIM file conversion, RSX SUG,	2-1
13-3, 13-5	dialog, RSX SUG, 2-6
MKB program	errors, RSX SUG, 2-12, 2-13
MIM file conversion, RSX SUG,	limitations, RSX SUG, 2-2 macro library restriction, RSX SUG,
13-3, 13-5	2-2
MMU device registers	system processes, RSX SUG, 2-4,
accessing in mapped environment,	2-10
LG, 10-13	user processes, RSX SUG, 2-4, 2-11
MOB files, INTRO, 6-6; RT SUG, 3-5	MPBUILD utility, RSX SUG, 5-8
system configuration file, RT SUG,	MPP.SAV
3-2	compiler, RT SUG, 8-2
Modular programming, RT SUG, 8-1	MPPASCAL compiler
Module files	command syntax, RSX SUG, 8-2
supplied by DIGITAL, LG, I-1	compilation options, RSX SUG, 8-3,
Module header	8-10
device driver, IOSM, 14-11	OTS libraries, RSX SUG, 8-1
MODULE keyword, LG, 7-1	overview, RSX SUG, 8-1
Modules	PREDFL.PAS file, RSX SUG, 8-13
compilation unit, LG, 7-1	source-program options, RSX SUG,
definition, LG, 1-4 shared variables, LG, 10-27	8-9 MECETUR COM 61- REV CUC. 1 10
Monadic operators, LG, 3-10	MPSETUP.COM file, RSX SUG, 1-10
/M option	MPxxxx symbol definitions, RSX SUG, 1-10
mapped application, RT SUG, 4-4	MU driver
MERGE utility, RT SUG, 9-15	features and capabilities, IOSM, 5-1
RELOC utility, RT SUG, 10-17	Get Characteristics function, <i>IOSM</i> ,
MPBLD	5-12
application building, RT SUG, 2-1	prefix file, IOSM, 5-15
application development, RT SUG,	Read function, IOSM, 5-11
1-3	Reposition Tape function, IOSM,
build cycle, RT SUG, 1-7	5-12
	Rewind Tape function, IOSM, 5-13
	_

MU driver (cont'd.)	NETBOOT option
status codes, IOSM, 5-14	SYSTEM macro, RSX SUG, 13-3,
Write function, IOSM, 5-11	13-5
Write Tape Mark function, IOSM,	NETTRIGGER option
5-13	SYSTEM macro, RSX SUG, 13-3,
Multidimensional arrays, LG, 2-12	13-5
storage allocation rules, LG, E-4	Network Control Program (NCP), RSX
Mutex	SUG, 13-2
binary semaphores, INTRO, 4-2	network node database, RSX SUG,
Mutex management requests, LG, 13-1	13-2, 13-4
Mutex structures	Network node database
creating, LG, 13-20	Network Control Program (NCP),
deleting, LG, 13-24	RSX SUG, 13-2, 13-4
locking, LG, 13-30	Network Service Process (NSP)
overview, LG, 13-3	creating logical links, LG, 9-5, 9-6
unlocking, LG, 13-36	features and capabilities, IOSM,
Mutual exclusion, INTRO, 1-3, 4-2	11-1
binary semaphores, INTRO, 4-2	Get Characteristics function, IOSM,
mechanism, WAIT procedure,	11-4
INTRO, 4-4	prefix file, IOSM, 11-8
MVBYT\$ macro, Move byte, IOSM,	run-time support, RSX SUG, 13-2,
15-16	13-4
MVBYU\$ macro, Move byte (user-mode	Set Characteristics function, <i>IOSM</i> ,
only), IOSM, 15-17	11-4
MVMAP\$ macro, Move word (mapped	status codes, IOSM, 11-6
case only), IOSM, 15-18	system process, INTRO, 1-5
MVVAD\$ macro (Move address and	task-to-task communication, IOSM,
PAR), IOSM, 15-19	11-2
MVWRD\$ macro, Move word, IOSM,	NIL
15-20	use with formal parameters, LG, 6-7
MVWRU\$ macro, Move word (user-	NIL identifier
mode only), IOSM, 15-21	pointer variable value, LG, 2-19
mode only), 1001/1, 10 21	Node addresses
N	logical names, LG, 9-7
	Node number, local
NAME attribute, INTRO, 3-11, 3-13;	determine and set, IOSM, 11-15
RSM, 2-7	Nodes
applicable entities, LG, F-2	
overview, LG, 10-24	DECnet naming conventions, LG, 9-7
syntax, LG, 10-24	
NAME parameter, INTRO, 4-3	Nonpositional syntax, LG, 6-23
Names	default parameters, LG, 6-24
compile-time	NOOPTIMIZE attribute
process, INTRO, 3-11	applicable entities, LG, F-2
multiply declared, LG, 7-4	overview, LG, 10-25
run-time, INTRO, 4-3	syntax, LG, 10-25
process, INTRO, 3-11	NO prefix
specifying process and structure, LG,	compiler option disabling, RT SUG,
11-4	8-10
use in real-time requests, LG, 11-4	/N option
Natural logarithm value	MERGE utility, RT SUG, 9-14
LN function, LG, 8-7	RELOC utility, RT SUG, 10-17
Nesting	Not equal
subprogram declarations, LG, 6-2	string operator, LG, 3-13

NCD	Operators (cont'd.)
NSP	-
See Network Service Process (NSP)	string, LG, 3-13
NULL ASCII code	OPTIMIZE attribute
TEXT files, LG, 2-18	applicable entities, LG, F-2
Numeric identifiers	overview, LG, 10-26
establishing, <i>LG</i> , 4-3	syntax, LG, 10-26
0	Optimized code, INTRO, 6-10
	OPTIMIZE parameter SYSTEM macro, RT SUG, 3-11, 3-12
Object libraries	Optimizing the kernel, RSX SUG, 3-11
DRVM and DRVU, RT SUG, 1-4;	
RSX SUG, 1-4	// option MERGE utility, <i>RT SUG</i> , 9-16
LIBNHD, LIBEIS, LIBFIS, LIBFPP,	Options
RSX SUG, 8-1	compile-time, LG, C-1
PAXM and PAXU, RT SUG, 1-4;	MIB utility, RSX SUG, 11-12
RSX SUG, 1-4	RELOC utility, RSX SUG, 11-12
SUPEIS, SUPFPP, RSX SUG, 8-1	ORD function, LG, 2-2
Object modules, INTRO, 6-3, 6-5, 6-6	Ordinal data types
/D option, RT SUG, 5-5	array index, LG, 2-12
static process, RT SUG, 8-2	overview, LG, 2-2
system library, INTRO, 6-6; RT	Ordinal value
SUG, 5-4	enumerated data types, LG, 2-5
user library, RT SUG, 5-5	OTS, RT SUG, 5-4
/OBJ option	libraries, Pascal, RSX SUG, 8-1
MPBLD dialog, RT SUG, 2-3	object libraries, RSX SUG, 6-6
MPBUILD dialog, RSX SUG, 2-4	routines, RSX SUG, 6-1, 6-3
shared libraries, RT SUG, 2-9	shared library, RT SUG, 6-6
Octal	supervisor-mode, RT SUG, 6-6
conversion function, LG, 9-40, 9-52	Output file
notation, LG, 2-2 OCT function	field width, LG, 9-49
	OUTPUT file variable, LG, 2-18
error returns, LG, 9-40, 9-53	default characteristics, LG, 9-10
overview, input, <i>LG</i> , 9-40 overview, output, <i>LG</i> , 9-52	OVERLAID attribute
O option	applicable entities, LG, F-2
RELOC utility, RT SUG, 5-6, 10-18	overview, LG, 10-27
Open files, LG, 9-10	syntax <i>, LG,</i> 10-27
OPEN procedure	D
error returns, LG, 9-28	P
file access method, LG, 9-4	P7SYS\$ service, RSM, 7-9
overview, LG, 9-24	description, RSM, 3-111
syntax, LG, 9-24	error returns, RSM, 3-111
Operands	restrictions, RSM, 3-111
expression, LG, 3-1	semantics, RSM, 3-111
Operational modes, DUG, 2-9	syntax, RSM, 3-111
Operators	syntax example, RSM, 3-111
arithmetic, LG, 3-10	Packed array
Boolean, LG, 3-13	characters, LG, 2-14
dyadic, LG, 3-10	PACKED modifier, LG, 2-1
monadic, LG, 3-10	conformant array parameters, LG,
precedence, LG, 3-15	6-12
relational, LG, 3-12	storage allocation, LG, E-1
set, <i>LG</i> , 3-14	Packed record
	specifying storage, LG, 10-6

Packed structures, LG, 2-1	Parallel I/O
specifying storage, LG, 10-42	support routines (cont'd.)
PACKET_ORDER, LG, 14-30, 14-33	KXT11-CA/KXJ11-CA, IOSM,
Packet format	6-9
COND_RECEIVE function, LG,	SBC-11/21, IOSM, 6-7
14-14	Parallel line driver
Packet interface, request/reply	features and capabilities, IOSM, 6-2
overview, IOSM, 1-8	prefix files, IOSM, 6-45
Packet pointer	Parallel processing, IOSM, B-10
use, LG, 14-42, 14-50, 14-60, 14-66	Parameter association
Packets	nonpositional syntax, LG, 6-22
allocation, LG, 14-4, 14-8	positional syntax, LG, 6-22
conditional passing, LG, 14-12,	Parameters
14-22, 14-26	conformant array, LG, 6-11
deallocating, LG, 14-36	default <i>, LG</i> , 6-24
definition, LG, 14-1	DESC, INTRO, 4-3
general structure, LG, 14-4	formal, LG, 6-5
obtaining, <i>LG</i> , 14-10, 14-14, 14-19,	formal list, LG, 6-6
14-52, 14-57	NAME, <i>INTRO</i> , 3-11, 4-3
obtaining from multiple semaphores,	PRIORITY, INTRO, 3-11
LG, 14-42, 14-60, 14-66	process descriptor, INTRO, 3-11
obtaining pointer, LG, 14-6, 14-8,	STACK_SIZE, INTRO, 3-11
14-40	structure descriptor, INTRO, 4-3
passing, LG, 14-50, 14-71, 14-76	VAL_LENGTH, INTRO, 4-10
structure for SEND_ACK procedure,	VALUE, INTRO, 4-3
LG, 14-78	value declaration, LG, 6-6
structure for SEND procedure, LG,	variable declaration, LG, 6-8
14-74	Parentheses
PACKETS parameter	enumerated data types, LG, 2-4
configuration file, RT SUG, 3-11	Parent process, LG, 5-15
Page Address Register (PAR)	Parent types, LG, 2-5
ALLOCATE_REGION function, LG,	Partial build
18-7	
	example <i>, INTRO, 7-7</i> Pascal
mapped target, RT SUG, 3-5	
mapping data, LG, 18-19	command format, RSX SUG, 5-3
memory mapping, RT SUG, 5-5	compiler, RSX SUG, 1-2
/X option, RT SUG, 5-7	file system interface, IOSM, 2-3,
Page Descriptor Register (PDR)	11-4
mapping data, LG, 18-19	I/O procedure interface, IOSM, 3-4
PAGE procedure	4-5, 5-8, 6-4, 7-3, 12-6, 13-10
error returns, LG, 9-29	INCLUDE files
overview, LG, 9-29	PREDFL.PAS, RSX SUG, 8-13
syntax, LG, 9-29	OTS libraries, RSX SUG, 8-1
PAR	predefined identifiers, LG, G-1
See Page Address Register (PAR)	program data, LG, 1-2
Parallel I/O, IOSM, 6-3	reserved words, LG, 1-7
DMA process	support routines interface, IOSM,
KXT11-CA/KXJ11-CA, IOSM,	5-4, 6-6, 7-4, 8-3, 9-3, 10-5
6-15	syntax summary, LG, B-1
DMA transfers, IOSM, 9-8, 9-21	Pascal block
status codes, IOSM, 6-44	declararation section, LG, 4-1
support routines	heading, LG, 4-1
	-

PASDBG, INTRO, 1-4, 2-1; RT SUG,	PELC\$ primitive (cont'd.)
1-2; RSX SUG, 1-2	semantics, RSM, 3-103
application execution, INTRO, 6-7	syntax, RSM, 3-102
application loading, INTRO, 7-6;	syntax example, RSM, 3-103
RT SUG, 1-7, 3-8	PELM\$ primitive
build cycle, RT SUG, 2-7; RSX SUG,	argument block, RSM, 3-106
2-8	call, RSM, 3-105
command line, DUG, 2-2	description, RSM, 3-105
commands, INTRO, 6-8	error returns, RSM, 3-107
communications line, INTRO, 7-2	restrictions, RSM, 3-106
DBG file, RT SUG, 3-8	semantics, RSM, 3-106
/D option, RT SUG, 3-6	syntax, RSM, 3-105
features, DUG, 2-1	syntax example, RSM, 3-106
host-specific errors, DUG, A-4	Peripheral processor
host sytem, INTRO, 6-7	adding to LSI-11 systems, <i>IOSM</i> ,
invoking, DUG, 4-1	B-8
LOAD/EXIT command, RT SUG,	application development, IOSM,
7-1; RSX SUG, 7-1	B-10
load format, RSX SUG, 11-3	design, IOSM, B-10
MIM file, RT SUG, 11-3	MicroPower/Pascal, IOSM, B-2
overview, DUG, 1-1	RT-11 and RSX tool kits, IOSM,
RAM-only target, RT SUG, 3-5	B-2
symbol table, INTRO, 6-7	tool kits, IOSM, B-2
/PAS option	applications, IOSM, B-7
MPBLD dialog, RT SUG, 2-3	overview, IOSM, B-1
MPBUILD dialog, RSX SUG, 2-4	partitioning, IOSM, B-10
Passive tasks	software configuration, IOSM,
specifying, LG, 9-6	B-9
Path name	arbiter processor relationship, IOSM,
debugging, INTRO, 6-8	B-2
PAXM.OBJ	communication support routines,
mapped targets, RT SUG, 3-4	IOSM, 13-33
PAXM.OLB, PAXU.OLB, RSX SUG, 1-4	communication with arbiter process,
PAXM.OLJ, PAXU.OLJ, RT SUG, 1-4	IOSM, B-9
PAXU.OBJ, RT SUG, 1-8	configuring hardware, IOSM, B-11
unmapped targets, RT SUG, 3-4	configuring software, IOSM, B-11
PCB	device drivers, IOSM, B-2
See Process Control Block (PCB)	environment, IOSM, B-1
PDAT\$ macro, RSM, 2-25	configuring system, IOSM, B-14
description, RSM, 3-101	hardware
error returns, RSM, 3-101	configuration, IOSM, B-9
semantics, RSM, 3-101	overview, IOSM, B-1
syntax, <i>RSM</i> , 3-101	setup, IOSM,B-14
PDB	jumper
See Process Descriptor Block (PDB)	TPR base address, IOSM, B-14
PDR	programming languages, IOSM, B-2
See Page Descriptor Register (PDR)	Q-bus limits, IOSM, B-14
PELC\$ primitive	software architecture, IOSM, B-1
argument block, RSM, 3-103	system ID switch, IOSM, B-37
call, RSM, 3-102	two-port RAM registers (TPR),
description, RSM, 3-102	IOSM, B-2
error returns, RSM, 3-104	XL driver, IOSM, C-17
restrictions, RSM, 3-103	Permanent files, LG, 9-12

Physical address	Predefined parameters (conf d.)
See Address expressions	process, LG, 6-14
PHYSICAL attribute	PREDFL.PAS, RSX SUG, 8-13
region-sharing mode, LG, 18-10	predefined data types, LG, D-1
Physical region	PRED function, LG, 2-2
•	Prefix files
program segment	AD driver, IOSM, 7-15
shared, RSM, 5-11	Ancillary Control Process (ACP),
unshared, RSM, 5-10	IOSM, 2-9
shared, <i>LG</i> , 18-10	CS driver, <i>IOSM</i> , 12-13
PIC	debugging information, INTRO,
See Position Independent Code (PIC)	6-10
PIM files, INTRO, 6-6; RT SUG, 3-5	
Pointer data types, LG, 2-1, 2-19	disk drivers, IOSM, 4-27
compatibility rules, LG, 6-25	KK driver, IOSM, 13-29
storage allocation rules, LG, E-3	KW driver, IOSM, 8-18
Pointer value	KX driver, IOSM, 13-29
ADDRESS function, LG, 8-3	MU driver, IOSM, 5-15
/P option	Network Service Process (NSP),
MERGE utility, RT SUG, 9-15	IOSM, 11-8
MIB utility, RT SUG, 11-13	parallel line driver, IOSM, 6-45
POS attribute	QD driver, IOSM, 9-26
entities applicable to, LG, F-2	QN driver, IOSM, 13-26
overview, LG, 10-28	TT driver, IOSM, 3-18
syntax, LG, 10-28	XA driver, IOSM,6-45
Position	XE driver, IOSM, 10-39
ORD function, LG, 8-10	XL driver
Positional syntax	KXT11–CA, <i>IOSM</i> , C-28
default parameters, LG, 6-24	PDP-11, <i>IOSM</i> , C-12
Position Independent Code (PIC), RSM,	XP driver, IOSM, 13-27
3-30, 7-2	XS driver, IOSM, 13-27
shared library, RT SUG, 6-10; RSX	YA driver, IOSM, 6-47
	YB driver, IOSM, 6-48
SUG, 6-5	YF driver, IOSM, 6-48
POWER_FAIL procedure	YK driver, IOSM, 6-50
error returns, LG, 20-13	Prefix modules
overview, LG, 20-12	assembling, RSX SUG, 4-4
semantics, LG, 20-13	device driver, RT SUG, 1-4, 2-8;
syntax, LG, 20-12	
Power failure	RSX SUG, 1-4, 2-10; IOSM,
cold start, LG, 20-12	14-3, 14-8
detecting occurrence, LG, 20-12	priority assignments, IOSM,
detection primitive, PWFL\$, RSM,	14-3
3-109	editing, RSX SUG, 4-2
warm start, LG, 20-12	merging
Precedence	device driver object library, RSX
operators, LG, 3-15	SUG, 4-5
Precision	kernel symbol table, RSX SUG,
Real numbers, LG, 2-6	4-5
Predecessor value	object libraries, RT SUG, 4-5
PRED function, LG, 8-12	RELOC utility, RT SUG, 4-5
Predefined data types	system macro library, RT SUG, 4-4
PREDFL.PAS, LG, D-1	system processes, RT SUG, 4-2
Predefined identifiers, LG, 1-8, G-1	Preliminary setup, DUG, 1-2
Predefined parameters	prim\$ macro variant

prim\$ macro variant (cont'd.)	PRIVILEGED attribute
general form, RSM, 3-2	entities applicable to, LG, F-2
usage rules, RSM, 3-4	overview, <i>LG</i> , 10-30
prim\$P macro variant	syntax, LG, 10-30
general form, RSM, 3-5	use in real-time requests, LG, 14-40
usage rules, RSM, 3-6	Privileged process
prim\$S macro variant	memory mapping, RSM, 2-32
general form, RSM, 3-5	Procedure call statement, LG, 5-13
usage rules, RSM, 3-5	PROCEDURE declaration, LG, 1-2
Primitive calls	Procedures
Process Descriptor Block (PDB)	activation, LG, 6-22
usage, RSM, 3-11	actual parameters, LG, 6-26
Primitive services	concepts, LG, 6-1
compiler interface, RSM, 3-1	declaring system initialization, LG,
error returns, RSM, 3-6	10-22
exception processing, RSM, 1-12	default parameters, LG, 6-24
interrupt management, RSM, 1-13	definition, LG, 1-3
kernel, RSM, 1-2	exception handlers, LG, 17-1
MACRO-11 interface, RSM, 3-1	
	disassociation, LG, 17-22
message transmission, RSM, 1-8	format, LG, 17-9
modules, RSM, 4-15	exception handling, INTRO, 4-12
name, definition, RSM, 3-2	external, LG, 6-20
overview, RSM, 1-3	tormal parameters, LG, 6-14
process management, RSM, 1-4	IEQ_AUX_COMMAND
process synchronization, RSM, 1-7	XE driver, IOSM, 10-14
request interface, RSM, 1-4	IEQ_COMMAND
resource management, RSM, 1-5	XE driver, IOSM, 10-10
ring buffers, RSM, 1-11	IEQ_CONTROL_GTS
Structure Descriptor Block (SDB),	XE driver, IOSM, 10-16
RSM, 3-7	IEQ_PARALLEL_CONFIG
user processes, RSM, 1-2	XE driver, IOSM, 10-13
PRIMITIVES macro, IOSM, B-39	IEQ_PARALLEL_LOAD
configuration file, RT SUG, 3-11	XE driver, IOSM, 10-13
description, RSM, 4-15	IEQ_PARALLEL_POLL
examples, RSM, 4-16	XE driver, IOSM, 10-12
parameters, RSM, 4-15	IEQ_PASS_CONTROL
syntax, RSM, 4-15	XE driver, IOSM,10-17
PRIO ordering	IEQ_REQ_SERVICE
for ring buffers, LG, 15-9	XE driver, IOSM, 10-15
Priorities	IEQ_SERIAL
static process, RSM, 2-3	XE driver, IOSM, 10-11
Priority-7	predefined identifiers, LG, G-1
Interrupt Service Routine (ISR), RSM,	READ_ANALOG_SIGNAL, <i>IOSM</i> ,
7-9	7-6
Priority assignments	READ_COUNTS_SIGNAL, IOSM,
device driver prefix module, IOSM,	8-6
14-3	READ_COUNTS_WAIT, IOSM, 8-3
PRIORITY attribute, INTRO, 3-11, 5-3	READ_IEQ
entities applicable to, LG, F-2	XE driver, IOSM, 10-6
overview, LG, 10-29	READ_TAPE, IOSM, 5-5
syntax, LG, 10-29	REC_IEQ_EVENT
Priority scheduling	XE driver, IOSM, 10-18
hierarchy, RSM, A-1	REPOSITION_TAPE, IOSM, 5-6
, ,,	

Procedures (cont'd.)	Process descriptors, INTRO, 3-11, 3-13
REWIND_TAPE, IOSM, 5-7	default value, LG, 11-5
scope of identifiers, LG, 6-15	using, LG, 11-5
SET_ANALOG_MODE <i>, IOSM, 7-</i> 5	Processes
SET_INT_MASK	activation, LG, 12-12
XE driver, IOSM, 10-17	blocked, INTRO, 3-6, 4-4
SET_PIO_MODE, IOSM, 6-8	blocking and unblocking, RSM, 2-13
specifying as external, LG, 10-15	changing priority, LG, 12-2
specifying as global, LG, 10-17	checking for signal, LG, 13-38,
START_RTCLOCK, IOSM, 8-8	13-40
STOP_RTCLOCK, IOSM, 8-10	communication, INTRO, 4-1
subprogram blocks, LG, 6-15	compile-time name, INTRO, 3-11
system initialization, LG, 10-20	concepts, LG, 6-1
system termination, LG, 10-37	concurrent, INTRO, 3-1, 4-1
WRITE_EOI_IEQ	creation, INTRO, 3-11
XE driver, IOSM, 10-9	creation, example, INTRO, 3-12
WRITE_IEQ	data access features, LG, 14-3
XE driver, IOSM, 10-7	declaration, INTRO, 3-10, 3-11
WRITE_PIO, IOSM, 6-8	declaration, example, INTRO, 3-12
WRITE_TAPE, IOSM, 5-5	default parameters, LG, 6-24
WRITE_TAPE_MARK, IOSM, 5-7	definition, INTRO, 3-1; RSM, 2-1;
PROCESS_ORDER, LG, 14-30, 14-33	LG, 1-3, 6-2
Process components, INTRO, 3-2	dependent, LG, 5-15
data structures, INTRO, 3-3	descriptor initialization, LG, 12-10
instruction sequence, INTRO, 3-3	device driver, INTRO, 4-14
Process context, RSM, 2-19	disabling effect of STOP request, LG,
restore primitive, RCTX\$, RSM,	12-4
3-114	dollar sign usage in names, LG, 11-4
save primitive, SCTX\$, RSM, 3-138	dynamic, INTRO, 3-1
scheduler, RSM, 2-18	establishing execution priority, LG,
unmap window primitive, UMAP\$,	10-29
RSM, 3-174	exception condition release, LG,
Process Control Block (PCB)	17-18
activation status, RSM, 2-2	exception group, LG, 17-3, 17-11
exception handler, RSM, 6-12	exception handlers, LG, 17-1, 17-11
access, LG, 17-11	declaration, LG, 17-16
exception handling, INTRO, 4-11;	disassociation, LG, 17-14
RSM, 6-15	exception handling, INTRO, 4-11
mapping data, LG, 18-19, 18-28	execution-time entity, RSM, 2-2
organization, RSM, 2-19	external, LG, 6-20, 10-15
overview, RSM, 2-19	formal parameters, LG, 6-14
process component, INTRO, 3-2	global, <i>LG</i> , 10-17
restriction on access, LG, 17-24	incrementing suspension count, LG,
space requirements, RSM, 2-23	12-19
state codes, RSM, 2-11	independent, LG, 5-15
state queues, RSM, 2-12	index and sequence number, LG,
PROCESS declaration, LG, 1-2	12-10
dynamic process, RSM, 2-4	initialization, INTRO, 3-3; LG,
Process definition	10-20
device driver, IOSM, 14-12	invocation, LG, 6-22
Process Descriptor Block (PDB)	memory mapping, RSM, 2-29
format, RSM, 3-11	obtaining status information, LG,
primitive call usage, RSM, 3-11	12-6

preventing start-up race conditions, LG, 12-2 priority, INTRO, 3-11, 4-1, 4-10, 4-16 referencing, INTRO, 3-12, by descriptor, INTRO, 3-12 by trun-time name, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying run-time name, LG, 10-22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, SPND\$, RSM, 3-169 subpension, RSM, 2-15; LG, 13-18 suspended, INTRO, 4-1, 4-2; RSM, 2-1 Concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-33 Process group codes exception bandling RSM, 6-14	Processes (cont'd.)	Process image module (cont'd.)
preventing start-up race conditions, LG, 12-2 priority, INTRO, 3-11, 4-1, 4-10, 4-16 referencing, INTRO, 3-12, 3-13 by descriptor, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primititive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying run-time name, LG, 10-22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 3-2 termination, INTRO, 3-3 trable storage allocation, LG, 10-33 roccess group codes	preemption, RSM, 2-13	See PIM files
priority, INTRO, 3-11, 4-1, 4-10, 4-16 referencing, INTRO, 3-12, 3-13 by descriptor, INTRO, 3-12 by run-time name, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying run-time name, LG, 10- 10-18 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 3-2 termination, INTRO, 3-3 systems, INTRO, 3-2 termination, INTRO, 3-3 systems, INTRO, 3-1, 12-18 synthonization, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 wait procedure, INTRO, 3-2 termination, INTRO, 3-3 suspension, RSM, 2-15; LG, 12-18 synthonization, INTRO, 3-2 termination, INTRO, 3-3 suspension, RSM, 2-15; LG, 12-18 synthonization, INTRO, 3-2 termination, INTRO, 3-3 suspension, RSM, 2-13 suspension, RSM, 2-15 unblocking, IG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 Process group codes	preventing start-up race conditions,	Process invocation statement, LG, 5-15
4-16 referencing, INTRO, 3-12, 3-13 by descriptor, INTRO, 3-12 by run-time name, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-1 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-1 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-2 system, INTRO, 3-2 termination, INTRO, 3-3 transitions, LG, 13-32, 13-34 unblocking, LG, 13-32, 13-34 unblocking signal primititive, SALL\$, RSM, 3-135 roccess group codes Process management requests, LG, 12-1 PROCESSOR macro, RSX SUG, 6-2; IOSM, B-39 arguments, RSM, 4-18 configuration file, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 roccessor scheduling, RSM, 4-18 rocrespront Rile, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 rocrespront Rile, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 rocrespront Rile, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 rocrespront Rile, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 rocrespront Rile, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 rocrespront Rile, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 rocrespronting, RSM, 4-18 rocrespronti		Process management
referencing, INTRO, 3-12, 3-13 by descriptor, INTRO, 3-12 by run-time name, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying nun-time name, LG, 10- 22, 10-24 state codes, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-2 termination, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes	priority, INTRO, 3-11, 4-1, 4-10,	primitive services, RSM, 1-4
by descriptor, INTRO, 3-12 by run-time name, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-1 state queues, RSM, 2-1 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-6 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 Process group codes PROCESSOR macro, RSX SUG, 6-2; IOSM, B-39 arguments, RSM, 4-18 configuration file, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 configuration file, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 configuration file, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 configuration file, RT SUG, 6-2 description, RSM, 4-16 examples, RSM, 4-18 error condition, RSM, 2-18 Processor scheduling, RSM, 2-18 Process priority champerintive, CHGP\$, RSM, 3-2-7 exception handler, RSM, 6-15 process states exception-wait active, INTRO, 3-2 priocess priority, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-6 exception-wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 wait active, INTRO, 3-5 ready-to-run, INTRO, 3-4 wait active, INTRO, 3-5 ready-to-run, INTRO, 3-6 vait active, INTRO, 3-2 gerial, INTRO, 3-2	= - -	Process management requests, LG,
by run-time name, INTRO, 3-12 relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying run-time name, LG, 10-22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-11 state queues, RSM, 2-11 state queues, RSM, 2-15 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-1, 4-2; RSM, 2-16 concurrent design, INTRO, 4-1, 4-2; RSM, 2-16 concurrent design, INTRO, 4-1, 4-2; RSM, 2-15 tunblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-32 Process group codes	referencing, INTRO, 3-12, 3-13	12-1
relationships, RSM, 2-6 relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM,		
relinquishing CPU, LG, 12-14 resume primitive, RSUM\$, RSM,		
resume primitive, RSUM\$, RSM, 3-133 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10-22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes description, RSM, 4-16 examples, RSM, 4-19 syntax, RSM, 4-16 examples, RSM, 4-16 exor cheduler, RSM, 3-16 error condition, RSM, 3-6 Process priority, INTRO, 3-5 recommended, RSM, A-2 Process scheduler, INTRO, 3-4 process priority, INTRO, 3-5 recommended, RSM, 3-2 process scheduler rerue, INTRO, 3-4 process priority, INTRO, 3-5 recommended, INTRO		
sa-f33 run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-163 suspended, INTRO, 4-5 suspended, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes examples, RSM, 4-19 syntax, RSM, 4-18 Processor status Word (PSW), DUG, 3-116 error condition, RSM, 3-6 Process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process priority, change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process priority, change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-4 process priority change primitive, CHGP\$, RSM, 3-17 exception handler, RSM, 6-15 process priority, change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-5 recommended, RSM, 3-2 process stack, INTRO, 3-4 process priority change primitive, CHGP\$, RSM, 3-17 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, 3-2 process stack, INTRO, 3-4 process priority, change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process stack, INTRO, 3-2 process scheduler, INTRO, 3-2 process s		
run-time name, INTRO, 3-11, 3-13; RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-163 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-2 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes		
RSM, 2-7 schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes Processor Status Word (PSW), DUG, 3-116 error condition, RSM, 3-6 Process priority change primitive, CHGP\$, RSM, 3-6 Process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 process scheduler, INTRO, 3-5 process scheduler, RSM, 3-6 Process priority change primitive, CHGP\$, RSM, 3-16 process priority change primitive, CHGP\$, RSM, 3-16 process scheduler, INTRO, 3-5 process scheduler, INTRO, 3-5 process scheduler, INTRO, 3-5 process scheduler, INTRO, 3-4 process priority change primitive, CHGP\$, RSM, 3-16 process priority change primitive, CHGP\$, RSM, 3-16 process scheduler, INTRO, 3-5 process states exception-wait active, INTRO, 3-5 pready-active, INTRO, 3-5 pready-active, INTRO, 3-5 pready-active, INTRO, 3-6 process spriority, INTRO, 3-6 process spriority, INTRO, 3-7 process states exception-wait active, INTRO, 3-7 pready-active, INTRO, 3-7 process synchronization primitive, CTST\$,		
schedule primitive, SCHD\$, RSM, 3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-12 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-1 wAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 wAIT procedure, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes Processor Status Word (PSW), DUG, 3-116 error condition, RSM, 3-6 Process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler recommended, RSM, A-2 Process stack, INTRO, 3-4 process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-4 process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5 ready-active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 ready-active, INTRO, 3-5 ready-active, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-1 process stack, INTRO, 3-2 process stack, INTRO, 3-5 recommended, RSM, A-2 Process stac		
3-137 scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-1 concurrent design, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 wait INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes		
scheduling, RSM, 2-13, 2-18 shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-12 system, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process scheduler, INTRO, 3-5 recommended, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process scheduler, INTRO, 3-5 recommended, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, C-15 process scheduler, INTRO, 3-5 recommended, INTRO, 3-6 recommen	_	
shared data, RSM, 2-1 shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 4-2 system, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-38 Process priority change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-4 process priority, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-4 process priority, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-4 process states exception handler, RSM, 6-15 process scheduler kernel, INTRO, 3-4 process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-5 Process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 recommended, RSM, A-2 Process scheduler kernel, INTRO, 3-4 process priority, INTRO, 3-5 process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 recommended, RSM, A-2 Process stack, INTRO, 3-5 recommended, RSM, A-2 Process stackuler kernel, INTRO, 3-4 process states exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-5 ready-to-run, INTRO, 3-5 ready-to-run, INTRO, 3-6 wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-5 ready-to-run, INTRO, 3-6 wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-6 wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-6 wait suspended, INTRO, 3-6 wait su		
shared resources, RSM, 2-2 sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-12 WAIT procedure, INTRO, 3-3, RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes change primitive, CHGP\$, RSM, 3-27 exception handler, RSM, 6-15 process scheduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-4 process omponent, INTRO, 3-2 process component, INTRO, 3-2 process states, INTRO, 3-10 process states, INTRO, 3-10 process stack, INTRO, 3-2 process spriority, INTRO, 3-2 process scheduler kernel, INTRO, 3-4 process stack, INTRO, 3-2 process stack, INTRO, 3-4 process stack, INTRO, 3-4 process stack, INTRO, 3-2 process stack, INTRO, 3-4 process stack, INTRO, 3-4 process stack, INTRO, 3-5 process stack, INTRO, 3-4 process stack, INTRO, 3-5		
sleep primitive, SLEP\$, RSM, 3-156 specifying exception group, LG, 10-18 specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes 3-27 exception handler, RSM, 6-15 process scheduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-5 process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 ready-active, INTRO, 3-6 wait, INTRO, 3-4 vait active, INTRO, 3-5 vait active, INTRO, 3-5 process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-6 exception-w		
specifying exception group, <i>LG</i> , 10-18 specifying names, <i>LG</i> , 11-4 specifying run-time name, <i>LG</i> , 10- 22, 10-24 state codes, <i>RSM</i> , 2-11 state queues, <i>RSM</i> , 2-12 state record format, <i>LG</i> , 12-6 states, <i>RSM</i> , 2-8 state transitions, <i>RSM</i> , 2-9 static, <i>INTRO</i> , 3-1, 5-5 suspended, <i>INTRO</i> , 4-5 suspended, <i>INTRO</i> , 4-5 suspend primitive, SPND\$, <i>RSM</i> , 3-163 suspension, <i>RSM</i> , 2-15; <i>LG</i> , 12-18 synchronization, <i>INTRO</i> , 4-1, 4-2; <i>RSM</i> , 2-1 concurrent design, <i>INTRO</i> , 4-12 WAIT procedure, <i>INTRO</i> , 4-12 walt procedure, <i>INTRO</i> , 3-3; <i>RSM</i> , 2-4; <i>LG</i> , 10-37, 12-15 unblocking, <i>LG</i> , 13-32, 13-34 unblocking signal primitive, SALL\$, <i>RSM</i> , 3-135 variable storage allocation, <i>LG</i> , 10-33 Process group codes exception handler, <i>RSM</i> , 6-15 process scheduler kernel, <i>INTRO</i> , 3-4 process scheduler kernel, <i>INTRO</i> , 3-4 process scheduler kernel, <i>INTRO</i> , 3-4 process states exception-wait active, <i>INTRO</i> , 3-5 exception-wait suspended, <i>INTRO</i> , 3-5 get primitive, GTST\$, <i>RSM</i> , 3-87 ready-active, <i>INTRO</i> , 3-5, 3-6; wait suspended, <i>INTRO</i> , 3-5 ready-to-run, <i>INTRO</i> , 3-4 vait active, <i>INTRO</i> , 3-4 wait active, <i>INTRO</i> , 3-5 variable storage allocation, <i>LG</i> , 10-33 Process group codes		T_
specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 3-2 termination, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process scheduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-4 process scheduler, INTRO, 3-5 recommended, RSM, A-2 Process stacks, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 recommended, RSM, A-2 Process stacks exception-wait active, INTRO, 3-2 ready-active, INTRO, 3-5 ready-active, INTRO, 3-6 wait, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-5 ready-active, INTRO, 3-5 ready-active, INTRO, 3-6 wait, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4		
specifying names, LG, 11-4 specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 wAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes recommended, RSM, A-2 Process scheduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-4 process stack, INTRO, 3-1 process stack, INTRO, 3-10 process component, INTRO, 3-2 exception-wait active, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5 ready-active, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-6 ready-active, INTRO, 3-6 ready-active, INTRO, 3-6 ready-active, INTRO, 3-2 ready-active		
specifying run-time name, LG, 10- 22, 10-24 state codes, RSM, 2-11 state queues, RSM, 2-12 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process stneduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-4 process scheduler kernel, INTRO, 3-4 process stacks exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 variable storage allocation, LG, 10-33 Process scheduler kernel, INTRO, 3-10 process stacks exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5 wait suspended, INTRO, 3-5 wait suspended, INTRO, 3-5 wait suspended, INTRO, 3-5 variable storage allocation, LG, 10-33 Process spriority, INTRO, 3-10 process stacks exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 exception-wait active, INTRO, 3-6 exception-wait active, INTRO, 3-6 exception-wait active, INTRO, 3-6 exception-wait active, INTRO, 3-6 exception-wait active, INTRO, 3		
kernel, INTRO, 3-4 state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 WAIT procedure, INTRO, 3-3 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes kernel, INTRO, 3-4 process priority, INTRO, 3-1 process stack, INTRO, 3-1 process stack, INTRO, 3-1 process stack, INTRO, 3-1 process states exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 ready-active, INTRO, 3-5, 3-6; wait, INTRO, 3-4 run, INTRO, 3-5 ready-to-run, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-5 ready-to-run, INTRO, 3-5 ready-to-run, INTRO, 3-6 wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-5 ready-to-run, INTRO, 3-6 wait, INTRO, 3-4 run, INTRO, 3-2 run, I		
state codes, RSM, 2-11 state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking signal primitive, SALL\$, RSM, 3-135 ready-active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4 wait active, INTRO, 3-4 wait suspended, INTRO, 3-5 wait suspended, INTRO, 3-5 ready-active, INTRO, 3-6 wait, INTRO, 3-4 run, INTRO, 3-5 ready-active, INTRO, 3-6 ready-active, INTRO, 3-7 ready-active, INTRO, 3-7 ready-active, INTRO, 3-7 ready-active, INTRO, 3-8 ready-active, INTRO, 3-7 ready-active, INTRO, 3-7		
state queues, RSM, 2-12 state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes Process stack, INTRO, 3-10 process component, INTRO, 3-2 exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 exception-wait suspended, INTRO, 3-8 exception-wait suspended, INTRO, 3-8 exception-wait suspended, INTRO, 3-8 exception-wait suspended, INTRO, 3-8 exception-wait active, INTRO, 3-8 ready-active, INTRO, 3-4 run, INTRO, 3-4, 3-5, 3-6 wait, INTRO, 3-4 vait active, INTRO, 3-4 vait suspended, INTRO, 3-5 variable storage allocation, LG, 10-33 Process states exception-wait active, INTRO, 3-8 exception-wait recipion-wait active, INTRO, 3-8 exception-wait suspended, INTRO, 3-8 exception-wait active, INTRO, 3-8 exception-wait suspended, INTRO, 3-8 ready-to-run, INTRO, 3-4 vait suspended, INTRO, 3-4 vait suspended, INTRO, 3-5 variable storage allocation, LG, 10-33 Process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-8 exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, ready-active, INTRO, 3-8 ready-active, INTRO, 3-4 vait suspended, INTRO, 3-5 variable storage allocation, LG, process states exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-5 exception-wait active, INTRO, 3-6 wait, INTRO, 3-4 vait suspended, INTRO, 3-2 variable storage allocation, LG, process states		
state record format, LG, 12-6 states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 static, INTRO, 3-1, 5-5 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspended, INTRO, 4-5 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes process component, INTRO, 3-2 process states exception-wait suspended, INTRO, 3-5 exception-wait valve, INTRO, 3-8 exception-wait valve, INTRO, 3-8 exception-wait suspended, INTRO, 3-8 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 run, INTRO, 3-4 vait active, INTRO, 3-4 wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		
states, RSM, 2-8 state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes Process states exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 run, INTRO, 3-4 vait active, INTRO, 3-4 wait active, INTRO, 3-5 vait suspended, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process tyne device-access, INTRO, 3-2 privileged, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		
state transitions, RSM, 2-9 static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 3-2 system, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes exception-wait active, INTRO, 3-5 exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-5 ready-active, INTRO, 3-5 wait, INTRO, 3-4 vait suspended, INTRO, 3-4 wait, INTRO, 3-4 wait suspended, INTRO, 3-5 wait, INTRO, 3-4 wait suspended, INTRO, 3-5 ready-active, INTRO, 3-4 vait, INTRO, 3-4 vait suspended, INTRO, 3-5 ready-active, INTRO, 3-4 vait, INTRO, 3-4 vait suspended, INTRO, 3-5 ready-active, INTRO, 3-4 vait, INTRO, 3-4 vait suspended, INTRO, 3-5 vait suspended, INTRO, 3-5 ready-active, INTRO		
static, INTRO, 3-1, 5-5 stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes exception-wait suspended, INTRO, 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4 vait active, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product		
stop primitive, STPC\$, RSM, 3-169 subprogram blocks, LG, 6-15 suspended, INTRO, 4-5 suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes 3-5 get primitive, GTST\$, RSM, 3-87 ready-active, INTRO, 3-5, 3-6; RSM, 2-9 ready suspended, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4 vait suspended, INTRO, 3-5 wait suspended, INTRO, 3-5 vait suspended, INTRO, 3-5 ready-active, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-4 ready-active, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-5 ready-active, INTRO, 3-4 ready-active, INTRO, 3-5 ready-active, INTRO, 3-4 run, INTRO, 3-4 vait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 run, INTRO, 3-2 run, INT		
subprogram blocks, <i>LG</i> , 6-15 suspended, <i>INTRO</i> , 4-5 suspend primitive, SPND\$, <i>RSM</i> , 3-163 suspension, <i>RSM</i> , 2-15; <i>LG</i> , 12-18 synchronization, <i>INTRO</i> , 4-1, 4-2; <i>RSM</i> , 2-1 concurrent design, <i>INTRO</i> , 4-12 WAIT procedure, <i>INTRO</i> , 4-4 system, <i>INTRO</i> , 3-2 termination, <i>INTRO</i> , 3-3; <i>RSM</i> , 2-4; <i>LG</i> , 10-37, 12-15 unblocking, <i>LG</i> , 13-32, 13-34 unblocking signal primitive, SALL\$, <i>RSM</i> , 3-135 variable storage allocation, <i>LG</i> , 10-33 Process group codes get primitive, GTST\$, <i>RSM</i> , 3-87 ready-active, <i>INTRO</i> , 3-5, 3-6; <i>RSM</i> , 2-9 ready suspended, <i>INTRO</i> , 3-5 ready-active, <i>INTRO</i> , 3-4 run, <i>INTRO</i> , 3-4 vait active, <i>INTRO</i> , 3-5 wait suspended, <i>INTRO</i> , 3-5 Process synchronization primitive services, <i>RSM</i> , 1-7 Process types device-access, <i>INTRO</i> , 3-2 general, <i>INTRO</i> , 3-2 privileged, <i>INTRO</i> , 3-2 Product features, <i>RT SUG</i> , 1-1		
suspend primitive, SPND\$, RSM, 3-163 suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes RSM, 2-9 ready suspended, INTRO, 3-4 run, INTRO, 3-4 run, INTRO, 3-4, 3-5, 3-6 wait, INTRO, 3-4 wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 ready suspended, INTRO, 3-4 run, INTRO, 3-4 vait, INTRO, 3-4 vait suspended, INTRO, 3-5 vait, INTRO, 3-5 vait, INTRO, 3-5 vait, INTRO, 3-6 wait, INTRO, 3-7 vait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 run, INTRO, 3-4 vait suspended, INTRO, 3-5 vait, INTRO, 3-5 vait suspended, INTRO, 3-5 vait, INTRO, 3-6 vait, INTRO, 3-7 vait suspended, INTRO, 3-5 vait, INTRO, 3-6 vait, INTRO, 3-7 vait suspended, INTRO, 3-6 vait, INTRO, 3-7 vait suspended, INTRO, 3-6 vait, INTRO, 3-7 vait suspended, I		get primitive, GTST\$, RSM, 3-87
suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 wait, INTRO, 3-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes ready suspended, INTRO, 3-4 run, INTRO, 3-4, 3-5, 3-6 wait, INTRO, 3-4, 3-5, 3-6 wait, INTRO, 3-4 vait active, INTRO, 3-5 wait suspended, INTRO, 3-5 ready-to-run, INTRO, 3-4 run, INTRO, 3-4 vait, INTRO, 3-4 vait suspended, INTRO, 3-5 vait, INTRO, 3-5 vait suspended, INTRO, 3-5 vait, INTRO, 3-4 vait suspended, INTRO, 3-5 vait, INTRO, 3-5 vait, INTRO, 3-5 vait, INTRO, 3-5 vait, INTRO, 3-6 vait, INTRO, 3-7 vait suspended, INTRO, 3-5 vait, INTRO, 3-5 vait suspended, INTRO, 3-5 vait, INTRO, 3-5 vait active, INTRO, 3-5 vait suspended, INTRO, 3-5 vait, INTRO, 3-6 vait, INTRO, 3-7 vait suspended, INTRO, 3-5 vait, INTRO, 3-7 vait suspended, INTRO, 3-5 vait, INTRO, 3-7 vait suspended, INTRO	suspended, INTRO, 4-5	ready-active, INTRO, 3-5, 3-6;
suspension, RSM, 2-15; LG, 12-18 synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 wait, INTRO, 3-4 wait, INTRO, 3-4 wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 wait suspended, INTRO, 3-5 wait suspended, INTRO, 3-5 rocess synchronization primitive services, RSM, 1-7 Process types unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes ready-to-run, INTRO, 3-4 run, INTRO, 3-5 wait suspended, INTRO, 3-5 rocess synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1	suspend primitive, SPND\$, RSM,	RSM, 2-9
synchronization, INTRO, 4-1, 4-2; RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes run, INTRO, 3-4, 3-5, 3-6 wait, INTRO, 3-4 wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		ready suspended, INTRO, 3-5
RSM, 2-1 concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes wait, INTRO, 3-4 wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		
concurrent design, INTRO, 4-12 WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes wait active, INTRO, 3-5 wait suspended, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		
WAIT procedure, INTRO, 4-4 system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes wait suspended, INTRO, 3-5 Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1	RSM, 2-1	
system, INTRO, 3-2 termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes Process synchronization primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1	concurrent design, INTRO, 4-12	
termination, INTRO, 3-3; RSM, 2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes primitive services, RSM, 1-7 Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 privileged, INTRO, 3-2 privileged, INTRO, 3-2 product features, RT SUG, 1-1		
2-4; LG, 10-37, 12-15 unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes Process types device-access, INTRO, 3-2 driver, INTRO, 3-2 peneral, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		
unblocking, LG, 13-32, 13-34 unblocking signal primitive, SALL\$, RSM, 3-135 variable storage allocation, LG, 10-33 Process group codes device-access, INTRO, 3-2 driver, INTRO, 3-2 general, INTRO, 3-2 privileged, INTRO, 3-2 Product features, RT SUG, 1-1		
unblocking signal primitive, SALL\$, driver, INTRO, 3-2 RSM, 3-135 general, INTRO, 3-2 variable storage allocation, LG, privileged, INTRO, 3-2 10-33 Product Process group codes features, RT SUG, 1-1		Process types
RSM, 3-135 general, INTRO, 3-2 variable storage allocation, LG, privileged, INTRO, 3-2 Product Process group codes product features, RT SUG, 1-1		
variable storage allocation, LG, privileged, INTRO, 3-2 10-33 Product Process group codes features, RT SUG, 1-1		
10-33 Product Process group codes features, RT SUG, 1-1		
Process group codes features, RT SUG, 1-1		_ *. •
0 1	_	
	exception handling, RSM, 6-14	objectives, RT SUG, 1-1
Process image module Program data, LG, 1-2		

PROGRAM declaration	PURES macro (cont d.)
static process, RSM, 2-3	description, RSM, 3-108
PROGRÂM keyword, LG, 7-1	error returns, RSM, 3-108
Programmable Read-Only Memory	semantics, RSM, 3-108
See PROM	syntax, RSM, 3-108
Programmer format	Pure-area definition
PROM, RSX SUG, 11-4	device driver, IOSM, 14-14
	Pure-code
Programming languages	declaration macro, PURE\$, RSM,
peripheral processor, <i>IOSM</i> , B-2	3-108
Programs IC 7.1	Pure-data
compilation unit, LG, 7-1	
declaring initialization procedures,	declaration macro, PDAT\$, RSM,
LG, 10-22	3-101
definition, LG, 1-4	low segment, RSM, 2-24
documenting with comments, LG,	PURGE procedure
1-9	error returns, LG, 9-31
identification, <i>LG</i> , 10-19	overview, LG, 9-31
optimized code, <i>LG</i> , 10-25, 10-26	syntax, <i>LG</i> , 9-31
setting execution priority, LG, 10-20	PUT_ELEMENT procedure, INTRO,
shared variables, <i>LG</i> , 10-27	4-6
variable storage allocation, LG,	conditional, INTRO, 4-6
10-33	error returns, LG, 15-32
Program section	overview, LG, 15-30
See P-sect	semantics, LG, 15-31
Program structure	syntax, LG, 15-30
example, LG, 1-4	PUT_PACKET procedure
PROM, INTRO, 2-1	error returns, LG, 14-51
build cycle, RT SUG, 1-8	overview, LG, 14-50
	semantics, LG, 14-51
chips	syntax, <i>LG</i> , 14-50
application loading, <i>RT SUG</i> , 7-6	Put element primitive
	basic, PELM\$, RSM, 3-105
programmer format, RSX SUG, 11-4	conditional, PELC\$, RSM, 3-102
application loading, RT SUG,	PUT procedure
7-4	error returns, <i>LG</i> , 9-33
MIM file, RT SUG, 11-3, 11-5	I/O server buffering, LG, 9-9
Promotion rules, data types, LG, 3-16	overview, LG, 9-32
PROTECT_FILE procedure	syntax, LG, 9-32
error returns, LG, 9-30	PWFL\$ primitive
overview, LG, 9-30	description, RSM, 3-109
syntax, <i>LG</i> , 9-30	error returns, RSM, 3-110
P-sect, INTRO, 6-6	
compiler-generated, RT SUG, 8-14	restrictions, RSM, 3-109
declarative statements, LG, 1-2	semantics, RSM, 3-110
executable statements, LG, 1-3	syntax, RSM, 3-109
MERGE utility, RT SUG, 9-3	Q
pure-code declaration macro, PURE\$,	
<i>RSM</i> , 3-108	Q-bus
pure-data declaration macro, PDAT\$,	KXT11–CA limitations, IOSM, B-14
RSM, 3-101	QD driver
PSW	Allocate Channel function, IOSM,
See Processor Status Word (PSW)	9-24
PURE\$ macro, RSM, 2-25	Deallocate Channel function, <i>IOSM</i> , 9-24

\$DMA_ALLOCATE function, \$IOSM, 9-11 \$DMA_DEALLOCATE function, \$IOSM, 9-11 \$DMA_SCET_STATUS function, \$IOSM, 9-9 \$DMA_SEARCH_TRANSFER function, \$IOSM, 9-7 \$DMA_SEARCH function, \$IOSM, 9-7 \$DMA_SEARCH function, \$IOSM, 9-6 \$DMA_TRANSFER function, \$IOSM, 9-4 \$features and capabilities, \$IOSM, 9-1 Get Characteristics function, \$IOSM, 9-22 prefix file, \$IOSM, 9-26 Read function, \$IOSM, 9-16 status codes, \$IOSM, 9-25 Write function, \$IOSM, 9-15 Write function, \$IOSM, 9-15 Stehernet communication, \$IOSM, 13-18 Enable Portal function, \$IOSM, 13-15 Ethernet communication, \$IOSM, 13-18 Enable Portal function, \$IOSM, 13-16 cun-time support, \$IOSM, 13-16 run-time support, \$IOSM, 13-16 run-time support, \$IOSM, 13-16 run-time support, \$IOSM, 13-16 queue sements, \$IOSM, 13-16 queue elements, \$IOSM, 13-16 queue elements, \$IOSM, 13-16 queue elements, \$IOSM, 13-16 queue pames, request, \$IOSM, 1-9 queue pames, request, \$IOSM, 1-9 queue pamphores, \$INTRO, 4-7 as reply semaphore, \$IC, 14-30, 14-33 reation, \$INTRO, 4-7 message packet, \$INTRO, 4-7 message packet, \$INTRO, 4-7 spend \$IA-42, 14-26, 14-40, obtaining packets, \$IC, 14-22, 14-26, 14-56 passing a packet, \$IC, 14-21, 14-56 passing a packet, \$IC, 14-2, 14-26, 14-50 process communication, \$INTRO, 4-9 reply semaphore, \$INTRO, 4-9 reply semaphore, \$INTRO, 4-9 reply semaphore, \$INTRO, \$INT	QD driver (cont'd.)	Queue semaphores (cont'd.)
\$DMA_DEALLOCATE function, IOSM, 9-11 \$DMA_GET_STATUS function, IOSM, 9-9 \$DMA_SEARCH_TRANSFER function, IOSM, 9-7 \$DMA_SEARCH_TRANSFER function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-4 features and capabilities, IOSM, 9-1 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 Status codes, IOSM, 9-25 Write function, IOSM, 9-15 Ethernet communication, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-3 Get Characteristics function, IOSM, 13-16 run-time support, RSX SIG, 13-2 Write function, IOSM, 13-16 Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDPF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40, 2-45 Queue mames, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40, 2-45 Queue acket send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40, 2-45 Queue acket send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40, 2-45 Queue acket send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40, 2-45 Queue acket send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-30 for Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 set claracteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7		
JOSM, 9-11 SDMA_SETATUS function, IOSM, 9-9 \$DMA_SEARCH_TRANSFER function, IOSM, 9-7 \$DMA_SEARCH function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-16 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 Status codes, IOSM, 9-15 Status codes, IOSM, 9-16 ON driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-16 Fun-time support, RSX 9UG, 13-2 Write function, IOSM, 13-16 run-time support, RSX 9UG, 13-2 Write function, IOSM, 13-16 run-time support, RSX 9UG, 13-2 Write function, IOSM, 13-16 RUEDF§ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphore, LG, 14-38 format, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33 creation, INTRO, 4-7 as reply semaphore, LG, 14-58 format, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 obtaining packets from multiple, LG, 14-22, 14-26, passing a packet, LG, 14-22, 14-26, placing a packet, LG, 14-20 placing a packet, LG, 14-50 placing a packet, LG, 14-50 placing a packet, LG, 14-20 placing a		
\$DDMA_SEARCH_TRANSFER function, IOSM, 9-9 \$DMA_SEARCH function, IOSM, 9-7 \$DMA_SEARCH function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-1 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-16 frun-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QO option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDIFS system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, IG, 14-30, 14-33 creation, INTRO, 4-8 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 splacket, LG, 14-22, 14-26, placing a packet, LG, 14-50 process communication, INTRO, 4-16 RECEIVE procedure, INTRO, 4-7 RECEIVE ANY function, INTRO, 4-16 RECEIVE ANY function, INTRO, 4-16 RECEIVE procedure, INTRO, 4-7 RECEIVE ANY function, INTRO, 4-16 RECEIVE procedure, INTRO, 4-7 RECEIVE ANY function, InTRO, 4-16 Receive LG, 14-19 Set Characteristics, IOSM, B-18 Radia perial protocol (RSP) bootstra loader, IOSM, B-18 Radia perial protocol (RSP)		
\$DMA_SEARCH_TRANSFER function, IOSM, 9-7 \$DMA_SEARCH function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-16 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-25 Write function, IOSM, 9-16 Ethernet communication, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 Queue lements, RSM, 2-40, 2-45 Queue lements, RSM, 2-40, 2-45 Queue names, request, IOSM, 19-9 Queue packet Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-36 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7	\$DMA_GET_STATUS function,	
function, IOSM, 9-7 \$DMA_SEARCH function, IOSM, 9-6 \$DMA_TRANSFER function, IOSM, 9-4 features and capabilities, IOSM, 9-1 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-16 ON driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 Queue elements, RSM, 2-40, 2-45 Gueue lements, RSM, 2-40; LG, 14-30, 14-33 creation, INTRO, 4-7 size and number of files, IOSM, A-8 home block, IOSM, A-9 segment requests, IG, 14-1 message packet, INTRO, 4-7 size and number of files, IOSM, A-1 size and number of files, IOSM, A-1 structure, IOSM, A-1		
\$DMA_SEARCH function, \$IOSM\$, 9-6 \$DMA_TRANSFER function, \$IOSM\$, 9-4 features and capabilities, \$IOSM\$, 9-1 Get Characteristics function, \$IOSM\$, 9-22 prefix file, \$IOSM\$, 9-26 Read function, \$IOSM\$, 9-16 status codes, \$IOSM\$, 9-25 Write function, \$IOSM\$, 9-16 Enable Portal function, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-15 Ethernet communication, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-16 Ethernet communication, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-16 Ethernet communication, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-18 Enable Portal function, \$IOSM\$, 13-15 Ethernet communication, \$IOSM\$, 13-16 enun-time support, \$RSX \$IUG\$, 13-2 Write function, \$IOSM\$, 13-16 Qupotion MIB utility, \$RT \$IUG\$, 10-14 RELOC utility, \$RT \$IUG\$, 10-18 QUEDI\$\$ system macro, \$RSM\$, 2-37, 2-38 Queue elements, \$RSM\$, 2-40, 2-45 Queue names, request, \$IOSM\$, 2-37 Queue packet send primitive, \$END\$\$, \$RSM\$, 3-140 Queue semaphore, \$IG\$, 14-58 creating, \$IG\$, 14-30, 14-33 creation, \$INTRO\$, 4-7 as reply semaphore, \$IG\$, 18-15 initializing, \$IG\$, \$IG\$		
9-6 \$DMA_TRANSFER function, IOSM, 9-4 features and capabilities, IOSM, 9-1 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QUEDIP\$ system macro, RSM, 2-40, 2-45 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-8 definition, RSM, 2-40; IG, 14-30 Get Characteristics, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QUEDIP\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 And Get Characteristics, IOSM, 1-5 initializing, IG, 14-30, 14-33 reation, INTRO, 4-8 definition, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, IG, 14-30, 14-33, 14-48 management requests, IG, 14-1 message packet, INTRO, 4-7		
\$DMA_TRANSFER function, IOSM, 9-4 features and capabilities, IOSM, 9-1 Get Characteristics function, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-16 Status codes, IOSM, 9-16 ON driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 Queuing mechanisms, RSM, 2-46 Read function, IOSM, 13-16 Radial serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 RECEIVE_ANY function, INTRO, 4-9 reply semaphore, LG, 14-19 SEND procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R RECEIVE_ANY function, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 reply semaphore, LG, 14-30 R Receive procedure, INTRO, 4-9 re		
features and capabilities, IOSM, 9-1 Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-15 Write function, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, IGSM, 13-15 Race conditions, DUG, B-5 Radial serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM-only target mapped application, RT SUG, 3-5 PASDBC, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 method, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-9 segment marker, IOSM, A-18 structure, IOSM, A-11 structure, IOSM, A-1	\$DMA_TRANSFER function, IOSM,	RECEIVE_ANY function, INTRO,
Get Characteristics function, IOSM, 9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-16 Get Characteristics function, IOSM, 13-18 Frefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QQ option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 creation, IOSM, 9-26 Race conditions, DUG, B-5 Radial serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-9 segment mended, IOSM, A-9 segment mended, IOSM, A-9 segment header, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
9-22 prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-25 Write function, IOSM, 9-16 ON driver Disable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 // Option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphore, IC, 14-58 creating, IG, 14-30, 14-33, 14-48 definition, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7		
prefix file, IOSM, 9-26 Read function, IOSM, 9-16 status codes, IOSM, 9-25 Write function, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-33 creating, LG, 14-30, 14-33 creating, LG, 14-30, 14-33 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7		
Read function, IOSM, 9-16 status codes, IOSM, 9-25 Write function, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Race conditions, DUG, B-5 Radial serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-9 segment header, IOSM, A-9 segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
Write function, IOSM, 9-16 QN driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-3 Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SIG, 13-2 Write function, IOSM, 13-16 run-time support, RSX SIG, 13-2 Write function, IOSM, 13-16 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, IG, 14-30, 14-33 creating, IG, 14-30, 14-33 creating, IG, 14-30, 14-33 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Race conditions, DUG, B-5 Radia serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only e		
QN driver Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-16 Frequence of the first file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 /Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-33, 14-48 manaagement requests, LG, 14-1 message packet, INTRO, 4-7 Race conditions, DUG, B-5 Radial serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-13 RAM: operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 RAMix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 RAMix operators, DUG, 18-10 Radix operators, DUG, 14-30, 14-31 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only environment memory layout, RSM, 2-24 RAM-only environment memory layout, RSM, A-16 directory, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		D
Disable Portal function, IOSM, 13-18 Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-15 Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40, 2-48 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Radial serial protocol (RSP) bootstrap loader, IOSM, B-18 Radix operators, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM. only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-16 extended entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-9 segment marker, IOSM, A-9 segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		IT
Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 // Q option MiB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7		Race conditions, DUG, B-5
Enable Portal function, IOSM, 13-15 Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 /Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-38 format, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Bototara to address expressions, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Rand configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Raddrosperators, DUG, 2-6 address expressions, DUG, 2-6 address expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 RAM, configuration rules, IOSM, B-13 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only environme		Radial serial protocol (RSP)
Ethernet communication, IOSM, 13-3 Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 //Q option MiB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; CG-t Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Maddress expressions, DUG, 2-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 RAM configuration rules, IOSM, B-13 dynamic allocation, LG, 18-1, 18-7, 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 R		
Get Characteristics function, IOSM, 13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; Cet Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 structure, IOSM, A-1		
Get Characteristics function, <i>IOSM</i> , 13-18 prefix file, <i>IOSM</i> , 13-26 Read function, <i>IOSM</i> , 13-16 run-time support, <i>RSX SUG</i> , 13-2 Write function, <i>IOSM</i> , 13-16 // Q option MIB utility, <i>RT SUG</i> , 11-14 RELOC utility, <i>RT SUG</i> , 10-18 QUEDF\$ system macro, <i>RSM</i> , 2-37, 2-38 Queue elements, <i>RSM</i> , 2-40, 2-45 Queue packet send primitive, SEND\$, <i>RSM</i> , 3-140 Queue semaphores, <i>INTRO</i> , 4-7 as reply semaphore, <i>LG</i> , 14-58 creating, <i>LG</i> , 14-30, 14-33 creation, <i>INTRO</i> , 4-8 definition, <i>RSM</i> , 2-40; <i>LG</i> , 14-1 deleting, <i>LG</i> , 14-30, 14-33, 14-48 management requests, <i>LG</i> , 14-1 message packet, <i>INTRO</i> , 4-7 MRAM, nonvolatile application debugging rules, <i>RSM</i> , 4-14 RAM-only environment memory layout, <i>RSM</i> , 2-24 RAM-only target mapped application, <i>RT SUG</i> , 3-5 PASDBG, <i>RT SUG</i> , 3-5 Random-access device contiguous file storage, <i>IOSM</i> , A-16 directory, <i>IOSM</i> , A-4 entry, <i>IOSM</i> , A-6 extended entry, <i>IOSM</i> , A-8 fragmented, <i>IOSM</i> , A-9 segment header, <i>IOSM</i> , A-9 segment marker, <i>IOSM</i> , A-9 segment marker, <i>IOSM</i> , A-5 end-of-segment marker, <i>IOSM</i> , A-2 size and number of files, <i>IOSM</i> , A-18 structure, <i>IOSM</i> , A-1		
13-18 prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 /Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-30, 14-33, creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 MIB utility, RT SUG, 13-2 Write function, IOSM, 13-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-9 segment header, IOSM, A-9 segment marker, IOSM, A-9 segment marker, IOSM, A-9 segment marker, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
prefix file, IOSM, 13-26 Read function, IOSM, 13-16 run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 /Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 18-8, 18-14, 18-16 selecting maps, IOSM, B-11 RAM, nonvolatile application debugging rules, RSM, 4-14 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-6 extended entry, IOSM, A-9 segment header, IOSM, A-9 segment header, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
Read function, <i>IOSM</i> , 13-16 run-time support, <i>RSX SUG</i> , 13-2 Write function, <i>IOSM</i> , 13-16 /Q option MIB utility, <i>RT SUG</i> , 11-14 RELOC utility, <i>RT SUG</i> , 10-18 QUEDF\$ system macro, <i>RSM</i> , 2-37, 2-38 Queue elements, <i>RSM</i> , 2-40, 2-45 Queue packet send primitive, SEND\$, <i>RSM</i> , 3-140 Queue semaphores, <i>INTRO</i> , 4-7 as reply semaphore, <i>LG</i> , 14-58 creating, <i>LG</i> , 14-30, 14-33 creation, <i>INTRO</i> , 4-8 definition, <i>RSM</i> , 2-40; <i>LG</i> , 14-1 deleting, <i>LG</i> , 14-38 format, <i>RSM</i> , 2-40 Get Characteristics, <i>IOSM</i> , 11-5 initializing, <i>LG</i> , 14-30, 14-33, 14-48 management requests, <i>LG</i> , 14-1 message packet, <i>INTRO</i> , 4-7 selecting maps, <i>IOSM</i> , B-11 RAM, nonvolatile application debugging rules, <i>RSM</i> , 4-14 RAM-only environment memory layout, <i>RSM</i> , 2-24 RAM-only target mapped application, <i>RT SUG</i> , 3-5 PASDBG, <i>RT SUG</i> , 3-5 Random-access device contiguous file storage, <i>IOSM</i> , A-16 directory, <i>IOSM</i> , A-4 entry, <i>IOSM</i> , A-6 extended entry, <i>IOSM</i> , A-6 extended entry, <i>IOSM</i> , A-9 segment header, <i>IOSM</i> , A-9 segment header, <i>IOSM</i> , A-5 end-of-segment marker, <i>IOSM</i> , A-2 size and number of files, <i>IOSM</i> , A-18 structure, <i>IOSM</i> , A-1		
run-time support, RSX SUG, 13-2 Write function, IOSM, 13-16 /Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-9 segment header, IOSM, A-9 segment marker, IOSM, A-5 end-of-segment marker, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
/Q option MIB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 MAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-5 end-of-segment marker, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
MiB utility, RT SUG, 11-14 RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 RAM-only environment memory layout, RSM, 2-24 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
RELOC utility, RT SUG, 10-18 QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-9 segment header, IOSM, A-9 segment marker, IOSM, A-5 end-of-segment marker, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
QUEDF\$ system macro, RSM, 2-37, 2-38 Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-30, 14-33, 14-48 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 RAM-only target mapped application, RT SUG, 3-5 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-6 extended entry, IOSM, A-9 segment header, IOSM, A-9 segment marker, IOSM, A-5 end-of-segment marker, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
Queue elements, RSM, 2-40, 2-45 Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 TASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-9 segment marker, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 PASDBG, RT SUG, 3-5 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
Queue names, request, IOSM, 1-9 Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Random-access device contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1	Queue elements, RSM, 2-40, 2-45	
Queue packet send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 Contiguous file storage, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
send primitive, SEND\$, RSM, 3-140 Queue semaphores, INTRO, 4-7 as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 method, IOSM, A-16 directory, IOSM, A-4 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1	Queue packet	
as reply semaphore, LG, 14-58 creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 entry, IOSM, A-6 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1	send primitive, SEND\$, RSM, 3-140	method, IOSM, A-16
creating, LG, 14-30, 14-33 creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 extended entry, IOSM, A-8 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
creation, INTRO, 4-8 definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 fragmented, IOSM, A-12 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
definition, RSM, 2-40; LG, 14-1 deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 sample segment, IOSM, A-9 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
deleting, LG, 14-38 format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 segment header, IOSM, A-5 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
format, RSM, 2-40 Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 end-of-segment marker, IOSM, A-8 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
Get Characteristics, IOSM, 11-5 initializing, LG, 14-30, 14-33, 14-48 management requests, LG, 14-1 message packet, INTRO, 4-7 home block, IOSM, A-2 size and number of files, IOSM, A-18 structure, IOSM, A-1		
management requests, LG, 14-33, 14-48 size and number of files, IOSM, Management requests, LG, 14-1 A-18 message packet, INTRO, 4-7 structure, IOSM, A-1		
management requests, LG, 14-1 A-18 message packet, INTRO, 4-7 structure, IOSM, A-1		
Structure, 100111, 11 1		A-18
Random-Access Memory	message packet, INTKO, 4-7	
		Random-Access Memory

Random-Access Memory (cont'd.)	READLN procedure
See RAM	error returns, LG, 9-38
RBUF\$ primitive	I/O server buffering, LG, 9-9
argument block, RSM, 3-112	overview, LG, 9-37
description, RSM, 3-112	reading lines from a file, LG, 9-37
error returns, RSM, 3-113	syntax, LG, 9-37
semantics, RSM, 3-113	Read Logical function
syntax, RSM, 3-112	converted data, IOSM, 7-13
syntax example, RSM, 3-113	READONLY attribute
RCTX\$ primitive	entities applicable to, LG, F-2
argument block, RSM, 3-114	overview, LG, 10-31
description, RSM, 3-114	syntax, LG, 10-31
error returns, RSM, 3-115	READ procedure
implementation notes, RSM, 3-115	error returns, LG, 9-36
restrictions, RSM, 3-114	I/O server buffering, LG, 9-9
semantics, RSM, 3-114	integer conversion functions, LG,
syntax, RSM, 3-114	9-38
syntax example <i>, RSM,</i> 3-114	overview, LG, 9-34
RCVA\$ primitive	syntax, LG, 9-34
argument block, RSM, 3-119	Ready-active process state, RSM, 2-9
description, RSM, 3-116	REAL data types, LG, 2-6
error returns, RSM, 3-120	constants, LG, 3-3
implementation notes, RSM, 3-120	storage allocation rules, LG, E-3
restrictions, RSM, 3-118	Real numbers
semantics, RSM, 3-119	exponential notation, LG, 2-6
syntax, RSM, 3-116	fixed-point notation, LG, 2-6
syntax example, RSM, 3-119	precision, LG, 2-6
RCVC\$ primitive	specifying exponents, LG, 2-7
argument block, RSM, 3-123	Real-time clock I/O, IOSM, 8-2
description, RSM, 3-121	Real-time interface
orror roturns PSM 2-125	
error returns, RSM, 3-125	compiler options, RT SUG, 8-14
information returned, RSM, 3-123	Real-time programming requests
restrictions, RSM, 3-122	binary and counting semaphores,
semantics, RSM, 3-124	LG, 13-1
syntax, RSM, 3-121	clock service, LG, 19-1
syntax example, RSM, 3-124	comma usage, LG, 11-3
RCVD\$ primitive	error returns, LG, 11-5
argument block, RSM, 3-128	exception condition management,
description, RSM, 3-126	LG, 17-1
error returns, RSM, 3-129	general conventions and usage, LG,
information returned, RSM, 3-128	11-3
restrictions, RSM, 3-127	%INCLUDE and module files, LG,
semantics, RSM, 3-129	I-1
syntax, RSM, 3-126	interrupt management, LG, 16-1
syntax example, RSM, 3-129	memory allocation, LG, 18-1
READ_ANALOG_SIGNAL procedure,	miscellaneous, LG, 20-1
IOSM, 7-6	name and descriptor parameters, LG,
READ_COUNTS_SIGNAL procedure,	11-4
IOSM, 8-6	overview, LG, 11-1
READ_COUNTS_WAIT procedure,	process management, LG, 12-1
IOSM, 8-3	queue semaphores, LG, 14-1
READ_PIO function, IOSM, 6-9	region sharing, LG, 18-1
READ_TAPE procedure, IOSM, 5-5	ring buffers, LG, 15-1
11111 = procedure, 100111, 00	1116 Dulleto, 20, 10 1

Real-time programming requests	Reference resolution (conf.d.)
(cont'd.)	object library order, RT SUG, 9-5
translation of logical names, LG,	Region
20-2	deallocate primitive, DLRG\$, RSM,
RECEIVE_ACK procedure	3-61
error returns, LG, 14-59	Region allocation
overview, LG, 14-57	mapped target, RSM, 3-21
	terms, defined, RSM, 5-2
semantics, LG, 14-59	
syntax, LG, 14-57 RECEIVE_ANY_ACK function	unmapped target, RSM, 3-21
	Region ID Block (RIB)
error returns, LG, 14-70	ACCESS_SHARED_REGION
overview, LG, 14-66	procedure, LG, 18-3
semantics, LG, 14-69	ALLOCATE_REGION function, LG,
syntax, LG, 14-67	18-7
RECEIVE_ANY function, INTRO,	content, RSM, 5-5
4-16	CREATE_SHARED_REGION
error returns, LG, 14-65	procedure, LG, 18-10
information record format, LG,	DEALLOCATE_REGION proceure,
14-62	LG, 18-14
overview, LG, 14-60	primitive service relationships, RSM,
semantics, LG, 14-64	5-4
syntax, <i>LG</i> , 14-61	symbolic offsets, RSM, 5-4
Receive data primitive	type definition, RSM, 5-3
basic, RCVD\$, RSM, 3-126	ÚÑMAP_WINDOW procedure, LG,
conditional, RCVC\$, RSM, 3-121	18-23
RECEIVE procedure, INTRO, 4-9, 4-10	Region sharing
conditional, INTRO, 4-9	deleting, LG, 18-17
error returns, LG, 14-56	primitive services, overview, RSM,
information record format, LG,	5-1
14-53	requests, LG, 18-1
message packet, INTRO, 4-9	terms, defined, RSM, 5-2
overview, LG, 14-52	Relational operators
semantics, LG, 14-55	arithmetic expressions, LG, 3-12
syntax, LG, 14-52	Boolean expressions, LG, 3-12
RECORD_MODE option, LG, 15-9	RELATIONSHIP parameter
RECORD data types	process termination, RSM, 2-5
attributes, LG, 2-7	RELEASE_EXCEPTION procedure,
declaration, LG, 2-7	RSM, 6-15
storage allocation rules, LG, E-6	error returns, LG, 17-19
variant clause, LG, 2-9	overview, LG, 17-18
Record fields	semantics, LG, 17-19
declaring side effects, LG, 10-40	syntax, LG, 17-18
identifiers, LG, 2-7	Relocating
positioning, LG, 10-28	kernel for debugging, RSX SUG, 3-7
Record field size	static processes, RSX SUG, 5-5
BITSIZE function, LG, 8-4	mapped, RSX SUG, A-1
Record field values	unmapped, RSX SUG, A-5
order in storage, LG, 2-8	system processes, RSX SUG, 4-5
Recursive subprograms, LG, 6-19	mapped, RSX SUG, 4-6
Reference resolution	unmapped, RSX SUG, 4-6
MERGE input file order, RT SUG,	Relocation map, RSX SUG, 10-7
9-5	Relocation Symbol Directory (RLD)
MERGE utility, RT SUG, 9-5	data block records, RT SUG, 9-1

Relocation Symbol Directory (RLD)	RELOC utility
(cont'd.)	options (cont'd.)
record updating, RT SUG, 9-4; RSX SUG, 9-4	round up section size (/UP), RSX SUG, 10-20
RELOC utility, INTRO, 6-6; RT SUG,	RW D-space starting address
1-3, 2-2; RSX SUG, 1-3, 2-2, 4-5	(/DW:n), RSX SUG, 10-17
/A option, RT SUG, 10-13	short map (/SH), RSX SUG,
build cycle, RT SUG, 10-3; RSX	10-19
SUG, 10-3	static process name (/NM), RSX
command line, RT SUG, 5-6	SUG, 10-18
examples, RT SUG, 10-6	supervisor-mode shared library
format, RT SUG, 10-4	(/SL), <i>RSX SUG</i> , 10-20
command line examples, RSX SUG,	user library base address
10-4	(/LS:name:addr), RSX
command line format, RSX SUG,	SUG, 10-18
3-5, 4-6, 5-6	user-mode shared library
/D option, RT SUG, 3-6, 10-14	(/UL[:addr]) <i>, RSX ŠUG,</i>
/E option, RT SUG, 10-15	10-20
/F option, RT SUG, 10-16	value of undefined locations
functions, RT SUG, 10-2; RSX SUG,	(/ZR), RSX SUG, 10-21
10-2	version number (/VR:xxx), RSX
/G option, <i>RT SUG</i> , 10-16	SUG, 10-20
I&D-space separation, RT SUG, 6-3	wide map (/WI), RSX SUG,
/I option, RT SUG, 10-16	10-20
/J option, RT SUG, 10-16	
	overview, RT SUG, 10-1
kernel phase, RSX SUG, 3-5	prefix module, RT SUG, 4-5
load map, RT SUG, 10-7	/Q option, RT SUG, 10-18
/L option, RT SUG, 10-17	/R option, RT SUG, 3-6, 10-19
/M option, RT SUG, 10-17	shared libraries, RT SUG, 6-7, 6-8
/N option, <i>RT SUG</i> , 10-17	/S option, RT SUG, 10-19
/O option, RT SUG, 10-18	static process, RT SUG, 5-5, 5-6
options, RSX SUG, 10-9	STB file, INTRO, 6-6
align first RW section (/AL), RSX	/U option, RT SUG, 10-19
SUG, 10-12	/V option, RT SUG, 10-20
alphabetical symbol listing	/W option, RT SUG, 10-20
(/AB), RSX SUG, 10-12	/X option, RT SUG, 10-20
debug symbols (/DE), RSX SUG,	/Y option, RT SUG, 10-21
10-14	/Z option, RT SUG, 10-22
disable section sort (/DS), RSX	Removing
SUG, 10-14	bootstrap file, RSX SUG, 11-6
extend section size (/EX), RSX	RENAME_FILE procedure
SUG, 10-17	error returns, <i>LG</i> , 9-41
first RO p-sect (/RO), RSX SUG,	overview, LG, 9-41
10-19	syntax, LG, 9-41
first RW p-sect (/RW), RSX SUG,	REPEAT statement, LG, 5-20
10-19	Reply semaphore
I&D-space separation (/ID), RSX	obtaining packet, LG, 14-19
ŚUG, 10-17	Reply subroutine
p-sect base address (/QB), RSX	device driver, IOSM, 14-17
SUG, 10-18	REPORT procedure, INTRO, 4-12
RO D-space starting address	error returns, LG, 17-21
(/DR:n), RSX SUG, 10-14	overview, LG, 17-20
(reporting exceptions, RSM, 6-9
	10p 01 1110 0 110110, 110111, 0)

REPORT procedure (cont'd.)	REXC\$ primitive (cont'd.)
semantics, LG, 17-21	error returns, RSM, 3-132
syntax, LG, 17-20	reporting exceptions, RSM, 6-9
REPOSITION_TAPE procedure, IOSM,	restrictions, RSM, 3-131
5-6	semantics, RSM, 3-132
Request/Reply packet interface, IOSM,	syntax, RSM, 3-130
2-4, 4-7, 5-9, 6-25, 7-8, 8-10, 9-14,	syntax example, RSM, 3-131
10-20, 12-8, 13-11	Ring buffers
overview, IOSM, 1-8	copying data, LG, 15-6
TT driver, IOSM, 3-5	creating, LG, 15-9, 15-12
Request queue names, IOSM, 1-9	creation, INTRO, 4-6
Reserved words, LG, 1-7	data structures, INTRO, 4-6
RESET_RING_BUFFER procedure	definition, RSM, 2-41
error returns, LG, 15-34	deleting, LG, 15-15
overview, LG, 15-33	emptying, <i>LG</i> , 15-33
semantics, LG, 15-34	format, RSM, 2-41
syntax, LG, 15-33	GET_ELEMENT procedure, INTRO,
RESET procedure	4-6
error returns, LG, 9-42	initializing, LG, 15-28
overview, LG, 9-42	input/output ordering, LG, 15-10
syntax, LG, 9-42	management requests, LG, 15-1
Resource management	message transfers, INTRO, 4-6
primitive services, RSM, 1-5	obtaining data, LG, 15-3, 15-17
Resource sharing, LG, 13-20	obtaining data from multiple, LG,
RESOURCES macro, RSM, 2-48;	15-20
IOSM, B-39	
description, RSM, 4-19	primitive services, RSM, 1-11 process communication, INTRO,
example, RSM, 4-21	4-15
parameters, RSM, 4-20	PUT_ELEMENT procedure, INTRO,
syntax, RSM, 4-20	4-6
RESTORE_CONTEXT procedure	reset primitive, RBUF\$, RSM, 3-112
error returns, LG, 18-29	resetting, LG, 15-33
overview, LG, 18-28	specifying, LG, 9-5
semantics, LG, 18-28	specifying names, LG, 9-6
syntax, LG, 18-28	type code, LG, 15-25
RESUME function, INTRO, 3-12, 4-6	RL02
error returns, LG, 12-13	
	external file storage, <i>LG</i> , 9-5 RLD
overview, LG, 12-12	
semantics, LG, 12-13	See Relocation Symbol Directory
syntax, LG, 12-12 REVERT procedure	(RLD) ROM
error returns, LG, 17-22	application start-up
overview, LG, 17-22	selecting, IOSM, B-17
semantics, LG, 17-22	calculating checksums, IOSM, B-67
syntax, LG, 17-22	configuration rules, IOSM, B-13
REWIND_TAPE procedure, IOSM, 5-7	selecting maps, IOSM, B-11
	specifying checksum test, IOSM,
REWRITE procedure	B-17
error returns, LG , 9-43 overview, LG , 9-43	ROM/RAM environment
syntax, LG, 9-43	memory layout, RSM, 2-24
REXC\$ primitive, RSM, 2-16	ROM/RAM target
argument block, RSM, 3-131	mapped application, RT SUG, 3-5
description, RSM, 3-130	MIM file, RT SUG, 3-11
	=:=:=:-, -:=:- - ,

ROM/RAM target (cont'd.)	SALL\$ primitive (cont'd.)
unmapped application, RT SUG, 3-6	argument block, RSM, 3-136
/R option	description, RSM, 3-135
MIB utility, RT SUG, 11-15	error returns, RSM, 3-136
RELOC utility, RT SUG, 3-6, 5-6,	restrictions, RSM, 3-135
10-19	semantics, RSM, 3-136
Rounding	syntax, RSM, 3-135
LROUND function, LG, 8-7	syntax example, RSM, 3-136
ROUND function, LG, 8-12	Sample program
UROUND function, LG, 8-16	DMA transfers, IOSM, 9-11
Routine block	
	task-to-task communication, IOSM
definition, LG, 1-3	11-11, 11-13
Routine heading	SAVE_CONTEXT procedure
definition, LG, 1-3	error returns, LG, 18-31
Routines	overview, LG, 18-30
concepts, LG, 6-1	semantics, LG, 18-31
definition, LG, 1-3, 6-2	syntax, LG, 18-30
RSUM\$ primitive	SBC-11/21 PIO support routines,
argument block, RSM, 3-133	IOSM, 6-7
description, RSM, 3-133	Scalar data types, LG, 2-1
error returns, RSM, 3-134	constants, LG, 3-2
semantics, RSM, 3-134	storage allocation rules, LG, E-1
syntax, RSM, 3-133	SCHD\$ primitive
syntax example, RSM, 3-134	applications, RSM, 3-137
RT-11 operating system, LG, 1-1	description, RSM, 3-137
Run-time	error returns, RSM, 3-137
error recovery, LG, 11-5	semantics, RSM, 3-137
expressions, LG, 3-2	syntax, RSM, 3-137
process name specification, LG,	SCHEDULE procedure
10-24	error returns, LG, 12-14
specifying environment, LG, 10-36	overview, LG, 12-14
Run-time checks	semantics, LG, 12-14
compiler options, RT SUG, 8-10	syntax, LG, 12-14
Run-time name, RSM, 2-7	Scheduler, RSM, 2-18
CRPC\$ service request, RSM, 2-7	process context switch, RSM, 2-18
data structures, RSM, 2-36	Scheduling
DFSPC\$ macro, RSM, 2-7	priority-based, INTRO, 1-3
dynamic process, RSM, 2-7	Scheduling processes, RSM, 2-13
static process, RSM, 2-7	blocking, RSM, 2-13
Run-time software	preemption, RSM, 2-13
device drivers, RT SUG, 1-4; RSX	unblocking, RSM, 2-14
SUG, 1-4	Scope of attributes
kernel, RT SUG, 1-3; RSX SUG,	functions, LG, 6-17
1-4	Scope of identifiers, LG, 6-3
overview, RT SUG, 1-2, 1-3; RSX	compilation units, LG, 7-4
SUG, 1-2, 1-4	functions, LG, 6-17
Run-time system, INTRO, 1-5	labels, LG, 6-15
definition, RSM, 1-2	rules, <i>LG</i> , 6-15
RX02 device	SCTX\$ primitive
diskette formatting, LG, 9-19	argument block, RSM, 3-138
ŭ	description, RSM, 3-138
S	error returns, RSM, 3-139
SALL\$ primitive	restrictions, RSM, 3-138
Crand binner	

SCTX\$ primitive (cont'd.)	SERA\$ primitive (cont'd.)
semantics, RSM, 3-138	argument block, RSM, 3-146
syntax, RSM, 3-138	description, RSM, 3-145
syntax example, RSM, 3-138	error returns, RSM, 3-146
SDB	establish exception handler, RSM,
See Structure Descriptor Block (SDB)	6-12
\$SECTL Queue Semaphore	establish exception service, RSM,
Get Characteristics, IOSM, 11-5	6-16
Set Characteristics, IOSM, 11-4	restrictions, RSM, 3-146
Self-tests	semantics, RSM, 3-146
automatic, IOSM, B-18	syntax, RSM, 3-145
error reporting, IOSM, B-16	Serial line, INTRO, 7-2
ROM applications, IOSM, B-17	dedicated, DUG, 1-2
selecting options, IOSM, B-15	Serial line unit
Semantics	DMA transfers, IOSM, 9-8, 9-22
actual value parameters, LG, 6-24	SET
formal declaration, LG, 6-14	base type, LG, 2-15
value parameters, LG, 6-6	data type, LG, 2-15
variable parameters, LG, 6-8	type declaration, LG, 2-15
Semaphore, INTRO, 4-2	SET_ANALOG_MODE procedure,
binary, INTRO, 1-3, 4-2, 4-3, 5-7;	IOSM, 7-5
RSM, 1-7, 2-39	SET_PIO_MODE procedure, IOSM,
counting, INTRO, 1-3, 4-2, 4-4;	6-8
RSM, 1-7, 2-39	SET_TIME procedure
data structures, INTRO, 1-3	error returns, LG, 19-6
interrupt vector, INTRO, 4-10	overview, LG, 19-5
queue, INTRO, 1-3, 4-2, 4-7, 4-14;	semantics, LG, 19-5
RSM, 1-8, 2-40	syntax, LG, 19-5
SEND\$ primitive	SET BREAK command
applications, RSM, 3-144	creating command option DO list,
argument block, RSM, 3-142	DUG, 3-56
description, RSM, 3-140	example, <i>DUG</i> , 3-55, 3-56, 3-58,
error returns, RSM, 3-144	3-94, 4-3
restrictions, RSM, 3-142	Set Characteristics function
semantics, RSM, 3-142	configure device, IOSM, 7-11
syntax, RSM, 3-140	\$SECTL Queue Semaphore, IOSM,
syntax example, RSM, 3-142	11-4
SEND_ACK procedure	Set constructors
error returns, LG, 14-79	set operators, LG, 3-14
overview, LG, 14-76	syntax, LG, 3-9
semantics, LG, 14-78	SET data types
syntax, <i>LG</i> , 14-76	storage allocation rules, LG, E-8
SEND procedure, INTRO, 4-8, 4-10	SET DO ALL command
conditional, INTRO, 4-8	definition, DUG, 3-59
error returns, LG, 14-74	example, <i>DUG</i> , 3-59, 3-94
message packet, INTRO, 4-9	Set expressions
overview, LG, 14-71	set operators, LG, 3-14
semantics, LG, 14-73	SET KERNEL command, DUG, 3-60
syntax, LG, 14-71	See also SET PROGRAM command
Send queue packet primitive	example, DUG, 3-9, 3-10, 3-64, 3-65
conditional, SNDC\$, RSM, 3-159	SET MODE DSPACE command, DUG,
SEQ11 directive, <i>LG</i> , 6-20, 6-21	3-61
SERA\$ primitive	

SET MODE GLOBAL command, DUG,	SGLC\$ primitive (cont'd.)
2-12	description, RSM, 3-147
definition, DUG, 3-62	error returns, RSM, 3-148
SET MODE ISPACE command, DUG,	restrictions, RSM, 3-147
3-63	semantics, RSM, 3-148
SET MODE MACRO command, DUG,	syntax, RSM, 3-147
3-64	syntax example, RSM, 3-148
example, DUG, 3-62, 3-64	SGLQ\$ primitive
SET MODE PASCAL command, DUG,	applications, RSM, 3-151
3-65	argument block, RSM, 3-150
SET MODE RELATIVE command,	description, RSM, 3-149
DUG, 2-12	error returns, RSM, 3-150
definition, DUG, 3-66	semantics, RSM, 3-150
SET MODE SYMBOLS command,	syntax, RSM, 3-149
DUG, 2-12	syntax example, RSM, 3-150
definition, DUG, 3-67	SGNL\$ primitive
SET MODE TERSE command, DUG,	argument block, RSM, 3-153
2-12	description, RSM, 3-152
definition, DUG, 3-68	error returns, RSM, 3-153
example, DUG, 3-94	semantics, RSM, 3-153
SET MODULE command, DUG, 3-69	syntax, RSM, 3-152
SET ODT command, DUG, 3-70	syntax, RSM, 3-152 syntax example, RSM, 3-153
Set operators, LG, 3-14	SGQC\$ primitive
SET PHYSICAL command, DUG, 3-71	applications, RSM, 3-155
	argument block, RSM, 3-155
See also Mapping modes	description, RSM, 3-154
SET PROCESS command, DUG, 3-72	
example, DUG, 3-73, 4-10	error returns, RSM, 3-155 semantics, RSM, 3-155
SET PROGRAM command, DUG, 3-74	
example, DUG, 3-7, 3-9, 3-10, 3-62,	syntax, RSM, 3-154
3-64, 3-65, 3-66, 4-3, 4-12	syntax example, RSM, 3-155
SET RADIX command, DUG, 3-76	Shared common region
Sets	program segment, RSM, 5-13
constructors, LG, 2-15	Shared library, RSX SUG, 6-1, 6-3
defining, LG, 2-15	absolute, RT SUG, 6-10
initializing, LG, 2-15	Active Page Register (APR), RT SUG,
SET SCOPE command, DUG, 3-77	6-4
example, DUG, 3-55, 3-78, 4-4, C-3	build cycle, RT SUG, 2-8, 6-6
SET SOURCE command, DUG, 3-79	debugging processes, RSX SUG, 6-14
example, <i>DUG</i> , 3-91, 3-138	
SET STEP command, DUG, 3-80	definition, RT SUG, 6-1
SET SUPERVISOR command, DUG,	FILSYS.OBJ, RT SUG, 6-6.
3-82	I&D separation, RT SUG, 6-2
SET TRACE command, DUG, 3-83	installing, RSX SUG, 11-6
example, DUG, 3-85, 3-94	debug symbols, RSX SUG, 11-7
SET TYPE command, DUG, 3-86	mapped application, RT SUG, 6-3
example, DUG, 3-133	mapped user-mode, RT SUG, 6-8
Set variables	MERGE utility, RT SUG, 6-6, 6-8,
set operators, LG, 3-14	9-7; RSX SUG, 9-7
SET WATCH command, DUG, 3-88	MIB utility, RT SUG, 6-7, 6-8, 11-7
example, DUG, 4-5	Position Independent Code (PIC), RT
SET WINDOW command, DUG, 3-90	SUG, 6-10
SGLC\$ primitive	referencing, RT SUG, 6-13
argument block, RSM, 3-148	relocatable, RT SUG, 6-8

Shared library (cont'd.)	SHOW EXCEPTION GROUPS
RELOC utility, RT SUG, 6-7, 6-8	command, DUG, 3-96
resident, RSM, 1-14	SHOW FREE MEMORY command,
restrictions, RT SUG, 6-5; RSX SUG,	DUG, 3-97
6-5	SHOW FREE PACKETS command,
supervisor-mode, RT SUG, 6-1, 6-4,	DUG, 3-99
6-5; RSX SUG, 6-4	SHOW FREE STRUCTURES command
building, RSX SUG, 6-6	example, DUG, 3-100
kernel configuration, RSX SUG,	SHOW HEAP command, DUG, 3-101
6-1	SHOW INACTIVE QUEUE command,
referencing, RSX SUG, 6-13	DUG, 3-102
symbol table file, RT SUG, 6-3	SHOW LOGICALS command, DUG,
unmapped application, RT SUG, 6-3	3-103
unmapped user-mode, RT SUG, 6-7	example, DUG, 3-103
user-mode, RT SUG, 6-4, 6-5; RSX	SHOW MAPPING command, DUG,
SUG, 6-4	3-105
absolute, RSX SUG, 6-5, 6-9	See also Mapping modes
building multiple, RSX SUG,	example, DŪĠ, 3-106
6-12	SHOW MODE command, DUG, 3-107
mapped, RSX SUG, 6-8	example, DUG, 3-9, 3-10, 3-64,
referencing, RSX SUG, 6-14	3-65, 3-107
relocatable, RSX SUG, 6-5, 6-8	SHOW NAMES command, DUG,
unmapped, RSX SUG, 6-7	3-108
user-mode, referencing, RT SUG,	SHOW PCB command, DUG, 3-109
6-14	example, DUG, 3-110
Shared Region Descriptor (SRD), LG,	SHOW PROCESS command, DUG,
18-3	3-111
10 0	
accessing shared regions, LG, 18-4	example, DUG, 3-73, 3-112, 4-10
	example, <i>DUG</i> , 3-73, 3-112, 4-10 SHOW RADIX command, <i>DUG</i> , 3-113
accessing shared regions, LG, 18-4	example, DUG, 3-73, 3-112, 4-10
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE,
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115
accessing shared regions, LG, 18-4 creating, LG, 18-10 definition, RSM, 2-43 deleting, LG, 18-17 format, RSM, 2-43 Shared regions access, RSM, 3-13	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE,
accessing shared regions, LG, 18-4 creating, LG, 18-10 definition, RSM, 2-43 deleting, LG, 18-17 format, RSM, 2-43 Shared regions access, RSM, 3-13 accessing, LG, 18-3	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116
accessing shared regions, LG, 18-4 creating, LG, 18-10 definition, RSM, 2-43 deleting, LG, 18-17 format, RSM, 2-43 Shared regions access, RSM, 3-13 accessing, LG, 18-3 create primitive, CRSR\$, RSM, 3-41	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116
accessing shared regions, LG, 18-4 creating, LG, 18-10 definition, RSM, 2-43 deleting, LG, 18-17 format, RSM, 2-43 Shared regions access, RSM, 3-13 accessing, LG, 18-3 create primitive, CRSR\$, RSM, 3-41 creating, LG, 18-10	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG,
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG,
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command,
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4 SHOW CALLS command, <i>DUG</i> , 3-93	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121 SHOW SOURCE command, DUG,
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4 SHOW CALLS command, <i>DUG</i> , 3-93 SHOW command, <i>DUG</i> , 3-91	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121 SHOW SOURCE command, DUG, 3-122
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4 SHOW CALLS command, <i>DUG</i> , 3-91 SHOW DO ALL command, <i>DUG</i> , 3-94	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121 SHOW SOURCE command, DUG, 3-122 SHOW STACK command, DUG, 3-123
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4 SHOW CALLS command, <i>DUG</i> , 3-91 SHOW DO ALL command, <i>DUG</i> , 3-94 example, <i>DUG</i> , 4-4	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121 SHOW SOURCE command, DUG, 3-122 SHOW STACK command, DUG, 3-123 SHOW STATEMENT command, DUG,
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4 SHOW CALLS command, <i>DUG</i> , 3-91 SHOW DO ALL command, <i>DUG</i> , 3-94	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121 SHOW SOURCE command, DUG, 3-122 SHOW STACK command, DUG, 3-123 SHOW STATEMENT command, DUG, 3-125
accessing shared regions, <i>LG</i> , 18-4 creating, <i>LG</i> , 18-10 definition, <i>RSM</i> , 2-43 deleting, <i>LG</i> , 18-17 format, <i>RSM</i> , 2-43 Shared regions access, <i>RSM</i> , 3-13 accessing, <i>LG</i> , 18-3 create primitive, CRSR\$, <i>RSM</i> , 3-41 creating, <i>LG</i> , 18-10 delete primitive, DLSR\$, <i>RSM</i> , 3-64 deletion, <i>RSM</i> , 3-13 mapped target, <i>RSM</i> , 3-13 unmapped target, <i>RSM</i> , 3-13 Shared variables compilation units, <i>LG</i> , 7-3 Shorthand rule process-related request, <i>RSM</i> , 3-11 SHOW BREAK command, <i>DUG</i> , 3-92 example, <i>DUG</i> , 3-58, 3-59, 4-4 SHOW CALLS command, <i>DUG</i> , 3-91 SHOW DO ALL command, <i>DUG</i> , 3-94 example, <i>DUG</i> , 4-4	example, DUG, 3-73, 3-112, 4-10 SHOW RADIX command, DUG, 3-113 SHOW READY/ACTIVE QUEUE, DUG, 3-114 SHOW READY/SUSPENDED QUEUE, DUG, 3-115 SHOW REGISTERS command, DUG, 3-116 example, DUG, 3-116 SHOW RING BUFFER command, DUG, 3-117 SHOW RUN QUEUE command, DUG, 3-118 SHOW SCOPE command, DUG, 3-119 example, DUG, 3-58, 3-119 SHOW SEMAPHORE command, DUG, 3-120 example, DUG, 4-3 SHOW SHARED REGION command, DUG, 3-121 SHOW SOURCE command, DUG, 3-122 SHOW STACK command, DUG, 3-123 SHOW STATEMENT command, DUG,

SHOW STEP command, DUG, 3-127	SLEP\$ primitive (cont'd.)
SHOW STRUCTURE command, DUG,	syntax, RSM, 3-156
3-128	syntax example, RSM, 3-157
SHOW SYMBOLS command, DUG,	SLÚ1
3-130	loading programs from TU58
See also Defining symbols	DECtape II, IOSM, B-18
SHOW TARGET command, DUG,	SNDC\$ primitive
3-131	applications, RSM, 3-162
example, DUG, 3-94	argument block, RSM, 3-161
SHOW TRACE command, DUG, 3-132	description, RSM, 3-159
SHOW TYPE command, DUG, 3-133	error returns, RSM, 3-162
SHOW WATCH command, DUG,	restrictions, RSM, 3-160
3-134	semantics, RSM, 3-161
example, DUG, 4-5	syntax, <i>RSM</i> , 3-159
SHOW WINDOW command, DUG,	syntax example, RSM, 3-161
3-135	Software architecture
See also Windowing mode	master/slave concept, IOSM, B-1
example, <i>DUG</i> , 3-90, 4-2	Software exceptions
Side effects	argument lists, RSM, 6-19
specifying entities with, LG, 10-40	characteristics, RSM, 6-2
SIGNAL_ALL procedure	reporting, RSM, 6-9
error returns, LG, 13-35	/S option
overview, LG, 13-34	MIB utility, RT SUG, 3-7, 11-9,
semantics, LG, 13-35	11-15
syntax, LG, 13-34	RELOC utility, RT SUG, 10-19
SIGNAL procedure, INTRO, 4-3, 5-8	Source code
actions, INTRO, 4-4	syntax errors, INTRO, 6-3
conditional, INTRO, 4-4	XD driver, IOSM, 4-31
error returns, LG, 13-33	Source files
overview, LG, 13-32	inserting text, LG, 7-5
semantics, LG, 13-33	Source line display
syntax, LG, 13-32	See Displaying source lines
Signal queue semaphore primitive	Source module
basic, SGLQ\$, RSM, 3-149	device driver, IOSM, 14-10
conditional, SGQC\$, RSM, 3-154	SPAWN command, DUG, 3-136
Signal semaphore primitive	SPL\$ macro (Set priority level), IOSM,
basic, SGNL\$, RSM, 3-152	15-22
conditional, SGLC\$, RSM, 3-147	SPND\$ primitive
Significant event, INTRO, 3-6; RSM,	argument block, RSM, 3-163
2-18	description, RSM, 3-163
Sine value	error returns, RSM, 3-164
SIN function, LG, 8-12	semantics, RSM, 3-164
SLEEP procedure	syntax, RSM, 3-163
error returns, LG, 19-8	syntax example, RSM, 3-164
overview, LG, 19-7	Square root
semantics, LG, 19-7	SQRT function, LG, 8-13
syntax, LG, 19-7	Squaring
SLEP\$ primitive	SQR function, LG, 8-13
argument block, RSM, 3-157	SQUEEZE_DIRECTORY procedure
description, RSM, 3-156	error returns, LG, 9-44
error returns, RSM, 3-158	overview, LG, 9-44
restrictions, RSM, 3-157	syntax, LG, 9-44
semantics, RSM, 3-157	SRD

SKD (cont a.)	Static process (cont a.)
See Shared Region Descriptor (SRD)	CHGP\$ primitive, RSM, 2-4
SSFA\$ primitive	define macro, DFSPC\$, RSM, 3-52
argument block, RSM, 3-166	delete primitive, DLPC\$, RSM, 3-60
description, RSM, 3-165	DFSPC\$ macro, RSM, 2-3
error returns, RSM, 3-166	general description, RSM, 2-3
restrictions, RSM, 3-166	I&D-space separation, RT SUG, 6-3
semantics, RSM, 3-166	INITIALIZE attribute, RSM, 2-3
syntax, RSM, 3-165	installing, RSX SUG, 5-5, 11-6
syntax example, RSM, 3-166	debug symbols, RSX SUG, 11-7
STACK_SIZE attribute, INTRO, 3-10,	MERGE utility, RT SUG, 9-7
5-3	merging, RSX SUG, 5-4
entities applicable to, LG, F-2	MIB utility, RT SUG, 5-5, 5-7, 11-6
overview, LG, 10-33	object modules, RT SUG, 8-2
syntax, LG, 10-33	priorities, RSM, 2-3
Stand-alone processor	PROGRAM declaration, RSM, 2-3
hardware setup, IOSM, B-14	relocating
START_RTCLOCK procedure, IOSM,	mapped, RT SUG, A-1; RSX
8-8	SUG, A-1
Starting	unmapped, RT SUG, A-5; RSX
ROM application, IOSM, B-17	SUG, A-5
Start-up priority, LG, 12-2	RELOC utility, RT SUG, 5-5; RSX
State changes, INTRO, 3-6	SUG, 5-5
State codes, RSM, 2-11	run-time name, RSM, 2-7
Process Control Block (PCB), RSM,	Status codes
2-11	AD driver, IOSM, 7-15
Statements	Ancillary Control Process (ACP),
assignment, LG, 5-2	IOSM, 2-7
CASE, <i>LG</i> , 5-3	CS driver, IOSM, 12-13
compound, LG, 5-5	disk drivers, IOSM, 4-25
executable, LG, 1-3	KK driver, IOSM, 13-25
FOR, <i>LG</i> , 5-6	KW driver, IOSM, 8-18
GOTO, <i>LG</i> , 5-8	KX driver, IOSM, 13-25
IF-THEN, LG, 5-9	MU driver, IOSM, 5-14
IF-THEN-ELSE, LG, 5-11	Network Service Process (NSP),
procedure call, LG, 5-13	IOSM, 11-6
process invocation, LG, 5-15	parallel I/O <i>, IOSM,</i> 6-44 QD driver <i>, IOSM,</i> 9-25
REPEAT, LG, 5-20	TT driver, <i>IOSM</i> , 3-17
simple, LG, 5-1	
structured, LG, 5-1	XE driver, IOSM, 10-38
WHILE, <i>LG</i> , 5-21	XL driver, IOSM, C-28
WITH, LG, 5-23	PDP-11, IOSM, C-12
State queues, RSM, 2-12	STATUS parameter
characteristics, RSM, 2-12	using, LG, 11-5
State record	STB files, <i>RT SUG</i> , 3-5, 3-8
format, LG, 12-6	build cycle, RT SUG, 2-5
State transitions, RSM, 2-9	RELOC utility, INTRO, 6-6
STATIC attribute	shared library, RT SUG, 6-3
entities applicable to, LG, F-2	STEP command, DUG, 3-137
overview, LG, 10-34	example, DUG, 3-138
syntax, <i>LG</i> , 10-34	STIM\$ primitive
Static process, INTRO, 3-1, 5-5	argument block, RSM, 3-167
build cycle, RT SUG, 5-2	description, RSM, 3-167
•	-

STIM\$ primitive (cont'd.)	Structured data types (cont'd.)
error returns, RSM, 3-168	compatibility rules, LG, 6-25
restrictions, RSM, 3-167	constants, LG, 3-2
semantics, RSM, 3-168	FILE, <i>LG</i> , 2-16
syntax, RSM, 3-167	packed, <i>LG</i> , 2-1
syntax example, RSM, 3-168	pointer, <i>LG</i> , 2-19
STOP_RTCLOCK procedure, IOSM,	RECORD, <i>LG</i> , 2-7
8-10	
	SET, LG, 2-15
Stop flag	storage allocation rules, LG, E-3
set address primitive, SSFA\$, RSM,	TEXT file, LG, 2-18
3-165	Structure Descriptor Block (SDB), LG,
Stopping a process, <i>LG</i> , 12-15	18-18
STOP procedure, INTRO, 3-12, 3-13	data structure index, RSM, 3-8
disabling effect, LG, 12-4	format, RSM, 3-8
error returns, LG, 12-17	initialization, RSM, 3-9
overview, LG, 12-15	primitive services, RSM, 3-7
relation to termination procedures,	uses, <i>RSM</i> , 3-8
LG, 10-37	Structures
semantics, LG, 12-16	dollar sign usage in names, LG, 11-4
syntax, <i>LG</i> , 12-15	specifying names, LG, 11-4
Storage allocation	Structures, unamed
array components, LG, 8-9	descriptors, LG, 11-4
BIT attribute, LG, 10-6	STRUCTURES parameter
BYTE attribute, <i>LG</i> , 10-7	configuration file, RT SUG, 3-11
common variables, LG, 10-27	Subexpressions
dynamic data, <i>LG</i> , 8-8, 10-9	definition, <i>LG</i> , 3-1
PACKED modifier, LG, E-1	Subprogram block, LG, 6-15
POS attribute, <i>LG</i> , 10-28	
	function identifiers, LG, 6-17
rules, LG, E-1	Subprogram declarations, LG, 6-3
stack, LG, 10-33	Subprograms
variables, LG, 10-33, 10-34	body, <i>LG</i> , 6-2
WORD attribute, LG, 10-42	calling sequence, LG, 6-20
Storage limitations	concepts, LG, 6-1
during compilation, LG, H-1	declaration nesting levels, LG, 6-2
STPC\$ primitive	default parameters, LG, 6-24
argument block, RSM, 3-170	definition, LG, 1-3
description, RSM, 3-169	recursive, LG, 6-19
error returns, RSM, 3-170	Subprogram table
semantics, RSM, 3-170	compile-time limitations, LG, H-6
syntax, <i>RSM</i> , 3-169	Subrange types, LG, 2-5
syntax example, RSM, 3-170	symbol, LG, 2-5
STREAM_MODE option, LG, 15-9	Subroutine calling
Strings	MACRO-11 conventions, RSM, B-1
comparing, LG, 3-13	SEQ11 conventions, RSM, B-3
constants, LG, 2-14, 3-8	Successor value
data types, LG, 2-14	SUCC function, LG, 8-13
operators, LG, 3-13	SUCC function, LG, 2-2
representation, LG, 2-3	SUPEIS.OLB, SUPFPP.OLB, RSX SUG,
Structured constants, LG, 3-3	8-1
	Supervisor-mode
examples, LG, 3-4	
rules, LG, 3-4	build cycle, RT SUG, 6-6
Structured data types, LG, 2-1	mapping, RSM, 2-26
ARRAY, LG, 2-11	memory mapping, RSM, 2-34

Supervisor-mode (cont a.)	Syntax (cont a.)
shared library, RT SUG, 6-4, 6-5;	errors, source code, INTRO, 6-3
RSX SÚG, 6-4	summary, LG, B-1
kernel configuration, RSX SUG,	SYS file
6-1	MKBOOT program, RSX SUG, 13-3
referencing, RSX SUG, 6-13	13-5
shared library, referencing, RT SUG,	System architecture, I/O, IOSM, 1-3
6-14	SYSTEM attribute, INTRO, 5-3
Suspended process, INTRO, 4-5, 4-6	entities applicable to, LG, F-2
state, INTRO, 4-5	overview, LG, 10-36
SUSPEND function, INTRO, 3-12, 4-5	syntax, <i>LG</i> , 10-36
error returns, LG, 12-19	System-common memory, RSM, 2-48
overview, LG, 12-18	System configuration file, RT SUG, 1-4
semantics, LG, 12-19	2-5; RSX SUG, 1-4, 2-7
syntax, LG, 12-18	configuration macros, RSM, 4-1
Suspending a process, LG, 12-18	debugging support macro, SYSTEM,
SUSPEND operation, RSM, 2-15	RSM, 4-21
Suspension count	functions, RSM, 4-2
decrementing, LG, 12-19	interrupt vectors, RSM, 7-6
incrementing, LG, 12-19	MAC, RT SUG, 2-5
maximum value, LG, 12-19	macro calls, RT SUG, 3-2
\$SV02 subroutine (Save/Restore	/MAP option, RT SUG, 2-5
registers), IOSM, 15-34	MERGE utility, RT SUG, 9-6
\$SV03 subroutine (Save/Restore	terminate macro, ENDCFG, RSM,
registers), IOSM, 15-34	4-5
\$SV05 subroutine (Save/Restore	System control registers
registers), IOSM, 15-34	two-port RAM registers (TPR),
Switch	IOSM, B-18
system ID, IOSM, B-15	System data structures, RSM, 2-35
Symbol definition file, MPSETUP.COM,	accessing, LG, 10-14
RSX SUG, 1-10	binary semaphore, LG, 13-1
Symbolic constant	counting semaphore, LG, 13-1
definition, LG, 1-2	queue semaphore, LG, 14-1
Symbolic debugger	ring buffer, LG, 15-1
See PASDBG	System ID switch, IOSM, B-14
Symbolic debugging	selecting, IOSM, B-15
compiler options, RT SUG, 8-11	System libraries
Symbols, externally defined	FILSYS.OBJ, RT SUG, 5-4
device driver, IOSM, 14-12	logical disk, LB:, RT SUG, 1-8
Symbols, special, LG, 1-7	object modules, INTRO, 6-6
Symbol table	SYSTEM macro
PASDBG, INTRO, 6-7	configuration file, RT SUG, 3-7;
Symbol table file	RSX SUG, 13-3
See STB files	DEBUG parameter, RT SUG, 3-12
Synchronization, INTRO, 1-3, 1-4	description, RSM, 4-21
Synchronous serial I/O	example, RSM, 4-23
XP driver, IOSM, 13-4	NETBOOT option, RSX SUG, 13-3,
XS driver, IOSM, 13-4	13-5
Syntax	NETTRIGGER option, RSX SUG,
address expressions, DUG, 2-2, 2-3	13-3, 13-5
command line, DUG, 2-2	OPTIMIZE parameter, RT SUG,
defining symbols, DUG, 2-2	3-11, 3-1 2
DO lists, DUG, 2-2, 2-7	parameters, RSM, 4-22

SYSTEM macro (cont'd.)	Target system (cont'd.)
syntax, RSM, 4-22	functions, INTRO, 2-4
System macro libraries	hardware requirements, INTRO, 2-4
COMM.SML, RT SUG, 3-3, 4-4	instruction set, RT SUG, 5-4
COMU.SML, <i>RT SUG</i> , 3-3, 4-4	loading and starting, IOSM, B-15
_	memory management, INTRO, 2-5
System processes	
Ancillary Control Process (ACP),	obtaining configuration file data, LG,
INTRO, 1-5	20-9
build cycle, RT SUG, 4-1	RAM-only, RT SUG, 1-8
device driver, INTRO, 1-5, 3-2; RT	ROM/RAM environment, RT SUG,
SUG, 4-2	1-8
DIGITAL-supplied, RT SUG, 4-1;	supervisor mode, RSM, 1-14
<i>RSM</i> , 1-2	supported devices, INTRO, 2-5
/D option, RT SUG, 4-5	Task-to-task communication
MIB utility, RT SUG, 4-6, 4-7	Network Service Process (NSP),
MPBUILD dialog, RSX SUG, 2-4,	IOSM, 11-2
2-10	sample program, IOSM, 11-11,
Network Service Process (NSP),	11-13
INTRO, 1-5	TD, DUG, A-5
overview, RT SUG, 1-4; RSX SUG,	definition, DUG, A-1
1-4; RSM, 1-13	TD: logical device for debugging
prefix module, RT SUG, 4-2	assignment, DUG, A-2
relocating	errors, DUG, A-4
mapped, RSX SUG, 4-6	setting protection, DUG, A-2
unmapped, RSX SUG, 4-6	setting speed, DUG, A-3
System-process phase	TERMINATE attribute, INTRO, 3-3
MPBLD dialog, RT SUG, 2-3, 2-8	entities applicable to, LG, F-2
System services	overview, LG, 10-37
kernel, INTRO, 1-2	STOP procedure, LG, 12-15
System time	syntax, <i>LG</i> , 10-37
calcuation, LG, 19-1	Termination procedures, LG, 10-37
clock time record format, LG, 19-2	device driver, IOSM, 14-18
get primitive, GTIM\$, RSM, 3-84	Terse mode
set primitive, STIM\$, RSM, 3-167	definition, DUG, 2-12
	_
setting and maintaining, LG, 19-1	Tests
setting and obtaining, LG, 19-1	automatic self-tests, IOSM, B-18
T	dedicated off-line, IOSM, B-19
	loopback, IOSM, B-19
Target communication line	obtaining status information, IOSM,
See Communication line	B-18
Target interface specification, DUG,	Text
D-1	inserting files, LG, 7-5
Target system, INTRO, 1-2; RT SUG,	TEXT file data type, LG, 2-18
	TMSCP tape I/O, IOSM, 5-2
1-1, 1-2; RSX SUG, 1-1, 1-2	/T option
application development, INTRO,	MERGE utility, RT SUG, 9-15
1-2, 2-1	TPR
bootstrap requirements, RT SUG,	See Two-port RAM registers (TPR)
11-12	Tracepoint number, DUG, 3-19
Central Processing Unit (CPU),	Tracepoints
INTRO, 4-1	used as address expressions, DUG,
Debugger Service Module (DSM),	
INTRO 6-7	2-4

TRANSLATE_LOGICAL_NAME	Two-port RAM registers (TPR) (cont'd.)
procedure	enabling, IOSM, B-14
error returns, LG, 20-15	peripheral processor, IOSM, B-2
overview, LG, 20-14	selecting base address, IOSM, B-14
semantics, LG, 20-15	system control registers, IOSM, B-18
syntax, LG, 20-14	TXT
	data block records, RT SUG, 9-1
Translation string	
obtaining logical name, LG, 20-14	Type cast operator
TRAPS macro, IOSM, B-39	mixing data types, LG, 3-17
arguments, RSM, 4-24	Type code
description, RSM, 4-23	binary semaphore, LG, 13-26
example, RSM, 4-24	counting semaphore, LG, 13-26
syntax, RSM, 4-24	TYPE declaration, LG, 1-2
TRLN\$ primitive, RSM, 3-10	heap allocation, LG, H-1
argument block, RSM, 3-172	11
description, RSM, 3-171	U
error returns, RSM, 3-173	IIMAP\$ primitivo
implementation notes, RSM, 3-173	UMAP\$ primitive
restrictions, RSM, 3-172	argument block, RSM, 3-175
	description, RSM, 3-174
semantics, RSM, 3-172	error returns, RSM, 3-176
syntax, RSM, 3-171	restrictions, RSM, 3-175
syntax example, RSM, 3-172	semantics, RSM, 3-176
TRUE Boolean values, LG, 2-4	syntax, <i>RSM</i> , 3-174
string expressions, LG, 3-13	syntax example, <i>RSM</i> , 3-175
Truncating	Unformatted data structure
LTRUNC function, LG, 8-8	definition, RSM, 2-45
SHORT function, LG, 8-12	Unique identifier table
TRUNC function, LG, 8-13	compile-time limitations, LG, H-7
USHORT function, LG, 8-16	UNLOCK_MUTEX procedure
UTRUNC function, LG, 8-16	error returns, LG, 13-37
TT driver	overview, LG, 13-36
features and capabilities, IOSM, 3-1	semantics, LG, 13-36
Get Characteristics function, IOSM,	
3-10	syntax, LG, 13-36
prefix file, IOSM, 3-18	UNMAP_WINDOW procedure
Read function, <i>IOSM</i> , 3-8	error returns, LG, 18-33
	overview, LG, 18-32
request/reply packet interface, IOSM, 3-5	semantics, LG, 18-33
	syntax, RSM, 5-8; LG, 18-32
Set Characteristics function, <i>IOSM</i> ,	Unmapped
3-10	applications, RSX SUG, 4-6, 6-3
Set Modem Semaphore function,	memory image, RSX SUG, 5-7
IOSM, 3-16	static processes
status codes, IOSM, 3-17	relocating, RSX SUG, A-5
Stop Request function, IOSM, 3-17	Unmapped-memory environment
Write function, <i>IOSM</i> , 3-9	allocating memory, LG, 18-7
TU58 DECtape II	deallocating memory, LG, 18-14
bootstrap loader, IOSM, B-18	region-sharing, LG, 18-3
external file storage, LG, 9-5	Unmapped target
Two-port RAM registers (TPR)	DRVU.OBJ, RT SUG, 4-2
communication	memory access, RSM, 2-26
KK driver, IOSM, 13-5	region allocation, RSM, 3-21
KX driver, IOSM, 13-5	
disabling, IOSM, B-14	shared region, RSM, 3-13
,,,	UNPROTECT_FILE procedure

UNPROTECI_FILE procedure (cont a.)	User processes (cont a.)
error returns, LG, 9-45	primitive services, RSM, 1-2
overview, LG, 9-45	User-process phase
syntax, LG, 9-45	build cycle, RT SUG, 2-9
UNSAFE attribute	MPBLD dialog, RT SUG, 2-3, 2-9
entities applicable to, LG, F-2	Utility programs
formal parameters, LG, 6-24	MERGE, RSX SUG, 2-2
overview, LG, 10-38	MIB, RSX SUG, 2-2
syntax, LG, 10-38	overview, RT SUG, 1-3; RSX SUG,
value parameters, LG, 6-6	1-3
UNSIGNED data types, LG, 2-3	RELOC, RSX SUG, 2-2
constants, LG, 3-3	Utility routines
storage allocation rules	overview, <i>LG</i> , 8-1
packed, LG, E-2	V
unpacked, LG, E-1	V
Unsigned numbers	VAL_LENGTH parameter, INTRO,
conversion for input, LG, 9-38	4-10
conversion for output, LG, 9-51	VALUE parameter, INTRO, 4-3
/U option	Value parameters, LG, 6-6
RELOC utility, RT SUG, 10-19	Values
unmapped application, RT SUG, 4-4	
Uppercase characters	function result, LG, 6-17
process and structure names, LG,	predefined identifiers, LG, G-1
11-4	Value semantics, LG, 6-6
User library	Value test
object module, RT SUG, 5-5	ODD function, LG, 8-10
User-mode	VAR declaration, LG, 1-2
build cycle, RT SUG, 6-7	heap allocation, LG, H-1
	Variables
mapping, RSM, 2-26	actual value parameters, LG, 6-24
multiple shared libraries, RT SUG,	declaring, LG, 3-2, 4-4
6-13	declaring side effect on, LG, 10-40
shared library, RT SUG, 6-4, 6-5;	definition, LG, 1-2, 3-2
RSX SUG, 6-4	dynamic, LG, 2-19
absolute, RSX SUG, 6-5, 6-9	establishing data type, LG, 1-2
referencing, RSX SUG, 6-14	external, LG, 10-15
relocatable, RSX SUG, 6-5, 6-8	formal parameters, LG, 6-8
shared library, mapped, RT SUG,	global, <i>LG</i> , 10-17
6-8	initializing, LG, 3-5
shared library, unmapped, RT SUG,	pointer type
6-7	binding to base type, LG, 2-19
User processes	nrogram lovel IC 2.10
assembling, RT SUG, 5-4; RSX	program-level, LG, 2-19
SUG, 5-3	reading from a file, LG, 9-34
build cycle, RT SUG, 5-1	routine-level, LG, 2-19
COMM.SML, RT SUG, 5-4	semantics, LG, 6-8
compiling, RT SUG, 5-3; RSX SUG,	sharing declarations, LG, 10-27
5-3	specifying storage address, LG, 10-5
	specifying storage allocation, LG,
COMU.SML, RT SUG, 5-4	10-34
/D option, RT SUG, 5-4	storage allocation, LG, 2-19
/I option, RT SUG, 5-4	subprogram blocks, LG, 6-15
MERGE utility, RT SUG, 5-5	Variant clauses, LG, 2-9
MPBUILD dialog, RSX SUG, 2-4,	VAR parameters
2-11	declaring, LG, 6-8

VAR parameters (cont'd.)	WAIQ\$ primitive (cont'd.)
file variables, LG, 6-25	restrictions, RSM, 3-184
passing files, LG, 2-16	semantics, RSM, 3-184
VAR semantics	syntax, RSM, 3-183
actual parameter, LG, 6-25	syntax example, RSM, 3-184
Virtual address	WAIT\$ primitive
See Address expression	argument block, RSM, 3-187
Virtual array	description, RSM, 3-186
program segment, RSM, 5-16	error returns, RSM, 3-187
Virtual memory	restrictions, RSM, 3-186
allocation, LG, 18-22	semantics, RSM, 3-187
deallocation, LG, 18-32	syntax, RSM, 3-186
obtaining mapping data, LG, 18-19	syntax example, RSM, 3-187
restoring previous environment, LG,	WAIT_ANY function
18-28	error returns, LG, 13-42
saving mapping context, LG, 18-30	implementation notes, LG, 13-43
VM driver	overview, LG, 13-40
Get Characteristics function, IOSM,	semantics, LG, 13-41
4-24	syntax, LG, 13-40
Logical Read function, IOSM, 4-24	WAIT_EXCEPTION procedure
Logical Write function, IOSM, 4-24	error returns, LG, 17-25
VMS operating system, LG, 1-1	overview, LG, 17-24
VOLATILE attribute	semantics, LG, 17-25
entities applicable to, LG, F-2	syntax, LG, 17-24
overview, LG, 10-40	WAIT_EXCEPTION statement, INTRO,
syntax, LG, 10-40	4-11
/V option MERGE utility, RT SUG, 9-16	Wait on semaphore primitive
DELOC Hiller DT CLC 10.20	any, WAIA\$, RSM, 3-177
RELOC utility, RT SUG, 10-20	any queue, WAQA\$, RSM, 3-188
W	binary, WAIT\$, RSM, 3-186
	conditional, WAIC\$, RSM, 3-181
WAIA\$ primitive	conditional queue, WAQC\$, RSM,
argument block, RSM, 3-178	3-192
description, RSM, 3-177	counting, WAIT\$, RSM, 3-186
error returns, RSM, 3-179	queue, WAIQ\$, RSM, 3-183
implementation notes, RSM, 3-179	WAIT procedure, INTRO, 4-4, 5-8
restrictions, RSM, 3-178	conditional, INTRO, 4-4
semantics, RSM, 3-179	error returns, LG, 13-39
syntax, RSM, 3-177	mutual-exclusion mechanism,
syntax example, RSM, 3-179	INTRO, 4-4
WAIC\$ primitive	overview, LG, 13-38
argument block, RSM, 3-182	process synchronization, INTRO,
description, RSM, 3-181	4-4
error returns, RSM, 3-182	semantics, LG, 13-39
restrictions, RSM, 3-181	syntax, LG, 13-38
semantics, RSM, 3-182	WAQA\$ primitive
	argument block, RSM, 3-190
syntax, RSM, 3-181	description, RSM, 3-188
syntax example, RSM, 3-182	error returns, RSM, 3-191
WAIQ\$ primitive, RSM, 6-14	implementation notes, RSM, 3-191
applications, RSM, 3-185	restrictions, RSM, 3-189
argument block, RSM, 3-184	semantics, RSM, 3-190
description, RSM, 3-183	syntax, RSM, 3-188
error returns, RSM, 3-185	3y11.ux, 101/1, 5 100

WAQA\$ primitive (cont'd.)	XA driver (cont'd.)
syntax example, RSM, 3-190	Get Characteristics function, IOSM,
WAQC\$ primitive	6-30
argument block, RSM, 3-193	prefix file, IOSM, 6-45
description, RSM, 3-192	Read function, IOSM, 6-29
error returns, RSM, 3-194	Write function, IOSM, 6-29
restrictions, RSM, 3-193	XD driver
semantics, RSM, 3-193	build cycle, RT SUG, B-1; RSX SUG
syntax, RSM, 3-192	B-1
syntax example, RSM, 3-193	Get Characteristics function, IOSM,
Warm start	4-20
power failure, LG, 20-12	Logical Read function, IOSM, 4-19
Warning messages	Logical Write function, IOSM, 4-19
compiler options, RT SUG, 8-14	source code, IOSM, 4-31
suppression, RT SUG, 8-14	XE driver
Watchpoint number, DUG, 3-20	Auxiliary Command function, IOSM,
WHILE statement, LG, 5-21	10-31
Windowing mode, DUG, 2-13	features and capabilities, IOSM,
WITH statement, LG, 5-23	10-3
/W option	Get Characteristics function, IOSM,
RELOC utility, RT SUG, 10-20	10-25
WORD attribute	Get Control function, IOSM, 10-33
entities applicable to, LG, F-2	Go to Standby Function, IOSM,
overview, LG, 10-42	10-33
syntax, LG, 10-42	IEQ_AUX_COMMAND procedure,
WRITE_PIO procedure, IOSM, 6-8	IOSM, 10-14
WRITE_TAPÊ_MARK procedure,	IEQ_COMMAND procedure, IOSM,
IOSM, 5-7	10-10
WRITE_TAPE procedure, IOSM, 5-5	<pre>IEQ_CONTROL_GTS procedure,</pre>
WRITELN procedure	IOSM, 10-16
error returns, LG, 9-49	IEQ_PARALLEL_CONFIG
I/O server buffering, LG, 9-9	procedure, IOSM, 10-13
integer conversion functions, LG,	IEQ_PARALLEL_LOAD procedure,
9-51	IOSM, 10-13
overview, LG, 9-48	<pre>IEQ_PARALLEL_POLL procedure,</pre>
syntax, LG, 9-48	IOSM, 10-12
WRITEONLY attribute	IEQ_PASS_CONTROL procedure,
entities applicable to, LG, F-2	IOSM, 10-17
overview, LG, 10-43	<pre>IEQ_REQ_SERVICE procedure,</pre>
syntax, LG, 10-43	IOSM, 10-15
WRITE procedure	IEQ_SERIAL procedure, IOSM,
error returns, LG, 9-47	10-11
I/O server buffering, LG, 9-9	Load Parallel Poll Register function,
integer conversion functions, LG,	IOSM, 10-29
9-51	Parallel Poll Configure function,
overview, LG, 9-46	IOSM, 10-30
syntax, LG, 9-46	Parallel Poll function, <i>IOSM</i> , 10-29
Sylitax, LG, 9-40	Pass Control function, IOSM, 10-29
X	
	prefix file, IOSM, 10-39
XA driver	READ_IEQ procedure, IOSM, 10-6 Read Logical function, IOSM, 10-23
Disable function, <i>IOSM</i> , 6-31	Read Logical function, IOSM, 10-23
Enable function, IOSM, 6-30	REC_IEQ_EVENT procedure, IOSM
	10-18

XE driver (cont'd.)	XL driver
Recognize Event function, IOSM,	PDP-11 (cont'd.)
10-36	report data-set status change
Request Service function, IOSM,	function, IOSM, C-4
10-32	set status function, IOSM, C-5
Serial Poll function, IOSM, 10-28	status codes, IOSM, C-12
SET_INT_MASK procedure, IOSM,	write function, <i>IOSM</i> , C-3
10-17	peripheral processor, <i>IOSM</i> , C-17
SET_STATE function, IOSM, 10-8	connect receive ring buffer
Set Characteristics function, IOSM,	function, IOSM, C-19
10-25	connect transmit ring buffer
Set Event Mask function, IOSM,	function, IOSM, C-19
10-34	device-independent function
status codes, IOSM, 10-38	modifiers, IOSM, C-20
Wait for Event function, IOSM,	disconnect receive ring buffer
10-36	function, IOSM, C-19
WRITE_EOI_IEQ procedure, IOSM,	disconnect transmit ring buffer
10-9	function, IOSM, C-20
WRITE_IEQ procedure, IOSM, 10-7	functions provided, IOSM, C-18
Write function, IOSM, 10-24	get status function, IOSM, C-20
Write IEEE Remote Messages	read function, IOSM, C-19
function, IOSM, 10-27	report data-set status change
Write with EOI Termination	function, IOSM, C-20
function, IOSM, 10-24	set status function, IOSM, C-20
XL driver	write function, <i>IOSM</i> , C-19
block-mode read function, IOSM,	Report Data-Set Status Change
C-21	function, IOSM, C-28
block-mode write function, <i>IOSM</i> , C-21	Ring Buffer Disconnect function, IOSM, C-22
connect receive ring buffer function, <i>IOSM</i> , C-21	Set Status function, IOSM, C-22
	status codes, <i>IOSM</i> , C-28 /X option
connect transmit ring buffer function, IOSM, C-21	
	MERGE utility, RT SUG, 9-16
function-dependent request formats,	Page Address Register (PAR), RT
IOSM, C-5, C-20	SUG, 5-7
Get Status function, <i>IOSM</i> , C-25 KXT11–CA	RELOC utility, RT SUG, 5-6, 10-20 XP-driver
prefix file, IOSM, C-28	Disable function, IOSM, 13-19
PDP-11, IOSM, C-1	Enable function, IOSM, 13-19
connect receive ring buffer	Get Characteristics function, <i>IOSM</i> ,
function, IOSM, C-4	13-20 prefix file, <i>IOSM</i> , 13-27
connect transmit ring buffer	
function, IOSM, C-4	Read function, IOSM, 13-19
device-independent function modifiers, IOSM, C-5	Set Modem Semaphore function, <i>IOSM</i> , 13-21
disconnect receive ring buffer	
0	Stop function, IOSM, 13-21
function, <i>IOSM</i> , C-4 disconnect transmit ring buffer	synchronous serial I/O, <i>IOSM</i> , 13-4 Write function, <i>IOSM</i> , 13-19
	XS driver
function, <i>IOSM</i> , C-4 functions, <i>IOSM</i> , C-3	Disable function, <i>IOSM</i> , 13-19
get status function, IOSM, C-5	Enable function, IOSM, 13-19
prefix file, IOSM, C-12	Get Characteristics function, <i>IOSM</i> ,
read function, IOSM, C-3	13-20

XS driver (cont'd.)
prefix file, IOSM, 13-27
Read function, IOSM, 13-19
Set Modem Semaphore function,
IOSM, 13-21
Stop function, IOSM, 13-21
synchronous serial I/O, IOSM, 13-4
Write function, IOSM, 13-19
XTAD\$ macro (Compute Bus Extended
Address), IOSM, 15-23
•
Υ
YA driver
build cycle, RT SUG, B-2; RSX SUG,
B-2
Get Characteristics function, IOSM,
6-32
prefix file, IOSM, 6-47
Pood function IOSM 6 21
Read function, IOSM, 6-31
Write function, <i>IOSM</i> , 6-31
YB driver
Get Characteristics function, IOSM,
6-36
prefix file, IOSM, 6-48
Read function, IOSM, 6-33
Set Characteristics function, IOSM,
6-35
Write function, IOSM, 6-33
YF driver
Get Characteristics function, IOSM,
6-37
prefix file, IOSM, 6-48
Read function, IOSM, 6-36
Write function, IOSM, 6-36
YK_CLEAR_TIMER function, IOSM,
6-21
YK_PORT_READ function, IOSM,
6-10
YK_PORT_WRITE function, IOSM,
6-11
YK_READ_TIMER function, IOSM,
6-20
YK_SET_PATTERN function, IOSM,
6-12
YK_SET_TIMER function, IOSM, 6-19
YK driver
Clear Timer function, <i>IOSM</i> , 6-43
DMA Complete function, IOSM,
6-41
DMA Read function, IOSM, 6-41
DMA Write function, <i>IOSM</i> , 6-41
Get Characteristics function, IOSM,
6-39
U-37

```
YK driver (cont'd.)

prefix file, IOSM, 6-50
Read function, IOSM, 6-38
Read Timer function, IOSM, 6-43
Set Pattern function, IOSM, 6-40
Set Timer function, IOSM, 6-42
Write function, IOSM, 6-38
/Y option
RELOC utility, RT SUG, 10-21

Z
/Z option
RELOC utility, RT SUG, 10-22
```

HOW TO ORDER ADDITIONAL DOCUMENTATION

From	Call	Write
Alaska, Hawaii, or New Hampshire	603-884-6660	Digital Equipment Corporation P.O. Box CS2008
Rest of U.S.A. and Puerto Rico*	800-258-1710	Nashua, NH 03061
* Prepaid orders fro 7575)	m Puerto Rico must	be placed with DIGITAL's local subsidiary (809-754-
Canada	800–267–6219 (for software documentation) 613–592–5111 (for hardware documentation)	Digital Equipment of Canada Ltd. 100 Herzberg Road Kanata, Ontario, Canada K2K 2A6 Attn: Direct Order desk
Internal orders (for software documentation)		Software Distribution Center (SDC) Digital Equipment Corporation Westminster, MA 01473
Internal orders (for hardware documentation)	617–234–4323	Publishing & Circulation Serv. (P&CS) NR03-1/W3 Digital Equipment Corporation Northboro, MA 01532

or Country

READER'S COMMENTS

Note: This form is for document comments only. DIGITAL will use comments submitted on this form at the company's discretion. If you require a written reply and are eligible to receive one under Software Performance Report (SPR) service, submit your comments on an SPR form.

	ou find this manual understa vement.	andable, usable, and well organized?	Please make suggestions for
			
Did yo	ou find errors in this manual?	? If so, specify the error and the pag	e number.
			·
Please	indicate the type of user/re ☐ Assembly language pro ☐ Higher-level language pro ☐ Occasional programmer ☐ User with little program ☐ Student programmer ☐ Other (please specify)	rogrammer r (experienced) nming experience	
Name	. , ,		
Organi	zation		
Street	·		
City _		State	Zip Code



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

DIGITAL EQUIPMENT CORPORATION CORPORATE USER PUBLICATIONS MLO5-5/E45 146 MAIN STREET MAYNARD, MA 01754-2571

Do Not Tear — Fold Here