

Program Product

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM
©Copyright IBM Corp. 1985
LC28-1388-0
File No. S370-37

**MVS/370 System
Programming Library:
Debugging Handbook
Volume 4
Data Areas N-R**

**MVS/System Product
JES3 5740-XYN
MVS/System Product
JES2 5740-XYs**

IBM

First Edition (July, 1985)

This edition applies to Version 1 Release 3.5 of MVS/System Product - JES2 5740-XYS and of MVS/System Product - JES3 5740-XYN until otherwise indicated in new editions or technical newsletters. See the Summary of Amendments following the Contents for a summary of the enhancements made in this manual. Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the *System/370 Bibliography*, GC20-0001, for the editions that are applicable and current.

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM program product in this publication is not intended to state or imply that only IBM's program product may be used. Any functionally equivalent program may be used instead.

Publications are not stocked at the address given below. Requests for IBM publications should be made to your IBM representative or to the IBM branch office serving your locality.

A form for reader's comments is provided at the back of this publication. If the form has been removed, comments may be addressed to IBM Corporation, Information Development, Department D58, Building 921-2, PO Box 390, Poughkeepsie, N.Y. 12602. IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

This document contains restricted materials of International Business Machines Corporation.

© Copyright International Business Machines Corporation 1980, 1985

Preface

This handbook provides reference information for use in debugging user or system programs. The user of this publication should have a working knowledge of MVS/370 functions and logic. It is intended for system programmers who are involved with debugging MVS system problems.

The handbook is divided into five volumes:

Volume 1 (LC28-1385)

- **Chapter 1. Problem Categories and Analysis** describes an approach to debugging based on identification and analysis of system status indicators.
- **Chapter 2. Debugging Aids** summarizes major MVS/370 debugging aids.
- **Chapter 3. Dump and Trace Formats** describes the output of debugging aids summarized in Section 2.
- **Chapter 4. Error Indicators** summarizes major system error indicators.
- **Chapter 5. General Reference** provides general reference information useful for debugging purposes.
- **Chapter 6. Control Block Chains** illustrates the logical relationships of major system data areas.

Volume 2 (LC28-1386)

- **Data Areas A-D** Describes the format of the data areas, and includes data areas frequently used in debugging.

Volume 3 (LC28-1387)

- **Data Areas E-M** Describes the format of the data areas, and includes data areas frequently used in debugging.

Volume 4 (LC28-1388)

- **Data Areas N-R** Describes the format of the data areas, and includes data areas frequently used in debugging.

Volume 5 (LC28-1389)

- **Data Areas S-Z** Describes the format of the data areas, and includes data areas frequently used in debugging.

Contents

Data Area Descriptions	1	QFPL	173
NVT	1	QFPL1	174
ORE	15	QHT	176
OUCB	18	QWA	178
OUSB	27	QXB	189
OUXB	29	RB	191
PARS	33	RCA	210
PART	35	RCT	217
PAT	40	RDCM	222
PCB	41	RIB	228
PCCA	46	RMCA	232
PCCAVT	60	RMCT	236
PCCB	62	RMEP	242
PCCW	64	RMEX	244
PCT	77	RMPT	246
PDS	79	RMSB	248
PDS2	83	RNLE	251
PEL	87	RPL	252
PEXB	91	RPT	262
PFTE	93	RQE	264
PGTE	97	RSA	267
PICA	99	RSC	272
PIE	101	RSL	275
PQCB	103	RSMHD	279
PQE	106	RSP	282
PRMESTAE	108	RST	283
PSA	110	RSV	286
PSCB	146	RTCT	302
PVT	148	RTM2WA	319
QCB	168	RTSD	341
QDB	170	RT1W	345
QEL	171	RWA	350

Summary of Amendments

**Summary of Amendments
for LC28-1388-0
as Updated July, 1985
by a major revision.
This edition supports
Version 1 Release 1.3.5 of MVS/System Product**

The new or changed data areas included are:

OUCB	PCT	QEL	RNLE
OUXB	PEL	QWA	RSA
PARS	PFTE	RCA	RSL
PART	PSA	RCT	RSMHD
PCCA	PVT	RMCT	RSV

Also, minor technical and editorial changes were made throughout the publication.

DATA AREA DESCRIPTIONS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NVT

Common Name : NIP Vector Table

Macro ID : IHANVT

DSECT Name : NVT

Created by : IEAVNIPO, IEAVNIPM

Subpool and Key : Nucleus, then moved to subpool 252 and key 0

Size : 552 bytes

Pointed to by : Register 2 during NIP processing

Serialization : None

Function : The NVT is the basic control block used during NIP processing. It contains pointers to numerous NIP-associated control blocks and to various NIP service routines.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	552	NVT	BEGIN BASED NVT
0	(0) ADDRESS	4	NVTIPLU	IPL UNIT ADDRESS
4	(4) ADDRESS	4	NVTICPU	IPL CPU ADDRESS
8	(8) ADDRESS	4	NVTALTN	ALT IPL PARMS
12	(C) ADDRESS	4	NVTALTRT	ALT NUC RTN
16	(10) ADDRESS	4	NVTALTV	ALT NUC INDICATR
20	(14) CHARACTER	4	NVTID	CONTROL BLOCK ID
24	(18) CHARACTER	28	NVTNPSUF	RESERVED
52	(34) CHARACTER	1		RESERVED
53	(35) ADDRESS	1	NVTNPSFX	INDEX TO NPSUF THIS LOAD

NVT

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

Data Area Descriptions

NVT

1

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
54	(36) CHARACTER	1	NVTNPATR	MOD. ATTRIB. THIS LOAD
	11..		NVTNPREN	REENTRANT
	1...			RESERVED
	.1...		NVTNPREU	REUSABLE
	.11 1111			RESERVED
55	(37) CHARACTER	1	NVTFLLB	LIBRARY STATUS FLAGS
	1...		NVTFLSLB	SVCLIB, LOGREC DEFINED
	.111 1111			RESERVED

NVT POINTERS TO NUCLEUS CONTROL BLOCKS

56	(38) ADDRESS	4	NVTMSTCB	NIP/MASTER SCHEDULER TCB
60	(3C) ADDRESS	4		RESERVED
64	(40) ADDRESS	4	NVTMASCB	MASTERS ASCB ADDRESS
68	(44) ADDRESS	4	NVTHCSVC	ADDRESS OF MSSF SVC BRANCH ENTRY POINT
72	(48) ADDRESS	4	NVTRSV42	RESERVED
76	(4C) ADDRESS	4	NVTSVCTB	ADDRESS OF SVC TABLE
80	(50) ADDRESS	4	NVTVBSDL	BLDL TABLE PTR ADDRESS
84	(54) ADDRESS	4	NVTIGCER	SVC ERROR ROUTINE ADDR
88	(58) ADDRESS	4	NVTVVMDI	LPA HASH VALUE ADDRESS
92	(5C) ADDRESS	4	NVTMSLNK	LINK PARMLIST ADDRESS
96	(60) ADDRESS	4	NVTDSSNG	DSS MASK OUT RTN ADDRESS
100	(64) ADDRESS	4	NVTMFA	ADDRESS OF SYSTEM MFA RTN
104	(68) ADDRESS	4	NVTNVRSZ	NIP REGION UPPER LIMIT
108	(6C) ADDRESS	4	NVTRSV49	RESERVED

NVT

2 MVS/370 Debug Hdbk Vol 4

NVT

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
----------------	-------------	---------------	-------------	--------------------

VIRTUAL ADDRESS OF SEGMENT TABLE

112	(70) ADDRESS	4	NVTVST0	FOR PLPA PROTECTION SUPPORT
116	(74) ADDRESS	4	NVTIGXER	ESR ERROR ROUTINE
120	(78) SIGNED	4	NVTLNGFX	RSM LONG FIX AREA SIZE
124	(7C) ADDRESS	4	NVTLSQAS	END OF MASTERS LSQA
128	(80) SIGNED	2	NVTSQANO	NO. INITIAL SQA PAGES
130	(82) SIGNED	2	NVTLSQNO	NO. OF LSQA PAGES TO FIX
132	(84) SIGNED	2	NVTRGNAV	NO. OF AVAILABLE PAGES
134	(86) SIGNED	2	NVTNBMIN	MINIMUM NUC. BUF. PAGES
136	(88) SIGNED	2	NVTRSVMN	MINIMUM RESRVD PAGES
138	(8A) SIGNED	2	NVTNVSQA	NUMBER OF VIRT SEG OF SQA

NVT SAVE AREAS - NUCLEUS CONTROL BLOCKS

140	(8C) CHARACTER	8	NVTABSAV	SVC TABLE SVC 13
140	(8C) ADDRESS	4	NVTABFST	
144	(90) CHARACTER	4	NVTABSEC	
148	(94) CHARACTER	8	NVTSVC60	SAVEAREA FOR SVC 60
156	(9C) SIGNED	4	NVTPQSAV	PVT ENTRY GET SQA PAGE
160	(A0) ADDRESS	4	NVTALSQA	LOW ADDR OF M.S. LSQA

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
164	(A4) ADDRESS	4	NVTLSPQE	ADDR OR SPQE FOR LSQA
168	(A8) ADDRESS	4	NVTMFASA	SA OF MFA ROUTINE ADDR
172	(AC) ADDRESS	4	NVTRTMSA	ADDR OF RTM BRANCH ENTRY
176	(B0) ADDRESS	4	NVTSTMAP	ADDRESS OF STORAGE MAP

NVT POINTERS TO NUCLEUS ADDITIONS

180	(B4) ADDRESS	4	NVTNUCND	BUFFER NEXT AVAIL BYTE
184	(B8) ADDRESS	4	NVTNBFND	END OF NUC BUFFER ADDR
188	(BC) ADDRESS	4	NVTVVPG1	ADDRESS OF 1ST V=V PAGE
192	(C0) ADDRESS	4	NVTNOMSG	NIPO MSGS ADDRESS
196	(C4) ADDRESS	4	NVTSGPSA	PTR TO SYSGENED PSA
200	(C8) SIGNED	2		RESERVED
202	(CA) SIGNED	2	NVTNXSIZ	NIPX RESRVD AREA SIZE
204	(CC) ADDRESS	4	NVTNXPTR	NIPX NUC. RESRVD AREA PTR

NVT SYSGEN VARIABLES

208	(D0) SIGNED	2	NVTTRACE	NO. TRACE TABLE ENTRIES
210	(D2) CHARACTER	1	NVTFLSG	NVT FLAGS
	1...		NVTNPROT	PLPA PROTECTION CONTROL 1 => DO PROTECT PLPA SEGMENTS, 0 => DON'T PROTECT PLPA SEGMENTS.
	.1...		NVTSGPRT	SEGMENT PROTECTION AVAILABILITY 1 => SEGMENT PROTECTION MECHANISM AVAILABLE, 0 => SEGMENT PROTECTION MECHANISM NOT

NVT

4 MVS/370 Debug Hdbk Vol 4

NVT

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				AVAILABLE RESERVED
NVT STATUS FLAGS				
211	(D3) CHARACTER	1	NVTFLCN	MESSAGE HANDLING FLAGS
	1...		NVTFLAC	ACTIVE MASTER CONSOLE
	.1...		NVTFLIOC	COMPOSITE MASTER
	..1.		NVTMP	MP SYSTEM IPLLED
	...1		NVTFLASM	NVTNVRSZ VALUE INVALID
	.... 1...		NVTFLNHC	HARDCOPY DISCONTINUED
	.... .1..		NVTFLNCK	TOD CLOCK INOPERATIVE
	.... ..1.		NVTFLRAC	WTOR REPLY OUTSTANDING
	.... ...1		NVTCLKER	TOD CLOCK WAS IN ERROR STATE AT IPL AND HAS BEEN SET TO 0 BY NIPO
212	(D4) ADDRESS	4		RESERVED
216	(D8) CHARACTER	8	NVTMCPSW	SAVEAREA FOR M/C NEW PSW
NVT PSW DESCRIPTORS SYSTEM WAIT STATE PSW				
224	(E0) CHARACTER	8	NVTWTPSW	
SYSTEM WAIT STATE PSW - WORD 1				
224	(E0) CHARACTER	4	NVTWPSW1	
228	(E4) SIGNED	4	NVTWPSW2	PORTION NIP UPDATES
228	(E4) CHARACTER	2	NVTIDPSW	PSW ID NIP MODULE NAME
230	(E6) CHARACTER	1	NVTFLWS1	SYSTEM WSC BYTE 1

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
231	(E7) CHARACTER	1	NVTFLWSC	SYSTEM WSC BYTE 2
231	(E7) CHARACTER	1	NVTIX	ID END INITIAL NVT
NVT POINTERS TO IEAVNIPM ROUTINES				
232	(E8) ADDRESS	4	NVTLOAD	LOAD ROUTINE ADDRESS
236	(EC) ADDRESS	4	NVTSENSE	SENSE ROUTINE ADDRESS
240	(F0) ADDRESS	4	NVTWAIT	SYSTEM WAIT ROUTINE ADDR
244	(F4) ADDRESS	4	NVTTIME	TIME ROUTINE ADDRESS
248	(F8) ADDRESS	4	NVTUCBFN	UCB FIND ROUTINE ADDR
252	(FC) ADDRESS	4	NVTWTO	WTO ROUTINE ADDRESS
256	(100) ADDRESS	4	NVTWTOR	WTOR ROUTINE ADDRESS
260	(104) ADDRESS	4	NVTWTOR2	WTOR WAIT RTN
264	(108) ADDRESS	4	NVTOPEN	NIPOPEN ROUTINE ADDRESS
268	(10C) ADDRESS	4	NVTMOUNT	NIPMOUNT ROUTINE ADDRESS
272	(110) ADDRESS	4	NVTPRMPT	NIPPRMPT ROUTINE
276	(114) ADDRESS	4	NVTVIRT	NIPSWAP TO V=V ROUTINE
280	(118) ADDRESS	4	NVTREAL	NIPSWAP TO V=R ROUTINE
284	(11C) ADDRESS	4	NVTSCHED	NIP SCHEDULE ROUTINE
288	(120) ADDRESS	4	NVTOPIO	NIP OPIO ROUTINE ADDRESS
292	(124) ADDRESS	12	NVTNIPM	IEAVNIPM BASE REGS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
304 (130)	ADDRESS	4	NVTNMBLD	NIPM BLDL ENTRY
308 (134)	SIGNED	16		RESERVED
NVT POINTERS TO IEAVNIPM DEFINED CONTROL BLOCKS AND POINTERS				
324 (144)	ADDRESS	4	NVTDCBIC	INPUT CONSOLE DCB ADDR
328 (148)	ADDRESS	4	NVTDCBOC	OUTPUT CONSOLE DCB ADDR
332 (14C)	ADDRESS	4	NVTDCBSN	SYS1.NUCLEUS DCB ADDR
NVT POINTERS TO SQA BUFFERS/QUEUES				
336 (150)	ADDRESS	4	NVTMBUF	MSG BUFFER NEXT BYTE
340 (154)	ADDRESS	4	NVTMBEND	END OF NIP MSG BUFFER
344 (158)	ADDRESS	8	NVTSPE	NIPSPE QUEUE ORIGIN
NVT SAVE AREAS USED BY IEAVNIPM ROUTINES				
352 (160)	SIGNED	4	NVTTOD	TOD CLOCK HI 32 BITS
356 (164)	CHARACTER	2	NVTCPUAD	ADDRESS OF CPU WITH CLOCK
358 (166)	CHARACTER	2		RESERVED
360 (168)	SIGNED	2	NVTABCD1	LEVEL 1 ABEND CODE
362 (16A)	CHARACTER	1	NVTABWS1	NIPABEND ENTRY WS CODE
363 (16B)	CHARACTER	1		RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
---------	------	--------	------	-------------

NVT SAVE AREAS USED BY IEAVNPXX ROUTINES				
--	--	--	--	--

364	(16C) ADDRESS	4	NVTRSV43	RESERVED
368	(170) ADDRESS	4	NVTPAREA	1ST PARM AREA POINTER
372	(174) ADDRESS	4	NVTPTAB	ORIGIN OF PARM TABLE
376	(178) ADDRESS	4	NVTQSBUF	QUICK START BUFFER ADDR
380	(17C) SIGNED	2	NVTRSV44	RESERVED
382	(17E) UNSIGNED	2	NVTSPUCB	SYS1.PARMLIB UCB ADDR
384	(180) ADDRESS	4	NVTVVTCB	NIP V=V TCB ADDRESS
388	(184) ADDRESS	4	NVTVRTCB	NIP V=R TCB ADDRESS
392	(188) SIGNED	8		RESERVED FIELDS
400	(190) ADDRESS	4	NVTVRBLD	LPA BLDL ENTRY ADDR (V=R)
404	(194) ADDRESS	4	NVTBBLD	BLDL TABLE BUILD AREA
408	(198) ADDRESS	4	NVTCSLIB	SYS1.LPALIB DCB ADDRESS
412	(19C) ADDRESS	4	NVTCSLNM	CURRENT LPA NAME ADDR
416	(1A0) ADDRESS	4	NVTCSI0B	ADDR OF IOB FOR FAILING COLDSTART I/O REQUESTS
420	(1A4) ADDRESS	4	NVTCSLPG	LAST ASSIGNED ADDRESS IN COLDSTART LPA
424	(1A8) CHARACTER	1	NVTLPACT	COUNT OF LPA ROUTINES ADDED BY IEAVNIPM
425	(1A9) CHARACTER	3		RESERVED
428	(1AC) CHARACTER	8	NVTXCTL	SAVE XCTL ADDRESS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
428	(1AC) ADDRESS	4	NVTXFST	
432	(1B0) CHARACTER	4	NVTXSEC	
436	(1B4) CHARACTER	8	NVTLOCAT	SAVE LOCATE SVCENT
436	(1B4) ADDRESS	4	NVTLFST	POINTER TO SVC ROUTINE
440	(1B8) CHARACTER	4	NVTLSEC	FLAGS AND ATTRIBUTES
SAVE AREA FOR V=V TCB JPQ FIELD				
444	(1BC) ADDRESS	4	NVTVJPQ	
SAVE AREA FOR V=V TCB LLE FIELD				
448	(1C0) ADDRESS	4	NVTVLLE	
SAVE AREA FOR V=V TCB PQE FIELD				
452	(1C4) ADDRESS	4	NVTVPQE	
SAVE AREA FOR V=V TCB MSS FIELD				
456	(1C8) ADDRESS	4	NVTVMSS	

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
			SAVE AREA FOR V=R TCB JPQ FIELD	
460	(1CC) ADDRESS	4	NVTRJPQ	
			SAVE AREA FOR V=R TCB LLE FIELD	
464	(1D0) ADDRESS	4	NVTRLLE	
			SAVE AREA FOR V=R TCB PQE FIELD	
468	(1D4) ADDRESS	4	NVTRPQE	
			SAVE AREA FOR V=R TCB MSS FIELD	
472	(1D8) ADDRESS	4	NVTRMSS	
			HIGH VIRTUAL ADDRESS OF PLPA	
476	(1DC) ADDRESS	4	NVTLPAND	
480	(1E0) ADDRESS	4	NVTRSV4A	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
----------------	-------------	---------------	-------------	--------------------

CURRENT LOW VIRTUAL ADDRESS OF COMMON AREA				
--	--	--	--	--

484	(1E4)	ADDRESS	4	NVTLVIRT
-----	-------	---------	---	----------

START OF V=R REGION				
---------------------	--	--	--	--

488	(1E8)	ADDRESS	4	NVTVRREG
-----	-------	---------	---	----------

LENGTH OF V=R AREA AVAILABLE IN PAGES				
---------------------------------------	--	--	--	--

492	(1EC)	SIGNED	4	NVTVRLNG
-----	-------	--------	---	----------

496	(1F0)	CHARACTER	8	NVTRSV45	RESERVED
-----	-------	-----------	---	----------	----------

RESERVED				
----------	--	--	--	--

504	(1F8)	ADDRESS	4	RESERVED
-----	-------	---------	---	----------

SAVE AREA FOR CVTREAL VALUE CALCULATED				
--	--	--	--	--

508	(1FC)	ADDRESS	4	NVTREALR
-----	-------	---------	---	----------

512	(200)	ADDRESS	4	RESERVED
-----	-------	---------	---	----------

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION	
516	(204)	ADDRESS	4	NVTRSV46	RESERVED
520	(208)	ADDRESS	4	NVTRSV47	RESERVED
524	(20C)	ADDRESS	4	NVTRSV48	RESERVED

SYSTEM PARAMETER OPTIONS

528	(210)	CHARACTER	1	NVTFLPO	PARAMETER OPTION FLAGS
	1...	....		NVTFLST	DISPLAY PARMLIB LISTS
	.1...	....		NVTSYSP	NIPO3 IN PROMPT MODE
	..11	....			RESERVED
	.... 1...			NVTFLQS	LPA IS QUICK-STARTABLE
	.... .1..			NVTFLWS	WARM START VIO DATA SETS
	.... .11				RESERVED
529	(211)	CHARACTER	3		RESERVED
532	(214)	ADDRESS	4	NVTRCODE	
536	(218)	ADDRESS	4	NVTRLLOCK	
540	(21C)	ADDRESS	4	NVTRMSG	

LOW VIRTUAL ADDRESS OF PLPA

544	(220)	ADDRESS	4	NVTLPALO	
				LPA HASH VALUE	

548 (224) SIGNED 4 NVTLPaha

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
NVT	0		NVTIDPSW	E4		NVTNVSQA	8A	
NVTABCD1	168		NVTIGCER	54		NVTNXPTR	CC	
NVTABFST	8C		NVTIGXER	74		NVTNXSIZ	CA	
NVTABSAV	8C		NVTIPLU	0		NVTNOMSG	C0	
NVTABSEC	90		NVTIX	E7		NVTOPEN	108	
NVTABWS1	16A		NVTLFST	1B4		NVTOPIO	120	
NVTALSQA	A0		NVTLNGFX	78		NVTPAREA	170	
NVTALTN	8		NVTLOAD	E8		NVTPQSAV	9C	
NVTALTRT	C		NVTLOCAT	1B4		NVTPRMPT	110	
NVTALTV	10		NVTLPACT	1A8		NVTPTAB	174	
NVTBSDL	194		NVTLPABA	224		NVTQSBUF	178	
NVTCLKER	D3	01	NVTLPALO	220		NVTRCODE	214	
NVTCPUAD	164		NVTLPAND	1DC		NVTREAL	118	
NVTCSI0B	1A0		NVTLSEC	1B8		NVTREALR	1FC	
NVTCSLIB	198		NVTLPQEQ	A4		NVTRGNAV	84	
NVTCSLNM	19C		NVTLSQAS	7C		NVTRJPQ	1CC	
NVTCSLPG	1A4		NVTLSQNO	82		NVTRLLE	1D0	
NVTDCBIC	144		NVTLVIRT	1E4		NVTRLOCK	218	
NVTDCB0C	148		NVTMASCB	40		NVTRMSG	21C	
NVTDCBSN	14C		NVTMBEND	154		NVTRMSS	1D8	
NVTDSSNG	60		NVTMBUF	150		NVTRPQE	1D4	
NVTFLAC	D3	80	NVTMCPSW	D8		NVTRSVMN	88	
NVTFLASM	D3	10	NVTMFA	64		NVTRSV4A	1E0	
NVTFLCN	D3		NVTMFASA	A8		NVTRSV42	48	
NVTFLIOC	D3	40	NVTMOUNT	10C		NVTRSV43	16C	
NVTFLLB	37		NVTMP	D3	20	NVTRSV44	17C	
NVTFLLST	210	80	NVTMSLNK	5C		NVTRSV45	1F0	
NVTFLNCK	D3	04	NVTMSTCB	38		NVTRSV46	204	
NVTFLNHC	D3	08	NVTNBFD	B8		NVTRSV47	208	
NVTFLPO	210		NVTNBMIN	86		NVTRSV48	20C	
NVTFLQS	210	08	NVTNIPM	124		NVTRSV49	6C	
NVTFLRAC	D3	02	NVTNMBLD	130		NVTRTMSA	AC	
NVTFLSG	D2		NVTNPATR	36		NVTSCHED	11C	
NVTFLSLB	37	80	NVTNPREN	36	C0	NVTSENSE	EC	
NVTFLWS	210	04	NVTNPREU	36	40	NVTSGPRT	D2	40
NVTFLWSC	E7		NVTNPROT	D2	80	NVTSGPSA	C4	
NVTFLWS1	E6		NVTNPSFX	35		NVTSPE	158	
NVTHCSVC	44		NVTNPSUF	18		NVTSPUCB	17E	
NVTICPU	4		NVTNUCND	B4		NVTSQANO	80	
NVTID	14		NVTNVRSZ	68		NVTSTMAP	B0	

Contains Restricted Materials of IBM
 Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
NVTSVCTB	4C		NVTVLLE	1C0		NVTVVTCB	180	
NVTSVC60	94		NVTVMSS	1C8		NVTWPSW1	E0	
NVTSWAIT	F0		NVTVPQE	1C4		NVTWPSW2	E4	
NVTSYSP	210	40	NVTVRBLD	190		NVTWTO	FC	
NVTTIME	F4		NVTVRNLG	1EC		NVTWTOR	100	
NVTTOD	160		NVTVRREG	1E8		NVTWTOR2	104	
NVTTRACE	D0		NVTVRTCB	184		NVTWTPSW	E0	
NVTUCBFN	F8		NVTVST0	70		NVTXCTL	1AC	
NVTBBLDL	50		NVTVVMDI	58		NVTXFST	1AC	
NVTVIOT	114		NVTVVPGL	BC		NVTXSEC	1B0	
NVTVJPQ	1BC							

ORE

Common Name : Operator Reply Element

Macro ID : IHAORE

DSECT Name : OREF

Created by : IEAVVWTO

Subpool and Key : 231 and key 0

Size : 54 bytes

Pointed to by : UCMRPyQ field of the UCM data area.

ORELXP field of the ORE data area (next ORE)

SSWTOR field of the SSOB data area

Serialization : Local and CMS locks

Function : Created only for WTOR request. Contains information pertaining to the reply portion of a WTOR request.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	OREF	
0	(0) ADDRESS	4	ORELKP	LINKAGE POINTER
4	(4) CHARACTER	2	OREID	REPLY IDENTIFICATION
6	(6) BITSTRING	1	OREXA	FLAGS
1...	....		ORERSV01	"BIT0,,C'X'"- RESERVED
.1...	....		OREKEY0	"BIT1"- WTOR ISSUED BY KEY 0 USER (BY-PASS VALIDITY CHECK)
..1.	....		ORESWAP	"BIT2"- TASK SWAPPED OUT
...1	....		ORESUSP	"BIT3"- PROCESSING TEMPORARILY SUSPENDED (OS/VS2)
....1...			ORERSV03	"BIT4,,C'X'"- RESERVED
....1..			ORERSV04	"BIT5,,C'X'"- RESERVED
....1.			ORERSV05	"BIT6,,C'X'"- RESERVED
....1..1			ORERSV06	"BIT7,,C'X'"- RESERVED
7	(7) BITSTRING	1	OREXC	BUFFER STATUS FLAGS
1...	....		OREBUFA	"BIT0"- BUFFER IS AVAILABLE
.1...	....		OREBUFB	"BIT1"- BUFFER IN USE
..1...			OREBUFC	"BIT2"- ORE IS TO BE DELETED, DO NOT PROCESS REPLY (OS/VS2)
...1	....		OREBUFD	"BIT3"- BUFFER OBTAINED DYNAMICALLY
....1..			OREBUFE	"BIT4"- BUFFER SERVICED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
			ORERSV08	"BIT5,,C'X'"- RESERVED
			ORERSV09	"BIT6,,C'X'"- RESERVED
			ORERSV10	"BIT7,,C'X'"- RESERVED
8	(8) ADDRESS	4	ORETCB	POINTER TO TCB
8	(8) ADDRESS	4	ORETCBA	ADDRESS OF TCB
12	(C) ADDRESS	4	OREWQE	ADDRESS OF ASSOCIATED DUMMY WQE (USED BY THE SUBSYSTEM)
16	(10) ADDRESS	4	ORERPY	POINTER TO REPLY BUFFER
16	(10) ADDRESS	4	ORERPYA	ADDRESS OF REPLY BUFFER
20	(14) ADDRESS	4	OREECB	POINTER TO REQUESTOR'S REPLY ECB
20	(14) ADDRESS	4	OREECBA	ADDRESS OF REQUESTOR'S REPLY ECB
24	(18) SIGNED	2	OREASID	ADDRESS SPACE IDENTIFIER (OS/VS2)
26	(1A) SIGNED	2	ORERSV11	RESERVED (OS/VS2)
28	(1C) ADDRESS	4	OREOPBUF	POINTER TO OPERATOR REPLY BUFFER (OS/VS2)
32	(20) CHARACTER	4	ORECBID	CONTROL BLOCK ID 'ORE '
36	(24) SIGNED	1	OREVRSN	VERSION LEVEL
	.... .1.		ORESP13	"1" ORE IS AT JBB1326 LEVEL
	.... .1.		OREVRID	"ORESP13" VERSION LEVEL VALUE
37	(25) BITSTRING	1	OREROUT	ROUTING CODES
37	(25) BITSTRING	1	OREROUT1	FIRST BYTE OF ROUTING CODES
	1...		OREROUTA	"X'80'" MASTER CONSOLE ACTION
	.1...		OREROUTB	"X'40'" MASTER CONSOLE INFORMATIONAL
	..1.		OREROUTC	"X'20'" TAPE POOL
	...1		OREROUTD	"X'10'" DIRECT ACCESS POOL
	.... 1...		OREROUTE	"X'08'" TAPE LIBRARY
	.... .1..		OREROUTF	"X'04'" DISK LIBRARY
	.... ..1.		OREROUTG	"X'02'" UNIT RECORD POOL
	.... .1.		OREROUTH	"X'01'" TELEPROCESSING CONTROL
38	(26) BITSTRING	1	OREROUT2	SECOND BYTE OF ROUTING CODES

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		1....	OREROUTI	"X'80'" SYSTEM SECURITY
		.1....	OREROUTJ	"X'40'" SYSTEM/ERROR MAINTENANCE
		..1....	OREROUTK	"X'20'" PROGRAMMER INFORMATION
		...1....	OREROUTL	"X'10'" EMULATOR INFORMATION
		....1....	OREROUTM	"X'08'" USER ROUTING CODE
		.... .1....	OREROUTN	"X'04'" USER ROUTING CODE
		.... .1....	OREROUTO	"X'02'" USER ROUTING CODE
		.... .1....	OREROUTP	"X'01'" RESERVED
39	(27) SIGNED	1	ORERCID	REPLY ISSUER CONSOLE ID
40	(28) ADDRESS	4	ORERWQE	ADDRESS OF ASSOCIATED REAL WQE
44	(2C) SIGNED	4	OREDOMID	DOM ID
48	(30) SIGNED	1	ORELNTH	MAXIMUM LENGTH OF REPLY
49	(31) CHARACTER	5	ORERSV12	RESERVED BYTES
	..11 .11.		OREL	"*"- END OF OPERATOR REPLY ELEMENT (OS/VS2)
	..11 .11.		ORESIZE	"OREL-OREF"- LENGTH OF OPERATOR REPLY ELEMENT (OS/VS2)

OUCB

Common Name : SRM User Control Block

Macro ID : IRAOUCB

DSECT Name : OUCB

Created by : IRARMEVT

Subpool and Key : 245 and key 0

Size : 232 bytes

Pointed to by : ASCBOUCB field of the ASCB data area
RMQHFWD field of the RMQH data area
RMQHBCK field of the RMQH data area
OUCBFWD field of the OUCB data area
OUCBBCK field of the OUCB data area
RMCTAQHD field of the RMCT data area
OUCBACT field of the OUCB data area

Serialization : SRM lock, Compare and Swap (CS) instruction

Function : Contains a description of the status of the associated address space for use by the SRM. The OUCB is located in SQA.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	232	OUCB	
0	(0) CHARACTER	4	OUCBNAME	BLOCK IDENTIFICATION 'OUCB'
4	(4) ADDRESS	4	OUCBFWD	SWAP CHAIN FORWARD POINTER
8	(8) ADDRESS	4	OUCBBCK	SWAP CHAIN BACKWARD POINTER
12	(C) UNSIGNED	4	OUCBTMA	TIME OF LAST ANALYSYS
16	(10) BITSTRING	1	OUCBQFL	SWAP TRANSITION FLAGS
	1...		OUCBG00	TRANSITIONING OUT OF CORE
	.1...		OUCBGOI	TRANSITIONING INTO CORE
	..1...		OUCBGOB	TRANSITIONING BETWEEN STATES
	...1....		OUCBQSFL	QSCEFL RECURSION FLAG
	.... 1...		OUCBOFF	REQUEST ENTER WAIT STATE
	.... .1..		OUCBOUT	REQUEST ENTER OUT STATE
	.... ..1.		OUCBLSW	LOGICALLY SWAPPED
	.... ...1		OUCBDLYB	DELAY BY RTO ON OUTQ

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
17	(11) BITSTRING	1	OUCBSFL	SWAPOUT CONTINUATION FLAGS
	1...		OUCBNSW	NON-SWAPPABLE STATUS
	.1...		OUCBCTI	CTL INHIBITS QUIESCE
	..1.		OUCBBIB	BRING IN FOR CANCEL
	...1		OUCBINV	=1 IF OUCB IS INVALID
	.... 1...		OUCBNSWI	PREVENT SWAP IN
	.... .1..		OUCBPVL	USER PROGRAM PRIVILEGED
	.... ..1.		OUCBENQ	ENQ RESIDENT STATUS
	.... ...1		OUCBSCN	SWAP CHAIN TERMINATION MARK
18	(12) BITSTRING	1	OUCBYFL	USER TYPE FLAGS
	1...		OUCBPSTE	POST ERROR
	.1...		OUCBSTT	START CREATED USER
	..1.		OUCBLOG	LOGON CREATED USER
	...1		OUCBMNT	MOUNT CREATED USER
	.... 1...		OUCBPSTR	IF POST ERROR, RECOVER
	.... .1..		OUCBAXS	AUX SHORTAGE FORCED SWAP
	.... ..1.		OUCBDTA	DATA ACCUMULATION IMPACTED
	.... ...1		OUCBFXS	FIXED STOR FORCED SWP
19	(13) BITSTRING	1	OUCBAFL	ALGORITHM STATUS FLAGS
	1...		OUCBSDPS	DPRTY IS SPEC'D ON JCL
	.1...		OUCBAPG	APG ALGORITHM APPLICABLE
	..1.		OUCBREPT	RPGNS ARE PRESENT
	...1		OUCBCPL	SIGNIFICANT CPU USER
	.... 1...		OUCBJSR	JOBSELECT RECEIVED
	.... .1..		OUCBIDPS	INITIAL PROC HAS DPRTY
	.... ..1.		OUCBNWT	MSO DETECTED NONSWAPP. WAIT
	.... ...1		OUCBASW	AUTHORIZED FOR DONTSWAP
20	(14) BITSTRING	1	OUCBTFL	TRANSACTION STATUS FLAGS
	1...		OUCBATR	TRANSACTION IN EXISTENCE
	.1...		OUCBSTR	TRANSACTION START PENDING
	..1.		OUCBNTR	TRANSACTION STOP PENDING
	...1		OUCBRTR	TRANSACTION RESUME PENDING
	.... 1...		OUCBPCH	PG PERIOD CHANGE PENDING
	.... .1..		OUCBMAR	ACTIVITY RECORDING MINUS
	.... ..1.		OUCBINP	INITIATOR ATTACH PENDING
	.... ...1		OUCBINC	INITIATOR ATTACH CURRENT
21	(15) BITSTRING	1	OUCBEFL	EVENT STATUS FLAGS
	1...		OUCBLWT	LONG WAIT STATUS
	.1...		OUCBTRM	TERMINAL WAIT STATUS
	..1.		OUCBOWT	OUTPUT TERMINAL WAIT

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
			....1	OUCBCIM COMPOSITE INPUT MESSAGE
			.... 1...	OUCBNQF ENQHOLD PROCESSED
			.... .1..	OUCBQSS QSCEST PROCESSED
			.... ..1.	OUCBQSC QSCECMP PROCESSED
			.... ...1	OUCBMWT MSO DETECTED WAIT STATUS
22	(16) UNSIGNED	1	OUCBNQC NO. OF OUTSTANDING ENQHOLDS	
23	(17) BITSTRING	1	OUCBUFL USER TYPE FLAGS	
			1...	OUCBJSFS JOB SELECT DELAYED DUE TO PAGEABLE FRAME SHORTAGE
			.1...	OUCBJSAS JOB SELECT DELAYED DUE TO AUXILIARY SLOT SHORTAGE
			..1.	OUCBRSWP REQSWAP IN PROGRESS
			...1	OUCBTSWP TRANSWAP IN PROGRESS
			.... 1...	OUCBTSWC TRANSWAP COMPLETE
			.... .1..	OUCBSI STORAGE ISOL CONTROL ACTIVE
			.... ..1.	OUCBSBSU SIGNIFICANT STORAGE USER
			.... ...1	OUCBSBET EXEC TIME THRSHOLD PASSED FOR SIG STOR CHECK
24	(18) BITSTRING	1	OUCBLFL ALGORITHM STATUS FLAGS	
			1...	OUCBCTB CPU LOAD BAL APPLICABLE
			.1..	OUCBITB I/O LOAD BAL APPLICABLE
			..1.	OUCBSTB STORAGE LOAD BAL APPL
			....1 1111	OUCBRSV7 RESERVED
25	(19) BITSTRING	1	OUCBRFL MORE USER FLAGS	
			1...	OUCBCSFS SWAP IN FAIL DEFER BIT USER ON WAIT QUEUE
			.1..	OUCBCSFM SWAP IN MESSAGE REQUIRED
			..1.	OUCBEASI EARLY ADDRESS SPACE
			...1	OUCBHIDP EARLY A.S. NEEDS HIGH PRTY
			.... 1...	OUCBSIFX FIXED TARGET WORKING SET SIZE FOR STORAGE ISOLATION
			.... .1..	OUCBLGFX LOGICAL FIXED FRAME SHORTAGE CAUSED SWAP OUT
			.... ..1.	OUCBLLSW LAST SWAP WAS LOGICAL
			.... ...1	OUCBCF9 RESERVED
26	(1A) UNSIGNED	1	OUCBNDP NEW DISPATCHING PRIORITY	
27	(1B) UNSIGNED	1	OUCBTNDP NEW TSDSP PRIORITY	
28	(1C) BITSTRING	1	OUCBMFL MISCELLANEOUS BITS	
			1...	OUCBSBT STOLE BELOW THRESHOLD

OUCB

20 MVS/370 Debug Hdbk Vol 4

OUCB

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
	.111 1111		OUCBRSV2	RESERVED
29	(1D) UNSIGNED	1	OUCBIAC	INIT ATTACH COUNT
30	(1E) UNSIGNED	1	OUCBIDP	INITIAL PROC'S DPRTY
31	(1F) ADDRESS	1	OUCBPGP	WMPGP OFFSET
32	(20) ADDRESS	4	OUCBWMG	WMPGD OFFSET
36	(24) ADDRESS	2	OUCBRSV3	RESERVED
38	(26) ADDRESS	2	OUCBDMO	OFFSET INTO DOMAIN TABLE
40	(28) ADDRESS	1	OUCBDMN	DOMAIN NUMBER
41	(29) ADDRESS	1	OUCBSRC	SWAP OUT REASON CODE
42	(2A) SIGNED	2	OUCBSWC	TRANSACTION SWAP COUNT
44	(2C) ADDRESS	4	OUCBASCB	ASCB ADDRESS
48	(30) ADDRESS	4	OUCBIMCB	IMCB ADDRESS
52	(34) UNSIGNED	4	OUCBTMW	WLM INTERVAL START TIME
56	(38) SIGNED	4	OUCBWMS	INTERVAL SERVICE ACCUMULATOR
60	(3C) SIGNED	4	OUCBCPU	INTERVAL CPU SERVICE ACCUM
64	(40) SIGNED	4	OUCBIOC	INTERVAL I/O SERVICE ACCUM
68	(44) SIGNED	4	OUCBMSO	INTERVAL MSO SERVICE ACCUM
72	(48) UNSIGNED	4	OUCBTMS	TIME OF LAST SWAP ACTION
76	(4C) UNSIGNED	4	OUCBTMO	TRANSACTION START TIME
80	(50) SIGNED	2	OUCBPSO	PAGES SWPPD AT LAST SWAP-OUT
82	(52) SIGNED	2	OUCBWSS	WORKING SET SIZE AT SWAP-IN
84	(54) ADDRESS	4	OUCBACT	ACTION QUE FORWD POINTER
88	(58) UNSIGNED	4	OUCBCSW	FIELD FOR COMPARE AND SWAP
88	(58) BITSTRING	2	OUCBACN	DEFERRED ACTION FLAGS
90	(5A) BITSTRING	1	OUCBCFL	MULTIPROCS CONDITION FLAGS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
		1...	OUCBRDY	USERRDY SYSEVENT RECEIVED
		.1...	OUCBRSM	RSM SERVICE OUTSTANDING
		..1.	OUCBDFSW	SWAP IN FAIL SPECIAL PROCESSING PVT THRESHOLDS INCREASED
		...1 1111	OUCBCF2	RESERVED
92	(5C) SIGNED	4	OUCBCMVR	COMPOSITE RECOM VALUE
96	(60) SIGNED	4	OUCBWMR	WLM RECOMMENDATION VALUE
100	(64) SIGNED	2	OUCBIRV	IOM RECOMM. VALUE
102	(66) SIGNED	2	OUCBCRV	CPM RECOMM. VALUE
104	(68) SIGNED	2	OUCBIOR	I/O USAGE PROFILE
106	(6A) SIGNED	2	OUCBTWSS	TARGET WORKING SET SIZE
108	(6C) UNSIGNED	4	OUCBIOSM	SMF EXCP COUNT THIS FIELD IS REFERENCED BY OTHER COMPONENTS
112	(70) BITSTRING	1	OUCBDSPC	CURRENT DISPATCHING CONTROL
		1...	OUCBMTW	CURRENT CTL IS MTW
		.1...	OUCBROT	CURRENT CTL IS ROTATE
		..1.	OUCBTS	CURRENT CTL IS TS
		...1	OUCBTSC3	WORKAREA FOR TS
		.... 1...	OUCBTSC4	WORKAREA FOR TS
		.... .1..	OUCBTSC5	WORKAREA FOR TS
		.... ..1.	OUCBTSC6	WORKAREA FOR TS
		.... ...1	OUCBTSC7	WORKAREA FOR TS
113	(71) BITSTRING	1	OUCBDSPN	NEW DISPATCHING CONTROL
		1...	OUCBNMTW	NEW CONTROL IS MTW
		.1...	OUCBNROT	NEW CONTROL IS ROTATE
		..1.	OUCBNTS	NEW CONTROL IS TS
		...1	OUCBTSN3	WORKAREA FOR TS
		.... 1...	OUCBTSN4	WORKAREA FOR TS
		.... .1..	OUCBTSN5	WORKAREA FOR TS
		.... ..1.	OUCBTSN6	WORKAREA FOR TS
		.... ...1	OUCBTSN7	WORKAREA FOR TS
114	(72) SIGNED	2	OUCBNTSP	NUM OF ADD'L TRANSWAPS PENDING
114	(72) SIGNED	2	OUCBLGWS	LOGICAL WORKING SET SIZE FOR LOGICAL PAGE STORAGE SHORTAGE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
116	(74) BITSTRING	8	OUCBPSS	CPU PAGE SECONDS
116	(74) UNSIGNED	4	OUCBPS1	HIGH WORD PAGE SECS
120	(78) UNSIGNED	4	OUCBPS2	LOW WORD PAGE SECONDS
124	(7C) UNSIGNED	4	OUCBPST	TIME OF LAST WORKING SET CHANGE
128	(80) UNSIGNED	4	OUCBTCP	TIME OF CPU USAGE EVALUATION
132	(84) UNSIGNED	4	OUCBTIO	TIME OF I/O USAGE EVALUATION
136	(88) SIGNED	2	OUCBNDS	NUM OF DONTSWAPS
138	(8A) UNSIGNED	1	OUCBNTSG	NEW TS GROUP NUMBER
139	(8B) UNSIGNED	1	OUCBSDP	SPECIFIED DP
140	(8C) SIGNED	4	OUCBTME	LAST RESPONSE TIME
144	(90) SIGNED	4	OUCBTML	TIME OF LAST TERMWAIT
148	(94) UNSIGNED	4	OUCBDWMS	INTVL DMN SVCE ACCU
152	(98) SIGNED	4	OUCBSRB	INTVL SRB SVCE ACCUM
156	(9C) UNSIGNED	4	OUCBHold	HOLD COUNT
160	(A0) UNSIGNED	4	OUCBTMP	PG PERIOD START
164	(A4) UNSIGNED	4	OUCBDLYT	RTO DELAY END TIME
168	(A8) SIGNED	2	OUCBSRV	STM RECOMM. VALUE
170	(AA) SIGNED	2	OUCBSBFC	RECENT FRAME COUNT FOR STOR LOAD BALANCING
172	(AC) UNSIGNED	4	OUCBSBTE	TIME OF STM USAGE EVALUATION
176	(B0) CHARACTER	4	OUCBSUBN	SUBSYSTEM NAME USED BY SMF
180	(B4) SIGNED	2	OUCBRPG	RESET PERFORMANCE GROUP NUMBER
182	(B6) SIGNED	2	OUCBSPG	SPECIFIED PERFORMANCE GROUP NUMBER

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
184	(B8) CHARACTER	10	OUCBFPG0	FPG OUTPUT AREA
184	(B8) SIGNED	2	OUCBNPG	CONTROL PERF. GROUP
186	(BA) SIGNED	2	OUCBSRPG	SUBSYSTEM RPGN
188	(BC) SIGNED	2	OUCBNRPG	TRXNAME RPGN
190	(BE) SIGNED	2	OUCBURPG	USERID RPGN
192	(C0) SIGNED	2	OUCBCRPG	TRXCLASS RPGN
194	(C2) SIGNED	2	OUCBSTOS	STAGE 1 WSS FOR SWAPIN FAIL
194	(C2) SIGNED	2	OUCBFMCT	FRAME COUNT WHEN DETECT LOGICAL PAGEABLE STORAGE SHORTAGE
196	(C4) SIGNED	4	OUCBRSV5	RESERVED
200	(C8) CHARACTER	8	OUCBTRXN	TRANSACTION NAME
208	(D0) CHARACTER	8	OUCBUSRD	USERID
216	(D8) CHARACTER	8	OUCBCLS	TRANSACTION CLASS NAME
224	(E0) SIGNED	2	OUCBSWFC	SWAP IN FAIL COUNT
226	(E2) SIGNED	2	OUCBSFEC	SWAP IN FAIL EVALUATION COUNT
228	(E4) SIGNED	4	OUCBR50	RESERVED
232	(E8) CHARACTER	0	OUCBEND	END OF OUCB

OUCB

24 MVS/370 Debug Hdbk Vol 4

OUCB

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
OUCB	0		OUCBFPG0	B8		OUCBNPG	B8	
OUCBACN	58		OUCBFWD	4		OUCBNQC	16	
OUCBACT	54		OUCBFXS	12	01	OUCBNQF	15	08
OUCBAFL	13		OUCBG0B	10	20	OUCBNROT	71	40
OUCBAPG	13	40	OUCBG0I	10	40	OUCBNRPG	BC	
OUCBASCB	2C		OUCBG00	10	80	OUCBNSW	11	80
OUCBASW	13	01	OUCBHIDP	19	10	OUCBNSWI	11	03
OUCBATR	14	80	OUCBHOLD	9C		OUCBNTR	14	20
OUCBAXS	12	04	OUCBIAAC	1D		OUCBNTS	71	20
OUCBBCK	8		OUCBIDP	1E		OUCBNTSG	8A	
OUCBBIB	11	20	OUCBIDPS	13	04	OUCBNTSP	72	
OUCBCFL	5A		OUCBIMCB	30		OUCBNWT	13	02
OUCBCF2	5A	1F	OUCBINC	14	01	OUCBOFF	10	08
OUCBCF9	19	01	OUCBINP	14	02	OUCBOUT	10	04
OUCBCIM	15	10	OUCBINV	11	10	OUCBOWT	15	20
OUCBCCLS	D8		OUCBIOC	40		OUCBPCH	14	08
OUCBCMRV	5C		OUCBIOR	68		OUCBPGP	1F	
OUCBCPL	13	10	OUCBIOSM	6C		OUCBPS0	50	
OUCBCPU	3C		OUCBIRV	64		OUCBPSS	74	
OUCBCRPG	C0		OUCBITB	18	40	OUCBPST	7C	
OUCBCRV	66		OUCBJSAS	17	40	OUCBPSTE	12	80
OUCBCSFM	19	40	OUCBJSFS	17	80	OUCBPSTR	12	08
OUCBCSFS	19	80	OUCBJSR	13	08	OUCBPS1	74	
OUCBCSW	58		OUCBLFL	18		OUCBPS2	78	
OUCBCTB	18	80	OUCBLGFX	19	04	OUCBPVL	11	04
OUCBCTI	11	40	OUCBLGWS	72		OUCBQFL	10	
OUCBDFSW	5A	20	OUCBLLSW	19	02	OUCBQSC	15	02
OUCBDLYB	10	01	OUCBLOG	12	20	OUCBQSFL	10	10
OUCBDLYT	A4		OUCBLSW	10	02	OUCBQSS	15	04
OUCBDMN	28		OUCBLWT	15	80	OUCBRDY	5A	80
OUCBDMO	26		OUCBMAR	14	04	OUCBREPT	13	20
OUCBDSPC	70		OUCBMFL	1C		OUCBRFL	19	
OUCBDSPN	71		OUCBMNT	12	10	OUCBROT	70	40
OUCBDTA	12	02	OUCBMS0	44		OUCBRPG	B4	
OUCBDWMS	94		OUCBMTW	70	80	OUCBRSM	5A	40
OUCBSEASI	19	20	OUCBMWT	15	01	OUCBRSV2	1C	7F
OUCBEFL	15		OUCBNAME	0		OUCBRSV3	24	
OUCBEND	E8		OUCBNDP	1A		OUCBRSV5	C4	
OUCBENQ	11	02	OUCBNDS	88		OUCBRSV7	18	1F
OUCBFMCT	C2		OUCBNMTW	71	80	OUCBRSWP	17	20

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
OUCBRTR	14	10	OUCBSTR	14	40	OUCBTSC4	70	08
OUCBR50	E4		OUCBTT	12	40	OUCBTSC5	70	04
OUCBSBT	17	01	OUCBSUBN	B0		OUCBTSC6	70	02
OUCBSBFC	AA		OUCBSWC	2A		OUCBTSC7	70	01
OUCBSBRV	A8		OUCBSWFC	E0		OUCBTSN3	71	10
OUCBSBSU	17	02	OUCBTCP	80		OUCBTSN4	71	08
OUCBSBT	1C	80	OUCBTFL	14		OUCBTSN5	71	04
OUCBSBTE	AC		OUCBTIO	84		OUCBTSN6	71	02
OUCBSCN	11	01	OUCBTMA	C		OUCBTSN7	71	01
OUCBSDP	8B		OUCBTME	8C		OUCBTSCW	17	08
OUCBSDPS	13	80	OUCBTML	90		OUCBTSWP	17	10
OUCBSFEC	E2		OUCBTMO	4C		OUCBTWSS	6A	
OUCBSFL	11		OUCBTMP	A0		OUCBUFL	17	
OUCBSI	17	04	OUCBTMS	48		OUCBURPG	BE	
OUCBSIFX	19	08	OUCBTMW	34		OUCBUSRD	D0	
OUCBSPG	B6		OUCBTNDP	1B		OUCBWMG	20	
OUCBSRB	98		OUCBTRM	15	40	OUCBWMR	60	
OUCBSRC	29		OUCBTRXN	C8		OUCBWMS	38	
OUCBSRPG	BA		OUCBTS	70	20	OUCBWSS	52	
OUCBSTB	18	20	OUCBTSC3	70	10	OUCBYFL	12	
OUCBSTOS	C2							

OUSB

Common Name : SRM User Swappable Block

Macro ID : IHAOUSB

DSECT Name : OUSB

Created by : IEAVEMIN

Subpool and Key : 255 and key 0

Size : 200 bytes

Pointed to by : ASXBOUSB field of the ASXB data area

Serialization : SRM lock

Function : Used by system resource manager to save information from the OUXB, so that the OUXB may be freed when the described address space is swapped out. Also used to accumulate user paging statistics for the SRM. It resides in LSQA.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	200	OUSB	
0	(0) CHARACTER	4	OUSBNAME	BLOCK IDENTIFICATION 'OUSB'
4	(4) CHARACTER	56	OUSBPAGE	OUSB PAGING INFO
4	(4) SIGNED	4	OUSBPIN	SESSION PAGE-IN ACCUMULATOR
8	(8) SIGNED	4	OUSBPOUT	SESSION PAGE-OUT ACCUMULATOR
12	(C) SIGNED	4	OUSBPREC	SESSION RECLAIM ACCUMULATOR
16	(10) SIGNED	4	OUSBVAMI	SESS VIO PAGE-IN ACCUMULATOR
20	(14) SIGNED	4	OUSBVAMO	SESS VIO PAGE-OUT ACCUMULATOR
24	(18) SIGNED	4	OUSBVAMR	SESS VIO RECLAIM ACCUMULATOR
28	(1C) CHARACTER	12	OUSBswap	SWAPPING INFO FOR SMF
28	(1C) SIGNED	4	OUSBSPIN	SWAPPING PAGE-IN ACCUMULATOR

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
32	(20) SIGNED	4	OUSBSPOT	SWAPPING PAGE-OUT ACCUMULATOR
36	(24) SIGNED	4	OUSBWCT	SESSION SWAP CNT ACCUMULATOR
40	(28) SIGNED	4	OUSBCAPI	COMMON PAGE-IN ACCUM
44	(2C) SIGNED	4	OUSBCAPR	COMMON RECLAIM ACCUM
48	(30) SIGNED	4	OUSBSTCT	PAGES STOLEN ACCUM
52	(34) SIGNED	4	OUSBLPAI	LPA PAGE IN
56	(38) SIGNED	4	OUSBLPAR	LPA PAGE RECLAIMS
60	(3C) CHARACTER	138	OUSBSAVE	OUXB FIELD SAVEAREA
198	(C6) SIGNED	2	OUSR80	RESERVED
200	(C8) CHARACTER	0	OUSBEND	END OF OUSB

OUXB

Common Name : SRM User Extension Block

Macro ID : IHAOUXB

DSECT Name : OUXB

Created by : IRARMEVT

Subpool and Key : 245 and key 0

Size : 240 bytes

Pointed to by : ASCBOUXB field of the ASCB data area

Serialization : SRM lock

Function : Contains data about an address space that is not required by the the SRM while the address space is swapped out. The OUXB is located in the SQA.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	256	OUXB	
0	(0) CHARACTER	4	OUXBNAME	BLOCK IDENTIFICATION 'OUXB'
4	(4) UNSIGNED	4	OUXPET	PAGE STEAL BASE CPU INTERVAL
8	(8) UNSIGNED	4	OUXBMET	MSO BASE CPU MEASUREMENT
12	(C) ADDRESS	4	OUXBRSW	REQSWAP ECB ADDRESS OR, IF HIGH ORDER BIT IS ON, ADDRESS OF A LIST.
16	(10) CHARACTER	56	OUXPAGE	PAGING INFO REPORTED BY SMF
16	(10) SIGNED	4	OUXPIN	INTERVAL PAGE-IN ACCUMULATOR
20	(14) SIGNED	4	OUXPOUT	INTERVAL PAGE-OUT ACCUMULATOR
24	(18) SIGNED	4	OUXPREC	INTERVAL RECLAIM ACCUMULATOR
28	(1C) SIGNED	4	OUXBVAMI	NTVL VIO PAGE-IN ACCUMULATOR
32	(20) SIGNED	4	OUXBVAMO	NTVL VIO PAGE-OUT ACCUMULATOR

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
36	(24) SIGNED	4	OUXBVAMR	NTVL VIO RECLAIM ACCUMULATOR
40	(28) CHARACTER	12	OUXBSWAP	SWAP INFORMATION
40	(28) SIGNED	4	OUXBSPIN	SWAP PAGES IN COUNT
44	(2C) SIGNED	4	OUXBSPOT	SWAP PAGES OUT COUNT
48	(30) SIGNED	4	OUXBSNCT	SWAP COUNT
52	(34) SIGNED	4	OUXBCAPI	COMMON PAGE-IN ACCUM
56	(38) SIGNED	4	OUXBCAPR	COMMON RECLAIM ACCUM
60	(3C) SIGNED	4	OUXBSTCT	PAGES STOLEN ACCUM
64	(40) SIGNED	4	OUXBLPAI	LPA PAGE IN
68	(44) SIGNED	4	OUXBLPAR	LPA PAGE RECLAIMS
72	(48) SIGNED	2	OUXBBIOS	WLM BASE I/O MEASUREMENT
74	(4A) SIGNED	2	OUXBSTC	INTERVAL STEAL CALL COUNT
76	(4C) BITSTRING	4	OUXBEJST	BASE EXEC TIME ,101%
80	(50) ADDRESS	4	OUXBTSW	TRANSWAP ECB ADDRESS OR, IF HIGH ORDER BIT IS ON, ADDRESS OF A LIST. (
84	(54) CHARACTER	138	OUXBFLDS	OUXB INFOR SAVED AT QSCECMP
84	(54) UNSIGNED	4	OUXBNQT	ENQ RESIDENCY START TIME
88	(58) CHARACTER	60	OUXBACNT	OUXB "ACCOUNTING"
88	(58) UNSIGNED	4	OUXBTRC	SESSION TRANSACTION COUNT
92	(5C) UNSIGNED	4	OUXBJBS	SESSION SERVIC ACCUMULATOR
96	(60) UNSIGNED	4	OUXBJBT	SESSION TIME ACCUMULATOR

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
100	(64) UNSIGNED	4	OUXBTRS	TRANSACTION SRVC ACCUMULATOR
104	(68) UNSIGNED	4	OUXBTRT	TRANSACTION TIME ACCUMULATOR
108	(6C) UNSIGNED	4	OUXBJBRR	SESSION RESIDENT ACCUMULATOR
112	(70) UNSIGNED	4	OUXBTRR	TRANSACT RESIDNT ACCUMULATOR
116	(74) UNSIGNED	4	OUXBJCPU	SESSION CPU SERVICE ACCUM
120	(78) UNSIGNED	4	OUXBTCPU	TRANSACTION CPU SERVICE ACCUM
124	(7C) UNSIGNED	4	OUXBJIOC	SESSION I/O SERVICE ACCUM
128	(80) UNSIGNED	4	OUXBTIOC	TRANSACTION I/O SERVICE ACCUM
132	(84) UNSIGNED	4	OUXBJMSO	SESSION STORAGE SERVICE ACCUM
136	(88) UNSIGNED	4	OUXBTMSO	TRANSACTION STORAGE SERVICE ACCUM
140	(8C) UNSIGNED	4	OUXBJSRB	SESSION SRB SERVICE ACCUM
144	(90) UNSIGNED	4	OUXBTSRB	TRANSACTION SRB SERVICE ACCUM
148	(94) UNSIGNED	4	OUXBILS	IOL BASE I/O MEASUREMENT
152	(98) UNSIGNED	4	OUXBIOSM	SMF BASE EXCP COUNT
156	(9C) SIGNED	4	OUXBRSV0	RESERVED
160	(A0) BITSTRING	8	OUXBCPS	WLM BASE CPU MSRM
168	(A8) BITSTRING	8	OUXBMSS	WLM BASE MSO SERVICE VALUE
176	(B0) BITSTRING	8	OUXBSBS	WLM SRB BASE SERVICE VALUE
184	(B8) UNSIGNED	4	OUXBITD	IOL BASE START TIME
188	(BC) UNSIGNED	4	OUXBSTD	AUX BASE START TIME

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
192	(C0) SIGNED	4	OUXBPRS	PG PERIOD STARTING SERVICE
196	(C4) SIGNED	2	OUXBWCT	APG BASE SHORT WAIT COUNT
198	(C6) UNSIGNED	1	OUXBRSV1	RESERVED
199	(C7) BITSTRING	1	OUXBFLGS	FLAG BYTE
	1...		OUXBWMO	TSO COMMAND ENDED
	.1..		OUXBCLST	TSO IN CLIST MODE
	..11 1111			RESERVED
200	(C8) UNSIGNED	2	OUXBVSC	AUX BASE VIO SLOT
202	(CA) UNSIGNED	2	OUXBNVC	AUX BASE NONVAM SLOT
204	(CC) SIGNED	2	OUXBFIXC	BASE USER FIXED FRAME COUNT
206	(CE) SIGNED	2	OUXBUIC	HIGHEST UNREF FRAME COUNT
208	(D0) SIGNED	4	OUXBSIBP	BASE PAGE IN COUNT
212	(D4) UNSIGNED	4	OUXBSIBR	BASE RESIDENCY TIME
216	(D8) UNSIGNED	4	OUXBSIBE	BASE EXECUTION TIME
220	(DC) SIGNED	2	OUXBSIPR	RECENT PAGE IN RATE
222	(DE) SIGNED	2	OUXBFMCT	EFFECTIVE FMCT
224	(E0) BITSTRING	8	OUXBAET	APG BASE CPU MEASUREMENT
232	(E8) UNSIGNED	4	OUXBUICT	TIME OF LAST UIC UPDT
236	(EC) SIGNED	4	OUXBRSV3	RESERVED
240	(F0) UNSIGNED	4	OUXBEJST2	LOWER HALF FOR ASCBEJST AT SWAPIN
244	(F4) SIGNED	4	OUXBRSV4	RESERVED
248	(F8) BITSTRING	8	OUXBEST	ASCBEWST AT SWAPIN
256	(100) CHARACTER	0	OUXBEND	END OF OUXB

PARS

Common Name : GRS Parse Setup Macro
Macro ID : ISGPARS
DSECT Name : None
Created by : The caller of ISGNPARS
Subpool and Key : Caller's
Size : 42 bytes
Pointed to by : Maintained by the caller or ISGNPARS
Serialization : None
Function : Maps the parameter list for the Global Resource Serialization Parse Setup Module (ISGNPARS).

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	42	PARS	PARSE SETUP ENTRY
0	(0) CHARACTER	4	PARSID	CONTROL BLOCK ACRONYM 'PARS'
4	(4) ADDRESS	4	PARSBUFF	ADDRESS OF MULTI-RECORD BUFFER
8	(8) ADDRESS	4	PARSEOR	ADDRESS OF READ ROUTINE ERROR ROUTINE
12	(C) ADDRESS	4	PARSTAB	ADDRESS OF PARSE TABLE
16	(10) ADDRESS	4	PARSSCL	ADDRESS OF SCL PARAMETER LIST
20	(14) SIGNED	4	PARSCNT	NUMBER OF RECORDS READ
24	(18) SIGNED	4	PARSRNRC	RETURN CODE FROM READ ROUTINE
28	(1C) UNSIGNED	2	PARSBUFL	DATA AREA FOR LENGTH OF MULTI-RECORD BUFFER
30	(1E) CHARACTER	8	PARSMEM	PARMLIB MEMBER TO BE READ
38	(26) CHARACTER	1	PARSFLG	QUIT OPTION FLAGS
	1...		PARNSUC	IN THE RDRTNEOR THIS QUIT FLAG IS INDICATED, WHEN 1- UNSUCCESSFUL, ISGNPARS STOPS PROCESSING
	.1...		PARSSUC	IN THE RDRTNEOR THIS QUIT FLAG IS INDICATED, WHEN 1- SUCCESSFUL, ISGNPARS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				STOPS PROCESSING
				RESERVED
39	(27) CHARACTER	1	PARSPFLG	PROCESS OPTION FLAGS
	1...		PARSMLTR	INDICATES MULTI-RECORD PROCESSING
	.111 1111			RESERVED
40	(28) CHARACTER	2		USED FOR FULLWORD BOUNDARY ALIGNMENT
42	(2A) CHARACTER	0	PARSEND	END OF PARS

PART

Common Name : ASM Paging Activity Reference Table
Macro ID : ILRPART
DSECT Name : PART
Created by : ILRASRIM
Subpool and Key : 245 and key 0
Size : 80 bytes + (64 bytes for each page data set); 4176 is maximum
Pointed to by : ASMPART field of the ASMVT data area
Serialization : The SALLOC lock is used to serialize the data area.
Function : Maps the collection of logical slots
of auxiliary storage to identifiable page data sets (VSAM
data spaces).

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	80	PART	PAGING ACTIVITY REFERENCE TABLE
0	(0) CHARACTER	80	PARTHDR	PART HEADER WHICH CONTAINS GENERAL INFORMATION ABOUT THE PAGE DATA SETS
0	(0) CHARACTER	4	PARTIDEN	'PART' IDENTIFIER
4	(4) SIGNED	4	PARTSIZE	THE TOTAL NUMBER OF PART ENTRIES (PARTE'S) CONTAINED IN THIS PART
8	(8) SIGNED	4	PARTEUSE	NUMBER OF PARTE'S IN USE

THE FOLLOWING THREE QUEUES POINT TO CIRCULAR PARTE QUEUES FOR LOCAL PAGE DATA SETS.

12	(C) ADDRESS	4	PARTCIR0	POINTER TO NEXT PARTE FROM WHICH TO ALLOCATE SLOTS FOR BPF FILES
16	(10) ADDRESS	4	PARTCIR1	POINTER TO NEXT PARTE FROM WHICH TO ALLOCATE SLOTS FOR FIXED HEAD FILES

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
20	(14) ADDRESS	4	PARTCIR2	POINTER TO NEXT PARTE FROM WHICH TO ALLOCATE SLOTS FOR MOVABLE HEAD FILES
24	(18) ADDRESS	4	PARTTPAR	ADDRESS OF TPARTBLE FOR USE BY TASK MODE INITIALIZATION
24	(18) ADDRESS	4	PARTDSNL	ADDRESS OF DATA SET NAME LIST IN CSA FOR PAGE DATA SETS. THIS ADDRESS REPLACES THE TPARTBLE POINTER WHEN THE DATA SET NAME LIST IS BUILT AT TMI TIME.
28	(1C) ADDRESS	4	PARTPCTQ	ADDRESS OF FIRST IN CHAIN OF ONE OR MORE PCT'S THAT HAVE BEEN BUILT FOR THE DEVICE TYPES CONTAINING OPEN PAGE DATA SETS

THE FOLLOWING FIELDS ARE UNIQUE FOR THE PART HEADER

32	(20) SIGNED	2	PARTLCNT	COUNT OF ACTIVE LOCAL PAGE DATA SETS
34	(22) BITSTRING	1	PARTFLG1	PART FLAGS
	1...		PARTNVI0	NO DS AVAILABLE FOR VIO
	.111 1111			RESERVED
35	(23) CHARACTER	1		RESERVED

15 L1D

36	(24) CHARACTER	8	PARTNPCW	CHAIN OF AIAS FOR WHICH THERE WERE NO PCCWS
36	(24) ADDRESS	4	PARTNPCF	FIRST AIA ON NO PCCW QUEUE
40	(28) ADDRESS	4	PARTNPCL	LAST AIA ON NO PCCW QUEUE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
44	(2C) UNSIGNED	4	PARTTIME	SUM OF TOTAL SERVICE TIMES FOR ALL LOCAL PAGE DATASETS
48	(30) CHARACTER	32	PARTRSV2	RESERVED
80	(50) CHARACTER	0	PARTENTS	THE PART ENTRIES. ONE PARTE REPRESENTS ONE PAGE DATA SET. A PARTE IS BUILT FOR EACH PAGE DATA SET OPENED AT IPL TIME AND FOR EACH POTENTIAL DATA SET THAT CAN BE ADDED LATER UP TO A MAXIMUM OF 64 TOTAL ENTRIES.
0	(0) STRUCTURE	64	PARTENT	PART ENTRY
0	(0) ADDRESS	4	PAREPARE	POINTER TO NEXT PARTE IN USE
6	L1D			
4	(4) UNSIGNED	1	PAREBRST	BURST VALUE FOR THIS PARTE
5	(5) UNSIGNED	1	PAREIORN	NUMBER OF IORB'S BUILT FOR THIS PARTE
6	(6) CHARACTER	2	PARERSV4	RESERVED
8	(8) CHARACTER	1	PARETYPE	PAGE DATA SET TYPE FLAGS
	1...		PAREPLPA	PARTE FOR PLPA DATA SET
	.1...		PARECOMM	PARTE FOR COMMON DATA SET
	..1.		PAREDPLX	PARTE FOR DUPLEX DATA SET
	...1		PARELOCL	PARTE FOR LOCAL DATA SET
	.... 1...		PAREBPF	1 => ASSOCIATED WITH BPF CACHE
	.... .1..		PARESPP	1 => USE SET PAGING PARAMETERS CCW
	.... .11			UNUSED
9	(9) CHARACTER	1	PAREFLG1	PARTE FLAGS
	1...		PARENUSE	PARTE NOT IN USE FLAG 1=PARTE NOT IN USE 0=PARTE IN USE
	.1...		PAREDSBD	DATA SET BAD FLAG 1=ASM HAS DETECTED ERRORS INDICATING THIS PAGE DATA SET IS NOT USEFUL FOR PAGING. IT IS EFFECTIVELY NOT IN USE. 0=PAGE DATA SET SATISFACTORY

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				FOR USE.
...1.			PAREINCP	INTERCEPTED FLAG. MEANINGFUL ONLY IF DUPLEXING ACTIVE I=PLPA OR COMMON DATA SET TEMPORARILY NOT AVAILABLE, READ REQUESTS SHOULD BE DIRECTED TO DUPLEX DATA SET 0=NORMAL PROCESSING IN EFFECT
....1			PARENVI0	NO VIO ALLOWED ON THIS DATASET
.... 1...			PARERSET	1 = THE BPF ASSOCIATED WITH THIS PAGE DATA SET HAS BEEN RESET BY ILRASRIM THIS IPL. CONSEQUENTLY, IF ILRTM100 DETERMINES THAT JOURNALLED VIO PAGES ARE THIS PAGE DATA SET (AND THEREFORE WERE LOST WHEN THE BPF WAS RESET) IT WILL FORCE A QUICK START ON A WARM START. 0 = THE BPF ASSOCIATED WITH THIS PAGE DATA SET HAS NOT BEEN RESET BY ILRASRIM THIS IPL.
.... .11.				RESERVED
.... ...1			PARECKD	ON=EXTENDED CKD ARCHITECTURE ALLOWED FOR DATASET. OFF=NOT ALLOWED
10	(A) SIGNED	2	PAREN	PART NUMBER FOR THIS PARTE
12	(C) ADDRESS	4	PAREDEIB	POINTER TO THE DEIB WHICH DESCRIBES THIS DATASET
16	(10) SIGNED	4	PARESZSL	SIZE OF PAGE DATA SET IN NUMBER OF SLOTS
20	(14) SIGNED	4	PARESLTA	NUMBER OF SLOTS AVAILABLE FOR ALLOCATION
24	(18) SIGNED	4	PARERRCT	COUNT OF THE NUMBER OF PERMANENT I/O ERRORS SUFFERED ON THIS PAGE DATA SET.
28	(1C) ADDRESS	4	PAREIORB	POINTER TO FIRST IORB FOR THIS PAGE DATA SET.
32	(20) ADDRESS	4	PAREPATP	POINTER TO PAT FOR THIS PAGE DATA SET
36	(24) ADDRESS	4	PAREPCTP	POINTER TO PCT FOR THIS PAGE DATA SET TYPE
40	(28) ADDRESS	4	PAREEDBP	POINTER TO EDB FOR PAGE DATA SET

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
44	(2C) ADDRESS	4	PAREUCBP	POINTER TO UCB FOR PAGE DATA SET

THE FOLLOWING ARE UNIQUE FOR THE PARTE

48	(30) ADDRESS	4	PARETIOR	THIS FIELD IS NON-ZERO ONLY FOR BPF-PLPA, BPF-COMMON AND BPF-DUPLEX PAGE DATA SETS AND THEN ONLY DURING SYSTEM INITIALIZATION WHEN IT IS NON-ZERO IT IS THE ADDRESS OF THE FIRST IORB FOR THIS DATA SET TO USE THE BPF STORE-IN CACHE.
52	(34) UNSIGNED	4	PARETIME	TOTAL SERVICE TIME USED FOR LOCALS ONLY
56	(38) UNSIGNED	4	PARERQTM	SINGLE-REQUEST SERVICE TIME USED FOR LOCALS ONLY
60	(3C) UNSIGNED	2	PARESLT	LAST SLOT REFERENCED WHEN BLOCKING REQUESTS
62	(3E) SIGNED	2	PAREREQS	NUMBER OF OUTSTANDING I/O REQUESTS USED FOR ALL PAGE DATASETS

PAT

Common Name : ASM Page Allocation Table

Macro ID : ILRPAT

DSECT Name : PAT

Created by : ILRASRIM, ILRPGEKP

Subpool and Key : 245 and key 0

Size : 16 plus number of slots in the paging space

Pointed to by : PAREPATP field of the PARTE data area

Serialization : The PATMAPs are serialized by compare & swap logic.

Function : Contains an exact representation of allocated slots within a
paging space.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	24	PAT	PAGE ALLOCATION TABLE
0	(0) CHARACTER	24	PATHDR	PAT HEADER
0	(0) CHARACTER	4	PATIDENT	'PAT' IDENTIFIER
4	(4) ADDRESS	4	PATPART	POINTER TO THE PART ENTRY
8	(8) SIGNED	2	PATCYLNO	NBR OF CYLINDER MAPS IN THIS PAT
10	(A) SIGNED	2	PATCYLSZ	NBR OF SLOTS PER CYLINDER
12	(C) SIGNED	2	PATCYLMW	NBR OF WORDS REQUIRED TO MAP ONE CYLINDER
14	(E) CHARACTER	2	PATRSVI	RESERVED
16	(10) CHARACTER	4	PATCCHB	CCHH OF THE BEGINNING OF DATA SET
20	(14) CHARACTER	4	PATCCHHE	CCHH OF THE END OF THE DATA SET
24	(18) CHARACTER	0	PATMAP	SLOT ALLOCATION BIT MAP SIZE DETERMINED BY RIM
24	(18) CHARACTER	0	PATCYLS	CYLINDER MAP WORDS---

PCB

Common Name : RSM Page Control Block

Macro ID : IHAPCB

DSECT Name : PCB

Created by : IEAVPCB (RSM supervisor) at NIP initialization and when more PCBs are needed

Subpool and Key : 245 and key 0

Size : 64 bytes

Pointed to by : PCBFQPA field of the PCB data area

PCBBQPA field of the PCB data area

PCBRTPA field of the PCB data area

RSMLIOQF field of the RSMHD data area

RSMLIOQL field of the RSMHD data area

PVTREUS field of the PVT data area

PVTFFPCBF field of the PVT data area

PVTFFPCBL field of the PVT data area

PVTGFADF field of the PVT data area

PVTGFADL field of the PVT data area

PVTCIOQF field of the PVT data area

PVTCIOQL field of the PVT data area

Serialization : SALLOC lock

Function : Describes a single I/O operation, initiated by RSM, for a single page.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PCB	, PCBPTR
0	(0) SIGNED	4	PCBFQP	FULLWORD REFERENCE FOR FORWARD POINTER
0	(0) CHARACTER	1	PCBCQN	CURRENT QUEUE NUMBER
	...1		PCBFREQN	"X'10'"- PCB ON FREE QUEUE
	...1 1...		PCBDEFRN	"X'18'"- PCB ON GFA DEFER QUEUE
	.1.		PCBCIOQN	"X'20'"- PCB ON COMMON I/O ACTIVE QUEUE
	1... 1...		PCBLIOQN	"X'88'"- PCB ON LOCAL I/O ACTIVE QUEUE
	1111 1111		PCBDEQN	"X'FF'"- NOT CURRENTLY QUEUED
1	(1) ADDRESS	3	PCBFQPA	FORWARD QUEUE POINTER

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
4	(4) SIGNED	4	PCBBQP	FULLWORD REFERENCE FOR BACKWARD PTR
4	(4) ADDRESS	4	PCBBQPA	BACKWARD QUEUE POINTER
8	(8) SIGNED	4	PCBRTP	FULLWORD REFERENCE FOR ROOT PCB PTR
8	(8) BITSTRING	1	PCBFL1	FIRST FLAG FIELD
	1...		PCBXM	"BIT0"- CROSS MEMORY PCB INDICATOR, WHEN 1, THIS PCB IS FOR A CROSS MEMORY PAGE FAULT.
	.1...		PCBPEX	"BIT1"- PAGE EXCEPTION FLAG, WHEN 1 = THIS PCB IS FOR A PAGE FAULT INTERRUPTION
	..1.		PCBSRBMD	"BIT2"- SRB MODE FLAG WHEN = 1 PCB IS FOR SRB PAGE FAULT PROCESSING. PCBSRB CONTAINS AN SRB ADDRESS.
	...1		PCBLLHLD	"BIT3"- THE LOCAL LOCK HELD FLAG. WHEN = 1 FAULTER HELD HIS OWN LOCAL LOCK WHEN PAGE FAULT OCCURRED
	.... 1...		PCBPREFR	"BIT4"- PREFERRED FIX REQUEST
	.... .1..		PCBROOT	"BIT5"- WHEN 1 INDICATES THAT PCBRTPA IS A ROOT PCB POINTER, WHEN 0 INDICATES THAT PCBRTPA IS A TCB POINTER
	.... ..1.		PCBIOI	"BIT6"- INPUT-OUTPUT FLAG. WHEN 1 = PAGE OUT, WHEN 0 = PAGE IN
	.... ...1		PCBIOCMP	"BIT7"- WHEN 1 = PAGING I/O COMPLETE FOR THIS PCB.
9	(9) ADDRESS	3	PCBRTPA	ROOT PCB POINTER/TCB POINTER CONTENTS DETERMINED BY PCBROOT FLAG
12	(C) SIGNED	4	PCBRLP	FULLWORD REFERENCE FOR RELATED PCB POINTER
12	(C) SIGNED	1	PCBFXC	FIX COUNT
13	(D) ADDRESS	3	PCBRLPA	RELATED PCB POINTER
16	(10) SIGNED	4	PCBXPT	FULLWORD REFERENCE FOR XPT PTR
16	(10) BITSTRING	1	PCBFL2	SECOND FLAG FIELD
	1...		PCBFREAL	"BIT0"- FREE REAL FLAG. WHEN 1, THIS FLAG INDICATES THAT THE REAL FRAME ASSOCIATED WITH THE PCB SHOULD BE BE FREED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
.1...	PCBRESV2			AT I/O COMPLETION. "BIT1"- RESERVED (USED TO BE 'PCBGFAD', GFA DEFER PROCESSOR SCHEDULED FOR THIS PCB FLAG)
..1.	PCBIOERR			"BIT2"- PERMANENT I/O ERROR FLAG. WHEN 1 A PAGING I/O OPERATION HAS FAILED BECAUSE OF A PERMANENT I/O ERROR
...1	PCBRESET			"BIT3"- RESET FLAG. WHEN 1, CALL RESET FOR PCB.
.... 1...	PCBSUPRS			"BIT4"- SUPPRESS FRAME PROCESSING. IGNORE PCBFRAL, PCBRBN AND ASSOCIATED PFTE.
.... .1..	PCBVIO			"BIT5"- THIS PCB IS FOR A VIO MOVE-OUT.
.... ..1.	PCBXMH			"BIT6"- CROSS MEMORY HOME/PAGE INDICA- TOR, IF PCBXM = 1 AND PCBXMH = 1, THEN PCB IS A HOME PCB. IF PCBXB = 1 AND PCBXMH = 0, THEN PCB IS A PAGE PCB.
.... ...1	PCBCHNGD			"BIT7"- CHANGED PAGE FLAG. WHEN 1, THIS IS A WORKING SET PAGE THAT IS BEING SWAPPED IN ALONG WITH LSQA AS PART OF STAGE-1 SWAP-IN, AND NO VALID AUX COPY OF THE DATA EXISTS, SO THE CHANGE BIT MUST BE TURNED ON IN THE STORAGE KEY(S) OF THE FRAME WHEN THE PAGE IS VALIDATED BY THE IEAVSIRT ROUTINE OF IEAVSWIN
17 (11) ADDRESS	3	PCBXPTA		VIRTUAL MEMORY ADDRESS OF EXTERNAL PAGE TABLE ENTRY
20 (14) SIGNED	4	PCBPGT		FULL WORD REFERENCE FOR PAGE TABLE ADDR
20 (14) SIGNED	4	PCBPPCBP		IF PCBXM = 1, AND PCBXMH = 1, THEN THIS FIELD CONTAINS THE ADDRESS OF THE ASSO- CIATED PAGE PCB.
20 (14) BITSTRING	1	PCBFL3		THIRD FLAG FIELD
1...		PCBSWPOT		"BIT0"- SWAP-OUT FLAG
.1...		PCBSWPIN		"BIT1"- SWAP-IN PRIVATE AREA PAGE FLAG
..1.		PCBSWPS1		"BIT2"- STAGE 1 SWAP-IN FLAG
...1		PCBSWPLS		"BIT3"- SWAP-IN LSQA PAGE FLAG
.... 1...		PCBDFRLS		"BIT4"- SWAP-IN DEFERRED RELEASE FLAG. THE SWIN ROOT EXIT MUST SET PFTDFRLS TO

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.... . . .		PCBBELO	1. "BIT5"- BACK BELOW FLAG. WHEN 1, IEAVGFA SHOULD ATTEMPT TO ASSIGN A FRAME BELOW 16 MEG REAL TO THIS PAGEABLE PAGE
	.... . .1.		PCBRESV1	"BIT6"- RESERVED
	.... . .1		PCBSWPS2	"BIT7"- WHEN 1, PCB IS FOR A STAGE 2 SWAP-IN.
21	(15) ADDRESS	3	PCBPGTA	VIRTUAL MEMORY ADDRESS OF PAGE TABLE ENTRY
24	(18) ADDRESS	2	PCBXRBN	REAL STORAGE BLOCK NUMBER (XRBIN FORMAT: RIGHT-JUSTIFIED 14 BIT FRAME INDEX NUMBER PADDED ON LEFT WITH 2 ZERO BITS)
26	(1A) ADDRESS	2	PCBVBN	VIRTUAL MEMORY BLOCK NUMBER (LEFT ADJUSTED WITH 4 LOW ORDER ZEROES.) IF THIS VALUE IS ZERO, NO PGTE VALIDATION WILL BE PERFORMED.
28	(1C) SIGNED	4	PCBBLOCK	MULTI USE FIELD, SEE BELOW.
28	(1C) SIGNED	4	PCBSRB	IF PCBSWPOT=1 AND PCBSRBMD=1 THEN FIELD CONTAINS ADDRESS OF PAGE FAULTING SRB.
28	(1C) SIGNED	4	PCBRB	IF PCBPEX=1 AND PCBSRBMD=0 THEN FIELD CONTAINS ADDRESS OF PAGE FAULTING RB.
28	(1C) SIGNED	4	PCBSPCTE	IF PCBSWPOT=1 OR PCBSWPS1=1 AND VBN IN PRIVATE AREA, THEN FIELD CONTAINS ADDRESS OF A SPCTSWPE.
28	(1C) ADDRESS	4	PCBHPCBP	IF PCBXM = 1, AND PCBXMH = 0, THEN THIS FIELD CONTAINS THE ADDRESS OF THE ASSOCIATED HOME PCB.
32	(20) ADDRESS	4	PCBASCB	THE ADDRESS OF THE ADDRESS SPACE CONTROL BLOCK (ASCB) OF THE REQUESTOR WHO CAUSED THE PCB TO BE BUILT.
36	(24) CHARACTER	28	PCBAIA	THE ASM I/O REQUEST AREA (AIA) WHICH IS ALWAYS PART OF THE PCB. THE AREA IS MAPPED BY THE ILRAIA MACRO.

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
.1...	PCBEND	....		"x"-- END OF PCB.
.1...	PCBLEN	....		"x-PCB" LENGTH OF PAGE CONTROL BLOCK

PCCA

Common Name : Physical Configuration Communication Area

Macro ID : IHAPCCA

DSECT Name : PCCA

Created by : IEAVNIPO, IEAVCPU

Subpool and Key : 245 and key 0

Size : 584 bytes

Pointed to by : PCCATxxP of the PCCAVT data area, where xx is the
processor ID

PSAPCCAV field of the PSA data area

PSAPCCAR field of the PSA data area

PCCAEMSA field of the PCCA data area (receiving routine's PCCA)

Serialization : Disablement

Function : Contains information about the physical facilities associated
with each processor in the system.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PCCA	
0	(0) CHARACTER	4	PCCAPCCA	CONTROL BLOCK ACRONYM IN EBCDIC
4	(4) HEX	12	PCCACPID	CPU ID (CONTAINS SERIAL NUMBER)
16	(10) SIGNED	2	PCCACPUA	PHYSICAL CPU ADDRESS
18	(12) SIGNED	2	PCCACAFM	BIT MASK CORRESPONDING TO PHYSICAL CPU ADDRESS
20	(14) ADDRESS	4	PCCATQEP	TQE POINTER
24	(18) ADDRESS	4	PCCAPSAV	VIRTUAL ADDRESS OF PSA
28	(1C) ADDRESS	4	PCCAPSAR	REAL ADDRESS OF PSA
32	(20) ADDRESS	4	PCCARV81	RESERVED
36	(24) ADDRESS	4	PCCARV82	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
40	(28) ADDRESS	4	PCCARV83	RESERVED
44	(2C) ADDRESS	4	PCCARV84	RESERVED
48	(30) SIGNED	4	PCCAXSLF	EXCESSIVE SPIN LENGTH FACTOR.
52	(34) SIGNED	4	PCCARSPR	RELATIVE SPEED (X4096) OF THIS PROCESSOR.
56	(38) ADDRESS	4	PCCARV87	RESERVED
60	(3C) ADDRESS	4	PCCARV88	RESERVED
64	(40) ADDRESS	4	PCCARV89	RESERVED
68	(44) ADDRESS	4	PCCARV90	RESERVED
72	(48) ADDRESS	4	PCCARV91	RESERVED
76	(4C) ADDRESS	4	PCCARV92	RESERVED
80	(50) ADDRESS	4	PCCARV93	RESERVED
84	(54) ADDRESS	4	PCCARV94	RESERVED
88	(58) ADDRESS	4	PCCARV95	RESERVED
92	(5C) ADDRESS	4	PCCARV96	RESERVED
96	(60) ADDRESS	4	PCCARV97	RESERVED
100	(64) ADDRESS	4	PCCARV98	RESERVED
104	(68) ADDRESS	4	PCCARV99	RESERVED
108	(6C) ADDRESS	4	PCCARV9A	RESERVED
112	(70) ADDRESS	4	PCCARV9B	RESERVED
116	(74) ADDRESS	4	PCCARV9C	RESERVED

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
120	(78) ADDRESS	4	PCCARV9D	RESERVED
124	(7C) ADDRESS	4	PCCARV9E	RESERVED
128	(80) BITSTRING	4	PCCATMST	TIMER STATUS BYTES
128	(80) HEX	1	PCCATMFL	FIRST BYTE OF PCCATMST
	1...		PCCAINIT	"X'80'"- ENTRY HAS BEEN INITIALIZED
	.1...		PCCASYNC	"X'40'"- CLOCK OUT OF SYNCHRONIZATION
	..1.		PCCAVKIL	"X'20'"- VARY CPU SHOULD BE CANCELLED
	...1		PCCAMCC	"X'10'"- PROCESSING FOR PERMANENTLY DAMAGED CLOCK COMPARATOR MUST BE DONE
	.... 1...		PCCAMINT	"X'08'"- PROCESSING FOR CPU TIMER MUST BE DONE
	.... .1..		PCCARV02	"X'04'" , C'X'"- RESERVED
	.... ..1.		PCCARV03	"X'02'" , C'X'"- RESERVED
	.... ...1		PCCARV04	"X'01'" , C'X'"- RESERVED
129	(81) HEX	1	PCCATODE	TOD CLOCK ERROR FLAGS
	1...		PCCANUTD	"X'80'"- CLOCK CANNOT BE USED
	.1...		PCCANFTD	"X'40'"- CLOCK SHOULD NOT BE RESET
	..11 1111		PCCACTTD	"X'3F'"- ERROR COUNT (6 BITS)
130	(82) HEX	1	PCCACCE	FLAGS FOR CLOCK COMPARATOR
	1...		PCCANUCC	"X'80'"- CLOCK COMPARATOR CANNOT BE USED
	.1...		PCCANFCC	"X'40'"- CLOCK COMPARATOR SHOULD NOT BE RESET
	..11 1111		PCCACTCC	"X'3F'"- ERROR COUNT (6 BITS)
131	(83) HEX	1	PCCAINTE	FLAGS FOR CPU TIMER
	1...		PCCANUIN	"X'80'"- CPU TIMER CANNOT BE USED
	.1...		PCCANFIN	"X'40'"- CPU TIMER SHOULD NOT BE RESET
	..11 1111		PCCACTIN	"X'3F'"- ERROR COUNT (6 BITS)
132	(84) SIGNED	4	PCCARPB	EXTERNAL CALL SIGP BUFFER
	1...		PCCASWTH	"X'80'" SWITCH REQUEST
	.1...		PCCASIOR	"X'40'" SIO REQUEST
	..1.		PCCARQCK	"X'20'" RQCHECK REQUEST
	...1		PCCAGTFR	"X'10'" GTF REQUEST
	.... 1...		PCCARV4B	"X'08'" RESERVED
	.... .1..		PCCAMODE	"X'04'" MODE REQUEST
	.... ..1.		PCCAMF1R	"X'02'" MF1TCH REQUEST
	.... ...1		PCCAMEMS	"X'01'" MEMSWT REQUEST

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
136	(88) CHARACTER	16	PCCAEMS1	EMERGENCY SIGNAL SIGP BUFFER
136	(88) BITSTRING	4	PCCAEMS1	FIRST WORD OF EMS BUFFER
136	(88) HEX	1	PCCARISP	CONTAINS PARALLEL/SERIAL REQUEST INDICATOR FOR REMOTE IMMEDIATE SIGNAL
	1....		PCCAPARL	"X'80'"- PARALLEL REQUEST
	.1....		PCCASERL	"X'40'"- SERIAL REQUEST
	..1....		PCCARV06	"X'20',,C'X'"- RESERVED
	...1....		PCCARV07	"X'10',,C'X'"- RESERVED
	....1....		PCCARV08	"X'08',,C'X'"- RESERVED
	....1....1...		PCCARV09	"X'04',,C'X'"- RESERVED
	....1....1..		PCCARV10	"X'02',,C'X'"- RESERVED
	....1....1.		PCCARV11	"X'01',,C'X'"- RESERVED
137	(89) HEX	1	PCCAEMS2	SECOND BYTE OF PCCAEMS1
	1....		PCCASERP	"X'80'"- SERIAL PENDING INDICATOR
	.1....		PCCARV13	"X'40',,C'X'"- RESERVED
	..1....		PCCARV14	"X'20',,C'X'"- RESERVED
	...1....		PCCARV15	"X'10',,C'X'"- RESERVED
	....1....		PCCARV16	"X'08',,C'X'"- RESERVED
	....1....1..		PCCARV17	"X'04',,C'X'"- RESERVED
	....1....1.		PCCARV18	"X'02',,C'X'"- RESERVED
	....1....1.		PCCARV19	"X'01',,C'X'"- RESERVED
138	(8A) HEX	1	PCCAEMS3	THIRD BYTE OF PCCAEMS1
	1....		PCCASERF	"X'80'" SERIAL REQUEST FAILED
	.1....		PCCARV21	"X'40',,C'X'"- RESERVED
	..1....		PCCARV22	"X'20',,C'X'"- RESERVED
	...1....		PCCARV23	"X'10',,C'X'"- RESERVED
	....1....		PCCARV24	"X'08',,C'X'"- RESERVED
	....1....1..		PCCARV25	"X'04',,C'X'"- RESERVED
	....1....1.		PCCARV26	"X'02',,C'X'"- RESERVED
	....1....1.		PCCARV27	"X'01',,C'X'"- RESERVED
139	(8B) HEX	1	PCCARMSB	CONTAINS RMS INDICATOR
	1....		PCCARV28	"X'80',,C'X'"- RESERVED
	.1....		PCCARV29	"X'40',,C'X'"- RESERVED
	..1....		PCCARV30	"X'20',,C'X'"- RESERVED
	...1....		PCCARV31	"X'10',,C'X'"- RESERVED
	....1....		PCCARV32	"X'08',,C'X'"- RESERVED
	....1....1..		PCCARV33	"X'04',,C'X'"- RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
		.... .1.	PCCARV34	"X'02',,C'X'"- RESERVED
		.... .1	PCCARMS	"X'01'"- SIGP WAS ISSUED VIA RMS
140	(8C) ADDRESS	4	PCCAEMSP	REMOTE IMMEDIATE SIGNAL PARAMETER ADDRESS
144	(90) ADDRESS	4	PCCAEMSE	REMOTE IMMEDIATE SIGNAL RECEIVING ROUTINE ENTRY POINT ADDRESS
148	(94) ADDRESS	4	PCCAEMSA	PCCA ADDRESS OF THE RECEIVING ROUTINE
152	(98) ADDRESS	4	PCCAPWAV	VIRTUAL ADDRESS OF MCH PROCESSOR WORK AREA
156	(9C) ADDRESS	4	PCCAPWAR	REAL ADDRESS OF MCH PROCESSOR WORK AREA
160	(A0) ADDRESS	4	PCCALRBV	VIRTUAL ADDRESS OF MCH LOGREC BUFFER
164	(A4) ADDRESS	4	PCCALRBR	REAL ADDRESS OF MCH LOGREC BUFFER
168	(A8) ADDRESS	4	PCCAEELAD	VIRTUAL ADDRESS OF I/O EXTENDED LOGOUT (IOEL) AREA
172	(AC) ADDRESS	4	PCCAEELBA	VIRTUAL ADDRESS OF CCH LOGOUT BUFFER
176	(B0) ADDRESS	4	PCCACCHM	VIRTUAL ADDRESS OF CCH MESSAGE BUFFER
180	(B4) HEX	44	PCCASRB	SRB FOR CCH TO SCHEDULE IECVIRST TO PROCESS CHANNEL ERRORS
224	(E0) HEX	1	PCCACHAN	FLAG BYTE FOR CCH-IOS CHANNEL RECOVERY COMMUNICATION
1...			PCCAIRST	"X'80'"- IECVIRST IS PROCESSING CHANNEL ERRORS DETECTED DURING AN EXTERNAL MACHINE CHECK
.1...			PCCAEXDM	"X'40'"- WHILE PCCAIRST BIT WAS SET, MORE CHANNEL ERRORS WERE DETECTED WHILE PROCESSING ANOTHER EXTERNAL DAMAGE MACHINE CHECK
..1.			PCCAR107	"X'20',,C'X'"- RESERVED
...1			PCCAR108	"X'10',,C'X'"- RESERVED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		.... 1...	PCCAR109	"X'08',,C'X'"- RESERVED
		.... .1..	PCCAR110	"X'04',,C'X'"- RESERVED
		.... ..1.	PCCAR111	"X'02',,C'X'"- RESERVED
		.... ...1	PCCAR112	"X'01',,C'X'"- RESERVED
225	(E1) HEX	1	PCCASRBL	LOCK BYTE FOR COMMUNICATING CHANNEL ERRORS BETWEEN CCH AND IOS
		.... ....	PCCASRBA	"X'00'"- SRB IS AVAILABLE FOR SCHEDULING
		1111 1111	PCCASRBN	"X'FF'"- SRB IS NOT AVAILABLE FOR SCHEDULING
226	(E2) SIGNED	2	PCCACCHI	CHANNEL SET ID FOR THE CHANNEL SET IN ERROR
228	(E4) HEX	1	PCCAR106(52)	RESERVED
280	(118) FLOATING	8		ALIGN PCCAWERP TO DOUBLEWORD
280	(118) HEX	8	PCCAWERP	WORK ERPIB FOR CCH
280	(118) ADDRESS	4	PCCACHUB	UCB ADDRESS OF THE DEVICE IN USE WHEN THE CHANNEL-DETECTED ERROR OCCURRED. THIS FIELD IS ZERO IF CCH HAS NOT CREATED AN ERPIB FOR THE ERP'S.
284	(11C) HEX	1	PCCACHPF	PROGRAM FLAGS. INDICATES THE SELECTION OR INTERRUPTION SEQUENCE WHEN THE CSW WAS STORED.
		1....	PCCACSI0	"X'80'"- THE CSW WAS STORED AFTER A START I/O INSTRUCTION WAS EXECUTED.
		.1....	PCCACINT	"X'40'"- THE CSW WAS STORED AFTER AN I/O INTERRUPTION
		..1....	PCCACTIO	"X'20'"- THE CSW WAS STORED AFTER A TEST I/O INSTRUCTION WAS EXECUTED.
		...1....	PCCACHIO	"X'10'"- THE CSW WAS STORED AFTER A HALT I/O INSTRUCTION WAS EXECUTED
		.... 1...	PCCARV37	"X'08',,C'X'"- RESERVED
		.... .1..	PCCACSN5	"X'04'"- THE SENSE DATA WAS STORED
		.... ..1.	PCCACCNT	"X'02'"- THE CSW COUNT IS VALID
		.... ...1	PCCACNOR	"X'01'"- NO RETRY IS TO BE ATTEMPTED UNDER ANY CONDITIONS
285	(11D) HEX	1	PCCACHBL	PROBABLE SOURCE OF ERROR
		1....	PCCACCPU	"X'80'"- CPU ERROR

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
.1..	PCCACCHA			"X'40'"- CHANNEL ERROR
.1..	PCCACSCU			"X'20'"- STORAGE CONTROL UNIT ERROR
...1	PCCACSTG			"X'10'"- STORAGE ERROR
.... 1..	PCCACCUE			"X'08'"- CONTROL UNIT ERROR
.... .1..	PCCARV38			"X'04',,C'X'"- RESERVED
.... ..1..	PCCARV39			"X'02',,C'X'"- RESERVED
.... ...1..	PCCARV40			"X'01',,C'X'"- RESERVED
286 (11E) HEX	1	PCCACHVA		VALIDITY INDICATORS. WHEN THE DESIGNATED FIELD IS STORED BY THE CHANNEL WITH THE CORRECT CONTENTS THE VALIDITY BIT IS ONE. THE VALIDITY BIT FOR NON-STORED FIELDS IS MEANINGLESS.
1...	PCCACITF			"X'80'"- INTERFACE ADDRESS IS VALID
.1..	PCCARV41			"X'40',,C'X'"- RESERVED
..1.	PCCARV42			"X'20',,C'X'"- RESERVED
...1	PCCACSQV			"X'10'"- SEQUENCE CODE IS VALID
.... 1..	PCCACUNS			"X'08'"- UNIT STATUS IS VALID
.... .1..	PCCACCMD			"X'04'"- COMMAND ADDRESS IS VALID. THE CSW CONTAINS A VALID COMMAND ADDRESS.
.... ..1..	PCCACCHV			"X'02'"- CHANNEL ADDRESS IS VALID
.... ...1..	PCCACDAV			"X'01'"- DEVICE ADDRESS IS VALID
287 (11F) HEX	1	PCCACHTS		TERMINATION AND SEQUENCE (RETRY) CODES
11..	PCCACTEC			"X'C0'"- TWO-BIT TERMINATION CODE. THIS CODE SPECIFIES THE TERMINATION SIGNALS USED ON THE I/O INTERFACE AFTER THE CHANNEL DETECTED THE ERROR. THIS FIELD HAS MEANING ONLY WHEN ICC OR CCC IS INDICATED IN THE CSW. THE FOLLOWING 4 EQU'S ARE THE VALUES FOR TERMINATION CODE.
....	PCCACTC0			"X'00'"- INTERFACE DISCONNECT
.1..	PCCACTC1			"X'40'"- STOP, STACK OR NORMAL TERMINATION
1...	PCCACTC2			"X'80'"- SELECTIVE RESET
11..	PCCACTC3			"X'C0'"- SYSTEM RESET
..1.	PCCADSC			"X'20'"- DEVICE STATUS CHECK
...1	PCCAI			"X'10'"- INTERFACE INOPERATIVE
.... 1..	PCCACDIN			"X'08'"- I/O ERROR ALERT
.... .111	PCCACSEQ			"X'07'"- THREE-BIT SEQUENCE CODE. THESE CODES HAVE CHANNEL-DEPENDENT MEANINGS.

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
288 (120) HEX			1 PCCACHS1	CCH INTERNAL SWITCH 1
1...			PCCACCMP	"X'80'"- COMMAND REGISTER PARITY IS VALID
.1...			PCCACNRE	"X'40'"- CCH WILL NOT CREATE A RECORD FOR THIS ERROR
..1.			PCCACFRR	"X'20'"- THE CCH FRR IS IN THE STACK
...1			PCCACNLS	"X'10'"- CCH IS TO PERFORM THE RECORD FUNCTION ONLY. AN ERPIB IS NOT TO BE PLACED IN THE EWA.
.... 1...			PCCACAND	"X'08'"- ATTENTION HAS BEEN PRESENTED
.... .1..			PCCACIBC	"X'04'"- AN ERPIB FOR THIS ERROR HAS ALREADY BEEN CREATED
.... .1.			PCCACUCB	"X'02'"- UCB INVALID BIT
.... ...1			PCCARV47	"X'01',,C'X'"- RESERVED
289 (121) HEX			1 PCCACHS2	CCH INTERNAL SWITCH 2
1...			PCCACIOR	"X'80'"- I/O RESTART FUNCTION REQUIRED
.1..			PCCACALT	"X'40'"- THE ALTERNATE RETURN TO IOS IS TO BE USED
..1.			PCCACMOD	"X'20'"- NO MODULE IS AVAILABLE TO ANALYZE THE CHANNEL LOGOUT
...1			PCCACNLG	"X'10'"- CCH DETECTED A FAILURE TO LOG OR FAILURE TO STORE AN ECSW CONDITION
.... 1...			PCCACURC	"X'08'"- THE STIDC FIELD OF THE CAT ENTRY IS VALID BUT NOT THAT OF A SUPPORTED CHANNEL
.... .1..			PCCACCRA	"X'04'"- CHANNEL RECONFIGURATION HARDWARE ACTIVE FOR THE CHANNEL
.... .1.			PCCARV50	"X'02',,C'X'"- RESERVED
.... ...1			PCCARV51	"X'01',,C'X'"- RESERVED
290 (122) HEX			1 PCCACHRB	CCH RECORD BYTE
1...			PCCACSB	"X'80'"- ERROR ON SIO
.1..			PCCACINB	"X'40'"- ERROR ON INTERRUPT
..1.			PCCACTIB	"X'20'"- ERROR ON TIO
...1			PCCACHIB	"X'10'"- ERROR ON HIO
.... 1...			PCCARV52	"X'08',,C'X'"- RESERVED
.... .1..			PCCACSNB	"X'04'"- SENSE DATA STORED
.... .1..			PCCACCVB	"X'02'"- COUNT VALID
.... ...1			PCCACNRB	"X'01'"- NO RETRY
291 (123) HEX			1 PCCAIOSI	IOS INTERCEPT BYTE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
292	(124) SIGNED	4	PCCACHW1	CCH WORK AREA 1
296	(128) SIGNED	4	PCCACHW2	CCH WORK AREA 2
300	(12C) SIGNED	2	PCCALOGL	LENGTH OF CHANNEL LOGOUT FOR CURRENT ERROR
302	(12E) SIGNED	2	PCCACELL	MAXIMUM LENGTH OF I/O EXTENDED LOGOUT (IOEL) AREA
304	(130) HEX	1	PCCALGP1	LOGOUT PARITY AREA 1
305	(131) HEX	1	PCCALGP2	LOGOUT PARITY AREA 2
306	(132) SIGNED	1	PCCACHPB	LOGOUT PARITY BYTE COUNT
307	(133) HEX	1	PCCARV05	RESERVED FOR CCH
308	(134) HEX	1	PCCACHF1	CCH FOOTPRINT BYTE 1
	1...		PCCACF11	"X'80'"- IOS GPR'S SAVED
	.1...		PCCACF12	"X'40'"- UCB ADDRESS IS ZERO
	..1.		PCCACF13	"X'20'"- ERPIB EXISTS
	...1		PCCACF14	"X'10'"- IGFCCHSI ENTERED
	.... 1...		PCCACF15	"X'08'"- IGFCCHII ENTERED
	.... .1..		PCCACF16	"X'04'"- IGFCCHFE ENTERED
	.... ..1.		PCCACF17	"X'02'"- IGFC60 ENTERED
	.... ...1.		PCCACF18	"X'01'"- IGFC70 ENTERED
309	(135) HEX	1	PCCACHF2	CCH FOOTPRINT BYTE 2
	1...		PCCACF21	"X'80'"- IGFC80 ENTERED
	.1..		PCCACF22	"X'40'"- IGFCIC ENTERED
	..1.		PCCACF23	"X'20'"- IGFCCHRD ENTERED
	...1		PCCACF24	"X'10'"- IGFCCHMP ENTERED
	.... 1...		PCCACF25	"X'08'"- IGFCCHUC ENTERED
	.... .1..		PCCACF26	"X'04'"- IGFCCHAS ENTERED
	.... ..1.		PCCACF27	"X'02'"- IGFCCHIO ENTERED
	.... ...1.		PCCACF28	"X'01'"- EXIT CCH
310	(136) HEX	1	PCCACHF3	CCH FOOTPRINT BYTE 3
	1...		PCCAISRB	"X'80'"- SRB FOR IECVIRST SCHEDULED
	.1..		PCCASLCK	"X'40'"- SPACE ALLOCATION LOCK HELD BY CCH
	..1.		PCCARV66	"X'20',,C'X'"- RESERVED
	...1		PCCARV67	"X'10',,C'X'"- RESERVED
	.... 1...		PCCARV68	"X'08',,C'X'"- RESERVED
	.... .1..		PCCARV69	"X'04',,C'X'"- RESERVED
	.... ..1..		PCCARV70	"X'02',,C'X'"- RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
311 (137)	HEX	1	PCCARV71 PCCACHF4	"X'01'",,C'X'"- RESERVED CCH FOOTPRINT BYTE 4
		1	PCCARV72	"X'80'",,C'X'"- RESERVED
		1	PCCARV73	"X'40'",,C'X'"- RESERVED
		1	PCCARV74	"X'20'",,C'X'"- RESERVED
		1	PCCARV75	"X'10'",,C'X'"- RESERVED
		1	PCCARV76	"X'08'",,C'X'"- RESERVED
		1	PCCARV77	"X'04'",,C'X'"- RESERVED
		1	PCCARV78	"X'02'",,C'X'"- RESERVED
		1	PCCARV79	"X'01'",,C'X'"- RESERVED
312 (138)	SIGNED	4	PCCACHSV(3)	CCH INTERNAL SAVE AREA. FIRST WORD CONTAINS THE ADDRESS OF THE CURRENT CCH RECORD BUFFER
324 (144)	HEX	8	PCCACHID	STORE CHANNEL ID WORK AREA
332 (14C)	ADDRESS	4	PCCALOGA	ADDRESS OF CHANNEL LOGOUT
336 (150)	ADDRESS	4	PCCARV54	RESERVED
340 (154)	ADDRESS	4	PCCARV55	RESERVED
344 (158)	ADDRESS	4	PCCARV56	RESERVED
348 (15C)	ADDRESS	4	PCCARV57	RESERVED
352 (160)	ADDRESS	4	PCCARV58	RESERVED
356 (164)	ADDRESS	4	PCCARV59	RESERVED
360 (168)	ADDRESS	4	PCCARV60	RESERVED
364 (16C)	ADDRESS	4	PCCARV61	RESERVED
368 (170)	ADDRESS	4	PCCARV62	RESERVED
372 (174)	ADDRESS	4	PCCARV63	RESERVED
376 (178)	HEX	1	PCCAATTR PCCACPUM	PROCESSOR ATTRIBUTES "X'80'"- INDICATOR THAT DEAD CPU HAD A

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				MALFUNCTION
.1..	PCCAIO			"X'40'"- PROCESSOR HAS I/O CAPABILITY
..1.	PCCANPFA			"X'20'"- WHEN SET, PAGE FAULT ASSIST SHOULD NOT BE USED
...1	PCCAR101			"X'10',,C'X'"- RESERVED
.... 1...	PCCAR102			"X'08',,C'X'"- RESERVED
.... .1..	PCCAR103			"X'04',,C'X'"- RESERVED
.... ..1.	PCCAR104			"X'02',,C'X'"- RESERVED
.... ...1	PCCAR105			"X'01',,C'X'"- RESERVED
377 (179) HEX	1	1	PCCARV01	RESERVED
378 (17A) SIGNED		2	PCCARV35	RESERVED
380 (17C) SIGNED		4	PCCARV36	RESERVED
384 (180) HEX		200		RESERVED

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PCCA	0		PCCACHF2	135		PCCACTC0	11F	00
PCCAATTR	178		PCCACHF3	136		PCCACTC1	11F	40
PCCACAFM	12		PCCACHF4	137		PCCACTC2	11F	80
PCCACALT	121	40	PCCACHIB	122	10	PCCACTC3	11F	C0
PCCACAND	120	08	PCCACHID	144		PCCACTEC	11F	C0
PCCACCE	82		PCCACHIO	11C	10	PCCACTIB	122	20
PCCACCHA	11D	40	PCCACHPB	132		PCCACTIN	83	3F
PCCACCHI	E2		PCCACHPF	11C		PCCACTIO	11C	20
PCCACCHM	B0		PCCACHRB	122		PCCACTTD	81	3F
PCCACCHV	11E	02	PCCACHSV	138		PCCACUCB	120	02
PCCACCMD	11E	04	PCCACHS1	120		PCCACUNS	11E	08
PCCACCMP	120	80	PCCACHS2	121		PCCACURC	121	08
PCCACCNT	11C	02	PCCACHTS	11F		PCCADSC	11F	20
PCCACCPU	11D	80	PCCACHUB	118		PCCAELAD	A8	
PCCACCRA	121	04	PCCACHVA	11E		PCCAELBA	AC	
PCCACCUE	11D	08	PCCACHW1	124		PCCAEMSA	94	
PCCACCVB	122	02	PCCACHW2	128		PCCAEMS8	88	
PCCACDAV	11E	01	PCCACIBC	120	04	PCCAEMSE	90	
PCCACDIN	11F	08	PCCACINB	122	40	PCCAEMSI	88	
PCCACCELL	12E		PCCACINT	11C	40	PCCAEMSP	8C	
PCCACFRR	120	20	PCCACIOR	121	80	PCCAEMS2	89	
PCCACF11	134	80	PCCACITF	11E	80	PCCAEMS3	8A	
PCCACF12	134	40	PCCACMOD	121	20	PCCAEXDM	E0	40
PCCACF13	134	20	PCCACNLG	121	10	PCCAGTFR	84	10
PCCACF14	134	10	PCCACNLS	120	10	PCCAI	11F	10
PCCACF15	134	08	PCCACNOR	11C	01	PCCAINIT	80	80
PCCACF16	134	04	PCCACNRB	122	01	PCCAINT	83	
PCCACF17	134	02	PCCACNRE	120	40	PCCAIO	178	40
PCCACF18	134	01	PCCACPID	4		PCCAIOSI	123	
PCCACF21	135	80	PCCACPUA	10		PCCAIRST	E0	80
PCCACF22	135	40	PCCACPUM	178	80	PCCAISRB	136	80
PCCACF23	135	20	PCCACSCU	11D	20	PCCALGP1	130	
PCCACF24	135	10	PCCACSEQ	11F	07	PCCALGP2	131	
PCCACF25	135	08	PCCACSI8	122	80	PCCALOGA	14C	
PCCACF26	135	04	PCCACSI0	11C	80	PCCALOGL	12C	
PCCACF27	135	02	PCCACSNB	122	04	PCCALRBR	A4	
PCCACF28	135	01	PCCACSN8	11C	04	PCCALRBV	A0	
PCCACHAN	E0		PCCACSQV	11E	10	PCCAMCC	80	10
PCCACHBL	11D		PCCACSTG	11D	10	PCCAMEMS	84	01
PCCACHF1	134		PCCACTCC	82	3F	PCCAMF1R	84	02

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PCCAMINT	80	08	PCCARV24	8A	08	PCCARV74	137	20
PCCAMODE	84	04	PCCARV25	8A	04	PCCARV75	137	10
PCCANFCC	82	40	PCCARV26	8A	02	PCCARV76	137	08
PCCANFIN	83	40	PCCARV27	8A	01	PCCARV77	137	04
PCCANFTD	81	40	PCCARV28	8B	80	PCCARV78	137	02
PCCANPFA	178	20	PCCARV29	8B	40	PCCARV79	137	01
PCCANUCC	82	80	PCCARV30	8B	20	PCCARV81		20
PCCANUIN	83	80	PCCARV31	8B	10	PCCARV82		24
PCCANUTD	81	80	PCCARV32	8B	08	PCCARV83		28
PCCAPARL	88	80	PCCARV33	8B	04	PCCARV84		2C
PCCAPCCA	0		PCCARV34	8B	02	PCCARV87		38
PCCAPSAR	1C		PCCARV35	17A		PCCARV88		3C
PCCAPSAV	18		PCCARV36	17C		PCCARV89		40
PCCAPWAR	9C		PCCARV37	11C	08	PCCARV9A		6C
PCCAPWAV	98		PCCARV38	11D	04	PCCARV9B		70
PCCARISP	88		PCCARV39	11D	02	PCCARV9C		74
PCCARMS	8B	01	PCCARV4B	84	08	PCCARV9D		78
PCCARMSB	8B		PCCARV40	11D	01	PCCARV9E		7C
PCCARPB	84		PCCARV41	11E	40	PCCARV90		44
PCCARQCK	84	20	PCCARV42	11E	20	PCCARV91		48
PCCARSPR	34		PCCARV47	120	01	PCCARV92		4C
PCCARV01	179		PCCARV50	121	02	PCCARV93		50
PCCARV02	80	04	PCCARV51	121	01	PCCARV94		54
PCCARV03	80	02	PCCARV52	122	08	PCCARV95		58
PCCARV04	80	01	PCCARV54	150		PCCARV96		5C
PCCARV05	133		PCCARV55	154		PCCARV97		60
PCCARV06	88	20	PCCARV56	158		PCCARV98		64
PCCARV07	88	10	PCCARV57	15C		PCCARV99		68
PCCARV08	88	08	PCCARV58	160		PCCAR101	178	10
PCCARV09	88	04	PCCARV59	164		PCCAR102	178	08
PCCARV10	88	02	PCCARV60	168		PCCAR103	178	04
PCCARV11	88	01	PCCARV61	16C		PCCAR104	178	02
PCCARV13	89	40	PCCARV62	170		PCCAR105	178	01
PCCARV14	89	20	PCCARV63	174		PCCAR106		E4
PCCARV15	89	10	PCCARV66	136	20	PCCAR107		20
PCCARV16	89	08	PCCARV67	136	10	PCCAR108		10
PCCARV17	89	04	PCCARV68	136	08	PCCAR109		08
PCCARV18	89	02	PCCARV69	136	04	PCCAR110		04
PCCARV19	89	01	PCCARV70	136	02	PCCAR111		02
PCCARV21	8A	40	PCCARV71	136	01	PCCAR112		01
PCCARV22	8A	20	PCCARV72	137	80	PCCASERF	8A	80
PCCARV23	8A	10	PCCARV73	137	40	PCCASERL	88	40

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>NAME</u>	<u>HEX</u>	<u>HEX</u>	<u>NAME</u>	<u>HEX</u>	<u>HEX</u>	<u>NAME</u>	<u>HEX</u>	<u>HEX</u>
	<u>OFFSET</u>	<u>VALUE</u>		<u>OFFSET</u>	<u>VALUE</u>		<u>OFFSET</u>	<u>VALUE</u>
PCCASERP	89	80	PCCASRBN	E1	FF	PCCATODE	81	
PCCASIOR	84	40	PCCASWTH	84	80	PCCATQEP	14	
PCCASLCK	136	40	PCCASYNC	80	40	PCCAVKIL	80	20
PCCASRB	B4		PCCATMFL	80		PCCAWERP	118	
PCCASRBA	E1	00	PCCATMST	80		PCCAXSLF	30	
PCCASRBL	E1							

PCCAVT

Common Name : Physical Configuration Communication Area Vector Table

Macro ID : IHAPCCAT

DSECT Name : PCCAVT

Created by : IEAVNIPO

Subpool and Key : 245 and key 0

Size : 64 bytes

Pointed to by : CVTPCCAT field of the CVT data area.

Serialization : N/A

Function : Contains the address of a PCCA for each CPU.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PCCAVT	
0	(0) ADDRESS	4	PCCAT00P	ADDRESS OF PCCA FOR CPU 0
4	(4) ADDRESS	4	PCCAT01P	ADDRESS OF PCCA FOR CPU 1
8	(8) ADDRESS	4	PCCAT02P	ADDRESS OF PCCA FOR CPU 2
12	(C) ADDRESS	4	PCCAT03P	ADDRESS OF PCCA FOR CPU 3
16	(10) ADDRESS	4	PCCAT04P	ADDRESS OF PCCA FOR CPU 4
20	(14) ADDRESS	4	PCCAT05P	ADDRESS OF PCCA FOR CPU 5
24	(18) ADDRESS	4	PCCAT06P	ADDRESS OF PCCA FOR CPU 6
28	(1C) ADDRESS	4	PCCAT07P	ADDRESS OF PCCA FOR CPU 7
32	(20) ADDRESS	4	PCCAT08P	ADDRESS OF PCCA FOR CPU 8
36	(24) ADDRESS	4	PCCAT09P	ADDRESS OF PCCA FOR CPU 9
40	(28) ADDRESS	4	PCCAT10P	ADDRESS OF PCCA FOR CPU 10
44	(2C) ADDRESS	4	PCCAT11P	ADDRESS OF PCCA FOR CPU 11

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
48	(30) ADDRESS	4	PCCAT12P	ADDRESS OF PCCA FOR CPU 12
52	(34) ADDRESS	4	PCCAT13P	ADDRESS OF PCCA FOR CPU 13
56	(38) ADDRESS	4	PCCAT14P	ADDRESS OF PCCA FOR CPU 14
60	(3C) ADDRESS	4	PCCAT15P	ADDRESS OF PCCA FOR CPU 15

PCCB

Common Name : Private Catalog Control Block
Macro ID : IEFPCCB
DSECT Name : IEFPCCB
Created by : IEFAB4EF
Subpool and Key : 236 or 237 and key 1
Size : Not available
Pointed to by : JSCBPCC field of the JSCB data area
Serialization : None
Function : Contains information relating to a private catalog of a job.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	176	IEFPCCB	PVT CAT CONTROL BLOCK
0	(0) CHARACTER	4	PCCACRO	ACRONYM OF BLOCK 'PCCB'
4	(4) ADDRESS	4	PCCNEXTP	ADDR OF NEXT PCCB OR ZERO
8	(8) ADDRESS	4	PCCPREVP	ADDR OF PREVIOUS PCCB OR 0
12	(C) CHARACTER	4	PCCSTATS	PCCB INDICATORS
12	(C) CHARACTER	1	PCCSTAT1	STATUS BYTE NUMBER 1
1...	....		PCCSTEPC	CATALOG IS A STEPCAT
.1..	....		PCCALIAS	CTLG CON ALIAS FOR DSNAME
..1.	....		PCCACTIV	CATALOG ALLOCATED ACTIVE
...1	....		PCOSCVOL	CATALOG IS AN OS CVOL
.... 1...			PCCTCL	TEMPORARILY CLOSED
.... .111				NOT USED
13	(D) BITSTRING	1	PCCSTAT2	NOT USED
14	(E) BITSTRING	1	PCCSTAT3	NOT USED
15	(F) BITSTRING	1	PCCSTAT4	NOT USED
16	(10) ADDRESS	4	PCCACBP	ADDR OF ACB FOR PVT CAT
20	(14) CHARACTER	8	PCCDDNAM	DD NAME FOR DYN ALLOC CTLG

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
28	(1C) CHARACTER	44	PCCDSNAM	CATALOG DATA SET NAME
72	(48) CHARACTER	44	PCCTGCON	CATALOG CONNECTOR (ALIAS)
116	(74) CHARACTER	6	PCVOLSER	CVOL VOLUME SERIAL
122	(7A) CHARACTER	2	PCCRSVD1	NOT USED
124	(7C) ADDRESS	4	PCCLACBP	ACB ADDRESS OF TEMPORARILY CLOSED CATA- LOG
128	(80) CHARACTER	48	PCCRSVD2	NOT USED

PCCW

Common Name : Paging Channel Command Work Area

Macro ID : ILRPCCW

DSECT Name : PCCW

Created by : ILROPS00

Subpool and Key : Nucleus buffer and key 0

Size : 128 bytes

Pointed to by : IORPCCW field of the IORB data area

PCCWPCCW field of the PCCW data area

ASMPCCWQ field of the ASMV data area

Serialization : The PCCW is serialized by the PCCW available queue. The PCCW is kept on an available queue and removed when needed.

Function : Describes the string of channel command words which are passed by the I/O supervisor to the channel for I/O processing of a page.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	128	PCCW	DCL PCCW LEVEL 1
0	(0) CHARACTER	4	PCCWID	PCCW IDENTIFIER 'PCCW'
4	(4) UNSIGNED	1	PCCWSECT	SECTOR FOR SET SECTOR COMMAND
5	(5) CHARACTER	1	PCCWFMLS	INTERNAL FLAGS
1...	....		PCCWFERR	X'80' = I/O ERROR
.111	1111			RESERVED
6	(6) CHARACTER	6		RESERVED
12	(C) ADDRESS	4	PCCWPCCW	NEXT PCCW ADDRESS
16	(10) ADDRESS	4	PCCWAIA	ASSOCIATED AIA ADDRESS
20	(14) ADDRESS	4	PCCWIORB	IORB ADDRESS
24	(18) ADDRESS	4	PCCWIDW1	FIRST INDIRECT ADDRESSING WORD. POINTS TO THE BEGINNING OF A PAGE. USED BY RD/WT CCW.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
28	(1C) ADDRESS	4	PCCWIDW2	SECOND INDIRECT ADDRESSING WORD. POINTS TO SECOND 2K OF PAGE.
32	(20) CHARACTER	8	PCCWRSV1	RESERVED USED BY EXTENDED CKD FORMAT, NOT BY THIS FORMAT
40	(28) CHARACTER	8	PCCWCHHR	FULL SEEK ADDRESS MBBCCHHR
40	(28) CHARACTER	1	PCCWM	EXTENT NUMBER
41	(29) CHARACTER	2	PCCWBB	BIN NUMBER
43	(2B) CHARACTER	2	PCCWCC	CYLINDER NUMBER
45	(2D) CHARACTER	2	PCCWHH	TRACK (HEAD) NUMBER
47	(2F) CHARACTER	1	PCCWR	RECORD NUMBER
48	(30) CHARACTER	8	PCCWSEEK	SEEK CCW
48	(30) CHARACTER	1	PCCWSK	SEEK OP CODE
49	(31) ADDRESS	3	PCCWSKAD	SEEK CCW ADDRESS
52	(34) CHARACTER	2	PCCWSKFG	SEEK FLAGS
54	(36) CHARACTER	2	PCCWSKCT	SEEK COUNT
56	(38) CHARACTER	8	PCCWSSEC	SET SECTOR CCW
56	(38) CHARACTER	1	PCCWSS	SET SECTOR OP CODE
57	(39) ADDRESS	3	PCCWSSAD	SET SECTOR CCW ADDRESS
60	(3C) CHARACTER	2	PCCWSSFG	SET SECTOR FLAGS
62	(3E) CHARACTER	2	PCCWSSCT	SET SECTOR COUNT
64	(40) CHARACTER	8	PCCWSRCH	SEARCH CCW
64	(40) CHARACTER	1	PCCWSIDE	SEARCH ID EQUAL OP CODE
65	(41) ADDRESS	3	PCCWSIAD	SEARCH ID EQUAL CCW ADDRESS
68	(44) CHARACTER	2	PCCWSIFG	SEARCH ID EQUAL FLAGS
70	(46) CHARACTER	2	PCCWSICT	SEARCH ID EQUAL COUNT
72	(48) CHARACTER	8	PCCWTIC	TIC CCW

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
72	(48) CHARACTER	1	PCCWT	TIC OP CODE
73	(49) ADDRESS	3	PCCWTAD	TIC CCW ADDRESS
76	(4C) CHARACTER	2	PCCWTFG	TIC FLAGS
78	(4E) CHARACTER	2	PCCWTCT	TIC COUNT
80	(50) CHARACTER	8	PCCWRW	READ/WRITE CCW
80	(50) CHARACTER	1	PCCWRDWT	R/W OP CODE
81	(51) ADDRESS	3	PCCWADDR	R/W CCW ADDRESS
84	(54) CHARACTER	2	PCCWRWFG	R/W FLAGS
86	(56) CHARACTER	2	PCCWCNT	R/W COUNT
88	(58) CHARACTER	8	PCCWNOP	NOP (OR TIC) CCW
88	(58) CHARACTER	1	PCCWN	NOP OP CODE
89	(59) ADDRESS	3	PCCWNAD	NOP CCW ADDRESS
92	(5C) CHARACTER	2	PCCWNFG	NOP FLAGS
94	(5E) CHARACTER	2	PCCWNCT	NOP COUNT
96	(60) CHARACTER	10	PCCWSPPD	SET PAGING PARAMETERS DATA
96	(60) CHARACTER	1	PCCWSPL	SET PAGING PARAMETER FLAG BYTE
	1...		PCCWSPSQ	SEQUENTIAL FLAG
	.1...		PCCWSPR1	READ ONCE FLAG
97	(61) CHARACTER	1	PCCWSPBC	SET PAGING PARAMETER BLOCK COUNT USED WHEN SEQUENTIAL FLAG IS SET. ELSE IS ZERO.
98	(62) CHARACTER	2	PCCWSPCA	SET PAGING PARAMETER BASE CYLINDER ADDRESS ALWAYS ZERO
100	(64) CHARACTER	2	PCCWRSV2	RESERVED
102	(66) CHARACTER	4	PCCWSPSK	SET PAGING PARAMETER SEEK ADDRESS
106	(6A) CHARACTER	22	PCCWRSVD	RESERVED
128	(80) CHARACTER	0		
32	(20) STRUCTURE	48	PCCWECKD	PCCW FOR EXTENDED ARCHITECTURE

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
32	(20) CHARACTER	16	PCCWDEFD	DEFINE EXTENT DATA
32	(20) CHARACTER	1	PCCWDMSK	DEFINE EXTENT MASK BYTE
33	(21) CHARACTER	1	PCCWDATR	DEFINE EXTENT ATTRIBUTE BYTE
34	(22) UNSIGNED	2	PCCWDSZ	DEFINE EXTENT RECORD SIZE
36	(24) CHARACTER	4	PCCWDRSV	RESERVED
40	(28) CHARACTER	4	PCCWCCHB	BEGINNING CCHH OF DEFINE EXTENT
44	(2C) CHARACTER	4	PCCWCCHC	ENDING CCHH OF DEFINE EXTENT
48	(30) CHARACTER	16	PCCWL OCD	LOCATE RECORD DATA
48	(30) CHARACTER	1	PCCWL OPB	LOCATE RECORD OPERATION BYTE
49	(31) CHARACTER	1	PCCWL AUX	LOCATE RECORD AUXILIARY BYTE
50	(32) UNSIGNED	2	PCCWL REC	NUMBER OF RECORDS
52	(34) CHARACTER	4	PCCWL SEK	SEEK ADDRESS
56	(38) CHARACTER	5	PCCWL SRC	SEARCH ARGUMENT
61	(3D) CHARACTER	1	PCCWL SEC	SECTOR NUMBER
62	(3E) UNSIGNED	2	PCCWL TRN	TRANSFER LENGTH FACTOR
64	(40) CHARACTER	8	PCCWDEF E	DEFINE EXTENT CCW
64	(40) CHARACTER	1	PCCWDEOP	DEFINE EXTENT OP CODE
65	(41) ADDRESS	3	PCCWDEAD	DEFINE EXTENT DATA ADDRESS
68	(44) CHARACTER	2	PCCWDEFG	DEFINE EXTENT FLAG
70	(46) UNSIGNED	2	PCCWDECT	DEFINE EXTENT COUNT
72	(48) CHARACTER	8	PCCWL OCR	LOCATE RECORD CCW
72	(48) CHARACTER	1	PCCWL ROP	LOCATE RECORD OP CODE
73	(49) ADDRESS	3	PCCWL RAD	LOCATE RECORD DATA ADDRESS
76	(4C) CHARACTER	2	PCCWL RFG	LOCATE RECORD FLAG
78	(4E) CHARACTER	2	PCCWL RCT	LOCATE RECORD COUNT
48	(30) STRUCTURE	8	PCCWSETP	SET PAGING PARAMETERS CCW

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
48	(30) CHARACTER	1	PCCWSPOP	SET PAGING PARAMETER OP CODE
49	(31) ADDRESS	3	PCCWSPAD	SET PAGING PARAMETER ADDRESS
52	(34) CHARACTER	2	PCCWSPFG	SET PAGING PARAMETER FLAG
54	(36) CHARACTER	2	PCCWSPCT	SET PAGING PARAMETER COUNT
32	(20) STRUCTURE	48	PCCWECKD	PCCW FOR EXTENDED ARCHITECTURE
32	(20) CHARACTER	16	PCCWDEFD	DEFINE EXTENT DATA
32	(20) CHARACTER	1	PCCWDMSK	DEFINE EXTENT MASK BYTE
33	(21) CHARACTER	1	PCCWDATR	DEFINE EXTENT ATTRIBUTE BYTE
34	(22) UNSIGNED	2	PCCWDSZ	DEFINE EXTENT RECORD SIZE
36	(24) CHARACTER	4	PCCWDRSV	RESERVED
40	(28) CHARACTER	4	PCCWCCHB	BEGINNING CCHH OF DEFINE EXTENT
44	(2C) CHARACTER	4	PCCWCCHE	ENDING CCHH OF DEFINE EXTENT
48	(30) CHARACTER	16	PCCWL OCD	LOCATE RECORD DATA
48	(30) CHARACTER	1	PCCWL OPB	LOCATE RECORD OPERATION BYTE
49	(31) CHARACTER	1	PCCWL AUX	LOCATE RECORD AUXILIARY BYTE
50	(32) UNSIGNED	2	PCCWL REC	NUMBER OF RECORDS
52	(34) CHARACTER	4	PCCWL SEK	SEEK ADDRESS
56	(38) CHARACTER	5	PCCWL SRC	SEARCH ARGUMENT
61	(3D) CHARACTER	1	PCCWL SEC	SECTOR NUMBER
62	(3E) UNSIGNED	2	PCCWL TRN	TRANSFER LENGTH FACTOR
64	(40) CHARACTER	8	PCCWDEF E	DEFINE EXTENT CCW
64	(40) CHARACTER	1	PCCWDEOP	DEFINE EXTENT OP CODE
65	(41) ADDRESS	3	PCCWDEAD	DEFINE EXTENT DATA ADDRESS
68	(44) CHARACTER	2	PCCWDEFG	DEFINE EXTENT FLAG
70	(46) UNSIGNED	2	PCCWDECT	DEFINE EXTENT COUNT
72	(48) CHARACTER	8	PCCWL OCR	LOCATE RECORD CCW

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
72	(48) CHARACTER	1	PCCWLROP	LOCATE RECORD OP CODE
73	(49) ADDRESS	3	PCCWLRAD	LOCATE RECORD DATA ADDRESS
76	(4C) CHARACTER	2	PCCWLRFG	LOCATE RECORD FLAG
78	(4E) CHARACTER	2	PCCWLRCT	LOCATE RECORD COUNT
0	(0) STRUCTURE	128	PCCW	PCCW IDENTIFIER 'PCCW'
0	(0) CHARACTER	4	PCCWID	SECTOR FOR SET SECTOR COMMAND
4	(4) UNSIGNED	1	PCCWSECT	INTERNAL FLAGS
5	(5) CHARACTER	1	PCCWFGLS	X'80' = I/O ERROR
1...			PCCWFERR	RESERVED
.111 1111				RESERVED
6	(6) CHARACTER	6		NEXT PCCW ADDRESS
12	(C) ADDRESS	4	PCCWPCCW	ASSOCIATED AIA ADDRESS
16	(10) ADDRESS	4	PCCWAIA	IORB ADDRESS
20	(14) ADDRESS	4	PCCWIORB	FIRST INDIRECT ADDRESSING WORD. POINTS TO THE BEGINNING OF A PAGE. USED BY RD/WT CCW.
24	(18) ADDRESS	4	PCCWIDW1	
28	(1C) ADDRESS	4	PCCWIDW2	
32	(20) CHARACTER	8	PCCWRSV1	
40	(28) CHARACTER	8	PCCWCHHR	EXTENT NUMBER
40	(28) CHARACTER	1	PCCWM	BIN NUMBER
41	(29) CHARACTER	2	PCCWBB	CYLINDER NUMBER
43	(2B) CHARACTER	2	PCCWCC	TRACK (HEAD) NUMBER
45	(2D) CHARACTER	2	PCCWHH	RECORD NUMBER
47	(2F) CHARACTER	1	PCCWR	SEEK CCW
48	(30) CHARACTER	8	PCCWSEEK	SEEK OP CODE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
48	(30) CHARACTER	1	PCCWSK	SEEK CCW ADDRESS
49	(31) ADDRESS	3	PCCWSKAD	SEEK FLAGS
52	(34) CHARACTER	2	PCCWSKFG	SEEK COUNT
54	(36) CHARACTER	2	PCCWSKCT	SET SECTOR CCW
56	(38) CHARACTER	8	PCCWSSEC	SET SECTOR OP CODE
56	(38) CHARACTER	1	PCCWSS	SET SECTOR CCW ADDRESS
57	(39) ADDRESS	3	PCCWSSAD	SET SECTOR FLAGS
60	(3C) CHARACTER	2	PCCWSSFG	SET SECTOR COUNT
62	(3E) CHARACTER	2	PCCWSSCT	SEARCH CCW
64	(40) CHARACTER	8	PCCWSRCH	SEARCH ID EQUAL OP CODE
64	(40) CHARACTER	1	PCCWSIDE	SEARCH ID EQUAL CCW ADDRESS
65	(41) ADDRESS	3	PCCWSIAD	SEARCH ID EQUAL FLAGS
68	(44) CHARACTER	2	PCCWSIFG	SEARCH ID EQUAL COUNT
70	(46) CHARACTER	2	PCCWSICT	TIC CCW
72	(48) CHARACTER	8	PCCWTIC	TIC OP CODE
72	(48) CHARACTER	1	PCCWT	TIC CCW ADDRESS
73	(49) ADDRESS	3	PCCWTAD	TIC FLAGS
76	(4C) CHARACTER	2	PCCWTFG	TIC COUNT
78	(4E) CHARACTER	2	PCCWTCT	READ/WRITE CCW
80	(50) CHARACTER	8	PCCWRW	R/W OP CODE
80	(50) CHARACTER	1	PCCWRDWT	R/W CCW ADDRESS
81	(51) ADDRESS	3	PCCWADDR	R/W FLAGS
84	(54) CHARACTER	2	PCCWRWFG	R/W COUNT
86	(56) CHARACTER	2	PCCWCNT	NOP (OR TIC) CCW
88	(58) CHARACTER	8	PCCWNOP	NOP OP CODE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
88	(58) CHARACTER	1	PCCWN	NOP CCW ADDRESS
89	(59) ADDRESS	3	PCCWNAD	NOP FLAGS
92	(5C) CHARACTER	2	PCCWNFG	NOP COUNT
94	(5E) CHARACTER	2	PCCWNCT	SET PAGING PARAMETERS DATA
96	(60) CHARACTER	10	PCCWSPPD	
96	(60) CHARACTER	1	PCCWSPFL	
1...	....		PCCWSPSQ	READ ONCE FLAG
.1...	....		PCCWSPR1	SET PAGING PARAMETER BLOCK COUNT USED WHEN SEQUENTIAL FLAG IS SET. ELSE IS ZERO.
97	(61) CHARACTER	1	PCCWSPBC	
98	(62) CHARACTER	2	PCCWSPCA	
100	(64) CHARACTER	2	PCCWRSV2	SET PAGING PARAMETER SEEK ADDRESS
102	(66) CHARACTER	4	PCCWSPSK	
106	(6A) CHARACTER	22	PCCWRSVD	
128	(80) CHARACTER	0		
48	(30) STRUCTURE	8	PCCWSETP	
48	(30) CHARACTER	1	PCCWSPOP	
49	(31) ADDRESS	3	PCCWSPAD	
52	(34) CHARACTER	2	PCCWSPFG	SET PAGING PARAMETER COUNT
54	(36) CHARACTER	2	PCCWSPCT	
48	(30) STRUCTURE	8	PCCWSETP	SET PAGING PARAMETERS CCW
48	(30) CHARACTER	1	PCCWSPOP	SET PAGING PARAMETER OP CODE
49	(31) ADDRESS	3	PCCWSPAD	SET PAGING PARAMETER ADDRESS
52	(34) CHARACTER	2	PCCWSPFG	SET PAGING PARAMETER FLAG
54	(36) CHARACTER	2	PCCWSPCT	SET PAGING PARAMETER COUNT
0	(0) STRUCTURE	128	PCCW	PCCW IDENTIFIER 'PCCW'
0	(0) CHARACTER	4	PCCWID	SECTOR FOR SET SECTOR COMMAND
4	(4) UNSIGNED	1	PCCWSECT	INTERNAL FLAGS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
5	(5) CHARACTER	1	PCCWF娄GS	X'80' = I/O ERROR
1...	....		PCCWFERR	RESERVED
.111	1111			RESERVED
6	(6) CHARACTER	6		NEXT PCCW ADDRESS
12	(C) ADDRESS	4	PCCWPCCW	ASSOCIATED AIA ADDRESS
16	(10) ADDRESS	4	PCCWAIA	IORB ADDRESS
20	(14) ADDRESS	4	PCCWIORB	FIRST INDIRECT ADDRESSING WORD. POINTS TO THE BEGINNING OF A PAGE. USED BY RD/WT CCW.
24	(18) ADDRESS	4	PCCWIDW1	
28	(1C) ADDRESS	4	PCCWIDW2	
32	(20) CHARACTER	8	PCCWRSV1	
40	(28) CHARACTER	8	PCCWCHHR	EXTENT NUMBER
40	(28) CHARACTER	1	PCCWM	BIN NUMBER
41	(29) CHARACTER	2	PCCWBB	CYLINDER NUMBER
43	(2B) CHARACTER	2	PCCWCC	TRACK (HEAD) NUMBER
45	(2D) CHARACTER	2	PCCWHH	RECORD NUMBER
47	(2F) CHARACTER	1	PCCWR	SEEK CCW
48	(30) CHARACTER	8	PCCWSEEK	SEEK OP CODE
48	(30) CHARACTER	1	PCCWSK	SEEK CCW ADDRESS
49	(31) ADDRESS	3	PCCWSKAD	SEEK FLAGS
52	(34) CHARACTER	2	PCCWSKFG	SEEK COUNT
54	(36) CHARACTER	2	PCCWSKCT	SET SECTOR CCW
56	(38) CHARACTER	8	PCCWSSEC	SET SECTOR OP CODE
56	(38) CHARACTER	1	PCCWSS	SET SECTOR CCW ADDRESS
57	(39) ADDRESS	3	PCCWSSAD	SET SECTOR FLAGS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
60	(3C) CHARACTER	2	PCCWSSFG	SET SECTOR COUNT
62	(3E) CHARACTER	2	PCCWSSCT	SEARCH CCW
64	(40) CHARACTER	8	PCCWSRCH	SEARCH ID EQUAL OP CODE
64	(40) CHARACTER	1	PCCWSIDE	SEARCH ID EQUAL CCW ADDRESS
65	(41) ADDRESS	3	PCCWSIAD	SEARCH ID EQUAL FLAGS
68	(44) CHARACTER	2	PCCWSIFG	SEARCH ID EQUAL COUNT
70	(46) CHARACTER	2	PCCWSICT	TIC CCW
72	(48) CHARACTER	8	PCCWTIC	TIC OP CODE
72	(48) CHARACTER	1	PCCWT	TIC CCW ADDRESS
73	(49) ADDRESS	3	PCCWTAD	TIC FLAGS
76	(4C) CHARACTER	2	PCCWTFG	TIC COUNT
78	(4E) CHARACTER	2	PCCWTCT	READ/WRITE CCW
80	(50) CHARACTER	8	PCCWRW	R/W OP CODE
80	(50) CHARACTER	1	PCCWRDWT	R/W CCW ADDRESS
81	(51) ADDRESS	3	PCCWADDR	R/W FLAGS
84	(54) CHARACTER	2	PCCWRWFG	R/W COUNT
86	(56) CHARACTER	2	PCCWCNT	NOP (OR TIC) CCW
88	(58) CHARACTER	8	PCCWNOP	NOP OP CODE
88	(58) CHARACTER	1	PCCWN	NOP CCW ADDRESS
89	(59) ADDRESS	3	PCCWNAD	NOP FLAGS
92	(5C) CHARACTER	2	PCCWNFG	NOP COUNT
94	(5E) CHARACTER	2	PCCWNCT	SET PAGING PARAMETERS DATA
96	(60) CHARACTER	10	PCCWSPPD	
96	(60) CHARACTER	1	PCCWSPFL	READ ONCE FLAG
	1...		PCCWSPSQ	
	.1...		PCCWSPRI	SET PAGING PARAMETER BLOCK COUNT USED WHEN SEQUENTIAL FLAG IS SET. ELSE IS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				ZERO.
97	(61) CHARACTER	1	PCCWSPBC	
98	(62) CHARACTER	2	PCCWSPCA	
100	(64) CHARACTER	2	PCCWRSV2	SET PAGING PARAMETER SEEK ADDRESS
102	(66) CHARACTER	4	PCCWSPSK	
106	(6A) CHARACTER	22	PCCWRSV2	
128	(80) CHARACTER	0		
32	(20) STRUCTURE	48	PCCWECKD	
32	(20) CHARACTER	16	PCCWDEFD	DEFINE EXTENT MASK BYTE
32	(20) CHARACTER	1	PCCWDMSK	
33	(21) CHARACTER	1	PCCWDATR	
34	(22) UNSIGNED	2	PCCWDZ	
36	(24) CHARACTER	4	PCCWDRSV	BEGINNING CCHH OF DEFINE EXTENT
40	(28) CHARACTER	4	PCCWCCHB	
44	(2C) CHARACTER	4	PCCWCCHB	
48	(30) CHARACTER	16	PCCWLQCD	LOCATE RECORD OPERATION BYTE
48	(30) CHARACTER	1	PCCWLOPB	
49	(31) CHARACTER	1	PCCWLAUX	
50	(32) UNSIGNED	2	PCCWLREC	SEEK ADDRESS
52	(34) CHARACTER	4	PCCWLSEK	SEARCH ARGUMENT
56	(38) CHARACTER	5	PCCWLSC	SECTOR NUMBER
61	(3D) CHARACTER	1	PCCWLSEC	TRANSFER LENGTH FACTOR
62	(3E) UNSIGNED	2	PCCWLTRN	
64	(40) CHARACTER	8	PCCWDEFE	DEFINE EXTENT OP CODE
64	(40) CHARACTER	1	PCCWDEOP	DEFINE EXTENT DATA ADDRESS
65	(41) ADDRESS	3	PCCWDEAD	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
68	(44) CHARACTER	2	PCCWDEFG	DEFINE EXTENT COUNT
70	(46) UNSIGNED	2	PCCWDECT	LOCATE RECORD CCW
72	(48) CHARACTER	8	PCCWLPCR	LOCATE RECORD OP CODE
72	(48) CHARACTER	1	PCCWLROP	LOCATE RECORD DATA ADDRESS
73	(49) ADDRESS	3	PCCWLRAD	
76	(4C) CHARACTER	2	PCCWLRFG	LOCATE RECORD COUNT
78	(4E) CHARACTER	2	PCCWLRCT	

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PCCW	0		PCCWLOCR	48		PCCWSICT	46	
PCCWADDR	51		PCCWLOPB	30		PCCWSIDE	40	
PCCWAIA	10		PCCWLRAD	49		PCCWSIFG	44	
PCCWB	29		PCCWLRCT	4E		PCCWSK	30	
PCCWCC	2B		PCCWLREC	32		PCCWSKAD	31	
PCCWCCHB	28		PCCWLRFG	4C		PCCWSKCT	36	
PCCWCCHC	2C		PCCWLROP	48		PCCWSKFG	34	
PCCWCCHR	28		PCCWLSEC	3D		PCCWSPAD	31	
PCCWCNT	56		PCCWLSEK	34		PCCWSPBC	61	
PCCWDATR	21		PCCWLSRC	38		PCCWSPCA	62	
PCCWDEAD	41		PCCWLTRN	3E		PCCWSPCT	36	
PCCWDECT	46		PCCWM	28		PCCWSPFG	34	
PCCWDEFD	20		PCCWN	58		PCCWSPFL	60	
PCCWT E FE	40		PCCWNAD	59		PCCWSPOP	30	
PCCWDEFG	44		PCCWNCT	5E		PCCWSPPD	60	
PCCWDEOP	40		PCCWNFG	5C		PCCWSPR1	60	40
PCCWDMSK	20		PCCWNOP	58		PCCWSPSK	66	
PCCWDRSV	24		PCCWPCCW	C		PCCWSPSQ	60	80
PCCWDSZ	22		PCCWR	2F		PCCWSRCH	40	
PCCWECKD	20		PCCWRDWT	50		PCCWSS	38	
PCCWFERR	5	80	PCCWRSVD	6A		PCCWSSAD	39	
PCCWFLGS	5		PCCWRSV1	20		PCCWSSCT	3E	
PCCWHH	2D		PCCWRSV2	64		PCCWSSEC	38	
PCCWID	0		PCCWRW	50		PCCWSSFG	3C	
PCCWIDW1	18		PCCWRWFG	54		PCCWT	48	
PCCWIDW2	1C		PCCWSECT	4		PCCWTAD	49	
PCCWIORB	14		PCCWSEEK	30		PCCWTCT	4E	
PCCWLAUX	31		PCCWSETP	30		PCCWTFG	4C	
PCCWLOCD	30		PCCWSIAD	41		PCCWTIC	48	

PCT

Common Name : ASM Performance Characteristics Table
Macro ID : ILRPCT
DSECT Name : PCT
Created by : ILRASRIM, ILRPGEXP
Subpool and Key : 245 and key 0
Size : 40 plus number of sector values for the device
Pointed to by : PARTPCTQ field of the PART data area
 PCTNEXT field of the PCT data area
 PAREPCTP field of the PARTE data area
Serialization : None
Function : Provides a single location for device-dependent information.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	40	PCT	PERFORMANCE CHARACTERISTICS TABLE
0	(0) CHARACTER	4	PCTID	'PCT' IDENTIFIER
4	(4) CHARACTER	6	PCTDTYPE	DEVICE TYPE (EBCDIC)
10	(A) UNSIGNED	2	PCTSMAX	DEVICE MAX SLOTS
12	(C) CHARACTER	2	PCTDTYPX	DEVICE TYPE
14	(E) SIGNED	2	PCTCYLSZ	SLOTS PER CYLINDER
16	(10) ADDRESS	4	PCTNEXT	CHAIN PTR FOR QUEUE OF PCTS BASED IN PART.
20	(14) CHARACTER	4	PCTDMASK	MASK TO PRESET NON-EXISTING SLOTS
24	(18) CHARACTER	1	PCTDUSE	DEVICE USAGE CODE.
25	(19) UNSIGNED	1	PCTPCCWM	PCCW MULTIPLIER
26	(1A) UNSIGNED	1	PCTBRST	BURST SIZE
27	(1B) CHARACTER	1	PCTRSV1	RESERVED
28	(1C) SIGNED	2	PCTDPGWT	PAGING WEIGHT FOR THIS DEVICE TYPE
30	(1E) SIGNED	2	PCTSSECN	NUMBER OF UNIQUE SET SECTOR VALUES

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
32	(20) SIGNED	4	PCTRQTIM	MIN TIME TO READ OR WRITE ONE 4096-BYTE SLOT
36	(24) UNSIGNED	2	PCTMAXTK	MAXIMUM RELATIVE TRACK POSITION
38	(26) UNSIGNED	2	PCTMSSB	MINIMUM BYTE VARIANCE TO INSERT SET SECTOR
40	(28) CHARACTER	0	PCTABLE	SECTOR VALUE TABLE
40	(28) CHARACTER	0	PCTSECT	TABLE OF SECTOR VALUES FOR THIS DEVICE TYPE
40	(28) CHARACTER	1	PCTSLTNM	RELATIVE SLOT NUMBER ON CYL
	1...		PCTFOVFL	1 = OVERFLOW TRACK
	.111 1111		PCTSLOT	SLOT NUMBER
41	(29) CHARACTER	1	PCTSECNM	SECTOR VALUE CORRESPONDING TO SLOT NUMBER
42	(2A) CHARACTER	2	PCTTRBA	REL BYTE ON TRACK
44	(2C) CHARACTER	3	PCTHHR	HEAD AND RECORD FOR THIS SLOT ON THE CYLINDER
47	(2F) CHARACTER	1	PCTRSV2	RESERVED

PDS

Common Name : Partitioned Data Set Directory Entry

Macro ID : IHAPDS

DSECT Name : PDS2

Created by : STOW

Subpool and Key : N/A, resides in a PDS directory

Size : Variable (34-58 bytes). All sections after the first are optional.

The optional section mapping SSI data (PDSS03) is halfword aligned and the total length is rounded up to an even number of bytes.

Pointed to by : N/A

Serialization : None

Function : Maps a load module's directory entry in a partitioned data set (PDS).

Contains the module's name or alias name, the relative address of the first record, the length of the user data, and variable length user data. The first 12 bytes can also be used to map any type of PDS directory entry.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	33	PDS2	
0	(0) CHARACTER	8	PDS2NAME	LOAD MODULE MEMBER NAME OR ALIAS
8	(8) CHARACTER	3	PDS2TTRP	TTR OF FIRST BLOCK OF NAMED MEMBER
11	(B) CHARACTER	1	PDS2INDC	INDICATOR BYTE
1...	....		PDS2ALIS	NAME IN THE FIRST FIELD IS AN ALIAS
.11.	....		PDS2NTTR	NUMBER OF TTR'S IN THE USER DATA FIELD
...1	1111		PDS2LUSR	LENGTH OF USER DATA FIELD IN HALF WORDS
12	(C) CHARACTER	3	PDS2TTRT	TTR OF FIRST BLOCK OF TEXT
12	(C) CHARACTER	1	PDS2USRD	START OF VARIABLE LENGTH USER DATA FIELD
15	(F) CHARACTER	1	PDS2ZERO	ZERO
16	(10) CHARACTER	3	PDS2TTRN	TTR OF NOTE LIST OR SCATTER/TRANSLATION TABLE. USED FOR MODULES IN SCATTER LOAD FORMAT OR OVERLAY STRUCTURE ONLY.
19	(13) ADDRESS	1	PDS2NL	NUMBER OF ENTRIES IN NOTE LIST FOR MODULES IN OVERLAY STRUCTURE, OTHERWISE ZERO

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
20	(14) CHARACTER	2	PDS2ATTR	TWO-BYTE MODULE ATTRIBUTE FIELD
20	(14) BITSTRING	1	PDS2ATTR1	FIRST BYTE OF MODULE ATTRIBUTE FIELD
	1...		PDS2RENT	REENTERABLE
	.1...		PDS2REUS	REUSABLE
	..1.		PDS20VLY	IN OVERLAY STRUCTURE
	...1		PDS2TEST	MODULE TO BE TESTED TESTRAN
	.... 1...		PDS2LOAD	ONLY LOADABLE
	.... .1..		PDS2SCTR	SCATTER FORMAT
	.... ..1.		PDS2EXEC	EXECUTABLE
	.... ...1		PDS21BLK	IF ZERO, MODULE CONTAINS MULTIPLE RECORDS WITH AT LEAST ONE BLOCK OF TEXT. IF ONE, MODULE CONTAINS NO RLD ITEMS AND ONLY ONE BLOCK OF TEXT.
21	(15) BITSTRING	1	PDS2ATTR2	SECOND BYTE OF MODULE ATTRIBUTE FIELD
	1...		PDS2FLVL	IF ZERO, MODULE CAN BE PROCESSED BY ALL LEVELS OF LINKAGE EDITOR. IF ONE, MODULE CAN BE PROCESSED ONLY BY F LEVEL OF LINKAGE EDITOR.
	.1...		PDS2ORG0	LINKAGE EDITOR ASSIGNED ORIGIN OF FIRST BLOCK OF TEXT IS ZERO.
	..1.		PDS2EP0	ENTRY POINT ASSIGNED BY LINKAGE EDITOR IS ZERO
	...1		PDS2NRLD	MODULE CONTAINS NO RLD ITEMS
	.... 1...		PDS2NREP	MODULE CANNOT BE REPROCESSED BY LINKAGE EDITOR
	.... .1..		PDS2TSTN	MODULE CONTAINS TESTRAN SYMBOL CARDS
	.... ..1.		PDS2LEF	MODULE CREATED BY LINKAGE EDITOR F
	.... ...1		PDS2REFR	REFRESHABLE MODULE
22	(16) ADDRESS	3	PDS2STOR	TOTAL CONTIGUOUS MAIN STORAGE REQUIRE- MENT OF MODULE
25	(19) SIGNED	2	PDS2FTBL	LENGTH OF FIRST BLOCK OF TEXT
27	(1B) ADDRESS	3	PDS2EPA	ENTRY POINT ADDRESS ASSOCIATED WITH MEM- BER NAME OR WITH ALIAS NAME IF ALIAS INDICATOR IS ONE
30	(1E) ADDRESS	3		LINKAGE EDITOR ASSIGNED ORIGIN OF FIRST BLOCK OF TEXT (OS USE OF FIELD)
30	(1E) CHARACTER	3	PDS2FTB0	FLAG BYTES (AOS USE OF FIELD)
30	(1E) BITSTRING	1	PDS2FTB1	BYTE 1 OF PDS2FTB0
	1...		PDSAOSLE	MODULE HAS BEEN PROCESSED BY VS LINKAGE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				EDITOR
.1..				RESERVED TO INDICATE ANOTHER EXPANSION WHEN IT BECOMES NECESSARY
..1.			PDS2PAGA	PAGE ALIGNMENT REQUIRED FOR LOAD MODULE
...1			PDS2SSI	SSI INFORMATION PRESENT
.... 1...			PDSAPFLG	INFORMATION IN PDSAPF IS VALID
.... .111				RESERVED
31	(1F) CHARACTER	1	PDS2FTB2	BYTE 2 OF PDS2FTB0
32	(20) CHARACTER	1	PDS2FTB3	BYTE 3 OF PDS2FTB0
33	(21) CHARACTER	0	PDSBCEND	END OF BASIC SECTION
0	(0) STRUCTURE	8	PDSS01	
0	(0) SIGNED	2	PDS2SLSZ	NUMBER OF BYTES IN SCATTER LIST
2	(2) SIGNED	2	PDS2TTSZ	NUMBER OF BYTES IN TRANSLATION TABLE
4	(4) CHARACTER	2	PDS2ESDT	IDENTIFICATION OF ESD ITEM (ESDID) OF CONTROL SECTION TO WHICH FIRST BLOCK OF TEXT BELONGS
6	(6) CHARACTER	2	PDS2ESDC	IDENTIFICATION OF ESD ITEM (ESDID) OF CONTROL SECTION CONTAINING ENTRY POINT
8	(8) CHARACTER	0	PDSS01ND	END OF SCATTER LOAD SECTION
0	(0) STRUCTURE	11	PDSS02	
0	(0) ADDRESS	3	PDS2EPM	ENTRY POINT FOR MEMBER NAME
3	(3) CHARACTER	8	PDS2MNM	MEMBER NAME OF LOAD MODULE. WHEN THE FIRST FIELD (PDS2NAME) IS AN ALIAS NAME, THIS FIELD CONTAINS THE ORIGINAL NAME OF THE MEMBER EVEN AFTER THE MEMBER HAS BEEN RENAMED.
11	(B) CHARACTER	0	PDSS02ND	END OF ALIAS SECTION
0	(0) STRUCTURE	4	PDSS03	
0	(0) CHARACTER	4	PDSSIW	SSI INFORMATION WORD
0	(0) ADDRESS	1	PDSCHLVL	CHANGE LEVEL OF MEMBER
1	(1) BITSTRING	1	PDSSSIFB	SSI FLAG BYTE

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		1....		RESERVED
		.1....	PDSFORCE	A FORCE CONTROL CARD WAS USED WHEN EXECUTING THE IHGUAP PROGRAM
		..1....	PDSUSRCH	A CHANGE WAS MADE TO MEMBER BY THE INSTALLATION, AS OPPOSED TO AN IBM-DISTRIBUTED CHANGE
		...1....	PDSEMFIX	SET WHEN AN EMERGENCY IBM-AUTHORIZED PROGRAM 'FIX' IS MADE, AS OPPOSED TO CHANGES THAT ARE INCLUDED IN AN IBM-DISTRIBUTED MAINTENANCE PACKAGE
		.... 1....	PDSDEPCH	A CHANGE MADE TO THE MEMBER IS DEPENDENT UPON A CHANGE MADE TO SOME OTHER MEMBER IN SYSTEM
		.... .11.	PDSSYSGN	FLAGS THAT INDICATE WHETHER OR NOT A CHANGE TO THE MEMBER WILL NECESSITATE A PARTIAL OR COMPLETE REGENERATION OF THE SYSTEM
2	.... .1 (2) CHARACTER	2	PDSIBMMB PDSMBRSN	MEMBER IS SUPPLIED BY IBM MEMBER SERIAL NUMBER
4	(4) CHARACTER	0	PDSS03ND	END OF SSI SECTION
0	(0) STRUCTURE	2	PDSS04	
0	(0) CHARACTER	2	PDSAPF	PROGRAM AUTHORIZATION FACILITY (APF) FIELD
0	(0) ADDRESS	1	PDSAPFCT	LENGTH OF PROGRAM AUTHORIZATION CODE (PDSAPFAC) IN BYTES
1	(1) CHARACTER	1	PDSAPFAC	PROGRAM AUTHORIZATION CODE
2	(2) CHARACTER	0	PDSS04ND	END OF APF SECTION

PDS2

Common Name : Partitioned Data Set Directory Entry

Macro ID : IHAPDS

DSECT Name : PDS2

Created by : BLDL

Subpool and Key : User defined

Size : User defined (12-60 bytes)

Pointed to by : N/A

Serialization : None

Function : Describes a member of a Partitioned Data Set (PDS). Contains the name or alias name, the relative address of the first record, concatenation number, the originating library, length of the user data, and variable length user data. This macro is for a load module's user data only. The first 14 bytes can be used to map any type of PDS directory entry. All sections after the first are optional, and the section which maps SSI data (PDSS03) is halfword aligned. An extra byte may be added to the end to make the total length an even number of bytes.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	35	PDS2	
0	(0) CHARACTER	8	PDS2NAME	LOAD MODULE MEMBER NAME OR ALIAS
8	(8) CHARACTER	3	PDS2TTRP	TTR OF FIRST BLOCK OF NAMED MEMBER
11	(B) ADDRESS	1	PDS2CNCT	CONCATENATION NUMBER OF THE DATA SET
12	(C) CHARACTER	1	PDS2LIBF	LIBRARY FLAG FIELD
13	(D) CHARACTER	1	PDS2INDC	INDICATOR BYTE
1...	....		PDS2ALIS	NAME IN THE FIRST FIELD IS AN ALIAS
.11.	....		PDS2NTTR	NUMBER OF TTR'S IN THE USER DATA FIELD
...1	1111		PDS2LUSR	LENGTH OF USER DATA FIELD IN HALF WORDS
14	(E) CHARACTER	3	PDS2TTRT	TTR OF FIRST BLOCK OF TEXT
14	(E) CHARACTER	1	PDS2USRD	START OF VARIABLE LENGTH USER DATA FIELD
17	(11) CHARACTER	1	PDS2ZERO	ZERO
18	(12) CHARACTER	3	PDS2TTRN	TTR OF NOTE LIST OR SCATTER/TRANSLATION TABLE. USED FOR MODULES IN SCATTER LOAD FORMAT OR OVERLAY STRUCTURE ONLY.
21	(15) ADDRESS	1	PDS2NL	NUMBER OF ENTRIES IN NOTE LIST FOR MODULES IN OVERLAY STRUCTURE, OTHERWISE

<u>OFFSET</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
22	(16) CHARACTER	2	PDS2ATR	ZERO
22	(16) BITSTRING	1	PDS2ATR1	TWO-BYTE MODULE ATTRIBUTE FIELD
	1...		PDS2RENT	FIRST BYTE OF MODULE ATTRIBUTE FIELD
	.1..		PDS2REUS	REENTERABLE
	..1.		PDS20VLY	REUSABLE
	...1		PDS2TEST	IN OVERLAY STRUCTURE
	.... 1...		PDS2LOAD	MODULE TO BE TESTED TESTRAN
	.... .1..		PDS2SCTR	ONLY LOADABLE
	.... ..1.		PDS2EXEC	SCATTER FORMAT
	.... ...1		PDS21BLK	EXECUTABLE
				IF ZERO, MODULE CONTAINS MULTIPLE RECORDS WITH AT LEAST ONE BLOCK OF TEXT. IF ONE, MODULE CONTAINS NO RLD ITEMS AND ONLY ONE BLOCK OF TEXT.
23	(17) BITSTRING	1	PDS2ATR2	SECOND BYTE OF MODULE ATTRIBUTE FIELD
	1...		PDS2FLVL	IF ZERO, MODULE CAN BE PROCESSED BY ALL LEVELS OF LINKAGE EDITOR. IF ONE, MODULE CAN BE PROCESSED ONLY BY F LEVEL OF LINKAGE EDITOR.
	.1..		PDS2ORG0	LINKAGE EDITOR ASSIGNED ORIGIN OF FIRST BLOCK OF TEXT IS ZERO.
	..1.		PDS2EP0	ENTRY POINT ASSIGNED BY LINKAGE EDITOR IS ZERO
	...1		PDS2NRLD	MODULE CONTAINS NO RLD ITEMS
	.... 1...		PDS2NREP	MODULE CANNOT BE REPROCESSED BY LINKAGE EDITOR
	.... .1..		PDS2TSTN	MODULE CONTAINS TESTRAN SYMBOL CARDS
	.... ..1.		PDS2LEF	MODULE CREATED BY LINKAGE EDITOR F
	.... ...1		PDS2REFR	REFRESHABLE MODULE
24	(18) ADDRESS	3	PDS2STOR	TOTAL CONTIGUOUS MAIN STORAGE REQUIRE- MENT OF MODULE
27	(1B) SIGNED	2	PDS2FTBL	LENGTH OF FIRST BLOCK OF TEXT
29	(1D) ADDRESS	3	PDS2EPA	ENTRY POINT ADDRESS ASSOCIATED WITH MEM- BER NAME OR WITH ALIAS NAME IF ALIAS INDICATOR IS ONE
32	(20) ADDRESS	3		LINKAGE EDITOR ASSIGNED ORIGIN OF FIRST BLOCK OF TEXT (OS USE OF FIELD)

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
32	(20) CHARACTER	3	PDS2FTB0	FLAG BYTES (AOS USE OF FIELD)
32	(20) BITSTRING	1	PDS2FTB1	BYTE 1 OF PDS2FTB0
	1...		PDSAOSLE	MODULE HAS BEEN PROCESSED BY VS LINKAGE EDITOR
	.1...			RESERVED TO INDICATE ANOTHER EXPANSION WHEN IT BECOMES NECESSARY
	..1.		PDS2PAGA	PAGE ALIGNMENT REQUIRED FOR LOAD MODULE
	...1		PDS2SSI	SSI INFORMATION PRESENT
	.... 1...		PDSAPFLG	INFORMATION IN PDSAPP IS VALID
	.... .111			RESERVED
33	(21) CHARACTER	1	PDS2FTB2	BYTE 2 OF PDS2FTB0
34	(22) CHARACTER	1	PDS2FTB3	BYTE 3 OF PDS2FTB0
35	(23) CHARACTER	0	PDSBCEND	END OF BASIC SECTION
0	(0) STRUCTURE	8	PDSS01	
0	(0) SIGNED	2	PDS2SLSZ	NUMBER OF BYTES IN SCATTER LIST
2	(2) SIGNED	2	PDS2TTSZ	NUMBER OF BYTES IN TRANSLATION TABLE
4	(4) CHARACTER	2	PDS2ESDT	IDENTIFICATION OF ESD ITEM (ESDID) OF CONTROL SECTION TO WHICH FIRST BLOCK OF TEXT BELONGS
6	(6) CHARACTER	2	PDS2ESDC	IDENTIFICATION OF ESD ITEM (ESDID) OF CONTROL SECTION CONTAINING ENTRY POINT
8	(8) CHARACTER	0	PDSS01ND	END OF SCATTER LOAD SECTION
0	(0) STRUCTURE	11	PDSS02	
0	(0) ADDRESS	3	PDS2EPM	ENTRY POINT FOR MEMBER NAME
3	(3) CHARACTER	8	PDS2MNM	MEMBER NAME OF LOAD MODULE. WHEN THE FIRST FIELD (PDS2NAME) IS AN ALIAS NAME, THIS FIELD CONTAINS THE ORIGINAL NAME OF THE MEMBER EVEN AFTER THE MEMBER HAS BEEN RENAMED.
11	(B) CHARACTER	0	PDSS02ND	END OF ALIAS SECTION
0	(0) STRUCTURE	4	PDSS03	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) CHARACTER	4	PDSSSIWD	SSI INFORMATION WORD
0	(0) ADDRESS	1	PDSCHLVL	CHANGE LEVEL OF MEMBER
1	(1) BITSTRING	1	PDSSSIFB	SSI FLAG BYTE
1...	....			RESERVED
.1..	....		PDSFORCE	A FORCE CONTROL CARD WAS USED WHEN EXECUTING THE IHGUAP PROGRAM
..1.	....		PDSUSRCH	A CHANGE WAS MADE TO MEMBER BY THE INSTALLATION, AS OPPOSED TO AN IBM-DISTRIBUTED CHANGE
...1	....		PDSEMFIX	SET WHEN AN EMERGENCY IBM-AUTHORIZED PROGRAM 'FIX' IS MADE, AS OPPOSED TO CHANGES THAT ARE INCLUDED IN AN IBM-DISTRIBUTED MAINTENANCE PACKAGE
.... 1...			PDSDEPCH	A CHANGE MADE TO THE MEMBER IS DEPENDENT UPON A CHANGE MADE TO SOME OTHER MEMBER IN SYSTEM
.... .11.			PDSSYSGN	FLAGS THAT INDICATE WHETHER OR NOT A CHANGE TO THE MEMBER WILL NECESSITATE A PARTIAL OR COMPLETE REGENERATION OF THE SYSTEM
.... .1			PDSIBMMB	MEMBER IS SUPPLIED BY IBM
2	(2) CHARACTER	2	PDSTMRSN	MEMBER SERIAL NUMBER
4	(4) CHARACTER	0	PDSS03ND	END OF SSI SECTION
0	(0) STRUCTURE	2	PDSS04	
0	(0) CHARACTER	2	PDSAPF	PROGRAM AUTHORIZATION FACILITY (APF) FIELD
0	(0) ADDRESS	1	PDSAPFCT	LENGTH OF PROGRAM AUTHORIZATION CODE (PDSAPFAC) IN BYTES
1	(1) CHARACTER	1	PDSAPFAC	PROGRAM AUTHORIZATION CODE
2	(2) CHARACTER	0	PDSS04ND	END OF APF SECTION

PEL

Common Name : Parameter Element
Macro ID : ISGPEL
DSECT Name : PEL
Created by : ENQ/DEQ/RESERVE macro expansion
Subpool and Key : Any valid subpool in the private or common area; user's key.
Size : Variable length (44 + length of RNAME)
Pointed to by : The pointer is maintained by the user of the macro.
Serialization : None
Function : Contains the necessary information to process an ENQ/DEQ/RESERVE macro.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	52	PEL	PARAMETER ELEMENT LIST
0	(0) CHARACTER	8	PELPREFIX	PARAMETER ELEMENT PREFIX
0	(0) ADDRESS	4	PELTCB	IF BOTH TCB AND ECB ARE CODED, CONTAINS THE TCB ADDRESS
4	(4) ADDRESS	4	PELDUAL	PEL PREFIX WORK (TCB ADDRESS OR ECB ADDRESS)
8	(8) CHARACTER	12	PELBASIC	PARAMETER ELEMENT BASIC SECTION
8	(8) BITSTRING	1	PELLAST	FLAG BYTE 1
1...	....	PELEOL	LAST ELEMENT OF LIST
.1..	....	PELIGNOR	IGNORE REMAINING BITS OF THIS BYTE
..1.	....	PELRES1	RESERVED
...1	....	PELSHR	SHARED RESOURCE REQUEST
.... 1..		PELSAVE	RESERVED	
.... .1..		PELGEN1	SEE COMMENTS BELOW	
.... ..1.		PELGEN2	SEE COMMENTS BELOW	
.... ...1		PELTCBF	TCB= WAS SPECIFIED	

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
---------	------	--------	------	-------------

PELGEN1 AND PELGEN2

00- NO GENERIC
01- GENERIC=YES
10- GENERIC=COND (VS1 ONLY)
11- GENERIC=ALL (VS1 ONLY)

9	(9) UNSIGNED	1	PELMILEN	RNAME LENGTH
10	(A) BITSTRING	1	PELFLAG	FLAG BYTE 2
	1...		PELSHARE	0=EXCLUSIVE, 1=SHARE
	.1...		PELSCPE1	SEE COMMENTS BELOW
	..1.		PELSSYMC	OBSOLETE (SET/RESET SYSTEM MUST COMPLETE)
	...1		PELSTPMC	SET/RESET STEP MUST COMPLETE SPECIFIED
	.... 1...		PELSCPE2	SEE COMMENTS BELOW
	.... .1..		PELRET1	SEE COMMENTS BELOW
	.... ..1.		PELRET2	SEE COMMENTS BELOW
	.... ...1		PELRET3	SEE COMMENTS BELOW

PELRET1, PELRET2 AND PELRET3

000- RET=NONE (NO RETURN CODE)

001- RET=HAVE

010- RET=CHNG

011- RET=USE

100- ECB=

101- RESERVED

110- RESERVED

111- RET=TEST

PELSCPE1 AND PELSCPE2

00- STEP

01- SYSTEMS AND UCB

10- SYSTEM

11- SYSTEMS

11	(B) UNSIGNED	1	PELRET	RETURN CODE AREA IN USER-S PEL
----	--------------	---	--------	--------------------------------

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
12	(C) ADDRESS	4	PELMAJA	ADDRESS OF QNAME NOT USED WHEN QNAME HAS BEEN MOVED TO THE PELX
16	(10) ADDRESS	4	PELMINA	ADDRESS OF RNAME NOT USED WHEN RNAME HAS BEEN MOVED TO THE PELX
20	(14) ADDRESS	4	PELUCBAA	ADDRESS OF POINTER TO UCB. THIS FIELD ONLY EXISTS FOR RESERVE REQUESTS. WHEN MAPPED TO A QWPBPEL, THIS FIELD IS NOT USED. THE UCB ADDRESS, HOWEVER, IS FOUND IN THE PELX.
24	(18) CHARACTER	28	PELX	EXTENSION. NOTE THAT THIS SECTION IS VARIABLE IN SIZE. THE SIZE REPRESENTED ON THE STATEMENT IS THE SMALLEST SIZE OF THE PELX. THE LENGTH OF THE RNAME MUST BE ADDED TO THIS LENGTH TO COMPUTE THE LENGTH OF THE PELX ENTRY.
24	(18) UNSIGNED	1	PELXRET	RETURN CODE AREA IN QWB
25	(19) BITSTRING	1	PELXFLG1	PEL EXTENSION FLAGS
	1...		PELXSIEX	SYSTEM SCOPE INCLUDED IN GLOBAL SHARING
	.1...		PELXRCEX	RESERVE CONVERTED TO GLOBAL ENQ
	..1.		PELXSEEX	SYSTEMS SCOPE EXCLUDED FROM GLOBAL SHARING
	...1		PELXGLBL	WHEN 1, INDICATES GLOBAL RESOURCE WHEN 0, INDICATES LOCAL RESOURCE
	.... 1...		PELXLAST	LAST ENTRY IN QWPBPEL
	.... .1..		PELXRESV	RESERVE REQUEST
	.... ..1.		PELXERR	THIS ENTRY IN ERROR
	.... ...1		PELX1R01	RESERVED
26	(1A) CHARACTER	1	PELXRSV1	RESERVED
27	(1B) BITSTRING	1	PELXFLG2	FLAG-BYTE
	1...		PELXERSV	EARLY-RESERVE FLAG. RESOURCE NAME MATCHES THE NAME USED IN AN EARLY GLOBAL RESERVE THAT WAS CONVERTED TO A LOCAL RESERVE.
	.1...		PELXRS27	RESERVED.
	..1.		PELXRS26	RESERVED.
	...1		PELXRS25	RESERVED.
	.... 1...		PELXRS24	RESERVED.

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	..... .1..		PELXRS23	RESERVED.
	..... .1..		PELXRS22	RESERVED.
	..... .1..		PELXRS21	RESERVED.
28	(1C) SIGNED	4	PELXPELE	IDENTIFIES THE REQUESTOR-S PEL ENTRY IN WHICH THE RETURN CODE SHOULD BE STORED.
32	(20) SIGNED	2	PELXSIZE	SIZE OF THIS PEL ENTRY
34	(22) SIGNED	2	PELXRNMW	RNAME SIZE ROUNDED TO WORD BOUNDARY
36	(24) ADDRESS	4	PELXUCBA	ADDRESS OF UCB
40	(28) ADDRESS	4	PELXQCBE	ADDRESS OF SMPL QCB ENTRY CONTAINING THE QCB FOR THIS RESOURCE. THIS FIELD IS ONLY VALID ON ENQ/RESERVE REQUESTS
44	(2C) CHARACTER	8	PELXQNME	QNAME OF THE RESOURCE
52	(34) CHARACTER	0	PELEND	END OF PEL (FIXED LEN SECTION)
52	(34) CHARACTER	0	PELXRNM	RNAME OF THE RESOURCE (VARIABLE LENGTH) NOTE RNAME IS PADDED TO WORD BOUNDARY WITH ZEROS

PEL

90 MVS/370 Debug Hdbk Vol 4

PEL

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

PEXB

Common Name : Pool Extent Block

Macro ID : ISGPPEXB

DSECT Name : PEXB and PEXCELL

Created by : ISGNNCBIM and ISGSALC

Subpool and Key : 229 and key 0

Size : 4096 bytes

Pointed to by : RPT - RPTEFPXB, RPTELPXB or RPTEIAPQ; PEXB -

PEXNPEXB or PEXPPEXB

Serialization : Local PEXBs are serialized by the CMS ENQ/DEQ Class Lock; Global PEXBs are serialized by the GRS Local Lock; QWB PEXBs are serialized by the CMS ENQ/DEQ Class Lock.

Function : A PEXB maps a 4K page in the Resource Queue Area (RQA).

Each PEXB begins on a 4K boundary and consists of cells that are all of the same cell type.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	32	PEXB	POOL EXTENT BLOCK
0	(0) CHARACTER	32	PEXHDR	POOL EXTENT BLOCK HEADER
0	(0) CHARACTER	16	PEXCOMM	THIS STRUCTURE CORRESPONDS TO THE FIRST 16 BYTES OF AN RPT ENTRY
0	(0) CHARACTER	4	PEXID	CONTROL BLOCK ACRONYM (PEXB)
4	(4) ADDRESS	4	PEXNPEXB	ADDRESS OF THE NEXT POOL EXTENT BLOCK
8	(8) ADDRESS	4	PEXPPEXB	ADDRESS OF THE PREVIOUS POOL EXTENT BLOCK
12	(C) SIGNED	2	PEXAVAIL	NUMBER OF CELLS AVAILABLE IN THIS POOL EXTENT BLOCK
14	(E) SIGNED	2	PEXTOTAL	TOTAL NUMBER OF CELLS IN THIS POOL EXTENT BLOCK

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
16	(10) CHARACTER	4	PEXTYPE	CONTROL BLOCK ACRONYM FOR THE CELLS CONTAINED IN THIS PEXB
20	(14) BITSTRING	1	PEXFLAGS	PEXB RESIDENCY FLAGS
	1...		PEXSQA	SQA RESIDENCY FLAG 0 = PEXB RESIDES IN GRS ADDRESS SPACE 1 = PEXB RESIDES IN SQA
	.1...		PEXRQA	RQA RESIDENCY FLAG 0 = PEXB RESIDES IN LOCAL RQA 1 = PEXB RESIDES IN GLOBAL RQA
	..11 1111			RESERVED
21	(15) CHARACTER	1		RESERVED
22	(16) UNSIGNED	2	PEXINDEX	INDEX OF THE ASSOCIATED RPT ENTRY
24	(18) ADDRESS	4	PEXFRST	ADDRESS OF THE FIRST AVAILABLE CELL IN THIS PEXB
28	(1C) ADDRESS	4	PEXLAST	ADDRESS OF THE LAST AVAILABLE CELL IN THIS PEXB
32	(20) CHARACTER	0	PEXHEND	END OF PEXB HEADER SECTION
32	(20) CHARACTER	0	PEXCELLS	CELL POOL FOR THIS PEXB
0	(0) STRUCTURE	4	PEXCELL	POOL EXTENT BLOCK CELL
0	(0) ADDRESS	4	PEXNCCELL	ADDRESS OF NEXT CELL IN CHAIN
4	(4) CHARACTER	0		REMAINDER OF CELL

PFTE

Common Name : RSM Page Frame Table Entry

Macro ID : IHAPFTE

DSECT Name : PFTE

Created by : NIP initialization

Subpool and Key : NUCLEUS and key 0

Size : 16 bytes

Pointed to by : The following are indicies into the PFT. When one of the following is added to PVTPFTP, one obtains the virtual address of PFTE:

PFTFQPTR field of the PFTE data area
PCBRBN field of the PCB data area
RSMLFQF field of the RSMHD data area
RSMLFQL field of the RSMHD data area
RSMLSQAL field of the RSMHD data area
PVTFPPN field of the PVT data area
PVTLPPN field of the PVT data area
PVTFVR field of the PVT data area
PVTLVR field of the PVT data area
PVTAFQF field of the PVT data area
PVTAFQL field of the PVT data area
PVTRSRVF field of the PVT data area
PVTRSRVL field of the PVT data area
PVTCFQF field of the PVT data area
PVTCFQL field of the PVT data area
PVTSQAQF field of the PVT data area
PVTSQAQL field of the PVT data area
PVTRSBQF field of the PVT data area
PVTRSBQL field of the PVT data area

Serialization : SALLOC lock

Function : Describes each page frame with status in system.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PFTE	, PFTEPTR
0	(0) SIGNED	4	PFTPGID	AN IDENTIFIER OF THE VIRTUAL PAGE CURRENTLY OCCUPYING THIS FRAME. IF PFTIRRG IS 0, THIS FIELD IS SUBDIVIDED INTO PFTASID AND PFTVBN.

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
0	(0) HEX	2	PFTASID	THE ASID OF THE PAGE CURRENTLY OWNING THE FRAME
2	(2) HEX	2	PFTVBN	VIRTUAL BLOCK NUMBER (HIGH ORDER 12 BITS OF 24 BIT VIRTUAL ADDRESS, LEFT ADJUSTED AND PADDED WITH 4 LOW ORDER BINARY ZEROS) CURRENTLY OWNING THE REAL FRAME.
4	(4) SIGNED	4	PFTQPTRS	WORD CONTAINING PFTNXRBN AND PFTPXRBN
4	(4) SIGNED	2	PFTNXRBN	PFTE QUEUE FORWARD CHAIN FIELD: THE XRBN OF THE NEXT PFTE ON THIS PAGE FRAME QUEUE (OR ZERO IF THIS IS THE LAST PFTE ON THE QUEUE, OR IF THIS PFTE IS NOT ON A QUEUE)
6	(6) SIGNED	2	PFTPXRBN	PFTE QUEUE BACKWARD CHAIN FIELD: THE XRBN OF THE PREVIOUS PFTE ON THIS PAGE FRAME QUEUE (OR ZERO IF THIS IS THE FIRST PFTE ON THE QUEUE, OR IF THIS PFTE IS NOT ON A QUEUE)
8	(8) SIGNED	2	PFTFXCT	FIX COUNT OF THIS FRAME
10	(A) HEX	1	PFTRSV1	RESERVED
11	(B) BITSTRING	1	PFTEFRMD	FLAGS FOR FRAME DEALLOCATION
1...			PFTNOUNC	"BIT0"- DOUBLE BIT ERROR FLAG
.1...			PFTSRBSC	"BIT1"- SRB SCHEDULED FLAG
12	(C) CHARACTER	2	PFTFLAGS	TWO PFTE FLAGS
12	(C) BITSTRING	1	PFTFLAG1	FIRST FLAG FIELD
1...			PFTONAVQ	"BIT0"- AVAILABLE FRAME QUEUE FLAG. WHEN 1, THIS PFTE IS ON AVAILABLE PFQ
.1..			PFTVRINT	"BIT1"- WHEN 1, PFTE INTERCEPTED FOR V=R
..1.			PFTLSQA	"BIT2"- SQA/LSQA FLAG, WHEN 1, PAGE FRAME CONTAINS AN LSQA OR SQA PAGE. IF PFTASID=X'FFFF' THE FRAME CONTAINS A SQA PAGE.
...1			PFTVRPLT	"BIT3"- V=R AREA POLLUTED FLAG, WHEN 1, A REQUEST FOR A PREFERRED AREA FRAME WAS SATISFIED WITH THIS V=R FRAME.
.... 1...			PFTPCBSI	"BIT4"- PCB DEFINED FOR THIS PAGE FLAG,

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
			PFTBADPG	WHEN 1, A PCB EXISTS FOR THIS PAGE. "BIT5"- BAD PAGE FRAME FLAG, WHEN 1, THIS PAGE FRAME MAY NOT BE ALLOCATED.
			PFTVRALC	"BIT6"- V = R ALLOCATED FLAG, WHEN 1, PFTE HAS BEEN ALLOCATED FOR A V=R REGION
			PFTOFINT	"BIT7"- WHEN 1, FRAME IS INTERCEPTED TO GO OFFLINE
13	(D) BITSTRING	1	PFTFLAG2	SECOND FLAG FIELD
			PFTDFRLS	"BIT0"- DEFERRED RELEASE FLAG, WHEN 1, RELEASE HAS BEEN DEFERRED UNTIL THIS PAGE HAS BEEN FREED (PFTFXCT=0).
			PFTOFFLN	"BIT1"- FRAME ONLINE/OFFLINE FLAG, WHEN 1, FRAME IS OFFLINE
			PFTVR	"BIT2"- V=R CANDIDATE, WHEN 1, FRAME MAY BE ALLOCATED TO A V=R REGION
			PFTIRRG	"BIT3"- WHEN 1, INDICATES A VIO FRAME
			PFTBBELO	"BIT4"- WHEN 1, INDICATES CURRENT OWNER OF FRAME IS A PAGEABLE PAGE THAT HAS THE XPTBBELO BIT =1 IN ITS XPTE
			PFTPREF	"BIT5"- WHEN 1, INDICATES PFTE IN THE PREFERRED AREA
			PFTSAF	"BIT6"- 'SOFTWARE ALLOCATED FRAME' BIT. WHEN PFTE IS ON AVAILABLE FRAME QUEUE, PFTSAF IS ALWAYS ZERO. WHEN SOFTWARE REMOVES THE PFTE FROM THE AFQ, IT SETS PFTSAF TO 1. WHEN PAGE FAULT ASSIST MICROCODE REMOVES THE PFTE FROM THE AFQ, IT LEAVES PFTSAF ZERO. (THE ONLY USE OF THIS BIT IS AS AN AID TO DEBUGGING. IT HAS NO FUNCTIONAL USE IN MVS CODE.)
			PFTRSV27	"BIT7"- RESERVED
			PFTQNDX	PFT QUEUE INDEX
14	(E) CHARACTER	1	PFTAFQN	"X'00'"- PFTE ON AVAILABLE QUEUE
			PFTSRQN	"X'04'"- PFTE ON SQA RESERVED QUEUE
			PFTCFQN	"X'08'"- PFTE ON COMMON FRAME QUEUE
			PFTSQAN	"X'0C'"- PFTE ON SQA FRAME QUEUE
			PFTRSBQN	"X'10'"- PFTE ON REAL STORAGE BUFFER (RSB) FRAME QUEUE
			PFTLFQN	"X'80'"- PFTE ON LOCAL FRAME QUEUE
			PFTLSQAN	"X'84'"- PFTE ON LSQA FRAME QUEUE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
15	1111 1111 (F) SIGNED	1	PFTNQN PFTUIC	"X'FF'"- PFTE NOT QUEUED NUMBER OF STEAL INTERVALS DURING WHICH THIS FRAME WAS NOT REFERENCED
16	(10) CHARACTER ...1	1	PFTEND PFTLEN	END OF PAGE FRAME TABLE ENTRY "PFTEND-PFTE"- LENGTH OF PAGE TABLE ENTRY

PGTE

Common Name : RSM Page Table Entry

Macro ID : IHAPGTE

DSECT Name : PGTpte

Created by : IEAVCSEG, IEAVEQR, and IEAVITAS (RSM supervisor)

Subpool and Key : 245 or 255 and key 0

Size : 2 bytes

Pointed to by : PCBPGTA field of the PCB data area

SPCTPGT field of the SPCT data area

Serialization : SALLOC lock

Function : Describes validity and the location of a page in the system.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PGTpte	, PTEPTR
0	(0) BITSTRING	2	PGTRSA	TO FORM THE REAL ADDRESS CORRESPONDING TO A VIRTUAL ADDRESS MAPPED BY A GIVEN PGTE, CONCATENATE BITS 13-14, FOLLOWED BY BITS 0-11 OF PGTRSA WITH BITS 20-31 OF THE VIRTUAL ADDRESS. IF THE REAL ADDRESS IS PLACED IN A 32-BIT WORD, BIT 13 OF PGTRSA WILL MAP TO BIT 6 OF THE WORD, BIT 14 OF PGTRSA WILL MAP TO BIT 7 OF THE WORD, AND BITS 0-11 OF PGTRSA WILL MAP TO BITS 8-19 OF THE WORD.
0	(0) BITSTRING	1	PGTREAL	HIGH ORDER BYTE OF REAL ADDRESS
1	(1) BITSTRING	1	PGTBITS	LOW ORDER FOUR BITS OF REAL ADDRESS AND FLAG BITS
.... 1...			PGTPVM	"X'08'" - PAGE VALIDITY FLAG, WHEN 1 = PAGE IS INVALID
.... .11.			PGTXRSA	"X'06'" - BITS 6-7 OF REAL STORAGE ADDRESS
.... .1..			PGTXR32M	"X'04'" - BIT 6 OF REAL STORAGE ADDRESS WHEN = 1 ADD 32 MEG TO THE ADDRESS REPRESENTED BY BITS 0-11 OF PGTE
.... ..1.			PGTXR16M	"X'02'" - BIT 7 OF REAL STORAGE ADDRESS WHEN = 1 ADD 16 MEG TO THE ADDRESS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				REPRESENTED BY BITS 0-11 OF PGTE
				"X'01'" - PAGE ASSIGNED FLAG, WHEN 1 =
				PAGE HAS BEEN ASSIGNED BY GETMAIN
2	(2) CHARACTER	1	PGTEND	END OF PAGE TABLE ENTRY
			PGTLEN	"PGTEND-PGTPTE"- LENGTH OF PAGE TABLE
				ENTRY

PICA

Common Name : Program Interrupt Control Area

Macro ID : IHAPICA

DSECT Name : PICA

Created by : The PICA is created and initialized by the executable code provided by the expansion of the SPIE macro.

Subpool and Key : User subpool and key

Size : 8 bytes

Pointed to by : PIEPICA field of the PIE data area

Serialization : LOCAL lock and task active mode

Function : Contains: a) the program mask to be used in the PSW,

b) the user SPIE exit routine address and

c) the interruption mask which identifies the program check interruptions which the user SPIE exit routine will serve.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PICA	
0	(0) SIGNED	4	PICAEXIT	
0	(0) BITSTRING	1	PICAPRMK	PROGRAM MASK TO BE USED IN THE PSW BITS 0-3 ARE ZERO; BITS 4-7 CONTAIN MASK
1	(1) ADDRESS	3	PICEXITA	ADDRESS OF THE USER'S PROGRAM INTERRUPTION EXIT RTN
4	(4) SIGNED	4	PICAITMK	MASK WHICH INDICATES ON WHICH PROGRAM INTERRUPTION TYPES THE EXIT RTN IS TO BE USED LENGTH IS 4 BYTES.
4	(4) BITSTRING	1	PICITMK1	
1...	....		PICAEXT	"X'80'"- AN EXTENDED PICA IS IN EFFECT
.1...	....		PICACD1	"X'40'"- OPERATION
..1.	....		PICACD2	"X'20'"- PRIVILEGED OPERATION
...1	....		PICACD3	"X'10'"- EXECUTE
.... 1...			PICACD4	"X'08'"- PROTECTION
.... .1..			PICACD5	"X'04'"- ADDRESSING
.... ..1.			PICACD6	"X'02'"- SPECIFICATION
.... ...1			PICACD7	"X'01'"- DATA INTRPT HANDLED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
5	(5) BITSTRING	1	PICITMK2	
	1...		PICACD8	"X'80'"- FIXED-POINT OVERFLOW
	.1...		PICACD9	"X'40'"- FIXED-POINT DIVIDE
	..1.		PICACD10	"X'20'"- DECIMAL OVERFLOW
	...1		PICACD11	"X'10'"- DECIMAL DIVIDE
	.... 1...		PICACD12	"X'08'"- EXPONENT OVERFLOW
	.... .1..		PICACD13	"X'04'"- EXPONENT UNDERFLOW
	.... ..1.		PICACD14	"X'02'"- SIGNIFICANCE
	.... ....1		PICACD15	"X'01'"- FLOATING-POINT DIVIDE
6	(6) BITSTRING	1	PICITMK3	
	.1...		PICACD17	"X'40'"- PAGE TRANSLATION
7	(7) BITSTRING	1	PICITMK4	

PIE

Common Name : Program Interrupt Element

Macro ID : IHAPIE

DSECT Name : PIE

Created by : SPIE (IEAVTB00)

Subpool and Key : 250 and user key

Size : 32 bytes

Pointed to by : SCAPIE field of the SCA data area

Serialization : The PIENOP1 bit of the PIE data area and LOCAL lock

Function : Passes necessary data to the user-specified exit
routine for program check interruptions.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PIE	
1...	....	0	BIT0	"128"
.1...	....	0	BIT1	"64"
..1.	....	0	BIT2	"32"
...1	....	0	BIT3	"16"
....1	...	0	BIT4	"8"
....	.1..	0	BIT5	"4"
....	..1.	0	BIT6	"2"
....	...1	0	BIT7	"1"
0	(0) SIGNED	4	PIEPICA	ADDRESS OF THE CURRENT PICA
0	(0) BITSTRING	1	PIEFLGS	FLAG BYTE
1...	....	0	PIENOP1	"BIT0"- IF ONE, INDICATES THAT THE TASK CANNOT ACCEPT FURTHER PI'S
1	(1) ADDRESS	3	PIEPICAA	ADDRESS OF THE CURRENT PICA
4	(4) CHARACTER	8	PIEPSW	PI OLD PSW STORED AT PROGRAM INTERRUPT TIME
12	(C) SIGNED	4	PIEGR14	SAVE AREA FOR REGISTER 14
16	(10) SIGNED	4	PIEGR15	SAVE AREA FOR REGISTER 15

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
20	(14) SIGNED	4	PIEGR0	SAVE AREA FOR REGISTER 0
24	(18) SIGNED	4	PIEGR1	SAVE AREA FOR REGISTER 1
28	(1C) SIGNED	4	PIEGR2	SAVE AREA FOR REGISTER 2

PQCB

Common Name : Placeholder Queue Control Block

Macro ID : ISGPQCB

DSECT Name : None

Created by : global resource serialization, queue scanning
services module (ISGQSCAN)

Subpool and Key : Subpool 229 in global resource serialization
address space, key 0

Size : 72 bytes

Pointed to by : PQCB - PQCBNQCB and PQCRPQCB,
QCB - QCBNQCB and QCBPQCB,

QHT - QHTEFGCB and QHTELQCB

Serialization : Local PQCB - CMS ENQ/DEQ lock.

Global PQCB - global resource serialization local lock.

Function : Contains the information necessary to resume a global resource
serialization queue scanning request. All resources before this
PQCB have been scanned. In order to satisfy the original request,
all resources following this PQCB still have to be scanned.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	72	PQCB	PLACEHOLDER QUEUE CONTROL BLOCK
0	(0) CHARACTER	40	PQCBBASC	PQCB BASIC SECTION (NOTE THAT THIS MAPS IDENTICALLY TO THE BASIC SECTION OF A QCB)
0	(0) ADDRESS	4	PQCBNQCB	ADDRESS OF NEXT QCB ON SYNONYM CHAIN
4	(4) ADDRESS	4	PQCBPQCB	ADDRESS OF PREVIOUS QCB ON SYNONYM CHAIN
8	(8) ADDRESS	4	PQCBFQEL	ADDRESS OF FIRST QEL FOR THIS PLACEHOLDER QCB
12	(C) ADDRESS	4	PQCBLQEL	ADDRESS OF LAST QEL FOR THIS PLACEHOLDER QCB

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
16	(10) ADDRESS	4	PQCBQHTE	ADDRESS OF QUEUE HASH TABLE ENTRY ON WHICH THIS PLACEHOLDER QCB IS CHAINED
20	(14) CHARACTER	4	PQCBRS01	RESERVED MUST BE ZERO
24	(18) UNSIGNED	2	PQCBASID	ASID OF THE REQUESTOR
26	(1A) UNSIGNED	1	PQCBDFLG	DESCRIPTOR FLAGS
	1...		PQCBDRS1	RESERVED MUST BE ZERO
	.1..		PQCBDRS2	RESERVED MUST BE ZERO
	..1.		PQCBDRS3	RESERVED MUST BE ZERO
	...1		PQCBGLBL	GLOBAL RESOURCE INDICATOR (1 GLOBAL RESOURCE, 0 LOCAL RESOURCE)
	.... 1...		PQCBDRS5	RESERVED MUST BE ZERO
	.... .1..		PQCBPHDR	PLACEHOLDER QCB FLAG (1 THIS QCB IS A PLACEHOLDER QCB, 0 THIS QCB IS A RESOURCE QCB). NOTE THAT A PQCB DOES NOT DEFINE A RESOURCE REQUEST.
	.... .1.		PQCBDRS6	RESERVED MUST BE ZERO
	.... .1		PQCBDRS7	RESERVED MUST BE ZERO
27	(1B) CHARACTER	13	PQCBRS02	RESERVED MUST BE ZERO
40	(28) ADDRESS	4	PQCBPQEL	ADDRESS OF QEL WHERE SCAN IS TO RESUME OR ZERO
44	(2C) SIGNED	4	PQCBRCNT	COUNT OF HOW MANY RIBE(S) HAVE TO BE BUILT TO REPRESENT REQUESTORS OF A RESOURCE
48	(30) SIGNED	4	PQCBRBLT	COUNT OF HOW MANY RIBE(S) HAVE BEEN BUILT TO REPRESENT REQUESTORS OF A RESOURCE
52	(34) SIGNED	4	PQCBOWNC	COUNT OF HOW MANY REQUESTORS OWN A RESOURCE
56	(38) SIGNED	4	PQCBWTEC	COUNT OF HOW MANY REQUESTORS ARE WAITING FOR EXCLUSIVE CONTROL OF A RESOURCE
60	(3C) SIGNED	4	PQCBWTSC	COUNT OF HOW MANY REQUESTORS ARE WAITING FOR SHARED CONTROL OF A RESOURCE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
64	(40) SIGNED	4	PQCBOWNS	COUNT OF HOW MANY REQUESTORS OWN A RESOURCE FOR WHICH NO RIBE(S) HAVE BEEN BUILT TO REPRESENT THEM
68	(44) UNSIGNED	2	PQCBQHTI	QUEUE HASH TABLE INDEX THAT THE SCAN IS TO RESUME ON
70	(46) BITSTRING	1	PQCBNFLG	SCANNING STATUS FLAGS
	1...		PQCBBLQHT	LOCAL QHT SCAN FLAG (1 SCANNING LOCAL QHT, 0 NOT SCANNING LOCAL QHT)
	.1..		PQCBGQHT	GLOBAL QHT SCAN FLAG (1 SCANNING GLOBAL QHT, 0 NOT SCANNING GLOBAL QHT)
	..1.		PQCBCLST	COMPLETE LOCAL QHT SCAN FOR SCOPE=STEP FLAG (1 COMPLETED SCANNING LOCAL QHT WHEN SCOPE= STEP, 0 NOT COMPLETED)
	...1		PQCBCLSM	COMPLETE LOCAL QHT SCAN FOR SCOPE=SYSTEM FLAG (1 COMPLETED SCANNING LOCAL QHT FOR SCOPE=SYSTEM, 0 NOT COMPLETED)
	.... 1...		PQCBCSS	COMPLETE LOCAL/GLOBAL QHT SCAN FOR SCOPE=SYSTEMS FLAG (1 COMPLETED SCANNING GIVEN QHT FOR SCOPE=SYSTEMS, 0 NOT COMPLETED)
71	.... .111	1	PQCBRSR1	RESERVED
	(47) CHARACTER	1	PQCBRS03	RESERVED
72	(48) CHARACTER	0	PQCBEND	END OF PQCB

PQE

Common Name : VSM Partition Queue Element

Macro ID : IHAPQE

DSECT Name : PQESECT

Created by : NIP, IEAVGCAS or IEAVPRT0 (VSM supervisor)

Subpool and Key : 245 or 255 and key 0

Size : 32 bytes

Pointed to by : LDASRPQE field of the LDA data area

ASDPQE field of the LDA data area

CSAPQEP field of the GDA data area

VRPQEP field of the GDA data area

FWDPTR field of the FBQE (highest) data area

BCKPTR field of the FBQE (lowest) data area

PQEFPQE field of the PQE data area (next PQE)

PQEFPQE field of the PQE data area (last PQE)

TCBPQE field of the TCB data area

Serialization : SALLOC lock for the SQA/CSA

LOCAL lock for the private area

Function : Describes space held by region.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PQESECT	PARTITION QUEUE ELEMENT
0	(0) ADDRESS	4	PQEFPQE	PTR TO FIRST FBQE OR IF NONE TO PQE
4	(4) ADDRESS	4	PQEFPQE	PTR TO LAST FBQE OR IF NONE, TO PQE
8	(8) ADDRESS	4	PQEFPQE	ADDR NEXT PQE OR ZERO
12	(C) ADDRESS	4	PQEFPQE	ADDR PREVIOUS PQE OR ZERO
16	(10) ADDRESS	4	PQETCB	ADDR TCB FOR JOB STEP TO WHICH SPACE BELONGS
20	(14) SIGNED	4	PQESIZE	SIZE OF REGION DESCRIBED BY THIS PQE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
24	(18) ADDRESS	4	PQEREGN	ADDR FIRST BYTE OF REGION DESCRIBED BY THIS PQE
28	(1C) CHARACTER	1	PQERFLGS	FLAG BYTE
29	(1D) CHARACTER	1	PQEHRID	HIERARCHY IDENTIFIER
30	(1E) BITSTRING	1	VMMFLGS	SEVEN HIGH ORDER BITS ZERO
	.... .1		VVVRFLG	"X'01'"REAL OR VIRTUAL REGION FLAG
31	(1F) CHARACTER	1	PQERSVD	RESERVED

PRMESTAE

Common Name : Common Allocation ESTAE Exit Parameter Area
Macro ID : IEFZB447
DSECT Name : PRMESTAE
Created by : IEFAB421
Subpool and Key : 230 and key 1
Size : 320 bytes
Pointed to by : ASWAPRMS field of the ASWA
Serialization : None
Function : Contains input parameters used by common allocation ESTAE exit, IEFAB4E8, and the update UCB FRR routine, IEFAB4E6.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	320	PRMESTAE	ESTAE PARAMETER LIST
0	(0) CHARACTER	252		AUTODATA AREA FOR EXIT RTN
252	(FC) BITSTRING	1	PRMRESC	RESOURCES HELD
	1...		ENQQ4	ENQUEUED ON Q4
	.1...		DDRQ	ENQUEUED ON DDR QUEUE
	..1.		CHNGQ	ENQUEUED ON CHANGE QUEUE
	...1		DSSTAP	DSS TAPE BIT
	.... 1...		DSSUNREC	DSS UNIT RECORD BIT
	.... .1..		TPQ	ENQUEUED ON TP QUEUE
	.... .1.		MLWTO	DOM MULTILINE WTO
	.... .1.			RESERVED
253	(FD) BITSTRING	1	PRMFUNC	FUNCTIONS NEEDED
	1...		GENCLNUP	CALL GENERIC CLEANUP RTN
	.1..		UPDSABCK	ZERO SIOT DSAB PTR
	..1.		DSABCHN	FIX UP DSAB CHAIN
	...1		TIOTBLT	TIOT ENTRY BUILT
	.... 1...		DUMPOK	
	.... .1..		FREECORE	FREE QUEUE MANAGER BLOCK
	.... .1.		VMVCALL	CALL VM&V CLEANUP RTN
	.... .1.		PRMRETRY	RETRY REQUESTED
254	(FE) SIGNED	2	PRMASID	ASID

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
256	(100) ADDRESS	4	PRMSIOTP	SIOT PTR
260	(104) ADDRESS	4	PRMUCBP	UCB PTR
264	(108) ADDRESS	4	PRMQMGP	PTR TO Q-MGR PARMs
268	(10C) SIGNED	4	PRMQMBLN	LENGTH OF Q-MGR BLOCK
272	(110) ADDRESS	4	PRMQMBP	PTR TO Q-MGR BLOCK TO FREE
276	(114) ADDRESS	4	PRMQDBP	PTR TO DSAB QDB
280	(118) ADDRESS	4	PRMDSQL	PTR TO LAST DSAB IN QUEUE
284	(11C) ADDRESS	4	PRMDSQF	PTR TO FIRST DSAB IN QUEUE
288	(120) SIGNED	4	PRMNELM	NO. ELEMENTS IN DSAB QUEUE
292	(124) SIGNED	4	PRMWTOID	DOM ID OF MULTILINE WTO
296	(128) ADDRESS	4	PRMAERBP	PTR TO AERB
300	(12C) ADDRESS	4	PRMJSCBP	PTR TO JSCB
304	(130) BITSTRING	1	PRMFUNC2	FUNCTION REQUIRED
	1...		WRTBUF	WRITE MESSAGE BUFFER
	.1...		STOKEY	RESTORE TCB PROTECTION KEY
	..11 1111			RESERVED
305	(131) CHARACTER	3		RESERVED
308	(134) ADDRESS	4	PRMALCWA	ADDR OF ALCWA
312	(138) CHARACTER	1	PRMSKEY	SAVED TCB PROT KEY
	1111 ...		SAVESKEY	TCB PROTECTION KEY
	... 1111			RESERVED
313	(139) CHARACTER	3		RESERVED
316	(13C) ADDRESS	4		RESERVED

PSA

Common Name : Prefixed Save Area
Macro ID : IHAPSA
DSECT Name : PSA
Created by : SYSGEN
Subpool and Key : NUCLEUS resident and key 0
Size : 4096 bytes
Pointed to by : PCCAPSAV field of the PCCA data area
 PCCAPSAR field of the PCCA data area
Serialization : Disablement
Function : Maps first 4K of storage.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PSA	
	.... ....		FLC	"X"
0	(0) CHARACTER	8	FLCIPPSW	IPL PSW
0	(0) HEX	4	FLCRNPSW	RESTART NEW PSW (AFTER IPL)
4	(4) V-ADDRESS	4		"V(IEAVRSTR)"- SECOND HALF OF RESTART NEW PSW
	.... ....		IPLPSW	"FLCIPPSW"--- ALIAS
8	(8) CHARACTER	8	FLCICCW1	IPL CCW1
8	(8) HEX	8	FLCROPSW	RESTART OLD PSW (AFTER IPL)
16	(10) CHARACTER	8	FLCICCW2	IPL CCW2
16	(10) V-ADDRESS	4	FLCCVT	"V(IEACVT)"- ADDRESS OF CVT (AFTER IPL). THIS OFFSET FIXED BY ARCHITECTURE.
20	(14) HEX	4		RESERVED (AFTER IPL)
24	(18) HEX	8	FLCEOPSW	EXTERNAL OLD PSW
	...1 1...		EXOPSW	"FLCEOPSW"--- ALIAS

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
32	(20) HEX	8	FLCSOPSW	SVC OLD PSW. THIS OFFSET FIXED BY ARCHITECTURE.
	.1.		SVCOPSW	"FLCSOPSW"--- ALIAS
40	(28) HEX	8	FLCPOPSW	PROGRAM CHECK OLD PSW
	.1. 1...		PIOPSW	"FLCPOPSW"--- ALIAS
48	(30) HEX	8	FLCMOPSW	MACHINE CHECK OLD PSW
	.11		MCOPSW	"FLCMOPSW"--- ALIAS
56	(38) HEX	8	FLCIOPSW	INPUT/OUTPUT OLD PSW
	.11 1...		IOOPSW	"FLCIOPSW"--- ALIAS
64	(40) HEX	8	FLCCSW	CHANNEL STATUS WORD. THIS OFFSET FIXED BY ARCHITECTURE.
72	(48) HEX	4	FLCCAW	CHANNEL ADDRESS WORD
76	(4C) V-ADDRESS	4	FLCCVT2	"V(IEACVT)"- ADDRESS OF CVT USED BY DUMP ROUTINES
80	(50) HEX	4	FLCTIMER	TIMER
	.1.1		TIMER	"FLCTIMER"
84	(54) ADDRESS	4	FLCTRACE	ADDRESS OF TRACE TABLE HEADER. THIS OFFSET FIXED BY ARCHITECTURE.
88	(58) HEX	4	FLCENPSW	EXTERNAL NEW PSW
92	(5C) V-ADDRESS	4		"V(IEAQEX00)"- SECOND HALF OF EXTERNAL NEW PSW
	.1.1 1...		EXNPSW	"FLCENPSW"--- ALIAS
96	(60) HEX	4	FLCSNPSW	SVC NEW PSW
100	(64) V-ADDRESS	4		"V(IEAQSC00)"- SECOND HALF OF SVC NEW PSW
	.11.		SVCNPSW	"FLCSNPSW"--- ALIAS
104	(68) HEX	4	FLCPNPSW	PROGRAM CHECK NEW PSW

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
108	(6C) V-ADDRESS	4		"V(IEAQPK00)"- SECOND HALF OF PROGRAM CHECK NEW PSW
	.11. 1...		PINPSW	"FLCPNPSW"--- ALIAS
112	(70) HEX	4	FLCMNPSW	MACHINE CHECK NEW PSW
116	(74) V-ADDRESS	4		"V(IGFPMCIH)"- SECOND HALF OF MACHINE CHECK NEW PSW
	.111		MCNPSW	"FLCMNPSW"--- ALIAS
120	(78) HEX	4	FLCINPSW	INPUT/OUTPUT NEW PSW
124	(7C) V-ADDRESS	4		"V(IEAQI000)"- SECOND HALF OF I/O NEW PSW
	.111 1...		IONPSW	"FLCINPSW"--- ALIAS
128	(80) SIGNED	4	PSAEPARM	EXTERNAL INTERRUPTION PARAMETER FIELD.
132	(84) SIGNED	4	PSAEEPSW	EXTENDED PSW DATA STORED ON EXTERNAL INTERRUPT
132	(84) SIGNED	2	PSASPAD	ISSUING PROCESSOR'S PHYSICAL ADDRESS ON MFA, EMS, OR EXTERNAL CALL INTERRUPT
134	(86) SIGNED	2	FLCEICOD	EXTERNAL INTERRUPTION CODE
	1... .11.		EXCODE	"FLCEICOD"--- ALIAS
136	(88) SIGNED	4	PSAESPSW	EXTENDED PSW DATA STORED ON SVC INTER- RUPT
136	(88) HEX	1		RESERVED SET TO ZERO
137	(89) SIGNED	1	FLCSVILC	SVC INSTRUCTION LENGTH COUNTER NUMBER OF BYTES. THIS OFFSET FIXED BY ARCHITEC- TURE.
	.... .111		FLCSILCB	"X'07'"- SIGNIFICANT BITS IN ILC FIELD LAST BIT IS ALWAYS ZERO
	1... 1..1		SVCILC	"FLCSVILC"--- ALIAS
138	(8A) SIGNED	2	FLCSVCN	SVC INTERRUPTION CODE SVC NUMBER. THIS OFFSET FIXED BY ARCHITECTURE.
	1... 1..1.		SVCNUM	"FLCSVCN"--- ALIAS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
140	(8C) CHARACTER	8	PSAEPPSW	EXTENDED PSW FOR PROGRAM INTERRUPT
140	(8C) HEX	1		RESERVED SET TO ZERO
141	(8D) SIGNED	1	FLCPIILC	PROGRAM INTERRUPT LENGTH COUNTER NUMBER OF BYTES IN INSTRUCTION CAUSING PROGRAM INTERRUPTION. THIS OFFSET FIXED BY ARCHITECTURE.
	.... .111		FLCPILCB	"X'07'"- SIGNIFICANT BITS IN ILC FIELD LAST BIT IS ALWAYS ZERO
	1... 11.1		PIILC	"FLCPIILC"--- ALIAS
142	(8E) SIGNED	2	FLCPICOD	PROGRAM INTERRUPTION CODE
	1... 111.		PICODE	"FLCPICOD"--- ALIAS
142	(8E) HEX	1		RESERVED FOR IMPRECISE INTERRUPTS
143	(8F) SIGNED	1	PSAPICOD	8-BIT INTERRUPT CODE. THIS OFFSET FIXED BY ARCHITECTURE.
	1...		PSAPIPER	"X'80'"- PER INTERRUPT OCCURRED
	.1..		PSAPIMC	"X'40'"- MONITOR CALL INTERRUPT OCCURRED
	..11 1111		PSAPIPC	"X'3F'"- AN UNSOLICITED PROGRAM CHECK HAS OCCURRED IF ANY OF THESE 6 BITS ARE ON
144	(90) ADDRESS	4	FLCTEA	TRANSLATION EXCEPTION ADDRESS. THIS OFFSET FIXED BY ARCHITECTURE.
144	(90) HEX	1		RESERVED SET TO ZERO
145	(91) ADDRESS	3	FLCTEAA	TRANSLATION EXCEPTION ADDRESS
148	(94) HEX	1		RESERVED SET TO ZERO
149	(95) HEX	1	FLCMCNUM	MONITOR CLASS NUMBER
150	(96) HEX	1	FLCPERCD	PROGRAM EVENT RECORDING CODE
151	(97) HEX	1		RESERVED SET TO ZERO
152	(98) ADDRESS	4	FLCPER	PER ADDRESS
152	(98) HEX	1		RESERVED SET TO ZERO
153	(99) ADDRESS	3	FLCPERA	PER ADDRESS
156	(9C) HEX	1		RESERVED SET TO ZERO
157	(9D) HEX	3	FLCMTRCD	MONITOR CODE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
160	(A0) HEX	4		RESERVED
164	(A4) V-ADDRESS	4	PSAMPL	"V(IHAMPL)"- MPL ADDRESS. THIS OFFSET FIXED BY ARCHITECTURE.
168	(A8) HEX	344	FLCMCLA	MACHINE CHECK LOGOUT AREA
168	(A8) HEX	4	FLCCHNID	CHANNEL ID SET BY STIDC
168	(A8) HEX	2	FLCCHTM	CHANNEL TYPE (4 BITS) AND MODEL NUMBER (12 BITS)
170	(AA) SIGNED	2	FLCCHIL	I/O EXTENDED LOGOUT (IOEL) LENGTH
172	(AC) ADDRESS	4	FLCIOEL	SAME AS FLCIOELA BELOW
172	(AC) HEX	1		RESERVED
173	(AD) ADDRESS	3	FLCIOELA	I/O EXTENDED LOGOUT (IOEL) POINTER
176	(B0) HEX	4	FLCLCL	LIMITED CHANNEL LOGOUT (ECSW)
180	(B4) HEX	2		RESERVED
182	(B6) HEX	1		RESERVED
183	(B7) HEX	1		RESERVED
184	(B8) ADDRESS	4	FLCIOA	I/O ADDRESS. THIS OFFSET FIXED BY ARCHI- TECTURE.
184	(B8) HEX	1		RESERVED
185	(B9) ADDRESS	3	FLCIOAA	I/O ADDRESS
185	(B9) HEX	1	FLCCHDT	CHANNEL INTERRUPTION DATA
11...			FLCDELCD	"X'C0'"- TWO-BIT CHANNEL DELAY CODE
11...			FLCDVBSY	"X'C0'"- DEVICE BUSY
1...			FLCCUBSY	"X'80'"- CONTROL UNIT BUSY
.1...			FLCCHBSY	"X'40'"- CHANNEL BUSY
..11 1...			FLCCHQLN	"X'38'"- THREE-BIT CHANNEL QUEUE LENGTH
186	(BA) SIGNED	2	FLCIOAAA	I/O INTERRUPT ADDRESS
188	(BC) HEX	44		RESERVED
232	(E8) HEX	8	FLCMCIC	MACHINE-CHECK INTERRUPTION CODE

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
240	(F0) HEX	4		RESERVED
244	(F4) HEX	1	PSAMEDC	EXTERNAL DAMAGE CODE
	.1...		PSAMCOPR	"X'40'"- CHANNEL CHANGED FROM NOT OPERATIONAL TO OPERATIONAL STATE
	..1.		PSAMEXSR	"X'20'"- EXTERNAL SECONDARY REPORT
	...1		PSAMCNOP	"X'10'"- CHANNEL ENTERED NOT OPERATIONAL STATE WITHOUT PERFORMING I/O SYSTEM RESET
	.... 1...		PSAMCCF	"X'08'"- CHANNEL CONTROL FAILURE
	.... .1..		PSAMINST	"X'04'"- I/O INSTRUCTION TIMEOUT
	.... ..1.		PSAMINTR	"X'02'"- I/O INTERRUPTION TIMEOUT
	.... ...1		PSAMDISC	"X'01'"- DISCONNECT CHANNEL SET (DISCS) INSTRUCTION CANNOT BE COMPLETED
245	(F5) HEX	3		ZEROES
248	(F8) ADDRESS	4	FLCFSA	FAILING STORAGE ADDRESS
248	(F8) HEX	1		ZEROES
249	(F9) ADDRESS	3	FLCFSAA	FAILING STORAGE ADDRESS
252	(FC) HEX	4	FLCRGNCD	REGION CODE
256	(100) HEX	96	FLCFLA	FIXED LOGOUT AREA
352	(160) HEX	32	FLCFPSAV	FLOATING POINT REGISTER SAVE AREA
384	(180) SIGNED	4	FLCGRSAV(16)	GENERAL REGISTER SAVE AREA
448	(1C0) SIGNED	4	FLCCRSBV(16)	CONTROL REGISTER SAVE AREA
512	(200) FLOATING	8	FLCHDEND	END OF HARDWARE ASSIGNMENTS
512	(200) CHARACTER	4	PSAPSA	CONTROL BLOCK ACRONYM IN EBCDIC
516	(204) SIGNED	2	PSACPUPA	PHYSICAL CPU ADDRESS (CHANGED DURING ACR)
518	(206) SIGNED	2	PSACPULA	LOGICAL CPU ADDRESS
520	(208) ADDRESS	4	PSAPCCAV	VIRTUAL ADDRESS OF PCCA

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
524 (20C) ADDRESS	4		PSAPCCAR	REAL ADDRESS OF PCCA
528 (210) ADDRESS	4		PSALCCAV	VIRTUAL ADDRESS OF LCCA
532 (214) ADDRESS	4		PSALCCAR	REAL ADDRESS OF LCCA
536 (218) ADDRESS	4		PSATNEW IEATCBP	TCB NEW POINTER "PSATNEW"- ALIAS
540 (21C) ADDRESS	4		PSATOLD	TCB OLD POINTER. THIS OFFSET FIXED BY ARCHITECTURE.
544 (220) ADDRESS	4		PSAANEW	ASCB NEW POINTER
548 (224) ADDRESS	4		PSAAOLD	ASCB OLD POINTER. THIS OFFSET FIXED BY ARCHITECTURE.
552 (228) BITSTRING	4		PSASUPER	SUPERVISOR CONTROL WORD. THIS OFFSET FIXED BY ARCHITECTURE.
552 (228) HEX	1		PSASUP1	FIRST BYTE OF PSASUPER
1...			PSAI0	"X'80'"- I/O FLIH
.1...			PSASVC	"X'40'"- SVC FLIH
..1.			PSAEXT	"X'20'"- EXTERNAL FLIH
...1			PSAPI	"X'10'"- PROGRAM CHECK FLIH
.... 1...			PSALOCK	"X'08'"- LOCK ROUTINE
.... .1..			PSADISP	"X'04'"- DISPATCHER
.... ..1.			PSATCTL	"X'02'"- TCTL RECOVERY FLAG
.... ...1			PSATYPE6	"X'01'"- TYPE 6 SVC IN CONTROL
553 (229) HEX	1		PSASUP2	SECOND BYTE OF PSASUPER
1...			PSAIPCRI	"X'80'"- REMOTE IMMEDIATE SIGNAL SERVICE ROUTINE (IEAVERI)
.1...			PSAGTF	"X'40'"- GTF GIVEN CONTROL FROM FLIH
..1.			PSAIPCEC	"X'20'"- EXTERNAL CALL SLIH IS ACTIVE
...1			PSAIPCES	"X'10'"- EMERGENCY SIGNAL SLIH IS ACTIVE
.... 1...			PSAIPCE2	"X'08'"- EMERGENCY SIGNAL (EMS) SLIH
.... .1..			PSAACR	RECURSIVE ENTRY FLAG "X'04'"- AUTOMATIC CPU RECONFIGURATION (ACR) IN CONTROL
.... ..1.			PSARTM	"X'02'"- RECOVERY TERMINATION MONITOR

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				(RTM) IN CONTROL
			PSALCR	"X'01'"- LOW CORE REFRESH ROUTINE IS ACTIVE
554 (22A) HEX	1	PSASUP3	THIRD BYTE OF PSASUPER	
1...		PSAOSUP	"X'80'"- IF ON, A MAINLINE IOS COMPONENT SUCH AS CHANNEL SCHEDULER HAS ENTERED A PHYSICALLY DISABLED STATE WITHOUT REGARD TO LOCKING REQUIREMENTS	
...1		PSASPR	"X'10'"- SUPER FRR IS ACTIVE	
.... 1...		PSAESTA	"X'08'"- SVC 60 RECOVERY ROUTINE ACTIVE	
.... .1..		PSARSM	"X'04'"- REAL STORAGE MANAGER (RSM) ENTERED FOR PAGE FIX	
.... .1.		PSAULCMS	"X'02'"- LOCK MANAGER UNCONDITIONAL LOCAL OR CMS LOCK ROUTINES	
.... .1		PSASLIP	"X'01'"- IEAVTSLP RECURSION CONTROL BIT	
555 (22B) HEX	1	PSASUP4	FOURTH BYTE OF PSASUPER	
1...		PSALDWT	"X'80'"- IF ON, IEEVLDWT IS ACTIVE AND PROCESSING STOP/RESTART REQUEST	
.1...		PSASMF	"X'40'"- SMF SUSPEND/RESET	
..1.		PSASTKSP	"X'20'"- STACK/UNSTACK IN CONTROL	
...1		PSASTPRT	"X'10'"- STOP/RESET IN CONTROL	
556 (22C) SIGNED	4	PSAGPREG(3)	REGISTER SAVE AREA FOR I/O FLIH, SVC FLIH, EXTERNAL FLIH, SCHEDULE AND SYSTEM TRACE	
568 (238) SIGNED	4	PSARSREG	RESTART FLIH REGISTER SAVE	
572 (23C) HEX	1	PSAPTYPE	PROCESSOR TYPE INDICATOR OWNERSHIP: SUPERVISOR CONTROL SERIALIZATION: DISABLEMENT	
1...		PSAAXP	"X'80'"- INDICATES AXP RESERVED	
573 (23D) HEX	3			
576 (240) FLOATING	8		ALIGN PSAEXPS1 TO DOUBLE WORD	
576 (240) HEX	8	PSAEXPS1	EXTERNAL FLIH PSW SAVE AREA 1	
584 (248) FLOATING	8		ALIGN PSAEXPS2 TO DOUBLE WORD	

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
584	(248) HEX	8	PSAEXPS2	EXTERNAL FLIH PSW SAVE AREA 2
592	(250) FLOATING	8		ALIGN PSAMPSW TO DOUBLE WORD
592	(250) HEX	8	PSAMPSW	SETLOCK MODEL PSW
600	(258) FLOATING	8		ALIGN PSAMCHEMA TO DOUBLE WORD
600	(258) HEX	8	PSAMCHEMA	MCH EXIT PSW
608	(260) HEX	2	PSAIPCR	FIRST HALF OF IPC INSTRUCTION TO BE EXECUTED
610	(262) Y-ADDRESS	2		SECOND HALF OF IPC INSTRUCTION
612	(264) HEX	1	PSAIPCRM	BYTE USED BY ABOVE IPC INSTRUCTION
613	(265) HEX	3		RESERVED
616	(268) HEX	2	PSAIPCD	FIRST HALF OF IPC INSTRUCTION TO BE EXECUTED
618	(26A) Y-ADDRESS	2		SECOND HALF OF IPC INSTRUCTION
620	(26C) HEX	1	PSAIPCDM	BYTE USED BY ABOVE IPC INSTRUCTION
621	(26D) HEX	1	PSAIPCC3	BYTE USED BY IPC STNSM CC3 PATH
622	(26E) HEX	2		RESERVED
624	(270) SIGNED	4	PSAIPCSA	IPC REGISTER SAVE AREA
628	(274) SIGNED	4	PSAHLHIS	SAVE AREA FOR PSAHLHI
632	(278) HEX	1	PSARECUR	RESTART FLIH RECURSION INDICATOR. IF X'00', FLIH NOT IN CONTROL. IF X'FF', FLIH IN CONTROL, ENTRY IS RECURSIVE.
633	(279) HEX	1	PSADSSGO	INITIALIZE DSS FLAG, SET BY OPERATOR. IF X'00', DSS NOT TO BE ACTIVATED. IF NOT X'00', NEXT RESTART INTERRUPT FROM CONSOLE SHOULD INITIALIZE DSS.
634	(27A) HEX	1	PSASNSM2	STNSM AREA FOR IEAVRT1
635	(27B) HEX	1	PSARTM1S	BITS 0-7 OF THE CURRENT PSW ARE STORED HERE WHENEVER PSARTM1R IS EXECUTED IN RTM.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
636	(27C) ADDRESS	4	PSASRSA	REAL ADDRESS OF SAVE AREA USED DURING STOP AND RESTART SUBROUTINE
640	(280) CHARACTER	56	PSACLHT	CPU LOCKS TABLE
640	(280) V-ADDRESS	4	PSADISPL	"V(DISPLOCK)"- GLOBAL DISPATCHER LOCK
644	(284) ADDRESS	4	PSAASML	AUXILIARY STORAGE MANAGEMENT (ASM) LOCK
648	(288) V-ADDRESS	4	PSASALCL	"V(SALCLOCK)"- SPACE ALLOCATION LOCK
652	(28C) ADDRESS	4	PSAISSL	IOS SYNCHRONIZATION LOCK
656	(290) ADDRESS	4	PSAIOSCL	IOS CHANNEL AVAILABLE TABLE LOCK
660	(294) ADDRESS	4	PSAIOSUL	IOS UNIT CONTROL BLOCK LOCK
664	(298) ADDRESS	4	PSAIOSLL	IOS LOGICAL CHANNEL QUEUE LOCK
668	(29C) ADDRESS	4	PSATPNCL	TCAM'S TPNCP LOCK
672	(2A0) ADDRESS	4	PSATPDNL	TCAM'S TPDNCB LOCK
676	(2A4) ADDRESS	4	PSATPACL	TCAM'S TPACBDEB LOCK
680	(2A8) V-ADDRESS	4	PSAOPTL	"V(OPTLOCK)"- SRM LOCK
684	(2AC) ADDRESS	4	PSACMSL	CROSS MEMORY SERVICES LOCK
688	(2B0) ADDRESS	4	PSARLCK2	RESERVED LOCK
692	(2B4) ADDRESS	4	PSARLOCK	RESERVED LOCK
696	(2B8) BAL STMT	4	PSAEMS2S	STOSM INSTRUCTION USED BY MEM SWTCH OWN- ERSHIP: SUPERVISOR CONTROL. SERIALIZA- TION: DISABLEMENT.
			PSAEMS2M	"PSAEMS2S+1,1,C'X'"- SYSTEM MASK USED IN ABOVE INSTRUCTION. OWNERSHIP: SUPERVISOR CONTROL.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
700 (2BC) HEX		48	PSARV2BC	RESERVED
748 (2EC) ADDRESS		4	PSALOCAL	LOCALLY LOCKED ADDRESS SPACE INDICATOR
752 (2F0) V-ADDRESS		4	PSACMSLK	"V(CMSLOCK)"- ADDRESS OF GENERAL CROSS MEMORY SERVICES LOCK
756 (2F4) ADDRESS		4	PSALCPUA	LOGICAL CPU ADDRESS FOR LOCK INSTRU- CTION. THIS OFFSET FIXED BY ARCHITECTURE.
760 (2F8) SIGNED		4	PSAHLHI	HIGHEST LOCK HELD INDICATOR. THIS OFFSET FIXED BY ARCHITECTURE.
760 (2F8) SIGNED		4	PSACLHS	CPU LOCKS HELD STRING
760 (2F8) HEX		1	PSACLHS1	FIRST BYTE OF PSACLHS. ALL BITS ARE RESERVED.
761 (2F9) HEX		1	PSACLHS2	SECOND BYTE OF PSACLHS. ALL BITS ARE RESERVED.
762 (2FA) HEX		1	PSACLHS3	THIRD BYTE OF PSACLHS
...1			PSADSPLI	"X'10'"- DISPATCHER LOCK INDICATOR
.... 1...			PSAASMLI	"X'08'"- ASM LOCK INDICATOR
.... .1..			PSASALLI	"X'04'"- SPACE ALLOCATION LOCK INDICATOR
.... ..1.			PSAIOSLI	"X'02'"- IOS SYNCHRONIZATION LOCK INDI- CATOR
....1			PSAIOLCI	"X'01'"- IOS CHANNEL AVAILABLE TABLE LOCK INDICATOR
763 (2FB) HEX		1	PSACLHS4	FOURTH BYTE OF PSACLHS
1...			PSAIOLI	"X'80'"- IOS UCB LOCK INDICATOR
.1..			PSAIOLLI	"X'40'"- IOS LOGICAL CHANNEL QUEUE LOCK INDICATOR
..1.			PSATPNLI	"X'20'"- TPNCP LOCK INDICATOR
...1			PSATPDLI	"X'10'"- TPDNCB LOCK INDICATOR
.... 1...			PSATPALI	"X'08'"- TPACBDEB LOCK INDICATOR
.... .1..			PSASRMLI	"X'04'"- SYSTEM RESOURCE MANAGER (SRM) LOCK INDICATOR
.... ..1.			PSACMSLI	"X'02'"- CROSS MEMORY SERVICES LOCK INDICATOR
....1			PSALCLLI	"X'01'"- LOCAL LOCK INDICATOR

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
764 (2FC)	V-ADDRESS	4	PSALITA	"V(IEAVELT1)" - ADDRESS OF LOCK INTERFACE TABLE. THIS OFFSET FIXED BY ARCHITECTURE.
768 (300)	FLOATING	8		ALIGN PSASVPSW TO DOUBLE WORD
768 (300)	HEX	8	PSASVPSW	I/O FLIH PSW SAVE AREA
776 (308)	SIGNED	4	PSACR0	SAVE AREA FOR CONTROL REGISTER 0
780 (30C)	HEX	1	PSAMCHFL	MCH RECURSION FLAGS
781 (30D)	HEX	1	PSASYMSK	THIS FIELD WILL BE USED IN CONJUNCTION WITH THE STNSM INSTRUCTION TO PLACE IOS CHANNEL SCHEDULER INTO A DISABLED STATE AND SIMULTANEOUSLY SAVE THE SYSTEM MASK OF THE CALLER
782 (30E)	HEX	1	PSAACTCD	ACTION CODE SUPPLIED BY OPERATOR AFTER SYSTEM HAS LOADED RESTARTABLE WAIT STATE AND BEFORE THE RESTART KEY IS DEPRESSED. VALUE DEPENDS ON RESTARTABLE WAIT STATE CODE. UNPREDICTABLE DURING NORMAL SYSTEM OPERATION.
783 (30F)	HEX	1	PSAMCHIC	MCH INITIALIZATION COMPLETE FLAGS
784 (310)	ADDRESS	4	PSAWKRAP	REAL ADDRESS OF VARY CPU PARAMETER LIST
788 (314)	ADDRESS	4	PSAWKVAP	VIRTUAL ADDRESS OF VARY CPU PARAMETER LIST
792 (318)	SIGNED	2	PSAVSTAP	WORK AREA FOR VARY CPU
794 (31A)	SIGNED	2	PSACPUSA	PHYSICAL CPU ADDRESS (STATIC)
796 (31C)	SIGNED	4	PSASTOR	MASTER MEMORY'S SEGMENT TABLE ORIGIN REGISTER (STOR) VALUE
800 (320)	SIGNED	4	PSADSSRS	REGISTER SAVE FOR DSS PROGRAM AND SVC INTERRUPT HANDLERS
804 (324)	SIGNED	4	PSADSSR2	REGISTER SAVE AREA FOR DSS I/O AND EXTERNAL INTERRUPT HANDLERS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
808 (328)	SIGNED	4	PSADSSR3	REGISTER SAVE AREA FOR DSS ERROR RECOVERY ROUTINE
812 (32C)	SIGNED	4	PSADSSWK	WORK AREA FOR DSS INTERRUPT HANDLERS
816 (330)	SIGNED	4	PSADSSTS(5)	REGISTER SAVE FOR DSS MODULES MAKING CALLS TO IQATSS
836 (344)	BITSTRING	4	PSADSSFL	DSS FLAG BYTES
836 (344)	HEX	1	PSADSSF1	DSS STATUS BYTE
1...	....		PSADSSMV	"X'80'"- DSS MONITORING, VS2 RUNNING
.1...	....		PSADSSDM	"X'40'"- DSS IN VS2-2 VM
..1.	....		PSADSSDD	"X'20'"- DSS IN DSS VM
...1	....		PSADSSDW	"X'10'"- DSS IN DSS WAIT
.... 1...			PSADSSTP	"X'08'"- DSS PROCESSING SIGP
.... .1..			PSADSSSP	"X'04'"- DSS SIGP PENDING
.... ..1.			PSADSSOI	"X'02'"- DSS EXECUTING OVERLAID INSTRUCTION
.... ...1			PSADSSPI	"X'01'"- DSS EXECUTING PRIVILEGED INSTRUCTION
837 (345)	HEX	1	PSADSSF2	SYSTEM STATUS BYTE
1111 1111			PSADSSPS	"X'FF'"- SYSTEM RUNNING IN PROBLEM STATE
1111 111.			PSADSSSS	"X'FE'"- SYSTEM RUNNING IN PRIVILEGED STATE
838 (346)	HEX	1	PSADSSF3	DSS FLAG BYTE
1...	....		PSADSSGP	"X'80'"- DSS SIGP INDICATOR
.1...	....		PSADSSSES	"X'40'"- ERROR SHORT SAVE INDICATOR
..1.	....		PSADSSNM	"X'20'"- NON-MONITORABLE CODE INDICATOR
...1	....		PSADSSRW	"X'10'"- DSS OWNS CVTRSTWD
.... 1...			PSADSSMC	"X'08'"- MACHINE CHECK RUNNING
839 (347)	HEX	1	PSADSSF4	DSS RECURSION FLAGS
1...	....		PSADSSRC	"X'80'"- PROGRAM-SVC RECURSION FLAG
.1...	....		PSADSS12	"X'40'"- PROGRAM INTERRUPT 12 RECURSION FLAG
..1.	....		PSADSSIE	"X'20'"- I/O-EXTERNAL RECURSION FLAG
...1	....		PSADSSC0	"X'10'"- CONTROL REGISTER 0 INVALID FLAG
.... 1...			PSADSSDE	"X'08'"- DAT ERROR WHILE DSS RUNNING IN VS2 VM
.... .1..			PSADSSVE	"X'04'"- DAT ERROR WHILE DSS RUNNING IN

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
			PSADSS10	DSS VM "X'02'"- SEGMENT EXCEPTION RECURSION FLAG
			PSADSS05	"X'01'"- ADDRESSING EXCEPTION RECURSION FLAG
840	(348) FLOATING	8		ALIGN PSADSSRP TO DOUBLEWORD
840	(348) HEX	8	PSADSSRP	DSS TO VS2-2 RESUME PSW
848	(350) FLOATING	8		ALIGN PSADSSPP TO DOUBLEWORD
848	(350) HEX	8	PSADSSPP	DSS PSW FOR RETURNING CONTROL FROM PRIV- ILEGED INSTRUCTION STREAM TO VS2
856	(358) SIGNED	4	PSADSS14	DSS RESTART SECOND LEVEL INTERRUPT HAN- DLER CONTROL REGISTER 14 SAVE AREA
860	(35C) SIGNED	4	PSADSSFW	FULL-WORD DSS WORK AREA
864	(360) SIGNED	4	PSADSSPR	DSS REGISTER SAVE FOR PRIVILEGED INSTRUCTION STREAM
			PSADSSED	"X"- END OF DSS FIELDS
868	(364) HEX	22	PSARV364	RESERVED FOR DSS
890	(37A) HEX	2	PSARET	BRANCH RETURN TO CALLER, USED BY ROU- TINES INVOKED BY IOS
892	(37C) HEX	4	PSARETCD	BRANCH RETURN TO CALLER WITH RETURN CODE IN REGISTER 15, USED BY ROUTINES INVOKED BY IOS
896	(380) CHARACTER	64	PSARSVT	RECOVERY STACK VECTOR TABLE
896	(380) CHARACTER	64	PSARSVTE	RECOVERY STACK VECTOR TABLE
896	(380) ADDRESS	4	PSACSTK	ADDRESS OF CURRENTLY USED FUNCTIONAL RECOVERY ROUTINE (FRR) STACK
900	(384) ADDRESS	4	PSANSTK	ADDRESS OF NORMAL FRR STACK

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
904	(388) ADDRESS	4	PSASSTK	ADDRESS OF SVC-I/O-DISPATCHER FRR STACK
908	(38C) ADDRESS	4	PSASSAV	ADDRESS OF INTERRUPTED STACK SAVED BY SVC, I/O, DISPATCHER
912	(390) ADDRESS	4	PSAMSTK	ADDRESS OF MCH FRR STACK
916	(394) ADDRESS	4	PSAMSAV	ADDRESS OF INTERRUPTED STACK SAVED BY MCH
920	(398) ADDRESS	4	PSAPSTK	ADDRESS OF PROGRAM CHECK FLIH FRR STACK
924	(39C) ADDRESS	4	PSAPSAV	ADDRESS OF INTERRUPTED STACK SAVED BY PROGRAM CHECK FLIH
928	(3A0) ADDRESS	4	PSAESTK1	ADDRESS OF EXTERNAL FLIH FRR STACK FOR NON-RECURSIVE ENTRIES
932	(3A4) ADDRESS	4	PSAESAV1	ADDRESS OF INTERRUPTED STACK SAVED BY EXTERNAL FLIH FOR NON-RECURSIVE ENTRIES
936	(3A8) ADDRESS	4	PSAESTK2	ADDRESS OF EXTERNAL FLIH FRR STACK FOR FIRST LEVEL RECURSIONS
940	(3AC) ADDRESS	4	PSAESAV2	ADDRESS OF INTERRUPTED STACK SAVE BY EXTERNAL FLIH FOR FIRST LEVEL RECURSIONS
944	(3B0) ADDRESS	4	PSAESTK3	ADDRESS OF EXTERNAL FLIH FRR STACK FOR SECOND LEVEL RECURSIONS AND ACR
948	(3B4) ADDRESS	4	PSAESAV3	ADDRESS OF INTERRUPTED STACK SAVED BY EXTERNAL FLIH FOR SECOND LEVEL RECURSIONS
952	(3B8) ADDRESS	4	PSARSTK	ADDRESS OF RESTART FLIH FRR STACK
956	(3BC) ADDRESS	4	PSARSAV	ADDRESS OF INTERRUPTED STACK SAVED BY RESTART FLIH
960	(3C0) FLOATING	8		ALIGN PSARPSW TO DOUBLE WORD

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
960 (3C0) HEX		8	PSASRPSW	RESUME PSW FOR STOP AND RESTART SUBROUTINE
968 (3C8) FLOATING		8		ALIGN PSASRPSW TO DOUBLE WORD
968 (3C8) HEX		8	PSARSPSW	RESUME PSW FIELD FOR RESTART INTERRUPT HANDLER
976 (3D0) HEX		24	PSARV3D0	RESERVED
1000 (3E8) FLOATING		8		ALIGN PSAVMFLD TO DOUBLE WORD
1000 (3E8) HEX		8	PSAVMFLD	FIELD USED BY VM
1008 (3F0) SIGNED		4		ALIGN PSASFACC TO FULL WORD
1008 (3F0) HEX		4	PSASFACC	SETFRR ABEND COMPLETION CODE USED WHEN A SETFRR ADD IS ISSUED AGAINST A FULL FRR STACK
1012 (3F4) BAL STMT		4	PSALSFCC	A LOAD INSTRUCTION TO PRIME REG 1 WITH THE SETFRR ABEND COMPLETION CODE IN PSASFACC
1016 (3F8) BAL STMT		2	PSASVC13	AN SVC 13 INSTRUCTION
1018 (3FA) HEX.... .1		1	PSATRACE PSATROFF	TRACE FLAGS "X'01'" - IF ON, TRACE SUSPENDED BECAUSE WAIT TASK DISPATCHED
1019 (3FB) HEX 1...		1	PSAINTE PSANUIN	FLAGS FOR CPU TIMER "X'80'" - CPU TIMER CANNOT BE USED
1020 (3FC) SIGNED		4	PSARTM1R	THIS IS A STOSM INSTRUCTION EXECUTED BEFORE RTM GOES TO THE RETRY ROUTINE FOR THE FRRS.
1020 (3FC) HEX		1		OPERATION CODE X'AD'.
1021 (3FD) HEX		1	PSARTM1M	MASK FILLED IN BY RTM.
1022 (3FE) ADDRESS		2		ADDRESS OF PSARTM1S.
1024 (400) FLOATING		8		ALIGN PSAPCPFW TO DOUBLE WORD

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1024 (400) HEX		8	PSAPCPsw	TEMPORARY OLD PSW STORAGE FOR PROGRAM FLIH
1032 (408) ADDRESS		4	PSAATCVT	ADDRESS OF VTAM ATCVT. INITIALIZED BY VTAM.
1036 (40C) ADDRESS		4	PSAWTCOD	CALLER-SUPPLIED WAIT STATE INFORMATION FOR STOP/RESTART
1040 (410) ADDRESS		4	PSACDAL	ADDRESS OF COMMON DISPATCHER ELEMENT FOR THIS CPU
1044 (414) SIGNED		2	PSACSID	CURRENT CHANNEL SET ID
1046 (416) HEX		2		RESERVED
1048 (418) FLOATING		8		ALIGN PSASCPSW TO DOUBLE WORD
1048 (418) HEX		4	PSASCPSW	SCHEDULE MODEL PSW
1052 (41C) ADDRESS		4		MODEL PSW SECOND HALF
1056 (420) FLOATING		8		ALIGN PSASMPSW TO DOUBLE WORD
1056 (420) HEX		4	PSASMPSW	SRB DISPATCH PSW
1060 (424) ADDRESS		4		DISPATCH PSW SECOND HALF
1064 (428) FLOATING		8		ALIGN PSAGSAV TO DOUBLE WORD
1064 (428) HEX		64	PSAGSAV	REGISTER SAVE AREA USED BY DISPATCHER, SCHEDULE
1128 (468) FLOATING		8		ALIGN PSAPSWSV TO DOUBLE WORD
1128 (468) HEX		8	PSAPSWSV	PSW SAVE AREA FOR DISPATCHER AND ACR
1136 (470) FLOATING		8		ALIGN PSACPUT TO DOUBLE WORD
1136 (470) HEX		8	PSACPUT	SUPERVISOR CPU TIMER SAVE AREA

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1144 (478) SIGNED		4	PSAPCFUN	PROGRAM FLIH RECURSION FLAGS
1144 (478) HEX		1	PSAPCFB1	FUNCTION VALUE
.... .1			PSAPCMC	"X'01'"- MC INTERRUPT
.... .1.			PSAPCPF	"X'02'"- PAGE FAULT
.... ..11			PSAPCP8	"X'03'"- PER/SPACE SWITCH INTERRUPT
.... .1..			PSAPCAD	"X'04'"- ADDRESSING EXCEPTION
.... .1.1			PSAPCTR	"X'05'"- TRANSLATION EXCEPTION
.... ..11.			PSAPCPC	"X'06'"- PROGRAM CHECK
1145 (479) HEX		1	PSAPCFB2	FUNCTION FLAGS
1....			PSAPCSS	"X'80'"- SUPER SPIE
.1....			PSAPCMT	"X'40'"- TRACE RECURSION FLAG
..1....			PSAXMSAL	"X'20'"- SPACE ALLOCATION LOCK OBTAINED
1146 (47A) HEX		1	PSAPCFB3	RECURSION FLAGS
1....			PSAPCP1	"X'80'"- FIRST LEVEL PROGRAM CHECK
.1....			PSAPCP2	"X'40'"- SECOND LEVEL PROGRAM CHECK
..1....			PSAPCDE	"X'20'"- DAT ERROR CONDITION
.... 1....			PSAPCLV	"X'10'"- 0=REGISTERS IN LCCA, 1=REGISTERS NOT IN LCCA.
.... 1...			PSAPCP3	"X'08'"- THIRD LEVEL PROGRAM CHECK
.... .1..			PSAPCP4	"X'04'"- FOURTH LEVEL PROGRAM CHECK
1147 (47B) HEX		1	PSAPCFB4	CROSS MEMORY FUNCTION VALUE
.... .1			PSAXCD	"X'01'"- COMMON DECODE FUNCTION
.... .1.			PSAXSPKA	"X'02'"- SET PSW KEY FUNCTION
.... ..11			PSAXIPK	"X'03'"- INSERT PROTECTION KEY FUNCTION
.... .1..			PSAXPC	"X'04'"- PROGRAM CALL FUNCTION
.... .1.1			PSAXSAC	"X'05'"- SET ADDRESS SPACE CONTROL FUNC- TION.
.... .11.			PSAXIVSK	"X'06'"- INSERT VIRTUAL STORAGE KEY FUNCTION.
.... .111			PSAXIAC	"X'07'"- INSERT ADDRESS SPACE CONTROL FUNCTION.
.... 1...			PSAXSSAR	"X'08'"- SET SECONDARY ADDRESS REGISTER FUNCTION.
.... 1..1			PSAXEPAR	"X'09'"- EXTRACT PRIMARY ADDRESS REGIS- TER FUNCTION.
.... 1.1.			PSAXESAR	"X'0A'"- EXTRACT SECONDARY ADDRESS REG- ISTER FUNCTION.
.... 1.11			PSAXPT	"X'0B'"- PROGRAM TRANSFER FUNCTION
.... 11..			PSAXMVCK	"X'0C'"- MOVE WITH KEY FUNCTION

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.... 11.1		PSAXMVC	"X'0D'"- MOVE TO PRIMARY FUNCTION
	.... 111.		PSAXMVC	"X'0E'"- MOVE TO SECONDARY FUNCTION
1148 (47C)	SIGNED	2	PSAPCPS2	PASID AT TIME OF SECOND LEVEL INTERRUPT
1150 (47E)	SIGNED	2	PSAPCPS3	PASID AT TIME OF THIRD LEVEL INTERRUPT
1152 (480)	SIGNED	4	PSAPCGR8	PROGRAM CHECK FLIH REGISTER SAVE AREA GR 8
1156 (484)	SIGNED	4	PSAPCGR9	PROGRAM CHECK FLIH REGISTER SAVE AREA GR 9
1160 (488)	SIGNED	4	PSAPCGRA	PROGRAM CHECK FLIH REGISTER SAVE AREA GR 10
1164 (48C)	SIGNED	4	PSAPCGRB	PROGRAM CHECK FLIH REGISTER SAVE AREA GR 11
1168 (490)	SIGNED	4	PSASCRG1	GLOBAL SCHEDULE REGISTER SAVE AREA
1172 (494)	SIGNED	4	PSASCRG2	GLOBAL SCHEDULE REGISTER SAVE AREA
1176 (498)	SIGNED	2	PSAPCPS4	PASID AT TIME OF FOURTH LEVEL INTERRUPT
1178 (49A)	HEX	2		RESERVED
1180 (49C)	SIGNED	4	PSAMODEW	WORD LABEL TO ADDRESS PSAMODE. THIS OFFSET FIXED BY ARCHITECTURE.
1180 (49C) HEX		1	PSAXMFLG	CROSS MEMORY STATUS FLAGS
1...			PSAMODE	"X'80'"- ADDRESS STATE 0=PRIMARY MODE, 1=SECONDARY MODE
1181 (49D) HEX		1	PSAMFLGS	SECOND BYTE OF PSAMODEW
1...			PSANSS	"X'80'"- ENABLED UNLOCKED TASK WITH FRR
1182 (49E) HEX		1	PSAMODEH	SECOND HALFWORD OF PSAMODEW. FIRST BYTE MUST BE ZERO FOR I/O AND EXTERNAL FLIHS.
1183 (49F) HEX		1	PSAMODE	SYSTEM MODE INDICATOR AND DISPLACEMENT INTO PSAEPTAB
....			PSATASKM	"X'00'"- TASK MODE VALUE
.... .1..			PSASRBM	"X'04'"- SRB MODE VALUE
.... 1...			PSAWAITM	"X'08'"- WAIT MODE VALUE
.... 11..			PSARECM	"X'0C'"- I/O RECURSION MODE VALUE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
	...1		PSADISPM	"X'10'"- DISPATCHER MODE VALUE
	..1.		PSAPSRBM	"X'20'"- PSEUDO SRB MODE FLAG BIT. THIS BIT MAY BE ON WITH ANY OF ABOVE MODE VALUES.
1184	(4A0) HEX	2		RESERVED
1186	(4A2) HEX	1	PSAMODES	SYSTEM MODE SAVE AREA
1187	(4A3) HEX	1	PSASTNSM	STNSM TARGET USED BY EXIT PROLOGUE
1188	(4A4) SIGNED	4	PSALKJW	LOCAL LOCK RELEASE SRB JOURNAL WORD
1192	(4A8) FLOATING	8	PSADZERO	DOUBLEWORD OF ZERO
1192	(4A8) SIGNED	4	PSAFZERO	FULLWORD OF ZERO
1196	(4AC) SIGNED	4		FULLWORD OF ZERO
1200	(4B0) SIGNED	4	PSALKJW2	CMS LOCK RELEASE JOURNAL WORD.
1204	(4B4) HEX	4	PSARV4B4	RESERVED
1208	(4B8) FLOATING	8		ALIGN PSASLSA TO DOUBLE WORD
1208	(4B8) HEX	72	PSASLSA	SINGLE LEVEL SAVE AREA USED BY DISABLED ROUTINES WITH NO DEPENDENCY THAT THE SAVE AREA REMAIN INTACT ACROSS A CALL. THIS AREA IS NOT MAINTAINED BY RESTART PROCESSING.
1280	(500) CHARACTER	64	PSALKSA	SETLOCK REGISTER SAVE AREA
1280	(500) SIGNED	4	PSALKR0	SETLOCK'S CALLER'S REGISTER 0
1284	(504) SIGNED	4	PSALKR1	SETLOCK'S CALLER'S REGISTER 1
1288	(508) SIGNED	4	PSALKR2	SETLOCK'S CALLER'S REGISTER 2
1292	(50C) SIGNED	4	PSALKR3	SETLOCK'S CALLER'S REGISTER 3
1296	(510) SIGNED	4	PSALKR4	SETLOCK'S CALLER'S REGISTER 4

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1300	(514) SIGNED	4	PSALKR5	SETLOCK'S CALLER'S REGISTER 5
1304	(518) SIGNED	4	PSALKR6	SETLOCK'S CALLER'S REGISTER 6
1308	(51C) SIGNED	4	PSALKR7	SETLOCK'S CALLER'S REGISTER 7
1312	(520) SIGNED	4	PSALKR8	SETLOCK'S CALLER'S REGISTER 8
1316	(524) SIGNED	4	PSALKR9	SETLOCK'S CALLER'S REGISTER 9
1320	(528) SIGNED	4	PSALKR10	SETLOCK'S CALLER'S REGISTER 10
1324	(52C) SIGNED	4	PSALKR11	SETLOCK'S CALLER'S REGISTER 11
1328	(530) SIGNED	4	PSALKR12	SETLOCK'S CALLER'S REGISTER 12
1332	(534) SIGNED	4	PSALKR13	SETLOCK'S CALLER'S REGISTER 13
1336	(538) SIGNED	4	PSALKR14	SETLOCK'S CALLER'S REGISTER 14
1340	(53C) SIGNED	4	PSALKR15	SETLOCK'S CALLER'S REGISTER 15
1344	(540) FLOATING	8		ALIGN PSARMSW TO DOUBLE WORD
1344	(540) HEX	8	PSARMSW	REAL STORAGE MANAGER (RSM) PSW
1352	(548) SIGNED	4	PSARSMGR(16)	RSM REGISTER SAVE AREA
1416	(588) HEX	1	PSAHWFB	HARDWARE FLAG BYTE. THIS OFFSET FIXED BY ARCHITECTURE.
1...			PSAESKI	"X'80'"- EXTENDED STORAGE KEY INSTRUCTIONS ARE AVAILABLE ON THIS SYSTEM.
.1...			PSARIO	"X'40'"- RESUME I/O INSTRUCTION AVAILABLE ON THIS PROCESSOR.
..1.			PSAPFA	"X'20'"- THE PAGE FAULT ASSIST FOOTPRINT BIT. SET TO ON WHEN PFA IS IN CONTROL. THIS OFFSET FIXED BY ARCHITECTURE.
1417	(589) HEX	1	PSACROCB	CRO CONTROL BYTE USED BY PROTPSA MACRO
...1			PSAENABL	"X'10'"- TO ENABLE PSA PROTECTION

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
1418	... . . . . (58A) HEX	2	PSADSABL	"X'00'"- TO DISABLE PSA PROTECTION RESERVED
1420	...1 (58C) SIGNED	4	PSACROSV PSACROEN	CRO SAVE AREA USED BY PROTPSA MACRO "X'10'"- IF 0, PSA PROTECT DISABLED. IF 1, PSA PROTECT ENABLED. BIT IS IN HIGH-ORDER BYTE OF PSACROSV.
1424	...1 (590) SIGNED	4	PSAPCCRO PSAPCPEN	PROGRAM CHECK FLIH CRO SAVE AREA "X'10'"- IF 0, PSA PROTECT DISABLED. IF 1, PSA PROTECT ENABLED. BIT IS IN HIGH-ORDER BYTE OF PSAPCCRO.
1428	...1 (594) SIGNED	4	PSARCRO PSARPEN	RESTART FLIH CRO SAVE AREA "X'10'"- IF 0, PSA PROTECT DISABLED. IF 1, PSA PROTECT ENABLED. BIT IS IN HIGH-ORDER BYTE OF PSARCRO.
1432	(598) FLOATING	8	PSASTKE	STACK CONTROL WORD
1432	(598) SIGNED	2	PSATKN	CURRENT STACK TOKEN
1434	(59A) SIGNED	2	PSAASD	CURRENT STACK ADDRESS SPACE DESIGNATOR
1436	(59C) SIGNED	4	PSASEL	CURRENT STACK ELEMENTS ADDRESS
1440	(5A0) FLOATING	8		ALIGN PSASKPSW TO A DOUBLEWORD
1440	(5A0) HEX	4	PSASKPSW	PCLINK STACK/UNSTACK MODEL PSW
1444	(5A4) ADDRESS	4	PSASKPS2	PCLINK PSW ADDRESS
1448	(5A8) FLOATING	8	PSAGXMSV	I/O + EXT FLIH CROSS MEMORY SAVE AREA
1456	(5B0) HEX	8	PSARV5B0	RESERVED
1464	1... (5B8) HEX	1	PSASCFB PSAIOPR	SUPERVISOR CONTROL FLAG BYTE. "X'80'"- INDICATES IF INTERRUPTED TASK SHOULD BE PREEMPTED. USED BY THE I/O FLIH.
1465	(5B9) HEX	3		RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1468	(5BC) ADDRESS	4	PSAXMCR0	CROSS MEMORY CONTROL REGISTER 0 SAVE AREA
1472	(5C0) FLOATING	8		ALIGN PSAXMCR1 TO DOUBLE WORD
1472	(5C0) ADDRESS	4	PSAXMCR1	CROSS MEMORY PRIMARY SEGMENT TABLE DESTINATOR
1476	(5C4) SIGNED	4	PSAXMCR3	CROSS MEMORY PROGRAM KEY/SECONDARY ASID WORD
1476	(5C4) SIGNED	2	PSAXMPKM	CROSS MEMORY PROGRAM KEY MASK
1478	(5C6) SIGNED	2	PSAXMSAS	CROSS MEMORY SECONDARY ASID
1480	(5C8) SIGNED	4	PSAXMCR4	CROSS MEMORY AUTHORIZATION MASK/PRIMARY ASID WORD
1480	(5C8) SIGNED	2	PSAXMAX	CROSS MEMORY AUTHORIZATION MASK
1482	(5CA) SIGNED	2	PSAXMPAS	CROSS MEMORY PRIMARY ASID
1484	(5CC) SIGNED	4	PSAXMCR5	CROSS MEMORY LINKAGE TABLE WORD
1488	(5D0) ADDRESS	4	PSAXMCR7	CROSS MEMORY SECONDARY SEGMENT TABLE DESTINATOR
1492	(5D4) SIGNED	4	PSAXMCR9	CROSS MEMORY PER CONTROL WORD
1496	(5D8) ADDRESS	4	PSAXMCRA	CROSS MEMORY PER ADDRESS START
1500	(5DC) ADDRESS	4	PSAXMCRB	CROSS MEMORY PER ADDRESS END
1504	(5E0) ADDRESS	4	PSAXMCRC	CROSS MEMORY TRACE CONTROL
1508	(5E4) ADDRESS	4	PSAXMCRE	CROSS MEMORY AFT ORIGIN
1512	(5E8) FLOATING	8		ALIGN PSAXMGRS TO DOUBLE WORD
1512	(5E8) CHARACTER	64	PSAXMGRS	CROSS MEMORY GPR SAVE AREA
1512	(5E8) SIGNED	4	PSAXMGR0	CROSS MEMORY GPR 0 SAVE AREA

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1516	(5EC) SIGNED	4	PSAXMGR1	CROSS MEMORY GPR 1 SAVE AREA
1520	(5F0) SIGNED	4	PSAXMGR2	CROSS MEMORY GPR 2 SAVE AREA
1524	(5F4) SIGNED	4	PSAXMGR3	CROSS MEMORY GPR 3 SAVE AREA
1528	(5F8) SIGNED	4	PSAXMGR4	CROSS MEMORY GPR 4 SAVE AREA
1532	(5FC) SIGNED	4	PSAXMGR5	CROSS MEMORY GPR 5 SAVE AREA
1536	(600) SIGNED	4	PSAXMGR6	CROSS MEMORY GPR 6 SAVE AREA
1540	(604) SIGNED	4	PSAXMGR7	CROSS MEMORY GPR 7 SAVE AREA
1544	(608) SIGNED	4	PSAXMGR8	CROSS MEMORY GPR 8 SAVE AREA
1548	(60C) SIGNED	4	PSAXMGR9	CROSS MEMORY GPR 9 SAVE AREA
1552	(610) SIGNED	4	PSAXMGRA	CROSS MEMORY GPR 10 SAVE AREA
1556	(614) SIGNED	4	PSAXMGRB	CROSS MEMORY GPR 11 SAVE AREA
1560	(618) SIGNED	4	PSAXMGRC	CROSS MEMORY GPR 12 SAVE AREA
1564	(61C) SIGNED	4	PSAXMGRD	CROSS MEMORY GPR 13 SAVE AREA
1568	(620) SIGNED	4	PSAXMGRF	CROSS MEMORY GPR 14 SAVE AREA
1572	(624) SIGNED	4	PSAXMGRF	CROSS MEMORY GPR 15 SAVE AREA
1576	(628) FLOATING	8		ALIGN PSAXMPSW TO DOUBLE WORD
1576	(628) HEX	8	PSAXMPSW	CROSS MEMORY OLD/RESUME PSW
1584	(630) SIGNED	4	PSAXMCTL	CROSS MEMORY CONTROL WORD
1584	(630) HEX 1...	1	PSAXMFB1 PSAXMAC	CROSS MEMORY FLAG BYTE "X'80'" - ASID CONTROL 0=NOT AUTHORIZED, 1=AUTHORIZED
	.1...		PSAXMSAC	"X'40'" - SUBSYSTEM LINKAGE CONTROL 0=NOT

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	..1.		PSAXMSIM	AUTHORIZED, 1=AUTHORIZED "X'20'"- 0=XM HARDWARE SUPPORT 1=XM SIMULATION SUPPORT
1585	(631) HEX	3		RESERVED
1588	(634) SIGNED	2	PSAXMILC	CROSS MEMORY INSTRUCTION LENGTH COUNTER
1590	(636) SIGNED	2	PSAXMPIC	CROSS MEMORY INTERRUPT CODE
1592	(638) ADDRESS	4	PSAXMTEA	CROSS MEMORY TRANSLATION EXCEPTION ADDRESS (TEA) VALUE
	1...		PSAXMTEM	"X'80'"- HIGH-ORDER BIT OF PSAXMTEA. IF 0, TEA SHOULD BE REFERENCED BY PRIMARY SEGMENT TABLE ADDRESS. IF 1, TEA SHOULD BE REFERENCED BY SECONDARY SEGMENT TABLE ADDRESS.
1596	(63C) HEX	1	PSAXMPEF	CROSS MEMORY PER EVENT FLAGS
	1...		PSAXMPSB	"X'80'"- CROSS MEMORY SUCCESSFUL BRANCH
	.1...		PSAXMPIF	"X'40'"- CROSS MEMORY INSTRUCTION FETCH
	..1.		PSAXMPSA	"X'20'"- CROSS MEMORY STORAGE ALTERATION
	...1		PSAXMPRG	"X'10'"- CROSS MEMORY REGISTER ALTERED
1597	(63D) HEX	1		RESERVED
1598	(63E) HEX	1	PSAXMRA1	CROSS MEMORY REGISTERS ALTERED REGISTERS 0-7
	1...		PSAXMPRO	"X'80'"- CROSS MEMORY GPR 0 ALTERED
	.1...		PSAXMPR1	"X'40'"- CROSS MEMORY GPR 1 ALTERED
	..1.		PSAXMPR2	"X'20'"- CROSS MEMORY GPR 2 ALTERED
	...1		PSAXMPR3	"X'10'"- CROSS MEMORY GPR 3 ALTERED
	.... 1...		PSAXMPR4	"X'08'"- CROSS MEMORY GPR 4 ALTERED
	.... .1..		PSAXMPR5	"X'04'"- CROSS MEMORY GPR 5 ALTERED
	.... .1.		PSAXMPR6	"X'02'"- CROSS MEMORY GPR 6 ALTERED
	.... .1..1		PSAXMPR7	"X'01'"- CROSS MEMORY GPR 7 ALTERED
1599	(63F) HEX	1	PSAXMRA2	CROSS MEMORY REGISTERS ALTERED REGISTERS 8-15
	1...		PSAXMPR8	"X'80'"- CROSS MEMORY GPR 8 ALTERED
	.1...		PSAXMPR9	"X'40'"- CROSS MEMORY GPR 9 ALTERED
	..1.		PSAXMPRA	"X'20'"- CROSS MEMORY GPR 10 ALTERED
	...1		PSAXMPRB	"X'10'"- CROSS MEMORY GPR 11 ALTERED
	.... 1...		PSAXMPRC	"X'08'"- CROSS MEMORY GPR 12 ALTERED
	.... .1..1		PSAXMPRD	"X'04'"- CROSS MEMORY GPR 13 ALTERED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.... .1.		PSAXMPRE	"X'02'"- CROSS MEMORY GPR 14 ALTERED
	.... .1		PSAXMPRF	"X'01'"- CROSS MEMORY GPR 15 ALTERED
1600 (640)	ADDRESS	4	PSAXMPSS	CROSS MEMORY PER STORAGE ALTERATION START ADDRESS
1604 (644)	SIGNED	4	PSAXMPSL	CROSS MEMORY PER STORAGE LENGTH
1608 (648)	FLOATING	8		ALIGN PSAXMETE TO DOUBLE WORD
1608 (648)	HEX	16	PSAXMETE	CROSS MEMORY ENTRY TABLE ENTRY
1624 (658)	FLOATING	8	PSATIME	SPECIFIED TIME LIMIT IF SRB BEING TIMED ELSE 0.
1632 (660)	SIGNED	4	PSASRSAV	ADDRESS OF CURRENT FRR STACK SAVED BY STOP/RESET.
1636 (664)	HEX	12	PSARV664	RESERVED
1648 (670)	FLOATING	8	PSADXMSI	DISPATCHER CONTROL REGISTER 3 AND 4 IMAGE
1648 (670)	SIGNED	4	PSADCR3I	DISPATCHER CONTROL REGISTER 3 IMAGE
1648 (670)	SIGNED	2	PSADPKMI	PKM IMAGE
1650 (672)	SIGNED	2	PSADSASI	SECONDARY ASID
1652 (674)	SIGNED	4	PSADCR4I	DISPATCHER CONTROL REGISTER 4 IMAGE
1652 (674)	SIGNED	2	PSADAXI	AUTHORIZATION INDEX
1654 (676)	SIGNED	2	PSADPASI	PRIMARY ASID
1656 (678)	HEX	64	PSAGGRSV	REGISTER SAVE AREA USED BY I/O FLIH AND FIRST LEVEL EXTERNAL FLIH ENTRY
1656 (678)	HEX	1	PSAFF678(64)	INITIALIZE FIELD PSAGGRSV
1720 (688)	FLOATING	8	PSADXMSV	DISPATCHER CONTROL REGISTER 3 AND 4 SAVE AREA

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
1720	(6B8) SIGNED	4	PSADCR3	DISPATCHER CONTROL REGISTER 3 SAVE AREA
1720	(6B8) SIGNED	2	PSADPKM	DISPATCHER PROGRAM KEY MASK SAVE AREA
1722	(6BA) SIGNED	2	PSADSAS	DISPATCHER SECONDARY ASID SAVE AREA
1724	(6BC) SIGNED	4	PSADCR4	DISPATCHER CONTROL REGISTER 4 SAVE AREA
1724	(6BC) SIGNED	2	PSADAX	DISPATCHER AUTHORIZATION INDEX SAVE AREA.
1726	(6BE) SIGNED	2	PSADPAS	DISPATCHER PRIMARY ASID SAVE AREA.
1728	(6C0) FLOATING	8	PSADTSAV	DISPATCHER CPU TIMER SAVE AREA
1728	(6C0) HEX	1	PSAFF6C0(8)	INITIALIZE FIELD PSADTSAV
1736	(6C8) FLOATING	8	PSAUSEND	END FIRST SET OF ASSIGNED FIELDS SAVED BY ACR.
1736	(6C8) HEX	56	PSARV6C8	RESERVED
1792	(700) HEX	256	PSARV700	RESERVED
2048	(800) FLOATING	8	PSAUS2ST	START SECOND SET OF ASSIGNED FIELDS SAVED BY ACR.
2048	(800) SIGNED	4	PSACDSAV	CALLDISP REGISTER SAVE AREA FOR REGISTERS 14 1
2048	(800) SIGNED	4	PSACDSAE	CALLDISP REGISTER 14 SAVE AREA
2052	(804) SIGNED	4	PSACDSAF	CALLDISP REGISTER 15 SAVE AREA
2056	(808) SIGNED	4	PSACDSAO	CALLDISP REGISTER 0 SAVE AREA
2060	(80C) SIGNED	4	PSACDSA1	CALLDISP REGISTER 1 SAVE AREA
2064	(810) SIGNED	4	PSAGSPSW	GLOBAL SCHEDULE SYS MASK SAVE AREA. OWNERSHIP: SUPERVISOR CONTROL. SERIALIZATION: DISABLEMENT.

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
2068 (814)	SIGNED	4	PSAGSRGS	GLOBAL SCHEDULE REGISTER SAVE AREA. OWNERSHIP: SUPERVISOR CONTROL. SERIALIZATION: DISABLEMENT.
2072 (818)	SIGNED	4	PSAGSRG1	GLOBAL SCHEDULE REGISTER SAVE AREA. OWNERSHIP: SUPERVISOR CONTROL. SERIALIZATION: DISABLEMENT.
2076 (81C)	SIGNED	4	PSAGSRG2	GLOBAL SCHEDULE REGISTER SAVE AREA. OWNERSHIP: SUPERVISOR CONTROL. SERIALIZATION: DISABLEMENT.
2080 (820)	SIGNED	4	PSAGSRG3	GLOBAL SCHEDULE REGISTER SAVE AREA. OWNERSHIP: SUPERVISOR CONTROL. SERIALIZATION: DISABLEMENT.
2084 (824)	SIGNED	4	PSAEMS2R	REGISTER SAVE AREA OWNERSHIP: MEMORY SWITCH. SERIALIZATION: DISABLEMENT.
2088 (828)	HEX	112	PSARV828	RESERVED
2200 (898)	HEX	256	PSARV898	RESERVED
2456 (998)	HEX	64	PSAJSTSA	SAVE AREA FOR JOB STEP TIMING ROUTINE. OWNERSHIP: SUPERVISOR CONTROL. SERIALIZATION: DISABLEMENT.
2456 (998)	HEX	1	PSAFF998(64)	INITIALIZE FIELD PSAJSTSA
2520 (9D8)	FLOATING	8	PSAUS2ND	END SECOND SET OF ASSIGNED FIELDS SAVED BY ACR.
2520 (9D8)	HEX	40	PSARV9D8	RESERVED
2560 (A00)	HEX	256	PSARVA00	RESERVED
2816 (B00)	FLOATING	8		ALIGN PSAEPTAB TO DOUBLE WORD
2816 (B00)	CHARACTER	64	PSAEPTAB	I/O FLIH ENTRY POINT TABLE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
2816 (B00)	V-ADDRESS	4	PSAIOEP1	"V(IEAVEI01)"- I/O FLIH TASK MODE ENTRY POINT
2820 (B04)	V-ADDRESS	4	PSAIOEP2	"V(IEAVEI02)"- I/O FLIH SRB MODE ENTRY POINT
2824 (B08)	V-ADDRESS	4	PSAIOEP3	"V(IEAVEI03)"- I/O FLIH WAIT MODE ENTRY POINT
2828 (B0C)	V-ADDRESS	4	PSAIOSRC	"V(IECINT2)"- I/O SLIH RECURSION MODE ENTRY POINT
2832 (B10)	V-ADDRESS	4	PSAIOEP4	"V(IEAVEI04)"- I/O FLIH DISPATCHER MODE ENTRY POINT
2836 (B14)	V-ADDRESS	4	PSAIOEP5	"V(IEAVEI05)"- RESERVED
2840 (B18)	V-ADDRESS	4	PSAIOEP6	"V(IEAVEI06)"- RESERVED
2844 (B1C)	V-ADDRESS	4	PSAIOEP7	"V(IEAVEI07)"- RESERVED
2848 (B20)	V-ADDRESS	4	PSAIOEP8	"V(IEAVEI02)"- TASK/NON PREMPT MODE ENTRY POINT
2852 (B24)	V-ADDRESS	4	PSAIOEP9	"V(IEAVEI02)"- SRB/NON PREMPT MODE ENTRY POINT
2856 (B28)	V-ADDRESS	4	PSAIOEPA	"V(IEAVEI02)"- WAIT/NON PREMPT MODE ENTRY POINT
2860 (B2C)	V-ADDRESS	4	PSAIOEPB	"V(IEAVEI02)"- RECURSION/NON PREMPT MODE ENTRY POINT
2864 (B30)	V-ADDRESS	4	PSAIOEPC	"V(IEAVEI02)"- DISPATCHER/NON PREMPT MODE ENTRY POINT
2868 (B34)	V-ADDRESS	4	PSAIOEPD	"V(IEAVEI08)"- RESERVED
2872 (B38)	V-ADDRESS	4	PSAIOEPE	"V(IEAVEI09)"- RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
2876	(B3C) V-ADDRESS	4	PSAIOEPF	"V(IEAVEIOA)"- RESERVED END OF I/O FLIH ENTRY POINT TABLE
2880	(B40) V-ADDRESS	4	PSAIOSLH	"V(IECINT)"- I/O SLIH MAIN ENTRY POINT
2884	(B44) V-ADDRESS	4	PSALSCH1	"V(IEAVESC1)"- ENABLED SCHEDULE ENTRY POINT
2888	(B48) V-ADDRESS	4	PSALSCH2	"V(IEAVESC2)"- DISABLED SCHEDULE ENTRY POINT
2892	(B4C) V-ADDRESS	4	PSASVT	"V(IEAVESVT)"- ADDRESS OF SUPERVISOR VECTOR TABLE
2896	(B50) CHARACTER	32	PSAWTENT	WAIT TRACE TABLE ENTRY
2896	(B50) HEX	8	PSAWTPSW	WAIT ENTRY NEW PSW
2904	(B58) SIGNED	4	PSAWTR15	WAIT ENTRY REGISTER 15
2908	(B5C) SIGNED	4	PSAWTR0	WAIT ENTRY REGISTER 0
2912	(B60) SIGNED	4	PSAWTR1	WAIT ENTRY REGISTER 1
2916	(B64) HEX	2	PSATWCPU	WAIT ENTRY CPUID
2918	(B66) HEX	2	PSATASID	WAIT ENTRY ASID
2920	(B68) V-ADDRESS	4	PSAWTTCB	"V(IEAWTCB)"- WAIT ENTRY ADDRESS OF WAIT TCB
2924	(B6C) HEX	4	PSASTMP	WAIT ENTRY TIME STAMP
2928	(B70) V-ADDRESS	4	PSAGSCH7	"V(IEAVESC7)" ENABLED GLOBAL SCHEDULE ENTRY POINT
2932	(B74) V-ADDRESS	4	PSAGSCH8	"V(IEAVESC8)" DISABLED GLOBAL SCHEDULE ENTRY POINT
2936	(B78) HEX	48	PSARVB78	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
2984 (BA8) SIGNED		4	PSAXSTK	OFFSET TO AND LENGTH OF THE ARRAY OF FRR STACK EXTENSION ENTRIES FROM THE START OF THE FRR STACK. THIS OFFSET FIXED BY ARCHITECTURE.
2988 (BAC) HEX		84	PSARVBAC	RESERVED
3072 (C00) FLOATING		8		ALIGN PSASTAK TO DOUBLE WORD
3072 (C00) HEX		1	PSASTAK(768)	NORMAL FRR STACK
3840 (F00) HEX		1	(256)	RESERVED FOR EXPANSION OF PSASTAK
4096 (1000) FLOATING		8	PSAEND	END OF PSA

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
EXCODE	86	86	FLCMCNUM	95		PSAASML	284	
EXNPSW	5C	58	FLCMNPSW	70		PSAASMLI	2FA	08
EXOPSW	18	18	FLCMOPSW	30		PSAATCVT	408	
FLC	0	00	FLCMTRCD	9D		PSAAXP	23C	80
FLCCAW	48		FLCPER	98		PSACDAL	410	
FLCCHBSY	B9	40	FLCPERA	99		PSACDSAE	800	
FLCCHDT	B9		FLCPERCD	96		PSACDSAF	804	
FLCCHIL	AA		FLCPICOD	8E		PSACDSAV	800	
FLCCHNID	A8		FLCPIILC	8D		PSACDSA0	808	
FLCCHQLN	B9	38	FLCPILCB	8D	07	PSACDSA1	80C	
FLCCHTM	A8		FLCPNPSW	68		PSACLHS	2F8	
FLCCRSAV	1C0		FLCPOPSW	28		PSACLHS1	2F8	
FLCCSW	40		FLCRGNCD	FC		PSACLHS2	2F9	
FLCCUBSY	B9	80	FLCRNPSW	0		PSACLHS3	2FA	
FLCCVT	10		FLCROPSW	8		PSACLHS4	2FB	
FLCCVT2	4C		FLCSILCB	89	07	PSACLHT	280	
FLCDELCD	B9	C0	FLCSNPSW	60		PSACMSL	2AC	
FLCDVBSY	B9	C0	FLCSOPSW	20		PSACMSLI	2FB	02
FLCEICOD	86		FLCSVCN	8A		PSACMSLK	2F0	
FLCENPSW	58		FLCSVILC	89		PSACPULA	206	
FLCEOPSW	18		FLCTEA	90		PSACPUPA	204	
FLCFLA	100		FLCTEAA	91		PSACPUSA	31A	
FLCFPSAV	160		FLCTIMER	50		PSACPUT	470	
FLCFSA	F8		FLCTRACE	54		PSACR0	308	
FLCFSA	F9		IEATCBP	218	0218	PSACR0CB	589	
FLCGRSAV	180		IONPSW	7C	78	PSACR0EN	58C	10
FLCHDEND	200		IOOPSW	38	38	PSACROSV	58C	
FLCICCW1	8		IPLPSW	4	00	PSACSID	414	
FLCICCW2	10		MCNPSW	74	70	PSACSTK	380	
FLCINPSW	78		MCOPSW	30	30	PSADAX	6BC	
FLCIOA	B8		PICODE	8E	8E	PSADAXI	674	
FLCIOAA	B9		PIILC	8D	8D	PSADCR3	6B8	
FLCIOAAA	BA		PINPSW	6C	68	PSADCR3I	670	
FLCIOEL	AC		PIOPSW	28	28	PSADCR4	6BC	
FLCIOELA	AD		PSA	0		PSADCR4I	674	
FLCIOPSW	38		PSAACR	229	04	PSADISP	228	04
FLCIPPSW	0		PSAACTCD	30E		PSADISPL	280	
FLCLCL	B0		PSAANEW	220		PSADISPM	49F	10
FLCMCIC	E8		PSAAOLD	224		PSADPAS	6BE	
FLCMCLA	A8		PSAASD	59A		PSADPASI	676	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PSADPKM	6B8		PSADSS05	347	01	PSAGSRG3	820	
PSADPKMI	670		PSADSS10	347	02	PSAGTF	229	40
PSADSABL	589	00	PSADSS12	347	40	PSAGXMSV	5A8	
PSADSAS	6BA		PSADSS14	358		PSAHLHI	2F8	
PSADSASI	672		PSADTSAV	6C0		PSAHLHIS	274	
PSADSPLI	2FA	10	PSADXMSI	670		PSAHWF	588	
PSADSSC0	347	10	PSADXMSV	6B8		PSAINTE	3FB	
PSADSSDD	344	20	PSADZERO	4A8		PSAIO	228	80
PSADSSDE	347	08	PSAEEPSW	84		PSAIOCLI	2FA	01
PSADSSDM	344	40	PSAEMS2M	2B8	02B9	PSAIOEPA	B28	
PSADSSDW	344	10	PSAEMS2R	824		PSAIOEPB	B2C	
PSADSSED	360	0364	PSAEMS2S	2B8		PSAIOEPC	B30	
PSADSSES	346	40	PSAENABL	589	10	PSAIOEPD	B34	
PSADSSFL	344		PSAEND	1000		PSAIOEPE	B38	
PSADSSFW	35C		PSAEPARM	80		PSAIOEPF	B3C	
PSADSSF1	344		PSAEPPSW	8C		PSAIOEP1	B00	
PSADSSF2	345		PSAEPTAB	B00		PSAIOEP2	B04	
PSADSSF3	346		PSAESAV1	3A4		PSAIOEP3	B08	
PSADSSF4	347		PSAESAV2	3AC		PSAIOEP4	B10	
PSADSSG0	279		PSAESAV3	3B4		PSAIOEP5	B14	
PSADSSGP	346	80	PSAESKI	588	80	PSAIOEP6	B18	
PSADSSIE	347	20	PSAESPSW	88		PSAIOEP7	B1C	
PSADSSMC	346	08	PSAESTA	22A	08	PSAIOEP8	B20	
PSADSSMV	344	80	PSAESTK1	3A0		PSAIOEP9	B24	
PSADSSNM	346	20	PSAESTK2	3A8		PSAIOLLI	2FB	40
PSADSSOI	344	02	PSAESTK3	3B0		PSAIOPR	5B8	80
PSADSSPI	344	01	PSAEXPS1	240		PSAIOSCL	290	
PSADSSPP	350		PSAEXPS2	248		PSAIOSLH	B40	
PSADSSPR	360		PSAEXT	228	20	PSAIOSLI	2FA	02
PSADSSPS	345	FF	PSAFF6C0	6C0		PSAIOSLL	298	
PSADSSRC	347	80	PSAFF678	678		PSAIOSRC	B0C	
PSADSSRP	348		PSAFF998	998		PSAISSL	28C	
PSADSSRS	320		PSAFZERO	4A8		PSAIOSUL	294	
PSADSSRW	346	10	PSAGGRSV	678		PSAIOSUP	22A	80
PSADSSR2	324		PSAGPREG	22C		PSAIOUTI	2FB	80
PSADSSR3	328		PSAGSAV	428		PSAIPCC3	26D	
PSADSSSP	344	04	PSAGSCH7	B70		PSAIPCD	268	
PSADSSSS	345	FE	PSAGSCH8	B74		PSAIPCDM	26C	
PSADSSTP	344	08	PSAGSPSW	810		PSAIPCEC	229	20
PSADSSTS	330		PSAGSRGS	814		PSAIPCES	229	10
PSADSSVE	347	04	PSAGSRG1	818		PSAIPCE2	229	08
PSADSSWK	32C		PSAGSRG2	81C		PSAIPCR	260	

PSA

142 MVS/370 Debug Hdbk Vol 4

PSA

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PSAIPCRI	229	80	PSAMEDC	F4		PSAPCP1	47A	80
PSAIPCRM	264		PSAMEXSR	F4	20	PSAPCP2	47A	40
PSAIPCSA	270		PSAMFLGS	49D		PSAPCP3	47A	08
PSAJSTSA	998		PSAMINST	F4	04	PSAPCP4	47A	04
PSALCCAR	214		PSAMINTR	F4	02	PSAPCSS	479	80
PSALCCAV	210		PSAMODE	49F		PSAPCTR	478	05
PSALCLLI	2FB	01	PSAMODEH	49E		PSAPFA	588	20
PSALCPUA	2F4		PSAMODES	4A2		PSAPI	228	10
PSALCR	229	01	PSAMODEW	49C		PSAPICOD	8F	
PSALDWT	22B	80	PSAMPL	A4		PSAPIMC	8F	40
PSALITA	2FC		PSAMPSW	250		PSAPIPC	8F	3F
PSALKJW	4A4		PSAMSAV	394		PSAPIPER	8F	80
PSALKJW2	4B0		PSAMSTK	390		PSAPSA	200	
PSALKR0	500		PSANSS	49D	80	PSAPSAV	39C	
PSALKR1	504		PSANSTK	384		PSAPSRBM	49F	20
PSALKR10	528		PSANUIN	3FB	80	PSAPSTK	398	
PSALKR11	52C		PSAOPTL	2A8		PSAPSWSV	468	
PSALKR12	530		PSAPCAD	478	04	PSAPTYPE	23C	
PSALKR13	534		PSAPCCAR	20C		PSARCRO	594	
PSALKR14	538		PSAPCCAV	208		PSARECM	49F	0C
PSALKR15	53C		PSAPCCR0	590		PSARECUR	278	
PSALKR2	508		PSAPCDE	47A	20	PSARET	37A	
PSALKR3	50C		PSAPCFB1	478		PSARETCD	37C	
PSALKR4	510		PSAPCFB2	479		PSARIO	588	40
PSALKR5	514		PSAPCFB3	47A		PSARLCK2	2B0	
PSALKR6	518		PSAPCFB4	47B		PSARLOCK	2B4	
PSALKR7	51C		PSAPCFUN	478		PSARPEN	594	10
PSALKR8	520		PSAPCGRA	488		PSARSAV	3BC	
PSALKR9	524		PSAPCGRB	48C		PSARSM	22A	04
PSALKSA	500		PSAPCGR8	480		PSARSMGR	548	
PSALOCAL	2EC		PSAPCGR9	484		PSARSMSW	540	
PSALOCK	228	08	PSAPCLV	47A	10	PSARSPSW	3C8	
PSALSCH1	B44		PSAPCMC	478	01	PSARSREG	238	
PSALSCH2	B48		PSAPCMT	479	40	PSARSTK	3B8	
PSALSFCC	3F4		PSAPCPC	478	06	PSARSVT	380	
PSAMCCF	F4	08	PSAPCPEN	590	10	PSARSVTE	380	
PSAMCHEX	258		PSAPCPF	478	02	PSARTM	229	02
PSAMCHFL	30C		PSAPCPS	478	03	PSARTM1M	3FD	
PSAMCHIC	30F		PSAPCPW	400		PSARTM1R	3FC	
PSAMCNOP	F4	10	PSAPCP2	47C		PSARTM1S	27B	
PSAMCOPR	F4	40	PSAPCP3	47E		PSARVA00	A00	
PSAMDISC	F4	01	PSAPCP4	498		PSARVBAC	BAC	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PSARVB78	B78		PSASTPRT	22B	10	PSAWTR15	B58	
PSARV2BC	2BC		PSASUPER	228		PSAWTTCB	B68	
PSARV3D0	3D0		PSASUP1	228		PSAXCD	47B	01
PSARV364	364		PSASUP2	229		PSAXEPAR	47B	09
PSARV4B4	4B4		PSASUP3	22A		PSAXESAR	47B	0A
PSARV5B0	5B0		PSASUP4	22B		PSAXIAC	47B	07
PSARV6C8	6C8		PSASVC	228	40	PSAXIPK	47B	03
PSARV664	664		PSASVC13	3F8		PSAXIVSK	47B	06
PSARV700	700		PSASVPSW	300		PSAXMAC	630	80
PSARV828	828		PSASVT	B4C		PSAXMAX	5C8	
PSARV898	898		PSASYMSK	30D		PSAXMCRA	5D8	
PSARV9D8	9D8		PSATASID	B66		PSAXMCRB	5DC	
PSASALCL	288		PSATASKM	49F	00	PSAXMCRC	5E0	
PSASALLI	2FA	04	PSATCTL	228	02	PSAXMCRE	5E4	
PSASCFB	5B8		PSATIME	658		PSAXMCR0	5BC	
PSASCPSW	418		PSATKN	598		PSAXMCR1	5C0	
PSASCRG1	490		PSATNEW	218		PSAXMCR3	5C4	
PSASCRG2	494		PSATOLD	21C		PSAXMCR4	5C8	
PSASEL	59C		PSATPACL	2A4		PSAXMCR5	5CC	
PSASFACC	3F0		PSATPALI	2FB	08	PSAXMCR7	5D0	
PSASKPSW	5A0		PSATPDLI	2FB	10	PSAXMCR9	5D4	
PSASKPS2	5A4		PSATPDNL	2A0		PSAXMCTL	630	
PSASLIP	22A	01	PSATPNCL	29C		PSAXMETE	648	
PSASLSA	4B8		PSATPNLI	2FB	20	PSAXMFB1	630	
PSASMF	22B	40	PSATTRACE	3FA		PSAXMFLG	49C	
PSASMPSW	420		PSATROFF	3FA	01	PSAXMGRA	610	
PSASNMS2	27A		PSATWCPU	B64		PSAXMGRB	614	
PSASPAD	84		PSATYPE6	228	01	PSAXMGRC	618	
PSASPR	22A	10	PSAULCMS	22A	02	PSAXMGRD	61C	
PSASRBM	49F	04	PSAUSEND	6C8		PSAXMGRE	620	
PSASRMLI	2FB	04	PSAUS2ND	9D8		PSAXMGRF	624	
PSASRPSW	3C0		PSAUS2ST	800		PSAXMGRS	5E8	
PSASRSA	27C		PSAVMFLD	3E8		PSAXMGR0	5E8	
PSASRSAV	660		PSAVSTAP	318		PSAXMGR1	5EC	
PSASSAV	38C		PSAWAITM	49F	08	PSAXMGR2	5F0	
PSASSTK	388		PSAWKRAP	310		PSAXMGR3	5F4	
PSASTAK	C00		PSAWKVAP	314		PSAXMGR4	5F8	
PSASTKE	598		PSAWTCOD	40C		PSAXMGR5	5FC	
PSASTKSP	22B	20	PSAWTENT	B50		PSAXMGR6	600	
PSASTMP	B6C		PSAWTPSW	B50		PSAXMGR7	604	
PSASTNSM	4A3		PSAWTR0	B5C		PSAXMGR8	608	
PSASTOR	31C		PSAWTR1	B60		PSAXMGR9	60C	

Contains Restricted Materials of IBM
 Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PSAXMILC	634		PSAXMPR3	63E	10	PSAXMSIM	630	20
PSAXMODE	49C	80	PSAXMPR4	63E	08	PSAXMTEA	638	
PSAXMPAS	5CA		PSAXMPR5	63E	04	PSAXMTEM	638	80
PSAXMPEF	63C		PSAXMPR6	63E	02	PSAXMVCK	47B	0C
PSAXMPIC	636		PSAXMPR7	63E	01	PSAXMVCP	47B	0D
PSAXMPIF	63C	40	PSAXMPR8	63F	80	PSAXMVCS	47B	0E
PSAXMPKM	5C4		PSAXMPR9	63F	40	PSAXPC	47B	04
PSAXMPRA	63F	20	PSAXMPSA	63C	20	PSAXPT	47B	0B
PSAXMPRB	63F	10	PSAXMPSB	63C	80	PSAXSAC	47B	05
PSAXMPRC	63F	08	PSAXMPSL	644		PSAXSPKA	47B	02
PSAXMPRD	63F	04	PSAXMPSS	640		PSAXSSAR	47B	08
PSAXMPRE	63F	02	PSAXMPSW	628		PSAXSTK	BA8	
PSAXMPRF	63F	01	PSAXMRA1	63E		SVCILC	89	89
PSAXMPRG	63C	10	PSAXMRA2	63F		SVCNPSW	64	60
PSAXMPRO	63E	80	PSAXMSAC	630	40	SVCNUM	8A	8A
PSAXMPR1	63E	40	PSAXMSAL	479	20	SVCOPSW	20	20
PSAXMPR2	63E	20	PSAXMSAS	5C6		TIMER	50	50

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

PSCB

Common Name : TSO Protected Step Control Block

Macro ID : IKJPSCB

DSECT Name : PSCB

Created by : IKJEFLA

Subpool and Key : 252 and key 0

Size : 72 bytes

Pointed to by : JSCBPSCB field of the JSCB data area
LWAPSCB field of the LWA data area

Serialization : None

Function : Contains information from UADS, control bits, and
accounting data for the userid.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PSCB	
0	(0) SIGNED	4		
0	(0) CHARACTER	7	PSCBUSER	USERID PADDED RIGHT WITH BLANKS
7	(7) CHARACTER	1	PSCBUSRL	LENGTH OF USERID
8	(8) CHARACTER	8	PSCBGPNM	ESOTERIC GROUP NAME INIT BY LOGON FROM UADS USED BY DYN ALLOC WHEN UNITNAME NOT SPECIFIED BUT IS REQUIRED
16	(10) HEX	1	PSCBATR1	A 15 BIT STRING OF USER ATTRIBUTES
	1...		PSCBCTRL	"X'80'" OPERATOR COMMAND USER
	.1...		PSCBACCT	"X'40'" ACCOUNT COMMAND USER
	..1.		PSCBJCL	"X'20'" SUBMIT COMMAND USER
	...1		PSCBVMNT	"X'10'" CNTL VOL MOUNT AUTH
	.... 1...		PSCBATTN	"X'08'" LINE DELETE CHAR IS ATTENTION
	.... .1..		PSCBRCVR	"X'04'" EDIT RECOVER/NORECOVER
	.... ..1.		PSCBRRBA	"X'02'" UADSDRBA CONTAINS INCORRECT ADDRESS OF USER MAIL DIRECTORY, REPLACE WITH PSCBDRBA AT LOGOFF

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
BITS 7 - 15				RESERVED FOR IBM USE
17	(11) HEX	1		RESERVED
18	(12) HEX	1	PSCBATR2	A 15 BIT STRING RESERVED FOR INSTALLATION USE
19	(13) HEX	1		
20	(14) SIGNED	4	PSCBLTIM	DOUBLEWORD FOR LOGON TIME
24	(18) SIGNED	4	PSCBLTI2	IN STORE CLOCK UNITS
28	(1C) CHARACTER	1	PSCBSUBH	SUBMIT HOLD CLASS
29	(1D) CHARACTER	1	PSCBSUBC	SUBMIT CLASS
30	(1E) CHARACTER	1	PSCBSUBM	SUBMIT MSGCLASS
31	(1F) CHARACTER	1	PSCBSOUT	SYSOUT CLASS
32	(20) CHARACTER	1		RESERVED
33	(21) CHARACTER	3	PSCBDRBA	ADDR OF USERS MAIL DIRECTORY
36	(24) CHARACTER	4		RESERVED
40	(28) CHARACTER	8	PSCBDEST	DEST FOR SYSOUT DATA SETS
48	(30) ADDRESS	4	PSCBRLGB	PTR TO RELOGON BUFFER
52	(34) ADDRESS	4	PSCBUPT	PTR TO USER PROFILE TABLE
56	(38) SIGNED	2	PSCBUPTL	LENGTH OF UPT
58	(3A) CHARACTER	1	PSCBCHAR	USER'S CHARACTER DELETE CHARACTER
59	(3B) CHARACTER	1	PSCBLINE	USER'S LINE DELETE CHARACTER
60	(3C) ADDRESS	4	PSCBRSZ	REGION SIZE REQUESTED IN 2K UNITS
64	(40) CHARACTER	8	PSCBU	RESERVED FOR INSTALLATION USE

PVT

Common Name : RSM Paging Vector Table

Macro ID : IHAPVT

DSECT Name : PVT

Created by : NIP initialization

Subpool and Key : NUCLEUS and key 0

Size : 2820 bytes

Pointed to by : CVTPVTP field of the CVT data area

Serialization : SALLOC lock

Function : Contains a collection of address vectors, constants, queue anchors and counters that are common in all real storage manager modules.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	PVT	, PVT PTR
0	(0) BITSTRING	1	PVTFLAG1	FLAG BYTE (FLAGS DYNAMICALLY SET/RESET BY THE SYSTEM)
1...			PVTPMSG	"BIT0"- WHEN 1, PREFERRED AREA EXPANSION MESSAGE HAS BEEN ISSUED (THE PREFERRED AREA EXPANSION MESSAGE IS ISSUED EACH TIME A RECONFIGURABLE STORAGE UNIT IS CONVERTED TO PREFERRED STORAGE). THE PVTPMSG BIT IS TURNED ON TO PROVIDE A RECORD OF THE FACT THAT STORAGE HAS BEEN CONVERTED, AND RECONFIGURABILITY IMPAIRED. THIS BIT SHOULD BE CHECKED WHEN DIAGNOSING PROBLEMS RELATED TO INABILITY TO VARY STORAGE OFFLINE.
.1...			PVTBGM	"BIT1"- WHEN =1, GETMAIN CANNOT BE CALLED
.1.			PVTSRBIU	"BIT2"- WHEN 1, PVTRSRB IS IN USE.
...1			PVTPCBLT	"BIT3"- WHEN ON, THE INITIAL PCB POOL HAS BEEN BUILT AS PART OF SYSTEM INITIALIZATION.
.... 1...			PVTRSMGM	"BIT4"- WHEN ON, RSM GETMAIN
.... .1..			PVTLSSI	"BIT5"- AFC LOW SYSEVENT ISSUED FLAG. WHEN 1, THE AFC LOW SYSEVENT HAS BEEN

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				ISSUED.
			PVTRCAFP	"BIT6"- FOOTPRINT FOR IEAVFP2
			PVTRESV3	"BIT7"- RESERVED
1	(1) BITSTRING	1	PVTFLAG2	FLAG BYTE 2 (FLAGS SET MANUALLY AND ONLY READ BY THE SYSTEM)
			PVTRESV2	"BIT0"- RESERVED
			PVTRESV4	"BIT1"- RESERVED
			PVTAPREF	"BIT2"- WHEN ON, ALL LSQA AND FIXED PAGES SHOULD GO TO THE PREFERRED AREA
			PVTDUMP	"BIT3"- WHEN 1, THE RSM RECOVERY ROUTINE WILL DUMP THE PVT, PFT, SQA, AND CURRENT LSQA ON COD ABENDS. SET/RESET MANUALLY.
			PVTSWSEL	"BIT4"- WHEN 0, 'ONE-STAGE' SWAPS WILL BE DONE (PAGEABLE PAGES WILL BE BROUGHT IN TOGETHER WITH LSQA AT SWAP-IN). WHEN 1, 'TWO-STAGE' SWAPS WILL BE DONE (PAGEABLE PAGES WILL COME BACK IN SEPARATELY FROM LSQA, AFTER LSQA HAS BEEN REBUILT BY IEAVSIRT).

THE RFA ROUTINES AND PFTE ENQ/DEQ WORK TOGETHER IN MAINTAINING THE NEXT THREE COUNTS, THEIR RELATED SRM SYSEVENTS, AND CONTROLLING FLAGS LISTED ABOVE.

2	(2) SIGNED	2	PVTafc	AVAILABLE FRAME COUNT (SUM OF FRAMES ON ABOVE AFQ AND BELOW AFQ)
4	(4) SIGNED	2	PVTafcLo	AVAILABLE FRAME COUNT LOW THRESHOLD. SRM IS NOTIFIED WHEN PVTafc IS TOO LOW.
6	(6) SIGNED	2	PVTafcOk	THRESHOLD AT WHICH THE SRM IS NOTIFIED THAT PVTafc IS AT A SATISFACTORY LEVEL
8	(8) SIGNED	2	PVTpool	THE TOTAL NUMBER OF REAL STORAGE FRAMES CURRENTLY AVAILABLE FOR REAL STORAGE MANAGEMENT USE. PVTpool IS THE NUMBER OF FRAMES DEFINED IN THE SYSTEM (WHICH NUMBER IS EQUAL TO ONE GREATER THAN THE XRBn OF THE HIGHEST PFTE DEFINED IN THE SYSTEM), MINUS THE NUMBER OF NUCLEUS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				FRAMES, THE NUMBER OF OFFLINE FRAMES, AND THE NUMBER OF FRAMES INTERCEPTED TO GO OFFLINE DUE TO A VARY STORAGE OFFLINE COMMAND. FRAMES INTERCEPTED TO GO OFFLINE DUE TO DETECTED STORAGE ERRORS ARE INCLUDED IN THE COUNT UNTIL THEY ACTUALLY GO OFFLINE. (SEE 'PVTPOOLA' FIELD FOR FURTHER INFORMATION).
10	(A) ADDRESS	1	PVTPCBS	NUMBER OF PCB'S TO BE CREATED AT SYSTEM INITIALIZATION.
11	(B) HEX	1	PVTSSPIN	SLAVE SPIN BYTE USED BY PAGE INVALIDATION ROUTINE
12	(C) ADDRESS	4	PVTPFTP	APPARENT ORIGIN OF PAGE FRAME TABLE (VM ADDR)
16	(10) ADDRESS	2	PVTFPFN	PFTE INDEX (XRBIN) TO FIRST PFTE IN PFT. INDEX IS IN XRBIN FORMAT, A 14 BIT FRAME INDEX NUMBER, RIGHT-JUSTIFIED IN A HALF WORD.
18	(12) ADDRESS	2	PVTLPFN	PFTE INDEX (XRBIN) TO LAST PFTE IN PFT. INDEX IS IN XRBIN FORMAT, A 14 BIT FRAME INDEX NUMBER, RIGHT-JUSTIFIED IN A HALF WORD. PVTLPFN CONTAINS THE XRBIN OF THE HIGHEST FRAME DEFINED IN THE SYSTEM. NO FRAME ABOVE THIS ADDRESS MAY BE VARIED ONLINE WITHOUT RE-IPL OF THE SYSTEM.
20	(14) ADDRESS	2	PVTFVR	PFTE INDEX (XRBIN) OF FIRST PFTE FOR V=R AREA. XRBIN OF LOWEST ADDRESS FRAME OF V=R AREA
22	(16) ADDRESS	2	PVTLVR	PFTE INDEX (XRBIN) OF LAST PFTE FOR V=R AREA, XRBIN OF HIGHEST ADDRESS FRAME OF V=R AREA
24	(18) ADDRESS	2	PVTLPRIV	VIRTUAL STORAGE INDEX (VBN) TO THE FIRST PAGE OF THE USER PRIVATE AREA. VBN IS THE HIGH ORDER 12 BITS OF A 24 BIT VIR-

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
26	(1A) ADDRESS	2	PVTLCSA	TUAL ADDRESS VBN TO THE FIRST PAGE OF CSA, SAME AS LOWEST ADDRESS PAGE ABOVE THE USER PRI- VATE AREA
28	(1C) HEX	1	PVTRSV14	RESERVED
29	(1D) ADDRESS	1	PVTTRXLN	PCBTRACE ENABLE PARAMETER: IF THIS FIELD IS ZERO WHEN IEAVPCB BUILDS THE INITIAL POOL OF PCB'S DURING NIP, PCBTRACE IS DISABLED FOR THE CURRENT IPL. IF THIS FIELD HAS A NON-ZERO VALUE AT NIP TIME, THEN THE PCBTRACE FACILITY WILL BE ENA- BLED, AND THE SIZE OF THE PCBTRACE TRACE AREA EXTENSION ADDED TO EACH PCB IN THE SYSTEM WILL BE THE VALUE IN THIS FIELD, ROUNDED UP TO A DOUBLE-WORD MULTIPLE IF IT IS NOT ALREADY SUCH.
30	(1E) SIGNED	1	PVTPCBNO	NUMBER OF PCB'S TO BE OBTAINED IF REPLENISHMENT IS NECESSARY
31	(1F) HEX	1	PVTPTLB	COMMUNICATION BYTE USED BY PAGE INVALIDA- TION ON MULTIPLE PROCESSORS
32	(20) SIGNED	2	PVTRSQA	THE NUMBER OF TIMES AN SQA RESERVED FRAME WAS USED FOR SQA ALLOCATION.
34	(22) SIGNED	2	PVTDFRS	THE COUNT OF THE NUMBER OF TIMES A FRAME ALLOCATION REQUEST WAS DEFERRED.
36	(24) SIGNED	2	PVTPCBCT	COUNT OF THE NUMBER OF PCB'S CURRENTLY ON THE FREE QUEUE
38	(26) SIGNED	2	PVTPCBLO	LOW THRESHOLD OF PCB FREE QUEUE. WHEN THE PCB COUNT GOES BELOW THIS THRESHOLD, THE PCB POOL MUST BE EXTENDED.
40	(28) ADDRESS	4	PVTVROOT	VSA OF FIRST ROOT PCB ON V=R REGION WAIT QUEUE
44	(2C) ADDRESS	2	PVTRSUS	RECONFIGURABLE STORAGE UNIT SIZE IN FRAMES
46	(2E) SIGNED	1	PVTSQVRC	THE NUMBER OF SQA RESERVE QUEUE FRAMES

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
47	(2F) SIGNED	1	PVTSQNPC	WHICH ARE V=R. THE NUMBER OF SQA RESERVE QUEUE FRAMES WHICH ARE NON-PREFERRED.
48	(30) SIGNED	4	PVTRESV6	RESERVED
52	(34) ADDRESS	4	PVTPRCA	ADDRESS OF CURRENT RECOVERY COMM AREA
56	(38) ADDRESS	4	PVTOROOT	VSA OF THE FIRST VARY OFFLINE ROOT PCB
60	(3C) ADDRESS	2	PVTLQSA	VBN OF LOWEST ADDRESSED PAGE OF THE VIRTUAL AREA TO BE PRESERVED FOR QUICKSTARTS.
62	(3E) ADDRESS	2	PVTHQSA	VBN OF NEXT HIGHEST PAGE ABOVE THE VIRTUAL AREA TO BE PRESERVED FOR QUICKSTARTS.
64	(40) ADDRESS	4	PVTPCIWA	ADDRESS OF FETCH PROTECTED WORKAREA FOR PAGE SERVICES ROUTINES

V-CONS FOR MAJOR RSM ENTRY POINTS

68	(44) ADDRESS	4	PVTRESV1	RESERVED
72	(48) V-ADDRESS	4	PVTPSIB	"V(IEAVPSIB)"- EXTERNAL PSI BRANCH ENTRY
76	(4C) V-ADDRESS	4	PVTPSINT	"V(IEAVPSII)"- INTERNAL PSI BRANCH ENTRY
80	(50) V-ADDRESS	4	PVTPSQA	"V(IEAVSQA2)"- SQA, LSQA ALLOCATION
84	(54) V-ADDRESS	4	PVTPGFA	"V(IEAVGFA2)"- GENERAL FRAME ALLOCATION
88	(58) V-ADDRESS	4	PVTPGFAD	"V(IEAVGFD2)"- GFA DEFER PROCESSOR
92	(5C) V-ADDRESS	4	PVTPIOP	"V(IEAVPIO2)"- PAGE I/O POST

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
96	(60) V-ADDRESS	4	PVTPRSMG	"V(IEAVRSMG)"- EP IN IEAVGFAX TO COUNT FRAMES BELOW 16 MEG REAL BACKING PAGEABLE PAGES THAT ARE GOOD CANDIDATES TO BE MOVED TO FRAMES ABOVE 16 MEG TO SATISFY FIXED STORAGE REQUESTS WHEN THERE ARE NO SUITABLE FRAMES ON THE AVAILABLE FRAME QUEUE.
100	(64) SIGNED	4	PVTRESV9	RESERVED
104	(68) V-ADDRESS	4	PVTPCB	"V(IEAVPCB2)"- PCB MANAGER
108	(6C) V-ADDRESS	4	PVTPFTE	"V(IEAVPFT2)"- PFTE ENQ/DEQ
112	(70) V-ADDRESS	4	PVTPFP	"V(IEAVFP1)"- FIND PAGE LOCAL LOCK HOLDER E.P.
116	(74) V-ADDRESS	4	PVTPFP2	"V(IEAVFP2)"- FIND PAGE RSM ENTRY POINT
120	(78) V-ADDRESS	4	PVTPRFR	"V(IEAVRFR2)"- REAL FRAME REPLACEMENT SELECT RTN
124	(7C) V-ADDRESS	4	PVTPVRPO	"V(IEAVEQRP)"- V=R FORCE PAGE OUT
128	(80) V-ADDRESS	4	PVTPPIOI	"V(IEAVPIOI)"- PAGE I/O INITIATOR
132	(84) V-ADDRESS	4	PVTPVEQR	"V(IEAVEQR2)"- V=R ALLOCATION
136	(88) V-ADDRESS	4	PVTPVRLS	"V(IEAVEQRF)"- V=R RELEASE
140	(8C) V-ADDRESS	4	PVTPVRIN	"V(IEAVEQRI)"- V=R INTERCEPT
144	(90) V-ADDRESS	4	PVTPVRC	"V(IEAVEQRC)"- V=R COMPLETION
148	(94) V-ADDRESS	4	PVTPRCF	"V(IEAVRCF2)"- STORAGE RECONFIGURATION INTERFACE
152	(98) V-ADDRESS	4	PVTPRCFI	"V(IEAVRCFI)"- RECONFIGURATION INTERCEPT ROUTINE IEAVRCFI OR IEAVRF3I

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
156	(9C) V-ADDRESS	4	PVTPRCV	"V(IEAVRCV2)"- FUNCTIONAL RECOVERY ROU-TINE
160	(A0) V-ADDRESS	4	PVTPSWIN	"V(IEAVSWI2)"- SWAP IN
164	(A4) V-ADDRESS	4	PVTPSOUT	"V(IEAVSOU2)"- SWAP OUT
168	(A8) V-ADDRESS	4	PVTPSWPC	"V(IEAVSWPC)"- SWAP OUT COMPLETION
172	(AC) V-ADDRESS	4	PVTPINV	"V(IEAVINV2)"- PAGE INVALIDATION
176	(B0) V-ADDRESS	4	PVTPCSEG	"V(IEAVCSE2)"- CREATE SEGMENT EXTERNAL BRANCH ENTRY
180	(B4) V-ADDRESS	4	PVTPCSGB	"V(IEAVCSGB)"- CREATE SEGMENT INTERNAL BRANCH ENTRY
184	(B8) V-ADDRESS	4	PVTPDSEG	"V(IEAVDSE2)"- DESTROY SEGMENT
188	(BC) V-ADDRESS	4	PVTPSRBP	"V(IEAVSRBP)"- SRB PURGE ROUTINE
192	(C0) V-ADDRESS	4	PVTPITAS	"V(IEAVITA2)"- INITIALIZE ADDRESS SPACE
196	(C4) V-ADDRESS	4	PVTPFXLD	"V(IEAVFXL2)"- PGFIX AND PGLOAD PROCESS-OR
200	(C8) V-ADDRESS	4	PVTPOUT	"V(IEAVOUT2)"- PGOUT PROCESSOR
204	(CC) V-ADDRESS	4	PVTPRELS	"V(IEAVREL2)"- PGRlse PROCESSOR
208	(D0) V-ADDRESS	4	PVTPFREE	"V(IEAVFRE2)"- PGFREE PROCESSOR
212	(D4) V-ADDRESS	4	PVTPRELV	"V(IEAVRELV)"- FREEMAIN-RELEASE ENTRY POINT
216	(D8) V-ADDRESS	4	PVTPRELF	"V(IEAVRELF)"- DEFERRED RELEASE ENTRY POINT
220	(DC) V-ADDRESS	4	PVTPOPBR	"V(IEAVOPBR)"- PCB PROCESSOR IN IEAVPIOP

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
224	(E0) V-ADDRESS	4	PVTPPREF	"V(IEAVPRE2)"- PREFERRED AREA STEAL ROUTINE
228	(E4) V-ADDRESS	4	PVTPSWPP	"V(IEAVSWPP)"- SWAP-IN POST ROUTINE IN MODULE IEAVSWIN
232	(E8) V-ADDRESS	4	PVTSWPIO	"V(ILRSWAP)"- ASM'S SWAP INTERFACE
236	(EC) V-ADDRESS	4	PVTIODRV	"V(ILRIODRV)"- ASM'S PAGING I/O INTERFACE
240	(F0) V-ADDRESS	4	PVTFRSLT	"V(ILRFRSLT)"- ASM'S FREE SLOT ROUTINE
244	(F4) V-ADDRESS	4	PVTPRSET	"V(IEAVRSET)"- PCFLIH'S RESET ROUTINE

EVENT COUNTERS FOR SMF AND TUNING PURPOSES
ALL FIELDS EXCEPT PVTCFMCT ARE WRAP-AROUND COUNTS.

248	(F8) SIGNED	4	PVTNPIN	NUMBER OF PAGES PAGED IN, EXCLUDING SWAP-INS AND VIO PAGE-INS
252	(FC) SIGNED	4	PVTNPOUT	NUMBER OF PAGES PAGED OUT, EXCLUDING SWAP-OUTS AND VIO PAGE-INS
256	(100) SIGNED	4	PVTVAMI	NUMBER OF VIO PAGE-INS, EXCLUDING SWAP
260	(104) SIGNED	4	PVTVAMO	NUMBER OF VIO PAGE-OUTS, EXCLUDING SWAP
264	(108) SIGNED	4	PVTVAMR	NUMBER OF VIO RECLAIMS
268	(10C) SIGNED	4	PVTSPIN	NUMBER OF PAGES SWAPPED IN
272	(110) SIGNED	4	PVTSPOUT	NUMBER OF PAGES SWAPPED OUT
276	(114) SIGNED	4	PVTNPREC	NUMBER OF PAGES RECLAIMED, EXCLUDING SWAP RECLAIMS

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
280	(118) SIGNED	4	PVTNSWPS	NUMBER OF SUCCESSFUL SWAP-INS
284	(11C) SIGNED	4	PVTCAIN	NUMBER OF COMMON AREA PAGE-INS
288	(120) SIGNED	4	PVTCAYOUT	NUMBER OF COMMON AREA PAGE-OUTS
292	(124) SIGNED	4	PVTCAREC	NUMBER OF RECLAIMS OF COMMON AREA PAGES
296	(128) SIGNED	4	PVTSPREC	NUMBER OF PRIVATE AREA PAGEABLE PAGES RECLAIMED ACROSS A SWAP
300	(12C) SIGNED	2	PVTCFMCT	NUMBER OF FRAMES CURRENTLY ASSIGNED TO PAGEABLE COMMON AREAS (CSA AND LPA)
302	(12E) SIGNED	2	PVTPFRR	NUMBER OF FRAMES FREED BY SWAP-OUT WITHOUT OUTPUT I/O.

THIS SECTION OF THE PVT CONTAINS ANCHORS FOR PFTE QUEUES. THE FIELDS MUST REMAIN IN THIS ORDER BECAUSE THEY ARE INDEXED BY QUEUE NUMBERS. ALSO, THE PFTE MANAGER DEPENDS ON THE COMPILE-TIME DISPLACEMENT OF THIS SECTION FROM THE PVT ORIGIN. ALL QUEUES ARE FORWARD AND BACKWARD CHAINED. IF FIELDS ARE ADDED OR DELETED FROM THIS SECTION, THE PFTE QUEUE INDEX VALUES MUST BE ADJUSTED.

NOTE: THERE ARE NOW TWO AVAILABLE FRAME QUEUES, ONE FOR FRAMES BELOW 16 MEG REAL, AND ANOTHER FOR FRAMES ABOVE 16 MEG REAL. BOTH HAVE THE QUEUE INDEX NUMBER OF ZERO. THE BELOW AVAILABLE FRAME QUEUE IS LOCATED AT OFFSET ZERO INTO PVTQS. THE ABOVE AFQ IS NOT LOCATABLE BY INDEX INTO PVTQS. TO LOCATE THE QUEUE HEADER FOR AN AFQ PFTE, FIRST CHECK TO SEE IF THE FRAME IS ABOVE 16 MEG. IF NO, THEN ITS QUEUE HEADER MAY BE FOUND BY ADDING THE PFTE'S QUEUE INDEX TO THE ADDRESS OF PVTQS (THE INDEX HAPPENS TO BE ZERO). BUT IF THE FRAME IS ABOVE 16 MEG, THEN THE ADDRESS OF PVTAQFQF MUST BE OBTAINED DIRECTLY FROM THE LOCATION OF PVTAQFQF IN THE PVT.

NOTE: IF FIELDS ARE ADDED OR DELETED FROM THIS SECTION, THE PFTE QUEUE INDEX VALUES MUST BE ADJUSTED.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
304	(130) SIGNED	4	PVTQS	BEGINNING OF ORDERED BLOCK OF PFTE QUEUE ANCHORS
304	(130) ADDRESS	2	PVTAFQF	XRBN OF FIRST PFTE ON BELOW AVAILABLE FRAME QUEUE
306	(132) ADDRESS	2	PVTAFQL	XRBN OF LAST PFTE ON BELOW AVAILABLE FRAME QUEUE
308	(134) HEX	4	PVTRSRVQ	SQA RESERVE Q ANCHOR
308	(134) ADDRESS	2	PVTRSRVF	XRBN OF FIRST PFTE ON SQA RESERVED Q
310	(136) ADDRESS	2	PVTRSRVL	XRBN OF LAST PFTE ON SQA RESERVED Q
312	(138) ADDRESS	2	PVTCFQF	XRBN OF FIRST PFTE ON COMMON FRAME Q (CSA AND LPA FRAMES)
314	(13A) ADDRESS	2	PVTCFQL	XRBN OF LAST PFTE ON COMMON FRAME Q
316	(13C) ADDRESS	2	PVTSQAQF	XRBN OF FIRST PFTE ON SQA FRAME Q
318	(13E) ADDRESS	2	PVTSQAQL	XRBN OF LAST PFTE ON SQA FRAME Q
320	(140) ADDRESS	2	PVTRSBQF	XRBN OF FIRST PFTE ON REAL STORAGE BUFFER (RSB) FRAME QUEUE
322	(142) ADDRESS	2	PVTRSBQL	XRBN OF LAST PFTE ON RSB FRAME Q
324	(144) SIGNED	4	PVTPFTQR(4)	RESERVED FOR ADDITIONAL PFTE QUEUES
340	(154) ADDRESS	2	PVTAAFQF	XRBN OF FIRST PFTE ON ABOVE AVAILABLE FRAME QUEUE
342	(156) ADDRESS	2	PVTAAFQL	XRBN OF LAST PFTE ON ABOVE AVAILABLE FRAME QUEUE

FOLLOWING ARE THE RSM WORK/SAVE AREA DEFINITIONS
USE OF THIS AREA IS GUARDED BY THE SALLOC LOCK.

344	(158) SIGNED	4	PVTWSAX	BEGINING OF THE WORK SAVE AREA
344	(158) SIGNED	4	PVTWSA1(18)	WORK/SAVE AREA FOR IEAVSQA, IEAVDSEG

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
416	(1A0) SIGNED	4	PVTWSA2(18)	WORK/SAVE AREA FOR IEAVD-LAS/P.S.SUBRTNS
488	(1E8) SIGNED	4	PVTWSA3(18)	WORK/SAVE AREA FOR IEAVEQRI, IEAVRC-FI, AND IEAVRF3I
560	(230) SIGNED	4	PVTWSA4(18)	WORK/SAVE AREA FOR IEAVPSII
632	(278) SIGNED	4	PVTWSA5(18)	SAVE AREA FOR IEAVRELV
704	(2C0) SIGNED	4	PVTWSA6(18)	SAVE AREA FOR IEAVRELF | SAVE AREA FOR CALLING IEAVSUSP OR IEAVSUSQ
776	(308) SIGNED	4	PVTWSA7(18)	WORK/SAVE AREA FOR ALL ROOT EXITS, (IEAVFXLD AND IEAVSWIN), AND BY SWAP-IN MAINLINE PROCESSING
848	(350) SIGNED	4	PVTWSA8(80) PVTTRTAB	WORK/SAVE AREA FOR IEAVGFA "PVTWSA8" START OF TABLE OF VCONS POINTING TO PCBTRACE TRACE POINTS. IEAVPCB USES THE ENTRIES IN THIS TABLE TO LOCATE THE TRACE POINTS WHEN TRACING IS TO BE ENABLED. CODE AT EACH TRACE POINT IS 'CORE ZAPPED' BY IEAVPCB TO ENABLE TRACING WHEN REQUESTED. PVTWSA8 CAN BE USED FOR THIS PURPOSE BECAUSE IEAVGFA CANNOT RUN UNTIL AFTER IEAVPCB HAS BUILT THE INITIAL PCB POOL AT NIP TIME. THAT IS THE ONLY TIME THESE VCONS CAN BE USED.
1168	(490) SIGNED	4	PVTWSA12(18)	WORK/SAVE AREA FOR IEAVPTE
1240	(4D8) SIGNED	4	PVTWSA13(18)	WORK/SAVE AREA FOR IEAVPCB
1312	(520) SIGNED	4	PVTWSA14(18)	WORK/SAVE AREA FOR IEAVFP2/IEAVINV
1384	(568) SIGNED	4	PVTWSA15(18)	WORK/SAVE AREA FOR IEAVAMSI, IEAVS-OUT, IEAVRFR, AND IEAVFREE
1456	(5B0) SIGNED	4	PVTWSA16(13)	WORK AREA FOR IEAVSQA

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
1508	(5E4) SIGNED	4	PVTWSA23(5)	WORK AREA FOR IEAVGFA
1528	(5F8) SIGNED	4	PVTWSA17(18)	WORK AREA FOR IEAVRELS
1600	(640) SIGNED	4	PVTWSA18(18)	WORK/SAVE AREA FOR IEAVSWPC, ENTRY IEAVPRSS IN IEAVPRSB, AND ENTRY IEAVRFRC IN IEAVRFR
1672	(688) SIGNED	4	PVTSAVE(18)	SAVE AREA FOR CALLING OTHER PROGRAMS
1744	(6D0) SIGNED	4	PVTACA(6)	ASM CONTROL AREA (ACA) USED BY RSM ROUTINES WHEN REQUESTING ASM SERVICES OTHER THAN REQUEST I/O.
1768	(6E8) CHARACTER	4	PVTID	PVT IDENTIFIER
1772	(6EC) SIGNED	4	PVTSQDC	SQA RESERVE QUEUE PREFERRED FRAME DEFINITION COUNT. THE NUMBER OF PREFERRED FRAMES NEEDED TO RESTORE THE SQA RESERVE QUEUE TO THE NUMBER OF FRAMES SPECIFIED IN THE PVT (NOTE THAT COMPARE-AND-SWAP IS USED TO UPDATE THIS FIELD, SINCE THE SRM UPDATES IT WITHOUT HOLDING THE SALLOC).
1776	(6F0) SIGNED	4	PVTRSRB	SRB TO SCHEDULE REPLENISH
1776	(6F0) CHARACTER	44		RESERVED SRB USED TO SCHED IEAVREP1
1820	(71C) SIGNED	2	PVTRSV11	RESERVED FIELD
1822	(71E) SIGNED	2	PVTMAXFX	FIXED FRAME THRESHOLD. SRM IS NOTIFIED WHEN THE NUMBER OF FIXED FRAMES EQUALS THIS VALUE.
1824	(720) FLOATING	8	PVTCNTRS	PVT FIX COUNTERS USED BY PAGE FIX INSTRUCTION (COUNTERS MUST START ON A DOUBLE WORD BOUNDARY)
1824	(720) SIGNED	2	PVTRSV12	RESERVED FIELD
1826	(722) SIGNED	2	PVTRSV13	RESERVED FIELD

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
1828	(724) SIGNED	2	PVTDEFFX	PAGE FIX REQUESTS REQUIRING A FRAME FROM THE AFQ ARE DEFERRED WHEN THE AFQ IS LESS THAN OR EQUAL TO THIS VALUE. VALUE MUST BE GREATER THAN 1 AND LESS THAN PVTAFCL0.
1830	(726) SIGNED	2	PVTCNTFX	TOTAL SYSTEM COUNT OF FIXED FRAMES. THIS INCLUDES V=R, LSQA, SQA, PAGE FIX, AND SQA RESERVE QUEUE FRAMES. USED BY PAGE FIX INSTRUCTION.
1832	(728) SIGNED	2	PVTSQAFX	NUMBER FRAMES ALLOCATED TO SQA
1834	(72A) SIGNED	2	PVTCOMFX	NUMBER FRAMES ALLOCATED TO COMMON AREA FIXES. USED BY PAGE FIX INSTRUCTION.
1836	(72C) SIGNED	2	PVTCHUIC	HIGHEST UNREFERENCED INTERVAL COUNT FOR THE CURRENTLY ALLOCATED COMMON AREA FRAMES.
1838	(72E) SIGNED	2	PVTLPAFC	NUMBER OF PAGEABLE LPA AND PAGEABLE LPA DIRECTORY FRAMES ALLOCATED.
1840	(730) SIGNED	4	PVTLPAI	NUMBER OF PAGEABLE LPA AND PAGEABLE LPA DIRECTORY PAGES PAGED-IN
1844	(734) SIGNED	4	PVTLPAR	NUMBER OF PAGEABLE LPA AND PAGEABLE LPA DIRECTORY PAGES RECLAIMED
1848	(738) SIGNED	2	PVTLSQAF	NUMBER OF LSQA FRAMES.
1850	(73A) SIGNED	2	PVTLPAFX	NUMBER OF LPA TCB-FIXED FRAMES

THIS SECTION OF THE PVT CONTAINS ANCHORS FOR PCB QUEUES. THE FIELDS MUST REMAIN IN THIS ORDER BECAUSE THEY ARE INDEXED BY QUEUE NUMBERS. ALSO, THE PCB MANAGER DEPENDS ON THE COMPILE TIME DISPLACEMENT OF THIS SECTION FROM THE PVT ORIGIN. ALL QUEUES ARE FORWARD AND BACKWARD CHAINED.

NOTE: IF FIELDS ARE ADDED OR DELETED FROM THIS SECTION, THE PCB QUEUE INDEX VALUES MUST BE ADJUSTED.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1852	(73C) SIGNED	4	PVTPCBQS	BEGINNING OF ORDERED BLOCK OF PCB QUEUE ANCHORS
1852	(73C) SIGNED	4	PVTPCBQR(4)	RESERVED FOR ADDITIONAL PCB QUEUE ANCHORS
1868	(74C) ADDRESS	4	PVTFPCBF	VSA OF FIRST PCB ON THE FREE QUEUE (AVAILABLE PCB'S)
1872	(750) ADDRESS	4	PVTFPCBL	VSA OF LAST PCB ON FREE QUEUE
1876	(754) ADDRESS	4	PVTGFADF	VSA OF FIRST PCB ON GFA DEFERRED ALLOCATION QUEUE
1880	(758) ADDRESS	4	PVTGFADL	VSA OF LAST PCB ON GFA DEFERRED ALLOCATION QUEUE
1884	(75C) ADDRESS	4	PVTCIOQF	VSA OF FIRST PCB ON COMMON I/O QUEUE
1888	(760) ADDRESS	4	PVTCIOQL	VSA OF LAST PCB ON COMMON I/O QUEUE

V-CONS FOR MAJOR RSM ENTRY POINTS (CONTINUED)

1892	(764) V-ADDRESS	4	PVTPRSB	"V(IEAVPRSB)"- REAL STORAGE BUFFER ALLOCATION
1896	(768) V-ADDRESS	4	PVTPPSIX	"V(IEAVPSIX)"- R-FORM PGFIX, SAVE REGS
1900	(76C) V-ADDRESS	4	PVTPPSIY	"V(IEAVPSIY)"- L-FORM PGFIX, SAVE REGS
1904	(770) V-ADDRESS	4	PVTPPSIZ	"V(IEAVPSIZ)"- R-FORM PGFIX, REGS NOT SAVED
1908	(774) V-ADDRESS	4	PVTPPSIF	"V(IEAVPSIF)"- PGFREE, SAVE REGS
1912	(778) V-ADDRESS	4	PVTPRCF3	"V(IEAVRCF3)"- REAL STORAGE RECONFIGURATION

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1916 (77C)	V-ADDRESS	4	PVTPBAD	"V(IEAVPBAD)" - PAGE BAD ENTRY POINT IN RCF3
1920 (780)	V-ADDRESS	4	PVTPWNDI	"V(IEAVWNDI)" - ENTRY POINT ADDRESS TO RSM WINDOW MANAGER ROUTINE (THIS ENTRY TO BE USED BY RSM ROUTINES ONLY)
1924 (784)	V-ADDRESS	4	PVTPWNDE	"V(IEAVWNDE)" - ENTRY POINT ADDRESS TO RSM WINDOW MANAGER ROUTINE (THIS ENTRY IS FOR USE BY NON-RSM ROUTINES)
1928 (788)	V-ADDRESS	4	PVTPANYW	"V(IEAVANYW)" - ANYWHER PAGE SERVICE FUNCTION PROCESSOR EP IN IEAVFREE
1932 (78C)	SIGNED	4	PVTVCONS	RESERVED FOR ADDITIONAL VCONS
1936 (790)	SIGNED	4	PVTMVCLC	COUNT OF FRAMES MOVED IN ORDER TO NOT ALLOCATE LONG TERM FIXED PAGES TO THE V=R AREA OR THE RECONFIGURABLE AREA BELOW 16 MEG
1940 (794)	ADDRESS	4	PVTSPCCA	PCCA ADDR OF PROCESSOR BEING SIGNALLED BY IEAVINV
1944 (798)	SIGNED	4	PVTWSAX2	BEGINNING OF SECOND SET OF WORK/SAVE AREAS
1944 (798)	SIGNED	4	PVTWSA10(26)	WORK/SAVE AREA FOR IEAVPIOP AND IEAV-IOCP
2048 (800)	SIGNED	4	PVTWSA19(18)	WORK/SAVE AREA FOR IEAVPIX
2120 (848)	SIGNED	4	PVTWSA20(18)	WORK/SAVE AREA FOR IEAVRCF3 AND IEAVRCF
2192 (890)	SIGNED	4	PVTSAVE2(18)	SAVE AREA FOR SRB-POOL PROGRAMS
2264 (8D8)	HEX	8	PVTRESV7	RESERVED
2272 (8E0)	SIGNED	4	PVTRESV8(6)	RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
2296 (8F8)	ADDRESS	4	PVTAPPTF	ADDRESS OF PFTE FOR THE FIRST FRAME ABOVE THE 16 MEG REAL LINE, OR, IF THE PFT MAPS ONLY 16 MEG OR LESS OF REAL STORAGE, THEN THIS FIELD WILL POINT TO THE BYTE FOLLOWING THE END OF THE PFT.
2300 (8FC)	ADDRESS	4	PVT16MRL	THE LOWEST REAL STORAGE ADDRESS ABOVE 16 MEGABYTES (=X'01000000'). USED TO CHECK THE ADDRESS RETURNED BY A 'LRA' INSTRUCTION.
2304 (900)	ADDRESS	2	PVT16MLN	XRBN OF FIRST FRAME ABOVE 16 MEG REAL (=X'1000')
2306 (902)	SIGNED	2	PVTPoola	NUMBER OF FRAMES ABOVE 16 MEG REAL CURRENTLY AVAILABLE FOR REAL STORAGE MANAGEMENT USE. 'PVTPoola' IS THE NUMBER OF FRAMES INCLUDED IN 'PVTPool' WITH XRBNs NOT LESS THAN 4096.
2308 (904)	ADDRESS	4	PVTRSV10	RESERVED

PVT FIELDS RELATING TO RSM WINDOW MANAGER FUNCTION

2312 (908)	SIGNED	4	PVTWNDV1	VIRTUAL ADDRESS OF LOWER OF THE TWO WINDOW PAGES ALLOCATED FROM THE COMMON AREA
2316 (90C)	SIGNED	4	PVTWNDV2	VIRTUAL ADDRESS OF HIGHER OF THE TWO WINDOW PAGES ALLOCATED FROM THE COMMON AREA
2320 (910)	ADDRESS	4	PVTW1PTO	REAL ADDRESS OF PAGE TABLE ORIGIN FOR PGTE WHICH MAPS PVTWNDV1 VIRTUAL ADDRESS
2324 (914)	ADDRESS	4	PVTW2PTO	REAL ADDRESS OF PAGE TABLE ORIGIN FOR PGTE WHICH MAPS PVTWNDV2 VIRTUAL ADDRESS

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
2328 (918)	ADDRESS	4	PVTW1PTE	VIRTUAL ADDRESS OF PAGE TABLE ENTRY WHICH MAPS PVTWNDV1 VIRTUAL ADDRESS
2332 (91C)	ADDRESS	4	PVTW2PTE	VIRTUAL ADDRESS OF PAGE TABLE ENTRY WHICH MAPS PVTWNDV2 VIRTUAL ADDRESS
2336 (920)	ADDRESS	4	PVTWNDSA	FULL-WORD WHERE RSM WINDOW MANAGER CAN SAVE THE ADDRESS OF A CALLER-PROVIDED REGISTER SAVE AREA
2340 (924)	ADDRESS	4	PVTMVDWN	COUNT OF NUMBER OF TIMES A PAGE BACKED BY A FRAME ABOVE 16 MEG REAL HAD TO BE MOVED DOWN TO A BELOW FRAME ON A PAGE FIX
2344 (928)	ADDRESS	4	PVTMVUPO	COUNT OF NUMBER OF TIMES A PAGEABLE PAGE THAT OCCUPIED A FRAME BELOW 16 MEG REAL AND HAD THE PFTE BACK BELOW BIT ('PFTBBELO') =0 HAD TO BE MOVED TO A FRAME ABOVE 16 MEG REAL (BECAUSE THE BELOW FRAME IT OCCUPIED WAS NEEDED TO SATISFY A FIXED STORAGE ALLOCATION REQUEST)
2348 (92C)	ADDRESS	4	PVTMVUP1	COUNT OF NUMBER OF TIMES A PAGEABLE PAGE THAT OCCUPIED A FRAME BELOW 16 MEG REAL AND HAD THE PFTE BACK BELOW BIT ('PFTBBELO') =1 HAD TO BE MOVED TO A FRAME ABOVE 16 MEG REAL (BECAUSE THE BELOW FRAME IT OCCUPIED WAS NEEDED TO SATISFY A FIXED STORAGE ALLOCATION REQUEST)
2352 (930)	SIGNED	4	PVTRSV15(8)	RESERVED
2384 (950)	SIGNED	4	PVTXMWA1(2)	WORK AREA FOR IEAVSQA
2392 (958)	SIGNED	4	PVTXMWA2(2)	WORK AREA FOR IEAVPREF
2400 (960)	SIGNED	4	PVTXMWA3(2)	WORK AREA FOR IEAVRFR AND IEAVPSI

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
2408	(968) SIGNED	4	PVTXMWA4(2)	WORK AREA FOR IEAVTERM
2416	(970) SIGNED	4	PVTWNDPL(6)	WORK AREA FOR RSM ROUTINES TO BUILD A PARAMETER LIST TO PASS TO THE RSM WINDOW MANAGER
2440	(988) SIGNED	4	PVTPCPYL(8)	WORK AREA FOR RSM ROUTINES TO BUILD A PARAMETER LIST TO PASS TO THE RSM PAGE COPY ROUTINE
2472	(9A8) SIGNED	4	PVTWSA9(26)	WORK/SAVE AREA FOR IEAVOPBR AND IEAVPSCD
2576	(A10) SIGNED	4	PVTWSA21(18)	WORK/SAVE AREA FOR IEAVEQRS AND IEAVPCPY
2648	(A58) SIGNED	4	PVTWSA22(25)	WORK/SAVE AREA FOR IEAVPREF AND IEAVWNDI
2748	(ABC) SIGNED	4	PVTWSA11(18)	WORK/SAVE AREA FOR IEAVPSI
2820	(B04) ADDRESS	4	PVTRSVD	RESERVED UNUSED
2824	(B08) SIGNED	4	PVTFRMD1(40)	WORK/SAVE AREA FOR IEAVFRMD FRAME DEALLOC
			PVTEND	"X" END OF PVT
			PTVLEN	"X-PVT" LENGTH OF PVT

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PVT	0		PVTIODRV	EC		PVTPFREE	D0	
PVTAAFQF	154		PVTLCSA	1A		PVTPFTE	6C	
PVTAAFQL	156		PVTLEN	B08	0BA8	PVTPFTP	C	
PVTACA	6D0		PVTLP AFC	72E		PVTPFTQR	144	
PVTAFC	2		PVTLP AX	73A		PVTPFXLD	C4	
PVTAFCLO	4		PVTLP AI	730		PVTPGFA	54	
PVTAFCOK	6		PVTLP AR	734		PVTPGFAD	58	
PVTAFQF	130		PVTLP FN	12		PVTPINV	AC	
PVTAFQL	132		PVTLP RIV	18		PVTPIOP	5C	
PVTAPFTF	8F8		PVTLQSA	3C		PVTPITAS	C0	
PVTAPREF	1	20	PVTLSI	0	04	PVTPMSG	0	80
PVTBGM S	0	40	PVTLSQAF	738		PVTPOOL	8	
PVTCAIN	11C		PVTLVR	16		PVTPOOLA	902	
PVTC AOUT	120		PVTMAXFX	71E		PVTPOPBR	DC	
PVTCAREC	124		PVTMVCLC	790		PVTPOUT	C8	
PVTCFMCT	12C		PVTMVDWN	924		PVT PPIQI	80	
PVTCFQF	138		PVTMVUPO	928		PVT PPREF	E0	
PVTCFQL	13A		PVTMVUP1	92C		PVT PPSIF	774	
PVTC HUIC	72C		PVTNPIN	F8		PVT PPSIX	768	
PVTCIOQF	75C		PVTNPOUT	FC		PVT PPSIY	76C	
PVTCIOQL	760		PVTNPREC	114		PVT PPSIZ	770	
PVTCNTFX	726		PVTNSWPS	118		PVT PRCA	34	
PVTCNTRS	720		PVTOROOT	38		PVT PRCF	94	
PVT COMFX	72A		PVT PANYW	788		PVT PRCFI	98	
PVTDEFFX	724		PVT PBAD	77C		PVT PRCF3	778	
PVTDFRS	22		PVT PCB	68		PVT PRCV	9C	
PVT DUMP	1	10	PVT PCBCT	24		PVT PRELF	D8	
PVTEND	B08	0BA8	PVT PCBLO	26		PVT PRELS	CC	
PVTFLAG1	0		PVT PCB LT	0	10	PVT PRELV	D4	
PVTFLAG2	1		PVT PCB NO	1E		PVT PRFR	78	
PVT FPCBF	74C		PVT PCB QR	73C		PVT PRSB	764	
PVT FPCBL	750		PVT PCB QS	73C		PVT PRSET	F4	
PVT FPFN	10		PVT PCB S	A		PVT PRSMG	60	
PVT FRMD1	B08		PVT PCI WA	40		PVT PSIB	48	
PVT FRS LT	F0		PVT PCPYL	988		PVT PSINT	4C	
PVT FVR	14		PVT PCSEG	B0		PVT PSOUT	A4	
PVT GFADF	754		PVT PCSGB	B4		PVT PSQA	50	
PVT GFADL	758		PVT PDSEG	B8		PVT PSRBP	BC	
PVT HQSA	3E		PVT PFP	70		PVT PSWIN	A0	
PVT ID	6E8		PVT PFP2	74		PVT PSWPC	A8	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
PVTPSWPP	E4		PVTRSV14	1C		PVTWSA10	798	
PVTPTLB	1F		PVTRSV15	930		PVTWSA11	ABC	
PVTPV5QR	81		PVTSAVE	688		PVTWSA12	490	
PVTPVRC	90		PVTSAVE2	890		PVTWSA13	4D8	
PVTPVRIN	8C		PVTSPCCA	794		PVTWSA14	520	
PVTPVRLS	88		PVTSPFR	12E		PVTWSA15	568	
PVTPVRP0	7C		PVTSPIN	10C		PVTWSA16	5B0	
PVTPWNDE	784		PVTSPOUT	110		PVTWSA17	5F8	
PVTPWNDI	780		PVTSPREC	128		PVTWSA18	640	
PVTQS	130		PVTSQAFX	728		PVTWSA19	800	
PVTRCAFP	0	02	PVTSQAQF	13C		PVTWSA2	1A0	
PVTRESV1	44		PVTSQAQL	13E		PVTWSA20	848	
PVTRESV2	1	80	PVTSQDC	6EC		PVTWSA21	A10	
PVTRESV3	0	01	PVTSQNPC	2F		PVTWSA22	A58	
PVTRESV4	1	40	PVTSQVRC	2E		PVTWSA23	5E4	
PVTRESV6	30		PVTSRBIU	0	20	PVTWSA3	1E8	
PVTRESV7	8D8		PVTSSPIN	B		PVTWSA4	230	
PVTRESV8	8E0		PVTSWPIO	E8		PVTWSA5	278	
PVTRESV9	64		PVTSWSEL	1	08	PVTWSA6	2C0	
PVTRSBQF	140		PVTTRTAB	350	0350	PVTWSA7	308	
PVTRSBQL	142		PVTTRXLN	1D		PVTWSA8	350	
PVTRSMGM	0	08	PVTVAMI	100		PVTWSA9	9A8	
PVTRSQA	20		PVTVAMO	104		PVTW1PTE	918	
PVTRSRB	6F0		PVTVAMR	108		PVTW1PT0	910	
PVTRSRVF	134		PVTVCONS	78C		PVTW2PTE	91C	
PVTRSRVL	136		PVTVRROOT	28		PVTW2PT0	914	
PVTRSRVQ	134		PVTWNNDPL	970		PVTXMWA1	950	
PVTRSUS	2C		PVTWNDSA	920		PVTXMWA2	958	
PVTRSVVD	B04		PVTWNNDV1	908		PVTXMWA3	960	
PVTRSV10	904		PVTWNNDV2	90C		PVTXMWA4	968	
PVTRSV11	71C		PVTWSAX	158		PVT16MLN	900	
PVTRSV12	720		PVTWSAX2	798		PVT16MRL	8FC	
PVTRSV13	722		PVTWSA1	158				

QCB

Common Name : Queue Control Block

Macro ID : ISGQCB

DSECT Name : QCB

Created by : The ENQ/RESERVE processing routines; ISGGNQDQ and ISGGRP00

Subpool and Key : 229 in the GRS address space; key 0

Size : The QCB is defined in 3 sizes: 24, 44 and 256 bytes

Pointed to by : QCBNQCB, QCBPQCB, QHTEFQCB and QHTELQCB

Serialization : Local resource - The CMS ENQ/DEQ Class Lock

Global resource - The GRS Local Lock

Function : Describes a global resource serialization resource.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	40	QCB	QUEUE CONTROL BLOCK
0	(0) CHARACTER	40	QCBBASIC	QCB BASIC SECTION
0	(0) ADDRESS	4	QCBNQCB	ADDRESS NEXT QCB ON SYNONYM CHAIN
4	(4) ADDRESS	4	QCBPQCB	ADDRESS PREVIOUS QCB ON SYNONYM CHAIN
8	(8) ADDRESS	4	QCBFQEL	ADDRESS FIRST QEL FOR THIS RESOURCE
12	(C) ADDRESS	4	QCBLQEL	ADDRESS LAST QEL FOR THIS RESOURCE
16	(10) ADDRESS	4	QCBQHTE	ADDRESS OF QUEUE HASH TABLE ENTRY FOR THIS RESOURCE
20	(14) ADDRESS	4	QCBRRSV3	RESERVED
24	(18) UNSIGNED	2	QCBASID	ASID OF REQUESTOR. VALID ONLY WHEN QCBSTEP=1
26	(1A) BITSTRING	1	QCBRFLGS	RESOURCE DESCRIPTION FLAGS
	1...		QCBSYS	SCOPE OF SYSTEM
	.1...		QCBSYSS	SCOPE OF SYSTEMS
	..1.		QCBSTEP	SCOPE OF STEP
	...1		QCBGLOBL	GLOBAL RESOURCE INDICATOR

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.... 1...		QCBNOENQ	NO ENQS PERMITTED SET BY FRR
	.... .1..		QCBPHLDR	THIS IS A PLACEHOLDER QCB. NOTE THAT THIS QCB DOES NOT DEFINE A RESOURCE REQUEST.
	.... ..1.		QCBQM	QUEUE MERGE INDICATES RESOURCE HAS BEEN PROCESSED
	.... ...1		QCBRBIT1	RESERVED
27	(1B) CHARACTER	1	QCBRRSV1	RESERVED
28	(1C) UNSIGNED	2	QCBRNAML	LENGTH OF RNAME
30	(1E) CHARACTER	2	QCBRRSV2	RESERVED
32	(20) CHARACTER	8	QCBQNAME	QNAME OF RESOURCE
40	(28) CHARACTER	0	QCBEND	END OF FIXED SECTION
40	(28) CHARACTER	0	QCBRNAME	RNAME OF RESOURCE

QDB

Common Name : Queue Descriptor Block
Macro ID : IHAQDB
DSECT Name : QDB
Created by : Depends on which queue
Subpool and Key : Depends on which queue
Size : 32 bytes
Pointed to by : Depends on which queue
Serialization : None
Function : Contains information on the size, location, and attributes
of a queue.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	QDB	
0	(0) CHARACTER	4	QDBQDB	ACRONYM IN EBCDIC QDB-
4	(4) BITSTRING	2	QDBATTR	QUEUE ATTRIBUTES
6	(6) SIGNED	2	QDBRV001	RESERVED
8	(8) SIGNED	4	QDBNELMS	NUMBER OF ELEMENTS ON QUEUE
12	(C) ADDRESS	4	QDBFELMP	POINTER TO FIRST ELEMENT
16	(10) ADDRESS	4	QDBLELMP	POINTER TO LAST ELEMENT
20	(14) SIGNED	2	QDBFPTDS	FORWARD POINTER DISPLACEMENT
22	(16) SIGNED	2	QDBBPTDS	BACKWARD POINTER DISPLACEMENT
24	(18) SIGNED	2	QDBPRSZ	PRIORITY FIELD SIZE
26	(1A) SIGNED	2	QDBPRDS	PRIORITY FIELD DISPLACEMENT
28	(1C) ADDRESS	4	QDBRV002	RESERVED

QEL

Common Name : Queue Element

Macro ID : ISGQEL

DSECT Name : QEL

Created by : The ENQ/RESERVE processing routines: ISGGNQDQ and ISGGRP00

Subpool and Key : 229 in the Global Resource Serialization private area; key 0

Size : 48 bytes

Pointed to by : QCBFQEL, QCBLQEL, QELNQEL, QELPQEL, QELNQELQ, QELPQELQ,

QELNSYN, QELPSYN, ASCBGQEL, ASCBLQEL and SAHTENT

Serialization : Local resource - The CMS ENQ/DEQ Class Lock

Global resource - The Global Resource Serialization Local Lock

Function : Contains data that describes the requestor of a Global

Resource Serialization resource.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	48	QEL	QUEUE ELEMENT
0	(0) ADDRESS	4	QELNQEL	ADDRESS OF NEXT QEL
4	(4) ADDRESS	4	QELPQEL	ADDRESS OF PREVIOUS QEL
8	(8) ADDRESS	4	QELNQELQ	NEXT QEL ON ASCB OR SYSID QUEUE
12	(C) ADDRESS	4	QELPQELQ	PREVIOUS QEL ON ASCB OR SYSID QUEUE
16	(10) ADDRESS	4	QELNSYN	NEXT QEL ON SYSID SYNONYM CHAIN
20	(14) ADDRESS	4	QELPSYN	PREVIOUS QEL ON SYSID SYNONYM CHAIN
24	(18) ADDRESS	4	QELQXB	ADDRESS OF QXB
28	(1C) ADDRESS	4	QELQCB	ADDRESS OF QCB
32	(20) ADDRESS	4	QELSAHTE	ADDRESS OF SLOT IN SYSID/ASID HASH TABLE. VALID ONLY WHEN THE REQUEST ORIGINATED FROM A GRS SYSTEM OTHER THAN CURRENT

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
36	(24) UNSIGNED	4	QELORIGN	ORIGIN OF REQUESTOR
36	(24) UNSIGNED	2	QELSYSID	SYSTEM ID OF REQUESTOR
38	(26) UNSIGNED	2	QELASID	ASID OF REQUESTOR
40	(28) CHARACTER	2	QELRSVD1	RESERVED
42	(2A) BITSTRING	1	QELQFLGS	THESE FLAGS PERTAIN TO THE QEL
	1...		QELSHARE	WHEN 1, SHARED REQUEST WHEN 0, EXCLUSIVE REQUEST
	.1...		QELMC	MC REQUEST
	.1.		QELRESV	RESERVE REQUEST
	...1		QELRESVC	RESERVE CONVERTED TO GLOBAL ENQ
	.... 1...		QELAUTH	CALLER IS AUTHORIZED
	.... .1..		QELTCBFA	TCBFA ON WHEN QEL INITIALIZED
	.... ..1.		QELQRSV2	RESERVED
	.... ...1		QELQRSV1	RESERVED
43	(2B) BITSTRING	1	QELLFLGS	THESE FLAGS PERTAIN TO LIST REQUESTS
	1...		QELPOST	THE ECB OR RB HAS BEEN POSTED
	.1..		QELECBF	THIS IS AN ECB REQUEST
	..1.		QELLRSV6	RESERVED
	....1....		QELLRSV	EARLY-RESERVE FLAG. QEL WAS CREATED BY AN EARLY GLOBAL RESERVE THAT WAS CONVERTED TO A LOCAL RESERVE
	.... 1...		QELLRSV4	RESERVED
	.... .1..		QELLRSV3	RESERVED
	.... ..1.		QELLRSV2	RESERVED
	.... ...1		QELLRSV1	RESERVED
44	(2C) ADDRESS	4	QELUCB	CONTAINS UCB ADDRESS WHEN QELRESV=1
48	(30) CHARACTER	0	QELEND	END OF QEL

QFPL

Common Name : ENQ/DEQ FRR Parameter List

Macro ID : ISGQFPL

DSECT Name : QFPL

Created by : RTM when SETFRR is issued with the PARAM keyword.

Subpool and Key : Subpool determined by RTM, key 0

Size : 24 bytes

Pointed to by : SDWAPARM when the FRR receives control. Area specified by the PARAM keyword on the SETFRR macro invocation.

Serialization : None

Function : Provides a common mapping of the FRR parameter list for those modules which use ISGGFRR0 for recovery.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	24	QFPL	E/D/R FRR PARAMETER LIST
0	(0) ADDRESS	4	QFPLRTAD	RETRY ADDRESS (0=> NO RETRY)
4	(4) ADDRESS	4	QFPLRUB	REGISTER UPDATE BLOCK ADDRESS (0=> RETRY REGS UNDEFINED)
8	(8) ADDRESS	4	QFPLMID	ADDRESS OF MODID MACRO INFO
12	(C) ADDRESS	4	QFPLSMPL	ADDRESS OF AN SMPL (USED FOR ISGSALC OR ISGSDAL ERRORS)
16	(10) ADDRESS	4	QFPLDBUG	ADDRESS OF ADDITIONAL INFO TO BE RECORDED IN THE VRA
20	(14) BITSTRING	4	QFPLMISC	FOR USE BY THE MODULE WHICH ISSUED THE SETFRR
24	(18) CHARACTER	0	QFPLEND	END OF QFPL

QFPL1

Common Name : Global Resource Serialization Queue Scanning Services FRR Parameter List

Macro ID : ISGQFPL1

DSECT Name : None

Created by : RTM component on behalf of the issuer of SETFRR macro.

Subpool and Key : Determined by RTM

Size : 24 bytes

Pointed to by : SDWA - SDWAPARM

Serialization : None

Function : Provides a means of communication between the global resource serialization queue scanning services module (ISGQSCAN) and the global resource serialization queue scanning services FRR routine (ISGQSCNR). Maps the 24-byte FRR parameter area obtained when the SETFRR macro is used.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	24	QFPL1	GRS QUEUE SCANNING SERVICES FRR PARAMETER LIST
0	(0) BITSTRING	1	QF1LCKST	LOCK STATUS FLAGS
1...			QF1UHLL	USER HELD LOCAL LOCK FLAG (1 USER HOLDS A LOCK LOCK, 0 USER DOES NOT HOLD A LOCAL LOCK)
.1...			QFIULL	USER LOCAL LOCK OBTAINED FLAG (1 LOCAL LOCK OF THE INVOKER OF ISGQSCAN OBTAINED, 0 LOCK NOT OBTAINED)
..1.			QFIGLL	GRS LOCAL LOCK OBTAINED FLAG (1 GRS LOCAL LOCK OBTAINED, 0 LOCK NOT OBTAINED)
...1			QFIUHCL	USER HELD CMS ENQ/DEQ LOCK FLAG (1 USER HOLDS CMS ENQ/DEQ LOCK, 0 USER DOES NOT HOLD LOCK)
.... 1...			QF1CL	CMS ENQ/DEQ LOCK OBTAINED FLAG (1 CMS ENQ/DEQ LOCK OBTAINED, 0 LOCK NOT OBTAINED)
.... .1..			QF1TSTLL	SETLOCK TEST FOR LOCAL LOCK EXECUTED FLAG (1 TEST FOR LOCAL LOCK EXECUTED, 0-

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				TEST NOT EXECUTED)
			QFITSTCL	SETLOCK TEST FOR CMS ENQ/DEQ LOCK EXECUTED FLAG (1- TEST FOR CMS ENQ/DEQ LOCK EXECUTED, 0 TEST NOT EXECUTED)
				RESERVED
1	(1) BITSTRING	1	QF1FTPRT	FOOT PRINT FLAGS
			QF1EXMVC	EXECUTING MVCP/MVCS INSTRUCTION FLAG (1 MVCP/MVCS INSTRUCTION BEING EXECUTED, 0 NOT EXECUTING MVCP/MVCS INSTRUCTION)
				INVOKING GRS STORAGE MANAGER FLAG (1 INVOKING GRS STORAGE MANAGER, 0 NOT INVOKING GRS STORAGE MANAGER)
				INVOKING ISGBCI FUNCTION FLAG (1 INVOKING ISGBCI FUNCTION, 0 NOT INVOKING ISGBCI FUNCTION)
				REGULAR INTERFACE FLAG (1 ISGQSCAN GIVEN CONTROL THROUGH GENERAL INTERFACE ENTRY POINT, 0 ISGQSCAN GIVEN CONTROL THROUGH THE RESTRICTED INTERFACE ENTRY POINT)
				RESERVED
2	(2) CHARACTER	1		RESERVED
3	(3) UNSIGNED	1	QF1QSNLN	LENGTH OF INPUT PARAMETER LIST FOR ISGQSCAN (PARAMETER LIST BUILT BY GQSCAN MACRO)
4	(4) ADDRESS	4	QF1QSNPL	POINTER TO INPUT PARAMETER LIST FOR ISGQSCAN WHILE IN THE GRS ADDRESS SPACE (PARAMETER LIST BUILT BY GQSCAN MACRO)
8	(8) ADDRESS	4	QF1PCTKN	TOKEN RETURNED FROM PCLINK MACRO
12	(C) ADDRESS	4	QF1HWKA1	POINTER TO HUGE WORKAREA-1 (USED AS A DYNAMIC AREA BY ISGQSCAN) OR ZERO
16	(10) ADDRESS	4	QF1HWKA2	POINTER TO HUGE WORKAREA-2 (USED AS THE INTERNAL BUFFER BY ISGQSCAN) OR ZERO
20	(14) ADDRESS	4	QF1PQCB	POINTER TO PQCB (USED AS A PLACEHOLDER QCB BY ISGQSCAN) OR ZERO
24	(18) CHARACTER	0	QFIEND	END OF QFPL1

QHT

Common Name : Queue Hash Table

Macro ID : ISGQHT

DSECT Name : QHT

Created by : ISGNCBIM in SQA and ISGNASIM in the global resource
serialization private area.

Subpool and Key : 229 and key 0

Size : Global QHT - 8192 bytes; local QHT - 2048 bytes.

Pointed to by : Global QHT - GVTXGQHT of GVTX; Local QHT - GVTXLQHT of GVTX.

Serialization : Local QHT is serialized by the CMS ENQ/DEQ Class Lock.

Global QHT is serialized by the global resource serialization Local
Lock.

Function : There are two Queue Hash tables. One for Local requests and
one for Global requests Each Queue Hash Table entry is a double
headed queue of QCB's.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	8	QHT	QUEUE HASH TABLE
0	(0) CHARACTER	8	QHTHDR	QUEUE HASH TABLE HEADER
0	(0) CHARACTER	4	QHTID	CONTROL BLOCK ACRONYM (GLO- BAL-GQHT, LOCAL-LQHT)
4	(4) UNSIGNED	2	QHTNENT	NUMBER OF ENTRIES IN TABLE
6	(6) CHARACTER	2		RESERVED
8	(8) CHARACTER	0	QHTENTS	QUEUE HASH TABLE ENTRIES
0	(0) STRUCTURE	8	QHTENT	QUEUE HASH TABLE ENTRY
0	(0) ADDRESS	4	QHTEFQCB	ADDRESS OF THE FIRST QCB ON THE SYNONYM CHAIN, THE HIGH ORDER BIT INDICATES IF THERE IS QUEUE DAMAGE
1...			QHTEQDMG	0 NO QUEUE DAMAGE IN THIS SYNONYM CHAIN. 1 QUEUE DAMAGE IN THIS SYNONYM CHAIN. ENQS NOT ALLOWED
				.111 1111

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	1111 1111			
	1111 1111			
	1111 1111			CAN NOT BE USED, THIS IS THE ADDRESS PORTION OF THE POINTER
4	(4) ADDRESS	4	QHTELQCB	ADDRESS OF LAST QCB ON SYNONYM CHAIN

QWA

Common Name : Queue Work Area

Macro ID : ISGQWA

DSECT Name : QWA

Created by : ISGNCBIM

Subpool and Key : Subpool 245 and key 0

Size : 888 bytes

Pointed to by : Local QWA - GVTLQWA

Global QWA - GVTGQWA

Serialization : Local QWA - CMS ENQ/DEQ Class Lock

Global QWA - Global Resource Serialization Local Lock

Function : Used as a common work area for the ENQ/DEQ/RESERVE processing routines.

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
0	(0) STRUCTURE	888	QWA	QUEUE WORK AREA
0	(0) CHARACTER	4	QWAID	CONTROL BLOCK IDENTIFIER
4	(4) CHARACTER	48	QWABASIC	QWA BASIC SECTION THIS IS THE ONLY SECTION THAT CAN MAP TO THE RB EXTENDED SAVEAREA OR THE RMPL WORK AREA
4	(4) ADDRESS	4	QWAPELA	INPUT PEL ADDRESS
8	(8) UNSIGNED	1	QWAKEY	REQUESTOR-S KEY
9	(9) UNSIGNED	1	QWARETRY	ID FOR RETRY ADDRESS
10	(A) CHARACTER	2	QWARSVD3	RESERVED
12	(C) ADDRESS	4	QWAPTI1	PT OPERAND 1
16	(10) ADDRESS	4	QWAPTI2	PT OPERAND 2
20	(14) CHARACTER	28	QWARSA	REQUEST SAVE AREA THIS AREA IS MOVED TO THE QWBHRSA WHEN A GLOBAL RESOURCE IS REQUESTED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
20	(14) ADDRESS	4	QWAMRBQ	POINTER TO FIRST MESSAGE IN MRB QUEUE
24	(18) UNSIGNED	1	QWAERR	FIRST DIGIT OF ABEND CODE
25	(19) CHARACTER	1	QWARSVD4	RESERVED
26	(1A) UNSIGNED	2	QWAPFLGS	SAVED PEL FLAGS
26	(1A) UNSIGNED	1	QWAPLAST	SAVED PELLAST FLAG BYTE
1...	....	1	QWAEO1	PELEOL
.1...	....	1	QWAIGNOR	PELIGNOR
..1.	....	1	QWARES1	PELRES1
...1	....	1	QWASHR	PELSHR
.... 1...		1	QWASAVE	PELSAVE
.... .1..		1	QWAGEN1	PELGEN1
.... .1.		1	QWAGEN2	PELGEN2
.... .1..1		1	QWATCBF	PELTCBF
27	(1B) UNSIGNED	1	QWAPFLAG	SAVED PELFLAG FLAG BYTE
1...	....	1	QWASHARE	PELSHARE
.1...	....	1	QWASCPE1	PELSCPE1
..1.	....	1	QWASYSMC	PELSYSMC
...1	....	1	QWASTPMC	PELSTPMC
.... 1...		1	QWASCPE2	PELSCPE2
.... .1..		1	QWARET1	PELRET1
.... .1..1		1	QWARET2	PELRET2
.... .1..1..1		1	QWARET3	PELRET3
28	(1C) BITSTRING	1	QWAFLAG1	QWA PROCESS FLAGS

THE FOLLOWING FLAGS ARE INITIALIZED IN THE QWA BY THE ENQ/DEQ/RESERVE MAINLINE ROUTINE. WHEN A GLOBAL RESOURCE REQUEST IS PROCESSED BY THE GRP, THE DATA IS MOVED TO THE QWB HEADER (QWBHFLG1). WHEN THE ENQ/DEQ/RESERVE SVRB IS POST'D, THE INFORMATION IS MOVED BACK TO THE QWA. THEREFORE THE BIT DEFINITIONS OF QWBHFLG1 MUST MATCH THE BIT DEFINITION OF QWAFLAG1.

1...	....	QWASTLC	STEAL PROCESSING IS NOW COMPLETE, I.E., STEAL QWB(S) HAVE BEEN PLACED ON THE REQUEST QUEUE IF NECESSARY
.1...	....	QWASMC	INDICATES SET SMC STATUS
..1.	....	QWARMC	INDICATES RESET SMC STATUS

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
			....1	QWASPOST
			.... 1...	QWAINT
			.... .1..	QWALNGWT
			.... .1.	QWAPC
			.... .1.	QWAPURG
29	(1D) BITSTRING	1	QWAFLAG2	INDICATES SPOST IS NECESSARY INDICATES AN INTERNALLY GENERATED REQUEST A LONG-WAIT IS NECESSARY PC HAS BEEN ISSUED INDICATE ISGGDEQP HAS PURGED THE QWB THAT WAS MAPPED TO THIS QWA QWA STATUS FLAGS
<p>THE FOLLOWING FLAGS ARE INITIALIZED IN THE QWA BY THE ENQ/DEQ/RESERVE MAINLINE ROUTINE. WHEN A GLOBAL RESOURCE IS REQUESTED, MAINLINE FRONT-END PROCESSING WILL MOVE THIS FLAG BYTE TO QWBHFLG2. THEREFORE THE BIT DEFINITIONS OF QWAFLAG2 MUST MATCH THE BIT DEFINITIONS OF QWBHFLG2.</p>				
			1...	QWAMIXR
			.1...	QWATCBFA
			..1.	QWAUTH
			...1	QWAGLBL
			.... 1...	QWAECBF
			.... .1..	QWASVC56
			.... .1.	QWAABDMC
			.... .1.	QWASYNCC
30	(1E) UNSIGNED	2	QWAGRES	MIXED RESOURCE REQUEST REQUESTING TASK WAS ABENDING WHEN THE REQUEST WAS RECEIVED REQUESTOR IS AUTHORIZED GLOBAL RESOURCES DEFINED IN THE QWB ECB= SPECIFIED ENQ/RESERVE REQUEST THE TASK OR ADDRESS SPACE HAS TERMINATED WHILE IN MUST COMPLETE SYNCHRONIZATION COMPLETE FOR ENQ REQUESTS, THE NUMBER OF GLOBAL RESOURCES FOR WHICH NO QEL WAS PUT IN QUEUE. FOR DEQ REQUESTS, THE NUMBER OF GLOBAL RESOURCES FOR WHICH A QEL WAS REMOVED FROM QUEUE
32	(20) ADDRESS	4	QWAECBA	ECB ADDRESS THIS FIELD IS REPLACED BY QWAQWBA WHEN THE QWABASIC SECTION MAPS TO THE SVRB EXTENDED SAVEAREA.
32	(20) ADDRESS	4	QWAQWBA	DUAL USE FIELD. THIS FIELD WILL ONLY EXIST IN THE SVRB QWA WHEN AN ENQ/DEQ REQUESTOR IS SUSPENDED. IF A LOCAL RESOURCE IS BEING PROCESSED, THIS FIELD

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				CONTAINS ZEROES. IF A GLOBAL RESOURCE IS BEING PROCESSED THIS FIELD CONTAINS THE ADDRESS OF THE FIRST QWB DEFINING THE REQUEST. THIS ENSURES THE QWB ADDRESS IS MADE AVAILABLE TO THE MAINLINE ESTAE ROUTINE SHOULD AN ERROR OCCUR OVER THE GLOBAL SUSPENSION.
36	(24) ADDRESS	4	QWATCBA	REQUESTOR-S (OR DIRECTED) TCB ADDRESS
40	(28) ADDRESS	4	QWASVRBA	SVRB ADDRESS FOR THIS REQUEST
44	(2C) ADDRESS	4	QWAQXB	ADDRESS OF QXB
END OF RSA SECTION				

48	(30) BITSTRING	1	QWAFLAG3	REQUEST PROCESSING FLAGS THESE FLAGS ARE NOT TRANPOSED TO THE QWB.
	1....		QWACMS	CMS LOCK HELD
	.1....		QWAFRR	FRR ESTABLISHED
	..1....		QWAREQLL	REQUESTOR-S LOCAL LOCK
	...1....		QWAGRSLL	GRS LOCAL LOCK
	.... 1....		QWA3RSV4	RESERVED
	.... .1..		QWA3RSV3	RESERVED
	.... .1.		QWA3RSV2	RESERVED
	.... ...1		QWA3RSV1	RESERVED
49	(31) BITSTRING	1	QWAFLAG4	REQUEST PROCESSING FLAGS THESE FLAGS ARE NOT TRANPOSED TO THE QWB.
	1....		QWABADML	BAD MINOR LENGTH SPECIFIED
	.1....		QWADMGE	TRIGGERS Q-DAMAGE MESSAGE
	..1....		QWAWAITN	WAITING QEL FOUND (NOT ECB)
	...1....		QWA1DEQ	AT LEAST 1 QEL DEQUEUED
	.... 1....		QWA4RSV1	RESERVED
	.... .1..		QWAWAIT	WAIT WITHIN ENQ/DEQ
	.... .1.		QWAMVCP	ISSUE MVCP EITHER USER IS NOT AUTHORIZED OR THE INPUT PEL COULD NOT BE CONTAINED IN THE SQA QWB

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
50	.... .1 (32) BITSTRING	1	QWANOENQ QWAFLAG5	TURN OFF ALL ENQ-S REQUEST PROCESSING FLAGS THESE FLAGS ARE NOT TRANSPOSED TO THE QWB
	1...		QWAGLBLQ	THE GLOBAL ASCB QEL QUEUE IS BEING SEARCHED
	.1...		QWARMFP	RMF HAS BEEN CALLED
	..1.		QWAHOLD	ISSUE ENQHOLD SYSEVENT
	...1		QWAQXBO	QXB OBTAINED
	.... 1...		QWACSYID	REQUEST WAS INITIATED FROM THE CURRENT SYSTEM
	.... .1..		QWAPHLDR	QSCAN PLACE-HOLDER QCB IS BEING PURGED.
	.... .1.		QWA5RSV1	RESERVED
	.... .1		QWAGBLRS	TASK OWNS GLOBAL RESOURCES
51	(33) BITSTRING	1	QWAFLAG6	QWA STATUS FLAGS
	1...		QWAR15SW	NON-ZERO RETURN CODE PRESENT
	.1...		QWA6ARV7	RESERVED
	..1.		QWA6ARV6	RESERVED
	...1		QWA6ARV5	RESERVED
	.... 1...		QWA6ARV4	RESERVED
	.... .1..		QWA6ARV3	RESERVED
	.... .1.		QWA6ARV2	RESERVED
	.... .1		QWA6ARV1	RESERVED
52	(34) CHARACTER	0	QWAEND1	END BASIC SECTION

NOTE THAT THE FOLLOWING FIELDS ARE NOT INCLUDED IN THE SVRB QWA

52	(34) CHARACTER	140	QWARDA	QWA REQUEST DATA AREA
52	(34) CHARACTER	16	QWARSA2	QWA REQUEST DATA AREA
52	(34) CHARACTER	8	QWAJOBNM	JOBNAME/USERID OF REQUESTOR
60	(3C) UNSIGNED	4	QWAORIGN	ORIGIN OF REQUESTOR
60	(3C) UNSIGNED	2	QWASYSID	SYSID OF REQUESTOR
62	(3E) UNSIGNED	2	QWAASID	ASID OF REQUESTOR

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
64	(40) ADDRESS	4	QWAASCB	IF ENQ/DEQ/RESERVE, ADDRESS OF REQUESTOR-S ASCB. IF PURGE REQUEST, ADDRESS OF TARGET ASCB.
END OF RSA2 SECTION				
68	(44) SIGNED	4	QWALOCLR	COUNT OF LOCAL RESOURCES REQUESTED
72	(48) SIGNED	4	QWAGLBLR	COUNT OF GLOBAL RESOURCES REQUESTED
76	(4C) SIGNED	4	QWAQWBS	COUNT OF QWB-S REQUIRED TO CONTAIN A GLOBAL RESOURCE REQUEST.
80	(50) SIGNED	4	QWAFREEC	COUNT OF QCB/QEL/QXB-S TO BE FREED
84	(54) SIGNED	4	QWACPELR	COUNT OF PEL ENTRIES REMAINING TO BE MOVED TO THE PRIVATE AREA QWB(S)
88	(58) SIGNED	4	QWAPRMSZ	TOTAL SIZE OF INPUT PEL
92	(5C) SIGNED	4	QWANMESZ	TOTAL SIZE OF QNAME/RNAME-S IN PEL
96	(60) UNSIGNED	2	QWAQWBSZ	AVAILABLE BYTES IN A PRIVATE AREA QWB
98	(62) UNSIGNED	2	QWACSYS	CURRENT SYSID (0 FOR A LOCAL RESOURCE REQUEST)
100	(64) ADDRESS	4	QWAQWBHS	ADDRESS OF THE QWB HEADER AND SMPL. IF A LOCAL RESOURCE IS BEING PROCESSED, CONTAINS THE ADDRESS OF THE SQA QWB. IF A GLOBAL RESOURCE IS BEING PROCESSED, CONTAINS THE ADDRESS OF A PRIVATE AREA QWB.
104	(68) ADDRESS	4	QWAQWBF	ADDRESS OF FIRST QWB ON THE REQUEST HOLD QUEUE
108	(6C) ADDRESS	4	QWAQWBL	ADDRESS OF LAST QWB ON THE REQUEST HOLD QUEUE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
112	(70) ADDRESS	4	QWAFQEL	ADDRESS OF FIRST INITIALIZED QEL FOR THE CURRENT REQUEST
116	(74) ADDRESS	4	QWAC0QWB	CURRENT OUTPUT QWB ADDRESS, I.E., THE PRIVATE AREA QWB(S) TO CONTAIN THE GLOBAL RESOURCE(S)
120	(78) ADDRESS	4	QWAC1QWB	CURRENT INPUT QWB ADDRESS, I.E., THE SQA QWB OR SQA QWB EXTENSION
124	(7C) ADDRESS	4	QWANSLOT	NEXT QWB SLOT
128	(80) ADDRESS	4	QWAHASH	HASH TABLE SLOT OF INPUT RESOURCE NAME
132	(84) ADDRESS	4	QWAFQWB	ADDRESS OF FIRST QWB DEFINING THE GLOBAL REQUEST.
136	(88) ADDRESS	4	QWAPPELE	PREVIOUS PEL ENTRY
140	(8C) ADDRESS	4	QWAGSA	ADDRESS OF LOCAL OR GLOBAL GSA
144	(90) CHARACTER	20	QWADPL	DEQ PURGE LIST
164	(A4) CHARACTER	12	QWARMFPL	RMF PARAMETER LIST
176	(B0) CHARACTER	16	QWARSVD1	RESERVED
192	(C0) CHARACTER	0	QWAEND2	END OF AREA CLEARED
192	(C0) SIGNED	4	QWAWORK1	GENERAL PURPOSE WORKAREA

SAVEAREAS FOLLOW. NOTE THE FOLLOWING PROTOCOL FOR USE OF THESE SAVEAREAS. SAVEAREAS 1-3 CAN BE USED BY ANY ROUTINE WITH CORRECT SERIALIZATION BUT CANNOT BE USED BETWEEN MODULES. SAVEAREA 4 IS USED BY ISGGRP00 TO INTERFACE WITH ISGGNQDQ AND BY ISGGTRM1 TO INTERFACE WITH ISGGNQDQ AND ISGGDEQP. SAVEAREA 5 IS USED BY ISGGDEQP TO INTERFACE WITH ISGGNQDQ.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
196	(C4) CHARACTER	72	QWASAVE1	SAVEAREA 1 LEVEL 1 S.A.
268	(10C) CHARACTER	72	QWASAVE2	SAVEAREA 2 LEVEL 2 S.A.
340	(154) CHARACTER	72	QWASAVE3	SAVEAREA 3 LEVEL 3 S.A.
412	(19C) CHARACTER	72	QWASAVE4	SAVEAREA 4 USED ONLY BY ISGGRP00 AND ISGGTRM0/1
484	(1E4) CHARACTER	72	QWASAVE5	SAVEAREA 4 USED ONLY BY ISGGDEQP
556	(22C) ADDRESS	4	QWAS1R14	REG 14 SUBROUTINE SAVEAREA 1
560	(230) ADDRESS	4	QWAS2R14	REG 14 SUBROUTINE SAVEAREA 2
564	(234) ADDRESS	4	QWAS3R14	REG 14 SUBROUTINE SAVEAREA 3
568	(238) ADDRESS	4	QWAS4R14	REG 14 SUBROUTINE SAVEAREA 4
572	(23C) ADDRESS	4	QWAE1R13	REG 13 ENTRY POINT SAVEAREA 1
576	(240) ADDRESS	4	QWAGRP13	SAVEAREA TO CONTAIN THE SAVEAREA ADDRESS PROVIDED BY THE ATTACH OF GRP.
580	(244) CHARACTER	52	QWATRMRM	ENQ/DEQ TERMINATION RESOURCE MANAGER WORK AREA.
580	(244) CHARACTER	8	QWASTPNM	STEPNAME OF TERMINATING TASK
588	(24C) BITSTRING	1	QWARMFLG	RESOURCE MANAGER FLAGS
	1...		QWAJSTEP	WHEN 1, JOBSTEP IS TERMINATING
	.1...		QWARMRV7	RESERVED
	..1.		QWARMRV6	RESERVED
	...1		QWARMRV5	RESERVED
	.... 1...		QWARMRV4	RESERVED
	.... .1..		QWARMRV3	RESERVED
	.... ..1.		QWARMRV2	RESERVED
	.... ...1		QWARMRV1	RESERVED
589	(24D) CHARACTER	3	QWARMR01	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
592	(250) CHARACTER	4	QWACCODE	COMPLETION CODE
592	(250) BITSTRING	3	QWACOMPC	SYSTEM COMPLETION CODE IS FIRST 12 BITS. USER COMPLETION CODE IS LAST 12 BITS.
595	(253) BITSTRING	1	QWACCRV1	RESERVED
596	(254) ADDRESS	4	QWARB	CURRENT RB
600	(258) CHARACTER	32	QWARUBTM	REGISTER UPDATE BLOCK FOR ISGGTRM1 RECOVERY
632	(278) CHARACTER	136	QWARESVD	RESERVED
768	(300) CHARACTER	120	QWAERSVB	BUFFER FOR EARLY-RESERVE MESSAGES ISSUED THROUGH RECORD MACRO.
888	(378) CHARACTER	0	QWAEND3	END QWA

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
QWA	0		QWAGLBL	1D	10	QWAQWSZ	60	
QWAABDMC	1D	02	QWAGLBLQ	32	80	QWAQXB	2C	
QWAASCB	40		QWAGLBLR	48		QWAQXBO	32	10
QWAASID	3E		QWAGRES	1E		QWARB	254	
QWAUTH	1D	20	QWAGRP13	240		QWARDA	34	
QWABADML	31	80	QWAGRSLL	30	10	QWAREQLL	30	20
QWABASIC	4		QWAGSA	8C		QWARESDV	278	
QWACCODE	250		QWAHASH	80		QWARES1	1A	20
QWACCRV1	253		QWAHOLD	32	20	QWARETRY	9	
QWACIQWB	78		QWAID	0		QWARET1	1B	04
QWACMS	30	80	QWAIGNOR	1A	40	QWARET2	1B	02
QWACOMPC	250		QWAINT	1C	08	QWARET3	1B	01
QWACOQWB	74		QWAJOBNM	34		QWARMC	1C	20
QWACPELR	54		QWAJSTEP	24C	80	QWARMFLG	24C	
QWACSYID	32	08	QWAKEY	8		QWARMFP	32	40
QWACSYS	62		QWALNGWT	1C	04	QWARMFPL	A4	
QWADMGE	31	40	QWALOC LR	44		QWARMRV1	24C	01
QWADPL	90		QWAMIXR	1D	80	QWARMRV2	24C	02
QWAECBA	20		QWAMRBQ	14		QWARMRV3	24C	04
QWAECBF	1D	08	QWAMVCP	31	02	QWARMRV4	24C	08
QWAEND1	34		QWANMESZ	5C		QWARMRV5	24C	10
QWAEND2	C0		QWANOENQ	31	01	QWARMRV6	24C	20
QWAEND3	378		QWANSLOT	7C		QWARMRV7	24C	40
QWAEO1	1A	80	QWAORIGN	3C		QWARMR01	24D	
QWAERR	18		QWAPC	1C	02	QWARSA	14	
QWAERSVB	300		QWAPELA	4		QWARSA2	34	
QWAE1R13	23C		QWAPFLAG	1B		QWARSVD1	B0	
QWAFLAG1	1C		QWAPFLGS	1A		QWARSVD3	A	
QWAFLAG2	1D		QWAPHLDR	32	04	QWARSVD4	19	
QWAFLAG3	30		QWAPLAST	1A		QWARUBTM	258	
QWAFLAG4	31		QWAPPELE	88		QWAR15SW	33	80
QWAFLAG5	32		QWAPRMSZ	58		QWASAVE	1A	08
QWAFLAG6	33		QWAPT1	C		QWASAVE1	C4	
QWAFQEL	70		QWAPT2	10		QWASAVE2	10C	
QWAFQWB	84		QWAPURG	1C	01	QWASAVE3	154	
QWAFREEC	50		QWAQWBA	20		QWASAVE4	19C	
QWAFRR	30	40	QWAQWBF	68		QWASAVE5	1E4	
QWAGBLRS	32	01	QWAQWBHS	64		QWASCPE1	1B	40
QWAGEN1	1A	04	QWAQWBL	6C		QWASCPE2	1B	08
QWAGEN2	1A	02	QWAQWBS	4C		QWASHARE	1B	80

Contains Restricted Materials of IBM
 Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
QWASHR	1A	10	QWAS2R14	230		QWA3RSV2	30	02
QWASMC	1C	40	QWAS3R14	234		QWA3RSV3	30	04
QWASPOST	1C	10	QWAS4R14	238		QWA3RSV4	30	08
QWASTLC	1C	80	QWATCBA	24		QWA4RSV1	31	08
QWASTPMC	1B	10	QWATCBF	1A	01	QWA5RSV1	32	02
QWASTPNM	244		QWATCBFA	1D	40	QWA6ARV1	33	01
QWASVC56	1D	04	QWATRMRM	244		QWA6ARV2	33	02
QWASVRBA	28		QWAWAIT	31	04	QWA6ARV3	33	04
QWASYNCC	1D	01	QWAWAITN	31	20	QWA6ARV4	33	08
QWASYSID	3C		QWAWORK1	C0		QWA6ARV5	33	10
QWASYSMC	1B	20	QWA1DEQ	31	10	QWA6ARV6	33	20
QWAS1R14	22C		QWA3RSV1	30	01	QWA6ARV7	33	40

QXB

Common Name : Queue Extension Block

Macro ID : ISGQXB

DSECT Name : QXB

Created by : The ENQ/RESERVE processing routines, ISGQNQDQ and ISGGRP00

Subpool and Key : 229 in the global resource serialization private area;
Key 0

Size : 32 bytes

Pointed to by : QELQXB and QWBHQXB

Serialization : Local resource - the CMS ENQ/DEQ Class Lock

Global resource - the global resource serialization
Local Lock

Function : Contains the common data that describes the ENQ/RESERVE
request.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	32	QXB	QUEUE EXTENSION BLOCK
0	(0) ADDRESS	4	QXBTCB	ADDRESS OF THE REQUESTOR-S (OR DIRECTED) TCB
4	(4) ADDRESS	4	QXBECB	ECB ADDRESS FOR POST OR
4	(4) ADDRESS	4	QXBSVRB	SVRB ADDRESS FOR POST
8	(8) ADDRESS	4	QXBQWB	ADDRESS OF QWB WHEN A MIXED RESOURCE REQUEST IS PRESENT. THIS IS USED DURING NIP TO LOCATE THE QWB CONTAINING THIS QXB ADDRESS SO THE QXB ADDRESS CAN BE REPLACED WITH THE MIGRATED QXB ADDRESS
8	(8) ADDRESS	4	QXBNWPTR	ADDRESS OF THE NEW QXB THAT HAS BEEN MOVED TO THE GRS ADDRESS SPACE
12	(C) BITSTRING	1	QXBFLGS1 QXBMRX QXBNW	FLAG BYTE 1 MIXED RESOURCE REQUEST FREE THE QXB FROM THE LOCAL RESOURCES POOL QXBNWPTR IS VALID QXB HAS BEEN MOVED

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
				FROM SQA TO THE GRS ADDRESS SPACE
			QXB1RSV1	RESERVED
			QXB1RSV2	RESERVED
			QXB1RSV3	RESERVED
			QXB1RSV4	RESERVED
			QXB1RSV5	RESERVED
			QXB1RSV6	RESERVED
13	(D) CHARACTER	3	QXBRSV01	RESERVED
16	(10) UNSIGNED	4	QXBLWC	LIST/WAIT COUNTS
16	(10) UNSIGNED	2	QXBLISTC	LIST COUNT NUMBER OF ACTIVE QELS REMAINING IN THE REQUEST
18	(12) UNSIGNED	2	QXBWAITC	WAIT COUNT NUMBER OF QELS WAITING FOR RESOURCES
20	(14) CHARACTER	8	QXBJOBNM	JOBNAME/USERID OF THE REQUESTOR.
28	(1C) CHARACTER	4	QXBRSV02	RESERVED
32	(20) CHARACTER	0	QXBEND	END OF QXB

RB

Common Name : Request Blocks

Macro ID : IHARB

DSECT Name : RBPRFX (DSECT card precedes prefix). RBBASIC should be used for USING for basic section

Created by : SYSGEN, CIRB (for IRBs); program manager (for PRBs); first level interruption handlers (for SVRBs)

Subpool and Key : IRB - subpool 253 and key 0; PRB, SVRB, SIRB - subpool 255 and key 0

Size : PRB - 136, SIRB - 200, SVRB - 240, IRB - 128 and optional fields

Pointed to by : TCBRBP field of the TCB data area

CDRRBP field of the CDE data area (associated RB)

EVNTRBP field of the EVNT data area (waiting RB)

PCBSRB field of the PCB data area (associated RB)

QELSVRB field of the QEL data area (associated SVRB)

RBLINK field of the RB data area (previous RB)

TAXEIRB field of the TAXE data area (associated RB)

TIQEIRB field of the TAXE data area (IRB to be scheduled)

Serialization : LOCAL lock, active (RB or TCB), non-dispatchable TCB, etc.

Function : Invokes IKJRB for VS2 system dependent fields. Contains information needed by supervisor concerning programs and routines.

Contains save areas for all general registers, extended registers and a save area for SVC routines plus additional data needed for control.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	RBPRFX	, RBSEC PTR-64
-64	(-40) FLOATING	8 (8)		PREFIX IS SYSTEM DEPENDENT
	.1..		RBBASIC	"X"- START OF BASIC SECTION OF RB
0	(0) CHARACTER	8	RBEXRTNM	EIGHT-CHARACTER NAME OF ERROR EXIT ROUTINE (SIRB)
0	(0) BITSTRING	1	RBTMFLD	INDICATORS FOR TIMER ROUTINES. WHEN THERE ARE NO TIMER ROUTINES, THIS FIELD IS ZERO. (IRB)
1...			RBTMQUE	"BIT0"- TIMER ELEMENT NOT ON QUEUE
.1...			RBTMTOD	"BIT1"- LOCAL TIME-OF-DAY OPTION IS USED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
	...1.		RBRSV005	"BIT2,,C'X'"- RESERVED
	...1		RBWLIM	"BIT3"- WAIT LIMIT EXCEEDED
	.... 1...		RBTMCMPP	"BIT4"- INTERVAL HAS EXPIRED
	.... .1..		RBTMIND2	"BIT5"- EXIT SPECIFIED WITH TASK OR REAL REQUEST
	.... ..11		RBTMIND3	"BIT6+BIT7"- TYPE OF REQUEST
	.... ....		RBTRREQ	"X'00'"- TASK REQUEST
	.... ...1		RBWREQ	"BIT7"- WAIT REQUEST
	.... ..11		RBRREQ	"BIT6+BIT7"- REAL REQUEST
1	(1) HEX	7		LAST 7 BYTES OF RBEXRTNM

8	(8) SIGNED	2		SYSTEM-DEPENDENT FIELD
10	(A) BITSTRING	2	RBSTAB	STATUS AND ATTRIBUTE BITS (ALL RB'S)
10	(A) BITSTRING	2	XSTAB	SAME AS RBSTAB
10	(A) BITSTRING	1	RBSTAB1	FIRST BYTE OF STATUS AND ATTRIBUTE BITS
10	(A) BITSTRING	1	XSTAB1	SAME AS RBSTAB1

BITS 0-4 ARE SYSTEM-DEPENDENT BITS

.... .1..	RBFTCKPT	"BIT5"- A CHECKPOINT MAY BE TAKEN IN A USER EXIT FROM THIS SVC ROUTINE (SVRB-BOTH)
.... .1..	XRBCCKPT	"BIT5"- SAME AS RBFTCKPT

BITS 6-7 ARE SYSTEM-DEPENDENT BITS

11	(B) BITSTRING	1	RBSTAB2	SECOND BYTE OF STATUS AND ATTRIBUTE BITS
11	(B) BITSTRING	1	XSTAB2	SAME AS RBSTAB2
1...			RBTCBNXT	"BIT0"- RBLINK FIELD POINTS TO TCB (ALL RB'S)
1...			XRBCBP	"BIT0"- SAME AS RBTCBNXT
.1...			RBFACTV	"BIT1"- IRB OR SIRB IS QUEUED TO TCB PROGRAM IS ACTIVE
.1...			XRBACTV	"BIT1"- ACTIVE PROGRAM (ALL RB'S EXCEPT LPRB AND LRB FOR OS/VS1)

OFFSETS TYPE LENGTH NAME DESCRIPTION

BITS 2-5 ARE SYSTEM-DEPENDENT BITS

.... .1.	RBFdyn	"BIT6"- RB STORAGE CAN BE FREED AT EXIT		
.... .1.	XRBFRRB	"BIT6"- SAME AS RBFdyn		
.... .1	RBEcbwt	"BIT7"- IF ZERO, WAIT FOR A SINGLE EVENT OR ALL OF A NUMBER OF EVENTS IF ONE, WAIT FOR A NUMBER OF EVENTS THAT IS LESS THAN THE TOTAL NUMBER OF EVENTS WAITING		
.... .1	XRBwait	"BIT7"- SAME AS RBEcbwt		
12	(C) ADDRESS	4	SYSTEM-DEPENDENT FIELD	
16	(10) CHARACTER	8	RBOPSW	USER'S OLD PSW. THIS OFFSET FIXED BY ARCHITECTURE. (ALL RB'S EXCEPT FRB)
16	(10) CHARACTER	8	XRBPSW	SAME AS RBOPSW
16	(10) BITSTRING	1	RBOPSWB1	OLD PSW BYTE 1
	.1..		RBOPER	"X'40'"- PER BIT IN RBOPSWB1
17	(11) BITSTRING	1	RBOPSWB2	OLD PSW BYTE 2
	.... .1		RBOPSWPS	"X'01'"- PROBLEM STATE BIT IN OLD PSW
18	(12) CHARACTER	6		OLD PSW BYTES 3-8
24	(18) ADDRESS	4	SYSTEM-DEPENDENT FIELD	
28	(1C) ADDRESS	4	RBLINK	SAME AS RBLINKB BELOW. THIS OFFSET FIXED BY ARCHITECTURE.
28	(1C) ADDRESS	4	XRBLNK	SAME AS RBLINKB BELOW
28	(1C) SIGNED	1	RBWCF	NUMBER OF REQUESTS WAITING (WAIT COUNT) (ALL RB'S FOR OS/VS2)
28	(1C) SIGNED	1	XRBWT	SAME AS RBWCF (ALL RB'S EXCEPT LPRB AND LRB FOR OS/VS1)
29	(1D) ADDRESS	3	RBLINKB	ADDRESS OF PREVIOUS RB, OR ADDRESS OF TCB WHEN THIS IS FIRST RB ON THE QUEUE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
29	(1D) ADDRESS	3	XRBLNKA	(CALL RB'S FOR OS/VS2) SAME AS RBLINKB (ALL RB'S EXCEPT LPRB AND LRB FOR OS/VS1)
32	(20) CHARACTER	64	RBGRSAVE	GENERAL REGISTER SAVE AREA. THIS OFFSET FIXED BY ARCHITECTURE. (SVRB-BOTH, IRB, TIRB FOR OS/VS2)
32	(20) CHARACTER	64	XRBREG	SAME AS RBGRSAVE (IRB, SIRB, SVRB FOR OS/VS1)
32	(20) SIGNED	4	RBGRS0	SAVE AREA FOR GENERAL REGISTER 0
32	(20) SIGNED	4	XRBREG0	SAME AS RBGRS0
36	(24) SIGNED	4	RBGRS1	SAVE AREA FOR GENERAL REGISTER 1
36	(24) SIGNED	4	XRBREG1	SAME AS RBGRS1
40	(28) SIGNED	4	RBGRS2	SAVE AREA FOR GENERAL REGISTER 2
40	(28) SIGNED	4	XRBREG2	SAME AS RBGRS2
44	(2C) SIGNED	4	RBGRS3	SAVE AREA FOR GENERAL REGISTER 3
44	(2C) SIGNED	4	XRBREG3	SAME AS RBGRS3
48	(30) SIGNED	4	RBGRS4	SAVE AREA FOR GENERAL REGISTER 4
48	(30) SIGNED	4	XRBREG4	SAME AS RBGRS4
52	(34) SIGNED	4	RBGRS5	SAVE AREA FOR GENERAL REGISTER 5
52	(34) SIGNED	4	XRBREG5	SAME AS RBGRS5
56	(38) SIGNED	4	RBGRS6	SAVE AREA FOR GENERAL REGISTER 6
56	(38) SIGNED	4	XRBREG6	SAME AS RBGRS6
60	(3C) SIGNED	4	RBGRS7	SAVE AREA FOR GENERAL REGISTER 7

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
60	(3C) SIGNED	4	XRBREG7	SAME AS RBGRS7
64	(40) SIGNED	4	RBGRS8	SAVE AREA FOR GENERAL REGISTER 8
64	(40) SIGNED	4	XRBREG8	SAME AS RBGRS8
68	(44) SIGNED	4	RBGRS9	SAVE AREA FOR GENERAL REGISTER 9
68	(44) SIGNED	4	XRBREG9	SAME AS RBGRS9
72	(48) SIGNED	4	RBGRS10	SAVE AREA FOR GENERAL REGISTER 10
72	(48) SIGNED	4	XRBREG10	SAME AS RBGRS10
76	(4C) SIGNED	4	RBGRS11	SAVE AREA FOR GENERAL REGISTER 11
76	(4C) SIGNED	4	XRBREG11	SAME AS RBGRS11
80	(50) SIGNED	4	RBGRS12	SAVE AREA FOR GENERAL REGISTER 12
80	(50) SIGNED	4	XRBREG12	SAME AS RBGRS12
84	(54) SIGNED	4	RBGRS13	SAVE AREA FOR GENERAL REGISTER 13
84	(54) SIGNED	4	XRBREG13	SAME AS RBGRS13
88	(58) SIGNED	4	RBGRS14	SAVE AREA FOR GENERAL REGISTER 14
88	(58) SIGNED	4	XRBREG14	SAME AS RBGRS14
92	(5C) SIGNED	4	RBGRS15	SAVE AREA FOR GENERAL REGISTER 15
92	(5C) SIGNED	4	XRBREG15	SAME AS RBGRS15
96	(60) FLOATING	8		
96	(60) CHARACTER	48	RBEXSAVE	EXTENDED SAVE AREA FOR SVC ROUTINES (SVRB-BOTH) (OS/VS2)

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
96	(60) FLOATING	8	XRBESA(10)	SVRB EXTENDED SAVE AREA OF UP TO TEN DOUBLEWORDS REQUESTED FOR SVC ROUTINE (OS/VS1)

OS/VS2 REQUEST BLOCK

COPYRIGHT=

5740-XYN COPYRIGHT IBM CORP 1977, 1980
LICENSED MATERIAL-PROGRAM, PROPERTY OF IBM,
REFER TO COPYRIGHT INSTRUCTIONS FORM NUMBER
G120-2083.

STATUS= OS/VS2 JBB1226, 01/02/80, LEVEL=10

SVRB - SUPERVISOR REQUEST BLOCK FOR TRANSIENT SVC ROUTINES
SVRB - SUPERVISOR REQUEST BLOCK FOR RESIDENT SVC ROUTINES
IRB - INTERRUPTION REQUEST BLOCK
SIRB - SYSTEM INTERRUPT REQUEST BLOCK
PRB - PROGRAM REQUEST BLOCK
TIRB - TASK INTERRUPTION REQUEST BLOCK

METHOD OF ACCESS

THIS MACRO IS INVOKED BY IHARB WHICH MAPS THE FIELDS
THAT ARE COMMON TO OS/VS1 AND OS/VS2.

IF THIS MACRO IS INVOKED DIRECTLY IN BAL, IT WILL INVOKE
IHARB TO MAP THE COMMON FIELDS.

-64	(-40) FLOATING	8	RBPREFIX	"X"- RBSEC PTR-64
-64	(-40) ADDRESS	4	RBRSV012	RESERVED
-60	(-3C) ADDRESS	4	RBRSV013	RESERVED
-56	(-38) SIGNED	2	RBRSV014	RESERVED
-54	(-36) HEX	1	RBRSV015	RESERVED
-53	(-35) HEX	1	RBRSV016	RESERVED
-52	(-34) HEX	1	RBRSV017	RESERVED
-51	(-33) HEX	1	RBRSV018	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
-50	(-32) BITSTRING	1	RBRSV019	RESERVED
	1...		RBRSV020	"X'80',,C'X'"- RESERVED
	.1...		RBRSV021	"X'40',,C'X'"- RESERVED
	..1.		RBRSV022	"X'20',,C'X'"- RESERVED
	...1		RBRSV023	"X'10',,C'X'"- RESERVED
	.... 1...		RBRSV024	"X'08',,C'X'"- RESERVED
	.... .1..		RBRSV025	"X'04',,C'X'"- RESERVED
	.... ..1.		RBRSV026	"X'02',,C'X'"- RESERVED
	.... ...1		RBRSV027	"X'01',,C'X'"- RESERVED
-49	(-31) BITSTRING	1	RBRSV028	RESERVED
	1...		RBRSV029	"X'80',,C'X'"- RESERVED
	.1...		RBRSV030	"X'40',,C'X'"- RESERVED
	..1.		RBRSV031	"X'20',,C'X'"- RESERVED
	...1		RBRSV032	"X'10',,C'X'"- RESERVED
	.... 1...		RBRSV033	"X'08',,C'X'"- RESERVED
	.... .1..		RBRSV034	"X'04',,C'X'"- RESERVED
	.... ..1.		RBRSV035	"X'02',,C'X'"- RESERVED
	.... ...1		RBRSV036	"X'01',,C'X'"- RESERVED
-48	(-30) ADDRESS	4	RBRSV037	RESERVED
-44	(-2C) ADDRESS	4	RBRSV038	RESERVED
-40	(-28) SIGNED	2	RBRSV039	RESERVED
-38	(-26) HEX	1	RBRSV040	RESERVED
-37	(-25) BITSTRING	1	RBRSV041	RESERVED
	1...		RBRSV042	"X'80',,C'X'"- RESERVED
	.1...		RBRSV043	"X'40',,C'X'"- RESERVED
	..1.		RBRSV044	"X'20',,C'X'"- RESERVED
	...1		RBRSV045	"X'10',,C'X'"- RESERVED
	.... 1...		RBRSV046	"X'08',,C'X'"- RESERVED
	.... .1..		RBRSV047	"X'04',,C'X'"- RESERVED
	.... ..1.		RBRSV048	"X'02',,C'X'"- RESERVED
	.... ...1		RBRSV049	"X'01',,C'X'"- RESERVED
-36	(-24) ADDRESS	4	RBRSV050	RESERVED
-32	(-20) FLOATING	8	RBPRFXST	START OF ASSIGNED FIELDS IN RB PREFIX

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
-32 (-20)	ADDRESS	4	RBXSB	ADDRESS OF EXTENDED STATUS BLOCK (XSB). SERIALIZATION TCBACTIV. OWNERSHIP SUPERVISOR.
-28 (-1C)	SIGNED	2	RBRSV052	RESERVED
-26 (-1A)	HEX	1	RBRSV053	RESERVED
-25 (-19)	BITSTRING	1	RBRSV054	RESERVED
1...			RBRSV055	"X'80',,C'X'"- RESERVED
.1..			RBRSV056	"X'40',,C'X'"- RESERVED
..1.			RBRSV057	"X'20',,C'X'"- RESERVED
...1			RBRSV058	"X'10',,C'X'"- RESERVED
.... 1...			RBRSV059	"X'08',,C'X'"- RESERVED
.... .1..			RBRSV060	"X'04',,C'X'"- RESERVED
.... ..1.			RBRSV061	"X'02',,C'X'"- RESERVED
.... ...1			RBRSV062	"X'01',,C'X'"- RESERVED
-24 (-18)	FLOATING	8		
-24 (-18)	CHARACTER	16	RBRTOPSW	PROGRAM STATUS INFORMATION STORED AT TIME OF INTERRUPT CAUSING ENTRY INTO THE RTM
-24 (-18)	CHARACTER	8	RBRTPSW1	FIRST DOUBLE WORD OF PSW SYSTEM AND PRO- GRAM MASKS, KEY CONDITION CODE AND INSTRUCTION COUNTER
-16 (-10)	CHARACTER	8	RBRTPSW2	SECOND DOUBLE WORD OF PSW
-16 (-10)	CHARACTER	4	RBRTICIL	ILC AND INTERRUPT CODE
-16 (-10)	HEX	1	RBRSV160	RESERVED SET TO ZERO IN LOW CORE BY HARDWARE
-15 (-F)	SIGNED	1	RBRTILC	INSTRUCTION LENGTH COUNTER NUMBER OF BYTES IN INSTRUCTION CAUSING INTERRUPT
-14 (-E)	SIGNED	2	RBRTINCD	INTERRUPT CODE
-12 (-C)	ADDRESS	4	RBRTRAN	VIRTUAL ADDRESS CAUSING TRANSLATION EXCEPTION IF PROGRAM INTERRUPT 16, 17 OR 18. OTHERWISE, NOT USED.

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
-8	(-8) BITSTRING	1	RBFLAGS1	FLAG BYTE
	1...		RBSLOCK	"BIT0"- INDICATES THAT THIS RB IS NON-DISPATCHABLE UNTIL THE SUPERVISOR LOCK (CVTSYLK) IS RESET (ALL RB'S)
	.1...		RBXWAIT	"BIT1"- INDICATES THAT THE PROGRAM OPERATING UNDER THIS RB HAS ISSUED AN EXPLICIT (SVC) WAIT (ALL RB'S)
	.1.		RBABEND	"BIT2"- ABEND SVRB (SVRB-BOTH)
	...1		RBXWPRM	"BIT3"- WAIT POST RESOURCE MANAGER REQUEST
	.... 1...		RBASIR	"BIT4"- ASIR IS RUNNING UNDER THIS RB
	.... .1..		RBLONGWT	"BIT5"- LONG WAIT ISSUED UNDER THIS RB
	.... ..1.		RBSCB	"BIT6"- SET BY SVC 60 TO INDICATE RB HAS AN ASSOCIATED ESTAE OR STAE EXIT
	.... ...1		RBSSSYN	"BIT7"- SYNCHRONIZED STATUS STOP PENDING FOR THIS RB
-7	(-7) HEX	1	RBRSV170	RESERVED
-6	(-6) SIGNED	2	RBXWAITI	EXPLICIT WAIT INDEX
-4	(-4) SIGNED	1	RBWCSA	NUMBER OF REQUESTS WAITING AT TIME OF TERMINATION (WAIT COUNT SAVE AREA) (ALL RB'S)
-3	(-3) CHARACTER	3	RBINTCDA	INTERRUPT CODE (ALL RB'S)
-3	(-3) CHARACTER	1	RBINLNTH	INSTRUCTION LENGTH CODE 4 HIGH-ORDER BITS MUST BE ZERO. THIS OFFSET FIXED BY ARCHITECTURE. (ALL RB'S)
-2	(-2) CHARACTER	2	RBINTCOD	INTERRUPT CODE. THIS OFFSET FIXED BY ARCHITECTURE. (ALL RB'S)
0	(0) CHARACTER	1	RBPRFXND	END OF RB PREFIX
0	(0) FLOATING	8	RBSECT	"*"- RBSECPTR THIS IS THE START OF THE BASIC SECTION OF THE RB
0	(0) ADDRESS	4	RBPPSAV	ADDRESS OF PROBLEM PROGRAM REGISTER SAVE AREA (IRB)

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) BITSTRING	1		RBTMFLD
1	(1) ADDRESS	3	RBPPSAV1	ADDRESS OF PROBLEM PROGRAM REGISTER SAVE AREA (IRB)
4	(4) CHARACTER	4	RBABOPSW	AFTER EXECUTION OF TRANSIENT AREA HANDLER ROUTINE FOUR LOW-ORDER BYTES OF NAME OF REQUESTED ROUTINE (SVRB-TRANS)
8	(8) SIGNED	2	RBSIZE	SIZE OF THIS RB IN DOUBLEWORDS (ALL RB'S)
10	(A) BITSTRING	2		RBSTAB
10	(A) BITSTRING	1		RBSTAB1
111.	RBFTP			"BIT0+BIT1+BIT2"- TYPE OF RB
....	RBFTP RB			"X'00'"- PRB
.11.	RBFTTIRB			"BIT1+BIT2"- TIRB
.1..	RBFTIRB			"BIT1"- IRB
1...	RBFTSIRB			"BIT0"- SIRB
11..	RBFTSVRB			"BIT0+BIT1"- SVRB
...1	RBTRSVRB			"BIT3"- IF RBTRSVRB=0 AND RBCDE=0, THEN TYPE 2 SVC IN NUCLEUS. IF RBTRSVRB=0 AND RBCDE1 NOT 0, THEN SECOND OR SUBSEQUENT LOAD OF TYPE 4 SVC IN FIXED OR MODIFIED LPA (RBCDE1 = ADDRESS OF CDE). IF RBTRSVRB=1 AND RBCDE1=0, THEN TYPE 3 OR FIRST LOAD OF TYPE 4 SVC IN PAGED, FIXED OR MODIFIED LPA. IF RBTRSVRB=1 AND RBCDE1 NOT 0, THEN SECOND OR SUBSEQUENT LOAD OF TYPE 4 SVC IN PAGED LPA (RBCDE1 = ADDRESS OF LPDE).
...1	RBFNSVRB			"BIT3"- ALIAS FOR RBTRSVRB
.... 1...	RBWAITP			"BIT4"- INDICATES THAT AN ECB IS POINTING AT THE RB.

RBFTCKPT EQU BITS5 -

SEE COMMON SECTION

.... .1.	RBATNXIT	"BIT6"- THIS IRB IS AN ATTENTION IRB
.... .1	RBPMNSVRB	"BIT7"- THIS IS A PROGRAM MANAGER SVRB VALID ONLY ON LINK, LOAD, XCTL OR ATTACH
11 (B) BITSTRING	1	RBSTAB2

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
---------	------	--------	------	-------------

RBTCBNXT	EQU	BIT0 -	SEE COMMON SECTION
RBFACTV	EQU	BIT1 -	SEE COMMON SECTION

...1.	RBATTN	"BIT2"- EXITING PROGRAM IS AN ATTENTION EXIT (IRB)
...1	RBETXR	"BIT3"- IRB IS FOR AN ETXR EXIT ROUTINE
...1	RBUSIQE	"BIT3"- SAME AS RBETXR
.... 11..	RBIQETP	"BIT4+BIT5"-
....	RBRQENR	"X'00'"- REQUEST QUEUE ELEMENT IS NOT TO BE RETURNED
.... .1..	RBIKBAER	"BIT5"- IRB HAS QUEUE ELEMENTS FOR ASYNCHRONOUSLY EXECUTED ROUTINES THAT ARE RQE'S
.... 1...	RBIQENR	"BIT4"- IQE IS NOT TO BE RETURNED AT EXIT
.... 11..	RBIKBAIQ	"BIT4+BIT5"- IRB HAS QUEUE ELEMENTS FOR ASYNCHRONOUSLY EXECUTED ROUTINES THAT ARE IQE'S

RBFDYN	EQU	BIT6 -	SEE COMMON SECTION
RBECKWT	EQU	BIT7 -	SEE COMMON SECTION

12	(C) ADDRESS	4	RBEP	ENTRY POINT ADDRESS OF ASYNCHRONOUSLY EXECUTED ROUTINE (IRB, SIRB)
16	(10) CHARACTER	8	RBOPSW	
24	(18) ADDRESS	4	RBPGMQ	SAME AS RBPGMQ1 BELOW
24	(18) HEX	1		ZERO
25	(19) ADDRESS	3	RBPGMQ1	ADDRESS OF RB INDICATING A REQUEST TO USE SAME SERIALLY REUSABLE PROGRAM (SVRB-RES, PRB)

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
28	(1C) ADDRESS	4		RBLINK
28	(1C) SIGNED	1		RBWCF
28	(1C) SIGNED	1	RBSCF	RB SUSPENDED COUNT
29	(1D) ADDRESS	3		RBLINKB
32	(20) CHARACTER	64		RBGRSAVE
96	(60) SIGNED	4	IRBEND	END OF IRB UNLESS OPTIONAL FIELDS RBNEX- AV AND RBIQEWRK ARE PRESENT
96	(60) CHARACTER	48		RBEXSAVE
96	(60) ADDRESS	4	RBRSV135	RESERVED
100	(64) SIGNED	2	RBRSV136	RESERVED
102	(66) HEX	1	RBRSV137	RESERVED
103	(67) BITSTRING	1	RBRSV138	RESERVED
	1...		RBRSV139	"X'80',,C'X'"- RESERVED
	.1...		RBRSV140	"X'40',,C'X'"- RESERVED
	..1.		RBRSV141	"X'20',,C'X'"- RESERVED
	...1		RBRSV142	"X'10',,C'X'"- RESERVED
	.... 1...		RBRSV143	"X'08',,C'X'"- RESERVED
	.... .1..		RBRSV144	"X'04',,C'X'"- RESERVED
	.... ..1.		RBRSV145	"X'02',,C'X'"- RESERVED
	.... ....1		RBRSV146	"X'01',,C'X'"- RESERVED
104	(68) SIGNED	4	PRBEND	END OF PRB
104	(68) SIGNED	4	TIRBEND	END OF TIRB
104	(68) CHARACTER	40		LAST 40 BYTES OF RBEXSAVE
144	(90) CHARACTER	24	RBSCBB	AREA CONTAINING STAE CONTROL BLOCK (SCB) (SVRB ONLY)
144	(90) ADDRESS	4	RBSCHAIN	POINTER TO NEXT SCB ON CHAIN
148	(94) ADDRESS	4	RBSEXIT	POINTER TO USER WRITTEN EXIT ROUTINE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
152	(98) ADDRESS	4	RBSParm	ADDRESS OF PARAMETER LIST FOR STA EXIT
152	(98) BITSTRING	1	RBSFLGS1	FIRST FLAG BYTE
1...	....		RBSSTAI	"BIT0"- STAI SCB
.1..	....		RBSSTAR	"BIT1"- STAR SCB. SCB IF FOR STAE IF NEITHER RBSSTAI NOR RBSSTAR BIT IS SET ON.
..1.	....		RBSDUMMY	"BIT2"- DUMMY SCB (WILL NOT BE SCHEDULED)
...1	....		RBSESTAE	"BIT3"- ESTAE INDICATOR
.... 1..			RBRSV162	"BIT4"- RESERVED
.... .1..			RBSASYNC	"BIT5"- ALLOW ASYNCHRONOUS INTERRUPTS
.... ..11			RBSIOPRC	"BIT6+BIT7"- I/O PROCESSING OPTION. BOTH BITS OFF MEANS QUIESCE I/O. BOTH BITS ON IS NOT DEFINED.
.... ..1.			RBSNOIOP	"BIT6"- BYPASS I/O INTERVENTION
.... ...1			RBSHALT	"BIT7"- HALT I/O
153	(99) ADDRESS	3	RBSPARMA	ADDRESS OF PARAMETER LIST FOR STA EXIT
156	(9C) ADDRESS	4	RBSOWNR	TCB/RB ADDRESS CONTROLLING THIS SCB
156	(9C) BITSTRING	1	RBSFLGS2	SECOND FLAG BYTE
1...	....		RBRSV163	"BIT0"- RESERVED
.1..	....		RBSXCTL2	"BIT1"- RETAIN THIS SCB ACROSS XCTL
..1.	....		RBRSV164	"BIT2"- RESERVED
...1	....		RBSINUSE	"BIT3"- THIS SCB IN USE
.... 1..			RBRSV165	"BIT4"- RESERVED
.... .1..			RBRSV166	"BIT5"- RESERVED
.... ..1.			RBSKEY0	"BIT6"- USER IN KEY 0
.... ...1			RBSSUPER	"BIT7"- USER IN SUPERVISOR MODE
157	(9D) ADDRESS	3	RBSOWNRA	RB ADDRESS IF STAE/STAR, TCB ADDRESS IF STAI
160	(A0) SIGNED	4	RBSData	FLAGS AND DATA FIELD
160	(A0) BITSTRING	1	RBSFLG3	OPTION FLAGS
1...	....		RBRSV167	"BIT0"- RESERVED
.1..	....		RBSTERMI	"BIT1"- AUTHORIZED FOR TERM PROCESSING
..1.	....		RBSRECRD	"BIT2"- ERROR RECORD TO BE WRITTEN TO SYS1.LOGREC
...1	....		RBSCNCEL	"BIT3"- SCB IS LOGICALLY CANCELED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
	.... 1...		RBSRNTR	"BIT4"- SCB IS PREVIOUSLY ENTERED
	.... .1..		RBSRNTR	"BIT5"- BRANCH ENTERED SVC 60
	.... ..1.		RBSTERMO	"BIT6"- TERM PROCESSING ONLY
	.... ...1		RBRSV168	"BIT7"- RESERVED
161	(A1) CHARACTER	1	RBSPKEY	PROGRAM KEY
162	(A2) CHARACTER	1	RBSID	SCB IDENTIFIER
163	(A3) HEX	1	RBRSV169	RESERVED
164	(A4) ADDRESS	4	RBSXPTR	POINTER TO SCB EXTENSION (SCBX)
168	(A8) SIGNED	4	SIRBEND	END OF SIRB MDC021-
168	(A8) SIGNED	4	RBFEPARM(6)	PARAMETER AREA FOR ROUTINES THAT USE FESTAE AND DEFAULT TO USE THIS AREA (I.E., DO NOT CODE PARAM=)
192	(C0) CHARACTER	16	RBSCBX	AREA CONTAINING STAE CONTROL BLOCK EXTENSION(SCBX)(SVRB ONLY)
208	(D0) SIGNED	4	SVRBEND	END OF SVRB (BOTH)
12	(C) ADDRESS	4	RBCDE	SAME AS RBCDE1 BELOW
12	(C) BITSTRING	1	RBCDFLGS	CONTROL FLAGS
1...			RBNOCELL	"BIT0"- EXIT SHOULD FREEMAIN THIS SVRB RATHER THAN FREECELL
.1...			RBRSV009	"BIT1", C'X'"- RESERVED
..1.			RBCDATCH	"BIT2"- CONTENTS SUPERVISION HAS BEEN ENTERED VIA ATTACH
...1			RBCDSAVE	"BIT3"- EXIT WILL LOAD REGISTERS FROM PRB ON RETURN FROM SYNCH TO ROUTINE
.... 1...			RBCDNODE	"BIT4"- NO DE SAVE AREA REQUIRED
.... .1..			RBCDSYNC	"BIT5"- SYNCH MACRO INSTRUCTION REQUESTED
.... ..1.			RBCDXCTL	"BIT6"- XCTL MACRO INSTRUCTION REQUESTED
.... ...1			RBCDLOAD	"BIT7"- LOAD MACRO INSTRUCTION REQUESTED
13	(D) ADDRESS	3	RBCDE1	ADDRESS OF CDE, ADDRESS OF LPDE OR ZERO (SEE COMMENTS FOR BIT RBTRSVRB)
24	(18) ADDRESS	4	RBSQE	SAME AS RBSQEA BELOW

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
24	(18) SIGNED	1		RBUSE CONTAINS ZEROS
25	(19) ADDRESS	3	RBSQEA	CHAIN OF SUPERVISOR QUEUE ELEMENTS (SQE'S) WHICH REPRESENT ASYNCHRONOUS SUPERVISOR SERVICE REQUESTS RELATED TO TCB UNDER WHICH TIRB IS PRESENTLY OPERATING (TIRB)
24	(18) ADDRESS	4	RBIQE	LIST ORIGIN FOR IQE (IRB)
24	(18) SIGNED	1	RBUSE	USE COUNT USED BY ATTACH (IRB)
25	(19) ADDRESS	3	RBIQE1	LIST ORIGIN FOR IQE (IRB)
24	(18) SIGNED	4	RBIQE2	
24	(18) SIGNED	4	RBIQEA	LIST ORIGIN FOR RQE (IRB WITH 4-BYTE LINK FIELD SEGMENT, SIRB)
96	(60) ADDRESS	4	RBNEXAV	ADDRESS OF NEXT AVAILABLE IQE (IRB)
100	(64) SIGNED	4	RBIQEWRK	IQE WORK SPACE, VARIABLE LENGTH, MAXIMUM SIZE IS 1984 BYTES (IRB)
96	(60) CHARACTER	64	RBSIRBWA	SIRB WORK AREA
160	(A0) ADDRESS	4	RBRSV161	RESERVED RBRSV148 FOLLOWS THIS FIELD
.1..			SIRBWALN	"64"- LENGTH OF RBSIRBWA
.1..			RBPRFXLN	"RBPRFXND-RBPREFIX"- TOTAL PREFIX LENGTH INCLUDING AREA RESERVED FOR FUTURE EXPANSION
..1.			RBPRFLNA	"RBPRFXND-RBPRFXST"- ASSIGNED PREFIX LENGTH
1... 1...			PRBLEN	"PRBEND-RBPRFXST"- REAL PRB LENGTH FOR GETMAIN
11.. 1...			SIRBLEN	"SIRBEND-RBPRFXST"- REAL SIRB LENGTH FOR GETMAIN
1... 1...			TIRBLEN	"TIRBEND-RBPRFXST"- REAL TIRB LENGTH FOR GETMAIN
1...			IRBLEN	"IRBEND-RBPRFXST"- REAL IRB LENGTH FOR GETMAIN UNLESS OPTIONAL FIELDS ARE ALSO

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
1111			SVRBLLEN	PRESENT "SVRBEND-RBPRFXST"- REAL SVRB LENGTH FOR GETMAIN

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
IRBEND	60		RBGRS11	4C		RBPREFIX	-40	00
IRBLEN	A0	80	RBGRS12	50		RBPRFLNA	A0	20
PRBEND	68		RBGRS13	54		RBPRFX	0	
PRBLEN	A0	88	RBGRS14	58		RBPRFXLN	A0	40
RBABEND	-8	20	RBGRS15	5C		RBPRFXND	0	
RBABOPSW	4		RBGRS2	28		RBPRFXST	-20	
RBASIR	-8	08	RBGRS3	2C		RBRQENR	B	00
RBATNXIT	A	02	RBGRS4	30		RBRREQ	0	03
RBATTN	B	20	RBGRS5	34		RBRSV005	0	20
RBBASIC	-40	40	RBGRS6	38		RBRSV009	C	40
RBCDATCH	C	20	RBGRS7	3C		RBRSV012	-40	
RBCDE	C		RBGRS8	40		RBRSV013	-3C	
RBCDE1	D		RBGRS9	44		RBRSV014	-38	
RBCDFLGS	C		RBINLNTH	-3		RBRSV015	-36	
RBCDLOAD	C	01	RBINTCDA	-3		RBRSV016	-35	
RBCDNCDE	C	08	RBINTCOD	-2		RBRSV017	-34	
RBCDSAVE	C	10	RBIQE	18		RBRSV018	-33	
RBCDSYNC	C	04	RBIQEA	18		RBRSV019	-32	
RBCDXCTL	C	02	RBIQENR	B	08	RBRSV020	-32	80
RBECBWT	B	01	RBIQETP	B	0C	RBRSV021	-32	40
RBEP	C		RBIQEWRK	64		RBRSV022	-32	20
RBETXR	B	10	RBIQE1	19		RBRSV023	-32	10
RBEXRTNM	0		RBIQE2	18		RBRSV024	-32	08
RBEXSAVE	60		RBIRBAER	B	04	RBRSV025	-32	04
RBFACTV	B	40	RBIRBAIQ	B	0C	RBRSV026	-32	02
RBFDYN	B	02	RBLINK	1C		RBRSV027	-32	01
RBFEPARM	A8		RBLINKB	1D		RBRSV028	-31	
RBFLAGS1	-8		RBLONGWT	-8	04	RBRSV029	-31	80
RBFNSVRB	A	10	RBNEXAV	60		RBRSV030	-31	40
RBFTCKPT	A	04	RBNOCCELL	C	80	RBRSV031	-31	20
RBFTIRB	A	40	RBOPER	10	40	RBRSV032	-31	10
RBFTP	A	E0	RBOPSW	10		RBRSV033	-31	08
RBFTPRB	A	00	RBOPSWB1	10		RBRSV034	-31	04
RBFTSIRB	A	80	RBOPSWB2	11		RBRSV035	-31	02
RBFTSVRB	A	C0	RBOPSWPS	11	01	RBRSV036	-31	01
RBFTTIRB	A	60	RBPGMQ	18		RBRSV037	-30	
RBGRSAVE	20		RBPGMQ1	19		RBRSV038	-2C	
RBGRS0	20		RBPMNSVRB	A	01	RBRSV039	-28	
RBGRS1	24		RBPPSAV	0		RBRSV040	-26	
RBGRS10	48		RBPPSAV1	1		RBRSV041	-25	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RBRSV042	-25	80	RBRSV170	-7		RBSSSYN	-8	01
RBRSV043	-25	40	RBRTICIL	-10		RBSSTAI	98	80
RBRSV044	-25	20	RBRTILC	-F		RBSSTAR	98	40
RBRSV045	-25	10	RBRTINCD	-E		RBSSUPER	9C	01
RBRSV046	-25	08	RBRTOPSW	-18		RBSTAB	A	
RBRSV047	-25	04	RBRTPSW1	-18		RBSTAB1	A	
RBRSV048	-25	02	RBRTPSW2	-10		RBSTAB2	B	
RBRSV049	-25	01	RBRTTRAN	-C		RBSTERMI	A0	40
RBRSV050	-24		RBSASYNC	98	04	RBSTERMO	A0	02
RBRSV052	-1C		RBSBRNTR	A0	04	RBSXCTL2	9C	40
RBRSV053	-1A		RBSBCB	-8	02	RBSXPTR	A4	
RBRSV054	-19		RBSBCB	90		RBTCBNXT	B	80
RBRSV055	-19	80	RBSBCBX	C0		RBTMCMPP	0	08
RBRSV056	-19	40	RBSFC	1C		RBTMFLD	0	
RBRSV057	-19	20	RBSCHAIN	90		RBTMIND2	0	04
RBRSV058	-19	10	RBSNCCEL	A0	10	RBTMIND3	0	03
RBRSV059	-19	08	RBSDATA	A0		RBTMQUE	0	80
RBRSV060	-19	04	RBSDUMMY	98	20	RBTMTOD	0	40
RBRSV061	-19	02	RBSECT	0	40	RBTREQ	0	00
RBRSV062	-19	01	RBSESTAE	98	10	RBTRSVRB	A	10
RBRSV135	60		RBSEXIT	94		RBUSE	18	
RBRSV136	64		RBSFLGS1	98		RBUSIQE	B	10
RBRSV137	66		RBSFLGS2	9C		RBWAITP	A	08
RBRSV138	67		RBSFLG3	A0		RBWCF	1C	
RBRSV139	67	80	RBSHALT	98	01	RBWCSA	-4	
RBRSV140	67	40	RBSID	A2		RBWLIM	0	10
RBRSV141	67	20	RBSINUSE	9C	10	RBWREQ	0	01
RBRSV142	67	10	RBSIOPRC	98	03	RBXSB	-20	
RBRSV143	67	08	RBSIRBWA	60		RBXWAIT	-8	40
RBRSV144	67	04	RBSIZE	8		RBXWAITI	-6	
RBRSV145	67	02	RBSKEY0	9C	02	RBXWPRM	-8	10
RBRSV146	67	01	RBSLOCK	-8	80	SIRBEND	A8	
RBRSV160	-10		RBSNOIOP	98	02	SIRBLEN	A0	C8
RBRSV161	A0		RBSOWNR	9C		SIRBWALN	A0	40
RBRSV162	98	08	RBSOWNRA	9D		SVRBEND	D0	
RBRSV163	9C	80	RBSPARM	98		SVRBLEN	A0	F0
RBRSV164	9C	20	RBSPARMA	99		TIRBEND	68	
RBRSV165	9C	08	RBSKEY	A1		TIRBLEN	A0	88
RBRSV166	9C	04	RBSPRNTR	A0	08	XRBACTV	B	40
RBRSV167	A0	80	RBSQE	18		XRBCKPT	A	04
RBRSV168	A0	01	RBSQEA	19		XRBESA	60	
RBRSV169	A3		RBSRECRD	A0	20	XRBFRRB	B	02

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>NAME</u>	<u>HEX OFFSET</u>	<u>HEX VALUE</u>	<u>NAME</u>	<u>HEX OFFSET</u>	<u>HEX VALUE</u>	<u>NAME</u>	<u>HEX OFFSET</u>	<u>HEX VALUE</u>
XRBLNK	1C		XRBREG13	54		XRBREG8	40	
XRBLNKA	1D		XRBREG14	58		XRBREG9	44	
XRBPSW	10		XRBREG15	5C		XRBTCBP	B	80
XRBREG	20		XRBREG2	28		XRBWAIT	B	01
XRBREG0	20		XRBREG3	2C		XRBWT	1C	
XRBREG1	24		XRBREG4	30		XSTAB	A	
XRBREG10	48		XRBREG5	34		XSTAB1	A	
XRBREG11	4C		XRBREG6	38		XSTAB2	B	
XRBREG12	50		XRBREG7	3C				

RCA

Common Name : Recovery Communications Area
Macro ID : IHARCA
DSECT Name : RCA
Created by : RSM (during SETFRR processing)
Subpool and Key : Nucleus (PSA) and key 0.
Size : 24 bytes
Pointed to by : RCAPTR
Serialization : Disablement
Function : Contains information for RSM's functional recovery routines.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
1...	BIT0			"128"
.1..	BIT1			"64"
..1..	BIT2			"32"
...1..	BIT3			"16"
....1..	BIT4			"8"
....1..	BIT5			"4"
....1..	BIT6			"2"
....1..	BIT7			"1"
0	(0) STRUCTURE	0	RCA	, RCAPTR
0	(0) SIGNED	4	RCAPARMO	VALUE TO BE PLACED IN REGISTER 0 WHEN ROUTINE RETRY IS INVOKED.
4	(4) SIGNED	4	RCAPARM1	VALUE TO BE PLACED IN REGISTER 1 WHEN ROUTINE RETRY IS INVOKED.
8	(8) HEX	1	RCARSV1	RESERVED
9	(9) HEX	1	RCACSECT	ID OF THE MODULE IN CONTROL
			RCACRCF3	"X'04'" IEAVRCF3 MODULE ID
			RCACPS	"X'08'" IEAVPSI MODULE ID
			RCACINIT	"X'0C'" IEAVITAS MODULE ID
			RCACRSB	"X'10'" IEAVPRSB MODULE ID
			RCACREAT	"X'14'" IEAVCSEG MODULE ID
			RCACDEST	"X'18'" IEAVDSEG MODULE ID
			RCACRECF	"X'1C'" IEAVRCF MODULE ID
			RCACREPL	"X'20'" IEAVRFR MODULE ID

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
			RCACDELE	"X'24'" IEAVDLAS MODULE ID
			RCACSQA	"X'28'" IEAVSQA MODULE ID
			RCACSWPC	"X'2C'" IEAVSWPC MODULE ID
			RCACWND	"X'30'" IEAVWND MODULE ID
			RCACSWPP	"X'34'" IEAVSWPP MODULE ID
			RCACPIX	"X'38'" IEAVPIX MODULE ID
			RCACPGFL	"X'3C'" IEAVFXLD MODULE ID
			RCACPGOT	"X'40'" IEAVOUT MODULE ID
			RCACINIO	"X'44'" IEAVPIOI MODULE ID
			RCACVRL	"X'48'" IEAVEQR MODULE ID
			RCACPGRL	"X'4C'" IEAVRELS MODULE ID
			RCACPGFR	"X'50'" IEAVFREE MODULE ID
			RCACREP	"X'60'" IEAVPCB MODULE ID
			RCACPOST	"X'70'" IEAVPIOP MODULE ID
			RCACCOMP	"X'80'" IEAVIOCP MODULE ID
			RCACVAM	"X'90'" IEAVAMSI MODULE ID
			RCACSPIN	"X'A0'" IEAVSWIN MODULE ID
			RCACPTRM	"X'B0'" IEAVTERM MODULE ID
			RCACSPOT	"X'C0'" IEAVSOUT MODULE ID
			RCACGFAX	"X'D0'" IEAVGFAX MODULE ID
			RCACGFA	"X'E0'" IEAVGFA MODULE ID
			RCAFRMD	"X'F0'" IEAVFRMD MODULE ID
10	(A) BITSTRING	1	RCAFLAGS	FLAG BYTE
			RCALOCKS	"RCAFLAGS"
			RCASAL	"BIT0"- 1 SALLOC LOCK AQUIRED
			RCALL	"BIT1"- 1 LOCAL LOCK AQUIRED
			RCAAABEND	"BIT2"- 1 RSM IS ABENDING CALLER
			RCAPSIER	"BIT3"- 1 PSI ABENDED WITH INPUT ERROR
			RCAQS	"BIT4"- 1 RSM QUEUES ARE BEING ALTERED

BIT 5 IS RESERVED

.... .1. RCADISP "BIT6"- 1 DISP LOCK ACQUIRED

BIT 7 IS RESERVED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
11	(B) BITSTRING	1	RCARCRD	REASON CODE
12	(C) BITSTRING	1	RCANAME1	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. SET TO 0 ON EXIT.
	1...		RCAVAMSI	"BIT0"- IEAVAMSI FLAG
	.1...		RCACSEG	"BIT1"- IEAVCSEG FLAG
	..1.		RCADLAS	"BIT2"- IEAVDLAS FLAG
	...1		RCADSEG	"BIT3"- IEAVDSEG FLAG
	.... 1...		RCAVEQR	"BIT4"- IEAVEQR FLAG
	.... .1..		RCAFXLD	"BIT5"- IEAVFXLD FLAG
	.... ..1.		RCAGFA	"BIT6"- IEAVGFA FLAG
	.... ...1		RCAINV	"BIT7"- IEAVINV FLAG
13	(D) BITSTRING	1	RCANAME2	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. SET TO 0 ON EXIT.
	1...		RCAIOPC	"BIT0"- IEAVIOPC FLAG
	.1...		RCAITAS	"BIT1"- IEAVITAS FLAG
	..1.		RCAOUT	"BIT2"- IEAVOUT FLAG
	...1		RCAPCB	"BIT3"- IEAVPCB FLAG
	.... 1...		RCAPFTE	"BIT4"- IEAVPFTE FLAG
	.... .1..		RCASWPP	"BIT5"- IEAVSWPP FLAG
	.... ..1.		RCASWPC	"BIT6"- IEAVSWPC FLAG
	.... ...1		RCAPIOP	"BIT7"- IEAVPIOP FLAG
14	(E) BITSTRING	1	RCANAME3	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. SET TO 0 ON EXIT.
	1...		RCAPIX	"BIT0"- IEAVPIX FLAG
	.1...		RCAPS112	"BIT1"- IGC112 FLAG
	..1.		RCAPSIB	"BIT2"- IEAVPSIB FLAG
	...1		RCAPSII	"BIT3"- IEAVPSII FLAG
	.... 1...		RCARCF	"BIT4"- IEAVRCF AND IEAVRCF3 FLAG
	.... .1..		RCARCFI	"BIT5"- IEAVRCFI FLAG
	.... ..1.		RCARELS	"BIT6"- IEAVRELS FLAG
	.... ...1		RCARFR	"BIT7"- IEAVRFR FLAG
15	(F) BITSTRING	1	RCANAME4	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. SET TO 0 ON EXIT.
	1...		RCASOUT	"BIT0"- IEAVSOUT FLAG
	.1...		RCASWIN	"BIT1"- IEAVSWIN FLAG
	..1.		RCASQA	"BIT2"- IEAVSQA FLAG
	...1		RCATERM	"BIT3"- IEAVTERM FLAG
	.... 1...		RCAVEQRC	"BIT4"- IEAVEQRC FLAG
	.... .1..		RCAVEQRF	"BIT5"- IEAVEQRF FLAG

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		.... .1.	RCAVEQRI	"BIT6"- IEAVEQRI FLAG
		.... .1	RCAGFAD	"BIT7"- IEAVGFAD FLAG
16	(10) BITSTRING	1	RCANAME5	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. SET TO 0 ON EXIT.
		1...	RCARELF	"BIT0"- IEAVREL/IEAVRLF FLAG: THE TWO DEFFERRED RELEASE ENTRY POINTS TO IEAV- RELS SHARE THIS BIT
		.1..	RCARELV	"BIT1"- IEAVRELV FLAG
		.1.	RCASIRT	"BIT2"- IEAVSIRT FLAG
		...1	RCARF3I	"BIT3"- IEAVRF3I FLAG
		.... 1...	RCAOPBR	"BIT4"- IEAVOPBR FLAG
		.... .1..	RCAPSXM	"BIT5"- IEAVPSXM FLAG
		.... .1.	RCARFR2	"BIT6"- IEAVRFR2 FLAG
		.... .1	RCAFREE	"BIT7"- IEAVFREE FLAG
17	(11) BITSTRING	1	RCANAME6	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. SET TO 0 ON EXIT.
		1...	RCAPS113	"BIT0"- IGC113 FLAG
		.1..	RCAFXL	"BIT1"- IEAVFXL FLAG
		.1.	RCACSGB	"BIT2"- IEAVCSGB FLAG
		...1	RCARCF	"BIT3"- IEAVRCFC FLAG
		.... 1...	RCAVEQRP	"BIT4"- IEAVEQRP FLAG
		.... .1..	RCAPSIX	"BIT5"- IEAVPSIX FLAG
		.... .1.	RCAPSIF	"BIT6"- IEAVPSIF FLAG
		.... .1	RCAREP1	"BIT7"- IEAVREP1 FLAG
18	(12) BITSTRING	1	RCANAME7	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. ZERO ON EXIT.
		.1..	RCAPSIY	"BIT1"- IEAVPSIY FLAG
		.1.	RCAPRSB	"BIT2"- IEAVPRSB FLAG
		...1	RCAPRSR	"BIT3"- IEAVPRSR FLAG
		.... 1...	RCAPRSS	"BIT4"- IEAVPRSS FLAG
		.... .1..	RCAPFOS	"BIT5"- IEAVPFOS FLAG
		.... .1.	RCAPREF	"BIT6"- IEAVPREF FLAG
19	(13) BITSTRING	1	RCANAME8	BIT MAP REPRESENTING RSM ENTRY POINTS SET TO 1 ON ENTRY. ZERO ON EXIT.
		1...	RCARLF	"BIT0"- IEAVRLF FLAG
		.1..	RCAANYW	"BIT1"- IEAVANYW FLAG
		..1.	RCAWNDI	"BIT2"- IEAVWNDI FLAG
		...1	RCAWNDE	"BIT3"- IEAVWNDE FLAG

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
			RCAGFAX	"BIT4"- IEAVGFAX FLAG
			RCADSCD	"BIT5"- IEAVDSCD FLAG
20	(14) SIGNED	4	RCARETAD	ADDRESS OF RETRY ROUTINE TO BE INVOKED IF AN UNEXPECTED ERROR OCCURS.
			RCALENTH	"X-RCA"- LENGTH OF RCA

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
BIT0	A0	80	RCACVAM	9	90	RCAPRSS	12	10
BIT1	A0	40	RCACVR	9	48	RCAPRSS	12	08
BIT2	A0	20	RCACWND	9	30	RCAPSIB	E	20
BIT3	A0	10	RCADISP	A	02	RCAPSIER	A	10
BIT4	A0	08	RCADLAS	C	20	RCAPSIF	11	02
BIT5	A0	04	RCADSCD	13	04	RCAPSII	E	10
BIT6	A0	02	RCADSEG	C	10	RCAPSIX	11	04
BIT7	A0	01	RCAFLAGS	A		RCAPSIY	12	40
RCA	0		RCAFREE	10	01	RCAPSXM	10	04
RCAABEND	A	20	RCAFRMD	9	F0	RCAPS112	E	40
RCAANYW	13	40	RCAFXL	11	40	RCAPS113	11	80
RCACCOMP	9	80	RCAFXLD	C	04	RCAQS	A	08
RCACDELE	9	24	RCAGFA	C	02	RCARCF	E	08
RCACDEST	9	18	RCAGFAD	F	01	RCARCF	11	10
RCACGFA	9	E0	RCAGFAX	13	08	RCARCFI	E	04
RCACGFAX	9	D0	RCAINV	C	01	RCARCRD	B	
RCACINIO	9	44	RCAIOP	D	80	RCARELF	10	80
RCACINIT	9	0C	RCAITAS	D	40	RCARELS	E	02
RCACPGFL	9	3C	RCALENTH	14	18	RCARELV	10	40
RCACPGFR	9	50	RCALL	A	40	RCAREPI	11	01
RCACPGOT	9	40	RCALOCKS	A	0A	RCARETAD	14	
RCACPGRL	9	4C	RCANAME1	C		RCARFR	E	01
RCACPIX	9	38	RCANAME2	D		RCARFR2	10	02
RCACPOST	9	70	RCANAME3	E		RCARF3I	10	10
RCACPS	9	08	RCANAME4	F		RCARLF	13	80
RCACPTRM	9	B0	RCANAME5	10		RCARSV1	8	
RCACRCF3	9	04	RCANAME6	11		RCASAL	A	80
RCACREAT	9	14	RCANAME7	12		RCASIRT	10	20
RCACRECF	9	1C	RCANAME8	13		RCASOUT	F	80
RCACREP	9	60	RCAOPBR	10	08	RCASQA	F	20
RCACREPL	9	20	RCAOUT	D	20	RCASWIN	F	40
RCACRSB	9	10	RCAPARM0	0		RCASWPC	D	02
RCACSECT	9		RCAPARM1	4		RCASWPP	D	04
RCACSEG	C	40	RCAPCB	D	10	RCATERM	F	10
RCACSGB	11	20	RCAPFOS	12	04	RCAVAMSI	C	80
RCACSPIN	9	A0	RCAPFTE	D	08	RCAVEQR	C	08
RCACSPOT	9	C0	RCAPIOP	D	01	RCAVEQRC	F	08
RCACSQA	9	28	RCAPIX	E	80	RCAVEQRF	F	04
RCACSWPC	9	2C	RCAPREF	12	02	RCAVEQRI	F	02
RCACSWPP	9	34	RCAPRSB	12	20	RCAVEQRP	11	08

RCA

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

Data Area Descriptions

RCA

215

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>NAME</u>	HEX <u>OFFSET</u>	HEX <u>VALUE</u>	<u>NAME</u>	HEX <u>OFFSET</u>	HEX <u>VALUE</u>	<u>NAME</u>	HEX <u>OFFSET</u>	HEX <u>VALUE</u>
RCAWNDE	13	10	RCAWNDI	13	20			

RCT

Common Name : System Resources Manager Resource Control Table
Macro ID : IRARCT
DSECT Name : RCT
Created by : Assembled into nucleus module IRARMCNS
Subpool and Key : Nucleus and key 0
Size : 184 bytes
Pointed to by : RMCTRCT field of the RMCT data area
Serialization : SRM lock
Function : Contains constants and statistics used by the system resources manager resource monitor routine.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	184	RCT	RESOURCE CONTROL TABLE
0	(0) CHARACTER	4	RCTRCT	ACRONYM IN EBCDIC RCT-
RESOURCE CONTROL CONSTANTS				
4	(4) SIGNED	2	RCCUICCTL	UIC THRESHOLD LOW
6	(6) SIGNED	2	RCCUICTH	UIC HIGH THRESHOLD
8	(8) SIGNED	2	RCCCPUTL	CPU LOW THRESHOLD
10	(A) SIGNED	2	RCCCPUTH	CPU HIGH THRESHOLD
12	(C) SIGNED	2	RCCPTRTL	PAGING RATE LOW THRESHOLD
14	(E) SIGNED	2	RCCPTRTH	PAGING RATE HIGH THRESHOLD
16	(10) SIGNED	2	RCCASMTL	ASM QUEUED REQUEST LOW THRESHOLD
18	(12) SIGNED	2	RCCASMTH	ASM QUEUED REQUEST HIGH THRESHOLD
20	(14) SIGNED	2	RCCDPRTL	DEMAND PAGE RATE LOW THRESHOLD
22	(16) SIGNED	2	RCCDPRTTH	DEMAND PAGE RATE HIGH THRESHOLD

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
24	(18) SIGNED	2	RCCCPUL	CPU UTIL LOW THRSHOLD WITH DEMAND PAGING
26	(1A) SIGNED	2	RCCCPUPH	CPU UTIL HIGH THRSHOLD WITH DEMAND PAGING
28	(1C) SIGNED	2	RCCMSPTL	PAGE DELAY LOW THRSHOLD WITH DEMAND PAGING
30	(1E) SIGNED	2	RCCMSPTH	PAGE DELAY HIGH THRSHOLD WITH DEMAND PAGING
32	(20) SIGNED	2	RCCPDLTL	PAGE DELAY LOW THRESHOLD (IN MILLISECONDS)
34	(22) SIGNED	2	RCCPDLTH	PAGE DELAY HIGH THRESHOLD
36	(24) SIGNED	2	RCCTOTUT	AVERAGE DEFERRED IO UTIL THRESHOLD
38	(26) SIGNED	2	RCCLCHUT	LCH DEFERRED UTIL THRESHOLD
40	(28) SIGNED	2	RCCLCHRR	LCH REQ RATE THRESHOLD
42	(2A) SIGNED	2	RCCRUAM	MULTIPLIER FOR OLD READY USER AVG
44	(2C) SIGNED	2	RCCRUCM	MULTIPLIER FOR ACCUM READY USER AVG
46	(2E) SIGNED	2	RCCWSRM	MULTIPLIER FOR OLD WEIGHTED SVCE RATE
48	(30) SIGNED	2	RCCSRCM	MULTIPLIER FOR ACCUMULATED SERVICE RATE
50	(32) SIGNED	2	RCCDCITL	CONTENTION INDEX THRESHOLD FOR EXCHANGE
52	(34) SIGNED	2	RC CETOLD	MULT FOR OLD E.T. AVG
54	(36) SIGNED	2	RC CETCUR	MULT FOR NEW E.T. AVG
56	(38) SIGNED	4	RCCRSVF3	RESERVED

RESOURCE CONTROL VARIABLES

60	(3C) SIGNED	2	RCVCTMC	SAMPLE INTERVALS COUNT
62	(3E) SIGNED	2	RCVUICA	UIC AVERAGE
64	(40) SIGNED	2	RCVCPUA	CPU USAGE AVERAGE
66	(42) SIGNED	2	RCVAVQC	AVQ LOW COUNT

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
68	(44) SIGNED	2	RCVAFQA	AVAILABLE FRAME AVG
70	(46) SIGNED	2	RCVASMQA	ASM QUEUE LENGTH AVERAGE
72	(48) SIGNED	2	RCVPTR	PAGING RATE
74	(4A) SIGNED	2	RCVDPR	DEMAND PAGING RATE
76	(4C) SIGNED	2	RCVPAGRT	TOTAL PAGING RATE
78	(4E) SIGNED	2	RCVMSPP	PAGE DELAY TIME(MILLISECS)
80	(50) SIGNED	4	RCVUICC	UIC ACCUMULATOR
84	(54) SIGNED	4	RCVCPUC	CPU USAGE ACCUMULATOR
88	(58) SIGNED	4	RCVAVQP	AVQ LOW COUNT SAVE AREA
92	(5C) SIGNED	4	RCVAFQC	AVAIL FRAME CUMULATOR
96	(60) SIGNED	4	RCVASMQ	ASM QUEUE LENGTH ACCUMULATOR
100	(64) SIGNED	4	RCVBPTCT	BASE PAGE FAULT COUNT
104	(68) SIGNED	4	RCVBDPCT	BASE DEMAND PAGE COUNT
108	(6C) SIGNED	4	RCVBPPCT	BASE TOTAL PAGE COUNT
112	(70) SIGNED	4	RCVBPTTM	BASE PAGE FAULT TIME
116	(74) SIGNED	2	RCVTOTDF	AVERAGE DEFERRED IO UTILIZATION
118	(76) SIGNED	2	RCVRSVF1	RESERVED
120	(78) SIGNED	4	RCVTAPAD	LAST ALLOCATED TAPE

EXTENDED REAL CONSTANTS

124	(7C) SIGNED	2	RCCFXTTL	% LOGICAL LOW MPL THRESHOLD
126	(7E) SIGNED	2	RCCFXTTH	% LOGICAL HIGH MPL THRESHOLD

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
128	(80) SIGNED	2	RCCFXETL	% PHYSICAL LOW MPL THRESHOLD
130	(82) SIGNED	2	RCCFXETH	% PHYSICAL HIGH MPL THRESHOLD
EXTENDED REAL VARIABLES				
132	(84) SIGNED	2	RCVFXIOP	AVG % OF TOTAL FRAMES THAT ARE FIXED OR IN I/O
134	(86) SIGNED	2	RCVMFXA	AVG % OF TOTAL FRAMES BELOW 16MEG THAT ARE FIXED
136	(88) SIGNED	4	RCVFXCA	FIXED FRAME COUNT AVERAGE
140	(8C) SIGNED	4	RCVFXCC	FIXED FRAME COUNT ACCUMULATOR
144	(90) UNSIGNED	4	RCVIORQC	BASE NONSWAP PAGE COMPLETE CNT
148	(94) SIGNED	4	RCVASMQN	NONSWAP ASM QUEUE ACCUMULATOR
152	(98) SIGNED	2	RCVNSQLA	NONSWAP ASM QUEUE LENGTH AVE
154	(9A) SIGNED	2	RCVSNPTM	SWAP PAGE DELAY TIME (MILLISECS)
156	(9C) SIGNED	4	RCVASMQS	SWAP ASM QUEUE ACCUMULATOR
160	(A0) UNSIGNED	4	RCVSWRQC	BASE SWAP PAGE COMPLETE COUNT
164	(A4) SIGNED	4		RESERVED
168	(A8) SIGNED	4	RCCMS60R	VALUE OF THE MS6 INVOCATION INTERVAL CALCULATED USING CPU ADJUSTMENT FACTOR (BEFORE LIMITS APPLIED)
172	(AC) SIGNED	4	RCCWM20R	VALUE OF THE WM2 EVALUATION THRESHOLD CALCULATED USING CPU ADJUSTMENT FACTOR (BEFORE LIMITS APPLIED)
176	(B0) SIGNED	4		RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSET</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
180	(B4) SIGNED	4	RCTRSVB	RESERVED
184	(B8) CHARACTER	0	RCTEND	END OF RCT

RDCM

Common Name : DIDOCS Resident Display Control Module/Screen Area Control Block
Macro ID : IEERDCM
DSECT Name : DCMTSRT
Created by : SYSGEN (1 per display console)
Subpool and Key : NUCLEUS and key 0
Size : 60 bytes plus 45 bytes for each SACB
Pointed to by : UCMXB field of the UCME data area
Serialization : Local and CMS locks
Function : Contains console screen and support interface information.
Beginning at DCMPACB, the SACB contains information concerning
the out-of-line screen areas defined on this console.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	64	DCMTSRT	
0	(0) ADDRESS	4	DCMADTRN	POINTER TO PAGABLE DCM
4	(4) CHARACTER	1		RESERVED
5	(5) CHARACTER	1	DCMRFLGS	FLAGS
1...	....			UNUSED
.1...	....			UNUSED
..1.	....			UNUSED
...1	....		DCMDOM	DOM MUST BE TRIED
.... 1...			DCMNIPP	CONSOLE WAS USED BY NIP
.... .1..				UNUSED
.... ..1.				UNUSED
.... ...1				UNUSED
6	(6) SIGNED	2	DCMLEN	LENGTH OF PAGABLE DCM
8	(8) ADDRESS	4	DCMADKP	ADDRESS OF ROUTED K COMMAND PARAMETER LIST
12	(C) CHARACTER	1	DCMTOPAR	TOP DISPLAY AREA DEFINED
13	(D) CHARACTER	1	DCMTOPDS	TOP DISPLAY ON SCREEN
14	(E) CHARACTER	1		RESERVED
1...	....			UNUSED
.1...	....			UNUSED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		..1.		UNUSED
		...1		UNUSED
		.... 1...		UNUSED
		.... .1..		UNUSED
		.... ..1.		UNUSED
		.... ...1		UNUSED
15	(F) CHARACTER	1	DCMDEVTY	DEVICE TYPE FLAGS
		1....	DCMTY60	USABLE FOR SD
		.1...	DCMTY50	UNUSABLE FOR SD
		..1.	DCMBCOLR	USABLE FOR BASE COLOR
		...1	DCMECOLR	USABLE FOR EXTENDED COLOR
		.... 1...		UNUSED
		.... .1..		UNUSED
		.... ..1.		UNUSED
		.... ...1		UNUSED
16	(10) ADDRESS	4	DCMADSDS	POINTER TO FIRST SDS SUPPORT AREA
20	(14) CHARACTER	1	DCMRMS	INDEX OF CCW FOR USER MSG
21	(15) ADDRESS	3	DCMADRMS	POINTER TO RMS CCWS
24	(18) ADDRESS	4	DCMWLAST	PT CON Q ENTRY LAST OUT (0-0-L)
28	(1C) SIGNED	2	DCMRMSAL	NUMBER LINES IN MSG AREA
30	(1E) SIGNED	2	DCMDOMKY	CONSOLE DOM ELEMENT
32	(20) ADDRESS	4	DCMSUBAD	POINTER TO SUB CONTROL BLOCK
36	(24) ADDRESS	4	DCMADPFK	POINTER TO RESIDENT PFK AREA
40	(28) SIGNED	2	DCMINTVL	INTERVAL FOR THIS DCM
42	(2A) SIGNED	2	DCMTMCTR	TIME COUNTER FOR THIS DCM
44	(2C) CHARACTER	1	DCMR2FLG	TIMER FLAGS
		1....	DCMRXSFL	FULL SCREEN FLAG
		.1...	DCMRXUNV	UNVIEWABLE MESSAGE DISPLAYED
		..1.	DCMRXTMR	TIMER FLAG
		...1	DCMRXRLL	READY TO ROLL
		.... 1...	DCMRXDEL	PENDING DELETE REQUEST
		.... .1..		UNUSED
		.... ...1.	DCMRXTIM	TIMER ELAPSED FOR THIS DISPLAY

OFFSET\$	TYPE	LENGTH	NAME	DESCRIPTION
45	(2D) CHARACTER	1	DCMR3FLG	UNUSED
			DCMSTSWT	MISC FLAGS
			DCMKVIP	CHANGING STATUS OF OUTPUT ONLY CON
			DCMCLPR	ENTRY FOR K VARY COMMAND
			DCMRXSCN	CLOSE IN PROCESS
			DCMR3PKA	ASY ERROR MESSAGE ON SCREEN
			DCMRXHMT	DCM I/O COMPLETE
				FULL SCREEN SIMULATED
				UNUSED
				UNUSED
46	(2E) SIGNED	2		RESERVED
48	(30) ADDRESS	4	DCMRQDEL	DELETE REQUEST BUFFER
52	(34) ADDRESS	4		DELETE REQUEST BUFFER
56	(38) ADDRESS	4	DCMMSGSV	LINE COUNT SAVE AREA FOR IEECVFTP

SCREEN AREA CONTROL BLOCK (SACB) PREFIX

60	(3C) CHARACTER	4	DCMPACB	SACB PREFIX
60	(3C) SIGNED	2	DCMPLN	SYSGEN LEN OF AREA.
62	(3E) SIGNED	2	DCMPLNPR	PREFIX LENGTH OF AREA.
0	(0) STRUCTURE	40	DCMACB	SACB
0	(0) ADDRESS	4	DCMACBNX	POINTER TO NEXT SACB.
4	(4) CHARACTER	1	DCMAID	AREA I.D.
5	(5) CHARACTER	1	DCMASACB	SACB FLAGS.
			DCMAUSE	AREA PRESENTLY DEFINED
			DCMAGM	GETMAINED SACB.
6	(6) SIGNED	2	DCMALN	LENGTH OF AREA.
8	(8) CHARACTER	1	DCMATOP	TOP ROW OF AREA.
9	(9) CHARACTER	31	DCMACLR	REINITIALIZED PORTION.

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
9	(9) CHARACTER	1	DCMAROW	ROW FOR NEXT WRITE.
10	(A) SIGNED	2	DCMAFR	FRAME ON SCREEN.
12	(C) ADDRESS	4	DCMAMJWQ	PTR MAJOR CON Q ENTRY
16	(10) ADDRESS	4	DCMAMIN	PTR TO MINOR WQE.
20	(14) SIGNED	4	DCMATIME	TIME CONTROL LINE WRITN.
24	(18) UNSIGNED	2	DCMAMT	RESERVED MB
26	(1A) CHARACTER	1	DCMAFLG1	AREA FLAGS. RESERVED.
	1...		DCMADISP	DISPLAY IN AREA
	.1...		DCMADEND	END OF DISP. ON SCREEN
	..1.		DCMAFRPR	FRAMING IN PROGRESS
	...1		DCMAFULL	FRAME FULL
	.... 1...		DCMABL	BLANKING TO BE DONE
	.... .1..			RESERVED.
	.... ..1.			RESERVED.
	.... ...1			RESERVED.
27	(1B) CHARACTER	1	DCMAFLG2	AREA FLAGS 2.
	1...		DCMALMIN	PTR TO LAST MINOR OUTPT.
	.1...		DCMAWCON	WRITE CONTROL LINE
	..1.		DCMARCON	REWRITE CONTROL LINE
	...1		DCMAMJFR	MAJOR WQE HAS BEEN FOUND
	.... 1...			RESERVED.
	.... .1..			RESERVED.
	.... ..1.			RESERVED.
	.... ...1			RESERVED.
28	(1C) CHARACTER	4	DCMATFLG	FLAGS AND UTME VALUE
28	(1C) CHARACTER	1	DCMADFLG	DYNAMIC DISPLAY FLAGS
	1...		DCMADD	TRACK IN AREA
	.1...		DCMAHOLD	TRACK IN HOLD MODE
	..1.		DCMACSIB	TRACK WITH CONT LINE
	...1			RESERVED.
	.... 1...			RESERVED.
	.... .1..			RESERVED.
	.... ..1.			RESERVED.
	.... ...1			RESERVED.
29	(1D) CHARACTER	1	DCMATRCK	TRACK REQUEST INDICATORS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1...			DCMATJOB	TRACK JOBS
.1...			DCMATJBL	TRACK JOBS,LIST
..1.				RESERVED
...1				RESERVED
.... 1...			DCMATTSS	TRACK TS
.... .1..			DCMATTSL	TRACK TS,LIST
.... .1.				RESERVED
....1				RESERVED

TO REFERENCE AND CHANGE THE ABOVE BITS REFERENCE: IF
DCMATJBL='1'B THEN ... CHANGE: DCMATJBL='1'B CHANGE:
DCMATRCK=DCMATA

30	(1E) SIGNED	2	DCMAUTME	UTME=NNN VALUE
32	(20) ADDRESS	4	DCMATECB	TRACK CANCEL ECB ADDRESS
36	(24) ADDRESS	4	DCMAASCB	TRACK ASCB POINTER
40	(28) CHARACTER	0	DCMACBND	SACB END

CROSS REFERENCE

NAME	HEX	HEX	NAME	HEX	HEX	NAME	HEX	HEX
	OFFSET	VALUE		OFFSET	VALUE		OFFSET	VALUE
DCMAASCB	24		DCMAMJWQ	C		DCMPACB	3C	
DCMABL	1A	04	DCMAMT	18		DCMPLN	3C	
DCMACB	0		DCMARCON	1B	20	DCMPLNPR	3E	
DCMACBND	28		DCMAROW	9		DCMRFLGS	5	
DCMACBNX	0		DCMASACB	5		DCMRMS	14	
DCMACLRL	9		DCMATECB	20		DCMRMSAL	1C	
DCMACSIB	1C	20	DCMATFLG	1C		DCMRQDEL	30	
DCMADD	1C	80	DCMATIME	14		DCMRXDEL	2C	08
DCMADEND	1A	20	DCMATJBL	1D	40	DCMRXHMT	2D	04
DCMADFLG	1C		DCMATJOB	1D	80	DCMRXRL	2C	10
DCMADISP	1A	40	DCMATOP	8		DCMRXSCN	2D	10
DCMADKP	8		DCMATRCK	1D		DCMRXSFL	2C	80
DCMADPFK	24		DCMATT5	1D	08	DCMRXTIM	2C	02
DCMADRMS	15		DCMATTSL	1D	04	DCMRXTMR	2C	20
DCMADSDS	10		DCMAUSE	5	80	DCMRXUNV	2C	40
DCMADTRN	0		DCMAUTME	1E		DCMR2FLG	2C	
DCMAFLG1	1A		DCMAWCON	1B	40	DCMR3FLG	2D	
DCMAFLG2	1B		DCMBCOLR	F	20	DCMR3PKA	2D	08
DCMAFR	A		DCMCLPR	2D	20	DCMSTSHT	2D	80
DCMAFRPR	1A	10	DCMDEVTY	F		DCMSUBAD	20	
DCMAFULL	1A	08	DCMDOM	5	10	DCMTMCTR	2A	
DCMAGM	5	40	DCMDOMKY	1E		DCMTOPAR	C	
DCMAHOLD	1C	40	DCMECOLR	F	10	DCMTOPDS	D	
DCMAID	4		DCMINVTL	28		DCMTSRT	0	
DCMALMIN	1B	80	DCMKVIP	2D	40	DCMTY50	F	40
DCMALN	6		DCMLEN	6		DCMTY60	F	80
DCMAMIN	10		DCMMMSGV	38		DCMNLAST	18	
DCMAMJFR	1B	10	DCMNIIPP	5	08			

RIB

Common Name : Resource Information Block

Macro ID : ISGRIB

DSECT Name : RIB/RIBVAR/RIBE

Created by : Global Resource Serialization Queue Scanning Services Module (ISGQSCAN) builds RIBs and RIBEs in the global resource serialization private area before moving them into the area provided by the user of Global Resource Serialization Queue Scanning Services.

Subpool and Key : 229 in global resource serialization address space, key 0 in global resource serialization address space.

Size : RIB - 40 bytes; RIBE - 36 bytes

Pointed to by : Pointer maintained by user.

Serialization : None

Function : Contains information describing a resource and any requests of that resource. The Resource Information Block (RIB) describes a given resource and the Resource Information Block Extent (RIBE) describes each owner or waiter for that resource. The variable portion of the RIB (RIBVAR) is located immediately after the RIB.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	40	RIB	RESOURCE INFORMATION BLOCK FIXED SECTION
0	(0) ADDRESS	4	RIBQCB	ADDRESS OF QCB FROM WHICH INFORMATION WAS EXTRACTED TO BUILD THIS RIB
4	(4) ADDRESS	4	RIBCHAIN	POINTER TO NEXT RIB USED BY ISGDSORT TO ALPHABETICALLY SORT RIBS BY RESOURCE NAME (QNAME AND RNAME)
8	(8) SIGNED	4	RIBNTO	NUMBER OF TASKS OWNING RESOURCE
12	(C) SIGNED	4	RIBNTWE	NUMBER OF TASKS WAITING FOR EXCLUSIVE CONTROL OF RESOURCE
16	(10) SIGNED	4	RIBNTWS	NUMBER OF TASKS WAITING FOR SHARED CONTROL OF RESOURCE

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
20	(14) SIGNED	4	RIBTRIBE	TOTAL NUMBER OF RESOURCE INFORMATION BLOCK EXTENTS ASSOCIATED WITH THIS RIB
24	(18) SIGNED	4	RIBNRIBE	NUMBER OF RESOURCE INFORMATION BLOCK EXTENTS RETURNED WITH THIS RIB IN THE USER SPECIFIED AREA
28	(1C) SIGNED	2	RIBVLEN	LENGTH OF THE VARIABLE SECTION OF THE RIB (MULTIPLE OF FOUR)
30	(1E) BITSTRING	1	RIBSCOPE	SCOPE OF REQUEST FLAGS
1...			RIBSYS	SYSTEM SCOPE (1 = SYSTEM, 0 = NONSYSTEM)
.1...			RIBSYSS	SYSTEMS SCOPE (1 = SYSTEMS, 0 = NONSYSTEMS)
..1.			RIBSTEP	STEP SCOPE (1 = STEP, 0 = NONSTEP)
...1			RIBGLBL	GLOBAL RESOURCE INDICATOR (1 = GLOBAL, 0 = LOCAL)
.... 1...			RIBBIT1	RESERVED
.... .1..			RIBBIT2	RESERVED
.... ..1.			RIBBIT3	RESERVED
.... ...1			RIBBIT4	RESERVED
31	(1F) UNSIGNED	1	RIBRNMLN	RNAME LENGTH
32	(20) CHARACTER	8	RIBQNAME	QNAME MAJOR NAME OF RESOURCE
40	(28) CHARACTER	0	RIBEND	END OF RIB FIXED SECTION
0	(0) STRUCTURE	0	RIBVAR	RESOURCE INFORMATION BLOCK VARIABLE SECTION
0	(0) CHARACTER	0	RIBRNAME	RNAME MINOR NAME OF RESOURCE
0	(0) STRUCTURE	36	RIBE	RESOURCE INFORMATION BLOCK EXTENT
0	(0) CHARACTER	8	RIBEJBNM	JOBNAME OF REQUESTOR
8	(8) CHARACTER	8	RIBESYSN	SYSTEM NAME OF REQUESTOR
16	(10) ADDRESS	4	RIBETCB	TCB ADDRESS OF REQUESTOR
20	(14) ADDRESS	4	RIBEECB	ECB ADDRESS WHEN RIBEECBF IS ONE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
20	(14) ADDRESS	4	RIBESVRB	SVRB ADDRESS WHEN RIBEECBF IS ZERO
24	(18) ADDRESS	4	RIBEUCB	UCB ADDRESS IF RESERVE RESOURCE, OTHERWISE ZERO
28	(1C) SIGNED	2	RIBEASID	ADDRESS SPACE ID OF REQUESTOR
30	(1E) BITSTRING	1	RIBERFLG	FLAGS PERTAINING TO THE REQUEST
	1...		RIBETYPE	REQUEST TYPE (0 = EXCLUSIVE, 1 = SHARED)
	.1..		RIBEMC	MUST COMPLETE (MC) REQUEST (1 = MC, 0 = NOT MC)
	..1.		RIBERESV	RESERVE REQUEST (1 = RESERVE, 0 = NOT RESERVE)
	...1		RIBERESC	RESERVE REQUEST CONVERTED TO GLOBAL ENQ (1 = CONVERTED, 0 = NOT CONVERTED)
	.... 1...		RIBEAUTH	AUTHORIZED CALLER (1 = AUTHORIZED, 0 = UNAUTHORIZED)
	.... .1..		RIBETCBF	TCB ABENDING FLAG (1 = REQUESTING TASK WAS IN PROCESS OF ABENDING WHEN REQUEST WAS RECEIVED, 0 = NORMAL)
	.... ..1.		RIBERRS1	RESERVED
	.... ...1		RIBERRS2	RESERVED
31	(1F) BITSTRING	1	RIBELFLG	FLAGS PERTAINING TO A LIST REQUEST
	1...		RIBEPOST	ECB OR RB HAS BEEN POSTED (1 = POSTED, 0 = NOT POSTED)
	.1..		RIBEECBF	ECB REQUEST (1 = ECB, 0 = NOT ECB)
	..1.		RIBELRS1	RESERVED
	...1		RIBELRS2	RESERVED
	.... 1...		RIBELRS3	RESERVED
	.... .1..		RIBELRS4	RESERVED
	.... ..1.		RIBELRS5	RESERVED
	.... ...1		RIBELRS6	RESERVED
32	(20) BITSTRING	1	RIBESFLG	STATUS FLAGS
	1...		RIBESTAT	REQUEST STATUS (0 = WAITING FOR RESOURCE, 1 = OWNS RESOURCE)
	.1..		RIBESRS1	RESERVED
	..1.		RIBESRS2	RESERVED
	...1		RIBESRS3	RESERVED
	.... 1...		RIBESRS4	RESERVED
	.... .1..		RIBESRS5	RESERVED
	.... ..1.		RIBESRS6	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
33	.... .1 (21) CHARACTER	3	RIBESRS7 RIBERS01	RESERVED RESERVED
36	(24) CHARACTER	0	RIBEEND	END OF RIBE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

RMCA

Common Name : SRM Control Area
Macro ID : IRARMCA
DSECT Name : RMCA
Created by : Assembled into nucleus module, IRARMCNS
Subpool and Key : NUCLEUS and key 0
Size : 224 bytes
Pointed to by : RMCTRMC field of the RMCT data area
Serialization : SRM lock
Function : Contains swap analysis variables used within SRM.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	232	RMCA	
0	(0) CHARACTER	4	RMCANAME	BLOCK IDENTIFICATION 'RMCA'
4	(4) SIGNED	2	RMCASWFT	SWAP IN FAIL THRESHOLD
6	(6) SIGNED	2	RMCAINUS	COUNT OF IN-CORE USERS
8	(8) SIGNED	2	RMCASFET	SWAP IN FAIL EVALUATION THRESHOLD INIT
10	(A) SIGNED	2	RMCASFWC	BASED ON RMCASFTM SWAP IN FAIL WAIT QUEUE COUNT
12	(C) UNSIGNED	4	RMCATQS	SYSTEM QUIESCE TIME
16	(10) UNSIGNED	4	RMCATRS	SYSTEM RESTART TIME
20	(14) UNSIGNED	4	RMCATOI	TIME OF EXPECTD INTERRUPT
24	(18) UNSIGNED	4	RMCFLGS	SAVEAREA AVAIL. FLAGS
1...	....		RMCASAAF	SIXTH LVL SAVEAREA AVAIL. FLG
.111	1111			
1111	1111			
1111	1111			
1111	1111		RMCARSVF	RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
28	(1C) SIGNED	4	RMCACPW2	OUCB ADDR DEFERRED SWAP IN USER ON WAIT QUEUE
32	(20) UNSIGNED	4	RMCASFTM	SWAP IN FAIL EVALUATION TIME DIVIDE BY CAP INVOCATION INTERVAL TO GET RMCASFET
36	(24) ADDRESS	4	RMCAPTRN	ADDR NEXT TS PATTERN ENTRY
40	(28) UNSIGNED	4	RMCANHLD	# HOLD SYSEVENTS
44	(2C) UNSIGNED	4	RMCAFHLD	# OF SWAPS TURNED AROUND DUE TO HOLD STATUS
48	(30) CHARACTER	4	RMCACHP	CHAP LIST FOR SWAP
52	(34) ADDRESS	4	RMCACHU	USER CHAPPED FOR SWAP
56	(38) BITSTRING	4	RMCAINV	RTNE INVOCATION WORK AREA
60	(3C) SIGNED	2	RMCADFCT	COUNT OF NONEXPRESS USERS DEFERRED FOR SWAP IN FAIL
62	(3E) UNSIGNED	2	RMCAISV	ISV REC. VALUE BOOST
64	(40) ADDRESS	2	RMCALGPG	DEF LOGON PERF GRP #
66	(42) ADDRESS	2	RMCABCPG	DEF BATCH PERF GRP #
68	(44) ADDRESS	4	RMCAMAS	ASCB ADDR FOR MASTER SCHEDULR
72	(48) CHARACTER	48	RMCAWKA	NONRESIDENT RTN WORKAREA
120	(78) UNSIGNED	1	RMCANDP	SA FOR NDP
121	(79) UNSIGNED	1	RMCATNDP	SA FOR TNDP
122	(7A) UNSIGNED	1	RMCAINTSG	SA FOR TS GROUP
123	(7B) UNSIGNED	1	RMCADSPN	SA FOR DSP STATUS
124	(7C) SIGNED	2	RMCADFCK	# DEFERRED USERS CHECKED
126	(7E) SIGNED	2	RMCACIUS	CT OF USERS COMING IN
128	(80) ADDRESS	4	RMCACPW1	CAP WORK AREA

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
132	(84) CHARACTER	52	RMCASRC	SWAP OUT REASON CNTS.
132	(84) UNSIGNED	4	RMCATOSC	TERMINAL OUTPUT SWAP COUNT
136	(88) UNSIGNED	4	RMCATISC	TERMINAL OUTPUT SWAP COUNT
140	(8C) UNSIGNED	4	RMCALWSC	LONG WAIT SWAP COUNT
144	(90) UNSIGNED	4	RMCAXSSC	AUT STOR SHORTAGE SWAP COUNT
148	(94) UNSIGNED	4	RMCARSSC	REAL STOR SHORTAGE SWAP COUNT
152	(98) UNSIGNED	4	RMCADWSC	DETECTED WAIT SWAP COUNT
156	(9C) UNSIGNED	4	RMCARQSC	REQSWAP SWAP COUNT
160	(A0) UNSIGNED	4	RMCANQSC	CAP ENQ EXCHANGE SWAP COUNT
164	(A4) UNSIGNED	4	RMCAEXSC	CAP EXCHANGE BASED ON RECOMM. VALUE SWAP COUNT
168	(A8) UNSIGNED	4	RMCAUSSC	CAP UNILATERAL SWAP OUT COUNT
172	(AC) UNSIGNED	4	RMCATSSC	TRANSITION SWAP COUNT
176	(B0) UNSIGNED	4	RMCALSSC	LOGICAL SWAP COUNT
180	(B4) UNSIGNED	4	RMCALFSC	LOGICAL SWAP FAIL CNT
184	(B8) UNSIGNED	1	RMCATSG	CURRENT TIME SLICE GROUP
185	(B9) UNSIGNED	1	RMCARSV9	RESERVED
186	(BA) SIGNED	2	RMCASFCT	SYS SWAP IN FAIL COUNT
188	(BC) ADDRESS	4	RMCATS1L	TS1 CHAP LIST ADDRESS
192	(C0) ADDRESS	4	RMCART1L	RT1 CHAP LIST ADDRESS
196	(C4) SIGNED	2	RMCATAU	TUNITS TILL SRM ALG EXEC
198	(C6) SIGNED	2	RMCATSU	TUNITS TILL TS1 EXECUTE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
200	(C8) SIGNED	2	RMCARTU	TUNITS TILL RT1 EXECUTE
202	(CA) SIGNED	2	RMCARTUS	TUNITS BETWEEN RT1 EXECs
204	(CC) SIGNED	2	RMCAPRVU	TUNITS BEFORE LAST TIMER
206	(CE) SIGNED	2	RMCANXTU	TUNITS TILL NEXT TIMER
208	(D0) CHARACTER	8	RMCACVD	WORK AREA FOR CONVERT TO DECIMAL. THESE TWO WORDS USED FOR TWO USES BUT PROTECTED BY THE SRM LOCK
208	(D0) SIGNED	4	RMCAODTH	WORK AREA
208	(D0) SIGNED	2	RMCAODLO	FOR CHANGING PVT
210	(D2) SIGNED	2	RMCAODOK	THRESHOLDS
212	(D4) SIGNED	4	RMCANWTH	WORK AREA
212	(D4) SIGNED	2	RMCANWLO	FOR CHANGING PVT
214	(D6) SIGNED	2	RMCANWOK	THRESHOLDS
216	(D8) SIGNED	2	RMCADSIN	# DEFERRED USERS BEING SWAPPED IN
218	(DA) SIGNED	2	RMCAEDCT	# OF EXPRESS USERS DEFERRED FOR SWAP IN FAIL
220	(DC) ADDRESS	4	RMCACPW3	OUCB ADDR EXPRESS DEFFERED SWAP IN
224	(E0) SIGNED	4	RMCALSSI	# OF LONG AND DETECTED WAIT LOGICAL SWAPS
228	(E4) SIGNED	4	RMCALFS1	# OF LONG AND DETECTED WAIT LOGICAL SWAPS THAT FAILED
232	(E8) CHARACTER	0	RMCAEND	END OF RMCA

RMCT

Common Name : SRM Control Table

Macro ID : IRARMCT

DSECT Name : RMCT

Created by : Assembled into nucleus module, IRARMCNS

Subpool and Key : NUCLEUS and key 0

Size : 288 bytes

Pointed to by : CVTOPCTP field of the CVT data area

Serialization : SRM lock

Function : Serves as the origin to locate SRM tables and entry points.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	288	RMCT	
0	(0) CHARACTER	4	RMCTNAME	BLOCK IDENTIFICATION 'RMCT'
4	(4) ADDRESS	4	RMCTCCT	CPU MGMT CONTROL TABLE
8	(8) ADDRESS	4	RMCTICT	I/O MGMT CONTROL TABLE
12	(C) ADDRESS	4	RMCTMCT	STORAGE MGMT CONTROL TABLE
16	(10) ADDRESS	4	RMCTRMP	CTL ALGORITHM PARAMETER TBL
20	(14) ADDRESS	4	RMCTRMCA	CTL ALGORITHM CONTROL AREA
24	(18) ADDRESS	4	RMCTWMST	WLM SPECIFICATION TABLE
28	(1C) ADDRESS	4	RMCTRLCT	LOGICAL CHANNEL MGMT TABLE
32	(20) ADDRESS	4	RMCTRMSA	RESOURCES MANAGER SAVE AREA
36	(24) ADDRESS	4	RMCTRMPD	RESOURCES MANAGER PERF DATA
40	(28) ADDRESS	4	RMCTRMEX	ROUTINE EXITING VECTOR TABLE
44	(2C) ADDRESS	4	RMCTRMSB	SUBRTNE CALLING VECTOR TABLE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
48	(30) ADDRESS	4	RMCTEPPA	PRTL ANALYSIS ENTRY TABLE
52	(34) ADDRESS	4	RMCTEPDT	USER ACTION ENTRY TABLE
56	(38) ADDRESS	4	RMCTEPAT	ALGORITHM ENTRY TABLE
60	(3C) ADDRESS	4	RMCTLSC	LOGICAL SWAP TABLE
64	(40) SIGNED	4	RMCTADJC	CPU RATE ADJUSTMENT
68	(44) ADDRESS	4	RMCTITT	EVENT CHARACTERISTICS TABLE
72	(48) ADDRESS	4	RMCTEPET	EVENT ROUTING VECTOR TABLE
76	(4C) ADDRESS	4	RMCTFLTM	TIME OF DAY DEPENDENT TABLE
80	(50) ADDRESS	4	RMCTEPR	PROCESS RATE DEPENDENT TABLE
84	(54) ADDRESS	4	RMCTWAST	WMST FOR SET IPS
88	(58) ADDRESS	4	RMCTWAMT	WAR MEASUREMENT TABLE
92	(5C) ADDRESS	4	RMCTTMQE	SCHED RTNE QUEUE HEAD ADDR
96	(60) SIGNED	4	RMCTAQCT	ACTION QUEUE MEMBER COUNT
100	(64) ADDRESS	4	RMCTAQHD	ACTION QUEUE FORWARD POINTER
104	(68) ADDRESS	4	RMCTWTQE	WAIT QUEUE HEADER ADDRESS
108	(6C) ADDRESS	4	RMCTOTQE	OUT QUEUE HEADER ADDRESS
112	(70) ADDRESS	4	RMCTINQE	IN QUEUE HEADER ADDRESS
116	(74) ADDRESS	4	RMCTEPBG	EPAT ADDRESS
120	(78) UNSIGNED	4	RMCTTBS	SRM TIME OF DAY BASE
124	(7C) UNSIGNED	4	RMCTTOD	CURRENT TIME OF DAY

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
128	(80) BITSTRING	8	RMCTTOC	CURR TIME OF CENTURY
136	(88) BITSTRING	4	RMCTALA	ALG REQUEST ACCUMULATOR
140	(8C) BITSTRING	4	RMCTALR	IMMED ALG REQUEST ACCUMUL
144	(90) ADDRESS	4	RMCTRQSV	REQ SERVICE WORK AREA
148	(94) BITSTRING	4	RMCTFLGS	FLAGS
148	(94) BITSTRING	2	RMCTFLG1	PROCESSING CONTROL
	1...		RMCTMFA	MEASUREMENT FACILITY ACTIVE
	.1...		RMCTCPS1	CAP SWITCH
	..1.		RMCTICS	CONTROL MEMBER DEFINED
	...1		RMCTINIT	SRM INITIALIZATION DONE
	.... 1...		RMCTREPT	NON-TSO REPORTING ACTIVE
	.... .1..		RMCTSTW	SET STOPPED WAR COLLECTION
	.... ..1.		RMCTTSAC	TIME SLICE ALG ACTIVE
	.... ...1		RMCTRRTAC	ROTATE ALG ACTIVE
	1...		RMCTRSV9	RESERVED
	.1...		RMCTMFS	RMF ACT., SET RCVD
	..1.		RMCTCNSW	COUNT NON-SWAPPABLE USERS IN CMPL
	...1		RMCTCLST	COUNT EACH COMMAND IN A CLIST
	.... 1...		RMCTRTSO	TSO TRXNAME REPORTING ACTIVE
	.... .1..		RMCTQTSW	DO LOOP QUIT SWITCH
	.... ..1.		RMCTNOBQ	NO BASIC REPORTING Q ELEMENTS
	.... ...1		RMCTNOEQ	NO EXTND REPORTING Q ELEMENTS
150	(96) BITSTRING	1	RMCTTAPE	TAPE SELECTION:
	1...		RMCTSLTN	NEXT HIGHEST
	.1...		RMCTSLTR	RANDOM
	..1.		RMCTSLTL	LOWEST ADDRESS
	...1		RMCTSLTF	FIRST DEVICE IN LIST
	.... 1111		RMCTF10	RESERVED
151	(97) BITSTRING	1	RMCTFLG2	PROCESSING FLAGS
	1...		RMCTRPGF	RPGS REQUESTED OF FPG
	.1...		RMCTOVFL	OVERFLOW OCCURRED
	..11 1111		RMCTF11	RESERVED
152	(98) ADDRESS	4	RMCTTELM	RSRC MANAGER TIMING ELEMENT

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
156	(9C) CHARACTER	4	RMCTCPID	RSRC MANAGER CELL POOL ID
160	(A0) BITSTRING	8	RMCTTOCI	TOD CLOCK READ AREA
168	(A8) ADDRESS	4	RMCTOUCB	PREASSEMBLED MODEL OUCB
172	(AC) ADDRESS	4	RMCTOUXB	INTERPOSED DUMMY OUXB
176	(B0) ADDRESS	4	RMCTSGBT	PREBUILT SRB TABLE
180	(B4) ADDRESS	4	RMCTDMDT	ADDR OF DOMAIN TABLE
184	(B8) ADDRESS	4	RMCTDMDE	ADDR OF LAST DMDT ENT
188	(BC) SIGNED	2	RMCTDMNC	NUMBER OF DOMAINS
190	(BE) SIGNED	2	RMCTCVTA	APG VALUE FROM SYS00
192	(C0) ADDRESS	4	RMCTTSPT	FIRST TS PATTERN ENT
196	(C4) ADDRESS	4	RMCTTSPE	LAST TS PATTERN ENTRY
200	(C8) ADDRESS	4	RMCTTSGT	FIRST TSGRP TBL ENTRY
204	(CC) ADDRESS	4	RMCTTSGE	LAST TSGRP TBL ENTRY
208	(D0) ADDRESS	4	RMCTRVT	FIRST ROT VECTOR ENT
212	(D4) ADDRESS	4	RMCTROTT	FIRST ROT TABLE ENTRY
216	(D8) ADDRESS	4	RMCTROTE	LAST ROT TABLE ENTRY
220	(DC) ADDRESS	4	RMCTICST	ICSC TABLE ADDR
224	(E0) SIGNED	4	RMCTCPMP	CPU ADJUSTING FACTOR IF THIS PROCESSOR MODEL HAS RELATED CPUS, THIS ADJUSTMENT FACTOR IS FOR THE FASTER CPU
228	(E4) ADDRESS	4	RMCTRCT	ADDRESS OF RCT
232	(E8) CHARACTER	8	RMCTBRQE	BASIC REPORTING AVAIL. Q

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
232	(E8) ADDRESS	4	RMCTBRQH	HEADER
236	(EC) SIGNED	4	RMCTBRQC	USE COUNT
240	(F0) CHARACTER	8	RMCTERQE	EXTENDED REPORTING AVAILQ
240	(F0) ADDRESS	4	RMCTERQH	HEADER
244	(F4) SIGNED	4	RMCTERQC	USE COUNT
248	(F8) CHARACTER	8	RMCTUPDQ	REPORTING UPDATE QUE
248	(F8) ADDRESS	4	RMCTUPQH	HEADER
252	(FC) SIGNED	4	RMCTUPQC	USE COUNT
256	(100) ADDRESS	4	RMCTTRAD	XACN REPORTING QUEUE FIRST PAGE PTR
260	(104) SIGNED	4	RMCTTRPC	XACN RPTG Q PAGE CNT
264	(108) ADDRESS	4	RMCTICSP	XACN DESCRIPTION TABLE
268	(10C) ADDRESS	4	RMCTRSPL	RSPL ADDRESS
272	(110) ADDRESS	4	RMCTEPL	EPL ADDRESS
276	(114) ADDRESS	4	RMCTPTCH	PATCH AREA ADDRESS
280	(118) SIGNED	4	RMCTRSV1	RESERVED
284	(11C) SIGNED	4	RMCTRSV2	RESERVED
288	(120) CHARACTER	0	RMCTEND	END OF RMCT

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RMCT	0		RMCTF11	97	3F	RMCTRSPL	10C	
RMCTADJC	40		RMCTICS	94	20	RMCTRSV1	118	
RMCTALA	88		RMCTICSP	108		RMCTRSV2	11C	
RMCTALR	8C		RMCTICST	DC		RMCTRSV9	95	80
RMCTAQCT	60		RMCTICT	8		RMCTRTAC	94	01
RMCTAQHD	64		RMCTINIT	94	10	RMCTRTSO	95	08
RMCTBRQC	EC		RMCTINQE	70		RMCTRTVT	D0	
RMCTBRQE	E8		RMCTITT	44		RMCTSLTF	96	10
RMCTBRQH	E8		RMCTLSCT	3C		RMCTSLTL	96	20
RMCTCCT	4		RMCTMCT	C		RMCTSLTN	96	80
RMCTCLST	95	10	RMCTMFA	94	80	RMCTSLTR	96	40
RMCTCNSW	95	20	RMCTMFS	95	40	RMCTSRT	B0	
RMCTCPID	9C		RMCTNAME	0		RMCTSTW	94	04
RMCTCPMP	E0		RMCTNOBQ	95	02	RMCTTAPE	96	
RMCTCPS1	94	40	RMCTNOEQ	95	01	RMCTTBS	78	
RMCTCVTA	BE		RMCTOTQE	6C		RMCTTELM	98	
RMCTDMDE	B8		RMCTOUCB	A8		RMCTTMQE	5C	
RMCTDMDT	B4		RMCTOUXB	AC		RMCTTOC	80	
RMCTDMNC	BC		RMCTOVFL	97	40	RMCTTOCI	A0	
RMCTEND	120		RMCTPTCH	114		RMCTTOD	7C	
RMCTEPAT	38		RMCTQTSW	95	04	RMCTTRAD	100	
RMCTEPBG	74		RMCTRCT	E4		RMCTTRPC	104	
RMCTEPDT	34		RMCTREPT	94	08	RMCTTSAC	94	02
RMCTEPET	48		RMCTRLCT	1C		RMCTTSGE	CC	
RMCTEPL	110		RMCTRMCA	14		RMCTTSGT	C8	
RMCTEPPA	30		RMCTRMEX	28		RMCTTSPE	C4	
RMCTEPPR	50		RMCTRMPD	24		RMCTTSPT	C0	
RMCTERQC	F4		RMCTRMPT	10		RMCTUPDQ	F8	
RMCTERQE	F0		RMCTRMSA	20		RMCTUPQC	FC	
RMCTERQH	F0		RMCTRMSB	2C		RMCTUPQH	F8	
RMCTFLGS	94		RMCTROTE	D8		RMCTWAMT	58	
RMCTFLG1	94		RMCTTrott	D4		RMCTWAST	54	
RMCTFLG2	97		RMCTRPGF	97	80	RMCTWMST	18	
RMCTFLTM	4C		RMCTRQSV	90		RMCTWTQE	68	
RMCTF10	96	0F						

RMEP

Common Name : SRM Entry Point Block

Macro ID : IRARMEP

DSECT Name : RMEP

Created by : Assembled into nucleus module, IRARMCNS

Subpool and Key : Nucleus and key 0

Size : 32 bytes

Pointed to by : RRPAEPA field of the RRPA data area

Serialization : SRM lock

Function : Designates a SRM processing routine that may be invoked through SRM control; contains the routine entry point address, defines the bit mask to be used to request the routine, and optionally provides for periodic execution of the routine. Contains flags indicating how the described routine may be invoked.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	32	RMEP	
0	(0) CHARACTER	16	RMEPEPB	ENTRY POINT BLOCK
0	(0) ADDRESS	4	RMEPEPA	ENTRY POINT ADDRESS
4	(4) ADDRESS	4	RMEPERA	ERROR RETRY POINT ADDRESS
8	(8) BITSTRING	4	RMEPFLG	INVOCATION FLAG MASK
	1111 1111			
	1111 1111			
	1111 1111			
	1111 1...		RMEPVFL	RTNE INVOC FLAG FIELD
	.... .1..		RMEPRCR	CRITICAL ALGORITHM INDICATOR
	.... ..1.		RMEPTMD	RTNE INVOKE TIME-DEPENDENT
	.... ...1		RMEPACN	RTNE PERFORMS USER LEVL ACTN
12	(C) ADDRESS	4	RMEPPRV	ADDRESS OF PREV RMEP BLOCK
16	(10) CHARACTER	0	RMEPEND	END OF BASE RMEP

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
16	(10) CHARACTER	16	RMEPSCH	SCHEDULING EXTENSN
16	(10) ADDRESS	4	RMEPFWD	TIME DRIVEN CHAIN FORWRD PTR
20	(14) ADDRESS	4	RMEPBCK	TIME DRIVEN CHAIN BCKWRD PTR
24	(18) UNSIGNED	4	RMEPTME	TIME WHEN ENTRY SCHED
28	(1C) UNSIGNED	4	RMEPINT	INVOCATION INTERVAL
32	(20) CHARACTER	0	RMEPSND	END OF SCHD RMEP

RMEX

Common Name : SRM External Entry Point Descriptor Table

Macro ID : IRARMEX

DSECT Name : RMEX

Created by : Assembled into nucleus module, IRARMCNS

Subpool and Key : NUCLEUS and key 0

Size : 88 bytes

Pointed to by : RMCTRME field of the RMCT data area

Serialization : SRM lock

Function : Contains the entry point descriptions of all externally entered branch points (routines that do not return control) within the SRM. The IRACTLCL macro keys off the RMEX displacements to route control to the requested point.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	88	RMEX	
0	(0) CHARACTER	16	RMEPB EVT	PERFORM SYSEVENT PROCESS
0	(0) ADDRESS	4	RMEX EVT	EVT RTNE ENTRY POINT ADDRESS
16	(10) CHARACTER	16	RMEPB CTL	ROUTE CONTROL WITHIN SRM
16	(10) ADDRESS	4	RMEX CTL	CTL RTNE ENTRY POINT ADDRESS
32	(20) CHARACTER	16	RMEPB FIP	PERFORM SYSEVENT PROCESS
32	(20) ADDRESS	4	RMEX FIP	FIP RTNE ENTRY POINT
48	(30) ADDRESS	4	RMEXI01	NORM EXIT FROM SRM PROCESSING
52	(34) ADDRESS	4	RMEXI17	SRM POST ECB ROUTINE
56	(38) ADDRESS	4	RMEXCET	SRM TIMEREXP PROCESS ENTRY PT
60	(3C) ADDRESS	4	RMEXI48	SRM SYSEVENT PROCESS ENTRY PT

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
64	(40) ADDRESS	4	RMEXRR1	RECOVERY RTNE IF W/O SRM LOCK
68	(44) ADDRESS	4	RMEXRR2	RECOVERY RTNE IF HAV SRM LOCK
72	(48) ADDRESS	4	RMEXXPE	RECOVERY RTNE IF XM-POST FAIL
76	(4C) ADDRESS	4	RMEXSRE	RECOVERY RTNE IF SRM SRB PURG
80	(50) ADDRESS	4	RMEXPSE	POST SRB PURGE
84	(54) ADDRESS	4	RMEXPFE	POST FAILURE ROUTINE
88	(58) CHARACTER	0	RMEXEND	END OF RMEX TABLE

RMPT

Common Name : SRM Parameter Table

Macro ID : IRARMPT

DSECT Name : RMPT

Created by : Assembled into nucleus module, IRARMCNS

Subpool and Key : NUCLEUS and key 0

Size : 104 bytes

Pointed to by : RMCTRMPT field of the RMCT data area

Serialization : SRM lock

Function : Contains certain values and SRM external parameters used by SRM control to determine the criteria and frequency of SRM analysis.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	104	RMPT	
0	(0) CHARACTER	4	RMPTNAME	BLOCK IDENTIFICATION 'RMPT'
4	(4) SIGNED	4	RMPTCPU	CPU RESOURCE FACTOR
8	(8) SIGNED	4	RMPTIOC	I/O RESOURCE FACTOR
12	(C) SIGNED	4	RMPTMSO	STOR RESOUCE FACTOR
16	(10) SIGNED	4	RMPTERV	ENQ RESIDENCE INTERVAL VALUE
20	(14) SIGNED	4	RMPTIDF	DEFAULT ISV VALUE
24	(18) UNSIGNED	4	RMPTTCS	SYSTEM CLOCK STEP TIME
28	(1C) UNSIGNED	4	RMPTTOM	TIME DRIVEN MINIMUM TOLERANCE
32	(20) UNSIGNED	4	RMPTTOL	TIME DRIVEN INVOKE TOLERANCE
36	(24) SIGNED	4	RMPTTUNT	LENGTH OF TUNIT
40	(28) SIGNED	2	RMPTNTU	NUMBER OF TUNITS/SEC
42	(2A) SIGNED	2	RMPTIMN	MINIMUM ISV VALUE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
44	(2C) SIGNED	4	RMPTXCHT	SWAP EXCHANGE THRESH.
48	(30) UNSIGNED	4	RMPTSAET	SWAP ANAL. EVALUATION THRES. (UNSIGNED TIME VALUE)
52	(34) UNSIGNED	4	RMPTWMET	WLM EVALUATION THRESH (UNSIGNED TIME VALUE)
56	(38) UNSIGNED	4	RMPTCPET	CPU EVALUATION THRESHOLD UNSIGNED TIME VALUE
60	(3C) UNSIGNED	4	RMPTIOET	I/O EVALUATION THRESHOLD UNSIGNED TIME VALUE
64	(40) UNSIGNED	4	RMPTMSET	STOR EVALUATION THRESHOLD UNSIGNED TIME VALUE
68	(44) CHARACTER	3	RMPTOPC	CPU RES FACTOR COEFF
71	(47) CHARACTER	3	RMPTOPI	IOC RES FACTOR COEFF
74	(4A) CHARACTER	3	RMPTOPM	MSO RES FACTOR COEFF
77	(4D) CHARACTER	6	RMPTOPE	ENQ RES CPU SERV VALU
83	(53) CHARACTER	2	RMPTOPTN	OPT SUFFIX NUMBER
85	(55) CHARACTER	4	RMPTRSV1	RESERVED
89	(59) CHARACTER	7	RMPTRSVC	RESERVED
96	(60) SIGNED	4	RMPTDLYD	MINIMUM RTO DELAY
100	(64) SIGNED	4	RMPTRSVB	RESERVED
104	(68) CHARACTER	0	RMPTEND	END OF RMPT

RMSB

Common Name : SRM Subroutine Vector Table

Macro ID : IRARMSB

DSECT Name : RMSB

Created by : Assembled into nucleus module, IRARMCNS

Subpool and Key : NUCLEUS and key 0

Size : 160 bytes

Pointed to by : RMCTRMSB field of the RMCT data area

Serialization : SRM lock

Function : Contains the entry point addresses of all externally entered subroutines (routines which return control to the invoker) within the system resources manager. The IRACTLCL macro keys off the RMSB displacements to route control to the requested subroutine.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	160	RMSB	
0	(0) ADDRESS	4	RMSBI02	INVOKE ASCBCHAP SERVICE RTNE
4	(4) ADDRESS	4	RMSBI03	INVOKE REAL FRAME STEAL RTNE
8	(8) ADDRESS	4	RMSBI04	INVOKE STORAGE GET/FREE RTNE
12	(C) ADDRESS	4	RMSBI05	INVOKE TIME INTERVL SET RTNE
16	(10) ADDRESS	4	RMSBI06	INVOKE QUIESCE FOR SWAPOUT
20	(14) ADDRESS	4	RMSBI07	INVOKE SCHEDULE OF SWAP-IN
24	(18) ADDRESS	4	RMSBI16	ROUTINE TO POST
28	(1C) ADDRESS	4	RMSBI09	INVOKE RECORD TO OPERATOR
32	(20) ADDRESS	4	RMSBI10	INVOKE ABNORMAL TERMINATION
36	(24) ADDRESS	4	RMSBCRL	RECEIVE SYS ALGRTHM REQUEST

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
40	(28) ADDRESS	4	RMSBCRN	RECEIVE USER ACTION REQUEST
44	(2C) ADDRESS	4	RMSBCRY	RECEIVE USER ANALYZE REQUEST
48	(30) ADDRESS	4	RMSBWM5	CHECK USER FOR PERIOD CHANGE
52	(34) ADDRESS	4	RMSBWM1	CALCULAT USER SERVICE AMOUNT
56	(38) ADDRESS	4	RMSBWM4	CALCULAT USER NORMALIZD LEVL
60	(3C) ADDRESS	4	RMSBWMK	DETERMINE ANLZ APPLICABILITY
64	(40) ADDRESS	4	RMSBWMN	START A NEW USER TRANSACTION
68	(44) ADDRESS	4	RMSBWM0	STOP CURRNT USER TRANSACTION
72	(48) ADDRESS	4	RMSBWMQ	PROCESS QUIESCE CMPLT EVENT
76	(4C) ADDRESS	4	RMSBWMR	PROCESS RESTORE CMPLT EVENT
80	(50) ADDRESS	4	RMSBI11	INVOKE EVENT NOTIFICATION
84	(54) ADDRESS	4	RMSBWM9	XACN RPTING ALGO, ALIAS
88	(58) ADDRESS	4	RMSBWM0	XACN RPTING SVCE CALC RTNE
92	(5C) ADDRESS	4	RMSBFPG	FIND P.G. RTNE
96	(60) ADDRESS	4	RMSBTRC	ADR ADR SRM INVOKE
100	(64) ADDRESS	4	RMSBWR4	CALCULATE ACTIVITY MEASRMNT
104	(68) ADDRESS	4	RMSBWR6	RECALCULATE ACTIVITY RATE
108	(6C) ADDRESS	4	RMSBWR9	XACN RPTING WAMP UPDATE RTNE
112	(70) ADDRESS	4	RMSBSET	PROCESS NEWIPS SYSEVENT RTN
116	(74) ADDRESS	4	RMSBSIC	ADR OF RTNE PROCESSING NEWICS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
120	(78) ADDRESS	4	RMSBNOP	RETURN TO INVOKING ROUTINE
124	(7C) ADDRESS	4	RMSBACT	ACTIVATE DSP CONTROL
128	(80) ADDRESS	4	RMSBCLO	ADJ CPU UTIL WHEN SWAP USER
132	(84) ADDRESS	4	RMSBIL0	COMPUTE USER I/O PROFILE
136	(88) ADDRESS	4	RMSBSWT	SWITCH DSP CNTL ALG
140	(8C) ADDRESS	4	RMSBSOP	NEWOPT SYSEVT RTN
144	(90) SIGNED	4	RMSBRSV1	RESERVED
148	(94) SIGNED	4	RMSBRSV2	RESERVED
152	(98) SIGNED	4	RMSBRSV3	RESERVED
156	(9C) SIGNED	4	RMSBRSV4	RESERVED
160	(A0) CHARACTER	0	RMSBEND	END OF RMSB TABLE

RNLE

Common Name : Resource Name List Entry

Macro ID : ISGRNLE

DSECT Name : RNLE

Created by : Loaded from SYS1.LINKLIB by ISGNCBIM into SQA during NIP.

Subpool and Key : Subpool 245 and key 0

Size : Each entry is 10 bytes plus a variable length RNAME.

Pointed to by : The RNLE is pointed to by register 0 on entry to ISGGREX0 which contains one of the following:

The System Exclusion Resource Name List (GVTSERNL),
the System Inclusion Resource Name List (GVTSIRNL), and
the RESERVE Conversion Resource Name List (GVTRCRNL).

Serialization : None

Function : Defines resources that are to be included or excluded from Global Resource Serialization and also defines RESERVE resources that are to be converted to global ENQ's.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
---------	------	--------	------	-------------

0	(0) STRUCTURE	10	RNLE	RNL ENTRY
0	(0) CHARACTER	1	RNLEFLGS	FLAG BYTE
	1...		RNLELAST	1: THIS IS THE LAST ENTRY
	.1...		RNLEGENR	1: GENERIC ENTRY
	..1.		RNLEFR06	RESERVED
	...1		RNLEFR05	RESERVED
	.... 1...		RNLEFR04	RESERVED
	.... .1..		RNLEFR03	RESERVED
	.... .1.		RNLEFR02	RESERVED
	.... ...1		RNLEFR01	RESERVED
1	(1) UNSIGNED	1	RNLERNML	LENGTH OF RNAME
2	(2) CHARACTER	8	RNLEQNME	QNAME
10	(A) CHARACTER	0	RNLERNME	RNAME (VARIABLE LENGTH)

RPL

Common Name : Request Parameter List

Macro ID : IFGRPL

DSECT Name : IFGRPL

Created by : User via the RPL macro instruction

Subpool and Key : 250 and user's key

Size : 76 bytes

Pointed to by : Register 1 for use by REQUEST processing routines

PLHMRPL field of the PLH data area

Serialization : The RPLACTIV field prevents concurrent use of the RPL.

Function : Contains user-request information and error feedback information. Also maintains information required by the GET and PUT macro instructions.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	IFGRPL	REQUEST PARAMETER LIST
	.... ....		RPLIDWD	"x" RPL IDENTIFICATION WORD
0	(0) HEX	1	RPLID	RPL IDENTIFIER
	.... ....		RPLIDD	"X'00'" IDENTIFIER VALUE X'00'
1	(1) HEX	1	RPLSTYP	RPL SUBTYPE SET TO X'00' FOR DATA MANAGEMENT AND X'0D' FOR JECS
	...1		RPLSVSAM	"X'10'" VSAM SUBTYPE X04SVHS
	...1 ...1		RPLSVRP	"X'11'" VRP SUBTYPE X04SVHS
	..1.		RPLSVTAM	"X'20'" VTAM SUBTYPE X04SVHS
	.1..		RPLS3540	"X'40'" 3540 SUBTYPE X04SVHS
	1111 1111		RPLCRID	"X'FF'" CRPL ID (VTAM)
2	(2) HEX	1	RPLREQ	RPL REQUEST TYPE
	.... ....		RPLGET	"X'00'" GET
	.... ...1		RPLPUT	"X'01'" PUT
	.... ..11		RPLPOINT	"X'03'" POINT
	.... .1.1		RPLERASE	"X'05'" ERASE
	.... .111		RPLJSFMT	"X'07'" JES FORMAT REQUEST

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
----------------	-------------	---------------	-------------	--------------------

THE FOLLOWING CODES ARE NOT STORED IN RPLREQ, BUT ARE
AVAILABLE IN REGISTER 0 WHEN THE FUNCTION IS ENTERED
AND STORED IN RPLREQ DURING PROCESSING OF THE FUNCTION.

.... .1.	RPLCHECK	"X'02'"	CHECK
.... .1..	RPLENDRE	"X'04'"	ENDREQ
.... .11.	RPLVERIF	"X'06'"	VERIFY
.... .111	RPLIMPRT	"X'07'"	IMPORT
.... 1...	RPLPFMTD	"X'08'"	DATA PREFORMAT
.... 1..1	RPLPFMTI	"X'09'"	INDEX PREFORMAT
.... 1.1.	RPLFRCIO	"X'0A'"	FORCE I/O
....1	RPLCNVTA	"X'10'"	CNVTAD
....1 ...1	RPLMNTAC	"X'11'"	MNTACQ(VSAM)
....1 ...1	RPLWRITE	"X'11'"	WRITE(VTAM)
....1 ..1.	RPLACQRA	"X'12'"	ACQRANGE(VSAM)
....1 ..1.	RPLRESET	"X'12'"	RESET(VTAM)
....1 ..11	RPLTERM	"X'13'"	TERMRPL
....1 ..11	RPLDO	"X'13'"	DO(VTAM)
....1 .1.1	RPLQUISE	"X'15'"	SETLOGON(VTAM)
....1 .11.	RPLSMLGO	"X'16'"	SIMLOGON(VTAM)
....1 .111	RPLOPNDS	"X'17'"	OPNDST(VTAM)
....1 1..1	RPLCHNG	"X'19'"	CHANGE(VTAM)
....1 1..1.	RPLINQIR	"X'1A'"	INQUIRE(VTAM)
....1 1..11	RPLINTPT	"X'1B'"	INTRPRET(VTAM)
....1 11..1	RPLREAD	"X'1D'"	READ(VTAM)
....1 111..	RPLSLICT	"X'1E'"	SOLICIT(VTAM)
....1 1111..	RPLCLOSE	"X'1F'"	CLSDST(VTAM)
..1. ....1	RPLCLACB	"X'21'"	CLOSEACB(VTAM)
..1. ...1.	RPLSNDCD	"X'22'"	SEND(VTAM) X3004BS
..1. ...11	RPLRCVCD	"X'23'"	RECEIVE(VTAM) X3004BS
..1. .1..	RPLRSRCD	"X'24'"	RESETSR(VTAM) X3004BS
..1. .1.1	RPLSSCCD	"X'25'"	SESSIONC(VTAM) X3004BS
..1. .111	RPLSDCMD	"X'27'"	SENCMD(VTAM)
..1. 1...1	RPLRVCMD	"X'28'"	RCVCMD(VTAM)
..1. 1..1.	RPLTREQS	"X'29'"	REQSESS(VTAM)
..1. 1..1.	RPLTOPNS	"X'2A'"	OPNSEC(VTAM)
..1. 1..11	RPLTCLSS	"X'2B'"	CLSSEC(VTAM)
..1. 11..	RPLTRMS	"X'2C'"	TRMSESS(VTAM)

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
3	(3) HEX	1	RPLLEN	LENGTH OF THIS RPL
3	(3) HEX	1	RPLLEN2	ALTERNATE NAME FOR RPLLEN
4	(4) ADDRESS	4	RPLPLHPT	POINTER TO PLACEHOLDER
8	(8) ADDRESS	4	RPLECB	INTERNAL ECB OR POINTER TO EXTERNAL ECB

ECB FLAGS

1...	....	RPLWAIT	"X'80'" A REQUEST HAS BEEN ISSUED
.1...	....	RPLPOST	"X'40'" THE REQUEST HAS COMPLETED
12	(C) HEX	4	RPLFDBWD	FEEDBACK WORD X04SVHS
12	(C) HEX	1	RPLSTAT	CURRENT RPL STATUS
....	11..	RPLFUNCD	"RPLSTAT" PROB DET FUNCT CD	
13	(D) HEX	3	RPLFDBK	ERROR FEEDBACK
13	(D) HEX	1	RPLRTNCD	RPL RETURN CODE
....	....	RPLNOERR	"X'00'" NORMAL RETURN
....	1..	RPLBLKER	"X'04'" INVALID CONTROL BLOCK	
....	.1..	RPLCBLKE	"X'04'" ALTERNATE NAME FOR RPLBLKER	
....	1...	RPLLOGER	"X'08'" ILLOGICAL REQUEST	
....	1...	RPLLOGIC	"X'08'" ALTERNATE NAME FOR RPLLOGER	
....	11..	RPLPHYER	"X'0C'" PHYSICAL I/O ERROR	
....	11..	RPLPHYS	"X'0C'" ALTERNATE NAME FOR RPLPHYER	
...1	....	RPLNGRCC	"X'10'" A CONDITIONAL COMMAND WAS ISSUED BUT THE CONDITION WAS NOT MET(VTAM)
...1	.1..	RPLSPECC	"X'14'" A TEMPORARY OUT-OF-CORE SITU- ATION EXISTS(VTAM)	
...1	1...	RPLCMDRT	"X'18'" THE REQUEST WAS CANCELLED BY THE RESET COMMAND(VTAM)	
...1	11..	RPLPURGE	"X'1C'" THE COMMAND WAS PURGED(VTAM)	
..1.	....	RPLVTMNA	"X'20'" VTAM IS NOT ACTIVE(VTAM)
..1.	.1..	RPLSYERR	"X'24'" SYSTEM ERROR(VTAM)	
..1.	1...	RPLDEVDC	"X'28'" DIAL LINE IS DISCONNECTED(VTAM)	
..1.	11..	RPLLIMEX	"X'2C'" RESPONSE LIMIT EXCEEDED(VTAM) X3004BS	
..11	....	RPLEXRQ	"X'30'" EXCEPTION REQUEST RECEIVED(VTAM)

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				X3004BS
	..11 .1..		RPLEXRS	"X'34'" EXCEPTION RESPONSE
	..11 1...		RPLNOIN	RECEIVED(VTAM) X3004BS
	..11 11..		RPLVABND	"X'38'" NO INPUT AVAILABLE(VTAM) X3004BS
13	(D) HEX	1	RPLERREG	"X'3C'" VTAM ENCOUNTERED ABEND CONDITION
14	(E) HEX	2	RPLCNDCD	ALTERNATE NAME FOR RPLRTNCD
14	(E) HEX	1	RPLCMPPON	RPL CONDITION CODE
14	(E) HEX	1	RPLFDB2	COMPONENT ISSUING CODE(VSAM)
	1...		RPLERLK	REASON CODE(VTAM)
	.1..		RPLRVID	"X'80'" ERROR LOCK SET
	..1.		RPLATND	"X'40'" RVI RECEIVED
	...1		RPLDVUNS	"X'20'" ATTN RECEIVED
	.... 1...		RPLIOERR	"X'10'" DEVICE UNUSABLE
	.... .1..		RPLDLGFL	"X'08'" I/O ERROR TYPE- 0=INPUT/
	.... .1.		RPLCUERR	1=OUTPUT
	.... .1.		RPLSTSAV	"X'04'" DIALOG INIT FAILED
15	(F) HEX	1	RPLERRCD	"X'02'" CONTROL UNIT FAILURE
15	(F) HEX	1	RPLFDB3	"X'01'" SENSE BYTES PRESENT
	1...		RPLUINPT	ERROR CODE(VSAM)
	.1..		RPLSV32	DATA FLAGS(VTAM)
	..1.		RPLREOB	"X'80'" UNSOLICITED INPUT
	...1		RPLREOM	"X'40'" RESERVED
	.... 1...		RPLREOT	"X'20'" END OF BLOCK
	.... .1..		RPLLGFRC	"X'10'" END OF MESSAGE
	.... .1..		RPLRLG	"X'08'" END OF TRANSMISSION
	.... .1..		RPLRDSOH	"X'04'" LOGOFF DETECTED
	.... .1..			"X'02'" LEADING GRAPHICS RECEIVED
	.... .1.			"X'01'" START OF HEADER (SOH) RECEIVED
16	(10) SIGNED	2	RPLKEYLE	KEY LENGTH (PROC=GEN)
16	(10) SIGNED	2	RPLKEYL	ALTERNATE NAME FOR RPLKEYLE
18	(12) SIGNED	2	RPLSTRID	CCW STRING IDENTIFIER
20	(14) ADDRESS	4	RPLCCHAR	POINTER TO CONTROL CHARACTER FOR UNIT RECORD DEVICES
24	(18) ADDRESS	4	RPLDACP	POINTER TO DATA ACB
28	(1C) ADDRESS	4	RPLTCBPT	POINTER TO TCB

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
32	(20) ADDRESS	4	RPLAREA	POINTER TO AREA CONTAINING DATA RECORD
36	(24) ADDRESS	4	RPLARG	POINTER TO SEARCH ARGUMENT; POINTER TO RELATIVE ADDRESS FOR POINT OPERATION; POINTER TO SETPRT PARMLIST
36	(24) HEX	2	RPLSAF	SOURCE ADDRESS FIELD(VTAM)
38	(26) HEX	2	RPLDAF	DESTINATION ADDRESS FIELD(VTAM)
40	(28) BITSTRING	4	RPLOPTCD	OPTION CODES
40	(28) BITSTRING	1	RPLOPT1	OPTION BYTE 1
1...	....		RPLLOC	"X'80'" LOCATE MODE; MOVE MODE IF 0
.1..	....		RPLDIR	"X'40'" DIRECT ACCESS
..1.	....		RPLSEQ	"X'20'" SEQUENTIAL ACCESS
...1	....		RPLSKP	"X'10'" SKIP SEQUENTIAL ACCESS
.... 1..			RPLASY	"X'08'" ASYNCHRONOUS PROCESSING
.... .1..			RPLKGE	"X'04'" SEARCH KEY GT/EQ
.... ...1.			RPLGEN	"X'02'" GENERIC KEY REQUEST
.... ...1			RPLECBSW	"X'01'" EXTERNAL ECB
.... ...1			RPLECBIN	"X'01'" ALTERNATE NAME FOR RPLECBSW
41	(29) BITSTRING	1	RPLOPT2	OPTION BYTE 2
1...	....		RPLKEY	"X'80'" KEYED ACCESS
.1..	....		RPLADR	"X'40'" ADDRESSED ACCESS
.1..	....		RPLADD	"X'40'" ALTERNATE NAME FOR RPLADR
..1..	....		RPLCNV	"X'20'" CONTROL INTERVAL ACCESS
...1..	....		RPLBWD	"X'10'" FWD=0/BWD=1 X04SVHS
.... 1..			RPLL RD	"X'08'" ARD=0/LRD=1 X04SVHS
.... .1..			RPLWAITX	"X'04'" AYNCH PROC WAIT
.... ...1.			RPLUPD	"X'02'" UPDATE
.... ...1			RPLNSP	"X'01'" NOTE STRING POSITION
42	(2A) BITSTRING	1	RPLOPT3	OPTION BYTE 3
1...	....		RPLEODS	"X'80'" END OF USER SYSOUT
.1..	....		RPLSF RM	"X'40'" SPECIAL FORM ON REMOTE PRINTER
..1..	....		RPLBLK	"X'20'" BLOCKED UCS DATA CHECKS FIXED BLOCK PROCESSING
...1..	....		RPLVFY	"X'10'" VERIFY UCS/FCB INFORMATION
.... 1..			RPLFLD	"X'08'" LOAD UCS BUFFER IN FOLD MODE
.... ...1.			RPLFMT	"X'02'" FCB LOAD
.... .11.			RPLFRMT	"X'06'" UCS LOAD IF 00
.... ...1			RPLALIGN	"X'01'" ALIGN FCB BUFFER LOADING

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
43	(2B) BITSTRING	1	RPLOPT4	OPTCD BYTE 4
	1...		RPLENDTR	"X'80'" 3800 END OF TRANSMISSION
	.1...		RPLMKFRM	"X'40'" 3800 MARK FORM
	..1.		RPLNOCIR	"X'20'" NO CI RECLAIM
44	(2C) ADDRESS	4	RPLNXTRP	POINTER TO NEXT RPL
44	(2C) ADDRESS	4	RPLCHAIN	ALTERNATE NAME FOR RPLNXTRP
48	(30) ADDRESS	4	RPLRLEN	LENGTH OF RECORD
52	(34) ADDRESS	4	RPLBUFL	USER BUFFER LENGTH
56	(38) HEX	4	RPLOPTC2	VTAM OPTIONS
56	(38) HEX	1	RPLOPT5	OPTION BYTE 5
	1...		RPLDLGIN	"X'80'" CONTINUE READING IN SPECIFIC TERMINAL MODE; IF 0, CONTINUE READING IN ANY TERMINAL MODE
	.1...		RPLSSNIN	"X'40'" CONTINUE DIALOG WITH THE SAME TERMINAL; IF 0, END DIALOG WITH THAT TERMINAL
	..1.		RPLPSOPT	"X'20'" PASS TERMINAL TO REQUESTING APPLICATION; IF 0, MAKE TERMINAL AVAILABLE TO ANY APPLICATION
	...1		RPLNERAS	"X'10'" WRITE TO 3270 BUT DO NOT ERASE WHAT IS CURRENTLY DISPLAYED
	.... 1...		RPLEAU	"X'08'" WRITE TO 3270 AND ERASE UNPROTECTED FIELDS
	.... .1..		RPLERACE	"X'04'" WRITE TO 3270 AND ERASE CURRENT DISPLAY
	.... ..1.		RPLNODE	"X'02'" READ FROM ANY TERMINAL; IF 0, READ FROM A SPECIFIC TERMINAL
	.... ...1		RPLWROPT	"X'01'" CONVERSATIONAL MODE; IF 0, NON-CONVERSATIONAL MODE
57	(39) HEX.	1	RPLOPT6	OPTION BYTE 6
	1...		RPLEOB	"X'80'" WRITE A BLOCK OF DATA
	.1...		RPLEOM	"X'40'" WRITE THE LAST BLOCK OF A MESSAGE
	..1.		RPLEOT	"X'20'" WRITE THE LAST BLOCK OF THE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
58 (3A) HEX	1		RPLCOND	TRANSMISSION "X'10'" DO NOT STOP OPERATION IF STARTED (USED WITH RESET REQUEST)
			RPLNCOND	"X'08'" STOP OPERATION IMMEDIATELY (USED WITH RESET REQUEST)
			RPLLOCK	"X'04'" RESET ERROR LOCK TO UNLOCKED STATUS
			RPLRSV67	"X'02'" RESERVED
			RPLRSV68	"X'01'" RESERVED
			RPLOPT7	OPTION BYTE 7
			RPLCNALL	"X'80'" ALL TERMINALS IN OPNDST LIST MUST BE AVAILABLE BEFORE ANY ARE CON- NECTED
			RPLCNANY	"X'40'" CONNECT ANY ONE TERMINAL IN OPNDST LIST
			RPLCNIMM	"X'20'" RESERVED
			RPLQOPT	"X'10'" QUEUE THE OPNDST REQUEST IF IT CANNOT BE SATISFIED IMMEDIATELY; IF 0, REJECT THE OPNDST REQUEST IF IT CANNOT BE SATISFIED IMMEDIATELY
59 (3B) HEX	1		RPLTPOST	"X'08'" RPL ALREADY UNDER PSS
			RPLRLSOP	"X'04'" SCHEDULE THE RELREQ EXIT OF THE REQUIRED TERMINAL IMMEDIATELY; IF 0, EITHER WAIT FOR THE TERMINAL TO BECOME AVAILABLE OR REJECT THE REQUEST IF THE TERMINAL IS BUSY(DEPENDS ON THE SETTING OF RPLQOPT)
			RPLTCRNO	"X'02'" CLOSE IN PROCESS FOR PO INTER- FACE
			RPLRSV78	"X'01'" RESERVED
			RPLOPT8	OPTION BYTE 8
			RPLODACQ	"X'80'" THE APPLICATION REQUIRES A SPE- CIFIC TERMINAL
			RPLODACP	"X'40'" THE APPLICATION WILL ACCEPT ANY TERMINAL DESIRING LOGON
			RPLODPRM	"X'20'" A SPECIFIC TERMINAL IS TO BE PREEMPTED EVEN THOUGH ANOTHER APPLICA- TION IS HOLDING IT (TOLTEP ONLY)
			RPLPEND	"X'10'" PREEMPT THE TERMINAL AFTER ALL PENDING OPERATIONS ARE COMPLETED (TOLTEP)

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				ONLY)
.... 1...			RPLSESS	"X'08'" PREEMPT THE TERMINAL AFTER COMPLETION OF THE CURRENT DIALOG SESSION (TOLTEP ONLY)
.... .1..			RPLACTV	"X'04'" PREEMPT THE TERMINAL IF CONNECTED BUT NOT BUSY (TOLTEP ONLY)
.... ..1.			RPLUNCON	"X'02'" PREEMPT THE TERMINAL IMMEDIATELY (TOLTEP ONLY)
.... ...1			RPLRSV88	"X'01'" RESERVED
60	(3C) CHARACTER	8	RPLRBAR	RBA RETURN LOCATION
60	(3C) CHARACTER	2	RPLAIXPC	AIX POINTER COUNTX04SVHS
62	(3E) HEX	1	RPLAIXID	AIX POINTER TYPE X04SVHS
1....			RPLAXPKP	"X'80'" RBA=1/PRIME=0
63	(3F) HEX	1		RESERVED X04SVHS
64	(40) CHARACTER	4	RPLDDDD	RETURN AREA FOR RELATIVE BYTE ADDRESS
68	(44) HEX	1	RPLEXTDS	EXIT DEFINITIONS Z9999DT
68	(44) HEX	1	RPLEXTD1	ALTERNATE NAME FOR RPLEXTDS
1....			RPLEXSCH	"X'80'" AN EXIT HAS BEEN SCHEDULED
.1....			RPLNEXIT	"X'40'" NO EXIT WAS SPECIFIED
..1....			RPLEXIT	"X'20'" ASYNCH EXIT
.... 1...			RPLTCRYP	"X'08'" IF ON, ENCRYPTION FEATURE REQ
.... .1..			RPLNIB	"X'04'" THE RPLARG FIELD CONTAINS A POINTER TO THE NIB
.... ...1.			RPLBRANC	"X'02'" USE A BRANCH ENTRY TO THE MACRO
69	(45) HEX	1	RPLACTIV	ACTIVE INDICATOR X'FF' INDICATES ACTIVE; X'00' INDICATES INACTIVE
70	(46) SIGNED	2	RPLEMLEN	LENGTH OF THE ERROR MESSAGE AREA
72	(48) ADDRESS	4	RPLERMSA	POINTER TO THE ERROR MESSAGE AREA
0	(0) BAL STMT	0		GET VSAM EXTENSION

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
IFGRPL	0		RPLDEVDC	D	28	RPLID	0	
RPLACQRA	2	12	RPLDIR	28	40	RPLIDD	0	00
RPLACTIV	45		RPLDLGFL	E	04	RPLIDWD	0	00
RPLACTV	3B	04	RPLDLGIN	38	80	RPLIMPRT	2	07
RPLADD	29	40	RPLDO	2	13	RPLINQIR	2	1A
RPLADR	29	40	RPLDVUNS	E	10	RPLINTPT	2	1B
RPLAIXID	3E		RPLEAU	38	08	RPLIOERR	E	08
RPLAIXPC	3C		RPLECB	8		RPLJSFMT	2	07
RPLALIGN	2A	01	RPLECBIN	28	01	RPLKEY	29	80
RPLAREA	20		RPLECBSW	28	01	RPLKEYL	10	
RPLARG	24		RPLEMLN	46		RPLKEYLE	10	
RPLASY	28	08	RPLENDRE	2	04	RPLKGE	28	04
RPLATND	E	20	RPLENDTR	2B	80	RPLLEN	3	
RPLAXPKP	3E	80	RPLEOB	39	80	RPLLEN2	3	
RPLBLK	2A	20	RPLEODS	2A	80	RPLLGFR	F	04
RPLBLKER	D	04	RPLEOM	39	40	RPLLIMEX	D	2C
RPLBRANC	44	02	RPLEOT	39	20	RPLLOC	28	80
RPLBUFL	34		RPLERACE	38	04	RPLLOCK	39	04
RPLBWD	29	10	RPLERASE	2	05	RPLLOGER	D	08
RPLCBLKE	D	04	RPLERLK	E	80	RPLLOGIC	D	08
RPLCCHAR	14		RPLERMSA	48		RPLLRD	29	08
RPLCHAIN	2C		RPLERRCD	F		RPLMKFRM	2B	40
RPLCHECK	2	02	RPLERREG	D		RPLMNTAC	2	11
RPLCHNG	2	19	RPLEXIT	44	20	RPLNCOND	39	08
RPLCLACB	2	21	RPLEXRQ	D	30	RPLNERAS	38	10
RPLCLOSE	2	1F	RPLEXRS	D	34	RPLNEXIT	44	40
RPLCMDRT	D	18	RPLEXSCH	44	80	RPLNGRCC	D	10
RPLCMPPON	E		RPLEXTDS	44		RPLNIB	44	04
RPLCNALL	3A	80	RPLEXTD1	44		RPLNOCIR	2B	20
RPLCNANY	3A	40	RPLFDBK	D		RPLNODE	38	02
RPLCNDCD	E		RPLFDBWD	C		RPLNOERR	D	00
RPLCNIMM	3A	20	RPLFDB2	E		RPLNOIN	D	38
RPLCNV	29	20	RPLFDB3	F		RPLNSP	29	01
RPLCNVTA	2	10	RPLFLD	2A	08	RPLNXTRP	2C	
RPLCOND	39	10	RPLFMT	2A	02	RPLODACP	3B	40
RPLCRID	1	FF	RPLFRC10	2	0A	RPLODACQ	3B	80
RPLCUERR	E	02	RPLFRMT	2A	06	RPLODPRM	3B	20
RPLDACP	18		RPLFUNCD	C	0C	RPLOPNDS	2	17
RPLDAF	26		RPLGEN	28	02	RPLOPTCD	28	
RPLDDDD	40		RPLGET	2	00	RPLOPTC2	38	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX	HEX	NAME	HEX	HEX	NAME	HEX	HEX
	OFFSET	VALUE		OFFSET	VALUE		OFFSET	VALUE
RPLOPT1	28		RPLREQ	2		RPLSTYP	1	
RPLOPT2	29		RPLRESET	2	12	RPLSVRP	1	11
RPLOPT3	2A		RPLRLEN	30		RPLSVSAM	1	10
RPLOPT4	2B		RPLRLG	F	02	RPLSVTAM	1	20
RPLOPT5	38		RPLRLSOP	3A	04	RPLSV32	F	40
RPLOPT6	39		RPLRSRCD	2	24	RPLSYERR	D	24
RPLOPT7	3A		RPLRSV67	39	02	RPLS3540	1	40
RPLOPT8	3B		RPLRSV68	39	01	RPLTCBPT	1C	
RPLPEND	3B	10	RPLRSV78	3A	01	RPLTCLSS	2	2B
RPLPFMTD	2	08	RPLRSV88	3B	01	RPLTCRNO	3A	02
RPLPFMTI	2	09	RPLRTNCD	D		RPLTCRYP	44	08
RPLPHYER	D	0C	RPLRVCMD	2	28	RPLTERM	2	13
RPLPHYSC	D	0C	RPLRVID	E	40	RPLTOPNS	2	2A
RPLPLHPT	4		RPLSAF	24		RPLTPOST	3A	08
RPLPOINT	2	03	RPLSDCMD	2	27	RPLTREQS	2	29
RPLPOST	8	40	RPLSEQ	28	20	RPLTRMS	2	2C
RPLPSOPT	38	20	RPLSESS	3B	08	RPLUINPT	F	80
RPLPURGE	D	1C	RPLSFORM	2A	40	RPLUNCON	3B	02
RPLPUT	2	01	RPLSKP	28	10	RPLUPD	29	02
RPLQOPT	3A	10	RPLSLICT	2	1E	RPLVABND	D	3C
RPLQUISE	2	15	RPLSMLGO	2	16	RPLVERIF	2	06
RPLRBAR	3C		RPLSNDCD	2	22	RPLVFY	2A	10
RPLRCVCD	2	23	RPLSPECC	D	14	RPLVTMNA	D	20
RPLRDSOH	F	01	RPLSSCCD	2	25	RPLWAIT	8	80
RPLREAD	2	1D	RPLSSNIN	38	40	RPLWAITX	29	04
RPLREOB	F	20	RPLSTAT	C		RPLWRITE	2	11
RPLREOM	F	10	RPLSTRID	12		RPLWROPT	38	01
RPLREOT	F	08	RPLSTSAV	E	01			

RPT

Common Name : Resource Pool Table

Macro ID : ISGRPT

DSECT Name : RPT

Created by : ISGNNCBIM in SQA and ISGANASIM in the global resource serialization private area.

Subpool and Key : 229 and key 0

Size : Global RPT - 288 bytes; Local RPT - 260 bytes

Pointed to by : Global RPT - GVTXGRPT; Local RPT - GVTXLRPT

Serialization : Local Resource Pool Table entries are serialized by CMS ENQ/DEQ class lock. Global Resource Pool Table entries are serialized by the global resource serialization local lock and the Global Resource Pool Table entry for QWBs is serialized by the CMS ENQ/DEQ class lock.

Function : There are two Resource Pool Tables - one for Global Resources and one for Local Resources. Each Resource Pool Table contains an entry for each cell type allowed. There are additional entries for cell types with multiple sizes. Each Resource Pool Table Entry points to the first and last pool extent block for that pool.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	8	RPT	RESOURCE POOL TABLE
0	(0) CHARACTER	8	RPTHDR	RESOURCE POOL TABLE HEADER
0	(0) CHARACTER	4	RPTID	CONTROL BLOCK ACRONYM (GLOBAL-GRPT, LOCAL-LRPT)
4	(4) CHARACTER	1		RESERVED
5	(5) UNSIGNED	1	RPTNENT	NUMBER OF ENTRIES IN THIS RPT
6	(6) CHARACTER	2		RESERVED
8	(8) CHARACTER	0	RPTENT	RESOURCE POOL TABLE ENTRY

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
8	(8) CHARACTER	16	RPTECOMM	THIS STRUCTURE CORRESPONDS TO THE FIRST SIXTEEN BYTES OF A PEXB, SO THE RPT CAN BE USED AS A DUMMY PEXB WHEN THE POOL IS EMPTY
8	(8) CHARACTER	4	RPTETYPE	CONTROL BLOCK ACRONYM FOR THE CELLS CONTAINED IN THIS POOL
12	(C) ADDRESS	4	RPTEFPXB	ADDRESS OF THE FIRST POOL EXTENT BLOCK IN THIS POOL
16	(10) ADDRESS	4	RPTELPXB	ADDRESS OF THE LAST POOL EXTENT BLOCK IN THIS POOL
20	(14) SIGNED	2	RPTEAVAL	NUMBER OF CELLS AVAILABLE IN THIS POOL EXTENT BLOCK (THIS FIELD MUST BE ZERO SO THAT THIS RPT ENTRY APPEARS TO BE AN EMPTY POOL EXTENT BLOCK)
22	(16) SIGNED	2	RPTETOTL	TOTAL NUMBER OF CELLS IN THIS POOL EXTENT BLOCK (THIS FIELD MUST BE ZERO SO THAT THIS RPT ENTRY APPEARS TO BE AN EMPTY POOL EXTENT BLOCK)
24	(18) CHARACTER	2		RESERVED
26	(1A) SIGNED	2	RPTESIZE	SIZE OF CELL CONTAINED WITHIN THIS POOL
28	(1C) SIGNED	4	RPTEPTOT	TOTAL NUMBER OF CELLS IN THE ENTIRE POOL USED BY THE DUMPING ROUTINES
32	(20) ADDRESS	4	RPTEIAPQ	INACTIVE PEXB QUEUE CONSISTING OF PEXBS CURRENTLY INACTIVE THESE PEXBS ARE QUEUED BY ISGSDAL AND DEQUEUED BY ISGSA-ALC OR ISGSPRLS

RQE

Common Name : IOS Request Queue Element

Macro ID : IECDRQE

DSECT Name : RQE

Created by : IECVEXCP, EXCP

Subpool and Key : 245 and key 0

Size : 40 bytes

Pointed to by : ASXBFRQE field of the ASXB data area
ASXBLRQE field of the ASXB data area
IOSUSE field of the IOSB data area
RQELNK field of the RQE data area

Serialization : Local lock

Function : Used by the EXCP processor to describe an I/O request, record its progress, and contain the addresses of associated control blocks. Also used by EXCP to queue related I/O requests on the data extent block (DEB), and by the stage II and III exit effectors to schedule asynchronous processing on behalf of a channel-end or abnormal-end appendage.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	RQE	
0	(0) ADDRESS	4	RQEUCB	ADDRESS OF THE UNIT CONTROL BLOCK
4	(4) ADDRESS	4	RQEIOB	ADDRESS OF THE INPUT-OUTPUT BLOCK
8	(8) ADDRESS	4	RQEDEB	ADDRESS OF THE DATA EXTENT BLOCK
12	(C) ADDRESS	4	RQETCB	ADDRESS OF THE TASK CONTROL BLOCK
16	(10) ADDRESS	4	RQETCCW	ADDRESS OF TRANSLATION CONTROL BLOCK USED BY VIO AS A WORK AREA
20	(14) ADDRESS	4	RQENRQE	ADDRESS OF THE NEXT RQE ON RELATED REQUEST CHAIN USED BY VIO AS A WORK AREA

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
24	(18) ADDRESS	4	RQERRQ	ADDRESS OF RELATED REQUEST QUEUE USED BY VIO AS A WORK AREA
28	(1C) ADDRESS	4	RQESRB	ADDRESS OF ASSOCIATED SRB USED BY VIO AS A WORK AREA
32	(20) ADDRESS	4	RQEIPIB	ADDRESS OF PURGE IPIB
36	(24) HEX	1	RQEPR	PROTECT KEY FROM SVC OLD PSW Z (BITS 0-3) AND FLAGS(4-7)
	1111		RQEPRKEY	"X'F0'" PROTECT KEY BITS 0-3
	.... 1...		RQEPR4R	"X'08'" BIT4 RESERVED
	.... .1..		RQEPR5R	"X'04'" BIT5 RESERVED
	.... ..1.		RQEKOBYP	"X'02'" BIT6 SAM-E REQUEST
	.... ...1		RQESMFHQ	"X'01'" BIT7 SMF RECORDING REQD
37	(25) HEX	1	RQETYPE	REQUEST TYPE FLAGS

BIT SETTINGS FOR RQETYPE

1....	RQE114	"X'80'" EXCPVR REQUEST
.1....	RQEVRT	"X'40'" VIRTUAL EXCP REQUEST
..1....	RQE1T01	"X'20'" VIRTUAL EQUAL REAL REQUEST
...1....	RQEVM	"X'10'" VIO RQE
.... 1....	RQEEOEE	"X'08'" END-OF-EXTENT-ERROR, TO BE PURGED
.... .1..	RQEDIE	"X'04'" EXCP DIE GOING TO PCI APPEND
.... ..11	RQERRTYP	"X'03'" RELATED REQUEST FLAGS
.... ..11	RQETYP3	"X'03'" RELATED REQUEST TYPE 3
.... ..1.	RQETYP2	"X'02'" RELATED REQUEST TYPE 2
.... ...1	RQETYP1	"X'01'" RELATED REQUEST TYPE 1
38 (26) HEX	1 RQEFLAG	FLAG BYTE IN RQE

BIT SETTINGS FOR RQEFLAG2

1....	RQERETRY	"X'80'" RETRY REQUESTED
.1....	RQENOPST	"X'40'" NO POST REQUESTED
..1....	RQENOFRE	"X'20'" DONT FREE RQE
...1....	RQEFIXST	"X'10'" FIX PROCESS HAS BEEN STARTED,

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
.... 1...	RQUESTBL			UNFIX REQUIRED
.... .1..	RQESRBS			"X'08'" THIS REQUEST IS STARTABLE THAT
.... ..1.	RQEPURGE			IS ALL FIXING AND TRANSLATION IS DONE
.... ...1	RQEACHEAC			"X'04'" SRB SCHEDULED FOR THIS RQE
				"X'02'" RQE UNDERGOING PURGE
				"X'01'" CHANNEL END APPENDAGE COMPLETE

BIT SETTINGS FOR RQEFLAG3

39 (27) HEX	1	RQEFLAG3	
1...		RQEINIOS	"X'80'" REQUEST IN IOS
..1.		RQEXDERP	"X'20'" DASD ERP IS CALLER OF EXTENT
			CHECK ROUTINE
.... ...1		RQEXCPS	"X'01'" CPS EXIT EXISTS
..1. 1...		RQEBL	"X-RQE" RQE BLOCK LENGTH

RSA

Common Name : Ring-Processing System Authority Message

Macro ID : ISGRSA

DSECT Name : None

Created by : ISGBT

Subpool and Key : Subpool 299 in global resource serialization address
space, key 0

Size : RSA - 4088 bytes; RSAIRCD - 64 bytes.

Pointed to by : RSVIBFOR and RSVOBFOR fields of the RSV data area

Serialization : RSA - serialized by field RSVWLOCK of the RSV;

RSAIRCD - serialized by field RSLWLOCK of the RSL.

Function : RSA - pass command data and ENQ/DEQ/RESERVE requests among
global resource serialization systems in the main ring. RSAIRCD - pass
command data between global resource serialization systems.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	24	RSA	RSA MESSAGE
0	(0) CHARACTER	24	RSAMRPFX	RSA MAINRING HEADER
0	(0) CHARACTER	4	RSAID	EBCDIC ID RSA
4	(4) BITSTRING	1	RSAMRFLG	MAINRING FLAGS
	1...		RSAFURC	UNRECEIVED-COMMAND BIT. IF 1, THE RSA CONTAINS A MAINRING COMMAND FROM ISGBCI
	.1...		RSAFBKQW	BLOCK-QWB BIT. IF 1, NO SYSTEM CAN PLACE A QWB IN THE MAINRING RSA. SET ONLY BY THE SYSTEM THAT SET RSAFURC.
	..1.		RSAFRQSR	REQUEST-SPANNING-RSA BIT. IF 1, THIS RSA CONTAINS AN INCOMPLETE REQUEST SO NO SYSTEM CAN PLACE A QWB IN THE MAINRING RSA UNTIL THE REQUEST IS COMPLETE. SET BY THE SYSTEM THAT PLACED INCOMPLETE REQUEST IN THE RSA
	...1 1111			RESERVED
5	(5) CHARACTER	7	RSARCP	TOKEN AND SEQUENCE NUMBER
5	(5) CHARACTER	3	RSARCTOK	RING-CREATION TOKEN

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
8	(8) SIGNED	4	RSARCSEQ	SEQUENCE-NUMBER
12	(C) SIGNED	2	RSAQWBCT	NUMBER OF QWB'S AND QWB-EXTENSIONS IN RSA
14	(E) SIGNED	2	RSALNCA	LENGTH OF COMMAND-AREA THAT FOLLOWS RSA-DATA
16	(10) SIGNED	2	RSALNCQD	LENGTH OF CONTINUATION QWB-DATA, OR 0
18	(12) UNSIGNED	1	RSATYPCA	COMMAND-TYPE IN COMMAND-AREA
19	(13) UNSIGNED	1	RSASYSCP	COMMAND-PHASE TO BE EXECUTED BY MAINRING SYSTEMS. SEE RSAR1XXX CONSTANTS FOR POSSIBLE VALUES
20	(14) UNSIGNED	1	RSASYS	SYSID OF SYSTEM THAT SET RSAFURC, OR 0
21	(15) UNSIGNED	1	RSATRGCA	SYSID OF SYSTEM THAT IS TARGET OF COMMAND-AREA, OR 0 IF ALL MAINRING SYSTEMS ARE TARGET
22	(16) CHARACTER	2		RESERVED
24	(18) CHARACTER	0	RSADATA	COMMAND AREA OR QWB DATA
0	(0) STRUCTURE	64	RSAIRCD	MESSAGE PASSED BETWEEN SYSTEMS VIA NON-MAINRING LINK
0	(0) CHARACTER	4	RSAIID	EBCDIC ID RSAI
4	(4) BITSTRING	1	RSAIFLGS	STATUS FLAGS
1...			RSAIFCPQ	COMMAND-PREVIOUSLY-QUEUED BIT. IF 1, THE SYSTEM THAT SENT THIS COMMAND IS RE-SENDING A COMMAND THAT WAS PREVIOUSLY QUEUED AND HAS NOT YET EXECUTED.
.1...			RSAIFIDR	IDENTITY-REQUESTED BIT. IF 1, THE SYSTEM THAT SENT THIS RSAIRCD IS REQUESTING THE IDENTITY OF THE RECEIVING SYSTEM
..1.			RSAIFSRF	SEND-RSL-FUTURE BIT. IF 1, THE SYSTEM THAT SENT THIS RSAIRCD WILL SEND THE MAINRING RSA VIA THE SAME RSL
...1			RSAIFRRF	RECEIVE-RSL-FUTURE BIT. IF 1, THE SYSTEM THAT SENT THIS RSAIRCD WILL EXPECT TO RECEIVE THE MAINRING RSA VIA THE SAME RSL

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		.... 1...	RSAIFRQP	REQUEST PERMISSION TO STARTPOP RESERVED
		.... .111		
5	(5) UNSIGNED	1	RSARRSP1	PHASE-NUMBER. FOR VALUES OF RSARRSP1 AND REASONS, SEE THE CONSTANTS THAT ARE NAMED RSAR1XXX
6	(6) SIGNED	2	RSACCMDC	COMMAND-COUNT. ID OF A COMMAND SENT IN RSAIRCD, OR 0
8	(8) SIGNED	2	RSARCMDC	RESPONSE COMMAND-COUNT. ID OF COMMAND THAT TRIGGERED RESPONSE, OR 0
10	(A) BITSTRING	1	RSAIFLG2	STATUS FLAGS 2
	1...		RSAIFNMD	NEW-MAINRING-DISCOVERED BIT. IF 1, THE SYSTEM SENDING THIS RSAIRCD HAS SEEN A MAINRING TOKEN NEWER THAN THE TOKEN IN RSAIMRTK
	.111 1111			RESERVED
11	(B) UNSIGNED	1	RSACTBIX	REQUESTED TABLE-INDEX. INDEX OF RSVENTY ENTRY THAT MUST BE PLACED IN FIELD RSA- ITBID. USED TO REQUEST RSVENTY INFORMA- TION FROM SOME OTHER SYSTEM
12	(C) CHARACTER	20	RSAITBID	TABLE SYSTEM ID. CONTAINS IDENTITY AND STATUS OF SYSTEM THAT CORRESPONDS TO RSVENTY ENTRY RSACTBIX. HAS SAME FORMAT AS RSVESNID
12	(C) CHARACTER	20	RSAISNID	SECTION OF RSAIRCD THAT IDENTIFIES SEND- ER. HAS SAME FORMAT AS RSVESNID
12	(C) CHARACTER	8	RSAISYNM	SYSNAME OF SYSTEM
20	(14) SIGNED	4	RSAISYTK	TOKEN OF SYSTEM
24	(18) CHARACTER	1		RESERVED
25	(19) UNSIGNED	1	RSAISYID	SYSID OF SYSTEM
26	(1A) BITSTRING	1	RSAIMNRF	MAINRING FLAG. IF FF, THE NAMED SYSTEM IS IS THE MAINRING
27	(1B) BITSTRING	1	RSAIUQDF	UPTODATE-QUEL-DATA FLAG AND INITI- ATE-RESTART-ABILITY FLAG
	1...		RSAIUUDF	UPTODATE-QUEL-DATA FLAG. IF 1, THE NAMED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				SYSTEM HAS UPTODATE QEL DATA
.1...			RSAIUNRF	NO-RESTART FLAG. IF 1, THIS SYSTEM CANNOT INITIATE AUTO RESTART
..11 1111				RESERVED
28	(1C) SIGNED	4	RSAIMRTL	SEQUENCE-NUMBER OF LAST MAINRING RSA SENT BY THE NAMED SYSTEM BEFORE IT LEFT THE MAINRING, OR ZERO
32	(20) CHARACTER	8	RSAIMRTK	CURRENT MAINRING TOKEN
40	(28) SIGNED	4	RSACREST	MAINRING RSA RESIDENCE TIME THAT WILL BE USED BY SENDING SYSTEM AFTER IT IS IN MAINRING. VALID IF RSAIRCD IS FROM A SYSTEM PERFORMING SENDCMD-RSCRADDS, AND PHASE-NUMBER RSARRSP1 IS LESS THAN RSARIATP
40	(28) SIGNED	4	RSACAMRC	MAINRING CYCLE-TIME PASSED TO AN ADDSYS TARGET. VALID IF RSAIRCD IS SENT FROM A SYSTEM PERFORMING ADDSYS TO A SYSTEM PERFORMING SENDCMD-RSCRADDS, AND PHASE-NUMBER RSARRSP1 = RSARIATP AND RACTBIX = 0
44	(2C) SIGNED	4	RSARMRFT	MAINRING FAILURE TOKEN. SENT TO TARGET OF AN ADDSYS, WHEN ADDSYS IS USED TO BRING A SYSTEM INTO A NEW MAINRING AFTER A MAINRING FAILURE. INFORMS ADDSYS TARGET WHAT WAS LAST MAINRING RSA RECEIVED BEFORE THE PREVIOUS MAINRING FAILURE
48	(30) SIGNED	2		RESERVED
50	(32) CHARACTER	10	RSACDATA	COMMAND DATA OR AUTO RESTART PERMISSION DATA

<u>OFFSET</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
50	(32) UNSIGNED	1	RSACTYPE	CRBTYPE OF CRB. MUST BE VALUE CRBRSTRQ
50	(32) BITSTRING	1	RSAPFLGS	FLAGS USED IN RESPONSE TO A REQUEST FOR PERMISSION TO PERFORM AUTO RESTART.
1...			RSAPFPRM	PERMISSION FLAG. IF 1, THE SYSTEM IS GRANTING PERMISSION TO THE SYSTEM REQUESTING PERMISSION
.1...			RSAPFSYN	VALID SYSNAME FLAG. IF 1, RSAPSYNM HAS THE NAME OF A SYSTEM THAT WAS PREVIOUSLY GIVEN PERMISSION OR IS EXPECTED TO INITIATE AUTO RESTART
..1.			RSAPFNPG	NULL PERMISSION GRANT FLAG. SET TO 1 BY A SYSTEM THAT CAN NEITHER GRANT NOR DENY PERMISSION TO INITIATE AUTO RESTART
...1 1111				RESERVED
51	(33) BITSTRING	1	RSACRSOP	CRBRSOFT OF CRB
52	(34) CHARACTER	8	RSACSYNM	CRBSYSNM OF CRB
52	(34) CHARACTER	8	RSAPSYNM	NAME OF SYSTEM THAT RECEIVED PERMISSION TO DO AUTO RESTART OR IS EXPECTED TO INITIATE AUTO RESTART. VALID ONLY IF RSAPFSYN IS 1. SET ZERO IF AN ACTIVE SYSTEM IS KNOWN TO EXIST.
60	(3C) SIGNED	4	RSAIMRSC	MAINRING-SEND-COUNT. VALUE OF RSVRSASC WHEN THIS RSAIRCD WAS SENT
60	(3C) SIGNED	4	RSAITOL	VALUE OF GVTOLINT USED IN SETTING RSVMRCYC
64	(40) CHARACTER	0	RSAIEND	

RSC

Common Name : Ring Status Change Parameter List

Macro ID : ISGRSC

DSECT Name : None

Created by : caller of ISGBCI

Subpool and Key : Determined by caller.

Size : 32 bytes

Pointed to by : Passed to ISGBCI as a parameter using standard linkage conventions.

Serialization : Provided by caller of ISGBCI.

Function : Parameter list for global resource serialization

Ring-Processing Command Interface ISGBCI.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	32	RSC	ISGBCI PARAMETER-LIST
0	(0) CHARACTER	4	RSCID	CHARACTER STRING 'RSC '
4	(4) CHARACTER	28	RSCPARMS	PARAMETERS OF RSC
4	(4) UNSIGNED	1	RSCFUNCT	REQUESTED FUNCTION- FOR POSSIBLE VALUES, SEE DEFINED CONSTANTS RSCFXXXX, WHERE XXXX IS THE 4-LETTER ABBREVIATION OF AN ISGBCI FUNCTION
5	(5) UNSIGNED	1	RSCSCSFN	SENCMD SUBFUNCTION CODE- IGNORED EXCEPT WHEN SENCMD FUNCTION IS INVOKED. SPECIFIES THE RESPONSE REQUIRED BY SENCMD. FOR POSSIBLE VALUES, SEE DEFINED CONSTANTS RSCRXXXX, WHERE XXXX IS THE 4-LETTER ABBREVIATION OF A RESPONSE
6	(6) BITSTRING	1	RSCFLAG1	FLAGS
		1...	RSCFLCOM	INTERSYS-COMMUNICATION BIT. USED ONLY FOR SPOP FUNCTION. IF 1, CONTINUE TO COMMUNICATE WITH OTHER SYSTEMS. IF 0, FREE RESOURCES USED IN COMMUNICATING TO

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
.1...	RSCFLBRD			OTHER SYSTEMS. BROADCAST BIT. USED ONLY FOR SENDCMD FUNCTION. IF 1, SEND COMMAND TO ALL SYS- TEMS IN MAIN-RING. IF 0, SEND COMMAND TO 1 SYSTEM
..1.	RSCFLMRS			MAIN-RING SEND BIT. USED ONLY FOR SENDCMD FUNCTION. IF 1, SEND COMMAND FROM SENDER TO RECEIVER VIA THE MAIN-RING. IF 0, SEND COMMAND VIA A LINK CONNECTING THIS SYSTEM TO TARGET
...1	RSCFERQM			ERROR-IN-ISGCQMRG BIT. USED ONLY FOR SERRELS FUNCTION. IF 1, REDUCE RINGS- TATE-SERIAL COUNT AND MARK THIS SYSTEM AS HAVING OBSOLETE QEL DATA
.... 1...	RSCFLNLI			NO-LINK-INFORMATION BIT. USED ONLY FOR SNAPSHOT FUNCTION. IF 1, DO NOT PLACE LINK INFORMATION IN RST
.... .1..	RSCFLNSI			NO-SYSTEM-INFORMATION BIT. USED ONLY FOR SNAPSHOT FUNCTION. IF 1, DO NOT PLACE SYSTEM INFORMATION IN RST
.... ..1.	RSCFLCEQ			CONDITIONAL-ENQ BIT. SET ONLY WHEN ISGBTC CALLS ISGBCI. IF 1, ISGBCI MUST RETURN IMMEDIATELY IF THE ISGBCI ENQ-RESOURCE IS NOT AVAILABLE.
.... ...1	RSCFLSUB			SUBSYS-TARGET-MESSAGE BIT. USED ONLY FOR SUBSYS FUNCTION. IF 1, THE TARGET OF SUBSYS MUST WRITE A MESSAGE TO ITS OPER- ATOR REPORTING THAT IT HAS BEEN REMOVED FROM THE MAINRING
7 (7) BITSTRING		1		RESERVED
8 (8) CHARACTER	8 RSCSYSNM			SYSNAME OF TARGET SYSTEM
16 (10) ADDRESS	4 RSCTBLAD			RST ADDRESS. USED ONLY FOR ISGBCI FUNC- TION SNAPSHOT
16 (10) ADDRESS	4 RSCCMDAD			CRB ADDRESS. USED ONLY FOR ISGBCI FUNC- TION SENDCMD

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
16	(10) ADDRESS	4	RSCBUFAD	DATA AREA ADDRESS. USED ONLY FOR ISGBCI FUNCTIONS BUFSEND AND BUFRECV
20	(14) SIGNED	4	RSCBUFLN	DATA AREA LENGTH. USED ONLY FOR ISGBCI FUNCTIONS BUFSEND AND BUFRECV
20	(14) SIGNED	4	RSCCMDLN	CRB LENGTH. USED ONLY FOR ISGBCI FUNCTION SENDCMD
24	(18) SIGNED	4	RSCBUFLR	RECEIVED DATA-LENGTH
24	(18) CHARACTER	3		RESERVED
27	(1B) UNSIGNED	1	RSCDELID	SYSID OF SYSTEM THAT THAT WAS NAMED AS TARGET OF DELSYS
28	(1C) SIGNED	4	RSCTMLIM	RESPONSE TIME-LIMIT, IN UNITS OF APPROXIMATELY 01 SECONDS
32	(20) CHARACTER	0	RSCEND	END OF RSC

RSL

Common Name : Ring-Processing System Link Block

Macro ID : ISGRSL

DSECT Name : None

Created by : ISGBTM

Subpool and Key : Subpool 229 of global resource serialization address
space, key 0

Size : 312 bytes

Pointed to by : RSVRSLQ field of the RSV data area
RSLNRSL field of the RSL data area

Serialization : Serialized by compare-and-swap or test-and-set: RSLWLOCK,
RSLBFCTC, RSLMSID, and all abnormal bit flags.

Function : Each RSL contains status for a single CTC used by global
resource serialization Ring Processing, and control blocks and work
areas used by that CTC.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	312	RSL	RING SYSTEM LINK BLOCK
0	(0) CHARACTER	4	RSLID	EBCDIC ID
4	(4) ADDRESS	4	RSLNRSL	ADDRESS OF NEXT RSL
8	(8) SIGNED	4	RSLWLOCK	LOCK-WORD FOR SERIALIZING RSLDYNAR. IF 0, RSLDYNAR IS AVAILABLE FOR USE.
12	(C) SIGNED	4	RSLINTSN	INTERVAL-AFTER-SEND. THE TIME, IN MILLI- SEC, THAT THIS SYSTEM ALLOWS FOR A RESPONSE FROM THE SYSTEM AT REMOTE END OF THIS CTC. IF NO RESPONSE OCCURS IN THIS INTERVAL, THEN THIS SYSTEM ASSUMES THERE WILL BE NO RESPONSE
16	(10) CHARACTER	8	RSLTMSND	TIME AT WHICH RSAIRCD WAS SENT VIA THIS RSL. SET BY ISGBSRRI.
24	(18) CHARACTER	4	RSLLNKI	LINK IDENTIFIER (CTC IO ADDRESS)

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
28	(1C) UNSIGNED	1	RSLNMSC	NON-MAIN SEND COUNT. BUMPED BY 1 EACH TIME RSAIRCD IS SENT VIA THIS RSL. SET BY ISGBSRRI.
29	(1D) BITSTRING	1	RSLMSID	MUST-SEND-ID BYTE. IF 0, AN IMMEDIATE-CCW HAS BEEN RECEIVED VIA THIS RSL AND IDENTITY OF THIS SYSTEM HAS NOT YET BEEN SENT
30	(1E) UNSIGNED	1	RSLICRF	IMMEDIATE-CCW RESPONSE FLAG. IF 255, THIS SYSTEM HAS SENT AN IMMEDIATE-CCW VIA THIS RSL AND HAS RECEIVED NO RESPONSE.
31	(1F) UNSIGNED	1	RSLIX	RSL-INDEX GIVING ITS POSITION ON THE RSL-QUEUE
32	(20) CHARACTER	8	RSLSYNM	SYSNAME OF SYSTEM AT REMOTE END OF CTC
40	(28) SIGNED	4	RSLSYTK	TOKEN IDENTIFYING SYSTEM AT REMOTE END OF THIS RSL
44	(2C) ADDRESS	4	RSLRSVAD	ADDRESS OF RSV
48	(30) BITSTRING	1	RSLLKSF	LINK-STATUS FLAGS
1...			RSLFMRL	MAINRING RECEIVE LINK. IF 1, MAINRING RSA IS RECEIVED USING THIS RSL
.1...			RSLFMSL	MAINRING SEND LINK. IF 1, MAINRING RSA IS SENT USING THIS RSL
..1.			RSLFCOS	COMMAND-FROM-OTHER-SYSTEM FLAG. IF 1, REMOTE SYSTEM IS SENDING A COMMAND VIA THIS RSL AND AWAITING A RESPONSE.
...1			RSLFDLMI	DISABLED-LINK MESSAGE IS-BEING-ISSUED BIT. IF 1, ISGBTM IS NOW ISSUING OPERATOR MESSAGE ISG046E FOR THIS RSL.
.... 1...			RSLFSWE	SOFTWARE-ERROR BIT. IF 1, RING PROCESSING HAS PREVIOUSLY DETECTED A NEVER-HAPPEN CONDITION ASSOCIATED WITH THIS RSL.
.... .1..			RSLFDLM	DISABLED-LINK MESSAGE WAS-ISSUED BIT. IF 1, ISGBTM PREVIOUSLY GAVE OPERATOR MESSAGE ISG046E FOR THIS RSL
.... ..11				RESERVED

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
49	(31) BITSTRING	1	RSLLKIF	LINK-INTERSECT FLAGS
	1...		RSLFSIP	SENDBUF-IN-PROGRESS FLAG. IF 1, THE GCB OF THIS RSL IS BEING USED TO SEND AN RSAIRCD TO THE REMOTE SYSTEM
	.1...		RSLFRSDM	REMOTE SYSTEM DISCARDED MESSAGE FLAG. IF 1, THE SYSTEM AT REMOTE END OF RSL HAS DISCARDED A MESSAGE SENT FROM THIS SYSTEM
	..1.		RSLFI46R	RSLIM46R-VALID FLAG. IF 1, RSLIM46R HAS A VALID MESSAGE-ID
	...1		RSLFI46W	RSLIM46W-VALID FLAG. IF 1, RSLIM46W HAS A VALID MESSAGE-ID
	.... 1...		RSLFI46P	RSLIM46P-VALID FLAG. IF 1, RSLIM46P HAS A VALID MESSAGE-ID
	.... .111			RESERVED
50	(32) BITSTRING	1	RSLBFCTC	BUFFER-GIVEN-TO-CTC SWITCH. IF NON-ZERO, CTC-DRIVER HAS BEEN GIVEN THE BUFFER AND GCQ ASSIGNED TO THIS RSL
51	(33) BITSTRING	1	RSLFPRM	PERMISSION-GRANTED FLAG. IF NON-ZERO, AUTO-RESTART PERMISSION HAS BEEN GIVEN BY SYSTEM AT REMOTE END OF THIS RSL
52	(34) SIGNED	2	RSLCMDC	VALUE OF RSACCMDC FOR A COMMAND BEING REPEATEDLY RECEIVED VIA THIS RSL, OR ZERO
54	(36) CHARACTER	1		RESERVED
55	(37) UNSIGNED	1	RSLSYID	SYSID OF SYSTEM AT REMOTE END OF CTC
56	(38) CHARACTER	4		RESERVED
60	(3C) SIGNED	4	RSLIM46R	MESSAGE-ID OF MESSAGE ISG046E FOR A READ-ERROR
64	(40) SIGNED	4	RSLIM46W	MESSAGE-ID OF MESSAGE ISG046E FOR A WRITE-ERROR
68	(44) SIGNED	4	RSLIM46P	MESSAGE-ID OF MESSAGE ISG046E FOR A NO-PATHS CONDITION

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
72	(48) CHARACTER	8	RSLERR	ERROR-FLAGS FOR NEVER-HAPPEN CONDITIONS DETECTED BY ISGBSRRI
72	(48) BITSTRING	1	RSLERR00	RECOVERY ROUTINE WAS ENTERED FROM ISGBSRRI
73	(49) BITSTRING	1	RSLERR01	INVALID-FORMAT RSAIRCD WAS RECEIVED
74	(4A) BITSTRING	1	RSLERR02	BAD VALUE WAS FOUND IN RSLWLOCK
75	(4B) BITSTRING	1	RSLERR03	NON-ZERO RETURN CODE WAS GIVEN BY ISGJGVBF
76	(4C) BITSTRING	1	RSLERR04	NON-ZERO RETURN CODE WAS GIVEN BY ISGJSNBF
77	(4D) CHARACTER	2		RESERVED
79	(4F) BITSTRING	1	RSLERR07	SEND-IMMEDIATE DID NOT COMPLETE IN REQUIRED TIME
80	(50) CHARACTER	8		RESERVED
88	(58) CHARACTER	160	RSLDYNAR	DYNAMIC STORAGE FOR MODULE ISGBSR.
248	(F8) CHARACTER	64	RSLIOSAV	16-WORD AREA PASSED TO CTC-DRIVER ISGJSNBF (SENDBUF)
312	(138) CHARACTER	0	RSLEND	END OF RSL

RSMHD

Common Name : RSM Header
Macro ID : IHARSMHD
DSECT Name : RSMHD
Created by : IEAVITAS (RSM supervisor)
Subpool and Key : 245 and key 0
Size : 40 bytes
Pointed to by : ASCBRSM field of the ASCB data area
Serialization : SALLOC lock
Function : A header exists for each address space. It contains address space related pointers, data fields, and queue headers used internally by RSM functions.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	RSMHD	, RSMHDPTR
0	(0) ADDRESS	4	RSMVST0	VSA OF SEGMENT TABLE ORIGIN
4	(4) ADDRESS	4	RSMPCT	VSA OF SWAP CONTROL TABLE
8	(8) ADDRESS	4	RSMASCB	VSA OF ADDR SPACE CONTROL BLOCK (ASCB), USED BY RSM AS BACKWARD REFERENCE TO THE MAIN ADDRESS SPACE CONTROL BLOCK
12	(C) BITSTRING	1	RSMFLG1	FLAG FIELD
1...			RSMPICXS	"BIT0"- WHEN 1, ENTRY POINT IEAVPICX IN IOCP IS SCHEDULED
.1...			RSMPICXR	"BIT1"- WHEN 1, SCHEDULE OF IEAVPICX IN IOCP IS REQUESTED
..1.			RSMGFAD	"BIT2"- GFA DEFER PROCESSOR FLAG. WHEN 1, GFA DEFER PROCESSOR HAS BEEN SCHED- ULED.
...1			RSMPICLS	"BIT3"- WHEN 1, ENTRY POINT IEAVPICL IN IOCP IS SCHEDULED
.... 1...			RSMPICLR	"BIT4"- WHEN 1, SCHEDULE OF IEAVPICL IN IOCP IS REQUESTED
.... .1..			RSMGFADD	"BIT5"- GFAD NOT SCHEDULED FLAG. WHEN 1, IEAVGFAD MUST BE SCHEDULED, BUT HAS NOT

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				BEEN SCHEDULED YET.
			RSMFAIL	"BIT6"- RSM FAIL FLAG. WHEN 1, AN I/O ERROR OCCURED ON A LSQA PAGE SWAP-IN.
			RSMTERMR	"BIT7"- IF ONE, ILRTERMR HAS PROCESSED THE LOCAL PCB I/O QUEUE
13	(D) ADDRESS	1	RSMSPLCT	NUMBER OF TIMES A STORAGE PINNED ERROR WAS LOGGED
14	(E) SIGNED	2	RSMCNTRX	NUMBER OF FRAMES FIXED IN THIS ADDRESS SPACE
16	(10) SIGNED	2	RSMLSQAC	NUMBER OF LSQA FRAMES
18	(12) SIGNED	2	RSMCOMFX	NUMBER OF COMMON AREA TCB-FIXED FRAMES

THE FOLLOWING ARE PFTE AND PCB QUEUE HEADERS
FOR THOSE QUEUES LOCAL TO A SPECIFIC ADDRESS SPACE. EACH
QUEUE HEADER CONSISTS OF TWO PARTS, THE FIRST CONTAINING
A POINTER TO THE FIRST ELEMENT ON THE QUEUE, THE SECOND
CONTAINING A POINTER TO THE LAST ELEMENT ON THE QUEUE.
SEE THE PFTE OR PCB DESCRIPTION FOR A DISCUSSION.
IF THE ORDER OR DISPLACEMENT OF ANY HEADER CHANGES, THE
PFTE OR PCB QUEUE INDEX VALUES MUST BE ADJUSTED ACCORDINGLY.

20	(14) SIGNED	4	RSMQS	BEGINNING OF LOCAL QUEUE HEADERS
20	(14) SIGNED	4	RSMLFQ	LOCAL FRAME QUEUE (LFQ) HEADER. THIS QUEUE REPRESENTS THE REAL STORAGE FRAMES CURRENTLY ASSIGNED TO PRIVATE AREA VIRTUAL PAGES OF AN ADDRESS SPACE. BOTH PAGEABLE AND FIXED. NOTE THAT ALL QUEUE POINTERS CONTAIN XRBNS 14 BIT FRAME INDEX NUMBERS RIGHT-JUSTIFIED AND PADDED TO THE LEFT WITH TWO ZERO BITS
20	(14) ADDRESS	2	RSMLFQF	PFTE INDEX TO FIRST PFTE ON LFQ
22	(16) ADDRESS	2	RSMLFQL	PFTE INDEX TO LAST PFTE ON LFQ

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
24	(18) SIGNED	4	RSMLSQA	THE LSQA QUEUE HEADER. THE QUEUE REPRESENTS ALL REAL FRAMES ASSIGNED TO VIRTUAL LSQA PAGES FOR AN ADDRESS SPACE.
24	(18) ADDRESS	2	RSMLSQAF	PFTE INDEX OF FIRST PFTE ON LSQA QUEUE
26	(1A) ADDRESS	2	RSMLSQAL	PFTE INDEX OF LAST PFTE ON LSQA QUEUE
28	(1C) CHARACTER	8	RSMLIOQ	THE LOCAL I/O ACTIVE PCB QUEUE HEADER FOR A VIRTUAL ADDRESS SPACE. THIS QUEUE REPRESENTS PAGING I/O REQUESTS FOR PRIVATE AREA VIRTUAL PAGES THAT HAVE BEEN TRANSMITTED TO ASM. THE PCB REMAINS ON THE QUEUE UNTIL ALL PROCESSING FOR THE REQUEST HAS COMPLETED.
28	(1C) ADDRESS	4	RSMLIOQF	THE VIRTUAL ADDRESS OF THE FIRST PCB ON THE LOCAL I/O ACTIVE QUEUE.
32	(20) ADDRESS	4	RSMLIOQL	THE VIRTUAL ADDRESS OF THE LAST PCB ON THE LOCAL I/O ACTIVE QUEUE.
36	(24) ADDRESS	4	RSMFOEQ	ADDRESS OF AVAILABLE FOE(S)
40	(28) CHARACTER	8	RSMXMR	THE CROSS MEMORY PGFIX ROOT PCB QUEUE HEADER. THIS DOUBLE THREADED CIRCULAR QUEUE CONTAINS ROOT PCBs FOR A XM PGFIX BEING DONE IN ANOTHER ADDRESS SPACE ON BEHALF OF THIS ADDRESS SPACE.
40	(28) ADDRESS	4	RSMXMRF	THE VIRTUAL ADDRESS OF THE FIRST ROOT PCB ON THE XM PGFIX ROOT PCB QUEUE.
44	(2C) ADDRESS	4	RSMXMRL	THE VIRTUAL ADDRESS OF THE LAST ROOT PCB ON THE XM PGFIX ROOT PCB QUEUE.
..11		RSMLEN		"x-RSMHD"- LENGTH OF RSM HEADER

RSP

Common Name : Ring-Processing Permutation Work Area

Macro ID : ISGRSP

DSECT Name : None

Created by : ISGBTAC

Subpool and Key : Subpool 229 of global resource serialization
address space, key 0

Size : 144 bytes

Pointed to by : RSVADPGP field of the RSV data area

Serialization : Serialized by field RSVWLOCK of the RSV.

Function : Provide working storage and parameters passed to Ring
Processing Permutation Generator ISGBPG.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	78	RSPPARM	MAPPING OF PARAMETER LIST PASSED TO ISGBPG
0	(0) SIGNED	4	RSPSYIC	COUNT OF SYSID'S IN LIST
4	(4) SIGNED	4	RSPTOTC	COUNT OF TOTAL NUMBER OF OF CONFIGURA- TIONS THAT CAN BE GENERATED
8	(8) CHARACTER	64	RSPWKAR	DYNAMIC-STORAGE WORK-AREA FOR ISGBPG
72	(48) SIGNED	4	RSPGENC	COUNT OF CONFIGURATIONS ALREADY GENER- ATED
76	(4C) SIGNED	2	RSPDUMI	DUMMY SYSID ENTRY 0 OF LIST
78	(4E) SIGNED	0	RSPSYIE	SYSID ENTRIES. NUMBER OF ENTRIES IS (RSPSYIC+1). LAST ENTRY OF LIST IS ZERO.

RST

Common Name : Ring-Processing Status Table
Macro ID : ISGRST
DSECT Name : None
Created by : caller of ISGBCI
Subpool and Key : determined by the caller.
Size : 1072 bytes
Pointed to by : RSCTBLAD field of the RSC data area
Serialization : provided by the caller of ISGBCI
Function : Report the status of global resource serialization systems and CTCs to the caller of ISGBCI SNAPSHOT functions.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	1052	RST	RING SYSTEM STATE AREA
0	(0) CHARACTER	28	RSTPFX	FIXED-SIZE HEADER
0	(0) CHARACTER	4	RSTID	CHARACTER 'RST '
4	(4) SIGNED	4	RSTLEN	SIZE OF RST AREA, IN BYTES
8	(8) ADDRESS	4	RSTPTRSE	ADDRESS OF SYSTEM-ENTRY TABLE
12	(C) SIGNED	4	RSTDIMSE	NUMBER OF ENTRIES IN SYSTEM-ENTRY TABLE
16	(10) ADDRESS	4	RSTPTRLE	ADDRESS OF LINK-ENTRY TABLE
20	(14) SIGNED	4	RSTDIMLE	NUMBER OF ENTRIES IN LINK-ENTRY TABLE
24	(18) SIGNED	4	RSTINCLN	NUMBER OF ADDITIONAL BYTES THAT WOULD BE NEEDED SO THAT RST AREA COULD CONTAIN ALL INFORMATION
28	(1C) CHARACTER	512	RSTDATAS	SPACE FOR SYSTEM-ENTRY AND/OR LINK-ENTRY SECTION
28	(1C) CHARACTER	512		

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
540	(21C) CHARACTER	512	RSTDATAL	SPACE FOR SYSTEM-ENTRY AND/OR LINK-ENTRY SECTION
540	(21C) CHARACTER	512		
1052	(41C) CHARACTER	0	RSTEND	END OF RST-AREA HEADER
0	(0) STRUCTURE	16	RSTSENTY	ENTRY OF RST SYSTEM-SECTION
0	(0) CHARACTER	8	RSTSSYNM	SYSNAME OF SYSTEM
8	(8) BITSTRING	1	RSTSRSV1	RESERVED
9	(9) BITSTRING	1	RSTSFLG1	SYSTEM STATUS FLAGS
1...	....		RSTSFLG1	RESPONDING-SYSTEM BIT. IF 1, SYSTEM RESPONDED TO LATEST REQUEST FOR STATUS. IF 0, ENTRY CONTAINS THE LAST STATUS REMEMBERED FOR THAT SYSTEM.
.1..	....		RSTSFL1MR	MAINRING SYSTEM. IF 1, THE NAMED SYSTEM IS IN MAINRING
..1.	....		RSTSFL1UQ	UPTODATE-QEL BIT. IF 1, GLOBAL QCB/QEL CHAINS OF THE NAMED SYSTEM ARE CONSIDERED UP TO DATE. IF 0, QCB/QEL CHAINS OF THE NAMED SYSTEM ARE INACCURATE
...1	....		RSTSFL1PM	PREVIOUSLY-IN-MAINRING SYSTEM. IF 1, THE NAMED SYSTEM HAS PREVIOUSLY BEEN IN A MAINRING
.... 1..			RSTSFL1DE	DUPLICATE-ENTRY BIT. IF 1, RING PROCESSING DISCOVERED 2 OR MORE SYSTEMS WITH THE SYSNAME GIVEN IN THIS ENTRY
.... .1..			RSTSFL1DR	DUPLICATE-RING BIT. IF 1, RING PROCESSING DISCOVERED 2 OR MORE DIFFERENT RINGS. SET ONLY IN RSTSENT ENTRY REPRESENTING THE SYSTEM THAT IS ISSUING SNAPSHOT.
.... ..1.			RSTSFL1NL	NO-LINK BIT. IF 1, THE NAMED SYSTEM HAS NO LINK CONNECTING IT TO THE SYSTEM THAT ISSUED SNAPSHOT
.... ...1			RSTSFL1RV	RESERVED
10	(A) BITSTRING	1	RSTSFLG2	STATUS ERROR FLAGS
1...	....		RSTSFLG2	THIS-SYSTEM ACTIVE BIT. IF 1, THE SYSTEM ISSUING SNAPSHOT IS ACTIVE. SET ONLY IN
			RSTSFL2TA	

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
	.1...		RSTSF2LR	FIRST RSTSENTY LIMIT-REACHED. TARGET SYSTEM ALREADY KNOWS OF 32 SYSTEMS AND CANNOT ACCEPT ANOTHER SYSTEM
11	..11 1111 (B) CHARACTER	1	RSTSF2RV RSTSRSV2	RESERVED RESERVED
12	(C) SIGNED	4		RESERVED
16	(10) CHARACTER	0	RSTSEND	END OF ENTRY
0	(0) STRUCTURE	16	RSTLENTY	ENTRY OF RST LINK-SECTION
0	(0) BITSTRING	1	RSTLFLG1	LINK STATUS FLAGS
	1...		RSTLFNRS	NONRESPONDING-SYSTEM BIT. IF 1, SYSTEM AT OPPOSITE END OF LINK FAILED TO RESPOND TO LATEST REQUEST FOR IDENTITY AND STATUS, SO ENTRY CONTAINS THE LAST STATUS REMEMBERED FOR THAT SYSTEM.
	.1...		RSTLFALT	ALTERNATE LINK. IF 1, THIS LINK IS NOT BEING USED TO COMMUNICATE WITH SYSTEM AT OPPOSITE END OF THIS LINK
	..1.		RSTLFDLK	DISABLED LINK. IF 1, THIS LINK IS CUR- RENTLY UNUSABLE
	...1		RSTLFPDL	RESERVED
	.... 1111			RESERVED
1	(1) CHARACTER	3	RSTLRSV0	RESERVED
4	(4) CHARACTER	8	RSTLSYNM	SYSNAME OF SYSTEM AT OPPOSITE END OF LINK, OR BLANK
12	(C) CHARACTER	4	RSTLLNKI	I/O ADDRESS OF THIS LINK
16	(10) CHARACTER	0	RSTLEND	END OF RST LINK-ENTRY

RSV

Common Name : Ring-Processing System Vector Table

Macro ID : ISGRSV

DSECT Name : None

Created by : ISGBT

Subpool and Key : Subpool 229 of global resource serialization address space, key 0

Size : 1232 bytes

Pointed to by : GVTXBRSV field of the GVTX data area

Serialization : compare-and-swap serialized: RSVCRSAT and all abnormal bit fields; serialized by ISGBCI ENQ resource: all RSVENTY entries, and field in the section used for communication between ISGBCI and ISGBSR; serialized by RSVWLOCK and the main ring RSA: all other fields of the RSV.

Function : The RSV provides a means of communication within global resource serialization Ring Processing modules. The RSV contains pointers to Ring Processing control blocks and tables, anchors of Ring Processing queues, and Ring Processing status flags.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	472	RSV	RING-PROCESSING SYSTEM VERIFICATION TABLE
0	(0) CHARACTER	4	RSVID	CHARACTER 'RSV'
4	(4) SIGNED	4	RSVLEN	SIZE OF RSV AREA, IN BYTES
8	(8) CHARACTER	64		LAST 16 WORDS OF AN 18-WORD SAVE-AREA PASSED TO SOME ROUTINES BY MODULE ISGBSR
STATIC POINTERS AND VALUES SET AT INITIALIZATION TIME AND NEVER CHANGED				
72	(48) ADDRESS	4	RSVAGCV	ADDRESS OF GCV

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
76	(4C) ADDRESS	4	RSVAPOST	ADDRESS OF ROUTINE TO POST ISGGRP00. POINTS AT POST BRANCH-ENTRY 1 (TAKEN FROM CVTOPT01)
80	(50) ADDRESS	4	RSVGCBIP	ADDRESS OF GCB USED TO RECEIVE MAINRING RSA
84	(54) ADDRESS	4	RSVGCBOP	ADDRESS OF GCB USED TO SEND MAINRING RSA
88	(58) ADDRESS	4	RSVGBCI	ADDRESS OF GCB USED BY ISGBCI
92	(5C) ADDRESS	4	RSVIDRSA	IDENTITY-RSAIRCD. POINTS AT AN AREA OF STORAGE PRE-INITIALIZED AS AN RSAIRCD CONTAINING THE NAME AND STATUS OF THIS SYSTEM
96	(60) ADDRESS	4	RSVAWKAR	ADDRESS OF WORK-AREA FOR MAINRING RSA SEND AND RECEIVE
100	(64) SIGNED	4	RSVMRRES	MAINRING RSA RESIDENCE TIME, IN MILISEC, OF THIS SYSTEM
104	(68) ADDRESS	4	RSVAREAD	ADDRESS OF GVTMREAD
108	(6C) ADDRESS	4	RSVAREAT	ADDRESS OF GVTMREAT
112	(70) ADDRESS	4	RSVAREQQ	ADDRESS OF GVTREQQ
116	(74) ADDRESS	4	RSVTESRB	ADDRESS OF TIMER-EXPIRATION SRB. COPIED FROM GVTTESRB.
120	(78) ADDRESS	4	RSVIBFOM	INPUT-BUFFER ORIGIN MINUS LENGTH OF TRAILING RCP
124	(7C) ADDRESS	4	RSVQWB1P	ADDRESS OF ENTRY POINT ISGGQWB1
128	(80) ADDRESS	4	RSVQPLAD	ADDRESS OF QPL PARAMETER-LIST TO ISGGQWB1

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
132	(84) SIGNED	4	RSVMRRSZ	MAINRING-RSA SIZE. MAXIMUM VALUE OF GCBLNBUF THAT CAN BE USED IN SENDING MAINRING RSA
136	(88) ADDRESS	4	RSVADPGP	ADDRESS OF PARAMETER-LIST OF ISGBPG
140	(8C) ADDRESS	4	RSVIBFOR	ADDR OF MAINRING RSA INPUT BUFFER MES- SAGE AREA ORIGIN
144	(90) ADDRESS	4	RSVOBFOR	ADDR OF MAINRING RSA OUTPUT BUFFER MES- SAGE AREA ORIGIN
148	(94) ADDRESS	4	RSVOBFLS	STATIC OUTPUT-BUFFER LIMIT. ADDR OF BYTE AFTER MAINRING RSA OUTPUT BUFFER
152	(98) ADDRESS	4	RSVBCIBF	ADDRESS OF SMALL-RSA BUFFER USED BY ISGBCI
156	(9C) ADDRESS	4	RSVSALC	ADDRESS OF GRS STORAGE-MANAGER ALLO- CATION ROUTINE. COPIED FROM GVTALC.
160	(A0) ADDRESS	4	RSVSMPL	ADDRESS OF SMPL USED TO OBTAIN A CRB
164	(A4) ADDRESS	4	RSVBNES	ADDR OF 1ST RSVENTY ENTRY
168	(A8) ADDRESS	4	RSVLIMES	ADDR OF BYTE AFTER LAST RSVENTY ENTRY
172	(AC) UNSIGNED	1	RSVVRSN	RSV VERSION IDENTIFIER. VALUE =1
173	(AD) UNSIGNED	1		RESERVED
174	(AE) SIGNED	2	RSVSZCAA	SIZE OF COMMAND-AREA FOR MAINRING RSA ALTERATION. THIS SIZE OF COMMAND-AREA IS USED IN PERFORMING ADDSYS, SUBSYS, DEL- SYS, OR SERRELS

AREA FOR COMMUNICATION BETWEEN ISGBCI AND ISGBSR

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
176	(B0) SIGNED	4	RSVCRSAT	VALUE OF RSCFUNCT USED FOR CURRENT MAINRING COMMAND. 0 IF NO COMMAND. POSITIVE IF COMMAND NOT YET ACCEPTED. NEGATIVE IF COMMAND ACCEPTED BY ISGBSR
180	(B4) ADDRESS	4	RSVCACKR	ADDRESS OF COMMAND-ACKNOWLEDGE ROUTINE EXECUTED WHEN A MAINRING COMMAND RETURNS AFTER A FULL CIRCUIT OF MAINRING
184	(B8) CHARACTER	8	RSVTOKSR	MAINRING TOKEN FOUND BY LATEST SNAPSHOT
3 P3D				
192	(C0) ADDRESS	4	RSVBNSS	ADDRESS OF RSVENTY-TABLE TO BE UPDATED WITH STATUS CONTAINED IN ANY RSAIRCD RECEIVED, OR ZERO
196	(C4) ADDRESS	4	RSVLIMSS	ADDRESS OF BYTE AFTER RSVENTY-TABLE POINTED AT BY RSVBNSS
200	(C8) ADDRESS	4	RSVBCINM	ADDRESS OF NON-MAINRING RSL BEING USED BY ISGBCI OR A PHASE OF ADDSYS
204	(CC) ADDRESS	4	RSVSNRSL	ADDRESS OF RSL TO SYSTEM THAT SET RSVTOKSR, OR 0
208	(D0) SIGNED	4	RSVTBOVF	TABLE-OVERFLOW COUNT. COUNT OF ENTRIES THAT COULD NOT BE PLACED IN THE RSVENTY TABLE OF THIS SYSTEM
212	(D4) CHARACTER	8	RSVCSYNM	SYSNAME USED FOR CURRENT MAINRING COMMAND
220	(DC) ADDRESS	4	RSVCACMD	ADDRESS OF CRB OR BUFFER-AREA USED FOR CURRENT MAINRING COMMAND
224	(E0) ADDRESS	4	RSVCRSC	ADDRESS OF RSC PASSED TO ISGBCI

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
228	(E4) SIGNED	4	RSVCBFLN	LENGTH OF CRB OR BUFFER-AREA USED FOR CURRENT MAINRING COMMAND
232	(E8) SIGNED	4	RSVCBFLR	BUFFER LENGTH-RECEIVED FOR CURRENT MAINRING COMMAND
236	(EC) SIGNED	4	RSVCTIML	TIME ACCUMULATED BY HOLDER OF ISGBCI ENQ-RESOURCE, IN 01-SECOND UNITS
240	(F0) SIGNED	4	RSVNMRCC	COMMAND COUNT. USED TO ASSIGN AN ID-NUMBER TO EACH INVOCATION OF ISGBCI
240	(F0) CHARACTER	2		ALWAYS ZERO
242	(F2) UNSIGNED	1	RSVNMRCI	SYSID OF SYSTEM EXECUTING ISGBCI, OR ZERO
243	(F3) UNSIGNED	1	RSVNMRCN	COMMAND-ID NUMBER. ALWAYS NONZERO
244	(F4) ADDRESS	4	RSVCRNAD	COMMAND RUNNING-ADDRESS POINTER. POINTS AT SOURCE OF NEXT BUFSIZE DATA TO BE SENT IN RSA, OR TARGET OF NEXT BUFSIZE DATA RECEIVED IN RSA
248	(F8) SIGNED	4	RSVCRNLN	COMMAND RUNNING LENGTH. LENGTH OF AREA POINTED AT BY RSVCRNAD
252	(FC) UNSIGNED	1	RSVSYIDA	SYSID OF ADDSYS TARGET, WHEN ADDSYS IS BEING EXECUTED BY SOME REMOTE SYSTEM
253	(FD) BITSTRING	1	RSVCFLAG	ISGBCI/ISGBSR COMMUNICATION FLAGS
	1...		RSVCFTMR	TERMINATE-MAINRING FLAG. IF 1, ISGBSRRI HAS DISCOVERED A MAINRING TOKEN NEWER THAN THE MAINRING TOKEN PREVIOUSLY KNOWN TO THIS SYSTEM
	.1...		RSVFCLRR	CLEAR-RSL FLAG. IF 1, THIS SYSTEM MUST ISSUE ISGJDCNC TO CLEAR ANY NON-RESPONDING RSL
	..1.		RSVFSUB2	SUBSYS-FLAG 2. IF 1, THIS SYSTEM IS A SUBSYS TARGET THAT IS ABOUT TO SEND ITS LAST RSA
	...1		RSVFSUB3	SUBSYS-FLAG 3. IF 1, THIS SYSTEM IF 1, THIS SYSTEM IS A SUBSYS TARGET THAT SENT

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				ITS LAST RSA
.... 1...			RSVCFNMD	NEW-MAINRING-DISCOVERED FLAG. IF 1, ISGBSRRI HAS DISCOVERED A MAINRING TOKEN NEWER THAN THE MAINRING TOKEN IN RSVTOKPR.
254	.... .111 (FE) SIGNED	2	RSVCRETC	RESERVED RETURN-CODE IN EFFECT FOR A MAINRING COMMAND
256	(100) ADDRESS	4	RSVCTRSL	CANDIDATE TARGET RSL. ADDRESS OF AN RSL THAT MAY BE USED TO COMMUNICATE WITH TARGET OF AN ADDSYS FUNCTION
QWB ADDRESSES				
260	(104) ADDRESS	4	RSVQWBIF	RING-PROCESSING INTERNAL QUEUE HEAD. POINTS TO OLDEST QWB THAT WAS TAKEN FROM REQUEST QUEUE
264	(108) ADDRESS	4	RSVQWBIL	RING-PROCESSING INTERNAL QUEUE TAIL. POINTS TO NEWEST QWB THAT WAS TAKEN FROM REQUEST QUEUE
268	(10C) ADDRESS	4	RSVQWBSF	RING-PROCESSING SENT-QUEUE HEAD. POINTS TO OLDEST QWB THAT WAS SENT (WITH ALL EXTENSIONS) TO OTHER SYSTEMS
272	(110) ADDRESS	4	RSVQWBSL	RING-PROCESSING SENT-QUEUE TAIL. POINTS TO NEWEST QWB THAT WAS SENT (WITH ALL EXTENSIONS) TO OTHER SYSTEMS
276	(114) ADDRESS	4	RSVQWBHF	RING-PROCESSING HOLD-QUEUE HEAD. POINTS TO OLDEST QWB THAT IS BEING SAVED DUE TO RSVSERCT

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
280 (118)	ADDRESS	4	RSVQWBHL	RING-PROCESSING HOLD-QUEUE TAIL. POINTS TO NEWEST QWB THAT IS BEING SAVED DUE TO RSVSERCT
284 (11C)	ADDRESS	4	RSVDCQWP	DUMMY CONTINUATION QWB POINTER. POINTS AT A QWB EXTENSION THAT DID NOT FIT IN THE PREVIOUS RSA AND MUST BE SENT IN THE NEXT RSA
288 (120)	SIGNED	4	RSVSQALN	LENGTH OF SQA STORAGE FOR RING PROCESSING

CONTINUED-STATUS SECTION USED FOR PASSING INFORMATION FROM A MAINRING RSA RECEIVE TO A SUBSEQUENT MAINRING RSA RECEIVE

292 (124)	SIGNED	4	RSVBXDL	TRANSMITTED-DATA-LENGTH. LENGTH OF DATA PLACED IN MAINRING RSA BY THIS SYSTEM
296 (128)	SIGNED	4	RSVBXQC	TRANSMITTED-QWB-COUNT. NUMBER OF QWB'S AND QWB EXTENSIONS PLACED IN MAINRING RSA BY THIS SYSTEM

RSL ADDRESSES

300 (12C)	ADDRESS	4	RSVRSLD	DUMMY RSL
304 (130)	ADDRESS	4	RSVRSLQ	RING-PROCESSING SYSTEM LINK BLOCK (RSL) QUEUE
308 (134)	ADDRESS	4	RSVRSLR	MAINRING RECEIVE RSL
312 (138)	ADDRESS	4	RSVRSLS	MAINRING SEND RSL

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
316 (13C)	ADDRESS	4	RSVRSLRF	FUTURE RSVRSLR. RSL FROM WHICH MAINRING RSA WILL BE RECEIVED.
320 (140)	ADDRESS	4	RSVRSLSF	FUTURE RSVRSLS. RSL TO WHICH MAINRING RSA WILL BE SENT.
324 (144)	ADDRESS	4	RSVTRSL	TARGET RSL. ADDRESS OF AN RSL THAT IS USED TO COMMUNICATE WITH TARGET OF AN ADDSYS FUNCTION
MISCELLANEOUS				
328 (148)	SIGNED	4	RSVIM25	MESSAGE-ID OF AUTO-RESTART MESSAGE. VALID ONLY IF RSVIVI25 IS 1.
332 (14C)	SIGNED	4	RSVTOL	VALUE OF GVTOLINT THAT IS ADDED TO MAINRING CYCLE TIME. TAKEN FROM FIRST SYSTEM THAT RECREATES THE MAINRING
336 (150)	SIGNED	4	RSVWLOCK	LOCKWORD TO SERIALIZE USE OF DYNAMIC STORAGE BETWEEN MAINRING-RSA SEND AND RECEIVE. IF 0, STORAGE IS NOT IN USE
340 (154)	SIGNED	4	RSVRASC	MAINRING RSA SEND COUNT. NUMBER OF TIMES MAINRING RSA HAS BEEN SENT FROM THIS SYSTEM
344 (158)	SIGNED	4	RSVMRCYC	MAINRING CYCLE TIME. TIME REQUIRED FOR MAINRING RSA TO TRAVEL AROUND MAINRING, IN MILISEC, PLUS TOLERANCE TIME GVTREAD
348 (15C)	SIGNED	4	RSVCMRCD	TIME-DELTA, IN MILLISEC, THAT IS TO BE ADDED TO MAINRING CYCLE-TIME
352 (160)	SIGNED	4	RSVCMRC2	TIME-DELTA, IN MILLISEC, THAT IS TO BE SUBTRACTED FROM MAINRING CYCLE-TIME

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
356	(164) ADDRESS	4	RSVIBFLM	ADDRESS OF TRAILING RCP IN INPUT BUFFER
360	(168) SIGNED	4	RSVMRLRL	MAINRING-RSA LAST RECEIVED LENGTH. LENGTH OF LAST MAINRING RSA THAT WAS RECEIVED
364	(16C) CHARACTER	4		RESERVED
368	(170) CHARACTER	8	RSVPRMSY	NAME OF SYSTEM THAT WAS GIVEN PERMISSION TO INITIATE AUTO RESTART AFTER A MAINRING FAILURE, OR ZEROES
376	(178) ADDRESS	4	RSVADSTQ	ADDRESS OF DESTINATION-QUEUE ANCHOR. POINTS AT ANCHORS OF QUEUE THAT RECEIVES QWB'S SEEN BY ALL SYSTEMS. POINTS AT THE HOLD-QUEUE WHEN SYSTEM IS IN SAVE-QWB MODE. POINTS AT THE PROCESS-QUEUE WHEN SYSTEM IS NOT IN SAVE-QWB MODE.
380	(17C) UNSIGNED	1	RSVFUNC2	TYPE OF COMMAND THAT BROADCAST THE RSVENTY SAVED IN RSVMENTY
381	(17D) BITSTRING	1	RSVRRFVF	RECEIVE-RSA-FUTURE VALID FLAG. IF HEX FF, RSVRSLRF IS VALID
382	(17E) BITSTRING	1	RSVSRFVF	SEND-RSA-FUTURE VALID FLAG. IF HEX FF, RSVRSLSF IS VALID
383	(17F) BITSTRING	1	RSVFURT1	UPDATE-RSVENTY-TABLE FLAGS
	1...		RSVFRURT	RESTRICT UPDATE OF RSVENTY TABLE. IF 1, RSVENTY-TABLE CAN BE UPDATED ONLY BY AN RSAIRCD RECEIVED THROUGH THE RSL POINTED AT BY RSVBCINM. IGNORED IF RSVBGNSS IS ZERO.
	.111 1111			RESERVED
384	(180) CHARACTER	24	RSVMENTY	RSVENTY BROADCAST TO THIS MAINRING SYSTEMS BY A SYSTEM EXECUTING ADDSYS OR SUBSYS
408	(198) CHARACTER	8	RSVTOKPR	PASSWORD/TOKEN OF LAST MAINRING THAT CONTAINED THIS SYSTEM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
408 (198)	CHARACTER	4	RSVTOKP1	RING-CREATION RANDOM PORTION OF TOKEN, USED AS PASSWORD
412 (19C)	CHARACTER	1	RSVTOKP2	RING-REBUILD RANDOM PORTION OF TOKEN, USED AS PASSWORD
413 (19D)	UNSIGNED	3	RSVTOKPC	COUNT OF TIMES MAINRING HAS VANISHED AND BEEN REBUILT
416 (1A0)	BITSTRING	1		INACTIVE FLAGS 1.
416 (1A0)	BITSTRING	1		RESERVED
417 (1A1)	BITSTRING	1	RSVIFLG2	INACTIVE-REASON FLAGS-2. MAY BE SET ONLY BY ISGBT
1....			RSVIHDWE	HARDWARE-ERROR FLAG. IF 1, THIS SYSTEM BECAME INACTIVE DUE TO A CTC READ-ERROR OR WRITE-ERROR
.1....			RSVIVI22	VALID-MESSAGE-ID 22. IF 1, RSVIM22 IS VALID
..1.			RSVIVI23	VALID-MESSAGE-ID 22. IF 1, RSVIM23 IS VALID
...1			RSVIVI25	VALID-MESSAGE-ID 25. IF 1, RSVIM25 IS VALID
.... 1111				RESERVED
418 (1A2)	BITSTRING	2		RESERVED
420 (1A4)	SIGNED	4	RSVIM22	MESSAGE-ID OF MESSAGE ISG022E, IF ISSUED
424 (1A8)	SIGNED	4	RSVIM23	MESSAGE-ID OF MESSAGE ISG023E, IF ISSUED
428 (1AC)	SIGNED	4	RSVR1ECB	ECB WAITED ON BY ISGBTCR1 IN WAITING FOR ISGBT TO CLEAR ALL CTC-DRIVER UNUSUAL EVENTS
432 (1B0)	ADDRESS	4	RSVDMPAD	ADDRESS OF RING PROCESSING PRIVATE-AREA STORAGE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
436	(1B4) SIGNED	4	RSVDMPLN	LENGTH OF RING PROCESSING PRIVATE-AREA STORAGE
440	(1B8) ADDRESS	4	RSVTRSVE	TARGET RSVE. ADDRESS OF RSVE DESCRIBING TARGET OF CURRENT MAINRING COMMAND
444	(1BC) ADDRESS	4	RSVSQAAD	ADDRESS OF RING PROCESSING SQA STORAGE
448	(1C0) ADDRESS	4		RESERVED
452	(1C4) BITSTRING	1		RESERVED
	1...		RSVFDMR	DUPLICATE-MAINRING FLAG. IF 1, SNAPSHOT DISCOVERED 2 OR MORE MAIN RINGS
	.1...		RSVFMF	ENTER-MAINRING FLAG. IF 1, ISGBTM MUST PERFORM PROCESSING PRIOR TO ENTERING OR RE-ENTERING MAINRING
	..1.		RSVFTESD	TIME-EXPIRATION SRB DISPATCHED FLAG. IF 1, SRB POINTED AT BY GVTTESRB CAN BE SCHEDULED. IF 0, SRB MAY BE IN USE BY DISPATCHER.
	...1		RSVFMRGA	MAINRING-RECEIVE GCB AVAILABLE. IF 1, THE MAINRING RECEIVE GCB IS NOT IN USE BY CTC DRIVER
	.... 1111			RESERVED
453	(1C5) BITSTRING	1		FLAGS
	1...		RSVFRSER	SAVE-QWB-MODE FLAG. IF 1, THIS SYSTEM IS IN SAVE-QWB MODE.
	.11.			RESERVED
	...1		RSVFRQSR	REQUEST-SPANNING-RSA FLAG. IF 1, THIS SYSTEM SENT AN INCOMPLETE REQUEST BECAUSE THE REQUEST DID NOT COMPLETELY FIT IN THE MAINRING RSA
	.... 1...		RSVFRNG1	RING-OF-1-SYSTEM FLAG. IF 1, THIS SYSTEM IS THE ONLY SYSTEM IN THE MAINRING
	.... .1..		RSVFSUBS	SUBSYS FLAG. IF 1, THIS SYSTEM MUST WRITE A MESSAGE TO THE OPERATOR REPORTING THAT THIS SYSTEM HAS BEEN REMOVED FROM THE MAINRING VIA SUBSYS
	.... ...1.			RESERVED. WAS UPDATE-RSVENTY-TABLE FLAG RSVFURSV. IF 1, ISGBSRRI UPDATED THE RSVENTY TABLE TO SHOW SYSTEMS NAMED IN

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.... ...1		RSVFXSR	RECEIVED RSAIRCD TRANSFER-SEND-RESPONSIBILITY FLAG. IF 1, THIS SYSTEM HAS PERFORMED A SEND-COMPLETION AFTER SENDING A SENDCMD-RSCRADD RSAIRCD, AND MUST REPEATEDLY RE-SEND THE RSAIRCD
454	(1C6) SIGNED	2	RSVCPHNO	PHASE-NUMBER OF A MAINRING COMMAND NOW BEING EXECUTED
456	(1C8) UNSIGNED	1	RSVSYIR	SYSID OF SYSTEM FROM WHICH THIS SYSTEM RECEIVES MAINRING RSA
457	(1C9) UNSIGNED	1	RSVSYIS	SYSID OF SYSTEM TO WHICH THIS SYSTEM SENDS MAINRING RSA
458	(1CA) UNSIGNED	1	RSVSYIRF	SYSID OF SYSTEM FROM WHICH THIS SYSTEM WILL RECEIVE MAINRING RSA
459	(1CB) UNSIGNED	1	RSVSYISF	SYSID OF SYSTEM TO WHICH THIS SYSTEM WILL SEND MAINRING RSA
460	(1CC) UNSIGNED	1	RSVSYIDT	SYSID OF THIS SYSTEM
461	(1CD) UNSIGNED	1	RSVCTSXI	SYSID OF TARGET OF MAINRING COMMAND THAT IS IN PROGRESS
462	(1CE) UNSIGNED	1	RSVLUSYI	LOWEST UNASSIGNED SYSID
463	(1CF) UNSIGNED	1	RSVFUNCT	FUNCTION CODE OF FUNCTION TO BE PER- FORMED BY ALL MAINRING SYSTEMS. FUNCTION WAS REQUESTED BY THE MAINRING SYSTEM EXECUTING ADDSYS, SUBSYS, OR DELSYS
464	(1D0) BITSTRING	1	RSVSTUQD	SLOT FOR SAVING SUBSYS-TARGET QEL-DATA STATE
465	(1D1) CHARACTER	7	RSVERR	ERROR-INDICATORS FOR NEVER-HAPPEN CONDI- TIONS DISCOVERED BY ISGBSR, CONDITIONS 00 THROUGH 06
465	(1D1) BITSTRING	1	RSVERR00	RECOVERY ROUTINE WAS ENTERED FROM ISGBSRR OR ISGBSRSR
466	(1D2) BITSTRING	1	RSVERR01	INVALID-FORMAT RSA WAS RECEIVED
467	(1D3) BITSTRING	1	RSVERR02	BAD VALUE WAS FOUND IN RSVWLOCK
468	(1D4) BITSTRING	1	RSVERR03	NON-ZERO RETURN CODE WAS GIVEN BY ISGJGVBF
469	(1D5) BITSTRING	1	RSVERR04	NON-ZERO RETURN CODE WAS GIVEN BY

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
470	(1D6) BITSTRING	1	RSVERR05	ISGJSNBF RMTR WAS ENTERED FOR AN SRB (ISGBSRRM WAS ENTERED).
471	(1D7) BITSTRING	1	RSVERR06	RSA DISAGREES WITH QPL ABOUT CONTIN- UED-REQUEST QWBS
472	(1D8) CHARACTER	0	RSVEND	END OF RSV HEADER
0	(0) STRUCTURE	24	RSVENTY	MAPPING OF AN RSVESYS ENTRY
0	(0) CHARACTER	20	RSVESNID	IDENTITY OF A SYSTEM. SAME FORMAT AS RSAISNID
0	(0) CHARACTER	8	RSVESYNM	SYSNAME OF SYSTEM
8	(8) SIGNED	4	RSVESYTK	TOKEN OF SYSTEM
12	(C) UNSIGNED	1		RESERVED
13	(D) UNSIGNED	1	RSVESYID	SYSID OF SYSTEM
14	(E) BITSTRING	1	RSVEFMNR	MAINRING FLAG. IF HEX FF, SYSTEM BELONGS TO MAINRING
15	(F) BITSTRING	1	RSVEFUQD	UPTODATE-QEL-DATA FLAG BYTE. TELLS WHETHER THE NAMED SYSTEM HAS ACCURATE GLOBAL-RESOURCE QEL DATA AND WHETHER IT CAN INITIATE AUTO RESTART
1...			RSVEFUUD	UPTODATE-DATA FLAG. IF 1, GLOBAL RESOURCE QEL DATA OF THIS SYSTEM IS UPTODATE
.1...			RSVEFUNR	NO-RESTART FLAG. IF 1, THIS SYSTEM CAN- NOT INITIATE AUTO RESTART AFTER A MAINR- ING FAILURE
..11 1111				RESERVED
16	(10) SIGNED	4	RSVEMRTL	LOW-ORDER WORD OF MAINRING TOKEN OF LAST MAINRING THAT CONTAINED THIS SYSTEM
20	(14) CHARACTER	3	RSVEFLG1	STATUS FLAGS
20	(14) BITSTRING	1	RSVEFNDL	NO-DIRECT-LINK FLAGS.
1...			RSVEFLIN	IMMEDIATE-NEIGHBOR FLAG. IF 1, ENTRY NAMES A SYSTEM CONNECTED TO THIS SYSTEM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.1...		RSVEFLMQ	VIA A CTC MAINRING-OR-QUIESCED FLAG. IF 1, ENTRY NAMES A SYSTEM THAT IS IN THE MAINRING OR IS QUIESCED OR IS INACTIVE
	..1.		RSVEFLMM	MAINRING-MEMORY FLAG. IF 1, THIS SYSTEM HAS MUST REMEMBER THE NAMED SYSTEM AND CANNOT FREE THIS RSVNTY
	...1 1111			RESERVED
21	(15) BITSTRING	1	RSVEFDUP	DUP-SYSNAME FLAG. IF HEX FF, THERE ARE 2 OR MORE SYSTEMS WITH THIS SYSNAME
22	(16) BITSTRING	1	RSVEFDMR	DUPLICATE-MAINRING FLAG. IF HEX FF, THE NAMED SYSTEM IS IN A DIFFERENT MAINRING FROM OTHER SYSTEMS
23	(17) UNSIGNED	1	RSVERSIX	VALUE OF RSLIX IN RSL THAT WAS USED BY THE NAMED SYSTEM TO SEND A COMMAND TO THIS SYSTEM
24	(18) CHARACTER	0	RSVEEND	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RSV	0		RSVEFLG1	14		RSVFXSR	1C5	01
RSVADPGP	88		RSVEFLIN	14	80	RSVGCBCI	58	
RSVADSTQ	178		RSVEFLMM	14	20	RSVGCBIP	50	
RSVAGCV	48		RSVEFLMQ	14	40	RSVGBOP	54	
RSVAPOST	4C		RSVEFMNR	E		RSVIBFLM	164	
RSVAREAD	68		RSVEFNDL	14		RSVIBFOM	78	
RSVAREAT	6C		RSVEFUNR	F	40	RSVIBFOR	8C	
RSVAREQQ	70		RSVEFUQD	F		RSVID	0	
RSVAWKAR	60		RSVEFUUD	F	80	RSVIDRSA	5C	
RSVBCIBF	98		RSVEMRTL	10		RSVIFLG2	1A1	
RSVBCINM	C8		RSVEND	1D8		RSVIHDWE	1A1	80
RSVBNES	A4		RSVENTY	0		RSVIM22	1A4	
RSVBNSS	C0		RSVERR	1D1		RSVIM23	1A8	
RSVBXDL	124		RSVERR00	1D1		RSVIM25	148	
RSVBXQC	128		RSVERR01	1D2		RSVIVI22	1A1	40
RSVCACKR	B4		RSVERR02	1D3		RSVIVI23	1A1	20
RSVCACMD	DC		RSVERR03	1D4		RSVIVI25	1A1	10
RSVCBFLN	E4		RSVERR04	1D5		RSVLEN	4	
RSVCBFLR	E8		RSVERR05	1D6		RSVLIMES	A8	
RSVCFLAG	FD		RSVERR06	1D7		RSVLIMSS	C4	
RSVCFNMD	FD	08	RSVERSLX	17		RSVLUSYI	1CE	
RSVCFTMR	FD	80	RSVESNID	0		RSVMENTY	180	
RSVCMRCD	15C		RSVESYID	D		RSVMRCYC	158	
RSVCMRC2	160		RSVESYNM	0		RSVMRLRL	168	
RSVCPHNO	1C6		RSVESYTK	8		RSVMRRES	64	
RSVCRETC	FE		RSVFCLRR	FD	40	RSVMRRSZ	84	
RSVCRNAD	F4		RSVFDMR	1C4	80	RSVNMRC	F0	
RSVCRNLN	F8		RSVFMF	1C4	40	RSVNMRCI	F2	
RSVCRSAT	B0		RSVFMRGA	1C4	10	RSVNMRCN	F3	
RSVCRSC	E0		RSVFRNG1	1C5	08	RSVOBFLS	94	
RSVCSYNM	D4		RSVFRQSR	1C5	10	RSVOBFOR	90	
RSVCTIML	EC		RSVFRSER	1C5	80	RSVPRMSY	170	
RSVCTRSL	100		RSVFRURT	17F	80	RSVQPLAD	80	
RSVCTSYI	1CD		RSVFSUBS	1C5	04	RSVQWBHF	114	
RSVDCQWP	11C		RSVFSUB2	FD	20	RSVQWBHL	118	
RSVDMPAD	1B0		RSVFSUB3	FD	10	RSVQWBIF	104	
RSVDMPLN	1B4		RSVFTESD	1C4	20	RSVQWBIL	108	
RSVEEND	18		RSVFUNCT	1CF		RSVQWBSF	10C	
RSVEFDMR	16		RSVFUNC2	17C		RSVQWBSL	110	
RSVEFDUP	15		RSVFURT1	17F		RSVQWB1P	7C	

RSV

300 MVS/370 Debug Hdbk Vol 4

RSV

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

Contains Restricted Materials of IBM
 Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RSVRRFVF	17D		RSVSQAAD	1BC		RSVTESRB	74	
RSVRASC	154		RSVSQALN	120		RSVTOKPC	19D	
RSVRSLD	12C		RSVSRFVF	17E		RSVTOKPR	198	
RSVRSLQ	130		RSVSTUQD	1D0		RSVTOKP1	198	
RSVRSLR	134		RSVSYIDA	FC		RSVTOKP2	19C	
RSVRSLRF	13C		RSVSYIDT	1CC		RSVTOKSR	B8	
RSVRSLS	138		RSVSYIR	1C8		RSVTOL	14C	
RSVRSLSF	140		RSVSYIRF	1CA		RSVTRSL	144	
RSVR1ECB	1AC		RSVSYIS	1C9		RSVTRSVE	1B8	
RSVSALC	9C		RSVSYISF	1CB		RSVVRSN	AC	
RSVSMPL	A0		RSVSZCAA	AE		RSVWLOCK	150	
RSVSNRSL	CC		RSVTBOVF	D0				

RTCT

Common Name : RTM Recovery Termination Control Table

Macro ID : IHARTCT

DSECT Name : RTCT

Created by : IEAVNPA6

Subpool and Key : 245 and key 0

Size : 388 bytes

Pointed to by : CVTRTMCT field of the CVT data area

Serialization : Most fields in the RTCT have no serialization other than the use of compare & swap instructions to update fields such as the dump options.

The SVC dump fields in the RTCT are serialized through the RTCTSDPL field. When RTCTSDPL is non-zero SVC dump is serialized.

(Note - the CVTSDBUF field is also set non-zero to serialize SVC dump whenever RTCTSDPL is set.)

Function : The RTCT provides a communication area between the various functions associated with dumping facilities, for SYSABEND, SYSDUMP, SYSUDUMP, and SVC dumps. It is used for coordination of the dump related processes of task and system recovery, the memory termination controller, installation and operator defined dump requirements.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	RTCT	, BAL MAPPING OF TABLE
1...	....	BIT0		"128"
.1...	....	BIT1		"64"
..1.	....	BIT2		"32"
...1	....	BIT3		"16"
.... 1...		BIT4		"8"
.... .1..		BIT5		"4"
.... ..1.		BIT6		"2"
.... ...1		BIT7		"1"
0	(0) CHARACTER	4	RTCTNAME	CONTAINS C'RTCT' AS IDENTIFIER.

SNAP/ABEND PARMLIB VALUES

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION															
4	(4) CHARACTER	12	RTCTPLIB																
4	(4) BITSTRING	4	RTCTSAP	SYSABEND INITIAL PARMLIB VALUES**															
4	(4) BITSTRING	1	RTCTSAP1	(BYTE 1 OF SDATA OPTIONS:)															
1...			RTCTSAB0	"BIT0" 1=DISPLAY NUCLEUS															
.1...			RTCTSAB1	"BIT1" 1=DISPLAY SQA															
..1.			RTCTSAB2	"BIT2" 1=DISPLAY LSQA															
...1			RTCTSAB3	"BIT3" 1=DISPLAY SWA															
.... 1...			RTCTSAB4	"BIT4" 1=DISPLAY GTF OR SUPERVISOR TRACE															
.... .1..			RTCTSAB5	"BIT5" 1=DISPLAY CONTROL BLOCKS FOR TASK															
.... ..1.			RTCTSAB6	"BIT6" 1=DISPLAY ENQUEUE CONTROL BLOCKS															
.... ...1			RTCTSAB7	"BIT7" 1=FORMAT DATA MGMT C.B.S															
5	(5) BITSTRING	1	RTCTSAP2	(BYTE 2 OF SDATA OPTIONS:)															
1...			RTCTSABG	"BIT0" 1=FORMAT IOS CONTROL BLOCKS															
.1...			RTCTSABH	"BIT1" 1=FORMAT ERROR CONTROL BLKS															
..1.			RTCTSABI	"BIT2" 1=FORMAT PCDATA INFORMATION															
<table> <tbody> <tr> <td>EQU</td> <td>BIT3</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT4</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT5</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT6</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT7</td> <td>RESERVED</td> </tr> </tbody> </table>					EQU	BIT3	RESERVED	EQU	BIT4	RESERVED	EQU	BIT5	RESERVED	EQU	BIT6	RESERVED	EQU	BIT7	RESERVED
EQU	BIT3	RESERVED																	
EQU	BIT4	RESERVED																	
EQU	BIT5	RESERVED																	
EQU	BIT6	RESERVED																	
EQU	BIT7	RESERVED																	
6	(6) BITSTRING	1	RTCTSAP3	(BYTE 1 OF PDATA OPTIONS:)															
1...			RTCTSAB8	"BIT0" 1=DISPLAY SAVE AREA TRACE(SA KEY-WORD)															
.1...			RTCTSAB9	"BIT1" 0=DISPLAY ENTIRE SAVE AREA 1=DISPLAY SAVE AREA HEADINGS(SAH KWD)															
..1.			RTCTSABA	"BIT2" 1=DISPLAY REGISTERS															
...1			RTCTSABB	"BIT3" 1=DISPLAY LINK PACK AREA															
.... 1...			RTCTSABC	"BIT4" 1=DISPLAY JOB PACK AREA															
.... .1..			RTCTSABD	"BIT5" 1=DISPLAY PSW															
.... ..1.			RTCTSABE	"BIT6" 1=DISPLAY USER SUBPOOLS: 0-127															
.... ...1			RTCTSABF	"BIT7" RESERVED															
7	(7) BITSTRING	1	RTCTSAP4	RESERVED															

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION															
8	(8) BITSTRING	4	RTCTSUP	SYSUDUMP INITIAL PARMLIB VALUES**															
8	(8) BITSTRING	1	RTCTSUP1	(BYTE 1 OF SDATA OPTIONS:)															
1...		RTCTSUD0	"BIT0" 1=DISPLAY NUCLEUS															
.1..		RTCTSUD1	"BIT1" 1=DISPLAY SQA															
..1.		RTCTSUD2	"BIT2" 1=DISPLAY LSQA															
...1		RTCTSUD3	"BIT3" 1=DISPLAY SWA															
....1	...		RTCTSUD4	"BIT4" 1=DISPLAY GTF OR SUPERVISOR TRACE															
....1..	..		RTCTSUD5	"BIT5" 1=DISPLAY CNTRL BLKS FOR TASK															
....1..1.	.		RTCTSUD6	"BIT6" 1=DISPLAY ENQUEUE CNTRL BLKS															
....1..1..1			RTCTSUD7	"BIT7" 1=FORMAT DATA MGMT C.B.S															
9	(9) BITSTRING	1	RTCTSUP2	(BYTE 2 OF SDATA OPTIONS:)															
1....		RTCTSUDG	"BIT0" 1=FORMAT IOS CONTROL BLOCKS															
.1..		RTCTSUDH	"BIT1" 1=FORMAT ERROR CONTROL BLKS															
..1..		RTCTSUDI	"BIT2" 1=FORMAT PCDATA INFORMATION															
<table border="0"> <tr> <td>EQU</td> <td>BIT3</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT4</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT5</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT6</td> <td>RESERVED</td> </tr> <tr> <td>EQU</td> <td>BIT7</td> <td>RESERVED</td> </tr> </table>					EQU	BIT3	RESERVED	EQU	BIT4	RESERVED	EQU	BIT5	RESERVED	EQU	BIT6	RESERVED	EQU	BIT7	RESERVED
EQU	BIT3	RESERVED																	
EQU	BIT4	RESERVED																	
EQU	BIT5	RESERVED																	
EQU	BIT6	RESERVED																	
EQU	BIT7	RESERVED																	
10	(A) BITSTRING	1	RTCTSUP3	(BYTE 1 OF PDATA OPTIONS:)															
1....		RTCTSUD8	"BIT0" 1=DISPLAY SAVE AREA TRACE(SA KEY-WORD)															
.1..		RTCTSUD9	"BIT1" 0=DISPLAY ENTIRE SAVE AREA 1=DISPLAY SAVE AREA HEADINGS(SAH KWD)															
..1..		RTCTSUDA	"BIT2" 1=DISPLAY REGISTERS															
...1..		RTCTSUDB	"BIT3" 1=DISPLAY LINK PACK AREA															
....1..	...		RTCTSUDC	"BIT4" 1=DISPLAY JOB PACK AREA															
....1..1..	..1..		RTCTSUDD	"BIT5" 1=DISPLAY PSW															
....1..1..1..	1..1..		RTCTSUDE	"BIT6" 1=DISPLAY USER SUBPOOLS: 0-127															
....1..1..1..1..1	1..1..1..		RTCTSUDF	"BIT7" RESERVED															
11	(B) BITSTRING	1	RTCTSUP4	RESERVED															
12	(C) BITSTRING	4	RTCTSYD	SYSMDUMP INITIAL PARMLIB VALUES**															
12	(C) BITSTRING	1	RTCTSY01	(BYTE 1 OF SDATA OPTIONS:)															
1....		RTCTSY00	"BIT0" 1=DISPLAY NUCLEUS															

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
.1..			RTCTSYM1	"BIT1" 1=DISPLAY SQA
..1.			RTCTSYM2	"BIT2" 1=DISPLAY LSQA
...1			RTCTSYM3	"BIT3" 1=DISPLAY SWA
.... 1...			RTCTSYM4	"BIT4" 1=DISPLAY GTF OR SUPV TRACE
.... .1..			RTCTSYM5	"BIT5" 1=DISPLAY REGION
.... ..1.			RTCTSYM6	"BIT6" 1=DISPLAY LPA FOR REGION
.... ...1			RTCTSYM7	"BIT7" 1=DISPLAY CSA
13	(D) BITSTRING	1	RTCTSY02	RESERVED
14	(E) BITSTRING	1	RTCTSY03	RESERVED
15	(F) BITSTRING	1	RTCTSY04	RESERVED

RTM AND LOGREC RECORDING INFORMATION

16	(10) SIGNED	2	RTCTYYY1	RESERVED**
18	(12) SIGNED	2	RTCTSDID	ASID OF MEMORY IN WHICH SVC DUMP IS OR WILL BE RUNNING.
20	(14) HEX	4	RTCTMECB	ECB WAIT'ED ON BY MEMORY TERMINATION CONTROLLER
24	(18) ADDRESS	4	RTCTFASB	ADDRESS OF FIRST ASCB ON MEMORY TERMINATION QUEUE.
28	(1C) HEX	4	RTCTRECB	ECB WAIT'ED ON BY RECORDING TASK.
32	(20) ADDRESS	4	RTCTRBCB	ADDRESS OF RECORDER'S BUFFER CONTROL BLOCKS (CONTAIN LOGREC ENTRIES).

THE FOLLOWING TABLE IS COMPOSED OF TEN TWELVE-BYTE ENTRIES, EACH ONE CORRESPONDING TO AN SVC DUMP DATA SET.

36	(24) CHARACTER	120	RTCTSDDS	TOTAL OF TEN TWELVE-BYTE ENTRIES
36	(24) CHARACTER	3	RTCTDSNM	NAME IDENTIFIER OF THIS DATA SET... TAPE EBCDIC UNIT ADDRESS, DISK EBCDIC 00-09

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
39	(27) BITSTRING	1	RTCTFLG	WITH TRAILING BLANK. FLAG BYTE.....
	1...		RTCTDSST	"BIT0" 1-D.S. FULL, 0-D.S. AVAILABLE.
	.1...		RTCTDSUS	"BIT1" 1-D.S. USED, 0-D.S. NOT USED.
	..1.		RTCTDETP	"BIT2" 0-TAPE D.S., 1-DASD D.S.
40	(28) ADDRESS	4	RTCTDCB	DEB ADDRESS FOR THIS DATA SET.
44	(2C) HEX	4	RTCTDEV	DEVICE TYPE CODE FOR THIS DATA SET.
	.... 11..		RTCTBLEN	"*-RTCTDSNM" LENGTH OF ONE TABLE ENTRY.
48	(30) CHARACTER	108		REMAINING NINE ENTRIES. END OF TABLE
156	(9C) ADDRESS	4	RTCTSDPL	ADDRESS OF SVC DUMP PARAMETER LIST FOR CROSS-MEMORY REQUEST.
	1...		RTCTSDIP	"BIT0" HIGH ORDER BIT IS SVC DUMP IN PROGRESS FLAG.
160	(A0) ADDRESS	4	RTCTFMT	USED FOR TESTING RTM MODULES
164	(A4) SIGNED	4	RTCTMLCK	LOCK FOR MEM TERM POST SRB
168	(A8) SIGNED	4	RTCTMSRB	PTR TO MEM TERM POST SRB
172	(AC) SIGNED	4	RTCTTEST	USED FOR TESTING RTM MODULES
176	(B0) BITSTRING	1	RTCTRFLG	RECORDING FLAGS
	1...		RTCTRTER	"BIT0" RECORDING TEMPORARY ERROR
	.1...		RTCTRPER	"BIT1" RECORDING PERMANENT ERROR
	..1.		RTCTRSTF	"BIT2" INITIAL STF ENTRY
177	(B1) BITSTRING	1	RTCTXXX1	RESERVED
178	(B2) SIGNED	2	RTCTSEQ#	ERRORID SEQUENCE NUMBER
180	(B4) ADDRESS	4	RTCTSDSW	ADDRESS OF SUMMARY SVC DUMP (SUMDUMP) WORK AREA (IHASMWK)
184	(B8) SIGNED	4	RTCTTDCB(9)	TAPE DCB FOR SVC DUMP
220	(DC) ADDRESS	4	RTCTSDWK	ADDRESS OF SVC DUMP WORK AREA

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
224	(E0) CHARACTER	10	RTCTERID	ERRORID FOR THIS FAILURE'S SVC DUMP HEADER
224	(E0) CHARACTER	2	RTCTESEQ	ERRORID SEQUENCE NUMBER
226	(E2) CHARACTER	2	RTCTECPU	ERRORID LOGICAL CPU ID
228	(E4) CHARACTER	2	RTCTEASD	ERRORID ASID
230	(E6) CHARACTER	4	RTCTETIM	ERRORID TIMESTAMP
234	(EA) CHARACTER	2	RTCTXXX2	RESERVED
DEFAULT DUMP OPTIONS, WHICH CAN BE CHANGED BY THE CHNGDUMP OPERATOR COMMAND				
236	(EC) CHARACTER	16	RTCTOPT	
236	(EC) BITSTRING	4	RTCTSAD	SYSABEND EFFECTIVE OPTIONS**
236	(EC) BITSTRING	2	RTCTSASD	
236	(EC) BITSTRING	1	RTCTSA01	(BYTE 1 OF SDATA OPTIONS:)
	1...		RTCTSAD0	"BIT0" 1=DISPLAY NUCLEUS
	.1...		RTCTSAD1	"BIT1" 1=DISPLAY SQA
	..1.		RTCTSAD2	"BIT2" 1=DISPLAY LSQA
	...1		RTCTSAD3	"BIT3" 1=DISPLAY SWA
	.... 1...		RTCTSAD4	"BIT4" 1=DISPLAY GTF OR SUPERVISOR TRACE
	.... .1..		RTCTSAD5	"BIT5" 1=DISPLAY CONTROL BLOCKS FOR TASK
	.... ..1.		RTCTSAD6	"BIT6" 1=DISPLAY ENQUEUE CONTROL BLOCKS
	.... ...1		RTCTSAD7	"BIT7" 1=FORMAT DATA MGMT C.B.S
237	(ED) BITSTRING	1	RTCTSA02	(BYTE 2 OF SDATA OPTIONS:)
	1...		RTCTSADG	"BIT0" 1=FORMAT IOS CONTROL BLOCKS
	.1...		RTCTSADH	"BIT1" 1=FORMAT ERROR CONTROL BLKS
	..1.		RTCTSADI	"BIT2" 1=FORMAT PC INFORMATION

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
BIT3			RESERVED	
BIT4			RESERVED	
BIT5			RESERVED	
BIT6			RESERVED	
BIT7			RESERVED	
238	(EE) BITSTRING	2	RTCTSAPD	
238	(EE) BITSTRING	1	RTCTSA03	(BYTE 1 OF PDATA OPTIONS:)
	1...		RTCTSAD8	"BIT0" 1=DISPLAY SAVE AREA TRACE(SA KEY-WORD)
	.1...		RTCTSAD9	"BIT1" 0=DISPLAY ENTIRE SAVE AREA 1=DISPLAY SAVE AREA HEADINGS(SAH KWD)
	..1.		RTCTSADA	"BIT2" 1=DISPLAY REGISTERS
	...1		RTCTSADB	"BIT3" 1=DISPLAY LINK PACK AREA
	.... 1...		RTCTSADC	"BIT4" 1=DISPLAY JOB PACK AREA
	.... .1..		RTCTSADD	"BIT5" 1=DISPLAY PSW
	.... ..1.		RTCTSADE	"BIT6" 1=DISPLAY USER SUBPOOLS: 0-127
	.... ...1		RTCTSADF	"BIT7" RESERVED
239	(EF) BITSTRING	1	RTCTSA04	(BYTE 1 OF OTHER OPTIONS:)
	.... ..1.		RTCTSAMG	"BIT6" SEE RTCTSAOV
	.... ..1.		RTCTSAOV	"BIT6" 1=OVER MODE 0=ADD MODE
	.... ...1		RTCTISAB	"BIT7" IGNORE REQUESTS FOR SYSABEND
240	(F0) BITSTRING	4	RTCTSOU	SYSUDUMP EFFECTIVE OPTIONS**
240	(F0) BITSTRING	2	RTCTSUSD	
240	(F0) BITSTRING	1	RTCTSU01	(BYTE 1 OF SDATA OPTIONS:)
	1...		RTCTSYD0	"BIT0" 1=DISPLAY NUCLEUS
	.1...		RTCTSYD1	"BIT1" 1=DISPLAY SQA
	..1.		RTCTSYD2	"BIT2" 1=DISPLAY LSQA
	...1		RTCTSYD3	"BIT3" 1=DISPLAY SWA
	.... 1...		RTCTSYD4	"BIT4" 1=DISPLAY GTF OR SUPERVISOR TRACE
	.... .1..		RTCTSYD5	"BIT5" 1=DISPLAY CNTRL BLKS FOR TASK
	.... ..1.		RTCTSYD6	"BIT6" 1=DISPLAY ENQUEUE CNTRL BLKS
	.... ...1		RTCTSYD7	"BIT7" 1=FORMAT DATA MGMT C.B.S
241	(F1) BITSTRING	1	RTCTSU02	(BYTE 2 OF SDATA OPTIONS:)
	1...		RTCTSYDG	"BIT0" 1=FORMAT IOS CONTROL BLOCKS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
.1..			RTCTSYDH	"BIT1" 1=FORMAT ERROR CONTROL BLKS
..1.			RTCTSYDI	"BIT2" 1=FORMAT PC INFORMATION

EQU	BIT3	RESERVED
EQU	BIT4	RESERVED
EQU	BIT5	RESERVED
EQU	BIT6	RESERVED
EQU	BIT7	RESERVED

242	(F2) BITSTRING	2	RTCTSUPD	
242	(F2) BITSTRING	1	RTCTSU03	(BYTE 1 OF PDATA OPTIONS:)
	.1..		RTCTSYD8	"BIT0" 1=DISPLAY SAVE AREA TRACE(SA KEY-WORD)
	.1..		RTCTSYD9	"BIT1" 0=DISPLAY ENTIRE SAVE AREA 1=DISPLAY SAVE AREA HEADINGS(SAH KWD)
	..1.		RTCTSYDA	"BIT2" 1=DISPLAY REGISTERS
	...1		RTCTSYDB	"BIT3" 1=DISPLAY LINK PACK AREA
	.... 1...		RTCTSYDC	"BIT4" 1=DISPLAY JOB PACK AREA
	.... .1..		RTCTSYDD	"BIT5" 1=DISPLAY PSW
	.... ..1.		RTCTSYDE	"BIT6" 1=DISPLAY USER SUBPOOLS: 0-127
	.... ...1		RTCTSYDF	"BIT7" RESERVED
243	(F3) BITSTRING	1	RTCTSU04	(BYTE 1 OF OTHER OPTIONS:)
	.... ..1.		RTCTSUMG	"BIT6" SEE RTCTSUV
	.... ..1.		RTCTSUV	"BIT6" 1=OVER MODE 0=ADD MODE
	.... ...1		RTCTISYU	"BIT7" IGNORE REQUESTS FOR SYSUDUMP
244	(F4) BITSTRING	4	RTCTSYO	SYSMDUMP EFFECTIVE OPTIONS**
244	(F4) BITSTRING	1	RTCTSD01	(BYTE 1 OF SDATA OPTIONS:)
	.1..		RTCTSDS0	"BIT0" 1=DISPLAY NUCLEUS
	.1..		RTCTSDS1	"BIT1" 1=DISPLAY SQA
	..1.		RTCTSDS2	"BIT2" 1=DISPLAY LSQA
	...1		RTCTSDS3	"BIT3" 1=DISPLAY SWA
	.... 1...		RTCTSDS4	"BIT4" 1=DISPLAY GTF OR SPV.TRACE,
	.... .1..		RTCTSDS5	"BIT5" 1=DISPLAY REGION
	.... ..1.		RTCTSDS6	"BIT6" 1=DISPLAY ACTIVE LPA FOR RGN
	.... ...1		RTCTSDS7	"BIT7" 1=DISPLAY CSA
245	(F5) BITSTRING	1	RTCTSD02	RESERVED
246	(F6) BITSTRING	1	RTCTSD03	RESERVED

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
247	(F7) BITSTRING	1	RTCTSD04	(BYTE 1 OF OTHER OPTIONS:)
	.... .1.		RTCTSMMG	"BIT6" SEE RTCTSMOV
	.... .1.		RTCTSMOV	"BIT6" 1=OVER MODE 0=ADD MODE
	.... .1		RTCTISYM	"BIT7" IGNORE REQUESTS FOR SYSMDUMP
248	(F8) BITSTRING	8	RTCTSD0	SVC DUMP EFFECTIVE OPTIONS**
248	(F8) BITSTRING	2	RTCTSD0D	
248	(F8) BITSTRING	1	RTCTSD01	(BYTE 1 OF SDATA OPTIONS:)
1...			RTCTSDP0	"BIT0" 1=DISPLAY ALL PSA'S IN SYSTEM
.1...			RTCTSDP1	"BIT1" 1=DISPLAY CURRENT PSA
..1.			RTCTSDP2	"BIT2" 1=DISPLAY NUCLEUS
...1			RTCTSDP3	"BIT3" 1=DISPLAY SQA
.... 1...			RTCTSDP4	"BIT4" 1=DISPLAY LSQA
.... .1..			RTCTSDP5	"BIT5" 1=DISPLAY REGION (PRIVATE AREA)
.... .1.			RTCTSDP6	"BIT6" 1=DISPLAY ACTIVE LPA MODULES FOR RGN
.... .1..1			RTCTSDP7	"BIT7" 1=DISPLAY GTF OR SUPERVISOR TRACE
249	(F9) BITSTRING	1	RTCTSD02	
1...			RTCTSDP8	"BIT0" 1=DISPLAY CSA
.1...			RTCTSDP9	"BIT1" 1=DISPLAY SWA
..1.			RTCTSDPA	"BIT2" 1=DISPLAY SUMMARY SVC DUMP (SUM-DUMP)
...1			RTCTSDPB	"BIT3" 1=NO SUMMARY DUMP DISPLAY
.... 1...			RTCTSDPC	"BIT4" 1=NO ALL PSA DISPLAY
.... .1..			RTCTSDPD	"BIT5" 1=NO SQA DISPLAY

EQU	BIT6	RESERVED
EQU	BIT7	RESERVED

250	(FA) BITSTRING	1	RTCTSD03	(BYTE 1 OF OTHER OPTIONS:)
	1...		RTCTSDPG	"BIT0" 1 MEANS QUIESCE=YES SPECIFIED ON CHNGDUMP COMMAND
	.1...		RTCTSDPH	"BIT1" 1 MEANS QUIESCE=NO SPECIFIED ON CHNGDUMP COMMAND

OFFSETS TYPE LENGTH NAME DESCRIPTION

EQU	BIT3	RESERVED
EQU	BIT4	RESERVED
EQU	BIT5	RESERVED
EQU	BIT6	RESERVED
EQU	BIT7	RESERVED

251	(FB) BITSTRING	1	RTCTSD04	(BYTE 2 OF OTHER OPTIONS:)
	.... .1.		RTCTSDMG	"BIT6" SEE RTCTSDOV
	.... .1.		RTCTSDOV	"BIT6" 1=OVER MODE 0=ADD MODE
	.... .1		RTCTISVC	"BIT7" IGNORE REQUESTS FOR SVCDUMP

ADDITIONAL SVC DUMP INFORMATION AND FLAGS

252	(FC) BITSTRING	2	RTCTAS0	ACTUAL SVC DUMP OPTIONS FROM MERGER OF DEFAULTS AND SDUMP MACRO OPTIONS**
-----	----------------	---	---------	--

252	(FC) BITSTRING	2	RTCTAS0D
-----	----------------	---	----------

252	(FC) BITSTRING	1	RTCTAS01	(BYTE 1 OF SDATA:)
	1...		RTCTASAL	"BIT0" 1=DISPLAY ALL PSA'S
	.1...		RTCTASPS	"BIT1" 1=DISPLAY CURRENT PSA
	..1.		RTCTASNU	"BIT2" 1=DISPLAY NUCLEUS
	...1		RTCTASSQ	"BIT3" 1=DISPLAY SQA
	.... 1...		RTCTASLS	"BIT4" 1=DISPLAY LSQA
	.... .1..		RTCTASRG	"BIT5" 1=DISPLAY REGION (RGN)
	.... .1.		RTCTASLP	"BIT6" 1=DISPLAY ACTIVE LPA
	.... .1		RTCTASTR	"BIT7" 1=DISPLAY GTF OR SUPV TRACE
253	(FD) BITSTRING	1	RTCTAS02	(BYTE 2 OF SDATA:)
	1...		RTCTASCS	"BIT0" 1=DISPLAY CSA
	.1...		RTCTASSH	"BIT1" 1=DISPLAY SWA
	..1.		RTCTASSU	"BIT2" 1=DISPLAY SUMMARY DUMP
	...1		RTCTASNS	"BIT3" 1=DISPLAY NO SUMDUMP
	.... 1...		RTCTASNA	"BIT4" 1=DISPLAY NO ALLPSA
	.... .1..		RTCTASNQ	"BIT5" 1=DISPLAY NO SQA

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
EQU	BIT6		RESERVED	
EQU	BIT7		RESERVED	
254	(FE) BITSTRING	2	RTCTSDI	SVC DUMP INFORMATION**
254	(FE) BITSTRING	1	RTCTSDNA	NUMBER ADDR SPACES TO DUMP
255	(FF) BITSTRING	1	RTCTINDX	INDEX FOR ASID LIST ENTRY
256	(100) HEX	1	RTCTSDPR	PERMANENT RETURN CODE
257	(101) BITSTRING	4	RTCTAS1	SDUMP ACTUAL EXIT FLAGS
257	(101) BITSTRING	2	RTCTSDTP	SVC DUMP TYPE OPTION FLAGS
257	(101) BITSTRING	1	RTCTTPE1	SVC DUMP TYPE OPTION FLAG 1
	1...		RTCTTPXM	"BIT0" TYPE=XMEM REQUESTED
	.1...		RTCTTXME	"BIT1" TYPE=XMEME REQUESTED
258	(102) BITSTRING	1	RTCTTPE2	SVC DUMP TYPE OPTION FLAG 2
259	(103) BITSTRING	2	RTCTSDEF	SVC DUMP EXIT OPTION FLAGS
259	(103) BITSTRING	1	RTCTEXF1	FIRST BYTE OF EXIT FLAGS
	1...		RTCTEXGR	"BIT0" GRS EXIT REQUESTED
	.1...		RTCTEXMT	"BIT1" MASTER TRACE EXIT REQUESTED
260	(104) BITSTRING	1	RTCTEXF2	SECOND BYTE OF EXIT FLAGS
261	(105) BITSTRING	3	RTCTZZZ2	RESERVED
264	(108) BITSTRING	2	RTCTSDF	SVC DUMP FLAGS**
264	(108) BITSTRING	1	RTCTSDF1	(BYTE 1 OF FLAGS:)
	1...		RTCTRRRR	"BIT0" RESERVED BIT
	.1...		RTCTSDND	"BIT1" SVC DUMP SET SYSTEM NON-DISP
	..1.		RTCTSDSH	"BIT2" SCHEDULE DUMP (IEAVTSDX) REQUEST
	...1		RTCTSDMA	"BIT3" MULTIPLE ADDR SPACE DUMP IN PRO- GRESS
	.... 1...		RTCTSDEP	"BIT4" CALLER'S ECB POSTED
	.... .1..		RTCTSDSD	"BIT5" SUMMARY DUMP (IEAVTSSD) RECEIVED CONTROL
	.... .1.		RTCTSDRS	"BIT6" REAL STORAGE BUFFER MGR (IEAVPRSB) RECEIVED CONTROL
	.... ...1		RTCTSDSC	"BIT7" SUMMARY DUMP (IEAVTSSD) COMPLETED PROCESSING
265	(109) BITSTRING	1	RTCTSDF2	(BYTE 2 OF FLAGS:)

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
1...		RTCTSDMR	"BIT0" DUMP MASTER ADDR SPACE REQD
.1..		RTCTSDTQ	"BIT1" TQE WAS ENQUEUED BY SETDIE
..1.		RTCTSDDI	"BIT2" TIMER DIE RECEIVED CONTROL (SCHDIE IN IEAVTSDX)
...1		RTCTSDLA	"BIT3" LAST ASID BEING PROCESSED
.... 1...			RTCTSDWF	"BIT4" SUMDUMP WRITER (IEAVTSDW) HAS COMPLETED
.... .1..			RTCTSDSL	"BIT5" DUMP DATA SET WAS SELECTED
.... ..1.			RTCTSDRW	"BIT6" SUMDUMP RECORDS (FROM IEAVTSSD) TO WRITE
.... ...1			RTCTSDFX	"BIT7" SVC DUMP SET TCBFX BIT

NOTE

THE FOLLOWING BITS SHOULD NOT BE REINITIALIZED BETWEEN SDUMP
NOTE *****

266 (10A) BITSTRING 2 RTCTZZ3 ADD. SVC DUMP FLAGS
1... RTCTSDSR "BIT0" SDUMP DIE SRB WAS SCHEDULED
.1... RTCTSDNO "BIT1" NO SYS1.DUMP DATASETS DEFINED

EQU BL14 RESERVED

266	(10A) CHARACTER	64	RTCTSDF3	ARRAY OF INFO FOR SVC DUMP OF MULTIPLE ADDRESS SPACESxx
266	(10A) BITSTRING	2	RTCTSDAS	ASID OF THIS ADDRESS SPACE (A.S.)
268	(10C) BITSTRING	1	RTCTSDF4	(BYTE 1 OF FLAGS:)
	1...		RTCTSDSS	"BIT0" GSRB IN ADDR SPACE SCHEDULED
	.1..		RTCTSDNC	"BIT1" NON-DISPATCHABLE SRB RECEIVED CONTROL
	..1.		RTCTSDAN	"BIT2" ADDRESS SPACE SET NON-DISPATCHABLE
	...1		RTCTSDRM	"BIT3" DUMP TASK HAS BEEN RESUMED
	.... 1...		RTCTSDTR	"BIT4" DUMP TASK RUNNING
	.... .1..		RTCTSDEQ	"BIT5" DUMP TASK ENQUEUED ON DUMP

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
				RESOURCE
			RTCTSDEN	"BIT6" SVC DUMP (IEAVADOO OR IEAVTSDT) IS PROCESSING THIS A.S.
269	(10D) BITSTRING	1	RTCTSDDO	"BIT7" DUMP ATTEMPTED FOR THIS ASID
			RTCTSDF5	0 = NO LISTA SPECIFIED FOR THIS ASID
			RTCTLSTA	"BIT0" LISTA STORAGE RANGES REQUESTED FOR THIS ADDRESS SPACE
			RTCTOLST	"BIT1" LISTA ONLY SPECIFIED OPTION FOR THIS ADDRESS SPACE
			RTCTSDEL	"*-RTCTSDF3" LENGTH OF ELEMENT OF ADDR SPACE ARRAY
270	(10E) CHARACTER	60		REMAINING 15 ASID ENTRIES

RTM INFORMATION

332	(14C) ADDRESS	4	RTCTMRMQ	ADDRESS OF QUEUE OF STORAGE AREAS (USED FOR SYSDUMPS) TO BE FREED AT MEMTERM
336	(150) ADDRESS	4	RTCTSTE	ADDRESS OF QUEUE OF SLIP TSO ELEMENTS (STE)
340	(154) SIGNED	4	RTCTEEDC	RTM COUNTER CONTAINS THE NUMBER OF TIMES EEDS WERE NOT OBTAINED, INCREMENTED BY 1 FOR EACH OCCURENCE EEDS NOT OBTAINED
344	(158) BITSTRING	4	RTCTS1	SDUMP FLAGS
344	(158) BITSTRING	2	RTCTS1TY	SDUMP TYPE FLAGS
344	(158) BITSTRING	1	RTCTTYP1	SDUMP TYPE FLAG 1
	1...		RTCTXMEM	"BIT0" 1=TYPE=XMEM REQUESTED
	.1...		RTCTXMEE	"BIT1" 1=TYPE=XMEME REQUESTED
345	(159) BITSTRING	1		RESERVED
346	(15A) BITSTRING	2	RTCTSDEX	SDUMP EXIT FLAGS
346	(15A) BITSTRING	1	RTCTEX1	SDUMP EXIT FLAG 1
	1...		RTCTGRSQ	"BIT0" 1=GRSQ EXIT
347	(15B) BITSTRING	1	RTCTEX2	SDUMP EXIT FLAG 2

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
348	(15C) BITSTRING	4	RTCTSM10	SYSMDUMP TYPE AND EXIT FLAGS
348	(15C) BITSTRING	2	RTCTSMTY	SYSMDUMP TYPE OPTIONS
350	(15E) BITSTRING	2	RTCTSMEX	SYSMDUMP EXIT OPTIONS
350	(15E) BITSTRING	1	RTCTSMX1	1ST SYSMDUMP EXIT BYTE
	1.....		RTCTMGRS	"BIT0" 1=GRSQ OPTION SPECIFIED
351	(15F) BITSTRING	1	RTCTSMX2	2ND EXIT BYTE
352	(160) SIGNED	4	RTCTZZZ8	RESV FOR SYSUDUMP TYPE/EXIT
356	(164) SIGNED	4	RTCTZZZ7	RESV FOR SYSABEND TYPE/EXIT
360	(168) BITSTRING	4	RTCTSMD2	SYSMDUMP PARMLIB DEFAULTS FOR TYPE AND EXIT OPTIONS
360	(168) BITSTRING	2	RTCTMTYP	SYSMDUMP TYPE DEFAULTS
362	(16A) BITSTRING	2	RTCTMEXT	SYSMDUMP EXIT DEFAULTS
362	(16A) BITSTRING	1	RTCTMEX1	FIRST EXIT BYTE
	1....		RTCTMXGR	"BIT0" 1=GRSQ OPTION
363	(16B) BITSTRING	1	RTCTMEX2	2ND SYSMDUMP EXIT BYTE
364	(16C) SIGNED	4	RTCTRSD	POINTER TO RTCT SDUMP EXTERNSION
368	(170) SIGNED	4	RTCTSMEW	POINTER TO SUMMARY DUMP EXTENDED WORKAREA IN THE DUMPSRV ADDRESS SPACE
372	(174) SIGNED	4	RTCTASCB	ADDRESS OF DUMPSRV ASCB
376	(178) SIGNED	4	RTCTSCTS	DTESTAE1 PARM PONTER
380	(17C) SIGNED	4	RTCTZZZ6	RESERVED
384	(180) SIGNED	4	RTCTZZZ9 RTCTLEN	RESERVED "X-RTCT" TOTAL LENGTH OF RTM CONTROL TABLE.

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
BIT0	0	80	RTCTESEQ	E0		RTCTRSD	16C	
BIT1	0	40	RTCTETIM	E6		RTCTSABA	6	20
BIT2	0	20	RTCTEXF1	103		RTCTSABB	6	10
BIT3	0	10	RTCTEXF2	104		RTCTSABC	6	08
BIT4	0	08	RTCTEXGR	103	80	RTCTSABD	6	04
BIT5	0	04	RTCTEXMT	103	40	RTCTSABE	6	02
BIT6	0	02	RTCTEX1	15A		RTCTSABF	6	01
BIT7	0	01	RTCTEX2	15B		RTCTSABG	5	80
RTCT	0		RTCTFASB	18		RTCTSABH	5	40
RTCTASAL	FC	80	RTCTFLG	27		RTCTSABI	5	20
RTCTASCB	174		RTCTFMT	A0		RTCTSAB0	4	80
RTCTASCS	FD	80	RTCTGRSQ	15A	80	RTCTSAB1	4	40
RTCTASLP	FC	02	RTCTINDX	FF		RTCTSAB2	4	20
RTCTASLS	FC	08	RTCTISAB	EF	01	RTCTSAB3	4	10
RTCTASNA	FD	08	RTCTISVC	FB	01	RTCTSAB4	4	08
RTCTASNQ	FD	04	RTCTISYM	F7	01	RTCTSAB5	4	04
RTCTASNS	FD	10	RTCTISYU	F3	01	RTCTSAB6	4	02
RTCTASNU	FC	20	RTCTLEN	180	0184	RTCTSAB7	4	01
RTCTASO	FC		RTCTLSTA	10D	80	RTCTSAB8	6	80
RTCTASOD	FC		RTCTMECB	14		RTCTSAB9	6	40
RTCTAS01	FC		RTCTMEXT	16A		RTCTSADA	EE	20
RTCTAS02	FD		RTCTMEX1	16A		RTCTSADB	EE	10
RTCTASPS	FC	40	RTCTMEX2	16B		RTCTSADC	EE	08
RTCTASRG	FC	04	RTCTMGRS	15E	80	RTCTSADD	EE	04
RTCTASSQ	FC	10	RTCTMLCK	A4		RTCTSADE	EE	02
RTCTASSU	FD	20	RTCTMRMQ	14C		RTCTSADF	EE	01
RTCTASSW	FD	40	RTCTMSRB	A8		RTCTSADG	ED	80
RTCTASTR	FC	01	RTCTMTYP	168		RTCTSADH	ED	40
RTCTAS1	101		RTCTMXGR	16A	80	RTCTSADI	ED	20
RTCTBLEN	2C	0C	RTCTNAME	0		RTCTSAD0	EC	80
RTCTDCB	28		RTCTOLST	10D	40	RTCTSAD1	EC	40
RTCTDETP	27	20	RTCTOPT	EC		RTCTSAD2	EC	20
RTCTDEV	2C		RTCTPLIB	4		RTCTSAD3	EC	10
RTCTDSNM	24		RTCTRCB	20		RTCTSAD4	EC	08
RTCTDSST	27	80	RTCTRECB	1C		RTCTSAD5	EC	04
RTCTDSUS	27	40	RTCTRFLG	B0		RTCTSAD6	EC	02
RTCTEASD	E4		RTCTRPER	B0	40	RTCTSAD7	EC	01
RTCTECPU	E2		RTCTRRRR	108	80	RTCTSAD8	EE	80
RTCTEEDC	154		RTCTRSTF	B0	20	RTCTSAD9	EE	40
RTCTERID	E0		RTCTRTER	B0	80	RTCTSAMG	EF	02

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RTCTSA0	EC		RTCTSD0	F8		RTCTSDS7	F4	01
RTCTSA0V	EF	02	RTCTSD0D	F8		RTCTSDTP	101	
RTCTSA01	EC		RTCTSD0V	FB	02	RTCTSDTQ	109	40
RTCTSA02	ED		RTCTSD01	F8		RTCTSDTR	10C	08
RTCTSA03	EE		RTCTSD02	F9		RTCTSDTS	178	
RTCTSA04	EF		RTCTSD03	FA		RTCTSDTY	158	
RTCTSAP	4		RTCTSD04	FB		RTCTSDWF	109	08
RTCTSAPD	EE		RTCTSDPA	F9	20	RTCTSDWK	DC	
RTCTSAP1	4		RTCTSDPB	F9	10	RTCTSD01	F4	
RTCTSAP2	5		RTCTSDPC	F9	08	RTCTSD02	F5	
RTCTSAP3	6		RTCTSDPD	F9	04	RTCTSD03	F6	
RTCTSAP4	7		RTCTSDPG	FA	80	RTCTSD04	F7	
RTCTSASD	EC		RTCTSDPH	FA	40	RTCTSD1	158	
RTCTSDAN	10C	20	RTCTSDPL	9C		RTCTSEQ#	B2	
RTCTSDAS	10A		RTCTSDPR	100		RTCTSM2	168	
RTCTSDDI	109	20	RTCTSDP0	F8	80	RTCTSMEW	170	
RTCTSDD0	10C	01	RTCTSDP1	F8	40	RTCTSMEX	15E	
RTCTSDDS	24		RTCTSDP2	F8	20	RTCTSMMG	F7	02
RTCTSDEF	103		RTCTSDP3	F8	10	RTCTSMOV	F7	02
RTCTSDEL	10D	04	RTCTSDP4	F8	08	RTCTSMTY	15C	
RTCTSDEN	10C	02	RTCTSDP5	F8	04	RTCTSMX1	15E	
RTCTSDEP	108	08	RTCTSDP6	F8	02	RTCTSMX2	15F	
RTCTSDEQ	10C	04	RTCTSDP7	F8	01	RTCTSM10	15C	
RTCTSDEX	15A		RTCTSDP8	F9	80	RTCTSTE	150	
RTCTSDF	108		RTCTSDP9	F9	40	RTCTSUDA	A	20
RTCTSDFX	109	01	RTCTSDRM	10C	10	RTCTSUDB	A	10
RTCTSDF1	108		RTCTSDRS	108	02	RTCTSUDC	A	08
RTCTSDF2	109		RTCTSDRW	109	02	RTCTSUDD	A	04
RTCTSDF3	10A		RTCTSDSC	108	01	RTCTSUDF	A	02
RTCTSDF4	10C		RTCTSDSD	108	04	RTCTSUDG	9	80
RTCTSDF5	10D		RTCTSDSH	108	20	RTCTSUDH	9	40
RTCTSDI	FE		RTCTSDSL	109	04	RTCTSUDI	9	20
RTCTSDID	12		RTCTSDSR	10A	80	RTCTSUD0	8	80
RTCTSDIP	9C	80	RTCTSDSS	10C	80	RTCTSUD1	8	40
RTCTSDLA	109	10	RTCTSDSW	B4		RTCTSUD2	8	20
RTCTSDMA	108	10	RTCTSDS0	F4	80	RTCTSUD3	8	10
RTCTSDMG	FB	02	RTCTSDS1	F4	40	RTCTSUD4	8	08
RTCTSDMR	109	80	RTCTSDS2	F4	20	RTCTSUD5	8	04
RTCTSDNA	FE		RTCTSDS3	F4	10	RTCTSUD6	8	02
RTCTSDNC	10C	40	RTCTSDS4	F4	08	RTCTSUD7	8	01
RTCTSDND	10A	40	RTCTSDS5	F4	04	RTCTSUD8	A	80
RTCTSDNO	10A	40	RTCTSDS6	F4	02			

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RTCTSUD9	A	40	RTCTSYDG	F1	80	RTCTSY01	C	
RTCTSUMG	F3	02	RTCTSYDH	F1	40	RTCTSY02	D	
RTCTSU0	F0		RTCTSYDI	F1	20	RTCTSY03	E	
RTCTSUV	F3	02	RTCTSYD0	F0	80	RTCTSY04	F	
RTCTSU01	F0		RTCTSYD1	F0	40	RTCTTDCB	B8	
RTCTSU02	F1		RTCTSYD2	F0	20	RTCTTEST	AC	
RTCTSU03	F2		RTCTSYD3	F0	10	RTCTTPE1	101	
RTCTSU04	F3		RTCTSYD4	F0	08	RTCTTPE2	102	
RTCTSUP	8		RTCTSYD5	F0	04	RTCTTPXM	101	80
RTCTSUPD	F2		RTCTSYD6	F0	02	RTCTTXME	101	40
RTCTSUP1	8		RTCTSYD7	F0	01	RTCTTYP1	158	
RTCTSUP2	9		RTCTSYD8	F2	80	RTCTXMEE	158	40
RTCTSUP3	A		RTCTSYD9	F2	40	RTCTXMEM	158	80
RTCTSUP4	B		RTCTSYM0	C	80	RTCTXXX1	B1	
RTCTSUSD	F0		RTCTSYM1	C	40	RTCTXXX2	EA	
RTCTSYD	C		RTCTSYM2	C	20	RTCTYYY1	10	
RTCTSYDA	F2	20	RTCTSYM3	C	10	RTCTZZZ2	105	
RTCTSYDB	F2	10	RTCTSYM4	C	08	RTCTZZZ3	10A	
RTCTSYDC	F2	08	RTCTSYM5	C	04	RTCTZZZ6	17C	
RTCTSYDD	F2	04	RTCTSYM6	C	02	RTCTZZZ7	164	
RTCTSYDE	F2	02	RTCTSYM7	C	01	RTCTZZZ8	160	
RTCTSYDF	F2	01	RTCTSY0	F4		RTCTZZZ9	180	

RTM2WA

Common Name : RTM2 Work Area

Macro ID : IHARTM2A

DSECT Name : RTM2WA

Created by : IEAVTRT2

Subpool and Key : 255 and key 0

Size : 872 bytes

Pointed to by : TCBRTWA field of the TCB data area

ESART2WA field of the RTM2ESA data area in the ABEND SVRB

ASCBRTWA field of the ASCB data area

RTM2PREV field of the RTM2WA data area (previously
acquired task RTM2WA)

Serialization : None

Function : Maps description of the errors and control flags for
subfunctions of task or memory termination within RTM2.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	996	RTM2WA	MAPPNG OF WORK AREA
0	(0) CHARACTER	12	RTM2DESC	RTM2 SELF DESCRIPTION
0	(0) CHARACTER	4	RTM2ID	CONTAINS 'RTM2' AS ID
4	(4) ADDRESS	4	RTM2ADDR	CONTAINS ADDR OF THIS RTM2WA
8	(8) CHARACTER	4	RTM2RT2D	DESCRIPTION OF RTM2WA
8	(8) UNSIGNED	1	RTM2SPID	CONTAINS SPID OF THIS RTM2WA
9	(9) UNSIGNED	3	RTM2LGTH	CONTAINS LENGTH OF THIS RTM2WA
12	(C) ADDRESS	4	RTM2CVT	CONTAINS ADDRESS OF THE CVT
16	(10) ADDRESS	4	RTM2TCBC	ADDRESS OF THE CURRENT TCB
20	(14) ADDRESS	4	RTM2VRBC	ADDRESS OF THE CURRENT SVRB
24	(18) ADDRESS	4	RTM2ASC	ADDRESS OF CURRENT ASCB

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
28	(1C) CHARACTER	4	RTM2CODE	CONTAINS COMPLETION CODE, FLAGS
28	(1C) BITSTRING	1	RTM2CCF	FLAGS
	1...		RTM2DREQ	DUMP REQUESTED
	.1...		RTM2STEP	STEP REQUESTED
	..1.		RTM2R0DP	REG 0 CONTAINS PARAMETERS
	...1		RTM2E0M	MEMORY TERMINATION REQUESTED
	.... 1...		RTM2E0T	TASK TERMINATION REQUESTED
	.... .111			NOT USED
29	(1D) CHARACTER	3	RTM2CC	COMPLETION CODE
32	(20) CHARACTER	16	RTM2SFWA	WORK AREA FOR COMPILER TEMPS
48	(30) ADDRESS	4	RTM2TCBT	ADDRESS OF TOP TCB IN THE FAILING TREE
52	(34) ADDRESS	4	RTM2VRBT	RTM2 SVRB QUEUED FROM TOP TCB IN FAILING TREE
56	(38) ADDRESS	4	RTM2CT	ADDRESS OF RTMCT
60	(3C) CHARACTER	126	RTM2PGCY	THE FOLLOWING FIELDS ARE COPIED INTO THE RTM2WA WHEN RTM2 IS ENTERED FOR PURGE ONLY
60	(3C) CHARACTER	126	RTM2TRRY	THE FOLLOWING ARE TASK RECOVERY FIELDS
60	(3C) CHARACTER	80	RTM2EEDR	THE FOLLOWING CONTAINS ERROR REGISTERS AND PSW
60	(3C) CHARACTER	64	RTM2EREG	GENERAL PURPOSE REGISTERS AT TIME OF ERROR
60	(3C) ADDRESS	4	RTM2ERO	REGISTER 0
64	(40) ADDRESS	4	RTM2ER1	REGISTER 1
68	(44) ADDRESS	4	RTM2ER2	REGISTER 2
72	(48) ADDRESS	4	RTM2ER3	REGISTER 3

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
76	(4C) ADDRESS	4	RTM2ER4	REGISTER 4
80	(50) ADDRESS	4	RTM2ER5	REGISTER 5
84	(54) ADDRESS	4	RTM2ER6	REGISTER 6
88	(58) ADDRESS	4	RTM2ER7	REGISTER 7
92	(5C) ADDRESS	4	RTM2ER8	REGISTER 8
96	(60) ADDRESS	4	RTM2ER9	REGISTER 9
100	(64) ADDRESS	4	RTM2ER10	REGISTER 10
104	(68) ADDRESS	4	RTM2ER11	REGISTER 11
108	(6C) ADDRESS	4	RTM2ER12	REGISTER 12
112	(70) ADDRESS	4	RTM2ER13	REGISTER 13
116	(74) ADDRESS	4	RTM2ER14	REGISTER 14
120	(78) ADDRESS	4	RTM2ER15	REGISTER 15
124	(7C) CHARACTER	16	RTM2APSW	EXTENDED CONTROL PSW AT TIME OF ERROR
124	(7C) CHARACTER	8	RTM2EPSW	EXTENDED CONTROL PSW AT TIME OF ERROR FIRST DBL WORD
124	(7C) BITSTRING	1	RTM2EMK1	INTERRUPT INFORMATION MASKS
1...	....			NOT USED
.1..	....		RTM2PER1	PROGRAM EVENT RECORDING
..11	....			NOT USED
....	1...		RTM2EAM1	EXTENDED ADDRESSING MODE
....	.1..		RTM2TRM1	ADDRESS TRANSLATION ACTIVE
....	.1..		RTM2AI01	OFF, I/O INTERRUPTION CANNOT OCCUR ON, I/O INTERRUPTIONS CAN OCCUR SUBJECT TO EXTERNAL SUBCLASS MASK BITS OF CONTROL

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				REG 0
			RTM2EXT1	OFF, EXTERNAL INTERRUPTIONS CANNOT OCCUR ON, EXTERNAL INTERRUPTIONS CAN OCCUR SUBJECT TO EXTERNAL SUBCLASS MASK BITS OF CONTROL REG 0
125	(7D) BITSTRING	1	RTM2MWP1	PSW KEY AND 'M-W-P'
	1111		RTM2KEY1	PSW KEY
	.... 1...		RTM2ECT1	EXTENDED CONTROL MODE
	.... .1..		RTM2MCK1	OFF, MACHINE CHECK CANNOT OCCUR ON, MACHINE CHECK DUE TO SYSTEM DAMAGE AND INSTRUCTION PROCESSING DAMAGE CAN OCCUR OTHER MACHINE CHECKS SUBJECT TO MASK BITS IN CONTROL REG 14
	.... .1.		RTM2WAT1	ON, CPU IN WAIT STATE
	.... .1		RTM2PGM1	ON, PROBLEM STATE OFF, SUPERVISOR STATE
126	(7E) BITSTRING	1	RTM2INT1	CONDITION CODE AND PROGRAM MASK
	1...		RTM2S1	ADDRESS SPACE SELECTION BIT
	.1..			NOT USED
	..11		RTM2CC1	CONDITION CODE
	.... 1...		RTM2FP01	FIXED POINT OVERFLOW
	.... .1..		RTM2DEC1	DECIMAL OVERFLOW
	.... .1.		RTM2EXP1	EXPONENT OVERFLOW
	.... .1		RTM2SGN1	SIGNIFICANCE
127	(7F) BITSTRING	1		RESERVED
128	(80) ADDRESS	4	RTM2NXT1	ADDRESS OF NEXT INSTRUCTION
128	(80) CHARACTER	1		RESERVED
129	(81) ADDRESS	3	RTM2ADD1	INSTRUCTION ADDRESS
132	(84) CHARACTER	8	RTM2AEC1	ADDITIONAL EC MODE INFORMATION
132	(84) CHARACTER	1		RESERVED
133	(85) BITSTRING	1	RTM2ILC1	INSTRUCTION LENGTH CODE
	1111 1...			RESERVED
	.... .1.		RTM2IL1	ILC
	.... .1..			RESERVED
134	(86) UNSIGNED	2	RTM2INCI	INTERRUPT CODE
134	(86) CHARACTER	1		RESERVED FOR IMPRECISE INTERRUPTS
135	(87) ADDRESS	1	RTM2ICD1	8 BIT INTERRUPT CODE
	1...		RTM2IPR1	PER INTERRUPT OCCURRED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	.1..		RTM2IMC1	MONITOR CALL INTERRUPT
	..11 1111		RTM2IPC1	AN UNSOLICITED PROGRAM CHECK HAS OCCURRED
136	(88) ADDRESS	4	RTM2TRAN	TRANSLATION EXCEPTION ADDRESS
140	(8C) CHARACTER	8	RTM2ABNM	NAME OF ABENDING PROGRAM
148	(94) ADDRESS	4	RTM2ABEP	ENTRY POINT ADDRESS OF ABENDING PROGRAM
152	(98) CHARACTER	28	RTM2EEDH	THE FOLLOWING FIELDS CONTAIN DATA CONCERNING MACHINE CHECKS
152	(98) CHARACTER	8	RTM2STCK	BEGINNING AND ENDING STORAGE CHECK ADDRESSES
152	(98) ADDRESS	4	RTM2SCKB	BEGINNING STORAGE CHECK ADDR
156	(9C) ADDRESS	4	RTM2SCKE	ENDING STORAGE CHECK ADDR
160	(A0) CHARACTER	2	RTM2MCHI	ADDITIONAL MCH INFORMATION FLAGS
160	(A0) BITSTRING	1	RTM2MCHS	MCH FLAG BYTE
	1..		RTM2SRVL	ON STORAGE ADDRESS SUPPLIED (RTM2STCK, RTM2RFSA) ARE VALID.
	.1..		RTM2RCDF	ON, MACHINE CHECK RECORD NOT RECORDED
	..1.		RTM2TSVL	ON, TIME STAMP VALID
	...1		RTM2INVP	ON, STORAGE IS RECONFIGURED, PAGE IS INVALIDATED.
	.... 1 . . .		RTM2RSRC	ON, STORAGE RECONFIGURATION STATUS AVAILABLE (RTM2RSR1, RTM2RSR2)
	.... .1.. . . .		RTM2RSRF	ON, STORAGE RECONFIGURATION NOT ATTEMPTED (RTM2RSR1, RTM2RSR2 ARE INVALID)
	.... .11			RESERVED
161	(A1) BITSTRING	1	RTM2MCHD	ADDITIONAL INFORMATION IF ERROR WAS MACHINE CHECK
	1..		RTM2SKYF	ON, STORAGE KEY FAILURE
	.1..		RTM2REGU	ON, REGISTERS AT TIME OF ERROR MAY BE INVALID
	..1.		RTM2PSWU	ON, PSW AT TIME OF ERROR MAY BE INVALID

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
			....1	RTM2SCK
			.... 1...	RTM2ACR
			.... .1..	RTM2INSF
			.... .1.	RTM2SOFT
			.... .1.	RTM2TERR
162	(A2) CHARACTER	2	RTM2CPID	ID OF FAILING CUP CAUSING ACR
164	(A4) CHARACTER	1	RTM2RSR1	ADDITIONAL STORAGE FRAME ERROR INDICATORS AS RETURNED FROM REAL STORAGE RECONFIGURATION
			1111 11..	RESERVED
			.... .1.	RTM2MSER
			.... .1.	RTM2CHNG
165	(A5) CHARACTER	1	RTM2RSR2	ADDITIONAL STORAGE ERROR INDICATORS.
			1...	RTM2OFLN
			.1..	RTM2INTC
			..1.	RTM2SPER
			...1	RTM2NUCL
			.... 1...	RTM2FSQA
			.... .1..	RTM2FLSQ
			.... .1.	RTM2PGFX
			.... .1.	RTM2VEQR
166	(A6) CHARACTER	2		RESERVED
168	(A8) ADDRESS	4	RTM2RFSA	REAL STORAGE FAILING ADDRESS. (VALID ONLY IF INDICATED BY RTM2SRVL)
172	(AC) CHARACTER	8	RTM2TIME	TIME STAMP OF ASSOCIATED MACHINE CHECK
180	(B4) CHARACTER	4	RTM2FLGS	INPUT FLAGS DESCRIBING REASONS AND CONDITIONS FOR ENTERING RTM2
180	(B4) BITSTRING	1	RTM2ERRA	ERROR TYPE CAUSING ENTRY TO RTM2
			1...	RTM2MCHK
			.1..	RTM2PCHK
			..1.	RTM2RKEY
				ON, MACHINE CHECK
				ON, PROGRAM CHECK
				ON, CONSOLE RESTART KEY WAS DEPRESSED

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
			....1	RTM2SVCD ON, TASK ISSUED SVC 13
			.... 1...	RTM2ABTM ON, ENTRY VIA ABTERM
			.... .1..	RTM2SVCE ON, INDICATES AN SVC WAS ISSUED BY A LOCKED OR SRB ROUTINE.
			.... .1.	RTM2TEXC ON, INDICATES AN UNRECOVERABLE TRANSLATION FAILURE
			.... .1.1	RTM2STRM ON, INDICATES AN STERM ERROR
181	(B5) CHARACTER	1	1111	RTM2ERRB ADDITIONAL ERROR ENTRY INFORMATION
			.... 1...	RESERVED
			.... .1..	RTM2TYP1 ON, TYPE 1 SVC IN CONTROL AT TIME OF ERROR
			.... .1.	RTM2ENRB ON, ENABLED RB IN CONTROL AT TIME OF ERROR
			.... .1.1	RTM2LDIS ON, A LOGICALLY OR PHYSICALLY DISABLED ROUTINE (OTHER THAN A TYPE 1 SVC) WAS IN CONTROL AT TIME OF ERROR
			.... .1.1.1	RTM2SRBM ON, SYSTEM IN SRB MODE AT TIME OF ERROR
182	(B6) CHARACTER	1	1...	RTM2ERRC ADDITIONAL ERROR ENTRY INFORMATION
			.1..	RTM2STAF ON, A PREVIOUS (E)STAE EXIT FAILED
			.1..	RTM2STAI ON, A (E)STAI EXIT PREVIOUSLY RECEIVED CONTROL
			..1.	RTM2IRB ON, AN IRB PRECEDED THE RB THAT IS ASSOCIATED WITH THIS EXIT
			...1	RTM2PERC ON, THIS RECOVERY ROUTINE IS BEING PERCOLATED TO
			.... 1...	RTM2EAS ON, A LOWER LEVEL EXIT HAS RECOGNIZED AN ERROR AND PROVIDED SERVICABILITY INFO.
			.... .111	RESERVED
183	(B7) CHARACTER	1	1...	RTM2ERRD ADDITIONAL ERROR ENTRY INFORMATION
			1...	RTM2CLUP ON, INDICATES RECOVERY ROUTINE ONLY TO CLEAN UP AND NOT RETRY (IF 33E COMPLETION CODE THE DUMP IS TAKEN AFTER ENTRY TO THE RECOVERY ROUTINE, IF THE COMPLETION CODE IS OTHER THAN 33E, THE DUMP IS TAKEN BEFORE ENTRY TO THE RECOVERY ROUTINE)
			.1..	RTM2NRBE ON, RB ASSOCIATED WITH THIS ESTA EXIT WAS NOT IN CONTROL AT TIME OF ERROR
			..1.	RTM2STAE ON, THIS ESTA EXIT HAS BEEN ENTERED FOR

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
				A PREVIOUS ABEND.
...1			RTM2CTS	ON, THIS TASK WAS NOT IN CONTROL AT TIME OF ERROR BUT A TASK WITHIN THE SAME JOB-STEP TREE REQUESTED A 'STEP' ABEND. ONLY ON IF RTM2CLUP IS ON.
.... 1...			RTM2MABD	ON, THIS TASK WAS NOT IN CONTROL AT TIME OF ERROR BUT AN ANCESTOR OF THIS TASK HAS ABENDED. ONLY ON IF RTM2CLUP IS ON.
.... .1..			RTM2RPIV	ON, THE REGISTERS AND PSW AT TIME OF ERROR ARE UNAVAILABLE
.... ..1.			RTM2MCIV	ON, MACHINE CHECK ERROR INFORMATION IS UNAVAILABLE
.... ...1			RTM2ERFL	ON, ERRORID INFORMATION AVAILABLE
184	(B8) CHARACTER	2	RTM2FMID	ASID OF MEMORY IN WHICH ERROR OCCURRED. EQUAL TO ZERO IF CURRENT MEMORY FAILED. NOT EQUAL TO ZERO IF CROSS MEMORY ABTERM.
186	(BA) CHARACTER	522	RTM2CVER	THE FOLLOWING FIELDS ARE ZEROED IN THE RTM2WA WHEN RTM2 IS ENTERED FOR CONVERT TO STEP
186	(BA) CHARACTER	50	RTM2TRRC	TASK RECOVERY FIELDS CONTINUED
186	(BA) BITSTRING	1	RTM2IOFS	CURRENT I/O STATUS
1...			RTM2IOQR	ON, I/O FOR TASK HAS BEEN QUIESCED AND IS RESTORABLE
.1..			RTM2IOHT	ON, I/O FOR FAILING TASK HAS BEEN HALTED AND IS NOT RESTORABLE
..1.			RTM2NOIO	ON, FAILING TASK HAS NO OUTSTANDING I/O
...1			RTM2NIOP	ON, TASK REQUESTED NO I/O PROCESSING
.... 1111				RESERVED
187	(BB) CHARACTER	1		RESERVED
188	(BC) ADDRESS	4	RTM2IOBP	4-BYTE PTR TO I/O RESTORE CHAIN
188	(BC) CHARACTER	1		FILLER
189	(BD) ADDRESS	3	RTM2FIOB	ADDRESS OF I/O RESTORE CHAIN
192	(C0) ADDRESS	4	RTM2RBST	STOPPER RB USED BY TASK RECOVERY WHEN CHECKING FOR AN INTERVENING IRB

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
196	(C4) ADDRESS	4	RTM2STAR	RB RELATED TO ESTAR EXIT
200	(C8) CHARACTER	12	RTM2SCBS	BEGINNING, ENDING, AND CURRENT SCB ADDRESSES TO BE ENTERED
200	(C8) ADDRESS	4	RTM2SCBC	ADDRESS OF CURRENT SCB
204	(CC) ADDRESS	4	RTM2SCBN	ADDRESS OF NEWEST SCB
208	(D0) ADDRESS	4	RTM2SCBO	ADDRESS OF OLDEST SCB
212	(D4) CHARACTER	8	RTM2RTCD	DESCRPTION OF THE SDWA
212	(D4) ADDRESS	4	RTM2RTCA	ADDRESS OF THE SDWA
216	(D8) CHARACTER	4	RTM2SPLL	SUBPL & LNGTH OF SDWA
216	(D8) UNSIGNED	1	RTM2SUBP	SUBPOOL ID OF SDWA
217	(D9) UNSIGNED	3	RTM2SIZE	LENGTH OF SDWA
220	(DC) ADDRESS	4	RTM2COMP	USED TO SAVE SDWACOMP DURING PERCOLATION
224	(E0) ADDRESS	4	RTM2RTYA	RETRY ADDRESS RETURNED FROM A RECOVERY EXIT
228	(E4) ADDRESS	4	RTM2RYRB	ADDRESS OF THE RB AT WHICH THE RETRY WILL OCCUR
232	(E8) CHARACTER	4	RTM2PARQ	USED TO SAVE RECOVERY ROUTINE FLAGS DURING PERCOLATION
232	(E8) CHARACTER	1	RTM2RCDE	RETURN CODE FROM RECOVERY ROUTINE TO INDICATE RETRY OR TERMINATION 0, CONTINUE WITH TERMINATION IMPLIES PERCOLATION 4, RETRY 8, RETRY (ONLY VALID FROM STAE) 12, RETRY (ONLY VALID FROM STAE) 16, PREVENT FURTHER STAI/ESTAI PROCESSING AND CONTINUE WITH TERMINATION
233	(E9) CHARACTER	3		RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
236	(EC) CHARACTER	8	RTM2CTL1	BC MODE PSW AT TIME OF ERROR
236	(EC) CHARACTER	1	RTM2CMKA	CHANNEL INTERRUPTS MASKS.
	1111 111.		RTM2I0A	I/O INTERRUPTS (ALL ZEROES OR ALL ONES).
	.... ...1		RTM2EXTA	EXTERNAL INTERRUPT.
237	(ED) CHARACTER	1	RTM2MWPA	PSW KEY AND 'M-W-P'.
	1111		RTM2KEYA	PSW KEY.
	.... 1...			RESERVED
	.... .1..		RTM2MCKA	MACHINE CHECK INTERRUPT
	.... ..1.		RTM2WATA	WAIT STATE
	.... ...1		RTM2SPVA	SUPERVISOR/PROBLEM-PROGRAM MODE
238	(EE) CHARACTER	2	RTM2INTA	INTERRUPT CODE (LAST 2 BYTES OF INTERRUPT CODE IF I/O INTERRUPT)
240	(F0) CHARACTER	1	RTM2PMKA	INSTRUCTION LENGTH CODE, CONDITION CODE, AND PROGRAM MASKS.
	11...		RTM2ILA	INSTRUCTION LENGTH CODE
	..11		RTM2CCA	LAST CONDITION CODE
	.... 1...		RTM2FPA	FIXED-POINT OVERFLOW
	.... .1..		RTM2DOA	DECIMAL OVERFLOW
	.... ..1.		RTM2EUA	EXPONENT OVERFLOW
	.... ...1		RTM2SGA	SIGNIFICANCE
241	(F1) ADDRESS	3	RTM2NXTA	ADDRESS OF NEXT INSTRUCTION TO BE EXECUTED
244	(F4) CHARACTER	8	RTM2CTL2	BC MODE PSW FROM LAST PRB ON RB CHAIN
244	(F4) CHARACTER	1	RTM2CMKP	CHANNEL INTERRUPTS MASKS.
	1111 111.		RTM2IOP	I/O INTERRUPTS (ALL ZEROES OR ALL ONES).
	.... ...1		RTM2EXTP	EXTERNAL INTERRUPT.
245	(F5) CHARACTER	1	RTM2MWPP	PSW KEY AND 'M-W-P'.
	1111		RTM2KEYP	PSW KEY
	.... 1...			RESERVED
	.... .1..		RTM2MCKP	MACHINE CHECK INTERRUPT
	.... ..1.		RTM2WATP	WAIT STATE
	.... ...1		RTM2SPVP	SUPERVISOR/PROBLEM PROGRAM MODE
246	(F6) CHARACTER	2	RTM2INTP	INTERRUPT CODE (LAST 2 BYTES OF INTERRUPT CODE IF I/O INTERRUPT)
248	(F8) CHARACTER	1	RTM2PMKP	INSTRUCTION LENGTH CODE, CONDITION CODE, AND PROGRAM MASKS

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		11...	RTM2ILP	INSTRUCTION LENGTH CODE
		..11	RTM2CCP	LAST CONDITION CODE
		.... 1...	RTM2FPP	FIXED POINT OVERFLOW
		.... .1..	RTM2DOP	DECIMAL OVERFLOW
		.... ..1.	RTM2EUP	EXPONENT UNDERFLOW
		.... ...1	RTM2SGP	SIGNIFICANCE
249	(F9) ADDRESS	3	RTM2NXTP	ADDRESS OF NEXT INSTRUCTION TO BE EXECUTED
252	(FC) CHARACTER	72	RTM2SNAP	THE FOLLOWING FIELDS ARE INVOLVED WITH DUMP PROCESSING
252	(FC) ADDRESS	4	RTM2DPLA	ADDRESS OF THE DUMP PARAMETER LIST
256	(100) CHARACTER	20	RTM2SPRM	SNAP PARM LIST
256	(100) CHARACTER	16		
272	(110) ADDRESS	4	RTM2SPSL	ADDRESS OF STORAGE LISTS (RTM2DPSL)
276	(114) CHARACTER	32	RTM2SRSV	RESERVED FOR FUTURE EXPANSION OF THE SNAP PARAMETER BIT
308	(134) CHARACTER	8	RTM2DD	DDNAME FOR DUMP DATA SET
316	(13C) SIGNED	4	RTM2SNCC	RETURN CODE FROM SNAP/ABDUMP 0, SUCCESSFUL COMPLETION 4, INVALID DCB OR UPR ON DCB 8, INVALID TCB, UPR ON TCB, OR INSUFFICIENT STORAGE 12, INVALID DCB TYPE
320	(140) ADDRESS	4	RTM2DTCB	ADDR OF TOP TCB IN TREE TO BE DUMPED
324	(144) CHARACTER	32	RTM2SECB	ADDRESSES OF ECB LIST AND ECBS USED IN STACKING
324	(144) ADDRESS 1...	16	RTM2ECBA RTM2LECB	ADDRESS OF ECBS ON, LAST ECB USED
340	(154) SIGNED	16	RTM2ECBS	ECBS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
356 (164)	ADDRESS	4	RTM2DCBA	ADDRESS OF A DCB TO BE CLOSED BY TASK RECOVERY PRIOR TO RETRY
360 (168)	ADDRESS	4	RTM2SPWA	ADDRESS OF PREVIOUS RTM2WA GOTTEN FROM SQA FOR THIS MEMORY
364 (16C)	ADDRESS	4	RTM2PREV	ADDRESS OF PREVIOUS RTM2WA ACQUIRED FOR THIS TASK
368 (170)	ADDRESS	4	RTM2PRWA	ADDRESS OF PREVIOUS RTM2WA PERTINENT TO THIS RECURSION
372 (174)	CHARACTER	72	RTM2SFRG	SUBFUNCTION REGISTER SAVE AREA
372 (174)	ADDRESS	72	RTM2SFSA	SUBFUNCTION REGISTER SAVE AREA
444 (1BC)	BITSTRING	1	RTM2PKEY	HOLDS CALLER'S PROTECT KEY FOR MODSET
445 (1BD)	CHARACTER	7	RTM2SCTL	FLAGS USED TO MANAGE PATHS WITHIN RTM2
445 (1BD)	BITSTRING	2	RTM2CCTL	FLAGS USED TO MANAGE CONTROLLER PATHS
1...			RTM2STPT	ON, SCOPE OF ABEND IS STEP
.1...			RTM2CNCL	ON, ENTRY IS FOR A 'CANCEL'
..1.			RTM2SQS	ON, RTM2WA ACQUIRED FROM SQS
...1			RTM2ISPC	ON, INITIAL SUBTASK PROCESSING HAS BEEN DONE.
.... 1...			RTM2REED	SET ON WHEN RTM2 FINDS A REGISTER TYPE EED ON THE QUEUE
.... .1..			RTM2HEED	SET ON WHEN RTM2 FINDS A HARDWARE EED
.... .1.			RTM2SLIP	ON WHEN SLIP REQUESTED FOR THIS ERROR
.... .1			RTM2CONT	USED BY RTM2 AS A CONTROL FLAG IN SEGMENT RTCFTCB
1...			RTM2RSCN	USED BY RTM2 AS A CONTROL BIT DURING STACKING. ON INDICATES A SUBTASK IN RTM2 HAS BEEN FOUND
.1...			RTM2DEND	USED BY RTM2 AS A CONTROL BIT WHEN PROCESSING DUMP OPTIONS
..1.			RTM2RGE8	USED BY RTM2 AS A CONTROL BIT WHEN PROCESSING DUMP OPTIONS
...1			RTM2NODP	ON=SLIP HAS SPECIFIED THAT ALL DUMP REQUESTS OUT OF THIS CALL TO RTM SHOULD BE IGNORED
.... 1...			RTM2INPG	USED BY RTM2 AS CONTROL BIT IN RTCINPRG

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		.... .1..	RTM2PPIO	USED BY RTM2 AS CONTROL BIT IN RTCINPRG
		.... .1..	RTM2DETF	ON, ENTRY IS FOR A DETACH X'13E' OR X'33E' ABEND
		.... .1..		RESERVED
447	(1BF) BITSTRING	1	RTM2TCTL	RESERVED FOR TASK TERMINATION
448	(1C0) BITSTRING	1	RTM2MCTL	RESERVED FOR MEMORY TERMINATION
449	(1C1) BITSTRING	2	RTM2ABDR	ABDUMP FLAGS
449	(1C1) BITSTRING	1	RTM2ABID	AREAS DUMPED WHEN ABEND IN PROGRESS
		1...	RTM2CB	ON, DUMP CONTROL BLOCKS
		.1...	RTM2ENQ	ON, DUMP ENQ CONTROL BLOCKS
		.1.	RTM2PSW	ON, DUMP PSW
		...1	RTM2REG	ON, DUMP REGISTERS
		.... 1...	RTM2SAVE	ON, DUMP SAVEAREAS
		.... .1..	RTM2SAV2	ON, DUMP SAVEAREA HEADINGS ONLY
		.... .1..	RTM2OERR	ON, DUMP ERROR CONTROL BLOCKS
		.... .1..		RESERVED
450	(1C2) BITSTRING	1	RTM2ABND	ABDUMP FLAGS
		1...	RTM2NDMP	REQ'D INFOR FOR DUMP MISSING NO DUMP PROVIDED
		.1...	RTM2STAT	INDICATES TREE MUST BE SET ND
451	(1C3) BITSTRING	1	RTM2RCTL	FLAGS USED TO MANAGE TASK RECOVERY PATHS
		1...	RTM2STA2	ON, STAE EXIT ENTERED FOR THIS ERROR
		.1...	RTM2WAIN	ON, SDWA INVALID ON RETURN FROM EXIT
		.1.	RTM2WANA	ON, SDWA NOT ACQUIRED
		...1	RTM2TRSW	USED BY TASK RECOVERY FOR LOOP CONTROL
		.... 1...	RTM2BFTL	USED BY TASK RECOVERY AS FIRST TIME LOG- IC INDICATOR
		.... .1..	RTM2LPAQ	USED BY TASK RECOVERY WHEN THE* LINK PACK AREA CDE CHAIN IS BEING SEARCHED
		.... .1..	RTM2JPAQ	USED BY TASK RECOVERY WHEN THE JOB PACK AREA CDE CHAIN IS BEING SEARCHED
		.... .1..		RESERVED
452	(1C4) BITSTRING	8	RTM2INTF	FLAGS USED TO MANAGE PATHS ACROSS RTM2 SUBFUNCTIONS
452	(1C4) BITSTRING	1	RTM2CTLR	FLAGS USED TO COMMUNICATE WITH THE CON- TROLLER
		1...	RTM2RECR	ON, THIS IS RECURSIVE ENTRY

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
	.1..		RTM2RETR	ON, RETRY REQUESTED BY EXIT
	..1.		RTM2TMEM	ON, TASK TERMINATION HAS ENDED THE LAST TASK IN THE MEMORY
	...1		RTM2WRAP	ON, INDICATES STORAGE RANGES WRAPPED AROUND
	.... 1111			RESERVED
453	(1C5) BITSTRING	1		RESERVED
454	(1C6) BITSTRING	1	RTM2TSKT	FLAGS USED TO COMMUNICATE WITH TASK TER- MINATION
	1...		RTM2PURG	ON, PURGE ONLY ENTRY
	.111 1111			RESERVED
455	(1C7) BITSTRING	1	RTM2MEMT	RESERVED FOR MEMORY TERMINATION
456	(1C8) BITSTRING	1	RTM2ABDP	FLAGS USED TO COMMUNICATE WITH ABDUMP
	1...		RTM2DMP1	ON, DUMP ONLY ONE TASK (RETRY WITH DUMP WAS REQUESTED)
	.1..		RTM2SMDP	SYSMDUMP IN PROCESS
	..1.		RTM2SMRD	SYSMREAD ROUTINE IN PROCESS
	...1 1111			RESERVED
457	(1C9) BITSTRING	1	RTM2ASIR	FLAGS USED TO COMMUNICATE WITH TASK RECOVERY
	1...		RTM2TRME	ON, ENTER ONLY TERM EXITS
	.1..		RTM2UPRG	ALL REGS TO BE UPDATED
	..11 1111			RESERVED
458	(1CA) BITSTRING	2	RTM2FLX	FLAGS USED TO COMMUNICATE WITH THE EXIT HANDLER
458	(1CA) BITSTRING	1	RTM2FLX1	
	1...		RTM2MTX	ON, MEMORY PURGE EXIT
	.1..		RTM2EOTX	ON, NORMAL END OF TASK EXIT
	..1.		RTM2ABX	ON, ABEND EXIT
	...1		RTM2DWX	ON, SUBTASK WAITING EXIT
	.... 1...		RTM2CVX	ON, CONVERT TO STEP EXIT
	.... .1..		RTM2PRX	ON, PERMANENT TASK EXIT
	.... .1.		RTM2LTX	ON, LAST TASK EXIT
	.... ...1		RTM2RTRX	ON, RETRY EXIT
459	(1CB) BITSTRING	1	RTM2FLX2	
	1...		RTM2RCRX	ON, RECURSION EXIT
	.1..		RTM2CERX	ON, THE RTM2 CONTROLLER HAS DETECTED AN UNRECOVERABLE ERROR. EXIT IS TO CRITICAL

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
		..11 1111		ERROR ROUTINE RESERVED
460	(1CC) CHARACTER	20	RTM2RECL	FLAGS USED TO MAINTAIN TRACKS FOR RECURSIVE ENTRIES
460	(1CC) BITSTRING	4	RTM2SCTC	CURRENT SECTION FLAG
464	(1D0) BITSTRING	4	RTM2SCTR	PREVIOUS SECTION FLAGS INDICATING WHICH SECTIONS HAVE SUFFERED RECURSION
468	(1D4) BITSTRING	4	RTM2SCTX	EXIT TYPE SECTION FLAGS INDICATING WHICH SECTIONS RECURSION ADDRESS SHOULD RECEIVE CONTROL
472	(1D8) BITSTRING	1	RTM2DCTL	FUNCTIONS COMPLETED IN ABDUMP
1...	....		RTM2DENQ	ENQ ON DUMP DATA SET COMPLETED
.1..	....		RTM2DGET	GETMAIN FOR DCB COMPLETED
..1.	....		RTM2DOPN	OPEN FOR DUMP DATA SET DONE
...1	....		RTM2DSNP	SNAP PROCESSING COMPLETED
....1..			RTM2DCLS	CLOSE COMPLETED
....1..			RTM2DFRM	FREEMAIN FOR DCB COMPLETED
....1..			RTM2DDEQ	DEQ COMPLETED
....1..	1		RTM2DFTK	FIRST TCB DUMPED
473	(1D9) BITSTRING	1	RTM2ECTL	EXTERNAL ROUTINE INDICATORS (ABDUMP)
1...	....		RTM2EENQ	ENQ IN CNTRL
.1..	....		RTM2EGET	GETMAIN FOR DCB IN CNTRL
..1.	....		RTM2EOPN	OPEN IN CONTROL
...1	....		RTM2ESNP	SNAP IN CNTRL
....1..			RTM2ECLS	CLOSE IN CNTRL
....1..			RTM2EFRM	FREEMAIN IN CONTROL
....1..			RTM2EDEQ	DEQ IN CONTROL
....1..	1		RTM2EQMN	QMNGRIO IN CONTROL
474	(1DA) BITSTRING	2	RTM2TMR	RESERVED FOR EOT, MEMORY TERMINATION, TASK TERMINATION
476	(1DC) BITSTRING	4	RTM2TRYR	RESERVED FOR TASK RECOVERY AND TERM EXIT PROCESSOR
476	(1DC) BITSTRING	2	RTM2TRF1	EXTERNAL ROUTINE INDICATORS (TASK RECOVERY)

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
			RTM2IOQS	QUIESCE IN CONTROL
			RTM2IOHS	HALT IN CONTROL
			RTM2IORS	RESTORE IN CONTROL
			RTM2GMS	GETMAIN IN CONTROL
			RTM2PPS	PURGE PAGE-IN IN CONTROL
			RTM2HOOK	GTF IN CONTROL
			RTM2VLDY	VALIDITY CHECK IN CONTROL
			RTM2FMS	FREEMAIN IN CONTROL
			RTM2RCD	RECORD IN CONTROL
			RTM2RTYS	RETRY SECTION IN CONTROL
			RTM2XIP	EXIT IN PROGRESS
			RTM2XABD	EXIT ABENDED
			RTM2XFLG	EXIT HAS BEEN ENTERED
			RTM2AS1R	AS1 IN CONTROL
			RTM2AS2R	AS2 IN CONTROL
			RTM2AS3R	AS3 IN CONTROL
478	(1DE) BITSTRING	1	RTM2TRF2	PRE EXIT RECURSION INDICATORS
			RTM2IOR	I/O RECURSION
			RTM2PPR	PURGE PAGE-IN RECURSION
			RTM2GMR	GETMAIN RECURSION
			RTM2STXR	STAX RECURSION
			.... 1111	RESERVED
479	(1DF) BITSTRING	1	RTM2TRF3	EXTERNAL ROUTINE INDICATORS (TASK RECOVERY)
			RTM2STX2	STAX IN CONTROL
			RTM2STXS	STAX SECTION FLAG
			.... 1111	RESERVED
480	(1E0) CHARACTER	16	RTM2RECH	RECURSION HANDLER ADDRESSES
480	(1E0) ADDRESS	4	RTM2TRRA	ADDRESS OF SUBFUNCTION RECURSION HANDLER
484	(1E4) ADDRESS	4	RTM2SKRA	ADDRESS OF CONTROLLER RECURSION HANDLER
488	(1E8) ADDRESS	4	RTM2STRA	ADDRESS OF STEP CONVERSION RECURSION HANDLER
492	(1EC) ADDRESS	4	RTM2CTRA	ADDRESS OF CRITICAL RECURSION HANDLER
496	(1F0) BITSTRING	2		RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
498	(1F2) ADDRESS	1	RTM2WARG	WORK AREA REGISTER
499	(1F3) ADDRESS	1	RTM2RB RG	RB REGISTER FOR RTM2 SVRB
500	(1F4) CHARACTER	64	RTM2RRG	RECUSION REGISTERS
500	(1F4) ADDRESS	64	RTM2RREG	REGISTER VALUES TO BE LOADED BEFORE GOING TO A SUBFUNCTION RECUSION ROUTINE
564	(234) CHARACTER	72	RTM2CRG	SAVE AREA FOR IEAVRT2
564	(234) ADDRESS	72	RTM2CREG	REGISTER SAVE AREA FOR IEAVRTC AND IEA- VTRTE
636	(27C) ADDRESS	72	RTM2RSA	REGISTER SAVE AREA FOR IEAVTAS2 AND IEAVTAS3
708	(2C4) CHARACTER	164	RTM2RMIN	RESOURCE MANAGER INTERFACE AREA
708	(2C4) ADDRESS	4	RTM2RMPS	ADDR OF THE RESOURCE MANAGER PARAMETER LIST (RTM2RMPL)
712	(2C8) CHARACTER	24	RTM2RMPL	R/M PARM LIST
736	(2E0) CHARACTER	64	RTM2RMWA	FIELD REFERENCE NAME FOR RTM2RMWS
736	(2E0) ADDRESS	64	RTM2RMWS	WORK AREA FOR RESOURCE MANAGER USE
800	(320) ADDRESS	72	RTM2RMSA	RESOURCE MANAGER SAVE AREA
872	(368) CHARACTER	10	RTM2ERID	ERRORID
872	(368) CHARACTER	2	RTM2SEQ#	SEQUENCE NUMBER
874	(36A) CHARACTER	2	RTM2CPUI	LOGICAL CPUID
876	(36C) CHARACTER	2	RTM2ERAS	ASID FOR ERROR MEMORY
878	(36E) CHARACTER	4	RTM2ERTM	TIME STAMP
882	(372) CHARACTER	2		RESERVED
884	(374) CHARACTER	20	RTM2ENSN	USED BY ABDUMP, CONTAINS THE COPIED TRACE TABLE ADDRESS AND TRACE SIZE

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
884	(374) CHARACTER	4	RTM2SNLN	LENGTHS OF SAVED DATA AREA
884	(374) SIGNED	4	RTM2TRLN	LENGTH OF COPIED TRACE TABLE
888	(378) ADDRESS	4	RTM2TRTB	COPIED TRACE TABLE ADDRESS
892	(37C) ADDRESS	4	RTM2TRCU	CURRENT TRACE TABLE ENTRY FOR THE COPIED TRACE TABLE
896	(380) ADDRESS	4	RTM2TRFS	FIRST TRACE TABLE ENTRY FOR THE COPIED TRACE TABLE
900	(384) ADDRESS	4	RTM2TRLS	LAST TRACE TABLE ENTRY FOR THE COPIED TRACE TABLE
904	(388) CHARACTER	68	RTM2RYRG	REG SAVEAREA FOR RETRY
904	(388) ADDRESS	64	RTM2RYRS	SAVEAREA ARRAY
968	(3C8) SIGNED	4	RTM2TECB	TRACE PROCESS ECB
972	(3CC) CHARACTER	8	RTM2XM	CROSS MEMORY INFO
972	(3CC) CHARACTER	4	RTM2CR3	CONTROL REGISTER 3
972	(3CC) CHARACTER	2	RTM2KM	KEY MASK
974	(3CE) CHARACTER	2	RTM2SASD	SASID
976	(3D0) CHARACTER	4	RTM2CR4	CONTROL REGISTER 4
976	(3D0) CHARACTER	2	RTM2AX	AUTHORIZATION INDEX
978	(3D2) CHARACTER	2	RTM2PASD	PASID
980	(3D4) CHARACTER	8	RTM2COMU	FRR TO ESTAE COMMUNICATION BUFFER
988	(3DC) CHARACTER	8	RTM2SDWX	SAVE AREA FOR POINTERS TO EACH SDWA EXTENSION (MAPPING MUST MATCH SDWAPTRS)
988	(3DC) ADDRESS	4	RTM2NRC1	PTR TO SDWANRC1
992	(3E0) ADDRESS	4	RTM2RC1	PTR TO SDWARC1

CROSS REFERENCE

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RTM2ABDP	1C8		RTM2CREG	234		RTM2ECTL	1D9	
RTM2ABDR	1C1		RTM2CRG	234		RTM2ECT1	7D	08
RTM2ABEP	94		RTM2CR3	3CC		RTM2EDEQ	1D9	02
RTM2ABID	1C1		RTM2CR4	3D0		RTM2EEDH	98	
RTM2ABND	1C2		RTM2CT	38		RTM2EEDR	3C	
RTM2ABNM	8C		RTM2CTLR	1C4		RTM2EENQ	1D9	80
RTM2ABTM	B4	08	RTM2CTL1	EC		RTM2EFRM	1D9	04
RTM2ABX	1CA	20	RTM2CTL2	F4		RTM2EGET	1D9	40
RTM2ACR	A1	08	RTM2CTRA	1EC		RTM2EMK1	7C	
RTM2ADDR	4		RTM2CTS	B7	10	RTM2ENQ	1C1	40
RTM2ADD1	81		RTM2CVER	BA		RTM2ENRB	B5	04
RTM2AEC1	84		RTM2CVT	C		RTM2ENSN	374	
RTM2AI01	7C	02	RTM2CVX	1CA	08	RTM2EOM	1C	10
RTM2APSW	7C		RTM2DCBA	164		RTM2EOPN	1D9	20
RTM2ASC	18		RTM2DCLS	1D8	08	RTM2EOT	1C	08
RTM2ASIR	1C9		RTM2DCTL	1D8		RTM2EOTX	1CA	40
RTM2AS1R	1DD	04	RTM2DD	134		RTM2EPSW	7C	
RTM2AS2R	1DD	02	RTM2DDEQ	1D8	02	RTM2EQMN	1D9	01
RTM2AS3R	1DD	01	RTM2DEC1	7E	04	RTM2ERAS	36C	
RTM2AX	3D0		RTM2DEND	1BE	40	RTM2EREG	3C	
RTM2BFTL	1C3	08	RTM2DENQ	1D8	80	RTM2ERFL	B7	01
RTM2CB	1C1	80	RTM2DESC	0		RTM2ERID	368	
RTM2CC	1D		RTM2DETF	1BE	02	RTM2ERRA	B4	
RTM2CCA	F0	30	RTM2DFRM	1D8	04	RTM2ERRB	B5	
RTM2CCF	1C		RTM2DFTK	1D8	01	RTM2ERRC	B6	
RTM2CCP	F8	30	RTM2DGET	1D8	40	RTM2ERRD	B7	
RTM2CCTL	1BD		RTM2DMP1	1C8	80	RTM2ERTM	36E	
RTM2CC1	7E	30	RTM2DOA	F0	04	RTM2ER0	3C	
RTM2CERX	1CB	40	RTM2DOP	F8	04	RTM2ER1	40	
RTM2CHNG	A4	01	RTM2DOPN	1D8	20	RTM2ER10	64	
RTM2CLUP	B7	80	RTM2DPLA	FC		RTM2ER11	68	
RTM2CMKA	EC		RTM2DREQ	1C	80	RTM2ER12	6C	
RTM2CMKP	F4		RTM2DSNP	1D8	10	RTM2ER13	70	
RTM2CNCL	1BD	40	RTM2DTCB	140		RTM2ER14	74	
RTM2CODE	1C		RTM2DWX	1CA	10	RTM2ER15	78	
RTM2COMP	DC		RTM2EAM1	7C	08	RTM2ER2	44	
RTM2COMU	3D4		RTM2EAS	B6	08	RTM2ER3	48	
RTM2CONT	1BD	01	RTM2ECBA	144		RTM2ER4	4C	
RTM2CPID	A2		RTM2ECBS	154		RTM2ER5	50	
RTM2CPUI	36A		RTM2ECLS	1D9	08	RTM2ER6	54	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RTM2ER7	58		RTM2IOA	EC	FE	RTM2NODP	1BE	10
RTM2ER8	5C		RTM2IOBP	BC		RTM2NOIO	BA	20
RTM2ER9	60		RTM2IOFS	BA		RTM2NRBE	B7	40
RTM2ESNP	1D9	10	RTM2IOHS	1DC	40	RTM2NRCI	3DC	
RTM2EUA	F0	02	RTM2IOHT	BA	40	RTM2NUCL	A5	10
RTM2EUP	F8	02	RTM2IOP	F4	FE	RTM2NXTA	F1	
RTM2EXP1	7E	02	RTM2IOQR	BA	80	RTM2NXTP	F9	
RTM2EXTA	EC	01	RTM2IOQS	1DC	80	RTM2NXT1	80	
RTM2EXTP	F4	01	RTM2IOR	1DE	80	RTM20ERR	1C1	02
RTM2EXT1	7C	01	RTM2IORS	1DC	20	RTM20FLN	A5	80
RTM2FI0B	BD		RTM2IPCI	87	3F	RTM2PARQ	E8	
RTM2FLGS	B4		RTM2IPR1	87	80	RTM2PASD	3D2	
RTM2FLSQ	A5	04	RTM2IRB	B6	20	RTM2PCHK	B4	40
RTM2FLX	1CA		RTM2ISPC	1BD	10	RTM2PERC	B6	10
RTM2FLX1	1CA		RTM2JPAQ	1C3	02	RTM2PER1	7C	40
RTM2FLX2	1CB		RTM2KEYA	ED	F0	RTM2PGCY	3C	
RTM2FMID	B8		RTM2KEYP	F5	F0	RTM2PGFX	A5	02
RTM2FMS	1DC	01	RTM2KEY1	7D	F0	RTM2PGM1	7D	01
RTM2FPA	F0	08	RTM2KM	3CC		RTM2PKEY	1BC	
RTM2FP01	7E	08	RTM2LDIS	B5	02	RTM2PMKA	F0	
RTM2FPP	F8	03	RTM2LECB	144	80	RTM2PMKP	F8	
RTM2FSQA	A5	08	RTM2LGTH	9		RTM2PPIO	1BE	04
RTM2GMR	1DE	20	RTM2LPAQ	1C3	04	RTM2PPR	1DE	40
RTM2GMS	1DC	10	RTM2LTX	1CA	02	RTM2PPS	1DC	08
RTM2HEED	1BD	04	RTM2MABD	B7	08	RTM2PREV	16C	
RTM2HOOK	1DC	04	RTM2MCHD	A1		RTM2PRWA	170	
RTM2ICD1	87		RTM2MCHI	A0		RTM2PRX	1CA	04
RTM2ID	0		RTM2MCHK	B4	80	RTM2PSW	1C1	20
RTM2ILA	F0	C0	RTM2MCHS	A0		RTM2PSWU	A1	20
RTM2ILC1	85		RTM2MCIV	B7	02	RTM2PURG	1C6	80
RTM2ILP	F8	C0	RTM2MCKA	ED	04	RTM2RB RG	1F3	
RTM2IL1	85	06	RTM2MCKP	F5	04	RTM2RBST	C0	
RTM2IMC1	87	40	RTM2MCK1	7D	04	RTM2RCD	1DD	80
RTM2INC1	86		RTM2MCTL	1C0		RTM2RCDE	E8	
RTM2INPG	1BE	08	RTM2MEMT	1C7		RTM2RCDF	A0	40
RTM2INSF	A1	04	RTM2MSER	A4	02	RTM2RCRX	1CB	80
RTM2INTA	EE		RTM2MTX	1CA	80	RTM2RCTL	1C3	
RTM2INTC	A5	40	RTM2MWPA	ED		RTM2RC1	3E0	
RTM2INTF	1C4		RTM2MWPP	F5		RTM2RECH	1E0	
RTM2INTP	F6		RTM2MWP1	7D		RTM2RECL	1CC	
RTM2INT1	7E		RTM2NDMP	1C2	80	RTM2RECR	1C4	80
RTM2INVP	A0	10	RTM2NIOP	BA	10	RTM2REED	1BD	08

RTM2WA

338 MVS/370 Debug Hdbk Vol 4

RTM2WA

LC28-1388-0 (c) Copyright IBM Corp. 1980, 1985

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE	NAME	HEX OFFSET	HEX VALUE
RTM2REG	1C1	10	RTM2SCTR	1D0		RTM2STRA	1E8	
RTM2REGU	A1	40	RTM2SCTX	1D4		RTM2STRM	B4	01
RTM2RETR	1C4	40	RTM2SDWX	3DC		RTM2STXR	1DE	10
RTM2RFSA	A8		RTM2SECB	144		RTM2STXS	1DF	40
RTM2RGEB	1BE	20	RTM2SEQ#	368		RTM2STX2	1DF	80
RTM2RKEY	B4	20	RTM2SFRG	174		RTM2SUBP	D8	
RTM2RMIN	2C4		RTM2SFSA	174		RTM2SVCD	B4	10
RTM2RMPL	2C8		RTM2SFWA	20		RTM2SVCE	B4	04
RTM2RMPS	2C4		RTM2SGA	F0	01	RTM2S1	7E	80
RTM2RMSA	320		RTM2SGN1	7E	01	RTM2TCBC	10	
RTM2RMWA	2E0		RTM2SGP	F8	01	RTM2TCBT	30	
RTM2RMWS	2E0		RTM2SIZE	D9		RTM2TCTL	1BF	
RTM2RPIV	B7	04	RTM2SKRA	1E4		RTM2TECB	3C8	
RTM2RREG	1F4		RTM2SKYF	A1	80	RTM2TERR	A1	01
RTM2RRG	1F4		RTM2SLIP	1BD	02	RTM2TEXC	B4	02
RTM2RSCN	1BE	80	RTM2SMDP	1C8	40	RTM2TIME	AC	
RTM2RSRC	A0	08	RTM2SMRD	1C8	20	RTM2TMEM	1C4	20
RTM2RSRF	A0	04	RTM2SNAP	FC		RTM2TMR	1DA	
RTM2RSR1	A4		RTM2SNCC	13C		RTM2TRAN	88	
RTM2RSR2	A5		RTM2SNLN	374		RTM2TRCU	37C	
RTM2RTCA	D4		RTM2S0FT	A1	02	RTM2TRFS	380	
RTM2RTCD	D4		RTM2SPER	A5	20	RTM2TRF1	1DC	
RTM2RTRX	1CA	01	RTM2SPID	8		RTM2TRF2	1DE	
RTM2RTYA	E0		RTM2SPLL	D8		RTM2TRF3	1DF	
RTM2RTYS	1DD	40	RTM2SPRM	100		RTM2TRLN	374	
RTM2RT2D	8		RTM2SPSL	110		RTM2TRLS	384	
RTM2RYRB	E4		RTM2SPVA	ED	01	RTM2TRME	1C9	80
RTM2RYRG	388		RTM2SPVP	F5	01	RTM2TRM1	7C	04
RTM2RYRS	388		RTM2SPWA	168		RTM2TRRA	1E0	
RTM2R0DP	1C	20	RTM2SQS	1BD	20	RTM2TRRC	BA	
RTM2SASD	3CE		RTM2SRBM	B5	01	RTM2TRRY	3C	
RTM2SAVE	1C1	08	RTM2SRSV	114		RTM2TRSA	27C	
RTM2SAV2	1C1	04	RTM2SRVL	A0	80	RTM2TRSW	1C3	10
RTM2SCBC	C8		RTM2STAЕ	B7	20	RTM2TRTB	378	
RTM2SCBN	CC		RTM2STAF	B6	80	RTM2TRYR	1DC	
RTM2SCB0	D0		RTM2STAI	B6	40	RTM2TSKT	1C6	
RTM2SCBS	C8		RTM2STAR	C4		RTM2TSVL	A0	20
RTM2SCK	A1	10	RTM2STAT	1C2	40	RTM2TYP1	B5	08
RTM2SCKB	98		RTM2STA2	1C3	80	RTM2UPRG	1C9	40
RTM2SCKE	9C		RTM2STCK	98		RTM2VEQR	A5	01
RTM2SCTC	1CC		RTM2STEP	1C	40	RTM2VLDY	1DC	02
RTM2SCTL	1BD		RTM2STPT	1BD	80	RTM2VRBC	14	

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>NAME</u>	HEX <u>OFFSET</u>	HEX <u>VALUE</u>	<u>NAME</u>	HEX <u>OFFSET</u>	HEX <u>VALUE</u>	<u>NAME</u>	HEX <u>OFFSET</u>	HEX <u>VALUE</u>
RTM2VRBT	34		RTM2WATA	ED	02	RTM2XABD	1DD	10
RTM2WA	0		RTM2WATP	F5	02	RTM2XFLG	1DD	08
RTM2WAIN	1C3	40	RTM2WAT1	7D	02	RTM2XIP	1DD	20
RTM2WANA	1C3	20	RTM2WRAP	1C4	10	RTM2XM	3CC	
RTM2WARG	1F2							

RTSD

Common Name : RTCT SDUMP Extension

Macro ID : IHARTSD

DSECT Name : RTSD

Created by : IEAVTSDI during NIP

Subpool and Key : 239 and key 0

Size : 720 bytes

Pointed to by : RTCTRTSD field of the RTSD data area

Serialization : High order bit of CVTSDBF - compare and swap.

RTCTSDPL - compare and swap.

Function : An extension of the RTCT. It contains working storage for branch entry and SVC 51 SDUMP's.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	752	RTSD	RTCT SDUMP EXTENSION
0	(0) CHARACTER	4	RTSDID	EBCDIC IDENTIFIER RTSD-
4	(4) CHARACTER	128	RTSDXATB	EXTENSION ASID TABLE CONTAINS CONTROL BITS AND LISTA POINTERS BY ASID
4	(4) CHARACTER	128	RTSDPTRT	TABLE HAS 16 ENTRIES AND IS INDEXED USING THE RTCTINDX FIELD
4	(4) BITSTRING	4	RTSDTCTL RTSDLAON	CONTROL AND DATA BITS FOR ASID 1... INDICATE A LISTA ONLY ASID
8	(8) ADDRESS	4	RTSDPTR	POINTER TO RANGES FOR THIS ASID
132	(84) ADDRESS	4	RTSDLSTN	ADDR OF NEXT FREE LISTA TABLE ENTRY
136	(88) ADDRESS	4	RTSDLEND	ADDRESS OF END OF THE LISTA AREA
140	(8C) CHARACTER	484	RTSDLTBL	LISTA RANGE TABLE AREA
624	(270) CHARACTER	28	RTSDXMST	CROSS MEMORY STATUS SAVE AREA

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
624	(270) SIGNED	4	RTSDXCR1	CONTROL REGISTER ONE
624	(270) ADDRESS	4	RTSDPST0	PRIMARY STO VALUE
628	(274) SIGNED	4		RESERVED UNUSED
632	(278) SIGNED	4	RTSDXCR3	CONTROL REGISTER 3
632	(278) UNSIGNED	2	RTSDXAKM	AUTHORIZATION KEY MASK
634	(27A) UNSIGNED	2	RTSDSAID	SECONDARY ASID
636	(27C) SIGNED	4	RTSDXCR4	CONTROL REGISTER 4
636	(27C) UNSIGNED	2	RTSDXMAI	AUTHORIZATION INDEX
638	(27E) UNSIGNED	2	RTSDPAID	PRIMARY ASID
640	(280) SIGNED	4	RTSDXCR5	CONTROL REGISTER 5
644	(284) SIGNED	4		RESERVED UNUSED
648	(288) SIGNED	4	RTSDXCR7	CONTROL REGISTER 7
648	(288) ADDRESS	4	RTSDSST0	SECONDARY STO
652	(28C) SIGNED	2	RTSDHAID	ASID OF THE CALLERS HOME ADDRESS SPACE
654	(28E) SIGNED	2		RESERVED
656	(290) CHARACTER	8	RTSDXPSW	CROSS MEMORY PSW ON ENTRY TO SDUMP
664	(298) ADDRESS	4	RTSDASCB	ASCB ADDR OF ADDRESSABLE ADDRESS SPACE OF SDUMP CALLER ON ENTRY
668	(29C) ADDRESS	4	RTSDCMLA	ASCB ADDR OF ASID WHOSE CML LOCK IS HELD
672	(2A0) CHARACTER	8	RTSDCMSV	SAVE AREA FOR CMSET LOGIC
680	(2A8) SIGNED	2	RTSDIDX1	SVC DUMP WORKING INDEX ONE
682	(2AA) SIGNED	2	RTSDIDX2	SVC DUMP WORKING INDEX TWO
684	(2AC) ADDRESS	4	RTSDEXTB	ADDRESS OF SDUMP EXIT TABLE

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
688	(2B0) ADDRESS	4	RTSDRTRN	COMMON SDUMP RETURN SAVE
692	(2B4) SIGNED	4	RTSDVBSZ	VIRTUAL BUFFER SIZE USED BY IEAVTSAI TO GETMAIN THE VIRTUAL BUFFER FOR SUSPEND SUMMARY DUMP
696	(2B8) ADDRESS	4	RTSDCSAV	ADDRESS OF THE SDUMP CALLERS SAVE AREA
700	(2BC) CHARACTER	8	RTSDRSAD	ADDRESSABILITY TO THE CALLERS REGISTER SAVE AREA
700	(2BC) UNSIGNED	2		RESERVED
702	(2BE) UNSIGNED	2	RTSDRSAS	SASID FOR THE SAVE AREA
704	(2C0) UNSIGNED	2		RESERVED
706	(2C2) UNSIGNED	2	RTSDRPAS	PASID FOR THE SAVE AREA
708	(2C4) CHARACTER	2	RTSDFLGS	SVC DUMP OPERATION FLAGS
708	(2C4) CHARACTER	1	RTSDFLG1	FIRST BYTE OF SDUMP FLAGS
	1...		RTSDASDW	THE COPIED SDWA IS USABLE
	.1...		RTSDVCPU	ALL CPUS ARE VALID AND NOT VM
709	(2C5) CHARACTER	1		RESERVED
710	(2C6) CHARACTER	2	RTSDASID	ASID OF THE CALLERS SDWA
712	(2C8) ADDRESS	4	RTSDSDWA	ADDRESS OF THE COPIED SDWA
716	(2CC) ADDRESS	4	RTSDCSDW	ADDRESS OF THE CALLERS SDWA
720	(2D0) CHARACTER	16	RTSDMCW	MAINTENANCE CONTROL WORD FOR DIAGNOSE LOGIC
720	(2D0) CHARACTER	8	RTSDMPRM	MSSFCALL PARAMETER LIST
720	(2D0) ADDRESS	4	RTSDMDBK	ADDRESS OF DATA BLOCK
724	(2D4) ADDRESS	4	RTSDMCDA	ADDRESS OF COMMAND WORD
728	(2D8) CHARACTER	4	RTSDMCMD	COMMAND WORD FOR MSSFCALL

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
732	(2DC) CHARACTER	4		
736	(2E0) CHARACTER	16	RTSDCDW	CONSOLE DIAGNOSE WORD
736	(2E0) CHARACTER	4	RTSDCDWC	CDW COMMAND CODE FIELD
740	(2E4) CHARACTER	4	RTSDCDWR	CDW RETURN CODE FIELD
744	(2E8) CHARACTER	4	RTSDCDWL	CDW LENGTH FIELD ALWAYS 2K
748	(2EC) CHARACTER	4	RTSDCDWA	CDW ADDRESS FIELD
0	(0) STRUCTURE	0	RTSDEXIT	SDUMP EXIT TABLE
0	(0) CHARACTER	4	RTSDEXFL	EXIT FLAGS
0	(0) BITSTRING	2	RTSDEXMS	EXIT MASK USED TO IDENTIFY THE EXIT WITH AN SDUMP PARAMETER
2	(2) CHARACTER	1		RESERVED
3	(3) BITSTRING	1	RTSDEXAT	EXIT ATTRIBUTES
1...	....		RTSDEXLC	ON FOR LOCAL EXIT
.1...	....		RTSDEXGB	ON FOR GLOBAL EXIT
..1.	....		RTSDEXSD	ON FOR SDUMP EXIT
...1	....		RTSDEXSM	ON FOR SYSMDUMP EXIT
....1...			RTSDEXON	ON FOR ONE TIME ONLY EXIT
....	.111			RESERVED
4	(4) ADDRESS	4	RTSDEXAD	EXIT LOAD MODULE ADDRESS
0	(0) STRUCTURE	8	RTSDRANG	ADDRESS RANGE FOR LISTA
0	(0) ADDRESS	4	RTSDBADR	BEGINNING ADDRESS
4	(4) ADDRESS	4	RTSDEADR	ENDING ADDRESS

RT1W

Common Name : RTM RT1W Work Area

Macro ID : IHART1W

DSECT Name : RT1W

Created by : IEAVNIP0 or IEEVCPU

Subpool and Key : One data area created in the NUCLEUS and seven created
in subpool 245; all key 0

Size : 68 bytes

Pointed to by : FRRSRT1W field of the FRRS data area

Serialization : None

Function : The RT1W is used to describe the current error condition and
provide an internal work area for the RTM1 subfunctions.

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	88	RT1W	THE RTM1 WORK AREA
0	(0) CHARACTER	76	RT1WTRTM	PART OF RT1W USED FROM IEAVTRTM ON
0	(0) CHARACTER	52	RT1WNPRS	DATA NOT PRESERVED ON VALID ANTICIPATED RECUSION
0	(0) SIGNED	24	RT1WLPTA	TRACKING AREA FOR LOGICAL PHASE RECOVERY PROCESSING MAPPED BY RT1TRACK BELOW
24	(18) ADDRESS	4	RT1WPSW1	CHECKPOINTED PTR TO PSW1
28	(1C) ADDRESS	4	RT1WPSW2	CHECKPOINTED PTR TO PSW2
32	(20) ADDRESS	20	RT1WVARI	VARIABLE FIELDS IN WA
52	(34) CHARACTER	24	RT1WPRSV	DATA TO BE PRESERVED ON VALID ANTIC- IPATED RECUSION
52	(34) ADDRESS	4	RT1WRTCA	POINTR TO THE SDWA CURNTLY IN USE (USED BY RTS)

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
56	(38) ADDRESS	4	RT1WSRBR	POINTER TO THE CHAIN PREFIX (SEE RTMCHDR) AND SDWA AQUIRED FROM SQA BY IEAVRTS
60	(3C) ADDRESS	4	RT1WEED	POINTER TO EEDS ACQUIRED
64	(40) SIGNED	4	RT1WENTR	ENTRY POINT DATA
64	(40) BITSTRING	1	RT1WMODE	SYSTEM MODE AT TIME OF ERROR (SEE MODE-BYTE AT THE END OF RT1W FOR A DESCRIPTION OF THIS BYTE)
65	(41) BITSTRING	1	RT1WSRMD	SYSTEM RECOVERY MODE
66	(42) BITSTRING	1	RT1WCOVR	PRESERVED CARRY OVER INFORMATION ON VALID RECURSIONS
1...			RT1WCLUP	CLEANUP AND PERCOLATE INDICATION
.1...			RT1WRTM	IF ON, INDICATES RTM'S FRR WAS IN CONTROL AT THE TIME OF THE ERROR
..1.			RT1WFAIL	IF ON, RTM1 ISSUED A CMSET MACRO WHICH EITHER ISSUED ABEND OR RETURNED A NON ZERO RETURN CODE
...1			RT1WRSTW	IF ON, RTS HAS ALREADY CLEARED THE CVT RESTART WORD (CVTRSTWD)
.... 1...			RT1WEREX	USED IN EEDPROC TO INDICATE AN ERRORID HAS BEEN PLACED IN AN EED. IT IS SET OFF BEFORE EXITING FROM EEDPROC
.... .1..			RT1NODMP	SET BY SLIP TO INFORM DUMPING PROGRAMS THAT DUMP REQUESTS SHOULD BE IGNORED FOR THIS INVOKATION OF RTM
.... ..1.			RT1WSLST	IF ON, AT LEAST ONE FRR HAS SUPPLIED DUMP RANGES TO RTS OR DUMP RANGES WERE SUPPLIED BY THE ISSUER OF ABEND
.... ...1			RT1WGFAI	IF ON, RTS ATTEMPTED TO ACQUIRE AN SDWA FROM SQA BUT THE GETMAIN REQUEST WAS UNSUCCESSFUL
67	(43) ADDRESS	1	RT1WLPN	INITIAL LOGICAL PHASE NUMBER ON ENTRY TO RTM
68	(44) ADDRESS	4	RT1WASCB	ASCB ADDR OF CML ADDRESS SPACE
72	(48) CHARACTER	4	RT1WENT2	ENTRY POINT DATA

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
72	(48) BITSTRING	1	RT1WCOV2	PRESERVED CARRY OVER INFORMATION ON VAL-ID RECURSIONS
	1...		RT1WSKIP	IF ON, AT LEAST ONE FRR IN THE PERCOLATION PATH HAS BEEN SKIPPED
	.1...		RT1WRMGR	IF ON, RTM1 IS PROCESSING THE FRR STACK ON BEHALF OF A CALLRTM TYPE=RMGRCML
73	(49) CHARACTER	3	RT1WRSV	RESERVED
76	(4C) CHARACTER	12	RT1WTRT1	PART OF RT1W USED FROM IEAVRT1 ON
76	(4C) CHARACTER	8	RT1WXM	CROSS MEMORY INFORMATION AT TIME OF ERROR
76	(4C) CHARACTER	4	RT1WCR3	CONTROL REGISTER 3 AT TIME OF ERROR
76	(4C) CHARACTER	2	RT1WKM	KEY MASK
78	(4E) CHARACTER	2	RT1WSAS	SASID
80	(50) CHARACTER	4	RT1WCR4	CONTROL REGISTER 4 AT TIME OF ERROR
80	(50) CHARACTER	2	RT1WAX	AUTHORIZATION INDEX
82	(52) CHARACTER	2	RT1WPAS	PASID
84	(54) ADDRESS	4	RT1WSAV1	WORK/SAVE AREA FOR RTM
0	(0) STRUCTURE	88	RT1RTRN	THE RTM1 WORK AREA IS USED TO CONTAIN RETRY REGISTERS IF AN FRR SUCCESSFULLY RETRYS. A LM INSTRUCTION IS ISSUED FROM THE WA BEFORE THE RETRY ROU- TIME IS GIVEN CONTROL
0	(0) SIGNED	4		FIRST WORD NOT OVERLAID
4	(4) CHARACTER	64	RT1RTRRG	16 REGISTERS FOR RETRY
4	(4) CHARACTER	60	RT1R0R14	RETRY REGS 0 THRU 14
64	(40) ADDRESS	4	RT1RTYAD	RETRY ADDRESS IN REG15 SLOT
68	(44) CHARACTER	16		RESERVED

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
84	(54) CHARACTER	4	RT1RTRMK	RETRY MASK
84	(54) CHARACTER	3		RESERVED
87	(57) CHARACTER	1	RT1RTMSK	RETRY MASK-PASSED FROM IEAVRTM TO IEAVRT1
0	(0) STRUCTURE	24	RT1TRACK	COMMON TRACKING AREA MAPPING FOR RTM1 RECOVERY
0	(0) SIGNED	4	RT1TRECC	RECUSION CONTROL DATA
0	(0) ADDRESS	1	RT1TLPN	LOGICAL PHASE NUMBER
1	(1) ADDRESS	1	RT1TLPID	LOGICAL PHASE REC RTN ID
2	(2) CHARACTER	1	RT1TENPT	ORIGINAL ENTRY POINT
3	(3) BITSTRING	1	RT1TACQR	RESOURCES ACQUIRED BY RTM1
1...			RT1TDISP	DISPATCHER LOCK ACQUIRED
.1...			RT1TLLCK	LOCAL LOCK ACQUIRED BY RT1
..1.			RT1TRETY	RT1 ATTEMPTED RETRY
...1			RT1TSBIT	PSW S-BIT FOR RETRY ROUTINE. USED BY RT1 & RTM
.... 1...			RT1TSERP	IF ON, SERALIZE SRB TO TASK PERCOLATION (USED TO INDICATE SDWASERP WAS SET)
.... .1..			RT1TTRTS	IF ON, IEAVRTM HAS GONE TO IEAVRTS
.... ..1.			RT1TNSS	IF ON, RT1 WAS ENTERED WITH PSANSS BIT ON
4	(4) ADDRESS	20	RT1TREGS	CHECKPOINTED REGISTERS
0	(0) STRUCTURE	52	RTMBRTAB	RTM BRANCH TABLE
0	(0) CHARACTER	8	RTMBTERM	INITIAL ENTRY POINT INSTRUCTIONS FOR CVTBTERM BRANCH
0	(0) CHARACTER	2	RTMBBALR	BALR 15,0 INSTRUCTION
2	(2) CHARACTER	4	RTMBBRAN	BRANCH INSTRUCTION
6	(6) CHARACTER	2	RTMBPAD2	2 BYTES OF PADDING
8	(8) ADDRESS	4	RTMBDAT	ENTRY IF TYPE = DATERR
12	(C) ADDRESS	4	RTMBREST	ENTRY IF TYPE = RESTART

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
16	(10) ADDRESS	4	RTMBMACH	ENTRY IF TYPE = MACHCK
20	(14) ADDRESS	4	RTMBSVC	ENTRY IF TYPE = SVCERR
24	(18) ADDRESS	4	RTMBSTRM	ENTRY IF TYPE = STERM
28	(1C) ADDRESS	4	RTMBCABT	ENTRY IF TYPE = ABTERM AND NO ASID WAS PROVIDED
32	(20) ADDRESS	4	RTMBMEMT	ENTRY IF TYPE = MEMTERM
36	(24) ADDRESS	4	RTMBPROG	ENTRY IF TYPE = PROGCK
40	(28) ADDRESS	4	RTMBACR	ENTRY IF TYPE = ACR
44	(2C) ADDRESS	4	RTMBXABT	ENTRY IF TYPE = ABTERM AND AN ASID WAS PROVIDED
48	(30) ADDRESS	4	RTMBRMGR	ENTRY IF TYPE = RMGRCML
0	(0) STRUCTURE	1	MODEBYTE	SYSTEM MODE AT ERROR TIME
	1...		MODESUPR	SUPERVISOR CONTROL MODE
	.1...		MODEDIS	PHYSICALLY DISABLED MODE
	..1.		MODEGSPN	GLOBAL SPIN LOCK MODE
	...1		MODEGSUS	GLOBAL SUSPEND LOCK MODE
	.... 1...		MODELOC	LOCALLY LOCKED MODE
	.... .1..		MODETYP1	TYPE 1 SVC MODE
	.... ..1.		MODESRB	SRB MODE
	.... ...1		MODETCB	TASK MODE

RWA

Common Name : RMS Recovery Work Area
Macro ID : IGFRWA
DSECT Name : RWA
Created by : IGFRWAC (MCH component)
Subpool and Key : NUCLEUS in IGFRWAC and key 0
Size : 144 bytes
Pointed to by : RVTRWA field of the RVT data area.
Serialization : None
Function : RMS system-dependent work area.

OFFSET	TYPE	LENGTH	NAME	DESCRIPTION
0	(0) STRUCTURE	0	RWA	
0	(0) FLOATING	8	RWATERM	SYSTEM TERMINATION PARAMETERS (A NON-ZERO VALUE INDICATES THAT SYSTEM TERMINATION IS IN PROGRESS)
0	(0) SIGNED	4	RWATWTO	ADDR OF WTO PARM FOR SYSTEM TERM
4	(4) SIGNED	4	RWATLRB	ADDR OF LRB FOR SYSTEM TERM
8	(8) HEX	8	RWASRDF	DEFAULT THRESHOLD BLOCK FOR SYSTEM RECOVERY EVENTS
16	(10) HEX	8	RWADGDF	DEFAULT THRESHOLD BLOCK FOR DEGRADATION EVENTS
24	(18) HEX	1	RWACWRFL	CONSOLE WRITE IN PROGRESS FLAGS
25	(19) HEX	1	RWAEMRFL	EMERGENCY RECORDING IN PROGRESS FLGS
26	(1A) HEX	1	RWAFLCFL	FIXED LOW CORE IN USE FLAGS
27	(1B) HEX	1	RWAMSGFL	LOST MESSAGE SUMMARY FLAGS
	1...		RWAMSG31	"X'80'". AT LEAST ONE IGF931I MSG LOST DUE TO LACK OF MSG BUFFER SPACE
	.1...		RWAMSG71	"X'40'". AT LEAST ONE IGF971I MSG LOST DUE TO LACK OF MSG BUFFER SPACE
	..1.		RWAMSG72	"X'20'". AT LEAST ONE IGF972I MSG LOST

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

<u>OFFSETS</u>	<u>TYPE</u>	<u>LENGTH</u>	<u>NAME</u>	<u>DESCRIPTION</u>
	...1		RWAMSG21	DUE TO LACK OF MSG BUFFER SPACE "X'10'". INDICATES ERROR IN THRESHOLD ANALYSIS RTN
	.... 1...		RWAMSG56	"X'08'". AT LEAST ONE IGF956I MSG LOST DUE TO LACK OF MSG BUFFER SPACE BITS 5-7 RESERVED FOR FUTURE USE
28	(1C) HEX	1	RWAFLAGS	MCH SYSTEM-WIDE FLAGS
	1...		RWAQNQI	"X'80'". WARNINGS TO BE DISABLED BITS 1-7 RESERVED FOR FUTURE USE
29	(1D) HEX	3		RESERVED FOR FUTURE USE
32	(20) HEX	8	RWATEST	RESERVED FOR TESTING
40	(28) SIGNED	4	RWAPCCAR(16)	REAL ADDRESSES OF PCCA'S FOR CPU 0 CPU 15
104	(68) HEX	16	RWAPDDF	DEFAULT THRESHOLD
104	(68) HEX	8		BLOCK FOR INSTRUCTION
112	(70) HEX	8		PROCESSING DAMAGE EVENTS
120	(78) HEX	16	RWASDDF	DEFAULT THRESHOLD
120	(78) HEX	8		BLOCK FOR SYSTEM
128	(80) HEX	8		DAMAGE EVENTS
136	(88) HEX	16	RWAIVDF	DEFAULT THRESHOLD
136	(88) HEX	8		BLOCK FOR INVALID PSW OR
144	(90) HEX	8		REGISTER EVENTS
152	(98) HEX	16	RWATCDF	DEFAULT THRESHOLD
152	(98) HEX	8		BLOCK FOR TOD CLOCK
160	(A0) HEX	8		DAMAGE EVENTS

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM

OFFSETS	TYPE	LENGTH	NAME	DESCRIPTION
168	(A8) HEX	16	RWAPTD ^F	DEFAULT THRESHOLD
168	(A8) HEX	8		BLOCK FOR CPU TIMER
176	(B0) HEX	8		DAMAGE EVENTS
184	(B8) HEX	16	RWACCD ^F	DEFAULT THRESHOLD
184	(B8) HEX	8		BLOCK FOR CLOCK
192	(C0) HEX	8		COMPARATOR DAMAGE EVENTS
200	(C8) HEX	8	RWAE1DF	DEFAULT THRESHOLD BLOCK FOR EXT DAMAGE EVENT (E1) CHANNEL NOT OPERATIONAL
208	(D0) HEX	8	RWAE2DF	DEFAULT THRESHOLD BLOCK FOR EXT DAMAGE EVENT (E2) CHANNEL CONTROL FAILURE
216	(D8) HEX	8	RWAE3DF	DEFAULT THRESHOLD BLOCK FOR EXT DAMAGE EVENT (E3) I/O INSTRUCTION TIMEOUT
224	(E0) HEX	8	RWAE4DF	DEFAULT THRESHOLD BLOCK FOR EXT DAMAGE EVENT (E4) I/O INTERRUPTION TIMEOUT

END OF MCH RECOVERY WORK AREA

**Contains Restricted Materials of IBM
Licensed Materials - Property of IBM
©Copyright IBM Corp. 1985
LC28-1388-0**

S370-37



Printed in U.S.A.

MVS/370 System
Programming Library:
Debugging Handbook
Volume 4
Data Areas N-R

LC28-1388-0

READER'S
COMMENT
FORM

This manual is part of a library that serves as a reference source for systems analysts, programmers, and operators of IBM systems. You may use this form to communicate your comments about this publication, its organization, or subject matter, with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

Note: Copies of IBM publications are not stocked at the location to which this form is addressed. Please direct any requests for copies of publications, or for assistance in using your IBM system, to your IBM representative or to the IBM branch office serving your locality.

Possible topics for comment are:

Clarity Accuracy Completeness Organization Coding Retrieval Legibility

If you wish a reply, give your name, company, mailing address, and date:

Note: Staples can cause problems with automated mail sorting equipment.
Please use pressure sensitive or other gummed tape to seal this form.

Cut or Fold Along Line

What is your occupation? _____

How do you use this publication? _____

Number of latest Newsletter associated with this publication: _____

Thank you for your cooperation. No postage stamp necessary if mailed in the U.S.A. (Elsewhere, an IBM office or representative will be happy to forward your comments or you may mail directly to the address in the Edition Notice on the back of the title page.)

Contains Restricted Materials of IBM
Licensed Materials - Property of IBM
(Except for Customer-Originated Materials)
©Copyright IBM Corp. 1985
LC28-1388-0

S370-37

Cut or Fold Along Line

Reader's Comment Form

d and tape

Please Do Not Staple

Fold and tape



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 40 ARMONK, N.Y.

POSTAGE WILL BE PAID BY ADDRESSEE

International Business Machines Corporation
Department D58, Building 921-2
PO Box 390
Poughkeepsie, New York 12602

d and tape

Please Do Not Staple

Fold and tape

IBM
®

Printed in U.S.A.

LC28-1388-00



**Contains Restricted Materials of IBM
Licensed Materials - Property of IBM
©Copyright IBM Corp. 1985
LC28-1388-0**

S370-37

Printed in U.S.A.

