



Technical Newsletter

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IBM Virtual Machine Facility/370: Data Areas and Control Block Logic

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This Technical Newsletter contains replacement pages for VM/370 Data Areas and Control Block Logic to support Release 6 PLC 4 of IBM Virtual Machine Facility/370.

Before inserting any of the attached pages into the VM/370 Data Areas and Control Block Logic read carefully the instructions on this cover. They indicate when and how you should insert pages.

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*If you are inserting pages from different Newsletters/Supplements and identical page numbers are involved, always use the pages with the latest date (shown in the slug at the top of the page). The page with the latest date contains the most complete information.

Changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Summary of Amendments

This Technical Newsletter incorporates changes reflecting the 4331 Communications Adapter Synchronous Data Link Control, CP Dump Services for Virtual Machine, CMS hooks for VM/Interactive Problem Control System Extension Program Product, Channel-Set Switching, Multiple Service Record Files, 3031 Attached Processor Extended Control Program, and 3880 DASD controller support.

Note: Please file this cover letter at the back of the base publication to provide a record of changes.

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Order No. SY20-0884-3

Systems

IBM Virtual Machine Facility/370: Data Areas and Control Block Logic

| Release 6 PLC 4

This publication, together with the *VM/370 System Logic and Problem Determination Guide, Volumes 1, 2, and 3*, is intended for use by system programmers responsible for updating VM/370. This publication contains descriptions of the major data areas and control blocks used by three of the components of VM/370, the Control Program (CP), the Conversational Monitor System (CMS), and the Remote Spooling Communications Subsystem (RSCS).

To use this publication effectively and to understand it thoroughly, the following publications are prerequisite:

IBM System/370 Principles of Operation

Order No. GA22-7000

IBM OS/VS, DOS/VS, and VM/370 Assembler Language,

Order No. GC33-4010



Fourth Edition (March 1979)

This is a major revision of, and obsoletes, SY20-0884-2 and Technical Newsletters SN25-0413, SN25-0453, and SN25-0466. This edition (SY20-0884-3) together with Technical Newsletter SN25-0497, dated August 1, 1979, applies to Release 6 PLC 4 (Program Level Change) of the IBM Virtual Machine Facility/370, and to all subsequent releases unless otherwise indicated in new editions or Technical Newsletters.

Technical changes and additions to text and illustrations are indicated by a vertical bar to the left of the change.

Changes are periodically made to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest IBM System/370 Bibliography, Order No. GC20-0001, for the editions that are applicable and current.

It is possible that this material may contain references to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

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A form for readers' comments is provided at the back of this publication. If the form has been removed, comments may be addressed to IBM Corporation, VM/370 Publications, Dept. D58, Bldg. 706-2, P.O. Box 390, Poughkeepsie, New York 12602. IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation whatever. You may, of course, continue to use the information you supply.

Preface

This publication contains descriptions of major data areas and control blocks used by the three major components of VM/370. The three components are:

- The Control Program (CP)
- The Conversational Monitor System (CMS)
- The Remote Spooling Communications Subsystem (RSCS)

There are three sections and five appendixes, as follows:

- "Section 1. CP Data Areas and Control Blocks" contains information about CP data areas and control blocks.
- "Section 2. CMS Data Areas and Control Blocks" contains information on CMS data areas and control blocks.
- "Section 3. RSCS Data Areas and Control Blocks" contains information on RSCS data areas and control blocks.
- "Appendix A. CP and RSCS Equate Symbols" contains assembler language equate symbols used by CP and RSCS to reference data.
- "Appendix B. RSCS Control Areas" contains RSCS control areas that define constants and variables used during execution.
- "Appendix C. RSCS Request Elements" contains RSCS request elements that are the tables used by RSCS for task-to-task communication.
- "Appendix D. CMS Equate Symbols" contains CMS equate symbols.
- "Appendix E. Data Areas and Control Block References" contains information on the modules that reference data areas and control blocks.

OTHER VM/370 DATA AREAS AND CONTROL BLOCKS

Some data areas and control blocks that affect VM/370 service and support programs are not included in this publication. Information on these data areas and control blocks can be found in the IBM Virtual

Machine Facility/370: Service Routines Program Logic, Order No. SY20-0882.

RELATED PUBLICATIONS

This publication should be used in conjunction with:

IBM Virtual Machine Facility/370:

System Logic and Problem Determination Guide,

Volume 1 Control Program (CP), Order No. SY20-0886

Volume 2 Conversational Monitor System (CMS), Order No. SY20-0887

Volume 3 Remote Spooling Communication Subsystem (RSCS), Order No. SY20-0888

System Programmer's Guide, Order No. GC20-1807

Glossary and Master Index, Order No. GC20-1813.

For information on how to use the fourth component -- interactive problem control system -- and its facilities, the hardware and software support personnel or the installation system programmer should use:

IBM Virtual Machine Facility/370: Interactive Problem Control System (IPCS) User's Guide, Order No. GC20-1823.

HOW TO USE THIS PUBLICATION

This publication addresses and describes the major control blocks associated with CP, CMS, and RSCS. Generally, data areas, or scratch areas that are created and exist only during the execution of a particular module are not described in this publication. In this publication, the data areas and control blocks are arranged in alphabetical order by DSECT name.

The CMS and RSCS components operate under control of CP. Each component creates, updates, and erases its own control blocks and data areas.

Control blocks and data areas are blocks of related information applicable to one or more system functions. They are usually defined by the DSECT instruction. The blocks can reflect current status, history information, or combinations of both, applicable to VM/370 functions. Control blocks and data areas provide the linkage and information for the user, the hardware, and the programs to work as one entity for the successful execution of a job, task, or process.

For every data area or control block, a statement is given that defines the use of the data area or control block. This statement is followed by a formatted block showing the fields defined in the data area or control block and the displacement into the DSECT of that field.

The formatted blocks for CP and CMS control areas are 8 bytes wide, showing two fullwords per line. RSCS control blocks are 4 bytes wide.

Note: One exception to this width rule is the formatting for PSA, where the control areas are given in 16-byte width.

When the name of a field is too large to fit into the formatted line, a pointer to the definition of the field is used instead of the name of the field. This pointer usually takes the form A*1, A*2, etc. When there is a particularly large field (one that uses more than three or four lines of the formatted block), ellipses are used in the block to show that the displacement of this field is larger than can be shown in the block.

The use of slashes in a field indicates that the field is reserved for IBM's use.

The formatted block is followed by listing-related information such as the hexadecimal displacement of the field into the DSECT, the name of the field and its definition in the listing, and a brief description of the contents and meaning of the field.

The following terms in this publication, refer to the indicated support devices:

- "2305" refers to IBM 2305 Fixed Head Storage, Models 1 and 2.
- "270x" refers to IBM 2701, 2702, and 2703 Transmission Control Units or the Integrated Communications Adapter (ICA) on the System/370 Model 135.
- "2741" refers to the IBM 2741 and the 3767, unless otherwise specified.

- "3270" refers to a series of display devices, namely, the IBM 3275, 3276, 3277, and 3278 Display Stations. A specific device type is used only when a distinction is required between device types.

Information about display terminal usage also applies to the IBM 3138, 3148, and 3158 Display Consoles when used in display mode, unless otherwise noted.

Any information pertaining to the IBM 3284 or 3286 Printer also pertains to the IBM 3287, 3288, and 3289 printers, unless otherwise noted.

- "3330" refers to the IBM 3330 Disk Storage, Models 1, 2, or 11; the IBM 3333 Disk Storage and Control, Models 1 or 11; and the 3350 Direct Access Storage operating in 3330/3333 Model 1 or 3330/3333 Model 11 compatibility mode.
- "3340" refers to the IBM 3340 Disk Storage, Models A2, B1, and B2, and the 3344 Direct Access Storage Model B2.
- "3350" refers to the IBM 3350 Direct Access Storage Models A2 and B2 in native mode.
- "370x" refers to IBM 3704 and 3705 Communications Controllers.
- The term "3705" refers to the 3705 I and the 3705 II unless otherwise noted.

Contents

The entries in this Table of Contents are accumulative. They list additions to this publication by the following VM/370 System Control Program Products:

- VM/370 Basic System Extensions, Program Number 5748-XX8
- VM/370 System Extensions, Program Number 5748-XE1

However, the text within the publication is not accumulative; it only relates to the one SCP program product that is installed on your system. Therefore, there may be topics and references listed in this Table of Contents that are not contained in the body of this publication.

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ADDITIONAL SUPPORT BY VM/370

New: Program and Documentation

The following list includes some of the units and facilities implemented and supported by VM/370:

- 4331 Communications Adapter Synchronous Data Link Control
- CP Dump Services for Virtual Machines
- CMS Hooks for the VM/Interactive Problem Control System Extension Program Product
- Channel-Set Switching
- Multiple Service Record Files
- 3031 Attached Processor Extended Control Program Support
- 3880 DASD Controller

MISCELLANEOUS

New: Documentation Only

Minor technical changes as noted on pages affected.

Changed: Documentation Only

Block diagrams, as needed, to show additional and new displacements.

Summary of Amendments
for SY20-0884-3
VM/370 Release 6 PLC 1

3800-1 PRINTER SUPPORT

New: Documentation and Program Support

VM/370 now offers support for the 3800-1 unit as a dedicated virtual machine printer. The 3800-1 is also supported as a VM/370 spooling device.

3850-2 VIRTUAL MACHINE MSS SUPPORT

New: Program and Documentation

VM/370 now supports the 3850-2 MSS to permit most operating systems that are running in the virtual machine environment access to data on MSS virtual volumes.

PASSWORD-ON-THE-COMMAND-LINE SUPPRESSION

New: Program Feature

VM/370 now supports the suppression of the entering of passwords on the command line for LOGON, AUTOLOG, and LINK. The intent is to force passwords to be typed upon a mask. The new support is specified via the SYSJRL macro in DMKSYS. It is optional and must be implemented at system generation time. Privilege class A users can use the JOURNAL operand of either the SET or QUERY commands.

MULTIPLE ALTERNATE CONSOLE SUPPORT

New: Program and Documentation

VM/370 supports the specification of multiple alternate consoles at system generation time.

MONITOR ENHANCEMENTS SUPPORT

New: Program and Documentation

VM/370 supports the enhancement to the Monitor module which permits the analyst the option to specify periodic closing

of the active Monitor spool file frequently enough to support real time data reduction and display.

SECURITY JOURNALING SUPPORT

New: Program Feature

VM/370 now supports the journaling of LOGONs and AUTOLOGs specifying invalid passwords and the journaling of all linkages. This is accomplished via the generation of type 04, 05, and 06 accounting records. The new support is specified in the SYSJRL macro in DMKSYS.

4331 AND 4341 PROCESSOR SUPPORT

New: Program and Documentation

VM/370 supports 4331 and 4341 processors offering compatibility with the new model IDs as well as the S/370 RAS function subset.

MISCELLANEOUS

New: Documentation and Program

The following features and enhancements are now supported by VM/370.

- 3203-5 Unit
- Special Messages facility
- Trace Table size as a system generation option
- Modification of Shared Segment handling
- 3031 Alternate Processor
- 12 and 16 Megabyte Processors
- Directory hooks

VARY PROCESSOR SUPPORTED BY VM/370

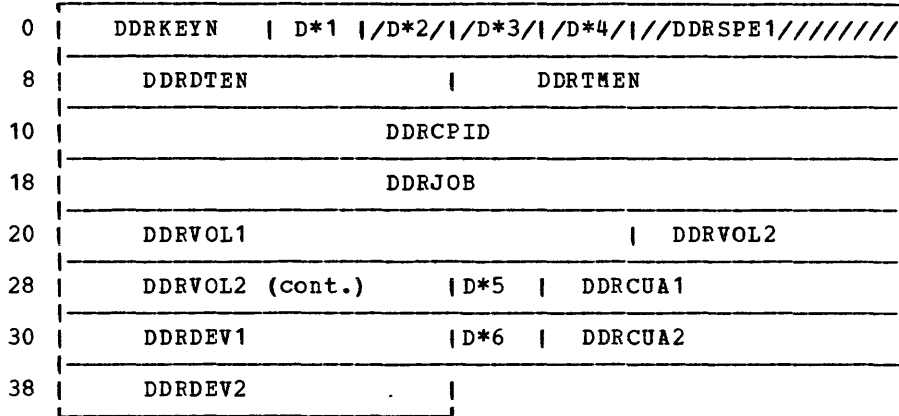
New: Documentation and Program Support

When a system has been generated for attached processor operations, use of a new command, VARY PROCESSOR ONLINE/OFFLINE, facilitates the transition to or from uniprocessor mode on the main processor. This command can be used to vary a specified processor offline or online without any serious disruption to system users.

Aug. 1, 1979

DDRREC: RECONFIGURATION MACRO

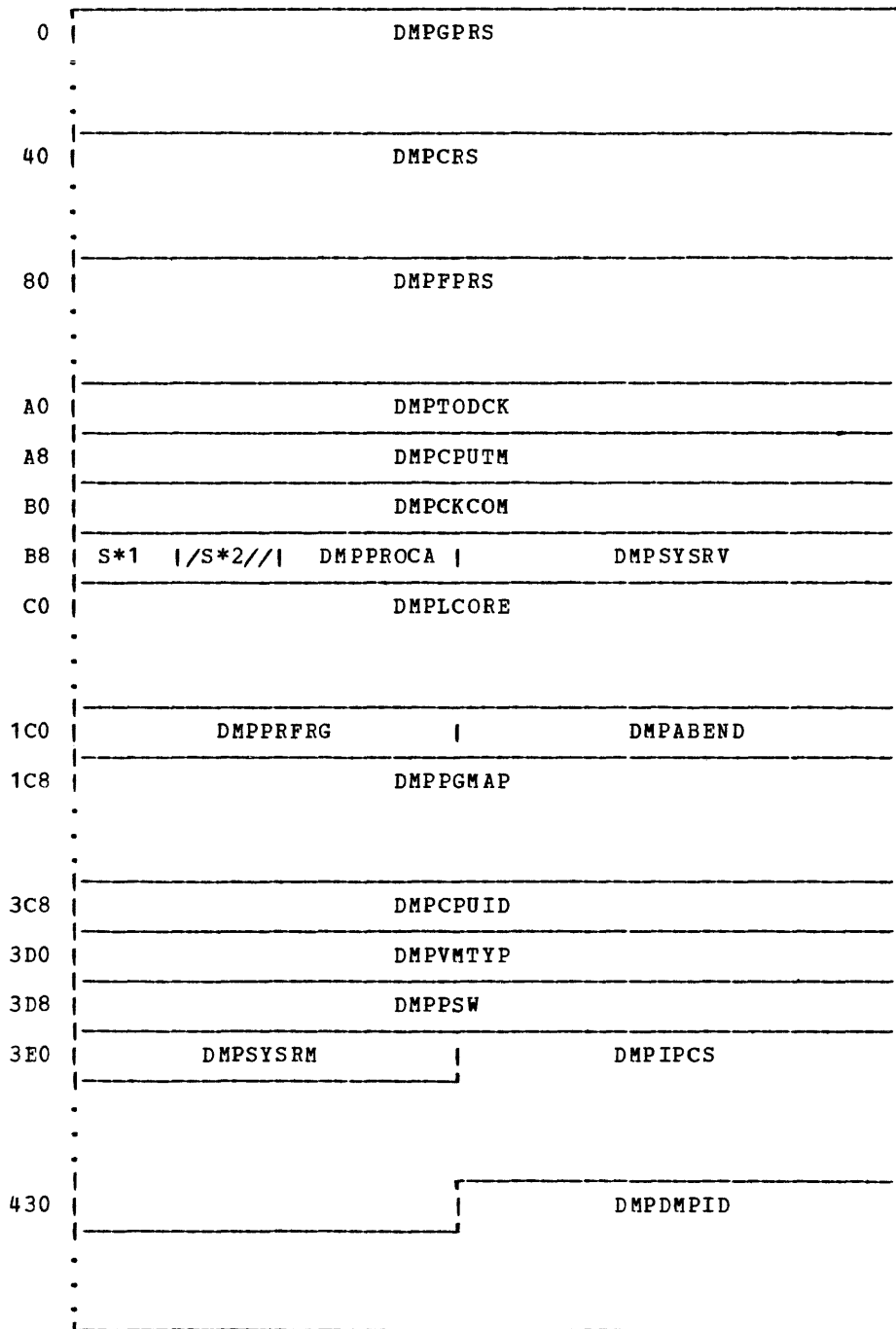
DDRREC is used in the SVC 76-initiated error recording process for type 60 DASD dump restore (DDR) dynamic device reallocation records. The reallocation records contain the replacement of the virtual "FROM" and "TO" control unit addresses (CUA) by the real addresses of the real DASD devices.



Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
0	DDRKEYN	DS	1H	Type and operating system
2	DDRSWS1	DD	1C	D*1 Switch byte
3	DDRSWS2	DS	1C	D*2 Reserved for IBM use
4	DDRSWS3	DS	1C	D*3 Reserved for IBM use
5	DDRRECNT	DS	1C	D*4 Reserved for IBM use
6	DDRSPE1	DS	1H	Reserved for IBM use
8	DDRDTEN	DS	1F	Date
C	DDRTMEN	DS	1F	Time
10	DDRCPID	DS	2F	Processor identification and model number
<u>Device Dependent Data</u>				
18	DDRJOB	DS	8X	Job using FROM device
20	DDRVOL1	DS	6X	Volume serial FROM device
26	DDRVOL2	DS	6X	Volume serial TO device
2C	DDRDEVP1	DS	1X	D*5 Device identification of FROM DASD
2D	DDRCUA1	DS	3X	Primary CUA of FROM device
30	DDRDEV1	DS	4X	Device type FROM device
34	DDRDEVP2	DS	1X	D*6 Device identification TO DASD
35	DDRCUA2	DS	3X	Primary CUA of TO device
38	DDRDEV2	DS	4X	Device type of TO device
	DDRSIZE	EQU	(*--DDRREC)	DDR record size

DMPINREC: DUMP FILE INFORMATION RECORD

DMPINREC retains vital system register and storage location values necessary for the CPDUMP or VMDUMP file. See also DMPKYREC.



Hexadecimal Displacement	Field Name	Field Description, Contents, Meaning		
0	DMPGPRS	DS	16F	16 general registers
40	DMPCRS	DS	16F	16 control registers

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
80	DMPFPRS	DS	4D	Four floating-point registers (if floating-point feature is installed on machine)
A0	DMPTODCK	DS	1D	Time-of-day clock
A8	DMPCPUTM	DS	1D	Processor timer
B0	DMPCKCOM	DS	1D	Time-of-day clock comparator
B8	DMPFLAG	DS	1X	S*1 Flag byte
<u>Bits defined in DMPFLAG</u>				
	HALFPAGE EQU		X'80'	When on, last record in DUMP file is 2K
B9	DMPRSV1	DS	1X	S*2 Reserved for IBM use
BA	DMPPROCA	DS	1H	Abending processor address
BC	DMPYSRV	DS	1F	System generated storage size
C0	DMPLCORE	DS	256X	Absolute storage locations 0 through 255
1C0	DMPFRFRG	DS	1F	Prefix register
1C4	DMPABEND	DS	1F	Abend code for failing processor
1C8	DMPPGMAP	DS	4096B	Bit map indicating which pages appear in the DUMP file (each bit represents a 4K block)
3C8	DMPCPUID	DS	1D	Processor identification from real processor
3D0	DMPVMTYP	DS	1D	Guest virtual machine type obtained from FORMAT operand of VMDUMP command
3D8	DMPPSW	DS	1D	PSW of virtual machine that issued VMDUMP command
3E0	DMPYSRM	DS	1F	Hardware size of the system on which VM/370 is running
3E4	DMPIPCS	DS	20F	VM/IPCS extension program product use
434	DMPDMPID	DS	CL100	DUMPID operand of the VMDUMP command

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IOBLOK: I/O TASK CONTROL BLOCK

IOBLOK contains information required to perform I/O operations. The I/O request initiator for the I/O operation is either a CP-initiated or virtual machine-initiated event. There are five pointers to the IOBLOK: RCHFIOB field of the RCHBLOK, RCHFIOB field of the RCUBLOK, RDEVAIOB field of the RDEVBLOK, VDEVFIOB field of the VDEVBLOK, RDEVFIOB field of the RDEVBLOK.

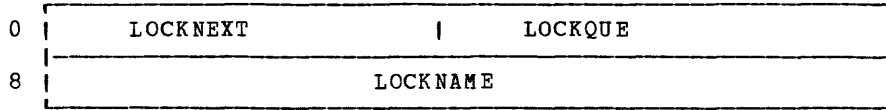
0	IOBRADD	I*1	I*2	IOBLINK	
8	IOBFPNT			IOBBPNT	
10	IOBCYL	IOBVADD		IOBMISC	
18	IOBUSER			IOBIRA	
20	IOBCAW			IOBRCAW	
28	IOBCSW				
30	IOBIOER			IOBMISC2	
38	I*3	I*4	I*5	RSV2	IOBCUBSY

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
0	IOBRADD	DS	1H	Real device address for SIO
2	IOBFLAG	DS	1X	I*1 IOBLOK flags
	<u>Bits defined in IOBFLAG</u>			
	IOBCP	EQU	X'80'	CP-generated I/O operation
	IOBRSTRT	EQU	X'40'	Restarted operation - IOBRCAW
	IOBSPLT	EQU	X'20'	DASD - CP split seek operation
	IOBPAG	EQU	X'10'	IOBLOK created for paging I/O
	IOBRELCU	EQU	X'08'	Control unit released at initiation
	IOBERP	EQU	X'04'	I/O task is under control of ERP
	IOBRES	EQU	X'02'	I/O task has been reset
	IOBHVC	EQU	X'01'	I/O initiated via DIAGNOSE instruction
3	IOBSTAT	DS	1X	I*2 IOBLOK status
	<u>Bits defined in IOBSTAT</u>			
	IOBFATAL	EQU	X'80'	Unrecoverable error in this I/O operation
	IOBFLT	EQU	X'40'	IOBLOK queued pending completion of a MSS cylinder fault
	IOBPATHF	EQU	X'20'	Path is fixed, use IOBRADD value
	IOBMINI	EQU	X'08'	This is a mini-IOBLOK
	IOBALTSK	EQU	X'04'	DASD channel program has seek to alternate track
	IOBCC3	EQU	X'03'	Processing CC 3, not available
	IOBCC2	EQU	X'02'	Processing CC 2, channel busy
	IOBCC1	EQU	X'01'	Processing CC 1, CSW stored
	IOBCC0	EQU	X'00'	Processing I/O interrupt

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
4	IOBLINK	DS	1F	Pointer for multipath IOBLOK chain
8	IOBFPNT	DS	1F	Pointer to next IOBLOK in queue
C	IOBPPNT	DS	1F	Pointer to previous IOBLOK in queue
	IOBMSIZE	EQU	(*IOBLOK)/8	Multiple path IOBLOK size in doublewords (X'02')
10	IOBCYL	DS	1H	DASD -- seek cylinder for this IOBLOK
12	IOBVADD	DS	1H	Virtual device address
14	IOBMISC	DS	1F	Use varies according to caller
18	IOBUSER	DS	1F	Pointer to VMBLOK of user
1C	IOBIRA	DS	1F	IOBLOK interrupt return address
20	IOBCAW	DS	1F	Pointer to CCW chain
24	IOBRCAW	DS	1F	Pointer to restart CCW chain
28	IOBCSW	DS	1D	Real CSW for I/O operation
30	IOBIOER	DS	1F	Pointer to IOERBLOK with sense byte
34	IOBMISC2	DS	1F	Use varies according to caller
38	IOBSPEC	DS	1X	I*3 IOBLOK special requests flag
	<u>Bits defined in IOBSPEC</u>			
	IOBTIO	EQU	X'80'	IOBLOK request for a TIO
	IOBHIO	EQU	X'40'	IOBLOK request for a HIO
	IOBSIOF	EQU	X'20'	Virtual SIO fast release
	IOBIMSTK	EQU	X'10'	Shut down SDR function
	IOBUNSL	EQU	X'08'	IOBLOK resulting from unsolicited interrupt
	IOBCOPY	EQU	X'04'	I/O block associated with a COPY request
	IOBSENS	EQU	X'02'	Sense operation for COPY request
	IOBTRPND	EQU	X'01'	Virtual trace pending on this I/O block
39	IOBSPEC2	DS	1X	I*4 IOBLOK special requests flag second byte
	<u>Bits defined in IOBSPEC2</u>			
	IOBWRAP	EQU	X'80'	Input/output task for AUTOPOLL wrap list
	IOBCLN	EQU	X'40'	VDEVBLOK locked when CCW got control
	IOBUNREL	EQU	X'20'	Input/output task contains release, DMKUNT must process
	IOBUC	EQU	X'10'	Unit check status
	IOBSNSIO	EQU	X'08'	Normal sense operation in progress
	IOBRELE	EQU	X'04'	Channel program contains CP release
3A	IOBSPEC3	DS	1X	IOBLOK special requests flag third byte
	<u>Bits defined in IOBSPEC3</u>			
	IOBSENSE	EQU	X'80'	Do not execute sense operation on hardware
	IOBCUE	EQU	X'20'	Special queue IOBLOK for SPM V=R
	IOBVCUE	EQU	X'10'	Virtual queue IOBLOK for SPM V=R
3B	IOBRV2	DS	1X	Reserved for IBM use
3C	IOBCUBSY	DS	1F	Forward Pointer for control unit busy IOBLOKs
	IOBSIZE	EQU	(*IOBLOK)/8	IOBLOK size in doublewords (X'08')
	<u>For CP IOBLOKs</u>			
		ORG	IOBVADD	
12	IOBRCNT	DS	1H	Retry count

LOCKBLOK: USERID LOCK CONTROL BLOCK

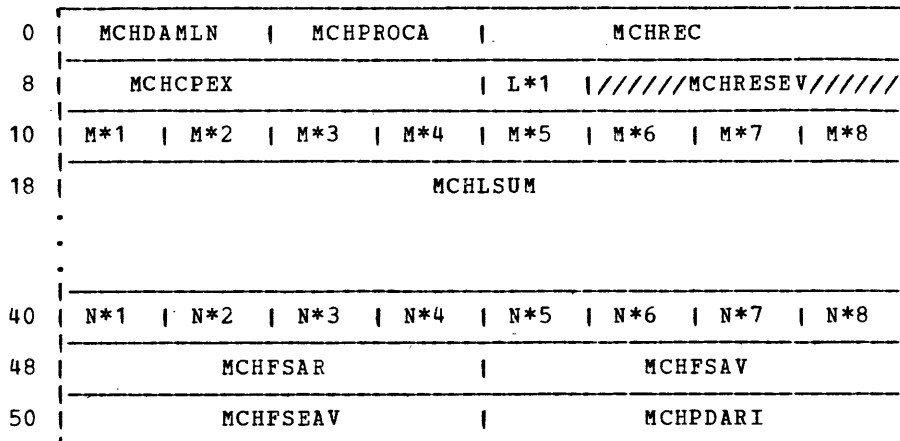
LOCKBLOK is used to synchronize execution for sections of nonreenterable code. Locked users are returned to the CPEXBLOK queue when the function being executed completes or no longer requires nonreenterable resources. LOCKBLOKs are queued off DMKSYSLB.



Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
0	LOCKNEXT DS	1F		Pointer to the next lock control block
4	LOCKQUE DS	1F		Pointer to CPEXBLOK queue
8	LOCKNAME DS	1D		The name being locked
	LOCKSIZE EQU	(*-LOCKBLOK)/8		LOCKBLOK size in doublewords (X'02')

MCHAREA: MACHINE CHECK SAVE AREA

MCHAREA provides CP with statistical data that relates to malfunctions of the real processor, to its buffers, to processor storage for damage assessment, and to the recovery of VM/370.



Hexadecimal Displacement	Field Name				Field Description, Contents, Meaning
0	MCHDAMGE	DS	0H		Damage assessment area
0	MCHDAMLN	DS	1H		Length of damage assessment area
2	MCHPROCA	DS	XL2		Processor address
4	MCHREC	DS	1F		Machine check record address
8	MCHCPEX	DS	1F		Machine check CPEXBLOK address
C	MCHMODEL	DS	1X		L*1 Model number for the machine

Bits defined in MCHMODEL

MOD4341	EQU	X'18'	ID number for the 4341 machine
MOD4331	EQU	X'18'	ID number for the 4331 machine
MOD3033	EQU	X'14'	ID number for the 3033 processor
MOD3032	EQU	X'14'	ID number for the 3032 processor
MOD3031	EQU	X'14'	ID number for the 3031 processor
MODEL168	EQU	X'10'	ID number for the 168 machine
MODEL165	EQU	X'10'	ID number for the 165 machine
MODEL158	EQU	X'0C'	ID number for the 158 machine
MODEL155	EQU	X'0C'	ID number for the 155 machine
MODEL148	EQU	X'08'	ID number for the 148 machine
MODEL145	EQU	X'08'	ID number for the 145 machine
MODEL138	EQU	X'04'	ID number for the 138 machine
MODEL135	EQU	X'04'	ID number for the 135 machine
NOMODEL	EQU	X'00'	No support for machine

D	MCHRESEV	DS	3X	Reserved for IBM use
10	MCHDAMFLL	DS	OBL8	Damage assessment data
10	MCHFLAGO	DS	1X	M*1 System status

Bits defined in MCHFLAGO

MCHOHDWR	EQU	X'80'	Hardware recovery
MCHOSFTR	EQU	X'40'	Software recovery
MCHOUSAD	EQU	X'20'	User abnormally terminated
MCH1GERR	EQU	X'10'	Channel inoperative
MCHOTERM	EQU	X'08'	Operating system termination
MCHOQUIT	EQU	X'04'	Quiet mode in effect

PSA: PREFIX STORAGE AREA (LOW STORAGE LOCATIONS)

{ PSA is the primary control block. It controls CP and virtual machine activity. PSA contains the normal low core IPL, logout, and PSW information; the processor model, type, and features; and BALR and FREE areas. PSA also contains monitor and trace data and the needed linkages to virtual machines, real devices, and spool files.

Note: All fields reside in real PSA unless otherwise specified. Fields residing in absolute PSA are specifically identified. For uniprocessor operation, real PSA equals absolute PSA (or 0). If the system was running in AP mode when a catastrophic error occurred, the Attached Processor will no longer be running. System recovery is in uniprocessor mode and the real PSA will no longer be zero.

Page 0, Machine Usage

0	IPLPSW	IPLCCW1	370	CPID	CPABEND	P*3	P*4	ASYSVM
10	IPLCCW2	EXOPSW	380	ARSPPR	ARSPPU	ARSPRD	ARIOPU	
20	SVCOPSW	PROPSW	390	ARIOPR	ARIORD	P*5	P*6	ARSPAC
30	MCOPSW	IOOPSW	3A0	AVMREAL	ASYSABND	ASYSLC	ASYSOP	
40	CSW	CAW	QUANTUMR	3B0	ARIOCT	ARIOCH	ARIOCU	ARIODV
50	TIMER	QUANTUM	EXNPSW	3C0	ARIOCC	ARIOUC	ARIODC	ACORETBL
60	SVCNPSW	PRNPSW	3D0	APAGCP	CPCREG0	CPCREG6	CPCREG8	
70	MCNPSW	IONPSW	3E0	TIMEDISP	ASVCLIST	AVMALIST	LASTUSER	
80		CPULOG	3F0	PAGECUR	MONNEXT	PAGEND	PAGENXT	
100		FXDLOG	400	TRACEFLG	TTSEGCNT	P*7	P*8	PSARSV1
160		FPRLOG	410	ALOKRF	ALOKSY	PSARECPS	////////	
180		GPRLOG	420	////////	////////	PSARSV15	////////	
1C0		CRLOG	430	INSTWRD1	INSTWRD2	INSTWRD3	INSTWRD4	
200		TEMPSAVE	440		Constants Pool			
240		BALRSAVE	:					
280		FREESAVE	4D0	APTRLK	NOADD	X4OFFS	XRIGHT24	
2C0		FREWORK	4E0	XPAGNUM	XRIGHT16	AFREE	AFRET	
2F0	DATE	TODATE	4F0	AQCNT	ADSPCH	APTRAN	X2048BND	
300	STARTIME	CPUID	500		DUMPSAVE			
310	IDLEWAIT	PAGEWAIT	:					
320	IONTWAIT	PROBTIME	540		SIGSAVE			
330	RUNPSW	RUNUSER	DSPLPSW	:				
340	RUNCRO	RUNCR1	CPSTAT	CPRESTRT	580		LOKSAVE	
350	PGREAD	PGWRITE	PGWAITIM	:				
360	////PGWAITPG////	PSASVCCT	P*1	P*2	:			

PSA

5C0	MFASAVE	6B0	CHGREGS RUN370E RESERVED/
.	.	6C0	UNSHRVM P*10 P*11 // // // // RESERVED // // //
600	SWTHSAVE	6D0	STACKVM UNSHRVM2 ADMKCPE RESERVED/
.	.	6E0	// // // // // RESERVED (cont) // // // // //
640	LOCKSAV	6F0	ALOKUM RESERVE ALOKSP AEXTSP
650	SVCREGS	700	ATMRSN // // // // // RESERVED // // // // //
660	PREFIXA PREFIXB PSACPXPB // RESVD //	710	MONREGS
670	WAITSTRT WAITEND	.	.
680	PWTPAGES ACTIVTRQ EMSPEND EMSREC	750	LOKSAVE2
690	XCPEND P*7 P*8 P*9 APSTATUS	.	.
6A0	AMCHAREA SHRLKCNT PROBSTRT	.	.

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
0	<u>Machine Usage</u> IPLPSW	DS	1D	IPL start PSW
	ORG	IPLPSW		
	RSRTNPSW	DS	1D	Restart new PSW
	RSRTOPSW	DS	1D	Restart old PSW
8	IPLCCW1	DS	1D	IPL CCW
	ORG	IPLCCW1		
8	PSARSV3	DS	1F	Reserved for IBM use
C	TRACSTRT	DS	1F	Address of start of trace table. Note that TRACSTRT is in absolute PSA
10	TRACEND	DS	1F	Address of end of trace table. Note that TRACEND is in absolute PSA
14	TRACCURR	DS	1F	Address of next available trace table entry. Note that TRACCURR is in absolute PSA
10	IPLCCW2	DS	1D	IPL CCW
18	EXOPSW	DS	1D	External old PSW
20	SVCOPSW	DS	1D	SVC old PSW
28	PROPSW	DS	1D	Program old PSW
30	MCOPSW	DS	1D	Machine check old PSW
38	IOOPSW	DS	1D	I/O old PSW
40	CSW	DS	1D	Channel status word
48	CAW	DS	1F	Channel address word
4C	QUANTUMR	DS	1F	Interval timer value at last interrupt
50	TIMER	DS	1F	13-microsecond interval timer
54	QUANTUM	DS	1F	Interval timer value at last dispatch
58	EXNPSW	DS	1D	External new PSW
60	SVCNPSW	DS	1D	SVC new PSW
68	PRNPSW	DS	1D	Program new PSW
70	MCNPSW	DS	1D	Machine check new PSW
78	IONPSW	DS	1D	I/O new PSW

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
348	CPSTAT	DS	1F	CP running status
348	CPSTATUS	DS	1X	CP running status
	<u>Bits defined in CPSTATUS</u>			
	CPWAIT	EQU	X'80'	CP in wait state
	CPRUN	EQU	X'40'	CP running user in RUNUSER
	CPEX	EQU	X'20'	CP executing stacked request
	CPFVRUN	EQU	X'10'	Reserved for IBM use
	CPSUPER	EQU	X'08'	Processor is executing in supervisor state
349	XTNDLOCK	DC	1X	System extending free storage if it is equal to X'FF'. Note that XTNDLOCK is in absolute PSA.
34A	CPSTAT2	DC	1X	Flag byte
	<u>Bits defined in CPSTAT2</u>			
	CPMICAVL	EQU	X'80'	Virtual machine assist available on processor
	CPMICON	EQU	X'40'	Virtual machine assist is on for system
	CPSHRLK	EQU	X'20'	CP processing shared named system page
	CPASTAVL	EQU	X'08'	CP assist available on processor
	CPASTON	EQU	X'04'	CP assist is on for system
34B	CPSTAT3	DS	1X	Wait time accounting flag
	<u>Bits defined in CPSTAT3</u>			
	CPTIDLE	EQU	X'80'	Timer contains idle time
	CPTPAGE	EQU	X'40'	Timer contains page wait time
	CPTIONT	EQU	X'20'	Timer contains I/O wait time
34C	CPRESTRT	DS	1F	Restart address if external interrupt marks page invalid
350	PGREAD	DS	1F	Total number of page reads
354	PGWRITE	DS	1F	Total number of page writes
358	PGWAITIM	DS	1D	Time spent in page wait, multiplied by number of pages waiting
360	PGWAITPG	DS	1D	Reserved for IBM use
368	PSASVCCT	DS	1F	Total number of user SVCs
36C	PAGELoad	DS	1H	P*1 Page wait percent, last measurement
36E	PAGERATE	DS	1H	P*2 Paging rate, pages per second Note that PAGERATE is in absolute PSA.
370	PSENDCLR	DS	0F	End of area cleared by DMKCPINT
370	CPID	DS	1F	CP running identifier. Note that CPID is in absolute PSA.
374	CPABEND	DS	1F	CP abend code
378	PSTARTSV	DS	0F	Start of save/restored code
378	SYSIPLDV	DS	1H	P*3 Device address of system IPL device
37A	PGSRATIO	DC	H'0'	P*4 Page steals/total replenished
37C	ASYSVM	DC	V(DMKSYSVM)	Address of system VMBLOK
380	ARSPPR	DC	V(DMKRSPPR)	Address of system printer file chain.
384	ARSPPU	DC	V(DMKRSPPU)	Address of system punch file chain.
388	ARSPRD	DC	V(DMKRSPRD)	Address of system reader file chain.
38C	ARIOPU	DC	V(DMKRIOPU)	Address of system punch table.
390	ARIOPR	DC	V(DMKRIOPR)	Address of system printer table.
394	ARIORD	DC	V(DMKRIORD)	Address of system reader table.
398	IPUADDR	DS	1H	P*5 Instruction processing address
39A	PSAMSS	DS	1H	P*6 Address of MSS volume
	<u>Bits defined in PSAMSS</u>			
	MSSPRES	EQU	X'80'	The MSS is online and the MSS communicator has been initialized

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
39C	ARSPAC	DC	V(DMKRSPAC)	Address of system accounting chain
3A0	AVMREAL	DC	A(0)	VMBLOK address of virtual=real user. Note that AVMREAL is maintained in both PSAs
3A4	ASYSABND	DC	A(0)	Address of system abend printer
3A8	ASYSLC	DC	V(DMKSYSLC)	Address of SYSLOCS information
3AC	ASYSOP	DC	V(DMKSYSOP)	Address of system operator VMBLOK
3B0	ARIOCT	DC	V(DMKRIOCT)	Address of real channel index table
3B4	ARIOCH	DC	V(DMKRIOCH)	Address of first RCHBLOK
3B8	ARIOCU	DC	V(DMKRIOCU)	Address of first RCUBLOK
3BC	ARIODV	DC	V(DMKRIODV)	Address of first RDEVBLOK
3C0	ARIOCC	DC	V(DMKRIOCC)	Address of count of real system channels
3C4	ARIOUC	DC	V(DMKRIOUC)	Address of count of real system control units
3C8	ARIODC	DC	V(DMKRIODC)	Address of count of real system devices
3CC	ACORETBL	DC	V(DMKSYSCS)	Address of system CORTABLE
3D0	APAGCP	DC	A(X'FFFFFF')	Address of first pageable program
3D4	CPCREG0	DC	X'808008C0'	CP architecture control and external mask
3D8	CPCREG6	DC	F'0'	CP assist and virtual machine assist mask
3DC	CPCREG8	DC	F'0'	MONITOR CALL enable mask
3E0	TIMEDISP	DS	1F	Timer displacement for charge
3E4	ASVCLIST	DC	V(DMKSVCS)	Address of CP assist pointer list
3E8	AVMALIST	DC	V(DMKPRVMA)	Address of expanded virtual machine assist pointer list
3EC	LASTUSER	DC	V(DMKSYSVM)	Last user to be dispatched
3F0	PAGECUR	DS	1F	Current monitor buffer page address. Note that PAGECUR is in absolute PSA.
3F4	MONNEXT	DS	1F	Next available address in monitor buffer. Note that MONNEXT is in absolute PSA.
3F8	PAGEND	DS	1F	Last address in current monitor buffer page. Note that PAGEND is in absolute PSA.
3FC	PAGENXT	DS	1F	Alternate monitor buffer page address. Note that PAGENXT is in absolute PSA.
400	TRACEFLG	DS	1F	Trace table flags
		ORG	TRACEFLG	
400	TRACFLG1	DS	1X	Trace table flag
	<u>Bits defined in TRACFLG1</u>			
	TRAC01	EQU	X'80'	External interrupt tracing on
	TRAC02	EQU	X'40'	SVC interrupt tracing on
	TRAC03	EQU	X'20'	Program interrupt tracing on
	TRAC04	EQU	X'10'	Machine check tracing on
	TRAC05	EQU	X'08'	I/O interrupt tracing on
	TRAC67	EQU	X'04'	FREE/FRET call tracing on
	TRAC08	EQU	X'02'	Enter dispatch tracing on
	TRAC09	EQU	X'01'	Queue drop tracing on
401	TRACFLG2	DS	1X	Trace table flag
	<u>Bits defined in TRACFLG2</u>			
	TRAC0A	EQU	X'80'	Run user tracing on
	TRAC0C	EQU	X'40'	Unstack I/O interrupt tracing on
	TRAC0D	EQU	X'20'	Virtual CSW stored tracing on
	TRACBEF	EQU	X'10'	SIO, TIO, and HDV tracing on
	TRAC10	EQU	X'08'	Unstack IOBLOK or TRQBLOK tracing on
	TRAC11	EQU	X'04'	Trace BTU activity for 370x NCP
	TRAC12	EQU	X'02'	Lock spin tracing active
	TRAC13	EQU	X'01'	Signal processor tracing active
402	TRACFLG3	DS	1H	Reserved for IBM use
404	TTSEGCNT	DS	1F	Count of total page/swap tables in system. Note that TTSEGCNT is in absolute PSA.
408	CSADDR	DC	H'0'	P*7 Channel set address
40A	PSARSV	DS	H	P*8 Reserved for IBM use
40C	PSARSV1	DS	1F	Reserved for IBM use

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
410	ALOKFR	DC	V(DMKLOKFR)	Attached processor free lockword address
414	ALOKSY	DC	V(DMKLOKSY)	Attached processor system lockword address
418	PSARECPS	DC	F'0'	Reserved for ECPS
41C	PSARSV15	DS	5F	Reserved for IBM use
430	INSTWRD1	DC	F'0'	Reserved for installation use

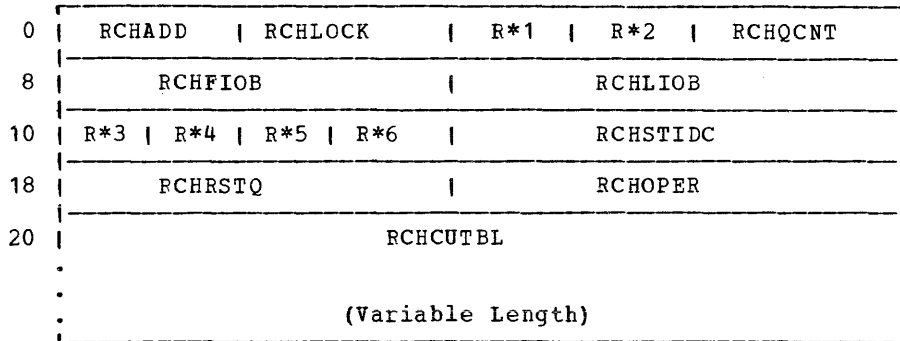
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Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
434	INSTWRD2	DC	F'0'	Reserved for installation use
438	INSTWRD3	DC	F'0'	Reserved for installation use
43C	INSTWRD4	DC	F'0'	Reserved for installation use
<u>List of Frequently Used Constants</u>				
440	ZEROES	DC	6D'0'	
470	BLANKS	DC	8X'40'	
478	FFS	DC	8X'FF'	Also = -1
440	F0	EQU	ZEROES	
480	F1	DC	F'1'	
484	F2	DC	F'2'	
488	F3	DC	F'3'	
48C	F4	DC	F'4'	
490	F5	DC	F'5'	
494	F6	DC	F'6'	
498	F7	DC	F'7'	
49C	F8	DC	F'8'	
4A0	F9	DC	F'9'	
4A4	F10	DC	F'10'	
4A8	F15	DC	F'15'	Also = X'0000000F'
4AC	F16	DC	F'16'	
4B0	F20	DC	F'20'	
4B4	F24	DC	F'24'	
4B8	F60	DC	F'60'	Also = X'0000003C'
4BC	F240	DC	F'240'	Also = X'000000F0' = C'0'
4C0	F255	DC	F'255'	Also = X'000000FF'
4C4	F256	DC	F'256'	Also = X'00000100'
4C8	F4095	DC	F'4095'	Also = X'00000FFF'
4CC	F4096	DC	F'4096'	Also = X'00001000'
4D0	APTRLK	DC	V(DMKPTRLK)	Entry to lock a page in storage
4D4	NOADD	DC	X'FF000000'	Frequently used work value
4D8	X4OFFS	DC	X'40FFFFFF'	Frequently used work value
4DC	XRIGHT24	DC	X'00FFFFFF'	Isolate right 24 bits
4E0	XPAGNUM	DC	X'00FFF000'	Isolate the page number
4E4	XRIGHT16	DC	X'0000FFFF'	Isolate the right 16 bits
4E8	AFREE	DC	V(DMKFREE)	Entry to allocate free storage
4EC	AFRET	DC	V(DMKFRET)	Entry to release free storage
4F0	AQCNT	DC	V(DMKQCNWT)	Entry to write a terminal message
4F4	ADSPCH	DC	V(DMKDSPCH)	Entry to the VM/370 dispatcher
4F8	APTRAN	DC	V(DMKPTRAN)	Entry to the paging supervisor
4FC	X2048BND	DC	X'00FFF800'	Locate a half-page boundary
500	PSBCLR2	DS	0F	Start of second area cleared by CP initialization (DMKCPI)
500	DUMPSAVE	DS	16F	Save area for dump routine
540	SIGSAVE	DS	16F	Save area for DMKEXT
580	LOKSAVE	DS	16F	DMKLOK save area
5C0	MFASAVE	DS	16F	Save area for malfunction alert
600	SWTHSAVE	DS	16F	DMKVMASW save area
640	LOCKSAV	DS	4F	LOCK macro save area
650	SVCREGS	DS	4F	SVC save area
660	PREFIXA	DC	F'0'	Prefix value of this processor
664	PREFIXB	DC	F'0'	Prefix value of other processor
668	PSACPXPB	DC	A(0)	Address of CPEXBLOK for switch SVC. Note that PSACPXPB is in absolute PSA.
66C	RESVD	DS	1F	Reserved for IBM use
670	WAITSTRT	DS	D	Timer value at start of wait
678	WAITEND	DS	D	Timer value at end of wait
680	PWTPAGES	DC	F'0'	Pages in PGWAIT at start of wait
684	ACTIVTRQ	DC	A(0)	Address of active transit queue

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
688	EMSPEND	DC	F'0'	Emergency signal pending flags
	<u>Bits defined in EMSPEND</u>			
	EMSPQUI	EQU	X'80'	Quiesce pending
	EMSPEXT	EQU	X'40'	Extend pending
	EMSPSYNC	EQU	X'20'	Synchronization pending
	EMSPSHD	EQU	X'10'	Shutdown pending
	EMSPCLKC	EQU	X'08'	High order TOD synchronization pending
	EMSINQSC	EQU	X'01'	Processor is quiesced
68C	EMSREC	DC	F'0'	Emergency signal received flags
	<u>Bits defined in EMSREC</u>			
	EMSRQUI	EQU	X'80'	Quiesce request received
	EMSREXT	EQU	X'40'	Extend request received
	EMSRSYNC	EQU	X'20'	Synchronization request received
	EMSRSHD	EQU	X'10'	Shutdown request received
	EMSRCLKC	EQU	X'08'	High order TOD synchronization received
690	XCPEND	DC	F'0'	External call pending flags
	<u>Bits defined in XCPEND</u>			
	XCAPR	EQU	X'80'	Automatic processor recovery pending
	XCRES	EQU	X'40'	Resume request pending
	XCWAK	EQU	X'20'	Wakeup request pending
	XCDISP	EQU	X'10'	Dispatch request pending
694	IPUADDRX	DC	H'0'	P*7 Processor address of other processor
696	LPUADDR	DC	H'0'	P*8 Logical address of this processor
698	LPUADDRX	DC	H'0'	P*9 Logical address of other processor
69A	APSTATUS	DS	6X	Attached processor status bytes
69A	APSTAT1	DC	X'00'	Attached processor status
		ORG	APSTATUS	
	<u>Bits defined in APSTAT1</u>			
	APUOPER	EQU	X'80'	Attached processor operational
	PROCIO	EQU	X'40'	Processor has I/O capability
	APUNONLN	EQU	X'20'	System generated for attached processor mode but running in uniprocessor mode
	MPFEAT	EQU	X'10'	Multiprocessing feature is installed
	CSSFPEAT	EQU	X'02'	Channel set switching feature installed
	CPINITD	EQU	X'01'	System initialization complete
69B	APSTAT2	DC	X'00'	Second flag byte
	<u>Bits defined in APSTAT2</u>			
	CPMCHLK	EQU	X'10'	Machine check processing pending (for ECPS only)
	CPPTLBR	EQU	X'02'	PTLB required for processor
69C	CPTERMLK	DC	X'00'	DMKMCT system termination is in progress. Note that CPTERMLK is in absolute PSA.
69D	CPFRELK	DC	X'00'	Free storage extend pending. Note that CPFRELK is in absolute PSA.
69E	FRLKPROC	DC	X'00'	Logical processor identification for CPFRELK. Note that FRLKPROC is in absolute PSA.
69F	CPFRESW	DC	X'00'	DMKFRE must transfer execution to the attached processor. Note that CPFRESW is in absolute PSA.
6A0	AMCHAREA	DC	F'0'	Address of DMKMCH work area
6A4	SHRLKCNT	DC	F'0'	Count of times CPSHRLK is set (used to clear CPSHRLK)
6A8	PROBSTRT	DS	1D	Virtual machine time out queue at dispatch

RCHBLOK: REAL CHANNEL BLOCK

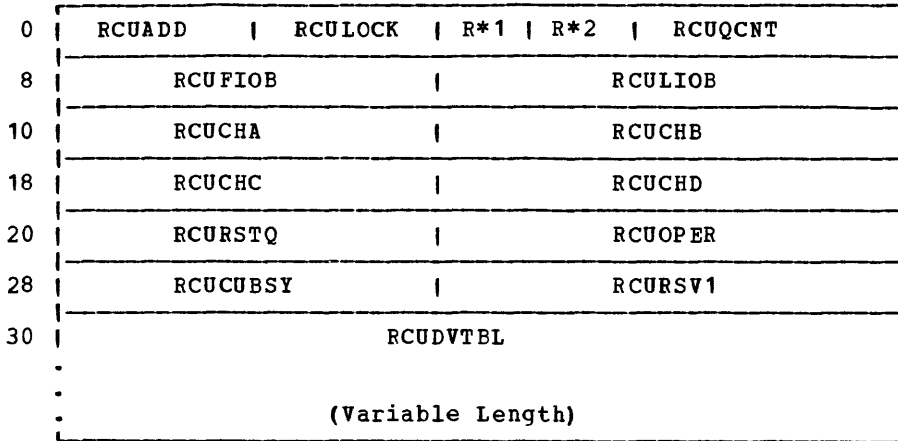
RCHBLOK contains status and type information for the specified channel. The linkage to I/O tasks operated on by that channel and to the control units attached to that channel is also maintained. The ARIOCH field of the PSA points to the first RCHBLOK, which is generated in contiguous storage.



Hexadecimal Displacement	Field Name				Field Description, Contents, Meaning
0	RCHADD	DS	1H		Channel address
2	RCHLOCK	DS	1H		Channel lock
4	RCHSTAT	DS	1X	R*1	Channel status
	<u>Bits defined in RCHSTAT</u>				
	RCHBUSY	EQU	X'80'		Channel busy
	RCHSCED	EQU	X'40'		IOB scheduled on channel
	RCHDED	EQU	X'01'		Channel dedicated
5	RCHTYPE	DS	1X	R*2	Channel type
	<u>Bits defined in RCHTYPE</u>				
	RCHSEL	EQU	X'80'		Selector channel
	RCHBMX	EQU	X'40'		Block multiplexer channel
	RCHMPX	EQU	X'20'		Byte multiplexer channel
	RCH370	EQU	X'01'		S/370 type channel (S/370 I/O instruction support)
6	RCHQCNT	DS	1H		Number of IOBLOKs queued off channel
8	RCHFIOB	DS	1F		Pointer to first IOBLOK queued
C	RCHLIOB	DS	1F		Pointer to last IOBLOK queued
10	RCHDTCK	DS	1X	R*3	Channel data check count
11	RCHCCCK	DS	1X	R*4	Channel control check count
12	RCHIFCC	DS	1X	R*5	Interface control check count
13	RCHCHCK	DS	1X	R*6	Channel chaining check count
14	RCHSTIDC	DS	1F		Result of STIDC instruction issued at CP initialization; if cc = 3, the content is X'FFFFFFF'
18	RCHRSTQ	DS	1F		Address of channel to be restarted
1C	RCHOPER	DS	1F		IOBLOK operational on channel time
20	RCHCUTBL	DS	32H		Control units attached - RCUSTART index (The index values must be multiplied by 8 and added to the beginning of the RDEVBLOK table (ARIODV).)
	RCHSIZE	EQU	(*-RCHBLOK)/8		RCHBLOK size in doublewords (X'0D')

RCUBLOK: REAL CONTROL UNIT BLOCK

RCUBLOK provides control and status information on a defined real control unit. Linkages are provided to queued IOBLOKs. The ARIOCU field of the PSA points to the first RCUBLOK, which is generated in contiguous storage.



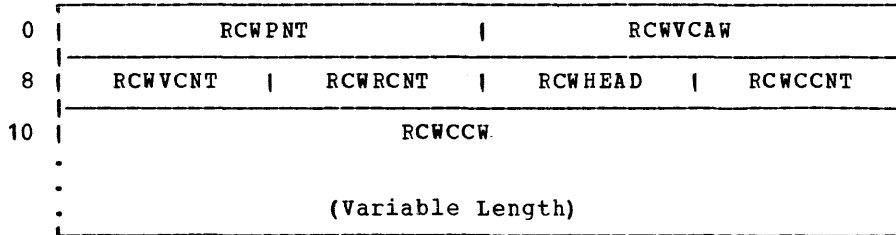
Hexadecimal Displacement	Field Name					Field Description, Contents, Meaning
0	RCUADD	DS	1H		Control unit address	
2	RCULOCK	DS	1H		Control unit lock	
4	RCUSTAT	DS	1X	R*1	Control unit status	
<u>Bits defined in RCUSTAT</u>						
	RCUBUSY	EQU	X'80'		Control unit busy	
	RCUSCED	EQU	X'40'		IOB scheduled on control unit	
	RCUDISA	EQU	X'20'		Control unit disabled	
	RCUCHAOF	EQU	X'08'		RCUCHA to RCHBLOK path is not available	
	RCUCHBOK	EQU	X'04'		RCUCHB to RCHBLOK path is not available	
	RCUCHCOF	EQU	X'02'		RCUCHC to RCHBLOK path is not available	
	RCUCHDOF	EQU	X'01'		RCUCHD to RCHBLOK path is not available	
5	RCUTYPE	DS	1X	R*2	Control unit type	
<u>Bits defined in RCUTYPE</u>						
	RCUSHRD	EQU	X'80'		This control unit can be attached to only one subchannel	
	RCUSUB	EQU	X'40'		This is a subordinate control unit	
	RCU2703	EQU	X'03'		TCU is a 2703	
	RCU2702	EQU	X'02'		TCU is a 2702	
	RCU2701	EQU	X'01'		TCU is a 2701	
6	RCUQCNT	DS	1H		Number of IOBLOKs queued off control unit	
8	RCUFIOB	DS	1F		Pointer to first IOBLOK queued	
C	RCULIOB	DS	1F		Pointer to last IOBLOK queued	
10	RCUCHA	DS	1F		Pointer to RCHBLOK - path A	
		ORG	RCUCHA			
10	RCUPRIME	DS	1F		Pointer to the primary control unit	

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
14	RCUCHB	DS	1F	Pointer to RCHBLOK - path B
18	RCUCHC	DS	1F	Pointer to RCHBLOK - path C
1C	RCUCHD	DS	1F	Pointer to RCHBLOK - path D
20	RCURSTQ	DS	1F	Address of control unit to be restarted
24	RCUOPER	DS	1F	IOBLOK operational on control unit time
28	RCUCUBSY	DS	1F	Queue of control unit busy IOBLOKs
2C	RCURSV1	DS	1F	Reserved for IBM use
30	RCUDVTBL	DS	16H	Devices attached - RDVSTART index (The index values must be multiplied by 8 and added to the beginning of the RDEVBLK table (ARIODV).)
	RCUSIZE	EQU	(*-RCUBLOK)/8	RCUBLOK size in doublewords (X'08')

RCWTASK

RCWTASK: TRANSLATED VIRTUAL I/O CCW

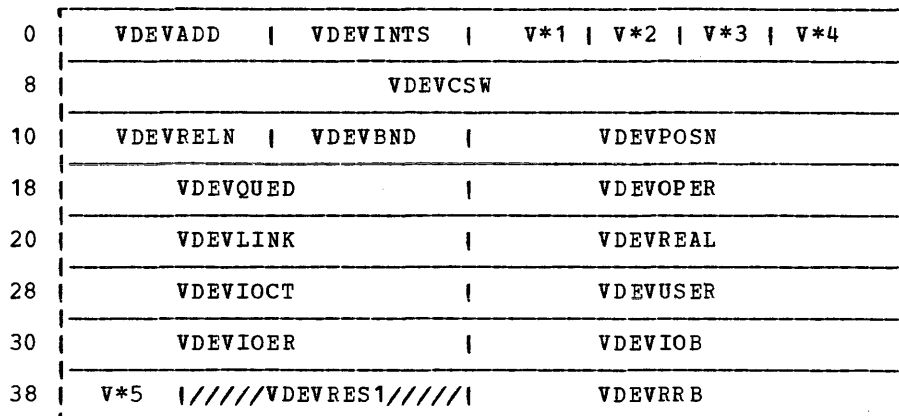
RCWTASK contains the virtual-to-real CCW translation and other data related to a virtual machine's I/O operation. A pointer is maintained to the virtual CCW operation. The first CCW-16 points to the beginning of RCWTASK.



Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
0	RCWPNT	DS	1F	Pointer to next RCWTASK
4	RCWVCAW	DS	1F	Virtual address of CCW chain
8	RCWVCNT	DS	1H	Virtual CCW count
A	RCWRCNT	DS	1H	Real CCW count
C	RCWHEAD	DS	1H	RCWTASK header mark X'FFFF'
E	RCWCCNT	DS	1H	RCWTASK control word count
10	RCWCCW	DS	1D	One or more CCWs for device I/O
		ORG	RCWCCW	
10	RCWADDR	DS	1F	CCW data address
14	RCWFLAG	DS	1X	CCW flag bits
15	RCWCTL	DS	1X	CCW CP-control bits
	<u>Bits defined in RCWCTL</u>			
	RCWIO	EQU	X'80'	I/O data page locked
	RCWGEN	EQU	X'40'	CP-generated CCW
	RCWHMR	EQU	X'20'	DMKUNT must relocate home address/record R0
	RCWREL	EQU	X'10'	CCW address relocatable if CCWs moved
	RCWISAM	EQU	X'08'	ISAM modifying CCW
	RCW2311	EQU	X'04'	TYP2311T-B pseudo 2311 on 2314
	RCWINVL	EQU	X'02'	CCW operation code or address is invalid
	RCWSHR	EQU	X'01'	Shared user page was copied
16	RCWCNT	DS	1H	CCW byte count
		ORG	RCWADDR	
10	RCWCOMND	DS	1X	CCW command code

VDEVBLK: VIRTUAL DEVICE BLOCK

VDEVBLK maintains status and interrupt conditions for one virtual device. The VMDVSTRT field of the VMBLOCK points to the first VDEVBLK.



Hexadecimal Displacement	Field Name	Field Description, Contents, Meaning			
0	VDEVADD DS 1H	Virtual device address			
2	VDEVINTS DS 1H	Virtual device interrupt status			
4	VDEVTYPE DS 1X	V*1	Virtual device type class		
5	VDEVTYPE DS 1X	V*2	Virtual device type		
6	VDEVSTAT DS 1X	V*3	Virtual device status		
<u>Bits defined in VDEVSTAT</u>					
	VDEVCHBS EQU X'80'	Virtual subchannel busy			
	VDEVCHAN EQU X'40'	Virtual channel interrupt pending			
	VDEVBUSY EQU X'20'	Virtual device busy			
	VDEVPEND EQU X'10'	Virtual device interrupt pending			
	VDEV CUE EQU X'08'	Virtual control unit end			
	VDEVNRDY EQU X'04'	Virtual device not ready			
	VDEV CATT EQU X'02'	Virtual device attached by console function			
	VDEVDED EQU X'01'	VDEVREAL is dedicated device RDEVBLK			
7	VDEVFLAG DS 1X	V*4	Virtual device flags		
<u>Bits defined in VDEVFLAG</u>					
	VDEVRDO EQU X'80'	DASD - read-only			
	VDEVENAB EQU X'80'	Virtual 270x - line enabled			
	VDEV TDSK EQU X'40'	DASD - T-disk space allocated by CP			
	VDEV DIAL EQU X'40'	Virtual 270x - line connected			
	VDEVCSPL EQU X'40'	Console - activity spooled			
	VDEV231T EQU X'20'	DASD - 2311 simulated on top half of 2314			
	VDEV231B EQU X'10'	DASD - 2311 simulated on bottom half of 2314			
	VDEVCCW1 EQU X'10'	Console and spooling - processing first CCW			
	VDEV SAS EQU X'08'	DASD - Executing standalone seek			
	VDEV DLY EQU X'08'	Console - delay spooling			
	VDEVDET EQU X'04'	Virtual device is being detached			
	VDEVPOST EQU X'02'	Present attention with a single interrupt			
	VDEVRSRL EQU X'02'	Reserve/release are valid CCW operation codes			
	VDEVUC EQU X'01'	Virtual device sense bytes present			

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
8	VDEVCSW	DS	1D	Virtual channel status word
10	VDEVRELN	DS	1H	Virtual DASD cylinder relocation
12	VDEVBND	DS	1H	Virtual DASD size (in cylinders)
14	VDEVPOSN	DS	1F	Virtual DASD seek position
18	VDEVQUED	DS	1F	Virtual SIO to real SIO queued time
1C	VDEVOPER	DS	1F	Device operational time
20	VDEVLINK	DS	1F	Link to virtual shared devices
		ORG	VDEVLINK	
20	VDEVTMAT	DS	1F	T-disk attached time (TOD clock word 0)
24	VDEVREAL	DS	1F	Pointer to real device RDEVBLOK
28	VDEVI OCT	DS	1F	Virtual device I/O count
2C	VDEVUSER	DS	1F	Pointer to VMBLOK of VDEVBLOK owner
30	VDEVI OER	DS	1F	Pointer to IOERBLOK for last error
		ORG	VDEVI OER	
30	VDEVSNSE	DS	1F	Sense bytes for spool device
34	VDEVFCBK	DS	1F	Address of forms control block (VFCBBLOK)
34	VDEVI OB	DS	1F	Pointer to active IOBLOK
38	VDEVFLG2	DS	1X	v*5 Virtual device flag byte 2
<u>Bits defined in VDEVFLG2</u>				
	VDEVRRF	EQU	X'80'	Process virtual RESERVE/RELEASE commands
	VDEVRES	EQU	X'40'	Minidisk reserved by VDEVUSER
	VDEVODE	EQU	X'20'	VDEVBLOK to get device when minidisk is released
	VDEVCPX	EQU	X'10'	Virtual I/O waiting for release of minidisk
	VDEVSMBY	EQU	X'02'	Status modifier plus busy interrupt
	VIRTUAL	EQU	X'01'	Virtual device is known by the virtual machine as a 3330V
39	VDEVRES1	DS	3X	Reserved for IBM use
3C	VDEVRRB	DS	1F	Address of VRRBLOK for RESERVE/RELEASE
	VDEVSIZE	EQU	(*-VDEVBLOK)/8	VDEVBLOK size in doublewords (X'07')
<u>For Spooling/Console Devices</u>				
		ORG	VDEVRELN	
10	VDEVEXTN	DS	1F	Pointer to spool extension block
14	VDEVSPAR	DS	1F	Spare pointer to spool extension block
18	VDEVCON	DS	1F	Pointer to VCONCTL console control
1C	VDEVSPPL	DS	1F	Pointer to VSPLCTL spool control
20	VDEVCLAS	DS	1C	Spool output class
21	VDEVKEY	DS	1X	Storage key in user's CAW
22	VDEVUNIT	DS	1H	Spool output directed device address
24	VDEVCPY	DS	1H	Number of copies requested
26	VDEVCF LG	DS	1X	Console - virtual console flags
<u>Bits defined in VDEVCF LG</u>				
	VDEVATTN	EQU	X'80'	User pressed Attention key two or more times
	VDEV TIC	EQU	X'40'	Last CCW processed was a TIC
	VDEVTRAN	EQU	X'20'	Data transfer occurred during this channel program
	VDEV VCF	EQU	X'10'	Virtual console function in progress
	VDEV AU CR	EQU	X'08'	Automatic carriage return on first read

ADTSECT

ADTSECT: ACTIVE DISK TABLE

ADTSECT describes the attributes of virtual disks (A-G, S, Y, Z) accessed by a virtual machine via the ACCESS command. Space is allocated for the ADT when DMSNUC is assembled. In the ADT, certain fields are defined for use by both CMS and OS. For example, ADTHBCT field at displacement 1C (hexadecimal) into ADTSECT is also defined as OSADTVTA for use by OS simulation routines. ADTSECT is invoked by the ADT macro.

0	ADTID		A*1	A*2	
8	ADTPTR	ADTDTA			
10	ADTFDA	ADTMFDN			
18	ADTMFDA	ADTHBCT			
20	ADTFSTC	ADTCHBA			
28	ADTCFST	ADT1ST			
30	ADTNUM	ADTUSED			
38	ADTLEFT	ADTLAST			
40	ADTCYL	A*3	A*4	A*5	A*6
48	ADTMSK	ADTQQM			
50	ADTPQM1	ADTPQM2			
58	ADTPQM3	ADTLHBA			
60	ADTLFST	ADTNACW	ADTRES		
68	ADTXNREC	ADTXAREC			

Hexadecimal Displacement	Field Name	Field Description, Contents, Meaning
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<u>Needed for Read-Only Disks and Read/Write Disks</u>		
0	ADTID DS CL6	Disk identifier (label)
6	ADTFLG3 DS 1X A*1	Third flag byte
<u>Bits defined in ADTFLG3</u>		
	ADTFUPD1 EQU X'80'	First half of DMSAUD has been called
	ADTFXCHN EQU X'40'	Extra chain link(s) to be returned
	ADTFRWOS EQU X'20'	Read/write OS or DOS disk
	ADTFSORT EQU X'10'	All FST hyperblocks and FST entries sorted
	ADTFORCE EQU X'08'	CMS/DOS/OS disk forced to a read-only
	ADTFNOAB EQU X'04'	For DMSAUD routine: Do not abend if it is a disk error
7	ADTFTYP DS 1X A*2	Filetype flag byte
8	ADTPTR DS 1A	Pointer to next ADT block in chain
C	ADTDTA DS 1A	Device table address in NUCON
10	ADTFDA DS 1A	File directory (PSTAT) address
14	ADTN DS 1F	Number of doublewords in master file directory
18	ADTMFDA DS 1A	Master file directory address
1C	OSADTVTA DS 0F	VTOC address of OS pack
1C	ADTHBCT DS 1F	FST hyperblock count

618	APIE		AIADT
620	AUSER		ARDTK
628	ASCANN		ASSTAT
630	ATABEND		ASUBSECT
638	AOSMODL		AWRTK
640	ASTRINIT		IADT
648	AFREE		AFRET
650	ADMSPIOC		APGMSECT
658	AIOSECT		ADMPEXEC
660	ADIOSECT		AABNSVC
668	ADMSERL		ADMSCRD
670	ADMSFREB		ASVCSECT
678	AADTLKP		AUPUFD
680	ASTATEXT		AOSRET
688	ACMSRET		ASCANO
690	AEXEC		ASTART
698	AADTLKW		AUSABRV
6A0	AEXTSECT		ASCBPTR
6A8	ADMSROS		LDMSROS CDMSROS
6B0	AACTLKP		AACTNXT
6B8	AACTFREE		AACTFRET
6C0	AADTNXT		ATRKLKP
6C8	ATRKLKPX		AQQTRK
6D0	AQQTRKX		AERASE
6D8	ATYPSRCH		AUPDISK
6E0	AKILLEX		ATFINIS
6E8	ARDBUF		AWRBUF
6F0	AFINIS		ASTATE
6F8	ASTATEW		APOINT

700	CONCCWS	
708		
710	CONINBLK	
718	CONINBUF	
.		
.		
7A0	CMNDLINE	
.		
.		
848	CMNDLIST	
.		
.		
A60	CONSTACK	
.		
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BA0	FREESAVE	
.		
.		
BE0	BALSAVE	
.		
.		
C20	WAITSAVE	
.		
.		
C60	PCTVSAM //////////////////// ////////////////////	
C68	ADIKQLAB	NDIKQLAB
C70	ARURTBL	ADMSVIB
C78	AVIPWORK	A*18 ////////////////////
C80	AVSAMSYS	AAMSSYS
C88	AVSREOJ	AVSRWORK
C90	ACBLIST	////////////////////
C98	AABWSECT	ADMSZIT

Hexadecimal Displacement	Field Name	Machine Usage		Field Description, Contents, Meaning
0	IPLPSW	DS	1D	Initial program load of PSW
8	IPLCCW1	DS	1D	Initial program load of CCW1
10	IPLCCW2	DS	1D	Initial program load of CCW2
			ORG	
0	RSTNPSW	DS	1D	PSW restart new PSW
8	RSTOPSW	DS	1D	PSW restart old PSW
10	ACMSCVT	DS	1F	Address of simulated OS CVT
14	ASYSREF	DS	1F	Address of nucleus address table
18	EXTOPSW	DS	1D	External old PSW
20	SVCOPSW	DS	1D	Supervisor call old PSW
28	PGMOPSW	DS	1D	Program old PSW
30	MCKOPSW	DS	1D	Machine-check old PSW
38	IOOPSW	DS	1D	Input/output old PSW
40	CSW	DS	1D	Channel status word
48	CAW	DS	1F	Channel address word
4C	NUCRSV1	DS	1F	Reserved for IBM use
50	TIMER	DS	1F	Interval timer
54	NUCRSV2	DS	1F	Reserved for IBM use
58	EXTNPSW	DS	1D	External new PSW
60	SVCNPSW	DS	1D	Supervisor call new PSW
68	PGMNPSW	DS	1D	Program new PSW
70	MCKNPSW	DS	1D	Machine-check new PSW
78	IONPSW	DS	1D	Input/output new PSW
80	CPULOG	DS	48D	Processor logout area
			ORG	
80	NUCRSV3	DS	2D	Reserved for IBM use
90	NUCRSV4	DS	1F	Reserved for IBM use
94	MONCLASS	DS	1H	Monitor call class number
96	PERCODE	DS	1H	Program event recorder code
98	PERADDR	DS	1F	Program event recorder address
9C	MONCODE	DS	1F	MONITOR CALL code
A0	NUCRSV5	DS	4D	Reserved for IBM use
C0	LOWSAVE	DS	XL160	Save area for first 160 bytes of storage
160	FPRLOG	DS	4D	Floating-point register logout area
180	GPRLOG	DS	16F	General-purpose register logout area
1C0	ECRLOG	DS	16F	Extended control register logout area
			ORG	
			CPULOG	
			ORG	
			DIAGTIME	
200	SYSTEMID	DS	CL32	System name and date
220	INSTALLID	DS	CL64	Installation identification
260	SYSNAME	DS	CL8	Name of saved system loaded (via IPL)
268	IPLADDR	DS	1H	Address of device loaded (via IPL)
26A	SYSADDR	DS	1H	Address of system disk
26C	DEVICE	DS	1F	Name of device causing last I/O interrupt
270	NUCRSV6	DS	1F	Reserved for IBM use
274	FEIBM	DC	CL12'5749DMS00	' Component identification -- referenced by IPCS extension program product
280	DIAGTIME	DS	CL24	Buffer for DIAGNOSE timer
			ORG	
280	CURRDATE	DS	CL8	Current date - mm/dd/yy
288	CURRTIME	DS	CL8	Current time - hh.mm.ss
290	CURRVIRT	DS	1F	Current elapsed virtual time used
294	CURRCPUT	DS	1F	Current elapsed processor time used
298	LASTVIRT	DS	1F	Previous elapsed virtual time used
29C	LASTCPUT	DS	1F	Previous elapsed processor time used
2A0	LASTCMND	DC	CL8' '	Last command issued
2A8	PREVCMND	DC	CL8' '	Next to last command
2B0	LASTEXEC	DC	CL8' '	Last EXEC procedure
2B8	PREVEXEC	DC	CL8' '	Next to last EXEC procedure

NUCON

Hexadecimal Displacement	Field Name		Field Description, Contents, Meaning
2C0	LASTLMD	DC CL8'	Last module LOADMOD into main storage
2C8	LASTTMD	DC CL8'	Last module LOADMOD into transient area
2D0	DATIPCMS	DC D'0'	Date (mm/dd/yy) at last IPL CMS
2D8	CLKVALMD	DC D'0'	Time (STCK form) at midnight (0000 hours)

Macro and Text Library Pointers

2E0	MACDIRC	DC 8A(0)	Address of macro library directories
300	MACLIBL	DC 18F'-1'	Current macro library names
348	TXLIBSV	DC F'0'	Library save area for TXTLIBS
34C	MACLBSV	DC F'0'	Library save area for MACLIBS
350	TOTLIBS	DC F'0'	Total global chains (in bytes)
354	TXTDIRC	DC A(0)	Address of TEXT library directories
358	TXTLIBS	DC 18F'-1'	Current TEXT library names

Debug Dump Parameters

3A0	DUMPLIST	DS OD	DEBUG DUMP PLIST
3A0	GRS015	DC A(GPRLOG)	Address of GPR save area
3A4	LOC0176	DC A(LOWSAVE)	Address of low storage save area
3A8	FIRSTDMP	DC A(0)	Address of first location to dump
3AC	LASTDMP	DC A(0)	Address of last location to dump
3B0	FRS06	DC A(FPRLOG)	Address of FPR save area
3B4	DMPTIT	DC A(DMPTITLE)	Address of dump title line
3B8		DC 4X'FF'	Reserved for IBM use
3BC	DMPTITLE	DC CL132'	Dump title line
440	GLBLTABL	DC F'0'	Reserved for IBM use
444		DC H'0'	Used for alignment
446	SVC\$202	SVC 202	Common SVC for reentrant code
448	ERR\$202	DC A(*+4)	User will fill if necessary
44C		BR 14	Return to caller
44E		DC H'0'	Reserved for IBM use

Batch Monitor Information

450	BATFLAGS	DC 1X'00'	A*1 Batch flags
-----	----------	-----------	-----------------

Bits defined in BATFLAGS

BATRUN	EQU X'80'	Batch monitor running
BATLOAD	EQU X'40'	Loading batch processor
BATNOEX	EQU X'20'	Suppress user job execution
BATRERR	EQU X'10'	Batch reader error
BATCPEX	EQU X'08'	CP command executing
BATUSEX	EQU X'04'	User job executing
BATMOVE	EQU X'02'	MOVEFILE executing from terminal
BATTERM	EQU X'01'	User job being flushed

451	BATFLAG2	DC 1X'00'	A*2 More batch flags
-----	----------	-----------	----------------------

Bits defined in BATFLAG2

BATXLIM	EQU X'80'	User job limit exceeded
BATXCPU	EQU X'40'	Processor time exceeded
BATXPRT	EQU X'20'	No. of printed lines exceeded
BATXPUN	EQU X'10'	No. of punched cards exceeded
BATDCMS	EQU X'08'	Disabled CMS command called
BATIPLSS	EQU X'04'	Batch loading (via IPL) saved system
BATSTOP	EQU X'02'	Batch stopping after current job
BATSYSAB	EQU X'01'	System abnormal termination in process

452		DC 2X'00'	Reserved for IBM use
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Batch Processor Entry Points

454	ABATPROC	DC A(0)	Main entry
458	ABATABND	DC A(0)	User job abend entry
45C	ABATLIMT	DC A(0)	User job limits table
460	AUSERST	DC A(0)	Virtual machine restart entry point
464		DC 2F'0'	Reserved for IBM use

Hexadecimal Displacement	Field Name		Field Description, Contents, Meaning
68C	ASCANO	DC	V(DMSSCNO)
690	AEXEC	DC	V(DMSEXC)
694	ASTART	DC	V(DMSLDRA)
698	AADTLKW	DC	V(ADTLKW)
69C	AUSABRV	DC	V(USABRV)
6A0	AEXTSECT	DC	V(EXTSECT)
6A4	ASCBPTR	DC	V(SCBPTR)
6A8	ADMSROS	DC	A(0)
6AC	LDMSROS	DC	H'0'
6AE	CDMSROS	DC	H'0'
6B0	AACTLKP	DC	V(DMSLAF)
6B4	AACTNXT	DC	V(DMSLAFNX)
6B8	AACTFREE	DC	V(DMSLAFFE)
6BC	AACTFRET	DC	V(DMSLAFFT)
6C0	AADTNXT	DC	V(ADTNXT)
6C4	ATRKLKP	DC	V(DMSTRK)
6C8	ATRKLKPX	DC	V(DMSTRKX)
6CC	AQQTRK	DC	V(DMSTQQ)
6D0	AQQTRKX	DC	V(DMSTQQX)
6D4	AERASE	DC	V(DMSERS)
6D8	ATYPSRCH	DC	V(TYPSRCH)
6DC	AUPDISK	DC	V(DMSAUD)
6E0	AKILLEX	DC	V(KILLEX)
6E4	ATFINIS	DC	V(DMSFNST)
6E8	ARDBUF	DC	V(DMSBRD)
6EC	AWRBUF	DC	V(DMSBWR)
6F0	AFINIS	DC	V(DMSFNS)
6F4	ASTATE	DC	V(DMSSTTE)
6F8	ASTATEW	DC	V(DMSSTTW)
6FC	APOINT	DC	V(POINT)
<u>Terminal Buffers</u>			
700		DS	0D
700	CONCCWS	CCW	0,0,X'60',0 Console read and write CCW
708		CCW	3,0,X'20',1 NOP to get CE and DE together
710	CONINBLK	DC	A(0)
714		DC	XL1'0A'
715		DC	AL1(134)
716	CONINBUF	DS	CL134
7A0		DS	0D
7A0	CMNDLINE	DS	CL160
840		DS	0D
840		DC	CL8'EXEC'
848	CMNDLIST	DS	CL536
A60		DS	0D
A60	CONSTACK	DS	CL320
<u>Save Areas</u>			
BA0	FREESAVE	DS	16F
BE0	BALRSAVE	DS	16F
C20	WAITSAVE	DS	16F
<u>VSAM and AMSERV Control Words</u>			
C60		DS	0D
<u>Percent of Available User Storage To Reserve for GETVIS/FREEVIS Use When Running VSAM</u>			
C60	PCTVSAM	DC	H'50' 50 percent for CMS/VSAM use
C62		DS	1H Reserved for IBM use
C64		DS	1F Reserved for IBM use

Hexadecimal Displacement	Field Name			Field Description, Contents, Meaning
<u>Beginning and End of IKQLAB (when in storage)</u>				
C68	ADIKQLAB	DC	A(X'FFFFFF')	Set to A(IKQLAB) when it is in storage
C6C	NDIKQLAB	DC	A(0)	Set to end of IKQLAB when in storage
C70	ARURTBL	DC	V(RURTBL)	VSAM resource table address
C74	ADMSVIB	DC	V(DMSVIB)	Address of VSAM interface bootstrap
C78	AVIPWORK	DC	A(0)	Address of DMSVIP work area
C7C	VSAMFLG1	DC	X'00' A*18	VSAM information flag
<u>Bits defined in VSAMFLG1</u>				
	VSAMRUN	EQU	X'80'	VSAM system loaded
	VSJOB CAT	EQU	X'40'	VSAM job catalog active
	VIPINIT	EQU	X'20'	DMSVIP has been initialized
	VSAMSERV	EQU	X'10'	CMSAMS system loaded (AMSERV running)
	VIPSOP	EQU	X'08'	OS interface SVC 2 call
	VIPTCLOS	EQU	X'04'	OS TCLOSE call
	VSAMSOS	EQU	X'02'	OS AMSERV running
C7D		DS	3X	Reserved for IBM use
C80	AVSAMSYS	DC	A(0)	Address of VSAM saved system
C84	AAMSSYS	DC	A(0)	Address of CMSAMS saved system
C88	AVSREOJ	DC	V(\$\$BEOJ4)	DMSVSR entry point from VSAM \$\$BACLOS
C8C	AVSRWORK	DC	A(0)	Address of DMSVSR work area
C90	ACBLIST	DC	A(0)	ACB list built by OPEN/CLOSE
C94		DS	1F	Reserved for IBM use
C98	AABWSECT	DC	V(DMSABWSE)	Pointer for the IPCS extension program product
C9C	ADMSZIT	DC	V(DMSZITEP)	Pointer for the IPCS extension program product
CA0		DS	0D	

Appendix A. CP and RSCS Equate Symbols

This Appendix contains Assembler language equate symbols used to reference CP and RSCS data for:

- VM/370 Device Classes, Types, Models, and Features
- VM/370 Machine Usage
- VM/370 Extended Control Registers
- VM/370 CP Usage
- VM/370 Registers

VM/370 DEVICE CLASSES, TYPES, MODELS, AND FEATURES

Field Name			Field Description, Contents, Meaning
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CLASTERM	EQU	X'80'	Terminal device class
TYP2700	EQU	X'40'	2700 bisynchronous line
TYP2955	EQU	TYP2700	2955 communications line
TYPTELE2	EQU	X'20'	Telegraph terminal control type II
TYPTTY	EQU	X'20'	Teletype terminal
TYPIBM1	EQU	X'10'	IBM terminal control type I
TYP2741	EQU	X'18'	2741 communications terminal
TYP1050	EQU	X'14'	1050 communications terminal
TYPUNDEF	EQU	X'1C'	Terminal device type is undefined
TYPBSC	EQU	X'80'	Bisynchronous line for 3270 remote stations
TYPSDLC	EQU	X'08'	Synchronous data link control
TYP3210	EQU	X'00'	3210 console
TYP3215	EQU	TYP3210	3215 console
TYP2150	EQU	TYP3210	2150 console
TYP1052	EQU	TYP3210	1052 console
FTRDIAL	EQU	X'01'	Dial feature
CLASGRAF	EQU	X'40'	Graphics device class
TYP2250	EQU	X'80'	2250 display unit
TYP2260	EQU	X'40'	2260 display station
TYP2265	EQU	X'20'	2265 display station
TYP3066	EQU	X'10'	3066 console
TYP1053	EQU	X'08'	1053 printer
TYP3277	EQU	X'04'	3277 display station
TYP3278	EQU	X'01'	3278 Model 2A system console
TYP3284	EQU	X'02'	3284 printer
TYP3286	EQU	TYP3284	3286 printer
TYP3287	EQU	TYP3284	3287 printer
TYP3288	EQU	TYP3284	3288 printer
TYP3138	EQU	TYP3277	3138 system console
TYP3148	EQU	TYP3277	3148 system console
TYP3158	EQU	TYP3277	3158 system console
FTROPRDR	EQU	X'80'	Operator identification card reader
CLASUR1	EQU	X'20'	Unit record input device class
TYPRDR	EQU	X'80'	Card reader device
TYP2501	EQU	X'81'	2501 card reader
TYP2540R	EQU	X'82'	2540 card reader
TYP3505	EQU	X'84'	3505 card reader
TYP1442R	EQU	X'88'	1442 card reader/punch
TYP2520R	EQU	X'90'	2520 card reader/punch
TYPTIMER	EQU	X'40'	Timer device
TYPTR	EQU	X'20'	Tape reader device
TYP2495	EQU	X'21'	2495 magnetic tape cartridge reader
TYP2671	EQU	X'22'	2671 paper tape reader
TYP1017	EQU	X'24'	1017 paper tape reader
CLASUR0	EQU	X'10'	Unit record output device class
TYPUN	EQU	X'80'	Card punch device
TYP2540P	EQU	X'82'	2540 card punch
TYP3525	EQU	X'84'	3525 card punch
TYP1442P	EQU	X'88'	1442 card punch
TYP2520P	EQU	X'90'	2520 card punch
TYPTR	EQU	X'40'	Printer type device
TYP1403	EQU	X'41'	1403 printer
TYP3211	EQU	X'42'	3211 printer
TYP3203	EQU	X'43'	3203 printer (3211 and 1403)
TYP1443	EQU	X'44'	1443 printer

Appendix E. Data Areas and Control Block References

This appendix -- a listing of CP, CMS, and RSCS control blocks -- contains the following:

- Module references to data areas and control blocks.
- Information on how certain data areas or control blocks are created and released.

CP CONTROL BLOCK REFERENCES

ACCTBLOK

Built by: DMKHVD
Released by: DMKHVD, DMKUSO
Referenced by: DMKACO, DMKCKP, DMKHVD, DMKSPL

CCHREC

Built by: DMKCCH
Released by: DMKCCH, DMKIOE, DMKIOF
Referenced by: DMKCCH, DMKEIG, DMKSEV, DMKSIX

ACNTBLOK

Built by: DMKACO, DMKHVD, DMKWWM
Released by: DMKACO
Referenced by: DMKACO, DMKCKP, DMKHVD, DMKJRL, DMKRSE, DMKWWM

CCPARM

Built by: DMKNLD, DMKSNC
Released by: DMKNLD, DMKSNC
Referenced by: DMKNLD, DMKSNC

ALOCBLOK

Built by: DMKCPI, DMKVDC
Released by: DMKCPI, DMKVDC
Referenced by: DMKCPI, DMKMON, DMKPGT, DMKTDK, DMKVDC

CHXBLOK

Built by: DMKDIA
Released by: DMKVCA
Referenced by: DMKCFP, DMKCQG, DMKDIA, DMKVCA, DMKVSI

BSCBLOK

Built by: DMKRGB
Released by: DMKRGGA
Referenced by: DMKBSC, DMKRGGA, DMKRGB

CHYBLOK

Built by: DMKDIA
Released by: DMKVCA
Referenced by: DMKDIA, DMKVCA

BUFFER

Built by: DMKCFM, DMKCPI, DMKERM, DMKGRF, DMKLNK, DMKLOG, DMKRGGA, DMKRSP
Released by: DMKCFM, DMKCPI, DMKGRF, DMKLNK, DMKRGGA, DMKRSP
Referenced by: DMKALG, DMKCDM, DMKCFG, DMKCFM, DMKCFO, DMKCFS, DMKCPI, DMKCPS, DMKCSB, DMKCSO, DMKCSP, DMKCSQ, DMKCST, DMKCSU, DMKCSV, DMKEMA, DMKERM, DMKGRF, DMKGRG, DMKLNK, DMKMSG, DMKNMT, DMKRGGA, DMKRND, DMKRSP, DMKSCN, DMKUDU, DMKVDC, DMKVMD, DMKWWM

CKPBLOK

Built by: DMKRNH
Released by: DMKRNH
Referenced by: DMKRNH, DMKWWM

CONTASK

Built by: DMKCNS, DMKGRF, DMKQCN, DMKRGGA, DMKRGB, DMKRNH
Released by: N/A
Referenced by: DMKCNS, DMKGRF, DMKMON, DMKNES, DMKQCN, DMKRGGA, DMKRGB, DMKRNH

CORTABLE

Assembled in DMKSYS.

Released by: N/A

Referenced by: DMKACO, DMKATS, DMKBLD,
DMKCCW, DMKCDL, DMKCFD, DMKCPI, DMKCPU,
DMKCPV, DMKDGD, DMKDMP, DMKFRF, DMKMCC,
DMKMCH, DMKMNI, DMKPAG, DMKPGS, DMKPSA,
DMKPTR, DMKRPA, DMKUDR, DMKUDU, DMKUNT,
DMKVMA

CPEXBLOK

Built by:

DMKACO, DMKCDL, DMKCFM, DMKCPD, DMKCPV,
DMKDIA, DMKGRF, DMKIOE, DMKIOF, DMKIOG,
DMKIOS, DMKLOC, DMKMCC, DMKMCH, DMKMON,
DMKPGT, DMKPTR, DMKQCN, DMKRGD, DMKRGB,
DMKRNH, DMKRPA, DMKRSP, DMKSPL, DMKSVC,
DMKUSO, DMKVCA, DMKVDC, DMKVDE, DMKVMA,
DMKVMC

Released by: DMKCPD, DMKDSP, DMKIOF,
DMKMON, DMKPTR

Referenced by: DMKACO, DMKALG, DMKCCW,
DMKCDL, DMKCFM, DMKCFD, DMKCFP, DMKCNS,
DMKCPB, DMKCPD, DMKCPU, DMKCPV, DMKDGD,
DMKDIA, DMKDSB, DMKDSP, DMKEXT, DMKFRF,
DMKGIO, DMKGRF, DMKIOE, DMKIOF, DMKIOS,
DMKLNK, DMKLOC, DMKMCC, DMKMCD, DMKMCH,
DMKMCT, DMKMIA, DMKMID, DMKMNI, DMKMON,
DMKPAG, DMKPGS, DMKPGT, DMKPRG, DMKPRV,
DMKPSA, DMKPTR, DMKQCN, DMKRGD, DMKRGB,
DMKRNH, DMKRPA, DMKRSP, DMKSPL, DMKSSS,
DMKSTK, DMKSVC, DMKTAP, DMKTMR, DMKTRD,
DMKUNT, DMKUSO, DMKVAT, DMKVCA, DMKVDA,
DMKVDC, DMKVDE, DMKVMA, DMKVMC, DMKVIS,
DMKVSP

DDRREC

Built by: DMKVER

Released by: DMKVER

Referenced by: DMKVER

DMPINREC

Built by: DMKDMP, DMKVMD

Released by: DMKDMP, DMKVMD

Referenced by: DMKDMP, DMKVMD

DMPKYREC

Built by: DMKDMP, DMKVMD

Released by: DMKDMP, DMKVMD

Referenced by: DMKDMP, DMKVMD

DMPTBREC

Built by: DMKDMP

Released by: DMKDMP

Referenced by: DMKDMP

ECBLOK

Built by: DMKBLD

Released by: DMKCFD, DMKCFD, DMKUSO

Referenced by: DMKBLD, DMKCDB, DMKCDM,
DMKCDL, DMKCFG, DMKCFH, DMKCFP, DMKCFD,
DMKDSP, DMKEXT, DMKPRG, DMKPRV, DMKSCH,
DMKSVC, DMKTMR, DMKTRC, DMKTRD, DMKUSO,
DMKVAT, DMKVMC

ERRBLOK

Built by: DMKIOE

Released by: DMKIOF

Referenced by: DMKIOE, DMKIOF

IOBLOK

Built by: DMKACO, DMKCCW, DMKCFP,
DMKCNS, DMKCPB, DMKCPD, DMKCPD, DMKCSO,
DMKCSPL, DMKCSU, DMKDGD, DMKDIA, DMKGIO,
DMKGRF, DMKHVC, DMKIOS, DMKNLD, DMKRGD,
DMKRGB, DMKSPL, DMKTDK, DMKVCA, DMKVDC,
DMKVDD, DMKVDE, DMKVDR, DMKVIO

Released by: DMKCFP, DMKCNS, DMKCPB,
DMKCPD, DMKCFD, DMKCSO, DMKDAS, DMKDGD,
DMKDIA, DMKGIO, DMKGRF, DMKHVC, DMKIOS,
DMKMON, DMKNLD, DMKPAG, DMKRGD, DMKRGB,
DMKRNH, DMKRSP, DMKSEP, DMKTDK, DMKVCA,
DMKVDC, DMKVDD, DMKVDE, DMKVIO

Referenced by: DMKACO, DMKBSC, DMKCCH,
DMKCCW, DMKCFP, DMKCNS, DMKCPB, DMKCPD,
DMKCPD, DMKCSB, DMKCSO, DMKCFP, DMKCSU,
DMKCSV, DMKDAS, DMKDGD, DMKDIA, DMKDIB,
DMKDSB, DMKDSP, DMKGIO, DMKGRF, DMKHVC,
DMKIOE, DMKIOG, DMKIOS, DMKISM, DMKLOG,
DMKMCC, DMKMNI, DMKMON, DMKMSW, DMKNLD,
DMKNLE, DMKPAG, DMKPGT, DMKRGD, DMKRGB,

DMKRNH, DMKRSE, DMKRSP, DMKSEP, DMKSPL,
DMKSSS, DMKSTK, DMKTAP, DMKTCS, DMKTDK,
DMKTRC, DMKTRD, DMKTRK, DMKUDR, DMKUNT,
DMKUSO, DMKVCA, DMKVDC, DMKVDD, DMKVDE,
DMKVDR, DMKVIO, DMKVSI

MCRECORD

Built by: DMKMCH

Released by: N/A

Referenced by: DMKMCH

IOERBLOK

Built by: DMKBSC, DMKCCH, DMKDAS,
DMKDIA, DMKDIB, DMKIOE, DMKIOS, DMKRSE,
DMKTAP, DMKVCA

MDRREC

Built by: DMKVER

Released by: DMKBSC, DMKCCH, DMKCCW,
DMKCFP, DMKCNS, DMKCPS, DMKDAS, DMKDGD,
DMKDIA, DMKDIB, DMKGIO, DMKGRF, DMKIOE,
DMKIOS, DMKMON, DMKNLD, DMKRG, DMKRGB,
DMKRNH, DMKRSE, DMKRSR, DMKTAP, DMKVIO

Released by: DMKVER

Referenced by: DMKIOF, DMKVER

Referenced by: DMKBSC, DMKCCH, DMKCCW,
DMKCFP, DMKCNS, DMKCPS, DMKDAS, DMKDGD,
DMKDIA, DMKDIB, DMKDSB, DMKEIG, DMKGIO,
DMKGRF, DMKIOE, DMKIOF, DMKIOS, DMKMSW,
DMKNLD, DMKNLE, DMKRG, DMKRGB, DMKRNH,
DMKRSE, DMKRSP, DMKSEV, DMKSIX, DMKTAP,
DMKTRK, DMKUNT, DMKVCA, DMKVDC, DMKVDE,
DMKVIO, DMKVSI

MICBLOK

Built by: DMKCFS, DMKLOG

Released by: DMKCFS, DMKLOG, DMKUSO

Referenced by: DMKBLD, DMKCFS, DMKDSP,
DMKLOG, DMKMCH, DMKPTR, DMKRPA, DMKTRA

IRMBLOK

Built by: DMKCFO, DMKCFS

MIHREC

Built by: DMKVER

Released by: DMKCFS, DMKIOE

Released by: DMKVER

Referenced by: DMKCFO, DMKIOE

Referenced by: DMKVER

JPSCBLOK

Assembled as part of DMKSYS

MNDEVLIST

Built by: DMKENT

Referenced by: DMKALG, DMKJRL, DMKLNK,
DMKLOG

Released by: DMKENT

Referenced by: DMKENT

LOCKBLOK

Built by: DMKLOC

MNHDR

Built by: DMKMON

Released by: DMKLOC

Released by: DMKMON

Referenced by: DMKLOC

Referenced by: DMKMON

MCHAREA

Built by: DMKIOG

MN000

Built by: DMKMON

Released by: N/A

Released by: DMKMON

Referenced by: DMKCCH, DMKCFO, DMKCPU,
DMKIOG, DMKMCH, DMKMCT

Referenced by: DMKMON

MN001

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN097

Built by: DMKMNI
Released by: DMKMON
Referenced by: DMKMNI

MN098

Built by: DMKMNI
Released by: DMKMON
Referenced by: DMKMNI

MN099

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN10X

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN20X

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN400

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN500

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN600

Built by: DMKMON, DMKMNI
Released by: DMKMON
Referenced by: DMKMNI, DMKMON

MN602

Built by: DMKENT
Released by: DMKENT
Referenced by: DMKENT

MN700

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MN802

Built by: DMKMON
Released by: DMKMON
Referenced by: DMKMON

MONCOM

Built by: DMKMCC
Released by: DMKMON
Referenced by: DMKCPS, DMKDMP, DMKENT,
DMKMCC, DMKMCD, DMKMIA, DMKMNI, DMKMON

MSSCOM

Built by: DMKSSS
Released by: DMKLNK, DMKLOG, DMKSSS,
DMKVDA
Referenced by: DMKCPB, DMKDGD, DMKDSB,
DMKLNK, DMKLOG, DMKMSS, DMKSSS, DMKVDA,
DMKVSI

NCPTBL

Built by: DMKSNT
Released by: N/A
Referenced by: DMKNLD, DMKSNC

NICBLOK

Built by: DMKNLD
Released by: DMKNLD
Referenced by: DMKACO, DMKBLD, DMKCFT, DMKCKP, DMKCPI, DMKCQR, DMKDIA, DMKHVD, DMKLOG, DMKNES, DMKNET, DMKNLD, DMKPSA, DMKQCN, DMKRG, DMKRGB, DMKRNH, DMKWRM

NPRTBL

Built by: DMKSNT
Released by: N/A
Referenced by: DMKCKS, DMKCSO, DMKHVD, DMKTCS, DMKWRM

OBRREC (Long OBR)

Built by: DMKIOF
Released by: DMKIOF
Referenced by: DMKIOC, DMKIOF, DMKVER

OBRREC (Short OBR)

Built by: DMKIOF
Released by: DMKIOF
Referenced by: DMKIOF

OWNDLIST

Assembled into DMKSYS
Referenced by: DMKATS, DMKCKP, DMKCKS, DMKCPI, DMKCPU, DMKDRD, DMKPAG, DMKPGS, DMKPGT, DMKPTR, DMKSPL, DMKUDR, DMKVDA, DMKVDC, DMKWRM

PAGTABLE

Built by: DMKBLD
Released by: DMKBLD, DMKPGS
Referenced by: DMKATS, DMKBLD, DMKCFG, DMKCPU, DMKPGS, DMKPTR, DMKVAT, DMKVMA

PGBLOK

Built by: DMKVAT
Released by: DMKCFP, DMKDSP
Referenced by: DMKCFP, DMKDSP, DMKVAT

PSA

Assembled as part of DMKSYS; part of CP nucleus.

Referenced by: DMKACO, DMKALG, DMKAPI, DMKATS, DMKBLD, DMKBSC, DMKCCH, DMKCCW, DMKCDB, DMKCDM, DMKCD, DMKCF, DMKCFD, DMKCFG, DMKCFH, DMKCFM, DMKCF, DMKCFP, DMKCFPS, DMKCFPT, DMKCKP, DMKCKS, DMKCLK, DMKCN, DMKCPB, DMKCPI, DMKCP, DMKCPU, DMKCPV, DMKCPG, DMKCPH, DMKCP, DMKCP, DMKCPY, DMKCSB, DMKCSO, DMKCS, DMKCSQ, DMKCS, DMKCSU, DMKCSV, DMKCVT, DMKDA, DMKDEF, DMKDGD, DMKDIA, DMKDIB, DMKDMP, DMKDRD, DMKDSB, DMKDSP, DMKEIG, DMKENT, DMKERM, DMKEXT, DMKFMT, DMKFRE, DMKGIO, DMKGRF, DMKGRT, DMKHVC, DMKHVD, DMKIOC, DMKIOE, DMKIOF, DMKIOG, DMKIOS, DMKISM, DMKJRL, DMKLNK, DMKLOC, DMKLOG, DMKLOH, DMKLOK, DMKMCC, DMKMCD, DMKMCH, DMKMCT, DMKMIA, DMKMID, DMKMNI, DMKMON, DMKMSG, DMKMSW, DMKNES, DMKNET, DMKNLD, DMKNLE, DMKOPR, DMKPAG, DMKPGS, DMKPGT, DMKPRG, DMKPRV, DMKPSA, DMKPTR, DMKQCN, DMKRG, DMKRGB, DMKRNH, DMKRPA, DMKRSE, DMKRSP, DMKSAV, DMKSCH, DMKSCN, DMKSEP, DMKSEV, DMKSIX, DMKSNC, DMKSPL, DMKSSP, DMKSSS, DMKSTK, DMKSVC, DMKTAP, DMKTCS, DMKTDK, DMKTHI, DMKTMR, DMKTRA, DMKTRC, DMKTRD, DMKTRK, DMKTRM, DMKUDR, DMKUDU, DMKUNT, DMKUSO, DMKVAT, DMKUCA, DMKVCH, DMKVCN, DMKVDA, DMKVDC, DMKVDD, DMKVDE, DMKVDR, DMKVDS, DMKVER, DMKVIO, DMKVMA, DMKVMC, DMKVMD, DMKVM, DMKVSI, DMKVSP, DMKVSQ, DMKWRM

PWDIBLOK

Built by: DMKJRL
Released by: DMKJRL
Referenced by: DMKJRL

RCHBLOK

Assembled into CP nucleus module DMKRIO

Released by: N/A

Referenced by: DMKCCH, DMKCFO, DMKCKP,
DMKCPB, DMKCPI, DMKCPS, DMKCPV, DMKCQP,
DMKDIA, DMKDSB, DMKENT, DMKIOG, DMKIOS,
DMKMNI, DMKMON, DMKNES, DMKPRV, DMKSCN,
DMKSSP, DMKSSS, DMKVCH, DMKVMT

RCUBLOK

Assembled into CP nucleus module DMKRIO.

Released by: N/A

Referenced by: DMKCCH, DMKCCW, DMKCFO,
DMKCKP, DMKCPB, DMKCPI, DMKCPS, DMKCPV,
DMKCQP, DMKDIA, DMKDSB, DMKENT, DMKGRF,
DMKIOC, DMKIOS, DMKMNI, DMKMON, DMKNES,
DMKNLD, DMKPRV, DMKSCN, DMKSSP, DMKSSS,
DMKVCH

RCWTASK

Built by: DMKCCW

Released by: DMKCCW, DMKUNT

Referenced by: DMKCCW, DMKCFP, DMKCPB,
DMKHVC, DMKIOS, DMKISM, DMKTRD, DMKTRK,
DMKUNT, DMKVDR

RDEVBLOK

Built by: Assembled into CP nucleus
module DMKRIO

Released by: N/A

Referenced by: DMKACO, DMKATS, DMKBLD,
DMKBSC, DMKCCH, DMKCCW, DMKCFC, DMKCFG,
DMKCFH, DMKCFM, DMKCFO, DMKCFP, DMKCFM,
DMKCKP, DMKCKS, DMKCNS, DMKCPB, DMKCPI,
DMKCPS, DMKCPU, DMKCPV, DMKCQG, DMKCQP,
DMKCQR, DMKCQY, DMKCSB, DMKCSO, DMKDSR,
DMKDEF, DMKDGD, DMKDIA, DMKDMP, DMKDRD,
DMKDSB, DMKDSP, DMKENT, DMKGRF, DMKGRT,
DMKHVD, DMKIOC, DMKIOE, DMKIOF, DMKIOG,
DMKIOS, DMKLNK, DMKLOG, DMKLOH, DMKMCC,
DMKMNI, DMKMON, DMKMSW, DMKNES, DMKNET,
DMKNLD, DMKNLE, DMKOPR, DMKPAG, DMKPGS,
DMKPGT, DMKPRV, DMKPSA, DMKPTR, DMKQCN,
DMKRG, DMKRGB, DMKRNH, DMKRSE, DMKRSP,
DMKSCN, DMKSEP, DMKSNC, DMKSPL, DMKSSP,
DMKSSS, DMKTAP, DMKTCS, DMKTDK, DMKTRK,
DMKTRM, DMKUNT, DMKUSO, DMKVCH, DMKVCN,
DMKVDA, DMKVDC, DMKVDD, DMKVDE, DMKVDR,
DMKVDS, DMKVER, DMKVTI, DMKWRM

RECBLOK

Built by: DMKCKS, DMKCPI, DMKPGT,
DMKRSP, DMKVSP, DMKWRM

Released by: DMKPGT, DMKSPL, DMKUSO

Referenced by: DMKCKP, DMKCKS, DMKCPI,
DMKDMP, DMKPGT, DMKRSP, DMKSPL, DMKVSP,
DMKWRM

RECPAG

Built by: DMKIOF, DMKIOG

Released by: DMKIOF, DMKIOG

Referenced by: DMKIOF, DMKIOG

RSPLCTL

Built by: DMKRSP

Released by: DMKRSP

Referenced by: DMKCKP, DMKCQP, DMKCSO,
DMKRSP, DMKSPL, DMKTCS

SAVEAREA

Built by: DMKCPI, DMKSVC

Released by: DMKSVC

Referenced by: DMKACO, DMKALG, DMKAPI,
DMKATS, DMKBLD, DMKBSC, DMKCCH, DMKCCW,
DMKCDB, DMKCDM, DMKCDL, DMKCFC, DMKCFD,
DMKCFG, DMKCFH, DMKCFM, DMKCFO, DMKCFP,
DMKCFM, DMKCFM, DMKCFM, DMKCKS, DMKCLK, DMKCNS,
DMKCPB, DMKCPB, DMKCPB, DMKCPV, DMKCQG,
DMKQOH, DMKCQP, DMKCQR, DMKCQY, DMKCSB,
DMKCSO, DMKCSO, DMKCSQ, DMKCSU, DMKCSU,
DMKCSV, DMKDSR, DMKDDR, DMKDEF, DMKDGD,
DMKDIA, DMKDIB, DMKDIR, DMKDRD, DMKDSB,
DMKEIG, DMKENT, DMKERM, DMKFMT, DMKGIO,
DMKGRF, DMKGRT, DMKHVD, DMKIOC, DMKIOE,
DMKIOF, DMKIOG, DMKIOS, DMKISM, DMKJRL,
DMKLNK, DMKLOG, DMKLOH, DMKMCC, DMKMCD,
DMKMCH, DMKMIA, DMKMID, DMKMNI, DMKMON,
DMKMSG, DMKMSW, DMKNEM, DMKNES, DMKNET,
DMKNLD, DMKNLE, DMKPGS, DMKPTR, DMKQCN,
DMKRG, DMKRGB, DMKRNH, DMKRPA, DMKRSE,
DMKRSP, DMKSET, DMKSEV, DMKSIX, DMKSNC,
DMKSPL, DMKSSP, DMKSSS, DMKSVC, DMKTAP,
DMKTCS, DMKTDK, DMKTHI, DMKTRA, DMKTRC,
DMKTRD, DMKTRK, DMKTRM, DMKUDR, DMKUDU,
DMKUNT, DMKUSO, DMKVAT, DMKVCA, DMKVCH,
DMKVDA, DMKVDC, DMKVDD, DMKVDE, DMKVDR,
DMKVDS, DMKVER, DMKVMA, DMKVMC, DMKVSP,
DMKWRM

SAVTABLE

Assembled into CP pageable module DMKSNT

Released by: N/A

Referenced by: DMKCFG, DMKCFH,

SPLINK

Built By: N/A

Released by: N/A

Referenced by: DMKCKS, DMKCQH, DMKCSU, DMKDRD, DMKMIA, DMKRSP, DMKSPL, DMKTCS, DMKVMD, DMKVSP, DMKVSQ

SDRBLOK

Built by: DMKIOF

Released by: DMKIOE

Referenced by: DMKIOE, DMKIOF

SWPTABLE

Built by: DMKBLD, DMKVMA

Released by: DMKBLD

Referenced by: DMKATS, DMKBLD, DMKCFG, DMKCPU, DMKPGS, DMKPTR, DMKVAT, DMKVMA

SEGTABLE

Built by: DMKBLD

Released by: DMKBLD

Referenced by: DMKATS, DMKBLD, DMKPGS, DMKVMA

SYSLOCS

Assembled into CP nucleus module DMKSYS.

Referenced by: DMKACO, DMKBLD, DMKCFO, DMKCFT, DMKCKP, DMKLOC, DMKLOG, DMKLOH, DMKUDR, DMKUDU, DMKUSO

SFBLOK

Built by: DMKCKS, DMKNLD, DMKSPL, DMKVMD, DMKWRM

Released by: DMKCKS, DMKRSP, DMKSPL, DMKUSO

Referenced by: DMKCKP, DMKCKS, DMKCPI, DMKCQG, DMKCQR, DMKCSO, DMKCSQ, DMKCSST, DMKCSU, DMKCSV, DMKDMP, DMKDRD, DMKMIA, DMKMNI, DMKNLE, DMKRSE, DMKRSP, DMKSEP, DMKSPL, DMKTCS, DMKUSO, DMKVMD, DMKVSP, DMKVSQ, DMKWRM

SYSTBL

Assembled into DMKSNT.

Referenced by: DMKATS, DMKCFG, DMKCFH, DMKCPU

TNSREC

Built by: DMKIOF

Released by: DMKIOF

Referenced by: DMKIOF

SHQBLOK

Built by: DMKCSP, DMKWRM

Released by: DMKCSP

Referenced by: DMKCKS, DMKCQR, DMKCSQ, DMKSPL, DMKWRM

TREXT

Built by: DMKTRA

Released by: DMKTRA, DMKTRC, DMKUSO

Referenced by: DMKCFM, DMKDSP, DMKPGS, DMKPRG, DMKPRV, DMKSVC, DMKTMR, DMKTRA, DMKTRC, DMKTRD, DMKVIO

SHRTABLE

Built by: DMKCFG

Released by: DMKPGS, DMKVMA

Referenced by: DMKATS, DMKCFG, DMKCFH, DMKCPU, DMKPGS, DMKPTR, DMKVMA

TRQBLOK

Built by: DMKBLD, DMKCFC, DMKCFS,
DMKCPI, DMKGRF, DMKLOG, DMKMCC, DMKQCN,
DMKRG

Released by: DMKCFM, DMKCFS, DMKDIA,
DMKMCC, DMKLOG, DMKMON, DMKQCN, DMKRG,
DMKUSO

Referenced by: DMKBLD, DMKCD, DMKCFC,
DMKCFM, DMKCFP, DMKCFS, DMKCPI, DMKCPU,
DMKDIA, DMKDSP, DMKENT, DMKGRF, DMKLOG,
DMKMCC, DMKMID, DMKMNI, DMKMON, DMKPSA,
DMKQCN, DMKRG, DMKRGB, DMKSCH, DMKSSS,
DMKTMR, DMKUSO

UDFBLOK

Built by: DMKDEF, DMKHVD, DMKSPL

Released by: DMKDEF, DMKHVD, DMKSPL

Referenced by: DMKCFS, DMKDEF, DMKHVD,
DMKLNK, DMKLOG, DMKSPL, DMKSSS, DMKUDR,
DMKUDU

UDEVBLOK

Built by: DMKCSP, DMKUDR

Released by: DMKCSP, DMKUDR

Referenced by: DMKDEF, DMKDIR, DMKLNK,
DMKLOG, DMKSCN, DMKUDR, DMKVDA, DMKVDS

UDIRBLOK

Built by: DMKCSP

Released by: DMKCSP

Referenced by: DMKCFS, DMKCPI, DMKCSP,
DMKDEF, DMKDIR, DMKHVD, DMKLNK, DMKLOG,
DMKSPL, DMKUDR, DMKUDU

UMACBLOK

Built by: DMKDIR

Released by: DMKDIR

Referenced by: DMKCFS, DMKDEF, DMKDIR,
DMKHVD, DMKLOG, DMKSPL, DMKUDR, DMKUDU

VCHBLOK

Built by: DMKVDS

Released by: DMKUSO

Referenced by: DMKCFM, DMKCFP, DMKCKP,
DMKCPB, DMKCPV, DMKCQG, DMKCSP, DMKCSU,
DMKDEF, DMKDIA, DMKDSP, DMKCSV, DMKLNK,
DMKLOG, DMKPRV, DMKSCN, DMKSPL, DMKSSS,
DMKUSO, DMKVCH, DMKVCN, DMKVDA, DMKVDC,
DMKVDD, DMKVDS, DMKVIO, DMKVI, DMKVSP

VCONCTL

Built by: DMKVDS

Released by: DMKVDR

Referenced by: DMKALG, DMKCFP, DMKGRF,
DMKRG, DMKVCN, DMKVDR

VCUBLOK

Built by: DMKVDS

Released by: DMKUSO

Referenced by: DMKCFM, DMKCFP, DMKCKP,
DMKCPB, DMKCPV, DMKCQG, DMKCSP, DMKCSU,
DMKCSV, DMKDEF, DMKDIA, DMKDSP, DMKLOG,
DMKNLD, DMKPRV, DMKSCN, DMKSPL, DMKSSS,
DMKUSO, DMKVCH, DMKVCN, DMKVDA, DMKVDC,
DMKVDD, DMKVDS, DMKVIO, DMKVI, DMKVSP

VDEVBLOK

Built by: DMKLOG, DMKVDS

Released by: DMKUSO

Referenced by: DMKACO, DMKALG, DMKCC, DMKCCW,
DMKCFG, DMKCFH, DMKCFM, DMKCFP, DMKCKP,
DMKCPB, DMKCPV, DMKCQG, DMKQCP, DMKCSB,
DMKCSP, DMKCSQ, DMKCSU, DMKCSV, DMKDS,
DMKDEF, DMKDGD, DMKDIA, DMKDIB, DMKDRD,
DMKDSP, DMKGIO, DMKGRF, DMKHVC, DMKHVD,
DMKIOS, DMKLNK, DMKLOG, DMKNLD, DMKPRV,
DMKQCN, DMKRG, DMKSCN, DMKSPL, DMKSSS,
DMKTHI, DMKTRC, DMKTRD, DMKTRK, DMKUNT,
DMKUSO, DMKVC, DMKVCH, DMKVCN, DMKVDA,
DMKVDC, DMKVDD, DMKVDR, DMKVDS, DMKVER,
DMKVIO, DMKVI, DMKVSP, DMKVSQ

VFCBBLOK

Built by: DMKCFG, DMKCSO

Released by: DMKVDR

Referenced by: DMKCSB, DMKVSP

VMABLOK

Built by: DMKBLD, DMKCFG
Released by: DMKBLD, DMKPGS, DMKVMA
Referenced by: DMKATS, DMKCFG, DMKPGS, DMKVMA

VMCPARM

Built by: Virtual machine user
Released by: Virtual machine user
Referenced by: DMKVMC

VMBLOK

Built by: DMKBLD
Released by: DMKBLD, DMKDIA, DMKLOG, DMKUSO
Referenced by: DMKACO, DMKALG, DMKAPI, DMKATS, DMKBLD, DMKCCCH, DMKCCW, DMKCDB, DMKCDM, DMKCDs, DMKCFc, DMKCFD, DMKCFG, DMKCFH, DMKCFM, DMKCFo, DMKCFP, DMKCFs, DMKCFt, DMKCKP, DMKCKs, DMKCNs, DMKCPB, DMKCPi, DMKCPs, DMKCPu, DMKCPv, DMKCOG, DMKCOH, DMKCOQ, DMKCOQ, DMKCOY, DMKCSB, DMKCSO, DMKCSp, DMKCSQ, DMKCSt, DMKCSu, DMKCSV, DMKDAS, DMKDEF, DMKDGD, DMKDIA, DMKDIB, DMKDRD, DMKDSP, DMKENT, DMKERM, DMKEXT, DMKFRE, DMKGIO, DMKGRF, DMKGRT, DMKHVC, DMKHVD, DMKIOE, DMKIOF, DMKIOG, DMKIOS, DMKISM, DMKJRL, DMKLNK, DMKLOG, DMKLOH, DMKLOK, DMKMCC, DMKMCD, DMKMCH, DMKMCT, DMKMIA, DMKMID, DMKMNI, DMKMON, DMKMSG, DMKMSW, DMKNES, DMKNET, DMKNLD, DMKNLE, DMKPAG, DMKPER, DMKPGS, DMKPGT, DMKPRG, DMKPRV, DMKPSA, DMKPTR, DMKQCN, DMKRGa, DMKRGB, DMKRNH, DMKRPA, DMKRSE, DMKRSP, DMKSCH, DMKSCN, DMKSEP, DMKSNC, DMKSPL, DMKSSS, DMKSTK, DMKSVC, DMKTCS, DMKTHI, DMKTMR, DMKTRA, DMKTRC, DMKTRD, DMKTRK, DMKUDR, DMKUDU, DMKUNT, DMKUSO, DMKVAT, DMKVCA, DMKVCH, DMKVCN, DMKVDA, DMKVDC, DMKVDD, DMKVDR, DMKVDS, DMKVER, DMKVIO, DMKVMA, DMKVMC, DMKVMD, DMKVSI, DMKVSP, DMKVSQ, DMKWRM

VRRBLOK

Built by: DMKVDS
Released by: DMKVDR
Referenced by: DMKCCW, DMKCFP, DMKDGD, DMKGIO, DMKUNT, DMKVDS, DMKVSI

VSPPLCTL

Built by: DMKDRD, DMKVSP
Released by: DMKVSP
Referenced by: DMKCKP, DMKCSp, DMKCSQ, DMKDRD, DMKSPL, DMKVSP, DMKVSQ

VSPXBLOK

Built by: DMKCST
Released by: DMKCST
Referenced by: DMKCKP, DMKCOG, DMKCSp, DMKCST, DMKSPL, DMKVDR, DMKVDS

XINTBLOK

Built by: DMKCFP, DMKCPB, DMKDSP, DMKGRF, DMKRGa, DMKSCH, DMKTMR
Released by: DMKCFP, DMKDSP, DMKSCH, DMKTMR
Referenced by: DMKCFP, DMKCPB, DMKDSP, DMKGRF, DMKRGa, DMKSCH, DMKTMR, DMKVMC

VMCBLOK

Built by: DMKVMC
Released by: DMKVMC
Referenced by: DMKDSP, DMKVMC

VMCMHDR

Built by: N/A
Released by: N/A
Referenced by: DMKMSG

XOBR3211

Built by: DMKRSE
Released by: DMKIOE
Referenced by: DMKIOF, DMKRSE

CMS CONTROL BLOCK REFERENCES

ABTAB

Assembled as part of DMSNUC.

Referenced by: DMSBAB, DMSDOS, DMSITP

ABWSECT

Assembled as part of DMSNUC

Referenced by: DMSABN, DMSDBG, DMSFRE,
DMSITI, DMSITP, DMSITS

ADTSECT

Assembled as part of DMSNUC.

Referenced by: DMSABN, DMSACC, DMSACF,
DMSACM, DMSALU, DMSAMS, DMSARE, DMSARN,
DMSARX, DMSASM, DMSASN, DMSAUD, DMSBOP,
DMSBWR, DMSCMP, DMSCPY, DMSDIO, DMSDLB,
DMSDLK, DMSDSK, DMSDSL, DMSDX, DMSERS,
DMSEXC, DMSEXT, DMSFNS, DMSFOR, DMSIFC,
DMSINS, DMSLAD, DMSLAF, DMSLBM, DMSLBT,
DMSLDS, DMSLFS, DMSLKD, DMSLLU, DMSLST,
DMSMVE, DMSPUN, DMSQRY, DMSRNM, DMSROS,
DMSSET, DMSSOP, DMSSTT, DMSTPE, DMSTQQ,
DMSTRK, DMSUPD, DMSXCP

AFTSECT

Assembled as part of DMSNUC; also
created and released dynamically by
DMSLAF.

Referenced by: DMSBRD, DMSBWR, DMSCPY,
DMSERS, DMSFNS, DMSINT, DMSLAF, DMSPNT,
DMSRNM, DMSSOP, DMSSTT, DMSTPE

ANCHSECT

Built by: DMSSTG

Released by: Not released

Referenced by: DMSDOS, DMSSTG

BATLSECT

Assembled as part of DMSBTP.

Referenced by: DMSCIO, DMSITE, DMSPIO

BBOX

Assembled as part of DMSNUC.

Referenced by: No CMS references. This
block is used by the DOS supervisor.

BGC0M

Assembled as part of DMSNUC.

Referenced by: DMSAMS, DMSASN, DMSBAB,
DMSBOP, DMSCLS, DMSDLB, DMSDLK, DMSDMP,
DMSDOS, DMSDSV, DMSFCH, DMSFET, DMSINS,
DMSITP, DMSLLU, DMSOPL, DMSOPT, DMSPRV,
DMSQRY, DMSRRV, DMSSET, DMSSMN, DMSRRV,
DMSSTG, DMSVSR, DMSXCP

CMSTAXE

Built by: DMSSVT

Released by: DMSSVT

Referenced by: DMSCIT, DMSITE, DMSITI,
DMSSVT

CVTSECT

Assembled as part of DMSNUC.

Referenced by: DMSINS

DBGSECT

Assembled as part of DMSNUC.

Referenced by: DMSDBD, DMSDBG, DMSITE.

DEVSECT

Assembled as part of DMSNUC.

Referenced by: DMSTIO, DMSTPE

DEVTAB

Assembled as part of DMSNUC.

Referenced by: DMSASN, DMSDBD, DMSEDI,
DMSDX, DMSINI, DMSLLU, DMSSVT

DIOSECT

Assembled as part of DMSNUC.

Referenced by: DMSACM, DMSDIO, DMSFNS, DMSITI

DMSCCB

Built by: N/A

Released by: N/A

Referenced by: DMSXCP

DOSSECT

Built by: DMSDLB

Released by: DMSDLB, DMSABN

Referenced by: DMSAMS, DMSBOP, DMSCLS, DMSDLB, DMSDLK, DMSDSV, DMSOPL, DMSQRY, DMSRRV, DMSSRV, DMSSVT, DMSVIP, DMSXCP

EDCB

Built by: DMSEDX

Released by: DMSEDI

Referenced by: DMSEDC, DMSEDI, DMSEDX, DMSGIO, DMSSCR

ERDSECT

Assembled as part of DMSNUC.

Referenced by: DMSERR

EXTSECT

Assembled as part of DMSNUC.

Referenced by: DMSINS, DMSINT, DMSIOW, DMSITE, DMSQRY, DMSSET, DMSSTG, DMSSVN, DMSSVT

EXTUAREA

Assembled as part of DMSNUC.

Released by: N/A

No CMS references.

FCBSECT

Built by: DMSFLD

Released by: DMSFLD, DMSABN

Referenced by: DMSALU, DMSARN, DMSARX, DMSASM, DMSDSL, DMSFCH, DMSFLD, DMSLDS, DMSMVE, DMSQRY, DMSROS, DMSSAB, DMSSBD, DMSSBS, DMSSCT, DMSSEB, DMSSOP, DMSSQS, DMSSVN, DMSSVT,

FCHTAB

Assembled as part of DMSNUC.

Referenced by: DMSDOS, DMSFET

FICL

Assembled as part of DMSNUC.

Referenced by: No CMS references. This block is used by the DOS supervisor.

FRDSECT

Assembled as part of DMSNUC.

Referenced by: DMSFRE, DMSSET

FSCBD

Built by: N/A

Released by: N/A

Referenced by: DMSBRD, DMSDLK, DMSIFC, DMSZAP, and user programs that access the CMS file system

FSTD

Built by: N/A

Released by: N/A

Referenced by: DMSCPYP, DMSDEX, DMSEX, DMSFNS, DMSGND, DMSNCP, DMSSOP, DMSTPE

FSTSECT

Built by: DMSACF

Released by: DMSALU

Referenced by: DMSACF, DMSAMS, DMSARN, DMSARX, DMSASM, DMSBOP, DMSBRD, DMSBWR, DMSCPY, DMSDLK, DMSDSK, DMSDSL, DMSERS, DMSFNS, DMSGND, DMSIFC, DMSLAF, DMSLBM, DMSLKD, DMSMVE, DMSRNM, DMSSTT, DMSTPE, DMSUPD, DMSXCP, DMSZAP

FVSECT

Assembled as part of DMSNUC.

Referenced by: DMSABN, DMSACC, DMSACF, DMSACM, DMSALU, DMSAUD, DMSBRD, DMSBTB, DMSBTP, DMSBWR, DMSCIT, DMSCRD, DMSCWR, DMSCWT, DMSDIO, DMSDOS, DMSDSK, DMSERS, DMSFNS, DMSINT, DMSITE, DMSITI, DMSITP, DMSITS, DMSLAD, DMSLFS, DMSMOD, DMSPNT, DMSQRY, DMSRNM, DMSSLN, DMSSOP, DMSSTT, DMSTPE, DMSTQQ

IHADECB

Built by: N/A

Released by: N/A

Referenced by: DMSSBD, DMSSBS, DMSSCT, DMSSSEB, DMSSVT

IOSECT

Assembled as part of DMSNUC.

Referenced by: DMSABN, DMSHDI, DMSINT, DMSITI

KEYSECT

Built by: DMSSVT

Released by: DMSSVT

Referenced by: DMSBBD, DMSSVT

LDRST

Built by: DMSLDR

Released by: DMSLDR

Referenced by: DMSLDR, DMSLGT, DMSLIB, DMSLIO, DMSLSB, DMSOLD

LUBPR

Assembled as part of DMSNUC

Referenced by: DMSDLK, DMSDSV

LUBTAB

Assembled as part of DMSNUC.

Referenced by: DMSAMS, DMSBOP, DMSCLS, DMSDLB, DMSFCH, DMSLLU, DMSOPL, DMSPRV, DMSRRV, DMSSET, DMSRRV, DMSXCP

NICL

Assembled as part of DMSNUC.

Referenced by: DMSBOP, DMSCLS, DMSDLB, DMSLLU, DMSXCP

NUCON

Assembled as part of DMSNUC.

Referenced by: DMSABN, DMSACC, DMSACF, DMSACM, DMSALU, DMSAMS, DMSARE, DMSARN, DMSARX, DMSASM, DMSASN, DMSAUD, DMSBAB, DMSBOP, DMSBRD, DMSBTB, DMSBTP, DMSBWR, DMSCAT, DMSCIO, DMSCIT, DMSCLS, DMSCMP, DMSCPF, DMSCPY, DMSCRD, DMSCWR, DMSCWT, DMSDBD, DMSDBG, DMSDIO, DMSDLB, DMSDLK, DMSDMP, DMSDOS, DMSDSK, DMSDSL, DMSDSV, DMSEDI, DMSIDX, DMSERR, DMSERS, DMSEXEC, DMSEXT, DMSFCH, DMSFET, DMSFLD, DMSFNS, DMSFOR, DMSPRE, DMSGIO, DMSGLB, DMSGND, DMSHDI, DMSHDS, DMSIFC, DMSINA, DMSINI, DMSINM, DMSINS, DMSINT, DMSIOW, DMSITE, DMSITI, DMSITP, DMSITS, DMSLAD, DMSLAF, DMSLBM, DMSLBT, DMSLDR, DMSLDS, DMSLFS, DMSLGT, DMSLIB, DMSLIO, DMSLKD, DMSLLU, DMSLOA, DMSLSB, DMSLST, DMSLSY, DMSMDP, DMSMOD, DMSMVE, DMSNCP, DMSOLD, DMSOPL, DMSOPT, DMSOR1, DMSOVR, DMSOVS, DMSPIO, DMSPNT, DMSPT, DMSPRV, DMSPPUN, DMSQRY, DMSRDC, DMSRNE, DMSRNM, DMSROS, DMSRRV, DMSSAB, DMSSBS, DMSSCN, DMSSCT, DMSSSEB, DMSSSET, DMSSLN, DMSSMN, DMSSOP, DMSSQS, DMSSRT, DMSSRV, DMSSSK, DMSSSTG, DMSSSTT, DMSSVN, DMSSVT, DMSSYN, DMSTIO, DMSTPD, DMSTPE, DMSTQQ, DMSTYP, DMSUPD, DMSVIP, DMSVSR, DMSXCP, DMSZAP

OPSECT

Assembled as part of DMSNUC.

Referenced by: DMSABN, DMSARX, DMSASM, DMSCPY, DMSCRD, DMSCWR, DMSCWT, DMSDBG, DMSEXEC, DMSEXT, DMSINS, DMSINT, DMSROS, DMSSBD, DMSSBS, DMSSCT, DMSSSEB, DMSSOP, DMSSQS, DMSSVN, DMSSVT

OSFST

Built by: DMSROS

Released by: DMSALU

Referenced by: DMSABN, DMSALU, DMSBOP, DMSDLK, DMSFCH, DMSMVE, DMSROS, DMSRRV, DMSSOP, DMSSRV, DMSSTT

OVSECT

Built by: N/A

Released by: N/A

Referenced by: DMSITS, DMSOVR

PCTAB

Assembled as part of DMSNUC.

Referenced by: DMSBAB, DMSDOS, DMSITP

PDSSECT

Built by: DMSSVT

Released by: DMSSVT

Referenced by: DMSSTG, DMSSVT

PGMSECT

Assembled as part of DMSNUC.

Referenced by: DMSITP, DMSSAB, DMSSLN, DMSSTG, DMSSVT

PIBADR

Assembled as part of DMSNUC.

Referenced by: DMSBAB, DMSDOS, DMSITP

PIB2TAB

Assembled as part of DMSNUC.

Referenced by: DMSBAB, DMSDOS, DMSVSR

PUBADR

Assembled as part of DMSNUC.

Referenced by: DMSBOP, DMSCLS, DMSDLK, DMSDSV, DMSLLU, DMSPRV, DMSXCP

PUBOWNER

Assembled as part of DMSNUC

Referenced by: DMSBOP, DMSCLS, DMSDLK, DMSLLU, DMSXCP

SSAVE

Built by: DMSITS

Released by: DMSITS

Referenced by: DMSABN, DMSACC, DMSBAB, DMSDBG, DMSDLB, DMSDOS, DMSERR, DMSFLD, DMSFRE, DMSIFC, DMSITP, DMSITS, DMSLDR, DMSOVS, DMSSAB, DMSSLN, DMSSMN, DMSSOP, DMSSTG, DMSSVN, DMSSVT, DMSVIP, DMSXCP

SUBSECT

Assembled as part of DMSNUC.

Referenced By: DMSABN, DMSINM, DMSINT

SVCSECT

Assembled as part of DMSNUC.

Referenced by: DMSCIT, DMSFRE, DMSHDS, DMSINT, DMSITE, DMSITS, DMSLAD, DMSLFS, DMSOVR, DMSOVS, DMSSLN

SVEARA

Assembled as part of DMSNUC.

Referenced by: DMSBAB, DMSDOS, DMSITP

SYSKOM

Assembled as part of DMSNUC.

Referenced by: DMSBAB, DMSBOP, DMSDOS, DMSFET, DMSITP, DMSQRY, DMSSTG, DMSSYN

SYSNAMES

Assembled as part of DMSNUC.

Referenced by: DMSAMS, DMSBOP, DMSBPT,
DMSDOS, DMSEDY, DMSEXC, DMSINS, DMSINT,
DMSITS, DMSQRY, DMSSET, DMSVIB, DMSVSR

USAVE

Built by: N/A

Released by: N/A

Referenced by: DMSITS

TSOBLKS

Assembled as part of DMSNUC.

Referenced by: DMSSET

USERSECT

Assembled as part of DMSNUC.

No CMS references.

RSCS CONTROL BLOCK REFERENCES

ASYNE

Built by: DMTASY
Released by: DMTASY, DMTASK
Referenced by: DMTASY, DMTEXT, DMTIOM,
DMTSIG

GIVEE

Built by: DMTGIV
Released by: DMTAKE, DMTASK
Referenced by: DMTAKE, DMTASK, DMTGIV

BUFDSECT

Built by: DMTSML
Released by: DMTSML
Referenced by: DMTSML

IOE

Built by: DMTIOM
Released by: DMTIOM
Referenced by: DMTASK, DMTIOM, DMTREX

COMDSECT

Built by: DMTCOM
Released by: N/A
Referenced by: DMTAXS, DMTCMX, DMTMGX,
DMTNPT, DMTREX, DMTSML

IOTABLE

Built by: DMTIOM, DMTCRE, DMTNPT,
DMTREX, DMTSML
Released by: DMTNPT, DMTSML
Referenced by: DMTAXS, DMTCMX, DMTCRE,
DMTINI, DMTIOM, DMTREX, DMTSML

DEVTABLE

Built by: DMTNPT
Released by: DMTNPT
Referenced by: DMTNPT

LINKTABL

Assembled into DMTSYS at system
generation; also built by DMTCMX.
Released by: DMTCMX
Referenced by: DMTASY, DMTAXS, DMTCMX,
DMTCOM, DMTCRE, DMTEXT, DMTLAX, DMTMGX,
DMTNPT, DMTREX, DMTSML

FREEE

Built by: DMTQRO
Released by: DMTQRO
Referenced by: DMTASK, DMTINI, DMTQRO

REQBLOCK

Built by: DMTNPT
Released by: DMTNPT
Referenced by: DMTNPT

GIVE

Built by: DMTSML, DMTNPT, DMTAXS, DMTREX
Released by: N/A
Referenced by: DMTSML, DMTNPT, DMTAXS,
DMTREX

ROUTE

Assembled in DMTSYS

Released by:

Referenced by: DMTAXS

TAKE

Built by: DMTSML, DMTNPT, DMTAXS, DMTREX

Released by: N/A

Referenced by: DMTSML, DMTNPT, DMTAXS, DMTREX

SVECTORS

Assembled into DMTVEC at system generation; resides in the RSCS nucleus.

Referenced by: DMTAKE, DMTASK, DMTASY, DMTAXS, DMTCMX, DMTCOM, DMTCRE, DMTDSP, DMTEXT, DMTGIV, DMTINI, DMTIOM, DMTLAX, DMTMGX, DMTNPT, DMTQRQ, DMTREX, DMTSIG, DMTSML, DMTSTO, DMTSVC, DMTWAT

TANKDSEC

Built by: DMTSML

Released by: DMTSML

Referenced by: DMTSML

TAG

Built by: DMTAXS

Released by: DMTAXS

Referenced by: DMTAXS, DMTCMX, DMTNPT, DMTSML

TAREA

Assembled into each task module.

Released by: DMTASK

Referenced by: DMTAKE, DMTASK, DMTASY, DMTCOM, DMTCRE, DMTDSP, DMTEXT, DMTGIV, DMTIOM, DMTREX, DMTSIG, DMTSTO, DMTSVC

TAGAREA

Built by: DMTAXS

Released by: N/A

Referenced by: DMTAXS

TASKE

Built by: DMTASK

Released by: DMTASK

Referenced by: DMTAKE, DMTASK, DMTASY, DMTAXS, DMTCOM, DMTDSP, DMTEXT, DMTGIV, DMTINI, DMTIOM, DMTNPT, DMTPST, DMTREX, DMTSIG, DMTSML, DMTSTO, DMTSVC, DMTWAT

TCTDSECT

Built by: DMTSML

Released by: DMTSML

Referenced by: DMTSML

Aug. 1, 1979