

z/OS



# JES2 Data Areas, Volume 1 (\$ALINDEX - \$EVT)



z/OS



# JES2 Data Areas, Volume 1 (\$ALINDEX - \$EVT)

**Note**

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 361.

**Third Edition, September 2002**

This is a major revision of GA22-7528-01.

This edition applies to Version 1 Release 4 of z/OS (5694-A01), and Version 1, Release 4 of z/OS.e (5655-G52), and to all subsequent releases and modifications until otherwise indicated in new editions.

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## About This Book

This book provides graphic presentations of many data areas used by the MVS operating system and by application programs. This book provides the data areas that:

- Are used by two or more components
- Are programming interfaces
- Are needed for debugging or diagnosis

This book supports z/OS (5694-A01) and z/OS.e (5655-G52).

For the latest information updates that have been provided in PTF cover letters and Documentation APARS for z/OS and z/OS.e, see the online document at:

<http://www.s390.ibm.com:80/bookmgr-cgi/bookmgr.cmd/B00KS/ZIDOCMST/CCONTENTS>

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## Who Should Use This Book

This book is for system programmers who diagnose and debug operating system and programming problems. It provides information for debugging installation-provided programs or diagnosing IBM-provided programs. The user of this publication should have a working knowledge of the operating system.

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## How To Use This Book

Data areas are sequenced alphanumerically by data area acronym. Each data area has up to three sections:

- Header
- Data area map
- Cross-reference, if the data area map is long enough

There are three volumes of *Data Areas*. The following list shows the range of data areas included in each volume:

<i>z/OS JES2 Data Areas, Vol 1 \$ALINDEX-\$EVT</i>	GA22-7528
<i>z/OS JES2 Data Areas, Vol 2 \$FCLWORK-\$OUTWORK</i>	GA22-7529
<i>z/OS JES2 Data Areas, Vol 3 \$PADDR-\$XRQ</i>	GA22-7530

## The Header

The header includes some or all of the following:

<b>Common Name:</b>	The descriptive name of the data area.
<b>Macro ID:</b>	The name of the mapping macro for the data area. Mapping macros can be issued in programs to generate a copy of the data area.
<b>DSECT Name:</b>	Name of the dummy control section (DSECT) created by the mapping macro.
<b>Owning Component:</b>	Component name and component identifier in parentheses.
<b>Eye-Catcher ID:</b>	Character string identifier of the eye-catcher (sometimes called the <b>control block id</b> ) within the mapping macro. The offset and length of the eye-catcher are also included.
<b>Storage Attributes:</b>	The storage attributes of the data area, including the following: <ul style="list-style-type: none"><li><b>Main Storage:</b> Central storage attributes of the data area.</li><li><b>Virtual Storage:</b> Virtual storage attributes of the data area.</li><li><b>Auxiliary Storage:</b> Spool storage attributes of the data area.</li><li><b>Subpool and Key:</b> Subpool is the area of virtual storage that contains the data area. Key is the storage protect key for the storage represented by the data area.</li></ul>
<b>Size:</b>	The size of the data area in decimal bytes.
<b>Created by:</b>	Module, macro, or component whose use creates the data area.
<b>Pointed to by:</b>	Registers or data area fields that contain the address of the data area.
<b>Serialization:</b>	Method used to ensure that one user does not update a data area that is being updated or used by another user. The most common methods used for serialization are: <ul style="list-style-type: none"><li>• Lock or locks</li><li>• ENQ and DEQ macros</li><li>• Compare and Swap (CS) instruction</li><li>• Disablement, which is disabling interruptions by setting bits in the program status word (PSW) of the program using the data area</li></ul>
<b>Function:</b>	Brief description of the use of the data area.

## Data Area Map

The data area is described field by field. These field descriptions are taken directly from the system code.

The following is an example of the field descriptions for the ANYAREA data area:

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE	384	ANYAREA	
0	(0)	CHARACTER		ANYBEGIN	BEGINNING OF ANYAREA
0	(0)	CHARACTER	4	ANYACRO	ACRONYM IN EBCDIC -ANY-
4	(4)	ADDRESS	4	ANYADDR	ADDRESS OF NEXT ANYAREA ON QUEUE

For each field in the data area, the data area map provides the following information:

**Offsets** The address of the field, shown in both decimal (DEC) and hexadecimal (HEX in parentheses), relative to the beginning of the data area.

**Type** The kind of program data defined for this field, as follows:

Type	Description
ADDRESS	address constant
BITSTRING	Bitstring constant
CHARACTER	Character value
FIXED	Arithmetic signed or unsigned value
DBL WORD	Double word boundary
FIXED	Arithmetic signed or unsigned value
HEX	Hexadecimal value
SIGNED	Arithmetic signed value
STRUCTURE	Level 1 control block name
UNSIGNED	Unsigned value

**Len** Size of the field in decimal bytes.

**Name (Dim)** The name of the field, bit, or mask.

Bit or mask names are preceded by a description of bit position and value, as follows:

1... ....	Refers to bit 0.
.... ..11	Refers to bits 6 and 7.
...1 ....	Refers to bit 3.
11.. 1111	Refers to bits 0, 1, 4, 5, 6, and 7.

**Description** A description of the purpose or meaning of the field, bit, or mask.

## Cross Reference

For each data area with more than 25 fields, Cross Reference shows the following:

<b>Name</b>	The name of the field, bit, or mask.
<b>Hex Offset</b>	The hexadecimal offset of the field into the data area. For bits, the hexadecimal offset of the field containing the bit.
<b>Hex Value</b>	Hexadecimal values are shown only for bits. The hexadecimal value shown implies the position of the bit in the field containing the bit.

Bit ANYBIT in the following illustrations shows how to use the hexadecimal value. In the example, cross reference for the ANYBIT bit looks like this:

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
TCBACTIV	F0	80

In the map of the data area, the ANYBIT bit appears like this:

240	(F0)	FIXED	4	ANYWORD	DISPATCHER INTERSECT CONTROL WORD
240	(F0)	BITSTRING	1	ANYBYTE	FLAG BYTE (MDC323)
		1... ..		ANYBIT	"X'80'" BIT ON MEANS THIS . . . .

X'F0' is the offset of field ANYWORD into the data area. ANYWORD is a 4-byte field, which contains a 1-byte field named ANYBYTE. Both ANYWORD and ANYBYTE have the same offset. The first bit in both fields is named ANYBIT. Ignoring the other bits in the field ANYBYTE, if the ANYBIT bit is on, the value of field ANYBYTE would be 1000 0000, which is equivalent to X'80'. This value (X'80') is shown both in the Description in the data area map and in the column of the cross reference.

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## Where to find more information

For complete titles and order numbers of the books for all products that are part of z/OS, see *z/OS Information Roadmap*.

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## Summary of changes

### **Summary of changes for GA22-7528-02 z/OS Version 1 Release 4**

The document contains information previously presented in *z/OS JES2 Data Areas*, GA22-7528-01, which supports z/OS Version 1 Release 2.

#### **New information**

Information is added to indicate this document supports z/OS.e.

The following data areas have been added:

- \$DTEEOM
- \$EOMWORK

This document contains terminology, maintenance, and editorial changes.

Starting with z/OS V1R2, you may notice changes in the style and structure of some content in this book — for example, headings that use uppercase for the first letter of initial words only, and procedures that have a different look and format. The changes are ongoing improvements to the consistency and retrievability of information in our books.

### **Summary of changes for GA22-7528-01 z/OS Version 1 Release 2**

The document contains information previously presented in GA22-7528-00, which supports z/OS Version 1 Release 1.

This document contains terminology, maintenance, and editorial changes.

### **Summary of changes for GA22-7528-00 z/OS Version 1 Release 1**

This document contains information also presented in *OS/390 JES2 Data Areas*.



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# JES2 Data Areas - Volume 1 (\$ALINDEX-\$EVT)





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## **\$ALINDEX Programming Interface information**

Programming Interface information

**\$ALINDEX**

End of Programming Interface information

## \$ALINDEX Heading Information

**Common Name:** ALET index table  
**Macro ID:** \$ALINDEX  
**DSECT Name:** ALINDEX  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** ALIX  
 Offset: ALIID-ALINDEX  
 Length: L'ALIID

**Storage Attributes:** Subpool: 229  
 Key: 1  
 Residency: Extended private in any address space using JES2 services. Virtual and real storage can be anywhere.

**Size:** See ALILEN  
**Created by:** \$ALESERV routine in HASCDSS  
**Pointed to by:** HXBALIDX field of the HASXB data area  
**Serialization:** Compare and Swap logic will be used to insert an ALET into the table for the pre-defined ALETs.

**Function:** This table is used to index into the JES2 maintained ALETs. It contains data space names and the ALET for this address space to access a space. Pre-defined types are listed first. User defined types are listed later. This table is built and maintained by the \$ALESERV service.

## \$ALINDEX Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ALINDEX	, Cell Pool Index Table
0	(0)	CHARACTER	4	ALIID	ALINDEX Identifier
4	(4)	ADDRESS	1	ALIVRSN	ALINDEX Version
4	(4)	X'1'	0	ALIVNUM	"1" Version number
5	(5)	BITSTRING	3		Reserved
8	(8)	DBL WORD	8	ALISTART (0)	Start of pre-defined ALETs
Comment					
Mapping of each ALET entry					
End of Comment					
8	(8)	X'0'	0	ALIENAME	"0,8,C'C" The name of the ALET
8	(8)	X'8'	0	ALIEALET	"8,4,C'A" The ALET itself
8	(8)	X'C'	0	ALIEFLAG	"12,1,C'B" ALET flag byte
		1... ..		ALIEFCOM	"B'10000000" ALET for SCOPE=COMMON data space
Comment					
EQU 13,3 Reserved					
End of Comment					
8	(8)	X'10'	0	ALIELEN	"16" Length of an entry
8	(8)	CHARACTER	8	ALISAPID	SAPID data space
24	(18)	CHARACTER	8	ALIIRDS	Internal reader data space
40	(28)	CHARACTER	8	ALICKVR	Checkpoint versions data space
56	(38)	CHARACTER	8	ALIPSO	Process Sysout Blocks
72	(48)	CHARACTER	8	ALISTAC	Status/cancel blocks
88	(58)	CHARACTER	8	ALITJEV	Thread JOE Exclusion Vec.
88	(58)	X'60'	0	ALISTEND	**ALISTART" Size of the pre-defined ALETs

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
88	(58)	X'6'	0	ALISTNUM	"ALISTEND/ALIELEN" Number of pre-defined ALETs
88	(58)	X'68'	0	ALISTD	**"-ALINDEX" Size of all pre-defined ALETs
104	(68)	SIGNED	4	ALIWSTRT (0)	Start of dynamic ALETs
104	(68)	BITSTRING	0	ALIWORK (0)	Dynamic ALET area
104	(68)	X'F90'	0	ALIWLEN	**"-ALIWSTRT" Size of the dynamic ALET area
104	(68)	X'FF'	0	ALINUMEN	"(*-ALISTART)/ALIELEN" Total number of entries
104	(68)	X'1000'	0	ALILEN	"4096" Size of the ALINDEX table

**\$ALINDEX Cross Reference**

Name	Hex Offset	Hex Value
ALICKVR	28	C3D2E5D9
ALIEALET	8	8
ALIEFCOM	8	80
ALIEFLAG	8	C
ALIELEN	8	10
ALIENAME	8	0
ALIID	0	C1D3C9E7
ALIIRDS	18	C9D9C4E2
ALILEN	68	1000
ALINDEX	0	
ALINUMEN	68	FF
ALIPSO	38	D7E2D640
ALISAPID	8	E2C1D7C9
ALISTAC	48	E2E3C1C3
ALISTART	8	
ALISTD	58	68
ALISTEND	58	60
ALISTNUM	58	6
ALITJEV	58	E3D1C5E5
ALIVNUM	4	1
ALIVRSN	4	
ALIWLEN	68	F90
ALIWORK	68	
ALIWSTRT	68	



---

## \$APT Programming Interface information

Programming Interface information

\$APT

End of Programming Interface information

## \$APT Heading Information

**Common Name:** NJE/SNA Application Table  
**Macro ID:** \$APT  
**DSECT Name:** APT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** APT  
 Offset: APTID  
 Length: 4  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: VIRTUAL - anywhere REAL - anywhere  
**Size:** See APTLEN  
**Created by:** APPLDYN service in HASPSNA  
**Pointed to by:** \$APPLTBL field of the HCT data area  
 APTCHAIN field of the APT data area  
**Serialization:** JES2 main task  
**Function:** An APT describes an NJE/SNA application. The APPLIDs defined in APTs match APPLIDs defined to VTAM.

## \$APT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	APT	SNA/NJE APPLICATION DSECT
0	(0)	CHARACTER	4	APTID	CONTROL BLOCK IDENTIFIER
0	(0)	X'1'	0	APTVRNUM	"1" CONTROL BLOCK VERSION EQUATE
4	(4)	ADDRESS	1	APTVRSN	CONTROL BLOCK VERSION
5	(5)	ADDRESS	3		RESERVED FOR FUTURE USE
8	(8)	CHARACTER	8	APTAPLID	APPLICATION ID FROM APPL STMT
16	(10)	CHARACTER	1	APTCTAB	COMPACTION TABLE NUMBER
17	(11)	BITSTRING	1	APTFLAGS	APPL TABLE FLAG BYTE
		1... ....		APTFINS	"B'10000000" APPL IN SESSION
		.1.. ....		APTFOPDP	"B'01000000" OPNDST ISSUED-AWAITING RESPONSE
		..1. ....		APTFOPSP	"B'00100000" OPNSEC ISSUED-AWAITING
		...1 ....		APTFDYN	"B'00010000" DYNAMICALLY ALLOCATED APT, NOT DUE TO APPL INIT STMT OR \$ADD
18	(12)	CHARACTER	1	APTFEAT	APPL FEATURES-RECV'D IN FM HDR
19	(13)	CHARACTER	1	APTRIDFM	RID FORMATS-RECV'D IN FM HEADER
20	(14)	SIGNED	2	APTNODE	NODE NUMBER WHERE APPL EXISTS
22	(16)	SIGNED	2	APTREST	APPLICATION RESISTANCE
24	(18)	ADDRESS	4	APTCHAIN	ADDR OF NEXT APT
28	(1C)	CHARACTER	8	APTLMODE	VTAM LOGMODE
36	(24)	SIGNED	2	APTLINE	Dedicated line number
38	(26)	SIGNED	2	APTLOGN	LOGON DCT NUMBER
38	(26)	X'28'	0	APTLEN	"*-APT" LENGTH OF APT

**\$APT Cross Reference**

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
APT	0	
APTAPLID	8	40404040
APTCHAIN	18	
APTCTAB	10	
APTFDYN	11	10
APTFEAT	12	
APTFINS	11	80
APTFFLAGS	11	0
APTFOPDP	11	40
APTFOPSP	11	20
APTID	0	
APTLIN	26	28
APTLIN	24	
APTLMODE	1C	
APTLOGN	26	
APTNODE	14	0
APTREST	16	
APTRIDFM	13	
APTVRNUM	0	1
APTVRSN	4	

## \$APT Cross Reference



## \$ARMG Heading Information

**Common Name:** JES2 ARM support JESXCF message  
**Macro ID:** \$ARMG  
**DSECT Name:** ARMG  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'ARMG'  
 Offset: ARMGID-ARMG  
 Length: L'ARMG  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are anywhere in the private storage of the JES2 address space.  
**Size:** See ARMGSIZE  
**Created by:** HASPARM  
**Pointed to by:** N/A  
**Serialization:** None required  
**Function:** Represents a JESXCF message intended for the ARM support processor.

### \$ARMG Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ARMG	, JES2 ARM support JESXCF message
0	(0)	CHARACTER	4	ARMGID	Control block eyecatcher
4	(4)	SIGNED	4	ARMGLEN	Length of message
8	(8)	BITSTRING	1	ARMGTYPE	Message type
8	(8)	X'1'	0	ARMGDREG	"1" JES-initiated deregister
9	(9)	BITSTRING	1	ARMGVER	Version
9	(9)	X'1'	0	ARMGVERN	"1" Current version
10	(A)	BITSTRING	1	ARMGSMEM	Sending member number
11	(B)	BITSTRING	1	ARMGRSV1	Reserved for future use
12	(C)	CHARACTER	8	ARMGJTOK (0)	Job token
12	(C)	CHARACTER	4	ARMGJBNM	Job number
16	(10)	CHARACTER	4	ARMGJBKY	Job key
20	(14)	BITSTRING	4	ARMGRSV2	Reserved for future use
20	(14)	X'18'	0	ARMGSIZE	**"ARMG" Size of ARMG

### \$ARMG Cross Reference

Name	Hex Offset	Hex Value
ARMG	0	
ARMGDREG	8	1
ARMGID	0	
ARMGJBKY	10	
ARMGJBNM	C	
ARMGJTOK	C	
ARMGLEN	4	
ARMGRSV1	B	
ARMGRSV2	14	
ARMGSIZE	14	18
ARMGSMEM	A	
ARMGTYPE	8	
ARMGVER	9	
ARMGVERN	9	1



## \$ARMT Heading Information

**Common Name:** JES2 ARM support trace record  
**Macro ID:** \$ARMT  
**DSECT Name:** ARMT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** NONE  
**Storage Attributes:** Residency: Resides in a JES2 trace buffer in ECSA.  
**Size:** See ARMTSIZE  
**Created by:** HASPARM  
**Pointed to by:** N/A  
**Serialization:** None required  
**Function:** Maps JES2 trace record 26.

### \$ARMT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ARMT	, JES2 ARM support trace record
Comment					
Contents of JQE fields at start of ARM request					
End of Comment					
0	(0)	BITSTRING	1	ARMTSFL1	JQEFLAG1
1	(1)	BITSTRING	1	ARMTSTYP	JQETYPE
2	(2)	BITSTRING	1	ARMTSBSY	JQEBUSY
3	(3)	BITSTRING	1	ARMTSDEV	JQEDEVID
4	(4)	BITSTRING	1	ARMTSAID	JQEARMID
Comment					
Contents of JQE fields at end of ARM request					
End of Comment					
5	(5)	BITSTRING	1	ARMTEFL1	JQEFLAG1
6	(6)	BITSTRING	1	ARMTEFL1	JQETYPE
7	(7)	BITSTRING	1	ARMTEBSY	JQEBUSY
8	(8)	BITSTRING	1	ARMTEDEV	JQEDEVID
9	(9)	BITSTRING	1	ARMTEAID	JQEARMID
Comment					
Miscellaneous fields					
End of Comment					
10	(A)	BITSTRING	1	ARMTEFLG1	ARMFLAG1 in \$ARMWORK
11	(B)	BITSTRING	1	ARMTRSV1	Reserved for future use
12	(C)	SIGNED	4	ARMTRC	MTRBRC
Comment					
SSPJ contents at end of request					
End of Comment					
16	(10)	BITSTRING	1	ARMTSSPJ	SSPJ
16	(10)	X'40'	0	ARMTSIZE	**"ARMT" Size of ARMT

## \$ARMT Cross Reference

### \$ARMT Cross Reference

Name	Hex Offset	Hex Value
ARMT	0	
ARMTEAID	9	
ARMTEBSY	7	
ARMTEDEV	8	
ARMTEFL1	5	
ARMTETYP	6	
ARMTFLG1	A	
ARMTRC	C	
ARMTRSV1	B	
ARMTSAID	4	
ARMTSBSY	2	
ARMTSDEV	3	
ARMTSFL1	0	
ARMTSIZE	10	40
ARMTSSPJ	10	
ARMTSTYP	1	

## \$ARMWORK Heading Information

**Common Name:** ARM support PCE work area  
**Macro ID:** \$ARMWORK  
**DSECT Name:** PCE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol ARMWKSIZ for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** \$ARMPCE field of the \$HCT data area  
 See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization

**Function:** The fields in this work area are used by the ARM support processor. \$ARMWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$ARMWORK are actually part of the PCE DSECT, but only maps the PCE with the value PCEARMID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

## \$ARMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	276		Warm PCE fields
516	(204)	ADDRESS	4	ARMMTRB	Active main task request block
520	(208)	ADDRESS	4	ARMSSPJ	SSOB extension from active request
524	(20C)	SIGNED	4	ARMLINES	LINES counter
528	(210)	SIGNED	4	ARMPUNCH	PUNCH counter
532	(214)	SIGNED	4	ARMXOUT	Records counter
536	(218)	SIGNED	4	ARMPAGES	PAGES counter
540	(21C)	SIGNED	4	ARMBYTES	BYTES counter
544	(220)	SIGNED	4	ARMDSKEY	DS key of last PDDB counted
548	(224)	ADDRESS	4	ARMSQD	SQD for \$SUBIT
552	(228)	ADDRESS	4	ARMQYJQE	JQE whose registration is currently being verified
556	(22C)	BITSTRING	4	ARMSAF	System affinity work area
560	(230)	BITSTRING	1	ARMFLAG1	Flags
		1... ....		ARM1ACTV	"B'10000000" \$ACTIVE done
		.1.. ....		ARM1JLOK	"B'01000000" Job lock acquired
		..1. ....		ARM1WARM	"B'00100000" Job was warm started
		...1 ....		ARM1INVQ	"B'00010000" Invalidate current registration query
561	(231)	BITSTRING	1	ARMFLAG2	Serialized flag byte UPDATE USING OIL/NIL
		1... ....		ARM2MAIL	"B'10000000" Messages have arrived
562	(232)	BITSTRING	2	ARMRSV1	Reserved for future use
564	(234)	SIGNED	4	ARMMSGA	XCF message address
568	(238)	SIGNED	4	ARMMSGL	XCF message length

# \$ARMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
572	(23C)	BITSTRING	8	ARMMSGTK	XCF message token
580	(244)	BITSTRING	64	ARMCTRAC	Current trace 26 record
644	(284)	BITSTRING	1	ARMPTRAC	Previous trace 26 record
Comment					
List form macros					
End of Comment					
712	(2C8)	DBL WORD	8	(0)	
712	(2C8)	BITSTRING	160	ARMLSTFM	List form macros
872	(368)	CHARACTER	1	ARMLSEND (0)	End of list form area
Comment					
MACDATE -93/05/10-<1>					
End of Comment					
712	(2C8)	SIGNED	2	M00M0828 (0)	IXZXIXMB-1
712	(2C8)	DBL WORD	8	ARMIXMB (0)	++ IXZXIXMB PARM LIST
712	(2C8)	BITSTRING	1	ARMIXMB_XVERSION	++ INPUT XVERSION
713	(2C9)	CHARACTER	6	ARMIXMB_XEYECATCH	++ CONSTANT XEYECATCH
719	(2CF)	CHARACTER	1	ARMIXMB_XRSV0001	++ RESERVED XRSV0001
720	(2D0)	CHARACTER	16	ARMIXMB_XMBOXNAME	++ XMBOXNAME
736	(2E0)	ADDRESS	4	ARMIXMB_XPOSTXIT	++ XPOSTXIT
740	(2E4)	ADDRESS	4	ARMIXMB_XPOSTDATA	++ XPOSTDATA
744	(2E8)	SIGNED	4	ARMIXMB_XPOSTALET	++ XPOSTALET
748	(2EC)	SIGNED	4	ARMIXMB_XGROUPTOKEN	++ XGROUPTOKEN
752	(2F0)	BITSTRING	1	ARMIXMB_XSYSEVENTS	++ FIELD_LABEL
		1... ..		ARMIXMB_XSYSEVENT_YES	"B'10000000" ++ XSYSEVENT.YES KEYWORD
		.1.. ..		ARMIXMB_XSYSEVENT_NO	"B'01000000" ++ XSYSEVENT.NO KEYWORD
752	(2F0)	X'29'	0	ARMIXMBL	"*-ARMIXMB" ++ LENGTH OF PLIST
Comment					
IXZXIXMB-1					
End of Comment					
754	(2F2)	ADDRESS	2	(0)	Ensure area fits
Comment					
MACDATE -93/05/10-<1>					
End of Comment					
712	(2C8)	SIGNED	2	M00M0830 (0)	IXZXIXRM-1
712	(2C8)	DBL WORD	8	ARMIXRM (0)	++ IXZXIXRM PARM LIST
712	(2C8)	BITSTRING	1	ARMIXRM_XVERSION	++ INPUT XVERSION
713	(2C9)	CHARACTER	6	ARMIXRM_XEYECATCH	++ CONSTANT XEYECATCH
719	(2CF)	CHARACTER	1	ARMIXRM_XRSV0001	++ RESERVED XRSV0001

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
720	(2D0)	CHARACTER	16	ARMIXRM_XMBOXNAME	++ XMBOXNAME
736	(2E0)	ADDRESS	4	ARMIXRM_XDATA	++ XDATA
740	(2E4)	SIGNED	4	ARMIXRM_XDATALEN	++ XDATALEN
744	(2E8)	BITSTRING	8	ARMIXRM_XMSGTOKEN	++ XMSGTOKEN
752	(2F0)	SIGNED	4	ARMIXRM_XGROUPTOKEN	++ XGROUPTOKEN
756	(2F4)	BITSTRING	1	ARMIXRM_XMSGFETCH	++ INPUT
		1... ....		ARMIXRM_XMSGFETCH_ALL	"B'10000000" ++ XMSGFETCH.ALL KEYWORD
		.1.. ....		ARMIXRM_XMSGFETCH_MESSAGES	"B'01000000" ++ XMSGFETCH.MESSAGES KEYWORD
		..1. ....		ARMIXRM_XMSGFETCH_SYSEVENT	"B'00100000" ++ XMSGFETCH.SYSEVENT KEYWORD
		...1 ....		ARMIXRM_XMSGFETCH_ACKS	"B'00010000" ++ XMSGFETCH.ACKS KEYWORD
757	(2F5)	BITSTRING	1	ARMIXRM_XKEYS	++ FIELD_LABEL
		1... ....		ARMIXRM_KEYUSED_MSGFETCH	"B'10000000" ++ KEYUSED.MSGFETCH KEYWORD
757	(2F5)	X'2E'	0	ARMIXRML	** -ARMIXRM" ++ LENGTH OF PLIST
Comment					
IXZXIXRM-1					
End of Comment					
758	(2F6)	ADDRESS	2	(0)	Ensure area fits
Comment					
MACDATE -93/06/10-<1>					
End of Comment					
712	(2C8)	SIGNED	2	M00M0831 (0)	IXZXIXAC-1
712	(2C8)	DBL WORD	8	ARMIXAC (0)	++ IXZXIXAC PARM LIST
712	(2C8)	BITSTRING	1	ARMIXAC_XVERSION	++ INPUT XVERSION
713	(2C9)	CHARACTER	6	ARMIXAC_XEYECATCH	++ CONSTANT XEYECATCH
719	(2CF)	BITSTRING	1	ARMIXAC_XSTB	++ INPUT
		1... ....		ARMIXAC_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
		.1.. ....		ARMIXAC_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
720	(2D0)	BITSTRING	8	ARMIXAC_XMSGTOKEN	++ XMSGTOKEN
728	(2D8)	ADDRESS	4	ARMIXAC_XDATA	++ XDATA
732	(2DC)	SIGNED	4	ARMIXAC_XDATALEN	++ XDATALEN
736	(2E0)	SIGNED	4	ARMIXAC_XUSERRC	++ XUSERRC
740	(2E4)	SIGNED	4	ARMIXAC_XGROUPTOKEN	++ XGROUPTOKEN
744	(2E8)	SIGNED	4	ARMIXAC_XSYSRC	++ XSYSRC
748	(2EC)	SIGNED	4	ARMIXAC_XSYSRSN	++ XSYSRSN
752	(2F0)	BITSTRING	1	ARMIXAC_XKEYS	

## \$ARMWORK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1... ....		ARMIXAC_KEYUSED_DATA	++ FIELD_LABEL "B'10000000" ++ KEYUSED.DATA KEYWORD
		.1.. ....		ARMIXAC_KEYUSED_DATALEN	"B'01000000" ++ KEYUSED.DATALEN KEYWORD
		..1. ....		ARMIXAC_KEYUSED_USERRC	"B'00100000" ++ KEYUSED.USERRC KEYWORD
		...1 ....		ARMIXAC_KEYUSED_SYSRC	"B'00010000" ++ KEYUSED.SYSRC KEYWORD
		.... 1..		ARMIXAC_KEYUSED_SYSRSN	"B'00001000" ++ KEYUSED.SYSRSN KEYWORD
753	(2F1)	BITSTRING	1	ARMIXAC_XMSGATTR	++ INPUT
		1... ....		ARMIXAC_XMSGATTR_J3CONNECT	"B'10000000" ++ XMSGATTR.J3CONNECT KEYWORD
		.1.. ....		ARMIXAC_XMSGATTR_EXPRESS	"B'01000000" ++ XMSGATTR.EXPRESS KEYWORD
753	(2F1)	X'2A'	0	ARMIXACL	** -ARMIXAC" ++ LENGTH OF PLIST
Comment					
IXZXIXAC-1					
End of Comment					
754	(2F2)	ADDRESS	2	(0)	Ensure area fits
872	(368)	X'278'	0	ARMPCEWS	** -PCEWORK" ARM PCE work area length

## \$ARMWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ARMBYTES	21C			2D0	
ARMCTRAC	244		ARMIXAC_XSTB	2CF	
ARMDSKEY	220		ARMIXAC_XSTB_NO		
ARMFLAG1	230			2CF	80
ARMFLAG2	231		ARMIXAC_XSTB_YES		
ARMIXAC	2C8			2CF	40
ARMIXAC_KEYUSED_DATA			ARMIXAC_XSYSRC		
	2F0	80		2E8	
ARMIXAC_KEYUSED_DATALEN			ARMIXAC_XSYSRSN		
	2F0	40		2EC	
ARMIXAC_KEYUSED_SYSRC			ARMIXAC_XUSERRC		
	2F0	10		2E0	
ARMIXAC_KEYUSED_SYSRSN			ARMIXAC_XVERSION		
	2F0	8		2C8	
ARMIXAC_KEYUSED_USERRC			ARMIXACL	2F1	2A
	2F0	20	ARMIXMB	2C8	
ARMIXAC_XDATA			ARMIXMB_XEYECATCH		
	2D8			2C9	
ARMIXAC_XDATALEN			ARMIXMB_XGROUPTOKEN		
	2DC			2EC	
ARMIXAC_XEYECATCH			ARMIXMB_XMBOXNAME		
	2C9			2D0	
ARMIXAC_XGROUPTOKEN			ARMIXMB_XPOSTALET		
	2E4			2E8	
ARMIXAC_XKEYS			ARMIXMB_XPOSTDATA		
	2F0			2E4	
ARMIXAC_XMSGATTR			ARMIXMB_XPOSTXIT		
	2F1			2E0	
ARMIXAC_XMSGATTR_EXPRESS			ARMIXMB_XRSV0001		
	2F1	40		2CF	
ARMIXAC_XMSGATTR_J3CONNECT			ARMIXMB_XSYSEVENT_NO		
	2F1	80		2F0	40
ARMIXAC_XMSGTOKEN			ARMIXMB_XSYSEVENT_YES		



Name	Hex Offset	Hex Value
	2F0	80
ARMIXMB_XSYSEVENTS	2F0	
ARMIXMB_XVERSION	2C8	
ARMIXMBL	2F0	29
ARMIXRM	2C8	
ARMIXRM_KEYUSED_MSGFETCH	2F5	80
ARMIXRM_XDATA	2E0	
ARMIXRM_XDATALEN	2E4	
ARMIXRM_XEYECATCH	2C9	
ARMIXRM_XGROUPTOKEN	2F0	
ARMIXRM_XKEYS	2F5	
ARMIXRM_XMBOXNAME	2D0	
ARMIXRM_XMSGFETCH	2F4	
ARMIXRM_XMSGFETCH_ACKS	2F4	10
ARMIXRM_XMSGFETCH_ALL	2F4	80
ARMIXRM_XMSGFETCH_MESSAGES	2F4	40
ARMIXRM_XMSGFETCH_SYSEVENT	2F4	20
ARMIXRM_XMSGTOKEN	2E8	
ARMIXRM_XRSV0001	2CF	
ARMIXRM_XVERSION	2C8	
ARMIXRML	2F5	2E
ARMLINES	20C	
ARMLSEND	368	
ARMLSTFM	2C8	
ARMMSGA	234	
ARMMSGL	238	
ARMMSGTK	23C	
ARMMTRB	204	
ARMPAGES	218	
ARMPCEWS	368	278
ARMPTRAC	284	
ARMPUNCH	210	
ARMQYJQE	228	
ARMRSV1	232	
ARMSAF	22C	
ARMSQD	224	
ARMSSPJ	208	
ARMXOUT	214	
ARM1ACTV	230	80
ARM1INVQ	230	10
ARM1JLOK	230	40
ARM1WARM	230	20
ARM2MAIL	231	80
M00M0828	2C8	
M00M0830	2C8	
M00M0831	2C8	
PCE	0	



## \$ASYWORK Heading Information

**Common Name:** JES2 Asynchronous I/O PCE Work Area  
**Macro ID:** \$ASYWORK  
**DSECT Name:** PCE (\$ASYWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol ASYPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** The \$ASYNPCE field of the \$HCT data area  
 See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization

**Function:** The fields in this area are used by the JES2 Asynchronous I/O Processor and by its support routines and exits. \$ASYWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$ASYWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEASYID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

## \$ASYWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	DBL WORD	8	(0)	Force double-word alignment
240	(F0)	X'0'	0	ASYPCEWS	"*-PCEWORK" Length of work area

## \$ASYWORK Map

## \$AUXCB Heading Information

**Common Name:** AUX address space control block  
**Macro ID:** \$AUXCB  
**DSECT Name:** AUXCB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** AUXC  
 Offset: AXBID  
 Length: L'AXBID

**Storage Attributes:** Subpool: 241  
 Key: 1  
 Residency: Virtual and real storage are anywhere (above or below 16M) in common storage (CSA).

**Size:** See AXBLEN

**Created by:** HASCSRAX

**Pointed to by:** CCTAUXCB field of the \$HCCT data area

**Serialization:** Only updated by HASCSRAX while running under the JES2 main task.

**Function:** This DSECT maps the data associated with the JES2 AUX address address space. It is used during JES2 initialization and termination processing to create and later delete the address space.

### \$AUXCB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	AUXCB	, Define DSECT
0	(0)	CHARACTER	4	AXBID	Eyecatcher
4	(4)	ADDRESS	1	AXBVER	Version
4	(4)	X'1'	0	AXBVERN	"1" Current version
5	(5)	BITSTRING	3		Reserved for future use
8	(8)	CHARACTER	8	AXBNAME	Address space name
16	(10)	BITSTRING	24	AXBODA	ASCRE output area (IHAASEO)
40	(28)	SIGNED	4	AXBECB	Main task wait ECB
44	(2C)	ADDRESS	4	AXBWORK	Address of working storage in the AUX address space.
48	(30)	DBL WORD	8	(0)	
48	(30)	X'30'	0	AXBLEN	**-"AUXCB" Length of AUXCB

### \$AUXCB Cross Reference

Name	Hex Offset	Hex Value
AUXCB	0	
AXBECB	28	
AXBID	0	C1E4E7C2
AXBLEN	30	30
AXBNAME	8	D1C5E2F2
AXBODA	10	
AXBWORK	2C	
AXBVER	4	
AXBVERN	4	1

## \$AUXCB Cross Reference

## \$BERT Heading Information

**Common Name:** HASP Block Extension Reuse Table  
**Macro ID:** \$BERT  
**DSECT Name:** BERT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: 0, 231, dataspace  
 Key: 1  
 Residency: Virtual storage is anywhere (below or above 16M) in the JES2 address space. Virtual storage for the APPLCOPY is in ECSA. Real storage is anywhere.  
**Size:** See BRTLEN  
**Created by:** JES2 initialization processing  
**Pointed to by:** \$BERTPTR field of the \$HCT data area  
**Serialization:** The JES2 Checkpoint data set lock (\$QSUSE).  
 The lock entry in the 1st \$BERT (BRTLOCK) is also used for serialization.  
**Function:** This control block maps the header and the entries in the BERT CTENT on the JES2 checkpoint. These entries are used as a pool of storage in the checkpoint by various services.

## \$BERT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BERT	, Block Extension Reuse Table
0	(0)	X'1'	0	BERTVERS	"1" BERT version number
0	(0)	BITSTRING	4	BRTWALLY (0)	Composite of TYPE and CB
0	(0)	BITSTRING	1	BRTTYPE	Control block type
0	(0)	X'0'	0	BRTINT	"\$DGBINT" Internal control block
0	(0)	X'1'	0	BRTJQE	"\$DGBJQE" JQE extension
0	(0)	X'2'	0	BRTCAT	"\$DGBCAT" Class attribute table
0	(0)	X'3'	0	BRTWSCQ	"\$DGBWSCQ" WLM service class queue
		1111 1111		BRTFREE	"X'FF" Free BERT
1	(1)	BITSTRING	3	BRTCB	Related control block index
4	(4)	BITSTRING	1	BRTSEQ	Sequence number
5	(5)	BITSTRING	3	BRTNEXT	Next BERT in CB chain
8	(8)	BITSTRING	2		Reserved for future use
8	(8)	X'A'	0	BRTPRELEN	**-"BERT" Length of BERT prefix
10	(A)	BITSTRING	54	BRTDATA	Data area for BERTIEs
10	(A)	X'40'	0	BRTLEN	**-"BERT" Total size of a BERT

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BERTIE	, BERT information element
0	(0)	BITSTRING	1	BRTIID	Section identifier
		1111 111.		BRTIICNT	"X'FE" Continued in next BERT
		1111 1111		BRTIEND	"X'FF" End of BERTIEs
1	(1)	BITSTRING	1	BRTILEN	Length of BERTIE data (does not include this prefix)
1	(1)	X'2'	0	BRTIPLLEN	**-"BERTIE" Prefix area length
2	(2)	BITSTRING	1	BRTIDATA (0)	Start of actual data

## \$BERT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BERTIO	, Type 0 BERTIE
0	(0)	BITSTRING	1	BRTLOCK	Lock byte (QSESIBSY value)
1	(1)	BITSTRING	1	BRT0FLG0	Type 0 flag byte
		1111 ....		BRT0USEQ	"B'11110000" Update sequence counter (4 bit count)
1	(1)	X'2'	0	BRTOLEN1	**-"BERTIO" Minimum type 0 BERTIE
2	(2)	BITSTRING	1	BRT0FLAG	General flags for chaining
3	(3)	BITSTRING	3	BRTONXT1	1st CB chain field
6	(6)	BITSTRING	3	BRTONXT2	2nd CB chain field
9	(9)	BITSTRING	1	BRT0KEY (0)	Search key
9	(9)	X'9'	0	BRTOLEN2	**-"BERTIO" Size with search key (plus key len)

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BRTMPREF	, BERT CTENT prefix area
0	(0)	BITSTRING	10	BRTPBERT	Start with a standard prefix
10	(A)	SIGNED	2	BRTPLEN	Size of BERT prefix
12	(C)	SIGNED	4	BRTPFREE	Index of 1st free BERT
16	(10)	SIGNED	4	BRTPFNUM	Number of free BERTs
20	(14)	SIGNED	4	BRTPMAP	BERT token for NAME to ID map
24	(18)	BITSTRING	1	BRTPMXTY	Max known BERT type
25	(19)	BITSTRING	3		Reserved for future use
28	(1C)	SIGNED	4	(2)	Reserved for future use

Comment

-----  
 BERT queue heads. There is one per entry even if they are not used. These must be in the same order as the ID number of control blocks.  
 -----

End of Comment

28	(1C)	X'0'	0	BRTPQHED	"0,4,C'F" Queue head part of entry
28	(1C)	X'4'	0	BRTPQHNM	"4,4,C'F" Number of elements on queue
28	(1C)	X'8'	0	BRTPQHDL	"8"
36	(24)	SIGNED	4	BRTPQHDS (0)	--+ Start of queue heads
36	(24)	SIGNED	4	BRTPJQE	First JQE BERT (not used)
40	(28)	SIGNED	4	BRTPJQEN	Number of JQEs (not used)
44	(2C)	SIGNED	4	BRTPCAT	First CAT BERT
48	(30)	SIGNED	4	BRTPCATN	Number of CATs defined
52	(34)	SIGNED	4	BRTPWSCQ	First WSCQ BERT
56	(38)	SIGNED	4	BRTPWSCN	--+ Number of WSCQs defined
56	(38)	X'3'	0	BRTPQHDN	"(*-BRTPQHDS)/BRTPQHDL" Number of queue heads
60	(3C)	BITSTRING	1		Reserved
60	(3C)	X'3'	0	BRTPQHMX	"(*-BRTPQHDS)/BRTPQHDL" Max queue heads
60	(3C)	X'40'	0	BRTPSIZE	**-"BRTMPREF" Size of prefix area

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BRTMAP	, BERTIE name to ID table
0	(0)	CHARACTER	8	BRTMNAME	Name of BERTIE (A value of all FF indicates end of table)
8	(8)	BITSTRING	1	BRTMTYPE	Control block type (see BRTTYPE for a list of valid values)
9	(9)	BITSTRING	1	BRTMID	ID assigned to this BERTIE name
10	(A)	BITSTRING	2		Reserved
12	(C)	SIGNED	4	(2)	Reserved for future use
12	(C)	X'14'	0	BRTMLEN	**-"BRTMAP" Length of map entry



**\$BERT Cross Reference**

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
BERT	0	
BERTIE	0	
BERTIO	0	
BERTVERS	0	1
BRTCAT	0	2
BRTCB	1	
BRTDATA	A	
BRTFREE	0	FF
BRTIDATA	2	
BRTIICNT	0	FE
BRTIID	0	
BRTIEND	0	FF
BRTILEN	1	
BRTINT	0	0
BRTIPLN	1	2
BRTJQE	0	1
BRTLEN	A	40
BRTMAP	0	
BRTMID	9	
BRTMLN	C	14
BRTMNAME	0	
BRTMTYPE	8	
BRTNEXT	5	
BRTPBERT	0	
BRTPCAT	2C	
BRTPCATN	30	
BRTPFNUM	10	
BRTPFREE	C	
BRTPJQE	24	
BRTPJQEN	28	
BRTPLEN	A	
BRTPMAP	14	
BRTPMXTY	18	
BRTPQHDL	1C	8
BRTPQHDN	38	3
BRTPQHDS	24	
BRTPQHED	1C	0
BRTPQHMX	3C	3
BRTPQHNM	1C	4
BRTPREF	0	
BRTPREN	8	A
BRTPSIZE	3C	40
BRTPWSCN	38	
BRTPWSCQ	34	
BRTSEQ	4	
BRTTYPE	0	
BRTWALLY	0	
BRTWSCQ	0	3
BRT0FLAG	2	
BRT0FLG0	1	
BRT0KEY	9	
BRT0LEN1	1	2
BRT0LEN2	9	9
BRT0LOCK	0	
BRT0NXT1	3	
BRT0NXT2	6	
BRT0USEQ	1	F0



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**\$BERTTAB Programming Interface information**

Programming Interface information

**\$BERTTAB**

End of Programming Interface information

## \$BERTTAB Heading Information

**Common Name:** BERT table entry  
**Macro ID:** \$BERTTAB  
**DSECT Name:** BRTT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: N/A  
 Key: N/A  
 Residency: These table entries are part of the HASJES20 load module and are located below 16M. Real storage can be anywhere.

**Size:** See BRTTELEN  
**Created by:** \$BERTTAB macro expansion in HASPTAB  
**Pointed to by:** MCTBRTTU field of the \$MCT data area  
 MCTBRTTH field of the \$MCT data area

**Serialization:** None required  
**Function:** This DSECT maps entries in the BERT table pairs which describe variable extensions to JES2 CKPTed control blocks.

## \$BERTTAB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BRTT	,
0	(0)	CHARACTER	8	BRTTNAME	Name of section (<KEY> if key entry)
8	(8)	BITSTRING	1	BRTTTYPE	Control block type
8	(8)	X'1'	0	BRTTJQE	"\$DGBJQE" JQE extension
8	(8)	X'2'	0	BRTTCAT	"\$DGBCAT" Class attribute table
8	(8)	X'3'	0	BRTTWSCQ	"\$DGBWSCQ" WLM service class queue
8	(8)	X'FF'	0	BRTTDYN	"\$DGBDYN" Dynamically defined type
9	(9)	BITSTRING	1	BRTTFLAG	General flag byte
		1... ....		BRTTUSER	"B'10000000" USER table entry (not user)
		.1.. ....		BRTTKEY	"B'01000000" This entry describes a flag
		..1. ....		BRTTOFFV	"B'00100000" The offset of this entry is dynamically generated
		...1 ....		BRTTOLAP	"B'00010000" This entry may overlap other entries in this CB
10	(A)	SIGNED	2	BRTTOFF	Offset of data area
12	(C)	BITSTRING	1	BRTTLEN	Length of section
13	(D)	BITSTRING	1	BRTTFILL	Fill character
14	(E)	BITSTRING	2		Reserved
16	(10)	CHARACTER	8	BRTTTNAM	CB type name
24	(18)	SIGNED	4	(0)	Align BRTT entry
24	(18)	X'18'	0	BRTTELEN	**"-BRTT" Length of BRTT entry DSECT

## \$BERTTAB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
BRTT	0		BRTTOLAP	9	10
BRTTCAT	8	2	BRTTTNAM	10	
BRTTDYN	8	FF	BRTTTYPE	8	
BRTTELEN	18	18	BRTTUSER	9	80
BRTTFILL	D		BRTTWSCQ	8	3
BRTTFLAG	9				
BRTTJQE	8	1			
BRTTKEY	9	40			
BRTTLEN	C				
BRTTNAME	0				
BRTTOFF	A				
BRTTOFFV	9	20			

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**\$BLDMSGL Programming Interface information**

Programming Interface information

**\$BLDMSGL**

End of Programming Interface information

### \$BLDMSG L Heading Information

**Common Name:** Build Message Parameter List  
**Macro ID:** \$BLDMSG L  
**DSECT Name:** BLD  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'BLD '  
 Offset: BLDID-BLD  
 Length: 4

**Storage Attributes:** Subpool: Subpool 1 for the \$BLDMSG MF=(I) case; Subpool is unknown if \$BLDMSG MF=(E,address) case.  
 Key: 1  
 Residency: JES2 address space. Virtual and Real are above or below the 16M line.

**Size:** See BLDSIZE  
**Created by:** \$BLDMSG macro  
**Pointed to by:** R1 when routine \$MSGSCAN is called  
**Serialization:** JES2 main task re-entrancy.  
**Function:** This control block contains all the information needed to invoke \$SCAN to create a message. It also has the information necessary to write the message lines created by \$SCAN as part of the "DISPRTN" operand of the \$SCAN macro.

### \$BLDMSG L Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BLD	HASP \$BLDMSG PARM LIST DSECT
0	(0)	CHARACTER	4	BLDID	EBCDIC CONTROL BLOCK ID, SET BY \$GETWORK VIA USE=BLD
4	(4)	BITSTRING	4	BLDCONID	Console id
8	(8)	ADDRESS	4	BLDCART	Address of the CART
12	(C)	ADDRESS	4	BLDJOBID	Pointer for given jobid
16	(10)	ADDRESS	4	BLDCBA	Control block address
20	(14)	ADDRESS	4	BLDISPR	Display routine address
24	(18)	ADDRESS	4	BLDADDR (6)	Work area definitions

Comment

WORK AREA DEFINITION IF BLD1WTOR IS ON

End of Comment

24	(18)	ADDRESS	4	BLDECB	ADDRESS OF ECB
28	(1C)	ADDRESS	4	BLDREPLY	ADDRESS OF REPLY AREA
32	(20)	ADDRESS	4	BLDLEN	LENGTH OF REPLY AREA
36	(24)	BITSTRING	8	BLDWORK (0)	Work area used by \$REPLY
36	(24)	SIGNED	4	BLDDOMID	MESSAGE ID USED IN DOM MACRO
40	(28)	SIGNED	4	BLDHUHDM	DOM ID FOR HUH MESSAGE
44	(2C)	ADDRESS	4	BLDREPV	Address of reply vector

Comment

WORK AREA DEFINITION IF BLD1WTO OR BLD1CMB IS ON

End of Comment

24	(18)	X'24'	0	BLDCNNCT	"BLDDOMID,4,C'F'" CONNECT ID FOR MULTI-LINE WTO
48	(30)	BITSTRING	2	BLDROUT	Route code for message
50	(32)	BITSTRING	2	BLDDDESC	Descriptor codes for msg
52	(34)	CHARACTER	4	BLDMSGID	MESSAGE ID
56	(38)	BITSTRING	1	BLDSEPAR	Separator character

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
57	(39)	BITSTRING 1... .... .1.. .... ..1. .... ...1 .... .... 1..	1	BLDFLAG1 BLD1WTO BLD1WTOR BLD1CMB BLD1WAIT BLD1JQE BLD1JID BLD1REPV BLD1GETW	Flag byte "B'10000000" BUILD WTO OR MLWTO MF=L "B'01000000" BUILD WTOR MF=L "B'00100000" BUILD CMB "B'00010000" \$WAIT IS ALLOWED "B'00001000" Prefix job id from JQE "B'00000100" Prefix job id from given id "B'00000010" Reply vector proc. required "B'00000001" This area obtained via \$GETWORK
58	(3A)	BITSTRING	1	BLDISPER	'DISPER' character
59	(3B)	BITSTRING 1... .... .1.. .... ..1. .... ...1 ....	1	BLDFLAG2 BLD2LOGO BLD2ROUT BLD2DESC BLD2LONG	Flag byte 2 "B'10000000" LOGONLY=YES is specified "B'01000000" Route codes are set "B'00100000" Descriptor codes are set "B'00010000" LONG=YES is specified
60	(3C)	BITSTRING	16		Reserved for future use
76	(4C)	ADDRESS	4	(0)	Ensure multiple of 4
76	(4C)	X'4C'	0	BLDSIZE	** -BLD"

**\$BLDMSG Cross Reference**

Name	Hex Offset	Hex Value
BLD	0	
BLDADDR	18	
BLDCART	8	
BLDCBA	10	
BLDCNNCT	18	24
BLDCONID	4	
BLDDDESC	32	
BLDDDOMID	24	
BLDECB	18	
BLDFLAG1	39	
BLDFLAG2	3B	
BLDHUHDM	28	
BLDID	0	
BLDISPER	3A	
BLDISPR	14	
BLDJOBID	C	
BLDLEN	20	
BLDMSGID	34	
BLDREPLY	1C	
BLDREPV	2C	
BLDROUT	30	
BLDSEPAR	38	
BLDSIZE	4C	4C
BLDWORK	24	
BLD1CMB	39	20
BLD1GETW	39	1
BLD1JID	39	4
BLD1JQE	39	8
BLD1REPV	39	2
BLD1WAIT	39	10
BLD1WTO	39	80
BLD1WTOR	39	40
BLD2DESC	3B	20
BLD2LOGO	3B	80
BLD2LONG	3B	10
BLD2ROUT	3B	40





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## \$BUFFER Programming Interface information

Programming Interface information

\$BUFFER

End of Programming Interface information

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## \$BUFFER Heading Information

**Common Name:** HASP Buffer  
**Macro ID:** \$BUFFER  
**DSECT Name:** BFPDSECT, SPBRECD  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'BUF '  
Offset: BFPID-BFPDSECT  
Length: 4

**Storage Attributes:** Subpool: BSC buffers are in subpool 6. VTAM buffers are in subpool 16. HASP buffers are in subpool 8. UBUF, PBUF, HBUF and GBUF buffers are in subpool 229. CB buffers in the JES2 main task environment are in subpool 7. CB buffers in the USER environment are in subpool 230. PAGE buffers are in subpool 14. PP buffers are in subpool 15.  
Key: BSC, VTAM, HASP, CB, HBUF, GBUF, PAGE and PP buffers are in key 1. UBUF buffers are in the key of the associated TCB. PBUF buffers are in key 5.  
Residency: Virtual and real storage for BSC, HASP, PAGE and PP buffers are below 16M in the private storage of the JES2 address space. Virtual and real storage for VTAM and CB (main task) buffers are anywhere (above or below 16M) in the private storage of the JES2 address space. Virtual and real storage for UBUF, PBUF, HBUF and GBUF buffers are above or below 16M in the address space of the application for which the I/O is being done. Virtual storage for CB buffers (USER environment) is anywhere (above or below 16M) except for CB buffers used for JCTs which must be below 16M. Real storage for CB buffers in the USER environment is anywhere.

**Size:** The size varies depending on the type of buffer.  
The size of BSC buffers is specified by the initialization statement TPDEF BELOWBUF= SIZE=.  
The size of VTAM buffers is specified by the initialization statement TPDEF EXTBUF= SIZE.  
PAGE, PBUF, UBUF, HBUF and GBUF buffers are 4096 bytes. The size of HASP and CB buffers is specified by the initialization statement SPOOLDEF BUFSIZE=.  
The following formula gives the size for PP buffers:  
-  $2X + (\text{BUFFER PREFIX AREA})$   
- WHERE  $X = \text{MAX} (\$NOPRCCW*8+\text{PCIESIZE}+\text{JOESIZE},$   
-  $\$NOPUCCW*8+\text{PCIESIZE}+\text{JOESIZE},$   
-  $(\$TCELSIZ*4-3)*4$

**Created by:** In environments other than the USER environment, the storage is obtained by the \$CPOOL services called during JES2 initialization, or by the \$GETBUF service. In the USER environment, storage is obtained via \$GETBUF.  
The control block is filled in by: bi-synch processing for BSC buffers, SNA processing for VTAM buffers, print/punch processing for PAGE and PP buffers, HASP Access Method (HAM) for PBUF, UBUF, HBUF and GBUF buffers, \$CBIO services for CB buffers, and various JES2 processors for HASP buffers.

**Pointed to by:**

BATBUF field of the \$BAT data area  
 BUFCHAIN field of the \$BUFFER data area  
 BUFCHEQ field of the \$BUFFER data area  
 DCTBUFAD field of the \$DCT data area  
 MDCTOBUF field of the \$DCT data area  
 RIDUBF field of the \$DCT data area  
 RIDPBF field of the \$DCT data area  
 DSSABUF field of the \$DSSCB data area  
 DSSNBUF field of the \$DSSCB data area  
 GCBMBUF field of the \$GCB data area  
 \$ASYNCQ field of the \$HCT data area  
 \$BSCCHEQ field of the \$HCT data area  
 \$MCONMSG field of the \$HCT data area  
 \$RPLCOMQ field of the \$HCT data area  
 \$XFRBEND field of the \$HCT data area  
 HFCTBUFS field of the \$HFCT data area  
 ICEINHD field of the \$ICE data area  
 ICEINTL field of the \$ICE data area  
 ICEOUTBF field of the \$ICE data area  
 ICEOUTHHD field of the \$ICE data area  
 ICEOUTTL field of the \$ICE data area  
 ICEBUFAD field of the \$ICE data area  
 JIBCPBUF field of the \$JIB data area  
 MLMRLPQ field of the \$MLMWORK data area  
 MLMBSCQ field of the \$MLMWORK data area  
 PCEBUFAD field of the \$PCE data area  
 PCIBUFAD field of the \$PCIE data area  
 PCTINQ field of the \$PCT data area  
 PCTVINQ field of the \$PCT data area  
 PCTSINQ field of the \$PCT data area  
 SDBUBF field of the \$SDB data area  
 SDBPBF field of the \$SDB data area  
 SDBCBF field of the \$SDB data area  
 SDBCBF1 field of the \$SDB data area  
 SDBGBF field of the \$SDB data area  
 SDBHBF field of the \$SDB data area  
 SJBSWBUF field of the \$SJB data area  
 Some pointers within control blocks in buffers  
 point to other control blocks in buffers  
 (for example, \$JCT and \$IOT).

**Serialization:**

Various fields in the processor work areas,  
 parameter lists and exit parameter lists (XPL).  
 Compare and swap logic is used to chain and dechain  
 buffers. Buffers are used in JES2 and application  
 tasks as well as in asynchronous I/O processing  
 (IRBs, SRBs, appendages). Implicit additional  
 serialization is provided by the SJB lock in the USER  
 environment and JES2 reentrancy techniques in the  
 JES2 main task environment.

## \$BUFFER Map

### Function:

Buffers are used to buffer data as part of the JES2 processing for spool data sets or devices. They are used to hold data, channel programs and parameter lists for interfacing with MVS IOS, VTAM and other I/O access methods.

There are multiple types of buffers mapped by \$BUFFER. Many types of buffers have control blocks associated with them that contain additional information required to use the buffer for I/O (for example, channel programs).

A HASP buffer is a local buffer used to read or write SYSIN or SYSOUT data.

A BSC buffer is a teleprocessing buffer used for BSC NJE and RJE.

A VTAM buffer is a teleprocessing buffer used for SNA NJE and RJE.

A PAGE buffer is a local 4096-byte buffer used for I/O to local non-impact printers supported directly by JES2. PAGE buffers are also used for BSAM spool offload I/O.

A PP buffer is a local print/punch buffer that contains an IOB and the CCWs required to do I/O from PAGE buffers to local non-impact printers.

A PROT buffer (PBUF) is a protected buffer used for spool I/O by the HASP Access Method (HAM).

An UNPROT buffer (UBUF) is an unprotected buffer used as a staging area for HAM. No I/O is actually done using this buffer. When a UBUF being used for output is full or input needs to be replenished, an associated PBUF is used.

A CB buffer is a control block buffer used by the \$CBIO service for I/O.

A HOLD buffer (HBUF) is an unprotected buffer which is used for GET/UPDATE by HAM. A GBUF is a protected HOLD buffer used for GET/UPDATE.

For additional information see \$GETBUF, \$CBIO and \$EXCP in "JES2 Customization".

## \$BUFFER Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BFPDSECT	START OF BUFFER PREFIX
0	(0)	CHARACTER	4	BFPID	BUFFER IDENTIFIER
4	(4)	SIGNED	4	BFPBAT	ADDRESS OF AUXILIARY BUFFER
4	(4)	X'4'	0	BFPBWEL	"BFPBAT,,C'A" Address of SWEL (TP buffers in process of signon only)
8	(8)	ADDRESS	4	BUFCHAIN	BUFFER CHAIN FIELD
12	(C)	BITSTRING	1	BUFTYPE	BUFFER TYPE
		.... ....		BUFLOCAL	"B'00000000" LOCAL BUFFER
Comment					
The BUFFIX and BUFMULT EQUs are the same as \$GTB1FIX and \$GTB1MUL EQUs in \$PARMLST					
End of Comment					
		1... ....		BUFFIX	"B'10000000" Page-fix request
		.1.. ....		BUFMULT	"B'01000000" Multiple buffer request

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1. ....		BUFIQB	"B'00100000" IOB in front of the buffer
		...1 ....		BUFRPL	"B'00010000" RPL IN FRONT OF BUFFER
		.... 1...		BUFDECB	"B'00001000" DECB IN FRONT OF BUFFER
		.... .111		BUFBPMT	"B'00000111" Buffer type (see below)
		.... ...1		BPMTBSC	"B'00000001" BSC buffer type
		.... ..1.		BPMTCB	"B'00000010" CB buffer type
		.... ...11		BPMTHASP	"B'00000011" HASP buffer type
		.... .1..		BPMPAGE	"B'00000100" PAGE buffer type
		.... .1.1		BPMTTP	"B'00000101" Print/Punch buffer type
		.... ..1.		BPMTVTAM	"B'00000110" VTAM buffer type
		.... .111		BPMTHAM	"B'00000111" HAM HDB buffer
		1111 1111		BPMTUSCB	"B'11111111" User environment CB buffer
12	(C)	X'21'	0	BUFBSC	"BUFLOCAL+BUFIQB+BPMTBSC"
12	(C)	X'22'	0	BUFCB	"BUFLOCAL+BUFIQB+BPMTCB"
12	(C)	X'23'	0	BUFHASP	"BUFLOCAL+BUFIQB+BPMTHASP"
12	(C)	X'16'	0	BUFVTAM	"BUFRPL+BPMTVTAM"
12	(C)	X'24'	0	BUFPAGE	"BUFLOCAL+BUFIQB+BPMPAGE"
12	(C)	X'C'	0	BUFXFR	"BUFLOCAL+BUFDECB+BPMPAGE"
12	(C)	X'25'	0	BUFXPP	"BUFLOCAL+BUFIQB+BPMTTP"
13	(D)	CHARACTER	1	BUFECCBCC	I/O COMPLETION CODE
		.... ...1		BUFECCFCB	"X'01" HASPIMAG - BAD FCB
14	(E)	BITSTRING	1	BUFFLAG1	Buffer flag byte
		1... ....		BFPTHMGR	"B'10000000" BUFFER BELONGS TO PATH MGR
		.1.. ....		BUF1WIN	"B'01000000" WRITE IN PROGRESS
		..1. ....		BUF1SINT	"B'00100000" Simulated I/O error
		...1 ....		BUF1PERM	"B'00010000" Permanent I/O error
		.... 1...		BUF1CHEN	"B'00001000" Channel end appendage processed buffer
		.... .1..		BUF1DASD	"B'00000100" I/O to DASD device
15	(F)	CHARACTER	1		RESERVED FOR FUTURE USE
16	(10)	ADDRESS	4	BFPDCT	ADDRESS OF DEVICE CONTROL TABLE
20	(14)	ADDRESS	4	BFPEWF	PCE WITH EWF TO POST OR EXIT ADDRESS
20	(14)	X'18'	0	BFPLEN	"*-BFPDSECT" LENGTH OF BUFFER PREFIX

Comment

-----  
 The following fields are a remapping of the IOB control block in the mapping macro IEZIOB.  
 -----

End of Comment

24	(18)	CHARACTER	1	IOBDSECT (0)	BUFFER CONTROL AREA
24	(18)	BITSTRING	1	IOBFLAG1	I/O FLAGS
		..1. ....		IOBCMDCH	"B'01000000" Command chaining used in channel program
		.... .1..		IOBIOERR	"B'00000100" Exceptional condition. After CEA returns and this bit is on, the error is considered permanent.
		.... ..1.		IOBUNREL	"B'00000010" Unrelated flag (i.e. nonsequential)
		.... ...1		IOBRSTRT	"B'00000001" Restart address in IOB to be used
25	(19)	CHARACTER	1	IOBFLAG2	I/O FLAGS
26	(1A)	CHARACTER	1	IOBSENS0	FIRST SENSE BYTE
27	(1B)	CHARACTER	1	IOBSENS1	SECOND SENSE BYTE
28	(1C)	CHARACTER	1	IOBECBCC (0)	I/O COMPLETION CODE
28	(1C)	SIGNED	4	IOBECBPT	ADDRESS OF HASP EVENT CONTROL BLOCK
32	(20)	CHARACTER	1	IOBFLAG3	I/O FLAGS
33	(21)	CHARACTER	7	IOBCSW	CHANNEL STATUS WORD
40	(28)	CHARACTER	1	IOBSIOCC (0)	SIO CONDITION CODE
40	(28)	SIGNED	4	IOBSTART	ADDRESS OF CHANNEL PROGRAM
44	(2C)	BITSTRING	1	IOBFLAG4 (0)	Flag byte
		1... ....		IOBGDPOL	"B'10000000" Not used by JES2
		.1.. ....		IOBCC3WE	"B'01000000" User requests that IOS POST when an 'all paths lost' condition is detected
		..1. ....		IOBPMERR	"B'00100000" Not used by JES2
		...1 ....		IOBCEF	"B'00010000" IOB common extension is available

## \$BUFFER Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
EQU B'00001100' Not used by JES2 (reserved)					
End of Comment					
	....	..1.		IOBJES3I	"B'00000010'" Not used by JES2
Comment					
EQU B'00000001' Not used by JES2 (reserved)					
End of Comment					
44	(2C)	SIGNED	4	IOBDCBPT	ADDRESS OF DATA CONTROL BLOCK
48	(30)	CHARACTER	1	IOBREPM (0)	REPOSITION MODIFIER
48	(30)	SIGNED	4	IOBRESTR	RESTART ADDRESS OF CHANNEL PROGRAM
52	(34)	CHARACTER	1	TPBMXREC (0)	MAXIMUM RJE OUTPUT RECORD COUNT
52	(34)	SIGNED	2	IOBINCAM	BLOCK COUNT INCREMENT
52	(34)	X'35'	0	IOBECBSV	"IOBINCAM+1,1" I/O COMPLETION SAVE AREA
54	(36)	SIGNED	2	IOBERRCT	ERROR COUNT
56	(38)	CHARACTER	1	TPBLCCC (0)	LAST REMOTE OUTPUT COMMAND OP.
56	(38)	SIGNED	4	TPBLCCAD (0)	ADDR OF LAST REMOTE CARRIAGE CONTROL
56	(38)	CHARACTER	1	IOBXTENT	DEB EXTENT
57	(39)	CHARACTER	7	IOBSEEK (0)	DIRECT ACCESS SEEK ADDRESS
Comment					
-----					
End of fields that are a remapping of the IOB control block in the mapping macro IEZIOB.					
-----					
End of Comment					
60	(3C)	CHARACTER	1	TPBRECNT (0)	CURRENT REMOTE OUTPUT RECORD COUNT
60	(3C)	SIGNED	4	TPBFDATA	REMOTE DATA POINTER
64	(40)	CHARACTER	1	LCBMCB	REMOTE MODE BYTE
64	(40)	X'40'	0	PPBFLAG1	"LCBMCB" IOB BUFF WHERE LAST PCI
65	(41)	CHARACTER	1	BUFCHOFF (0)	OFFSET OF 1ST BUFFER IN TRACKCELL
65	(41)	CHARACTER	1	LCBACK	REMOTE NEXT ACKNOWLEDGEMENT
66	(42)	SIGNED	2	BUFCHNCT (0)	COUNT OF BUFFERS IN CHAIN
66	(42)	SIGNED	2	LCBRCB	REMOTE RESPONSE CONTROL BLOCK
68	(44)	SIGNED	4	BUFCHECB (0)	\$EXCP ECB
68	(44)	SIGNED	4	BUFCHCQ	Channel end queue chain
72	(48)	DBL WORD	8	IOBCCW1	CHANNEL COMMAND WORD 1
80	(50)	DBL WORD	8	IOBCCW2	CHANNEL COMMAND WORD 2
88	(58)	DBL WORD	8	IOBCCW3	CHANNEL COMMAND WORD 3
96	(60)	DBL WORD	8	IOBCCW4	CHANNEL COMMAND WORD 4
Comment					
-----					
PP BUFFER SYNCHRONIZATION INFORMATION					
-----					
End of Comment					
72	(48)	SIGNED	4	PPBPCIE	ADDRESS OF ACTIVE PCIE
76	(4C)	SIGNED	4	PPBCCWNX	ADDRESS OF NEXT CCW AREA
80	(50)	SIGNED	4	PPBLVCCN	LAST-VALID CCW IN NEXT AREA
84	(54)	SIGNED	4	PPBLVCCC	LAST VALID CCW IN CURRENT AREA
88	(58)	CHARACTER	4	PPBCMTR	CURRENT PUNCH
92	(5C)	CHARACTER	2	PPBCRCB	RESTART
94	(5E)	CHARACTER	1	PPBCBOFF	POINTERS
95	(5F)	CHARACTER	4	PPBNMTR	NEXT PUNCH
99	(63)	CHARACTER	2	PPBNRCB	RESTART

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
101	(65)	CHARACTER	1	PPBNBOFF	POINTERS
102	(66)	CHARACTER	2	PPBDISPL	OFFSET OF 2ND IOB BUFFER

Comment

Define memory-only fields for control block I/O. These utility fields will be accessed using definitions in the control blocks using the fields (for example the IOT). The access will be via the use of EQU. For example IOTIOT (a memory chain pointer for the IOT) could be defined as: IOTIOT EQU BUFMEMW1-BFPDSECT+IOT  
 The advantage of defining the fields at this point in the buffer is that this part of the buffer is never written to SPOOL and thus there is no exposure to residual data being available when the buffer is read from SPOOL later. This area is zeroed in the \$CBIO support routines just before a control block is read.

End of Comment

56	(38)	DBL WORD	8	BUFMEMD1	Memory-only double word
64	(40)	ADDRESS	4	BUFMEMW1	First memory-only word
68	(44)	ADDRESS	4	BUFMEMW2	Second memory-only word
72	(48)	ADDRESS	4	BUFMEMW3	Third memory-only word
76	(4C)	ADDRESS	4	BUFMEMW4	Fourth memory-only word

Comment

Flag byte BUFMEMF1 is currently defined to use only for control block I/O (eg. IOT.) For general use (eg. HDB buffers), flag byte BUFMEMF4 should be used with necessary bit definitions defined in corresponding DSECT.

End of Comment

80	(50)	BITSTRING	1	BUFMEMF1	First memory-only flag
80	(50)	X'50'	0	BUFMFLG1	"BUFMEMF1" Memory only flag
		1... ..		BUFM1CKP	"B'10000000" Control block needs to be written to SPOOL
		.1... ..		BUFM1CK2	"B'01000000" Secondary CKPT flag (only set for IOTs)
81	(51)	BITSTRING	1	BUFMEMF2	Second memory-only flag
82	(52)	BITSTRING	1	BUFMEMF3	Third memory-only flag
83	(53)	BITSTRING	1	BUFMEMF4	Fourth memory-only flag. For general use, see specific control block for bit definitions.
84	(54)	ADDRESS	4	BUFMEMW5	Fifth memory-only word
88	(58)	ADDRESS	4	BUFMEMW6	Sixth memory-only word
92	(5C)	ADDRESS	4	BUFMEMW7	Seventh memory-only word
96	(60)	ADDRESS	4	BUFMEMW8	Eight memory-only word
100	(64)	ADDRESS	4	BUFWRBTK	Buffer backward chain pointer during CB chain write in user environment
100	(64)	X'38'	0	BUFMEM	"IOBXTENT,*-IOBXTENT,C'X'" Name of composite area

## \$BUFFER Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
An assembly error on the following statement implies that there has been too much "redefinition" of the buffer prefix area. Ensure the redefinition does not exceed 6 double words.					
-----					
End of Comment					
104	(68)	ADDRESS	2	(0)	See above
Comment					
-----					
Start of data area in SPOOL buffers					
-----					
End of Comment					
104	(68)	DBL WORD	8	BUFSTART (0)	START OF BUFFER WORK SPACE
Comment					
-----					
The following sub-section, generated by the SPID macro, must reside immediately after the I/O control data in every spool buffer.					
The following fields are defined:					
Eyecatcher - 4 bytes					
Job name - 8 bytes					
Job number - 4 bytes					
Job key - 4 bytes					
Dataset key - 4 bytes (or reserved if not applicable)					
-----					
End of Comment					
104	(68)	CHARACTER	4	HDBID	Eyecatcher
108	(6C)	CHARACTER	8	HDBJNAME	Job name
116	(74)	SIGNED	4	HDBJBNUM	Job number
120	(78)	BITSTRING	8	HDBKEY (0)	Record verification key
120	(78)	SIGNED	4	HDBJBKEY	Job key
124	(7C)	SIGNED	4	HDBDSKEY	Dataset key
124	(7C)	X'18'	0	HDBSPLNG	**HDBID"
128	(80)	SIGNED	4	HDBNXTRK	HASP DATA BLOCK CHAIN TRACK
132	(84)	SIGNED	4		Reserved
132	(84)	X'88'	0	HDBSTART	*** HASP DATA BLOCK START
Comment					
-----					
BSC TP buffer fields					
-----					
End of Comment					
104	(68)	DBL WORD	8	IOBCCW5	CHANNEL COMMAND WORD 5
112	(70)	DBL WORD	8	IOBCCW6	CHANNEL COMMAND WORD 6
120	(78)	DBL WORD	8	IOBCCW7	CHANNEL COMMAND WORD 7
128	(80)	DBL WORD	8	IOBCCW8	CHANNEL COMMAND WORD 8
128	(80)	X'70'	0	BUFIOBSZ	**IOBDSECT" IOB LENGTH
136	(88)	SIGNED	4	TPBUFST (0)	START OF REMOTE BUFFER WORK SPACE
136	(88)	X'F78'	0	\$MAXTPBS	"(4096+7-(TPBUFST-BFPDSECT))/8*8" Max bisynch buffer size
136	(88)	X'7F00'	0	\$SNABFMX	"(32768-256)" Max SNA buffer size



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
SPOOL OFFLOAD BUFFER FORMAT. THE FIELD SPBSTART MUST ALWAYS BE X'36' BYTES INTO THE BUFFER TO ENSURE A CONSISTENT AMOUNT OF DATA IS BEING READ OR WRITTEN.					
End of Comment					
24	(18)	SIGNED	4	SPBCHAN2	SECONDARY BUFFER CHAIN FIELD
28	(1C)	SIGNED	4	SPBFDATA	POINTER TO NEXT RECORD
32	(20)	SIGNED	2	SPBRECNT	SPOOL TRANSFER BUFFER REC CNT
34	(22)	BITSTRING	1	SPBFLAG1	SPOOL OFFLOAD BUFFER FLAGS
54	(36)	BITSTRING	1	SPBSTART (0)	START OF DATA SECTION OF BUFFER

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	SPBRECD	, START OF LOGICAL RECORD
0	(0)	BITSTRING	1	SPBRCB	RECORD RCB
1	(1)	BITSTRING	1	SPBSRCB	RECORD SRCB
2	(2)	BITSTRING	1	SPBTYPE	RECORD TYPE
3	(3)	BITSTRING	2	SPBDLEN	RECORD LENGTH FOR DATA RECORD
5	(5)	BITSTRING	1	SPBRDATA (0)	START OF DATA PORTION OF RECORD
5	(5)	X'0'	0	SPBHDR	"SPBRCB,*-SPBRCB" DISPL AND LENGTH OF RECORD HDR
5	(5)	X'3'	0	SPBEOFID	"SPBDLEN" EOF TYPE FOR EOF RECORD

Comment					
SPBTYPE DEFINITIONS					
End of Comment					
5	(5)	X'1'	0	SPBTYPD	"1" TYPE IS DATA RECORD
5	(5)	X'2'	0	SPBTYPEF	"2" TYPE IS EOF RECORD
5	(5)	X'3'	0	SPBTYPEB	"3" TYPE IS END OF BUFFER RECORD

Comment					
SPBEOFID DEFINITIONS					
End of Comment					
5	(5)	X'1'	0	SPBEOFOK	"1" NORMAL EOF REACHED
5	(5)	X'2'	0	SPBEOFAB	"2" ABNORMAL EOF REACHED

Comment					
SPBFLAG1 DEFINITIONS					
End of Comment					
		1... ....		SPBSYNAD	"B'10000000" PERM I/O ERROR HAS OCCURED
		.1.. ....		SPBEODAD	"B'01000000" END OF DATA HAS OCCURED
		..1. ....		SPBSKIP	"B'00100000" BUFFER IS TO BE SKIPPED

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BFD	Start of HAM buffer prefix
0	(0)	CHARACTER	4	BFDID	Buffer identifier
4	(4)	SIGNED	4	BFDBAT	Address of auxiliary buffer
8	(8)	ADDRESS	4	BFDCHAIN	Buffer chain field
12	(C)	BITSTRING	1	BFDTYPE	Buffer type (see BUFTYPE)
13	(D)	BITSTRING	1		Reserved
14	(E)	SIGNED	2	BFDLEN	Length remaining in buffer
16	(10)	DBL WORD	8	(0)	Alignment for BFDCCWS

## \$BUFFER Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
16	(10)	BITSTRING	56	BFDCWWS	CCWs for write processing
16	(10)	CHARACTER	8	BFDFSRBA	First seg spanned RBA addr
72	(48)	ADDRESS	4	BFDSDDB	In HAM, addr of owning SDB
76	(4C)	BITSTRING	1	BFDECBCC (0)	I/O completion code
76	(4C)	SIGNED	4	BFDECB	ECB on which to wait
80	(50)	BITSTRING	1	BFDFLAG1	Flag byte 1
		1... ....		BFD1EOB	"B'10000000" END-OF-BUFFER indicator
		.1... ....		BFD1PUAC	"B'01000000" PUT update active
Comment					
BFDFLAG1 flags, for internal reader only					
End of Comment					
		.... 1...		BFD1IEOF	"B'00001000" PUT request for EOF
		.... .1..		BFD1IDEL	"B'00000100" PUT req for DEL or PURGE
		.... ..1.		BFD1IERQ	"B'00000010" ENDREQ request
		.... ...1		BFD1ICLS	"B'00000001" CLOSE request
81	(51)	BITSTRING	1	BFDFLAG2	Flag byte 2
		1... ....		BFD2IOE	"B'10000000" I/O error encountered
		.1... ....		BFD2SRBF	"B'01000000" SRB failed to obtain bfr
		..1. ....		BFD2RPBF	"B'00100000" Try again to fill PBF
82	(52)	SIGNED	2		Reserved
84	(54)	SIGNED	4	BFDTRK	Track address of buffer
88	(58)	DBL WORD	8	(0)	Alignment for BFDRBA
88	(58)	CHARACTER	8	BFDRBA	Relative block address
96	(60)	ADDRESS	4	BFDTCB	TCB address for FREEMAIN
100	(64)	ADDRESS	4	BFDLOC	Current location in buffer
104	(68)	DBL WORD	8	BFDSTART (0)	Start of data in buffer
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	ADDRESS	2	(0)	
104	(68)	X'1000'	0	BFDSSIZE	"4096" Length of data set buffer

## \$BUFFER Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
\$MAXTPBS	88	F78	BFDTRK	54	
\$SNABFMX	88	7F00	BFDTYPE	C	
BFD	0		BFD1EOB	50	80
BFDBAT	4		BFD1ICLS	50	1
BFDCWWS	10		BFD1IDEL	50	4
BFDCHAIN	8		BFD1IEOF	50	8
BFDECB	4C		BFD1IERQ	50	2
BFDECBCC	4C		BFD1PUAC	50	40
BFDFLAG1	50		BFD2IOE	51	80
BFDFLAG2	51		BFD2RPBF	51	20
BFDFSRBA	10		BFD2SRBF	51	40
BFDID	0		BFPBAT	4	
BFDLEN	E		BFPDCT	10	
BFDLOC	64		BFPDSECT	0	
BFDRBA	58		BFPEWF	14	
BFDSDDB	48		BFPID	0	
BFDSSIZE	68	1000	BFPLEN	14	18
BFDSTART	68		BFPSWEL	4	4
BFDTCB	60		BFPTHMGR	E	80

## \$BUFFER Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
BPMTBSC	C	1	IOBCCW1	48	
BPMTCB	C	2	IOBCCW2	50	
BPMTHAM	C	7	IOBCCW3	58	
BPMTHASP	C	3	IOBCCW4	60	
BPMPAGE	C	4	IOBCCW5	68	
BPMTTP	C	5	IOBCCW6	70	
BPMTUSCB	C	FF	IOBCCW7	78	
BPMTVTAM	C	6	IOBCCW8	80	
BUFBPMT	C	7	IOBCC3WE	2C	40
BUFBSC	C	21	IOBCEF	2C	10
BUFCB	C	22	IOBCMDCH	18	40
BUFCCFCB	D	1	IOBCSW	21	
BUFCHAIN	8		IOBDCBPT	2C	
BUFCHECB	44		IOBDSECT	18	
BUFCHEQ	44		IOBECBCC	1C	
BUFCHNCT	42		IOBECBPT	1C	
BUFCHOFF	41		IOBECBSV	34	35
BUFDECB	C	8	IOBERRCT	36	
BUFECBCC	D		IOBFLAG1	18	
BUFFIX	C	80	IOBFLAG2	19	
BUFFLAG1	E		IOBFLAG3	20	
BUFHASP	C	23	IOBFLAG4	2C	
BUFIOB	C	20	IOBGDPOL	2C	80
BUFIOBSZ	80	70	IOBINCAM	34	
BUFLOCAL	C	0	IOBIOERR	18	4
BUFMEM	64	38	IOBJES3I	2C	2
BUFMEMD1	38		IOBPMERR	2C	20
BUFMEMF1	50		IOBREPM	30	
BUFMEMF2	51		IOBRESTR	30	
BUFMEMF3	52		IOBRSTRT	18	1
BUFMEMF4	53		IOBSEEK	39	
BUFMEMW1	40		IOBSENS0	1A	
BUFMEMW2	44		IOBSENS1	1B	
BUFMEMW3	48		IOBSIOCC	28	
BUFMEMW4	4C		IOBSTART	28	
BUFMEMW5	54		IOBUNREL	18	2
BUFMEMW6	58		IOBXTENT	38	
BUFMEMW7	5C		LCBACK	41	
BUFMEMW8	60		LCBMCB	40	
BUFMFLG1	50	50	LCBRCB	42	
BUFMULT	C	40	PPBCBOFF	5E	
BUFM1CKP	50	80	PPBCCWNX	4C	
BUFM1CK2	50	40	PPBCMTTR	58	
BUFPAGE	C	24	PPBCRCB	5C	
BUFPF	C	25	PPBDISPL	66	
BUFRPL	C	10	PPBFLAG1	40	40
BUFXPFR	C	C	PPBLVCCC	54	
BUFSTART	68		PPBLVCCN	50	
BUFTYPE	C		PPBNBOFF	65	
BUFVTAM	C	16	PPBNMTTR	5F	
BUFWRTBK	64		PPBNRCB	63	
BUF1CHEN	E	8	PPBPCIE	48	
BUF1DASD	E	4	SPBCHAN2	18	
BUF1PERM	E	10	SPBDLEN	3	
BUF1SINT	E	20	SPBEOBAD	5	40
BUF1WIN	E	40	SPBEOFAB	5	2
HDBDSKEY	7C		SPBEOFID	5	3
HDBID	68		SPBEOFOK	5	1
HDBJBKEY	78		SPBFDATA	1C	
HDBJBNUM	74		SPBFLAG1	22	
HDBJNAME	6C		SPBHDR	5	0
HDBKEY	78		SPBRCB	0	
HDBNXTRK	80		SPBRDATA	5	
HDBSPLNG	7C	18	SPBRECD	0	
HDBSTART	84	88	SPBRECNT	20	

## \$BUFFER Cross Reference

Name	Hex Offset	Hex Value
SPBSKIP	5	20
SPBSRCB	1	
SPBSTART	36	
SPBSYNAD	5	80
SPBTYPD	5	1
SPBTYPE	2	
SPBTYPEB	5	3
SPBTYPEF	5	2
TPBFDATA	3C	
TPBLCCAD	38	
TPBLCCC	38	
TPBMXREC	34	
TPBRECNT	3C	
TPBUFST	88	

## \$CADDR Heading Information

**Common Name:** Common storage address table  
**Macro ID:** \$CADDR  
**DSECT Name:** CADDR  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'CADD'  
 Offset: CADDRID-CADDR  
 Length: 4

**Storage Attributes:** Subpool: 241  
 Key: 1  
 Residency: Virtual and real storage can be either above or below the 16M line, in common storage.

**Size:** See the CADDRLEN equate.  
**Created by:** The CADDR is created during JES2 initialization, when JES2 common storage code modules are loaded.  
**Pointed to by:** CCTCADDR field of the \$HCCT data area  
**Serialization:** The CADDR should be considered as read-only once the initialization processing that builds it completes.  
**Function:** The CADDR contains the addresses of all JES2 common storage service routines to which access is required from multiple assembly modules or installation exits.

This table may be used by \$CALL to locate routines residing in common storage in the JES2 address space. \$CALL uses this table to find either the address or PC number for the called routine.

JES2 service routine addresses are normally defined using the \$ENTRY macro (common storage service routine addresses MUST be defined using \$ENTRY). When \$ENTRY is used in base IBM JES2 product modules which are assembled using the USER assembly environment, it builds information about the entry point in the module. The information is then used during JES2 initialization to resolve the routine's address to the appropriate CADDR field.

## \$CADDR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CADDR	, JES2 Common storage routine ADDRESS table dsect
0	(0)	CHARACTER	4	CADDRID	CADDR TABLE EYECATCHER
4	(4)	ADDRESS	1	CADDRVSN	VERSION NUMBER FIELD
4	(4)	X'7'	0	CADDRVNM	"7" Current version number
5	(5)	BITSTRING	3		RESERVED FOR FUTURE USE
Comment					
Fields from CADDREQS through CADDREQE are resolved from the MTEs (\$ENTRY information) in IBM JES2 product modules loaded to common storage. They must all be either non-zero or defined in an exception table after that resolution.					
End of Comment					
8	(8)	ADDRESS	4	CADDREQS (0)	Start of fields that must be non-zero after loading common storage modules and resolving CADDR values from module MTEs

## \$CADDR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MODULE HASCARMS ROUTINES LISTED ALPHABETICALLY					
End of Comment					
8	(8)	ADDRESS	4	C@CPJCLINI	Initialize PJCL queue
12	(C)	ADDRESS	4	C@CPJCLTRM	Terminate PJCL queue
Comment					
MODULE HASCARSO ROUTINES LISTED ALPHABETICALLY					
End of Comment					
16	(10)	ADDRESS	4	C@ARMEOJ	Notify ARM of end of job
Comment					
Module HASCDAU Routines Listed Alphabetically					
End of Comment					
20	(14)	ADDRESS	4	C@\$ALLDAU	Allocate daughter IOT
24	(18)	ADDRESS	4	C@\$UALDAU	Unallocate daughter IOT
Comment					
MODULE HASCDSAL ROUTINES LISTED ALPHABETICALLY					
End of Comment					
28	(1C)	ADDRESS	4	C@\$DSCTBLD	Fill in DSCT
32	(20)	ADDRESS	4	C@\$PDBBLD	GET A Pddb SLOT ROUTINE
36	(24)	ADDRESS	4	C@\$PDBDEFS	Default some Pddb fields
40	(28)	ADDRESS	4	C@HALFDSNR	Find data set name
44	(2C)	ADDRESS	4	C@HALJMERG	MERGE JFCB FIELDS
48	(30)	ADDRESS	4	C@HALOCR P	MERGE OCR KEYWORDS
52	(34)	ADDRESS	4	C@HALOPDBI	FINISH SYSOUT Pddb INIT
56	(38)	ADDRESS	4	C@HALSSALP	MERGE SSOB KEYWORDS
60	(3C)	ADDRESS	4	C@HALUNAL	UNALLOCATE A DATASET ROUTINE
64	(40)	ADDRESS	4	C@HAOUTSCN	SCAN OUTPUT DD REFERENCES
68	(44)	ADDRESS	4	C@HIOTSPIN	SPIN THE ARGUMENT IOT
72	(48)	ADDRESS	4	C@HNDUPDTE	Update SWB NOTIFY keyword
76	(4C)	ADDRESS	4	C@HPOSTIR	POST tasks waiting to allocate an INTRDR
Comment					
MODULE HASCDSOC ROUTINES LISTED ALPHABETICALLY					
End of Comment					
80	(50)	ADDRESS	4	C@DSOPEN	DATA SET OPEN ROUTINE
84	(54)	ADDRESS	4	C@HFEXJESL	Extend JESLOG data set
88	(58)	ADDRESS	4	C@HFEXSPIN	Spin JESLOG data sets
92	(5C)	ADDRESS	4	C@HFOPSUB	ACB FAKE OPEN ROUTINE
96	(60)	ADDRESS	4	C@HOCSETUP	RESTART/OPEN/CLOSE SETUP ROUTINE
100	(64)	ADDRESS	4	C@SSVCLSC	CONVERTER FAKE CLOSE
104	(68)	ADDRESS	4	C@SSVOPNC	CONVERTER FAKE OPEN
Comment					
MODULE HASCDSO ENTRY POINT.					
End of Comment					
108	(6C)	ADDRESS	4	C@\$ALESERV	ALET management service
112	(70)	ADDRESS	4	C@\$DPSERV	Data space service entry

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Module HASCENF routines and tokens listed alphabetically.					
End of Comment					
116	(74)	ADDRESS	4	C@ENFISSUE	ENF issue service
120	(78)	ADDRESS	4	CADDRENFBE (0)	Start of ENF entries
120	(78)	ADDRESS	4	CADDR@ENF35	Code 35 - CF structure
124	(7C)	ADDRESS	4	CADDR#ENF35	status change
128	(80)	ADDRESS	4	CADDR@ENF41GL	Code 41 - VARY WLM,POLICY=
132	(84)	ADDRESS	4	CADDR#ENF41GL	in goal mode done
136	(88)	ADDRESS	4	CADDR@ENF41CP	Code 41 - VARY WLM,POLICY=
140	(8C)	ADDRESS	4	CADDR#ENF41CP	in compatibility mode done
144	(90)	ADDRESS	4	CADDR@ENF42	Code 42 - MODIFY WLM,
148	(94)	ADDRESS	4	CADDR#ENF42	MODE=GOAL done
152	(98)	ADDRESS	4	CADDR@ENF56	Code 56 - RESET job
156	(9C)	ADDRESS	4	CADDR#ENF56	command issued
160	(A0)	ADDRESS	4	CADDR@ENF57CM	Code 57 - MODIFY WLM,
164	(A4)	ADDRESS	4	CADDR#ENF57CM	RESOURCE command issued
168	(A8)	ADDRESS	4	CADDR@ENF57RV	Code 57 - Scheduling chg
172	(AC)	ADDRESS	4	CADDR#ENF57RV	due to WLM recovery
172	(AC)	X'7'	0	CADDRENFNUM	"(*-CADDRENFBE)/8" Number of ENF entries
Comment					
MODULE HASC GGKY ROUTINES LISTED ALPHABETICALLY					
End of Comment					
176	(B0)	ADDRESS	4	C@\$GKGET	Get grouping keys
180	(B4)	ADDRESS	4	C@\$GKINIT	Initialize grouping keys
184	(B8)	ADDRESS	4	C@\$GKTERM	Terminate grouping keys
Comment					
MODULE HASC GGST ROUTINES LISTED ALPHABETICALLY					
End of Comment					
188	(BC)	ADDRESS	4	C@\$GASSIGN	Assign grouping token
192	(C0)	ADDRESS	4	C@\$GSINIT	Initialize grouping strings
196	(C4)	ADDRESS	4	C@\$GSTERM	Terminate grouping strings
Comment					
Module HASCHAM routines listed alphabetically					
End of Comment					
200	(C8)	ADDRESS	4	CADDR@HAMAVT	HAM appendage vector table, not for \$CALL, data only
204	(CC)	ADDRESS	4	C@ABEND722	Issue 722 ABEND
208	(D0)	ADDRESS	4	C@CNIN2OUT	Convert SDB from input to output mode
212	(D4)	ADDRESS	4	C@FREPBLOK	Free protected block
216	(D8)	ADDRESS	4	C@FRESDBLK	Unserialize the SDB
220	(DC)	ADDRESS	4	C@GETPBLOK	Obtain GET protected block
224	(E0)	ADDRESS	4	C@GETSDBLK	Serialize the SDB

## \$CADDR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
228	(E4)	ADDRESS	4	C@HAMNULL	'Null' acsmeth interface
232	(E8)	ADDRESS	4	C@HAMPSTER	HAM Post Exit routine
236	(EC)	ADDRESS	4	C@HASPAMI	Access method interface
240	(F0)	ADDRESS	4	C@HINTRDR	INTERNAL READER ACCESS METHOD
244	(F4)	ADDRESS	4	C@HWAITBUF	Wait for all I/O to end
248	(F8)	ADDRESS	4	C@OBTGBAT	Obtain BAT for GET request
252	(FC)	ADDRESS	4	C@PROTENDR	Protected Endreq entry pt
256	(100)	ADDRESS	4	C#PROTENDR	Protected Endreq PC number
260	(104)	ADDRESS	4	C@PRENRREC	Protected Endreq recov rtn
264	(108)	ADDRESS	4	C@PROTGET	Protected Get entry point
268	(10C)	ADDRESS	4	C#PROTGET	Protected Get PC number
272	(110)	ADDRESS	4	C@PRGETREC	Protected Get recovery rtn
276	(114)	ADDRESS	4	C@PROTPUT	Protected Put entry point
280	(118)	ADDRESS	4	C#PROTPUT	Protected Put PC number
284	(11C)	ADDRESS	4	C@PRPUTREC	Protected Put recovery rtn
288	(120)	ADDRESS	4	C@PROTPNT	Protected Point entry point
292	(124)	ADDRESS	4	C#PROTPNT	Protected Point PC number
296	(128)	ADDRESS	4	C@PRPNTREC	Protected Point recovery rt
300	(12C)	ADDRESS	4	C@PROTSRB	Protected Get SRB entry pnt
304	(130)	ADDRESS	4	C#PROTSRB	Protected Get SRB PC number
308	(134)	ADDRESS	4	C@PRSRBREC	Protected SRB recovery rtn
312	(138)	ADDRESS	4	C@RELGBAT	Release BAT for GET request

Comment

### MODULE HASCBST ROUTINES LISTED ALPHABETICALLY

End of Comment

316	(13C)	ADDRESS	4	C@HFJOBLOG	PLACE TITLE IN JES2 JOB LOG
320	(140)	ADDRESS	4	C@HFJLOGTM	Add date line to JOB LOG
324	(144)	ADDRESS	4	C@HFJDLIN	Create date line
328	(148)	ADDRESS	4	C@HJE000	COMMON JOB TERMINATION ROUTINE
332	(14C)	ADDRESS	4	C@HJSMASL	MAKE A SLOT FOR A SYSTEM Pddb
336	(150)	ADDRESS	4	C@JBFOUND	JOB SELECT SET UP ROUTINE
340	(154)	ADDRESS	4	C@JBSELECT	JOB SELECT SELECTION ROUTINE
344	(158)	ADDRESS	4	C@JOBSTATS	UPDATE JCT STATS ROUTINE
348	(15C)	ADDRESS	4	C@JSOPSSDS	OPEN SUBSYSTEM DATASETS ROUTINE
352	(160)	ADDRESS	4	C@JSREOPEN	JOB SELECT DS REOPEN RTN
356	(164)	ADDRESS	4	C@MRGSWBS	MERGE SWBS INTO PDDBS FOR JESDS

Comment

### MODULE HASCBTR ROUTINES LISTED ALPHABETICALLY

End of Comment

360	(168)	ADDRESS	4	C@\$UCBINDX	Reset Attn Index in UCB
364	(16C)	ADDRESS	4	C@EOBLOB	Clean up BLOB
368	(170)	ADDRESS	4	C@EOTFDCON	ISSUE FSI DISCONNECT REQUEST

Comment

### MODULE HASCLINK ROUTINES LISTED ALPHABETICALLY

End of Comment

372	(174)	ADDRESS	4	C@\$CRETRN	\$RETURN SERVICE ROUTINE
376	(178)	ADDRESS	4	C@\$CSAVE	\$SAVE SERVICE ROUTINE
380	(17C)	ADDRESS	4	C@\$FBUFFRTN	Routine to free buffers with LOCAL lock held
384	(180)	ADDRESS	4	C@\$FRECEL	FREE A CSA CELL
388	(184)	ADDRESS	4	C@\$GETCEL	OBTAIN A CSA CELL
392	(188)	ADDRESS	4	C@\$GETHP	HIGH PRIVATE STORAGE CELLS
396	(18C)	ADDRESS	4	C@\$HGFMMAIN	HGFMMAIN GET/FREE MAIN SERVICES
400	(190)	ADDRESS	4	C@\$MLTFBUF	MULTIPLE BUFFER FREE ROUTINE
404	(194)	ADDRESS	4	C@\$MSDDUMP	Multi System Dump Routine
408	(198)	ADDRESS	4	C@\$SSIBEGN	SSI INTERFACE BEGIN ROUTINE



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
412	(19C)	ADDRESS	4	C@\$SSIEND	SSI INTERFACE END ROUTINE
416	(1A0)	ADDRESS	4	C@\$SYMREC	ENTRY TO \$SYMREC ROUTINE
420	(1A4)	ADDRESS	4	C@FINDMOD	Find LMT/MIT for a module containing a given address
424	(1A8)	ADDRESS	4	C@FRETRE	FREE TCB RECOVERY ELEMENT
428	(1AC)	ADDRESS	4	C@GETTRE	GET TCB RECOVERY ELEMENT
432	(1B0)	ADDRESS	4	C@MBSCATTN	BSC CTC Attention routine
436	(1B4)	ADDRESS	4	C@RECOVERY	SSI RECOVERY ROUTINE
440	(1B8)	ADDRESS	4	C@SSIFINE	SSI INTERFACE FINISH ROUTINE
444	(1BC)	ADDRESS	4	C@SSISESTA	SSI \$ESTAE ROUTINE
448	(1C0)	ADDRESS	4	C@SSISSETUP	SSI INTERFACE SETUP ROUTINE
452	(1C4)	ADDRESS	4	CADDR@CNTBITAB	TRT table for \$CNTBIT macro

Comment

Module HASCOFST entries listed alphabetically

End of Comment

456	(1C8)	ADDRESS	4	CADDR@OCOFFST	Offset table for O C O code (data only, not \$CALLable) O C O code cannot use this CADDR field, as the CADDR is not frozen.
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Comment

MODULE HASCPPOOL ROUTINES LISTED ALPHABETICALLY

End of Comment

460	(1CC)	ADDRESS	4	C@CPBUILD	CPool build entry point
464	(1D0)	ADDRESS	4	C#CPBUILD	CPool build PC number
468	(1D4)	ADDRESS	4	C@CPBREC	CPool build recovery rtn
472	(1D8)	ADDRESS	4	C@CPDELETE	CPool delete entry point
476	(1DC)	ADDRESS	4	C#CPDELETE	CPool delete PC number
480	(1E0)	ADDRESS	4	C@CPDREC	CPool delete recovery rtn
484	(1E4)	ADDRESS	4	C@CPEXPAND	CPool expand entry point
488	(1E8)	ADDRESS	4	C#CPEXPAND	CPool expand PC number
492	(1EC)	ADDRESS	4	C@CPXREC	CPool expand recovery rtn
496	(1F0)	ADDRESS	4	C@CPFREE	CPool free entry point
500	(1F4)	ADDRESS	4	C#CPFREE	CPool free PC number
504	(1F8)	ADDRESS	4	C@CPFREC	CPool free recovery rtn
508	(1FC)	ADDRESS	4	C@CPGET	CPool get entry point
512	(200)	ADDRESS	4	C#CPGET	CPool get PC number
516	(204)	ADDRESS	4	C@CPGREC	CPool get recovery rtn
520	(208)	ADDRESS	4	C@CPINIT	CPool initialization
524	(20C)	ADDRESS	4	C@CPMODIFY	CPool modify entry point
528	(210)	ADDRESS	4	C#CPMODIFY	CPool modify PC number
532	(214)	ADDRESS	4	C@CPMREC	CPool modify recovery rtn
536	(218)	ADDRESS	4	C@CPQCELL	CPool query cell entry pt
540	(21C)	ADDRESS	4	C#CPQCELL	CPool query call PC number
544	(220)	ADDRESS	4	C@CPQCREC	CPool query cell recovery
548	(224)	ADDRESS	4	C@CPQEXT	CPool query extent entry pt
552	(228)	ADDRESS	4	C#CPQEXT	CPool query extent PC numb
556	(22C)	ADDRESS	4	C@CPQXREC	CPool query extent recovery
560	(230)	ADDRESS	4	C@CPQPOOL	CPool query pool entry pt
564	(234)	ADDRESS	4	C#CPQPOOL	CPool query pool PC number
568	(238)	ADDRESS	4	C@CPQPREC	CPool query pool recovery
572	(23C)	ADDRESS	4	C@CPTERM	CPool termination
576	(240)	ADDRESS	4	CADDR@CPLTABS	CPool table of JES2 pools, not for \$CALL, data only

Comment

MODULE HASCRQUE ROUTINES LISTED ALPHABETICALLY

End of Comment

## \$CADDR Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
580	(244)	ADDRESS	4	C@\$RQUEACT	Activate service
584	(248)	ADDRESS	4	C@\$RQUECMP	Wait for completion
588	(24C)	ADDRESS	4	C@\$RQUEDEA	Deactivate service
592	(250)	ADDRESS	4	C@\$RQUEEXE	Execute request
596	(254)	ADDRESS	4	C@\$RQUEGET	Get request
600	(258)	ADDRESS	4	C@\$RQUERET	Return request

Comment

Module HASCSAPI Routines listed alphabetically

End of Comment

604	(25C)	ADDRESS	4	C@CSPEOX	Scan SAPIDs for terminating TCB or memory
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Comment

MODULE HASCSIJR ROUTINES LISTED ALPHABETICALLY

End of Comment

608	(260)	ADDRESS	4	C@DATASERV	JOB INFORMATION SERVICE
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Comment

MODULE HASCSIRQ ROUTINES LISTED ALPHABETICALLY

End of Comment

612	(264)	ADDRESS	4	C@\$DESTCHK	AUTHORIZE TRANSMIT TO DEST
616	(268)	ADDRESS	4	C@MCSFLUSH	MCS flush routine
620	(26C)	ADDRESS	4	C@SFNDSJB	Find current SJB
624	(270)	ADDRESS	4	C@TSCNVJB	CONVERT EXT JOB ID TO JOB NUM
628	(274)	ADDRESS	4	C@USERDEST	VERIFY DESTINATION
632	(278)	ADDRESS	4	C@USERSUB	USER/SUBTASK EXIT EFFECTOR
636	(27C)	ADDRESS	4	C@USRNEWND	Assign new node to dest
640	(280)	ADDRESS	4	C@WTALOGQ	Flush S35D Joblog queue

Comment

Module HASCSISC routines listed alphabetically

End of Comment

644	(284)	ADDRESS	4	C@CNVDEVID	Convert DEVID to EBCDIC
648	(288)	ADDRESS	4	C@CVDEVID	Process device ID to name conversion
652	(28C)	ADDRESS	4	C@PRJBCLD	Process job class info
656	(290)	ADDRESS	4	C@PRSPLIO	Process spool I/O info

Comment

Module HASCSJFA Routines Listed Alphabetically

End of Comment

660	(294)	ADDRESS	4	C@HSJFACC	MVS SJFACC Routine
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Comment

Module HASCSJFS Routines Listed Alphabetically

End of Comment

664	(298)	ADDRESS	4	C@HASJFREQ	SJFREQ Service Routine
668	(29C)	ADDRESS	4	C@HASJIDST	IPADDR/DEST Process - CSJFS
672	(2A0)	ADDRESS	4	C@SJFSWBRD	SWB Read Service Routine
676	(2A4)	ADDRESS	4	C@SWBTUMRG	SWB Merge Service Routine
680	(2A8)	ADDRESS	4	C@TUXTRACT	TU extraction - HASCSJFS

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Module HASCSRAX routines listed alphabetically					
End of Comment					
684	(2AC)	ADDRESS	4	C@GETJ2AUX	Access aux address space
688	(2B0)	ADDRESS	4	C@DELJ2AUX	Delete aux address space

Comment					
MODULE HASCSRDS ROUTINES LISTED ALPHABETICALLY					
End of Comment					

692	(2B4)	ADDRESS	4	C@\$CBIO	CONTROL BLOCK I/O ROUTINE ADDR
696	(2B8)	ADDRESS	4	C@\$DCTCHEK	Verify a DCT routine
700	(2BC)	ADDRESS	4	C@\$FNDRLOT	FIND REUSEABLE SPIN IOT
704	(2C0)	ADDRESS	4	C@\$IOTBLD	BUILD AN IOT ROUTINE
708	(2C4)	ADDRESS	4	C@\$PDBFIND	FIND A Pddb ROUTINE
712	(2C8)	ADDRESS	4	C@\$PDBNEXT	Find next Pddb same key
716	(2CC)	ADDRESS	4	C@\$SDBCHEK	Verify a SDB/DCT routine
720	(2D0)	ADDRESS	4	C@\$SDBFREE	FREE AN SDB
724	(2D4)	ADDRESS	4	C@\$SDBINIT	INITIALIZE AN SDB
728	(2D8)	ADDRESS	4	C@\$VERIFY	\$VERIFY SERVICE ROUTINE ADDRESS
732	(2DC)	ADDRESS	4	C@DSNCMP	SYSIN/SYSOUT DATASET COMPRESS
736	(2E0)	ADDRESS	4	C@DSNVFY	SYSIN/SYSOUT DATASET VERIFY
740	(2E4)	ADDRESS	4	C@ENF58BLD	Build ENF58 parm lists
744	(2E8)	ADDRESS	4	C@HALCLASS	CHECK SYSOUT CLASS FOR HOLD RTN
748	(2EC)	ADDRESS	4	CADDR@HASPVTAB	\$VERIFY control block table
752	(2F0)	ADDRESS	4	C@HCBCK	CHECKPOINT HASP CONTROL BLOCKS
756	(2F4)	ADDRESS	4	C@HCBFM	FREEMAIN CONTROL BLOCK STORAGE
760	(2F8)	ADDRESS	4	C@HCBGM	GETMAIN CONTROL BLOCK STORAGE
764	(2FC)	ADDRESS	4	C@HFCLSUB	FAKE CLOSE DATASETS
768	(300)	ADDRESS	4	C@HFCLTRNC	TRUNCATE A BUFFER ROUTINE
772	(304)	ADDRESS	4	C@HJSRETAB	REBUILD SDB TAB
776	(308)	ADDRESS	4	C@HONEWOUT	OPEN NEW OUTPUT DATASET RTN
780	(30C)	ADDRESS	4	C@HOOLDINP	OPEN OLD INPUT DATASET RTN
784	(310)	ADDRESS	4	C@HOOLDOUT	OPEN OLD OUTPUT DATASET RTN
788	(314)	ADDRESS	4	C@MTTRVAL	VALIDATE MTTR ROUTINE
792	(318)	ADDRESS	4	C@MTTR0VAL	Validate MTTR (R = 0 OK)
796	(31C)	ADDRESS	4	C@NJEHDRDU	NJE header read routine
800	(320)	ADDRESS	4	C@OLDJOE	Old JOE
804	(324)	ADDRESS	4	C@SIGIOU	Signature Rcd I/O Routine
808	(328)	ADDRESS	4	C@SYMTT	Generate SIGIO SYMREC rtn
812	(32C)	ADDRESS	4	C@USENF58	User environment ENF58 rtn

Comment					
MODULE HASCSRIC ROUTINES LISTED ALPHABETICALLY					
End of Comment					

816	(330)	ADDRESS	4	C@\$POST	POST HASP TASK
820	(334)	ADDRESS	4	C@\$RACROUT	ISSUE SAF CALL
824	(338)	ADDRESS	4	C@\$STRAK	ALLOCATE TRACK ADDRESS
828	(33C)	ADDRESS	4	C@\$SVJLOK	GET JOB COM QUEUES LOCK RTN
832	(340)	ADDRESS	4	C@\$SVJLOK2	Secondary locking routine
836	(344)	ADDRESS	4	C@\$SVJTEST	TEST FOR JCQ LOCK OWNERSHIP
840	(348)	ADDRESS	4	C@\$SVJUNLK	RELEASE JOB COM QUEUES LOCK RTN
844	(34C)	ADDRESS	4	C@\$TRACER	EVENT TRACE FACILITY
848	(350)	ADDRESS	4	C@\$TRAREL	\$TRACE RELEASE ENTRY POINT
852	(354)	ADDRESS	4	C@\$VFLI	SIMULATE VFL INSTRUCTION
856	(358)	ADDRESS	4	C@\$XMPOST	CROSS MEMORY POST ROUTINE
860	(35C)	ADDRESS	4	C@BERTREAD	CSA \$DOGBERT Fetch support

## \$CADDR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
864	(360)	ADDRESS	4	C@BLOBMNT	2nd phase BLOB commit
868	(364)	ADDRESS	4	C#BLOBMNT	2nd phase BLOB commit PC #
872	(368)	ADDRESS	4	C@BLOBMNTA	2nd phase BLOB commit ARR
876	(36C)	ADDRESS	4	C@CATBFREE	Free unused \$CATBERT
880	(370)	ADDRESS	4	C@CATREAD	CSA \$DOGCAT Fetch support
884	(374)	ADDRESS	4	C@CKPTVERS	Obtain/release ckpt version
888	(378)	ADDRESS	4	C@FIFOEQ	Remove elmnt from FIFO que
892	(37C)	ADDRESS	4	C@FIFOENQ	Place element on FIFO queue
896	(380)	ADDRESS	4	C@GRPASGN	ASSIGN GROUPING TOKEN
900	(384)	ADDRESS	4	C@HCNVTIME	USED BY C/T FOR A TOD CONVERSION ROUTINE IN HASCSRIC
904	(388)	ADDRESS	4	C@HKYMERGE	MERGE OUTPUT JCL KEYWORDS RTN
908	(38C)	ADDRESS	4	C@HOSWB	GET SWB ERROR ROUTINE
912	(390)	ADDRESS	4	C@HSJFLSP	FREE SJF STORAGE ROUTINE
916	(394)	ADDRESS	4	C@JQERead	CSA \$DOGJQE Fetch support
920	(398)	ADDRESS	4	C@PDDBUPD	Update PDDD
924	(39C)	ADDRESS	4	C@PPSOSJB	PURGE PSO FROM SJB ROUTINE
928	(3A0)	ADDRESS	4	C@PREWTO	WTO PREPROCESSING ROUTINE
932	(3A4)	ADDRESS	4	C@PRTAUTH	JESNEWS & SYSOUT DATA SET AUTHORIZATION
936	(3A8)	ADDRESS	4	C@PSQUEUE	PSO QUEUE ROUTINE
940	(3AC)	ADDRESS	4	C@RECABORT	PSO,STATUS,CANCEL recovery
944	(3B0)	ADDRESS	4	C@RRWTORTN	Issue chain of WTO msgs
948	(3B4)	ADDRESS	4	C@SSVXDEF	EXIT DEFINITION ROUTINE
952	(3B8)	ADDRESS	4	C@TBADTGBQ	Queue bad TGB to HASPSPOL
956	(3BC)	ADDRESS	4	C@TSETLOCK	GET LOCAL AND CMS LOCKS ROUTINE
960	(3C0)	ADDRESS	4	C@TSFRELOK	FREE LOCAL AND CMS LOCKS RTN
964	(3C4)	ADDRESS	4	C@WSCREAD	CSA \$WSCJQE Fetch support

Comment

MODULE HASCSRJB ROUTINES LISTED ALPHABETICALLY

End of Comment

968	(3C8)	ADDRESS	4	C@\$JBIDBLD	JOB ID BUILD ROUTINE
972	(3CC)	ADDRESS	4	C@\$QLOCC	Locate JQE for a job #
976	(3D0)	ADDRESS	4	C@\$SJBFINd	FIND AN SJB
980	(3D4)	ADDRESS	4	C@\$SJBLOCK	LOCK AN SJB
984	(3D8)	ADDRESS	4	C@\$SJBRC	REQUEUE AN SJB
988	(3DC)	ADDRESS	4	C@\$SJBUNLK	UNLOCK AN SJB
992	(3E0)	ADDRESS	4	C@HETSOUT	SAVES STATUS ON INTERRUPT
996	(3E4)	ADDRESS	4	C@SJBFREE	FREE AN SJB
1000	(3E8)	ADDRESS	4	C@SJBINIT	CREATE AN SJB
1004	(3EC)	ADDRESS	4	C@SJOBINT	SJOB initialization

Comment

Module HASCSRJM routines listed alphabetically

End of Comment

1008	(3F0)	ADDRESS	4	C@GETJ2MON	Access monitor addr space
1012	(3F4)	ADDRESS	4	C@DELJ2MON	Delete monitor addr space

Comment

Module HASCUBSR routines listed alphabetically

End of Comment

1016	(3F8)	ADDRESS	4	C@UBSRB	Unwritten buffer SRB rtn
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Comment

Module HASCXJCT routines listed alphabetically

End of Comment

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1020	(3FC)	ADDRESS	4	C@\$JCTXADD	Add \$JCT extension
1024	(400)	ADDRESS	4	C@\$JCTXEXP	Expand \$JCT extension
1028	(404)	ADDRESS	4	C@\$JCTXGET	Locate \$JCT extension
1032	(408)	ADDRESS	4	C@\$JCTXREM	Delete \$JCT extension

Comment

RESERVED FOR FUTURE USE FIELDS--(LAST ENTRIES IN CADDR)

End of Comment

1036	(40C)	ADDRESS	4	CADDRREQ (0)	End of fields that must be non-zero after loading common storage modules and resolving CADDR values from module MTEs
1036	(40C)	ADDRESS	4	(4)	Reserved for future use

Comment

The following contains the entry points for routines which may or may not be present. When adding entry points above, use one of the above reserved fields to avoid requiring an assembly of modules using the entry points below.

End of Comment

1052	(41C)	ADDRESS	4	C@IEAVH709	MVS MCS flush routine
1052	(41C)	X'420'	0	CADDRLEN	**-"CADDR" LENGTH OF THE CADDR TABLE

\$CADDR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C#BLOBMNT	364		C@\$GSINIT	C0	
C#CPBUILD	1D0		C@\$GSTERM	C4	
C#CPDELETE	1DC		C@\$HGFMAIN	18C	
C#CPEXPAND	1E8		C@\$IOTBLD	2C0	
C#CPFREE	1F4		C@\$JBIDBLD	3C8	
C#CPGET	200		C@\$JCTXADD	3FC	
C#CPMODIFY	210		C@\$JCTXEXP	400	
C#CPQCELL	21C		C@\$JCTXGET	404	
C#CPQEXT	228		C@\$JCTXREM	408	
C#CPQPPOOL	234		C@\$MLTFBUF	190	
C#PROTENDR	100		C@\$MSDDUMP	194	
C#PROTGET	10C		C@\$PDBBLD	20	
C#PROTPNT	124		C@\$PDBDEFS	24	
C#PROTPUT	118		C@\$PDBFIND	2C4	
C#PROTSRB	130		C@\$PDBNEXT	2C8	
C@\$POST	330		C@\$QLOCC	3CC	
C@\$SALESERV	6C		C@\$RACROUT	334	
C@\$ALLDAU	14		C@\$RQUEACT	244	
C@\$CBIO	2B4		C@\$RQUECMP	248	
C@\$CRETRN	174		C@\$RQUEDEA	24C	
C@\$CSAVE	178		C@\$RQUEEXE	250	
C@\$DCTCHEK	2B8		C@\$RQUEGET	254	
C@\$DESTCHK	264		C@\$RQUERET	258	
C@\$DSCTBLD	1C		C@\$SDBCHEK	2CC	
C@\$FBUFRTN	17C		C@\$SDBFREE	2D0	
C@\$FNDRIT	2BC		C@\$SDBINIT	2D4	
C@\$FRECEL	180		C@\$SJBFIN	3D0	
C@\$GASSIGN	BC		C@\$SJBLOCK	3D4	
C@\$GETCEL	184		C@\$SJBREQ	3D8	
C@\$GETHP	188		C@\$SJBUNLK	3DC	
C@\$GKGET	B0		C@\$SSIBEGN	198	
C@\$GKINIT	B4		C@\$SSIEND	19C	
C@\$GKTERM	B8		C@\$STRAK	338	

## \$CADDR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C@\$SVJLOK	33C		C@GETPBLOK	DC	
C@\$SVJLOK2	340		C@GETSDBLK	E0	
C@\$SVJTEST	344		C@GETTRE	1AC	
C@\$SVJUNLK	348		C@GRPASGN	380	
C@\$SYMREC	1A0		C@HALCLASS	2E8	
C@\$TRACER	34C		C@HALFDSNR	28	
C@\$TRAREL	350		C@HALJMERG	2C	
C@\$UALDAU	18		C@HALOCRCP	30	
C@\$UCBINDX	168		C@HALOPDBI	34	
C@\$VERIFY	2D8		C@HALSSALP	38	
C@\$VFLI	354		C@HALUNAL	3C	
C@\$XMPOST	358		C@HAMNULL	E4	
C@ABEND722	CC		C@HAMPSTER	E8	
C@ARMEQJ	10		C@HAOUTSCN	40	
C@BERTREAD	35C		C@HASJFREQ	298	
C@BLOBMNT	360		C@HASJIDST	29C	
C@BLOBMNTA	368		C@HASPAMI	EC	
C@CATBFREE	36C		C@HCBCK	2F0	
C@CATREAD	370		C@HCBFM	2F4	
C@CKPTVERS	374		C@HCBGM	2F8	
C@CNIN2OUT	D0		C@HCNVTIME	384	
C@CNVDEVID	284		C@HETSOUT	3E0	
C@CPBREC	1D4		C@HFCLSUB	2FC	
C@CPBUILD	1CC		C@HFCLTRNC	300	
C@CPDELETE	1D8		C@HFEXJESL	54	
C@CPDREC	1E0		C@HFEXSPIN	58	
C@CPEXPAND	1E4		C@HFJDLINE	144	
C@CPFREC	1F8		C@HFJLOGTM	140	
C@CPFREE	1F0		C@HFJOBLOG	13C	
C@CPGET	1FC		C@HFOPSUB	5C	
C@CPGREC	204		C@HINTRDR	F0	
C@CPINIT	208		C@HIOTSPIN	44	
C@CPJCLINI	8		C@HJE000	148	
C@CPJCLTRM	C		C@HJSMAKSL	14C	
C@CPMODIFY	20C		C@HJSRETAB	304	
C@CPMREC	214		C@HKYMERGE	388	
C@CPQCELL	218		C@HNDUPDTE	48	
C@CPQCREC	220		C@HOCSETUP	60	
C@CPQEXT	224		C@HONEWOUT	308	
C@CPQPPOOL	230		C@HOOLDINP	30C	
C@CPQPPREC	238		C@HOOLDOUT	310	
C@CPQXREC	22C		C@HOSWB	38C	
C@CPTERM	23C		C@HPOSTIR	4C	
C@CPXREC	1EC		C@HSJFACC	294	
C@CSPEOX	25C		C@HSJFLSP	390	
C@CVDEVID	288		C@HWAITBUF	F4	
C@DATASERV	260		C@IEAVH709	41C	
C@DELJ2AUX	2B0		C@JBFOUND	150	
C@DELJ2MON	3F4		C@JBSELECT	154	
C@DSNCMP	2DC		C@JOBSTATS	158	
C@DSNVFY	2E0		C@JQEREAD	394	
C@DSOPEN	50		C@JSOPSSDS	15C	
C@DSPSERV	70		C@JSREOPEN	160	
C@ENFISSUE	74		C@MBSCATTN	1B0	
C@ENF58BLD	2E4		C@MCSFLUSH	268	
C@EOBLOB	16C		C@MRGSWBS	164	
C@EOTFDCON	170		C@MTTRVAL	314	
C@FIFOEQ	378		C@MTTROVAL	318	
C@FIFOENQ	37C		C@NJEHDRDU	31C	
C@FINDMOD	1A4		C@OBTGBAT	F8	
C@FREPBLOK	D4		C@OLDJOE	320	
C@FRESDBLK	D8		C@PDDBUPD	398	
C@FRETRE	1A8		C@PPSOSJB	39C	
C@GETJ2AUX	2AC		C@PRENRREC	104	
C@GETJ2MON	3F0		C@PREWTO	3A0	

## \$CADDR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C@PRGETREC	110		CADDR@ENF56	98	
C@PRJBCLD	28C		CADDR@ENF57CM		
C@PROTENDR	FC			A0	
C@PROTGET	108		CADDR@ENF57RV		
C@PROTPNT	120			A8	
C@PROTPUT	114		CADDR@HAMAVT	C8	
C@PROTSRB	12C		CADDR@HASPVTAB		
C@PRPNTREC	128			2EC	
C@PRPUTREC	11C		CADDR@OCOOFFST		
C@PRSPLIO	290			1C8	
C@PRSRBREC	134		CADDRENFBEQ	78	
C@PRTAUTH	3A4		CADDRENFNUM	AC	7
C@PSQUEUE	3A8		CADDREQE	40C	
C@RECAORT	3AC		CADDREQS	8	
C@RECOVERY	1B4		CADDRID	0	C3C1C4C4
C@RELGBAT	138		CADDRLEN	41C	420
C@RRWTORTN	3B0		CADDRVNM	4	7
C@SFNDSJB	26C		CADDRVSN	4	
C@SIGIOU	324				
C@SJBFFREE	3E4				
C@SJBINIT	3E8				
C@SJFSWBRD	2A0				
C@SJJOBINT	3EC				
C@SSIFINE	1B8				
C@SSISESTA	1BC				
C@SSISSETUP	1C0				
C@SSVCLSC	64				
C@SSVOPNC	68				
C@SSVXDEF	3B4				
C@SWBTUMRG	2A4				
C@SYMTT	328				
C@TBADTGBQ	3B8				
C@TSCNVJB	270				
C@TSETLOCK	3BC				
C@TSFRELOK	3C0				
C@TUXTRACT	2A8				
C@UBSRB	3F8				
C@USENF58	32C				
C@USERDEST	274				
C@USERSUB	278				
C@USRNEWND	27C				
C@WSCREAD	3C4				
C@WTALOGQ	280				
CADDR	0				
CADDR#ENF35	7C				
CADDR#ENF41CP					
	8C				
CADDR#ENF41GL					
	84				
CADDR#ENF42	94				
CADDR#ENF56	9C				
CADDR#ENF57CM					
	A4				
CADDR#ENF57RV					
	AC				
CADDR@CNTBITAB					
	1C4				
CADDR@CPLTABS					
	240				
CADDR@ENF35	78				
CADDR@ENF41CP					
	88				
CADDR@ENF41GL					
	80				
CADDR@ENF42	90				

## \$CADDR Cross Reference



---

## \$CAT Programming Interface information

Programming Interface information

\$CAT

End of Programming Interface information

## \$CAT Heading Information

**Common Name:** Class Attribute Table  
**Macro ID:** \$CAT  
**DSECT Name:** CAT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.  
**Size:** See CATLEN, CATLLEN  
**Created by:** JES2 Initialization  
 \$DOGCAT  
**Pointed to by:** \$CATABLE field of the \$HCT data area (during JES2 initialization only).  
 Constructed dynamically from data in BERTs  
**Serialization:** None Required  
**Function:** The CAT defines the attributes of the JES2 job classes. There are 64 CAT entries arranged contiguously. The appropriate CAT entry for a particular class is found by taking the class (e.g. class A = X'C1'), turning off the high order two bits (e.g. class A = '01') multiplying by the CATLEN equate, and adding the contents of \$CATABLE.

## \$CAT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CAT	HASP CLASS ATTRIBUTE TABLE ELEMENT
0	(0)	BITSTRING	1	CATJOBFL	HASP JOB FLAGS, COPIED INTO THE JCTJOBFL FIELD, FLAG VALUES ARE DEFINED IN \$JCT
1	(1)	BITSTRING	1	CATJBOPT	HASP JOB OPTIONS, COPIED INTO THE JCTJBOPT FIELD, FLAG VALUES ARE DEFINED IN \$JCT
2	(2)	CHARACTER	2	CATPROCN	PROCEDURE LIBRARY NUMBER
4	(4)	BITSTRING	1	CATSMFLG	HASP SMF FLAGS, COPIED INTO THE JCTSMFLG FIELD, FLAG VALUES ARE DEFINED IN \$JCT
5	(5)	CHARACTER	3	CATPERFM	DEFAULT PERFORMANCE GROUP

Comment

-----  
 The following fields are defined in aggregate by the CATCONVP symbol (below) and represent the converter defaults mapped by the converter parameter list (IEFCNPRM). The fields covered by CATCONVP must match those mapped by IEFCNPRM.  
 -----

End of Comment

8	(8)	SIGNED	4	CATCPBGN (0)	START OF CONVERTER PARMS
8	(8)	CHARACTER	1	CATCACCT	ACCOUNTING INFO REQUIRED
		.... ....		CATCNONE	"B'00000000" NO INFO IS REQUIRED
		.... ..1		CATCNAME	"B'00000001" PROGRAMMER NAME REQ'D
		.... ..1.		CATCNUMB	"B'00000010" ACCOUNT NUMBER REQUIRED
8	(8)	X'3'	0	CATCALL	"CATCNAME+CATCNUMB" JOB AND NUMBER REQUIRED
		.... ..1..		CATCSWAL	"B'00000100" SWA ABOVE 16M LINE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
9	(9)	CHARACTER	2		RESERVED
11	(B)	CHARACTER	8	CATCTIME (0)	DFLT JOB STEP INTL TIME
11	(B)	CHARACTER	6	CATCMNTE	MAXIMUM MINUTES
17	(11)	CHARACTER	2	CATCSECS	MAXIMUM SECONDS
19	(13)	CHARACTER	5	CATCREGN (0)	DEFAULT JOB STEP REGION
19	(13)	CHARACTER	4	CATCRGN	NUMERIC SPECIFICATION
23	(17)	CHARACTER	1	CATCRGA	KILOBYTES OR MEGABYTES SPECIFICATION
24	(18)	CHARACTER	1	CATCMND	COMMAND DISPOSITION
24	(18)	X'F0'	0	CATCEXEC	"C'0" PASS THE COMMAND THROUGH
24	(18)	X'F1'	0	CATCDSPL	"C'1" DISPLAY AND THEN PASS CMND
24	(18)	X'F2'	0	CATCVER	"C'2" ASK OPERATOR DISPOSITION
24	(18)	X'F3'	0	CATCIGN	"C'3" IGNORE THE COMMAND
25	(19)	CHARACTER	1	CATCBLP	BYPASS LABEL PROCESSING OPT.
		.... ...1		CATCBLPY	"B'00000001" PROCESS BYPASS LABEL PARM
26	(1A)	CHARACTER	1	CATCOCG (4)	OPERATOR COMMAND GROUP
		.... .1..		CATCGSYS	"B'00000100" GROUP 1 COMMANDS (SYS)
		.... ..1.		CATCGIO	"B'00000010" GROUP 2 COMMANDS (I/O)
		.... ...1		CATCGCON	"B'00000001" GROUP 3 COMMANDS (CONS)
26	(1A)	X'7'	0	CATCGALL	"CATCGSYS+CATCGIO+CATCGCON" ALL GROUPS
30	(1E)	CHARACTER	1	CATCLJCL	DEFAULT MSGLEVEL, JCL LISTED IF NO MSGLEVEL
31	(1F)	CHARACTER	1	CATCTMSG	ALLOCATION TERMINATION MSGS
31	(1F)	X'8'	0	CATCONVP	"CATCPBGN,*-CATCPBGN" FULL CONVERTER PARAMETERS
32	(20)	BITSTRING	8		Reserved for potential expansion of IEF CNPRM

Comment

-----  
 End of converter parameters mapped by IEF CNPRM  
 -----

-----  
 End of Comment  
 -----

40	(28)	BITSTRING	1	CATOPSWT	CONVERTER OPTION SWITCHES
41	(29)	BITSTRING	1	CATFLAG1	NORMAL OUTDISP FOR JESDS
		1... ....		CAT1CDP	"B'10000000" CONDITIONALLY PURGE OUTPUT FOR JOBS IN THIS CLASS
41	(29)	X'10'	0	CAT1NODP	"\$ODPURGE" NORMAL OUTDISP=PURGE
41	(29)	X'8'	0	CAT1NODW	"\$ODWRITE" NORMAL OUTDISP=WRITE
41	(29)	X'4'	0	CAT1NODH	"\$ODHOLD" NORMAL OUTDISP=HOLD
41	(29)	X'2'	0	CAT1NODK	"\$ODKEEP" NORMAL OUTDISP=KEEP
41	(29)	X'1'	0	CAT1NODL	"\$ODLEAVE" NORMAL OUTDISP=LEAVE
42	(2A)	BITSTRING	1	CATFLAG2	ABNORMAL OUTDISP FOR JESDS
42	(2A)	X'10'	0	CAT2AODP	"\$ODPURGE" ABNORMAL OUTDISP=PURGE
42	(2A)	X'8'	0	CAT2AODW	"\$ODWRITE" ABNORMAL OUTDISP=WRITE
42	(2A)	X'4'	0	CAT2AODH	"\$ODHOLD" ABNORMAL OUTDISP=HOLD
42	(2A)	X'2'	0	CAT2AODK	"\$ODKEEP" ABNORMAL OUTDISP=KEEP
42	(2A)	X'1'	0	CAT2AODL	"\$ODLEAVE" ABNORMAL OUTDISP=LEAVE
43	(2B)	BITSTRING	1	CATFLAG3	Processing flags
		1... ....		CAT3WLM	"B'10000000" WLM managed class
		..1.. ....		CAT3SPEC	"B'01000000" Special class (STC/TSU)
		..1. ....		CAT3PSEU	"B'00100000" Pseudo-class queue (not set in real CATs)
		...1 ....		CAT3RBLD	"B'00010000" Pseudo-class queue for rebuild queue
		.... 1...		CAT3RECO	"B'00001000" Pseudo CAT used for JQE and CAT reconciliation
		.... .1..		CAT3SINV	"B'00000100" Default SCHENV (CATSCHED) no longer defined
44	(2C)	CHARACTER	8	CATXBM	PROCNAME FOR XBM/2 JOB
52	(34)	CHARACTER	8	CATCLASS	Job class
60	(3C)	SIGNED	4	CATMAXJ	Max executing jobs in this class in the JESplex

## \$CAT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
CATCURJ is altered by \$QBUSY, QADCHAIN and QDECHAIN only					
-----					
End of Comment					
64	(40)	SIGNED	4	CATCURJ	Current executing jobs in this class in the JESplex
68	(44)	SIGNED	4	CATMAXT	TOD when Max executing jobs reached
72	(48)	SIGNED	4	CATJQER	Number of JQEs waiting for timer reconciliation (only present in CATs with CAT3RECO on)
76	(4C)	SIGNED	4	CATIMER	TOD when queue held
80	(50)	ADDRESS	4	CATQHDI	First JQE in class; CKPT only (offset in R4 mode and index in R12 mode)
84	(54)	CHARACTER	16	CATSCHED	Default SCHENV, JOB classes only
100	(64)	CHARACTER	1	CATMCLAS	Default message class, TSU and STC classes only
Comment					

### START OF SPECIFICATIONS

01 DESCRIPTIVE NAME: JES log control  
 02 ACRONYM: \$JESLOG  
 01 MACRO NAME: \$JESLOG  
 01 DSECT NAME: JLG  
 01 LABEL PREFIX: JLG  
 01 COMPONENT ID: JES2 (SC1BH)  
 01 EXTERNAL CLASSIFICATION: PSPI  
 01 END OF EXTERNAL CLASSIFICATION:  
 01 EYE-CATCHER: "None"  
 02 OFFSET: N/A  
 02 LENGTH: N/A  
 01 STORAGE ATTRIBUTES:  
 02 SUBPOOL: n/a  
 02 KEY: n/a  
 02 RESIDENCY:  
     This block is included in JCTs, SJXBs, CATs and CNVWORK. See the description of those "hosting" blocks for storage attributes.  
 01 SIZE:  
     See JLGLEN  
 01 CREATED BY:  
     See "hosting" control blocks  
 01 POINTED TO BY:  
     No pointers  
 01 SERIALIZATION:  
     None required  
 01 FUNCTION:  
     The JESLOG describes how the spinning of JESLOG (JESYSMG and JESJOBLOG) is to be supported.  
 01 METHOD OF ACCESS:  
 02 ASM:  
     Specify \$JESLOG as a positional operand on a \$MODULE macro instruction to cause this mapping to be generated. A USING of the following form is used: USING JLG,xxxx where xxxx is the label within the "hosting" block where the JESLOG

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
mapping begins. For example when referencing the JESLOG within the JCT, code USING JLG,JCTJLOG					
02 PL/X: This mapping is not available for compilations.					
01 USED BY: Spin processing for the the two JESLOG data sets use the information for their decisions.					
01 DELETED BY: See "hosting" blocks.					
01 FREQUENCY: See "hosting" blocks					
01 RESTRICTIONS: None END OF SPECIFICATIONS					
01 CHANGE ACTIVITY: \$Z02LLRJ=LRJOB HJE7705 001101 J_K2: Long running jobs \$Z02P049=LRJ HJE7705 001218 J_K2: RJI SSOB JESLOG Support 01 A000000-999999 CREATED for JES2 OS/390 Release 12					

End of Comment

101	(65)	BITSTRING	6	CATJLOG	JES log control
112	(70)	DBL WORD	8	(0)	Ensure double word bdy
112	(70)	X'70'	0	CATLEN	**CAT" Length of CAT
112	(70)	X'70'	0	CATLLEN	**CAT" Full length of CAT

Comment

SPECIAL CLASS DEFINITIONS

End of Comment

		11.1 ....		CATSTCCL	"X'D0" SYSTEM TASK CLASS
		111. ....		CATTSUCL	"X'E0" FOREGROUND TIME SHARING CLASS
112	(70)	X'5B'	0	CATSTCID	"C\$" SYSTEM TASK DISPLAY ID
112	(70)	X'7C'	0	CATTSUID	"C'@" FOREGROUND TIME SHARING DISPLAY ID
		.1.. ....		CATNENT	"X'FF'-X'C0'+1" NUMBER OF ENTRIES IN CAT

\$CAT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CAT	0		CATCRGN	13	
CATCACCT	8		CATCSECS	11	
CATCALL	8	3	CATCSWAL	8	4
CATCBLP	19		CATCTIME	B	
CATCBLPY	19	1	CATCTMSG	1F	
CATCDSPL	18	F1	CATCURJ	40	
CATCEXEC	18	F0	CATCVER	18	F2
CATCGALL	1A	7	CATFLAG1	29	
CATCGCON	1A	1	CATFLAG2	2A	
CATCGIO	1A	2	CATFLAG3	2B	
CATCGSYS	1A	4	CATIMER	4C	
CATCIGN	18	F3	CATJBOPT	1	
CATCLASS	34		CATJLOG	65	
CATCLJCL	1E		CATJOBFL	0	
CATCMND	18		CATJQER	48	
CATCMNTE	B		CATLEN	70	70
CATCNAME	8	1	CATLLEN	70	70
CATCNONE	8	0	CATMAXJ	3C	
CATCNUMB	8	2	CATMAXT	44	
CATCOCG	1A		CATMCLAS	64	
CATCONVP	1F	8	CATNENT	70	40
CATCPBGN	8		CATOPSWT	28	
CATCREGN	13		CATPERFM	5	
CATCRGA	17		CATPROCN	2	

## \$CAT Cross Reference

Name	Hex Offset	Hex Value
CATQHDI	50	
CATSCHEd	54	
CATSMFLG	4	
CATSTCCL	70	D0
CATSTCID	70	5B
CATTSUCL	70	E0
CATTSUID	70	7C
CATXBM	2C	
CAT1CDP	29	80
CAT1NODH	29	4
CAT1NODK	29	2
CAT1NODL	29	1
CAT1NODP	29	10
CAT1NODW	29	8
CAT2AODH	2A	4
CAT2AODK	2A	2
CAT2AODL	2A	1
CAT2AODP	2A	10
CAT2AODW	2A	8
CAT3PSEU	2B	20
CAT3RBLD	2B	10
CAT3RECO	2B	8
CAT3SINV	2B	4
CAT3SPEC	2B	40
CAT3WLM	2B	80

## \$CATBERT Heading Information

**Common Name:** Collector Attribute Table for BERTs  
**Macro ID:** \$CATBERT  
**DSECT Name:** CATBERT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CATB  
 Offset: -8 (in the JES2 CSA storage prefix)  
 Length: 4

**Storage Attributes:** Subpool: 241  
 Key: 1  
 Residency: Virtual storage is anywhere (below or above 16M) in ECSA. Real storage is anywhere.

**Size:** See CBRSIZE (plus an 8 byte prefix)  
**Created by:** JES2 initialization processing  
**Pointed to by:** CCTCBRT field of the HCCT data area  
 CVCB\_\$CATBERT\_ADDR field of the CVCB data area

**Serialization:** This control block is updated during JES2 initialization processing and not updated after that.

**Function:** This control block maps the common storage data area used by the \$DOGBERT (and related) services.

## \$CATBERT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CATBERT	, Collector Attribute table for BERTs
0	(0)	ADDRESS	1	CBRVERS	Version number
0	(0)	X'1'	0	CBRVERSN	"1" Current version
1	(1)	SIGNED	1	CBRNTYPE	Number of table entries
2	(2)	SIGNED	1	CBRMSTRV	CKPT level of last BERTMAP
3	(3)	BITSTRING	1		Reserved
4	(4)	SIGNED	4	CBRVERCT	Number of CKPT versions using this \$CATBERT

Comment

The following table points to the BERT maps for the supported types of BERTs. The entries in this table must match the CB numbers assigned in \$PARMLST and in the \$BERT CB type field.

End of Comment

4	(4)	X'0'	0	CBRMAPE	"0,12,C'X'" BERT map entry
4	(4)	X'0'	0	CBRMADDR	"0,4,C'A'" Address of BERT translate table
4	(4)	X'4'	0	CBRMCNT	"4,1,C'F'" Number of table entries (Not including id 0 record)
4	(4)	X'5'	0	CBRMFLAG	"5,1,C'B'" Flags
		1... ..		CBRMFJ2	"B'10000000" Type is JES2-defined
4	(4)	X'6'	0	CBRMSIZE	"6,2,C'H'" Max entry size (highest offset set)
4	(4)	X'8'	0	CBRMBYTE	"8,2,C'H'" Bytes of BERT data needed
4	(4)	X'C'	0	CBRMLEN	"L'CBRMAPE" Size of BERT map tabl entry
8	(8)	SIGNED	4	CBRMAPS (0)	--+ Table of BERT maps
8	(8)	ADDRESS	4	CBRMINT	Internal CB (always zero)
12	(C)	SIGNED	1	CBRNINT	Number of entries (always 0)
13	(D)	BITSTRING	1	CBRINTF	Flag byte
14	(E)	SIGNED	2	CBRINTL	Max size (always zero)
16	(10)	SIGNED	2	CBRINTS	Bytes in BERTs
18	(12)	SIGNED	2		Reserved
20	(14)	ADDRESS	4	CBRMJQE	JQE extensions
24	(18)	SIGNED	1	CBRNJQE	Number of entries

## \$CATBERT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
25	(19)	BITSTRING	1	CBRJQEF	Flag byte
26	(1A)	SIGNED	2	CBRJQEL	Max JQE size
28	(1C)	SIGNED	2	CBRJQES	Bytes in BERTs
30	(1E)	SIGNED	2		Reserved
32	(20)	ADDRESS	4	CBRMCAT	CAT control blocks
36	(24)	SIGNED	1	CBRNCAT	Number of entries
37	(25)	BITSTRING	1	CBRCATF	Flag byte
38	(26)	SIGNED	2	CBRCATL	Max CAT size
40	(28)	SIGNED	2	CBRCATS	Bytes in BERTs
42	(2A)	SIGNED	2		Reserved
44	(2C)	ADDRESS	4	CBRMWSCQ	WSCQ control blocks
48	(30)	SIGNED	1	CBRNWSCQ	Number of entries
49	(31)	BITSTRING	1	CBRWSCQF	Flag byte
50	(32)	SIGNED	2	CBRWSCQL	Max WSCQ size
52	(34)	SIGNED	2	CBRWSCQS	Bytes in BERTs
54	(36)	SIGNED	2		Reserved
56	(38)	SIGNED	4	(0)	--+ End of table
56	(38)	X'4'	0	CBRMAPCT	"(*-CBRMAPS)/CBRMLEN" Number of table entries
56	(38)	X'FE'	0	CBRMAXID	"\$DGBDYN-1" Max usable CB type
56	(38)	X'BFC'	0	CBRDYNPT	"CBRMAPS+CBRMADDR+(\$DGBDYN*CBRMLEN),4,C'A" Dynamic BRTRANS pointer
56	(38)	X'C08'	0	CBRSIZE	"(CBRMAPS-CATBERT)+(CBRMAXID+1+1)*CBRMLEN" Size of CATBERT

Comment

### BERT translation table

Bert translation tables are obtained in CSA and consist of a prefix area, containing storage pointers from area to area, followed by several (up to 253) BRTRANS areas. The prefix area contains a chain pointer that is used to free the CSA on a clean shutdown of JES2.

End of Comment

56	(38)	X'0'	0	CBRBMPFX	"0,8" Prefix area
56	(38)	X'0'	0	CBRBMPTR	"0,4" Prefix area chain pointer

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BRTRANS	, BERT translation table
0	(0)	CHARACTER	8	BRTRNAME	Name (Zero if not in use)
8	(8)	BITSTRING	1	BRTRID	BERTIE id
8	(8)	X'FD'	0	BRTRMAXI	"BRTIICNT-1" Max usable BERTIE ID
9	(9)	BITSTRING	1	BRTRCBT	CB type (same as \$PARMLST)
10	(A)	SIGNED	2	BRTRCOFF	Offset into CB of data
12	(C)	BITSTRING	1	BRTRLEN	Length of data
13	(D)	BITSTRING	1	BRTRFLG1	Flag bytes
		1... ....		BRTRF1OL	"B'10000000" Offset overlaps allowed
		.1.. ....		BRTRF1J2	"B'01000000" Type is JES2-defined
14	(E)	X'F'	0	BRTRFILL	"BRTRFCLI+1,1" Fill character
14	(E)	X'12'	0	BRTRSIZE	** -BRTRANS" Length of a table entry



**\$CATBERT Cross Reference**

Name	Hex Offset	Hex Value
BRTRANS	0	
BRTRCBT	9	
BRTRCOFF	A	
BRTRFILL	E	F
BRTRFLG1	D	
BRTRF1J2	D	40
BRTRF1OL	D	80
BRTRID	8	
BRTRLEN	C	
BRTRMAXI	8	FD
BRTRNAME	0	
BRTRSIZE	E	12
CATBERT	0	
CBRBMPFX	38	0
CBRBMPTR	38	0
CBRCATF	25	
CBRCATL	26	
CBRCATS	28	
CBRDYNPT	38	BFC
CBRINTF	D	
CBRINTL	E	
CBRINTS	10	
CBRJQEF	19	
CBRJQEL	1A	
CBRJQES	1C	
CBRMADDR	4	0
CBRMAPCT	38	4
CBRMAPE	4	0
CBRMAPS	8	
CBRMAXID	38	FE
CBRMBYTE	4	8
CBRMCAT	20	
CBRMCNT	4	4
CBRMFJ2	4	80
CBRMFLAG	4	5
CBRMINT	8	
CBRMJQE	14	
CBRMLN	4	C
CBRMSIZE	4	6
CBRMSTRV	2	
CBRMWSCQ	2C	
CBRNCAT	24	
CBRNINT	C	
CBRNJQE	18	
CBRNTYPE	1	
CBRNWSCQ	30	
CBRSIZE	38	C08
CBRVERCT	4	
CBRVERS	0	
CBRVERSN	0	1
CBRWSCQF	31	
CBRWSCQL	32	
CBRWSCQS	34	



## \$CCE Heading Information

**Common Name:** Cell Control Element  
**Macro ID:** \$CCE  
**DSECT Name:** CCE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CCE  
 Offset: CCEID-CCE  
 Length: L'CCEID

**Storage Attributes:** Subpool: 231  
 Key: 1  
 Residency: Virtual and real storage are anywhere (above or below 16M) in common storage.

**Size:** See CCEL

**Created by:** \$GETCEL in HASCLINK

**Pointed to by:** CCTCSACH field of the HCCT data area  
 CCECCE field of the CCE data area  
 PSOCCE field of the PSO data area  
 S35DCCE field of the S35D data area

**Serialization:** Compare and swap logic is used to place CCEs on the CCTCSACH chain. Once on the chain, they are never removed. Compare and swap logic must also be used to update field CCEKEY1. CCEKEY1 is a claim field that must be obtained prior to modifying any other CCE field. If CCEKEY1 field is 0 then there is no owner of the CCE.

**Function:** CCE's represent CSA cells of variable length (allocated in blocks of 256 bytes). The CCEs are chain from the CCTCSACH field in the HCCT control block. Once on this chain, a CCE will never be removed. The cell represented by each CCE is chained from the CCECLOC field of the CCE. The CCE describes who the owner of the cell is and what properties are associated with the cell (how large it is, whether it is a primary cell or not, how the cell may be freed). For more information on the CCEs, look at routines \$GETCEL and \$FRECEL in HASCLINK.

## \$CCE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CCE	THE \$CCE CONTROL BLOCK
0	(0)	CHARACTER	4	CCEID	CCE IDENTIFICATION
4	(4)	ADDRESS	1	CCEVRSN	CCE VERSION FIELD
4	(4)	X'1'	0	CCEVERSN	"1" CURRENT VERSION LEVEL
5	(5)	BITSTRING	1	CCEFLAG1	CCE FLAG FIELD
		1... ....		CCE1PRIM	"B'10000000" CELL WAS ALLOCATED WITH CCES--DO NOT FREE THE ASSOCIATED CELL
6	(6)	ADDRESS	2	CCECSIZ	ASSOCIATED CELL SIZE IN BYTES
8	(8)	ADDRESS	4	CCECCE	NEXT CCE
12	(C)	ADDRESS	4	CCECLOC	ADDRESS OF ASSOCIATED CELL
16	(10)	ADDRESS	4	CCEKEY1	PRIMARY KEY (CLAIM ID)--USUALLY AN SJB ADDRESS (USE CS INSTR)
20	(14)	ADDRESS	4	CCEKEY2	SECONDARY KEY--USUALLY A TCB ADDRESS OR 0

## \$CCE Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
20	(14)	X'18'	0	CCEL	**CCE"

## \$CCE Cross Reference

Name	Hex Offset	Hex Value
CCE	0	
CCECCE	8	
CCECLOC	C	
CCECSIZ	6	
CCEFLAG1	5	
CCEID	0	C3C3C540
CCEKEY1	10	
CCEKEY2	14	
CCEL	14	18
CCEVERSN	4	1
CCEVRSN	4	
CCE1PRIM	5	80

---

**SCCW Programming Interface information**

Programming Interface information

SCCW

End of Programming Interface information

## \$CCW Heading Information

**Common Name:** CCW mapping and operation code equates  
**Macro ID:** \$CCW  
**DSECT Name:** None  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: N/A  
 Key: N/A  
 Residency: N/A  
**Size:** N/A  
**Created by:** N/A  
**Pointed to by:** N/A  
**Serialization:** N/A  
**Function:** These equates define the fields within format 0 and format 1 CCWs as well as the operation codes and flags. Basic command codes may have to be combined with modifiers to produce CCW operation codes for specific devices.  
 Not all combinations of basic opcodes and modifiers are valid CCW opcodes for all types of devices. See specific device documentation for valid combinations.

## \$CCW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0		
Comment					
,MODULE - \$CADDR WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$HASPEQU WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$MIT WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$MITETBL WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$PADDR WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$PARMLST WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$PSV WILL BE GENERATED, IT IS REQUIRED BY ,MODULE - \$USERCBS WILL BE GENERATED, IT IS REQUIRED BY					
End of Comment					

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
START OF SPECIFICATIONS					
01 DESCRIPTIVE NAME: CCW mapping and operation code equates					
02 ACRONYM: \$CCW					
01 MACRO NAME: \$CCW					
01 DSECT NAME: None					
01 LABEL PREFIX: None					
01 COMPONENT ID: JES2 (SC1BH)					
01 EXTERNAL CLASSIFICATION: PSPI					
01 END OF EXTERNAL CLASSIFICATION:					
01 EYE-CATCHER: None					
02 OFFSET: N/A					
02 LENGTH: N/A					
01 STORAGE ATTRIBUTES:					
02 SUBPOOL: N/A					
02 KEY: N/A					
02 RESIDENCY: N/A					
01 SIZE: N/A					
01 CREATED BY: N/A					
01 POINTED TO BY: N/A					
01 SERIALIZATION: N/A					
01 FUNCTION:					
These equates define the fields within format 0 and format 1 CCWs as well as the operation codes and flags. Basic command codes may have to be combined with modifiers to produce CCW operation codes for specific devices.					
Not all combinations of basic opcodes and modifiers are valid CCW opcodes for all types of devices. See specific device documentation for valid combinations.					
01 METHOD OF ACCESS:					
02 ASM:					
Specify \$CCW as a positional operand on a \$MODULE macro instruction to cause this mapping to be generated.					
02 PL/X:					
This mapping is not available for compilations.					
01 USED BY:					
Used throughout JES2 by processes that build channel programs for EXCP and EXCPVR.					
01 DELETED BY: N/A					
01 FREQUENCY: N/A					
01 RESTRICTIONS:					
None					
END OF SPECIFICATIONS					
01 CHANGE ACTIVITY:					
@311 MVS/SP-JES2 VERSION 3 RELEASE 1 LEVEL 1 (SP3.1.1, HJE3311)					
@311XX MAINTENANCE MERGED INTO MVS/SP-JES2 RELEASE 3.1.1 (MODULE HASPDOCS DOCUMENTS THE APAR NUMBERS)					
\$R10LHIO=PERFDATA HJE7703 990930 TJW: HAM I/O performance					
\$Z04LHIO=HAMIO HJE7707 010914 TJW: HAM I/O performance					
A000000-9999999 CREATED FOR JES2 PRE SP					
01 NOTES:					
None					
Basic CCW fields (format 0)					
End of Comment					
0	(0)	X'0'	0	CCWOP	"0,1" OPERATION
0	(0)	X'0'	0	CCWCMD	"0,1" (ALIAS COMMAND CODE)
0	(0)	X'1'	0	CCWADDR	"1,3" DATA (TARGET) ADDRESS
0	(0)	X'4'	0	CCWFLAG	"4,1" FLAG BYTES

## \$CCW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'5'	0	CCWRESVD	"5,1" RESERVED
0	(0)	X'6'	0	CCWCOUNT	"6,2" LENGTH
0	(0)	X'6'	0	CCWLEN	"6,2" LENGTH
Comment					
Basic CCW fields (format 1)					
End of Comment					
0	(0)	X'0'	0	CCW1OP	"0,1" Operation
0	(0)	X'0'	0	CCW1CMD	"0,1" (Alias command code)
0	(0)	X'1'	0	CCW1FLAG	"1,1" Flag byte
0	(0)	X'2'	0	CCW1CNT	"2,2" Length
0	(0)	X'2'	0	CCW1LEN	"2,2" (Alias length)
0	(0)	X'1'	0	CCW1RESV	"CCW1FLAG,L'CCW1FLAG+L'CCW1CNT" Area that must be zero in a TIC
0	(0)	X'4'	0	CCW1ADDR	"4,4" Data (target) address
Comment					
BASIC COMMAND CODES					
End of Comment					
		.... ..1		WRITE	"X'01" WRITE
		.... ..1		PRINT	"X'01" PRINT (ON PRINTERS)
		.... ..1		PUNCH	"X'01" PUNCH (ON PUNCHES)
		.... ..1		SRCH	"X'01" SEARCH (USED WITH MODIFIER)
		.... ..1.		READ	"X'02" READ
		.... ..11		CNTRL	"X'03" CONTROL
		.... ..11		NOP	"X'03" NO OPERATION
		.... ..1..		SNS	"X'04" SENSE
		.... ..1..		TIC	"X'08" TRANSFER IN CHANNEL
0	(0)	X'6'	0	READIO	"READ+SNS" READ AND SENSE COMMAND
0	(0)	X'5'	0	WRITEIO	"WRITE+SNS" WRITE AND SENSE COMMAND
Comment					
CCW FLAG VALUES					
End of Comment					
		1.. ....		DC	"X'80" DATA CHAINING
		.1.. ....		CC	"X'40" COMMAND CHAINING
		..1. ....		SLI	"X'20" SUPPRESS INCORRECT LENGTH
		...1 ...		SKIP	"X'10" SUPPRESS DATA TRANSFER
		.... 1..		PCI	"X'08" PGM CONTROLLED INTERRUPT
		.... ..1..		IDA	"X'04" CHANNEL INDIRECT ADDRESSING
Comment					
DIRECT ACCESS DEVICE -- CONTROL COMMANDS					
End of Comment					
		..1. 1.11		ORIENT	"X'28'+CNTRL" ORIENT - (2305 ONLY)
		...1 ..11		RECALIB	"X'10'+CNTRL" RECALIBRATE
		.... .111		SEEK	"X'04'+CNTRL" SEEK
		.... 1.11		SEEKCYL	"X'08'+CNTRL" SEEK CYLINDER
		...1 1.11		SEEKHD	"X'18'+CNTRL" SEEK HEAD
		.... 1111		SPACNT	"X'0C'+CNTRL" SPACE COUNT
		...1 1111		SETFMSK	"X'1C'+CNTRL" SET FILE MASK
		..1. ..11		SETS	"X'20'+CNTRL" SET SECTOR - (RPS ONLY)
		..1. ..11		SETSECTR	"X'20'+CNTRL" SET SECTOR - (RPS ONLY)
		...1 ..11		RESTORE	"X'14'+CNTRL" RESTORE
		..1. .111		VARYSNS	"X'24'+CNTRL" VARY SENSING - (2305 ONLY)
		..1.. .111		LOCRC	"X'44'+CNTRL" LOCATE RECORD - (EXT. C-K-D)



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Direct Access Device -- Locate record operators					
End of Comment					
	....	...1		LROWRITE	"X'01" - Write data
	....	..11		LROFMT	"X'03" - Format write
	....	.11.		LROREAD	"X'06" - Read data
	....	1.11		LROWTRAK	"X'0B" - Write Track
	....	11..		LRORTRAK	"X'0C" - Read Track
Comment					
Direct Access Device -- Track operations					
End of Comment					
	1.1.	.11.		READTRD	"X'A4'+READ" Read track data
	1.1.	.1.1		WRITETRD	"X'A4'+WRITE" Write track data
Comment					
DIRECT ACCESS DEVICE -- SEARCH COMMAND MODIFIERS					
End of Comment					
	..1.	....		EQ	"X'20" SEARCH EQUAL MODIFIER
	.1..	....		HI	"X'40" SEARCH HI MODIFIER
	.11.	....		HIEQ	"X'60" SEARCH HI OR EQUAL MODIFIER
	....	.1..		CNTNU	"X'04" SEARCH CONTINUE (2314 ONLY)
Comment					
DIRECT ACCESS DEVICE -- SENSE COMMAND MODIFIERS					
End of Comment					
	1..1	....		RSVDISK	"X'90" DEVICE RESERVE
	1.11	....		RLSDISK	"X'B0" DEVICE RELEASE
Comment					
DIRECT ACCESS DEVICE -- FIELD MODIFIERS					
End of Comment					
	...1	1..		HA	"X'18" HOME ADDRESS FIELD
	...1	....		CNT	"X'10" COUNT (ID) FIELD
	...1	....		ID	"X'10" ID (COUNT) FIELD
	...1	.1..		REC0	"X'14" RECORD ZERO
	....	.1..		DATA	"X'04" DATA FIELD
	....	1..		KEY	"X'08" KEY FIELD
	....	11..		KD	"X'0C" KEY AND DATA FIELD
	...1	11..		CKD	"X'1C" COUNT, KEY AND DATA FIELDS
	....	....		IPL	"X'00" IPL RECORD
	..1.	....		SECTOR	"X'20" SECTOR
	1...	....		MT	"X'80" MULTI-TRACK OPERATION
Comment					
PRINTER DEVICE -- CONTROL COMMANDS					
End of Comment					
	1111	1.11		LOADUCS	"X'F8'+CNTRL" LOAD UCS BUFFER
	1111	.11		LOADUSCF	"X'F0'+CNTRL" LOAD UCS BUFFER (FOLDED)
	.1..	.11		FOLDUCS	"X'40'+CNTRL" FOLD UCS BUFFER
	..1.	.11		UNFLDUCS	"X'20'+CNTRL" UNFOLD UCS BUFFER

# \$CCW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		111. 1.11		GATEUCS	"X'E8'+CNTRL" GATE/LOAD UCS BUFFER
		.111 ..11		BLKDATAC	"X'70'+CNTRL" BLOCK DATA CHECK
		.111 1.11		ALWDATAC	"X'78'+CNTRL" ALLOW DATA CHECK
		.11. ..11		LOADFCB	"X'60'+CNTRL" LOAD FCB
		.11. 1.11		RAISCOVR	"X'68'+CNTRL" RAISE COVER
Comment					
PRINTER DEVICE -- READ COMMANDS					
End of Comment					
		.... ..1.		READPLB	"X'00'+READ" READ PRINT INE BUFFER
		.... 1.1.		READUCS	"X'08'+READ" READ UCS BUFFER
		...1 ..1.		READFCB	"X'10'+READ" READ FCB
Comment					
PRINTER DEVICE -- SPACING AND CHANNEL MODIFIERS					
End of Comment					
		.... ..11		IMED	"X'03" IMMEDIATE COMMAND (FORMS CONTROL)
		.... 1...		SPAC1	"X'08" PRINT WITH 1 SPACE
		...1 ....		SPAC2	"X'10" PRINT WITH 2 SPACES
		...1 1...		SPAC3	"X'18" PRINT WITH 3 SPACES
		1... ....		SKPCH0	"X'00'+X'80" SKIP TO CHANNEL 0
		1... 1...		SKPCH1	"X'08'+X'80" SKIP TO CHANNEL 1
		1..1 ....		SKPCH2	"X'10'+X'80" SKIP TO CHANNEL 2
		1..1 1...		SKPCH3	"X'18'+X'80" SKIP TO CHANNEL 3
		1.1. ....		SKPCH4	"X'20'+X'80" SKIP TO CHANNEL 4
		1.1. 1...		SKPCH5	"X'28'+X'80" SKIP TO CHANNEL 5
		1.11 ....		SKPCH6	"X'30'+X'80" SKIP TO CHANNEL 6
		1.11 1...		SKPCH7	"X'38'+X'80" SKIP TO CHANNEL 7
		11.. ....		SKPCH8	"X'40'+X'80" SKIP TO CHANNEL 8
		11.. 1...		SKPCH9	"X'48'+X'80" SKIP TO CHANNEL 9
		11.1 ....		SKPCH10	"X'50'+X'80" SKIP TO CHANNEL 10
		11.1 1...		SKPCH11	"X'58'+X'80" SKIP TO CHANNEL 11
		111. ....		SKPCH12	"X'60'+X'80" SKIP TO CHANNEL 12
Comment					
NON-IMPACT PRINTER DEVICE (3800) -- CONTROL COMMANDS					
End of Comment					
		..11 .111		INITPRT	"X'34'+CNTRL" INITIALIZE PRINTER
		1.. .111		SELXTAB0	"X'44'+CNTRL" SELECT TRANSLATE TABLE 0
		.1.1 .111		SELXTAB1	"X'54'+CNTRL" SELECT TRANSLATE TABLE 1
		.11. .111		SELXTAB2	"X'64'+CNTRL" SELECT TRANSLATE TABLE 2
		.111 .111		SELXTAB3	"X'74'+CNTRL" SELECT TRANSLATE TABLE 3
		1... .111		CLEARPRT	"X'84'+CNTRL" CLEAR PRINTER
		... .111		PRTEOT	"X'04'+CNTRL" END-OF-TRANSMISSION
		.... .111		OFFSTACK	"X'04'+CNTRL" OR OFFSET-STACK
		...1 .111		MARKFORM	"X'14'+CNTRL" MARK FORM
		.1.1 ..11		LOADWCGM	"X'50'+CNTRL" LOAD CHARACTER MODULE
		..1. .111		LDCOPYNO	"X'20'+CNTRL" LOAD COPY NUMBER
		.1.. .111		SETFLASH	"X'40'+CNTRL" LOAD FLASH FRAME
		.1.. .111		SETOVRLY	"X'40'+CNTRL" OR OVERLAY CONTROL SEQ.
Comment					
NON-IMPACT PRINTER DEVICE (3800) -- SPECAIL WRITE COMMANDS					
End of Comment					
		..1. .1.1		LDCHARMD	"X'24'+WRITE" LOAD CHARACTER MODIFICATION

Offsets		Type/Value	Len	Name (Dim)	Description
Dec	Hex				
		..11 .1.1		LDCOPYMD	"X'34'+WRITE" LOAD COPY MODIFICATION

**\$CCW Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ALWDATAC	0	7B	PUNCH	0	1
BLKDATAC	0	73	RAISCOVER	0	6B
CC	0	40	READ	0	2
CCWADDR	0	1	READFCB	0	12
CCWCMD	0	0	READIO	0	6
CCWCOUNT	0	6	READPLB	0	2
CCWFLAG	0	4	READTRD	0	A6
CCWLEN	0	6	READUCS	0	A
CCWOP	0	0	RECALIB	0	13
CCWRESVD	0	5	REC0	0	14
CCW1ADDR	0	4	RESTORE	0	17
CCW1CMD	0	0	RLSDISK	0	B0
CCW1CNT	0	2	RSVDISK	0	90
CCW1FLAG	0	1	SECTOR	0	20
CCW1LEN	0	2	SEEK	0	7
CCW1OP	0	0	SEEKCYL	0	B
CCW1RESV	0	1	SEEKHD	0	1B
CKD	0	1C	SELXTAB0	0	47
CLEARPRT	0	87	SELXTAB1	0	57
CNT	0	10	SELXTAB2	0	67
CNTNU	0	4	SELXTAB3	0	77
CNTRL	0	3	SETFLASH	0	43
DATA	0	4	SETFMSK	0	1F
DC	0	80	SETOVRLY	0	43
EQ	0	20	SETS	0	23
FOLDUCS	0	43	SETSECTR	0	23
GATEUCS	0	EB	SKIP	0	10
HA	0	18	SKPCH0	0	80
HI	0	40	SKPCH1	0	88
HIEQ	0	60	SKPCH10	0	D0
ID	0	10	SKPCH11	0	D8
IDA	0	4	SKPCH12	0	E0
IMED	0	3	SKPCH2	0	90
INITPRT	0	37	SKPCH3	0	98
IPL	0	0	SKPCH4	0	A0
KD	0	C	SKPCH5	0	A8
KEY	0	8	SKPCH6	0	B0
LDCHARMD	0	25	SKPCH7	0	B8
LDCOPYMD	0	35	SKPCH8	0	C0
LDCOPYNO	0	23	SKPCH9	0	C8
LOADFCB	0	63	SLI	0	20
LOADUCS	0	FB	SNS	0	4
LOADUSCF	0	F3	SPACNT	0	F
LOADWCGM	0	53	SPAC1	0	8
LOCRC	0	47	SPAC2	0	10
LROFMT	0	3	SPAC3	0	18
LROREAD	0	6	SRCH	0	1
LRORTRAK	0	C	TIC	0	8
LROWRITE	0	1	UNFLDUCS	0	23
LROWTRAK	0	B	VARYSNS	0	27
MARKFORM	0	17	WRITE	0	1
MT	0	80	WRITEIO	0	5
NOP	0	3	WRITETRD	0	A5
OFFSTACK	0	7			
ORIENT	0	2B			
PCI	0	8			
PRINT	0	1			
PRTEOT	0	7			



---

**\$CHK Programming Interface information**

Programming Interface information

\$CHK

End of Programming Interface information

## \$CHK Heading Information

**Common Name:** JES2 FSI Checkpoint Record  
**Macro ID:** \$CHK  
**DSECT Name:** CHK  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CHK  
 Offset: CHKID-CHK  
 Length: L'CHKID  
**Storage Attributes:** Subpool: 1  
 Key: 1  
 Residency: Virtual and real storage below 16 meg line  
**Size:** See CHKAZLNG  
**Created by:** HASPPRPU (via \$GETWORK)  
 \$#ALCHK allocated SPOOL space.  
**Pointed to by:** WRMCHKBF field of the \$WARMWRK data area  
 PPPCHKBF field of the \$PPPWORK data area  
 PSPCKPTB field of the \$PSOWORK data area  
 SPOOL MTTR kept in JOECPADR  
**Serialization:** Serialized by standard JES2 Main task serialization.  
**Function:** Maps the data area describing that information needed to understand where a printing or PSO function was when it reached a significant point in logic.  
 This is used to reposition printers when they are resume working on a piece of output.

## \$CHK Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CHKDSECT	HASP FSI CKPT RECORD DSECT
0	(0)	BITSTRING	1	(0)	BUFFER CONTROL INFORMATION
0	(0)	X'68'	0	CHKSTART	*** START OF DATA WRITTEN TO SPOOL

Comment

-----  
 The following sub-section, generated by the SPID macro, must reside immediately after the I/O control data in every spool buffer.

The following fields are defined:

Eyecatcher - 4 bytes

Job name - 8 bytes

Job number - 4 bytes

Job key - 4 bytes

Dataset key - 4 bytes (or reserved if not applicable)

-----  
 End of Comment

104	(68)	CHARACTER	4	CHKJID	Eyecatcher
108	(6C)	CHARACTER	8	CHKJNAME	Job name
116	(74)	SIGNED	4	CHKJBNUM	Job number
120	(78)	SIGNED	4	CHKJBKEY	Job key
124	(7C)	BITSTRING	4		Reserved
124	(7C)	X'18'	0	CHKSPLNG	**-CHKJID"

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
		%CHKPRO: ;			
		START OF SPECIFICATIONS			
01		Descriptive name: JES FSI checkpoint record area			
02		Acronym: IAZCHK			
01		Macro name: IAZCHK			
01		DSECT name: IAZCHK or CHK			
01		Label prefix: CHK			
01		Component ID: JES Common (SC141)			
01		External classification: PSP1			
01		End of external classification:			
01		Eye-catcher: 'CHK '			
02		Offset: CHKID-CHK			
02		Length: L'CHKID			
01		Storage attributes:			
02		Subpool: Caller			
02		Key: Any			
02		Residency:			
		Virtual and real storage are anywhere.			
01		Size:			
		See CHKLEN			
01		Created by:			
		Caller of FSIREQ service			
01		Pointed to by:			
		GDSCKPA field of the IAZFSIP data area when FSIREQ REQUEST=FSIGDS			
		CHKADR field of the IAZFSIP data area when FSIREQ REQUEST=FSICKPT			
01		Serialization:			
		None required			
01		Function:			
		This macro maps the data area describing the dataset information needed to understand the progress being made on the dataset by the processing FSA when a significant point in logic was reached. This information is used if the processing needs to be restarted, for example, a printer is repositioned and needs to resume work on a piece of output.			
01		Method of access:			
02		ASM:			
		IAZCHK DSECT=YESINO			
		DSECT=YES - Provided DSECT for IAZCHK			
		DSECT=NO - Provides storage definition for IAZCHK			
02		PL/X:			
		%DCL CHKPTR PTR			
		%INCLUDE SYSLIB(IAZCHK)			
01		Used by:			
		Functional Subsystem Interface			
01		Deleted by:			
		Caller of FSIREQ service			
01		Frequency:			
		1 per call to the Functional Subsystem Interface			
01		Restrictions:			
		None			
		END OF SPECIFICATIONS			
01		CHANGE ACTIVITY:			
		MVS/SP RELEASE 3 LEVEL 3 (SP1.3.3, JBB1329)			

# \$CHK Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
\$VC1PXXX=PTM HJE5530 950915 VLC: BCP PTM xxx Ext Classifi					
\$R04LWLM=WLM HJE6604 970317 J_K2: Misc fixes					
\$R04P498=WLM HJE6604 970331 J_S1:					
A000000-999999 CREATED FOR MVS 1.3.3					
01 NOTES:					
None					
%GOTO CHKDCL;					
					End of Comment
128	(80)	DBL WORD	8	IAZCHK (0)	
128	(80)	X'80'	0	CHK	"IAZCHK" ALTERNATE DSECT NAME
128	(80)	CHARACTER	4	CHKID	CHKPT RECORD AREA ID
132	(84)	SIGNED	2	CHKLNTH	CHKPT LENGTH
134	(86)	SIGNED	2		RESERVED
136	(88)	CHARACTER	64	CHKJESWK	TO BE FILLED IN BY JES
200	(C8)	CHARACTER	8	CHKRBA	JES EQUIVALENT OF A RBA
208	(D0)	SIGNED	4	CHKDEV	DEVICE TYPE
212	(D4)	SIGNED	4	CHKMOD	MODEL NUMBER
216	(D8)	SIGNED	4	CHKCOPY	COPY COUNT
220	(DC)	SIGNED	4	CHKTRNC	TRANSMISSION COUNT
224	(E0)	SIGNED	4	CHKREC	LOGICAL RECORD COUNT(FROM SPOOL)
228	(E4)	SIGNED	4	CHKPAGE	PHYSICAL SHEET COUNT
232	(E8)	CHARACTER	8	CHKPROD	PRODUCT THAT CREATED CKPT REC
240	(F0)	SIGNED	4	CHKVER	VERSION OF PRODUCT
244	(F4)	SIGNED	4	CHKRELS	RELEASE OF PRODUCT
248	(F8)	SIGNED	4	CHKMODF	MODIFICATION LEVEL OF PRODUCT
252	(FC)	SIGNED	4	CHKSERV	SERVICE LEVEL OF PRODUCT
252	(FC)	X'80'	0	CHKLEN	"*-CHK"
136	(88)	SIGNED	2	CHKJRCB	OFFSET TO RCB IN BUFFER
138	(8A)	SIGNED	2	CHKPDDDB	DISPLACEMENT OF PDDDB INTO IOT
140	(8C)	SIGNED	4	CHKPPCT	PDDDB PAGE COUNT
144	(90)	SIGNED	4	CHKTLNC	TOTAL JOE LINE COUNT
148	(94)	SIGNED	4	CHKTPCT	TOTAL JOE PAGE COUNT (PHYSICAL)
152	(98)	BITSTRING	4	CHKMTTR	DATA BUFFER SPOOL ADDR (MTTR)
156	(9C)	BITSTRING	4	CHKIOTTC	IOT TRACK ADDR (MTTR)
160	(A0)	BITSTRING	1	CHKCOPYC	CURRENT COPY NUMBER
161	(A1)	BITSTRING	1	CHKBOFF	CURRENT OFFSET INTO TRACKCELL
162	(A2)	BITSTRING	1	CHKCPYG	CURRENT OFFSET INTO COPY GROUP
163	(A3)	BITSTRING	1	CHKTNDS	TOTAL JOE DATASET COUNT

Comment

KEEP NEXT TWO FIELDS TOGETHER FOR \$DU COMMAND

					End of Comment
164	(A4)	SIGNED	4	CHKCRECN	CURRENT RECORD NUMBER
168	(A8)	SIGNED	4	CHKCPAGN	CURRENT PAGE NUMBER
168	(A8)	X'88'	0	CHKDATA	"CHKJESWK,*-CHKJESWK" CHK DATA AREA
172	(AC)	CHARACTER	12	CHKJOID (0)	JOE ID BLOCK FOR CHK VALIDATION
172	(AC)	CHARACTER	8	CHKJOENM	JOE OUTPUT GROUP NAME(JOENAME)
180	(B4)	CHARACTER	2	CHKJOID1	JOE OUTPUT GROUP ID (JOEID1)
182	(B6)	CHARACTER	2	CHKJOID2	JOE OUTPUT GROUP ID (JOEID2)
184	(B8)	BITSTRING	2		Reserved for future use
186	(BA)	SIGNED	2	CHKPPHPC	PDDDB PHYSICAL PAGE COUNT
200	(C8)	BITSTRING	1		Reserved
201	(C9)	BITSTRING	4	CHKRDATA	DATA BUFFER TRACK ADDRESS
205	(CD)	BITSTRING	3	CHKRBARN	RECORD NUMBER WITHIN BUFFER
256	(100)	SIGNED	4	(0)	PRESERVE FULL WORD ALIGNMENT
256	(100)	X'100'	0	CHKAZLNG	"*-CHKDSECT" Length of DSECT



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
FLAG EQUATES FOR \$#CHK MACRO INLINE PARAMETER LIST					
End of Comment					
	1...	....		CHK1RD	"B'10000000" TYPE=READ OPTION \$#CHK MACRO
	.1..	....		CHK1WR	"B'01000000" TYPE=WRITE OPTION \$#CHK MACRO
	..1.	....		CHK1YW	"B'00100000" WAIT=YES OPTION \$#CHK MACRO
	...1	....		CHK1NW	"B'00010000" WAIT=NO OPTION \$#CHK MACRO
	....	1...		CHK1RS5	"B'00001000" RESERVED FOR FUTURE USE
	....	.1..		CHK1RS6	"B'00000100" RESERVED FOR FUTURE USE
	....	.1.		CHK1RS7	"B'00000010" RESERVED FOR FUTURE USE
	....	...1		CHK1RS8	"B'00000001" RESERVED FOR FUTURE USE
Comment					
FLAG EQUATES FOR \$#ALCHK MACRO INLINE PARAMETER LIST					
End of Comment					
	1...	....		CHK2WRI	"B'10000000" WRIOT=YES OPTION \$#ALCHK MACRO
	.1..	....		CHK2WRJ	"B'01000000" WRJCT=YES OPTION \$#ALCHK MACRO
	..1.	....		CHK2IOT	"B'00100000" IOT ADDR PASSED TO \$#ALCHK
	...1	....		CHK2JCT	"B'00010000" JCT ADDR PASSED TO \$#ALCHK
	....	1...		CHK2YJL	"B'00001000" LOCK=YES OPTION \$#ALCHK MACRO
	....	.1..		CHK2QUE	"B'00000100" Use \$CKPTQUE to update JOE
	....	.1.		CHK2RS7	"B'00000010" RESERVED FOR FUTURE USE
	....	...1		CHK2RS8	"B'00000001" RESERVED FOR FUTURE USE

**\$CHK Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CHK	80	80	CHKPPHPC	BA	
CHKAZLNG	100	100	CHKPROD	E8	
CHKBOFF	A1		CHKRBA	C8	
CHKCOPY	D8		CHKRBARN	CD	
CHKCOPYC	A0		CHKRBATA	C9	
CHKCPAGN	A8		CHKREC	E0	
CHKCPYG	A2		CHKRELS	F4	
CHKCRECN	A4		CHKSERV	FC	
CHKDATA	A8	88	CHKSPLNG	7C	18
CHKDEV	D0		CHKSTART	0	68
CHKDSECT	0		CHKTLNC	90	
CHKID	80		CHKTNDS	A3	
CHKIOTTC	9C		CHKTPCT	94	
CHKJBKEY	78		CHKTRNC	DC	
CHKJBNUM	74		CHKVER	F0	
CHKJESWK	88		CHK1NW	100	10
CHKJID	68		CHK1RD	100	80
CHKJNAME	6C		CHK1RS5	100	8
CHKJOENM	AC		CHK1RS6	100	4
CHKJOID	AC		CHK1RS7	100	2
CHKJOID1	B4		CHK1RS8	100	1
CHKJOID2	B6		CHK1WR	100	40
CHKJRCB	88		CHK1YW	100	20
CHKLEN	FC	80	CHK2IOT	100	20
CHKLNGTH	84		CHK2JCT	100	10
CHKMOD	D4		CHK2QUE	100	4
CHKMODF	F8		CHK2RS7	100	2
CHKMTTR	98		CHK2RS8	100	1
CHKPAGE	E4		CHK2WRI	100	80
CHKPDDB	8A		CHK2WRJ	100	40
CHKPPCT	8C		CHK2YJL	100	8

## \$CHK Cross Reference

Name	Hex Offset	Hex Value
IAZCHK	80	

---

## \$CIRWORK Programming Interface information

Programming Interface information

### \$CIRWORK

The following field is **NOT** programming interface information:

- CIRPRMWR

End of Programming Interface information

## \$CIRWORK Heading Information

**Common Name:** JES2 Common Initialization Routines PCE Work Area  
**Macro ID:** \$CIRWORK  
**DSECT Name:** PCE (\$CIRWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: The subpool of the HASPIRA module  
 Key: 1  
 Residency: Virtual storage is below 16M and real storage is anywhere (above or below 16M) in the private storage of the JES2 address space.

**Size:** See symbol CIRWLEN for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** The initialization base PCE along with this work area is assembled into the HASPIRA module, which is contained in the HASPINIT or HASJES20 load module. The base PCE is defined statically using constants and this work area is generated by coding this macro with a DSECT=NO operand.

**Pointed to by:** See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** None

**Function:** The fields in this work area are used by the JES2 Initialization Processor and by its support routines and exits. \$CIRWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$CIRWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEINTID in the second byte of field PCEID.

The CIR PCE Work Area is used by the Initialization Routines (IR's) for temporary work areas, routine addresses, and various constants and values. Values required by multiple Initialization Routines are kept there.

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
Comment					
GENERAL FLAG BYTES AND FIELDS COMMON TO ALL IRS					
End of Comment					
240	(F0)	BITSTRING	1	CIRFLAG1	GENERAL USAGE FLAG 1
		1... ....		CIRF1HPI	"B'10000000" Current IRPL stmt from PARMLIB
		.1.. ....		CIRF1INC	"B'01000000" Current IRPL stmt INCLUDED
		..1. ....		CIRF1CI	"B'00100000" CURRENT IRPL STMT FROM CONSOLE
		...1 ....		CIRF1XI	"B'00010000" CURRENT IRPL STMT FROM EXIT 19
		.... 1..		CIRF1PER	"B'00001000" ERROR(S) IN SOME IRPL STMTS
		.... .1..		CIRF1CAN	"B'00000100" CANCEL STATEMENT PROCESSED
		.... ..1.		CIRF1SSW	"B'00000010" SINGLE SYSTEM WARM START

Offsets								
Dec	Hex	Type/Value	Len	Name (Dim)	Description			
241	(F1)	.... ...1	1	CIRF1SER	"B'00000001" SCAN PROCESSING DIAG ERROR MSG			
		1... ....		CIRFLAG2	GENERAL USAGE FLAG 2			
		.1.. ....		CIRF2JEX	"B'10000000" JQE extensions rebuilt			
		..1. ....		CIRF2RRD	"B'01000000" REREAD NECESSARY FOR PARMLIB			
		...1 ....		CIRF2HPO	"B'00100000" HASPPARM (FIRST) OPEN DONE			
		.... 1..		CIRF2CM	"B'00010000" IRPL IN CONSOLE MODE			
		.... ..1.		CIRF2ECM	"B'00001000" IRPL IN 'ERROR' CONSOLE MODE			
		.... ...1		CIRF2SSE	"B'00000100" IRPL, SUPPRESS INITSTMT ERRORS			
		.... ..1.		CIRF2CMA	"B'00000010" ENDING COMMA ON INIT PARM			
		.... ...1		CIRF2CMT	"B'00000001" NON-COMPLETE COMMENT ON INIT PARM			
		242		(F2)	ADDRESS	1	CIRFLAG3	GENERAL USAGE FLAG 3
					1... ....		CIRF3LST	"B'10000000" IRPL 'LIST' IN EFFECT
					.1.. ....		CIRF3LOG	"B'01000000" IRPL 'LOG' IN EFFECT
					..1. ....		CIRF3MID	"B'00100000" MSGID NOT SUPPL. IN DIAG TEXT
...1 ....	CIRF3BDV		"B'00010000" Bad Verify during patching					
.... 1..	CIRF3IO1		"B'00001000" I/O error on CKPT1					
.... ..1.	CIRF3IO2		"B'00000100" I/O error on CKPT2					
.... ..1.	CIRF3VE1		"B'00000010" Validation error on CKPT1					
.... ...1	CIRF3VE2		"B'00000001" Validation error on CKPT2					
242	(F2)		X'F'		0		CIRF3ERR	"CIRF3IO1+CIRF3IO2+CIRF3VE1+CIRF3VE2" Mask to test for any CKPT errors
242	(F2)	X'C'	0	CIRF3I12	"CIRF3IO1+CIRF3IO2" I/O error on both datasets			
242	(F2)	X'3'	0	CIRF3V12	"CIRF3VE1+CIRF3VE2" Validation error on both			
242	(F2)	X'9'	0	CIRF3I1V	"CIRF3IO1+CIRF3VE2" I/O error on CKPT1, val. error on CKPT2			
242	(F2)	X'6'	0	CIRF3V1I	"CIRF3VE1+CIRF3IO2" Val. error on CKPT1, I/O error on CKPT2			
243	(F3)	BITSTRING	1	CIRFLAG4	GENERAL USAGE FLAG 4			
		1... ....		CIRF4ILL	"B'10000000" INIT LMOD LOADED, NOT HASJES20			
		.1.. ....		CIRF4XER	"B'01000000" ERRORS IN EXIT ROUTINE ADDRS			
		..1. ....		CIRF4SCN	"B'00100000" \$STMTLOG CALLED FROM NPLDISP			
		...1 ....		CIRF4RES	"B'00010000" EXIT RTN NOT IN CSA/LPA			
		.... 1..		CIRF4RER	"B'00001000" Error in reader route code			
		.... ..1.		CIRF4CHM	"B'00000100" Chain current DCT via MDCTDCT			
		.... ..1.		CIRF4CHD	"B'00000010" Chain Current DCT via DCTDCB			
		.... ...1		CIRF4RTE	"B'00000001" Invalid Route code found			
		244		(F4)	SIGNED	4		RESERVED FOR FUTURE USE
248	(F8)	DBL WORD	8	CIRREPLY	WTOR REPLY AREA			
256	(100)	DBL WORD	8	CIRDWORK	DOUBLE WORD WORK AREA			
264	(108)	ADDRESS	4	CIRHCT	ADDR OF THE HCT			
268	(10C)	SIGNED	4	CIRECB	ECB FOR GENERAL INIT USAGE			

Comment

IROPTS FIELDS REQUIRED THROUGHOUT INITIALIZATION

End of Comment

272	(110)	ADDRESS	4	CIRWXITO	"V(HASPXIT0)" HASPXIT0 ADDR IN HASPINIT LMOD
276	(114)	ADDRESS	4	CIREXIT0	HASPXIT0 LOAD MODULE ADDR OR 0
280	(118)	ADDRESS	4	CIROPTPF	ADDR OF THE OS PARM FIELD
284	(11C)	BITSTRING	100	CIROPTS	HASP OPTIONS STRING

Comment

INIT fields for Priority aging and jesplex resource thresholds

End of Comment

384	(180)	ADDRESS	2	CIRJQRAT	Priority aging rate
386	(182)	ADDRESS	1	CIRJQHI	Job priority aging upper
387	(183)	ADDRESS	1	CIRJQLOW	and lower limits
388	(184)	ADDRESS	2	CIRJORAT	Output priority aging rate
390	(186)	ADDRESS	2	CIRJOHI	Output priority aging upper
392	(188)	ADDRESS	2	CIRJOLOW	and lower limits

## \$CIRWORK Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
394	(18A)	ADDRESS	2	CIRJQPRC	JQE threshold percentage
396	(18C)	ADDRESS	2	CIRJOPRC	JOE threshold percentage
398	(18E)	ADDRESS	2	CIRJNPRC	Job num threshold percent
400	(190)	ADDRESS	2	CIRTGPRC	Track grp threshold percent
402	(192)	ADDRESS	2	CIRBTPRC	BERT threshold percentage

Comment

### IRPL GENERAL PROCESSING FIELDS

End of Comment

404	(194)	ADDRESS	4	CIRSTMTW	ADDRESS OF IRPL STMT BUFFER
408	(198)	ADDRESS	4	CIRSTMTT	Address of IRPL translated statement buffer
412	(19C)	SIGNED	4	CIRSYMBP (0)	Symbol service parm list
424	(1A8)	ADDRESS	4		Addr of translated length
436	(1B4)	ADDRESS	4		Addr of return code
440	(1B8)	SIGNED	4	CIRTRANL	Length of translated str.
444	(1BC)	SIGNED	4	CIRTRANR	RC from translation service
448	(1C0)	SIGNED	2	CIRSTMTC	CURRENT IRPL STATEMENT COUNT
450	(1C2)	SIGNED	2	CIRNLLCT	NPLLOG LINE COUNTER (50-1)
452	(1C4)	SIGNED	2	CIRNLPCT	NPLLOG CURRENT PAGE NUMBER
454	(1C6)	BITSTRING	1	CIRIRPL1	Flag used in IRPL
		1... ..		CIRP1AST	"B'10000000" Asterisk is last char on a line within a comment
455	(1C7)	BITSTRING	1		Reserved for future use
456	(1C8)	SIGNED	4	CIRSDLCT	\$SCAN DISPLAY LINE COUNT
460	(1CC)	ADDRESS	4	CIRX0XRT	ADDR OF XRT FOR EXIT 0
464	(1D0)	SIGNED	1	CIRX0#RT	# of exit 0 routines
465	(1D1)	ADDRESS	3		RESERVED FOR FUTURE USE

Comment

### SUBROUTINE ADDRESSES

End of Comment

468	(1D4)	ADDRESS	4	CIRNPLLG	"V(NPLLOG)" ADDRESS OF IRPL LOGGING ROUTINE
472	(1D8)	ADDRESS	4		RESERVED FOR FUTURE USE
476	(1DC)	ADDRESS	4		RESERVED For Future Use
480	(1E0)	ADDRESS	4	CIRNQMSG	"V(NQUERY)" ADDRESS FOR QUERY MESSAGE
484	(1E4)	ADDRESS	4	CIRNDLAY	"V(NDELAY)" Address for NDELAY routine

Comment

### DCT PROCESSING FIELDS

End of Comment

488	(1E8)	ADDRESS	4	CIRPDCT	PREVIOUS DCT POINTER FOR USE WHEN GENERATING \$DCTPOOL DCTS
492	(1EC)	ADDRESS	4	CIRPDCT2	PREVIOUS DCT POINTER FOR USE WHEN GENERATING \$DCTPOL2 DCTS

Comment

### NDELAY processing fields

STIMERM SET,MF=L List form to set timer  
MACDATE = 08/19/88

End of Comment

496	(1F0)	BITSTRING	24	CIRSTIMS	REMOTE STIMERM SET PARM LIST
496	(1F0)	X'18'	0	CIRSTMSL	"*-CIRSTIMS" Length of parm list

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
STIMERM CANCEL,MF=L List form to cancel timer MACDATE = 08/19/88					
End of Comment					
520	(208)	BITSTRING	16	CIRSTIMC	REMOTE STIMERM TEST/CANCEL PARM LIST
520	(208)	X'10'	0	CIRSTMCL	"*-CIRSTIMC" Length of parm list
536	(218)	SIGNED	4	CIRNDCHN	Chain of NDELAY elements
536	(218)	X'0'	0	CIRNDEYE	"0,4,C'C'" Eyecatcher
536	(218)	X'4'	0	CIRNDNXT	"4,4,C'A'" Addr of next element
536	(218)	X'8'	0	CIRNDSTI	"8,4,C'F'" STIMERM ID=id-area
536	(218)	X'C'	0	CIRNDMSG	"12,4,C'A'" Addr of message text
536	(218)	X'10'	0	CIRNDDOM	"16,4,C'F'" NDELAY DOM id
536	(218)	X'14'	0	CIRNDLEN	"20" NDELAY element length
544	(220)	DBL WORD	8		Reserved for future use

Comment					
MISCELLANEOUS FIELDS					

End of Comment					
552	(228)	DBL WORD	8	CIRCMTSV	HOLD THE ADDR AND LEN OF STMT CURRENTLY RUNNING IN COMMENT-SCAN
560	(230)	SIGNED	2		Reserved for future use
562	(232)	BITSTRING	1	CIRFLAG5	General usage flag 5
		1... ....		CIR5IRDD	"B'10000000" IRDA has completed
		..1. ....		CIR5DSEQ	"B'00100000" Parmlib Dataset is Seq.
		...1 ....		CIR5HPRM	"B'00010000" HASPPARM specified
		.1.. ....		CIR5QWIK	"B'01000000" Jobqueue or JOT rebuilt
		.... 1...		CIR5DMEM	"B'00001000" Default member specified
		.... .1..		CIR5LPRM	"B'00000100" Logical Parmlib at EOF
		.... ..1.		CIR5BRTE	"B'00000010" BERT errors detected
		.... ...1		CIR5RRTE	"B'00000001" Error building RRT
563	(233)	BITSTRING	1		Reserved for future use
564	(234)	SIGNED	4	CIRXRTNS	TOTAL NO. OF EXIT ROUTINES
568	(238)	ADDRESS	4	CIRJBMIN	MINIMUM LOCAL JOB NUMBER
572	(23C)	ADDRESS	4	CIRJBMAX	MAXIMUM LOCAL JOB NUMBER
572	(23C)	X'3C'	0	CIRXEMN	"WPLTXT-WPL+47,2" EXIT NUMBER IN INIT MSG864
572	(23C)	X'39'	0	CIRGEMR	"WPLTXT-WPL+44,10" GETMAIN ERROR MSG REASON
572	(23C)	X'3D'	0	CIRINFMR	"WPLTXT-WPL+9+48,45" Reason text in MSG HASP448
576	(240)	ADDRESS	4	CIRACCTJ	ADDR OF JES2-TO-NET NETACCT ELEMENTS
580	(244)	ADDRESS	4	CIRACCTN	ADDR OF NET-TO-JES2 NETACCT ELEMENTS
584	(248)	BITSTRING	6	CIRTGEDM	NUM TRACK GROUP EDIT MASK

Comment

-----

The TSUCLASS, STCCCLASS and JOBCLASS defaults are mapped by the Converter parameter list, IEFCNPRM. The following data definitions must be updated if the corresponding data definition in the converter parameter list is changed.

-----

End of Comment					
590	(24E)	CHARACTER	24	CIRROPSL	TSUCLASS DEFAULTS
614	(266)	CHARACTER	24	CIRROPST	STCCCLASS DEFAULTS
638	(27E)	CHARACTER	24	CIRROPSU	JOBCLASS DEFAULTS
662	(296)	SIGNED	2		RESERVED FOR FUTURE USE
664	(298)	ADDRESS	4	CIRVOLT B	ADDR OF VOLUME ALLOCATION TABLE
668	(29C)	ADDRESS	4	CIRCMDTB	ADDR OF 1ST TEMP COMMAND AREA
672	(2A0)	ADDRESS	4	CIRTSTOR	ADDR OF TEMPORARY STORAGE
676	(2A4)	ADDRESS	4	CIRT DCTS	ADDR OF PERMANENT DCT STORAGE

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
680	(2A8)	SIGNED	4	CIRSNALC	COUNT OF UNIT=SNA LINES
684	(2AC)	ADDRESS	4	CIRZIP	ZAPJOB ZIP chain
688	(2B0)	ADDRESS	4	CIRBTGFA	ADDR OF FIRST BTG TABLE ENTRY
692	(2B4)	ADDRESS	4	CIRBTGLA	ADDR OF LAST BTG TABLE ENTRY
696	(2B8)	BITSTRING	0	CIRSPT (0)	SMF IDs for CPU 1-32
824	(338)	SIGNED	4	CIRX0PS (0)	PARAMETER LIST FOR EXIT 0
824	(338)	ADDRESS	4	CIROPTA	ADDR OF OPTIONS (OS OR WTOR)
828	(33C)	ADDRESS	4	CIROPTL	LENGTH OF OPTIONS (OS OR WTOR)
832	(340)	ADDRESS	4	CIRDOMID	\$\$WTO DOM ID
836	(344)	ADDRESS	4	CIRCNECT	WTO CONNECT message number
840	(348)	CHARACTER	8	CIRIQNAM	ENQ queue/resource name,
848	(350)	CHARACTER	8	CIRIRNAM	used for most of init time
856	(358)	ADDRESS	2		Reserved for future use
858	(35A)	SIGNED	2	CIRLNENM	Number of lines with dedicated sub-devices
860	(35C)	SIGNED	4	CIRNUMJT	Total number of NJTs
864	(360)	SIGNED	4	CIRNUMJR	Total number of NJRs
868	(364)	SIGNED	4	CIRNUMST	Total number of NSTs
872	(368)	SIGNED	4	CIRNUMSR	Total number of NSRs
876	(36C)	SIGNED	4	CIRBLDM (0)	Control block ID
880	(370)	BITSTRING	4		Console ID
884	(374)	ADDRESS	4		Address of the CART
888	(378)	ADDRESS	4		Pointer for JOBID
892	(37C)	ADDRESS	4		Control block address
896	(380)	ADDRESS	4		Display routine address
900	(384)	ADDRESS	4	(6)	6 word work area
924	(39C)	BITSTRING	2		ROUT code for Message
926	(39E)	BITSTRING	2		Not used
928	(3A0)	CHARACTER	4		Message ID
932	(3A4)	CHARACTER	1		Separator character
933	(3A5)	ADDRESS	1		Flag byte 1
934	(3A6)	ADDRESS	1		'DISPER'
935	(3A7)	ADDRESS	1		Flag byte 2
936	(3A8)	BITSTRING	16		Not used
952	(3B8)	ADDRESS	4	(0)	Ensure multiple of 4
952	(3B8)	ADDRESS	2	(0)	
952	(3B8)	CHARACTER	300	CIRMWORK	Message building work area
1256	(4E8)	DBL WORD	8	(0)	Ensure double alignment

Comment

-----  
 General work area for short-term usage by IRs  
 -----

End of Comment

1256	(4E8)	BITSTRING	1	CIRGWORK	General work area
------	-------	-----------	---	----------	-------------------

Comment

-----  
 First mapping of CIRGWORK used by IROPTS  
 -----

End of Comment

1256	(4E8)	BITSTRING	2	CIRSCMLN	Scan message length
1258	(4EA)	CHARACTER	80	CIRSCMSG	Scan message text
1258	(4EA)	X'52'	0	CIRGW1LN	"*-CIRGWORK" Length of first mapping



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
Second mapping of CIRGWORK used by IRPL					
-----					
End of Comment					
1256	(4E8)	BITSTRING	20	CIRS99RB	SVC 99 REQUEST BLOCK
1276	(4FC)	SIGNED	4	CIRS99PT (0)	SVC 99 REQUEST BLOCK POINTER
1280	(500)	CHARACTER	121	CIRNLLNE (0)	NPLLOG OUTPUT LINE
1280	(500)	CHARACTER	1	CIRNLLCC	CARRIAGE CONTROL
1281	(501)	CHARACTER	10	CIRNLLSR	STATEMENT/DIAGNOSTIC SOURCE
1294	(50E)	CHARACTER	5	CIRNLLSH	STATEMENT NUMBER TEXT
1299	(513)	CHARACTER	6	CIRNLLSN	STATEMENT NUMBER
1299	(513)	X'1E'	0	CIRNLLL1	**-'CIRNLLSR' LENGTH OF FIRST PART OF LINE
1311	(51F)	CHARACTER	10		BLANKS
1321	(529)	CHARACTER	80	CIRNLLST	STATEMENT (ALL OR PART)
1404	(57C)	SIGNED	4	CIRX19PS (0)	PARAMETER LIST FOR EXIT 19
1404	(57C)	ADDRESS	4	CIRSTMTA	IRPL PARM STATEMENT ADDR
1408	(580)	ADDRESS	4	CIRSTMTL	IRPL PARM STATEMENT LEN
1412	(584)	ADDRESS	4	CIRINSSA	EXIT 19 INSERT STATEMENT ADDR
1416	(588)	ADDRESS	4	CIRINSSL	EXIT 19 INSERT STATEMENT LEN
1420	(58C)	ADDRESS	1	CIRSWARN	\$SCAN WARNING MASK
1421	(58D)	ADDRESS	3		RESERVED FOR FUTURE USE
1424	(590)	ADDRESS	4	CIRPLWRK	IRPL 24 bit work area
1428	(594)	ADDRESS	4	CIRPRDCB	Original PARMLIB DCB
1432	(598)	ADDRESS	4	CIRPRMWR	Alt PARMLIB work areas
1436	(59C)	ADDRESS	4	CIRLPARM	Logical parmlib Readbuf adr
1440	(5A0)	SIGNED	4	CIRLRCNT	Logical dataset rec counter
Comment					
-----					
Fields used to save the current PARMLIB data set name.					
-----					
End of Comment					
1444	(5A4)	BITSTRING	1	CIRIPRW	Init PRW data area
1444	(5A4)	X'188'	0	CIRGW2LN	**-'CIRGWORK' Length of second mapping
Comment					
-----					
Third mapping of CIRGWORK used by IRPOSTPL					
-----					
End of Comment					
1256	(4E8)	X'0'	0	CIRGW3LN	**-'CIRGWORK' Length of third mapping
Comment					
-----					
Fourth mapping of CIRGWORK used by IRDA					
-----					
End of Comment					
1256	(4E8)	CHARACTER	8	CIRCURRC	\$CKVTAB current value for \$HASP496 message
1264	(4F0)	CHARACTER	8	CIRPREVC	\$CKVTAB previous value for \$HASP496 message
1272	(4F8)	SIGNED	4	CIRJQENC	\$CKVTAB cur number of JQEs
1276	(4FC)	SIGNED	4	CIRJQENP	\$CKVTAB prev number of JQEs
1280	(500)	ADDRESS	4	CIRSPLF	FIRST SPL IN WORK CHAIN
1284	(504)	ADDRESS	4	CIRSPLL	LAST SPL IN WORK CHAIN

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1288	(508)	ADDRESS	4	CIRMSTRS	ADDR OF MSTR REC SAVE AREA
1292	(50C)	ADDRESS	4	CIRTOTA	ADDR OF TEMP TRACK-1 TABLE
1296	(510)	ADDRESS	4	CIRCURDS	CKG ADDRESS OF CURRENT DS
1300	(514)	ADDRESS	4	CIRALTDS	CKG address of other DS
1304	(518)	ADDRESS	4	CIRLFJQE	Address of last JQE put on free queue (\$QREBLD only)
1308	(51C)	ADDRESS	4	CIRCTENT	CTENT table used by IRDA
1312	(520)	ADDRESS	4	CIRCTEND	End of CTENT table
1316	(524)	SIGNED	4	CIRCOUNT	LOCK RETRY COUNT
1320	(528)	SIGNED	2	CIRCLREC	SIZE OF CHLOG FROM INIT
1322	(52A)	BITSTRING	1	CIRIRDA2	IRDA flags 2
Comment					
CIRIRDA2 bit definitions					
End of Comment					
		1... ....		CIRCKVWR	"B'10000000" Init deck error encountered
		.1.. ....		CIRCKVER	"B'01000000" Only a warning is needed
		..1. ....		CIRCKVTM	"B'00100000" Terminating error detected
1323	(52B)	BITSTRING	1		Reserved
Comment					
CTRACE PLISTVER=1,MF=L CTRACE parameter list MACDATE -98/06/17-<2>					
End of Comment					
0	(0)	X'530'	0	M00M0859	"CIRCTLST" ++ CTRACE NAME
1328	(530)	DBL WORD	8	CIRCTLST (0)	++ CTRACE PARM LIST
1328	(530)	BITSTRING	1	CIRCTLST_XVERSION	++ INPUT XVERSION
1329	(531)	CHARACTER	3	CIRCTLST_XRSV0000	++ RESERVED XRSV0000
1332	(534)	SIGNED	4	CIRCTLST_XSERVICE	++ XSERVICE
1332	(534)	X'1'	0	CIRCTLST_DEFINE	"1" ++ XSERVICE.DEFINE KEYWORD
1332	(534)	X'2'	0	CIRCTLST_DELETE	"2" ++ XSERVICE.DELETE KEYWORD
1336	(538)	CHARACTER	8	CIRCTLST_XNAME	++ XNAME
1344	(540)	CHARACTER	8	CIRCTLST_XSTARTNAM	++ XSTARTNAM
1352	(548)	CHARACTER	8	CIRCTLST_XFMTTAB	++ XFMTTAB
1360	(550)	BITSTRING	1	CIRCTLST_XFLG1	++ FIELD_LABEL
		1... ....		CIRCTLST_XASIDS_YES	"B'10000000" ++ XASIDS.YES KEYWORD
		.1.. ....		CIRCTLST_XBUFFER_YES	"B'01000000" ++ XBUFFER.YES KEYWORD
		..1. ....		CIRCTLST_XJOBS_YES	"B'00100000" ++ XJOBS.YES KEYWORD
		...1 ....		CIRCTLST_KEYUSED_MINOPS	"B'00010000" ++ KEYUSED.MINOPS KEYWORD
		.... 1...		CIRCTLST_XMOD_YES	"B'00001000" ++ XMOD.YES KEYWORD
		.... .1..		CIRCTLST_XBUFDEFIN_YES	"B'00000100" ++ XBUFDEFIN.YES KEYWORD
		.... ..1.		CIRCTLST_XWTR_YES	"B'00000010" ++ XWTR.YES KEYWORD
1361	(551)	BITSTRING	1	CIRCTLST_XFLG2	++ FIELD_LABEL
		1... ....		CIRCTLST_XLIKEHEAD_YES	

Offsets		Type/Value	Len	Name (Dim)	Description
Dec	Hex				
		.1.. ....		CIRCTLST_XHEAD_YES	"B'10000000" ++ XLIKEHEAD.YES KEYWORD
		..1. ....		CIRCTLST_XHEADOPTS_YES	"B'01000000" ++ XHEAD.YES KEYWORD
		...1 ....		CIRCTLST_XMANYSUBS_YES	"B'00100000" ++ XHEADOPTS.YES KEYWORD
		.... 1...		CIRCTLST_XWTRMODE_PAGEABLE	"B'00010000" ++ XMANYSUBS.YES KEYWORD
		.... .1..		CIRCTLST_XWTRMODE_DREF	"B'00001000" ++ XWTRMODE.PAGEABLE KEYWORD
		.... ..1.		CIRCTLST_XWTRMODE_FIXED	"B'00000100" ++ XWTRMODE.DREF KEYWORD
1362	(552)	BITSTRING	1	CIRCTLST_XFLG3	"B'00000010" ++ XWTRMODE.FIXED KEYWORD
		1... ....		CIRCTLST_KEYUSED_SUB	++ FIELD_LABEL
		.1.. ....		CIRCTLST_KEYUSED_PARM	"B'10000000" ++ KEYUSED.SUB KEYWORD
		..1. ....		CIRCTLST_KEYUSED_BUFMIN	"B'01000000" ++ KEYUSED.PARM KEYWORD
		...1 ....		CIRCTLST_KEYUSED_BUFMAX	"B'00100000" ++ KEYUSED.BUFMIN KEYWORD
		.... 1...		CIRCTLST_KEYUSED_BUFDFLT	"B'00010000" ++ KEYUSED.BUFMAX KEYWORD
		.... .1..		CIRCTLST_KEYUSED_SSRC	"B'00001000" ++ KEYUSED.BUFDFLT KEYWORD
		.... ..1.		CIRCTLST_KEYUSED_SSR SNC	"B'00000100" ++ KEYUSED.SSRC KEYWORD
		.... ...1		CIRCTLST_KEYUSED_IFNOSUBS	"B'00000010" ++ KEYUSED.SSR SNC KEYWORD
1363	(553)	BITSTRING	1	CIRCTLST_XFLG4	"B'00000001" ++ KEYUSED.IFNOSUBS KEYWORD
		1... ....		CIRCTLST_KEYUSED_USERDATA	++ FIELD_LABEL
1364	(554)	ADDRESS	4	CIRCTLST_XLNKPARM	"B'10000000" ++ KEYUSED.USERDATA KEYWORD
1368	(558)	ADDRESS	4	CIRCTLST_XMINOPS_ADDR	++ FIELD_LABEL XLNKPARM
1372	(55C)	BITSTRING	2	CIRCTLST_XMINOPS_LEN	++ ADDR XMINOPS
1374	(55E)	CHARACTER	16	CIRCTLST_XUSERDATA	++ FIELD_LABEL XMINOPS_LEN
1390	(56E)	CHARACTER	2	CIRCTLST_XRVS0002	++ XUSERDATA
1392	(570)	SIGNED	4	CIRCTLST_XBUFMIN	++ FIELD_LABEL XRVS0002
1396	(574)	SIGNED	4	CIRCTLST_XBUFMAX	++ XBUFMIN
1400	(578)	SIGNED	4	CIRCTLST_XBUFDFLT	++ XBUFMAX
1404	(57C)	ADDRESS	4	CIRCTLST_XSUB_ADDR	++ XBUFDFLT
1408	(580)	BITSTRING	2	CIRCTLST_XSUB_LEN	++ ADDR XSUB
1410	(582)	CHARACTER	2	CIRCTLST_XRVS0003	++ FIELD_LABEL XSUB_LEN
1412	(584)	CHARACTER	8	CIRCTLST_XPARAM	++ FIELD_LABEL XRVS0003
1420	(58C)	SIGNED	4	CIRCTLST_XSSRC	++ XPARAM
1424	(590)	SIGNED	4	CIRCTLST_XSSRSNC	++ XSSRC
1424	(590)	X'594'	0	CIRCTLST_PL_END	++ XSSRSNC

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1424	(590)	X'64'	0	CIRCTLSTL	*** ++ END OF BASE PLIST **-CIRCTLST" ++ LENGTH OF PLIST
Comment					
CTRACE-2					
End of Comment					
1428	(594)	ADDRESS	4	(0)	Force work alignment
1428	(594)	BITSTRING	16	CIRCTUSR (0)	CTRACE userdata
1428	(594)	ADDRESS	4	CIRCTBUF	Addr of data area
1432	(598)	ADDRESS	4	CIRCTBLN	Length of data area
1436	(59C)	SIGNED	2	CIRCTASI	Address space id of data
1438	(59E)	BITSTRING	6		Reserved
1444	(5A4)	CHARACTER	8	CIRCTNAM	CTRACE component name
1452	(5AC)	BITSTRING	1	CIRJOTES	JOT ERROR SWITCH
1453	(5AD)	BITSTRING	1	CIRIRDAF	IRDA ERROR SWITCH
Comment					
CIRIRDAF BIT DEFINITIONS					
End of Comment					
		1... ....		CIRWMER	"B'10000000" SPL VOL ERROR DURING WARM START
		.1.. ....		CIREXPRF	"B'01000000" EXTRA VOLUMES WITH SPOOL PREFIX
		..1. ....		CIRMAXQT	"B'00100000" MAX VOLUMES, OPERATOR SAID QUIT
		...1 ....		CIRSPLGE	"B'00010000" EXTENT TOO LARGE FOR TRCK GRPS
		.... 1...		CIRCLGSZ	"B'00001000" LOG SIZE MUST BE CALCULATED
		.... ..1.		CIRJOTEC	"B'00000010" JOT Error correction comp.
		.... ...1		CIRJOTRB	"B'00000001" JOT rebuild completed
1453	(5AD)	X'3'	0	CIRJOTV	"CIRJOTEC+CIRJOTRB" JOT Verification Completed
1454	(5AE)	BITSTRING	1	CIRIRDA1	IRDA FLAG BYTE
Comment					
CIRIRDA1 BIT DEFINITIONS					
End of Comment					
		1... ....		CIRMSGIS	"B'10000000" HASP488 MESSAGE ISSUED
		.1.. ....		CIRFWDDS	"B'01000000" A FORWARDED DATASET FOUND
		..1. ....		CIRDONFW	"B'00100000" FORWARDED DS PROC DONE
		...1 ....		CIRFFWD	"B'00010000" A DS HAS BEEN FORWARDED
		.... 1...		CIRCHIUS	"B'00001000" INUSE INDICATOR HAS CHANGED
		.... ..1.		CIRI460	"B'00000100" HASP460 was issued
		.... ...1		CIRI416	"B'00000010" Need to issue HASP416
		.... ...1		CIRNODAT	"B'00000001" CKPT data not useable
1455	(5AF)	BITSTRING	1	CIRPARMF	PARAMETER FLAG BYTE
1456	(5B0)	SIGNED	4	CIRPARML (0)	GENERIC PARM LIST
1456	(5B0)	SIGNED	4	CIRPARM1	PARAM 1
1460	(5B4)	SIGNED	4	CIRPARM2	PARAM 2
1464	(5B8)	SIGNED	4	CIRPARM3	PARAM 3
1468	(5BC)	SIGNED	4	CIRPARM4	PARAM 4
1472	(5C0)	SIGNED	4	CIRPARM5	PARAM 5
1476	(5C4)	SIGNED	4	CIRPARM6	PARAM 6
1476	(5C4)	X'5AF'	0	CIRPARMS	"CIRPARMF,*-CIRPARMF" FULL PARAMETER LIST
1480	(5C8)	SIGNED	4	CIRFWCNT	COUNT FORWARDED DATA SET
1484	(5CC)	CHARACTER	72	CIRCKPT1	CKPT1 SPEC SAVE AREA
1556	(614)	CHARACTER	72	CIRCKPT2	CKPT2 SPEC SAVE AREA
1628	(65C)	CHARACTER	144	CIRCHFES	CURRENT STATE OF CKPT ALOC
1772	(6EC)	BITSTRING	4	CIRIDMEM	'In-Doubt' members mask
1776	(6F0)	ADDRESS	4	CIRM791W	CBADDR for HASP791 message
1780	(6F4)	SIGNED	4	CIRECBLS (0)	List of ECBs to wait on
1780	(6F4)	ADDRESS	4	CIRECBA1	Pointer to ECB 1
1784	(6F8)	ADDRESS	4	CIRECBA2	Pointer to ECB 2

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1788	(6FC)	ADDRESS	4	CIRECBA3	Pointer to ECB 3
1792	(700)	SIGNED	4	CIRECB1	1st ECB
1796	(704)	SIGNED	4	CIRECB2	2nd ECB
1800	(708)	SIGNED	4	CIRECB3	3rd ECB
1804	(70C)	CHARACTER	70	CIRDIAGR	Init dialog reason text
1804	(70C)	X'26A'	0	CIRGW4LN	**-CIRGWORK" Length of fourth mapping

Comment

-----  
 Fifth mapping of CIRGWORK used by IRURDEV  
 -----

End of Comment

Comment

CIRCAPU IOSCAPU MF=(L,CIRCAPU) IOSCAPU parm list  
 MACDATE -01/22/01-<1>

End of Comment

0	(0)	X'4E8'	0	M00M0861	"CIRCAPU" ++ IOSCAPU NAME
1256	(4E8)	DBL WORD	8	CIRCAPU (0)	++ IOSCAPU PARM LIST
1256	(4E8)	BITSTRING	1	CIRCAPU_XVERSION	++ INPUT XVERSION
1257	(4E9)	BITSTRING	1	CIRCAPU_XFLAGS1	++ FIELD_LABEL
		1... ....		CIRCAPU_KEYUSED_CAPTUCB	"B'10000000" ++ KEYUSED.CAPTUCB KEYWORD
		.1.. ....		CIRCAPU_KEYUSED_UCAPTUCB	"B'01000000" ++ KEYUSED.UCAPTUCB KEYWORD
		..1. ....		CIRCAPU_KEYUSED_CAPTOACT	"B'00100000" ++ KEYUSED.CAPTOACT KEYWORD
		...1 ....		CIRCAPU_KEYUSED_ASID	"B'00010000" ++ KEYUSED.ASID KEYWORD
		.... 1..		CIRCAPU_KEYUSED_UCBPTR	"B'00001000" ++ KEYUSED.UCBPTR KEYWORD
		.... .1..		CIRCAPU_KEYUSED_CAPTPTR	"B'00000100" ++ KEYUSED.CAPTPTR KEYWORD
1258	(4EA)	CHARACTER	2	CIRCAPU_XRESERVED1	++ FIELD_LABEL XRESERVED1
1260	(4EC)	ADDRESS	4	CIRCAPU_XUCBPTR	++ XUCBPTR
1264	(4F0)	ADDRESS	4	CIRCAPU_XCAPTPTR	++ XCAPTPTR
1268	(4F4)	CHARACTER	1	CIRCAPU_XRESERVED2	++ FIELD_LABEL XRESERVED2
1269	(4F5)	BITSTRING	1	CIRCAPU_XMASK	++ FIELD_LABEL
		1... ....		CIRCAPU_XMSIFREE_YES	"B'10000000" ++ XMSIFREE.YES KEYWORD
		.1.. ....		CIRCAPU_XLASTING_YES	"B'01000000" ++ XLASTING.YES KEYWORD
		..1. ....		CIRCAPU_XCAPTCOM_YES	"B'00100000" ++ XCAPTCOM.YES KEYWORD
		...1 ....		CIRCAPU_XCAPTCOM_NEVER	"B'00010000" ++ XCAPTCOM.NEVER KEYWORD
1270	(4F6)	BITSTRING	2	CIRCAPU_XASID	++ XASID
1272	(4F8)	CHARACTER	16	CIRCAPU_XRESERVED3	++ FIELD_LABEL XRESERVED3
1272	(4F8)	X'20'	0	CIRCAPUL	**-CIRCAPU" ++ LENGTH OF PLIST

# \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
IOSCAPU-1					
End of Comment					
0	(0)	X'20'	0	CIRGW5LN	** -CIRGWORK" Length of fifth mapping
Comment					
----- Sixth mapping of CIRGWORK used by IRMVS -----					
End of Comment					
1256	(4E8)	ADDRESS	4	CIRSJLSP	SJF LOCAL STORAGE POINTER
1260	(4EC)	ADDRESS	4	CIRSJPTR	SWB SJF POINTER
1264	(4F0)	BITSTRING	256	CIRSJEXP	SJF EXTRACT PARAMETER LIST
1520	(5F0)	CHARACTER	32	CIRFPTX	FOOTPRINT AREA FOR \$GKINIT
1552	(610)	SIGNED	1	CIRFPLN	FOOTPRINT LENGTH
1553	(611)	CHARACTER	3	CIRRSV1	RESERVED FOR FUTURE USE
1553	(611)	X'12C'	0	CIRGW6LN	** -CIRGWORK" Length of sixth mapping
Comment					
----- Seventh mapping of CIRGWORK used indirectly by IRNJE (IRNJE \$CALLs NCOMMREQ, which \$CALLs NPDDMSG to display a diagnostic message in error scenarios) -----					
End of Comment					
1256	(4E8)	CHARACTER	120	CIRM500A	
1256	(4E8)	X'78'	0	CIRGW7LN	** -CIRGWORK" Length of seventh mapping
Comment					
----- Eighth mapping of CIRGWORK used by IRFINAL, IRNJE and IRRJE. -----					
End of Comment					
1256	(4E8)	SIGNED	4	CIRCMSTR (0)	Full word alignment
1256	(4E8)	CHARACTER	4		CPLTAB ID
1260	(4EC)	ADDRESS	1		CPLTAB Version
1261	(4ED)	ADDRESS	1		Sub Pool ID (non-JES2 AS)
1262	(4EE)	ADDRESS	1		Sub Pool number (JES2 AS)
1263	(4EF)	ADDRESS	1		Storage Key
1264	(4F0)	ADDRESS	4		CPINDEX offset
1268	(4F4)	CHARACTER	8		Cell Type
1276	(4FC)	ADDRESS	4		Cell size
1280	(500)	ADDRESS	1		General flags
1281	(501)	ADDRESS	1		Location flags
1282	(502)	ADDRESS	1		Data space flags
1283	(503)	BITSTRING	1		Reserved for future use
1284	(504)	ADDRESS	4		Limit of num of cells
1288	(508)	ADDRESS	4		Primary cell count
1292	(50C)	ADDRESS	4		Secondary cell count
1292	(50C)	X'28'	0	CIRGW8LN	** -CIRGWORK" Length of eighth mapping

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
Ninth mapping of CIRGWORK used by IRSSI					
-----					
End of Comment					
1256	(4E8)	ADDRESS	4	CIRETDEF	Local ETDEF work area
Comment					
-----					
This is mapping of CIRGWORK used by CSVNYNEX for Multi System Dump					
-----					
MACDATE -12/07/01-<0>					
-----					
End of Comment					
0	(0)	X'4F0'	0	M00M0865	"CIRDYNEX" ++ CSVNYNEX NAME
1264	(4F0)	DBL WORD	8	CIRDYNEX (0)	++ CSVNYNEX PARM LIST
1264	(4F0)	BITSTRING	1	CIRDYNEX_XVERSION	++ INPUT XVERSION
1265	(4F1)	BITSTRING	1	CIRDYNEX_XREQUEST	++ XREQUEST
1265	(4F1)	X'0'	0	CIRDYNEX_XREQUEST_DEFINE	"0" ++ XREQUEST.DEFINE KEYWORD
1265	(4F1)	X'1'	0	CIRDYNEX_XREQUEST_ADD	"1" ++ XREQUEST.ADD KEYWORD
1265	(4F1)	X'2'	0	CIRDYNEX_XREQUEST_MODIFY	"2" ++ XREQUEST.MODIFY KEYWORD
1265	(4F1)	X'3'	0	CIRDYNEX_XREQUEST_DELETE	"3" ++ XREQUEST.DELETE KEYWORD
1265	(4F1)	X'4'	0	CIRDYNEX_XREQUEST_UNDEFINE	"4" ++ XREQUEST.UNDEFINE KEYWORD
1265	(4F1)	X'5'	0	CIRDYNEX_XREQUEST_ATTRIB	"5" ++ XREQUEST.ATTRIB KEYWORD
1265	(4F1)	X'6'	0	CIRDYNEX_XREQUEST_LIST	"6" ++ XREQUEST.LIST KEYWORD
1265	(4F1)	X'7'	0	CIRDYNEX_XREQUEST_CALL	"7" ++ XREQUEST.CALL KEYWORD
1265	(4F1)	X'8'	0	CIRDYNEX_XREQUEST_RECOVER	"8" ++ XREQUEST.RECOVER KEYWORD
1265	(4F1)	X'9'	0	CIRDYNEX_XREQUEST_PROCESSDP	"9" ++ XREQUEST.PROCESSDP KEYWORD
1265	(4F1)	X'A'	0	CIRDYNEX_XREQUEST_ACTIVATE	"10" ++ XREQUEST.ACTIVATE KEYWORD
1265	(4F1)	X'B'	0	CIRDYNEX_XREQUEST_QUERY	"11" ++ XREQUEST.QUERY KEYWORD
1265	(4F1)	X'C'	0	CIRDYNEX_XREQUEST_REPLACE	"12" ++ XREQUEST.REPLACE KEYWORD
1266	(4F2)	BITSTRING	1	CIRDYNEX_XFLAGS	++ FIELD_LABEL
		1... ....		CIRDYNEX_KEYUSED_CALLSTOPRC	"B'10000000" ++ KEYUSED.CALLSTOPRC KEYWORD
		.1.. ....		CIRDYNEX_KEYUSED_RCFROM	"B'01000000" ++ KEYUSED.RCFROM KEYWORD
		..1. ....		CIRDYNEX_KEYUSED_KEEPRC	"B'00100000" ++ KEYUSED.KEEPRC KEYWORD
		...1 ....		CIRDYNEX_XFASTPATH_YES	"B'00010000" ++ XFASTPATH.YES KEYWORD
		.... 1...		CIRDYNEX_XREENTRANT_REQ	"B'00001000" ++ XREENTRANT.REQ KEYWORD
		.... .1..		CIRDYNEX_XMESSAGE_ERROR	

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... ..1.		CIRDYNEX_XSTATE_ACTIVE	"B'00000100" ++ XMESSAGE.ERROR KEYWORD
		.... ...1		CIRDYNEX_XSTATE_INACTIVE	"B'00000010" ++ XSTATE.ACTIVE KEYWORD
					"B'00000001" ++ XSTATE.INACTIVE KEYWORD
1267	(4F3)	BITSTRING	1	CIRDYNEX_XAMODE	
					++ XAMODE
1267	(4F3)	X'0'	0	CIRDYNEX_XAMODE_31	"0" ++ XAMODE.31 KEYWORD
1267	(4F3)	X'1'	0	CIRDYNEX_XAMODE_24	"1" ++ XAMODE.24 KEYWORD
1267	(4F3)	X'2'	0	CIRDYNEX_XAMODE_DEFINED	"2" ++ XAMODE.Defined KEYWORD
1268	(4F4)	SIGNED	4	CIRDYNEX_XKEY	
					++ XKEY
1272	(4F8)	BITSTRING	1	CIRDYNEX_XFLAGS2	
					++ FIELD_LABEL
		1... ....		CIRDYNEX_XONEMODULE_YES	"B'10000000" ++ XONEMODULE.YES KEYWORD
		.1.. ....		CIRDYNEX_XFORCE_YES	"B'01000000" ++ XFORCE.YES KEYWORD
		..1. ....		CIRDYNEX_XPERSIST_ADDRESSSPACE	"B'00100000" ++ XPERSIST.ADDRESSSPACE KEYWORD
		...1 ....		CIRDYNEX_XPERSIST_IPL	"B'00010000" ++ XPERSIST.IPL KEYWORD
		.... 1...		CIRDYNEX_XANYKEY_YES	"B'00001000" ++ XANYKEY.YES KEYWORD
		.... .1..		CIRDYNEX_XABENDCONSEC_YES	"B'00000100" ++ XABENDCONSEC.YES KEYWORD
		.... ..1.		CIRDYNEX_XLINKSTACKOK_NO	"B'00000010" ++ XLINKSTACKOK.NO KEYWORD
		.... ...1		CIRDYNEX_KEYUSED_STOKEN	"B'00000001" ++ KEYUSED.STOKEN KEYWORD
1273	(4F9)	BITSTRING	1	CIRDYNEX_XFLAGS3	
					++ FIELD_LABEL
		1... ....		CIRDYNEX_XRETINFO_HIGHEST	"B'10000000" ++ XRETINFO.HIGHEST KEYWORD
		.1.. ....		CIRDYNEX_XRETINFO_LOWEST	"B'01000000" ++ XRETINFO.LOWEST KEYWORD
		..1. ....		CIRDYNEX_XRETINFO_ALL	"B'00100000" ++ XRETINFO.ALL KEYWORD
		...1 ....		CIRDYNEX_XRETINFO_LAST	"B'00010000" ++ XRETINFO.LAST KEYWORD
		.... 1...		CIRDYNEX_XQTYPE_ADD	"B'00001000" ++ XQTYPE.ADD KEYWORD
1274	(4FA)	BITSTRING	1	CIRDYNEX_XPOS	
					++ XPOS
1274	(4FA)	X'0'	0	CIRDYNEX_XPOS_SYSTEM	"0" ++ XPOS.SYSTEM KEYWORD
1274	(4FA)	X'1'	0	CIRDYNEX_XPOS_LAST	"1" ++ XPOS.LAST KEYWORD
1274	(4FA)	X'2'	0	CIRDYNEX_XPOS_FIRST	"2" ++ XPOS.FIRST KEYWORD
1275	(4FB)	BITSTRING	1	CIRDYNEX_XEXAAVER	
					++ XEXAAVER
1275	(4FB)	X'0'	0	CIRDYNEX_XEXAAVER_0	"0" ++ XEXAAVER.0 KEYWORD
1275	(4FB)	X'1'	0	CIRDYNEX_XEXAAVER_1	"1" ++ XEXAAVER.1 KEYWORD
1276	(4FC)	CHARACTER	4	CIRDYNEX_XRSV0002	
					++ RESERVED XRSV0002
1280	(500)	CHARACTER	16	CIRDYNEX_XEXITNAME	
					++ XEXITNAME
1296	(510)	CHARACTER	8	CIRDYNEX_XMODNAME	



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1304	(518)	ADDRESS	4	CIRDYNEX_XCMDINFO_ADDR	++ XMODNAME ++ ADDR XCMDINFO
1308	(51C)	SIGNED	4	CIRDYNEX_XABENDNUM	++ XABENDNUM
1312	(520)	SIGNED	4	CIRDYNEX_XRCTO	++ XRCTO
1316	(524)	SIGNED	4	CIRDYNEX_XRCFROM	++ XRCFROM
1320	(528)	SIGNED	4	CIRDYNEX_XKEEPRC	++ XKEEPRC
1324	(52C)	BITSTRING	1	CIRDYNEX_XKEEPRCCOMP	++ XKEEPRCCOMP
1324	(52C)	X'0'	0	CIRDYNEX_XKEEPRCCOMP_EQ	"0" ++ XKEEPRCCOMP.EQ KEYWORD
1324	(52C)	X'1'	0	CIRDYNEX_XKEEPRCCOMP_NE	"1" ++ XKEEPRCCOMP.NE KEYWORD
1324	(52C)	X'2'	0	CIRDYNEX_XKEEPRCCOMP_GT	"2" ++ XKEEPRCCOMP.GT KEYWORD
1324	(52C)	X'3'	0	CIRDYNEX_XKEEPRCCOMP_LT	"3" ++ XKEEPRCCOMP.LT KEYWORD
1324	(52C)	X'4'	0	CIRDYNEX_XKEEPRCCOMP_GE	"4" ++ XKEEPRCCOMP.GE KEYWORD
1324	(52C)	X'5'	0	CIRDYNEX_XKEEPRCCOMP_LE	"5" ++ XKEEPRCCOMP.LE KEYWORD
1325	(52D)	BITSTRING	1	CIRDYNEX_XRCCOMPARE	++ XRCCOMPARE
1325	(52D)	X'0'	0	CIRDYNEX_XRCCOMPARE_EQ	"0" ++ XRCCOMPARE.EQ KEYWORD
1325	(52D)	X'1'	0	CIRDYNEX_XRCCOMPARE_NE	"1" ++ XRCCOMPARE.NE KEYWORD
1325	(52D)	X'2'	0	CIRDYNEX_XRCCOMPARE_GT	"2" ++ XRCCOMPARE.GT KEYWORD
1325	(52D)	X'3'	0	CIRDYNEX_XRCCOMPARE_LT	"3" ++ XRCCOMPARE.LT KEYWORD
1325	(52D)	X'4'	0	CIRDYNEX_XRCCOMPARE_GE	"4" ++ XRCCOMPARE.GE KEYWORD
1325	(52D)	X'5'	0	CIRDYNEX_XRCCOMPARE_LE	"5" ++ XRCCOMPARE.LE KEYWORD
1326	(52E)	CHARACTER	1	CIRDYNEX_XRSV0003	++ RESERVED XRSV0003
1327	(52F)	BITSTRING	1	CIRDYNEX_XEXRETVER	++ XEXRETVER
1327	(52F)	X'0'	0	CIRDYNEX_XEXRETVER_0	"0" ++ XEXRETVER.0 KEYWORD
1327	(52F)	X'1'	0	CIRDYNEX_XEXRETVER_1	"1" ++ XEXRETVER.1 KEYWORD
1328	(530)	SIGNED	4	CIRDYNEX_XCALLSTOPRC	++ XCALLSTOPRC
1332	(534)	CHARACTER	44	CIRDYNEX_XRSVNNNN	++ RESERVED XRSVNNNN
1332	(534)	X'560'	0	CIRDYNEX_PL_END	*** ++ END OF BASE PLIST
1308	(51C)	SIGNED	4	CIRDYNEX_XADDABENDNUM	++ XADDABENDNUM
1324	(52C)	BITSTRING	1	CIRDYNEX_XKEEPRCCVAL	++ XKEEPRCCVAL
1325	(52D)	BITSTRING	1	CIRDYNEX_XRCCVAL	++ XRCCVAL
1332	(534)	ADDRESS	4	CIRDYNEX_XWORKAREA_ADDR	++ ADDR XWORKAREA
1336	(538)	ADDRESS	4	CIRDYNEX_XRETAREA_ADDR	++ ADDR XRETAREA
1340	(53C)	SIGNED	4	CIRDYNEX_XRETAREA_ALET	

# \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++ ALET XRETAREA
1344	(540)	SIGNED	4	CIRDYNEX_XRETLEN	++ XRETLEN
1348	(544)	ADDRESS	4	CIRDYNEX_XRUB_ADDR	++ ADDR XRUB
1352	(548)	SIGNED	4	CIRDYNEX_XRUB_ALET	++ ALET XRUB
1356	(54C)	CHARACTER	8	CIRDYNEX_XNEXTTOKEN	++ XNEXTTOKEN
1364	(554)	ADDRESS	4	CIRDYNEX_XSDWA_ADDR	++ ADDR XSDWA
1332	(534)	ADDRESS	4	CIRDYNEX_XANSAREA_ADDR	++ ADDR XANSAREA
1336	(538)	SIGNED	4	CIRDYNEX_XANSAREA_ALET	++ ALET XANSAREA
1340	(53C)	SIGNED	4	CIRDYNEX_XANSLEN	++ XANSLEN
1332	(534)	ADDRESS	4	CIRDYNEX_XDSNAME_ADDR	++ ADDR XDSNAME
1336	(538)	SIGNED	4	CIRDYNEX_XDSNAME_ALET	++ ALET XDSNAME
1340	(53C)	CHARACTER	8	CIRDYNEX_XJOBNAME	++ XJOBNAME
1348	(544)	ADDRESS	4	CIRDYNEX_XMODADDR	++ XMODADDR
1352	(548)	CHARACTER	8	CIRDYNEX_XPARAM	++ XPARAM
1340	(53C)	CHARACTER	8	CIRDYNEX_XSTOKEN	++ XSTOKEN
1376	(560)	X'70'	0	CIRDYNEXL	**-'CIRDYNEX' ++ LENGTH OF PLIST
Comment					
CSVDYNEX-0					
End of Comment					
0	(0)	X'78'	0	CIRGW9LN	**-'CIRGWORK' Length of ninth mapping
Comment					
----- End of CIRGWORK mappings. -----					
End of Comment					
1376	(560)	ADDRESS	2	(0)	Ensure that
1376	(560)	ADDRESS	2	(0)	CIRGWORK is
1376	(560)	ADDRESS	2	(0)	larger than
1376	(560)	ADDRESS	2	(0)	each of the
1376	(560)	ADDRESS	2	(0)	individual
1376	(560)	ADDRESS	2	(0)	mappings of
1376	(560)	ADDRESS	2	(0)	the data
1376	(560)	ADDRESS	2	(0)	area
1908	(774)	SIGNED	4	(0)	
1908	(774)	X'684'	0	CIRWLEN	**-'PCEWORK' LENGTH OF CIR PCE WORK
1908	(774)	X'774'	0	CIRLEN	**-'PCE' LENGTH OF INIT PCE

**\$CIRWORK Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CIRACCTJ	240		CIRCTBUF	594	
CIRACCTN	244		CIRCTEND	520	
CIRALTDS	514		CIRCTENT	51C	
CIRBLDM	36C	C2D3C440	CIRCTLST	530	
CIRBTGFA	2B0		CIRCTLST_DEFINE		
CIRBTGLA	2B4			534	1
CIRBTPRC	192		CIRCTLST_DELETE		
CIRCAPU	4E8			534	2
CIRCAPU_KEYUSED_ASID			CIRCTLST_KEYUSED_BUFDFLT		
	4E9	10		552	8
CIRCAPU_KEYUSED_CAPTOACT			CIRCTLST_KEYUSED_BUFMAX		
	4E9	20		552	10
CIRCAPU_KEYUSED_CAPTPTR			CIRCTLST_KEYUSED_BUFMIN		
	4E9	4		552	20
CIRCAPU_KEYUSED_CAPTUCB			CIRCTLST_KEYUSED_IFNOSUBS		
	4E9	80		552	1
CIRCAPU_KEYUSED_UCAPTUCB			CIRCTLST_KEYUSED_MINOPS		
	4E9	40		550	10
CIRCAPU_KEYUSED_UCBPTR			CIRCTLST_KEYUSED_PARM		
	4E9	8		552	40
CIRCAPU_XASID			CIRCTLST_KEYUSED_SSRC		
	4F6			552	4
CIRCAPU_XCAPTCOM_NEVER			CIRCTLST_KEYUSED_SSR SNC		
	4F5	10		552	2
CIRCAPU_XCAPTCOM_YES			CIRCTLST_KEYUSED_SUB		
	4F5	20		552	80
CIRCAPU_XCAPTPTR			CIRCTLST_KEYUSED_USERDATA		
	4F0			553	80
CIRCAPU_XFLAGS1			CIRCTLST_PL_END		
	4E9			590	594
CIRCAPU_XLASTING_YES			CIRCTLST_XASIDS_YES		
	4F5	40		550	80
CIRCAPU_XMASK			CIRCTLST_XBUFDEFIN_YES		
	4F5			550	4
CIRCAPU_XMSIFREE_YES			CIRCTLST_XBUFDFLT		
	4F5	80		578	
CIRCAPU_XRESERVED1			CIRCTLST_XBUFFER_YES		
	4EA			550	40
CIRCAPU_XRESERVED2			CIRCTLST_XBUFMAX		
	4F4			574	
CIRCAPU_XRESERVED3			CIRCTLST_XBUFMIN		
	4F8			570	
CIRCAPU_XUCBPTR			CIRCTLST_XFLG1		
	4EC			550	
CIRCAPU_XVERSION			CIRCTLST_XFLG2		
	4E8			551	
CIRCAPUL	4F8	20	CIRCTLST_XFLG3		
CIRCHFES	65C			552	
CIRCHIUS	5AE	8	CIRCTLST_XFLG4		
CIRCKPT1	5CC			553	
CIRCKPT2	614		CIRCTLST_XFM TTAB		
CIRCKVER	52A	40		548	
CIRCKVTM	52A	20	CIRCTLST_XHEAD_YES		
CIRCKVWR	52A	80		551	40
CIRCLGSZ	5AD	8	CIRCTLST_XHEADOPTS_YES		
CIRCLREC	528			551	20
CIRCMDTB	29C		CIRCTLST_XJOBS_YES		
CIRCMSTR	4E8			550	20
CIRCMTSV	228	0	CIRCTLST_XLIKEHEAD_YES		
CIRCNECT	344			551	80
CIRCOUNT	524		CIRCTLST_XLNK PARM		
CIRCTASI	59C			554	
CIRCTBLN	598		CIRCTLST_XMANYSUBS_YES		

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	551	10	CIRDYNEX_XADDABENDNUM	51C	
CIRCTLST_XMINOPS_ADDR	558		CIRDYNEX_XAMODE	4F3	
CIRCTLST_XMINOPS_LEN	55C		CIRDYNEX_XAMODE_DEFINED	4F3	2
CIRCTLST_XMOD_YES	550	8	CIRDYNEX_XAMODE_24	4F3	1
CIRCTLST_XNAME	538		CIRDYNEX_XAMODE_31	4F3	0
CIRCTLST_XPARAM	584		CIRDYNEX_XANSAREA_ADDR	534	
CIRCTLST_XRSV0000	531		CIRDYNEX_XANSAREA_ALET	538	
CIRCTLST_XRVS0002	56E		CIRDYNEX_XANSLEN	53C	
CIRCTLST_XRVS0003	582		CIRDYNEX_XANYKEY_YES	4F8	8
CIRCTLST_XSERVICE	534		CIRDYNEX_XCALLSTOPRC	530	
CIRCTLST_XSSRC	58C		CIRDYNEX_XCMDINFO_ADDR	518	
CIRCTLST_XSSRSNC	590		CIRDYNEX_XDSNAME_ADDR	534	
CIRCTLST_XSTARTNAM	540		CIRDYNEX_XDSNAME_ALET	538	
CIRCTLST_XSUB_ADDR	57C		CIRDYNEX_XEXAAVER	4FB	
CIRCTLST_XSUB_LEN	580		CIRDYNEX_XEXAAVER_0	4FB	0
CIRCTLST_XUSERDATA	55E		CIRDYNEX_XEXAAVER_1	4FB	1
CIRCTLST_XVERSION	530		CIRDYNEX_XEXITNAME	500	
CIRCTLST_XWTR_YES	550	2	CIRDYNEX_XEXRETVER	52F	
CIRCTLST_XWTRMODE_DREF	551	4	CIRDYNEX_XEXRETVER_0	52F	0
CIRCTLST_XWTRMODE_FIXED	551	2	CIRDYNEX_XEXRETVER_1	52F	1
CIRCTLST_XWTRMODE_PAGEABLE	551	8	CIRDYNEX_XFASTPATH_YES	4F2	10
CIRCTLSTL	590	64	CIRDYNEX_XFLAGS	4F2	
CIRCTNAM	5A4		CIRDYNEX_XFLAGS2	4F8	
CIRCTUSR	594		CIRDYNEX_XFLAGS3	4F9	
CIRCURDS	510		CIRDYNEX_XFORCE_YES	4F8	40
CIRCURRC	4E8		CIRDYNEX_XJOBNAME	53C	
CIRDIAGR	70C		CIRDYNEX_XKEEPRC	528	
CIRDOMID	340		CIRDYNEX_XKEEPRCCOMP	52C	
CIRDONFW	5AE	20	CIRDYNEX_XKEEPRCCOMP_EQ	52C	0
CIRDWORK	100	0	CIRDYNEX_XKEEPRCCOMP_GE	52C	4
CIRDYNEX	4F0		CIRDYNEX_XKEEPRCCOMP_GT	52C	2
CIRDYNEX_KEYUSED_CALLSTOPRC	4F2	80	CIRDYNEX_XKEEPRCCOMP_LE	52C	5
CIRDYNEX_KEYUSED_KEEPRC	4F2	20	CIRDYNEX_XKEEPRCCOMP_LT		
CIRDYNEX_KEYUSED_RCFROM	4F2	40			
CIRDYNEX_KEYUSED_STOKEN	4F8	1			
CIRDYNEX_PL_END	534	560			
CIRDYNEX_XABENDCONSEC_YES	4F8	4			
CIRDYNEX_XABENDNUM	51C				

Name	Hex Offset	Hex Value
	52C	3
CIRDYNEX_XKEEPRCCOMP_NE	52C	1
CIRDYNEX_XKEEPRCCVAL	52C	
CIRDYNEX_XKEY	4F4	
CIRDYNEX_XLINKSTACKOK_NO	4F8	2
CIRDYNEX_XMESSAGE_ERROR	4F2	4
CIRDYNEX_XMODADDR	544	
CIRDYNEX_XMODNAME	510	
CIRDYNEX_XNEXTTOKEN	54C	
CIRDYNEX_XONEMODULE_YES	4F8	80
CIRDYNEX_XPARAM	548	
CIRDYNEX_XPERSIST_ADDRESSSPACE	4F8	20
CIRDYNEX_XPERSIST_IPL	4F8	10
CIRDYNEX_XPOS	4FA	
CIRDYNEX_XPOS_FIRST	4FA	2
CIRDYNEX_XPOS_LAST	4FA	1
CIRDYNEX_XPOS_SYSTEM	4FA	0
CIRDYNEX_XQTYPE_ADD	4F9	8
CIRDYNEX_XRCCOMPARE	52D	
CIRDYNEX_XRCCOMPARE_EQ	52D	0
CIRDYNEX_XRCCOMPARE_GE	52D	4
CIRDYNEX_XRCCOMPARE_GT	52D	2
CIRDYNEX_XRCCOMPARE_LE	52D	5
CIRDYNEX_XRCCOMPARE_LT	52D	3
CIRDYNEX_XRCCOMPARE_NE	52D	1
CIRDYNEX_XRCCVAL	52D	
CIRDYNEX_XRCFROM	524	
CIRDYNEX_XRCTO	520	
CIRDYNEX_XREENTRANT_REQ	4F2	8
CIRDYNEX_XREQUEST	4F1	
CIRDYNEX_XREQUEST_ACTIVATE	4F1	A
CIRDYNEX_XREQUEST_ADD	4F1	1
CIRDYNEX_XREQUEST_ATTRIB	4F1	5

Name	Hex Offset	Hex Value
CIRDYNEX_XREQUEST_CALL	4F1	7
CIRDYNEX_XREQUEST_DEFINE	4F1	0
CIRDYNEX_XREQUEST_DELETE	4F1	3
CIRDYNEX_XREQUEST_LIST	4F1	6
CIRDYNEX_XREQUEST_MODIFY	4F1	2
CIRDYNEX_XREQUEST_PROCESSDP	4F1	9
CIRDYNEX_XREQUEST_QUERY	4F1	B
CIRDYNEX_XREQUEST_RECOVER	4F1	8
CIRDYNEX_XREQUEST_REPLACE	4F1	C
CIRDYNEX_XREQUEST_UNDEFINE	4F1	4
CIRDYNEX_XRETAREA_ADDR	538	
CIRDYNEX_XRETAREA_ALET	53C	
CIRDYNEX_XRETINFO_ALL	4F9	20
CIRDYNEX_XRETINFO_HIGHEST	4F9	80
CIRDYNEX_XRETINFO_LAST	4F9	10
CIRDYNEX_XRETINFO_LOWEST	4F9	40
CIRDYNEX_XRETLEN	540	
CIRDYNEX_XRSVNNNN	534	
CIRDYNEX_XRSV0002	4FC	
CIRDYNEX_XRSV0003	52E	
CIRDYNEX_XRUB_ADDR	544	
CIRDYNEX_XRUB_ALET	548	
CIRDYNEX_XSDWA_ADDR	554	
CIRDYNEX_XSTATE_ACTIVE	4F2	2
CIRDYNEX_XSTATE_INACTIVE	4F2	1
CIRDYNEX_XSTOKEN	53C	
CIRDYNEX_XVERSION	4F0	
CIRDYNEX_XWORKAREA_ADDR	534	
CIRDYNEXL	560	70
CIRECB	10C	0
CIRECBA1	6F4	
CIRECBA2	6F8	
CIRECBA3	6FC	
CIRECBLS	6F4	
CIRECB1	700	
CIRECB2	704	
CIRECB3	708	

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CIRETDEF	4E8		CIRINSSL	588	
CIREXIT0	114		CIRIPRW	5A4	0
CIREXPRF	5AD	40	CIRIQNAM	348	E2E8E2E9
CIRFFWD	5AE	10	CIRIRDAF	5AD	0
CIRFLAG1	F0	0	CIRIRDA1	5AE	0
CIRFLAG2	F1	0	CIRIRDA2	52A	0
CIRFLAG3	F2		CIRIRNAM	350	C9D5C9E3
CIRFLAG4	F3	0	CIRIRPL1	1C6	0
CIRFLAG5	232	0	CIRI416	5AE	2
CIRFPLN	610		CIRI460	5AE	4
CIRFPTX	5F0		CIRJBMAX	23C	
CIRFWCNT	5C8		CIRJBMIN	238	
CIRFWDDS	5AE	40	CIRJNPRC	18E	
CIRF1CAN	F0	4	CIRJOHI	186	FF0
CIRF1CI	F0	20	CIRJLOW	188	0
CIRF1HPI	F0	80	CIRJOPRC	18C	
CIRF1INC	F0	40	CIRJORAT	184	0
CIRF1PER	F0	8	CIRJOTEC	5AD	2
CIRF1SER	F0	1	CIRJOTES	5AC	
CIRF1SSW	F0	2	CIRJOTRB	5AD	1
CIRF1XI	F0	10	CIRJOTV	5AD	3
CIRF2CM	F1	10	CIRJQENC	4F8	
CIRF2CMA	F1	2	CIRJQENP	4FC	
CIRF2CMT	F1	1	CIRJQHI	182	
CIRF2ECM	F1	8	CIRJQLOW	183	
CIRF2HPO	F1	20	CIRJQPRC	18A	
CIRF2JEX	F1	80	CIRJQRAT	180	0
CIRF2RRD	F1	40	CIRLEN	774	774
CIRF2SSE	F1	4	CIRLFJQE	518	
CIRF3BDV	F2	10	CIRLNENM	35A	0
CIRF3ERR	F2	F	CIRLPARM	59C	
CIRF3IO1	F2	8	CIRLRCNT	5A0	
CIRF3IO2	F2	4	CIRMAXQT	5AD	20
CIRF3I1V	F2	9	CIRMSGIS	5AE	80
CIRF3I12	F2	C	CIRMSTRS	508	
CIRF3LOG	F2	40	CIRMWORK	3B8	
CIRF3LST	F2	80	CIRM500A	4E8	
CIRF3MID	F2	20	CIRM791W	6F0	
CIRF3VE1	F2	2	CIRNDCHN	218	0
CIRF3VE2	F2	1	CIRNDDOM	218	10
CIRF3V11	F2	6	CIRNDEYE	218	0
CIRF3V12	F2	3	CIRNDLAY	1E4	
CIRF4CHD	F3	2	CIRNDLEN	218	14
CIRF4CHM	F3	4	CIRNDMSG	218	C
CIRF4ILL	F3	80	CIRNDNXT	218	4
CIRF4RER	F3	8	CIRNDSTI	218	8
CIRF4RES	F3	10	CIRNLLCC	500	
CIRF4RTE	F3	1	CIRNLLCT	1C2	1
CIRF4SCN	F3	20	CIRNLLL1	513	1E
CIRF4XER	F3	40	CIRNLLNE	500	
CIRGEMR	23C	39	CIRNLLSH	50E	
CIRGWORK	4E8		CIRNLLSN	513	
CIRGW1LN	4EA	52	CIRNLLSR	501	
CIRGW2LN	5A4	188	CIRNLLST	529	
CIRGW3LN	4E8	0	CIRNLPCT	1C4	0
CIRGW4LN	70C	26A	CIRNODAT	5AE	1
CIRGW5LN	0	20	CIRNPLLG	1D4	
CIRGW6LN	611	12C	CIRNQMSG	1E0	
CIRGW7LN	4E8	78	CIRNUMJR	360	0
CIRGW8LN	50C	28	CIRNUMJT	35C	0
CIRGW9LN	0	78	CIRNUMSR	368	0
CIRHCT	108		CIRNUMST	364	0
CIRIDMEM	6EC		CIROPTA	338	
CIRINFMR	23C	3D	CIROPTL	33C	
CIRINSSA	584		CIROPTPF	118	

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CIROPTS	11C	0	CIR5DMEM	232	8
CIRPARMF	5AF		CIR5DSEQ	232	20
CIRPARML	5B0		CIR5HPRM	232	10
CIRPARMS	5C4	5AF	CIR5IRDD	232	80
CIRPARM1	5B0		CIR5LPRM	232	4
CIRPARM2	5B4		CIR5QWIK	232	40
CIRPARM3	5B8		CIR5RRTE	232	1
CIRPARM4	5BC		M00M0859	0	530
CIRPARM5	5C0		M00M0861	0	4E8
CIRPARM6	5C4		M00M0865	0	4F0
CIRPDCT	1E8		PCE	0	
CIRPDCT2	1EC				
CIRPLWRK	590				
CIRPRDCB	594				
CIRPREVC	4F0				
CIRPRMWR	598				
CIRP1AST	1C6	80			
CIRREPLY	F8	0			
CIRROPSL	24E	F0F0F0F0			
CIRROPST	266	F0F0F0F0			
CIRROPSU	27E	F0F0F0F0			
CIRRSV1	611				
CIRSCMLN	4E8				
CIRSCMSG	4EA				
CIRSDLCT	1C8	0			
CIRSJEXP	4F0				
CIRSJLSP	4E8				
CIRSJPTR	4EC				
CIRSNALC	2A8	0			
CIRSPLF	500				
CIRSPLGE	5AD	10			
CIRSPLL	504				
CIRSPT	2B8	0			
CIRSTIMC	208	0			
CIRSTIMS	1F0	0			
CIRSTMCL	208	10			
CIRSTMSL	1F0	18			
CIRSTMTA	57C				
CIRSTMTC	1C0	0			
CIRSTMTL	580				
CIRSTMTT	198				
CIRSTMTW	194				
CIRSWARN	58C				
CIRSYMBP	19C	0			
CIRS99PT	4FC				
CIRS99RB	4E8				
CIRTDCTS	2A4				
CIRTGEDM	248	40202020			
CIRTGPRC	190				
CIRTOTA	50C				
CIRTRANL	1B8	0			
CIRTRANR	1BC	0			
CIRTSTOR	2A0				
CIRVOLTB	298				
CIRWLEN	774	684			
CIRWMER	5AD	80			
CIRWXIT0	110				
CIRXEMN	23C	3C			
CIRXRTNS	234	0			
CIRX0#RT	1D0				
CIRX0PS	338				
CIRX0XRT	1CC				
CIRX19PS	57C				
CIRZIP	2AC				
CIR5BRTE	232	2			

## \$CIRWORK Cross Reference



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## \$CK Programming Interface information

Programming Interface information

\$CK

End of Programming Interface information

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## \$CK Heading Information

**Common Name:** HASP Checkpoint block and CCW DSECTS  
**Macro ID:** \$CK  
**DSECT Name:** CKA CKAE CKB CKDDSECT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: CKBPOOL (See \$HASPEQU)  
Key: 1  
Residency: For CKBs that represent checkpoint data sets on DASD: Virtual and real storage of the CKB is below 16M in the private storage of the JES2 address space. The CKB is page fixed for the life of JES2 and must lie on a 2K boundary to ensure that the check and lock buffers do not cross a 2K boundary. The virtual and real storage for the CKA and CKAEs are anywhere in JES2 address space. For CKBs that represent checkpoint data sets on a coupling facility: Virtual and real storage of the CKB is above 16M in the private storage of the JES2 address space.

**Size:** CKB for data set on DASD  
CKBASLEN  
CKB for data set on Coupling Facility  
CKBCFSZE  
CKA+CKAE for data set on DASD only  
CKAPLEN + number\_of\_4K\_records in CKPT data set  
\* CKAELEN  
CKBSIZE in the CK contains the total length.

**Created by:** CKPTALOC called during initialization or from the checkpoint dialog.

**Pointed to by:** CKB  
- The \$CKBCRNT field in the \$HCT data area  
- The CKGCKB field in the \$CKGPAR data area  
CKA  
- The CKBCKA field in the CKB data area

**Serialization:** These control blocks are used to direct I/O to the checkpoint data set. Checkpoint I/O should only be issued by the initialization and checkpoint PCEs. They are not used by other subtasks or PCEs.

**Function:** Control block for I/O operations directed to a checkpoint data set.

A CKB exists for each checkpoint data set allocated. The CKB contains:

- Checkpoint IOB
- Checkpoint status and flags
- CCW packets for track 1 data
- Data packets for track 1 data
- IDAWS for master record

A CKA and a set of CKAEs exists for each checkpoint data set allocated on DASD. The CKAEs contain record addresses (CCHHRs) for each potential record record in the data set.

## \$CK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKB	
Comment					
CKPT I/O IOB (corresponds to IEZIOB starting at IOBSTDRD) 32 bytes + 8 byte extension					
End of Comment					
0	(0)	DBL WORD	8	CKBIOB (0)	IOB for checkpoint
0	(0)	BITSTRING	1	CKBIFLG1	IOBFLAG1
1	(1)	BITSTRING	1	CKBIFLG2	IOBFLAG2
2	(2)	BITSTRING	2	CKBSENSE	IOB SENSE BYTES
4	(4)	BITSTRING	1	CKBECBCC (0)	I/O COMPLETION CODE
4	(4)	ADDRESS	4	CKBECBP	ADDRESS OF HASP ECB
8	(8)	BITSTRING	8	CKBCSW	IOB FLAG AND CSW BYTES IOBFLAG3 and IOBCSW
16	(10)	ADDRESS	4	CKBSTART	Channel program address
20	(14)	BITSTRING	1	CKBIFLG4 (0)	IOBFLAG4
20	(14)	ADDRESS	4	CKBDCCBP	ADDRESS OF DCB
24	(18)	ADDRESS	4		CHANNEL PROGRAM RESTART
28	(1C)	SIGNED	2	CKBIRRCT (2)	ERROR COUNTS
Comment					
----- Direct access IOB extension (8 bytes) -----					
End of Comment					
32	(20)	BITSTRING	8	CKBSEEK	INITIAL SEEK ADDRESS
Comment					
----- End of IOB -----					
End of Comment					
40	(28)	BITSTRING	1	CKBFLAG1	CKB I/O Flags
		1... ....		CKB1EXCP	"B'10000000" I/O NEEDED/ISSUED TO DS
		.1.. ....		CKB1SHFL	"B'01000000" CCW PACKETS SHUFFLED
		..1. ....		CKB1SPCI	"B'00100000" PCI flag to be turned on
		...1 ....		CKB1CFIO	"B'00010000" CF I/O needed/issued
		.... .1..		CKB1NOPP	"B'00000100" NOP CCW issued to obtain hardware reserve
41	(29)	BITSTRING	1	CKBFLAG2	CKB Processing flags
Comment					
CKBFLAG2 DEFINITIONS ARE PASSED AS INPUT TO KTRK1IO ROUTINE. THEY INDICATE THE OPERATIONS TO BE PERFORMED BY KTRK1IO. CKB2TLCK IMPLIES READ OF LOCK RECORD IF TEST-LOCK FAILS.					
End of Comment					
		1... ....		CKB2RCHK	"B'10000000" READ OF CHECK RECD REQ'D
		.1.. ....		CKB2WCHK	"B'01000000" WRITE OF CHECK RECD REQ'D
		..1. ....		CKB2TLCK	"B'00100000" TEST OF LOCK RECD REQ'D
		...1 ....		CKB2RLCK	"B'00010000" READ OF LOCK RECD REQ'D
		.... 1...		CKB2RMST	"B'00001000" READ OF MASTER RECD REQ'D
		.... .1..		CKB2RLOG	"B'00000100" READ OF CHANGE LOG REQ'D
		.... .1.		CKB2WLCK	"B'00000010" WRITE OF LOCK RECD REQ'D
		.... ...1		CKB2MSLI	"B'00000001" SUPPRESS LENGTH ERROR ON MASTER RECORD READ
42	(2A)	BITSTRING	1	CKBFLAG3	Reserved for future IBM Use
43	(2B)	BITSTRING	1	CKBNREC	RECORD COUNT FROM CKD NREC
44	(2C)	SIGNED	4	CKBECB (0)	CKPT I/O XECB

## \$CK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
64	(40)	ADDRESS	4	CKBCKA	Addr of checkpoint address table for this data set (one entry per record)
68	(44)	SIGNED	4	CKBSIZE (0)	SIZE OF ENTIRE CKB
68	(44)	BITSTRING	1		SUBPOOL CKB IS IN
69	(45)	BITSTRING	3		LENGTH OF CKB
72	(48)	ADDRESS	4	CKBTRK1T	ADDR OF TRACK ONE TABLE
76	(4C)	SIGNED	2	CKBRETRY	ERROR RETRY COUNTER
78	(4E)	SIGNED	2	CKBERRCT	(APPENDAGE FIELD) ERROR RETRY COUNTER
80	(50)	ADDRESS	4	CKBERCCW	CCW address from IOB
84	(54)	ADDRESS	4	CKBERCC2	CCW address from IEDB

Comment

Key data area used in the search key operations

End of Comment

88	(58)	DBL WORD	8	(0)	
88	(58)	BITSTRING	8	CKBKEY	SEARCH KEY CCW ARGUMENT

Comment

Lock record read buffer

End of Comment

96	(60)	DBL WORD	8	(0)	
96	(60)	BITSTRING	8	CKBLRKEY	Key portion of lock record
104	(68)	BITSTRING	372	CKBLRDAT	LOCK DATA INPUT AREA
104	(68)	SIGNED	4	CKBLRSYS	Member ID (\$SIDBUSY) Fid
108	(6C)	SIGNED	4	CKBLRLVI	Level indicator field
112	(70)	CHARACTER	4	CKBLRSID	\$SID field
116	(74)	CHARACTER	360	CKBLROTH (0)	Area to copy to check record if CKPT on CF

Comment

Any changes to the equates CKBLRPLN to CKBLRMVS require changes to the parameter list passed to XCFQSTAT routine in the HASPXCF module. The data is required to be mapped together.

End of Comment

116	(74)	CHARACTER	8	CKBLRPLN	MVS sysplex name
124	(7C)	BITSTRING	4	CKBLRSYT	MVS system id/token
128	(80)	BITSTRING	8	CKBLRPLI	MVS sysplex id
136	(88)	BITSTRING	8	CKBLRMTK	XCF member token
144	(90)	CHARACTER	8	CKBLRMVS	MVS System Name

Comment

End of data to be mapped together for XCFQSTAT.

End of Comment

476	(1DC)	X'168'	0	CKBLROTL	**-CKBLROTH" Size of lock data to be moved to "check record" when CKPT is on CF
476	(1DC)	ADDRESS	2	(0)	Ensure hard coded
476	(1DC)	ADDRESS	2	(0)	length is correct
476	(1DC)	X'174'	0	CKBLKRLN	**-CKBLRDAT" SIZE OF DATA AREA OF LOCK

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Lock record write buffer					
End of Comment					
480	(1E0)	DBL WORD	8	CKBLWKEY	STORAGE AREA FOR WRITING
480	(1E0)	X'1E0'	0	CKBLWKYP	"CKBLWKEY,8,C'C" Define character version of field since PLX and the offset table don't handle doublewords well
488	(1E8)	BITSTRING	372	CKBLWDAT	LOCK RECORD KEY AND DATA
488	(1E8)	SIGNED	4	CKBLWSYS	Member ID (\$SIDBUSY) Fld
492	(1EC)	SIGNED	4	CKBLWLVI	Level indicator field
496	(1F0)	CHARACTER	4	CKBLWSID	\$\$SID field
500	(1F4)	CHARACTER	360	CKBLWOTH (0)	Area to copy to check record if CKPT on CF
Comment					
<p>-----</p> <p>Any changes to the equates CKBLWPLN to CKBLWMVS require changes to the parameter list passed to XCFQSTAT routine in the HASPXCF module. The data is required to be mapped together.</p> <p>-----</p>					
End of Comment					
500	(1F4)	CHARACTER	8	CKBLWPLN	MVS sysplex name
508	(1FC)	BITSTRING	4	CKBLWSYT	MVS system id/token
512	(200)	BITSTRING	8	CKBLWPLI	MVS sysplex id
520	(208)	BITSTRING	8	CKBLWMTK	XCF member token
528	(210)	CHARACTER	8	CKBLWMVS	MVS System Name
Comment					
<p>-----</p> <p>End of data to be mapped together for XCFQSTAT.</p> <p>-----</p>					
End of Comment					
860	(35C)	X'168'	0	CKBLWOTL	**CKBLWOTH" Size of lock data to be moved to "check record" when CKPT is on CF
860	(35C)	ADDRESS	2	(0)	Ensure hard coded
860	(35C)	ADDRESS	2	(0)	length is correct
Comment					
Check record buffer					
End of Comment					
864	(360)	DBL WORD	8	CKBCKDAT (0)	START OF CHECK RECORD DATA
864	(360)	CHARACTER	372	CKBCKREC (0)	Size of Check record (Offset table needs hard coded values)
864	(360)	BITSTRING	1	CKBCKHFM	CKPT DS FILE NAMES, FLAGS
864	(360)	X'360'	0	CKBCKHFP	"CKBCKHFM,308,C'C" Get character version for offset table
1172	(494)	ADDRESS	2	(0)	Ensure lengths are
1172	(494)	ADDRESS	2	(0)	correct
1172	(494)	SIGNED	1	CKBFORWD	Dataset forwarded indicator
1173	(495)	BITSTRING	1	CKBCKFLG	Flag byte
		1... ....		CKBCKGMT	"B'10000000" CKBWRTIM is in GMT
		.1.. ....		CKBCKCKM	"B'01000000" GMT offsets on all members are not within 1 minute (skip checks in HASPIRDA)
1174	(496)	BITSTRING	6	CKBLVOTH	Level of other checkpoint (CKBCKLEV of other CKB)
1180	(49C)	BITSTRING	32	CKBSVDEF	WLM Service Definition ID
1212	(4BC)	SIGNED	4	CKBWRTIM	Time data set last written
1216	(4C0)	DBL WORD	8	(0)	
1216	(4C0)	DBL WORD	8	CKBCKLEV	Level of all data in ckpt

## \$CK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1216	(4C0)	X'4C0'	0	CKBCKLVP	"CKBCKLEV,8,C'C" Define character version of field since PLX and the offset table don't handle doublewords well
1216	(4C0)	X'4C4'	0	CKBCKLVH	"CKBCKLEV+4,4,C'F" Full word version of level number of 4K pages
1224	(4C8)	DBL WORD	8	CKB4KLEV	Level of 4K pages in ckpt
1224	(4C8)	X'4C8'	0	CKB4KLVP	"CKB4KLEV,8,C'C" Define character version of field since PLX and the offset table don't handle doublewords well
1224	(4C8)	X'4CC'	0	CKB4KLVH	"CKB4KLEV+4,4,C'F" Full word version of level number of 4K pages
1232	(4D0)	SIGNED	1	CKBCKVAL (0)	CHECK VALUE
1232	(4D0)	X'174'	0	CKBCKRLN	"*-CKBCKDAT" LENGTH OF CHECK RECORD
1236	(4D4)	ADDRESS	2	(0)	Make sure hardcoded
1236	(4D4)	ADDRESS	2	(0)	length is accurate
Comment					
Other data buffers					
End of Comment					
1240	(4D8)	DBL WORD	8	CKBVERFY	STORAGE FOR READ-COUNT
1248	(4E0)	BITSTRING	8		Reserved for future IBM use
1248	(4E0)	X'500'	0	CKBCFSZE	"((-CKB+63)/64)*64" Size of CKB when CKPT is on a CF
Comment					
IOB extension (IOBE) and IOS diagnostic area (IEDB) for CKPT DASD I/O.					
End of Comment					
1256	(4E8)	SIGNED	4	(0)	Ensure word alignment
1256	(4E8)	BITSTRING	48	CKBIOBE	Reserve space for IOB extension
1304	(518)	SIGNED	4	(0)	Ensure word alignment
1304	(518)	BITSTRING	48	CKBIEDB	Reserve space for I/O error data block
1352	(548)	ADDRESS	4	CKBLMTIC	TIC in last mstr rec CCW packet
1356	(54C)	SIGNED	4		Reserved
Comment					
CCW packets					
Note: These channel programs are copied to HASPCCKDS in routine KBLDCKB. Any changes to these channel programs MUST be copied into CKDS.					
End of Comment					
1360	(550)	DBL WORD	8	CKBCCWS (0)	Channel program area
Comment					
----- Channel program used by KTRK1IO -----					
End of Comment					
1376	(560)	DBL WORD	8	CKBLOCKV (0)	Lock verification
1424	(590)	DBL WORD	8	CKBCHCKR (0)	Check record read
1464	(5B8)	DBL WORD	8	CKBLOCKR (0)	Lock record read
1504	(5E0)	DBL WORD	8	CKBLOCK (0)	Lock record write KEY+DATA
1544	(608)	DBL WORD	8	CKBCHECK (0)	Check record read/write
1584	(630)	DBL WORD	8	CKBMSTR (0)	Master record read/write
1616	(650)	X'28'	0	CKBMSTCL	"*-CKBMSTR" Len of master record CCWs
1624	(658)	BITSTRING	40	CKBMSTX2	2nd extra mst rec CCWs
1664	(680)	BITSTRING	40	CKBMSTX3	3rd extra mst rec CCWs
1704	(6A8)	BITSTRING	40	CKBMSTX4	4th extra mst rec CCWs
1744	(6D0)	BITSTRING	40	CKBMSTX5	5th extra mst rec CCWs

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1784	(6F8)	BITSTRING	40	CKBMSTX6	6th extra mst rec CCWs
1824	(720)	BITSTRING	40	CKBMSTX7	7th extra mst rec CCWs
1864	(748)	BITSTRING	1	CKBMSTX8	8th extra mst rec CCWs
1864	(748)	X'220'	0	CKBCCWSL	**CKBCCWS" Len of normal track 1 CCWs

Comment

-----  
 Data areas for track one channel programs. Note:  
 these data areas must be in the same order as the  
 TOR entries in the TOT (ie same order as the table  
 at label NTR1TABL in HASPIRDA). Change log data  
 area is done differently.  
 -----

End of Comment

1904	(770)	DBL WORD	8	CKBT1DAT (0)	Start of data areas
1904	(770)	BITSTRING	16	CKBLOCKD	Lock record data area
1920	(780)	BITSTRING	16	CKBCHEKD	Check record data area
1936	(790)	BITSTRING	1	CKBMSTRD	Master record data area
1936	(790)	X'30'	0	CKBT1DLN	**CKBT1DAT" Length of data areas
1936	(790)	X'3'	0	CKBT1DNM	"CKBT1DLN/CKDLEN" Number of track 1 records

Comment

-----  
 CKBMSTD2 must follow CKBMSTRD because code in  
 CKDS (KBLDCKA) depends on it.  
 -----

End of Comment

1952	(7A0)	BITSTRING	16	CKBMSTD2	2nd extra mstr rec area
1968	(7B0)	BITSTRING	16	CKBMSTD3	3rd extra mstr rec area
1984	(7C0)	BITSTRING	16	CKBMSTD4	4th extra mstr rec area
2000	(7D0)	BITSTRING	16	CKBMSTD5	5th extra mstr rec area
2016	(7E0)	BITSTRING	16	CKBMSTD6	6th extra mstr rec area
2032	(7F0)	BITSTRING	16	CKBMSTD7	7th extra mstr rec area
2048	(800)	BITSTRING	16	CKBMSTD8	8th extra mstr rec area
2064	(810)	BITSTRING	16	CKBCHKD2	Special check read
2080	(820)	BITSTRING	16	CKBLCKD2	Special lock read
2096	(830)	SIGNED	4	CKBIDAWS (0)	Master record IDAWs
2640	(A50)	ADDRESS	4	CKBIDAW1	IDAW for 1st MSTR rec CCW
2644	(A54)	ADDRESS	4	CKBIDAW2	IDAW for 2nd MSTR rec CCW
2648	(A58)	ADDRESS	4	CKBIDAW3	IDAW for 3rd MSTR rec CCW
2652	(A5C)	ADDRESS	4	CKBIDAW4	IDAW for 4th MSTR rec CCW
2656	(A60)	ADDRESS	4	CKBIDAW5	IDAW for 5th MSTR rec CCW
2660	(A64)	ADDRESS	4	CKBIDAW6	IDAW for 6th MSTR rec CCW
2664	(A68)	ADDRESS	4	CKBIDAW7	IDAW for 7th MSTR rec CCW
2668	(A6C)	ADDRESS	4	CKBIDAW8	IDAW for 8th MSTR rec CCW

Comment

-----  
 Change log CCWs. This area is arranged as follows:  
 Positioning CCWs - 1 set  
 Read/write CCWs - TOTNORTK number of these  
 TIC next packet - 1  
 -----

End of Comment

2672	(A70)	BITSTRING	16	CKBCHLGD	Change log data area
2688	(A80)	DBL WORD	8	CKBCHLOG (0)	Change log positioning CCWs
2712	(A98)	X'18'	0	CKBCHL1L	"CKBCHLRW-CKBCHLOG" Len of trk1 change log CCWs

## \$CK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2712	(A98)	X'A98'	0	CKBMINLN	"CKBCHLRW-CKB" Length of CKB without change log R/W CCWs, and final TIC.
2712	(A98)	X'1000'	0	CKBASLEN	"((*-CKB+2047)/2048)*2048" CKB length

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKDDSECT	

Comment

Locate record parameter list (ECKD devices only)

End of Comment

0	(0)	BITSTRING	16	CKDIPARM (0)	LOCATE RECORD PARAMETER LIST FOR PRIMARY
0	(0)	BITSTRING	1	CKDOPER	OPERATION BYTE
		.... ..1		CKDWRITE	"X'01" - WRITE DATA
		.... ..11		CKDFMT	"X'03" - FORMAT WRITE
		.... .11.		CKDREAD	"X'06" - READ DATA
		.... 1.11		CKDWTRAK	"X'0B" - Write Track
1	(1)	BITSTRING	1	CKDAUX	AUXILIARY BYTE
		1... ....		CKDAXTL	"X'80" - USE TRANSFER LENGTH FACTOR
2	(2)	BITSTRING	1		RESERVED (MUST BE 0)
3	(3)	BITSTRING	1	CKDNREC	NUMBER OF RECORDS TO PROCESS
4	(4)	BITSTRING	4	CKDCCHH	(CCHH) Seek address (CCHH)
8	(8)	BITSTRING	5	CKDCCHR1 (0)	(CCHHR) SEARCH ADDRESS
8	(8)	BITSTRING	4	CKDCCHH1	(CCHH) CYLINDER AND HEAD NUMBERS
12	(C)	BITSTRING	1	CKDREC1	(R) RECORD NUMBER
13	(D)	BITSTRING	1	CKDSECT1	SECTOR NUMBER
14	(E)	BITSTRING	2	CKDTLEN	TRANSFER LENGTH FACTOR
14	(E)	X'10'	0	CKDLEN	** -CKDDSECT" Len of standard data packet
14	(E)	X'10'	0	CKDNEXT	*** Label to addr next packet

Comment

Short CKD format for CKD devices only

End of Comment

0	(0)	BITSTRING	6	CKDADDR (0)	(00CCHH) Seek address (BBCCHH)
0	(0)	BITSTRING	2	CKDBB	BB value (always zero)
2	(2)	BITSTRING	5	CKDCCHHR (0)	CCHHR value
2	(2)	BITSTRING	4		CCHH value
6	(6)	BITSTRING	1	CKDREC	R value
7	(7)	BITSTRING	1	CKDSECT	Sector number
7	(7)	X'8'	0	CKDLEN2	** -CKDDSECT" Length of CKD parm area

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKA	, CKPT address DSECT
0	(0)	CHARACTER	4	CKAID	Eyecatcher
4	(4)	SIGNED	4	CKASIZE	Size of entire CKA
8	(8)	SIGNED	4	CKACHLOG	# of 1st change log entry
12	(C)	SIGNED	4	CKA4KPAG	# of 1st 4K page entry
12	(C)	X'10'	0	CKAFIRST	*** Start of CKPT address table
12	(C)	X'10'	0	CKAPLEN	** -CKA" Size of CKA prefix

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKAE	, CKPT address table entry
0	(0)	BITSTRING	5	CKACCHHR (0)	CCHHR



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	BITSTRING	2	CKACC	CC
2	(2)	BITSTRING	2	CKAHH	HH
4	(4)	BITSTRING	1	CKAR	R
5	(5)	BITSTRING	1	CKASECT	Sector address of record
5	(5)	X'6'	0	CKAELEN	**CKAE" Length of a CKAE entry
5	(5)	X'6'	0	CKANEXT	*** Start of next address entry

**\$CK Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKA	0		CKBIDAW1	A50	
CKACC	0		CKBIDAW2	A54	
CKACCHHR	0		CKBIDAW3	A58	
CKACHLOG	8		CKBIDAW4	A5C	
CKAE	0		CKBIDAW5	A60	
CKAELEN	5	6	CKBIDAW6	A64	
CKAFIRST	C	10	CKBIDAW7	A68	
CKAHH	2		CKBIDAW8	A6C	
CKAID	0	C3D2C140	CKBIEDB	518	
CKANEXT	5	6	CKBIFLG1	0	42
CKAPLEN	C	10	CKBIFLG2	1	0
CKAR	4		CKBIFLG4	14	
CKASECT	5		CKBIOB	0	
CKASIZE	4		CKBIOBE	4E8	
CKA4KPAG	C		CKBIRRCT	1C	0
CKB	0		CKBKEY	58	
CKBASLEN	A98	1000	CKBLCKD2	820	
CKBCCWS	550		CKBLKRLN	1DC	174
CKBCCWSL	748	220	CKBLMTIC	548	
CKBCFSZE	4E0	500	CKBLOCK	5E0	
CKBCHCKR	590		CKBLOCKD	770	
CKBCHECK	608		CKBLOCKR	5B8	
CKBCKEKD	780		CKBLOCKV	560	
CKBCHKD2	810		CKBLRDAT	68	
CKBCHLGD	A70		CKBLRKEY	60	
CKBCHLOG	A80		CKBLRLVI	6C	
CKBCHL1L	A98	18	CKBLRMTK	88	
CKBCKA	40		CKBLRMVS	90	
CKBCKCKM	495	40	CKBLROTH	74	
CKBCKDAT	360		CKBLROTL	1DC	168
CKBCKFLG	495		CKBLRPLI	80	
CKBCKGMT	495	80	CKBLRPLN	74	
CKBCKHFM	360		CKBLRSID	70	
CKBCKHFP	360	360	CKBLRSYS	68	
CKBCKLEV	4C0		CKBLRSYT	7C	
CKBCKLVH	4C0	4C4	CKBLVOTH	496	
CKBCKLVP	4C0	4C0	CKBLWDAT	1E8	
CKBCKREC	360		CKBLWKEY	1E0	
CKBCKRLN	4D0	174	CKBLWKYP	1E0	1E0
CKBCKVAL	4D0		CKBLWLVI	1EC	
CKBCSW	8	0	CKBLWMTK	208	
CKBDCBP	14		CKBLWMVS	210	
CKBECB	2C		CKBLWOTH	1F4	
CKBECBCC	4		CKBLWOTL	35C	168
CKBECBP	4		CKBLWPLI	200	
CKBERCCW	50		CKBLWPLN	1F4	
CKBERCC2	54		CKBLWSID	1F0	
CKBERRCT	4E		CKBLWSYS	1E8	
CKBFLAG1	28		CKBLWSYT	1FC	
CKBFLAG2	29		CKBMINLN	A98	A98
CKBFLAG3	2A		CKBMSTCL	650	28
CKBFORWD	494		CKBMSTD2	7A0	
CKBIDAWS	830		CKBMSTD3	7B0	

## \$CK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKBMSTD4	7C0		CKDWRITE	0	1
CKBMSTD5	7D0		CKDWTRAK	0	B
CKBMSTD6	7E0				
CKBMSTD7	7F0				
CKBMSTD8	800				
CKBMSTR	630				
CKBMSTRD	790				
CKBMSTX2	658	0			
CKBMSTX3	680	0			
CKBMSTX4	6A8	0			
CKBMSTX5	6D0	0			
CKBMSTX6	6F8	0			
CKBMSTX7	720	0			
CKBMSTX8	748	0			
CKBNREC	2B				
CKBRETRY	4C				
CKBSEEK	20	0			
CKBSENSE	2	0			
CKBSIZE	44				
CKBSTART	10				
CKBSVDEF	49C				
CKBTRK1T	48				
CKBT1DAT	770				
CKBT1DLN	790	30			
CKBT1DNM	790	3			
CKBVERIFY	4D8				
CKBWRTIM	4BC				
CKB1CFIO	28	10			
CKB1EXCP	28	80			
CKB1NOPP	28	4			
CKB1SHFL	28	40			
CKB1SPCI	28	20			
CKB2MSLI	29	1			
CKB2RCHK	29	80			
CKB2RLCK	29	10			
CKB2RLOG	29	4			
CKB2RMST	29	8			
CKB2TLCK	29	20			
CKB2WCHK	29	40			
CKB2WLCK	29	2			
CKB4KLEV	4C8				
CKB4KLVH	4C8	4CC			
CKB4KLVP	4C8	4C8			
CKDADDR	0				
CKDAUX	1				
CKDAXTL	1	80			
CKDDBB	0				
CKDCCHH	4				
CKDCCHHR	2				
CKDCCHH1	8				
CKDCCHR1	8				
CKDDSECT	0				
CKDFMT	0	3			
CKDIPARM	0				
CKDLEN	E	10			
CKDLEN2	7	8			
CKDNEXT	E	10			
CKDNREC	3				
CKDOPER	0				
CKDREAD	0	6			
CKDREC	6				
CKDREC1	C				
CKDSECT	7				
CKDSECT1	D				
CKDTLEN	E				

## \$CKGPAR Heading Information

**Common Name:** Checkpoint Generalized Parameter List  
**Macro ID:** \$CKGPAR  
**DSECT Name:** CKG  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CKG  
 Offset: CKGID  
 Length: L'CKGID  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.  
**Size:** See CKGSIZE  
**Created by:** HASPIRDA for the checkpoint data sets that are defined in the JES2 initialization stream  
 KDIALOG for data sets that are being allocated during the checkpoint reconfiguration dialog.  
**Pointed to by:** \$CKG1 field of the HCT data area  
 \$CKG2 field of the HCT data area  
**Serialization:** None required.  
**Function:** This DSECT describes the parameter list required by all checkpoint management routines.

## \$CKGPAR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKG	
0	(0)	CHARACTER	4	CKGID	CONTROL BLOCK EYE CATCHER
4	(4)	SIGNED	1	CKGVER	VERSION IDENTIFIER
4	(4)	X'2'	0	CKGVNR	"2" Version number
5	(5)	BITSTRING	1	CKGFLAG1	FLAGS
		1... ....		CKG1ESUP	"B'10000000" SUPPRESS I/O ERROR MESSAGES FOR THIS DATA SET
		.1.. ....		CKG1LOKD	"B'01000000" THIS FILE HAS BEEN LOCKED
		..1. ....		CKG1ITRP	"B'00100000" THIS FILE HAS HAD INTERRUPTED I/O
		...1 ....		CKG1IOER	"B'00010000" THIS FILE HAS HAD AN I/O ERROR
		.... 1..		CKG1LOUT	"B'00001000" TRACK 1 I/O INCOMPLETE
		.... .1..		CKG1IOE	"B'00000100" KFORMAT I/O ERROR
		.... ..1.		CKG1IONC	"B'00000010" KFORMAT I/O INCOMPLETE
6	(6)	BITSTRING	1	CKGFLAG2	Second flag byte
		1... ....		CKG2DASD	"B'10000000" Checkpoint resides on DASD
		.1.. ....		CKG2CF	"B'01000000" Checkpoint resides on CF
		..1. ....		CKG2FCON	"B'00100000" This was the first connect to the structure, and as such, caused the actual allocation of the struct. in the Coupling Facility. Used by KFORMAT
		...1 ....		CKG2ALOC	"B'00010000" Data set allocated
		.... 1..		CKG2RBLD	"B'00001000" A CF rebuild is in progress
		.... .1..		CKG2NEWWR	"B'00000100" A structure could be used to satisfy this allocation
7	(7)	BITSTRING	1	CKGALPRM	Hold CKPTALOC parm list for use by CFFORMAT
8	(8)	CHARACTER	8	CKGFILE	FILE NAME
16	(10)	ADDRESS	4	CKGHFAME	ADDRESS OF THE HFAME
20	(14)	ADDRESS	4	CKGCKB	ADDRESS OF THE CKB
24	(18)	ADDRESS	4	CKGCKC	ADDRESS OF THE CKC
28	(1C)	ADDRESS	4	CKGTOKEN	ADDRESS OF A TOKEN FIELD
32	(20)	ADDRESS	4	CKGDTE	Address of related DTE (CF only)
36	(24)	BITSTRING	8	CKGPARM (0)	PARAMETER LIST FOR KBLDCKB

## \$CKGPAR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
36	(24)	ADDRESS	4	CKGDCB	ADDRESS OF THE DCB
40	(28)	ADDRESS	4	CKGTOT	ADDR OF THE TRACK 1 TABLE (TOT)
44	(2C)	SIGNED	4	CKGCF4KL	Size, in 4K elements, the structure is lacking
48	(30)	SIGNED	4	CKGCFSIZ	Size, in 1K units, of the CF structure
52	(34)	CHARACTER	16	CKGCONTK	Connection Token (only used if data set in CF)
68	(44)	SIGNED	1	CKGCONID	Connection Id (only used if data set in CF)
69	(45)	BITSTRING	1	CKGFLAG3	CKB CF Request footprints
		1... ....		CKG3MOVE	"B'10000000" IXLLIST MOVE Request
		.1.. ....		CKG3RITE	"B'01000000" IXLLIST WRITE Request
		..1. ....		CKG3READ	"B'00100000" IXLLIST READ Request
		...1 ....		CKG3LOCK	"B'00010000" IXLLIST LOCK Request
		.... 1..		CKG3RLST	"B'00001000" IXLLIST READLIST Request
		.... .1..		CKG3DELM	"B'00000100" IXLLIST DELETE MULT rqst
70	(46)	BITSTRING	1	CKGFLAG4	Fourth flag byte
		1... ....		CKG4LE0B	"B'10000000" List 0 LEIDs are built
		.1.. ....		CKG4LE1B	"B'01000000" List 1 LEIDs are built
		..1. ....		CKG4COND	"B'00100000" Get LOCK conditionally
		...1 ....		CKG4STEL	"B'00010000" Steal the CF lock from CKGSCNID holder
		.... 1..		CKG4NOCK	"B'00001000" No check record found for data set on CF
		.... .1..		CKG4WCFL	"B'00000100" Waiting for CF lock
		.... ..1.		CKG4DUPC	"B'00000010" Duplicate connection - when this data set was allocated on CF, NEWCKPTn pointed to the same str as CKPTn; however, we can only have one connection active to a given str at time.
		.... ...1		CKG4VALR	"B'00000001" Validation error
71	(47)	BITSTRING	1	CKGFLAG5	CCW 1 I/O Error flags
		1... ....		CKG5NDTR	"B'10000000" No data written on error
		.1.. ....		CKG5DTRS	"B'01000000" Data written on error
		..1. ....		CKG5CHKR	"B'00100000" Error on CHECK record
		...1 ....		CKG5LCKR	"B'00010000" Error on LOCK record
		.... 1..		CKG5MSTR	"B'00001000" Error on MASTER record
		.... .1..		CKG5LOGR	"B'00000100" Error on Change log recd
		.... ..1.		CKG5PAGR	"B'00000010" Error on 4K page record
		.... ...1		CKG5VERP	"B'00000001" Error on verify CCWs
72	(48)	BITSTRING	1	CKGFLAG6	CCW 2 I/O Error flags Bit definitions are the same as CKGFLAG5
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	BITSTRING	4	CKGERROR (0)	Error flag word (set by CFALOC, used by PRE536 to display variable text of HASP536 message)
76	(4C)	BITSTRING	3	CKGCFERR	\$OFFSTBL only supports
79	(4F)	BITSTRING	1		bit string of length 24.
80	(50)	SIGNED	4	CKGCFRRC	CF Service return code
84	(54)	SIGNED	4	CKGCFRRC	Return code from IXL services
88	(58)	SIGNED	4	CKGCFRSN (0)	Reason code from IXL services
88	(58)	SIGNED	2	CKGCFRIN	First two bytes are internally defined
90	(5A)	SIGNED	2	CKGCFREX	Last two bytes have external meaning
92	(5C)	CHARACTER	4	CKGMSGID	Error message to issue
96	(60)	ADDRESS	4	CKGLEID	Pointer to LEIDs
100	(64)	ADDRESS	4	CKGANSA	Pointer to hold a single IXLLIST answer area.
104	(68)	SIGNED	4	CKGECB	XECB for asynch IXL reqs
104	(68)	BITSTRING	20	CKGXECB	XECB for asynch IXL reqs
124	(7C)	SIGNED	4	CKGRECB	ECB portion of XECB for CF locking requests
124	(7C)	BITSTRING	20	CKGRXECB	XECB for CF locking request
144	(90)	ADDRESS	4	CKGLIST0	Addr of LIST0 data buffer
148	(94)	SIGNED	4	CKGT1NUM	Number of elements in a Track1 CF access
152	(98)	SIGNED	1	CKGLOBLT	ID of List0 Leid builder
153	(99)	SIGNED	1	CKGL1BLT	ID of List1 Leid builder
154	(9A)	BITSTRING	1	CKGECBTP	I/O completion code for \$HASP291 message
155	(9B)	SIGNED	1	CKGSCNID	Steal lock from CONID
156	(9C)	ADDRESS	4	CKGRDBF1	Pointer to 64K buffer for IXLLIST READ_LIST requests
160	(A0)	ADDRESS	4	CKGRDBF2	Pointer to second 64K buffer for IXLLIST READ_LIST requests
164	(A4)	ADDRESS	4	CKGCFLST	Pointer to CFLIST
168	(A8)	ADDRESS	4	CKGRWTKN	Pointer to storage to hold tokens returned from an IXLLIST READ or WRITE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
172	(AC)	ADDRESS	4	CKGBFLST	Pointer to BUFLIST storage
176	(B0)	ADDRESS	4	CKGLAAS	Addr of set of answer areas
180	(B4)	SIGNED	4	CKGCFSZE	Size of work area obtained when first structure is connected to
184	(B8)	SIGNED	4		Reserved for future IBM use
184	(B8)	X'BC'	0	CKGSIZE	**_CKG" SIZE OF THE CKG

Comment

Use the DS 0S to ensure that fields in the CKG that are dependent on fields in MVS control blocks are the correct size. Since the S-con can not have a length associated with it (and it therefore forces half-word alignment), the S-cons are grouped down here.

End of Comment

188	(BC)	ADDRESS	2	(0)	Verify CKGCONTK
188	(BC)	ADDRESS	2	(0)	and CONCONTOKEN are same length
188	(BC)	ADDRESS	2	(0)	Verify CKGCONID
188	(BC)	ADDRESS	2	(0)	and CONACONID are the same length

### \$CKGPAR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKG	0		CKGRDBF1	9C	
CKGALPRM	7		CKGRDBF2	A0	
CKGANSA	64		CKGRECB	7C	
CKGBFLST	AC		CKGRWTKN	A8	
CKGCFERR	4C		CKGRXECB	7C	
CKGCFLST	A4		CKGSCNID	9B	
CKGCFRC	54		CKGSIZE	B8	BC
CKGCFREX	5A		CKGTOKEN	1C	
CKGCFRIN	58		CKGTOT	28	
CKGCFRRC	50		CKGT1NUM	94	
CKGCFRSN	58		CKGVER	4	
CKGCFSIZ	30		CKGVNR	4	2
CKGCFSZE	B4		CKGXECB	68	
CKGCF4KL	2C		CKG1ESUP	5	80
CKGCKB	14		CKG1IOE	5	4
CKGCKC	18		CKG1IOER	5	10
CKGCONID	44		CKG1IONC	5	2
CKGCONTK	34		CKG1ITRP	5	20
CKGDCEB	24		CKG1LOKD	5	40
CKGDTE	20		CKG1LOUT	5	8
CKGECB	68		CKG2ALOC	6	10
CKGECBTP	9A		CKG2CF	6	40
CKGERROR	4C		CKG2DASD	6	80
CKGFILE	8		CKG2FCON	6	20
CKGFLAG1	5		CKG2NEWR	6	4
CKGFLAG2	6		CKG2RBLD	6	8
CKGFLAG3	45		CKG3DELM	45	4
CKGFLAG4	46		CKG3LOCK	45	10
CKGFLAG5	47		CKG3MOVE	45	80
CKGFLAG6	48		CKG3READ	45	20
CKGHFAME	10		CKG3RITE	45	40
CKGID	0	C3D2C740	CKG3RLST	45	8
CKGLAAS	B0		CKG4COND	46	20
CKGLEID	60		CKG4DUPC	46	2
CKGLIST0	90		CKG4LE0B	46	80
CKGLOBLT	98		CKG4LE1B	46	40
CKGL1BLT	99		CKG4NOCK	46	8
CKGMSGID	5C		CKG4STEL	46	10
CKGPARM	24		CKG4VALR	46	1

## \$CKGPAR Cross Reference

Name	Hex Offset	Hex Value
CKG4WCFL	46	4
CKG5CHKR	47	20
CKG5DTRS	47	40
CKG5LCKR	47	10
CKG5LOGR	47	4
CKG5MSTR	47	8
CKG5NDTR	47	80
CKG5PAGR	47	2
CKG5VERP	47	1

## \$CKM Heading Information

**Common Name:** JES2 Checkpoint Inter-member Communications Area  
**Macro ID:** \$CKM  
**DSECT Name:** CKM  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'CKM '  
 Offset: CKMID-CKM  
 Length: L'CKM  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are anywhere in the private storage of the JES2 address space.  
**Size:** See CKMLEN  
**Created by:** Routine CKRRINIT during JES2 initialization  
**Pointed to by:** CKWCKMA field of the \$CKW data area  
**Serialization:** None required  
**Function:** The \$CKM data area is used by JES2 checkpoint reconfiguration routines to coordinate processing with other members in a MAS. The \$CKM contains fields to communicate with callers of the CKRRxxxx routines and fields used internally to communicate with other members using JESXCF services.

## \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKM	, Checkpoint inter-member communications area
0	(0)	CHARACTER	4	CKMID	Control block eyecatcher
4	(4)	ADDRESS	1	CKMVERSN	Control block version
4	(4)	X'1'	0	CKMVERN	"1" Current version number
5	(5)	BITSTRING	3		Reserved for future use
----- Comment -----					
Input/Output for routine CKRRSTRT callers.					
Fields in section are named CKMSxxxx.					
"S" for start					
Output fields are available to caller until the next CKRRDONE call.					
----- End of Comment -----					
8	(8)	DBL WORD	8	(0)	Alignment
8	(8)	BITSTRING	0	CKMSPARM (0)	CKRRSTRT parameter list
8	(8)	DBL WORD	8	CKMSBEGN (0)	Beginning of CKRRSTRT parms
8	(8)	BITSTRING	1	CKMSFLG1	(IO) Flag byte 1 for CKRRSTRT
		1... ....		CKMS1MBD	"B'10000000" (I.) - This member MUST be driver (owns the Q's)
		.1.. ....		CKMS1DRV	"B'01000000" (.O) - CKRRSTRT has determined this is the initial driving member
		..1. ....		CKMS1OPV	"B'00100000" (IO) - Use OPVERIFY=YES during this reconfiguration
		...1 ....		CKMS1HUP	"B'00010000" (I.) - HFAM update is pending
9	(9)	BITSTRING	1	CKMSFLG2	(IO) Flag byte 2 (Used for reconfiguration reason)
		1... ....		CKMS2IO1	"B'10000000" (IO) - I/O error on CKPT1
		.1.. ....		CKMS2IO2	"B'01000000" (IO) - I/O error on CKPT2
9	(9)	X'CO'	0	CKMS2IOE	"CKMS2IO1+CKMS2IO2" (.O) - I/O error on CKPTn
		..1. ....		CKMS2CKV	"B'00100000" (IO) - CKPT on volatile CF

## \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		...1 ....		CKMS2OPR	"B'00010000" (IO) - Operator requested dialog
		.... 1...		CKMS2CAN	"B'00001000" (.O) - Reconfiguration cancelled by JES2
10	(A)	BITSTRING	2		Reserved for future use
12	(C)	BITSTRING	4	CKMSDCON	(IO) Console ID or zero
16	(10)	SIGNED	4	CKMSNIOE	(.O) Number of members with I/O errors on CKPTn (Check CKMSFLG2 bits for "n")
20	(14)	CHARACTER	4	CKMSDNAM	(.O) Name of driving member (Original driving member, use CKMCCDMN after syncs)
24	(18)	BITSTRING	8	CKMSLEVN	(I.) Checkpoint level number
32	(20)	CHARACTER	128	CKMSMEMV	(.O) Vector of member names at original driver selection
160	(A0)	BITSTRING	308	CKMSHFAM	(IO) Copy of HFAM to initially use for this reconfig
468	(1D4)	BITSTRING	4		Reserved for future use
472	(1D8)	DBL WORD	8	CKMSEND (0)	End of CKRRSTRT parm list

Comment

-----  
 CKRRSTRT return codes  
 -----

End of Comment

472	(1D8)	X'0'	0	CKMSRCOK	"0" STRT processing completed
472	(1D8)	X'4'	0	CKMSRCCN	"4" Reconfig cancelled by JES2

Comment

Input/Output for routine CKRRSYNC callers.  
 Fields in section are named CKMCxxxx.

! "C" for sync

Output fields are available to caller until the  
 next CKRRSYNC or CKRRDONE call.

End of Comment

472	(1D8)	DBL WORD	8	(0)	Alignment
472	(1D8)	BITSTRING	0	CKMCPARM (0)	CKRRSYNC parameter list
472	(1D8)	DBL WORD	8	CKMCBEGN (0)	Beginning of CKRRSYNC parms
472	(1D8)	BITSTRING	1	CKMCFLG1	(IO) Flag byte 1 for CKRRSYNC
		1... ....		CKMC1DMF	"B'10000000" (.O) - Driving member failed
		.1.. ....		CKMC1NDM	"B'01000000" (.O) - This member is new driver (This bit only set for transitions, and NOT on subsequent syncs)
		..1. ....		CKMC1OKW	"B'00100000" (IO) - OK for this non-driving member to wait for driver without issuing a delay message. Always zero on return
473	(1D9)	BITSTRING	3		
476	(1DC)	CHARACTER	4	CKMCCDMN	(.O) Name of current/new driving member
480	(1E0)	CHARACTER	8	CKMCTYPE	(I.) Type of sync call

Comment

-----  
 CKMCACT contains an "action" code set by the  
 driving member that tells non-driving members  
 what to do.  
 -----

End of Comment

488	(1E8)	SIGNED	4	CKMCACT	(IO) Action code (in on driver)
488	(1E8)	X'0'	0	CKMCACNL	"0" - Null (Action implied by CKMCTYPE)
488	(1E8)	X'4'	0	CKMCACCT	"4" - Continue (All members successful, wrap up and call DONE)
488	(1E8)	X'8'	0	CKMCACRT	"8" - Retry (Member(s) unsuccessful, retry from the top)
488	(1E8)	X'C'	0	CKMCACOC	"12" - Operator requested CANCEL or TERM
488	(1E8)	X'10'	0	CKMCACF1	"16" - Start using forwarded CKPT1
488	(1E8)	X'14'	0	CKMCACF2	"20" - Start using forwarded CKPT2
488	(1E8)	X'18'	0	CKMCACS1	"24" - Suspend CKPT1



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
488	(1E8)	X'1C'	0	CKMCACS2	"28" - Suspend CKPT2
488	(1E8)	X'20'	0	CKMCACU1	"32" - Start using CKPT1
488	(1E8)	X'24'	0	CKMCACU2	"36" - Start using CKPT2

Comment

-----  
 The "condition" fields communicate conditions from all members to the driving member. Conditions are collected into a vector on the driving member.  
 -----

End of Comment

492	(1EC)	SIGNED	4	CKMCICON	(I.) Condition on entering CKRRSYNC call
492	(1EC)	X'0'	0	CKMCCCNL	"0" (.O) - Null condition (member not participating or failed)
492	(1EC)	X'4'	0	CKMCCCOK	"4" (IO) - OK condition (previous action successful or no condition to report)
492	(1EC)	X'8'	0	CKMCCCUS	"8" (IO) - Unsuccessful result from previous action
496	(1F0)	BITSTRING	128	CKMCCONV	(.O) (On driver only) A vector containing the condition from each member
624	(270)	SIGNED	4	CKMCCONM	(.O) (On driving member only) Maximum condition value from CKMCCONV vector

Comment

-----  
 "Reason codes" are communicated from all members to the driving member. The "reason codes" are collected into a vector on the driving member. Reason codes are set to zero by CKRRSYNC for non-participating or failed members.  
 -----

End of Comment

628	(274)	SIGNED	4	CKMCIRSN	(I.) Reason code on entry to CKRRSYNC call
632	(278)	BITSTRING	1	CKMCRSNV	(.O) (On driver only) A vector containing reason codes for each member

Comment

-----  
 Latest \$HFAM from driving member  
 -----

End of Comment

760	(2F8)	BITSTRING	308	CKMCHFAM	(IO) Copy of HFAM from driver when CKRRSYNC called
1068	(42C)	BITSTRING	4		Reserved for future use
1072	(430)	DBL WORD	8	CKMCEND (0)	End of CKRRSYNC parm list

Comment

-----  
 CKRRSYNC return codes  
 -----

End of Comment

1072	(430)	X'0'	0	CKMCRCOK	"0" SYNC processing completed
1072	(430)	X'4'	0	CKMCRCDF	"4" Driving member failed

## \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>Input/Output for routine CKRRDONE callers.            Fields in section are named CKMDxxxx.                  "D" for done            Output fields are available to caller until the            next CKRRSTRT call.</p>					
-----					
CKRRDONE return codes					
-----					
End of Comment					
1072	(430)	X'0'	0	CKMDRCOK	"0" DONE processing completed
1072	(430)	X'4'	0	CKMDRCRC	"4" Re-enter CKPT reconfig (Start-up request for new reconfig was received)
Comment					
<p>Data internal to CKRRxxxx routines.            Fields in section are named CKMIxxxx.                  "I" for internal            Fields between CKMIDATA and CKMICLR1 are            persistent for the life of this JES2.            Fields beginning at CKMICLR1 are cleared            when CKRRSTRT is called.            Fields beginning at CKMICLR2 are cleared            when CKRRSYNC or CKRRDONE are called.</p>					
End of Comment					
1072	(430)	DBL WORD	8	CKMIDATA (0)	Beginning of internal data
1072	(430)	CHARACTER	8	CKMIIEYE	Internal data eyecatcher (set by CKRRINIT)
1080	(438)	ADDRESS	4	CKMICKXA	Addr of CKX used to build messages and acks (obtained by CKRRINIT)
1084	(43C)	ADDRESS	4	CKMICKXS	Addr of CKX used to save last received msg or ack (obtained by CKRRINIT)
1088	(440)	SIGNED	4	CKMICRST	Reconfig start time (BIN)
1092	(444)	SIGNED	4	CKMICRSD	Start date (YYYYMMDD)
1096	(448)	SIGNED	4	CKMICRET	Reconfig end time (BIN)
1100	(44C)	SIGNED	4	CKMICRED	End date (YYYYMMDD)
1104	(450)	SIGNED	4	CKMICRSE	Count of system events received during reconfig
1108	(454)	SIGNED	4	CKMICRIF	Count of IXZXIXIF requests issued in reconfiguration
1112	(458)	SIGNED	4	CKMIXECB (0)	XECB to wait on
Comment					
-----					
General status flag byte					
-----					
End of Comment					
1132	(46C)	BITSTRING	1	CKMIFLG1	General status flag byte 1
		1... ....		CKMI1CAP	"B'10000000" - Reconfiguration capable
		.1.. ....		CKMI1RST	"B'01000000" - Reconfiguration started
		..1. ....		CKMI1CAN	"B'00100000" - Reconfiguration cancelled by JES2
1133	(46D)	BITSTRING	3		Reserved
Comment					
-----					
Mailbox names (set by CKRRINIT)					
-----					
End of Comment					

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1136	(470)	CHARACTER	1	CKMIMBNS	
1152	(480)	CHARACTER	1	CKMIMBNR	

Comment

-----  
 Delay time constants (set by CKRRINIT)  
 -----

End of Comment

0	(0)	X'F'	0	CKMISECS	"15" Wait time for other members in seconds
1168	(490)	SIGNED	4	CKMISTBI	STIMERM wait time for other members in 100th's of seconds
1168	(490)	X'3'	0	CKMISECI	"3" Wait time for IXZXIXIF to complete in seconds
1172	(494)	SIGNED	4	CKMISTIF	STIMERM wait time for IXZXIXIF in 100th's of seconds
1172	(494)	X'64'	0	CKMIIFFC	"100" Interval between IXZXIXIF requests in 100th's of seconds
1176	(498)	SIGNED	4	CKMIIFFI	STIMERM wait time between IXZXIXIF requests in 100th's of seconds

Comment

-----  
 JESXCF post exit information (set by CKRRINIT).  
 Field CKMICKMA is also used for STIMERM.  
 -----

End of Comment

1180	(49C)	ADDRESS	4	CKMICKMA	Pointer to \$CKM used by IXZXIXMB for POSTDATA= and STIMERM for PARM=
1184	(4A0)	ADDRESS	4	CKMIHCTA	Addr of \$HCT for post exit
1184	(4A0)	X'4'	0	CKMIPXRP	"4" Post exit reason code for incorrect exit parm list
1184	(4A0)	X'8'	0	CKMIPXRD	"8" Post exit reason code for incorrect post data
1184	(4A0)	X'C'	0	CKMIPXRM	"12" Post exit reason code for incorrect mailbox name
1188	(4A4)	SIGNED	4		Reserved

Comment

Beginning of area cleared by CKRRSTRT.  
 Warning: The remainder of the \$CKM data area is cleared when CKRRSTRT is called. The area from CKMICLR1 for a length of CKMICL1L is cleared.  
 Note: See CKMICLR2 below for beginning of area to clear on CKRRSYNC and CKRRDONE calls.

End of Comment

1192	(4A8)	DBL WORD	8	CKMICLR1 (0)	Begin area to clear on STRT
------	-------	----------	---	--------------	-----------------------------

Comment

-----  
 Reconfiguration status flags  
 -----

End of Comment

1192	(4A8)	BITSTRING	1	CKMIFLG2	General status flag byte 2
		1... ..		CKMI2NIH	"B'10000000" - Reconfig initiated from elsewhere assumed
		.1... ..		CKMI2ONE	"B'01000000" - Single member reconfig (Set by IFGETVER rtn)
		..1. ....		CKMI2RCO	"B'00100000" - Reconfig is committed (First driving member was committed)
		...1 ....		CKMI2DCO	"B'00010000" - Driving member is (re)committed
		.... 1...		CKMI2DRV	"B'00001000" - We are driving member
		.... .1..		CKMI2DMF	"B'00000100" - Driving member failed during this SYNC/DONE (or was previously pending)

## \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... ..1.		CKMI2DFP	"B'00000010" - Driving member failed is pending for next call to CKRRSYNC
		.... ...1		CKMI2WSG	"B'00000001" - This non-driving member waiting for a sync go-ahead message
1193	(4A9)	BITSTRING	1	CKMIFLG3	General status flag byte 3
		1... ....		CKMI3RDD	"B'10000000" - Ready for driver decommit
		.1.. ....		CKMI3IFT	"B'01000000" - STIMERM used to control frequency of IXZXIXIF requests is set
1194	(4AA)	BITSTRING	1		Reserved
End of Comment					
<p>The following byte is permanently dedicated for IBM internal Function Component Test (FCT) use only. Warning: This section is used only for testing. Setting data in this section causes permanent waits or \$K25 ABENDs.</p>					
End of Comment					
1195	(4AB)	CHARACTER	1	CKMIFCT	FCT test byte
End of Comment					
<p>Reconfiguration operation sequence number Starts at zero on exit from CKRRSTRT and increments by one for each CKRRSYNC and by one more for CKRRDONE.</p>					
End of Comment					
1196	(4AC)	SIGNED	4	CKMIOSEQ	Operation sequence number
End of Comment					
<p>Information about members participating in the current reconfiguration This information is looked at, but NOT set by, the IFGETVER (get member information) routine. IFGETVER does, however, subtract failed members from the participating member mask.</p>					
End of Comment					
1200	(4B0)	SIGNED	4	CKMIDMNO	Current/last committed
1204	(4B4)	CHARACTER	4	CKMIDMNA	driver number and name
1208	(4B8)	SIGNED	4	CKMIDCNO	Current/last candidate
1212	(4BC)	CHARACTER	4	CKMIDCNA	driver number and name (zeros unless driver is being selected)
1216	(4C0)	BITSTRING	4	CKMIMMPM	Participating member mask
1220	(4C4)	BITSTRING	4		Reserved
End of Comment					
Timing data					
End of Comment					
1224	(4C8)	DBL WORD	8	(0)	Alignment

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
--ISTMS STIMERM SET,MF=L List form to set timer MACDATE = 08/19/88					
End of Comment					
1224	(4C8)	BITSTRING	24	CKMISTMS	REMOTE STIMERM SET PARM LIST
1224	(4C8)	X'18'	0	CKMISTSL	**-CKMISTMS" Length of parm list
Comment					
--ISTMC STIMERM CANCEL,MF=L List form to cancel timer MACDATE = 08/19/88					
End of Comment					
1248	(4E0)	BITSTRING	16	CKMISTMC	REMOTE STIMERM TEST/CANCEL PARM LIST
1248	(4E0)	X'10'	0	CKMISTCL	**-CKMISTMC" Length of parm list
1264	(4F0)	DBL WORD	8	(0)	Alignment
1264	(4F0)	SIGNED	4	CKMISTMI	STIMERM ID=id-area while waiting for response from IXZXIXIF service
1268	(4F4)	SIGNED	4	CKMISTMM	STIMERM ID=id-area while waiting for msg, ack or system event
1272	(4F8)	SIGNED	4	CKMISTME	STIMERM ID=id-area used for postponed IXZXIXIF request
1276	(4FC)	SIGNED	4	CKMISTEI	STIMERM interval set for postponed IXZXIXIF request
1280	(500)	BITSTRING	1	CKMISTFI	Interval timer flag byte (This byte is serialized with OIL and NIL)
		1... ....		CKMISTFI	"B'10000000" STIMERM interval expired IXZXIXIF service
		.1.. ....		CKMISTFM	"B'01000000" STIMERM interval expired for msg, ack or sys event
		..1. ....		CKMISTFE	"B'00100000" STIMERM interval expired for postponed IXZXIXIF request
1281	(501)	BITSTRING	7		Reserved
Comment					
Beginning of area cleared by CKRRSYNC and CKRRDONE calls. Warning: The remainder of the \$CKM data area is cleared when CKRRSYNC or CKRRDONE is called. The area from CKMICLR2 for a length of CKMICL2L is cleared. Note: See CKMICLR1 above for beginning of area to clear on CKRRSTRT calls.					
End of Comment					
1288	(508)	DBL WORD	8	CKMICLR2 (0)	Begin area to clear on SYNC or DONE calls
Comment					
----- Information returned from IFGETVER routine -----					
End of Comment					
1288	(508)	BITSTRING	1	CKMIIFG	IFGETVER flags
		1... ....		CKMIIFGD	"B'10000000" - Failed driver candidate's state indicates driver
		.1.. ....		CKMIIFGC	"B'01000000" - Failed driver XCF user state shows committed
1289	(509)	BITSTRING	3		Reserved
1292	(50C)	BITSTRING	4	CKMIMMRC	Reconfig capable mask
1296	(510)	BITSTRING	4	CKMIMMST	Reconfig started mask
1300	(514)	BITSTRING	4	CKMIMMMD	Member MUST drive mask
1304	(518)	BITSTRING	4	CKMIMMCO	Reconfig committed mask
1308	(51C)	BITSTRING	4	CKMIMMDR	Driving member mask

## \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1312	(520)	SIGNED	4	CKMIICNO	Candidate for driving member (based on CKPT level and MUST drive)
1316	(524)	CHARACTER	4	CKMIICNA	Candidate's name
1320	(528)	SIGNED	4	CKMIIDNO	Driving member number (Based on XMAUC1DR bit of lowest participating mem)
1324	(52C)	CHARACTER	4	CKMIIDNA	Driving member name
1328	(530)	CHARACTER	128	CKMIMEMV	Vector of member names
1456	(5B0)	BITSTRING	160	CKMIMCLV	Vector member CKPT levels from XMAUCRLV in member's XCF user state
1616	(650)	SIGNED	4	CKMIIFTS	BIN time stamp of last IXZXIXIF completion
Comment					
-----					
Bit mapped work mask for member states, etc.					
-----					
End of Comment					
1620	(654)	BITSTRING	1	CKMIMMWK	Member affinity work mask
Comment					
-----					
Data used by the WUSTATE routine					
- R1 parameter equates for expected XCF user state data					
- Mask of members that have not made the expected state change and have a HASP257 message outstanding					
-----					
End of Comment					
1620	(654)	X'1'	0	CKMIWUST	"1" Expecting "started"
1620	(654)	X'2'	0	CKMIWUDR	"2" Expecting "driving member" (issued by non-drivers)
1620	(654)	X'3'	0	CKMIWUCO	"3" Expecting "reconfiguration committed" (issued by driver only)
1620	(654)	X'4'	0	CKMIWUDD	"4" Expecting "driver done" (issued by non-drivers waiting for driver to revert to capable only)
1620	(654)	X'5'	0	CKMIWUAD	"5" Expecting "all done" (every participating member to revert to capable only)
1624	(658)	BITSTRING	1	CKMIWUDM	Mask of delayed members w/ pending user state change
Comment					
-----					
Driver selection information					
-----					
End of Comment					
1628	(65C)	SIGNED	4	(0)	Alignment
1628	(65C)	BITSTRING	0	CKMIDS (0)	Driver selection info
1628	(65C)	SIGNED	4	CKMIDSBG (0)	Begin driver selection info
1628	(65C)	BITSTRING	1	CKMIDFLG	Reconfig reason flags
		1... ....		CKMIDFOV	"B'10000000" - Use OPVERIFY=YES
		.1.. ....		CKMIDF1	"B'01000000" - I/O error on CKPT1
		..1. ....		CKMIDF2	"B'00100000" - I/O error on CKPT2
1628	(65C)	X'60'	0	CKMIDFIO	"CKMIDF1+CKMIDF2" - I/O error on CKPTn
		...1 ....		CKMIDFCV	"B'00010000" - CKPT on volatile CF
		.... 1...		CKMIDFOR	"B'00001000" - Operator requested dialog
		.... .1..		CKMIDFCN	"B'00000100" - Cancelled by JES2
		.... ..1.		CKMIDFHU	"B'00000010" - Pending HFAM update
1629	(65D)	BITSTRING	3		Reserved
1632	(660)	SIGNED	4	CKMIDSOS	Operation sequence number
1636	(664)	BITSTRING	4	CKMIDCON	Console ID or zero
1640	(668)	SIGNED	4	CKMIDSI1	Number of CKPT1 I/O errors

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1644	(66C)	SIGNED	4	CKMIDSI2	Number of CKPT2 I/O errors
1648	(670)	CHARACTER	4	CKMIDNAM	Name of driving member
1652	(674)	CHARACTER	128	CKMIDPMV	Participating memb names
1780	(6F4)	BITSTRING	308	CKMIDSHF	HFAM to initially use for this reconfig instance
2088	(828)	SIGNED	4	CKMIDSEN (0)	End driver selection info

Comment

Reason codes for \$K28 errors

End of Comment

2088	(828)	X'1'	0	CKMIECKM	"1" CKM eyecatcher error
2088	(828)	X'2'	0	CKMIESND	"2" STRT called again w/o DONE
2088	(828)	X'3'	0	CKMIECNS	"3" SYNC called before STRT
2088	(828)	X'4'	0	CKMIECAN	"4" SYNC called after reconfig cancelled by JES2
2088	(828)	X'5'	0	CKMIEDNS	"5" DONE called before STRT
2088	(828)	X'6'	0	CKMIESTE	"6" More than one reconfig reason in parm list
2088	(828)	X'7'	0	CKMIECTE	"7" Sync type (CKMCTYPE) mismatch detected by this non-driving member
2088	(828)	X'8'	0	CKMIESWD	"8" Non-driving member called CKRRSYNC when driving member called CKRRDONE
2088	(828)	X'9'	0	CKMIEDWS	"9" Non-driving member called CKRRDONE when driving member called CKRRSYNC
2088	(828)	X'A'	0	CKMIEIEC	"10" Internal eyecatcher error (Possible storage overlay from STRT/SYNC parm list)

Comment

Register save area, \$ERROR reason code, and \$Kxx error code index. Fields are set by the \$CKRRRC, \$CKRRV and \$CKRRK30 macros and CRERROR routine.

End of Comment

2088	(828)	SIGNED	4	CKMIKRGs (2)	R14, R15 at time of error
2096	(830)	SIGNED	4	CKMIKRsn (0)	\$Kxx reason code set from
2096	(830)	BITSTRING	1	CKMIKRsf	- (CKMIFUNC) Function code
2097	(831)	BITSTRING	1	CKMIKRss	- (CKMIFLG2) Status flags
2098	(832)	ADDRESS	1	CKMIKRst	- (CKMIXERT) Error type
2099	(833)	ADDRESS	1	CKMIKRsx	- (CKMILSTX) Last IXZIXxx
2100	(834)	ADDRESS	1	CKMIKxxx	\$Kxx error code index
2100	(834)	X'1'	0	CKMIK29	"1" - Fail with \$K29 error - JESXCF data
2100	(834)	X'2'	0	CKMIK30	"2" - Fail with \$K30 error - HASPCKRR internal logic
2100	(834)	X'3'	0	CKMIK34	"3" - Fail with \$K34 error - JESXCF return code

# \$CKM Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Footprint information					
Caution: Footprints are used for diagnosis ONLY and are NOT tested to control the flow or logic in reconfiguration routines. Using footprints to control main-line logic diminishes their value as an independent diagnosis tool, and could cause the diagnostic data to become part of a problem instead of an aid for problem determination.					
-----					
Function footprint codes					
-----					
End of Comment					
2101	(835)	BITSTRING	1	CKMIFUNC	Function being performed
		111. ....		CKMIFURM	"B'11100000" - CKRRxxxx routine mask
		..1. ....		CKMIFURI	"B'00100000" - CKRRINIT routine called
		.1.. ....		CKMIFURS	"B'01000000" - CKRRSTRT routine called
		.11. ....		CKMIFURC	"B'01100000" - CKRRSYNC routine called
		1... ....		CKMIFURD	"B'10000000" - CKRRDONE routine called
		...1 ....		CKMIFUDR	"B'00010000" - Driver path if bit on (set/reset by mult rtns)
		.... 1..		CKMIFUIF	"B'00001000" - In routine IFGETVER
		.... .1.		CKMIFUWU	"B'00000100" - In routine WUSTATE
		.... ..1		CKMIFUDS	"B'00000010" - In routine DSELECT
		.... ...1		CKMIFUIM	"B'00000001" - In routine IMPROC
Comment					
-----					
Last IXZXIXxx function footprint					
-----					
End of Comment					
2102	(836)	ADDRESS	1	CKMILSTX	Last JESXCF function
2102	(836)	X'1'	0	CKMILXAC	"1" - Acknowledge message
2102	(836)	X'2'	0	CKMILXIF	"2" - Obtain member information
2102	(836)	X'3'	0	CKMILXMB	"3" - Create mailbox
2102	(836)	X'4'	0	CKMILXMC	"4" - Clear mailbox
2102	(836)	X'5'	0	CKMILXMD	"5" - Delete mailbox
2102	(836)	X'6'	0	CKMILXRM	"6" - Receive message
2102	(836)	X'7'	0	CKMILXSM	"7" - Send message
2102	(836)	X'8'	0	CKMILXUS	"8" - Call to XCFUSTAT to update XCF user state
Comment					
-----					
Specific error type					
Error type equates have the form:					
CKMIXExx for JESXCF related \$K29 and \$K34 errors					
CKMIIExx for HASPCKRR internal logic \$K30 errors					
-----					
End of Comment					
2103	(837)	ADDRESS	1	CKMIXERT	Error type
Comment					
Error types for JESXCF related \$K29 or \$K34 errors					
End of Comment					



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2103	(837)	X'1'	0	CKMIXERC	"1" - Unexpected return code (Used for \$K34 only)
2103	(837)	X'2'	0	CKMIXEDA	"2" - IXZXIXRM DATA= addr is 0
2103	(837)	X'3'	0	CKMIXEZL	"3" - IXZXIXRM DATALEN is 0
2103	(837)	X'4'	0	CKMIXEZT	"4" - IXZXIXSM/IF REQTOKEN is 0
2103	(837)	X'5'	0	CKMIXEEE	"5" - YIXEN eyecatcher error
2103	(837)	X'6'	0	CKMIXEER	"6" - YIXEN system RC is not 0
2103	(837)	X'7'	0	CKMIXEES	"7" - YIXEN rsn code is not 0
2103	(837)	X'8'	0	CKMIXEEV	"8" - YIXEN not for sys event
2103	(837)	X'9'	0	CKMIXEEO	"9" - YIXEN msg offset is 0
2103	(837)	X'A'	0	CKMIXEEL	"10" - YIXEN msg length is 0
2103	(837)	X'B'	0	CKMIXEEC	"11" - YIXEN inconsistent length
2103	(837)	X'C'	0	CKMIXESE	"12" - YIXSE eyecatcher error
2103	(837)	X'D'	0	CKMIXESO	"13" - YIXSE msg offset is 0
2103	(837)	X'E'	0	CKMIXESM	"14" - YIXSE offset points past end of msg
2103	(837)	X'F'	0	CKMIXESI	"15" - YIXSE not for member info
2103	(837)	X'10'	0	CKMIXEIE	"16" - YIXIF eyecatcher error
2103	(837)	X'11'	0	CKMIXEIL	"17" - YIXIF length greater than remaining msg len
2103	(837)	X'12'	0	CKMIXEIG	"18" - YIXIF group name error
2103	(837)	X'13'	0	CKMIXEIP	"19" - YIXIF member name not blank padded
2103	(837)	X'14'	0	CKMIXEID	"20" - YIXIF duplicate member #
2103	(837)	X'15'	0	CKMIXEIO	"21" - YIXIF offset inconsistent with YIXIF length
2103	(837)	X'16'	0	CKMIXEIB	"22" - YIXIF offset past msg end
2103	(837)	X'17'	0	CKMIXEIU	"23" - YIXIF own memb # missing
2103	(837)	X'18'	0	CKMIXEIN	"24" - YIXIF own name mismatch
2103	(837)	X'19'	0	CKMIXEAE	"25" - YIXAC eyecatcher error
2103	(837)	X'1A'	0	CKMIXEAC	"26" - YIXAC inconsistent length
2103	(837)	X'1B'	0	CKMIXEAO	"27" - YIXAC msg offset is 0

Comment

Error types for HASPCKRR internal logic \$K30 errors

End of Comment

2103	(837)	X'0'	0	CKMIIEUN	"0" Unknown error type
2103	(837)	X'1'	0	CKMIIEIL	"1" Internal logic error
2103	(837)	X'2'	0	CKMIIESU	"2" Non-start-up msg received in start-up mailbox
2103	(837)	X'3'	0	CKMIIEMT	"3" Unexpected msg type received
2103	(837)	X'4'	0	CKMIIEMS	"4" Cannot find a REQTOKEN in CKMISMRT token vector
2103	(837)	X'5'	0	CKMIIEIN	"5" Message type does not match envelope
2103	(837)	X'6'	0	CKMIIEOS	"6" Sync operation sequence number mismatch
2103	(837)	X'7'	0	CKMIIEDF	"7" Inconsistent view of driver failed status
2103	(837)	X'8'	0	CKMIIEIR	"8" Unexpected return code from IMPROC
2103	(837)	X'9'	0	CKMIIEIM	"9" Invalid member number passed to subroutine
2103	(837)	X'A'	0	CKMIIEDE	"10" Non-zero DOM ID found on a DOMDELAY verify call
2103	(837)	X'B'	0	CKMIIEHD	"11" We are driving when there is another driver with a lower member number
2103	(837)	X'C'	0	CKMIIEMD	"12" Multiple members with MUST in XCF user state and we aren't the lowest MUST drive member #
2103	(837)	X'D'	0	CKMIIEAD	"13" IMPROC is processing an appl msg, but we do not have a driver or driver candidate
2103	(837)	X'E'	0	CKMIIEEY	"14" Invalid CKX eyecatcher
2103	(837)	X'F'	0	CKMIIEMH	"15" Invalid msg type passed to MHEADER routine

Comment

-----  
IXZXIXxx macro return and reason codes  
-----

End of Comment

2104	(838)	SIGNED	4	CKMIRTNC	Last IXZXIXxx return code (except for IXZXIXUS)
2108	(83C)	SIGNED	4	CKMIRSNC	Last IXZXIXxx reason code (except for IXZXIXUS)

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
Other footprints					
-----					
End of Comment					
2112	(840)	SIGNED	4	CKMIIFRC	Last IFGETVER return code
2116	(844)	SIGNED	4	CKMIIMRC	Last IMPROC return code
2120	(848)	SIGNED	4		Reserved
Comment					
Data associated with IXZXIXxx services					
-----					
General use data					
-----					
End of Comment					
2120	(848)	X'8'	0	CKMITOKL	"8" Length of JESXCF msg token
2124	(84C)	SIGNED	4	CKMICRML	Current residual msg length
2128	(850)	SIGNED	4	CKMIMSGL	Length of msg/ack to send
2132	(854)	CHARACTER	1	CKMISMNA	XCF member name to send to
Comment					
Data returned from IXZXIXIF for member information					
-----					
End of Comment					
2148	(864)	BITSTRING	1	CKMIIFRT	Request token (REQTOKEN=)
Comment					
Data returned from IXZXIXRM for a system event					
-----					
End of Comment					
2156	(86C)	ADDRESS	4	CKMIRMED	Addr of message (DATA=)
2160	(870)	SIGNED	4	CKMIRMEL	Length of msg (DATALEN=)
2164	(874)	BITSTRING	1	CKMIRMET	Message token (MSGTOKEN=)
Comment					
Data returned from IXZXIXRM for a message or ack					
-----					
End of Comment					
2172	(87C)	ADDRESS	4	CKMIRMMD	Addr of message (DATA=)
2176	(880)	SIGNED	4	CKMIRMML	Length of msg (DATALEN=)
2180	(884)	BITSTRING	8	CKMIRMMT	Message token (MSGTOKEN=)
2188	(88C)	SIGNED	4		Reserved
2192	(890)	SIGNED	4	CKMIRMSN	Sending member number (set by IMPROC routine)
2196	(894)	BITSTRING	1	CKMIRMAC	Req token from ack's YIXAC (set by IMPROC routine)

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
----- Data returned from IXZXIXSM -----					
End of Comment					
2204	(89C)	BITSTRING	1	CKMISMRT	Request tokens (REQTOKEN=). One for each member number
Comment					
Data associated with \$BLDMSG usage --IBMSG \$BLDMSG MF=L List form of \$BLDMSG					
End of Comment					
2460	(99C)	SIGNED	4	CKMIBMSG (0)	Control block ID
2464	(9A0)	BITSTRING	4		Console ID
2468	(9A4)	ADDRESS	4		Address of the CART
2472	(9A8)	ADDRESS	4		Pointer for JOBID
2476	(9AC)	ADDRESS	4		Control block address
2480	(9B0)	ADDRESS	4		Display routine address
2484	(9B4)	ADDRESS	4	(6)	6 word work area
2508	(9CC)	BITSTRING	2		ROUT code for Message
2510	(9CE)	BITSTRING	2		Not used
2512	(9D0)	CHARACTER	4		Message ID
2516	(9D4)	CHARACTER	1		Separator character
2517	(9D5)	ADDRESS	1		Flag byte 1
2518	(9D6)	ADDRESS	1		'DISPER'
2519	(9D7)	ADDRESS	1		Flag byte 2
2520	(9D8)	BITSTRING	16		Not used
2536	(9E8)	ADDRESS	4	(0)	Ensure multiple of 4
2536	(9E8)	ADDRESS	2	(0)	
0	(0)	X'4C'	0	CKMIBMLN	** -CKMIBMSG" Length of \$BLDMSG MF=L
2536	(9E8)	SIGNED	4	CKMID254	DOM ID for HASP254/709 msg
2540	(9EC)	BITSTRING	128	CKMID257	DOM ID vector for HASP257
2668	(A6C)	CHARACTER	4	CKMIDMCM	HASP257 causing member name
2672	(A70)	ADDRESS	1	CKMIDMAC	HASP257 waiting for action
2672	(A70)	X'1'	0	CKMIDMA1	"1" - Reconfig starting
2672	(A70)	X'2'	0	CKMIDMA2	"2" - Driver commit
2672	(A70)	X'3'	0	CKMIDMA3	"3" - Reconfig commit
2672	(A70)	X'4'	0	CKMIDMA4	"4" - JESXCF msg from driver
2672	(A70)	X'5'	0	CKMIDMA5	"5" - JESXCF ack from non-drv
2672	(A70)	X'6'	0	CKMIDMA6	"6" - Driver decommit
2672	(A70)	X'7'	0	CKMIDMA7	"7" - Reconfig decommit
2673	(A71)	CHARACTER	2	CKMIDMMT	First two chars of CKXMEYE for HASP257 message
2675	(A73)	BITSTRING	5		Reserved
Comment					
List form macros for JESXCF services					
End of Comment					
2680	(A78)	DBL WORD	8	CKMIXLST (0)	JESXCF list form macros
Comment					
----- IXZXIXAC MF=(L,CKMIIXAC) Acknowledge message MACDATE -93/06/10-<1>					
End of Comment					
2680	(A78)	SIGNED	2	M00M0853 (0)	IXZXIXAC-1
2680	(A78)	DBL WORD	8	CKMIIXAC (0)	++ IXZXIXAC PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXAC_XVERSION	

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2681	(A79)	CHARACTER	6	CKMIIXAC_XEYECATCH	++ INPUT XVERSION ++ CONSTANT XEYECATCH
2687	(A7F)	BITSTRING	1	CKMIIXAC_XSTB	++ INPUT
		1... ....		CKMIIXAC_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
		.1.. ....		CKMIIXAC_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
2688	(A80)	BITSTRING	8	CKMIIXAC_XMSGTOKEN	++ XMSGTOKEN
2696	(A88)	ADDRESS	4	CKMIIXAC_XDATA	++ XDATA
2700	(A8C)	SIGNED	4	CKMIIXAC_XDATALEN	++ XDATALEN
2704	(A90)	SIGNED	4	CKMIIXAC_XUSERRC	++ XUSERRC
2708	(A94)	SIGNED	4	CKMIIXAC_XGROUPTOKEN	++ XGROUPTOKEN
2712	(A98)	SIGNED	4	CKMIIXAC_XSYSRC	++ XSYSRC
2716	(A9C)	SIGNED	4	CKMIIXAC_XSYSRSN	++ XSYSRSN
2720	(AA0)	BITSTRING	1	CKMIIXAC_XKEYS	++ FIELD_LABEL
		1... ....		CKMIIXAC_KEYUSED_DATA	"B'10000000" ++ KEYUSED.DATA KEYWORD
		.1.. ....		CKMIIXAC_KEYUSED_DATALEN	"B'01000000" ++ KEYUSED.DATALEN KEYWORD
		..1. ....		CKMIIXAC_KEYUSED_USERRC	"B'00100000" ++ KEYUSED.USERRC KEYWORD
		...1 ....		CKMIIXAC_KEYUSED_SYSRC	"B'00010000" ++ KEYUSED.SYSRC KEYWORD
		.... 1...		CKMIIXAC_KEYUSED_SYSRSN	"B'00001000" ++ KEYUSED.SYSRSN KEYWORD
2721	(AA1)	BITSTRING	1	CKMIIXAC_XMSGATTR	++ INPUT
		1... ....		CKMIIXAC_XMSGATTR_J3CONNECT	"B'10000000" ++ XMSGATTR.J3CONNECT KEYWORD
		.1.. ....		CKMIIXAC_XMSGATTR_EXPRESS	"B'01000000" ++ XMSGATTR.EXPRESS KEYWORD
2721	(AA1)	X'2A'	0	CKMIIXACL	**CKMIIXAC" ++ LENGTH OF PLIST

Comment

IXZXIXAC-1

End of Comment

Comment

----- IXZXIXIF MF=(L,CKMIIXIF) Obtain member information  
MACDATE -96/10/24-<2>

End of Comment

0	(0)	X'A78'	0	M00M0854	"CKMIIXIF" ++ IXZXIXIF NAME
2680	(A78)	DBL WORD	8	CKMIIXIF (0)	++ IXZXIXIF PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXIF_XVERSION	++ INPUT XVERSION
2681	(A79)	CHARACTER	6	CKMIIXIF_XEYECATCH	++ CONSTANT XEYECATCH
2687	(A7F)	CHARACTER	1	CKMIIXIF_XRSV0001	++ RESERVED XRSV0001
2688	(A80)	SIGNED	4	CKMIIXIF_XGROUPTOKEN	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2692	(A84)	CHARACTER	16	CKMIIXIF_XREQMBOX	++ XGROUPTOKEN
2708	(A94)	CHARACTER	8	CKMIIXIF_XREQTOKEN	++ XREQMBOX
2716	(A9C)	ADDRESS	4	CKMIIXIF_XANSAREA	++ XREQTOKEN
2720	(AA0)	SIGNED	4	CKMIIXIF_XANSLEN	++ XANSAREA
2724	(AA4)	BITSTRING	1	CKMIIXIF_XINFOLVL	++ XANSLEN
		1... ....		CKMIIXIF_XINFOLVL_GROUP	++ INPUT
		.1.. ....		CKMIIXIF_XINFOLVL_MEMBER	"B'10000000" ++ XINFOLVL.GROUP KEYWORD
2725	(AA5)	BITSTRING	1	CKMIIXIF_XKEYS	"B'01000000" ++ XINFOLVL.MEMBER KEYWORD
		1... ....		CKMIIXIF_KEYUSED_REQMBOX	++ FIELD_LABEL
		.1.. ....		CKMIIXIF_KEYUSED_ANSAREA	"B'10000000" ++ KEYUSED.REQMBOX KEYWORD
		..1. ....		CKMIIXIF_KEYUSED_GROUPTOKEN	"B'01000000" ++ KEYUSED.ANSAREA KEYWORD
		...1 ....		CKMIIXIF_KEYUSED_GROUPNAME	"B'00100000" ++ KEYUSED.GROUPTOKEN KEYWORD
2726	(AA6)	BITSTRING	1	CKMIIXIF_XSTATE	"B'00010000" ++ KEYUSED.GROUPNAME KEYWORD
		1... ....		CKMIIXIF_XSTATE_ANY	++ INPUT
		.1.. ....		CKMIIXIF_XSTATE_ACTIVE	"B'10000000" ++ XSTATE.ANY KEYWORD
2727	(AA7)	BITSTRING	1	CKMIIXIF_XSYSTEM	"B'01000000" ++ XSTATE.ACTIVE KEYWORD
		1... ....		CKMIIXIF_XSYSTEM_ANY	++ INPUT
		.1.. ....		CKMIIXIF_XSYSTEM_CURRENT	"B'10000000" ++ XSYSTEM.ANY KEYWORD
2728	(AA8)	BITSTRING	1	CKMIIXIF_XPOLYJES	"B'01000000" ++ XSYSTEM.CURRENT KEYWORD
		1... ....		CKMIIXIF_XPOLYJES_YES	++ INPUT
		.1.. ....		CKMIIXIF_XPOLYJES_NO	"B'10000000" ++ XPOLYJES.YES KEYWORD
2729	(AA9)	BITSTRING	2	CKMIIXIF_XFUNCTION	"B'01000000" ++ XPOLYJES.NO KEYWORD
2729	(AA9)	BITSTRING	0	CKMIIXIF_XFUNCTION_ARM	++ INPUT
2731	(AAB)	CHARACTER	8	CKMIIXIF_XGROUPNAME	"B'100000000000000000" ++ XFUNCTION.ARM KEYWORD
2731	(AAB)	X'3B'	0	CKMIIXIFL	++ XGROUPNAME
					**_CKMIIXIF" ++ LENGTH OF PLIST
Comment					
IXZXIXIF-2					
End of Comment					
Comment					
----- IXZXIXMB MF=(L,CKMIIXMB) Create mailbox					
MACDATE -93/05/10-<1>					
End of Comment					
2680	(A78)	SIGNED	2	M00M0855 (0)	IXZXIXMB-1

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2680	(A78)	DBL WORD	8	CKMIIXMB (0)	++ IXZXIXMB PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXMB_XVERSION	++ INPUT XVERSION
2681	(A79)	CHARACTER	6	CKMIIXMB_XEYECATCH	++ CONSTANT XEYECATCH
2687	(A7F)	CHARACTER	1	CKMIIXMB_XRSV0001	++ RESERVED XRSV0001
2688	(A80)	CHARACTER	16	CKMIIXMB_XMBOXNAME	++ XMBOXNAME
2704	(A90)	ADDRESS	4	CKMIIXMB_XPOSTXIT	++ XPOSTXIT
2708	(A94)	ADDRESS	4	CKMIIXMB_XPOSTDATA	++ XPOSTDATA
2712	(A98)	SIGNED	4	CKMIIXMB_XPOSTALET	++ XPOSTALET
2716	(A9C)	SIGNED	4	CKMIIXMB_XGROUPTOKEN	++ XGROUPTOKEN
2720	(AA0)	BITSTRING	1	CKMIIXMB_XSYSEVENTS	++ FIELD_LABEL
		1... ..		CKMIIXMB_XSYSEVENT_YES	"B'10000000" ++ XSYSEVENT.YES KEYWORD
		.1.. ..		CKMIIXMB_XSYSEVENT_NO	"B'01000000" ++ XSYSEVENT.NO KEYWORD
2720	(AA0)	X'29'	0	CKMIIXMBL	**CKMIIXMB" ++ LENGTH OF PLIST

Comment

IXZXIXMB-1

End of Comment

Comment

----- IXZXIXMC MF=(L,CKMIIXMC) Clear mailbox  
MACDATE -93/05/10-<1>

End of Comment

2680	(A78)	SIGNED	2	M00M0857 (0)	IXZXIXMC-1
2680	(A78)	DBL WORD	8	CKMIIXMC (0)	++ IXZXIXMC PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXMC_XVERSION	++ INPUT XVERSION
2681	(A79)	CHARACTER	6	CKMIIXMC_XEYECATCH	++ CONSTANT XEYECATCH
2687	(A7F)	BITSTRING	1	CKMIIXMC_XSTB	++ INPUT
		1... ..		CKMIIXMC_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
		.1.. ..		CKMIIXMC_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
2688	(A80)	CHARACTER	16	CKMIIXMC_XMBOXNAME	++ XMBOXNAME
2704	(A90)	SIGNED	4	CKMIIXMC_XGROUPTOKEN	++ XGROUPTOKEN
2704	(A90)	X'1C'	0	CKMIIXMCL	**CKMIIXMC" ++ LENGTH OF PLIST

Comment

IXZXIXMC-1

End of Comment

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
----- IXZXIXMD MF=(L,CKMIIXMD) Delete mailbox MACDATE -93/05/10-<1>					
End of Comment					
2680	(A78)	SIGNED	2	M00M0858 (0)	IXZXIXMD-1
2680	(A78)	DBL WORD	8	CKMIIXMD (0)	++ IXZXIXMD PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXMD_XVERSION	++ INPUT XVERSION
2681	(A79)	CHARACTER	6	CKMIIXMD_XEYECATCH	++ CONSTANT XEYECATCH
2687	(A7F)	BITSTRING	1	CKMIIXMD_XSTB	++ INPUT
		1... ....		CKMIIXMD_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
		.1.. ....		CKMIIXMD_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
2688	(A80)	CHARACTER	16	CKMIIXMD_XMBOXNAME	++ XMBOXNAME
2704	(A90)	SIGNED	4	CKMIIXMD_XGROUPTOKEN	++ XGROUPTOKEN
2704	(A90)	X'1C'	0	CKMIIXMDL	**CKMIIXMD" ++ LENGTH OF PLIST
Comment					
IXZXIXMD-1					
End of Comment					
Comment					
----- IXZXIXRM MF=(L,CKMIIXRM) Receive message MACDATE -93/05/10-<1>					
End of Comment					
2680	(A78)	SIGNED	2	M00M0859 (0)	IXZXIXRM-1
2680	(A78)	DBL WORD	8	CKMIIXRM (0)	++ IXZXIXRM PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXRM_XVERSION	++ INPUT XVERSION
2681	(A79)	CHARACTER	6	CKMIIXRM_XEYECATCH	++ CONSTANT XEYECATCH
2687	(A7F)	CHARACTER	1	CKMIIXRM_XRSV0001	++ RESERVED XRSV0001
2688	(A80)	CHARACTER	16	CKMIIXRM_XMBOXNAME	++ XMBOXNAME
2704	(A90)	ADDRESS	4	CKMIIXRM_XDATA	++ XDATA
2708	(A94)	SIGNED	4	CKMIIXRM_XDATALEN	++ XDATALEN
2712	(A98)	BITSTRING	8	CKMIIXRM_XMSGTOKEN	++ XMSGTOKEN
2720	(AA0)	SIGNED	4	CKMIIXRM_XGROUPTOKEN	++ XGROUPTOKEN
2724	(AA4)	BITSTRING	1	CKMIIXRM_XMSGFFETCH	++ INPUT
		1... ....		CKMIIXRM_XMSGFFETCH_ALL	"B'10000000" ++ XMSGFFETCH.ALL KEYWORD
		.1.. ....		CKMIIXRM_XMSGFFETCH_MESSAGES	"B'01000000" ++ XMSGFFETCH.MESSAGES KEYWORD
		..1. ....		CKMIIXRM_XMSGFFETCH_SYSEVENT	"B'00100000" ++ XMSGFFETCH.SYSEVENT KEYWORD
		...1 ....		CKMIIXRM_XMSGFFETCH_ACKS	

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2725	(AA5)	BITSTRING	1	CKMIIXRM_XKEYS	"B'00010000" ++ XMSGFETCH.ACKS KEYWORD ++ FIELD_LABEL
		1... ..		CKMIIXRM_KEYUSED_MSGFETCH	"B'10000000" ++ KEYUSED.MSGFETCH KEYWORD
2725	(AA5)	X'2E'	0	CKMIIXRML	"*-CKMIIXRM" ++ LENGTH OF PLIST
Comment					
IXZXIXRM-1					
End of Comment					
Comment					
----- IXZXIXSM MF=(L,CKMIIXSM) Send message MACDATE -93/05/10-<1>					
End of Comment					
2680	(A78)	SIGNED	2	M00M0860 (0)	IXZXIXSM-1
2680	(A78)	DBL WORD	8	CKMIIXSM (0)	++ IXZXIXSM PARM LIST
2680	(A78)	BITSTRING	1	CKMIIXSM_XVERSION	++ INPUT XVERSION
2681	(A79)	CHARACTER	6	CKMIIXSM_XEYECATCH	++ CONSTANT XEYECATCH
2687	(A7F)	BITSTRING	1	CKMIIXSM_XMSGATTR	++ INPUT
		1... ..		CKMIIXSM_XMSGATTR_J3CONNECT	"B'10000000" ++ XMSGATTR.J3CONNECT KEYWORD
		.1.. ..		CKMIIXSM_XMSGATTR_EXPRESS	"B'01000000" ++ XMSGATTR.EXPRESS KEYWORD
2688	(A80)	CHARACTER	16	CKMIIXSM_XMBOXNAME	++ XMBOXNAME
2704	(A90)	CHARACTER	16	CKMIIXSM_XMEMBER	++ XMEMBER
2720	(AA0)	ADDRESS	4	CKMIIXSM_XDATA	++ XDATA
2724	(AA4)	SIGNED	4	CKMIIXSM_XDATALEN	++ XDATALEN
2728	(AA8)	BITSTRING	8	CKMIIXSM_XREQTOKEN	++ XREQTOKEN
2736	(AB0)	CHARACTER	16	CKMIIXSM_XREQMBOX	++ XREQMBOX
2752	(AC0)	SIGNED	4	CKMIIXSM_XDATAALET	++ XDATAALET
2756	(AC4)	SIGNED	4	CKMIIXSM_XRESPDALT	++ XRESPDALT
2760	(AC8)	SIGNED	4	CKMIIXSM_XECB	++ XECB
2764	(ACC)	SIGNED	4	CKMIIXSM_XEXIT	++ XEXIT
2768	(AD0)	BITSTRING	8	CKMIIXSM_XCONNECT	++ XCONNECT
2776	(AD8)	SIGNED	4	CKMIIXSM_XGROUPTOKEN	++ XGROUPTOKEN
2780	(ADC)	SIGNED	4	CKMIIXSM_XUSERRC	++ XUSERRC
2784	(AE0)	SIGNED	4	CKMIIXSM_XRESPDATA	++ XRESPDATA
2788	(AE4)	SIGNED	4	CKMIIXSM_XRESPDLEN	++ XRESPDLEN
2792	(AE8)	CHARACTER	4	CKMIIXSM_XRSV00001	++ RESERVED XRSV00001
2796	(AEC)	BITSTRING	8	CKMIIXSM_XMSGTOKEN	



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2804	(AF4)	SIGNED	4	CKMIIXSM_XSYNCECB	++ XMSGTOKEN
2808	(AF8)	BITSTRING	1	CKMIIXSM_XREQTYPE	++ FIELD_LABEL XSYNCECB
		1... ....		CKMIIXSM_XREQTYPE_ASYNC	++ INPUT
		.1.. ....		CKMIIXSM_XREQTYPE_SYNC	"B'10000000" ++ XREQTYPE.ASYNC KEYWORD
		..1. ....		CKMIIXSM_XREQTYPE_ASYNCACK	"B'01000000" ++ XREQTYPE.SYNC KEYWORD
		...1 ....		CKMIIXSM_XREQTYPE_COMM	"B'00100000" ++ XREQTYPE.ASYNCACK KEYWORD
2809	(AF9)	BITSTRING	1	CKMIIXSM_XSEGTYPE	"B'00010000" ++ XREQTYPE.COMM KEYWORD
		1... ....		CKMIIXSM_XSEGTYPE_SINGLE	++ INPUT
		.1.. ....		CKMIIXSM_XSEGTYPE_FIRST	"B'10000000" ++ XSEGTYPE.SINGLE KEYWORD
		..1. ....		CKMIIXSM_XSEGTYPE_MIDDLE	"B'01000000" ++ XSEGTYPE.FIRST KEYWORD
		...1 ....		CKMIIXSM_XSEGTYPE_LAST	"B'00100000" ++ XSEGTYPE.MIDDLE KEYWORD
		.... 1..		CKMIIXSM_XSEGTYPE_ABORT	"B'00010000" ++ XSEGTYPE.LAST KEYWORD
2810	(AFA)	BITSTRING	1	CKMIIXSM_XKEYS	"B'00001000" ++ XSEGTYPE.ABORT KEYWORD
		1... ....		CKMIIXSM_KEYUSED_REQTYPE	++ FIELD_LABEL
		.1.. ....		CKMIIXSM_KEYUSED_REQTOKEN	"B'10000000" ++ KEYUSED.REQTYPE KEYWORD
		..1. ....		CKMIIXSM_KEYUSED_REQMBOX	"B'01000000" ++ KEYUSED.REQTOKEN KEYWORD
		...1 ....		CKMIIXSM_KEYUSED_EXIT	"B'00100000" ++ KEYUSED.REQMBOX KEYWORD
		.... 1..		CKMIIXSM_KEYUSED_SEGTYPE	"B'00010000" ++ KEYUSED.EXIT KEYWORD
		.... .1..		CKMIIXSM_KEYUSED_CONNECT	"B'00001000" ++ KEYUSED.SEGTYPE KEYWORD
		.... ..1.		CKMIIXSM_KEYUSED_MSGTOKEN	"B'00000100" ++ KEYUSED.CONNECT KEYWORD
		.... ...1		CKMIIXSM_KEYUSED_MSGATTR	"B'00000010" ++ KEYUSED.MSGTOKEN KEYWORD
2811	(AFB)	BITSTRING	1	CKMIIXSM_XKEYS1	"B'00000001" ++ KEYUSED.MSGATTR KEYWORD
		1... ....		CKMIIXSM_KEYUSED_ECB	++ FIELD_LABEL
		.1.. ....		CKMIIXSM_KEYUSED_DATAALET	"B'10000000" ++ KEYUSED.ECB KEYWORD
2811	(AFB)	X'84'	0	CKMIIXSML	"B'01000000" ++ KEYUSED.DATAALET KEYWORD
					** -CKMIIXSM" ++ LENGTH OF PLIST

Comment

IXZXIXSM-1

End of Comment

2816	(B00)	DBL WORD	8	(0)	Alignment
2816	(B00)	X'88'	0	CKMIXLLN	** -CKMIXLST" Length of longest list form

Comment

End of data internal to CKRRxxxx routines

End of Comment

## \$CKM Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2816	(B00)	DBL WORD	8	(0)	Alignment
2816	(B00)	X'5F8'	0	CKMICL2L	**_CKMICLR2" Length of area to clear in CKRRSTRT
2816	(B00)	X'658'	0	CKMICL1L	**_CKMICLR1" Length of area to clear in CKRRSYNC or CKRRDONE
2816	(B00)	X'6D0'	0	CKMIEND	**_CKMIDATA" Length of internal data
Comment					
End of \$CKM data area					
End of Comment					
2816	(B00)	X'B00'	0	CKMLEN	**_CKM" Length of \$CKM data area PRINT ON

## \$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKM	0		CKMICRSD	444	
CKMCACCT	1E8	4	CKMICRSE	450	
CKMCACF1	1E8	10	CKMICRST	440	
CKMCACF2	1E8	14	CKMID	0	
CKMCACNL	1E8	0	CKMIDATA	430	
CKMCACOC	1E8	C	CKMIDCNA	4BC	
CKMCACRT	1E8	8	CKMIDCNO	4B8	
CKMCACS1	1E8	18	CKMIDCON	664	
CKMCACS2	1E8	1C	CKMIDFCN	65C	4
CKMCACT	1E8		CKMIDFCV	65C	10
CKMCACU1	1E8	20	CKMIDFHU	65C	2
CKMCACU2	1E8	24	CKMIDFIO	65C	60
CKMCBEGN	1D8		CKMIDFI1	65C	40
CKMCCCNL	1EC	0	CKMIDFI2	65C	20
CKMCCCOK	1EC	4	CKMIDFLG	65C	
CKMCCCUS	1EC	8	CKMIDFOR	65C	8
CKMCCDMN	1DC		CKMIDFOV	65C	80
CKMCCONM	270		CKMIDMAC	A70	
CKMCCONV	1F0		CKMIDMA1	A70	1
CKMCEND	430		CKMIDMA2	A70	2
CKMCFGL1	1D8		CKMIDMA3	A70	3
CKMCHFAM	2F8		CKMIDMA4	A70	4
CKMCICON	1EC		CKMIDMA5	A70	5
CKMCIRSN	274		CKMIDMA6	A70	6
CKMCPARM	1D8		CKMIDMA7	A70	7
CKMCRCDF	430	4	CKMIDMCM	A6C	
CKMCRCOK	430	0	CKMIDMMT	A71	
CKMCRSNV	278		CKMIDMNA	4B4	
CKMCTYPE	1E0		CKMIDMNO	4B0	
CKMC1DMF	1D8	80	CKMIDNAM	670	
CKMC1NDM	1D8	40	CKMIDPMV	674	
CKMC1OKW	1D8	20	CKMIDS	65C	
CKMDRCOK	430	0	CKMIDSBG	65C	
CKMDRCRC	430	4	CKMIDSEN	828	
CKMIBMLN	0	4C	CKMIDSHF	6F4	
CKMIBMSG	99C	C2D3C440	CKMIDS11	668	
CKMICKMA	49C		CKMIDS12	66C	
CKMICKXA	438		CKMIDSOS	660	
CKMICKXS	43C		CKMID254	9E8	
CKMICLR1	4A8		CKMID257	9EC	
CKMICLR2	508		CKMIECAN	828	4
CKMICL1L	B00	658	CKMIECKM	828	1
CKMICL2L	B00	5F8	CKMIECNS	828	3
CKMICRED	44C		CKMIECTE	828	7
CKMICRET	448		CKMIEDNS	828	5
CKMICRIF	454		CKMIEDWS	828	9
CKMICRML	84C		CKMIEIEC	828	A

Name	Hex Offset	Hex Value
CKMIEND	B00	6D0
CKMIESND	828	2
CKMIESTE	828	6
CKMIESWD	828	8
CKMIFCT	4AB	
CKMIFLG1	46C	
CKMIFLG2	4A8	
CKMIFLG3	4A9	
CKMIFUDR	835	10
CKMIFUDS	835	2
CKMIFUIF	835	8
CKMIFUIM	835	1
CKMIFUNC	835	
CKMIFURC	835	60
CKMIFURD	835	80
CKMIFURI	835	20
CKMIFURM	835	E0
CKMIFURS	835	40
CKMIFUWU	835	4
CKMIHCTA	4A0	
CKMIICNA	524	
CKMIICNO	520	
CKMIIDNA	52C	
CKMIIDNO	528	
CKMIIEAD	837	D
CKMIIEDE	837	A
CKMIIEDF	837	7
CKMIIEEY	837	E
CKMIIEHD	837	B
CKMIIEIL	837	1
CKMIIEIM	837	9
CKMIIEIN	837	5
CKMIIEIR	837	8
CKMIIEMD	837	C
CKMIIEMH	837	F
CKMIIEMS	837	4
CKMIIEMT	837	3
CKMIIEOS	837	6
CKMIIESU	837	2
CKMIIEUN	837	0
CKMIIEYE	430	
CKMIIFFC	494	64
CKMIIFFI	498	
CKMIIFG	508	
CKMIIFGC	508	40
CKMIIFGD	508	80
CKMIIFRC	840	
CKMIIFRT	864	
CKMIIFTS	650	
CKMIIMRC	844	
CKMIIXAC	A78	
CKMIIXAC_KEYUSED_DATA	AA0	80
CKMIIXAC_KEYUSED_DATALEN	AA0	40
CKMIIXAC_KEYUSED_SYSRC	AA0	10
CKMIIXAC_KEYUSED_SYSRSN	AA0	8
CKMIIXAC_KEYUSED_USERRC	AA0	20
CKMIIXAC_XDATA	A88	
CKMIIXAC_XDATALEN	A8C	

Name	Hex Offset	Hex Value
CKMIIXAC_XEYECATCH	A79	
CKMIIXAC_XGROUPTOKEN	A94	
CKMIIXAC_XKEYS	AA0	
CKMIIXAC_XMSGATTR	AA1	
CKMIIXAC_XMSGATTR_EXPRESS	AA1	40
CKMIIXAC_XMSGATTR_J3CONNECT	AA1	80
CKMIIXAC_XMSGTOKEN	A80	
CKMIIXAC_XSTB	A7F	
CKMIIXAC_XSTB_NO	A7F	80
CKMIIXAC_XSTB_YES	A7F	40
CKMIIXAC_XSYSRC	A98	
CKMIIXAC_XSYSRSN	A9C	
CKMIIXAC_XUSERRC	A90	
CKMIIXAC_XVERSION	A78	
CKMIIXACL	AA1	2A
CKMIIXIF	A78	
CKMIIXIF_KEYUSED_ANSAREA	AA5	40
CKMIIXIF_KEYUSED_GROUPNAME	AA5	10
CKMIIXIF_KEYUSED_GROUPTOKEN	AA5	20
CKMIIXIF_KEYUSED_REQMBOX	AA5	80
CKMIIXIF_XANSAREA	A9C	
CKMIIXIF_XANSLEN	AA0	
CKMIIXIF_XEYECATCH	A79	
CKMIIXIF_XFUNCTION	AA9	
CKMIIXIF_XFUNCTION_ARM	AA9	8000
CKMIIXIF_XGROUPNAME	AAB	
CKMIIXIF_XGROUPTOKEN	A80	
CKMIIXIF_XINFOLVL	AA4	
CKMIIXIF_XINFOLVL_GROUP	AA4	80
CKMIIXIF_XINFOLVL_MEMBER	AA4	40
CKMIIXIF_XKEYS	AA5	
CKMIIXIF_XPOLYJES	AA8	
CKMIIXIF_XPOLYJES_NO	AA8	40
CKMIIXIF_XPOLYJES_YES		

## \$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	AA8	80	CKMIIXMD_XGROUPTOKEN	A90	
CKMIIXIF_XREQMBOX	A84		CKMIIXMD_XMBOXNAME	A80	
CKMIIXIF_XREQTOKEN	A94		CKMIIXMD_XSTB	A7F	
CKMIIXIF_XRSV0001	A7F		CKMIIXMD_XSTB_NO	A7F	80
CKMIIXIF_XSTATE	AA6		CKMIIXMD_XSTB_YES	A7F	40
CKMIIXIF_XSTATE_ACTIVE	AA6	40	CKMIIXMD_XVERSION	A78	
CKMIIXIF_XSTATE_ANY	AA6	80	CKMIIXMDL	A90	1C
CKMIIXIF_XSYSTEM	AA7		CKMIIXRM	A78	
CKMIIXIF_XSYSTEM_ANY	AA7	80	CKMIIXRM_KEYUSED_MSGFETCH	AA5	80
CKMIIXIF_XSYSTEM_CURRENT	AA7	40	CKMIIXRM_XDATA	A90	
CKMIIXIF_XVERSION	A78		CKMIIXRM_XDATALEN	A94	
CKMIIXIFL	AAB	3B	CKMIIXRM_XEYECATCH	A79	
CKMIIXMB	A78		CKMIIXRM_XGROUPTOKEN	AA0	
CKMIIXMB_XEYECATCH	A79		CKMIIXRM_XKEYS	AA5	
CKMIIXMB_XGROUPTOKEN	A9C		CKMIIXRM_XMBOXNAME	A80	
CKMIIXMB_XMBOXNAME	A80		CKMIIXRM_XMSGFETCH	AA4	
CKMIIXMB_XPOSTALET	A98		CKMIIXRM_XMSGFETCH_ACKS	AA4	10
CKMIIXMB_XPOSTDATA	A94		CKMIIXRM_XMSGFETCH_ALL	AA4	80
CKMIIXMB_XPOSTXIT	A90		CKMIIXRM_XMSGFETCH_MESSAGES	AA4	40
CKMIIXMB_XRSV0001	A7F		CKMIIXRM_XMSGFETCH_SYSEVENT	AA4	20
CKMIIXMB_XSYSEVENT_NO	AA0	40	CKMIIXRM_XMSGTOKEN	A98	
CKMIIXMB_XSYSEVENT_YES	AA0	80	CKMIIXRM_XRSV0001	A7F	
CKMIIXMB_XSYSEVENTS	AA0		CKMIIXRM_XVERSION	A78	
CKMIIXMB_XVERSION	A78		CKMIIXRML	AA5	2E
CKMIIXMBL	AA0	29	CKMIIXSM	A78	
CKMIIXMC	A78		CKMIIXSM_KEYUSED_CONNECT	AFA	4
CKMIIXMC_XEYECATCH	A79		CKMIIXSM_KEYUSED_DATAALET	AFB	40
CKMIIXMC_XGROUPTOKEN	A90		CKMIIXSM_KEYUSED_ECB	AFB	80
CKMIIXMC_XMBOXNAME	A80		CKMIIXSM_KEYUSED_EXIT	AFA	10
CKMIIXMC_XSTB	A7F		CKMIIXSM_KEYUSED_MSGATTR	AFA	1
CKMIIXMC_XSTB_NO	A7F	80	CKMIIXSM_KEYUSED_MSGTOKEN	AFA	2
CKMIIXMC_XSTB_YES	A7F	40	CKMIIXSM_KEYUSED_REQMBOX	AFA	20
CKMIIXMC_XVERSION	A78		CKMIIXSM_KEYUSED_REQTOKEN	AFA	40
CKMIIXMCL	A90	1C	CKMIIXSM_KEYUSED_REQTYPE	AFA	80
CKMIIXMD	A78		CKMIIXSM_KEYUSED_SEGTYPE		
CKMIIXMD_XEYECATCH	A79				



## \$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKMISTIF	494		CKMSHFAM	A0	
CKMISTMC	4E0	0	CKMSLEVN	18	
CKMISTME	4F8		CKMSMEMV	20	
CKMISTMI	4F0		CKMSNIOE	10	
CKMISTMM	4F4		CKMSPARM	8	
CKMISTMS	4C8	0	CKMSRCCN	1D8	4
CKMISTSL	4C8	18	CKMSRCOK	1D8	0
CKMITOKL	848	8	CKMS1DRV	8	40
CKMIWUAD	654	5	CKMS1HUP	8	10
CKMIWUCO	654	3	CKMS1MBD	8	80
CKMIWUDD	654	4	CKMS1OPV	8	20
CKMIWUDM	658		CKMS2CAN	9	8
CKMIWUDR	654	2	CKMS2CKV	9	20
CKMIWUST	654	1	CKMS2IOE	9	C0
CKMIXEAC	837	1A	CKMS2IO1	9	80
CKMIXEAE	837	19	CKMS2IO2	9	40
CKMIXEAO	837	1B	CKMS2OPR	9	10
CKMIXECB	458		CKMVERN	4	1
CKMIXEDA	837	2	CKMVERSN	4	
CKMIXEEC	837	B	M00M0853	A78	
CKMIXEEE	837	5	M00M0854	0	A78
CKMIXEEL	837	A	M00M0855	A78	
CKMIXEEO	837	9	M00M0857	A78	
CKMIXEER	837	6	M00M0858	A78	
CKMIXEES	837	7	M00M0859	A78	
CKMIXEEV	837	8	M00M0860	A78	
CKMIXEIB	837	16			
CKMIXEID	837	14			
CKMIXEIE	837	10			
CKMIXEIG	837	12			
CKMIXEIL	837	11			
CKMIXEIN	837	18			
CKMIXEIO	837	15			
CKMIXEIP	837	13			
CKMIXEIU	837	17			
CKMIXERC	837	1			
CKMIXERT	837				
CKMIXESE	837	C			
CKMIXESI	837	F			
CKMIXESM	837	E			
CKMIXESO	837	D			
CKMIXEZL	837	3			
CKMIXEZT	837	4			
CKMIXLLN	B00	88			
CKMIXLST	A78				
CKMI1CAN	46C	20			
CKMI1CAP	46C	80			
CKMI1RST	46C	40			
CKMI2DCO	4A8	10			
CKMI2DFP	4A8	2			
CKMI2DMF	4A8	4			
CKMI2DRV	4A8	8			
CKMI2NIH	4A8	80			
CKMI2ONE	4A8	40			
CKMI2RCO	4A8	20			
CKMI2WSG	4A8	1			
CKMI3IFT	4A9	40			
CKMI3RDD	4A9	80			
CKMLN	B00	B00			
CKMSBEGN	8				
CKMSDCON	C				
CKMSDNAM	14				
CKMSEND	1D8				
CKMSFLG1	8				
CKMSFLG2	9				

## \$CKPRECV Heading Information

**Common Name:** Checkpoint recovery parameter list  
**Macro ID:** \$CKPRECV  
**DSECT Name:** CKR  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** "CKR "  
 Offset: CKRID  
 Length: L'CKRID  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are anywhere in the storage of the JES2 address space  
**Size:** See CKRSIZE  
**Created by:** \$CKPTDIA macro  
**Pointed to by:** Register 1 upon entry to KDIALOG  
**Serialization:** None required  
**Function:** The CKPRECV is used to describe the requirements of the caller of the checkpoint reconfiguration. It is \$GETWORK'ed by the caller (via the \$CKPTDIA macro) and \$RETWORK'ed by the dialog routine.

## \$CKPRECV Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKR	
0	(0)	CHARACTER	4	CKRID	ID PLACED HERE BY GETWORK
4	(4)	ADDRESS	4	CKRCKG	ADDRESS OF THE CKGPAR
8	(8)	ADDRESS	4	CKRCKG2	ADDR CKG FOR COMPANION DATA SET
12	(C)	BITSTRING	1	CKRFLAG1	Flag byte
		1... ....		CKR1LIM	"B'10000000" MAIN TASK LIMITED CALLER
		.1.. ....		CKR1IOER	"B'01000000" REASON FOR CALL IS I/O ERROR
		..1. ....		CKR1RECO	"B'00100000" REASON FOR CALL IS RECONFIG
		...1 ....		CKR1INIT	"B'00010000" REASON FOR CALL IS INIT
		.... 1...		CKR1THIS	"B'00001000" MOST UP TO DATE QUEUES ARE IN THIS SYSTEM'S MEMORY
		.... .1..		CKR1OTH	"B'00000100" SOME OTHER SYSTEM HAS THE MOST UP DATE QUEUES
		.... ..1.		CKR1STAT	"B'00000010" USE THE \$STATUS BYTE TO DETERMINE IF WE HAVE MOST UP-TO-DATE COPY OF THE QUEUES
		.... ...1		CKR1QUSE	"B'00000001" TURN OFF \$QSONDA WHEN FINISHED
13	(D)	BITSTRING	1	CKRFLAG2	Flag byte
		1... ....		CKR2RECR	"B'10000000" RECURSIVE ERROR PENDING
		.1.. ....		CKR2MIOE	"B'01000000" The checkpoint reconfig was resulted from the I/O error on my system
		..1. ....		CKR2OPT7	"B'00100000" OPTION 7/8 PROCESSING
		...1 ....		CKR2DEL	"B'00010000" DELETE IS VALID RESPONSE TO HASP237, HASP273, HASP278
		.... .1..		CKR2CREA	"B'00000100" CREATE IS VALID RESPONSE TO HASP278 MESSAGE
		.... ..1.		CKR2NCRE	"B'00000010" CREATE IS INVALID RESPONSE TO FIRST HASP278 MESSAGE
		.... ...1		CKR2KRSV	"B'00000001" RESERVE WAS IN EFFECT WHEN DIALOG WAS ENTERED
13	(D)	X'16'	0	CKR2KNUL	"CKR2DEL+CKR2CREA+CKR2NCRE" KNULLCHK & KDSLOC FLAGS

## \$CKPRECX Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
ALL BIT CONFIGURATIONS FOR CKRFLAG3 ARE DEFINED IN \$HASPEQU					
End of Comment					
14	(E)	BITSTRING	1	CKRFLAG3	Flag byte (Shadowed in CKWRECF3)
15	(F)	BITSTRING	1	CKRFLAG4	Flag byte
		1... ....		CKR4ILEV	"B'10000000" Increment \$CKPTLEV
		.1.. ....		CKR4CFV	"B'01000000" REASON=VOLATILE when dialog is entered
		..1. ....		CKR4OPV	"B'00100000" Verify reconfiguration with operator possibly due to OPVERIFY=YES specified
		...1 ....		CKR4FWC1	"B'00010000" Forward CKPT1
		.... 1...		CKR4FWC2	"B'00001000" Forward CKPT2
		.... .1..		CKR4OAR	"B'00000100" Operator assistance requested (this is used for the issuance of HASP235 message)
16	(10)	BITSTRING	1	CKRFLAG5	DISPER flag for HASPMSG
		1... ....		CKR5CRC	"B'10000000" Reconfig Complete -255
		.1.. ....		CKR5CRCO	"B'01000000" Reconfig Cancelled by Operator -255
		..1. ....		CKR5CRCJ	"B'00100000" Reconfig Cancelled by JES2 -255
17	(11)	BITSTRING	3		Reserved
20	(14)	SIGNED	4	CKRCOUNT	The number of members unable to reconfigure
Comment					
-----					
CKRCACT contains an "action" code set by the driving member that tells non-driving members what to do. This is copied from CKMCACT and its values are mapped in the \$CKM.					
-----					
End of Comment					
24	(18)	SIGNED	4	CKRCACT	Reconfig "action" saved for undoing reconfig
28	(1C)	CHARACTER	4	CKRAERRC	\$ERROR CODE FOR HASP275 MESSAGE
32	(20)	ADDRESS	4	CKRACODE	ADDR OF \$ERROR MACRO TO BE USED IF ALL ELSE FAILS
36	(24)	SIGNED	4	CKRRTCD1	Return code from KDLRECON or KDLINITC routine
Comment					
ALL WTO DOM IDS ARE KEPT HERE					
End of Comment					
40	(28)	ADDRESS	4	CKRDMFST (0)	FIRST DOM ID
40	(28)	SIGNED	4	CKRDM233	DOM ID for message HASP233
44	(2C)	SIGNED	4	CKRDM235	DOM ID for message HASP235
48	(30)	SIGNED	4	CKRDM237	DOM ID for message HASP237
52	(34)	SIGNED	4	CKRDM270	DOM ID FOR MESSAGE HASP270
56	(38)	SIGNED	4	CKRDM271	DOM ID FOR MESSAGE HASP271
60	(3C)	SIGNED	4	CKRDM272	DOM ID FOR MESSAGE HASP272
64	(40)	SIGNED	4	CKRDM273	DOM ID FOR MESSAGE HASP273
68	(44)	SIGNED	4	CKRDM275	DOM ID FOR MESSAGE HASP275
72	(48)	SIGNED	4	CKRDM276	DOM ID FOR MESSAGE HASP276
76	(4C)	SIGNED	4	CKRDM277	DOM ID FOR MESSAGE HASP277
80	(50)	SIGNED	4	CKRDM278	DOM ID FOR MESSAGE HASP278
84	(54)	SIGNED	4	CKRDM281	DOM ID FOR MESSAGE HASP281
88	(58)	SIGNED	4	CKRDM282	DOM ID FOR MESSAGE HASP282
92	(5C)	SIGNED	4	CKRDM284	DOM ID FOR MESSAGE HASP284
96	(60)	SIGNED	4	CKRDM285	DOM ID FOR MESSAGE HASP285
100	(64)	SIGNED	4	CKRDM294	DOM ID FOR MESSAGE HASP294
104	(68)	SIGNED	4	CKRDM299	DOM ID FOR MESSAGE HASP299
108	(6C)	SIGNED	4	CKRDMINT	DOM ID for init statement
108	(6C)	X'6C'	0	CKRDM1ST	"*-4" LAST DOM ID



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
THE WTOR ECB					
End of Comment					
112	(70)	ADDRESS	4	CKRECB (0)	ECB USED FOR ALL WTOR'S
132	(84)	ADDRESS	4	CKRSVHF	ANCHOR FOR SAVED HFAM'S
136	(88)	CHARACTER	8	CKRCKPTD	'CKPTDEF' when needed
144	(90)	CHARACTER	144	CKRESPON	ALL REPLIES TO WTOR'S COME HERE
Comment					
----- \$BLDMSG MF=L List form of \$BLDMSG					
End of Comment					
288	(120)	SIGNED	4	CKRMSGL (0)	Control block ID
292	(124)	BITSTRING	4		Console ID
296	(128)	ADDRESS	4		Address of the CART
300	(12C)	ADDRESS	4		Pointer for JOBID
304	(130)	ADDRESS	4		Control block address
308	(134)	ADDRESS	4		Display routine address
312	(138)	ADDRESS	4	(6)	6 word work area
336	(150)	BITSTRING	2		ROUT code for Message
338	(152)	BITSTRING	2		Not used
340	(154)	CHARACTER	4		Message ID
344	(158)	CHARACTER	1		Separator character
345	(159)	ADDRESS	1		Flag byte 1
346	(15A)	ADDRESS	1		'DISPER'
347	(15B)	ADDRESS	1		Flag byte 2
348	(15C)	BITSTRING	16		Not used
364	(16C)	ADDRESS	4	(0)	Ensure multiple of 4
364	(16C)	ADDRESS	2	(0)	
364	(16C)	ADDRESS	4	CKRCKGW	Spare CKG pointer
368	(170)	ADDRESS	4	CKRECLST (2)	ECB LIST
Comment					
BLD parameter list used as \$SCAN token by the \$MSGDISR display routine					
----- \$BLDMSG MF=L For HASP272 init stmt reply					
End of Comment					
376	(178)	SIGNED	4	CKRSDBLD (0)	Control block ID
380	(17C)	BITSTRING	4		Console ID
384	(180)	ADDRESS	4		Address of the CART
388	(184)	ADDRESS	4		Pointer for JOBID
392	(188)	ADDRESS	4		Control block address
396	(18C)	ADDRESS	4		Display routine address
400	(190)	ADDRESS	4	(6)	6 word work area
424	(1A8)	BITSTRING	2		ROUT code for Message
426	(1AA)	BITSTRING	2		Not used
428	(1AC)	CHARACTER	4		Message ID
432	(1B0)	CHARACTER	1		Separator character
433	(1B1)	ADDRESS	1		Flag byte 1
434	(1B2)	ADDRESS	1		'DISPER'
435	(1B3)	ADDRESS	1		Flag byte 2
436	(1B4)	BITSTRING	16		Not used
452	(1C4)	ADDRESS	4	(0)	Ensure multiple of 4
452	(1C4)	ADDRESS	2	(0)	

## \$CKPRECV Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
GENERATE ENOUGH SPACE TO HANDLE ALL POSSIBLE RESPONSES TO THE HASP272 MESSAGE. THE LENGTH INCLUDES 1 BYTE FOR THE LENGTH; 1 BYTE FOR THE RESPONSE; AND 4 BYTES FOR THE ADDRESS OF THE PROCESSING ROUTINES. THERE ARE TWO ENTRIES AT THE END FOR CKPTDEF AND CANCEL.					
End of Comment					
452	(1C4)	BITSTRING	72	CKRVECTR	RESPONSE VECTOR
524	(20C)	BITSTRING	72	CKRHFAME	TEMPORARY HFAME
596	(254)	BITSTRING	1	CKRMFLAG	FLAG BYTE USED FOR MESSAGE CREATION
Comment					
PARAMETER LIST FOR KTRK1IO ROUTINE					
End of Comment					
600	(258)	ADDRESS	4	CKRPARMX (0)	PARAMETER LIST FOR \$CALLS
600	(258)	ADDRESS	4	CKRTCKG1	ADDRESS OF CKG1
604	(25C)	ADDRESS	4	CKRTCKG2	ADDRESS OF CKG2
608	(260)	ADDRESS	4	CKRTKYR1	ADDRESS OF KEY COMP FOR DS1
612	(264)	ADDRESS	4	CKRTKYR2	ADDRESS OF KEY COMP FOR DS2
616	(268)	ADDRESS	4	CKRTKYW1	ADDRESS KEY WRITE FOR DS1
620	(26C)	ADDRESS	4	CKRTKYW2	ADDRESS KEY WRITE FOR DS2
620	(26C)	X'258'	0	CKRPARM	"CKRPARMX,*-CKRPARMX" PARAMETER LIST
600	(258)	BITSTRING	12	CKRTQE	TQE AREA
624	(270)	ADDRESS	4	CKRCVCKG	ADDRESS OF CKG WHICH HAS HAD AN I/O ERROR AS A COMPANION
628	(274)	ADDRESS	4		RESERVED FOR FUTURE USE
632	(278)	ADDRESS	4	(0)	ENSURE WORK AREA ENDS ON WORD BOUNDARY
Comment					
Equates for HASPCKDS as a function indicator for type of work to do in subroutines - KDLRFORW, KDLRSUSP, KDLRRESM, KDLROPT1, KDLROPT5, and KDLROPT7					
End of Comment					
632	(278)	X'0'	0	CKRPROC	"0" Process the function
632	(278)	X'4'	0	CKRFNSH	"4" Finish up remaining work
632	(278)	X'8'	0	CKRCLEN	"8" Clean up the work
632	(278)	X'C'	0	CKRDRVF	"12" Handle driver failure
632	(278)	X'278'	0	CKRSIZE	**"-CKR" SIZE OF WORK AREA

## \$CKPRECV Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKR	0		CKRDM233	28	
CKRACODE	20		CKRDM235	2C	
CKRAERRC	1C		CKRDM237	30	
CKRCACT	18		CKRDM270	34	
CKRCKG	4		CKRDM271	38	
CKRCKGW	16C		CKRDM272	3C	
CKRCKG2	8		CKRDM273	40	
CKRCKPTD	88		CKRDM275	44	
CKRCLEN	278	8	CKRDM276	48	
CKRCOUNT	14		CKRDM277	4C	
CKRCVCKG	270		CKRDM278	50	
CKRDMFST	28		CKRDM281	54	
CKRDMINT	6C		CKRDM282	58	
CKRDMMLST	6C	6C	CKRDM284	5C	

Name	Hex Offset	Hex Value
CKRDM285	60	
CKRDM294	64	
CKRDM299	68	
CKRDRVF	278	C
CKRECB	70	
CKRECLST	170	
CKRESPON	90	
CKRFLAG1	C	
CKRFLAG2	D	
CKRFLAG3	E	
CKRFLAG4	F	
CKRFLAG5	10	
CKRFNSH	278	4
CKRHFAME	20C	
CKRID	0	
CKRMFLAG	254	
CKRMSGL	120	C2D3C440
CKRPARM	26C	258
CKRPARMX	258	
CKRPROC	278	0
CKRRTCD1	24	
CKRSAVHF	84	
CKRSDBLD	178	C2D3C440
CKRSIZE	278	278
CKRTCKG1	258	
CKRTCKG2	25C	
CKRTKYR1	260	
CKRTKYR2	264	
CKRTKYW1	268	
CKRTKYW2	26C	
CKRTQE	258	
CKRVECTR	1C4	
CKR1INIT	C	10
CKR1IOER	C	40
CKR1LIM	C	80
CKR1OTH	C	4
CKR1QUSE	C	1
CKR1RECO	C	20
CKR1STAT	C	2
CKR1THIS	C	8
CKR2CREA	D	4
CKR2DEL	D	10
CKR2KNUL	D	16
CKR2KRSV	D	1
CKR2MIOE	D	40
CKR2NCRE	D	2
CKR2OPT7	D	20
CKR2RECR	D	80
CKR4CFV	F	40
CKR4FWC1	F	10
CKR4FWC2	F	8
CKR4ILEV	F	80
CKR4OAR	F	4
CKR4OPV	F	20
CKR5CRC	10	80
CKR5CRCJ	10	20
CKR5CRCO	10	40

## \$CKPRECV Cross Reference

## \$CKPTQCB Heading Information

**Common Name:** Checkpoint request queue element  
**Macro ID:** \$CKPTQCB  
**DSECT Name:** CKPTQCB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CKQ  
 Offset: CKQID  
 Length: L'CKQID  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.  
**Size:** See CKQLEN  
**Created by:** \$CKPTQUE service  
**Pointed to by:** \$CKQHEAD field of the HCT data area  
**Serialization:** Normal PCE dispatch serialization  
**Function:** The \$CKPWQCB represents a unit of work for the CKPT PCE to perform, once the CKPT queues are obtained. Queue elements are created via the \$CKPTQUE macro and service routines.

### \$CKPTQCB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKPTQCB	CKPT request queue element
0	(0)	CHARACTER	4	CKQID	Control block id
4	(4)	ADDRESS	1	CKQVERSN	Control block version
4	(4)	X'1'	0	CKQVERN	"1" Version number
5	(5)	BITSTRING	3		Reserved
8	(8)	ADDRESS	4	CKQNEXT	Next CB on work queue
12	(C)	SIGNED	4	CKQREGS (2)	R0 and R1 on entry to service
20	(14)	ADDRESS	4	CKQRTNA	Address of routine
24	(18)	ADDRESS	4	CKQPCE	Address of associated PCE
24	(18)	X'1C'	0	CKQLEN	**-CKPTQCB" Length of CKPTQCB

### \$CKPTQCB Cross Reference

Name	Hex Offset	Hex Value
CKPTQCB	0	
CKQID	0	C3D2D840
CKQLEN	18	1C
CKQNEXT	8	
CKQPCE	18	
CKQREGS	C	
CKQRTNA	14	
CKQVERN	4	1
CKQVERSN	4	

## \$CKPTQCB Cross Reference

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**\$CKPWORK Programming Interface information**

Programming Interface information

\$CKPWORK

End of Programming Interface information

**\$CKPWORK Heading Information**

**Common Name:** HASP Checkpoint PCE Work Area DSECT  
**Macro ID:** \$CKPWORK  
**DSECT Name:** PCE (\$CKPWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol CKPPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** \$CKPTPCE field of the \$HCT data area  
**Serialization:** Normal PCE dispatch serialization  
**Function:** The fields in this work area are used by the JES2 checkpoint processor. \$CKPWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$CKPWORK are actually part of the PCE DSECT, but only map PCEs with the value PCECKPID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

**\$CKPWORK Map**

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	HASP CHECKPOINT PROCESSOR
240	(F0)	ADDRESS	4	CKPXREQ	Pointer to XREQ area
244	(F4)	SIGNED	4		Reserved for future use
248	(F8)	DBL WORD	8	CKPGTLKT	TIME SYSTEM GOT CKPT LOCK
256	(100)	DBL WORD	8	CKPRLSET	TIME SYSTEM GAVE UP LOCK
264	(108)	SIGNED	4	CKPHLTIM	Checkpoint held time
268	(10C)	SIGNED	4	CKPDRMTM	Checkpoint dormancy time
272	(110)	SIGNED	2	CKPUWORK	General work area
274	(112)	BITSTRING	4	CKPUMASK	General work mask
278	(116)	BITSTRING	1	CKPFLAG1	FLAG BYTE --
		1... ....		CKP1FILL	"B'10000000" TGB HAS BEEN FILLED

Comment

COMPATABILITY

End of Comment

		.1.. ....		CKP1JQTR	"B'01000000" Reconcile JQTs needed
		..1. ....		CKP1OFLW	"B'00100000" CH LOG IS OVERFLOWING
		...1 ....		CKP1SFMI	"B'00010000" SPOOL FULL MSG ISSUED
		.... 1..		CKP1PCAP	"B'00001000" APPLCOPY SUBTASK POSTED
		.... .1..		CKP1VLEN	"B'00000100" CURRENT CB IS IN VARIABLE LENGTH SECTION OF CKPT
		.... ..1.		CKP1LHBS	"B'00000010" CKPQSOLD is zero because the lock was held by the system
		.... ...1		CKP1STOP	"B'00000001" When reach end of DAS chain, do not start over (used in KBLOB)
279	(117)	BITSTRING	1		Reserved for future use



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
280	(118)	SIGNED	2		RESERVED FOR FUTURE USE
282	(11A)	SIGNED	2	CKPSRCHO	SEARCH OFFSET WITHIN EXTENT
284	(11C)	SIGNED	4	(0)	
284	(11C)	BITSTRING	12	CKPSTQE	\$STIMER QUEUE ELEMENT
296	(128)	BITSTRING	12	CKPMITQE	\$STIMER QUEUE ELEMENT FOR MAX INTERVAL TO WAIT BEFORE INITIATING A CHECKPOINT WRITE
308	(134)	BITSTRING	20	CKPAPECB	HASPCKAP ECB
328	(148)	SIGNED	4	CKPAPTIM	TIME OF LAST HASPCKAP POST
332	(14C)	SIGNED	4	CKPBTIME	SPOOL WARNING TIME STAMP
336	(150)	ADDRESS	4	CKPPALA	ADDRESS OF PAGE ADDR LIST
340	(154)	ADDRESS	4	CKPTRPTR	ADDRESS OF THE CHECKPOINT TRACE WORK AREA
344	(158)	ADDRESS	4	CKPCLENT	ADDRESS OF THE NEXT AVAILABLE ENTRY IN THE CHANGE LOG
348	(15C)	SIGNED	4	CKPUSER1	RESERVED FOR USER
352	(160)	SIGNED	4	CKPUSER2	RESERVED FOR USER
356	(164)	SIGNED	4	CKPSTCK	TIMER SAVE AREA
360	(168)	SIGNED	4	CKPDASN	ADDRESS OF NEXT DAS FOR BLOB
364	(16C)	BITSTRING	32	CKPBLMPR	Previous mask of volumes in the BLOB (from last time through KBLOB)
396	(18C)	BITSTRING	32	CKPBLMSK	Mask of volumes in BLOB with affinity for this member
428	(1AC)	BITSTRING	32	CKPBLMFN	Mask of vols in BLOB at end of KBLOB (may include vols without affinity for the member)
460	(1CC)	BITSTRING	32	CKPBLMWK	Work mask for KBLOB
492	(1EC)	BITSTRING	1		Reserved for future use
493	(1ED)	BITSTRING	1	CKPDASP2	'M' of next DAS to use when filling BLOB round- robin from the DASes
494	(1EE)	SIGNED	2	CKPRETRY	I/O ERROR RETRY COUNTER +1
496	(1F0)	CHARACTER	4	CKPRLSID	SYSTEM NAME AND AFFINITY
500	(1F4)	ADDRESS	1	CKPRLAFF	FROM \$ESYS,RESET=
501	(1F5)	BITSTRING	1	CKPBLCNT	COUNT OF SPOOLS IN BLOB
502	(1F6)	SIGNED	2	CKPTGESZ	Max num of entries in BLOB
504	(1F8)	SIGNED	4	CKPQLOCK (0)	Query Lock work area
504	(1F8)	SIGNED	4	CKPQSSID	System ID of lock holder
508	(1FC)	CHARACTER	16	CKPQSSNM	System name of lock holder
508	(1FC)	X'14'	0	CKPQLLEN	"*-CKPQLOCK" Length of Query Lock
508	(1FC)	X'1FB'	0	CKPSTLID	"CKPQSSID+3" 1 byte lock id to be cleared via \$SYS,RESET=
524	(20C)	SIGNED	4	CKPQSOLD	System ID of previous CF lock holder
528	(210)	DBL WORD	8	CKPCSTRT	STCK WHEN CKPT STARTED CYCLE (KRESERVE ISSUED)
536	(218)	ADDRESS	4	CKPECMBF	Addr of first CMB for reset of checkpoint lock FIFO q
540	(21C)	ADDRESS	4	CKPECNID	Console id for reset lock messages
544	(220)	CHARACTER	8	CKPECART	CART for reset lock msgs
552	(228)	ADDRESS	4	CKPKITPS	Address of KIT PSTs
556	(22C)	SIGNED	4		Reserved
560	(230)	DBL WORD	8	(0)	
560	(230)	X'140'	0	CKPPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA

**\$CKPWORK Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKPAPECB	134		CKPECMBF	218	
CKPAPTIM	148		CKPECNID	21C	
CKPBLCNT	1F5		CKPFLAG1	116	
CKPBLMFN	1AC		CKPGTLKT	F8	
CKPBLMPR	16C		CKPHLTIM	108	
CKPBLMSK	18C		CKPKITPS	228	
CKPBLMWK	1CC		CKPMITQE	128	
CKPBTIME	14C		CKPPALA	150	
CKPCLENT	158		CKPPCEWS	230	140
CKPCSTRT	210		CKPQLLEN	1FC	14
CKPDASN	168		CKPQLOCK	1F8	
CKPDASP2	1ED		CKPQSOLD	20C	
CKPDRMTM	10C		CKPQSSID	1F8	
CKPECART	220		CKPQSSNM	1FC	

## \$CKPWORK Cross Reference

Name	Hex Offset	Hex Value
CKPRETRY	1EE	
CKPRLAFF	1F4	
CKPRLSET	100	
CKPRLSID	1F0	
CKPSRCHO	11A	
CKPSTCK	164	
CKPSTLID	1FC	1FB
CKPSTQE	11C	
CKPTGESZ	1F6	
CKPTRPTR	154	
CKPUMASK	112	
CKPUSER1	15C	
CKPUSER2	160	
CKPUWORK	110	
CKPXREQ	F0	
CKP1FILL	116	80
CKP1JQTR	116	40
CKP1LHBS	116	2
CKP1OFLW	116	20
CKP1PCAP	116	8
CKP1SFMI	116	10
CKP1STOP	116	1
CKP1VLEN	116	4
PCE	0	

## \$CKW Heading Information

**Common Name:** Checkpoint Routine Work Area  
**Macro ID:** \$CKW  
**DSECT Name:** CKW  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CKW  
 Offset: CKWID  
 Length: L'CKWID

**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.

**Size:** See CKWLNGLTH

**Created by:** HASPIRMA during JES2 initialization  
**Pointed to by:** \$CKW field of the HCT data area  
**Serialization:** Normal PCE dispatch serialization  
**Function:** The \$CKW maps a work area used by the externally \$CALLable routines in the checkpoint modules (HASPCKPT and HASPCKDS). Since these routines are \$CALLable under different PCEs (namely, init and checkpoint), this work area holds common fields which must be PCE work area independent.

## \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKW	CKPT WORK AREA MAPPING
0	(0)	CHARACTER	4	CKWID	CONTROL BLOCK ID
4	(4)	ADDRESS	1	CKWVERSN	CONTROL BLOCK VERSION
4	(4)	X'3'	0	CKWVERN	"3" Version number
5	(5)	BITSTRING	1		Reserved
6	(6)	BITSTRING	1	CKWFLAG1	Ckpt work area flags
		1... ....		CKW1FNLW	"B'10000000" FINAL CHECKPOINT DS WRITE
		.1.. ....		CKW1OFLW	"B'01000000" CHANGE LOG OVERFLOWING
		..1. ....		CKW1ESUP	"B'00100000" SUPPRESS I/O ERROR MESSAGES
		...1 ....		CKW1S266	"B'00010000" SUPPRESS 266/267 MESSAGES DURING KFORMAT ROUTINE
		.... 1..		CKWLDIAG	"B'00001000" THE CHECKPOINT WAS RECONFIGURED (SET BY DIALOG, RESET AFTER OBTAINING THE LOCK)
		.... .1..		CKW1SPIO	"B'00000100" SPLIT THE IO ACROSS 2 CALLS TO KPRIMW (ONE TO START THE I/O ONE TO WAIT FOR IT)
		.... ..1.		CKW1SPSC	"B'00000010" THIS IS THE SECOND CALL TO KPRIMW (TO WAIT FOR THE I/O IF IT WAS STARTED)
7	(7)	BITSTRING	1	CKWFLAG2	CKPT work area flags
		1... ....		CKW2R1LS	"B'10000000" LAST CKPT PHASE WAS RD 1
		.1.. ....		CKW2R2LS	"B'01000000" LAST CKPT PHASE WAS RD 2
		..1. ....		CKW2PWLS	"B'00100000" LAST CKPT PHASE WAS PRM W
		...1 ....		CKW2IWLS	"B'00010000" LAST CKPT PHASE WAS INT W
		.... 1..		CKW2FWLS	"B'00001000" LAST CKPT PHASE WAS FIN W
		.... .1..		CKW2FMLS	"B'00000100" LAST CKPT PHASE WAS FMT W
8	(8)	BITSTRING	1	CKWSCAN	\$SCAN Work byte
		1... ....		CKWSCF	"B'10000000" STRNAME= was specified
		.1.. ....		CKWSDSN	"B'01000000" DSN= was just specified
		..1. ....		CKWSVOL	"B'00100000" VOL= was just specified
8	(8)	X'E0'	0	CKWSCNL	"CKWSCF+CKWSDSN+CKWSVOL" (NEW)CKPTn level bits
		.... ...1		CKWSNCN	"B'00000001" NEWCKPTn was changed

# \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
8	(8)	X'1'	0	CKWSCDL	"CKWSNCR" CKPTDEF level bits
9	(9)	BITSTRING	1	CKWFLAG3	CKPT Work flag 3
		1... ....		CKW3FMFX	"B'10000000" KFORMAT fixed pages for I/O to DASD
		.1.. ....		CKW3FMCP	"B'01000000" KFORMAT needs to copy pages to I/O area
		...1 ....		CKW3R2WP	"B'00010000" Wrapping active for READ2
		.... 1..		CKW3PWWP	"B'00001000" Wrapping active for primary write
10	(A)	BITSTRING	1	CKWFLAG4	CKPT Work Flag 4
		1... ....		CKW4WTO1	"B'10000000" VOLATILE=ONECKPT=WTOR
		.1.. ....		CKW4IGN1	"B'01000000" VOLATILE=ONECKPT=IGNORE
		..1. ....		CKW4DIA1	"B'00100000" VOLATILE=ONECKPT=DIALOG
		...1 ....		CKW4WTOR	"B'00010000" VOLATILE=ALLCKPT=WTOR
		.... 1..		CKW4IGNO	"B'00001000" VOLATILE=ALLCKPT=IGNORE
		.... .1..		CKW4DIAG	"B'00000100" VOLATILE=ALLCKPT=DIALOG
11	(B)	BITSTRING	1	CKWFLAG5	CKPT Work Flag 5
		1... ....		CKW51VOL	"B'10000000" CKPT1 is volatile
		.1.. ....		CKW51NVL	"B'01000000" CKPT1 is non-volatile
		..1. ....		CKW52VOL	"B'00100000" CKPT2 is volatile
		...1 ....		CKW52NVL	"B'00010000" CKPT2 is non-volatile
		.... 1..		CKW5STRL	"B'00001000" Need STRLIST on SDUMPX
		.... .1..		CKW5PROT	"B'00000100" CKPT memory read-only
		.... ..1.		CKW5PMST	"B'00000010" Master record is read-only
12	(C)	BITSTRING	1	CKWRECF3	Shadow copy of CKRFLAG3
13	(D)	BITSTRING	3	CKWRESV1	Reserved for future IBM use
16	(10)	BITSTRING	4	CKWRCID	Connection id of member holding the lock if the reserve data set is on a structure
20	(14)	ADDRESS	4	CKWLKIT	Local KIT information
24	(18)	SIGNED	2	CKWLKNUM	Number of local KITs
26	(1A)	SIGNED	2	CKWMAXRC	Maximum # of 4K CKPT pages
28	(1C)	ADDRESS	4	CKWIO24K	I/O area to 4K page index
32	(20)	ADDRESS	4	CKWCKMA	Address of CKM control blk
36	(24)	ADDRESS	4	CKWPPLA	ADDRESS OF PAGE POINTER LIST
40	(28)	ADDRESS	4	CKWCTWA	ADDRESS OF CKPT TRACE WORK AREA
44	(2C)	SIGNED	4	CKWERREG (16)	SAVE AREA FOR REGS IF ERROR
108	(6C)	ADDRESS	4	CKWCURCG	CKG OF DS BEING PROCESSED
112	(70)	SIGNED	4	CKWMSTRL	Len of \$MASTERI page fixed
116	(74)	SIGNED	2	CKWLIRCT	LOST INTERRUPT RETRY COUNTER
118	(76)	SIGNED	2	CKWPCIRC	Record count for PCs
118	(76)	X'7D0'	0	CKWPCICT	"2000" PCI frequency value

Comment

-----  
 Accumulators used to gather performance data for the JES2 checkpoint trace records. The data is accumulated across, at most, one checkpoint cycle (not all data is collected for an entire checkpoint cycle).  
 -----

End of Comment

120	(78)	SIGNED	4	CKWCKPTN	Number of \$CKPTs issued
128	(80)	DBL WORD	8	CKWMVSWT	Amount of wall-clock time in microseconds that JES2 is idle (MVS WAIT)
136	(88)	DBL WORD	8	CKWQSUSE	Amount of wall-clock time in microseconds that PCEs were actively using the queues (\$QSUSE)
144	(90)	SIGNED	4	CKWWTTM	Total PCE wait time before obtaining the queues (in units of 16 microseconds)
148	(94)	SIGNED	4	CKWOPTCK	Number of \$CKPTs (CAEs) skipped due to CKPT optimization
152	(98)	SIGNED	4	CKWOPT4K	Number of 4K pages skipped due to CKPT optimization
156	(9C)	SIGNED	4	CKWPAGCT	4K pages in current I/O
160	(A0)	SIGNED	4	CKWCBCNT	CBs in change log for I/O
164	(A4)	SIGNED	4	CKWCKPSZ	Size of checkpoint data

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
CKC fixed area work area					
End of Comment					
168	(A8)	ADDRESS	4	CKWCKCLP	1st non-page fixed byte at beginning of CKC
172	(AC)	ADDRESS	4	CKWCKCSP	Start of page fixed area at end of CKC
176	(B0)	ADDRESS	4	CKWCKCLW	Max low area in CKC used
180	(B4)	ADDRESS	4	CKWCKCHW	Max high area in CKC used
184	(B8)	ADDRESS	4	CKWCKCTM	Time of last CKC adjustment
Comment					
The following are work areas used in building channel programs (routines KB4KCCWS, KBCLCCWS)					
End of Comment					
188	(BC)	SIGNED	2	CKWRECNT	Current adjacent record cnt
190	(BE)	BITSTRING	1	CKWRWOP	The R/W CCW op code
191	(BF)	BITSTRING	1	CKWCCWFL	CCW build flag byte
		1... ....		CKWCECKD	"B'10000000" Build ECKD CCWs
		.1. ....		CKWCADJ	"B'01000000" Adjacent records flag
		..1. ....		CKWC1ST	"B'00100000" 1st CCW packet added
192	(C0)	ADDRESS	4	CKWCCWA	Pointer to last used CCW
196	(C4)	ADDRESS	4	CKWCKDA	Pointer to available data area
200	(C8)	ADDRESS	4	CKWCTLBA	1st CTLB used to build CCWs
204	(CC)	ADDRESS	4	CKWCTLB0	Zero-th byte of CTLBs
208	(D0)	ADDRESS	4	CKWFIXST	Starting addr of fix-list
212	(D4)	SIGNED	4	CKWCLSTA	Record # for previous CCWs
216	(D8)	ADDRESS	4	CKWSHLST	Address of share list
220	(DC)	ADDRESS	4	CKWIOLST	Address of I/O needed list
Comment					
General parameter list					
End of Comment					
224	(E0)	SIGNED	4	(0)	
224	(E0)	BITSTRING	0	CKWPARMS (0)	GENERAL PARAMETER LIST
224	(E0)	ADDRESS	4	CKWPARAM1	PARAMETER WORD 1
228	(E4)	ADDRESS	4	CKWPARAM2	PARAMETER WORD 2
232	(E8)	ADDRESS	4	CKWPARAM3	PARAMETER WORD 3
236	(EC)	ADDRESS	4	CKWPARAM4	PARAMETER WORD 4
240	(F0)	ADDRESS	4	CKWPARAM5	PARAMETER WORD 5
244	(F4)	ADDRESS	4	CKWPARAM6	PARAMETER WORD 6
244	(F4)	X'18'	0	CKWPARML	"*-CKWPARMS" LENGTH OF GENERAL PARM LIST
248	(F8)	BITSTRING	8	CKWLKEY1	CKPT1 LOCK KEY COMPARAND VAL
256	(100)	BITSTRING	8	CKWLKEY2	CKPT2 LOCK KEY COMPARAND VAL
264	(108)	BITSTRING	8	CKWLKVL1	CKPT1 LOCK KEY WRITE VALUE
272	(110)	BITSTRING	8	CKWLKVL2	CKPT2 LOCK KEY WRITE VALUE
280	(118)	SIGNED	4	CKWKT1RC	KTRK1IO - RETURN CODE SAVE
284	(11C)	SIGNED	4	CKWCT1RC	CFTRK1IO - return code save
288	(120)	SIGNED	4	CKWCFAIL	CFTRK1IO - failing CKG
292	(124)	SIGNED	4	CKWDFAIL	KTRK1IO - failing CKG
296	(128)	ADDRESS	4	CKWCFTD	CF Trace data table
304	(130)	DBL WORD	8	CKWKT1PK	KTRK1IO - 1ST CCW PACKET (PSEUDO TIC CCW)
312	(138)	DBL WORD	8	CKWINITM	Time IRDA got the CKPT data set lock
320	(140)	DBL WORD	8	CKWCFWTM	Time CKPT started waiting for CF (CFWAIT)
328	(148)	SIGNED	4	CKWCFWRE	R14 at time CFWAIT called
332	(14C)	SIGNED	4	CKWFMCKG	CKG work area - KFORMAT
336	(150)	DBL WORD	8	(0)	Align next field
336	(150)	CHARACTER	8	CKWCFLVL	\$CKPTLEV when CF subtask is posted
336	(150)	X'154'	0	CKWCFLVN	"CKWCFLVL+4,4,C'F" 4 byte level for PLX code

## \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
344	(158)	DBL WORD	8	CKWR2LEV	CKPT level at last Read 2
352	(160)	DBL WORD	8	CKWWRLEV	CKPT level at last IW/FW
360	(168)	SIGNED	4	CKWRECB (0)	CKPT RESERVE ECB
380	(17C)	BITSTRING	12	CKWKSTQE	TIMER ELEMENT FOR CKPT SERVICES
392	(188)	SIGNED	4	CKWQECB (0)	KWRITE HASP272 msg ecb
412	(19C)	CHARACTER	8	CKWQREPL	KWRITE HASP272 reply area
420	(1A4)	BITSTRING	4	CKWCONID	Dialog console id
Comment					
-----					
DOM IDs for HASP256 message					
-----					
End of Comment					
424	(1A8)	SIGNED	4	CKWDRNC1	DOMID FOR \$HASP256 NEWCKPT1
428	(1AC)	SIGNED	4	CKWDRNC2	DOMID FOR \$HASP256 NEWCKPT2
432	(1B0)	CHARACTER	80	CKWMSG	MESSAGE WORK AREA
Comment					
-----					
\$BLDMSG MF=L List form of \$BLDMSG					
-----					
End of Comment					
512	(200)	SIGNED	4	CKWBMSG (0)	Control block ID
516	(204)	BITSTRING	4		Console ID
520	(208)	ADDRESS	4		Address of the CART
524	(20C)	ADDRESS	4		Pointer for JOBID
528	(210)	ADDRESS	4		Control block address
532	(214)	ADDRESS	4		Display routine address
536	(218)	ADDRESS	4	(6)	6 word work area
560	(230)	BITSTRING	2		ROUT code for Message
562	(232)	BITSTRING	2		Not used
564	(234)	CHARACTER	4		Message ID
568	(238)	CHARACTER	1		Separator character
569	(239)	ADDRESS	1		Flag byte 1
570	(23A)	ADDRESS	1		'DISPER'
571	(23B)	ADDRESS	1		Flag byte 2
572	(23C)	BITSTRING	16		Not used
588	(24C)	ADDRESS	4	(0)	Ensure multiple of 4
588	(24C)	ADDRESS	2	(0)	
588	(24C)	SIGNED	4	CKWPPL (0)	PURGE PARAMETER LIST
604	(25C)	SIGNED	4	(0)	ALIGN TO FULL WORD BOUNDARY
604	(25C)	CHARACTER	12	CKWSTAR (0)	STAR PARM LIST MAP
604	(25C)	SIGNED	4	STARUCBA (0)	UCB ADDRESS
604	(25C)	SIGNED	4	STARDCTA (0)	DEVICE TABLE ADDRESS
604	(25C)	BITSTRING	3		
607	(25F)	BITSTRING	1	STARTYPE	DEVICE TYPE
608	(260)	BITSTRING	1	STARFLGS	FUNCTION AND OPTIONS
		1... ..		STARFUNC	"B'10000000" FUNCTION: 0=TRKBAL, 1=TRKCAP
		.1.. ..		STARMAXS	"B'01000000" 1=MAXSIZE REQUESTED
		..1. ....		STARREMV	"B'00100000" 1=REMOVE REQUESTED
		...1 ....		STARUBAL	"B'00010000" 1=CALLER PROVIDED BALANCE
		.... 1...		STARLAST	"B'00001000" 1=SPECIAL LAST RCD REQUEST
		.... .11.		STARDTU	"B'00000110" DVCT ENTRY SOURCE FLAGS: 00=DVCT ENTRY ADDRESS PROVIDED 01=RESERVED 10=UCB ADDRESS PROVIDED 11=DEVICE TYPE PROVIDED
		.... ...1		STARLOC	"B'00000001" LOC=ANY. DEVTAB OR UCB ABOVE THE LINE
609	(261)	BITSTRING	1		RESERVED
610	(262)	SIGNED	2	STARBAL	TRACK BALANCE
612	(264)	SIGNED	4	STARRKDD (0)	RECORD INFO AS DEFINED BELOW
612	(264)	BITSTRING	1	STARR	RECORD NUMBER
613	(265)	BITSTRING	1	STARKL	KEY LENGTH
614	(266)	SIGNED	2	STARDL	DATA LENGTH

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
616	(268)	ADDRESS	4	CKWRESVS (0)	RESERVE MF=L BEGINS HERE
Comment					
MACRO-DATE = 05/05/95					
End of Comment					
616	(268)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
616	(268)	ADDRESS	4		PREFIX - ECB ADDRESS
616	(268)	X'26C'	0	CKWRESV	*** X02113
620	(26C)	ADDRESS	1		PELLAST flag byte. X02113
621	(26D)	ADDRESS	1		PELMILEN - RNAME length.
622	(26E)	BITSTRING	1		
Comment					
PELFLAG - flag byte 2.					
End of Comment					
623	(26F)	ADDRESS	1		PELRET - return code byte.
624	(270)	ADDRESS	4		QNAME ADDRESS
628	(274)	ADDRESS	4		RNAME ADDRESS
632	(278)	ADDRESS	4		PELUCBAA - address to pointer to UCB.
632	(278)	X'268'	0	CKWRESVL	"CKWRESVS,*-CKWRESVS" MF=L FORM OF RESERVE
616	(268)	ADDRESS	4	CKWDEQS (0)	DEQ MF=L BEGINS HERE
Comment					
MACRO-DATE = 01/17/01					
End of Comment					
616	(268)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
616	(268)	X'268'	0	CKWDEQ	*** X02113
616	(268)	ADDRESS	1		PELLAST flag byte. X02113
617	(269)	ADDRESS	1		PELMILEN - RNAME length.
618	(26A)	BITSTRING	1		
Comment					
PELFLAG - flag byte 2.					
End of Comment					
619	(26B)	ADDRESS	1		PELRET - return code byte.
620	(26C)	ADDRESS	4		QNAME ADDRESS
624	(270)	ADDRESS	4		RNAME ADDRESS
628	(274)	ADDRESS	4		PELUCBAA - address to pointer to UCB.
628	(274)	X'268'	0	CKWDEQL	"CKWDEQS,*-CKWDEQS" MF=L FORM OF DEQ
Comment					
MACDATE -04/12/94-<0>					
End of Comment					
616	(268)	SIGNED	2	M00M0860 (0)	IXLPURGE-0
616	(268)	DBL WORD	8	CKWCFPUR (0)	++ IXLPURGE PARM LIST
616	(268)	BITSTRING	1	CKWCFPUR_XVERSION	++ INPUT XVERSION
617	(269)	BITSTRING	1	CKWCFPUR_XSCOPEFLAGS	++ FIELD_LABEL
		1... ....		CKWCFPUR_XSCOPE_STOKEN	"B'10000000" ++ XSCOPE.STOKEN KEYWORD
		.1.. ....		CKWCFPUR_XSCOPE_TTOKEN	"B'01000000" ++ XSCOPE.TTOKEN KEYWORD
		..1. ....		CKWCFPUR_XSCOPE_CONTOKEN	

# \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
618	(26A)	CHARACTER	2	CKWCFPUR_XRSV0001	"B'00100000" ++ XSCOPE.CONTOKEN KEYWORD ++ RESERVED XRSV0001
620	(26C)	CHARACTER	8	CKWCFPUR_XSTOKEN	++ XSTOKEN
628	(274)	CHARACTER	16	CKWCFPUR_XTTOKEN	++ XTTOKEN
644	(284)	CHARACTER	16	CKWCFPUR_XCONTOKEN	++ XCONTOKEN
660	(294)	CHARACTER	8	CKWCFPUR_XREQID	++ XREQID
660	(294)	X'34'	0	CKWCFPURL	"*-CKWCFPUR" ++ LENGTH OF PLIST
Comment					
IXLPURGE-0					
End of Comment					
0	(0)	X'268'	0	CKWCFPRL	"CKWCFPUR,*-CKWCFPUR" Length of IXLPURGE
0	(0)	X'268'	0	M00M0861	"CKWXLIST" ++ IXLLIST NAME
616	(268)	DBL WORD	8	CKWXLIST (0)	++ IXLLIST PARM LIST
616	(268)	CHARACTER	96	CKWXLIST_XSHL_DATA	++ FIELD_LABEL XSHL_DATA
712	(2C8)	CHARACTER	4	CKWXLIST_XMOB_DATA	++ FIELD_LABEL XMOB_DATA
716	(2CC)	CHARACTER	112	CKWXLIST_XMCB_DATA1	++ FIELD_LABEL XMCB_DATA1
828	(33C)	CHARACTER	20	CKWXLIST_XMCB_DATA2	++ FIELD_LABEL XMCB_DATA2
828	(33C)	X'350'	0	CKWXLIST_PL_END	*** ++ END OF BASE PLIST
616	(268)	BITSTRING	1	CKWXLIST_XVERSION	++ INPUT XVERSION
617	(269)	BITSTRING	1	CKWXLIST_XCMDCODE	++ FIELD_LABEL XCMDCODE
618	(26A)	CHARACTER	4	CKWXLIST_XSHLFLGS	++ FIELD_LABEL XSHLFLGS
622	(26E)	CHARACTER	2	CKWXLIST_XRSV0102	++ RESERVED XRSV0102
624	(270)	BITSTRING	1	CKWXLIST_XCOMPCONID	++ FIELD_LABEL XCOMPCONID
625	(271)	BITSTRING	1	CKWXLIST_XBUFSTGKEY	++ XBUFSTGKEY
626	(272)	BITSTRING	2	CKWXLIST_XANSLEN	++ XANSLEN
628	(274)	CHARACTER	16	CKWXLIST_XCONTOKEN	++ XCONTOKEN
644	(284)	CHARACTER	12	CKWXLIST_XDATADDR	++ FIELD_LABEL XDATADDR
656	(290)	CHARACTER	8	CKWXLIST_XADJADDR	++ FIELD_LABEL XADJADDR
664	(298)	CHARACTER	8	CKWXLIST_XANSADDR	++ FIELD_LABEL XANSADDR
672	(2A0)	CHARACTER	8	CKWXLIST_XREQDATA	++ XREQDATA
680	(2A8)	CHARACTER	8	CKWXLIST_XREQID	++ XREQID
688	(2B0)	CHARACTER	16	CKWXLIST_XOPTIONALDATA	++ FIELD_LABEL XOPTIONALDATA
704	(2C0)	CHARACTER	8	CKWXLIST_XRSV0103	++ RESERVED XRSV0103
618	(26A)	BITSTRING	1	CKWXLIST_XSHLFLGS1	++ FIELD_LABEL
		1... ..		CKWXLIST_KEYUSED_BUFFER	



Offsets		Type/Value	Len	Name (Dim)	Description
Dec	Hex				
		.1.. ....		CKWXLIST_KEYUSED_BUFLLIST	"B'10000000" ++ KEYUSED.BUFFER KEYWORD
		..1. ....		CKWXLIST_KEYUSED_ADJAREA	"B'01000000" ++ KEYUSED.BUFLIST KEYWORD "B'00100000" ++ KEYUSED.ADJAREA KEYWORD
		...1 ....		CKWXLIST_KEYUSED_ANSAREA	"B'00010000" ++ KEYUSED.ANSAREA KEYWORD
		.... 1...		CKWXLIST_XPAGEABLE_NO	"B'00001000" ++ XPAGEABLE.NO KEYWORD
		.... .1..		CKWXLIST_KEYUSED_BUFSTGKEY	"B'00000100" ++ KEYUSED.BUFSTGKEY KEYWORD
		.... ..1.		CKWXLIST_XBUFADDRTYPE_REAL	"B'00000010" ++ XBUFADDRTYPE.REAL KEYWORD
619	(26B)	BITSTRING	1	CKWXLIST_XSHLFLGS2	++ FIELD_LABEL
		1... ....		CKWXLIST_XMODE_SYNCECB	"B'10000000" ++ XMODE.SYNCECB KEYWORD
		.1.. ....		CKWXLIST_XMODE_SYNCEXIT	"B'01000000" ++ XMODE.SYNCEXIT KEYWORD
		..1. ....		CKWXLIST_XMODE_SYNCTOKEN	"B'00100000" ++ XMODE.SYNCTOKEN KEYWORD
		...1 ....		CKWXLIST_XMODE_ASYNCCECB	"B'00010000" ++ XMODE.ASYNCECB KEYWORD
		.... 1...		CKWXLIST_XMODE_ASYNCEXIT	"B'00001000" ++ XMODE.ASYNCEXIT KEYWORD
		.... .1..		CKWXLIST_XMODE_ASYNCCTOKEN	"B'00000100" ++ XMODE.ASYNCTOKEN KEYWORD
		.... ..1.		CKWXLIST_XMODE_ASYNCNORESPONSE	"B'00000010" ++ XMODE.ASYNCTOKEN KEYWORD "B'00000010" ++ XMODE.ASYNCTOKEN KEYWORD
620	(26C)	BITSTRING	1	CKWXLIST_XSHLFLGS3	++ FIELD_LABEL
		1... ....		CKWXLIST_XLOCKOPER_SET	"B'10000000" ++ XLOCKOPER.SET KEYWORD
		.1.. ....		CKWXLIST_XLOCKOPER_RESET	"B'01000000" ++ XLOCKOPER.RESET KEYWORD
		..1. ....		CKWXLIST_XLOCKOPER_NOTHELD	"B'00100000" ++ XLOCKOPER.NOTHELD KEYWORD
		...1 ....		CKWXLIST_XLOCKOPER_HELDDBY	"B'00010000" ++ XLOCKOPER.HELDDBY KEYWORD
		.... 1...		CKWXLIST_XLOCKOPER_TEST	"B'00001000" ++ XLOCKOPER.TEST KEYWORD
		.... .1..		CKWXLIST_XLOCKOPER_READNEXT	"B'00000100" ++ XLOCKOPER.READNEXT KEYWORD
		.... ..1.		CKWXLIST_XLOCKMODE_COND	"B'00000010" ++ XLOCKMODE.COND KEYWORD
		.... ...1		CKWXLIST_KEYUSED_LOCKCOMP	"B'00000001" ++ KEYUSED.LOCKCOMP KEYWORD
621	(26D)	BITSTRING	1	CKWXLIST_XSHLFLGS4	++ FIELD_LABEL
		1... ....		CKWXLIST_XTYPE_ADJDATA	"B'10000000" ++ XTYPE.ADJDATA KEYWORD
		.1.. ....		CKWXLIST_XTYPE_ECONTROLS	"B'01000000" ++ XTYPE.ECONTROLS KEYWORD
		..1. ....		CKWXLIST_KEYUSED_EXTRESTOKEN	"B'00100000" ++ KEYUSED.EXTRESTOKEN KEYWORD
		.... ...1		CKWXLIST_RCVRYREQASYNC	"B'00000001" ++ MACUSED.LIST KEYWORD
628	(274)	CHARACTER	13	CKWXLIST_XRSV0201	++ RESERVED XRSV0201
641	(281)	BITSTRING	1	CKWXLIST_XCONID	++ FIELD_LABEL XCONID
642	(282)	CHARACTER	2	CKWXLIST_XRSV0202	++ RESERVED XRSV0202
644	(284)	SIGNED	4	CKWXLIST_XBUFFER_ALET	

## \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
648	(288)	SIGNED	4	CKWXLIST_XBUFSIZE	++ ALET XBUFFER ++ XBUFSIZE
652	(28C)	ADDRESS	4	CKWXLIST_XBUFFER	++ XBUFFER
644	(284)	SIGNED	4	CKWXLIST_XBUFALET	++ XBUFALET
648	(288)	SIGNED	4	CKWXLIST_XBUFLIST_ALET	++ ALET XBUFLIST
652	(28C)	ADDRESS	4	CKWXLIST_XBUFLIST	++ XBUFLIST
656	(290)	SIGNED	4	CKWXLIST_XADJAREA_ALET	++ ALET XADJAREA
660	(294)	ADDRESS	4	CKWXLIST_XADJAREA	++ XADJAREA
656	(290)	SIGNED	4	CKWXLIST_XMOSVECTOR_ALET	++ ALET XMOSVECTOR
660	(294)	ADDRESS	4	CKWXLIST_XMOSVECTOR	++ XMOSVECTOR
664	(298)	SIGNED	4	CKWXLIST_XANSAREA_ALET	++ ALET XANSAREA
668	(29C)	ADDRESS	4	CKWXLIST_XANSAREA	++ XANSAREA
672	(2A0)	ADDRESS	4	CKWXLIST_XREQECB	++ XREQECB
676	(2A4)	CHARACTER	4	CKWXLIST_XRSV0203	++ RESERVED XRSV0203
672	(2A0)	SIGNED	4	CKWXLIST_XREQTOKEN_ALET	++ ALET XREQTOKEN
676	(2A4)	ADDRESS	4	CKWXLIST_XREQTOKEN	++ XREQTOKEN
688	(2B0)	CHARACTER	8	CKWXLIST_XLOCKDATA	++ XLOCKDATA
696	(2B8)	CHARACTER	8	CKWXLIST_XRSV0204	++ RESERVED XRSV0204
688	(2B0)	CHARACTER	16	CKWXLIST_XEXTRESTOKEN	++ XEXTRESTOKEN
688	(2B0)	CHARACTER	8	CKWXLIST_XEXTRESTOKENTKN	++ FIELD_LABEL XEXTRESTOKENTKN
696	(2B8)	CHARACTER	8	CKWXLIST_XEXTRESTOKENPSVN	++ FIELD_LABEL XEXTRESTOKENPSVN
712	(2C8)	BITSTRING	2	CKWXLIST_XCMDLEN	++ FIELD_LABEL XCMDLEN
714	(2CA)	BITSTRING	1	CKWXLIST_XBUFNUM	++ XBUFNUM
715	(2CB)	BITSTRING	1	CKWXLIST_XBUFINCRNUM	++ XBUFINCRNUM
716	(2CC)	CHARACTER	1	CKWXLIST_XCCA	++ FIELD_LABEL XCCA
717	(2CD)	CHARACTER	1	CKWXLIST_XCCB	++ FIELD_LABEL XCCB
718	(2CE)	CHARACTER	2	CKWXLIST_XRSV0501	++ RESERVED XRSV0501
720	(2D0)	BITSTRING	4	CKWXLIST_XCMDFLGS1	++ FIELD_LABEL XCMDFLGS1
724	(2D4)	CHARACTER	4	CKWXLIST_XB8TO11	++ FIELD_LABEL XB8TO11
728	(2D8)	SIGNED	4	CKWXLIST_XLOCKINDEX	++ XLOCKINDEX
732	(2DC)	SIGNED	4	CKWXLIST_XLISTNUM	++ XLISTNUM
736	(2E0)	CHARACTER	12	CKWXLIST_XENTRYID	++ XENTRYID
748	(2EC)	CHARACTER	8	CKWXLIST_XNEWVERS	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
756	(2F4)	CHARACTER	8	CKWXLIST_XVERSCOMP	++ XNEWVERS
764	(2FC)	CHARACTER	16	CKWXLIST_XAUTHCOMP1	++ XVERSCOMP
780	(30C)	CHARACTER	16	CKWXLIST_XNEWAUTH1	++ FIELD_LABEL XAUTHCOMP1
796	(31C)	CHARACTER	32	CKWXLIST_XLISTDESC	++ FIELD_LABEL XNEWAUTH1
720	(2D0)	CHARACTER	1	CKWXLIST_XCMDFLGS1A	++ XLISTDESC
721	(2D1)	CHARACTER	1	CKWXLIST_XCMDFLGS1B	++ FIELD_LABEL XCMDFLGS1A
722	(2D2)	CHARACTER	1	CKWXLIST_XCMDFLGS1C	++ FIELD_LABEL XCMDFLGS1B
723	(2D3)	CHARACTER	1	CKWXLIST_XCMDFLGS1D	++ FIELD_LABEL XCMDFLGS1C
720	(2D0)	BITSTRING	1	CKWXLIST_XELEMNUM	++ FIELD_LABEL XCMDFLGS1D
720	(2D0)	BITSTRING	1	CKWXLIST_XDBS	++ XELEMNUM
723	(2D3)	CHARACTER	1	CKWXLIST_XUID3	++ FIELD_LABEL XDBS
724	(2D4)	CHARACTER	3	CKWXLIST_XRSV0502	++ FIELD_LABEL XUID3
727	(2D7)	CHARACTER	1	CKWXLIST_XCGLM	++ RESERVED XRSV0502
724	(2D4)	BITSTRING	2	CKWXLIST_XSTARTINDEX	++ FIELD_LABEL XCGLM
726	(2D6)	BITSTRING	2	CKWXLIST_XENDINDEX	++ XSTARTINDEX
728	(2D8)	SIGNED	4	CKWXLIST_XVECTORINDEX	++ XENDINDEX
736	(2E0)	SIGNED	4	CKWXLIST_XLISTLIMIT	++ XVECTORINDEX
740	(2E4)	CHARACTER	8	CKWXLIST_XRSV0601	++ XLISTLIMIT
764	(2FC)	CHARACTER	16	CKWXLIST_XENTRYNAME	++ RESERVED XRSV0601
764	(2FC)	CHARACTER	16	CKWXLIST_XENTRYKEY	++ XENTRYNAME
764	(2FC)	CHARACTER	16	CKWXLIST_XKEYCOMP	++ XENTRYKEY
764	(2FC)	CHARACTER	1	CKWXLIST_XUID2	++ XKEYCOMP
765	(2FD)	CHARACTER	15	CKWXLIST_XRSV0602	++ FIELD_LABEL XUID2
780	(30C)	CHARACTER	8	CKWXLIST_XRESTOKEN	++ RESERVED XRSV0602
788	(314)	CHARACTER	8	CKWXLIST_XRSV0603	++ XRESTOKEN
780	(30C)	BITSTRING	2	CKWXLIST_XFIRSTELEM	++ RESERVED XRSV0603
782	(30E)	BITSTRING	2	CKWXLIST_XLASTELEM	++ XFIRSTELEM
784	(310)	CHARACTER	8	CKWXLIST_XRSV0604	++ XLASTELEM
792	(318)	CHARACTER	1	CKWXLIST_XCMDFLGS2A	++ RESERVED XRSV0604
793	(319)	CHARACTER	3	CKWXLIST_XRSV0605	++ FIELD_LABEL XCMDFLGS2A
796	(31C)	CHARACTER	1	CKWXLIST_XUID1	++ RESERVED XRSV0605
797	(31D)	CHARACTER	31	CKWXLIST_XRSV0606	++ FIELD_LABEL XUID1

# \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
828	(33C)	CHARACTER	16	CKWXLIST_XMOVETOKEY0	++ RESERVED XRSV0606
844	(34C)	SIGNED	4	CKWXLIST_XMOVETOLIST0	++ FIELD_LABEL XMOVETOKEY0
848	(350)	X'E8'	0	CKWXLISTL	++ FIELD_LABEL XMOVETOLIST0 "-CKWXLIST" ++ LENGTH OF PLIST
Comment					
IXLLIST-3					
End of Comment					
0	(0)	X'268'	0	CKWCFLSL	"CKWXLIST,*-CKWXLIST" Length of IXLLIST
848	(350)	ADDRESS	4	CKWVRL	Pointer to VRL area
852	(354)	SIGNED	4	CKWVRLN	Total number of VRL entries
856	(358)	ADDRESS	4	CKWVRLP	Pointer to free VRL
860	(35C)	SIGNED	4	CKWVRLC	Count of entries in use
Comment					
IARVSERV MF=(L,CKWVSERV) List form of IARVSERV macro					
MACDATE -12/04/00-<0>					
End of Comment					
0	(0)	X'360'	0	M00M0862	"CKWVSERV" ++ IARVSERV NAME
864	(360)	DBL WORD	8	CKWVSERV (0)	++ IARVSERV PARM LIST
864	(360)	BITSTRING	1	CKWVSERV_XVERSION	++ INPUT XVERSION
865	(361)	BITSTRING	1	CKWVSERV_XSERVICE	++ XSERVICE
865	(361)	X'1'	0	CKWVSERV_SHARE	"1" ++ XSERVICE.SHARE KEYWORD
865	(361)	X'2'	0	CKWVSERV_UNSHARE	"2" ++ XSERVICE.UNSHARE KEYWORD
865	(361)	X'3'	0	CKWVSERV_CHANGEACCESS	"3" ++ XSERVICE.CHANGEACCESS KEYWORD
865	(361)	X'4'	0	CKWVSERV_SHARESEG	"4" ++ XSERVICE.SHARESEG KEYWORD
866	(362)	BITSTRING	1	CKWVSERV_XFLAGS1	++ FIELD_LABEL
		1... ....		CKWVSERV_TARGET_VIEW_RO	"B'10000000" ++ XTARGET_VIEW.READONLY KEYWORD
		.1.. ....		CKWVSERV_TARGET_VIEW_SW	"B'01000000" ++ XTARGET_VIEW.SHAREDWRITE KEYWORD
		..1. ....		CKWVSERV_TARGET_VIEW_UW	"B'00100000" ++ XTARGET_VIEW.UNIQUEWRITE KEYWORD
		...1 ....		CKWVSERV_TARGET_VIEW_TW	"B'00010000" ++ XTARGET_VIEW.TARGETWRITE KEYWORD
		.... 1...		CKWVSERV_TARGET_VIEW_LS	"B'00001000" ++ XTARGET_VIEW.LIKESOURCE KEYWORD
		.... .1..		CKWVSERV_TARGET_VIEW_NA	"B'00000100" ++ XTARGET_VIEW.HIDDEN KEYWORD
		.... ..1.		CKWVSERV_COPYNOW	"B'00000010" ++ KEYUSED.COPYNOW KEYWORD
		.... ...1		CKWVSERV_RETAIN_YES	"B'00000001" ++ XRETAIN.YES KEYWORD
867	(363)	BITSTRING	1	CKWVSERV_XFLAGS2	++ FIELD_LABEL
		1... ....		CKWVSERV_XPARTIALPAGE_YES	"B'10000000" ++ XPARTIALPAGE.YES KEYWORD
868	(364)	SIGNED	4	CKWVSERV_XNUMRANGE	++ XNUMRANGE
872	(368)	ADDRESS	4	CKWVSERV_XRANGLIST	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
872	(368)	X'C'	0	CKWVSERV	++ XRANGLIST "-CKWVSERV" ++ LENGTH OF PLIST
Comment					
IARVSERV-0					
End of Comment					
880	(370)	DBL WORD	8	CKWGMTOF	GMT offset of local member, including leap seconds
888	(378)	DBL WORD	8	CKWRESTM	Time CKPT got the reserve
888	(378)	X'380'	0	CKWLNGLTH	"-CKW" LENGTH OF CKW

**\$CKW Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKW	0		CKWCTLBA	C8	
CKWBLMSG	200	C2D3C440	CKWCTLB0	CC	
CKWCADJ	BF	40	CKWCTWA	28	
CKWCBCNT	A0		CKWCT1RC	11C	
CKWCCWA	C0		CKWCURCG	6C	
CKWCCWFL	BF		CKWC1ST	BF	20
CKWCECKD	BF	80	CKWDEQ	268	268
CKWCFAIL	120		CKWDEQL	274	268
CKWCFLSL	0	268	CKWDEQS	268	
CKWCFLVL	150		CKWDFAIL	124	
CKWCFLVN	150	154	CKWDRNC1	1A8	
CKWCFPRL	0	268	CKWDRNC2	1AC	
CKWCFPUR	268		CKWERREG	2C	
CKWCFPUR_XCONTOKEN	284		CKWFIXST	D0	
CKWCFPUR_XREQID	294		CKWFLAG1	6	
CKWCFPUR_XRSV0001	26A		CKWFLAG2	7	
CKWCFPUR_XSCOPE_CONTOKEN	269	20	CKWFLAG3	9	
CKWCFPUR_XSCOPE_STOKEN	269	80	CKWFLAG4	A	
CKWCFPUR_XSCOPE_TTOKEN	269	40	CKWFLAG5	B	
CKWCFPUR_XSCOPEFLAGS	269		CKWFMCKG	14C	
CKWCFPUR_XSTOKEN	26C		CKWGMTOF	370	
CKWCFPUR_XTTOKEN	274		CKWID	0	C3D2E640
CKWCFPUR_XVERSION	268		CKWINITM	138	
CKWCFPURL	294	34	CKWIOLST	DC	
CKWCFTD	128		CKWIO24K	1C	
CKWCFWRE	148		CKWKSTQE	17C	
CKWCFWTM	140		CKWKT1PK	130	
CKWCKCHW	B4		CKWKT1RC	118	
CKWCKCLP	A8		CKWLDIAG	6	8
CKWCKCLW	B0		CKWLIRCT	74	
CKWCKCSP	AC		CKWLKEY1	F8	
CKWCKCTM	B8		CKWLKEY2	100	
CKWCKDA	C4		CKWLKIT	14	
CKWCKMA	20		CKWLKNUM	18	
CKWCKPSZ	A4		CKWLKVL1	108	
CKWCKPTN	78		CKWLKVL2	110	
CKWCLSTA	D4		CKWLNGLTH	378	380
CKWCONID	1A4		CKWMAXRC	1A	
			CKWMSG	1B0	
			CKWMSTRL	70	
			CKWMVSWT	80	
			CKWOPTCK	94	
			CKWOPT4K	98	
			CKWPAGCT	9C	
			CKWPARML	F4	18
			CKWPARM5	E0	
			CKWPARM1	E0	
			CKWPARM2	E4	

## \$CKW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKWPARAM3	E8			363	
CKWPARAM4	EC		CKWVSERV_XNUMRANGE		
CKWPARAM5	F0			364	
CKWPARAM6	F4		CKWVSERV_XPARTIALPAGE_YES		
CKWPCICT	76	7D0		363	80
CKWPCIRC	76		CKWVSERV_XRANGLIST		
CKWPPL	24C	0		368	
CKWPPLA	24		CKWVSERV_XSERVICE		
CKWQECB	188			361	
CKWQREPL	19C	40404040	CKWVSERV_XVERSION		
CKWQSUSE	88			360	
CKWRCID	10		CKWVSERVL	368	C
CKWRECB	168		CKWWRLEV	160	
CKWRECF3	C		CKWWTTM	90	
CKWRECNT	BC		CKWXLIST	268	
CKWRESTM	378		CKWXLIST_KEYUSED_ADJAREA		
CKWRESV	268	26C		26A	20
CKWRESVL	278	268	CKWXLIST_KEYUSED_ANSAREA		
CKWRESVS	268			26A	10
CKWRESV1	D		CKWXLIST_KEYUSED_BUFFER		
CKWRWOP	BE			26A	80
CKWR2LEV	158		CKWXLIST_KEYUSED_BUFLIST		
CKWSCAN	8			26A	40
CKWSCDL	8	1	CKWXLIST_KEYUSED_BUFSTGKEY		
CKWSCF	8	80		26A	4
CKWSCNL	8	E0	CKWXLIST_KEYUSED_EXTRESTOKEN		
CKWSDSN	8	40		26D	20
CKWSHLST	D8		CKWXLIST_KEYUSED_LOCKCOMP		
CKWSNCN	8	1		26C	1
CKWSTAR	25C		CKWXLIST_PL_END		
CKWSVOL	8	20		33C	350
CKWVERN	4	3	CKWXLIST_RCVRYREQASYNC		
CKWVERSN	4			26D	1
CKWVRL	350		CKWXLIST_XADJADDR		
CKWVRLC	35C			290	
CKWVRLN	354		CKWXLIST_XADJAREA		
CKWVRLP	358			294	
CKWVSERV	360		CKWXLIST_XADJAREA_ALET		
CKWVSERV_CHANGEACCESS				290	
	361	3	CKWXLIST_XANSADDR		
CKWVSERV_COPYNOW				298	
	362	2	CKWXLIST_XANSAREA		
CKWVSERV_RETAIN_YES				29C	
	362	1	CKWXLIST_XANSAREA_ALET		
CKWVSERV_SHARE				298	
	361	1	CKWXLIST_XANSLEN		
CKWVSERV_SHARESEG				272	
	361	4	CKWXLIST_XAUTHCOMP1		
CKWVSERV_TARGET_VIEW_LS				2FC	
	362	8	CKWXLIST_XBUFADDRTYPE_REAL		
CKWVSERV_TARGET_VIEW_NA				26A	2
	362	4	CKWXLIST_XBUFALET		
CKWVSERV_TARGET_VIEW_RO				284	
	362	80	CKWXLIST_XBUFFER		
CKWVSERV_TARGET_VIEW_SW				28C	
	362	40	CKWXLIST_XBUFFER_ALET		
CKWVSERV_TARGET_VIEW_TW				284	
	362	10	CKWXLIST_XBUFINCRNUM		
CKWVSERV_TARGET_VIEW_UW				2CB	
	362	20	CKWXLIST_XBUFLIST		
CKWVSERV_UNSHARE				28C	
	361	2	CKWXLIST_XBUFLIST_ALET		
CKWVSERV_XFLAGS1				288	
	362		CKWXLIST_XBUFNUM		
CKWVSERV_XFLAGS2				2CA	

Name	Hex Offset	Hex Value
CKWXLIST_XBUFSIZE	288	
CKWXLIST_XBUFSTGKEY	271	
CKWXLIST_XB8TO11	2D4	
CKWXLIST_XCCA	2CC	
CKWXLIST_XCCB	2CD	
CKWXLIST_XCGLM	2D7	
CKWXLIST_XCMDCODE	269	
CKWXLIST_XCMDFLGS1	2D0	
CKWXLIST_XCMDFLGS1A	2D0	
CKWXLIST_XCMDFLGS1B	2D1	
CKWXLIST_XCMDFLGS1C	2D2	
CKWXLIST_XCMDFLGS1D	2D3	
CKWXLIST_XCMDFLGS2A	318	
CKWXLIST_XCMDLEN	2C8	
CKWXLIST_XCOMPCONID	270	
CKWXLIST_XCONID	281	
CKWXLIST_XCONTOKEN	274	
CKWXLIST_XDATADDR	284	
CKWXLIST_XDBS	2D0	
CKWXLIST_XELEMNUM	2D0	
CKWXLIST_XENDINDEX	2D6	
CKWXLIST_XENTRYID	2E0	
CKWXLIST_XENTRYKEY	2FC	
CKWXLIST_XENTRYNAME	2FC	
CKWXLIST_XEXTRESTOKEN	2B0	
CKWXLIST_XEXTRESTOKENPSVN	2B8	
CKWXLIST_XEXTRESTOKENTKN	2B0	
CKWXLIST_XFIRSTELEM	30C	
CKWXLIST_XKEYCOMP	2FC	
CKWXLIST_XLASTELEM	30E	
CKWXLIST_XLISTDESC	31C	
CKWXLIST_XLISTLIMIT	2E0	
CKWXLIST_XLISTNUM		

Name	Hex Offset	Hex Value
	2DC	
CKWXLIST_XLOCKDATA	2B0	
CKWXLIST_XLOCKINDEX	2D8	
CKWXLIST_XLOCKMODE_COND	26C	2
CKWXLIST_XLOCKOPER_HELDBY	26C	10
CKWXLIST_XLOCKOPER_NOTHELD	26C	20
CKWXLIST_XLOCKOPER_READNEXT	26C	4
CKWXLIST_XLOCKOPER_RESET	26C	40
CKWXLIST_XLOCKOPER_SET	26C	80
CKWXLIST_XLOCKOPER_TEST	26C	8
CKWXLIST_XMCB_DATA1	2CC	
CKWXLIST_XMCB_DATA2	33C	
CKWXLIST_XMOB_DATA	2C8	
CKWXLIST_XMODE_ASYNCCEB	26B	10
CKWXLIST_XMODE_ASYNCEXIT	26B	8
CKWXLIST_XMODE_ASYNCNORESPONSE	26B	2
CKWXLIST_XMODE_ASYNCCTOKEN	26B	4
CKWXLIST_XMODE_SYNCECB	26B	80
CKWXLIST_XMODE_SYNCEXIT	26B	40
CKWXLIST_XMODE_SYNCTOKEN	26B	20
CKWXLIST_XMOSVECTOR	294	
CKWXLIST_XMOSVECTOR_ALET	290	
CKWXLIST_XMOVETOKEY0	33C	
CKWXLIST_XMOVETOLIST0	34C	
CKWXLIST_XNEWAUTH1	30C	
CKWXLIST_XNEWVERS	2EC	
CKWXLIST_XOPTIONALDATA	2B0	
CKWXLIST_XPAGEABLE_NO	26A	8
CKWXLIST_XREQDATA	2A0	
CKWXLIST_XREQECB	2A0	
CKWXLIST_XREQID	2A8	
CKWXLIST_XREQTOKEN	2A4	
CKWXLIST_XREQTOKEN_ALET	2A0	

## \$CKW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKWXLIST_XRESTOKEN	30C		CKW1SPSC	6	2
CKWXLIST_XRSV0102	26E		CKW1S266	6	10
CKWXLIST_XRSV0103	2C0		CKW2FMLS	7	4
CKWXLIST_XRSV0201	274		CKW2FWLS	7	8
CKWXLIST_XRSV0202	282		CKW2IWLS	7	10
CKWXLIST_XRSV0203	2A4		CKW2PWLS	7	20
CKWXLIST_XRSV0204	2B8		CKW2R1LS	7	80
CKWXLIST_XRSV0501	2CE		CKW2R2LS	7	40
CKWXLIST_XRSV0502	2D4		CKW3FMCP	9	40
CKWXLIST_XRSV0601	2E4		CKW3FMFX	9	80
CKWXLIST_XRSV0602	2FD		CKW3PWWP	9	8
CKWXLIST_XRSV0603	314		CKW3R2WP	9	10
CKWXLIST_XRSV0604	310		CKW4DIAG	A	4
CKWXLIST_XRSV0605	319		CKW4DIA1	A	20
CKWXLIST_XRSV0606	31D		CKW4IGNO	A	8
CKWXLIST_XSHL_DATA	268		CKW4IGN1	A	40
CKWXLIST_XSHLFLGS	26A		CKW4WTOR	A	10
CKWXLIST_XSHLFLGS1	26A		CKW4WTO1	A	80
CKWXLIST_XSHLFLGS2	26B		CKW5PMST	B	2
CKWXLIST_XSHLFLGS3	26C		CKW5PROT	B	4
CKWXLIST_XSHLFLGS4	26D		CKW5STRL	B	8
CKWXLIST_XSTARTINDEX	2D4		CKW51NVL	B	40
CKWXLIST_XTYPE_ADJDATA	26D	80	CKW51VOL	B	80
CKWXLIST_XTYPE_ECONTROLS	26D	40	CKW52NVL	B	10
CKWXLIST_XUID1	31C		CKW52VOL	B	20
CKWXLIST_XUID2	2FC		M00M0860	268	
CKWXLIST_XUID3	2D3		M00M0861	0	268
CKWXLIST_XVECTORINDEX	2D8		M00M0862	0	360
CKWXLIST_XVERSCOMP	2F4		STARBAL	262	
CKWXLIST_XVERSION	268		STARBDCTA	25C	
CKWXLISTL	350	E8	STARDDL	266	
CKW1ESUP	6	20	STARDTU	260	6
CKW1FNLW	6	80	STARFLGS	260	
CKW1OFLW	6	40	STARFUNC	260	80
CKW1SPIO	6	4	STARKL	265	
			STARLAST	260	8
			STARLOC	260	1
			STARMAXS	260	40
			STARR	264	
			STARREMV	260	20
			STARRKDD	264	
			STARTYPE	25F	
			STARUBAL	260	10
			STARUCBA	25C	



## \$CKX Heading Information

**Common Name:** JES2 Checkpoint Reconfiguration JESXCF Messages  
**Macro ID:** \$CKX  
**DSECT Name:** CKX  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'CKX '  
 Offset: CKXID-CKX  
 Length: L'CKX

**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are anywhere in the private storage of the JES2 address space.

**Size:** See CKXMAXLN for the length of the largest message or acknowledgement message. This includes both the header length (CKXHDRLN) and the message data length. The execution time message length is in field CKXMSGLN. Each message type has its own length. The message data lengths (which do not include the header length) are defined with field names of the form CKXMnMSG for messages and CKXAnMSG for acknowledgement messages, where "n" is the message type number (see equates for field CKXMTYPE).

**Created by:** The area used to compose messages and their acknowledgements is created by routine CKRRINIT during JES2 initialization. Areas in JESXCF messages are created by the IXZXISM macro instruction and areas in acknowledgement messages are created by the IXZXIAC macro instruction.

**Pointed to by:** CKMCKXA field of the \$CKM data area  
 MESSAGE\_OFFSET field of the IXZYIXEN data area  
 YIXAC\_APPL\_DATA field of the IXZYIAC data area

**Serialization:** None required

**Function:** The \$CKX data area is used by JES2 checkpoint reconfiguration routines to map the application portion of JESXCF messages and acknowledgements exchanged between members in a JES2 MAS.

### \$CKX Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CKX	, Checkpoint reconfiguration JESXCF messages and acks
Comment					
JES2 checkpoint reconfiguration message/ack header					
End of Comment					
0	(0)	CHARACTER	4	CKXID	Control block eyecatcher
4	(4)	ADDRESS	1	CKXVERSN	Sender's control block version

# \$CKX Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
4	(4)	X'1'	0	CKXVERN	"1" Current version on this member (see restrictions when you change this)
5	(5)	ADDRESS	1	CKXVERLT	Lowest control block version receiver can be at and tolerate message
5	(5)	X'1'	0	CKXVLCVN	"CKXVERN" Lowest version number this member is compatible with

Comment

Reason codes for \$K26 error codes

End of Comment

5	(5)	X'1'	0	CKXK26R1	"1" Receiver's \$CKX version too far down level to be compatible with sender's
5	(5)	X'2'	0	CKXK26R2	"2" Receiver's \$CKX version too far up level to be compatible with sender's

Comment

General purpose information fields

End of Comment

6	(6)	BITSTRING	2		Reserved for future use
8	(8)	SIGNED	4	CKXSMEMN	Sending member number
12	(C)	SIGNED	4	CKXTMEMN	To member number
16	(10)	SIGNED	4	CKXMSGLN	Length of this entire msg
20	(14)	BITSTRING	32		Reserved for future use

Comment

The following section is permanently dedicated for IBM internal Function Component Test (FCT) use only.

Warning: This section is used only for testing. Setting data in this section causes permanent waits or \$K25 ABENDs.

End of Comment

52	(34)	BITSTRING	1	CKXFCTFG	Flags for IBM FCT use only
		1... ....		CKXFCTFA	"B'10000000" - Tell receiver to issue \$K25 error code
		.1.. ....		CKXFCTFI	"B'01000000" - Tell receiver to pretend it never got this msg
		..1. ....		CKXFCTFC	"B'00100000" - Tell driving member to issue \$K25 after next driver commit
		...1 ....		CKXFCTFD	"B'00010000" - Tell driving member to issue \$K25 after driver decommit
53	(35)	BITSTRING	3		Reserved for future FCT use
56	(38)	SIGNED	4	CKXFCTRC	Reason code for \$K25 error

Comment

JES2 checkpoint reconfiguration JESXCF message and acknowledgement types

End of Comment

60	(3C)	SIGNED	4	CKXMTYPE	Message or ack type
60	(3C)	X'1'	0	CKXM0	"1" Start-up CKPT reconfig

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
60	(3C)	X'2'	0	CKXM1	"2" Request info for driver (re)selection
60	(3C)	X'3'	0	CKXA1	"3" Acknowledgement for above
60	(3C)	X'4'	0	CKXM2	"4" Notification of driver (re)selection
60	(3C)	X'5'	0	CKXA2	"5" Acknowledgement for above
60	(3C)	X'6'	0	CKXM3	"6" Sync point action/cond req
60	(3C)	X'7'	0	CKXA3	"7" Acknowledgement for above
60	(3C)	X'8'	0	CKXM4	"8" Sync go-ahead
60	(3C)	X'9'	0	CKXA4	"9" Acknowledgement for above
60	(3C)	X'A'	0	CKXM5	"10" Reconfiguration DONE
60	(3C)	X'B'	0	CKXA5	"11" Acknowledgement for above

Comment

-----  
 End of header section  
 -----

-----  
 End of Comment  
 -----

64	(40)	SIGNED	4	(0)	Alignment
64	(40)	X'40'	0	CKXHDLRN	**"-CKX" Length of msg/ack header

Comment

-----  
 Beginning of message section  
 -----

-----  
 End of Comment  
 -----

64	(40)	SIGNED	4	CKXMSG (0)	All msgs/acks begin here
64	(40)	CHARACTER	8	CKXMEYE	All msgs/acks begin with a msg specific eyecatcher starting with "Mn" for msgs and "An" for acks

Comment

Message: Start-up checkpoint reconfiguration  
 This message is used to start-up a JES2 checkpoint reconfiguration. The message is sent by every starting member to every reconfiguration capable members.  
 The start-up message is the only message sent to the life-of-member mailbox. All other messages are directed to a mailbox created for the life of a reconfiguration instance.  
 This is a TYPE=COMM message.  
 Use this section when CKXMTYPE is set to CKXM0.  
 Fields in this section are named CKXM0xxx.

-----  
 End of Comment  
 -----

64	(40)	BITSTRING	0	CKXM0MSG (0)	Start-up CKPT reconfig
64	(40)	SIGNED	4	CKXM0BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM0EYE	Message eyecatcher
72	(48)	SIGNED	4	CKXM0END (0)	End of message
72	(48)	X'8'	0	CKXM0HCL	"8" If you change this constant
72	(48)	ADDRESS	2	(0)	or get an assembly
72	(48)	ADDRESS	2	(0)	error, you MUST update CKXVERN

## \$CKX Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>Message: Request info for driver (re)selection            This message is sent by the driver candidate to every active, participating member. The members return the requested information in an acknowledgement message.            This is a TYPE=ASYNCAACK message.            Use this section when CKXMTYPE is set to CKXM1.            Fields in this section are named CKXM1xxx.</p>					
End of Comment					
64	(40)	BITSTRING	0	CKXM1MSG (0)	Request info for driver (re)selection
64	(40)	SIGNED	4	CKXM1BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM1EYE	Message eyecatcher
72	(48)	SIGNED	4	CKXM1END (0)	End of message
72	(48)	X'8'	0	CKXM1HCL	"8" If you change this constant
72	(48)	ADDRESS	2	(0)	or get an assembly
72	(48)	ADDRESS	2	(0)	error, you MUST update CKXVERN
Comment					
<p>Ack message: Info for driver (re)selection            The acknowledgements are used by the driver candidate to determine the cause for the reconfiguration, the OPVERIFY value to use, what console ID to use (if any), and the CKPT data set names to use.            When selecting a replacement driving member, the acknowledgements are also used to determine each member's operation sequence number.            Use this section when CKXMTYPE is set to CKXA1.            Fields in this section are named CKXA1xxx.</p>					
End of Comment					
64	(40)	BITSTRING	0	CKXA1MSG (0)	Info for driver select
64	(40)	SIGNED	4	CKXA1BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA1EYE	Message eyecatcher
72	(48)	BITSTRING	1	CKXA1FLG	Flag byte
		1... ....		CKXA1FOV	"B'10000000" - OPVERIFY=YES on this memb
		.1.. ....		CKXA1FI1	"B'01000000" - I/O error on CKPT1
		..1. ....		CKXA1FI2	"B'00100000" - I/O error on CKPT2
		...1 ....		CKXA1FCV	"B'00010000" - CKPT on volatile CF
		.... 1...		CKXA1FOR	"B'00001000" - Operator dialog request
		.... .1..		CKXA1HUP	"B'00000100" - HFAM update is pending
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	4	CKXA1SEQ	Operation sequence number
80	(50)	BITSTRING	4	CKXA1CON	Console ID or zero
84	(54)	BITSTRING	308	CKXA1HFM	Copy of HFAM for NEWCKPTn specifications on member
392	(188)	SIGNED	4	CKXA1END (0)	End of ack message
392	(188)	X'148'	0	CKXA1HCL	"328" If you change this constant
392	(188)	ADDRESS	2	(0)	or get an assembly
392	(188)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>Message: Notification of driver (re)selection                      This message notifies all participating members of the selection of the driving member, or the replacement of a failed driving member. This message contains the accumulated results from the request driver selection information message from the MAS perspective. The MAS wide results includes the cause for the reconfiguration, the OPVERIFY value to use, what console ID to use (if any), and the CKPT data set names to use use. When selecting a replacement driving member, the message also indicates the highest valid operation sequence number for catch-up processing. This is a TYPE=ASYNACK message. Use this section when CKXMTYPE is set to CKXM2. Fields in this section are named CKXM2xxx.</p>					

End of Comment					
64	(40)	BITSTRING	0	CKXM2MSG (0)	Notification of driver (re)selection
64	(40)	SIGNED	4	CKXM2BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM2EYE	Message eyecatcher
72	(48)	BITSTRING	1	CKXM2FLG	Flag byte
		1... ..		CKXM2FOV	"B'10000000" - Use OPVERIFY=YES
		.1.. ..		CKXM2FI1	"B'01000000" - I/O error on CKPT1
		..1. ....		CKXM2FI2	"B'00100000" - I/O error on CKPT2
		...1 ....		CKXM2FCV	"B'00010000" - CKPT on volatile CF
		.... 1...		CKXM2FOR	"B'00001000" - Operator dialog
		.... .1..		CKXM2FCN	"B'00000100" - Cancelled by JES2
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	4	CKXM2SEQ	Highest operation sequence
80	(50)	BITSTRING	4	CKXM2CON	Console ID or zero
84	(54)	SIGNED	4	CKXM2NI1	Number of CKPT1 I/O errors
88	(58)	SIGNED	4	CKXM2NI2	Number of CKPT2 I/O errors
92	(5C)	CHARACTER	4	CKXM2NAM	Name of new driving member
96	(60)	CHARACTER	128	CKXM2PMV	Vector of member names participating in orig driver selection
224	(E0)	BITSTRING	308	CKXM2HFM	HFAM to initially use for this reconfig instance
532	(214)	SIGNED	4	CKXM2END (0)	End of message
532	(214)	X'1D4'	0	CKXM2HCL	"468" If you change this constant
532	(214)	ADDRESS	2	(0)	or get an assembly
532	(214)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Comment					
<p>Ack message: Ack driver (re)selection notification                      The acknowledging non-driving member does NOT consider the selection of the driver to be "complete" until the driving member updates its XCF user state data. Use this section when CKXMTYPE is set to CKXA2. Fields in this section are named CKXA2xxx.</p>					

End of Comment					
64	(40)	BITSTRING	0	CKXA2MSG (0)	Ack notification of who's driving member
64	(40)	SIGNED	4	CKXA2BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA2EYE	Message eyecatcher
72	(48)	SIGNED	4	CKXA2END (0)	End of ack message
72	(48)	X'8'	0	CKXA2HCL	"8" If you change this constant
72	(48)	ADDRESS	2	(0)	or get an assembly
72	(48)	ADDRESS	2	(0)	error, you MUST update CKXVERN

## \$CKX Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>Message: Sync point action/condition request            This message is issued by the driving member in order to give instructions (actions) to non-driving members, or to request the results of previous action requests.            Non-driving members do not carry out an action until instructed to do so by a "sync go-ahead" message or unless it's necessary to go-ahead in order to keep in sync with other members (catch-up processing).            This is a TYPE=ASYNCAACK message.            Use this section when CKXMTYPE is set to CKXM3.            Fields in this section are named CKXM3xxx.</p>					
End of Comment					
64	(40)	BITSTRING	0	CKXM3MSG (0)	Sync point action/cond
64	(40)	SIGNED	4	CKXM3BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM3EYE	Message eyecatcher
72	(48)	BITSTRING	1	CKXM3FLG	Flag byte
		1... ....		CKXM3DMF	"B'10000000" - Driving member failed
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	4	CKXM3SEQ	Operation sequence number
80	(50)	CHARACTER	8	CKXM3TYP	Sync point type
88	(58)	SIGNED	4	CKXM3ACT	Requested action
92	(5C)	CHARACTER	308	CKXM3HFM	Driver's current HFAM
400	(190)	SIGNED	4	CKXM3END (0)	End of message
400	(190)	X'150'	0	CKXM3HCL	"336" If you change this constant
400	(190)	ADDRESS	2	(0)	or get an assembly
400	(190)	ADDRESS	2	(0)	error, you MUST update CKXVERN

### Comment

Ack message: Ack sync point action/condition req  
 This message is used to acknowledge an action request and to inform the driving member of the non-driving member's condition.  
 Use this section when CKXMTYPE is set to CKXA3.  
 Fields in this section are named CKXA3xxx.

End of Comment					
64	(40)	BITSTRING	0	CKXA3MSG (0)	Ack sync and return condition data
64	(40)	SIGNED	4	CKXA3BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA3EYE	Message eyecatcher
72	(48)	CHARACTER	8	CKXA3TYP	Sync point type
80	(50)	CHARACTER	4	CKXA3CON	Non-driver's condition
84	(54)	CHARACTER	4	CKXA3RSN	Non-driver's reason code
88	(58)	SIGNED	4	CKXA3END (0)	End of ack message
88	(58)	X'18'	0	CKXA3HCL	"24" If you change this constant
88	(58)	ADDRESS	2	(0)	or get an assembly
88	(58)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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Comment

Message: Sync go-ahead  
 This message is sent by the driving member to give non-driving members the go-ahead to proceed with the sync point action request. If the driver fails in such a way that some, but not all, members receive this message, then those members that did not receive this message will do catch-up processing when a new driver is selected. This is a TYPE=ASYNACK message. Use this section when CKXMTYPE is set to CKXM4. Fields in this section are named CKXM4xxx.

End of Comment

64	(40)	BITSTRING	0	CKXM4MSG (0)	Sync go-ahead
64	(40)	SIGNED	4	CKXM4BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM4EYE	Message eyecatcher
72	(48)	CHARACTER	8	CKXM4TYP	Sync point type
80	(50)	SIGNED	4	CKXM4END (0)	End of message
80	(50)	X'10'	0	CKXM4HCL	"16" If you change this constant
80	(50)	ADDRESS	2	(0)	or get an assembly
80	(50)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Comment

Ack message: Ack sync go-ahead  
 Use this section when CKXMTYPE is set to CKXA4. Fields in this section are named CKXA4xxx.

End of Comment

64	(40)	BITSTRING	0	CKXA4MSG (0)	Ack sync go-ahead
64	(40)	SIGNED	4	CKXA4BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA4EYE	Message eyecatcher
72	(48)	CHARACTER	8	CKXA4TYP	Sync point type
80	(50)	SIGNED	4	CKXA4END (0)	End of ack message
80	(50)	X'10'	0	CKXA4HCL	"16" If you change this constant
80	(50)	ADDRESS	2	(0)	or get an assembly
80	(50)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Comment

Message: Reconfiguration DONE  
 This message is issued by the driving member to inform other members of the pending completion of this reconfiguration. Non-driving members do not exit this CKPT reconfiguration until they detect an XCF user state update indicating the reconfiguration has decommitted. This is a TYPE=ASYNACK message. Use this section when CKXMTYPE is set to CKXM5. Fields in this section are named CKXM5xxx.

End of Comment

64	(40)	BITSTRING	0	CKXM5MSG (0)	Reconfiguration DONE
64	(40)	SIGNED	4	CKXM5BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM5EYE	Message eyecatcher
72	(48)	SIGNED	4	CKXM5SEQ	Operation sequence number
76	(4C)	SIGNED	4	CKXM5END (0)	End of message
76	(4C)	X'C'	0	CKXM5HCL	"12" If you change this constant
76	(4C)	ADDRESS	2	(0)	or get an assembly

## \$CKX Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
76	(4C)	ADDRESS	2	(0)	error, you MUST update CKXVERN
Comment					
Ack message: Ack reconfiguration DONE Use this section when CKXMTYPE is set to CKXA5. Fields in this section are named CKXA5xxx.					
End of Comment					
64	(40)	BITSTRING	0	CKXA5MSG (0)	Ack reconfig DONE
64	(40)	SIGNED	4	CKXA5BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA5EYE	Message eyecatcher
72	(48)	SIGNED	4	CKXA5END (0)	End of ack message
72	(48)	X'8'	0	CKXA5HCL	"8" If you change this constant
72	(48)	ADDRESS	2	(0)	or get an assembly
72	(48)	ADDRESS	2	(0)	error, you MUST update CKXVERN
Comment					
End of \$CKX data area					
End of Comment					
532	(214)	SIGNED	4	(0)	Alignment
532	(214)	X'214'	0	CKXMAXLN	**-\$CKX" Max \$CKX data area length PRINT ON

## \$CKX Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKX	0		CKXA4EYE	40	
CKXA1	3C	3	CKXA4HCL	50	10
CKXA1BEG	40		CKXA4MSG	40	
CKXA1CON	50		CKXA4TYP	48	
CKXA1END	188		CKXA5	3C	B
CKXA1EYE	40		CKXA5BEG	40	
CKXA1FCV	48	10	CKXA5END	48	
CKXA1FI1	48	40	CKXA5EYE	40	
CKXA1FI2	48	20	CKXA5HCL	48	8
CKXA1FLG	48		CKXA5MSG	40	
CKXA1FOR	48	8	CKXFCTFA	34	80
CKXA1FOV	48	80	CKXFCTFC	34	20
CKXA1HCL	188	148	CKXFCTFD	34	10
CKXA1HFM	54		CKXFCTFG	34	
CKXA1HUP	48	4	CKXFCTFI	34	40
CKXA1MSG	40		CKXFCTRC	38	
CKXA1SEQ	4C		CKXHDRLN	40	40
CKXA2	3C	5	CKXID	0	
CKXA2BEG	40		CKXK26R1	5	1
CKXA2END	48		CKXK26R2	5	2
CKXA2EYE	40		CKXMAXLN	214	214
CKXA2HCL	48	8	CKXMEYE	40	
CKXA2MSG	40		CKXMSG	40	
CKXA3	3C	7	CKXMSGLN	10	
CKXA3BEG	40		CKXMTYPE	3C	
CKXA3CON	50		CKXM0	3C	1
CKXA3END	58		CKXM0BEG	40	
CKXA3EYE	40		CKXM0END	48	
CKXA3HCL	58	18	CKXM0EYE	40	
CKXA3MSG	40		CKXM0HCL	48	8
CKXA3RSN	54		CKXM0MSG	40	
CKXA3TYP	48		CKXM1	3C	2
CKXA4	3C	9	CKXM1BEG	40	
CKXA4BEG	40		CKXM1END	48	
CKXA4END	50		CKXM1EYE	40	



Name	Hex Offset	Hex Value
CKXM1HCL	48	8
CKXM1MSG	40	
CKXM2	3C	4
CKXM2BEG	40	
CKXM2CON	50	
CKXM2END	214	
CKXM2EYE	40	
CKXM2FCN	48	4
CKXM2FCV	48	10
CKXM2FI1	48	40
CKXM2FI2	48	20
CKXM2FLG	48	
CKXM2FOR	48	8
CKXM2FOV	48	80
CKXM2HCL	214	1D4
CKXM2HFM	E0	
CKXM2MSG	40	
CKXM2NAM	5C	
CKXM2NI1	54	
CKXM2NI2	58	
CKXM2PMV	60	
CKXM2SEQ	4C	
CKXM3	3C	6
CKXM3ACT	58	
CKXM3BEG	40	
CKXM3DMF	48	80
CKXM3END	190	
CKXM3EYE	40	
CKXM3FLG	48	
CKXM3HCL	190	150
CKXM3HFM	5C	
CKXM3MSG	40	
CKXM3SEQ	4C	
CKXM3TYP	50	
CKXM4	3C	8
CKXM4BEG	40	
CKXM4END	50	
CKXM4EYE	40	
CKXM4HCL	50	10
CKXM4MSG	40	
CKXM4TYP	48	
CKXM5	3C	A
CKXM5BEG	40	
CKXM5END	4C	
CKXM5EYE	40	
CKXM5HCL	4C	C
CKXM5MSG	40	
CKXM5SEQ	48	
CKXSMEMN	8	
CKXTMEMN	C	
CKXVERLT	5	
CKXVERN	4	1
CKXVERSN	4	
CKXVLCVN	5	1

## \$CKX Cross Reference

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**\$CMB Programming Interface information**

Programming Interface information

\$CMB

End of Programming Interface information

## \$CMB Heading Information

**Common Name:** Console Message Buffer  
**Macro ID:** \$CMB  
**DSECT Name:** CMB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** "CMB "  
 Offset: CMBID-CMB  
 Length: L'CMBID

**Storage Attributes:** Subpool: 0, 20, or 231  
 Key: 1  
 Residency: Virtual and real storage are above 16M, in either the private storage of the JES2 address space or in CSA from another address space.

**Size:** See CMBLGLEN, CMBL  
 CMBLGLEN is used as the length for private area CMBs so that nodal message records (NMRs) destined for another node can be store-and-forward'ed unchanged by the Remote Console Processor in HASPRTAM. Note that messages originated by JES2 only use CMBL of these CMBs.  
 CMBs that are GETMAIN'ed from common storage are always obtained with length CMBL.

**Created by:** \$GETCMB routine in HASPCON  
 SSICMD routine in HASCSIRQ  
 SSINOUS routine in HASCSIRQ

**Pointed to by:** CMBCMB field of the \$CMB data area  
 \$BUSYQUE field of the \$HCT data area  
 \$BUSYRQ field of the \$HCT data area  
 \$COMMQTP field of the \$HCT data area  
 \$COMMQUE field of the \$HCT data area  
 \$CONWKQ field of the \$HCT data area  
 CCTCMBFQ field of the \$HCCT data area  
 CCTCOMMQ field of the \$HCCT data area  
 CCTELCMB field of the \$HCCT data area  
 CCTRCPCQ field of the \$HCCT data area  
 RCPMSHDR field of the \$RCPWORK data area

**Serialization:** Compare-and-swap logic must be used for queueing or de-queueing the CMB on most queues.

**Function:** Used to contain messages issued by JES2 or commands destined for JES2.

## \$CMB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CMB	
Comment					
KEEP FIELDS CMBCMB THROUGH CMBUSER TOGETHER FOR \$WTO LONG PARAMETER LIST.					
End of Comment					
0	(0)	CHARACTER	4	CMBID	CMB IDENTIFIER
4	(4)	ADDRESS	1	CMBVRS	CMB VERSION

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
4	(4)	X'1'	0	CMBVRSN	"1" SET CMB VERSION
4	(4)	X'5'	0	CMBCLR	*** START OF AREA CLEARED BY THE \$GETCMB SERVICE (EXCEPT FOR CMBCMB)
5	(5)	BITSTRING	1	CMBFLAG2	GENERAL FLAG BYTE
		1... ....		CMB2GETM	"B'10000000" GETMAINED CMB (FOR CMDS)
		.1.. ....		CMB2GMTK	"B'01000000" \$GETMAINED TOKEN
		..1. ....		CMB2AUTO	"B'00100000" CMB from auto command
		...1 ....		CMB2INIT	"B'00010000" CMB from initialization
		.... 1...		CMB2IFF	"B'00001000" IFF indicator from SSINOUS
		.... .1..		CMB2LGON	"B'00000100" User is logged on-indicator
		.... ..1.		CMB2NOTF	"B'00000010" THIS IS A NOTIFY CMB
		.... ...1		CMB2DMC	"B'00000001" CMB obtained for DEMANDCMB
6	(6)	BITSTRING	1	CMBFLAG4	General flag byte 4
		.... ...1		CMB4LOGO	"B'00000001" Issue msg to HRDCPY only
		1... ....		CMB4EMER	"B'10000000" This is an EMERGENCY CMB
7	(7)	BITSTRING	1		RESERVED FOR FUTURE USE
8	(8)	ADDRESS	4	CMBTOKA	SECURITY TOKEN ADDRESS - IF 0, CMD DEFAULT CHECKING WILL BE USED, AS IN THE CASE OF REMOTE WHICH VERIFYX ON SIGNON RECEIVED A RC 4
12	(C)	ADDRESS	4	CMBCMB	NEXT CMB BUFFER
16	(10)	ADDRESS	4	CMBPCE	PCE ISSUING MLWTO
20	(14)	SIGNED	4	CMBWTOPL (0)	START OF WTO PARM MAP
20	(14)	BITSTRING	1	CMBFLAG	FLAG BYTE
21	(15)	BITSTRING	1	CMBLEVEL (0)	IMPORTANCE LEVEL (HIGH 4 BITS)
21	(15)	BITSTRING	1	CMBPRIO	OUTPUT PRIORITY (LOW 4 BITS)
22	(16)	BITSTRING	1	CMBTYPE	TYPE BYTE
23	(17)	BITSTRING	1	CMBML	LENGTH OF MESSAGE
24	(18)	SIGNED	4	(0)	FORCE FULLWORD ALIGNMENT
24	(18)	ADDRESS	3	CMBTO (0)	TO SYSTEM ROUTE CODE (BINARY)
24	(18)	SIGNED	2	CMBTONOD	TO NODE NUMBER
26	(1A)	BITSTRING	1	CMBTOQUL	TO NODE QUALIFIER
27	(1B)	BITSTRING	1	CMBFLAG3	GENERAL FLAG BYTE
		1... ....		CMB3TOK	"B'10000000" COMMAND HAS A TOKEN ASSOCIATED WITH IT
		.1.. ....		CMB3INTC	"B'01000000" Internal command (used within a MAS when trans- porting commands between members to give a single system image)
28	(1C)	CHARACTER	8	CMBCART	COMMAND AND RESPONSE TOKEN
36	(24)	BITSTRING	1	CMBUCM	FOR DOWN LEVEL COMPATIBILITY
37	(25)	BITSTRING	1	CMBUCMA	MCS CONSOLE AREA
38	(26)	BITSTRING	2	CMBLINET	LINE TYPE FOR MLWTO
40	(28)	BITSTRING	4	CMBUCMID	4-BYTE MCS CONSOLE ID
44	(2C)	BITSTRING	2	CMBDESC	MCS DESCRIPTOR CODES
46	(2E)	BITSTRING	2	CMBROUT	MCS CONSOLE ROUTINGS
48	(30)	BITSTRING	4	CMBDOMID	MCS DOM ID
52	(34)	SIGNED	2	CMBRMT	REMOTE NUMBER
54	(36)	CHARACTER	8	CMBUSER	TSO USER ID
54	(36)	X'2A'	0	CMBWTOLG	""-CMBWTOPL" LENGTH OF LONG WTO PARMLIST
64	(40)	SIGNED	4	(0)	FORCE FULLWORD ALIGNMENT
64	(40)	ADDRESS	3	CMBFM (0)	FROM SYSTEM ROUTE CODE (BINARY)
64	(40)	SIGNED	2	CMBFMNOD	FROM NODE NUMBER
66	(42)	BITSTRING	1	CMBFMQUL	FROM NODE QUALIFIER
67	(43)	BITSTRING	1		RESERVED FOR FUTURE USE
67	(43)	X'30'	0	CMBPARML	""-CMBWTOPL" LENGTH OF CMB PARAMETER LST
68	(44)	CHARACTER	148	CMBLGMSG (0)	Maximum nodal message for store-and-forward
68	(44)	CHARACTER	132	CMBMSG (0)	CONSOLE MESSAGE
68	(44)	CHARACTER	8	CMBTIME	TIME STAMP FOR REMOTE SYSTEMS
76	(4C)	CHARACTER	1		SPACER
77	(4D)	CHARACTER	8	CMBJOBID	JOB ID
85	(55)	CHARACTER	1		SPACER
86	(56)	CHARACTER	9	CMBMID	MESSAGE ID FIELD
95	(5F)	CHARACTER	8	CMBJOBN	JOB NAME
103	(67)	CHARACTER	1		SPACER
104	(68)	CHARACTER	96	CMBTEXT	MESSAGE TEXT

# \$CMB Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
200	(C8)	SIGNED	4	CMBEND (0)	END OF CMB
200	(C8)	X'C8'	0	CMBL	"CMBEND-CMB" LENGTH OF CMB
200	(C8)	X'D8'	0	CMBLGEND	"CMBEND+(L'CMBLGMSG-L'CMBMSG)" End of store-and-forwrd CMB
200	(C8)	X'D8'	0	CMBLGLEN	"CMBLGEND-CMB" Max length for store-and- forward CMB

Comment

## FORMATTED COMMAND DEFINITIONS

End of Comment

68	(44)	BITSTRING	40	CMBFNORM (0)	Formatted area for normal command
68	(44)	BITSTRING	40	CMBFRTE (0)	Formatted area for route command
68	(44)	BITSTRING	1	CMBFOP	OPCODE
69	(45)	BITSTRING	1	CMBFFLG	FLAGS OR OPCODE MODIFIER
70	(46)	BITSTRING	2	CMBFJID	INITIAL JOB NUMBER
72	(48)	CHARACTER	8	CMBFORGN	ORIGIN NODE NAME
80	(50)	CHARACTER	8	CMBFJNAM	JOB NAME
88	(58)	CHARACTER	8	CMBFD	DESTINATION FOR ROUTE COMMAND
96	(60)	CHARACTER	8	CMBFR	REMOTE IF NOT IMPLIED BY CMBFD
104	(68)	BITSTRING	4	CMBFJNUM	Fullword job number

Comment

## CMBFLAG DEFINITIONS

End of Comment

		1... ....		CMBFLAGC	"B'10000000" CMB CONTAINS A COMMAND
		.1. ....		CMBFLAGW	"B'01000000" CMB HAS RMT WORKSTATION NUM
		..1. ....		CMBFLAGT	"B'00100000" CMB HAS TSO USER ID
		...1 ....		CMBFLAGU	"B'00010000" CMB HAS UCMID INFORMATION
		.... 1..		CMBFLAGR	"B'00001000" CONSOLE IS ONLY REMOTE AUTHORIZED
		.... .1.		CMBFLAGJ	"B'00000100" CONSOLE NOT JOB AUTHORIZED
		.... ..1.		CMBFLAGD	"B'00000010" CONSOLE NOT DEVICE AUTHORIZED
		.... ...1		CMBFLAGS	"B'00000001" CONSOLE NOT SYSTEM AUTHORIZED
104	(68)	X'60'	0	CMBFLAGQ	"CMBFLAGW+CMBFLAGT" CMB HAS EITHER REMOTE OR TSO USERID

Comment

## CMBPRIO DEFINITIONS

End of Comment

		.... 1111		CMBPRIM	"B'00001111" CMBPRIO PURIFYING MASK
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Comment

## CMBTYPE DEFINITIONS

WARNING: For CMBs which are to cross nodes, CMBTYPE becomes NMRTYPE and the following bits can take on meaning specified by NMRTYPE.

End of Comment

		1111 ....		CMBTYPEX	"B'11110000" RESERVED BITS
		.... ...1		CMBTYPEP	"B'00000001" Formatted DOM CMB
		.... .1.		CMBTYPEF	"B'00000010" Formatted command in CMBMSG
		.... .1..		CMBTYPEP	"B'00000100" MSG TEXT ONLY IN NMRMSG
		.... 1...		CMBTYPE4	"B'00001000" RESERVED BIT

Comment

## CMBFOP DEFINITIONS

End of Comment

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
104	(68)	X'1'	0	CMBFOPD	"1" DISPLAY JOB COMMAND
104	(68)	X'2'	0	CMBFOPC	"2" CANCEL JOB COMMAND
104	(68)	X'3'	0	CMBFOPA	"3" RELEASE JOB COMMAND
104	(68)	X'4'	0	CMBFOPH	"4" HOLD JOB COMMAND
104	(68)	X'5'	0	CMBFOPR	"5" ROUTE JOB COMMAND

Comment

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End of Comment

CMBFFLG DEFINITIONS

.... ..11	CMBFFLGJ	"X'03" BATCH JOB TYPE WHEN ZEROES
.... ...1	CMBFFLGS	"X'01" STC JOB TYPE
.... ..1.	CMBFFLGT	"X'02" TSU JOB TYPE
1... ....	CMBFFLGO	"X'80" CANCEL OR ROUTE OUTPUT
.1.. ....	CMBFFLGD	"X'40" CANCEL EXECUTION WITH DUMP

\$CMB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CMB	0		CMBID	0	C3D4C240
CMB CART	1C	40404040	CMBJOBID	4D	40404040
CMB CLR	4	5	CMBJOBN	5F	40404040
CMB CMB	C		CMBL	C8	C8
CMB DESC	2C	0	CMB LEVEL	15	
CMB DOMID	30	0	CMB LGEND	C8	D8
CMB END	C8		CMB LGLEN	C8	D8
CMB FD	58	40404040	CMB LGMSG	44	
CMB FFLG	45	0	CMB LINET	26	0
CMB FFLGD	68	40	CMB MID	56	
CMB FFLGJ	68	3	CMB ML	17	0
CMB FFLGO	68	80	CMB MSG	44	
CMB FFLGS	68	1	CMB PARML	43	30
CMB FFLGT	68	2	CMB PCE	10	
CMB FJID	46	0	CMB PRIM	68	F
CMB FJNAM	50	40404040	CMB PRIO	15	0
CMB FJNUM	68	0	CMB RMT	34	0
CMB FLAG	14	0	CMB ROUT	2E	0
CMB FLAGC	68	80	CMB TEXT	68	40404040
CMB FLAGD	68	2	CMB TIME	44	40404040
CMB FLAGJ	68	4	CMB TO	18	
CMB FLAGQ	68	60	CMB TOKA	8	
CMB FLAGR	68	8	CMB TONOD	18	0
CMB FLAG S	68	1	CMB TOQUL	1A	0
CMB FLAG T	68	20	CMB TYPE	16	0
CMB FLAG U	68	10	CMB TYPED	68	1
CMB FLAG W	68	40	CMB TYPEF	68	2
CMB FLAG 2	5	0	CMB TYPET	68	4
CMB FLAG 3	1B	0	CMB TYPEX	68	F0
CMB FLAG 4	6	0	CMB TYPE4	68	8
CMB FM	40		CMB UCM	24	0
CMB FMNOD	40	0	CMB UCMA	25	0
CMB FMQUL	42	0	CMB UCMID	28	0
CMB FNORM	44		CMB USER	36	40404040
CMB FOP	44	0	CMB VRS	4	
CMB FOPA	68	3	CMB VRSN	4	1
CMB FOPC	68	2	CMB WTOLG	36	2A
CMB FOPD	68	1	CMB WTOPL	14	
CMB FOPH	68	4	CMB 2AUTO	5	20
CMB FOPR	68	5	CMB 2DMC	5	1
CMB FORGN	48	40404040	CMB 2GETM	5	80
CMB FR	60	40404040	CMB 2GMTK	5	40
CMB FRTE	44		CMB 2IFF	5	8

## \$CMB Cross Reference

Name	Hex Offset	Hex Value
CMB2INIT	5	10
CMB2LGON	5	4
CMB2NOTF	5	2
CMB3INTC	1B	40
CMB3TOK	1B	80
CMB4EMER	6	80
CMB4LOGO	6	1



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**\$CNVWORK Programming Interface information**

Programming Interface information

\$CNVWORK

End of Programming Interface information

**\$CNVWORK Heading Information**

**Common Name:** JES2 JCL Conversion PCE Work Area  
**Macro ID:** \$CNVWORK  
**DSECT Name:** PCE (\$CNVWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol JPCELEN for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** The \$JCLPCE field of the \$HCT data area points into the \$PCEORG/\$PCELAST chain to the first JCL conversion PCE. Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type. DTEPCE field of the \$DTECNV data area See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization  
**Function:** The fields in this work area are used by a JES2 JCL Conversion Processor and by its support routines and exits. \$CNVWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$CNVWORK are actually part of the PCE DSECT, but only map PCEs with the value PCECNVID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

**\$CNVWORK Map**

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	1	JPCESTAT	PROCESSOR STATUS BYTE
		1... ....		JPCEDUPL	"B'10000000" Duplicate logon tried
		.1.. ....		JPCEJCTV	"B'01000000" JCT VALID
		...1 ....		JPCECNWT	"B'00010000" This PCE cannot wait for OS CNVT
241	(F1)	CHARACTER	1	JPCECLAS	ORIGINAL JOB CLASS
242	(F2)	CHARACTER	1	JPCEPRIO	ORIGINAL JOB PRIORITY
243	(F3)	BITSTRING	1		RESERVED FOR FUTURE USE
244	(F4)	ADDRESS	4	JPCEDETE	SUBTASK DTE ADDRESS
248	(F8)	ADDRESS	4	JPCEJCTA	JCT BUFFER ADDR FOR PCE
252	(FC)	ADDRESS	4	JPCEIOT	ADDRESS OF ALLOCATION IOT
256	(100)	BITSTRING	12	JPCEJCTQ	HASP TIMER QUEUE ELEMENT
268	(10C)	SIGNED	4	JPCEBSIZ	TOTAL PERMANENT BUFFER STORAGE
272	(110)	ADDRESS	4	JPCEJCTQ	\$ESTAE RESUME ADDR, IF ANY
276	(114)	SIGNED	4	JPCEJCTT	MTTR OF JCT, CHANGED BY PROCESSOR WHEN NEW MTTR SET OF JCT
280	(118)	ADDRESS	4		RESERVED FOR FUTURE IBM USE
284	(11C)	SIGNED	4	JPCEDOM	ADDRESS OF CMB TO BE \$DOM'D

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
288	(120)	ADDRESS	4	JPCEXPLA	Address of XPL for Exit 44
292	(124)	ADDRESS	4	JPCEPARM	NODE TABLE ADDRESS
296	(128)	ADDRESS	4		CONTROL BLOCK ADDRESS
300	(12C)	ADDRESS	4		CLASS LIST ADDRESS
304	(130)	ADDRESS	4		ADDRESS OF JQE
308	(134)	ADDRESS	1		CLASS LIST LENGTH
309	(135)	ADDRESS	1		QUEUE TYPE SPECIFIED
310	(136)	ADDRESS	1		WORK SELECTION TYPE FLAG
311	(137)	ADDRESS	1		RESERVED FOR FUTURE USE
311	(137)	X'124'	0	JPCELST	"JPCEPARM,*-JPCEPARM" QGET PARAMETER LIST STORAGE
312	(138)	BITSTRING	1	JPCEXRSP	EXIT 44 response byte Work area copy of \$XPL response byte X044RESP
313	(139)	CHARACTER	16	JPCESCHE	Default SCHENV

Comment

START OF SPECIFICATIONS

- 01 DESCRIPTIVE NAME: JES log control
- 02 ACRONYM: \$JESLOG
- 01 MACRO NAME: \$JESLOG
- 01 DSECT NAME: JLG
- 01 LABEL PREFIX: JLG
- 01 COMPONENT ID: JES2 (SC1BH)
- 01 EXTERNAL CLASSIFICATION: PSPI
- 01 END OF EXTERNAL CLASSIFICATION:
- 01 EYE-CATCHER: "None"
- 02 OFFSET: N/A
- 02 LENGTH: N/A
- 01 STORAGE ATTRIBUTES:
- 02 SUBPOOL: n/a
- 02 KEY: n/a
- 02 RESIDENCY:
  - This block is included in JCTs, SJXBs, CATs and CNVWORK. See the description of those "hosting" blocks for storage attributes.
- 01 SIZE:
  - See JLGLEN
- 01 CREATED BY:
  - See "hosting" control blocks
- 01 POINTED TO BY:
  - No pointers
- 01 SERIALIZATION:
  - None required
- 01 FUNCTION:
  - The JESLOG describes how the spinning of JESLOG (JESYSMG and JESJOB LG) is to be supported.
- 01 METHOD OF ACCESS:
- 02 ASM:
  - Specify \$JESLOG as a positional operand on a \$MODULE macro instruction to cause this mapping to be generated. A USING of the following form is used: USING JLG,xxxx where xxxx is the label within the "hosting" block where the JESLOG

## \$CNVWORK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
mapping begins. For example when referencing the JESLOG within the JCT, code USING JLG,JCTJLOG					
02 PL/X: This mapping is not available for compilations.					
01 USED BY: Spin processing for the the two JESLOG data sets use the information for their decisions.					
01 DELETED BY: See "hosting" blocks.					
01 FREQUENCY: See "hosting" blocks					
01 RESTRICTIONS: None END OF SPECIFICATIONS					
01 CHANGE ACTIVITY: \$Z02LLRJ=LRJOB HJE7705 001101 J_K2: Long running jobs \$Z02P049=LRJ HJE7705 001218 J_K2: RJI SSOB JESLOG Support 01 A000000-999999 CREATED for JES2 OS/390 Release 12					
End of Comment					
329	(149)	BITSTRING	6	JPCEJLOG	JES log control
329	(149)	X'5F'	0	JPCELEN	**"PCEWORK" LENGTH OF PROCESSOR WORK SPACE

## \$CNVWORK Cross Reference

Name	Hex Offset	Hex Value
JPCEBSIZ	10C	
JPCECLAS	F1	
JPCEDOM	11C	
JPCEDETE	F4	
JPCEDUPL	F0	80
JPCEIOT	FC	
JPCEJCTA	F8	
JPCEJCTT	114	
JPCEJCTV	F0	40
JPCEJLOG	149	
JPCELEN	149	5F
JPCELST	137	124
JPCENCWT	F0	10
JPCEPARM	124	
JPCEPRIO	F2	
JPCERSUM	110	
JPCESCHE	139	
JPCESTAT	F0	
JPCEETQE	100	
JPCEXPLA	120	
JPCEXRSP	138	
PCE	0	

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## \$COMWORK Programming Interface information

Programming Interface information

### \$COMWORK

The following field is **NOT** programming interface information:

- COMMLTEA

End of Programming Interface information

## \$COMWORK Heading Information

**Common Name:** JES2 Command PCE Work Area  
**Macro ID:** \$COMWORK  
**DSECT Name:** PCE (\$COMWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol COMPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** The \$COMMPCE field of the \$HCT data area  
 See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization  
**Function:** The fields in this work area are used by a JES2 Command Processor and by its support routines and exits. \$COMWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$COMWORK are actually part of the PCE DSECT, but only map PCEs with the value PCECONID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

## \$COMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	1		\$RDRWORK len (for HASPRJCS)
Comment					
SPOOL MASK WORK AREA - USED WITH V=VOLSER OPERAND					
End of Comment					
880	(370)	BITSTRING	1	COMSPMSK	VOLUME SERIAL MASK
Comment					
SECURITY RELATED TOKEN OF ISSUER OF COMMAND					
End of Comment					
912	(390)	CHARACTER	80	COMSECT	SECURITY TOKEN
992	(3E0)	ADDRESS	4	COMSQD	ADDRESS OF SQD OR ZERO
996	(3E4)	BITSTRING	1	COMFLAG2	Second CMB flag (CMBFLAG2)
1000	(3E8)	ADDRESS	4	COMPXEQ	DOM id for \$P XEQ

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
Address of the first character in the field pointed to by PCENTITY beyond the sub-system name and its trailing period. If our sub-system name is JES2, then this address will be 5 greater than PCENTITY.					
-----					
End of Comment					
1004	(3EC)	SIGNED	4	COMENTBG	See above comment box
Comment					
-----					
Parameters for IEAVM173 (WPL message extract service)					
-----					
End of Comment					
1008	(3F0)	ADDRESS	4	COMMLTEA	Address of MLTE
1012	(3F4)	CHARACTER	1	COMMLTE	WPL message extract parms
Comment					
-----					
List form of the \$WTO parameter list. The following fields must match those defined in the CMB starting at CMBWTOPL.					
-----					
End of Comment					
1060	(424)	SIGNED	4	COMWTOPL (0)	START OF WTO PARAMETERS
1060	(424)	CHARACTER	1	COMFLAG	FLAGS FOR CMB
1061	(425)	CHARACTER	1	COMLEVEL	LIST LEVEL AND PRIORITY
1062	(426)	CHARACTER	1	COMTYPE	FORMAT TYPE
1063	(427)	CHARACTER	1	COMML	LENGTH OF MESSAGE
1064	(428)	SIGNED	4	(0)	
1064	(428)	ADDRESS	3	COMTO (0)	TO SYSTEM NODE INFORMATION
1064	(428)	SIGNED	2	COMTONOD	NODE NUMBER (BINARY)
1066	(42A)	BITSTRING	1	COMTOQUL	NODE QUALIFIER
1067	(42B)	BITSTRING	1	COMFLAG3	CMB General flag byte 3
1068	(42C)	CHARACTER	8	COMCART	COMMAND AND RESPONSE TOKEN
1076	(434)	CHARACTER	1	COMUCM	FOR DOWN LEVEL COMPATIBILITY
1077	(435)	CHARACTER	1	COMUCMA	MCS CONSOLE AREA
1078	(436)	CHARACTER	2	COMLINET	LINE TYPE FOR MLWTO
1080	(438)	CHARACTER	4	COMUCMID	4-BYTE MCS CONSOLE ID
1084	(43C)	CHARACTER	2	COMDESC	MCS DESCRIPTOR CODES
1086	(43E)	CHARACTER	2	COMROUT	MCS ROUTE CODES
1088	(440)	CHARACTER	4	COMDOMID	MCS DOM ID
1092	(444)	SIGNED	2	COMRMT	REMOTE NUMBER
1094	(446)	CHARACTER	8	COMUSER	TSO USER ID
1094	(446)	X'2A'	0	COMWTOLG	"*-COMWTOPL" LENGTH OF WTO PARM LIST
1102	(44E)	ADDRESS	2	(0)	Verify that lengths of
1102	(44E)	ADDRESS	2	(0)	parameter lists are OK
Comment					
FUNCTION WORK SPACE					
-----					
End of Comment					
1102	(44E)	CHARACTER	4	COMINCON	SOURCE CONSOLE UCMID
1106	(452)	CHARACTER	1	COMAUTH	SOURCE CONSOLE AUTHORITY
1107	(453)	CHARACTER	8	COMACEID	AUTOMATIC COMMAND ELEMENT ID

## \$COMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1116	(45C)	SIGNED	4	COMJROUT (0)	JOB QUEUING ROUTE CODE FROM CMB (BINARY)
1116	(45C)	SIGNED	2	COMJNOD	NODE ID
1118	(45E)	SIGNED	2	COMJRMT	REMOTE ID
1120	(460)	SIGNED	4	COMJSCAT	SAVE AREA FOR \$CFJSCAN CAT
1124	(464)	SIGNED	4	COMWORK	SINGLE PRECISION WORK AREA
1128	(468)	DBL WORD	8	COMDWORK	DOUBLE PRECISION WORK AREA
1136	(470)	DBL WORD	8	COMWREGS (2)	REGISTER SAVE AREA
1152	(480)	SIGNED	4	COMFWORK	FULL WORD WORK AREA
1156	(484)	ADDRESS	1	COMBWORK	ONE BYTE WORK AREA
1157	(485)	BITSTRING	1	COMGFLG1	GENERAL FLAG BYTE
		1... ....		COMG1APO	"B'10000000" APOSTROPHE SWITCH IS ON
		.1.. ....		COMG1REQ	"B'01000000" CMB MUST BE REQUEUED
		..1. ....		COMG1PAR	"B'00100000" CLOSING PAREN SWITCH IS ON
		...1 ....		COMG1CON	"B'00010000" MASTER CONSOLE RETRY BIT
		.... 1...		COMG1SSI	"B'00001000" SSI FORMATTED COMMAND
		.... .1..		COMG1\$MN	"B'00000100" \$M/\$N command found
		.... ..1.		COMG1UAC	"B'00000010" Unauthorized console
		.... ...1		COMG1SJR	"B'00000001" A single job being processed by a job list command
1158	(486)	BITSTRING	1	COMGFLG2	Command level general flag

Comment

CPOFLAG and definitions for \$PQ and \$OQ commands

End of Comment

1158	(486)	X'486'	0	CPOFLAG	"COMGFLG2"
		1... ....		CPOFCLS	"B'10000000" FLAG FOR CLASS STRING EXISTS
		.1.. ....		CPOFCNCL	"B'01000000" FLAG FOR CANCEL HELD DS
		..1. ....		CPOFRTE	"B'00100000" FLAG FOR RE-ROUTING DESIRED
		...1 ....		CPOPROT	"B'00010000" PROTECTED keyword given
		.... 1...		CPOFALL	"B'00001000" FLAG FOR 'ALL' OPERAND
		.... .1..		CPOFAGHR	"B'00000100" FLAG FOR CUT OFF AGE/HOURS
		.... ..1.		CPOFQR	"B'00000010" Q= and/or R= was specified
		.... ...1		CPOFNJO	"B'00000001" Flag destid on Network Q
1159	(487)	BITSTRING	1	COMPWORK	For "PROTECTED" keyword use
1160	(488)	SIGNED	2	COMLCCA	FLAGS AND AREA OF 'L='
		.... ..11		COMFFLGJ	"B'00000011" BATCH JOB TYPE WHEN ZEROES
		.... ...1		COMFFLGS	"B'00000001" STC JOB TYPE
		.... ..1.		COMFFLGT	"B'00000010" TSU JOB TYPE
1162	(48A)	CHARACTER	10	COMCONNM	SYMBOLIC CONSOLE NAME AND OUT-OF-LINE AREA

Comment

COMMAND EDIT ROUTINE FLAGS

End of Comment

1162	(48A)	X'466'	0	COMLFLG	"COMWORK+2" FLAG BYTE
1162	(48A)	X'1'	0	COMLFLGR	"1" UCM CMD FROM REMOTE SYSTEM
1162	(48A)	X'2'	0	COMLFLGC	"2" CONSOLE HAS BEEN SPECIFIED
1162	(48A)	X'4'	0	COMLFLGA	"4" AREA HAS BEEN SPECIFIED

Comment

COMMAND INPUT PASSED TO \$SCAN

End of Comment

1172	(494)	CHARACTER	132	COMINPUT	COMMAND INPUT PASSED TO \$SCAN
1304	(518)	SIGNED	4	COMSDLCT	COUNT OF \$SCAN DISPLAY LINES
1308	(51C)	SIGNED	4	COMTDLCT	Count of total lines displayed for commands partially implemented via \$SCAN
1312	(520)	ADDRESS	4	COMSTAB	Address of \$SCANTAB related to command



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
COMMAND TEXT AREA					
End of Comment					
1316	(524)	CHARACTER	2	COMMID	MESSAGE ID
1316	(524)	X'524'	0	COMLNGLTH	"COMMID" Command length
1318	(526)	CHARACTER	1024	COMMAND	COMMAND AND MESSAGE AREA
1318	(526)	X'527'	0	COMVERB	"COMMAND+1" LOCATION OF COMMAND VERB
1318	(526)	X'528'	0	COMOPRND	"COMMAND+2" LOCATION OF FIRST OPERAND
1318	(526)	X'5EE'	0	COMSAFL	"COMMAND+200,1" Length and command image
1318	(526)	X'5EF'	0	COMSAFC	"COMSAFL+1,150" for \$SEAS CMDAUTH call
2342	(926)	CHARACTER	8	COMJNAME	MESSAGE AREA EXTENSION/JOBNAME
2350	(92E)	CHARACTER	132	CURRCMD	Mirror of Command
2482	(9B2)	SIGNED	2	COMMNDLN	Length of data in CURRCMD
2484	(9B4)	ADDRESS	4	COMXWCA	Address of CXWC DSECT
2488	(9B8)	ADDRESS	4	COMLJBRG	Ptr to last job range

Comment					
OPERAND POINTER AREA					
End of Comment					
2492	(9BC)	SIGNED	4	COMPNTER (20)	AREA FOR OPERAND POINTERS
2492	(9BC)	X'50'	0	COMPNTRL	**COMPNTER" Length of operand ptr area
2572	(A0C)	ADDRESS	2	(0)	Force assembly error IF AREA TOO SMALL FOR USE BY \$DM
2572	(A0C)	SIGNED	4	COMNULOP	NULL OPERAND
2576	(A10)	BITSTRING	20	COMPINDX	COMPNTER/CDUTABLE INDEX BYTES
2596	(A24)	SIGNED	4	(0)	
2596	(A24)	SIGNED	4	COMINXSV	SAVE AREA FOR COMPINDX POINTER
2600	(A28)	SIGNED	4	COMOPFLG	Operand flags

Comment

-----  
 COMREGSV is used by HASPCOMM for a \$SCAND buffer when it calls SCAN. 64 bytes are used.  
 -----

End of Comment					
2604	(A2C)	BITSTRING	248	COMREGSV	REGISTER SAVE/WORK AREA

Comment

-----  
 COFRTR work area for route code ranges  
 -----

End of Comment					
2852	(B24)	BITSTRING	18	COMRWORK	WORK AREA FOR SUBMITTING EBCDIC ROUTES TO \$DEST/USERDEST
2870	(B36)	BITSTRING	1	COMRFLG1	FLAG BYTE FOR ROUTECODES
		.1.. ....		COMR1GNC	"B'01000000" Indicates the userid in COMUWORK contains a least one generic character
		..1. ....		COMR1UNN	"B'00100000" INDICATES WHETHER OR NOT SPECIAL LOCAL ROUTING IS INCLUDED IN RANGE
		...1 ....		COMR1RAL	"B'00010000" Indicates that route code ranges are allowed
		.... 1..		COMR1DFT	"B'00001000" INDICATES COMREGSV+2 IS TO BE USED FOR THE DEFAULT NODE INSTEAD OF COMJNOD
		.... .1..		COMR1GEN	"B'00000100" INDICATES WHETHER OR NOT A GEN. USERID IS ALLOWED
		.... ..1.		COMR1GNA	"B'00000010" Indicates that a generic userid was specified, implicitly or explicitly on first dest in range

# \$COMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2871	(B37)	BITSTRING .... ...1	1	COMR1RPR	"B'00000001" INDICATES ROUTECODE CONTAINED (RESERVED FOR FUTURE USE
2872	(B38)	CHARACTER	8	COMUWORK	HI-END USERID FROM \$DEST
2872	(B38)	X'0'	0	COMNODE	"0,2,C'H" Offset/length of node
2872	(B38)	X'2'	0	COMRMT	"2,2,C'H" Offset/length of rmt
2872	(B38)	X'4'	0	COMUSEID	"4,8,C'D" Offset/length of userid
2872	(B38)	X'4'	0	COMNRLEN	"L'COMNODE+L'COMRMT" Length of node+remote
2872	(B38)	X'8'	0	COMUCNT	"8" COUNTER FOR EXAMINING GENERIC USERIDS
2880	(B40)	BITSTRING	1		Reserved
Comment					
-----					
More flag bytes					
-----					
End of Comment					
2881	(B41)	BITSTRING 1... ....	1	COMSFLG1 COMS1WT	Flag byte for specific cmds "B'10000000" Waited 1 sec in \$PJES2 for system to quiesce
Comment					
-----					
Next 2 bits used for Joblist commands					
-----					
End of Comment					
		.1.. ....		COMS1JQ	"B'01000000" JOBQ specified as object
		..1. ....		COMS1JST	"B'00100000" J, S, or T specified
		...1 ....		COMS1HIT	"B'00010000" JOE found flag
		.... 1..		COMS1RTS	"B'00001000" \$T RMT switched BSC<-->SNA
		.... .1..		COMS1MAX	"B'00000100" Maximum hi range specified
		.... ..1.		COMS1FLT	"B'00000010" Job queue filter required
		.... ...1		COMS1RBD	"B'00000001" Include rebuild queue in job scan
2882	(B42)	BITSTRING	2		Reserved for future use
Comment					
-----					
\$CFSEL macro/service routine communication area					
-----					
End of Comment					
2884	(B44)	ADDRESS	4	COMSCOTE	Address of current entry in operand pointer table
2888	(B48)	ADDRESS	4	COMSRTNA	Address of selected routine (or zero if no match)
2892	(B4C)	SIGNED	4	COMSSLEN	Length of matching string (or zero if no match)
2896	(B50)	SIGNED	4	COMSRLEN	Residual operand length (or input operand length if no match)
Comment					
-----					
Area for specifications for filter type operands					
-----					
End of Comment					
2900	(B54)	CHARACTER	8	COMJNAM	STORE OUTPUT JOE NAME
2908	(B5C)	SIGNED	2	COMJID1	STORE OUTPUT JOE 1ST ID
2910	(B5E)	SIGNED	2	COMJID2	STORE OUTPUT JOE 2ND ID
Comment					
-----					
\$TO AND \$R WORK AREA FOR JOES					
-----					
End of Comment					

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2912	(B60)	SIGNED	4	(0)	Word alignment
2912	(B60)	BITSTRING	104	COJWORK	Work-JOE area for \$TO/\$R
3016	(BC8)	BITSTRING	76	COCHAR	Char-JOE area for \$TO/\$R
3092	(C14)	BITSTRING	1	COMLTLFLG	Flag byte for \$L and \$TO
		1... ..		COMLTMAX	"B'10000000" DISPMAX reached for current set of \$HAS686 msgs

Comment

Field needed for \$CFJSCAN Processing

End of Comment

3093	(C15)	BITSTRING	2		Reserved for future use
3095	(C17)	BITSTRING	1	COMQUE	Requested Queue

Comment

Work area to hold system affinity mask for commands that allow multiple system affinities to be specified.  
eg. \$DA, \$T ALL, \$T RDR/I, \$T OFF(n).JR/JT \$T J/S/T

End of Comment

3096	(C18)	BITSTRING	4	COMAFMSK	System affinity mask
3100	(C1C)	BITSTRING	1	COMOSAFM	Old system affinity mask

Comment

ENQ/DEQ parameter lists

MACRO-DATE = 01/30/01

End of Comment

3104	(C20)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
3104	(C20)	X'C20'	0	COMRDRNQ	*** X02113
3104	(C20)	ADDRESS	1		PELLAST flag byte. X02113
3105	(C21)	ADDRESS	1		PELMILEN - RNAME length.
3106	(C22)	BITSTRING	1		

Comment

PELFLAG - flag byte 2.

End of Comment

3107	(C23)	ADDRESS	1		PELRET - return code byte.
3108	(C24)	ADDRESS	4		QNAME ADDRESS
3112	(C28)	ADDRESS	4		RNAME ADDRESS
3112	(C28)	X'C'	0	COMENQL	**-COMRDRNQ' Length of ENQ

Comment

MACRO-DATE = 01/17/01

End of Comment

3116	(C2C)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
3116	(C2C)	X'C2C'	0	COMRDRDQ	*** X02113
3116	(C2C)	ADDRESS	1		PELLAST flag byte. X02113
3117	(C2D)	ADDRESS	1		PELMILEN - RNAME length.
3118	(C2E)	BITSTRING	1		

# \$COMWORK Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
PELFLAG - flag byte 2.					
End of Comment					
3119	(C2F)	ADDRESS	1		PELRET - return code byte.
3120	(C30)	ADDRESS	4		QNAME ADDRESS
3124	(C34)	ADDRESS	4		RNAME ADDRESS
3124	(C34)	X'C'	0	COMDEQL	**_COMRDRDQ" Length of DEQ
3124	(C34)	X'B48'	0	COMMAXL	**_PCEWORK" Maximum length of COMWORK

Comment

-----  
 Beginning of remappings of existing areas. Add all new fields that are to be in the "base" \$COMWORK mapping before label COMMAXL.  
 -----

### SUBSYSTEM-INDEPENDENT (SSI) FORMATTED COMMAND AREA

End of Comment					
2604	(A2C)	BITSTRING	40	COMFCMDA (0)	FORMATTED COMMAND AREA
2604	(A2C)	CHARACTER	1	COMFOP	FORMATTED COMMAND OPTION CODE
2605	(A2D)	CHARACTER	1	COMFFLG	FORMATTED COMMAND FLAG BYTE
2606	(A2E)	SIGNED	2	COMFJID	JOB IDENTIFICATION
2608	(A30)	CHARACTER	8	COMFORGN	ORIGINATING NODE NAME
2616	(A38)	CHARACTER	8	COMFJNAM	JOB NAME
2624	(A40)	CHARACTER	8	COMFD	DESTINATION NODE NAME (ROUTE CMD)
2632	(A48)	CHARACTER	8	COMFR	REMOTE NAME (ROUTE CMD)
2640	(A50)	SIGNED	4	COMFJNO	Job number identifier
2640	(A50)	X'A54'	0	COMFEND	*** END OF FORMATTED COMMAND AREA
2640	(A50)	X'28'	0	COMFL	**_COMFOP" LENGTH OF FORMATTED CMD AREA
2644	(A54)	ADDRESS	2	(0)	Ensure area fits within COMREGSV

Comment

### SSI FORMATTED CMD WORKAREA (USED BY HASPCFCP)

End of Comment					
2492	(9BC)	CHARACTER	80	COSIWORK (0)	
2492	(9BC)	BITSTRING	40	COSICMDA (0)	FORMATTED COMMAND AREA
2492	(9BC)	CHARACTER	1	COSIOP	FORMATTED COMMAND OPTION CODE
2493	(9BD)	CHARACTER	1	COSIFLG	FLAG BYTE (SEE COMFFLG DEF.)
2494	(9BE)	SIGNED	2	COSIJID	JOB IDENTIFICATION
2496	(9C0)	CHARACTER	8	COSIORGN	ORIGINATING NODE NAME
2504	(9C8)	CHARACTER	8	COSIJNAM	JOB NAME
2512	(9D0)	CHARACTER	8	COSID	DESTINATION NODE NAME (ROUTE CMD)
2520	(9D8)	CHARACTER	8	COSIR	REMOTE NAME (ROUTE CMD)
2528	(9E0)	SIGNED	4	COSIJNO	Job number identifier
2528	(9E0)	X'9E4'	0	COSIEND	*** END OF FORMATTED COMMAND AREA
2528	(9E0)	X'28'	0	COSIL	**_COSICMDA" LENGTH OF FORMATTED CMD AREA
2532	(9E4)	SIGNED	4	COSILINK	USED TO SAVE LINK REGISTER
2536	(9E8)	SIGNED	4	COSIJQER	USED TO SAVE PTR TO JQE
2540	(9EC)	SIGNED	4	COSISAV0	USED TO SAVE R0 CONTENTS
2544	(9F0)	SIGNED	2	COSINOD#	ORIGINATING NODE # (BINARY)
2546	(9F2)	CHARACTER	1	COSIEFOP	EFFECTIVE CMD OPTION CODE
2547	(9F3)	BITSTRING	1		RESERVED FOR FUTURE USE
2547	(9F3)	X'38'	0	COMSIL	**_COSIWORK" Length of this remapping
2548	(9F4)	ADDRESS	2	(0)	Ensure area fits within COMPNTER

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
-----	-----	------------	-----	------------	-------------

Comment

COMFOP DEFINITIONS

End of Comment

2548	(9F4)	X'1'	0	COMFOPD	"1" DISPLAY JOB COMMAND (\$GD)
2548	(9F4)	X'2'	0	COMFOPC	"2" CANCEL JOB COMMAND (\$GC)
2548	(9F4)	X'3'	0	COMFOPA	"3" RELEASE JOB COMMAND (\$GA)
2548	(9F4)	X'4'	0	COMFOPH	"4" HOLD JOB COMMAND (\$GH)
2548	(9F4)	X'5'	0	COMFOPR	"5" ROUTE JOB COMMAND (\$GR)

Comment

COMFFLG DEFINITIONS

End of Comment

		1... ....		COMFFLGO	"B'10000000" A) FOR COMFOPC (\$GC) COMMAND - CANCEL OUTPUT AS OPPOSED TO EXECUTION B) FOR COMFOPR (\$GR) COMMAND - ROUTE OUTPUT AS OPPOSED TO EXECUTION
		.1.. ....		COMFFLGD	"B'01000000" CANCEL EXECUTION WITH A DUMP
		..1. ....		COMFFLGN	"B'00100000" COSIFJNO is job number

Comment

\$R COMMAND WORK AREA

End of Comment

2604	(A2C)	SIGNED	4	CRXWORKA (0)	\$R COMMAND WORK AREA
2604	(A2C)	SIGNED	4	CRXOLDRT	SAVE AREA FOR OLD ROUTECDE
2608	(A30)	SIGNED	4	CRXNEWRT	SAVE AREA FOR NEW ROUTECDE
2612	(A34)	SIGNED	4	CRXCLSPT	SAVE AREA FOR CLASS PTR
2616	(A38)	SIGNED	4	CRXJBNUM	SAVE AREA FOR JOB NUMBER
2620	(A3C)	BITSTRING	1	CRXOUTD	OUTDISP PROCESSING FLAGS
		1... ....		CRXODLST	"B'10000000" PARENTHESIZED OPERAND LIST CURRENTLY BEING PROCESSED
2620	(A3C)	X'8'	0	CRXODW	"\$ODWRITE" PROCESS OUTDISP=WRITE
2620	(A3C)	X'4'	0	CRXODH	"\$ODHOLD" PROCESS OUTDISP=HOLD
2620	(A3C)	X'2'	0	CRXODK	"\$ODKEEP" PROCESS OUTDISP=KEEP
2620	(A3C)	X'1'	0	CRXODL	"\$ODLEAVE" PROCESS OUTDISP=LEAVE
2620	(A3C)	X'F'	0	CRXODANY	"\$ODANY" ANY OUTDISP SETTINGS
2621	(A3D)	BITSTRING	1	CRXFLAG1	\$R command flag byte
		1... ....		CRX1GENC	"B'10000000" CRXOLDUS contains generic characters ('*' or '?')
2622	(A3E)	BITSTRING	37	CRXCLASL	Q= CLASS LIST (36 + BLANK)
2660	(A64)	SIGNED	4	(0)	FULL WORD ALIGNMENT
2660	(A64)	CHARACTER	8	CRXOLDUS	SAVE AREA FOR OLD ROUTE CD
2668	(A6C)	CHARACTER	8	CRXNEWUS	SAVE AREA FOR NEW ROUTE CD
2676	(A74)	CHARACTER	8	CRXNEWND	SAVE AREA FOR NEW NODE NAME
2676	(A74)	X'50'	0	CRXLEN	"*-CRXWORKA" LENGTH OF \$R WORK AREA
2684	(A7C)	ADDRESS	2	(0)	CHECK FOR OVERLAP

Comment

MESSAGE TEXT FOR PRMODE SYSTEM TABLE ERROR

End of Comment

1318	(526)	CHARACTER	66	CTPRTEXT	PRMODE TABLE MESSAGE
1384	(568)	ADDRESS	2	(0)	Generate assembly error if L'CTPRTEXT exceeds L'COMMAND

# \$COMWORK Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Flag byte for PREJOE, PREJQE and PSTCFVQE					
End of Comment					
2704	(A90)	BITSTRING	1	CRJFLAG	Flags for JOE/JQE commands
2704	(A90)	X'65'	0	CRJLEN	"*-COMREGSV" Length of remapped area
2706	(A92)	ADDRESS	2	(0)	Check for overlap
Comment					
Flag definitions for CRJFLAG					
End of Comment					
		1... ..		CRJFLGCF	"B'10000000" PSTCFVQE has been invoked
Comment					
DISPLAY UNIT FLAG DEFINITIONS					
End of Comment					
2706	(A92)	X'A28'	0	CDUFLAG1	"COMOPFLG" CDUFLAG1 DEFINITION
		1... ..		CDUFLGRP	"B'10000000" GROUP DISPLAY REQUEST
		11.. ..		CDUFLTYP	"B'11000000" TYPE-GROUP DISPLAY REQ
		..1. ....		CDUFLRMT	"B'00100000" REMOTE SUB-DISPLAY REQ
		...1 ....		CDUFLRAT	"B'00010000" RAT BASED DISPLAY REQ
		.... 1...		CDUFLONE	"B'00001000" SINGLE DCT DISPLAY REQ
		.... .1..		CDUFLCLS	"B'00000100" DCT CLASS SKIP REQUEST
		.... ..1.		CDUFLLU	"B'00000010" SNA LUNAME SUBDISPLAY
		.... ...1		CDUFLMOD	"B'00000001" MODIFIER OPERAND ONLY
2706	(A92)	X'A29'	0	CDUDEVTP	"COMOPFLG+1" TYPE-GROUP DCT TYPE
2706	(A92)	X'A2A'	0	CDUMASK	"COMOPFLG+2" BRANCH MASK VALUE
2706	(A92)	X'A2B'	0	CDUFLAG2	"COMOPFLG+3" CDUFLAG2 DEFINITION
		1... ..		CDUFLSUB	"B'10000000" RMT SUB-DSPLY IN PROGR
		..1. ....		CDUFLONG	"B'01000000" FORCE LONG DISPLAY
		..1. ....		CDUFLFND	"B'00100000" DEVICE FOUND IN DSPLY
		...1 ....		CDUFLOPR	"B'00010000" NON-MODIFIER OPERANDS
		.... 1...		CDUFLACT	"B'00001000" ACTIVE ONLY MODIFIER
		.... .1..		CDUFLSTR	"B'00000100" STARTED ONLY MODIFIER
		.... ..1.		CDUFLSHT	"B'00000010" SHORT MODIFIER
		.... ...1		CDUFXSUB	"B'00000001" XFR SUB-DISPLAY
2706	(A92)	X'A2C'	0	CDUDEVN	"COMREGSV,12" Device name for \$DU
Comment					
-----					
Definitions for HASP608 job information message					
OPT= operand of the \$CFJMSG macro.					
-----					
End of Comment					
		.... ..1		COFN	"X'01" DISPLAY NORMAL JOBS
		.... ..1.		COFS	"X'02" DISPLAY SYSTEM JOBS
		.... ..1..		COFT	"X'04" DISPLAY LOGON JOBS
2706	(A92)	X'7'	0	COFJ	"COFN+COFS+COFT" DISPLAY ALL JOBS
		.... 1...		COFX	"X'08" DISPLAY JOBS IN EXECUTION
		...1 ....		COFD	"X'10" DISPLAY JOBS ON DEVICES
2706	(A92)	X'1F'	0	COFA	"COFJ+COFX+COFD" DISPLAY ACTIVE JOBS
		..1. ....		COFI	"X'20" DISPLAY PRE-XEQ QUEUED JOBS
		..1. ....		COFO	"X'40" DISPLAY POST-XEQ QUEUED JOBS
		1... ..		COFP	"X'80" DISPLAY QUEUED FOR PRT/PUN
2706	(A92)	X'E7'	0	COFQ	"COFJ+COFI+COFO+COFP" DISPLAY QUEUED JOBS

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2706	(A92)	X'FF'	0	COFU	"COFJ+COFI+COFO+COFX+COFP+COFD" DISPLAY UNCONDITIONAL

Comment

Definitions for HASP608 job information message  
OPT2= operand of the \$CFJMSG macro.

End of Comment

....	...1			COFLNGFG	"B'00000001" LONG OPERAND SPECIFIED FLAG
....	..1.			COFPREFX	"B'00000010" SPOOL PREFIX ALREADY PRINTED

Comment

Define the COMMAND work area for use building the job related display messages.

Define the fixed message start.

End of Comment

2706	(A92)	X'526'	0	COFJOB	"COMMAND,3" TEXT 'JOB', 'STC', OR 'TSU'
2706	(A92)	X'529'	0	COFJNO	"COFJOB+3,5" JOB NUMBER WITH LEADING BLANK
2706	(A92)	X'52F'	0	COFJNAME	"COFJNO+6,8" JOB NAME

Comment

Define the 2nd field - queue and/or activity info.

End of Comment

2706	(A92)	X'538'	0	COFQUE	"COFJNAME+9,8" TEXT 'AWAITING'
2706	(A92)	X'908'	0	COFOPT	"COMMAND+L'COMMAND-30,1" OPTION SPECIFIED
2706	(A92)	X'909'	0	COFNULL	"COFOPT+1,1" Place holder for COFAFF
2706	(A92)	X'90A'	0	COFOPT2	"COFNULL+1,1" 2ND OPTION FLAG
2706	(A92)	X'90B'	0	COFSECF	"COFOPT2+1,4" SECURITY FIELD FOR \$WTO'S
2706	(A92)	X'90F'	0	COFLNGTH	"COFSECF+4,2" LENGTH OF MSG
2706	(A92)	X'3EB'	0	COFSIZE	"COFLNGTH+L'COFLNGTH-COFJOB" Size of work area
2706	(A92)	CHARACTER	1	(0)	Ensure work area fits within COMMAND field
2706	(A92)	X'C1C'	0	COFAFF	"COMOSAFM" System affinity mask
2706	(A92)	X'C18'	0	COFAFWRK	"COMAFMSK" Affinity mask work area

Comment

Determine maximum length of the COMM PCE work area by ORGing back to the start of the variable section (PCEWORK) and accounting for the largest definition of \$COMWORK.

NOTE: all new fields should be added BEFORE the label COMMAXL.

End of Comment

240	(F0)	BITSTRING	2888		Account for largest section
3128	(C38)	SIGNED	4	(0)	Ensure full-word align
3128	(C38)	X'B48'	0	COMPCEWS	**-PCEWORK" LENGTH OF WORK AREA

## \$COMWORK Cross Reference

### \$COMWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CDUDEVN	A92	A2C	COMFD	A40	
CDUDEVTP	A92	A29	COMFEND	A50	A54
CDUFLACT	A92	8	COMFFLG	A2D	
CDUFLAG1	A92	A28	COMFFLGD	9F4	40
CDUFLAG2	A92	A2B	COMFFLGJ	488	3
CDUFLCLS	A92	4	COMFFLGN	9F4	20
CDUFLFND	A92	20	COMFFLGO	9F4	80
CDUFLGRP	A92	80	COMFFLGS	488	1
CDUFLLU	A92	2	COMFFLGT	488	2
CDUFLMOD	A92	1	COMFJID	A2E	
CDUFLONE	A92	8	COMFJNAM	A38	
CDUFLONG	A92	40	COMFJNO	A50	
CDUFLOPR	A92	10	COMFL	A50	28
CDUFLRAT	A92	10	COMFLAG	424	
CDUFLRMT	A92	20	COMFLAG2	3E4	
CDUFLSHT	A92	2	COMFLAG3	42B	
CDUFLSTR	A92	4	COMFOP	A2C	
CDUFLSUB	A92	80	COMFOPA	9F4	3
CDUFLTYP	A92	C0	COMFOPC	9F4	2
CDUFXSUB	A92	1	COMFOPD	9F4	1
CDUMASK	A92	A2A	COMFOPH	9F4	4
COCHAR	BC8		COMFOPR	9F4	5
COFA	A92	1F	COMFORGN	A30	
COFAFF	A92	C1C	COMFR	A48	
COFAFWRK	A92	C18	COMFWORK	480	
COFD	A92	10	COMGFLG1	485	
COFI	A92	20	COMGFLG2	486	
COFJ	A92	7	COMG1\$MN	485	4
COFJNAME	A92	52F	COMG1APO	485	80
COFJNO	A92	529	COMG1CON	485	10
COFJOB	A92	526	COMG1PAR	485	20
COFLNGFG	A92	1	COMG1REQ	485	40
COFLNGTH	A92	90F	COMG1SJR	485	1
COFN	A92	1	COMG1SSI	485	8
COFNULL	A92	909	COMG1UAC	485	2
COFO	A92	40	COMINCON	44E	
COFOPT	A92	908	COMINPUT	494	
COFOPT2	A92	90A	COMINXSV	A24	
COFP	A92	80	COMJID1	B5C	
COFPREFX	A92	2	COMJID2	B5E	
COFQ	A92	E7	COMJNAM	B54	
COFQUE	A92	538	COMJNAME	926	
COFS	A92	2	COMJNOD	45C	
COFSECF	A92	90B	COMJRMT	45E	
COFSIZE	A92	3EB	COMJRROUT	45C	
COFT	A92	4	COMJSCAT	460	
COFU	A92	FF	COMLCCA	488	
COFX	A92	8	COMLEVEL	425	
COJWORK	B60		COMLFLG	48A	466
COMACEID	453		COMLFLGA	48A	4
COMAFMSK	C18		COMLFLGC	48A	2
COMAUTH	452		COMLFLGR	48A	1
COMBWORK	484		COMLINET	436	
COMCART	42C		COMLJBRG	9B8	
COMCONNM	48A		COMLNGTH	524	524
COMDEQL	C34	C	COMLTFLG	C14	
COMDESC	43C		COMLTMAX	C14	80
COMDOMID	440		COMMAND	526	
COMDWORK	468		COMMAXL	C34	B48
COMENQL	C28	C	COMMID	524	
COMENTBG	3EC		COMML	427	
COMework	464		COMMLTE	3F4	
COMFCMDA	A2C		COMMLTEA	3F0	



Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
COMMNDLN	9B2		COMWTOPL	424	
COMNODE	B38	0	COMXWCA	9B4	
COMNRLEN	B38	4	COSICMDA	9BC	
COMNULOP	A0C		COSID	9D0	
COMOPFLG	A28		COSIEFOP	9F2	
COMOPRND	526	528	COSIEND	9E0	9E4
COMOSAFM	C1C		COSIFLG	9BD	
COMPCEWS	C38	B48	COSIJID	9BE	
COMPINDX	A10		COSIJNAM	9C8	
COMPNTER	9BC		COSIJNO	9E0	
COMPNTRL	9BC	50	COSIJQER	9E8	
COMPWORK	487		COSIL	9E0	28
COMPXEQ	3E8		COSILINK	9E4	
COMQUE	C17		COSINOD#	9F0	
COMRRDRQ	C2C	C2C	COSIOP	9BC	
COMRRDRNQ	C20	C20	COSIORGN	9C0	
COMREGSV	A2C		COSIR	9D8	
COMRFLG1	B36		COSISAV0	9EC	
COMRMT	444		COSIWORK	9BC	
COMRMTE	B38	2	CPOFAGHR	486	4
COMROUT	43E		CPOFALL	486	8
COMRWORK	B24		CPOFCLS	486	80
COMR1DFT	B36	8	CPOFCNCL	486	40
COMR1GEN	B36	4	CPOFLAG	486	486
COMR1GNA	B36	2	CPOFNJO	486	1
COMR1GNC	B36	40	CPOFQR	486	2
COMR1RAL	B36	10	CPOFRTE	486	20
COMR1RPR	B36	1	CPOPROT	486	10
COMR1UNN	B36	20	CRJFLAG	A90	
COMSAFC	526	5EF	CRJFLGCF	A92	80
COMSAFL	526	5EE	CRJLEN	A90	65
COMSCOTE	B44		CRXCLASL	A3E	
COMSDLCT	518		CRXCLSPT	A34	
COMSECT	390		CRXFLAG1	A3D	
COMSFLG1	B41		CRXJBNUM	A38	
COMSIL	9F3	38	CRXLEN	A74	50
COMSPMSK	370		CRXNEWND	A74	
COMSQD	3E0		CRXNEWRT	A30	
COMSRLEN	B50		CRXNEWUS	A6C	
COMSRTNA	B48		CRXODANY	A3C	F
COMSSLEN	B4C		CRXODH	A3C	4
COMSTAB	520		CRXODK	A3C	2
COMS1FLT	B41	2	CRXODL	A3C	1
COMS1HIT	B41	10	CRXODLST	A3C	80
COMS1JQ	B41	40	CRXODW	A3C	8
COMS1JST	B41	20	CRXOLDRT	A2C	
COMS1MAX	B41	4	CRXOLDUS	A64	
COMS1RBD	B41	1	CRXOUTD	A3C	
COMS1RTS	B41	8	CRXWORKA	A2C	
COMS1WT	B41	80	CRX1GENC	A3D	80
COMTDLCT	51C		CTPRTEXT	526	
COMTO	428		CURRCMD	92E	
COMTONOD	428		PCE	0	
COMTOQUL	42A				
COMTYPE	426				
COMUCM	434				
COMUCMA	435				
COMUCMID	438				
COMUCNT	B38	8			
COMUSEID	B38	4			
COMUSER	446				
COMUWORK	B38				
COMVERB	526	527			
COMWREGS	470				
COMWTOLG	446	2A			



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**\$CPCWORK Programming Interface information**

Programming Interface information

\$CPCWORK

End of Programming Interface information

## \$CPCWORK Heading Information

**Common Name:** CPOOL Query Cell Work Area Mapping  
**Macro ID:** \$CPCWORK  
**DSECT Name:** CPCWPARAM  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: any  
 Key: 1  
 Residency: Extended private in any address space using JES2 services. Virtual and real storage can be anywhere.  
**Size:** See CPCWSIZE  
**Created by:** User of the \$CPOOL query cell (QCELL) service  
**Pointed to by:** Register 0 on entry to the CPQCELL service  
**Serialization:** None required  
**Function:** This mapping is used to map over the storage passed by the caller to use \$CPOOL QCELL service. Information is passed back via this storage.

## \$CPCWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CPCWPARAM	, CPOOL QCELL Work Mapping
0	(0)	ADDRESS	4	CPCWCELL	Cell address
4	(4)	SIGNED	4	CPCWSTAT	Cell status
8	(8)	SIGNED	4	CPCWXNUM	Extent number for cell
12	(C)	SIGNED	4	CPCWRC	MVS service return code
16	(10)	SIGNED	4	CPCALET	ALET of cell
16	(10)	X'14'	0	CPCWSIZE	**-CPCWPARAM" Size of parmlist

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**\$CPEBE Programming Interface Information**

Programming Interface Information

**\$CPEBE**

End of Programming Interface Information

## \$CPEBE Heading Information

**Common Name:** Cell Pool Extent Block Element  
**Macro ID:** \$CPEBE  
**DSECT Name:** CPEBE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CPEB  
 Offset: 0  
 Length: 4  
**Storage Attributes:** Subpool: 231  
 Key: 1  
 Residency: Extended private  
**Size:** See CPESIZE  
**Created by:** CPEXPAND Routine in HASCPPOOL  
**Pointed to by:** CPMCPEBE field of the CPMASSTR table.  
 Frequency: One per cell pool extent.  
**Serialization:** None.  
**Function:** The \$CPEBE mapping is used to mapped over storage that contains information on Cell Pool extents.

## \$CPEBE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CPEBE	Cell Pool Extent Block Elem
0	(0)	CHARACTER	4	CPEID	CPEBE Identifier
4	(4)	BITSTRING	1	CPEVRSN	CPEBE Version
4	(4)	X'1'	0	CPEVNUM	"1" Version number
5	(5)	BITSTRING	3		Reserved for future use
8	(8)	ADDRESS	4	CPENEXT	Address of next CPEBE
12	(C)	ADDRESS	4	CPEBBADR	Address of CPEB/Bit map
16	(10)	SIGNED	4	CPEBBSIZ	Size of CPEB/Bit map
20	(14)	ADDRESS	4	CPEXXADD	Address of extent
24	(18)	SIGNED	4	CPEXXSZ	Size of extent
28	(1C)	SIGNED	4	CPEBXNUM	Extent number
32	(20)	SIGNED	4	CPEBMAST	CPMASSTR offset in CPINDEX
32	(20)	X'24'	0	CPESIZE	**_CPEBE" Size of CPEBE element

## \$CPEBE Cross Reference

Name	Hex Offset	Hex Value
CPEBBADR	C	
CPEBBSIZ	10	
CPEBE	0	
CPEBMAST	20	
CPEBXNUM	1C	
CPEID	0	C3D7C5C2
CPENEXT	8	
CPESIZE	20	24
CPEVNUM	4	1
CPEVRSN	4	
CPEXXADD	14	
CPEXXSZ	18	

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## **\$CPINDEX Programming Interface information**

Programming Interface information

**\$CPINDEX**

End of Programming Interface information

## \$CPINDEX Heading Information

**Common Name:** Cell Pool Index table  
**Macro ID:** \$CPINDEX  
**DSECT Name:** CPINDEX  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CPIX  
 Offset: -8 (in the JES2 CSA storage prefix)  
 Length: L'\$CSBID

**Storage Attributes:** Subpool: 229 or 231  
 Key: 1  
 Residency: Extended private in any address space using JES2 services. One copy is located in ECSA. Virtual and real storage can be anywhere.

**Size:** See CPILEN + 8 byte prefix  
**Created by:** CPINIT routine in HASCPOOL  
**Pointed to by:** HXBCPIDX field of the HASXB data area  
 CCTCPIDX field of the HCCT data area

**Serialization:** Compare and Swap logic will be used to insert a \$CPMASTR element in the pre-defined cell types. For the user-defined cell types, a lock for the \$CPINDEX table must be held before entry can be inserted.

**Function:** This table is used to index into the Master Cell Pool Table (\$CPMASTR). It contains index pointers into the \$CPMASTR. Each of the pointer is associated with a Cell Type (BAT, BSC, CB, HASP, NMAP, NSA, NTQ, NAT, PAGE, PP, PROT, PSO, SAPID, SMF, SPXFR, STAC, TJEV, UNPROT, and VTAM). A work cell type can be specified by the caller only in the USER environment. For example, TYPE=ccccc, where ccccc is any alphanumeric character, up to a length of 5 characters.

## \$CPINDEX Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CPINDEX	Cell Pool Index Table
0	(0)	BITSTRING	1	CPIVRSN	CPINDEX Version
0	(0)	X'1'	0	CPIVNUM	"1" Version number
1	(1)	BITSTRING	1	CPILOCK	CPINDEX lock
2	(2)	BITSTRING	1	CPIFLAG1	Flag 1
		1... ....		CPIEMPTY	"B'10000000" Empty entry in user area
		.1.. ....		CPI1CSA	"B'01000000" CSA CPINDEX
3	(3)	BITSTRING	1	CPIFLAG2	Recovery footprints
4	(4)	SIGNED	4	CPISTART (0)	Start of CPLTABs
4	(4)	ADDRESS	4	CPIBAT	BAT CPMASSTR addr, location (BELOW,ANY)
4	(4)	X'4'	0	CPIBAT_C	"CPIBAT,4,C'A" BAT Common pool equate
8	(8)	ADDRESS	4	CPIBSC	BSC CPMASSTR addr, subpool BSCPOOL
12	(C)	ADDRESS	4	CPICB	CB CPMASSTR addr, subpool CBPOOL
16	(10)	ADDRESS	4	CPICMB	CMB CPMASSTR addr, subpool CMBPOOL
20	(14)	ADDRESS	4	CPIEVT	EVT CPMASSTR addr, location CSA
20	(14)	X'14'	0	CPIEVT_C	"CPIEVT,4,C'A" EVT Common pool equate
24	(18)	ADDRESS	4	CPIHASP	HASP CPMASSTR addr, subpool HASPPPOOL
28	(1C)	ADDRESS	4	CPIHEDR	HEDR CPMASSTR addr, subpool HEDRPOOL
32	(20)	ADDRESS	4	CPIICE	ICE CPMASSTR addr, subpool ICEPOOL
36	(24)	ADDRESS	4	CPINAT	NAT CPMASSTR addr, subpool NATPOOL



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
40	(28)	ADDRESS	4	CPIB32K	B32K CPMASSTR addr, subpool B32KPOOL
44	(2C)	ADDRESS	4	CPINMAP	NMAP CPMASSTR addr, subpool NMAPPOOL
48	(30)	ADDRESS	4	CPINSA	NSA CPMASSTR addr, subpool NSAPPOOL
52	(34)	ADDRESS	4	CPINTQ	NTQ CPMASSTR addr, subpool NTQPOOL
56	(38)	ADDRESS	4	CPIPAGE	PAGE CPMASSTR addr, subpool PAGEPOOL
60	(3C)	ADDRESS	4	CPIPP	PP CPMASSTR addr, subpool PPPOOL
64	(40)	ADDRESS	4	CPIPSO	PSO CPMASSTR addr, location DATASPACE
64	(40)	X'40'	0	CPIPSO_C	"CPIPSO,4,C'A" PSO Common pool equate
68	(44)	ADDRESS	4	CPIRNT	RNT CPMASSTR addr, subpool RNTPOOL
72	(48)	ADDRESS	4	CPISAPID	SAPID CPMASSTR addr, location DATASPACE
72	(48)	X'48'	0	CPISAPID_C	"CPISAPID,4,C'A" SAPID Common pool equate
76	(4C)	ADDRESS	4	CPISTAC	STAC CPMASSTR addr, location DATASPACE
76	(4C)	X'4C'	0	CPISTAC_C	"CPISTAC,4,C'A" STAC Common pool equate
80	(50)	ADDRESS	4	CPITJEV	TJEV CPMASSTR addr, location DATASPACE
80	(50)	X'50'	0	CPITJEV_C	"CPITJEV,4,C'A" TJEV Common pool equate
84	(54)	ADDRESS	4	CPISMF	SMF CPMASSTR addr, subpool SMFPOOL
88	(58)	ADDRESS	4	CPITRE	TRE CPMASSTR addr, subpool 230
92	(5C)	ADDRESS	4	CPIVTAM	VTAM CPMASSTR addr, subpool VTAMPOOL
96	(60)	ADDRESS	4	CPIXRQ	XRQ CPMASSTR addr, subpool XRQPOOL
96	(60)	X'60'	0	CPISTEND	** -CPISTART" Size of the CPLTABs
96	(60)	X'64'	0	CPISTD	** -CPINDEX" Size of the standard cell types
96	(60)	X'4'	0	CPIOFLEN	"4" Length of offset field
100	(64)	SIGNED	4	CPIWSTRT (0)	Start of the work cell types
100	(64)	ADDRESS	4	CPIWORK (0)	User-defined CPMASSTR's
100	(64)	X'F94'	0	CPIWLEN	** -CPIWSTRT" Size of the work cell types
100	(64)	X'FF8'	0	CPILEN	"4096-\$CSBPRFX" Size of the CPINDEX table

\$CPINDEX Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CPIBAT	4		CPISTD	60	64
CPIBAT_C	4	4	CPISTEND	60	60
CPIBSC	8		CPITJEV	50	
CPIB32K	28		CPITJEV_C	50	50
CPICB	C		CPITRE	58	
CPICMB	10		CPIVNUM	0	1
CPIEMPTY	2	80	CPIVRSN	0	
CPIEVT	14		CPIVTAM	5C	
CPIEVT_C	14	14	CPIWLEN	64	F94
CPIFLAG1	2		CPIWORK	64	
CPIFLAG2	3		CPIWSTRT	64	
CPIHASP	18		CPIXRQ	60	
CPIHEDR	1C		CPI1CSA	2	40
CPIICE	20				
CPILEN	64	FF8			
CPILOCK	1				
CPINAT	24				
CPINDEX	0				
CPINMAP	2C				
CPINSA	30				
CPINTQ	34				
CPIOFLEN	60	4			
CPIPAGE	38				
CPIPP	3C				
CPIPSO	40				
CPIPSO_C	40	40			
CPIRNT	44				
CPISAPID	48				
CPISAPID_C	48	48			
CPISMF	54				
CPISTAC	4C				
CPISTAC_C	4C	4C			
CPISTART	4				



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**\$CPMASTR Programming Interface information**

Programming Interface information

\$CPMASTR

End of Programming Interface information

## \$CPMASTR Heading Information

**Common Name:** Cell Pool Master Element  
**Macro ID:** \$CPMASTR  
**DSECT Name:** CPMASSTR  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'CPMR'  
 Offset: CPMID-CPMASTR  
 Length: 4

**Storage Attributes:** Subpool: 231  
 Key: 1  
 Residency: Extended private

**Size:** See CPMSIZE

**Created by:** CPBUILD Routine in HASCPOOL  
 (Main Task and User environments)

**Pointed to by:** The addresses of the \$CPINDEX Table

**Serialization:** Compare and Swap logic will be used to insert a CPMASSTR element in the JES2 pre-defined cell types. To insert a user-defined cell type, a lock (CPILOCK) must be obtained before the CPMASSTR element for that type can be inserted.

**Function:** The Cell Pool Master Element contains information on the Cell Pool ID, the size of the cells, the maximum number of cells allowed in this cell pool, etc.  
 See mapping for details.

## \$CPMASTR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CPMASTR	Cell Pool Master Element
0	(0)	CHARACTER	4	CPMID	CPMASTR Identifier
4	(4)	BITSTRING	1	CPMVRSN	CPMASTER Version
4	(4)	X'2'	0	CPMVNUM	"2" Version number
5	(5)	BITSTRING	1	CPMSUBP2	Cell subpool (not JES2 AS)
6	(6)	BITSTRING	1	CPMSUBP	Subpool for storage (set to CPMSUBP2 if build is not done in the JES2 address space).
7	(7)	BITSTRING	1	CPMKEY	Cell Storage Key
8	(8)	SIGNED	4	CPMOFFST	CPINDEX offset for CPMASSTR
12	(C)	CHARACTER	8	CPMTYPE	Cell Type
20	(14)	SIGNED	4	CPMCSIZE	Cell Size
24	(18)	BITSTRING	1	CPMFLAG1	CPMASTR processing flags
		1... ..		CPM1FALL	"B'10000000" FREEMAIN setup storage
		.1.. ..		CPM1ALTP	"B'01000000" Alternate cell pool
		..1. ....		CPM1REAL	"B'00100000" The real CPMASSTR
		...1 ....		CPM1PRIM	"B'00010000" Primary extent allocated
25	(19)	BITSTRING	1	CPMFLAG2	CPMASTR pool attribute flag
		1... ..		CPM2ABOV	"B'10000000" Storage is above
		.1.. ..		CPM2BELO	"B'01000000" Storage is below
		..1. ....		CPM2DSP	"B'00100000" Cell pool in a data space
		...1 ....		CPM2CSA	"B'00010000" Cell pool is in CSA
		.... 1...		CPM2NCLR	"B'00001000" Don't clear cell storage between uses (up to caller to clear)
		.... .1..		CPM2RANY	"B'00000100" Real storage can be above
26	(1A)	BITSTRING	1	CPMFLAG3	CPMASTR data space flags (Flags must be the same as in DSWAIFL2)
		1... ..		CPM3FPRO	"B'10000000" FPROT=YES specified
		.1.. ..		CPM3NPRO	"B'01000000" FPROT=NO specified
		..1. ....		CPM3MSTR	"B'00100000" OWNER=MASTER specified

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		...1 ....		CPM3CURR	"B'00010000" OWNER=CURRENT specified
		.... 1...		CPM3AUX	"B'00001000" OWNER=AUX specified
		.... .1..		CPM3LOCL	"B'00000100" SCOPE=LOCAL specified
		.... ..1.		CPM3ALL	"B'00000010" SCOPE=ALL specified
		.... ...1		CPM3COMM	"B'00000001" SCOPE=COMMON specified
27	(1B)	BITSTRING	1		Reserved for future use
28	(1C)	SIGNED	4	CPMGEND (0)	End of general CPMMASTR
28	(1C)	SIGNED	4	CPMLIMIT	Max limit for num of cell
32	(20)	SIGNED	4	CPMPRMSZ	Primary extent size (cells)
36	(24)	SIGNED	4	CPMSECSZ	Secondary ext size (cells)
36	(24)	X'28'	0	CPMTCBAD	"*-CPMASTR" CPMMASTR portion that maps over CPLTAB
40	(28)	SIGNED	2	CPMLEN	Length of storage area (Includes CPMMASTR and a CPAB that follows)
42	(2A)	SIGNED	2		Reserved for future use
44	(2C)	ADDRESS	4	CPMCPAB	CPAB addr
48	(30)	ADDRESS	4	CPMCPIX	CPINDEX addr
52	(34)	ADDRESS	4	CPMCPEBE	Addr to first CPEBE
56	(38)	ADDRESS	4	CPMTCBAD	TCB Address to use with STORAGE OBTAIN
60	(3C)	SIGNED	4	CPMALLOC	Num of allocated cells

Comment

The following 3 fields are used if the cell pool is in a data space.

End of Comment

64	(40)	ADDRESS	4	CPMDSB	DSB address
72	(48)	DBL WORD	8	CPMDSPOL (0)	+-- Dataspace work storage pool
72	(48)	ADDRESS	4	CPMDSSTR	Addr of available Block of   storage
76	(4C)	SIGNED	4	CPMDSLEN	+-- Length of storage block
76	(4C)	X'40'	0	CPMSCPAB	"64" Size of CPAB
76	(4C)	X'80'	0	CPMSCPEB	"128" Size of CPEB
76	(4C)	X'50'	0	CPMSIZE	"*-CPMASTR" Size of the CPMMASTR

### \$CPMASTR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CPMALLOC	3C		CPMTCBAD	38	
CPMASTR	0		CPMTCBAD	24	28
CPMCPAB	2C		CPMTCBAD	C	
CPMCPEBE	34		CPMTCBAD	4	2
CPMCPIX	30		CPMTCBAD	4	
CPMCSIZE	14		CPMTCBAD	18	40
CPMDSB	40		CPMTCBAD	18	80
CPMDSLEN	4C		CPMTCBAD	18	10
CPMDSPOL	48		CPMTCBAD	18	20
CPMDSSTR	48		CPMTCBAD	19	80
CPMFLAG1	18		CPMTCBAD	19	40
CPMFLAG2	19		CPMTCBAD	19	10
CPMFLAG3	1A		CPMTCBAD	19	20
CPMGEND	1C		CPMTCBAD	19	8
CPMID	0	C3D7D4D9	CPMTCBAD	19	4
CPMKEY	7		CPMTCBAD	1A	2
CPMLEN	28		CPMTCBAD	1A	8
CPMLIMIT	1C		CPMTCBAD	1A	1
CPMOFFST	8		CPMTCBAD	1A	10
CPMPRMSZ	20		CPMTCBAD	1A	80
CPMSCPAB	4C	40	CPMTCBAD	1A	4
CPMSCPEB	4C	80	CPMTCBAD	1A	20
CPMSECSZ	24		CPMTCBAD	1A	40
CPMSIZE	4C	50			
CPMSUBP	6				
CPMSUBP2	5				

## \$CPMASTR Cross Reference

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**\$CPPWORK Programming Interface information**

Programming Interface information

\$CPPWORK

End of Programming Interface information

## \$CPPWORK Heading Information

**Common Name:** CPOOL Query Pool Work Area Mapping  
**Macro ID:** \$CPPWORK  
**DSECT Name:** CPPWPARAM  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: any  
 Key: 1  
 Residency: Extended private in any address space using JES2 services. Virtual and real storage can be anywhere.  
**Size:** See CPPWSIZE  
**Created by:** User of the \$CPOOL query pool (QPOOL) service  
**Pointed to by:** Register 0 on entry to the CPQPOOL service  
**Serialization:** None required  
**Function:** This mapping is used to map over the storage passed by the caller to use \$CPOOL QPOOL service. Information is passed back via this storage.

## \$CPPWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CPPWPARAM	, CPOOL Query Pool Work Area
0	(0)	CHARACTER	8	CPPWUSER	User name or cell type
8	(8)	SIGNED	4	CPPWCSIZ	Cell size
12	(C)	SIGNED	4	CPPWCNUM	Total number of cells
16	(10)	SIGNED	4	CPPWACNM	Number of available cells
20	(14)	SIGNED	4	CPPWNMXT	Number of extents
24	(18)	SIGNED	4	CPPWRC	MVS service return code
28	(1C)	SIGNED	4	CPPWALET	ALET to access pool
28	(1C)	X'20'	0	CPPWSIZE	**CPPWPARAM" Size of parmlist



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**\$CPXWORK Programming Interface information**

Programming Interface information

\$CPXWORK

End of Programming Interface information

## \$CPXWORK Heading Information

**Common Name:** CPOOL Query Extent Work Area Mapping  
**Macro ID:** \$CPXWORK  
**DSECT Name:** CPXWPARAM  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: any  
 Key: 1  
 Residency: Extended private in any address space using JES2 services. Virtual and real storage can be anywhere.  
**Size:** See CPXWSIZE  
**Created by:** Caller of the \$CPOOL query extent (QEXT) service  
**Pointed to by:** Register 0 on entry to the CPQEXT service  
**Serialization:** None required  
**Function:** This mapping is used to map over the storage passed by the caller to use \$CPOOL QEXT service. Information is passed back via this storage.

## \$CPXWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CPXWPARAM	, CPOOL Query Ext Work Area DSECT
0	(0)	SIGNED	4	CPXWEXTN	Extent number
4	(4)	SIGNED	4	CPXWSTAT	Extent status
8	(8)	ADDRESS	4	CPXWCPEB	CPEB addr for this extent
12	(C)	SIGNED	4	CPXWEBLN	Length of CPEB in bytes
16	(10)	ADDRESS	4	CPXWSTOR	Storage address
20	(14)	SIGNED	4	CPXWSTSZ	Storage size
24	(18)	SIGNED	4	CPXWCELL	Total number of cells in ext.
28	(1C)	SIGNED	4	CPXWAVAI	Number of available cells
32	(20)	SIGNED	4	CPXWRC	MVS service return code
32	(20)	X'24'	0	CPXWSIZE	**CPXWPARAM" Size of parmlist

## \$CPXWORK Cross Reference

Name	Hex Offset	Hex Value
CPXWAVAI	1C	
CPXWCELL	18	
CPXWCPEB	8	
CPXWEBLN	C	
CPXWEXTN	0	
CPXWPARAM	0	
CPXWRC	20	
CPXWSIZE	20	24
CPXWSTAT	4	
CPXWSTOR	10	
CPXWSTSZ	14	

## \$CTOKEN Heading Information

**Common Name:** Client Token mapping  
**Macro ID:** \$CTOKEN  
**DSECT Name:** CTOKEN (\$CTOKEN is part of the IAZCTKN DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: See IAZCTKN  
 Key: See IAZCTKN  
 Residency: See IAZCTKN  
**Size:** See IAZCTKN  
**Created by:** See IAZCTKN  
**Pointed to by:** This DSECT maps the field CTKNJESD in the IAZCTKN data area  
**Serialization:** None required  
**Function:** Maps the JES2 dependent portion of the client token (mapped by IAZCTKN). The client token may be returned as a result of a dynamic allocation request, as part of an ENF parameter list or as part of the output from an Extended Status SSI request.  
 The JES2 dependent portion of the client token contains the information that JES2 needs to uniquely identify and locate the data set represented by the client token.

## \$CTOKEN Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CTOKEN	, HASP Client Token DSECT
16	(10)	SIGNED	4	CTK2JOBN	Job number
20	(14)	BITSTRING	4	CTK2JOBK	Job identifier key
24	(18)	SIGNED	4	CTK2DSID	Data set number
28	(1C)	BITSTRING	4	CTK2MTTR	IOT MTTR for data set
32	(20)	CHARACTER	12	CTK2JOEI (0)	JOE Identification block
32	(20)	CHARACTER	8	CTK2JONM	JOE's output group name
40	(28)	SIGNED	2	CTK2JOI1	JOE'S output group 1st id
42	(2A)	SIGNED	2	CTK2JOI2	JOE'S output group 2nd id
44	(2C)	SIGNED	4	CTK2PDBO	Offset of Pddb within IOT
48	(30)	BITSTRING	31		Reserved
79	(4F)	BITSTRING	1	CTK2FLG1	Flag byte
		1... ..		CTK21TCT	"B'10000000" Token represents a data set (Created as a result of a dynamic allocation request)
		.1.. ....		CTK21TJO	"B'01000000" Token represents a JOE rather than a data set
		..1. ....		CTK21TSA	"B'00100000" Token represents a data set (Returned as a result of a SAPI Put/Get Request)
79	(4F)	X'40'	0	CTK2SIZE	**-"CTKNJESD" Length of HASP section
80	(50)	ADDRESS	2	(0)	Generate assembly error if CTK2SIZE exceeds L'CTKNJESD

## \$CTOKEN Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>The following equates provide values for the Bit Map based on which parts of the Client Token are valid to be used in comparisons. Two equates are required to map the Bit Map (each equate maps 32 bits).            CTK2BCT1 and CTK2BCT2 indicate that the job number, job key, data set number are valid in the Client Token.            CTK2BJO1 and CTK2BJO2 indicate that the job number, job key and JOE Group Name are valid in the Client Token (actually a schedulable work element token).            CTK2BJB1 and CTK2BJB2 indicate that the job number and job key are valid in the Client Token (token is a job level token).            CTK2BDS1 and CTK2BDS2 indicate that the job number, job key, data set number and Pddb offset are valid in the token.</p>					
End of Comment					
80	(50)	BITSTRING	0	CTK2BCT1	"B'11111111111100000000000000000000',4,C'B"
		....		CTK2BCT2	"B'00000000000000000000000000000000',4,C'B"
80	(50)	BITSTRING	0	CTK2BJO1	"B'11111111000000001111111111110000',4,C'B"
		....		CTK2BJO2	"B'00000000000000000000000000000000',4,C'B"
		....		CTK2BJB1	"B'11111111000000000000000000000000',4,C'B"
		....		CTK2BJB2	"B'00000000000000000000000000000000',4,C'B"
80	(50)	BITSTRING	0	CTK2BDS1	"B'11111111111100000000000000001111',4,C'B"
		....		CTK2BDS2	"B'00000000000000000000000000000000',4,C'B"

## \$CTOKEN Cross Reference

Name	Hex Offset	Hex Value
CTK2BCT1	50	F00000
CTK2BCT2	50	0
CTK2BDS1	50	F0000F
CTK2BDS2	50	0
CTK2BJB1	50	0
CTK2BJB2	50	0
CTK2BJO1	50	FFF0
CTK2BJO2	50	0
CTK2DSID	18	
CTK2FLG1	4F	
CTK2JOBK	14	
CTK2JOBN	10	
CTK2JOEI	20	
CTK2JOI1	28	
CTK2JOI2	2A	
CTK2JONM	20	
CTK2MTTR	1C	
CTK2PDBO	2C	
CTK2SIZE	4F	40
CTK21TCT	4F	80
CTK21TJO	4F	40
CTK21TSA	4F	20
CTOKEN	0	

## \$CTW Heading Information

**Common Name:** Checkpoint Trace Work Area DSECT  
**Macro ID:** \$CTW  
**DSECT Name:** CTW  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** CTW  
 Offset: CTWLID  
 Length: L'CTWLID  
**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.  
**Size:** See CTWFXEND + (Number of CTENTS)\*CTWCTLEN  
**Created by:** JES2 Initialization  
**Pointed to by:** CKWCTWA field of the CKW data area  
**Serialization:** Normal PCE dispatch serialization  
**Function:** The \$CTW maps a work area used by the Checkpoint PCE to save performance trace information.

## \$CTW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CTW	
0	(0)	CHARACTER	4	CTWLID	CTW IDENTIFIER
4	(4)	BITSTRING	1	CTWVER	CTW VERSION IDENTIFIER
4	(4)	X'2'	0	CTWVERN	"2" CTW version number
5	(5)	BITSTRING	1	CTWFLAG1	FLAGS
		1... ....		CTW1RD1	"B'10000000" THIS DATA IS FOR READ 1
		.1.. ....		CTW1RD2	"B'01000000" THIS DATA IS FOR READ 2
		..1. ....		CTW1PRM1	"B'00100000" THIS DATA IS FOR THE PRIM WRITE
		...1 ....		CTW1INTW	"B'00010000" THIS DATA IS FOR AN INTERMEDIATE WRITE
		.... 1...		CTW1FINW	"B'00001000" THIS DATA IS FOR FINAL WRITE
		.... .1..		CTW1PRIO	"B'00000100" THIS DATA WAS AFFECTED BY PRIORITY AGING
		.... ..1.		CTW1CKDS	"B'00000010" 0 IF I/O TO CKPT1, 1 IF I/O TO CKPT2
6	(6)	BITSTRING	2		RESERVED FOR FUTURE USE
8	(8)	SIGNED	2	CTWDATA (0)	START OF CTW DATA
8	(8)	DBL WORD	8	CTWIOSTR	I/O START TIME
16	(10)	DBL WORD	8	CTWIOSTP	I/O STOP TIME
24	(18)	SIGNED	4	CTWCKPWT	NUM OF TIMES THE CKPT PCE \$WAITED BEFORE BEING DISPATCHED
28	(1C)	SIGNED	4	CTWCLNPA	NUMBER OF PAGES ALLOCATED TO CHANGE LOG
32	(20)	SIGNED	4	CTWCLNPU	NUM OF USED PAGES IN CHANGE LOG
36	(24)	SIGNED	4	CTWCLPR1	NUMBER OF CH LOG PAGES READ IN
40	(28)	SIGNED	4	CTWMINHL	MINHOLD VALUE
44	(2C)	SIGNED	4	CTWMINDR	MINDORM VALUE
48	(30)	SIGNED	4	CTWMAXDR	MAXDORM VALUE
52	(34)	SIGNED	4	CTWCLNCB	NUMBER OF CONTROL BLOCKS IN THE CHANGE LOG
56	(38)	SIGNED	4	CTWNMPCE	NUMBER OF PCES DEFINED
60	(3C)	SIGNED	4	CTWWTPCE	NUMBER OF PCES WAITING FOR CKPT
64	(40)	SIGNED	4	CTWMXTIM	MAXIMUM AMOUNT OF TIME A PCE HAS WAITED FOR CHECKPOINT
68	(44)	SIGNED	4	CTWAVTIM	AVERAGE AMOUNT OF TIME A PCE HAS WAITED FOR CHECKPOINT
72	(48)	SIGNED	4	CTWCLNBU	NUM OF USED BYTES IN THE CH LOG
76	(4C)	SIGNED	4	CTWHLTIM	CHECKPOINT HELD TIME
80	(50)	SIGNED	4	CTWDRMTM	CHECKPOINT DORMANCY TIME

## \$CTW Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
84	(54)	SIGNED	4	CTWPGNCL	PAGES TRANS. IF NO CH LOG
88	(58)	SIGNED	4	CTWLEVNМ	LEVEL NUMBER OF DATASET

Comment

Performance data measures for the JES2 checkpoint trace records. The measures are for, at most, one checkpoint cycle (not all measurements are collected for an entire checkpoint cycle).

End of Comment

92	(5C)	SIGNED	4	CTWCKPTN	Number of \$CKPTs issued
96	(60)	SIGNED	4	CTWMVSWT	Amount of wall-clock time in microseconds that JES2 is idle (MVS WAIT)
100	(64)	SIGNED	4	CTWQSUSE	Amount of wall-clock time in microseconds that PCEs were actively using the queues (\$QSUSE)
104	(68)	SIGNED	4	CTWWTTM	Total PCE wait time before obtaining the queues (in units of 16 microseconds)
108	(6C)	SIGNED	4	CTWOPTCK	Number of \$CKPTs (CAEs) skipped due to CKPT optimization
112	(70)	SIGNED	4	CTWOPT4K	Number of 4K pages skipped due to CKPT optimization
116	(74)	SIGNED	2	CTWKITNM	Number of CTENT entries
118	(76)	SIGNED	2		Reserved for future use
118	(76)	X'78'	0	CTWFXEND	"*-CTW" END OF FIXED PORTION OF CTW
120	(78)	SIGNED	4	CTWCTNTS (0)	START OF CTENT INFORMATION:
120	(78)	X'0'	0	CTWCTNMP	"0,4" NUM OF PAGES FOR THIS CTENT
120	(78)	X'4'	0	CTWCTNMC	"4,4" NUMBER OF CONTROL BLOCKS FOR THIS CTENT
120	(78)	X'8'	0	CTWCTLEN	"L'CTWCTNMP+L'CTWCTNMC" LENGTH OF CTW CTENT ENTRY

## \$CTW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CTW	0		CTWOPTCK	6C	
CTWAVTIM	44		CTWOPT4K	70	
CTWCKPTN	5C		CTWPGNCL	54	
CTWCKPWT	18		CTWQSUSE	64	
CTWCLNBU	48		CTWVER	4	
CTWCLNCB	34		CTWVERN	4	2
CTWCLNPA	1C		CTWWTPCE	3C	
CTWCLNPU	20		CTWWTTM	68	
CTWCLPR1	24		CTW1CKDS	5	2
CTWCTLEN	78	8	CTW1FINW	5	8
CTWCTNMC	78	4	CTW1INTW	5	10
CTWCTNMP	78	0	CTW1PRIO	5	4
CTWCTNTS	78		CTW1PRMW	5	20
CTWDATA	8		CTW1RD1	5	80
CTWDRMTM	50		CTW1RD2	5	40
CTWFLAG1	5				
CTWFXEND	76	78			
CTWHLTМ	4C				
CTWIOSTP	10				
CTWIOSTR	8				
CTWKITNM	74				
CTWLEVNМ	58				
CTWLID	0	C3E3E640			
CTWMAXDR	30				
CTWMINDR	2C				
CTWMINHL	28				
CTWMVSWT	60				
CTWMXTIM	40				
CTWNMPCE	38				

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## \$CVCB Heading Information

**Common Name:** Checkpoint Version Control Block  
**Macro ID:** \$CVCB  
**DSECT Name:** CVCB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** \$CVCB  
 Offset: CVCB\_ID-CVCB  
 Length: L'CVCB\_ID  
**Storage Attributes:** Subpool: N/A  
 Key: 1  
 Residency: In the JES2CKVR data space  
**Size:** See CVCBSIZE  
**Created by:** HASPCKVR  
**Pointed to by:** SPUD\_LATEST\_VERSION field of \$SPUD data area  
 SPUD\_FREE\_QUEUE field of \$SPUD data area  
 SPUD\_HOLD field of \$SPUD data area  
 DSRVCVPT field of IAZDSERV data area  
**Serialization:** Serialization is handled by means of ENQ/DEQ.  
 HASPCKVR-Versioning/Applycopy subtask, creates all the CVCBs initially establishing the CVCB free queue.  
 When a copy of the real in storage checkpoint data set is made into the data space as a version, the representative CVCB is placed in the SPUD (Space Utilization Description block) at the head of the CVCB active queue, called SPUD\_LATEST\_VERSION, thus making it available to the service routine which handles the SSI request for a data space version. The service routine will issue an shared ENQ on the CVCB address contained in SPUD\_LATEST\_VERSION, scope=system. Following the ENQ, the service routine will check that the CVCB is still the latest version then increment the enqueue count within the CVCB by means of a compare and swap. In the case of release of access to a version, the service routine will decrement the enqueue count and DEQ on the CVCB.  
 When the HASPCKVR subtask picks a CVCB to update, it will issue an exclusive ENQ on the CVCB to insure that no outstanding ENQs are held against the CVCB before the update is made.  
 ENQ/DEQ NAMES:  
 Major name - CCTQNAM = 'SYSZssss'  
 ssss - JES2 subsystem name  
 Minor name - 'CVCBnnnn'  
 nnnn - CVCB\_VERSION\_NUMBER

## \$CVCB Map

### Function:

This control block describes a version of the Checkpoint data set, contained in the Checkpoint data space. A CVCB exists for each version of the checkpoint which is maintained as active by the checkpoint version subtask. There are two queues of CVCBs, a free queue and an active queue, the heads of which reside in the SPUD. As a new version of the checkpoint data set is generated, the CVCB for that version is put at the head of the active queue.

## \$CVCB Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	CVCB	Checkpoint Version CB
0	(0)	CHARACTER	4	CVCB_ID	CVCB eye catcher
4	(4)	ADDRESS	1	CVCB_CBVN	CB version number
4	(4)	X'2'	0	CVCBCVNO	"2" Current CB version number

Comment

CVCB\_FLAG is cleared when a CVCB version is generated.

End of Comment

5	(5)	BITSTRING	1	CVCB_FLAG	Flag Byte
		1... ..		CVCB_FDMP	"B'10000000" SDUMP requested
6	(6)	BITSTRING	1		Reserved

Comment

CVCB\_ENQ\_SKIP\_COUNT is incremented every cycle when the CVCB\_ENQ\_CT is non-zero. When the count reaches a certain value, an ENQ is issued to verify the CVCB\_ENQ\_CT field. If the ENQ is obtained, then the CVCB\_ENQ\_CT is set to zero.

End of Comment

7	(7)	BITSTRING	1	CVCB_ENQ_SKIP_COUNT	ENQ check counter
8	(8)	ADDRESS	4	CVCB_NEXT	Next CVCB address
12	(C)	ADDRESS	4	CVCB_MASTER_REC	Address of master record
16	(10)	ADDRESS	4	CVCB_4K_PAGES	Address of 4K pages
20	(14)	ADDRESS	4	CVCB_\$CATBERT_ADDR	Address of \$CATBERT
24	(18)	SIGNED	4	CVCB_ADDRS (0)	Start of section address
24	(18)	ADDRESS	4	CVCB_JOT_ADDR	JOT start address
28	(1C)	ADDRESS	4	CVCB_JQE_ADDR	JQE start address
32	(20)	ADDRESS	4	CVCB_QSE_ADDR	QSE start address
36	(24)	ADDRESS	4	CVCB_HCT_ADDR	HCT start address (Ckpt'ed)
40	(28)	ADDRESS	4	CVCB_JQEX_ADDR	JQE extension address
44	(2C)	ADDRESS	4	CVCB_KIT_ADDR	KITs start address
48	(30)	ADDRESS	4	CVCB_JNT_ADDR	JNT start address
52	(34)	ADDRESS	4	CVCB_JQX_ADDR	JQX start address



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
56	(38)	ADDRESS	4	CVCB_BERT_ADDR	BERT start address
60	(3C)	ADDRESS	4	CVCB_DAS_ADDR	DAS start address
64	(40)	SIGNED 1... ....	4	CVCB_ENQ_CT	Count of shared ENQs
68	(44)	CHARACTER	8	CVCB_USED	"B'10000000" Version used this cycle
76	(4C)	CHARACTER	8	CVCB_TIME	Time stamp for version
76	(4C)	CHARACTER	4	CVCB_MAJOR (0)	Major name for ENQ
80	(50)	CHARACTER	4	CVCB_SYS	'SYSZ'
84	(54)	CHARACTER	4	CVCB_JESID	Subsystem name
84	(54)	CHARACTER	8	CVCB_MINOR (0)	Minor name for ENQ
84	(54)	CHARACTER	4	CVCB_ENQ_ID	'CVCB'
88	(58)	SIGNED	4	CVCB_VERSION_NUMBER	Version numb of this CVCB
92	(5C)	SIGNED	4	(0)	Alignment
92	(5C)	X'5C'	0	CVCBSIZE	**"CVCB" Size of the CVCB

**\$CVCB Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CVCB	0		CVCB_4K_PAGES		
CVCB_\$CATBERT_ADDR	14		CVCBCVNO	4	2
CVCB_ADDRS	18		CVCBSIZE	5C	5C
CVCB_BERT_ADDR	38				
CVCB_CBVN	4				
CVCB_DAS_ADDR	3C				
CVCB_ENQ_CT	40				
CVCB_ENQ_ID	54				
CVCB_ENQ_SKIP_COUNT	7				
CVCB_FDMP	5	80			
CVCB_FLAG	5				
CVCB_HCT_ADDR	24				
CVCB_ID	0				
CVCB_JESID	50				
CVCB_JNT_ADDR	30				
CVCB_JOT_ADDR	18				
CVCB_JQE_ADDR	1C				
CVCB_JQEX_ADDR	28				
CVCB_JQX_ADDR	34				
CVCB_KIT_ADDR	2C				
CVCB_MAJOR	4C				
CVCB_MASTER_REC	C				
CVCB_MINOR	54				
CVCB_NEXT	8				
CVCB_QSE_ADDR	20				
CVCB_SYS	4C				
CVCB_TIME	44				
CVCB_USED	40	80			
CVCB_VERSION_NUMBER	58				



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## \$DAS Programming Interface information

Programming Interface information

**\$DAS**

The following field is **NOT** programming interface information:

- DASMAPO

End of Programming Interface information

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## \$DAS Heading Information

**Common Name:** Direct Access Spool Data Set  
**Macro ID:** \$DAS  
**DSECT Name:** DAS  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** The pool of DASes is preceded by an eyecatcher **\*\*\*DAS POOL\*\*\*** in the header for the pool.  
Offset: HDPID-HDP  
Length: 13

**Storage Attributes:** Subpool: 0, 231, 241, dataspace  
Key: 1  
Residency: Virtual storage is anywhere (below or above 16M) in the JES2 address space. Virtual storage for the APPLCOPY and the DAS copies is ECSA. Real storage is anywhere.

**Size:** See DASSIZ for JES2 private storage  
See DASSIZC for CSA copies

**Created by:** JES2 initialization allocates storage for the DASes in JES2 private and ECSA. The checkpoint versions subtask creates copies of the DASes in the APPLCOPY and the checkpoint versions data space.

**Pointed to by:** The \$DASAREA field of the \$HCT data area points to the header of the DAS pool in the JES2 private area.  
The \$DASFRST field of the \$HCT data area points to the first DAS in the JES2 private area.  
The CCTDAS1 field of the \$HCCT data area points to the first DAS copy in ECSA.

**Serialization:** JES2 checkpoint data set lock (\$QSUSE)  
**Function:** A DAS defines the characteristics of a spool data set. There is one DAS per extent for each possible extent as determined by SPOOLNUM on the SPOOLDEF statement. The DAS control blocks are contiguous in storage and are preceded by a header section. Each DAS resides in JES2 private storage with a partial copy in ECSA that is updated with each track group allocation (KBLOB). The extents are numbered (DASEXTNO) consecutively from 0 to \$SPOOLNUM-1. The DASes are offset from \$DASAREA. When looping through a chain of DASes, an offset of zero means the end of the chain. Thus, a DAS cannot be at offset 0 from \$DASAREA.

The DASes are mapped as one of the 4K checkpoint record entries. In order to modify the DAS, access to the shared queues must be owned (\$QSUSE) and \$CKPT must be issued with ID=DAS.

Since the DASes are checkpointed control blocks, there are at least 2 copies of each DAS in storage (the actual and I/O copies of the checkpoint in subpool 0). There also may be 1 or more copies in the checkpoint versions data space, and perhaps an APPLCOPY copy in subpool 0 private or subpool 231 ECSA.

The field DASCTGA in the DAS is filled in only when the DAS is in ECSA. This field contains the number of track groups allocated for that DAS. If the information is needed from private storage, it resides in the master checkpoint record and is pointed to by field \$DASEXT in the \$HCT.

**\$DAS Map**

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DAS	
0	(0)	CHARACTER	6	DASVOLID	EBCDIC VOLSER ID
6	(6)	BITSTRING	1	DASEXTNO	BINARY EXTENT NUMBER
7	(7)	BITSTRING	1	DASFLAG	FLAG BYTE
		1... ....		DASDRAIN	"B'10000000" SPOOL IS DRAINING
		.1.. ....		DASHALT	"B'01000000" SPOOL IS HALTING
		..1. ....		DASTART	"B'00100000" SPOOL IS STARTING
		...1 ....		DASEXSTS	"B'00010000" SPOOL EXISTS
		.... 1..		DASSELEC	"B'00001000" SELECTION MAY OCCUR
		.... .1..		DASALLOC	"B'00000100" ALLOCATION MAY OCCUR
		.... ..1.		DASFINAL	"B'00000010" Final Command Processing (Obsolete , Do not test or turn on)
		.... ...1		DASRPSF	"B'00000001" EXTENT SUPPORTS RPS
7	(7)	X'C'	0	DASACTIV	"DASSELEC+DASALLOC" SELECTION + ALLOC. MAY OCCUR
7	(7)	X'CC'	0	DASAVAIL	"DASACTIV+DASDRAIN+DASHALT" AVAILABLE FOR SELECTION
7	(7)	X'48'	0	DASIOOK	"DASSELEC+DASHALT" I/O to extent is OK if selectable or halting unless DASTART is on too
8	(8)	BITSTRING	32	DASMASK	SPOOL MASK FOR THIS DAS MAPPED IN CSA FOR EXIT 12
40	(28)	SIGNED	4	DASTKCYL	NR OF TRACKS/CYLINDER ON DEVICE
44	(2C)	BITSTRING	2	DASNOTGE	NUMBER OF TG'S IN EXTENT
46	(2E)	SIGNED	2	DASNORTK	NUMBER OF RECORDS PER TRACK

Comment

-----  
 DASTRK is the absolute track addresses if DAS4RELT is off (absolute addressing is being used) or the relative track numbers (DASLOTRK = 1) if DAS4RELT is on. When relative track addressing is active the absolute track address is obtained by adding DASSTRK to the relative TT.  
 -----

End of Comment

48	(30)	SIGNED	4	DASTRK (0)	Valid track range (TT)
48	(30)	BITSTRING	2	DASLOTRK	Low value (1 if relative)
50	(32)	BITSTRING	2	DASUPTRK	Upper limit
52	(34)	SIGNED	2	DASNOTGP	NUMBER OF TRACKS PER GROUP
54	(36)	SIGNED	2	DASMTCSZ	MINIMUM TRACKCELL SIZE
56	(38)	BITSTRING	1	DASTYPE	UCB DEVICE TYPE (UCBTBYT4)

Comment

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 DASFLAG4 is updated by JES2 maintask only. There is no serialization.  
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End of Comment

57	(39)	BITSTRING	1	DASFLAG4	Fourth flag byte
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# \$DAS Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
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The next two bits have the following valid states:					
00 No signature records, none desired					
01 No signature records, but signature records desired					
11 Signature records exist					
End of Comment					
		1... ..		DAS4SIG	"B'10000000" Extent has signature rcds
		.1... ..		DAS4MFMT	"B'01000000" Extent needs to be mini-formatted
Comment					
-----					
End of Comment					
		..1. ....		DAS4SFMT	"B'00100000" DAS is on \$DASWRKQ performing mini-format
		...1 ....		DAS4PFMT	"B'00010000" DAS is on \$DASWRKQ pending mini-format
		.... 1...		DAS4ECKD	"B'00001000" Extent is on ECKD device
		.... .1..		DAS4RDTD	"B'00000100" Extent supports read track data CCW
		.... ..1.		DAS4WTRD	"B'00000010" Extent supports write track data CCW
		.... ...1		DAS4RELT	"B'00000001" This extent uses relative track addresses
Comment					
COMPATIBILITY CODE					
DASRPSO is maintained for compatibility with pre-release 10 levels of JES2. Once release 8 and below are no longer supported in a MAS, this field does not need to be maintained.					
End of Comment					
58	(3A)	BITSTRING	1	DASRPSO	RPS Table for this device
Comment					
-----					
This table will be moved to a non-checkpointed area.					
All 64 RPS entries are never used so we can "steal" some space at the end of the RPS table for other data that needs to be checkpointed.					
-----					
COMPATIBILITY CODE					
Field DASJOBNO_R4 should be used for the job number when the checkpoint is R4 mode and field DASJBNUM should be used when the checkpoint is R12 mode.					
End of Comment					
108	(6C)	SIGNED	4	DASJBNUM	Lowest job number using extent while halting or draining (R12 mode)
112	(70)	SIGNED	4	DASSTRK	First track of spool extent if relative addressing is being used (else 0)
116	(74)	SIGNED	2		Reserved for future use
118	(76)	BITSTRING	1	DASSYAFF	Spool system affinity
118	(76)	X'E'	0	DASNRPS	"*-DASJBNUM" Length of fields that are not part of the RPS table but use the RPS storage
122	(7A)	SIGNED	2	DASCTGA	CSA only mapping of track groups allocated
124	(7C)	SIGNED	2	DASCSAC (0)	End of area copied to CSA
124	(7C)	X'7C'	0	DASSIZCO	"*-DAS" Len of area copied to CSA
124	(7C)	BITSTRING	64	DASRPS	RPS Table for this device
124	(7C)	X'BC'	0	DASSIZC	"*-DAS" Length of DAS mapped in CSA

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
128	(80)	DBL WORD	8		RESERVED FOR FUTURE USE
136	(88)	SIGNED	4	DASTRAKQ	OFFSET OF NEXT DAS IN THE TGM
140	(8C)	SIGNED	4	DASWORKQ	OFFSET OF NXT DAS ON CMD WORK Q

Comment

COMPATIBILITY CODE

Field DASJOBNO\_R4 should be used for the job number when the checkpoint is R4 mode and field DASJBNUM should be used when the checkpoint is R12 mode.

End of Comment

144	(90)	SIGNED	2	DASJOBNO_R4	LOWEST JOB NUM USING EXTENT WHILE HALTING OR DRAINING
146	(92)	SIGNED	2	DASNOBYM	NUMBER OF BYTES IN A MAP
148	(94)	SIGNED	4	DASMAPO	OFFSET OF THIS MAP FROM \$TGMAP
152	(98)	SIGNED	2	DASTGSIZ	TG SIZE ON THIS VOLUME, ROUNDED FOR NUMBER OF BUFS PER TRACK
154	(9A)	SIGNED	2		RESERVED FOR FUTURE USE
156	(9C)	BITSTRING	1	DASFLAG2	COMMAND FLAG BYTE
		1... ....		DASCDRN	"B'10000000" DRAIN COMMAND HAS BEEN ISSUED
		.1.. ....		DASCHALT	"B'01000000" HALT COMMAND HAS BEEN ISSUED
		..1. ....		DASCSTRT	"B'00100000" START COMMAND HAS BEEN ISSUED
		...1 ....		DASCFMT	"B'00010000" FORMAT REQUESTED
		.... 1...		DASINACT	"B'00001000" THIS VOLUME IS INACTIVE
		.... .1..		DASBLOB	"B'00000100" Indicates which phase of drain/halt processing has completed(acts as a gate to Phase 2, deallocation)
		.... ..1.		DASINIT	"B'00000010" INITIAL START HAS BEEN PERFORMED
		.... ...1		DASJOBWT	"B'00000001" HALT/DRAIN WAITING JOBS
156	(9C)	X'F0'	0	DASCMNDS	"DASCDRN+DASCHALT+DASCSTRT+DASCFMT"
157	(9D)	BITSTRING	1	DASFLAG3	FLAG BYTE
		1... ....		DAS3ITGM	"B'10000000" This extent on DASTRAKQ
		.1.. ....		DAS3SYSA	"B'01000000" System affinity set for this volume
		..1. ....		DAS3CNCL	"B'00100000" Command issued with CANCEL operand
158	(9E)	BITSTRING	1	DASCMD2	Member nr issuing new cmd
159	(9F)	BITSTRING	1		Reserved for future use

Comment

THE NEXT FOUR FIELDS MUST BE KEPT TOGETHER. ROUTINE DADCKALL IN HASPSPOL DEPENDS ON THESE FIELDS BEING CONTIGUOUS.

End of Comment

160	(A0)	SIGNED	4	DASINDIC (0)	INDICATOR FIELDS
160	(A0)	BITSTRING	4	DASALOCs	Sys. with ext alloc'ed
164	(A4)	BITSTRING	4	DASDONE	Cmd done on these systems
168	(A8)	BITSTRING	4	DASBUSY	Cmd being done on systems
172	(AC)	ADDRESS	1	DASCMDID	SYSID of sys issuing cmd
172	(AC)	X'D'	0	DASINDLN	**-"DASINDIC" Length of indicator fields
173	(AD)	BITSTRING	4	DASERROR	Affinity of system with command error
177	(B1)	BITSTRING	1	DASERCDE (0)	ERROR CODES FOR SYSTEMS
177	(B1)	X'20'	0	DASERLEN	**-"DASERCDE" LENGTH OF ALL ERROR CODES
212	(D4)	SIGNED	4	(0)	ALIGN END OF DAS
212	(D4)	X'D4'	0	DASSIZ	**-"DAS" LENGTH OF DSECT
212	(D4)	X'7'	0	DASVRSN	"7" VERSION OF THE DAS

## \$DAS Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>THESE EQUATES REPRESENT THE ERROR CONDITIONS THAT ARE REFLECTED IN DASERCDE. THERE IS A DASERCDE SLOT FOR EACH POSSIBLE SYSTEM IN AN MAS COMPLEX. DASERROR BIT SETTING INDICATE WHICH SYSTEM HAD AN ERROR AND WHAT OFFSET INTO DASERCDE SHOULD BE LOOKED AT.</p>					
End of Comment					
212	(D4)	X'4'	0	DASMNTER	"4,L'DASERCDE" VOLUME NOT MOUNTED
212	(D4)	X'8'	0	DASDUPER	"8,L'DASERCDE" DUPLICATE SPOOL VOLUMES
212	(D4)	X'C'	0	DASALCER	"12,L'DASERCDE" ALLOCATION ERROR
212	(D4)	X'10'	0	DASPMTER	"16,L'DASERCDE" PREVIOUS MOUNTED VOL NOT MOUNTED
212	(D4)	X'14'	0	DASEXTER	"20,L'DASERCDE" EXTENT ERROR
212	(D4)	X'18'	0	DASFMTER	"24,L'DASERCDE" PREV. MOUNTED VOL NOT FORMATTED
Comment					
<p>THE FOLLOWING EQUATES ARE USED TO MAP OUT FIELDS IN THE MASTER RECORD ASSOCIATED WITH THE DAS. THE FIELDS IN THE MASTER RECORD CAN BE THOUGHT OF AS AN EXTENSION TO EACH DAS. ALTHOUGH THERE IS A DASEXTGA ASSOCIATED WITH EACH DAS, IT IS KEPT IN THE MASTER RECORD BECAUSE IT IS ALTERED BY THE CKPT PROCESSOR EACH CYCLE. THE DAS EXTENSION AREAS ARE CONTIGUOUS IN STORAGE, AS ARE THE DASES. THE NTH EXTENSION AREA IS ASSOCIATED WITH THE NTH DAS (AS DEFINED BY DASEXTNO). Note: track groups assigned to the BLOB are considered allocated for purposes of this count.</p>					
End of Comment					
212	(D4)	X'0'	0	DASEXTGA	"0,2" NO. TG'S ALLOC. - 16 BITS
212	(D4)	X'2'	0	DASEXLEN	"L'DASEXTGA" LENGTH OF DAS EXTENSION

## \$DAS Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DAS	0		DASEXSTS	7	10
DASACTIV	7	C	DASEXTER	D4	14
DASALCER	D4	C	DASEXTGA	D4	0
DASALLOC	7	4	DASEXTNO	6	0
DASALOCS	A0	0	DASFINAL	7	2
DASAVAIL	7	CC	DASFLAG	7	0
DASBLOB	9C	4	DASFLAG2	9C	0
DASBUSY	A8	0	DASFLAG3	9D	0
DASCDRN	9C	80	DASFLAG4	39	
DASCFMT	9C	10	DASFMTER	D4	18
DASCHALT	9C	40	DASHALT	7	40
DASCMDID	AC		DASINACT	9C	8
DASCMD2	9E	0	DASINDIC	A0	
DASCMNDS	9C	F0	DASINDLN	AC	D
DASCSAC	7C		DASINIT	9C	2
DASCSTRT	9C	20	DASIOOK	7	48
DASCTGA	7A		DASJBNUM	6C	0
DASDONE	A4	0	DASJOBNO_R4	90	0
DASDRAIN	7	80	DASJOBWT	9C	1
DASDUPER	D4	8	DASLOTRK	30	0
DASERCDE	B1	0	DASMAPO	94	0
DASERLEN	B1	20	DASMASK	8	0
DASERROR	AD	0	DASMNTER	D4	4
DASEXLEN	D4	2	DASMTCSZ	36	1



<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
DASNOBYM	92	0
DASNORTK	2E	0
DASNOTGE	2C	0
DASNOTGP	34	0
DASNRPS	76	E
DASPMTER	D4	10
DASRPS	7C	0
DASRPSF	7	1
DASRPSO	3A	0
DASSELEC	7	8
DASSIZ	D4	D4
DASSIZC	7C	BC
DASSIZCO	7C	7C
DASSTRK	70	0
DASSYAFF	76	
DASTART	7	20
DASTGSIZ	98	0
DASTKCYL	28	0
DASTRAKQ	88	0
DASTRK	30	
DASTYPE	38	0
DASUPTRK	32	0
DASVOLID	0	40404040
DASVRSN	D4	7
DASWORKQ	8C	0
DAS3CNCL	9D	20
DAS3ITGM	9D	80
DAS3SYSA	9D	40
DAS4ECKD	39	8
DAS4MFMT	39	40
DAS4PFMT	39	10
DAS4RDTD	39	4
DAS4RELT	39	1
DAS4SFMT	39	20
DAS4SIG	39	80
DAS4WTRD	39	2



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## \$DCT Programming Interface information

Programming Interface information

### \$DCT

The following fields are **NOT** programming interface information:

- DCTACB
- DCTDCB
- DCTUCB

End of Programming Interface information

## \$DCT Heading Information

**Common Name:** Device Control Table  
**Macro ID:** \$DCT  
**DSECT Name:** DCT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DCT '  
Offset: DCTID-DCT  
Length: 4

**Storage Attributes:** Subpool: Subpool 2 for JES2 private storage DCTs (most DCTs); Subpool 241 for CSA storage DCTs (internal reader DCTs only).  
Key: 1  
Residency: Virtual and real storage are anywhere (above or below 16M). Storage for internal reader DCTs is in common storage (CSA). All other DCTs are in the private storage of the JES2 address space.

**Size:** Size is of varying lengths. See \$DCTTABs and the length equates throughout DCT for the length specifications for each DCT type.

**Created by:** Most DCTs are allocated using the \$DCTDYN service during initialization or as a result of a \$ADD command. Remote and network subdevices are obtained during JES2 initialization.

**Pointed to by:**

- the PCEDCT field of the associated \$PCE data area, if any
  - chaining fields, and associated-device fields, in related \$DCT data areas, including DCTCHAIN, DCTFSSCH, MDCTADCT, MDCTDCT, XDCTDCT, MDCTACT, XDCTACTV, MDCTSDCT
  - the CCTIRDRS and CCTDCTMD fields of the \$HCCT data area
  - anchor fields for all \$DCTs in the \$HCT data area, including \$DCTPOOL and \$DCTPOOL2
  - anchor fields for each type of \$DCT data area, in the \$HCT or \$UCT data area, as directed by each \$DCT type's defining \$DCTTAB specification
  - I/O, request, and status anchors in the \$HCT data area
  - fields within the \$MLMWORK data area, including MLMSNALG, MLMSNAAL, MLMLOGQ, MLMXLDCT
  - fields within other device-managing JES2 processor work areas, like \$MLMWORK, including the \$RCPWORK, \$NPMWORK, and \$XFRWORK data area, and subtask \$DTEOFF data area
  - fields within RJE/NJE related data areas used for RJE terminal definition, NJE node definition, and I/O, including the RJE \$RAT data area, NJE \$NIT and \$NITP and \$PCT data areas, and VTAM \$ICE data area
  - fields within parameters lists for JES2 exits, in the \$XPL data area, typically labeled XnnnDCT, where nnn is the exit number
- The following fields are used to chain DCTs on the \$#POST work queues:
- \$NJEADCT field of the HCT data area
  - \$OFFADCT field of the HCT data area
  - \$LCLADCT field of the HCT data area
  - DCTNACTV field of the DCT data area
  - DCTPACTV field of the DCT data area

**Serialization:**

Standard JES2 reentrancy techniques

**Function:**

The DCT defines the devices used by the JES2 address space, their attributes and the related parameter settings. A DCT may or may not be supported on a one-for-one basis by a processor (PCE). If they are thus supported, the PCE might not exist if the DCT is not active.

**\$DCT Map**

Offsets		Type/Value	Len	Name (Dim)	Description
Dec	Hex				
0	(0)	STRUCTURE	0	DCT	DEVICE CONTROL TABLE DSECT

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
GENERAL DCT FOUNDATION - REQUIRED AND COMMON TO ALL DCTS. NOTE THAT THE FOLLOWING FIELDS (THROUGH DCTDEVTP) MUST CORRESPOND EXACTLY TO THE PCEDADCT AND PPPADCT FIELDS					
End of Comment					
0	(0)	CHARACTER	4	DCTID	CONTROL BLOCK IDENTIFIER
4	(4)	ADDRESS	4	DCTPCE	ADDRESS OF PROCESSOR CNTRL ELEM.
8	(8)	SIGNED	4	DCTFLGFW (0)	FOLLOWING FOUR FLAG BYTES MUST BE KEPT CONTIGUOUS FOR COMPARE AND SWAP PROCESSING
8	(8)	BITSTRING	1	DCTSTAT	STATUS FLAGS
		1... ....		DCTINUSE	"B'10000000" DCT is in use
		.1.. ....		DCTDRAIN	"B'01000000" DCT is drained
		..1. ....		DCTHOLD	"B'00100000" DCT is held
		...1 ....		DCTUNAL	"B'00010000" DCT is unallocated
		.... 1..		DCTRTAM	"B'00001000" DCT in process by RTAM
		.... .1..		DCTSTRT	"B'00000100" SPOF xmitter/receiver START INDICATOR
		.... ..1.		DCTPATN	"B'00000100" Local reader attention pending
		.... ...1.		DCTATTN	"B'00000010" DCT is set for attention processing
		.... ....1		DCTPAUSE	"B'00000001" DCT is paused
9	(9)	BITSTRING	1	DCTFLAGS	OPERATOR COMMAND FLAGS
		1... ....		DCTSTOP	"B'10000000" \$Z command
		.1.. ....		DCTDELET	"B'01000000" \$C command
		..1. ....		DCTRSTRT	"B'00100000" \$E command
		...1 ....		DCTRPT	"B'00010000" \$N command
		.... 1..		DCTSOFF2	"B'00010000" MDCTSTAT/DCTSOFF shadow for line DCTs, used only during CMD \$SCAN, \$N LINE not supported
		.... .1..		DCTBKSP	"B'00001000" \$B command
		.... ..1.		DCTHOLDJ	"B'00000100" \$T...,H command
		.... ...11		DCTSPACE	"B'00000011" \$T...,K=X command
		.... ...1.		DCTSP2	"B'00000010" Force double spacing
		.... ...1		DCTSP1	"B'00000001" Force single spacing
		.... ...1		DCTLOGAL	"B'00000001" \$TLNEx,E=Y command
10	(A)	BITSTRING	1	DCTFLAG2	MORE DCT FLAGS
		1... ....		DCTRACE	"B'10000000" Device eligible for I/O tracing
		.1.. ....		DCTERMNR	"B'01000000" Stream terminated by receiver
		..1. ....		DCTRBFF	"B'00100000" NJE Route buffer full
		...1 ....		DCTRRDY	"B'00010000" NJE Route receiver ready
		.... 1..		DCT2POST	"B'00001000" SNA line manager is waiting to be \$POSTed
		.... ..1.		DCT2PTRC	"B'00000100" Processor tracing on (TR=P), only used to save PCETRACE value across \$PCEDYN PCE activity
		.... ...1		DCT2RSP	"B'00000010" NJE device open/close wait
		.... ...1		DCTRTE	"B'00000001" Route codes (HASPINIT only)
		.... ...1		DCTOPEN	"B'00000001" NJE/RJE device open req
11	(B)	BITSTRING	1	DCTFSSFL	DCT FLAGS FOR AN FSS OWNED DVC
		1... ....		DCTSTART	"B'10000000" Device is being started
		.1.. ....		DCTFCKMD	"B'01000000" CKPT mode page 'ON', TIME 'OFF'
		..1. ....		DCTDFFLT	"B'00100000" Reset setup defaults
		...1 ....		DCTFSYNC	"B'00010000" Dev parm changes require synch order
		.... 1..		DCTFSET	"B'00001000" Dev parm changes require set order
		.... ..1.		DCTCMODF	"B'00000100" Change mode to FSS mode
		.... ...1.		DCTCMODJ	"B'00000010" Change mode to JES mode
		.... ....1		DCTFSSMD	"B'00000001" DCT/PCE is in FSS mode
12	(C)	ADDRESS	4	MDCTSDCT (0)	ADDR OF NXT SUSPND RMT DCT (SNA)
12	(C)	ADDRESS	4	DCTBUFAD	ADDRESS OF CURRENT BUFFER
16	(10)	ADDRESS	4	DCTDCB (0)	ADDRESS OF DATA CONTROL BLOCK
16	(10)	ADDRESS	4	DCTSEEK (0)	SEEK ADDRESS FOR \$EXCP
16	(10)	ADDRESS	4	DCTACB	ADDRESS OF ACB
20	(14)	ADDRESS	4	DCTEWF	PCE WITH EWF TO POST OR EXIT ADDR
24	(18)	SIGNED	2	DCTBUFCN	Count of active buffers
24	(18)	X'14'	0	DCTBUFLM	"20" Max buffers for some DCT types (NOT enforced for all types)

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
26	(1A)	BITSTRING	1	DCTDEVTP	DEVICE TYPE
Comment					
<p>Start of DEVICE TYPE definition</p> <p>Since bits are combined to define some device types, extreme caution must be used when testing the type. For example, the X'20' bit is on for local and remote printers and punches, and NJE and SPOF job and sysout transmitters. Use a TM instruction to test for a class of device. Use a CLI instruction to test for an exact type of device. Examples:</p> <p>Test for a local printer:            CLI DCTDEVTP,DCTPRT Local printer?            BNE SKIPIT No, skip it</p> <p>Test for a local or remote printer or punch:            TM DCTDEVTP,DCTPRPU Prt/punch or transmitter?            BZ SKIPIT No, skip it</p> <p>TM DCTDEVTP,DCTNET Transmitter?            BO SKIPIT Yes, skip it</p> <p>EQU X'00' RESERVED FOR PCEDARD            EQU X'01' RESERVED FOR PCEDAWR</p>					
End of Comment					
		.... ..1.		DCTRJE	"X'02" REMOTE JOB ENTRY DEVICE
		.... .1..		DCTINT	"X'04" INTERNAL DEVICE
		.... 1...		DCTNET	"X'08" NETWORK REMOTE DEVICE
		.1.. ....		DCTDVTPX	"X'40" EXTRA FLAG TO FURTHER IDENTIFY DCT DEVICE TYPES, PROVIDING UNIQUE IDS ACROSS ALL DCT TYPES
		1... ....		DCTSPOF	"X'80" SPOOL OFFLOAD DEVICE
26	(1A)	X'2'	0	DCTLNE	"DCTRJE" REMOTE JOB ENTRY LINE
26	(1A)	X'E'	0	DCTMLNE	"DCTINT+DCTRJE+DCTNET" MAS JOB ENTRY LINE
26	(1A)	X'6'	0	DCTLOG	"DCTINT+DCTRJE" APPLICATION LOGON DCT
		...1 ....		DCTRDR	"X'10" LOCAL CARD READER
26	(1A)	X'12'	0	DCTRJR	"DCTRJE+DCTRDR" REMOTE CARD READER
26	(1A)	X'14'	0	DCTINR	"DCTINT+DCTRDR" INTERNAL READER
26	(1A)	X'50'	0	DCTRJI	"DCTDVTPX+DCTRDR" REQUEST-FOR-JOBID DCT
		..1. ....		DCTPRT	"X'20" LOCAL PRINTER
26	(1A)	X'22'	0	DCTRPR	"DCTRJE+DCTPRT" REMOTE PRINTER
		..11 ....		DCTPUN	"X'30" LOCAL PUNCH
26	(1A)	X'32'	0	DCTRPV	"DCTRJE+DCTPUN" REMOTE PUNCH
26	(1A)	X'20'	0	DCTPRPU	"DCTPRT" PRINTER OR PUNCH
26	(1A)	X'30'	0	DCTRRP	"DCTRDR+DCTPRPU" READER, PRINTER, OR PUNCH
26	(1A)	X'42'	0	DCTRCON	"DCTRJE+DCTDVTPX" REMOTE CONSOLE
26	(1A)	X'18'	0	DCTNJR	"DCTNET+DCTRDR" NETWORK JOB RECEIVER
26	(1A)	X'38'	0	DCTNJT	"DCTNJR+DCTPRPU" NETWORK JOB TRANSMITTER
26	(1A)	X'8'	0	DCTNSR	"DCTNET" NETWORK SYSOUT RECEIVER
26	(1A)	X'28'	0	DCTNST	"DCTNSR+DCTPRPU" NETWORK SYSOUT TRANSMITTER
26	(1A)	X'58'	0	DCTNRR	"DCTNJR+DCTDVTPX" NETWORK ROUTE RECEIVER
26	(1A)	X'78'	0	DCTNRT	"DCTNJT+DCTDVTPX" NETWORK ROUTE TRANSMITTER
26	(1A)	X'90'	0	DCTXJR	"DCTSPOF+DCTRDR" SPOOL OFFLOAD JOB RECEIVER
26	(1A)	X'B0'	0	DCTXJT	"DCTXJR+DCTPRPU" SPOOL OFFLOAD JOB TRANSMITTER
26	(1A)	X'80'	0	DCTXSR	"DCTSPOF" SPOOL OFFLOAD SYSOUT RECEIVER
26	(1A)	X'A0'	0	DCTXST	"DCTXSR+DCTPRPU" SPOOL OFFLOAD SYSOUT XMITTER
26	(1A)	X'84'	0	DCTOFF	"DCTSPOF+DCTINT" SPOOL OFFLOAD MEDIA DEVICE
Comment					
End of DEVICE TYPE definition					
End of Comment					
27	(1B)	BITSTRING	1	DCTFLAG3	Flags
		1... ....		DCT3JWS	"B'10000000" Dev uses JOB work sel

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1.. ....		DCT3SWS	"B'01000000" Dev uses SYSOUT work sel
27	(1B)	X'18'	0	DCTDALEN	"*-DCTPCE" LENGTH OF DA DCT FOR \$EXCP
28	(1C)	BITSTRING	1	DCTSTAT2	SECOND STATUS FLAG BYTE
29	(1D)	BITSTRING	7		Reserved for future use
36	(24)	ADDRESS	4	DCTCHAIN	ADDRESS OF NEXT DCT
40	(28)	CHARACTER	8	DCTDEVN	EBCDIC DEVICE NAME
48	(30)	ADDRESS	4	DCTUCB	UCB ADDRESS
52	(34)	ADDRESS	4	DCTTOKA	SECURITY TOKEN ADDRESS - IF 0, JES TOKEN IS ASSOCIATED WITH DEVICE; ELSE, IS ADDRESS OF TOKEN
56	(38)	BITSTRING	1	DCTLRECL	DEVICE DEFAULT LRECL

Comment

Start of DEVICE ID definition

End of Comment

57	(39)	BITSTRING	3	DCTDEVID	DEVICE IDENTITY
----	------	-----------	---	----------	-----------------

Comment

DCTDEVID (first byte only)

Use CLI, not TM, to test DCTINRID since the equate value is 0.

End of Comment

....	....			DCTINRID	"B'00000000" Internal reader
------	------	--	--	----------	------------------------------

Comment

For the following devices, the low 4 bits may be used as a device number 'x':

- local device - always 0
- remote device - RMTn.RDx, RMTn.PRx, RMTn.PUx
- network device - Ln.JRx, Ln.JTx, Ln.STx, Ln.SRx
- route device - always hex '8' (DCTRTEID)
- spof device - always hex 'F' (DCTXFRID)

Use CLI to test for a local device.

E.G. CLI DCTDEVID,DCTRDRID Local reader?

Use TM to test for an RJE or an NJE

E.G. TM DCTDEVID,DCTRMTID+DCTNJTID

- BM Is RJE or NJE
- BO Is Line or Logon
- BZ Is Local

End of Comment

...1	....			DCTRDRID	"B'00010000" Card reader
..1.	....			DCTPRTID	"B'00100000" Printer
..11	....			DCTPUNID	"B'00110000" Punch
.1..	....			DCTNJTID	"B'01000000" Job transmitter
.1.1	....			DCTNJRID	"B'01010000" Job reader
.11.	....			DCTNSTID	"B'01100000" Sysout transmitter
.111	....			DCTNSRID	"B'01110000" Sysout receiver
1...	....			DCTRMTID	"B'10000000" Remote device
11..	....			DCTLGNID	"B'11000000" Logon
11.1	....			DCTLNEID	"B'11010000" Line



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>-----  DCTXFRID is valid only when combined with one of  the transmitter/receiver bit equates.  -----</p>					
End of Comment					
	....	1111		DCTXFRID	"B'00001111" Spool transfer device
Comment					
<p>-----  DCTRTEID is valid only when combined with the  job receiver or job transmitter equate.  -----</p>					
End of Comment					
	....	1...		DCTRTEID	"B'00001000" Route device
Comment					
<p>-----  The following equates indicate pseudo devices.  There can be up to 15 of these ('0001'b-'1111'b).  CLI must be used to test for these devices.  -----</p>					
End of Comment					
	....	...1		DCTSFSID	"B'00000001" SJFR pseudo device
	....	.1.		DCTSPNID	"B'00000010" Spin pseudo device - to prevent JOE from getting selected while waiting for checkpoint write
	....	..11		DCTCOMID	"B'00000011" Command pseudo device
	....	.1..		DCTPRGID	"B'00000100" Psuedo device indicating JOE is being purged
	....	.1.1		DCTARMID	"B'00000101" ARM support processor
Comment					
<p>EQU B'00000110' Unused  EQU B'00000111' Unused  EQU B'00001000' Unused  EQU B'00001001' Unused  EQU B'00001010' Unused  EQU B'00001011' Unused  EQU B'00001100' Unused</p>					
End of Comment					
	....	11.1		DCTSAPID	"B'00001101" Sysout API
	....	111.		DCTOUTID	"B'00001110" TSO Output command device
	....	1111		DCTXWTID	"B'00001111" External writer device

# \$DCT Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					

-----  
 The DCTNUM portion of DCTDEVID for the DCTOUTID pseudo device indicates whether the JOE is "checked out" to a non-group request (1) or just busy in PSO (0).  
 If the DCTNUM portion of DCTDEVID is non-zero for the DCTCOMID pseudo device, it indicates that the specific command has completed processing of the JOE.  
 -----

End of Comment					
57	(39)	X'3A'	0	DCTNUM	"DCTDEVID+1,2,C'H" DEVICE NUMBER
57	(39)	X'1'	0	DCTTODNE	"1" \$TO has processed the JOE
57	(39)	X'2'	0	DCTRDONE	"2" \$R or \$GR has processed the JOE

Comment					
End of DEVICE ID definition					

End of Comment					
60	(3C)	SIGNED	4	DCTUSER0	RESERVED FOR USER
64	(40)	SIGNED	4	DCTUSER1	RESERVED FOR USER
68	(44)	CHARACTER	8	DCTFSSNM (0)	FSS NAME (HASPINIT ONLY)
68	(44)	ADDRESS	4	DCTFSSCH (0)	NEXT FSS DCT (INIT ONLY)
68	(44)	SIGNED	2	DCTFSSNW (0)	FSS ID TO CHANGE TO FOR NEW FSS (POST-INIT FSS-MODE DCT ONLY)
68	(44)	SIGNED	4	DCTWKBUF	ADDR OF PRINTER WORK BUFFER (POST-INIT JES-MODE DCT)
72	(48)	SIGNED	4	DCTFSID (0)	FSID OF DEVICE FSA, FSS MODE
72	(48)	SIGNED	2	DCTFSSID	FSS PORTION OF FSID
74	(4A)	SIGNED	2	DCTFSAID	FSA PORTION OF FSID

Comment					
DCT FOUNDATION EXTENSION ORG POINT - REQUIRED.					

End of Comment					
80	(50)	DBL WORD	8	DCTFEORG (0)	DCT FOUNDATION EXT ORIGIN

Comment					
LOCAL DEVICE FOUNDATION EXTENSION					

End of Comment					
80	(50)	ADDRESS	4		RESERVED
84	(54)	ADDRESS	4		RESERVED
88	(58)	ADDRESS	4		RESERVED
92	(5C)	ADDRESS	4		RESERVED
96	(60)	ADDRESS	4		RESERVED
100	(64)	CHARACTER	4	DCTUNIT	UNIT FOR LOCAL DEVICES, LINES
104	(68)	BITSTRING	8		Reserved

Comment					
DEVICE EXTENSION ORG POINT - OPTIONAL.					

End of Comment					
112	(70)	DBL WORD	8	DCTEXORG (0)	DCT DEVICE EXTENSION ORIGIN

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
-----	-----	------------	-----	------------	-------------

Comment

SNA LOGON DCT FOUNDATION EXTENSION

End of Comment

80	(50)	ADDRESS	4		MDCTADCT ADDR NEXT ACTIVE LOGON DCT
84	(54)	ADDRESS	4	MDCTICE	ADDR OF FIRST LOGGED ON ICE
88	(58)	ADDRESS	4		MDCTDCT RESERVED FOR SNA LOGON DCTS
92	(5C)	BITSTRING	1	MDCTXERR	VTAM EXIT ROUTINE ERROR CODE
93	(5D)	BITSTRING	1	MDCTATYP	APPLICATION TYPE
94	(5E)	BITSTRING	1		MDCTATTN APPLICATION ACTION FLAGS
95	(5F)	BITSTRING	1		MDCTSTAT APPLICATION STATUS FLAGS
96	(60)	ADDRESS	2		RESERVED
98	(62)	BITSTRING	1	MDCTSUSP	DCT SUSPEND FLAG
99	(63)	ADDRESS	1	MDCTPWDL	APPLICATION PASSWORD LENGTH
100	(64)	CHARACTER	4		RESERVED
104	(68)	BITSTRING	8		Not used

Comment

BSC LINE DCT FOUNDATION EXTENSION

End of Comment

80	(50)	ADDRESS	4	MDCTADCT	ADDR OF NEXT ACTIVE LINE DCT
84	(54)	BITSTRING	1	MDCTRSEQ	RECEIVE SEQUENCE COUNT
85	(55)	BITSTRING	1	MDCTTSEQ	TRANSMIT SEQUENCE COUNT
86	(56)	BITSTRING	1	MDCTMODE	ADAPTER MODE SET VALUE
87	(57)	ADDRESS	1	MDCTERCT	LINE ERROR COUNT
88	(58)	ADDRESS	4	MDCTDCT	ADDR OF FIRST REMOTE DCT
92	(5C)	BITSTRING	1	MDCTLINE	LINE CHARACTERISTICS
93	(5D)	BITSTRING	1	MDCTTYPE	TERMINAL TYPE
94	(5E)	BITSTRING	1	MDCTATTN	LINE ACTION FLAGS
95	(5F)	BITSTRING	1	MDCTSTAT	LINE STATUS FLAGS
96	(60)	SIGNED	2	MDCTBFSZ	MULTI-LEAVING BUFFER SIZE - 5
98	(62)	BITSTRING	2	MDCTFCS	LAST RECEIVED FCS
100	(64)	CHARACTER	4		MDCTUNIT UNIT FOR LOCAL DEVICES, LINES
104	(68)	BITSTRING	8		Not used

Comment

SNA LINE DCT FOUNDATION EXTENSION

End of Comment

80	(50)	ADDRESS	4		MDCTADCT ADDR OF NEXT ACTIVE LNE DCT
84	(54)	ADDRESS	4		MDCTICE ADDR OF FIRST ALLOCATED ICE
88	(58)	ADDRESS	4		MDCTDCT ADDR OF FIRST REMOTE DCT
92	(5C)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
93	(5D)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
94	(5E)	BITSTRING	1		MDCTATTN LINE ACTION FLAGS
95	(5F)	BITSTRING	1		MDCTSTAT LINE STATUS FLAGS
96	(60)	ADDRESS	4	MDCTWICE	ADDR OF ICE IN WAIT-TIME DELAY
100	(64)	CHARACTER	4		DCTUNIT UNIT FOR LCLS/LNES ('SNA')
104	(68)	BITSTRING	8		Not used

Comment

BSC REMOTE DCT FOUNDATION EXTENSION

End of Comment

80	(50)	BITSTRING	1	MDCTRECL	REMOTE DEVICE MAX RECORD LENGTH
81	(51)	BITSTRING	1	MDCTRCB	REMOTE DEVICE RECORD CNTRL BYTE
82	(52)	BITSTRING	1	MDCTFMT	TERMINAL DATA FORMAT
83	(53)	BITSTRING	1	MDCTFEAT	TERMINAL FEATURES

## \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
84	(54)	ADDRESS	4		RESERVED
88	(58)	ADDRESS	4		MDCTDCT ADDR OF NEXT REMOTE DCT
92	(5C)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
93	(5D)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
94	(5E)	BITSTRING	1		RESERVED
95	(5F)	BITSTRING	1		MDCTSTAT REMOTE STATUS FLAGS
96	(60)	SIGNED	2		MDCTBFSZ MULTI-LEAVING BFR SIZE - 5
98	(62)	BITSTRING	2		MDCTFCS REMOTE FUNCTION CTRL SEQ
100	(64)	CHARACTER	4		DCTUNIT RESERVED
104	(68)	BITSTRING	8		Not used
104	(68)	X'70'	0	MDCTRFXE	***

Comment

### SNA REMOTE DCT FOUNDATION EXTENSION

End of Comment

80	(50)	BITSTRING	1		MDCTRECL REMOTE DEV MAX RECORD LEN
81	(51)	BITSTRING	1	MDCTSEL	REMOTE DEVICE DATASTREAM SELECT
82	(52)	BITSTRING	1		MDCTFMT TERMINAL DATA FORMAT
83	(53)	BITSTRING	1		MDCTFEAT TERMINAL FEATURES
84	(54)	ADDRESS	4		MDCTICE ADDR OF ASSOCIATED ICE
88	(58)	ADDRESS	4		MDCTDCT ADDR OF NEXT REMOTE DCT
92	(5C)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
93	(5D)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
94	(5E)	BITSTRING	1	MDCTFLG1	REMOTE FLAG BYTE
95	(5F)	BITSTRING	1		MDCTSTAT REMOTE STATUS FLAGS
96	(60)	ADDRESS	2		MDCTBFSZ MAXIMUM RU SIZE
98	(62)	BITSTRING	1		RESERVED
99	(63)	ADDRESS	1	MDCTCHLM	OUTSTANDING CHAIN LIMIT
100	(64)	CHARACTER	4		RESERVED
104	(68)	BITSTRING	8		Not used

Comment

### INTERNAL READER FOUNDATION EXTENSION

End of Comment

80	(50)	BITSTRING	12	RIDXMP (0)	Cross memory POST parm list
80	(50)	ADDRESS	4	RIDERRET	Addr of XMPOST error exit
84	(54)	ADDRESS	4	RIDECBP	ADDRESS OF INTERNAL READER ECB
88	(58)	ADDRESS	4	RIDASCBP	ADDRESS OF ASCB
92	(5C)	BITSTRING	8	RIDASCBT	Address space token
100	(64)	SIGNED	4	RIDECB	Internal reader ECB
104	(68)	ADDRESS	4	RIDHCCT	ADDRESS OF HCCT
108	(6C)	SIGNED	2	RIDLRECL	LRECL of intrdr dataset
110	(6E)	BITSTRING	1	RIDRECFM	RECFM of intrdr dataset, bits defined in DCB under DCBRECFM
111	(6F)	BITSTRING	1	RIDFLAG1	Miscellaneous flag byte, serialized by SJB lock
		1... ..		RID1LRDF	"B'10000000" OPEN set default LRECL or lrecl value specified by user at open intrdr time is to be overridden.
		.1... ..		RID1UDCB	"B'01000000" Internal 'switch' used to determine method for setting lrecl for SYSIN data sets. If on, prop- agate DCB attributes associated with internal reader to SYSIN data sets. If off, set LRECL to logical record length of record immediately preced- ing the SYSIN data.

Comment

### SPOOL OFFLOAD (XFR) DCT FOUNDATION EXTENSION

End of Comment

80	(50)	BITSTRING	1	XDCTSTAT	STATUS FLAG BYTE
81	(51)	BITSTRING	1	XDCTRCB	STREAM IDENTIFIER

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
82	(52)	BITSTRING	2		RESERVED FOR FUTURE USE
84	(54)	ADDRESS	4	XDCTDCT	PTR TO CHAIN OF RECV/TRANS DCTS
88	(58)	SIGNED	4	(3)	RESERVED FOR FUTURE USE
100	(64)	CHARACTER	4		RESERVED
104	(68)	BITSTRING	8		Not used

Comment

Line transmitter/receiver DCT extension

End of Comment

80	(50)	ADDRESS	1		MDCTRECL DEVICE MAX RECORD LENGTH
81	(51)	ADDRESS	1		MDCTRCB DEVICE RECORD CNTRL BYTE
82	(52)	ADDRESS	2		RESERVED
84	(54)	ADDRESS	4		RESERVED
88	(58)	ADDRESS	4		MDCTDCT Address of next xmitter/ receiver
92	(5C)	ADDRESS	4		RESERVED
96	(60)	ADDRESS	2		RESERVED
98	(62)	ADDRESS	2		MDCTFCS LAST RECEIVED FCS
100	(64)	ADDRESS	4		RESERVED
104	(68)	BITSTRING	8		Not used
104	(68)	X'70'	0	DCTSREND	***

Comment

READER DCT EXTENSION

End of Comment

112	(70)	SIGNED	2	DCTXEQND	DEFAULT EXECUTION NODE
114	(72)	BITSTRING	1	DCTRDFL1	Reader flags
		1... ....		DCTR1IND	"B'10000000" Independent mode
115	(73)	BITSTRING	1		Reserved for future use
116	(74)	SIGNED	4	DCTRDRT (0)	READER ROUTE CODE
116	(74)	SIGNED	2	DCTRDNOD	NODE NUMBER
118	(76)	SIGNED	2	DCTRDRTE	REMOTE NUMBER
120	(78)	SIGNED	4	DCTPRINT (0)	DEFAULT PRINT ROUTE CODE
120	(78)	SIGNED	2	DCTPRNOD	NODE NUMBER
122	(7A)	SIGNED	2	DCTPRRTE	LOCAL PRINTER/REMOTE NUMBER
124	(7C)	CHARACTER	8	DCTPRSER	PRINT USERID
132	(84)	SIGNED	4	DCTPUNCH (0)	DEFAULT PUNCH ROUTE CODE
132	(84)	SIGNED	2	DCTPUNOD	NODE NUMBER
134	(86)	SIGNED	2	DCTPURTE	LOCAL PUNCH/REMOTE NUMBER
136	(88)	CHARACTER	8	DCTPUSER	PUNCH USERID
144	(90)	BITSTRING	4	DCTSIAFF	Default system affinity
148	(94)	BITSTRING	1	DCTRAUTH	READER COMMAND AUTHORITY
149	(95)	CHARACTER	1	DCTJCLAS	DEFAULT JOB CLASS
150	(96)	CHARACTER	1	DCTMCLAS	DEFAULT MSGCLASS
151	(97)	BITSTRING	1	DCTPRINC	PRIORITY INCREMENT
152	(98)	BITSTRING	1	DCTPRIM	PRIORITY LIMIT
152	(98)	X'99'	0	DCTIRORG	*** END OF COMMON READER DCT FIELDS
156	(9C)	SIGNED	4	DCTRDEND (0)	END OF READER DCT
156	(9C)	X'9C'	0	DCTJREND	*** END OF JOB RECEIVER DCT

# \$DCT Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
OPTIONAL SPECIFIC DEVICE EXTENSIONS. EACH DEVICE TYPE MAY DEFINE DIFFERENT DEVICE EXTENSIONS. HOWEVER, TWO COMMON BEGINNINGS EXIST FOR THE DEVICE EXTENSION - ONE FOR DEVICES THAT REQUIRE JOB WORK SELECTION CRITERIA AND ONE FOR DEVICES THAT REQUIRE SYSOUT WORK SELECTION CRITERIA. NOTE THAT ANY DEVICE REQUIRING ONE OF THESE WORK SELECTION SECTIONS MUST DEFINE THAT SECTION STARTING AT DCTEXORG. FIRST, DEFINE FIELDS COMMON TO BOTH SETS OF CRITERIA.					
End of Comment					
112	(70)	BITSTRING	1	DCTWORK	JOB RECEIVER WORK AREA
Comment					
CTWSP--\$WSP PREFIX=DCT,DSECT=NO Generate \$#GET parms					
End of Comment					
160	(A0)	DBL WORD	8	DCTWSP (0)	HASP WSP
160	(A0)	SIGNED	4	DCTCWS (0)	Start of common work select
160	(A0)	CHARACTER	4	DCTID2	
160	(A0)	X'6'	0	DCTVLEN	"6" Length of volume
160	(A0)	X'4'	0	DCTVOLMX	"4" Maximum number of volumes
164	(A4)	SIGNED	1	DCTNMVOL	Number of volumes
165	(A5)	BITSTRING	3		Reserved for future use
Comment					
Note that the xxxVOL field must always precede the xxxWS field and that the xxxWSPRI must always be the first byte of xxxWS					
End of Comment					
168	(A8)	BITSTRING	0	DCTVOL (0)	Device select volume list
168	(A8)	X'4'	0	DCTWSENT	"4" Length of ws entry
168	(A8)	X'8'	0	DCTWSPRL	"8" Offset of first ws entry
Comment					
-----					
xxxMAXWS is derived by determining which WSTAB has the largest number of possible entries and then adding two for potential WSTAB user entries in the table pair.					
As of OS/390 Release 5 with APAR OW35104, the largest table is that of the Sysout API which has 20 entries.					
-----					
End of Comment					
168	(A8)	X'16'	0	DCTMAXWS	"19+1+2" Number of criteria that will fit in xxxWSREQ
192	(C0)	SIGNED	4	(0)	
192	(C0)	CHARACTER	1	DCTWSBEG (0)	Beginning of WS list
192	(C0)	BITSTRING	1	DCTWSPRI	WS priority flag
		1... ..		DCTQVAL	"B'10000000" Class optimum WS prio
		.1.. ..		DCTRVAL	"B'01000000" Route optimum WS prio
		..1. ....		DCTQWS	"B'00100000" Use class list for WS
		...1 ....		DCTSLASH	"B'00010000" Optional criteria switch
		.... 1...		DCTVOLFL	"B'00001000" Use volume for WS
		.... .1..		DCTWSRNG	"B'00000100" Select by range specified
		.... ..1.		DCTWSRGS	"B'00000010" Range criterion after slash
		.... ...1		DCTRWS	"B'00000001" Select by route specified
193	(C1)	BITSTRING	1	DCTWSPR2	2nd WS priority flag

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1... ....		DCTWSODP	"B'10000000" Outdisp specified in WS or Outdisp is not valid WS criterion for dev
		.1.. ....		DCTWSLIM	"B'01000000" Limit specified in WS
		..1. ....		DCTSLIM	"B'00100000" Limit is after slash
		...1 ....		DCTWSCTK	"B'00010000" Select by CTOKEN
		.... 1...		DCTODPNV	"B'00001000" Outdisp is not a valid WS criterion for dev; forced to WRITE/KEEP
194	(C2)	BITSTRING	1	DCTQPOS	Position of Q in WS-list
195	(C3)	BITSTRING	1	DCTLPOS	Position of LIM in WS-list
196	(C4)	BITSTRING	1	DCTRPOS	Position of RC in WS-list
197	(C5)	BITSTRING	1	DCTPPOS	Position of P in WS-list
198	(C6)	SIGNED	2	DCTONODE	Job's origin node number

Comment

note that a value of X'FF' for xxxQPOS, xxxLPOS, xxxRPOS, xxxPPOS indicates that position has not been calculated

End of Comment

		1111 1111		DCTPOSNL	"X'FF" Position has not been set
200	(C8)	BITSTRING	1	DCTWSREQ	Work selection via ws parm
200	(C8)	X'CO'	0	DCTWS	"DCTWSBEG,*-DCTWSBEG,C'X'" Max length ws list
288	(120)	ADDRESS	4	DCTWSTB	Addr of related ws table pair
288	(120)	X'4'	0	DCTRCMAX	"4" Define maximum route codes
288	(120)	X'0'	0	DCTNODE	"0,2,C'H" Offset/len of node in rc
288	(120)	X'2'	0	DCTROUTE	"2,2,C'H" Offset/length of remote in rc
288	(120)	X'4'	0	DCTUSEID	"4,8,C'D" Offset/len of userid in rc
288	(120)	X'C'	0	DCTRCLEN	"L'DCTNODE+L'DCTROUTE+L'DCTUSEID" Len of rc
288	(120)	X'4'	0	DCTNRLEN	"L'DCTNODE+L'DCTROUTE" Len of node and route
292	(124)	CHARACTER	0	DCTRC (0)	Space for route codes
340	(154)	ADDRESS	2	(0)	xxxNRC must follow xxxRC
340	(154)	CHARACTER	8	DCTJOBNM	Job name for device work select
348	(15C)	CHARACTER	8	DCTCURJB	Job name of element last selected
356	(164)	CHARACTER	8	DCTCRUID	Value for creator= keyword
364	(16C)	ADDRESS	1	DCTNRC	Number of route codes
365	(16D)	BITSTRING	1	DCTRTEQ	and route output queue flag
		1... ....		DCTWSLOC	"B'10000000" Scan local output queue
		.1.. ....		DCTWSRMT	"B'01000000" Scan remote output queue
		..1. ....		DCTWSNET	"B'00100000" Scan network queue
		...1 ....		DCTWSUSE	"B'00010000" Scan userid queue
		.... 1...		DCTINDIR	"B'10000000" Indirect routing flag (HASPINIT ONLY)
366	(16E)	BITSTRING	2		Reserved for future use
368	(170)	SIGNED	4	DCTJNUML	Device select low job number
372	(174)	SIGNED	4	DCTJNUMH	Device select high job number
376	(178)	ADDRESS	4	(2)	Reserved for future use
384	(180)	CHARACTER	37	DCTCLASS	Class list, terminated by blank
421	(1A5)	BITSTRING	1		Reserved for future use
422	(1A6)	BITSTRING	1	DCTWSFG1	Device select flags
		1... ....		DCTWSHLD	"B'10000000" Select held jobs
		.1.. ....		DCTWSHNS	"B'01000000" Hold operand not specified
		..1. ....		DCTWSNOT	"B'00100000" Send notify message
		...1 ....		DCTWSFJR	"B'00010000" Select within JOB range
		.... 1...		DCTWSFST	"B'00001000" Select within STC range
		.... .1..		DCTWSFST	"B'00000100" Select within TSU range
		.... .1.		DCTWSFAP	"B'00000010" Select APPC initiators
		...1 111.		DCTWSANY	"B'00011110" Select any range
423	(1A7)	BITSTRING	1		Reserved for future use
424	(1A8)	SIGNED	4	DCTWRNUM	Writer ID number for JOE/Writer exclude list
428	(1AC)	BITSTRING	8	DCTWRASI	Writer ID address space level used for JOE/Writer exclude list
436	(1B4)	CHARACTER	8	DCTDEVN2	Device name of form: For non-SAPI DCTDEVN For SAPI jobname.sss2appl
436	(1B4)	X'1B4'	0	DCTDEVNC	"DCTDEVN2,*-DCTDEVN2,C'C" Complete device name
453	(1C5)	BITSTRING	1	DCTDEVT2	Device type (copy of DCTDEVTP)
454	(1C6)	BITSTRING	3	DCTDEVI2	Device identity (copy of DCTDEVID)

## \$DCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
457	(1C9)	BITSTRING	3		Reserved for future use
460	(1CC)	SIGNED	4	DCTLIMLO	Device lower limit (records)
464	(1D0)	SIGNED	4	DCTLIMHI	Device upper limit (records)
468	(1D4)	SIGNED	4	(0)	Force alignment
468	(1D4)	X'134'	0	DCTCWSLN	**DCTCWS" Length of common criteria fields

Comment

Job work selection criteria fields

End of Comment

160	(A0)	SIGNED	4	DCTJWS (0)	Start of job work selection
160	(A0)	BITSTRING	308		Fields common with sysout select
468	(1D4)	BITSTRING	4	DCTSAF	Device select affinity list
472	(1D8)	ADDRESS	4	DCTSAFPT	System affinity list pointer
476	(1DC)	CHARACTER	8	DCTSRVCL	Service class
484	(1E4)	CHARACTER	16	DCTSCHE	Scheduling environment
484	(1E4)	X'154'	0	DCTJWSLN	**DCTJWS" Length of job work selection

Comment

Sysout work selection criteria fields

End of Comment

160	(A0)	SIGNED	4	DCTSWS (0)	Start of sysout work selection
160	(A0)	BITSTRING	308		Fields common with sysout select
468	(1D4)	CHARACTER	8	DCTFORMS	Current print/punch forms id
476	(1DC)	CHARACTER	8	DCTWFORM (0)	Forms for work selection
476	(1DC)	X'1DC'	0	DCTWFORC	"DCTWFORM, *-DCTWFORM,C'C" Forms
540	(21C)	CHARACTER	4	DCTFCB	Printer fcb (carriage tape) id
544	(220)	CHARACTER	4	DCTUCS	Printer ucs id
548	(224)	CHARACTER	4	DCTFLASH	Printer overlay frame
552	(228)	CHARACTER	4	DCTFLSHD	N/I-printer overlay default
556	(22C)	SIGNED	4	DCTPLIML	Device lower limit (pages)
560	(230)	SIGNED	4	DCTPLIMH	Device upper limit (pages)
564	(234)	SIGNED	4	DCTAGE	Age in seconds since JOE creation
568	(238)	CHARACTER	8	DCTWTRID	Ext wtr name for work select
576	(240)	BITSTRING	8	DCTPRMD	Prmode index list
584	(248)	ADDRESS	4	DCTPRTBL	Address of PRMODE table or zero
588	(24C)	BITSTRING	1	DCTWSFG2	Device select flag
		1... ....		DCTWSDSH	"B'10000000" Select held output
		.1.. ....		DCTNIBRS	"B'01000000" Select bursted output
		..1. ....		DCTWSDAN	"B'00100000" Select held/non-held output
		...1 ....		DCTWSBNS	"B'00010000" Burst operand not specified

Comment

-----  
 The following two bits are mutually exclusive. If both of them are OFF, this device DOES NOT support IP-format destination (this is the default for all JES2 local devices.)  
 -----

End of Comment

		.... 1...		DCTWSIP	"B'00001000" Select only IP-format
		.... .1..		DCTWSBTH	"B'00000100" Select both IP and non-IP
589	(24D)	BITSTRING	1	DCT1STFL	Device select flag byte
589	(24D)	X'8'	0	DCT1SODW	"\$ODWRITE" Select OUTDISP=WRITE
589	(24D)	X'4'	0	DCT1SODH	"\$ODHOLD" Select OUTDISP=HOLD
589	(24D)	X'2'	0	DCT1SODK	"\$ODKEEP" Select OUTDISP=KEEP
589	(24D)	X'1'	0	DCT1SODL	"\$ODLEAVE" Select OUTDISP=LEAVE
589	(24D)	X'F'	0	DCT1SODA	"\$ODANY" Check all bit settings
590	(24E)	BITSTRING	2		Reserved for future use



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
592	(250)	ADDRESS	4	DCTGTW	Address of \$#GET Trace work area
596	(254)	ADDRESS	4	DCTASAPI	Address of SAPID (ALET is in \$SAPTOK in HCT)
600	(258)	ADDRESS	4	DCTNACTV	Next active DCT address
604	(25C)	ADDRESS	4	DCTPACTV	Previous active DCT address
608	(260)	BITSTRING	1	DCTWSFG3	WSP status flag
		1... ....		DCTWS3QD	"B'10000000" DCT is on an active DCT Q
609	(261)	BITSTRING	3		Reserved for future use

Comment

-----  
xxxPJOE identifies the next JOE for this device to process. Three different values are possible:  
0 - nothing in queue for this device  
positive - one JOE to process and the address is the positive value in xxxPJOE  
-1 - more than one JOE in queue for this device  
-----

End of Comment

612	(264)	ADDRESS	4	DCTPJOE	Next JOE to process
616	(268)	ADDRESS	4	(0)	Align on a full word
616	(268)	X'1C8'	0	DCTSWSLN	** -DCTSWS" Length of sysout selection
616	(268)	X'1C8'	0	DCTLENG	** -DCTCWS" Length of WSP

Comment

SNA LOGON DCT EXTENSION

End of Comment

112	(70)	CHARACTER	8		APPLICATION PASSWORD
120	(78)	ADDRESS	2	MDCTSUNCT	COUNT OF LOGGED ON TERMINALS
122	(7A)	ADDRESS	1		RESERVED FOR SNA LOGON DCTS
123	(7B)	ADDRESS	1	MDCTAPNL	APPLICATION NAME LENGTH
124	(7C)	CHARACTER	8	MDCTAPPL	APPLICATION NAME
132	(84)	SIGNED	4	MDCTLOGN	COUNT OF LOGONS TO APPL
136	(88)	SIGNED	4	MDCTNICE	LOGON FAILED FOR ICE COUNT
140	(8C)	SIGNED	4	MDCTNLNE	LOGON FAILED FOR LINE COUNT
144	(90)	SIGNED	4	MDCTINVL	LOGON FAILED FOR DATA COUNT
148	(94)	SIGNED	4	MDCTABRT	SESSION ABNORMAL TERM COUNT
152	(98)	SIGNED	4		RESERVED FOR FUTURE USE
160	(A0)	DBL WORD	8	MDCTRAWK (0)	ACTIVE RECEIVE ANY BUFFER WORK
160	(A0)	SIGNED	2	MDCTRALM	ACTIVE RECEIVE ANY BUFFER LIMIT
162	(A2)	SIGNED	2	MDCTRACT	ACTIVE RECEIVE ANY BUFFER COUNT
164	(A4)	ADDRESS	4	MDCTRABF	ACTIVE RECEIVE ANY BUFFER CHAIN
168	(A8)	DBL WORD	8	MDCTRQWK (0)	QUEUED RECEIVE ANY BUFFER WORK
168	(A8)	SIGNED	2	MDCTRQLM	QUEUED RECEIVE ANY BUFFER LIMIT
170	(AA)	SIGNED	2	MDCTRQCT	QUEUED RECEIVE ANY BUFFER COUNT
172	(AC)	ADDRESS	4	MDCTRQBF	QUEUED RECEIVE ANY BUFFER CHAIN
176	(B0)	DBL WORD	8	MDCTEXWK (0)	EXIT ROUTINE WORK AREA
176	(B0)	SIGNED	4	MDCTEXCD (0)	EXIT ROUT. ACTION CODE WORKAREA
176	(B0)	BITSTRING	3		RESERVED
179	(B3)	BITSTRING	1	MDCTXCOD	EXIT ROUTINE REQ ACTION CODE
180	(B4)	ADDRESS	4	MDCTEXIT	ADDR OF NEXT SCHED LOGON DCT
184	(B8)	SIGNED	4	MDCTLGND (0)	END OF SNA LOGON DCT

Comment

BSC LINE DCT EXTENSION

End of Comment

112	(70)	CHARACTER	8	MDCTPSWD	RJE LINE PASSWORD
120	(78)	ADDRESS	4	MDCTOBUF	RJE OUTPUT BUFFER CHAIN

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
124	(7C)	SIGNED	4	MDCTIMOK	TIME OF LAST TRANSMISSION
128	(80)	ADDRESS	4	MDCTRAT	ADDRESS OF RAT ENTRY (RJE) ADDRESS OF NIT ENTRY (NJE)
132	(84)	ADDRESS	4	MDCTCODE	ADDRESS OF RJE CODE TABLE
136	(88)	BITSTRING	0	MDCTOTAL (0)	DCT EVENT COUNTERS
136	(88)	SIGNED	4	MDCTXCP	LINE COUNTS - TOTAL EXCPS
140	(8C)	SIGNED	4	MDCTNAK	NAKS TO WRITE TEXT
144	(90)	SIGNED	4	MDCTDCK	DATA CHECKS TO READ TEXT
148	(94)	SIGNED	4	MDCTTO	TIMEOUTS TO READ TEXT
152	(98)	SIGNED	4	MDCTREM	ALL OTHER ERRORS
156	(9C)	BITSTRING	0	MDCTCNTS (0)	DCT SESSION EVENT COUNTERS
156	(9C)	SIGNED	4	MDCTSXCP	SESSION COUNTS - TOTAL EXCPS
160	(A0)	SIGNED	4	MDCTSNAK	NAKS TO WRITE TEXT
164	(A4)	SIGNED	4	MDCTSDCK	DATA CHECKS TO READ TEXT
168	(A8)	SIGNED	4	MDCTSTO	TIMEOUTS TO READ TEXT
172	(AC)	SIGNED	4	MDCTSREM	ALL OTHER ERRORS
176	(B0)	BITSTRING	1	MDCTPMBC	NETWORK PATH MGR BUF COUNT
177	(B1)	BITSTRING	1	MDCTPMFL	NETWORK PATH MGR FLAGS
178	(B2)	SIGNED	2	MDCTDCNT	DEDICATED LINE DCT COUNT
180	(B4)	ADDRESS	4	MDCTACT (0)	ACTIVE HARDWARE RJE DCT
180	(B4)	ADDRESS	4	MDCTNM	NETWORK MULTIPLE TRUNK QUEUE
184	(B8)	ADDRESS	4	MDCTNA	NETWORK ACTIVE QUEUE
188	(BC)	SIGNED	2	MDCTNR	NETWORK HALF LINE RESISTANCE
190	(BE)	SIGNED	2	MDCTNNR	NETWORK NODE TO NODE RESISTANCE
192	(C0)	ADDRESS	4	MDCTNCES	NETWORK CONNECT EVENT SEQUENCE
196	(C4)	BITSTRING	1	MDCTNFL2	NETWORK FLAGS II
197	(C5)	BITSTRING	1	MDCTNFL3	Network flags III
198	(C6)	BITSTRING	1		Reserved for future use
199	(C7)	CHARACTER	1	MDCTLNCC	Last NCC signon record sent
200	(C8)	SIGNED	2	MDCTOPCT	COUNT OF OPEN RJE PROCESSORS
202	(CA)	BITSTRING	1	MDCTNFL	NETWORK FLAGS
203	(CB)	SIGNED	1	MDCTCMCT	CONSOLE MESSAGE COUNT
203	(CB)	X'B4'	0	MDCTNETA	"MDCTNM,*-MDCTNM" NETWORK AREA FOR \$NPMWORK
204	(CC)	BITSTRING	8	MDCTNEGR	PENDING NEGATIVE XMTTER RESPONSES
212	(D4)	SIGNED	4	MDCTNO (0)	LINE ROUTE CODE
212	(D4)	ADDRESS	2	MDCTNODE	NODE NUMBER
214	(D6)	ADDRESS	1	MDCTQUAL	QUALIFIER
215	(D7)	ADDRESS	1		RESERVED FOR FUTURE USE
216	(D8)	ADDRESS	4	MDCTNMAP	NETWORK PATH MAN NOTIFY MAP
220	(DC)	ADDRESS	4	MDCTRNTA	REACHABLE NODES TABLE ADDR, ZERO UNLESS LINE IN NJE USE RNT=1 BIT PER NODE
224	(E0)	CHARACTER	8	MDCTNPAS	PASSWORD to send to node (BSC Only)
232	(E8)	SIGNED	4	MDCTMDOM	\$HASP500 DOM ID
236	(EC)	SIGNED	4	MDCTIFEA	NJE signon feature flags supported by this line
240	(F0)	ADDRESS	4	MDCTNLDV (0)	Numbers of line subdevices
240	(F0)	ADDRESS	1	MDCTJTNM	LINE <sub>nn</sub> JTNUM= value
241	(F1)	ADDRESS	1	MDCTJRNM	LINE <sub>nn</sub> JRNUM= value
242	(F2)	ADDRESS	1	MDCTSTNM	LINE <sub>nn</sub> STNUM= value
243	(F3)	ADDRESS	1	MDCTSRNM	LINE <sub>nn</sub> SRNUM= value
244	(F4)	ADDRESS	4	MDCTMRT	MRT address
248	(F8)	ADDRESS	4	MDCTMRRT	MRRT address
252	(FC)	SIGNED	4	MDCTNOTS	RCP CMB Throw-away time
256	(100)	SIGNED	4	MDCTLEND (0)	END OF LINE DCT

Comment

SNA LINE DCT EXTENSION

End of Comment

112	(70)	CHARACTER	8		RJE LINE PASSWORD
120	(78)	ADDRESS	2		ALLOCATED SESSION COUNT
122	(7A)	SIGNED	2		RESERVED
124	(7C)	SIGNED	4		TIME OF LAST TRANSMISSION

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
128	(80)	ADDRESS	4		MDCTRAT ADDRESS OF RAT ENTRY (RJE) ADDRESS OF NIT ENTRY (NJE)
132	(84)	ADDRESS	4	MDCTATE	APT address for automatic restart from NPM recovery
136	(88)	SIGNED	4	MDCTVREQ	TOTAL COUNT OF VTAM REQ PROCESSED
140	(8C)	SIGNED	4	MDCTXRSP	TOTAL COUNT OF EXCEPTION RESP
144	(90)	SIGNED	4	MDCTLUST	TOTAL COUNT OF LUSTAT RECEIVED
148	(94)	SIGNED	4	MDCTBIDR	TOTAL COUNT OF BID REJECTED
152	(98)	SIGNED	4	MDCTMPER	TOTAL COUNT OF TEMPORARY ERRORS
156	(9C)	SIGNED	4	MDCTSCNT (5)	REMOTE COUNTS
176	(B0)	BITSTRING	1		NETWORK PATH MGR BUF COUNT
177	(B1)	BITSTRING	1		NETWORK PATH MGR FLAGS
178	(B2)	SIGNED	2		DEDICATED LINE DCT COUNT
180	(B4)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
184	(B8)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
188	(BC)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE FROM APT
190	(BE)	SIGNED	2		MDCTNNR NJE TOTAL CONNECTION RESISTANCE
192	(C0)	ADDRESS	4		MDCTNCES NJE CONNECTION EVENT SEQUENCE
196	(C4)	BITSTRING	1		MDCTNFL2 Network flags II
197	(C5)	BITSTRING	1		MDCTNFL3 Network flags III
198	(C6)	BITSTRING	1		Reserved for future use
199	(C7)	CHARACTER	1		MDCTLNCC Last signon NCC record sent
200	(C8)	SIGNED	2		MDCTOPCT COUNT OF OPEN RJE PROCESSORS
202	(CA)	BITSTRING	1		MDCTNFL NETWORK FLAGS
203	(CB)	SIGNED	1		CONSOLE MESSAGE COUNT
204	(CC)	BITSTRING	8		RESERVED
212	(D4)	ADDRESS	4		LINE ROUTE CODE
216	(D8)	ADDRESS	4		NETWORK PATH MAN NOTIFY MAP
220	(DC)	ADDRESS	4		REACHABLE NODES TABLE ADDR
224	(E0)	CHARACTER	8	MDCTATMP	APPL NAME (SNA ONLY)
232	(E8)	SIGNED	4		\$HASP500 DOM ID
236	(EC)	SIGNED	4		NJE signon feature flags supported by this line
240	(F0)	ADDRESS	1		MDCTJTNM LINE <sub>nn</sub> JTNUM= value
241	(F1)	ADDRESS	1		MDCTJRNM LINE <sub>nn</sub> JRNUM= value
242	(F2)	ADDRESS	1		MDCTSTNM LINE <sub>nn</sub> STNUM= value
243	(F3)	ADDRESS	1		MDCTSRNM LINE <sub>nn</sub> SRNUM= value
244	(F4)	ADDRESS	4		MDCTMRT MRT address
248	(F8)	ADDRESS	4		MDCTMRRT MRRT address
252	(FC)	SIGNED	4		MDCTNOTS RCP CMB Throw-away time
256	(100)	SIGNED	4	(0)	SNA LINE DCT END (MDCTLEND)

Comment

MAS LINE DCT EXTENSION

End of Comment

112	(70)	ADDRESS	0	MDCTAFTK (0)	Affinity token for member
112	(70)	CHARACTER	8		Reserved
120	(78)	BITSTRING	1	MDCTMEMB	ID of associated member
121	(79)	BITSTRING	3		Reserved
124	(7C)	SIGNED	4		Time of last transmission
128	(80)	ADDRESS	4		MDCTRAT Address of NIT entry
132	(84)	ADDRESS	4	MDCTNATP	NATP chain for response to member signon propagation
136	(88)	ADDRESS	4	MDCTNPCH	Chain of permanent NATPs
140	(8C)	ADDRESS	4	MDCTNQSE	QSE address
144	(90)	ADDRESS	4	MDCTMDNQ	Member down chain field
148	(94)	SIGNED	4	MDCTMTIM	Time last MAS I/J sent to this member
152	(98)	SIGNED	4	MDCTMDID	\$HASP501 DOM id
156	(9C)	SIGNED	4	(5)	Reserved
176	(B0)	BITSTRING	1		NETWORK PATH MGR BUF COUNT
177	(B1)	BITSTRING	1		NETWORK PATH MGR FLAGS
178	(B2)	SIGNED	2		Reserved
180	(B4)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
184	(B8)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
188	(BC)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
190	(BE)	SIGNED	2		MDCTNNR NJE TOTAL RESISTANCE
192	(C0)	ADDRESS	4		MDCTNCES NJE CONNECT EVENT SEQUENCE
196	(C4)	BITSTRING	1		MDCTNFL2 Network flags II
197	(C5)	BITSTRING	1		MDCTNFL3 Network flags III
198	(C6)	BITSTRING	1		Reserved for future use
199	(C7)	CHARACTER	1		MDCTLNCC Reserved
200	(C8)	SIGNED	2		Reserved
202	(CA)	BITSTRING	1		MDCTNFL Network flags
203	(CB)	SIGNED	1		Reserved
204	(CC)	BITSTRING	8		RESERVED
212	(D4)	ADDRESS	4		MDCTNO LINE ROUTE CODE
216	(D8)	ADDRESS	4		MDCTNMAP NETWORK PATH MAN NOTIFY MAP
220	(DC)	ADDRESS	4		MDCTRNTA REACHABLE NODES TABLE ADDR
224	(E0)	CHARACTER	8		APPL NAME (SNA ONLY)
232	(E8)	SIGNED	4		MDCTMDOM \$HASP500 DOM ID
236	(EC)	SIGNED	4		NJE signon feature flags supported by this line
240	(F0)	ADDRESS	1		LINEnn JTNUM= value
241	(F1)	ADDRESS	1		LINEnn JRNUM= value
242	(F2)	ADDRESS	1		LINEnn STNUM= value
243	(F3)	ADDRESS	1		LINEnn SRNUM= value
244	(F4)	ADDRESS	4		MDCTMRT MRT address
248	(F8)	ADDRESS	4		MDCTMRRT MRRT address
252	(FC)	SIGNED	4		MDCTNOTS RCP CMB Throw-away time
256	(100)	SIGNED	4	(0)	MAS LINE DCT END (MDCTLEND)

Comment

## INTERNAL READER DCT EXTENSION

End of Comment

153	(99)	BITSTRING	1	RIDFLAGS	INTRDR serialized flag byte (update using OIL/NIL only)
		.1.. ....		RIDCLNUP	"B'01000000" INTRDR needs cleanup (non-EOM)
		..1. ....		RIDALLOC	"B'00100000" THIS INTERNAL READER IS ALLOCATED
		...1 ....		RIDEND	"B'00010000" Internal reader is closing (processing last buffer)
		.... 1..		RIDSKIP	"B'00001000" INTERNAL READER SKIPPING FOR JOB
		.... .1..		RIDEOM	"B'00000100" EOM IN PROGRESS
		.... ..1.		RID1ROUT	"B'00000010" A default print/punch routing has been passed
		.... ...1		RIDPOSTI	"B'00000001" INTENT TO POST INTERNAL RDR
156	(9C)	ADDRESS	4	RIDUBF	ADDRESS OF UNPRTECTD BUFFER (IBF)
160	(A0)	ADDRESS	4	RIDPBF	ADDRESS OF PROTECTED BUFFER (JBF)
164	(A4)	ADDRESS	4	RIDPBFO	OFFSET IN PROTECTED BUFFER
168	(A8)	CHARACTER	8	RIDJOBID	INTERNAL READER JOB ID
176	(B0)	BITSTRING	12	RIDEXMPL (0)	Cross memory POST parm list
176	(B0)	ADDRESS	4	RIDEOMER	Error return for \$XMPOST
180	(B4)	ADDRESS	4	RIDEOMP	Address of EOM ECB
184	(B8)	ADDRESS	4	RIDEOMA	Address of ASCB to POST
188	(BC)	ADDRESS	4	RIDEOME	EOM ECB
192	(C0)	CHARACTER	8	RIDJBID	ID OF CURRENT OWNER
200	(C8)	CHARACTER	8	RIDJNAM	NAME OF CURRENT OWNER
208	(D0)	CHARACTER	8	RIDSUSR	'USER' FROM OWNER'S ACEE
216	(D8)	CHARACTER	8	RIDSGRP	'GROUP' FROM OWNER'S ACEE
224	(E0)	SIGNED	4	RIDLOCK	Lock for SVC 111 internal reader services
228	(E4)	ADDRESS	4	RIDSJB	SJB address
232	(E8)	CHARACTER	8	RIDRSV2	RESERVED
240	(F0)	SIGNED	4	(0)	ENSURE FULLWORD ALIGNMENT
240	(F0)	BITSTRING	1	RIDXECB	XECB TO POST INTRDR PCE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
POST COMPLETION CODES USED BY HASPAM AND HASPRDR TO DETERMINE THE NATURE OF A GIVEN POST. THESE VALUES ARE PLACED INTO THE LOW ORDER BYTE OF THE ACTUAL ECBS (RIDECEB AND RIDXECB) WHEN THEY ARE POSTED (OR QUICK POSTED).					
End of Comment					
240	(F0)	X'4'	0	RIDCAVAL	"4" HASPAM WANTS RDR TO GET PAST THE \$GETUNIT AND START RDR'ING (USED IN RIDXECB)
240	(F0)	X'8'	0	RIDCDATA	"8" HASPAM WANTS RDR TO KNOW THAT THERE IS MORE DATA IN THE PBUF TO BE READ (USED IN RIDXECB) OR RDR WANTS MORE DATA (USED IN RIDECEB)
240	(F0)	X'C'	0	RIDCDONE	"12" RDR IS NOTIFYING AM THAT THE LAST BUFFER HAS BEEN PROCESSED (IN RIDECEB)
260	(104)	ADDRESS	4	RIDSAA	ADDRESS OF SAVE AREA
264	(108)	SIGNED	4	RIDALET	ALET OF PBUF DATASPACE
268	(10C)	BITSTRING	1	RIDFLAG2	SERIALIZED FLAG BYTE (UPDATE USING OIL/NIL ONLY)
		1... ....		RID2ERRD	"B'10000000" HASPRDR HAS DETECTED AN INTERNAL ERROR.
		.1.. ....		RID2ERAM	"B'01000000" HASPAM HAS DETECTED AN INTERNAL ERROR.
269	(10D)	BITSTRING	1	RIDFLAGA	UNSERIALIZED flag byte (*SET IN ALLOCATION ONLY*)
		1... ....		RIDALOCL	"B'10000000" Force SYSAFF to local
		.1.. ....		RIDAHOLD	"B'01000000" Force TYPRUN=HOLD
270	(10E)	BITSTRING	1	RIDFLAG3	FLAG BYTE
		1... ....		RID3BLIM	"B'10000000" Honor BYTES= values for internal readers
271	(10F)	CHARACTER	1	RIDRSV3	RESERVED FOR FUTURE USE
272	(110)	SIGNED	4	RIDCTEND (0)	END OF INTERNAL READER DCT
272	(110)	X'2000'	0	RIDBUFSZ	"8192" SIZE OF INTERNAL READER BUFFERS

Comment

LOCAL/RMT PRINT/PUNCH DCT EXTENSION.

End of Comment					
160	(A0)	BITSTRING	456		SPACE FOR SYSOUT WORK SELECTION
616	(268)	CHARACTER	4	DCTNIFCB	3800 INSTALLATN DEFAULT FCB
620	(26C)	CHARACTER	4	DCTDDFCB	DEVICE DEFAULT FCB
624	(270)	BITSTRING	1	DCTINDEX	PRINTER INDEX VALUE
625	(271)	BITSTRING	1	DCTPPFL	PRINT/PUNCH FLAGS
626	(272)	BITSTRING	1	DCTPPSW	PRINT/PUNCH SWITCHES
627	(273)	BITSTRING	1	DCTPPSW2	PRINT/PUNCH SWITCHES
628	(274)	BITSTRING	1	DCTPPSW3	PRINT/PUNCH SWITCHES
629	(275)	BITSTRING	1	DCTPPSW4	PRINT/PUNCH SWITCHES
630	(276)	BITSTRING	1	DCTPPSW5	PRINT/PUNCH Switches
		1... ....		DCT5C1ON	"B'10000000" Chnl 1 is only new page
		.1.. ....		DCT5CALL	"B'01000000" All chnls are new page
		.1. ....		DCT5TUCS	"B'00100000" UCS has been modified via a \$T command
		...1 ....		DCT5TFSS	"B'00010000" FSSID is to be removed
		.... 1..		DCT5DNRC	"B'00001000" Device not responding condition
		.... .1..		DCT5\$SPN	"B'00000100" \$Sppt for FSS prt pending
		.... .1.		DCT5\$PPN	"B'00000010" \$Pprt for FSS prt pending
		.... ...1		DCT5FSAT	"B'00000001" FSA level rolling trace on
631	(277)	BITSTRING	1	DCTPPSW6	PRINT/PUNCH Switches
		1... ....		DCT6NOTR	"B'10000000" TRC on OUTPUT card not honored
632	(278)	CHARACTER	4	DCTCHAR1	N/I-PRINTER XLATE TABLE 1
636	(27C)	CHARACTER	4	DCTCHAR2	N/I-PRINTER XLATE TABLE 2
640	(280)	CHARACTER	4	DCTCHAR3	N/I-PRINTER XLATE TABLE 3
644	(284)	CHARACTER	4	DCTCHAR4	N/I-PRINTER XLATE TABLE 4
648	(288)	CHARACTER	4	DCTMODF	N/I-PRINTER MODIFY IDENTIFIER
652	(28C)	ADDRESS	2	DCTLDPID	3800 LOST DATA PAGE ID G38E

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
654	(28E)	BITSTRING	1	DCTDCPTN	DEFAULT COMPACTION TABLE NUMBER
655	(28F)	BITSTRING	1	DCTACPTN	ACTIVE COMPACTION TABLE NUMBER
656	(290)	SIGNED	2	DCTCKPTP	NO. OF LOGICAL PAGES/CKPT
658	(292)	SIGNED	2	DCTCKPTL	NO. OF LINES/LOGICAL PAGE
660	(294)	SIGNED	2	DCTCKPTT	AMT OF TIME BEFORE FORCED CKPT
662	(296)	SIGNED	2	DCTNPRO	TIME BEFORE NON PROCESS RUN OUT
664	(298)	ADDRESS	4	DCTPRTRN	ADDRESS OF DEFAULT TRAN TABLE
668	(29C)	ADDRESS	4	DCTCCWTB	ADDRESS OF DEFAULT CCW TRN TBLE
672	(2A0)	SIGNED	4	DCTCSW	PRINT INTERVENTION REQ AREA
672	(2A0)	X'2A4'	0	DCTPREND	*** PRINT/PUNCH DCT EXTENSION END

Comment

SPOOL OFFLOAD DEVICE DCT EXTENSION

End of Comment

112	(70)	ADDRESS	4	XDCTDTE	ADDRESS OF SUB-TASK DTE
116	(74)	SIGNED	4	XDCTSEQN	NUM BLOCKS READ FOR LOAD CKPT
120	(78)	SIGNED	2	XDCTXNUM	DEVICE NUMBER
122	(7A)	SIGNED	2	XDCTSUBR	SUB-TASK REQUEST
124	(7C)	SIGNED	2	XDCTSUBC	SUB-TASK REQ COMPLETION CODE
126	(7E)	BITSTRING	1	XDCTUNCT	UNIT COUNT
127	(7F)	BITSTRING	1	XDCTFLG1	FLAG BYTE
128	(80)	BITSTRING	1	XDCTFLG2	FLAG BYTE
129	(81)	BITSTRING	1	XDCTVOLS	OFFLOAD VOLUME COUNT
130	(82)	BITSTRING	1	XDCTLABL	LABEL TYPE (SL,NL,...)
131	(83)	BITSTRING	2	XDCTRTPD	RETENTION PERIOD IN DAYS
133	(85)	CHARACTER	8	XDCTUNIT	DEFAULT UNIT NAME
141	(8D)	BITSTRING	1	XDCTOFSL	Offload archive bits
142	(8E)	BITSTRING	2	XDCTFREE	RESERVED FOR FUTURE USAGE

Comment

THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER

End of Comment

144	(90)	SIGNED	4	XDCTTIME	TIME OFFLOAD DATA SET ALLOCATED
148	(94)	SIGNED	4	XDCTDATE	DATE OFFLOAD DATA SET ALLOCATED

Comment

THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER

End of Comment

152	(98)	SIGNED	4	XDCTTVER	TIME VERIFICATION STAMP
156	(9C)	SIGNED	4	XDCTDVER	DATE VERIFICATION STAMP
160	(A0)	ADDRESS	4	XDCTCMPQ	XFRDCT SUB-TASK COMPLETION Q
164	(A4)	ADDRESS	4	XDCTBUFQ	Q OF BUFFERS WAITING COMPLETION
168	(A8)	ADDRESS	4	XDCTACTV	QUEUE OF ACTIVE XFR DCTS
172	(AC)	BITSTRING	1	XDCTERCT	READ ERROR COUNT
173	(AD)	BITSTRING	1	XDCTOPCT	COUNT OF RECV/TRANS DCTS OPEN
174	(AE)	SIGNED	2	XDCTMAXB	Max buffers allowed to hold
176	(B0)	CHARACTER	44	XDCTDSN	OFFLOAD DATASET NAME
220	(DC)	SIGNED	4	DCTXFEND (0)	END OF OFFLOAD DCT EXTENSION

Comment

JOB TRANSMITTER DCT EXTENSION

End of Comment

160	(A0)	BITSTRING	340		SPACE FOR JOB WORK SELECTION
500	(1F4)	BITSTRING	1	DCTJTDSP	DISPOSITION FLAGS
		1... ....		DCTJTDPG	"B'10000000" PURGE JOB AFTER DUMP
		.1.. ....		DCTJTDHD	"B'01000000" HOLD JOB AFTER DUMP

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
500	(1F4)	X'1F5'	0	DCTJTDKP	"B'00100000" KEEP JOB AFTER DUMP
500	(1F4)	X'1F5'	0	DCTOJEND	*** OFFLOAD JOB XMITTER DCT EXT END
500	(1F4)	X'1F5'	0	DCTJTEND	*** NETWORK JOB XMITTER
Comment					
SYSOUT TRANSMITTER DCT EXTENSION.					
End of Comment					
160	(A0)	BITSTRING	456		SPACE FOR SYSOUT WORK SELECTION
616	(268)	BITSTRING	1	DCTSTDSP	DISPOSITION FLAG
		1... ....		DCTSTDPG	"B'10000000" PURGE DATA SET AFTER DUMP
		.1... ....		DCTSTDHD	"B'01000000" HOLD DATA SET AFTER DUMP
		.1. ....		DCTSTDKP	"B'00100000" KEEP DATA SET AFTER DUMP
617	(269)	BITSTRING	3		Reserved for future use
617	(269)	X'26C'	0	DCTOSEND	*** OFFLOAD SYSOUT XMITTER EXT END
617	(269)	X'26C'	0	DCTSTEND	*** NETWORK SYSOUT XMITTER
Comment					
OFFLOAD JOB RECEIVER DCT EXTENSION					
End of Comment					
160	(A0)	BITSTRING	340		SPACE FOR JOB WORK SELECTION
500	(1F4)	BITSTRING	4	DCTJRSAF	DEVICE MODIFY AFFINITY (EBCDIC)
504	(1F8)	BITSTRING	4	DCTJRMSF	DEVICE MODIFY AFFINITY (FLAGS)
508	(1FC)	BITSTRING	1	DCT1JRFL	DEVICE MODIFY FLAG BYTE
		1... ....		DCT1JHLD	"B'10000000" HOLD JOB MODIFY FLAG
		.1... ....		DCT1JHNL	"B'01000000" HOLD NOT TO BE MODIFIED
509	(1FD)	CHARACTER	1	DCTJRMCL	DEVICE MODIFY JOB CLASS
510	(1FE)	BITSTRING	1		RESERVED FOR FUTURE USE
511	(1FF)	ADDRESS	4	DCTJRMNO	DEVICE MODIFY NODE NUMBER
511	(1FF)	X'201'	0	DCTOJRLN	*** JOB RECEIVER DCT END
Comment					
OFFLOAD SYSOUT RECEIVER DCT EXTENSION					
End of Comment					
160	(A0)	BITSTRING	456		SPACE FOR SYSOUT WORK SELECTION
616	(268)	BITSTRING	1	DCT1SRFL	DEVICE MODIFY FLAG BYTE
		1... ....		DCT1SHLD	"B'10000000" SET HELD POST-EXECUTION JOBS
		.1... ....		DCT1SHNL	"B'01000000" HOLD NOT TO BE MODIFIED
		.1. ....		DCT1SDSH	"B'00100000" SET HELD OUTPUT
		...1 ....		DCT1SDNL	"B'00010000" DSHOLD NOT TO BE MODIFIED
		.... 1..		DCT1SBUR	"B'00001000" SET BURSTED OUTPUT
		.... .1..		DCT1SBNL	"B'00000100" BURST NOT TO BE MODIFIED
617	(269)	BITSTRING	1	DCT2SRFL	DEVICE MODIFY FLAG2 BYTE
617	(269)	X'8'	0	DCT2MODW	"\$ODWRITE" MODIFY OUTDISP=WRITE
617	(269)	X'4'	0	DCT2MODH	"\$ODHOLD" MODIFY OUTDISP=HOLD
617	(269)	X'2'	0	DCT2MODK	"\$ODKEEP" MODIFY OUTDISP=KEEP
617	(269)	X'1'	0	DCT2MODL	"\$ODLEAVE" MODIFY OUTDISP=LEAVE
617	(269)	X'F'	0	DCT2MODA	"\$ODANY" CHECK ALL BIT SETTINGS
618	(26A)	BITSTRING	1	DCT3SRFL	DEVICE SELECT FLAG3 BYTE
618	(26A)	X'8'	0	DCT3SODW	"\$ODWRITE" SELECT OUTDISP=WRITE
618	(26A)	X'4'	0	DCT3SODH	"\$ODHOLD" SELECT OUTDISP=HOLD
618	(26A)	X'2'	0	DCT3SODK	"\$ODKEEP" SELECT OUTDISP=KEEP
618	(26A)	X'1'	0	DCT3SODL	"\$ODLEAVE" SELECT OUTDISP=LEAVE
618	(26A)	X'F'	0	DCT3SODA	"\$ODANY" CHECK ALL BIT SETTINGS
619	(26B)	CHARACTER	1	DCTSRMCL	DEVICE MODIFY JOB CLASS
620	(26C)	CHARACTER	12	DCTSRMNO	DEVICE MODIFY NODE NUMBER
632	(278)	CHARACTER	4	DCTSRMFC	DEVICE MODIFY FCB ID
636	(27C)	CHARACTER	4	DCTSRMFL	DEVICE MODIFY FLASH
640	(280)	CHARACTER	4	DCTSRMUC	DEVICE MODIFY UCS ID

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
644	(284)	CHARACTER	8	DCTSRMPR	DEVICE MODIFY PRMODE LIST
652	(28C)	CHARACTER	8	DCTSRMFO	DEVICE MODIFY FORMS ID
660	(294)	CHARACTER	1	DCTSRMWI	DEVICE MODIFY WRITER ID
660	(294)	X'29C'	0	DCTOREND	*** SYSOUT RECEIVER DCT END
Comment					
DCTSTAT2					
End of Comment					
		1... ....		DCTCIP	"B'10000000" COMMAND IN PROGRESS
		.1.. ....		DCTGTDCB	"B'01000000" DEVICE NEEDS A DCB
		.1. ....		DCTGTBSM	"B'00100000" DEVICE NEEDS A BSAM DCB
		...1 ....		DCTNEWFS	"B'00010000" DCT FSS-OWNERSHIP IS TO BE CHANGED TO THE FSS IN DCTFSSNW
		.... 1..		DCT\$TFLS	"B'00001000" \$T FLASH INDICATOR
		.... .1..		DCTR190	"B'00000100" RMT PRPU WILL STOP FOR A REPLY TO SETUP MESSAGE
		.... ..1.		DCT\$TNSP	"B'00000010" \$T FSS PRT.. non setup parameters change require FSACB updates
Comment					
MDCTATTN					
End of Comment					
		1... ....		MDCTIMER	"B'10000000" TIMED ACTION REQUESTED
		.1.. ....		MDCTPAWS	"B'01000000" LINE PAUSE REQUESTED
		.1. ....		MDCTJOB1	"B'00100000" JOB POST INDICATOR 1
		...1 ....		MDCTJOB2	"B'00010000" JOB POST INDICATOR 2
660	(294)	X'30'	0	MDCTJOB	"MDCTJOB1+MDCTJOB2" JOB POST INDICATION
		.... 1..		MDCTDSC	"B'00001000" LINE DISCONNECT SEQUENCE
		.... .1..		MDCTINTE	"B'00000100" DISCINTV exceeded reason to be put in HASP203 msg
		.... ..1.		MDCTSTRT	"B'00000010" START VERIFICATION REQUIRED
		.... ...1		MDCTATT8	"B'00000001" RESERVED FOR FUTURE USE
Comment					
MDCTSTAT					
End of Comment					
		1... ....		DCTLEASE	"B'10000000" DEDICATED LINE
		1... ....		DCTADS	"B'10000000" ABNORMAL END OF DATA
		.1.. ....		DCTSHARE	"B'01000000" SHARED LINE
		.1. ....		DCTETX	"B'00100000" AN ETX HAS BEEN RECEIVED
		..1. ....		DCTFLUSH	"B'00100000" STREAM HAS BEEN TERMINATED
		...1 ....		DCTSOFF	"B'00010000" SIGNOFF RCVD OR DISCONNECT REQD
		...1 ....		DCTEOF	"B'00010000" AN EOF HAS BEEN DETECTED
		.... 1..		DCTSINON	"B'00001000" REMOTE DCT IS ATTACHED TO LNE DCT
		.... .1..		DCTSHMSG	"B'00000100" Message issued for denied nonshare req (Init only)
		.... ..1.		DCTPOST	"B'00000100" I/O COMPLETE FLAG
		.... .1..		DCTABORT	"B'00000010" TRANSMISSION WAS ABORTED
		.... ...1		DCTPBUF	"B'00000001" REMOTE OUTPUT BUFFER INDICATOR
		.... ...1		DCTPSUSP	"B'00000001" REMOTE DEVICE HAS BEEN SUSPENDED
Comment					
XDCTSTAT					
End of Comment					
		1... ....		XDCTOPEN	"B'10000000" \$EXTP OPEN ISSUED
		.1.. ....		XDCTERR	"B'01000000" I/O ERROR INDICATOR



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
EQU B'00100000' DCTFLUSH					
EQU B'00010000' DCTEOF					
End of Comment					
		.... 1...		XDCTMSG	"B'00001000" FORCE DRAINED MESSAGE
		.... .1..		XDCTSKIP	"B'00000100" RECEIVER SKIPPING BUFFER
Comment					
EQU B'00000010' DCTABORT					
EQU B'00000001' DCTPBUF					
MDCTLINE					
End of Comment					
		1... ....		DCTPTRSP	"B'10000000" TRANSPARENCY
		.1.. ....		DCTPASCII	"B'01000000" USASCII CODE
		..1. ....		DCTPCTC	"B'00100000" CHANNEL-TO-CHANNEL ADAPTER
		...1 ....		DCTPHASP	"B'00010000" HASP-TO-HASP
		.... 1...		DCTPCOMP	"B'00001000" COMPRESS-EXPAND FEATURE
		.... .1..		DCTPNADS	"B'00000100" NO ABORTIVE DISCONNECT
		.... .1..		DCTPWIDE	"B'00000010" WIDE-BAND LINE
		.... ...1		DCTPFULL	"B'00000001" FULL-DUPLEX LINE
Comment					
MDCTTYPE					
End of Comment					
		1... ....		DCTPSNA	"B'10000000" SNA LU TYPE TERMINAL
		.1.. ....		DCTPCPU	"B'01000000" BSC CPU TYPE TERMINAL
		..1. ....		DCTPHDW	"B'00100000" BSC HARDWARE TERMINAL
		.... 1111		DCTPSUBC	"B'00001111" LOW ORDER 4 BITS (X'0F) FOR DEVICE SUB-CLASSIFICATION
660	(294)	X'81'	0	DCTPLU1	"DCTPSNA+X'01" SNA LU TYPE 1
660	(294)	X'41'	0	DCTP20S2	"DCTPCPU+X'01" 360/20 SUBMODEL 2
660	(294)	X'42'	0	DCTP20S5	"DCTPCPU+X'02" 360/20 SUBMODEL 5
660	(294)	X'43'	0	DCTP20S6	"DCTPCPU+X'03" 360/20 SUBMODEL 6
660	(294)	X'44'	0	DCTP360	"DCTPCPU+X'04" SYSTEM/360
660	(294)	X'45'	0	DCTP1130	"DCTPCPU+X'05" 1130
660	(294)	X'46'	0	DCTPSYS3	"DCTPCPU+X'06" SYSTEM/3
660	(294)	X'47'	0	DCTPCRS7	"DCTPCPU+X'07" RESERVED FOR FUTURE USE
660	(294)	X'48'	0	DCTPSY36	"DCTPCPU+X'08" SYSTEM 36 (BSC MODE)
660	(294)	X'49'	0	DCTP370	"DCTPCPU+X'09" SYSTEM/370
660	(294)	X'4A'	0	DCTP20S4	"DCTPCPU+X'0A" 360/20 SUBMODEL 4
660	(294)	X'4B'	0	DCTP2922	"DCTPCPU+X'0B" 2922
660	(294)	X'21'	0	DCTP2770	"DCTPHDW+X'01" 2770
660	(294)	X'22'	0	DCTP3781	"DCTPHDW+X'02" 3781
660	(294)	X'23'	0	DCTP3740	"DCTPHDW+X'03" 3740
660	(294)	X'24'	0	DCTP3780	"DCTPHDW+X'04" 3780
660	(294)	X'25'	0	DCTP2780	"DCTPHDW+X'05" 2780
Comment					
MDCTSEL					
End of Comment					
		1... ....		DCTPOUTB	"B'10000000" OUTBOUND DEVICE SELECTION

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MDCTPMFL					
End of Comment					
		1... ..		DCTNPLIM	"B'10000000" PATH MANAGER BUFFER LIMIT REACHED
Comment					
MDCTFMT					
End of Comment					
		1... ..		DCTPBLK	"B'10000000" BLOCKED RECORDS
		.1... ..		DCTPVAR	"B'01000000" VARIABLE LENGTH RECORDS
		.1... ..		DCTPROG	"B'00100000" MULTI-LEAVING INTERFACE
		.... 1...		DCTPCFB	"B'00001000" DEVICE FCB HAS BEEN LOADED
Comment					
CTPPRES EQU B'00000100' COMPRESSED DATASTREAM ACTIVE					
End of Comment					
		.... .1.		DCTPALTC	"B'00000010" ALTERNATE CODE SELECTED
		.... .1.		DCTPCPCT	"B'00000001" COMPACTED DATASTREAM ACTIVE
		...1 ....		DCTHOLDS	"B'00010000" NJE TRANSMISSION HOLD STREAM
Comment					
MDCTFEAT					
CTPTRSP EQU B'10000000' TERMINAL TRANSPARENCY					
End of Comment					
		.... .1.		DCTPMRF	"B'00000010" MULTIPLE-RECORD FEATURE
		.1... ..		DCTPBEXP	"B'01000000" BUFFER EXPANSION FEATURE
		.1... ..		DCTPABEX	"B'00100000" ADDITIONAL BUFFER EXPANSION
		.1... ..		DCTPNDST	"B'00100000" MEDIA NOT BASIC EXCHANGE
		...1 ....		DCTPTAB	"B'00010000" HORIZONTAL FORMAT CONTROL
		...1 ....		DCTPCCTL	"B'00010000" CARRIAGE CONTROL
		.... 1...		DCTPSHDR	"B'00001000" SETUP HEADER FEATURE
		.... .1.		DCTPPRES	"B'00000100" COMPRESS-EXPAND FEATURE
Comment					
CTPALTC EQU B'00000010' ALTERNATE CODE SELECTED					
DCTPCPCT EQU B'00000001' COMPACTION FEATURE					
DCTRAUTH					
End of Comment					
		.... 1...		DCTREJRM	"B'00001000" REMOTE RESTRICTION
		.... .1..		DCTREJJB	"B'00000100" RESTRICTED FROM JOB COMMANDS
		.... .1.		DCTREJDV	"B'00000010" RESTRICTED FROM DEVICE COMMANDS
		.... .1.		DCTREJSY	"B'00000001" RESTRICTED FROM SYSTEM COMMANDS
Comment					
MDCTNFL					
End of Comment					
		1... ..		MDCTNFLL	"B'10000000" THIS END LOW NODE
		.1... ..		MDCTNFLC	"B'01000000" CONCURRENCE REQUIRED
		.1... ..		MDCTNFLE	"B'00100000" RESET REQUIRED
		...1 ....		MDCTNFLQ	"B'00010000" ON ACTIVE QUEUE
		.... 1...		MDCTNFLS	"B'00001000" SECONDARY TRUNK

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... .1..		MDCTNFLI	"B'00000100" SIGNON INPUT EXPECTED
		.... .1.		MDCTNFLP	"B'00000010" Signon is pending MAS validation
		.... ...1		MDCTNJEH	"B'00000001" SEND NJE HDR TO SESSION PARTNR
Comment					
MDCTNFL2					
End of Comment					
		1... ....		MDCTNF2R	"B'10000000" THIS LINE REQUIRES RESTART
		.1.. ....		MDCTNF2S	"B'01000000" RESTART OF THIS LINE IS AS SECONDARY
		.1. ....		MDCTNF2N	"B'00100000" Restart line after draining it
		...1 ....		MDCTNF2A	"B'00010000" Signon of NJE line as primary trunk has completed
		.... 1...		MDCTNF2D	"B'00001000" The transmitter/receiver DCTs for this line are assigned at init and should not be freed
		.... .1..		MDCTNF2I	"B'00000100" Received 'I' record, awaiting MAS validation
		.... .1.		MDCTNF2J	"B'00000010" Received 'J' record, awaiting MAS validation
Comment					
MDCTNFL3					
End of Comment					
		1... ....		MDCTNF3M	"B'10000000" Multi-trunk bit set from MAS validation
		.1.. ....		MDCTNF3J	"B'01000000" Multi-trunk bit set from 'J' record
		.... ...1		MDCTNF3E	"B'00000001" \$EXTP PUT failed for other than buffer shortage while transmitting NMR
Comment					
DCTPPFL					
End of Comment					
		1... ....		DCTEJECT	"B'10000000" PRINTER IS AT TOP OF PAGE
		.1.. ....		DCTRPSSE	"B'01000000" REMOTE PRINTER - SUPPRESS PAGE EJECT ON RMT SIGNON
		.1.. ....		DCTRUSBC	"B'01000000" REMOTE PUNCH - SUPPRESS BLANK CARD TO FLUSH PUNCH BETWEEN/AFTER DATA SETS
		.1. ....		DCTALIGN	"B'00100000" PRINTER WILL ACCEPT ALIGNMENT
		...1 ....		DCTRANS	"B'00010000" PRINTER TRANSLATION SPECIFIED
		.... 1...		DCTTCEL	"B'00001000" TRACK-CELL DESPOOLING
		.... .1..		DCTRMFCB	"B'00000100" REMOTE PRINTER HAS FCB FEATURE
		.... .1.		DCTSUSPD	"B'00000010" OUTPUT SUSPEND IS ALLOWED
Comment					
CTPAUSE EQU B'00000001' OPERATOR SET PAUSE=YES					
DCTPPSW					
End of Comment					
		1... ....		DCTPPSWC	"B'10000000" FCB CARRIAGE ALTERED
		.1. ....		DCTPPSWB	"B'00100000" FCB NOT STANDARD
		...1 ....		DCTPPSWS	"B'00010000" SUPPRESS SEPARATOR PAGES
		.... 1...		DCTPPSWT	"B'00001000" UCS TRAIN ALTERED
		.... .1..		DCTPPSWU	"B'00000100" UCS NOT STANDARD
		.... .1.		DCTPPSWI	"B'00000010" DEVICE IDLE MESSAGE ISSUED
		.... ...1		DCTPPSWO	"B'00000001" OPERATOR ACTION ALLOWED
Comment					
DCTPPSW2					
End of Comment					

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1... ....		DCTNIPRT	"B'10000000" N/I-PRINTER DCT IDENTIFIER
		.1... ....		DCTSTFSS	"B'01000000" Device can only be successfully started if in FSS mode (for example, AFP1 devices)
		..1. ....		DCTNIMRK	"B'00100000" N/I-PRT FORMS MARK ALTERED
		...1 ....		DCTCKJAM	"B'00010000" N/I-CANCEL KEY OR PAPER JAM G38E
		.... 1...		DCTNINIT	"B'00001000" N/I-PRINTER INITIALIZATION SWITCH
		.... .1..		DCTSEPNL	"B'00000100" N/I DON'T LOAD DEFAULT FOR SEP
		.... .1..		DCTSDESSW	"B'00000010" NOSEPDS/SEPDS SWITCH
		.... ...1		DCTBFCKP	"B'00000001" \$B/\$F FROM LAST CHECKPOINT
Comment					
DCTPPSW3					
THE BIT DEFINITIONS FOR COPYMARKS IN THE DCTPPSW3					
BYTE HAVE TO MATCH THE BIT DEFINITIONS FOR COPYMARKS					
IN THE FSAFLAG4 BYTE FOR HASPCOMM PROCESSING					
End of Comment					
		1... ....		DCTDOPN	"B'10000000" DCB HAS BEEN OPENED
		.1... ....		DCTS3TFC	"B'01000000" FCB has been modified via a \$T command
		..1. ....		DCTUCSBL	"B'00100000" USE 4245 BLDL/LOAD FLAG
		...1 ....		DCT3UCSV	"B'00010000" PERFORM 424X UCS VERIFY
		.... 1...		DCTS3CNO	"B'00001000" COPYMARKS NONE
		.... .1..		DCTS3CDS	"B'00000100" COPYMARKS ON DATASET LEVEL
		.... .1..		DCTS3CJB	"B'00000010" COPYMARKS ON JOB LEVEL
		.... ...1		DCTS3CON	"B'00000001" COPYMARKS CONSTANT
660	(294)	X'F'	0	DCTS3CPY	"DCTS3CNO+DCTS3CDS+DCTS3CJB+DCTS3CON" COPYMARKS reset
Comment					
DCTPPSW4					
End of Comment					
		1... ....		DCTS4NPS	"B'10000000" NO DATA SET PRESELECTION
		.1... ....		DCTS4NHLT	"B'01000000" DO NOT HALT DEV FOR SETUP
		..1. ....		DCTS4NHOR	"B'00100000" SETUP=NOHALT OVERRIDE
		...1 ....		DCTS4OPI	"B'00010000" INTERVENTION-REQUIRED CONDITION
		.... 1...		DCTS4TUN	"B'00001000" Unit has been modified via \$T command
		.... .1..		DCTS4AIS	"B'00000100" Send data ASIS to remote
		.... .1..		DCT4TRNY	"B'00000010" TRANS=YES
		.... ...1		DCT4TRNN	"B'00000001" TRANS=NO
Comment					
XDCTFLG1					
End of Comment					
		1... ....		XDCT1DMP	"B'10000000" TRANSMIT (DUMP)
		.1... ....		XDCT1LOD	"B'01000000" RECEIVE (LOAD)
		..1. ....		XDCT1SUB	"B'00100000" SUBTASK OPERATING ON THIS DCT
		...1 ....		XDCT1ALC	"B'00010000" OFFLOAD DATASET ALLOCATED
		.... 1...		XDCT1CLS	"B'00001000" CLOSE ISSUED FOR OFFLOAD DCT
		.... .1..		XDCT1VER	"B'00000100" RECORD VERIFICATION ERROR
		.... .1..		XDCT1RD	"B'00000010" READ IN PROGRESS FOR OFFLOAD
		.... ...1		XDCT1STR	"B'00000001" OFFLOAD DEVICE BEING RESTARTED
Comment					
XDCTFLG2					
End of Comment					
		1... ....		XDCT2ST	"B'10000000" OFFLOAD XMIT/RECEIVE CAN BEGIN
		.1... ....		XDCT2PRO	"B'01000000" SAF PROTECTION IF DISP=NEW

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1. ....		XDCT2NDF	"B'00100000" Node of offload and this node are different
		...1 ....		XDCT2NVR	"B'00010000" Skip checks of time/date stamp from first record
Comment					
MDCTFLG1 SNA REMOTE DCT FLAG BYTE					
End of Comment					
		1... ....		MDCT1OUT	"B'10000000" OUTPUT EXISTS FOR THIS DEV
		.1.. ....		MDCT1EOT	"B'01000000" ACKN END-OF-TRANS (ATC) FLG

**\$DCT Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCT	0		DCTDOPN	294	80
DCT\$FELS	294	8	DCTDRAIN	8	40
DCT\$TNSP	294	2	DCTDVTPX	1A	40
DCTABORT	294	2	DCTEJECT	294	80
DCTACB	10		DCTEOF	294	10
DCTACPTN	28F		DCTERMNR	A	40
DCTADS	294	80	DCTETX	294	20
DCTAGE	234		DCTEWF	14	
DCTALIGN	294	20	DCTEXORG	70	
DCTARMID	39	5	DCTFCB	21C	
DCTASAPI	254		DCTFCKMD	B	40
DCTATTN	8	2	DCTFDFLT	B	20
DCTBFCKP	294	1	DCTFEORG	50	
DCTBKSP	9	8	DCTFLAGS	9	
DCTBUFAD	C		DCTFLAG2	A	
DCTBUFCN	18		DCTFLAG3	1B	
DCTBUFLM	18	14	DCTFLASH	224	
DCTCCWTB	29C		DCTFLGFW	8	
DCTCHAIN	24		DCTFLSHD	228	
DCTCHAR1	278		DCTFLUSH	294	20
DCTCHAR2	27C		DCTFORMS	1D4	
DCTCHAR3	280		DCTFSAID	4A	
DCTCHAR4	284		DCTFSET	B	8
DCTCIP	294	80	DCTFSID	48	
DCTCKJAM	294	10	DCTFSSCH	44	
DCTCKPTL	292		DCTFSSFL	B	
DCTCKPTP	290		DCTFSSID	48	
DCTCKPTT	294		DCTFSSMD	B	1
DCTCLASS	180		DCTFSSNM	44	
DCTCMODF	B	4	DCTFSSNW	44	
DCTCMODJ	B	2	DCTFSYNC	B	10
DCTCOMID	39	3	DCTGTBSM	294	20
DCTCRUID	164		DCTGTDCB	294	40
DCTCSW	2A0		DCTGTW	250	
DCTCURJB	15C		DCTHOLD	8	20
DCTCWS	A0		DCTHOLDJ	9	4
DCTCWSLN	1D4	134	DCTHOLDS	294	10
DCTDALEN	1B	18	DCTID	0	
DCTDCB	10		DCTID2	A0	E6E2D740
DCTDCPTN	28E		DCTINDEX	270	
DCTDDFCB	26C		DCTINDIR	16D	80
DCTDELET	9	40	DCTINR	1A	14
DCTDEVID	39		DCTINRID	39	0
DCTDEVI2	1C6		DCTINT	1A	4
DCTDEVN	28		DCTINUSE	8	80
DCTDEVNC	1B4	1B4	DCTIIRORG	98	99
DCTDEVN2	1B4		DCTJCLAS	95	
DCTDEVTP	1A		DCTJNUMH	174	
DCTDEVT2	1C5		DCTJNUML	170	

## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCTJOBNM	154		DCTPALTC	294	2
DCTJREND	9C	9C	DCTPASCII	294	40
DCTJRMCL	1FD		DCTPATTN	8	4
DCTJRMNO	1FF		DCTPAUSE	8	1
DCTJRMSF	1F8		DCTPBEXP	294	40
DCTJRSAF	1F4		DCTPBLK	294	80
DCTJTDHD	1F4	40	DCTPBUF	294	1
DCTJTDKP	1F4	20	DCTPCCTL	294	10
DCTJTDPG	1F4	80	DCTPCE	4	
DCTJTDSP	1F4		DCTPCOMP	294	8
DCTJTEND	1F4	1F5	DCTPCPCT	294	1
DCTJWS	A0		DCTPCPU	294	40
DCTJWSLN	1E4	154	DCTPCRS7	294	47
DCTLDPID	28C		DCTPCTC	294	20
DCTLEASE	294	80	DCTPFCB	294	8
DCTLENG	268	1C8	DCTPFULL	294	1
DCTLGND	39	C0	DCTPHASP	294	10
DCTLIMHI	1D0		DCTPHDW	294	20
DCTLIMLO	1CC		DCTPJOE	264	
DCTLNE	1A	2	DCTPLIMH	230	
DCTLNEID	39	D0	DCTPLIML	22C	
DCTLOG	1A	6	DCTPLU1	294	81
DCTLOGAL	9	1	DCTPMRF	294	2
DCTLPOS	C3		DCTPNADS	294	4
DCTLRECL	38		DCTPNDST	294	20
DCTMAXWS	A8	16	DCTPOSNL	C6	FF
DCTMCLAS	96		DCTPOST	294	4
DCTMLNE	1A	E	DCTPOUTB	294	80
DCTMODF	288		DCTPPFL	271	
DCTNACTV	258		DCTPPOS	C5	
DCTNET	1A	8	DCTPPRES	294	4
DCTNEWFS	294	10	DCTPPSW	272	
DCTNIBRS	24C	40	DCTPPSWB	294	20
DCTNIFCB	268		DCTPPSWC	294	80
DCTNIMRK	294	20	DCTPPSWI	294	2
DCTNINIT	294	8	DCTPPSWO	294	1
DCTNIPRT	294	80	DCTPPSWS	294	10
DCTNJR	1A	18	DCTPPSWT	294	8
DCTNJRID	39	50	DCTPPSWU	294	4
DCTNJT	1A	38	DCTPPSW2	273	
DCTNJTID	39	40	DCTPPSW3	274	
DCTNMVOL	A4		DCTPPSW4	275	
DCTNODE	120	0	DCTPPSW5	276	
DCTNPLIM	294	80	DCTPPSW6	277	
DCTNPRO	296		DCTPREND	2A0	2A4
DCTNRC	16C		DCTPRGID	39	4
DCTNRLEN	120	4	DCTPRINC	97	
DCTNRR	1A	58	DCTPRINT	78	
DCTNRT	1A	78	DCTPRIM	98	
DCTNSR	1A	8	DCTPRMD	240	
DCTNSRID	39	70	DCTPRNOD	78	
DCTNST	1A	28	DCTPROG	294	20
DCTNSTID	39	60	DCTPRPU	1A	20
DCTNUM	39	3A	DCTPRRTE	7A	
DCTODPNV	C1	8	DCTPRSER	7C	
DCTOFF	1A	84	DCTPRT	1A	20
DCTOJEND	1F4	1F5	DCTPRTBL	248	
DCTOJRLN	1FF	201	DCTPRTID	39	20
DCTONODE	C6		DCTPRTRN	298	
DCTOPEN	A	1	DCTPSHDR	294	8
DCTOREND	294	29C	DCTPSNA	294	80
DCTOSEND	269	26C	DCTPSUBC	294	F
DCTOUTID	39	E	DCTPSUSP	294	1
DCTPABEX	294	20	DCTPSYS3	294	46
DCTPACTV	25C		DCTPSY36	294	48

## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCTPTAB	294	10	DCTRVAL	C0	40
DCTPTRSP	294	80	DCTRWS	C0	1
DCTPUN	1A	30	DCTR1IND	72	80
DCTPUNCH	84		DCTR190	294	4
DCTPUNID	39	30	DCTSAF	1D4	
DCTPUNOD	84		DCTSAFPT	1D8	
DCTPURTE	86		DCTSAPID	39	D
DCTPUSER	88		DCTSCHE	1E4	
DCTPVAR	294	40	DCTSDDSSW	294	2
DCTPWIDE	294	2	DCTSEEK	10	
DCTP1130	294	45	DCTSEPNL	294	4
DCTP20S2	294	41	DCTSFSID	39	1
DCTP20S4	294	4A	DCTSHARE	294	40
DCTP20S5	294	42	DCTSHMSG	294	4
DCTP20S6	294	43	DCTSIAFF	90	
DCTP2770	294	21	DCTSINON	294	8
DCTP2780	294	25	DCTSLASH	C0	10
DCTP2922	294	4B	DCTSLIM	C1	20
DCTP360	294	44	DCTSNHLT	294	40
DCTP370	294	49	DCTSNHOR	294	20
DCTP3740	294	23	DCTSOFF	294	10
DCTP3780	294	24	DCTSOFF2	9	10
DCTP3781	294	22	DCTSPACE	9	3
DCTQPOS	C2		DCTSPNID	39	2
DCTQVAL	C0	80	DCTSPOF	1A	80
DCTQWS	C0	20	DCTSP1	9	1
DCTRACE	A	80	DCTSP2	9	2
DCTRANS	294	10	DCTSREND	68	70
DCTRAUTH	94		DCTSRMCL	26B	
DCTRBFF	A	20	DCTSRMFC	278	
DCTRC	124		DCTSRMFL	27C	
DCTRCLN	120	C	DCTSRMFO	28C	
DCTRCLMAX	120	4	DCTSRMNO	26C	
DCTRCON	1A	42	DCTSRMPR	284	
DCTRDEND	9C		DCTSRMUC	280	
DCTRDFL1	72		DCTSRMWI	294	
DCTRDNOD	74		DCTSRVCL	1DC	
DCTRDONE	39	2	DCTSTART	B	80
DCTRDR	1A	10	DCTSTAT	8	
DCTRDRID	39	10	DCTSTAT2	1C	
DCTRDRT	74		DCTSTDHD	268	40
DCTRDRTE	76		DCTSTDKP	268	20
DCTREJDV	294	2	DCTSTDPG	268	80
DCTREJJB	294	4	DCTSTDSP	268	
DCTREJRM	294	8	DCTSTEND	269	26C
DCTREJSY	294	1	DCTSTFSS	294	40
DCTRJE	1A	2	DCTSTOP	9	80
DCTRJI	1A	50	DCTSTRT	8	4
DCTRJR	1A	12	DCTSUSPD	294	2
DCTRMFCB	294	4	DCTSWS	A0	
DCTRMID	39	80	DCTSWSLN	268	1C8
DCTROUTE	120	2	DCTS3CDS	294	4
DCTRPOS	C4		DCTS3CJB	294	2
DCTRPP	1A	30	DCTS3CNO	294	8
DCTRPR	1A	22	DCTS3CON	294	1
DCTRPSSE	294	40	DCTS3CPY	294	F
DCTRPT	9	10	DCTS3TFC	294	40
DCTRPU	1A	32	DCTS4AIS	294	4
DCTRRDY	A	10	DCTS4NPS	294	80
DCTRSTRT	9	20	DCTS4OPI	294	10
DCTRSTAM	8	8	DCTS4TUN	294	8
DCTRTE	A	1	DCTTCEL	294	8
DCTRTEID	39	8	DCTTODNE	39	1
DCTRTEQ	16D		DCTTOKA	34	
DCTRUSBC	294	40	DCTUCB	30	

## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCTUCS	220		DCT1SBUR	268	8
DCTUCSBL	294	20	DCT1SDNL	268	10
DCTUNAL	8	10	DCT1SDSH	268	20
DCTUNIT	64		DCT1SHLD	268	80
DCTUSEID	120	4	DCT1SHNL	268	40
DCTUSER0	3C		DCT1SODA	24D	F
DCTUSER1	40		DCT1SODH	24D	4
DCTVOL	A8		DCT1SODK	24D	2
DCTVOLEN	A0	6	DCT1SODL	24D	1
DCTVOLFL	C0	8	DCT1SODW	24D	8
DCTVOLMX	A0	4	DCT1SRFL	268	
DCTWFORC	1DC	1DC	DCT1STFL	24D	
DCTWFORM	1DC		DCT2MODA	269	F
DCTWKBUF	44		DCT2MODH	269	4
DCTWORK	70		DCT2MODK	269	2
DCTWRASI	1AC		DCT2MODL	269	1
DCTWRNUM	1A8		DCT2MODW	269	8
DCTWS	C8	C0	DCT2POST	A	8
DCTWSANY	1A6	1E	DCT2PTRC	A	4
DCTWSBEG	C0		DCT2RSP	A	2
DCTWSBNS	24C	10	DCT2SRFL	269	
DCTWSBTH	24C	4	DCT3JWS	1B	80
DCTWSCTK	C1	10	DCT3SODA	26A	F
DCTWSDAN	24C	20	DCT3SODH	26A	4
DCTWSDSH	24C	80	DCT3SODK	26A	2
DCTWSENT	A8	4	DCT3SODL	26A	1
DCTWSFAP	1A6	2	DCT3SODW	26A	8
DCTWSFG1	1A6		DCT3SRFL	26A	
DCTWSFG2	24C		DCT3SWS	1B	40
DCTWSFG3	260		DCT3UCSV	294	10
DCTWSFJR	1A6	10	DCT4TRNN	294	1
DCTWSFST	1A6	8	DCT4TRNY	294	2
DCTWSFTS	1A6	4	DCT5\$PPN	276	2
DCTWSHLD	1A6	80	DCT5\$SPN	276	4
DCTWSHNS	1A6	40	DCT5CALL	276	40
DCTWSIP	24C	8	DCT5C1ON	276	80
DCTWSLIM	C1	40	DCT5DNRC	276	8
DCTWSLOC	16D	80	DCT5FSAT	276	1
DCTWSNET	16D	20	DCT5TFSS	276	10
DCTWSNOT	1A6	20	DCT5TUCS	276	20
DCTWSODP	C1	80	DCT6NOTR	277	80
DCTWSP	A0		MDCTABRT	94	
DCTWSPRI	C0		MDCTACT	B4	
DCTWSPRL	A8	8	MDCTADCT	50	
DCTWSPR2	C1		MDCTAFTK	70	
DCTWSREQ	C8		MDCTAPNL	7B	
DCTWSRGS	C0	2	MDCTAPPL	7C	
DCTWSRMT	16D	40	MDCTATE	84	
DCTWSRNG	C0	4	MDCTATMP	E0	
DCTWSTB	120		MDCTATTN	5E	
DCTWSUSE	16D	10	MDCTATT8	294	1
DCTWS3QD	260	80	MDCTATYP	5D	
DCTWTRID	238		MDCTBFSZ	60	
DCTXEQND	70		MDCTBIDR	94	
DCTXFEND	DC		MDCTCHLM	63	
DCTXFRID	39	F	MDCTCMCT	CB	
DCTXJR	1A	90	MDCTCNTS	9C	
DCTXJT	1A	B0	MDCTCODE	84	
DCTXSR	1A	80	MDCTDCK	90	
DCTXST	1A	A0	MDCTDCNT	B2	
DCTXWTID	39	F	MDCTDCT	58	
DCT1JHLD	1FC	80	MDCTDSC	294	8
DCT1JHNL	1FC	40	MDCTERCT	57	
DCT1JRFL	1FC		MDCTEXCD	B0	
DCT1SBNL	268	4	MDCTEXIT	B4	



## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MDCTEXWK	B0		MDCTNODE	D4	
MDCTFCS	62		MDCTNOTS	FC	
MDCTFEAT	53		MDCTNPAS	E0	
MDCTFLG1	5E		MDCTNPCH	88	
MDCTFMT	52		MDCTNQSE	8C	
MDCTICE	54		MDCTNR	BC	
MDCTIFEA	EC		MDCTOBUF	78	
MDCTIMER	294	80	MDCTOPCT	C8	
MDCTIMOK	7C		MDCTOTAL	88	
MDCTINTE	294	4	MDCTPAWS	294	40
MDCTINVL	90		MDCTPMBC	B0	
MDCTJOB	294	30	MDCTPMFL	B1	
MDCTJOB1	294	20	MDCTPSWD	70	
MDCTJOB2	294	10	MDCTPWDL	63	
MDCTJRNM	F1		MDCTQUAL	D6	
MDCTJTNM	F0		MDCTRABF	A4	
MDCTLEND	100		MDCTRACT	A2	
MDCTLGND	B8		MDCTRALM	A0	
MDCTLINE	5C		MDCTRAT	80	
MDCTLNCC	C7		MDCTRAWK	A0	
MDCTLOGN	84		MDCTRCB	51	
MDCTLUST	90		MDCTRECL	50	
MDCTMDID	98		MDCTREM	98	
MDCTMDNQ	90		MDCTRFXE	68	70
MDCTMDOM	E8		MDCTRNTA	DC	
MDCTMEMB	78		MDCTRQBF	AC	
MDCTMODE	56		MDCTRQCT	AA	
MDCTMPER	98		MDCTRQLM	A8	
MDCTMRRT	F8		MDCTRQWK	A8	
MDCTMRT	F4		MDCTRSEQ	54	
MDCTMTIM	94		MDCTSCNT	9C	
MDCTNA	B8		MDCTSDCK	A4	
MDCTNAK	8C		MDCTSDCT	C	
MDCTNATP	84		MDCTSEL	51	
MDCTNCES	C0		MDCTSNAK	A0	
MDCTNEGR	CC	0	MDCTSNET	78	
MDCTNETA	CB	B4	MDCTSREM	AC	
MDCTNFL	CA		MDCTSRNM	F3	
MDCTNFLC	294	40	MDCTSTAT	5F	
MDCTNFLF	294	20	MDCTSTNM	F2	
MDCTNFLI	294	4	MDCTSTO	A8	
MDCTNFLL	294	80	MDCTSTRT	294	2
MDCTNFLP	294	2	MDCTSUSP	62	
MDCTNFLQ	294	10	MDCTSXCP	9C	
MDCTNFLS	294	8	MDCTTO	94	
MDCTNFL2	C4		MDCTTSEQ	55	
MDCTNFL3	C5		MDCTTYPE	5D	
MDCTNF2A	294	10	MDCTVREQ	88	
MDCTNF2D	294	8	MDCTWICE	60	
MDCTNF2I	294	4	MDCTXCOD	B3	
MDCTNF2J	294	2	MDCTXCP	88	
MDCTNF2N	294	20	MDCTXERR	5C	
MDCTNF2R	294	80	MDCTXRSP	8C	
MDCTNF2S	294	40	MDCT1EOT	294	40
MDCTNF3E	294	1	MDCT1OUT	294	80
MDCTNF3J	294	40	RIDAHOOLD	10D	40
MDCTNF3M	294	80	RIDALET	108	
MDCTNICE	88		RIDALLOC	99	20
MDCTNJEH	294	1	RIDALOCL	10D	80
MDCTNLDV	F0		RIDASCBP	58	
MDCTNLNE	8C		RIDASCBT	5C	
MDCTNM	B4		RIDBUFSZ	110	2000
MDCTNMAP	D8		RIDCAVAL	F0	4
MDCTNNR	BE		RIDCDATA	F0	8
MDCTNO	D4		RIDCDONE	F0	C

## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
RIDCLNUP	99	40	XDCTSKIP	294	4
RIDCTEND	110		XDCTSTAT	50	
RIDECB	64		XDCTSUBC	7C	
RIDECBP	54		XDCTSUBR	7A	
RIDEND	99	10	XDCTTIME	90	
RIDEOM	99	4	XDCTTVER	98	
RIDEOMA	B8		XDCTUNCT	7E	
RIDEOME	BC		XDCTUNIT	85	
RIDEOMER	B0		XDCTVOLS	81	
RIDEOMP	B4		XDCTXNUM	78	
RIDERRET	50		XDCT1ALC	294	10
RIDEXMPL	B0		XDCT1CLS	294	8
RIDFLAGA	10D		XDCT1DMP	294	80
RIDFLAGS	99		XDCT1LOD	294	40
RIDFLAG1	6F		XDCT1RD	294	2
RIDFLAG2	10C		XDCT1STR	294	1
RIDFLAG3	10E		XDCT1SUB	294	20
RIDHCCT	68		XDCT1VER	294	4
RIDJBID	C0		XDCT2NDF	294	20
RIDJNAM	C8		XDCT2NVR	294	10
RIDJOBID	A8		XDCT2PRO	294	40
RIDLOCK	E0		XDCT2ST	294	80
RIDLRECL	6C				
RIDPBF	A0				
RIDPBFO	A4				
RIDPOSTI	99	1			
RIDRECFM	6E				
RIDRSV2	E8				
RIDRSV3	10F				
RIDSAA	104				
RIDSGRP	D8				
RIDSJB	E4				
RIDSKIP	99	8			
RIDSUSR	D0				
RIDUBF	9C				
RIDXECB	F0				
RIDXMPL	50				
RID1LRDF	6F	80			
RID1ROUT	99	2			
RID1UDCB	6F	40			
RID2ERAM	10C	40			
RID2ERRD	10C	80			
RID3BLIM	10E	80			
XDCTACTV	A8				
XDCTBUFQ	A4				
XDCTCMPQ	A0				
XDCTDATE	94				
XDCTDCT	54				
XDCTDSN	B0				
XDCTDTE	70				
XDCTDVER	9C				
XDCTERCT	AC				
XDCTERR	294	40			
XDCTFLG1	7F				
XDCTFLG2	80				
XDCTFREE	8E				
XDCTLABL	82				
XDCTMAXB	AE				
XDCTMSG	294	8			
XDCTOFSL	8D				
XDCTOPCT	AD				
XDCTOPEN	294	80			
XDCTRCB	51				
XDCTRTPD	83				
XDCTSEQN	74				

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**\$DCTTAB Programming Interface information**

Programming Interface information

**\$DCTTAB**

End of Programming Interface information

## \$DCTTAB Heading Information

**Common Name:** DCT Table Entry DSECT  
**Macro ID:** \$DCTTAB  
**DSECT Name:** DTAB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** The pool of DCTTABS is preceded by an eyecatcher **\*\*\*DCT POOL\*\*\*** in the header for the pool.  
 Offset: HDPID-HDP  
 Length: 13

**Storage Attributes:** Subpool: Part of HASJES20 or user exit load module  
 Key: 1  
 Residency: Part of the HASJES20 load module in the JES2 address space for HASP tables. Virtual and real storage anywhere within the JES2 address space for USER tables.

**Size:** See DTABELEN  
**Created by:** Assembly  
**Pointed to by:** MCTDCTTH field of the \$MCT data area  
 MCTDCTTU field of the \$MCT data area  
 DTABSCHN field of the \$DCTTAB data area  
 PTABDTAB field of the \$PCETAB data area  
 The end of the previous DCTTAB is the start of the next DCTTAB in the pool.

**Serialization:** \$DCTTABS are read only.  
**Function:** \$DCTTAB maps the static tables used by JES2 for creation, location, and deletion of \$DCTs.

\$DCTTABS are used to define devices supported by IBM distributed code. They can also be used to define installation defined devices or to override IBM defined devices (this does not imply that IBM distributed code will support the installation defined devices).

## \$DCTTAB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTAB	
0	(0)	CHARACTER	8	DTABNAME	DCT TABLE ENTRY NAME
8	(8)	CHARACTER	24	DTABDESC	DCT DESCRIPTION
32	(20)	CHARACTER	8	DTABALS	DCT NAME ALIAS
40	(28)	BITSTRING	1	DTABFLG1	GENERAL FLAGS
		1... ....		DTAB1DEU	"B'10000000" ENTRY IS USER DTAB ENTRY
		.1.. ....		DTAB1DEH	"B'01000000" ENTRY IS HASP DTAB ENTRY
		..1. ....		DTAB1PCE	"B'00100000" DCTS OF THIS TYPE EACH HAVE CORRESPONDING PCES
		...1 ....		DTAB1MP	"B'00010000" DCTS OF THIS TYPE ARE MANAGED AS AS A GROUP BY ONE PCE
		.... 1...		DTAB1PPU	"B'00001000" PCEPTR FIELD IN THE UCT
		.... .1..		DTAB1PPH	"B'00000100" PCEPTR FIELD IN THE HCT
41	(29)	BITSTRING	1	DTABFLG2	SECOND FLAG BYTE
		1... ....		DTAB2CHU	"B'10000000" CHAIN FIELD IN THE UCT
		.1.. ....		DTAB2CHH	"B'01000000" CHAIN FIELD IN THE HCT
		..1. ....		DTAB2CTU	"B'00100000" COUNT FIELD IN THE UCT
		...1 ....		DTAB2CTH	"B'00010000" COUNT FIELD IN THE HCT
		.... 1...		DTAB2SUB	"B'00001000" DCT HAS SUBTYPE CHAIN (PARENT)
		.... .1..		DTAB2POL	"B'00000100" DCT IS IN \$DCTPOOL CHAIN

Offsets		Type/Value	Len	Name (Dim)	Description
Dec	Hex				
		.... ..1.		DTAB2DCB	"B'00000010" EXCP DCB AND DEB FOR DCT
		.... ..1		DTAB2BSM	"B'00000001" BSAM DCB BUILT FOR THIS DCT
42	(2A)	BITSTRING	1	DTABFLG3	Third flag
		1... ....		DTAB3JWS	"B'10000000" Dev does JOB work sel
		.1... ....		DTAB3SWS	"B'01000000" Dev does SYSOUT work sel
43	(2B)	BITSTRING	3		Reserved for future use
46	(2E)	BITSTRING	1	DTABID	DCTDEVTP FIELD
47	(2F)	BITSTRING	1	DTABPTYP	PARENT DEVICE TYPE
48	(30)	BITSTRING	1	DTABDEV	DCTDEVID FIELD
49	(31)	ADDRESS	1	DTABNAML	LENGTH OF DCT NAME
50	(32)	ADDRESS	1	DTABSUBL	OFFSET OF SUBSCRIPT IN NAME
51	(33)	ADDRESS	1	DTABDESL	LENGTH-1 FOR DTABDESC
52	(34)	ADDRESS	2	DTABSCHN	SUBCHAINING FIELD OFFSET
54	(36)	ADDRESS	2	DTABLEN	LENGTH OF THIS DCT TYPE
56	(38)	ADDRESS	2	DTABPCEP (0)	OFFSET OF MANAGING PCE ADDRESS IF DTAB1MP IS ON
56	(38)	ADDRESS	4	DTABPTAB	RELATED PCE TABLE ENTRY ADDRESS IF DTAB1PCE is on
60	(3C)	ADDRESS	4	DTABWSTB	ADDR OR OFFSET OF WS TABLE PAIR ADDRESS
64	(40)	ADDRESS	4	DTABWSDF	DEFAULT WS LIST ADDRESS
68	(44)	ADDRESS	2	DTABCHN	OFFSET OF DCT CHAINING FIELD
70	(46)	ADDRESS	2	DTABCNT	OFFSET OF DCT COUNT FIELD
72	(48)	ADDRESS	2	DTABLV	LOW SUBSCRIPT RANGE VALUE
74	(4A)	ADDRESS	2	DTABHV	HIGH SUBSCRIPT RANGE VALUE
76	(4C)	ADDRESS	4	DTABRTN	ADDRESS OF DCT INIT ROUTINE
76	(4C)	X'2'	0	DTABVERS	"2" DTAB VERSION LEVEL
76	(4C)	X'50'	0	DTABELEN	**DTAB" LENGTH OF DCT TABLE ENTRY DSECT

\$DCTTAB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DTAB	0		DTAB2CHU	29	80
DTABALS	20		DTAB2CTH	29	10
DTABCHN	44		DTAB2CTU	29	20
DTABCNT	46		DTAB2DCB	29	2
DTABDESC	8		DTAB2POL	29	4
DTABDESL	33		DTAB2SUB	29	8
DTABDEV	30		DTAB3JWS	2A	80
DTABELEN	4C	50	DTAB3SWS	2A	40
DTABFLG1	28				
DTABFLG2	29				
DTABFLG3	2A				
DTABHV	4A				
DTABID	2E				
DTABLEN	36				
DTABLV	48				
DTABNAME	0				
DTABNAML	31				
DTABPCEP	38				
DTABPTAB	38				
DTABPTYP	2F				
DTABRTN	4C				
DTABSCHN	34				
DTABSUBL	32				
DTABVERS	4C	2			
DTABWSDF	40				
DTABWSTB	3C				
DTAB1DEH	28	40			
DTAB1DEU	28	80			
DTAB1MP	28	10			
DTAB1PCE	28	20			
DTAB1PPH	28	4			
DTAB1PPU	28	8			
DTAB2BSM	29	1			
DTAB2CHH	29	40			



## \$DILWORK Heading Information

**Common Name:** JES2 BERT Lock POST Processor  
**Macro ID:** \$DILWORK  
**DSECT Name:** PCE (\$DILWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol DILPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** The \$DILPCE field of the \$HCT data area points into the \$PCEORG/\$PCELAST chain to the first BERT POST PCE. Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type. See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization  
**Function:** The fields in this work area are used by a JES2 BERT Lock POST Processor and by its support routines and exits. \$DILWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$DILWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEDILID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

### \$DILWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
4096	(1000)	ADDRESS	4	DILDWA	Address of active DWA
4096	(1000)	X'F14'	0	DILPCEWS	**"-PCEWORK" Length of \$DILBERT PCE

## \$DILWORK Map



## \$DSB Heading Information

**Common Name:** Data Space Control Block  
**Macro ID:** \$DSB  
**DSECT Name:** DSB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** \$DSB  
 Offset: -8 (in the JES2 CSA storage prefix)  
 Length: 4

**Storage Attributes:** Subpool: 231 or 229  
 Key: 1  
 Residency: Virtual and real storage are anywhere, above or below 16M, in common storage (if SCOPE=LOCAL or SCOPE=ALL) and private storage (if SCOPE=LOCAL).

**Size:** See DSBLN (plus an 8 byte prefix)  
**Created by:** HASCDSS during data space create  
**Pointed to by:** CCTDSB field of the \$HCCT data area  
 CCTDSINR field of the \$HCCT data area  
 HXBDSB field of the \$HASXB data area  
 DSBNEXT field of the \$DSB data area  
 SCIDDSB field of the \$SCID data area for CKPT versions

**Serialization:** None required  
**Function:** This DSECT maps a work area used in the maintenance of JES2 dataspace.

## \$DSB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DSB	DATASPACE BLOCK
0	(0)	BITSTRING	1	DSBVERS	CONTROL BLOCK VERSION
0	(0)	X'2'	0	DSBVERSN	"2" Current control block ver
1	(1)	BITSTRING	1	DSBFLAG1	Latest \$DSPSERV request type (see DSWAIFL1 for bit values). Not set for RELEASE requests
2	(2)	BITSTRING	2		RESERVED FOR FUTURE USE
4	(4)	ADDRESS	4	DSBNEXT	Pointer to the next DSB
8	(8)	SIGNED	4	DSBRC	Return code from latest service routine (\$DSPSERV or \$ALESERV)
12	(C)	SIGNED	4	DSBALET	ALET FOR JES2 TO USE WHEN ACCESSING THE DATA SPACE
16	(10)	BITSTRING	8	DSBSTKN	DATASPACE TOKEN
24	(18)	ADDRESS	4	DSBOASCB	Owning ASCB address
28	(1C)	BITSTRING	8	DSBOSTKN	Owning STOKEN value
36	(24)	ADDRESS	4	DSBOTCB	Owning TCB address
40	(28)	BITSTRING	16	DSBOTTKN	Owning TCB TTOKEN
56	(38)	ADDRESS	4	DSBORG	DATASPACE ORIGIN
60	(3C)	SIGNED	4	DSBBLKSM	MAX data space size
64	(40)	SIGNED	4	DSBBLKSC	Current data space size
68	(44)	SIGNED	4	DSBBLKSI	Initial data space size
72	(48)	CHARACTER	8	DSBPNAME	Name passed on \$DSPSERV
80	(50)	CHARACTER	8	DSBNAME (0)	Constructed data space name
80	(50)	CHARACTER	4	DSBNAME1	USUALLY SUBSYSTEM NAME
84	(54)	CHARACTER	4	DSBNAME2	First 4 bytes of DSBPNAME
88	(58)	CHARACTER	8	DSBOUTN	DATASPACE NAME USED
96	(60)	BITSTRING	1	DSBKEY	DATASPACE KEY
97	(61)	BITSTRING	1	DSBFLAG2	Data space flags
		1... ....		DSB2FPRO	"B'10000000" DS is fetch protected
		..1. ....		DSB2OWNM	"B'00100000" OWNER=MASTER specified
		...1 ....		DSB2OWNC	"B'00010000" OWNER=CURRENT specified

## \$DSB Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		DSB2OWNA	"B'00001000" OWNER=AUX specified
		.... .1..		DSB2SCLO	"B'00000100" SCOPE=LOCAL data space
		.... ..1.		DSB2SCAL	"B'00000010" SCOPE=ALL data space
		.... ...1		DSB2SCCO	"B'00000001" SCOPE=COMMON data space
98	(62)	BITSTRING	2		RESERVED FOR FUTURE USE
100	(64)	ADDRESS	4	DSBLIST	Pointer to DSPSERV work area (used for CREATE and DELETE only)
104	(68)	ADDRESS	4	(2)	RESERVED FOR FUTURE USE
112	(70)	DBL WORD	8	(0)	Ensure doubleword alignment
112	(70)	X'70'	0	DSBLEN	** -DSB" LENGTH OF DATASPACE BLOCK

## \$DSB Cross Reference

Name	Hex Offset	Hex Value
DSB	0	
DSBALET	C	
DSBBLKSC	40	
DSBBLKSI	44	
DSBBLKSM	3C	
DSBFLAG1	1	
DSBFLAG2	61	
DSBKEY	60	
DSBLEN	70	70
DSBLIST	64	
DSBNAME	50	
DSBNAME1	50	
DSBNAME2	54	
DSBNEXT	4	
DSBOASCB	18	
DSBORG	38	
DSBOSTKN	1C	
DSBOTCB	24	
DSBOTTKN	28	
DSBOUTN	58	
DSBPNAME	48	
DSBRC	8	
DSBSTKN	10	
DSBVERS	0	
DSBVERSN	0	2
DSB2FPRO	61	80
DSB2OWNA	61	8
DSB2OWNC	61	10
DSB2OWNM	61	20
DSB2SCAL	61	2
DSB2SCCO	61	1
DSB2SCLO	61	4

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**\$DSCT Programming Interface information**

Programming Interface information

\$DSCT

End of Programming Interface information

## \$DSCT Heading Information

**Common Name:** Data Set Control Table  
**Macro ID:** \$DSCT  
**DSECT Name:** DSCT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DSCT'  
 Offset: DSID-DSCT  
 Length: 4

**Storage Attributes:** Subpool: Same as \$IOT  
 Key: Same as \$IOT  
 Residency: The DSCT resides within the \$IOT data area.

**Size:** See DSCTLEN

**Created by:** \$IOTBLD routine, filled in by the \$DSCTBLD routine at allocation time

**Pointed to by:** IOTDSCT field of the \$IOT data area contains the offset within the IOT of the DSCT.

**Serialization:** Same as \$IOT

**Function:** The DSCT is a control block which resides within the IOT control block. The DSCT is initialized only for data sets created by APPC Transaction Programs. The DSCT contains data set level information used to override job level information. The DSCT is located at the end of each spin IOT. Flag IOT2DSCT indicates that the DSCT exists and contains valid information.

## \$DSCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DSCT	HASP Data Set Control Table
0	(0)	DBL WORD	8	(0)	Assumed double word start
0	(0)	CHARACTER	4	DSID	DSCT identifier
4	(4)	ADDRESS	1	DSVERS	DSCT version number
4	(4)	X'1'	0	DSVERN	"1" DSCT version
5	(5)	BITSTRING	1	DSFLAG1	DSCT flag byte 1
		1... ....		DSUSUNDF	"B'10000000" Userid is undefined
6	(6)	SIGNED	2		Reserved for future use
8	(8)	CHARACTER	8	DSJBN	Job name
16	(10)	CHARACTER	8	DSWKID	Work unit identifier
24	(18)	DBL WORD	8	DSESTK	Entry start clock time
32	(20)	DBL WORD	8	DSXSTK	Execution start clock time
40	(28)	SIGNED	4	DSSTRT	Entry time in 1/100's sec
44	(2C)	SIGNED	4	DSSTRD	Entry date 00yydddf
48	(30)	CHARACTER	8	DSUID	User identification field
56	(38)	CHARACTER	8	DSTPUID	Transaction Program Userid
64	(40)	CHARACTER	4	DSACT	Account number
68	(44)	SIGNED	4		Reserved for future use
72	(48)	SIGNED	4		Reserved for future use
76	(4C)	SIGNED	4		Reserved for future use
80	(50)	SIGNED	4		Reserved for future use
84	(54)	SIGNED	4		Reserved for future use
88	(58)	SIGNED	4		Reserved for future use
92	(5C)	SIGNED	4	DSUSERF (5)	Reserved fields for user
92	(5C)	X'70'	0	DSCTLEN	"*-DSCT" Length of DSCT

**\$DSCT Cross Reference**

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
DSACT	40	
DSCT	0	
DSCTLEN	5C	70
DSESTK	18	
DSFLAG1	5	
DSID	0	C4E2C3E3
DSJBN	8	
DSSTRD	2C	
DSSTRT	28	
DSTPUID	38	
DSUID	30	
DSUSERF	5C	
DSUSUNDF	5	80
DSVERN	4	1
DSVERS	4	
DSWKID	10	
DSXSTK	20	



## \$DSSCB Heading Information

**Common Name:** Data Set Services Control Block  
**Macro ID:** \$DSSCB  
**DSECT Name:** DSSCB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** DSS  
 Offset: DSSID-DSSCB  
 Length: L'DSSID

**Storage Attributes:** Subpool: 0  
 Key: 1  
 Residency: Virtual and real storage are anywhere in the JES2 address space.

**Size:** See DSSGLEN+DSSVLEN

**Created by:** RDSMSG routine in HASPRDR, and  
 OPJLOG routine in HASPHOPE

**Pointed to by:** OUTDSSCB field of the \$OUTWORK data area

**Serialization:** See macros \$DSOPEN, \$DSPUT, and \$DSCLOSE

**Function:** The \$DSSCB is a work area used to allow data set services. Three sections are identified in the \$DSSCB dsect.

The three sections are: 1) a control section, 2) an internal work area, and 3) a caller's work area.

### The Control Section:

Fields in the control section must be set prior to calling \$DSOPEN. Failure to set the fields in this section will result in a failure in \$DSOPEN.

### Internal Work Section:

The internal work area will be set to zero by \$DSOPEN. Subsequent data set services will use this internal work area to store information such as buffer pointers and counters.

### Caller's Work Area:

The caller section will contain all the fields that the caller of the data set service routines will need to set to write the next record.

## \$DSSCB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DSSCB	HASP DATA SET SERVICE DSECT
0	(0)	CHARACTER	4	DSSID	DATA SET SERVICE IDENTIFIER
4	(4)	ADDRESS	4	DSSAIOT	POINTER TO ALLOCATION IOT
8	(8)	BITSTRING	8	DSSKEY (0)	RECORD VERIFICATION KEY
8	(8)	BITSTRING	4	DSSJKEY	4-BYTE UNIQUE JOB KEY
12	(C)	BITSTRING	4	DSSDSKEY	4-BYTE UNIQUE DATA SET NUMBER
12	(C)	X'10'	0	DSSGLEN	**"DSSCB" LEN OF GENERAL SECT OF DSS

## \$DSSCB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
INTERNAL WORK AREA - THESE FIELDS ARE SET TO ZERO ON ENTRY TO THE \$DSOPEN ROUTINE					
End of Comment					
16	(10)	ADDRESS	4	DSSABUF	STORAGE ADDR OF FIRST BUF
20	(14)	ADDRESS	4	DSSONXT	ADDR OF NEXT RECORD IN BUF
24	(18)	ADDRESS	4	DSSNBUF	STORAGE ADDR OF NEXT BUFFER
28	(1C)	BITSTRING	4	DSSMTTRF	TRACK ADDR OF FIRST BUF IN NEW DS CHAIN CREATED BY \$DSPUT
32	(20)	BITSTRING	4	DSSMTTRO	TRACK ADDRESS OF LAST BUFFER IN ORIGINAL DATA SET CHAIN
36	(24)	ADDRESS	4	DSSPIOT	IOT ADDR OF 'OPENED' Pddb
40	(28)	ADDRESS	4	DSSPddb	ADDRESS OF 'OPENED' Pddb
44	(2C)	SIGNED	4	DSSRECCT	DATA SET RECORD COUNT
48	(30)	SIGNED	4	DSSPGCT	DATA SET PAGE COUNT
52	(34)	SIGNED	4	DSSBYTE	DATA SET BYTE COUNT
56	(38)	ADDRESS	4	DSSRECAD	ADDR OF USER SUPPLIED REC
60	(3C)	ADDRESS	4	DSSEWF	Callers's PCEIOEWF
64	(40)	BITSTRING	1	DSSFLAG1	DATA SET SERVICE FLAG BYTE
Comment					
CALLER WORK AREA - DATA IN THIS AREA IS SUPPLIED BY THE CALLER OF \$DSPUT. IF CARRIAGE CONTROL INFORMATION IS NOT SUPPLIED THEN TRIPLE SPACING WILL BE SET AS THE DEFAULT CARRIAGE CONTROL. NONE OF THE FIELDS IN THE CALLER WORK AREA WILL BE ZEROED AFTER THE INITIAL ZEROING DONE BY \$DSOPEN. IF THE LENGTH OR CARRIAGE CONTROL INFORMATION IS TO CHANGE THEN THE CALLER MUST UPDATE THESE FIELDS PRIOR TO THE CALL TO \$DSPUT.					
End of Comment					
65	(41)	BITSTRING	1	DSSCCTL	CARRIAGE CONTROL BYTE - IF NOT SET TRIPLE SPACING ASSUME
66	(42)	SIGNED	2	DSSLEN	LENGTH OF INPUT DATA RECORD
68	(44)	ADDRESS	4	DSSRECPT	PENTER TO DATA RECORD
68	(44)	X'38'	0	DSSVLEN	**DSSABUF" LENGTH OF VARIABLE SECTION
72	(48)	SIGNED	4	DSSREC (0)	START OF RECORD TEXT
Comment					
DSSFLAG1 FLAG SETTINGS FOR DSSFLAG1					
End of Comment					
	1... ..			DSS1OPEN	"B'10000000" DATA SET HAS BEEN \$DSOPENED
	.1.. ..			DSS1NCLS	"B'01000000" \$DSCLOSE DATA SET IN ERROR
	..1. ....			DSS1PUTS	"B'00100000" A \$DSPUT HAS BEEN COMPLETED
	...1 ....			DSS1FRST	"B'00010000" \$DSCLOSE READ FIRST RECORD OF THE ORIGINAL DATA SET
	.... 1...			DSS1DSTR	"B'00001000" \$DSCLOSE HAS ISSUED DISTERR



**\$DSSCB Cross Reference**

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
DSSABUF	10	
DSSAIOT	4	
DSSBYTE	34	
DSSCB	0	
DSSCCTL	41	
DSSDSKEY	C	
DSSEWF	3C	
DSSFLAG1	40	
DSSGLEN	C	10
DSSID	0	
DSSJKEY	8	
DSSKEY	8	
DSSLEN	42	
DSSMTTRF	1C	
DSSMTTRO	20	
DSSNBUF	18	
DSSONXT	14	
DSSPDDB	28	
DSSPGCT	30	
DSSPIOT	24	
DSSREC	48	
DSSRECAD	38	
DSSRECCT	2C	
DSSRECPT	44	
DSSVLEN	44	38
DSS1DSTR	48	8
DSS1FRST	48	10
DSS1NCLS	48	40
DSS1OPEN	48	80
DSS1PUTS	48	20



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**\$DSWA Programming Interface information**

Programming Interface information

\$DSWA

End of Programming Interface information

### \$DSWA Heading Information

**Common Name:** Data Space Services Work Area  
**Macro ID:** \$DSWA  
**DSECT Name:** DSWA  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** DSWA  
 Offset: DSWAID-DSWA  
 Length: L'DSWAID  
**Storage Attributes:** Subpool: 229  
 Key: 1  
 Residency: Virtual and real storage are anywhere, above or below 16M, in private storage.  
**Size:** See DSWASIZE  
**Created by:** \$DSPSERV macro  
**Pointed to by:** None  
**Serialization:** None required  
**Function:** This DSECT maps the parameter list to the data space services routines in HASCDSS. It is created by the \$DSPSERV macro and freed in HASCDSS.

### \$DSWA Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DSWA	
0	(0)	CHARACTER	4	DSWAID	\$DSWA IDENTIFIER
4	(4)	BITSTRING	1	DSWAVERS	\$DSWA VERSION NUMBER
4	(4)	X'3'	0	DSWALEVL	"3" \$DSWA CURRENT VERS LEVEL
Comment					
INPUT FLAG INDICATORS.					
End of Comment					
5	(5)	BITSTRING	1	DSWAIFL1	\$DSPSERV FUNCTION FLAG
		1... ....		DSWAI1CR	"B'10000000" Create request
		.1.. ....		DSWAI1EX	"B'01000000" Extend request
		..1. ....		DSWAI1RL	"B'00100000" Release request
		...1 ....		DSWAI1DE	"B'00010000" Delete request
6	(6)	BITSTRING	1	DSWAIFL2	\$DSPSERV Parameter flag (flags must be the same as CPMFLAG3)
		1... ....		DSWAI2FY	"B'10000000" FPROT=YES specified
		.1.. ....		DSWAI2FN	"B'01000000" FPROT=NO specified
		..1. ....		DSWAI2OM	"B'00100000" OWNER=MASTER specified
		...1 ....		DSWAI2OC	"B'00010000" OWNER=CURRENT specified
		.... 1..		DSWAI2OA	"B'00001000" OWNER=AUX specified
		.... .1..		DSWAI2SL	"B'00000100" SCOPE=LOCAL specified
		.... ..1.		DSWAI2SA	"B'00000010" SCOPE=ALL specified
		.... ...1		DSWAI2SC	"B'00000001" SCOPE=COMMON specified
7	(7)	BITSTRING	4	DSWARS1	RESERVED FOR DEVELOPMENT
Comment					
Input/Output data fields (see \$DSPSERV for an explanation of the fields).					
End of Comment					
11	(B)	BITSTRING	1	DSWAKEY	KEY= KEYWORD
12	(C)	ADDRESS	4	DSWADSB	DSB= keyword

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
16	(10)	CHARACTER	8	DSWANAME	NAME= KEYWORD
24	(18)	CHARACTER	8	DSWACALL	NAME OF \$DSPSERV CALLER
32	(20)	SIGNED	4	DSWABLCM	BLOCKS=(max,) keyword
36	(24)	SIGNED	4	DSWABLCI	BLOCKS=(,init) keyword
40	(28)	SIGNED	4	DSWASTRT	START= keyword

Comment

DSPSERV ERROR/WARNING EQUATE VALUES.

End of Comment

40	(28)	X'8'	0	DSWANOES	"8" NO ESTAE COULD BE ESTABLISHED
40	(28)	X'C'	0	DSWAEEST	"12" ESTAE ENTERED, NO DS CREATED
40	(28)	X'10'	0	DSWACERR	"16" CATASTROPHIC RECURSION ERROR
40	(28)	X'28'	0	DSWANCSA	"40" Unable to obtain ECSA storage for the DSB
40	(28)	X'2C'	0	DSWANOST	"44" Unable to obtain working storage (in private)
40	(28)	X'30'	0	DSWAINVF	"48" ISSUED WITH INVALID FUNCTION
40	(28)	X'34'	0	DSWAIBLK	"52" CREATE FUNCTION, INVALID BLOCKS
40	(28)	X'38'	0	DSWASRBF	"56" Error in SRB processing
40	(28)	X'3C'	0	DSWATTKF	"60" MVS TCBTOKEN failure
40	(28)	X'40'	0	DSWADSPF	"64" MVS DSPSERV FAILURE
40	(28)	X'44'	0	DSWAALEF	"68" MVS ALESERV FAILURE
40	(28)	X'4C'	0	DSWAIVER	"76" INVALID \$DSWA VERSION NUMBER
40	(28)	X'C8'	0	DSWANGEN	"200" DATA SPACE NAME GENERATED

Comment

END OF \$DSWA DATA AREA.

End of Comment

44	(2C)	BITSTRING	1	DSWAEND (0)	
44	(2C)	X'2C'	0	DSWASIZE	"DSWAEND-DSWA" SIZE OF \$DSWA DATA AREA

\$DSWA Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DSWA	0		DSWAI2SL	6	4
DSWAALEF	28	44	DSWAKEY	B	
DSWABLCI	24		DSWALEVL	4	3
DSWABLCM	20		DSWANAME	10	
DSWACALL	18		DSWANCSA	28	28
DSWACERR	28	10	DSWANGEN	28	C8
DSWADSB	C		DSWANOES	28	8
DSWADSPF	28	40	DSWANOST	28	2C
DSWAEEST	28	C	DSWARS1	7	
DSWAEND	2C		DSWASIZE	2C	2C
DSWAIBLK	28	34	DSWASRBF	28	38
DSWAID	0		DSWASTRT	28	
DSWAI1FL1	5		DSWATTKF	28	3C
DSWAI1FL2	6		DSWAVERS	4	
DSWAINVF	28	30			
DSWAIVER	28	4C			
DSWAI1CR	5	80			
DSWAI1DE	5	10			
DSWAI1EX	5	40			
DSWAI1RL	5	20			
DSWAI2FN	6	40			
DSWAI2FY	6	80			
DSWAI2OA	6	8			
DSWAI2OC	6	10			
DSWAI2OM	6	20			
DSWAI2SA	6	2			
DSWAI2SC	6	1			



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**\$DTE Programming Interface information**

Programming Interface information

**\$DTE**

End of Programming Interface information

## \$DTE Heading Information

**Common Name:** HASP Daughter Task Element  
**Macro ID:** \$DTE  
**DSECT Name:** DTE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
Offset: DTEID-DTE  
Length: 4

**Storage Attributes:** Subpool: 0  
Key: 1  
Residency: Virtual storage below the 16M line, and real storage above or below the 16M line, in the private storage of the JES2 address space.

**Size:** The length of a DTE is the length of the base DTE (defined by the expression, DTEWORK-DTE) plus the length of a variable length work area beginning at symbol DTEWORK.  
The length of the work area depends on the type of DTE. These work areas and their lengths are defined in separate mapping macros and are extensions of the DTE DSECT. See the definitions for DTESTID in this macro (\$DTE) for the names of the work area mapping macros.  
The total length of the DTE is stored in the field DTESIZE.

**Created by:** The \$DTEDYN service. Most DTEs are created during JES2 initialization processing, others are created when needed.

**Pointed to by:** The TCBBDT field of the MVS TCB control block for the associated JES2 address space subtask.  
The DTENEXT and DTEPREV pointers in the DTEs' double-threaded chain anchored by the \$DTEORG and \$DTELAST fields in the \$HCT control block.  
Each DTE type has associated with it a pointer in the HCT or UCT which points to the first DTE of that type in the DTENEXT chain.

**Serialization:** Compare-and-swap logic may be required for certain fields if they are used by both the JES2 main task and the subtask represented by the DTE.



**Function:** The DTE is the central means of communication between JES2 main task and its subtasks. All JES2 subtasks are attached by the \$DTEDYN service. When a subtask is attached, a DTE is built for it and placed on the DTENEXT and DTEPREV chains (chain heads \$DTEORG and \$DTELAST respectively). The DTE remains on these chains until the subtask is detached via the \$DTEDYN routine. The DTEs are grouped by type (id) on the DTENEXT/DTEPREV chains. DTEs are always pushed onto the chain at the beginning (head) of their subtask type group within the chain. The HASP subtask type chain heads are located in the HCT. An installation may define their own subtask types and place the chain head either in the UCT or HCT. The DTE may contain a work area extension for certain subtask types. This extension begins at the DTEWORK field and is mapped by a mapping macro of the type \$DTExxxx.

**\$DTE Map**

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	DAUGHTER TASK ELEMENT DSECT
0	(0)	CHARACTER	4	DTEID (0)	DTE CONTROL BLOCK IDENTIFIER
0	(0)	BITSTRING	1	(0)	\$SAVE AREA (SEE PSV IN PCE)
104	(68)	ADDRESS	4	DTELPSV	ADDR OF LAST/CURRENT SAVE AREA
108	(6C)	ADDRESS	1	DTELEVEL	DTE CONTROL BLOCK VERSION LEVEL
109	(6D)	BITSTRING	1	DTESTID	SUBTASK IDENTIFIER
110	(6E)	SIGNED	2	DTESIZE	SIZE OF DTE + WORK AREA EXT.
112	(70)	BITSTRING	1	DTEFLAG1	DTE FLAG BYTE 1
		1... ....		DTE1ACTV	"B'10000000" SUBTASK ACTIVE
		.1... ....		DTE1TERM	"B'01000000" SUBTASK SHUTDOWN REQUESTED
		..1. ....		DTE1AUTO	"B'00100000" AUTOMATICALLY STARTED BY IRMVS
		...1 ....		DTE1STAE	"B'00010000" SUBTASK DETACHED WITH STAE=YES
		.... 1...		DTE1SUB0	"B'00001000" SUBTASK ATTACHED WITH SZERO=NO
		.... .1..		DTE1ECB	"B'00000100" JES2 WAITING FOR SUBTASK POST
		.... ..1.		DTE1XECB	"B'00000010" PCE \$WAITING FOR SUBTASK POST
		.... ...1		DTE1PJ2	"B'00000001" JES2 IS COMMING DOWN CLEAN (\$HCCT WILL BE FREEMAINED)
113	(71)	BITSTRING	1	DTEFLAG2	DTE FLAG BYTE 2
		1... ....		DTE2IERR	"B'10000000" SUBTASK INITIALIZATION FAILED
		.1... ....		DTE2TRAC	"B'01000000" TASK ELIGIBLE FOR TRACING
		..1. ....		DTE2CRTM	"B'00100000" Subtask being cancelled by maintask via CALLRTM
		...1 ....		DTE2\$CD	"B'00010000" Subtask cancelled with dump
114	(72)	BITSTRING	1	DTEFLAG3	DTE initialization opt flag
		1... ....		DTE3REQD	"B'10000000" This subtask is essential, abnormal term will also terminate maintask (\$Z03)
115	(73)	BITSTRING	1		RESERVED FOR FUTURE USE
116	(74)	ADDRESS	4	DTENEXT	FORWARD CHAIN FIELD (\$DTEORG)
120	(78)	ADDRESS	4	DTEPREV	BACKWARD CHAIN FIELD (\$DTELAST)
124	(7C)	ADDRESS	4	DTETCB	SUBTASK TCB ADDRESS
128	(80)	ADDRESS	4	DTEPCE	RELATED PCE ADDRESS OR ZERO, SET TO CURRENT PCE BY DTEDYN UNLESS INIT., MAY BE RESET
132	(84)	ADDRESS	4	DTEHCT	ADDRESS OF HCT

## \$DTE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
SUBTASK INITIALIZATION ECB'S MUST BE KEPT TOGETHER NOTE THAT THESE ECB'S CAN BE USED DURING NORMAL JES2 PROCESSING ALSO.					
End of Comment					
136	(88)	SIGNED	4	DTEIECB	SUBTASK INITIALIZATION ECB
136	(88)	BITSTRING	20	DTEIXECB	SUBTASK INITIALIZATION XECB
Comment					
SUBTASK WORK ECB'S MUST BE KEPT TOGETHER					
End of Comment					
156	(9C)	SIGNED	4	DTEWECB	SUBTASK WORK ECB
156	(9C)	BITSTRING	20	DTEWXECB	SUBTASK WORK XECB
Comment					
SUBTASK TERMINATION ECB'S MUST BE KEPT TOGETHER					
End of Comment					
176	(B0)	SIGNED	4	DTETECB	SUBTASK TERMINATION ECB
176	(B0)	BITSTRING	20	DTETXECB	SUBTASK TERMINATION XECB
Comment					
SUBTASK TERMINATION ECB LIST, MUST BE KEPT TOGETHER					
End of Comment					
196	(C4)	ADDRESS	4	DTEECBL1	JES2 TERMINATION ECBLIST
200	(C8)	ADDRESS	4	DTEECBL2	AND STIMER EXIT ROUTINE ECB
204	(CC)	SIGNED	4	DTEJECB	(ALL USED ONLY IN HASPTERM)
Comment					
END OF ECB AREAS THAT MUST BE KEPT TOGETHER					
End of Comment					
208	(D0)	CHARACTER	8	DTENAME	SUBTASK EBCDIC NAME
216	(D8)	ADDRESS	4	DTEVRXAD	SUBTASK RECOVERY VRA EXIT ADDR
220	(DC)	ADDRESS	4	DTEESXAD	SUBTASK RCVY CLEAN UP EXIT ADDR
224	(E0)	ADDRESS	4	DTERTXAD	SUBTASK RCVY RETRY EXIT ADDR
Comment					
SUBTASK ESTAE RECOVERY WORK AREA.					
End of Comment					
228	(E4)	BITSTRING	1	DTEABFLG	SUBTASK RECOVERY ESTAE FLAG
		1... ....		DTEABEND	"B'10000000" SUBTASK ABEND IN PROGRESS
		.1.. ....		DTEABVRA	"B'01000000" SUBTASK VRA EXIT ACTIVE
		..1. ....		DTEABESX	"B'00100000" SUBTASK CLEAN UP EXIT ACTIVE
		...1 ....		DTEABSTR	"B'00010000" SUBTASK RETRY EXIT ACTIVE
		.... 1...		DTEABREC	"B'00001000" SUBTASK RETRY RECURSION FLAG
229	(E5)	BITSTRING	3		RESERVED FOR FUTURE USE
232	(E8)	BITSTRING	348	DTEERA	SUBTASK ERA
580	(244)	BITSTRING	576	DTETRCA	SUBTASK TRCA
1156	(484)	SIGNED	4	DTESDECB	SUBTASK ESTAE SDUMP ECB

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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Comment

Subtask Work area

End of Comment

1160	(488)	DBL WORD	8	(0)	
1160	(488)	CHARACTER	108	DTEAWRKA	SUBTASK ESTAE WORK AREA
1160	(488)	X'410'	0	DTEASAVL	**DTEABFLG" LENGTH OF RECOVERY WORK AREA

Comment

GENERAL PARAMETER LIST AREA AND RESERVED USER FIELDS

End of Comment

1268	(4F4)	SIGNED	4	DTEPARML (2)	8 BYTE PARAMETER LIST
1268	(4F4)	X'4F4'	0	DTEPARM	"DTEPARML,4,C'A" parm list @ from attach or
1268	(4F4)	X'4F8'	0	DTEPARM2	"DTEPARML+4,4,C'A" 2 work parm for subtsk use
1276	(4FC)	SIGNED	4	DTEUSER1	RESERVED FOR USER
1280	(500)	SIGNED	4	DTEUSER2	RESERVED FOR USER
1284	(504)	SIGNED	4	DTEUSER3	RESERVED FOR USER
1288	(508)	SIGNED	4	DTEUSER4	RESERVED FOR USER
1296	(510)	DBL WORD	8	DTEWORK (0)	VARIABLE LEN SUBTASK WORK AREA
1296	(510)	X'3'	0	DTEVERSN	"3" DTE Version level
1296	(510)	X'510'	0	DTELEN	**DTE" LENGTH OF DTE DSECT FOUNDATION

Comment

DTESTID -- SUBTASK IDENTIFIER EQUATES  
(USER SUBTASK IDS SHOULD BEGIN AT 255 AND  
WORK DOWN TOWARDS THE JES2 SUBTASK IDS)

End of Comment

1296	(510)	X'0'	0	DTEIDIMG	"0" HASPIMAG SUBTASK ID; work area mapped by \$DTEIMAG
1296	(510)	X'1'	0	DTEIDALC	"1" HOSALLOC SUBTASK ID; work area mapped by \$DTEALOC
1296	(510)	X'2'	0	DTEIDSPL	"2" HOSPOOL SUBTASK ID; work area mapped by \$DTEISPL
1296	(510)	X'3'	0	DTEIDSMF	"3" HASPACCT SUBTASK ID; work area mapped by \$DTEACCT
1296	(510)	X'4'	0	DTEIDVTM	"4" HASPVTAM SUBTASK ID; work area mapped by \$DTEVTAM
1296	(510)	X'5'	0	DTEIDWTO	"5" HASPWTO SUBTASK ID; work area mapped by \$DTEWTO
1296	(510)	X'6'	0	DTEIDCNV	"6" HOSCNTV SUBTASK ID; work area mapped by \$DTECNV
1296	(510)	X'7'	0	DTEIDOFF	"7" HASPOFF SUBTASK ID; work area mapped by \$DTEOFF
1296	(510)	X'8'	0	DTEIDCVR	"8" HASPCKVR SUBTASK ID; work area mapped by \$DTECKVR
1296	(510)	X'9'	0	DTEIDSUB	"9" HASPSUBS SUBTASK ID; work area mapped by \$DTEISUBS
1296	(510)	X'A'	0	DTEIDCCF	"10" HASPCKCF SUBTASK ID; work area mapped by \$DTECKCF
1296	(510)	X'B'	0	DTEIDEOM	"11" HASPEOM SUBTASK ID; work area mapped by \$DTEEOM

## \$DTE Cross Reference

### \$DTE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DTE	0		DTE1PJ2	70	1
DTEABEND	E4	80	DTE1STAE	70	10
DTEABESX	E4	20	DTE1SUB0	70	8
DTEABFLG	E4		DTE1TERM	70	40
DTEABREC	E4	8	DTE1XECB	70	2
DTEABSTR	E4	10	DTE2\$CD	71	10
DTEABVRA	E4	40	DTE2CRTM	71	20
DTEASAVL	488	410	DTE2IERR	71	80
DTEAWRKA	488		DTE2TRAC	71	40
DTEECBL1	C4		DTE3REQD	72	80
DTEECBL2	C8				
DTEERA	E8				
DTEESXAD	DC				
DTEFLAG1	70				
DTEFLAG2	71				
DTEFLAG3	72				
DTEHCT	84				
DTEID	0				
DTEIDALC	510	1			
DTEIDCCF	510	A			
DTEIDCNV	510	6			
DTEIDCVR	510	8			
DTEIDEOM	510	B			
DTEIDIMG	510	0			
DTEIDOFF	510	7			
DTEIDSMF	510	3			
DTEIDSPL	510	2			
DTEIDSUB	510	9			
DTEIDVTM	510	4			
DTEIDWTO	510	5			
DTEIECB	88				
DTEIXECB	88				
DTEJECB	CC				
DTELEN	510	510			
DTELEVEL	6C				
DTELPVS	68				
DTEName	D0				
DTENext	74				
DTEPARM	4F4	4F4			
DTEPARML	4F4				
DTEPARM2	4F4	4F8			
DTEPCE	80				
DTEPREV	78				
DTERTXAD	E0				
DTE\$DECB	484				
DTE\$SIZE	6E				
DTE\$TID	6D				
DTETCB	7C				
DTETECB	B0				
DTETRCA	244				
DTETXECB	B0				
DTEUSER1	4FC				
DTEUSER2	500				
DTEUSER3	504				
DTEUSER4	508				
DTEVERSN	510	3			
DTEVRXAD	D8				
DTEWECB	9C				
DTEWORK	510				
DTEWXECB	9C				
DTE1ACTV	70	80			
DTE1AUTO	70	20			
DTE1ECB	70	4			

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**\$DTEACCT Programming Interface information**

Programming Interface information

\$DTEACCT

End of Programming Interface information

## \$DTEACCT Heading Information

**Common Name:** HASPACCT subtask DTE work area extension  
**Macro ID:** \$DTEACCT  
**DSECT Name:** DTE (\$DTEACCT is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DSMFLEN equate for the length of the HASPACCT DTE extension.

**Created by:** JES2 initialization (using \$DTEDYN ATTACH service)  
**Pointed to by:** The \$DTESMF field of the \$HCT data area. See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** This area is used by the HASPACCT subtask. Other tasks cannot use it.

**Function:** Describes the work area extension to the DTE for the HASPACCT subtask. The DTE is the general control block used by JES2 to communicate with its daughter tasks.

The JMR buffer work area is used to pass the JES2 JMR record to SMFEXIT IEFUJP and the SMFEWTFM service. The work area resides below the 16M line, while the JES2 SMF buffer may reside anywhere.

## \$DTEACCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASPACCT DTE WORK AREA EXTENSION
1296	(510)	BITSTRING	920	DSMFJMR	JMR BUFFER WORK AREA
2216	(8A8)	SIGNED	4	DSMFWRK (5)	5 WORD WORKAREA FOR SMFEWTFM
2236	(8BC)	BITSTRING	4		Reserved for future use
2236	(8BC)	X'3B0'	0	DSMFLEN	"*-DTEWORK" LENGTH OF WORK AREA

## \$DTEALOC Heading Information

**Common Name:** HASP Allocation Subtask DTE work area DSECT  
**Macro ID:** \$DTEALOC  
**DSECT Name:** DTE (\$DTEALOC is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DDALLEN equate for the length of an allocation subtask DTE extension.

**Created by:** Created by \$DTEDYN ATTACH during JES2 initialization. The subtask (and DTE) definitions are defined by the \$DTETAB definitions.

**Pointed to by:** The \$DTEALOC field of the \$HCT data area points into \$DTEORG/\$DTELAST chain to the HASP allocation subtask DTE.  
 See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** Serialized by the JES2 main task. Only one request may be processed at one time.

**Function:** The HASP Dynamic Allocation Subtask DTE work area, \$DTEALOC, defines the \$DTE work area extension for that subtask. The mapping defines the fields after label DTEWORK.

The Dynamic Allocation Subtask DTE handles dynamic allocation (DYNALLOC) requests from the JES2 main task. The \$ALLOC service, running under the JES2 main task, fills in the DYNALLOC parameter list, then waits for the subtask to become available. When it does, the main task stores the address of the parameter list in the field DTEPARM. The subtask is then awakened and it does the DYNALLOC.

### \$DTEALOC Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HOSALLOC DTE WORK AREA EXT.
1296	(510)	X'0'	0	DDALLEN	**"DTEWORK" LENGTH OF WORK AREA

## \$DTEALOC Map



## \$DTECKCF Heading Information

**Common Name:** HASP Checkpoint on CF DTE work area  
**Macro ID:** \$DTECKCF  
**DSECT Name:** DTE (\$DTECKCF is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DCCFLEN equate for the length of a checkpoint on CF DTE work area extension.

**Created by:** Created by \$DTEDYN ATTACH during JES2 CKPT data set allocation. The subtask (and DTE) definitions are defined by the \$DTETAB definitions.

**Pointed to by:** The \$DTECKCF field of the \$HCT data area points into \$DTEORG/\$DTELAST chain to the checkpoint on CF subtask DTEs.  
 See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** Serialized by the JES2 main task. Only one request may be processed at one time.

**Function:** The HASP Checkpoint on CF Subtask DTE work area, \$DTECKCF, defines the \$DTE work area extension for that subtask. The mapping defines the fields after label DTEWORK.

This subtask interfaces between JES2 and the XES CF support. Each subtask manages the requests for a single CF. They are attached when the checkpoint is allocated (at connect time) and detached when the CF is no longer needed (at checkpoint unallocate). A subtask is used to limit the impact of XES suspending the requester of a service or terminating the connector of a CF.

### \$DTECKCF Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASP Checkpoint on CF subtask work area ext.
1296	(510)	DBL WORD	8	(0)	Ensure alignment
1296	(510)	X'0'	0	DCCFLEN	**-DTEWORK" Length of work area

## \$DTECKCF Map

## \$DTECKVR Heading Information

**Common Name:** HASP Checkpoint Version DTE work area  
**Macro ID:** \$DTECKVR  
**DSECT Name:** DTE (\$DTECKVR is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DCKVLEN equate for the length of a checkpoint version DTE work area extension.

**Created by:** n/a  
 Created by \$DTEDYN ATTACH during JES2 initialization. The subtask (and DTE) definitions are defined by the \$DTETAB definitions.

**Pointed to by:** The \$DTECKVR field of the \$HCT data area points into \$DTEORG/\$DTELAST chain to the checkpoint versions DTE.  
 See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** Serialized by the JES2 main task. Only one request may be processed at one time.

**Function:** The HASP Checkpoint Version/APPLCOPY Subtask DTE work area, \$DTECKVR, defines the \$DTE work area extension for that subtask. The mapping defines the fields after label DTEWORK.

This subtask maintains one or more versions of the checkpoint data set for use by authorized programs. When attached, it determines which of the two modes of checkpoint maintenance are in operation. In a Checkpoint Version, a data space is established and versions are created and maintained. In an Application Copy (APPLCOPY), the checkpoint is serviced in extended common or private storage. Both types are serviced by the same subtask.

### \$DTECKVR Map

Offsets		Type/Value	Len	Name (Dim)	Description
Dec	Hex				
0	(0)	STRUCTURE	0	DTE	HASP Checkpoint Version subtask work area ext.
1296	(510)	DBL WORD	8	DCKVTSMF	Time of last 'full' sampling
1296	(510)	X'8'	0	DCKVLEN	**"DTEWORK" LENGTH OF WORK AREA



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## \$DTECNV Programming Interface information

Programming Interface information

### \$DTECNV

The following field is **NOT** programming interface information:

- DCNVDEBS

End of Programming Interface information

## \$DTECNV Heading Information

**Common Name:** JCL Conversion subtask DTE work area  
**Macro ID:** \$DTECNV  
**DSECT Name:** DTE (\$DTECNV is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DCONVLEN equate for the length of a JCL conversion DTE extension.

**Created by:** \$DTEEDYN ATTACH, called from the JCL conversion JES2 processor to ATTACH its associated JCL conversion subtask. The subtask (and DTE) definitions are defined in the \$DTEEDTAB tables.

**Pointed to by:** The JPCEDTE field of the associated JCL conversion \$PCE control block.  
 The \$DTECNVT pointer in the \$HCT control block, pointing into the \$DTEORG/\$DTELAST chain, to the first JCL conversion \$DTE control block.  
 See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** This area is used serially by the JCL-conversion processor and its associated subtask. Other tasks can not use it.  
 The chain fields should only be managed by the JES2 main task \$DTEEDYN and subtask RAS facilities.

**Function:** The JCL-conversion subtask DTE work area DSECT, \$DTECNV, describes the work area extension to the DTE for the JCL-conversion subtask. The mapping defines the fields after label DTEWORK.

There are one or more JCL-conversion processors, defined by \$PCE control blocks, in a JES2 address space. Each one attaches a subtask. The JES2 \$DTEEDYN service used for the ATTACH creates a DTE, mapped by the \$DTE macro, with a function-specific extension, mapped by this macro. The DTE is the general control block used by JES2 to manage and communicate with its daughter tasks.

## \$DTECNV Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASP CONVERSION SUBTASK WORK AREA
1296	(510)	BITSTRING	1	DCNVSTAT	PROCESSOR STATUS BYTE
		1... ....		DCNVAOPN	"B'10000000" ACBS SUCCESSFULLY 'FAKE' OPENED
		..1. ....		DCNVDST	"B'00100000" DATA SET TYPE - BIT ON -> SYSIN BIT OFF -> SYSOUT
1297	(511)	BITSTRING	3		RESERVED FOR FUTURE USE
1300	(514)	SIGNED	4	DCNVSAVE (15)	ESTAE REGISTER SAVE AREA
1360	(550)	ADDRESS	4	DCNVSJBP	ADDRESS OF CONVERSION TASK SJB
1364	(554)	ADDRESS	4	DCNVIOT	ADDRESS OF ALLOCATION IOT

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1368	(558)	ADDRESS	4	DCNVADDR	ADDRESS OF JCL CONVERTER
1372	(55C)	ADDRESS	4	DCNVCAT	Address of CAT for job
1376	(560)	ADDRESS	4	DCNVPAD	Addr of current(open) PAD
1380	(564)	BITSTRING	8	DCNVPCRT	Open PAD create time
1388	(56C)	ADDRESS	4	DCNVPD00	Addr of PROC00 PAD
1392	(570)	ADDRESS	4	DCNVJPAD	Address of PAD for job
1396	(574)	CHARACTER	4		Reserved for future use
1400	(578)	SIGNED	4	DCNVDCB (0)	ALIGN LIST TO FULLWORD
1400	(578)	ADDRESS	1		OPTION BYTE
1401	(579)	ADDRESS	3		DCB ADDRESS

Comment

PARAMETER LIST FOR EXIT 6. VARIABLES DCNVPARM THRU DCNVCNMB  
MAKEUP THIS LIST AND SHOULD ALWAYS BE KEPT TOGETHER.

End of Comment

1404	(57C)	SIGNED	4	DCNVPARM (0)	EXIT 6 PARAMETER LIST
1404	(57C)	ADDRESS	4	DCNVUWAA	ADDR OF EXIT 6 USER WORK AREA
1408	(580)	ADDRESS	4	DCNVP2A	IF R0=0 THEN INTERNAL TEXT IMAGE ADDRESS ELSE IF R0=4 THEN CONVERTER RETURN CODE ADDRESS
1412	(584)	ADDRESS	4	DCNVDTEA	ADDRESS OF DTE
1416	(588)	ADDRESS	4	DCNVJCTA	ADDRESS OF JCT BUFFER
1420	(58C)	ADDRESS	4	DCNVCNMB	ADDRESS OF CONVERTER MESSAGE BUFFER
1424	(590)	ADDRESS	4	DCNVCPTR	POINTER TO CONVERTER'S MESSAGE BUFFER
1428	(594)	ADDRESS	4	DCNVWAVE	ADDR OF THE WAVE CONTROL BLOCK FOR \$SEAS CALLS
1432	(598)	ADDRESS	1	DCNVJBTY	JOB TYPE SAVE AREA
1433	(599)	ADDRESS	3		RESERVED FOR FUTURE USE
1436	(59C)	SIGNED	4	DCNVJNUM	Job number save area

Comment

Start of general work areas, cleared en mass at startup.

End of Comment

1436	(59C)	X'5A0'	0	DCNVCLR	*** START OF WORK AREA CLEARED IN CONVERTER SUB-TASK INITIALIZATION
1440	(5A0)	CHARACTER	8	DCNVDDNM	DDNAME OF PROCLIB NOW OPEN
1448	(5A8)	CHARACTER	120	DCNVCNPR	CONVERTER ENTRY LIST
1568	(620)	CHARACTER	36	DCNVQMPA	QUEUE MNGR PARM AREA
1604	(644)	SIGNED	4	DCNVSYMA (0)	SYSTEM SYMBOLICS DATA AREA
1604	(644)	CHARACTER	7	DCNVSYM1	&SYSUID KEYWORD
1611	(64B)	CHARACTER	8	DCNVSYMU	&SYSUID PARAMETER VALUE
1620	(654)	SIGNED	2	DCNVCOM	CONSOLE ID FOR CONVERSION
1624	(658)	ADDRESS	4	DCNVIOTA	INPUT IOT FOR TEXT EXIT
1628	(65C)	SIGNED	4	DCNVPDOB	OFFSET OF LAST INPUT PDDB
1632	(660)	CHARACTER	1	DCNVRD	JOB CARD RD= PARAMETER
1633	(661)	BITSTRING	1	DCNVFLG1	SERIALIZED FLAG BYTE (UPDATE USING OIL/NIL ONLY)
		1... ....		DCNV1REO	"B'10000000" REOPEN PROCLIB DATA SET
		.1... ....		DCNV1CLR	"B'01000000" CLOSE has been issued once for job in XCNVRTY
1634	(662)	SIGNED	2	DCNVITDL	LENGTH OF INTERNAL TEXT
1636	(664)	ADDRESS	4	DCNVAR0	XRT @ for trace ID 13
1640	(668)	CHARACTER	8	DCNVPERF	Performance Group for job from //JOB JCL statement (left justified, blank fill)
1648	(670)	CHARACTER	16	DCNVSCHE	Scheduling environment for job (left justified, blank fill)
1664	(680)	SIGNED	4	DCNVERC1	USER EXIT RETURN CODE 1
1668	(684)	SIGNED	4	DCNVERC2	USER EXIT RETURN CODE 2
1672	(688)	SIGNED	4	DCNVESV1 (18)	USER EXIT SAVE AREA 1
1744	(6D0)	SIGNED	4	DCNVESV2 (18)	USER EXIT SAVE AREA 2
1816	(718)	DBL WORD	8	(0)	
1816	(718)	CHARACTER	200	DCNVWORK	MESSAGE WORK AREA
1816	(718)	X'718'	0	DCNVETXT	"DCNVWORK" END OF TEXT ADDRESS
1816	(718)	X'720'	0	DCNVUDSN	"DCNVWORK+8" USER DSN ADDRESS

## \$DTECNV Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1816	(718)	X'724'	0	DCNVITXT	"DCNVWORK+12" INTERNAL TEXT ADDRESS
1816	(718)	X'728'	0	DCNVIDSN	"DCNVWORK+16" INTERNAL TEXT DSN ADDRESS
1816	(718)	X'72C'	0	DCNVPDDB	"DCNVWORK+20" SYSIN PDDB ADDRESS
2016	(7E0)	BITSTRING	16	DCNVUWA	EXIT USER WORK AREA
2032	(7F0)	CHARACTER	8	DCNVJDVT	JDVT NAME

Comment

### START OF SPECIFICATIONS

- 01 DESCRIPTIVE NAME: JES log control
- 02 ACRONYM: \$JESLOG
- 01 MACRO NAME: \$JESLOG
- 01 DSECT NAME: JLG
- 01 LABEL PREFIX: JLG
- 01 COMPONENT ID: JES2 (SC1BH)
- 01 EXTERNAL CLASSIFICATION: PSPI
- 01 END OF EXTERNAL CLASSIFICATION:
- 01 EYE-CATCHER: "None"
- 02 OFFSET: N/A
- 02 LENGTH: N/A
- 01 STORAGE ATTRIBUTES:
- 02 SUBPOOL: n/a
- 02 KEY: n/a
- 02 RESIDENCY:
  - This block is included in JCTs, SJXBs, CATs and CNVWORK. See the description of those "hosting" blocks for storage attributes.
- 01 SIZE:
  - See JLGLEN
- 01 CREATED BY:
  - See "hosting" control blocks
- 01 POINTED TO BY:
  - No pointers
- 01 SERIALIZATION:
  - None required
- 01 FUNCTION:
  - The JESLOG describes how the spinning of JESLOG (JESYSMG and JESJOBLOG) is to be supported.
- 01 METHOD OF ACCESS:
- 02 ASM:
  - Specify \$JESLOG as a positional operand on a \$MODULE macro instruction to cause this mapping to be generated. A USING of the following form is used: USING JLG,xxxx where xxxx is the label within the "hosting" block where the JESLOG



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
mapping begins. For example when referencing the JESLOG within the JCT, code USING JLG,JCTJLOG					
02 PL/X: This mapping is not available for compilations.					
01 USED BY: Spin processing for the the two JESLOG data sets use the information for their decisions.					
01 DELETED BY: See "hosting" blocks.					
01 FREQUENCY: See "hosting" blocks					
01 RESTRICTIONS: None END OF SPECIFICATIONS					
01 CHANGE ACTIVITY: \$Z02LLRJ=LRJOB HJE7705 001101 J_K2: Long running jobs \$Z02P049=LRJ HJE7705 001218 J_K2: RJI SSOB JESLOG Support 01 A000000-999999 CREATED for JES2 OS/390 Release 12					

End of Comment					
2040	(7F8)	BITSTRING	6	DCNVJLOG	JES log control
Comment					

CONVERSION EXIT LIST

End of Comment					
2048	(800)	SIGNED	4	DCNVXLST (0)	CONVERSION EXIT LIST
2048	(800)	BITSTRING	8	DCNVXLHD	EXIT LIST HEADER
2056	(808)	BITSTRING	1	DCNVXLTE	INTERNAL TEXT EXIT ENTRY
2056	(808)	X'8'	0	DCNVXLEN	**"DCNVXLTE" LENGTH OF EXIT LIST ENTRY
2064	(810)	SIGNED	4	DCNVDEBS (0)	ADDRESS OF DEB'S FOR ACB'S
2064	(810)	CHARACTER	32	DCNVDEBJ	DEB FOR JCL DATA SET
2096	(830)	CHARACTER	32	DCNVDEBI	DEB FOR JCL IMAGE DATA SET
2128	(850)	CHARACTER	32	DCNVDEBM	DEB FOR SYSTEM MSG DATA SET
2160	(870)	CHARACTER	32	DCNVDEBT	DEB FOR INTERNAL TEXT DATA SET
2192	(890)	ADDRESS	1	DCNUIDL	USERID LENGTH + VALUE
2192	(890)	X'891'	0	DCNUID	"DCNUIDL+1,8,C'C" USERID FOR THIS JOB
2201	(899)	ADDRESS	1	DCNGRPL	GROUP LENGTH + VALUE
2201	(899)	X'89A'	0	DCNGRP	"DCNGRPL+1,8,C'C" GROUP FOR THIS JOB
2210	(8A2)	ADDRESS	1	DCNPASL	PASSWORD LENGTH + VALUE
2210	(8A2)	X'8A3'	0	DCNPAS	"DCNPASL+1,8,C'C" PASSWORD FOR THIS JOB
2219	(8AB)	ADDRESS	1	DCNNPASL	NEW PASSWORD LEN + VALUE
2219	(8AB)	X'8AC'	0	DCNNPAS	"DCNNPASL+1,8,C'C" NEW PASSWORD FOR THIS JOB
2219	(8AB)	X'314'	0	DCNVCLRL	**"DCNVCLR" END OF WORK AREA CLEARED IN CONVERTER SUBTASK INITIALIZATION
Comment					

DCB for PROCLIB, and ACBs for the JES datasets.  
 DCNVPROC DCB FOR PROCLIB DATA SET  
 CNVPROC DCB DSORG=PO,MACRF=R,RECFM=FB,LRECL=80,  
 DDNAME= ,EXLST= -

End of Comment					
2228	(8B4)	SIGNED	4	(0)	DCNVPROC ORIGIN DATA CONTROL BLOCK
2228	(8B4)	SIGNED	4	DCNVPROC (0)	ORIGIN ON WORD BOUNDARY DIRECT ACCESS DEVICE INTERFACE
2228	(8B4)	BITSTRING	16		FDAD, DVTBL
2244	(8C4)	ADDRESS	4		KEYLEN, DEVT, TRBAL COMMON ACCESS METHOD INTERFACE
2248	(8C8)	ADDRESS	1		BUFNO, NUMBER OF BUFFERS
2249	(8C9)	ADDRESS	3		BUFCB, BUFFER POOL CONTROL BLOCK
2252	(8CC)	ADDRESS	2		BUFL, BUFFER LENGTH

# \$DTECNV Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2254	(8CE)	BITSTRING	2		DSORG, DATA SET ORGANIZATION
2256	(8D0)	ADDRESS	4		IOBAD FOR EXCP OR RESERVED FOUNDATION EXTENSION
2260	(8D4)	BITSTRING	1		BFTEK, BFALN, DCBE INDICATORS
2261	(8D5)	ADDRESS	3		EODAD (END OF DATA ROUTINE ADDRESS)
2264	(8D8)	BITSTRING	1		RECFM (RECORD FORMAT)
2265	(8D9)	ADDRESS	3		EXLST (EXIT LIST ADDRESS) FOUNDATION BLOCK
2268	(8DC)	CHARACTER	8		DDNAME
2276	(8E4)	BITSTRING	1		OFLGS (OPEN FLAGS)
2277	(8E5)	BITSTRING	1		IFLGS (IOS FLAGS)
2278	(8E6)	BITSTRING	2		MACR (MACRO FORMAT) BSAM-BPAM-QSAM INTERFACE
2280	(8E8)	BITSTRING	1		OPTCD, OPTION CODES
2281	(8E9)	ADDRESS	3		CHECK OR INTERNAL QSAM SYNCHRONIZING RTN.
2284	(8EC)	ADDRESS	4		SYNAD, SYNCHRONOUS ERROR RTN. (3 BYTES)
2288	(8F0)	SIGNED	2		INTERNAL ACCESS METHOD FLAGS
2290	(8F2)	ADDRESS	2		BLKSIZE, BLOCK SIZE
2292	(8F4)	SIGNED	4		INTERNAL ACCESS METHOD FLAGS
2296	(8F8)	ADDRESS	4		INTERNAL ACCESS METHOD USE BSAM-BPAM INTERFACE
2300	(8FC)	ADDRESS	1		NCP, MAX NUM OF OUTSTANDING READ/Writes
2301	(8FD)	ADDRESS	3		EOBR, INTERNAL ACCESS METHOD USE
2304	(900)	ADDRESS	4		EOBW, INTERNAL ACCESS METHOD USE
2308	(904)	ADDRESS	1	(2)	FLAGS AND EITHER DIRCT OR BUFOFF
2310	(906)	ADDRESS	2		LRECL
2312	(908)	ADDRESS	4		CNTRL, NOTE, POINT

Comment

DCNVJCL ACB FOR JCL DATA SET

End of Comment

2316	(90C)	SIGNED	4	(0)	DCNVJCL ORIGIN
2316	(90C)	SIGNED	4	DCNVJCL (0)	
2316	(90C)	BITSTRING	1		. ACB IDENTIFICATION
2317	(90D)	ADDRESS	1		ACB SUBTYPE X04SVHS
2318	(90E)	ADDRESS	2		. ACB LENGTH X03004HS
2320	(910)	ADDRESS	4		. AMB LIST POINTER
2324	(914)	ADDRESS	4		. INTERFACE ROUTINE POINTER
2328	(918)	BITSTRING	1		MACRF(1) X04SVHS
2329	(919)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
2330	(91A)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
2331	(91B)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
2332	(91C)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
2334	(91E)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
2336	(920)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
2337	(921)	ADDRESS	1		SHARED RESOURCE POOL ID
2338	(922)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
2340	(924)	BITSTRING	1		. RECFM=A
2341	(925)	BITSTRING	1		READ INTEGRITY OPTIONS
2342	(926)	BITSTRING	2		. DSORG=ACB
2344	(928)	ADDRESS	4		X04SVHS
2348	(92C)	ADDRESS	4		. PASSWORD POINTER
2352	(930)	ADDRESS	4		. EXIT LIST POINTER
2356	(934)	CHARACTER	8		
2364	(93C)	BITSTRING	1		OFLAGS
2365	(93D)	ADDRESS	1		. ERFLAGS
2366	(93E)	BITSTRING	1		INFLGS(1) X04SVHS
2367	(93F)	BITSTRING	1		INFLGS(2) X04SVHS
2368	(940)	ADDRESS	4		. OPENJ JFCB POINTER
2372	(944)	ADDRESS	4		BUFFER SPACE
2376	(948)	ADDRESS	2		. BLOCK SIZE
2378	(94A)	ADDRESS	2		. RECORD SIZE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2380	(94C)	ADDRESS	4		. USER WORKAREA POINTER
2384	(950)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
2388	(954)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Comment

DCNVJCLI ACB FOR JCL IMAGES DATA SET

End of Comment

2392	(958)	SIGNED	4	(0)	DCNVJCLI ORIGIN
2392	(958)	SIGNED	4	DCNVJCLI (0)	
2392	(958)	BITSTRING	1		. ACB IDENTIFICATION
2393	(959)	ADDRESS	1		ACB SUBTYPE X04SVHS
2394	(95A)	ADDRESS	2		. ACB LENGTH X03004HS
2396	(95C)	ADDRESS	4		. AMB LIST POINTER
2400	(960)	ADDRESS	4		. INTERFACE ROUTINE POINTER
2404	(964)	BITSTRING	1		MACRF(1) X04SVHS
2405	(965)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
2406	(966)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
2407	(967)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
2408	(968)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
2410	(96A)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
2412	(96C)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
2413	(96D)	ADDRESS	1		SHARED RESOURCE POOL ID
2414	(96E)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
2416	(970)	BITSTRING	1		. RECFM=A
2417	(971)	BITSTRING	1		READ INTEGRITY OPTIONS
2418	(972)	BITSTRING	2		. DSORG=ACB
2420	(974)	ADDRESS	4		X04SVHS
2424	(978)	ADDRESS	4		. PASSWORD POINTER
2428	(97C)	ADDRESS	4		. EXIT LIST POINTER
2432	(980)	CHARACTER	8		
2440	(988)	BITSTRING	1		OFLAGS
2441	(989)	ADDRESS	1		. ERFLAGS
2442	(98A)	BITSTRING	1		INFLGS(1) X04SVHS
2443	(98B)	BITSTRING	1		INFLGS(2) X04SVHS
2444	(98C)	ADDRESS	4		. OPENJ JFCB POINTER
2448	(990)	ADDRESS	4		BUFFER SPACE
2452	(994)	ADDRESS	2		. BLOCK SIZE
2454	(996)	ADDRESS	2		. RECORD SIZE
2456	(998)	ADDRESS	4		. USER WORKAREA POINTER
2460	(99C)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
2464	(9A0)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Comment

DCNVMSG ACB FOR SYSTEM MSGS DATA SET

End of Comment

2468	(9A4)	SIGNED	4	(0)	DCNVMSG ORIGIN
2468	(9A4)	SIGNED	4	DCNVMSG (0)	
2468	(9A4)	BITSTRING	1		. ACB IDENTIFICATION
2469	(9A5)	ADDRESS	1		ACB SUBTYPE X04SVHS
2470	(9A6)	ADDRESS	2		. ACB LENGTH X03004HS
2472	(9A8)	ADDRESS	4		. AMB LIST POINTER
2476	(9AC)	ADDRESS	4		. INTERFACE ROUTINE POINTER
2480	(9B0)	BITSTRING	1		MACRF(1) X04SVHS
2481	(9B1)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
2482	(9B2)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS

## \$DTECNV Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2483	(9B3)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
2484	(9B4)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
2486	(9B6)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
2488	(9B8)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
2489	(9B9)	ADDRESS	1		SHARED RESOURCE POOL ID
2490	(9BA)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
2492	(9BC)	BITSTRING	1		. RECFM=A
2493	(9BD)	BITSTRING	1		READ INTEGRITY OPTIONS
2494	(9BE)	BITSTRING	2		. DSORG=ACB
2496	(9C0)	ADDRESS	4		X04SVHS
2500	(9C4)	ADDRESS	4		. PASSWORD POINTER
2504	(9C8)	ADDRESS	4		. EXIT LIST POINTER
2508	(9CC)	CHARACTER	8		
2516	(9D4)	BITSTRING	1		OFLAGS
2517	(9D5)	ADDRESS	1		. ERFLAGS
2518	(9D6)	BITSTRING	1		INFLGS(1) X04SVHS
2519	(9D7)	BITSTRING	1		INFLGS(2) X04SVHS
2520	(9D8)	ADDRESS	4		. OPENJ JFCB POINTER
2524	(9DC)	ADDRESS	4		BUFFER SPACE
2528	(9E0)	ADDRESS	2		. BLOCK SIZE
2530	(9E2)	ADDRESS	2		. RECORD SIZE
2532	(9E4)	ADDRESS	4		. USER WORKAREA POINTER
2536	(9E8)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
2540	(9EC)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Comment

DCNVTXT ACB FOR INTERNAL TEXT DATA SET

End of Comment

2544	(9F0)	SIGNED	4	(0)	DCNVTXT ORIGIN
2544	(9F0)	SIGNED	4	DCNVTXT (0)	
2544	(9F0)	BITSTRING	1		. ACB IDENTIFICATION
2545	(9F1)	ADDRESS	1		ACB SUBTYPE X04SVHS
2546	(9F2)	ADDRESS	2		. ACB LENGTH X03004HS
2548	(9F4)	ADDRESS	4		. AMB LIST POINTER
2552	(9F8)	ADDRESS	4		. INTERFACE ROUTINE POINTER
2556	(9FC)	BITSTRING	1		MACRF(1) X04SVHS
2557	(9FD)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
2558	(9FE)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
2559	(9FF)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
2560	(A00)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
2562	(A02)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
2564	(A04)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
2565	(A05)	ADDRESS	1		SHARED RESOURCE POOL ID
2566	(A06)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
2568	(A08)	BITSTRING	1		. RECFM=A
2569	(A09)	BITSTRING	1		READ INTEGRITY OPTIONS
2570	(A0A)	BITSTRING	2		. DSORG=ACB
2572	(A0C)	ADDRESS	4		X04SVHS
2576	(A10)	ADDRESS	4		. PASSWORD POINTER
2580	(A14)	ADDRESS	4		. EXIT LIST POINTER
2584	(A18)	CHARACTER	8		
2592	(A20)	BITSTRING	1		OFLAGS
2593	(A21)	ADDRESS	1		. ERFLAGS
2594	(A22)	BITSTRING	1		INFLGS(1) X04SVHS
2595	(A23)	BITSTRING	1		INFLGS(2) X04SVHS
2596	(A24)	ADDRESS	4		. OPENJ JFCB POINTER
2600	(A28)	ADDRESS	4		BUFFER SPACE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2604	(A2C)	ADDRESS	2		. BLOCK SIZE
2606	(A2E)	ADDRESS	2		. RECORD SIZE
2608	(A30)	ADDRESS	4		. USER WORKAREA POINTER
2612	(A34)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
2616	(A38)	ADDRESS	4		. PTR TO APPLICATION NAME X03004
2616	(A38)	X'52C'	0	DCNVLEN	**-DTEWORK" LENGTH OF THE CNVT DTE DSECT

**\$DTECNV Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCNGRP	899	89A	DCNVPD00	56C	
DCNGRPL	899		DCNVPERF	668	
DCNNPAS	8AB	8AC	DCNVPROC	8B4	
DCNNPASL	8AB		DCNVP2A	580	
DCNPAS	8A2	8A3	DCNVQMPA	620	
DCNPASL	8A2		DCNVRD	660	
DCNUID	890	891	DCNVSAVE	514	
DCNUIDL	890		DCNVSCHE	670	
DCNVADDR	558		DCNVSJBP	550	
DCNVAOPN	510	80	DCNVSTAT	510	
DCNVAR0	664		DCNVSYMA	644	
DCNVCAT	55C		DCNVSYMU	64B	
DCNVCLR	59C	5A0	DCNVSYM1	644	
DCNVCLRL	8AB	314	DCNVTXT	9F0	
DCNVCNMB	58C		DCNVUDSN	718	720
DCNVCNPR	5A8		DCNVUWA	7E0	
DCNVCOM	654	0	DCNVUWAA	57C	
DCNVCPTR	590		DCNVWAVE	594	
DCNVDCB	578		DCNVWORK	718	
DCNVDDNM	5A0		DCNVXLEN	808	8
DCNVDEBI	830		DCNVXLHD	800	
DCNVDEBJ	810		DCNVXLST	800	
DCNVDEBM	850		DCNVXLTE	808	
DCNVDEBS	810		DCNV1CLR	661	40
DCNVDEBT	870		DCNV1REO	661	80
DCNVDST	510	20	DTE	0	
DCNVDTEA	584				
DCNVERC1	680				
DCNVERC2	684				
DCNVESV1	688				
DCNVESV2	6D0				
DCNVETXT	718	718			
DCNVFLG1	661				
DCNVIDSN	718	728			
DCNVIOT	554				
DCNVIOTA	658				
DCNVITDL	662				
DCNVITXT	718	724			
DCNVJBTY	598				
DCNVJCL	90C				
DCNVJCLI	958				
DCNVJCTA	588				
DCNVJDVT	7F0				
DCNVJLOG	7F8				
DCNVJNUM	59C				
DCNVJPAD	570				
DCNVLEN	A38	52C			
DCNVMSG	9A4				
DCNVPAD	560				
DCNVPARM	57C				
DCNVPCRT	564				
DCNVPDBO	65C				
DCNVPDDB	718	72C			

## \$DTECNV Cross Reference

## \$DTEEOM Heading Information

**Common Name:** HASP End of Memory DTE work area  
**Macro ID:** \$DTEEOM  
**DSECT Name:** DTE (\$DTEEOM is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the EMSLEN equate for the length of a End of Memory DTE work area extension.

**Created by:** Created by \$DTEDYN ATTACH during EOM PCE initialization. The subtask (and DTE) definitions are defined by the \$DTETAB definitions.

**Pointed to by:** The \$DTEEOM field of the \$HCT data area points into \$DTEORG/\$DTELAST chain to the End of Memory subtask DTEs.  
 EOMDTE of the \$EOMWORK data area  
 See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** Serialized by the JES2 main task. Only one request may be processed at one time.

**Function:** The HASP End of Memory DTE work area, \$DTEEOM, defines the \$DTE work area extension for that subtask. The mapping defines the fields after label DTEWORK.

This subtask deals with SJBs on the End-of-Memory queue. JES2 resource cleanup is performed here. The SJB is placed on the work queue for this DTE by MVS EOM SSI support.

## \$DTEEOM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	,
1296	(510)	ADDRESS	4	EMSSJB	Address of SJB
1300	(514)	ADDRESS	4	EMSPCE	Address of our PCE
1304	(518)	CHARACTER	12	EMSWTAEB	EBCDIC portion of minor
1316	(524)	BITSTRING	8	EMSWTAST	ASCB Token of minor
1316	(524)	X'518'	0	EMSWTAMI	"EMSWTAEB,-EMSWTAEB" Define RNAME for ENQ/DEQ
Comment					
MACRO-DATE = 01/30/01					
End of Comment					
1324	(52C)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
1324	(52C)	X'52C'	0	EMSWTANQ	*** X02113
1324	(52C)	ADDRESS	1		PELLAST flag byte. X02113
1325	(52D)	ADDRESS	1		PELMILEN - RNAME length.
1326	(52E)	BITSTRING	1		

## \$DTEEOM Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
PELFLAG - flag byte 2.					
End of Comment					
1327	(52F)	ADDRESS	1		PELRET - return code byte.
1328	(530)	ADDRESS	4		QNAME ADDRESS
1332	(534)	ADDRESS	4		RNAME ADDRESS
1332	(534)	X'C'	0	EMSWTANL	**-EMSWTANQ" Length JESLOG ENQ list form
Comment					
MACRO-DATE = 01/17/01					
End of Comment					
1324	(52C)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
1324	(52C)	X'52C'	0	EMSWTADQ	*** X02113
1324	(52C)	ADDRESS	1		PELLAST flag byte. X02113
1325	(52D)	ADDRESS	1		PELMILEN - RNAME length.
1326	(52E)	BITSTRING	1		
Comment					
PELFLAG - flag byte 2.					
End of Comment					
1327	(52F)	ADDRESS	1		PELRET - return code byte.
1328	(530)	ADDRESS	4		QNAME ADDRESS
1332	(534)	ADDRESS	4		RNAME ADDRESS
1332	(534)	X'C'	0	EMSWTADL	**-EMSWTADQ" Length JESLOG DEQ list form
1336	(538)	DBL WORD	8	(0)	Ensure alignment
1336	(538)	X'28'	0	EMSLEN	**-DTEWORK" Length of work area

## \$DTEEOM Cross Reference

Name	Hex Offset	Hex Value
DTE	0	
EMSLEN	538	28
EMSPCE	514	
EMSSJB	510	
EMSWTADL	534	C
EMSWTADQ	52C	52C
EMSWTAEB	518	
EMSWTAMI	524	518
EMSWTANL	534	C
EMSWTANQ	52C	52C
EMSWTAST	524	



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## **\$DTEIMG Programming Interface Information**

Programming Interface Information

**\$DTEIMG**

End of Programming Interface Information

## \$DTEIMG Heading Information

**Common Name:** HASPIMAG SUBTASK DTE WORK AREA EXTENSTION  
**Macro ID:** \$DTEIMG  
**DSECT Name:** DTE  
**Owning Component:** JES2 (SC1BH)  
**Storage Attributes:** Subpool: \$GETMAIN SERVICES (JES2 PRIVATE)  
 Key: 1  
**Size:** SEE IMGLEN  
**Created by:** \$DTEDYN ATTACH  
**Pointed to by:** DIMG ORIGIN BEGINS AT THE DTE WORK AREA  
 EXTENSION FIELD DTEWORK. THE HASPIMAG DTE  
 CHAIN HEAD (\$DTEIMAG) IS LOCATED IN THE HCT.  
**Serialization:** THIS WORK AREA IS USED SERIALY BY THE  
 HASPIMAG SUBTASK. NO SPECIAL SERIALIZATION  
 IS NECESSARY.  
**Function:** THIS DESCT MAPS THE ENTIRE WORK AREA EXTENSION FOR HASPIMAG  
 SUBTASKS.

## \$DTEIMG Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASPIMAG DTE WORK AREA EXTENSION
1296	(510)	CHARACTER	8	DIMGNAME	NAME OF LOADED MODULE
1296	(510)	X'513'	0	DIMGBYT3	"DIMGNAME+3" IMAGE NAME PREFIX BYTE
1304	(518)	SIGNED	4	DIMGDCB	ADDRESS OF IMAGELIB DCB
1308	(51C)	SIGNED	4	DIMGBFAD	BUFFER ADDRESS FOR ESTAE
1312	(520)	SIGNED	4	DIMGABCC	ABEND COMP CODE FOR RETRY
1316	(524)	SIGNED	4	DIMGSDCB	ADDRESS OF PRT DCB FOR SETPRT
1320	(528)	CHARACTER	80	DIMGMSG	MESSAGE AREA
1400	(578)	BITSTRING	1	DIMGFLG1	IMAGE LOADER FLAG BYTE
		1... ....		DIMG1ABD	"B'10000000" IMAGE LOADER ABEND FLAG
		.1... ....		DIMG1DEL	"B'01000000" DELETE RTN FLAG IN ESTAE
1400	(578)	X'69'	0	DIMGLEN	** -DTEWORK" LENGTH OF WORK AREA

## \$DTEIMG Cross Reference

Name	Hex Offset	Hex Value
DIMGABCC	520	
DIMGBFAD	51C	
DIMGBYT3	510	513
DIMGDCB	518	
DIMGFLG1	578	
DIMGLEN	578	69
DIMGMSG	528	
DIMGNAME	510	
DIMGSDCB	524	
DIMG1ABD	578	80
DIMG1DEL	578	40
DTE	0	

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**\$DTEOFF Programming Interface information**

Programming Interface information

**\$DTEOFF**

End of Programming Interface information

## \$DTEOFF Heading Information

**Common Name:** Spool Offload subtask DTE Work Area  
**Macro ID:** \$DTEOFF  
**DSECT Name:** DTE (\$DTEOFF is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DOFWLEN equate for the length of a Spool offload DTE extension.

**Created by:** \$DTEOFF ATTACH, called from the Spool Offload I/O manager JES2 processor to ATTACH the Spool Offload subtask for the Spool Offload in response to a \$S command against a drained device. The subtask (and DTE) definitions are defined in the \$DTEOFF tables.

**Pointed to by:** The \$DTEOFF field of the \$HCT data area points into the \$DTEORG/\$DTELAST chain, to the first Spool Offload \$DTE control block. See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** This area is used by the Spool-offload subtask. Other tasks can not use it.

**Function:** The Spool-offload subtask DTE work area DSECT, \$DTEOFF, describes the work area extension to the DTE for that kind of subtask. The mapping defines the fields after label DTEWORK.

There is one Spool Offload I/O Manager PCE (defined by \$PCE control block) in a JES2 address space. This \$PCE attaches a spool offload subtask for each Spool Offload Device that is started via the \$S command. The JES2 \$DTEOFF service used for the ATTACH creates a DTE, mapped by the \$DTE macro, with a function-specific extension, mapped by this macro. The DTE is the general control block used by JES2 to communicate with its daughter tasks.

## \$DTEOFF Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASPOFF DTE WORK AREA EXTENSION
1296	(510)	DBL WORD	8	DOFWSTRT (0)	
1296	(510)	X'4'	0	DOFOPENR	"04" SUB-TASK REQUEST CODE FOR OPEN
1296	(510)	X'8'	0	DOFCLOSR	"08" SUB-TASK REQUEST CODE FOR CLOSE
1296	(510)	X'C'	0	DOFCHEKR	"12" SUB-TASK REQUEST CODE FOR CHECK DATA CONTROL BLOCK
1296	(510)	SIGNED	4	DOFDCBST (0)	ORIGIN ON WORD BOUNDARY DIRECT ACCESS DEVICE INTERFACE
1296	(510)	BITSTRING	16		FDAD, DVTBL
1312	(520)	ADDRESS	4		KEYLEN, DEVT, TRBAL COMMON ACCESS METHOD INTERFACE
1316	(524)	ADDRESS	1		BUFNO, NUMBER OF BUFFERS
1317	(525)	ADDRESS	3		BUFCB, BUFFER POOL CONTROL BLOCK

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1320	(528)	ADDRESS	2		BUFL, BUFFER LENGTH
1322	(52A)	BITSTRING	2		DSORG, DATA SET ORGANIZATION
1324	(52C)	ADDRESS	4		IOBAD FOR EXCP OR RESERVED FOUNDATION EXTENSION
1328	(530)	BITSTRING	1		BFTEK, BFALN, DCBE INDICATORS
1329	(531)	ADDRESS	3		EODAD (END OF DATA ROUTINE ADDRESS)
1332	(534)	BITSTRING	1		RECFM (RECORD FORMAT)
1333	(535)	ADDRESS	3		EXLST (EXIT LIST ADDRESS) FOUNDATION BLOCK
1336	(538)	CHARACTER	8		DDNAME
1344	(540)	BITSTRING	1		OFLGS (OPEN FLAGS)
1345	(541)	BITSTRING	1		IFLGS (IOS FLAGS)
1346	(542)	BITSTRING	2		MACR (MACRO FORMAT) BSAM-BPAM-QSAM INTERFACE
1348	(544)	BITSTRING	1		OPTCD, OPTION CODES
1349	(545)	ADDRESS	3		CHECK OR INTERNAL QSAM SYNCHRONIZING RTN.
1352	(548)	ADDRESS	4		SYNAD, SYNCHRONOUS ERROR RTN. (3 BYTES)
1356	(54C)	SIGNED	2		INTERNAL ACCESS METHOD FLAGS
1358	(54E)	ADDRESS	2		BLKSIZE, BLOCK SIZE
1360	(550)	SIGNED	4		INTERNAL ACCESS METHOD FLAGS
1364	(554)	ADDRESS	4		INTERNAL ACCESS METHOD USE BSAM-BPAM INTERFACE
1368	(558)	ADDRESS	1		NCP, MAX NUM OF OUTSTANDING READ/Writes
1369	(559)	ADDRESS	3		EOBR, INTERNAL ACCESS METHOD USE
1372	(55C)	ADDRESS	4		EOBW, INTERNAL ACCESS METHOD USE
1376	(560)	ADDRESS	1	(2)	FLAGS AND EITHER DIRCT OR BUFOFF
1378	(562)	ADDRESS	2		LRECL
1380	(564)	ADDRESS	4		CNTRL, NOTE, POINT
1380	(564)	X'510'	0	DOFDCB	"DOFDCBST,*-DOFDCBST" DEFINE BASE AND LENGTH OF DCB
1384	(568)	SIGNED	4	DOFDECB	EVENT CONTROL BLOCK
1388	(56C)	BITSTRING	1		TYPE FIELD
1389	(56D)	BITSTRING	1		TYPE FIELD
1390	(56E)	ADDRESS	2		LENGTH
1392	(570)	ADDRESS	4		DCB ADDRESS
1396	(574)	ADDRESS	4		AREA ADDRESS
1400	(578)	ADDRESS	4		RECORD POINTER WORD

Comment

OFFLOAD DATA SET HEADER RECORD

End of Comment

1404	(57C)	BITSTRING	80	DOFHDBUF	OFFLOAD DATASET HEADER RECORD
1404	(57C)	ADDRESS	1	DOFHVRSN	VERSION NUMBER
1404	(57C)	X'2'	0	DOFHVRS1	"2" Current version number
1405	(57D)	BITSTRING	3		RESERVED
1408	(580)	SIGNED	4	DOFHTIME	TIME VERIFICATION STAMP
1412	(584)	SIGNED	4	DOFHDATE	DATE VERIFICATION STAMP
1416	(588)	CHARACTER	8	DOFHNODE	Node name offload done on
1416	(588)	X'14'	0	DOFHDLN	"*-DOFHVRSN" Length of header record
1424	(590)	ADDRESS	2	(0)	Generate assembly error if remapping is larger than base area
1424	(590)	SIGNED	4	(0)	
1424	(590)	ADDRESS	1	DOFABND	FLAGS FOR ESTAEX
1425	(591)	ADDRESS	1		SECOND FLAG BYTE
1426	(592)	ADDRESS	1		THIRD FLAG BYTE
1427	(593)	ADDRESS	1		VERSION NUMBER
1428	(594)	ADDRESS	4		TOKEN VALUE AREA
1432	(598)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED
1436	(59C)	ADDRESS	4		ALET FOR PARM LIST
1440	(5A0)	ADDRESS	4		FOUR BYTE EXIT ADDR

Comment

DYNAMIC ALLOCATE PARAMETER LIST

End of Comment

## \$DTEOFF Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1444	(5A4)	ADDRESS	4	DOFDAST	
1448	(5A8)	ADDRESS	1	DOFDARB	LENGTH OF RB
1449	(5A9)	ADDRESS	1		ALLOCATE VERB CODE
1450	(5AA)	ADDRESS	1	(2)	FLAGS1 = DON'T USE EXISTING ALLOC
1452	(5AC)	SIGNED	2	DOFDAERR (2)	ERROR AND INFO CODE
1456	(5B0)	ADDRESS	4	DOFDATPP	POINTER TO TU POINTERS
1460	(5B4)	ADDRESS	4		RESERVED
1464	(5B8)	ADDRESS	1	(4)	FLAGS 2 FIELD
1468	(5BC)	ADDRESS	4	DOFDATP1	
1472	(5C0)	ADDRESS	4	DOFDATP2	
1476	(5C4)	ADDRESS	4	DOFDATP3	
1480	(5C8)	ADDRESS	4	DOFDATP4	
1484	(5CC)	ADDRESS	4	DOFDATP5	
1488	(5D0)	ADDRESS	4	DOFDATP6	
1492	(5D4)	ADDRESS	4	DOFDATP7	
1496	(5D8)	ADDRESS	4	DOFDATP8	
1500	(5DC)	ADDRESS	4	DOFDATP9	
1504	(5E0)	ADDRESS	4	DOFDATPA	
1508	(5E4)	ADDRESS	2	DOFDATU1	DSN=
1514	(5EA)	CHARACTER	44	DOFDADSN	.....
1558	(616)	ADDRESS	2	DOFDATU2	
1564	(61C)	BITSTRING	1	DOFDADSP	DISP=OLD
1565	(61D)	ADDRESS	2	DOFDATU3	RETURN DD NAME
1571	(623)	CHARACTER	8	DOFDADDN	
1579	(62B)	ADDRESS	2	DOFDATU4	UNITCT=
1585	(631)	ADDRESS	1	DOFDAUCT	NN
1586	(632)	ADDRESS	2	DOFDATU5	DISP=CATLG
1593	(639)	ADDRESS	2	DOFDATU6 (3)	UNIT=
1599	(63F)	CHARACTER	8	DOFDAUNI	NAME (FROM XDCTUNIT)
1607	(647)	ADDRESS	2	DOFDATU7 (3)	VOLUME COUNT
1613	(64D)	ADDRESS	1	DOFNAVOL	MAXIMUM VOLUMES = 255
1614	(64E)	ADDRESS	2	DOFDATU8 (3)	LABEL=
1620	(654)	ADDRESS	1	DOFDALBL	LABEL TYPE (SL,NL,AL,...)
1621	(655)	ADDRESS	2	DOFDATU9 (3)	RETENTION PERIOD
1627	(65B)	ADDRESS	2	DOFDARPD	IN DAYS
1629	(65D)	ADDRESS	2	DOFDATUA (2)	SAF PROTECTION OPTION

Comment

### DYNAMIC UN-ALLOCATE PARAMETER LIST

End of Comment

1636	(664)	ADDRESS	4	DOFDUST	
1640	(668)	ADDRESS	1	DOFDURB	LENGTH OF RB
1641	(669)	ADDRESS	1		UNALLOCATE VERB CODE
1642	(66A)	ADDRESS	1	(2)	FLAGS1 = DON'T USE EXISTING ALLOC
1644	(66C)	SIGNED	2	(2)	ERROR AND INFO CODE
1648	(670)	ADDRESS	4	DOFDUTPP	POINTER TO TU POINTERS
1652	(674)	ADDRESS	4		RESERVED
1656	(678)	ADDRESS	1	(4)	FLAGS 2 FIELD
1660	(67C)	ADDRESS	4	DOFDUTP1	
1664	(680)	ADDRESS	2	DOFDUTU1	DD NAME
1670	(686)	CHARACTER	8	DOFDUDDN	
1680	(690)	ADDRESS	4	DOFOPRM	OPEN/CLOSE PARAMETER LIST
1684	(694)	SIGNED	4	DOFABDCC	ABEND COMPLETION CODE
1688	(698)	ADDRESS	4	DOFDCTPT	POINTER TO DCT FOR RECOVERY
1692	(69C)	SIGNED	4	DOFWTECB	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
Pseudo-buffer area for SYNAD/EODAD exits to use for 80-byte header of offload data set. DOFFLAG maps to SPBFLAG1; DOFSYBUF is the origin which corresponds to the start of the buffer.					
End of Comment					
1696	(6A0)	BITSTRING 1... ..	1	DOFFLAG	FLAG FOR SYNAD ROUTINE
		.1... ..		DOFSYNAD	"B'10000000" I/O ERROR HAS OCCURED
				DOFEODAD	"B'01000000" END OF DATA HAS OCCURED
1696	(6A0)	X'67E'	0	DOFSYBUF	"DOFFLAG-(SPBFLAG1-BFPDSECT)" Beginning of pseudo-buffer
1697	(6A1)	BITSTRING	3		Reserved for future use
Comment					
Work area for messages issued from the offload subtask					
End of Comment					
1700	(6A4)	SIGNED	4	(0)	
1700	(6A4)	SIGNED	4	DOFMSGA (0)	
1700	(6A4)	ADDRESS	2		TEXT LENGTH
1702	(6A6)	BITSTRING	2		MCSFLAGS
1704	(6A8)	ADDRESS	4		MESSAGE TEXT ADDRESS
1708	(6AC)	ADDRESS	1		VERSION LEVEL
1709	(6AD)	BITSTRING	1		MISCELLANEOUS FLAGS
1710	(6AE)	ADDRESS	1		REPLY LENGTH
1711	(6AF)	ADDRESS	1		LENGTH OF WPX
1712	(6B0)	BITSTRING	2		EXTENDED MCS FLAGS
1714	(6B2)	ADDRESS	2		RESERVED
1716	(6B4)	ADDRESS	4		REPLY BUFFER ADDRESS
1720	(6B8)	ADDRESS	4		REPLY ECB ADDRESS
1724	(6BC)	ADDRESS	4		CONNECT ID
1728	(6C0)	BITSTRING	2		DESCRIPTOR CODES
1730	(6C2)	ADDRESS	2		RESERVED
1732	(6C4)	BITSTRING	16		
1748	(6D4)	BITSTRING	2		MESSAGE TYPE
1750	(6D6)	ADDRESS	2		MESSAGE'S PRIORITY
1752	(6D8)	CHARACTER	8		JOB ID
1760	(6E0)	CHARACTER	8		JOB NAME
1768	(6E8)	CHARACTER	8		RETRIEVAL KEY
1776	(6F0)	ADDRESS	4		TOKEN FOR DOM
1780	(6F4)	ADDRESS	4		CONSOLE ID
1784	(6F8)	CHARACTER	8		SYSTEM NAME
1792	(700)	CHARACTER	8		CONSOLE NAME
1800	(708)	ADDRESS	4		REPLY CONSOLE NAME/ID ADDR
1804	(70C)	ADDRESS	4		CART ADDRESS
1808	(710)	ADDRESS	4		WSPARM ADDRESS
1808	(710)	X'70'	0	DOFMSGAL	"*-DOFMSGA"
1812	(714)	ADDRESS	2	DOFMSGL	
1814	(716)	CHARACTER	100	DOFMSG	
1814	(716)	X'26A'	0	DOFWLEN	"*-DOFWSTRT"

## \$DTEOFF Cross Reference

## \$DTEOFF Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DOFABDCC	694		DOFWLEN	716	26A
DOFABND	590		DOFWSTRT	510	
DOFCHEKR	510	C	DOFWTECB	69C	0
DOFCLOSR	510	8	DTE	0	
DOFDADDN	623				
DOFDADSN	5EA				
DOFDADSP	61C	1			
DOFDAERR	5AC	0			
DOFDALBL	654				
DOFDARB	5A8				
DOFDARPD	65B				
DOFDAST	5A4				
DOFDATPA	5E0				
DOFDATPP	5B0				
DOFDATP1	5BC				
DOFDATP2	5C0				
DOFDATP3	5C4				
DOFDATP4	5C8				
DOFDATP5	5CC				
DOFDATP6	5D0				
DOFDATP7	5D4				
DOFDATP8	5D8				
DOFDATP9	5DC				
DOFDATUA	65D				
DOFDATU1	5E4				
DOFDATU2	616				
DOFDATU3	61D				
DOFDATU4	62B				
DOFDATU5	632				
DOFDATU6	639				
DOFDATU7	647				
DOFDATU8	64E				
DOFDATU9	655				
DOFDAUCT	631				
DOFDAUNI	63F				
DOFDAVOL	64D				
DOFDCB	564	510			
DOFDCBST	510				
DOFDCTPT	698				
DOFDECB	568	0			
DOFDUDDN	686				
DOFDURB	668				
DOFDUST	664				
DOFDUTPP	670				
DOFDUTP1	67C				
DOFDUTU1	680				
DOFEODAD	6A0	40			
DOFFLAG	6A0	0			
DOFHDATE	584	0			
DOFHDBUF	57C	0			
DOFHDLN	588	14			
DOFHNODE	588	40404040			
DOFHTIME	580	0			
DOFHVRSN	57C				
DOFHVRS1	57C	2			
DOFMSG	716	40404040			
DOFMSGA	6A4				
DOFMSGAL	710	70			
DOFMSGL	714				
DOFOPENR	510	4			
DOFOPRM	690				
DOFSYBUF	6A0	67E			
DOFSYNAD	6A0	80			



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**\$DTESPL Programming Interface information**

Programming Interface information

**\$DTESPL**

End of Programming Interface information

## \$DTESPL Heading Information

**Common Name:** HASP Dynamic Spool Allocation DTE Work Area  
**Macro ID:** \$DTESPL  
**DSECT Name:** DTE (\$DTESPL is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: See \$DTE  
 Key: See \$DTE  
 Residency: See \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and ((SPLTGM-SPLSTART)+\$MAXTGV) for the length of a Dynamic Spool Allocation DTE extension.

**Created by:** Created by \$DTEIDYD ATTACH during JES2 initialization. The subtask (and DTE) definitions are defined by the \$DTETAB definitions.

**Pointed to by:** The \$DTESPOL field of the \$HCT data area points into \$DTEORG/\$DTELAST chain to the first HOSPOOL DTE. See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** This work area is used serially by the HOSPOOL subtask. No special serialization is necessary.

**Function:** The Spool Allocation DTE work area DSECT, \$DTESPOL, defines a work area used by the JES2 Dynamic Spool Allocation subtask (HOSPOOL). The mapping defines the fields after label DTEWORK. This mapping is only used to map DTEs with the value DTEIDSPL in the field DTESTID, indicating this DTE is a Dynamic Spool Allocation DTE.

## \$DTESPL Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASP SPOOL ALLOCATION WORK AREA
1296	(510)	X'510'	0	SPLSTART	*** START OF SPL MAPPING
1296	(510)	SIGNED	4	SPLSAVE (18)	STANDARD 18-WORD SAVE AREA
1368	(558)	BITSTRING	1	SPLFLG1	REQUEST FLAG BYTE
		1... ....		SPL1FMT	"B'10000000" Volume to be formatted
		.1.. ....		SPL1NFMT	"B'01000000" Volume not to be formatted
		..1. ....		SPL1MFMT	"B'00100000" Vol to be mini-formatted
		...1 ....		SPL1UNAL	"B'00010000" Volume to be unallocated
		.... 1..		SPL1ALLO	"B'00001000" Volume to be allocated
		.... .1..		SPL1BAD	"B'00000100" Task attached for BADTRACK
		.... ..1.		SPL1WFMT	"B'00000010" Volume was formatted
		.... ...1		SPL1PACE	"B'00000001" I/O pacing requested
1369	(559)	BITSTRING	1	SPLFLG2	ERROR FLAG BYTE
		1... ....		SPL2OBT	"B'10000000" OBTAIN error
		.1.. ....		SPL2FMT	"B'01000000" I/O error during formatting
		..1. ....		SPL2RDER	"B'00100000" SPOOL read or block length error
		...1 ....		SPL2UNAL	"B'00010000" Dynamic allocate error
		.... 1..		SPL2ABND	"B'00001000" Sub-task ABENDED
		.... .1..		SPL2DVTP	"B'00000100" DEVTYPE error
		.... ..1.		SPL2EXT	"B'00000010" Extent error
		.... ...1		SPL2SIZE	"B'00000001" Data set size error
1370	(55A)	BITSTRING	1	SPLFLG3	Subtask status flags

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1... ....		SPL3TGBG	"B'10000000" Formatting 1st trk in TG
		.1.. ....		SPL3ECKD	"B'01000000" This is ECKD device
		..1. ....		SPL3RELT	"B'00100000" Volume using relative addressing
		...1 ....		SPL3NREL	"B'00010000" Not all members support relative addressing
		.... 1...		SPL3RDTD	"B'00001000" Extent supports read track data CCW
		.... .1..		SPL3WTRD	"B'00000100" Extent supports write track data CCW
1371	(55B)	BITSTRING	1		Reserved for future use
1372	(55C)	SIGNED	2	SPLLENG	WORK AREA LENGTH
1374	(55E)	SIGNED	2		Reserved for future use
1376	(560)	ADDRESS	4	SPLCHAIN	ADDRESS OF NEXT WORK AREA
1380	(564)	ADDRESS	4	SPLCEBA	ADDR OF ECB FOR HOSPOOL SUBTASK
1384	(568)	ADDRESS	4	SPLDYNAL	ADDRESS OF DYNAMIC ALLOCATE RB
1388	(56C)	SIGNED	4	SPLDYNRB (0)	DYNAMIC ALLOCATE RB
1408	(580)	ADDRESS	4	SPLTEXT (0)	LIST OF TEXT UNIT POINTERS
1408	(580)	ADDRESS	4	SPLDDTA	POINTER TO DDNAME TEXT UNIT
1412	(584)	ADDRESS	4	SPLDSNTA	POINTER TO DSNAME TEXT UNIT
1416	(588)	ADDRESS	4	SPLUDSPA (0)	POINTER TO DISP. TEXT UNIT FOR UNALLOCATION REQUESTS
1416	(588)	ADDRESS	4	SPLVOLTA	POINTER TO VOLUME SERIAL TXT UNIT
1420	(58C)	ADDRESS	4	SPLUNITA	POINTER TO UNIT NAME TEXT UNIT
1424	(590)	ADDRESS	4	SPLDSPTA	POINTER TO DISPOSITION TEXT UNIT
1428	(594)	BITSTRING	6	SPLDDTXT	DDNAME TEXT
1434	(59A)	CHARACTER	8	SPLDDNAM	DDNAME
1442	(5A2)	BITSTRING	6	SPLDSTXT	DSNAME TEXT
1448	(5A8)	CHARACTER	44	SPLDSNAM	DSNAME
1492	(5D4)	BITSTRING	6	SPLVLTXT	VOLUME SERIAL TEXT
1498	(5DA)	CHARACTER	6	SPLVOLID	VOLUME SERIAL
1504	(5E0)	BITSTRING	6	SPLUNTXT	UNIT TEXT
1510	(5E6)	CHARACTER	5	SPLUNIT	Unit Name (or Type)
1518	(5EE)	BITSTRING	7	SPLDPTXT	DISPOSITION TEXT, DISPOSITION
1528	(5F8)	SIGNED	4	SPLCMLST (4)	CAMLST FOR OBTAIN
1544	(608)	DBL WORD	8	SPLDSCB (0)	OBTAIN WORK AREA
1692	(69C)	SIGNED	4	SPLDVA (0)	DEVTYPE WORK AREA
1716	(6B4)	CHARACTER	8	SPLSTRCC (0)	VOLUME'S FIRST EXTENT
1716	(6B4)	SIGNED	2	SPLLOWLIM (2)	LOWER CCHH OF FIRST EXTENT
1720	(6B8)	SIGNED	2	SPLUPLIM (2)	UPPER CCHH OF FIRST EXTENT
1724	(6BC)	SIGNED	4		Reserved

Comment

SPLABS is the absolute start and end track returned from allocating a spool data set.  
 SPLTRK is the 2 byte track range that is to be placed in the DAS. SPLTRK are relative track numbers if SPL3RELT is on, otherwise they are absolute track numbers. if relative addresses are used, the low track is always 1.  
 SPLSTRK is the value to add to a relative track address to get an absolute track address. If absolute addressing is being used, SPLSTRK is zero. (You can always add SPLSTRK to a track address to obtain an absolute track address).

End of Comment

1728	(6C0)	DBL WORD	8	SPLABS (0)	DS start/end absolute track
1728	(6C0)	SIGNED	4	SPLWABS	Start absolute track no.
1732	(6C4)	SIGNED	4	SPLUPABS	End absolute track number
1736	(6C8)	SIGNED	4	SPLTRK (0)	SPOOL start and end track
1736	(6C8)	BITSTRING	2	SPLWTRK	Start track value
1738	(6CA)	BITSTRING	2	SPLUPTRK	End track value
1740	(6CC)	SIGNED	4	SPLSTRK	Base track address (if relative addressing used)
1744	(6D0)	SIGNED	4	SPLCECB	DIRECT ACCESS I/O WAIT ECB
1748	(6D4)	SIGNED	4	SPLIOB (11)	DIRECT ACCESS IOB
1748	(6D4)	X'6D8'	0	SPLDCB	"*-40" DIRECT ACCESS DCB ORIGIN

# \$DTESPL Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1792	(700)	SIGNED	4	(3)	DIRECT ACCESS DCB
1804	(70C)	SIGNED	4	SPLDEB (12)	DIRECT ACCESS DEB
1852	(73C)	ADDRESS	4	SPLUCBPT	UCB ADDRESS
1856	(740)	ADDRESS	4	SPLCAPA	Last captured UCB
1860	(744)	ADDRESS	4	SPLTCBPT	TCB ADDRESS (USED DURING INIT.)
1864	(748)	SIGNED	4	SPLTKCYL	NUMBER OF HEADS PER CYLINDER
1868	(74C)	SIGNED	2	SPLNORTK	NUMBER OF RECORDS PER TRACK
1870	(74E)	SIGNED	2	SPLNOTGP	NUMBER OF TRACKS PER GROUP
1872	(750)	BITSTRING	2	SPLNMTRK	NUMBER OF TRACKS IN EXTENT
1874	(752)	SIGNED	2	SPLNOBYM	NUMBER OF BYTES IN TGM ENTRY
1876	(754)	SIGNED	4	SPLNUMTG	NUMBER OF USABLE TRACK GROUPS
1880	(758)	ADDRESS	4	SPLGMAIN	CCW WORK AREA SIZE
1884	(75C)	ADDRESS	4	SPLWCKDL	Addr of last Write CKD CCW
1888	(760)	ADDRESS	4	SPLOCPRM	Addr locate rcd parm area
1892	(764)	ADDRESS	4		Reserved for future use
1896	(768)	DBL WORD	8	SPLCCWS (0)	CCWS FOR READ COUNT-KEY-DATA
1896	(768)	DBL WORD	8	SPLCCW1	1ST CCW
1904	(770)	DBL WORD	8	SPLCCW2	2ND CCW
1912	(778)	DBL WORD	8	SPLCCW3	3RD CCW
1920	(780)	DBL WORD	8	SPLRDCT	READ-IN AREA
1928	(788)	DBL WORD	8	SPLTIMES	Start of trackgroup format
1936	(790)	DBL WORD	8	SPLTIMEE	End of trackgroup format
1944	(798)	ADDRESS	4	SPLCFLDS	POINTER TO 8 BEFORE 1ST COUNT FLD
1948	(79C)	SIGNED	4	SPLOPCL (0)	ALIGN LIST TO FULLWORD
1948	(79C)	ADDRESS	1		OPTION BYTE
1949	(79D)	ADDRESS	3		DCB ADDRESS
1949	(79D)	X'4'	0	SPLOCLEN	"*-SPLOPCL" Length of OPEN, CLOSE workarea
1952	(7A0)	ADDRESS	4	SPLRECTK	DVCT OR UCB ADDR, OR DEVTYPE
1956	(7A4)	BITSTRING	1		FLAG BYTE
1957	(7A5)	BITSTRING	1		RESERVED
1958	(7A6)	ADDRESS	2		TRACK BALANCE
1960	(7A8)	ADDRESS	1		RECORD NUMBER
1961	(7A9)	ADDRESS	1		KEY LENGTH
1962	(7AA)	ADDRESS	2		DATA LENGTH
1962	(7AA)	X'C'	0	SPLTKLEN	"*-SPLRECTK" LENGTH OF WORK AREA (FOR DTESPL IPCS MODEL)

Comment

MACDATE = 08/19/88

End of Comment

1964	(7AC)	BITSTRING	24	SPLSTIM	REMOTE STIMER SET PARM LIST
1964	(7AC)	X'18'	0	SPLSTIML	"*-SPLSTIM" Length of MF=L form

Comment

MACDATE -01/22/01-<1>

End of Comment

0	(0)	X'7C8'	0	M00M0900	"SPLCAPU" ++ IOSCAPU NAME
1992	(7C8)	DBL WORD	8	SPLCAPU (0)	++ IOSCAPU PARM LIST
1992	(7C8)	BITSTRING	1	SPLCAPU_XVERSION	++ INPUT XVERSION
1993	(7C9)	BITSTRING	1	SPLCAPU_XFLAGS1	++ FIELD_LABEL
		1... ..		SPLCAPU_KEYUSED_CAPTUCB	"B'10000000" ++ KEYUSED.CAPTUCB KEYWORD
		.1.. ..		SPLCAPU_KEYUSED_UCAPTUCB	"B'01000000" ++ KEYUSED.UCAPTUCB KEYWORD
		..1. ....		SPLCAPU_KEYUSED_CAPTOACT	"B'00100000" ++ KEYUSED.CAPTOACT KEYWORD
		...1 ....		SPLCAPU_KEYUSED_ASID	"B'00010000" ++ KEYUSED.ASID KEYWORD

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		SPLCAPU_KEYUSED_UCBPTR	"B'00001000" ++ KEYUSED.UCBPTR KEYWORD
		.... .1..		SPLCAPU_KEYUSED_CAPTPTR	"B'00000100" ++ KEYUSED.CAPTPTR KEYWORD
1994	(7CA)	CHARACTER	2	SPLCAPU_XRESERVED1	++ FIELD_LABEL XRESERVED1
1996	(7CC)	ADDRESS	4	SPLCAPU_XUCBPTR	++ XUCBPTR
2000	(7D0)	ADDRESS	4	SPLCAPU_XCAPTPTR	++ XCAPTPTR
2004	(7D4)	CHARACTER	1	SPLCAPU_XRESERVED2	++ FIELD_LABEL XRESERVED2
2005	(7D5)	BITSTRING	1	SPLCAPU_XMASK	++ FIELD_LABEL
		1... ....		SPLCAPU_XMSIFREE_YES	"B'10000000" ++ XMSIFREE.YES KEYWORD
		.1.. ....		SPLCAPU_XLASTING_YES	"B'01000000" ++ XLASTING.YES KEYWORD
		..1. ....		SPLCAPU_XCAPTCOM_YES	"B'00100000" ++ XCAPTCOM.YES KEYWORD
		...1 ....		SPLCAPU_XCAPTCOM_NEVER	"B'00010000" ++ XCAPTCOM.NEVER KEYWORD
2006	(7D6)	BITSTRING	2	SPLCAPU_XASID	++ XASID
2008	(7D8)	CHARACTER	16	SPLCAPU_XRESERVED3	++ FIELD_LABEL XRESERVED3
2008	(7D8)	X'20'	0	SPLCAPUL	**SPLCAPU" ++ LENGTH OF PLIST

Comment

IOSCAPU-1

End of Comment

0	(0)	X'608'	0	SPLMSG	"SPLDSCB,80" SUBTASK MESSAGE AREA
0	(0)	X'658'	0	SPLWORK	"SPLDSCB+L'SPLMSG,10" SUBTASK MESSAGE WORK AREA
0	(0)	X'662'	0	SPLCC	"SPLWORK+L'SPLWORK,4" SUBTASK ABEND COMPLETION CODE
0	(0)	X'7E8'	0	SPLTGM	*** START OF VOLUME TRACK GROUP MAP

**\$DTESPL Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DTE	0			7D5	10
M00M0900	0	7C8	SPLCAPU_XCAPTCOM_YES	7D5	20
SPLABS	6C0		SPLCAPU_XCAPTPTR	7D0	
SPLCAPA	740		SPLCAPU_XFLAGS1	7C9	
SPLCAPU	7C8		SPLCAPU_XLASTING_YES	7D5	40
SPLCAPU_KEYUSED_ASID	7C9	10	SPLCAPU_XMASK	7D5	
SPLCAPU_KEYUSED_CAPTOACT	7C9	20	SPLCAPU_XMSIFREE_YES	7D5	80
SPLCAPU_KEYUSED_CAPTPTR	7C9	4	SPLCAPU_XRESERVED1	7CA	
SPLCAPU_KEYUSED_CAPTUCB	7C9	80	SPLCAPU_XRESERVED2	7D4	
SPLCAPU_KEYUSED_UCAPTUCB	7C9	40	SPLCAPU_XRESERVED3	7D8	
SPLCAPU_KEYUSED_UCBPTR	7C9	8	SPLCAPU_XUCBPTR		
SPLCAPU_XASID	7D6				
SPLCAPU_XCAPTCOM_NEVER					

## \$DTESPL Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	7CC		SPLUNITA	58C	
SPLCAPU_XVERSION			SPLUNTXT	5E0	
	7C8		SPLUPABS	6C4	
SPLCAPUL	7D8	20	SPLUPLIM	6B8	
SPLCC	0	662	SPLUPTRK	6CA	
SPLCCWS	768		SPLVLTXT	5D4	
SPLCCW1	768		SPLVOLID	5DA	
SPLCCW2	770		SPLVOLTA	588	
SPLCCW3	778		SPLWCKDL	75C	
SPLCFLDS	798		SPLWORK	0	658
SPLCHAIN	560		SPL1ALLO	558	8
SPLCMLST	5F8		SPL1BAD	558	4
SPLDCB	6D4	6D8	SPL1FMT	558	80
SPLDDNAM	59A		SPL1MFMT	558	20
SPLDDTA	580		SPL1NFMT	558	40
SPLDDTXT	594		SPL1PACE	558	1
SPLDEB	70C		SPL1UNAL	558	10
SPLDPTXT	5EE		SPL1WFMT	558	2
SPLDSCB	608		SPL2ABND	559	8
SPLDSNAM	5A8		SPL2DVTP	559	4
SPLDSNTA	584		SPL2EXT	559	2
SPLDSPTA	590		SPL2FMT	559	40
SPLDSTXT	5A2		SPL2OBT	559	80
SPLDVA	69C		SPL2RDER	559	20
SPLDYNAL	568		SPL2SIZE	559	1
SPLDYNRB	56C		SPL2UNAL	559	10
SPL ECB	6D0		SPL3ECKD	55A	40
SPL ECBA	564		SPL3NREL	55A	10
SPLFLG1	558		SPL3RDTD	55A	8
SPLFLG2	559		SPL3RELT	55A	20
SPLFLG3	55A		SPL3TGBG	55A	80
SPLGMAIN	758		SPL3WTRD	55A	4
SPLIOB	6D4				
SPLLENG	55C				
SPLMSG	0	608			
SPLNMTRK	750				
SPLNOBYM	752				
SPLNORTK	74C				
SPLNOTGP	74E				
SPLNUMTG	754				
SPLOCLEN	79D	4			
SPLOCPRM	760				
SPLOPCL	79C				
SPLOWABS	6C0				
SPLOWLIM	6B4				
SPLOWTRK	6C8				
SPLRDCT	780				
SPLRECTK	7A0				
SPLSAVE	510				
SPLSTART	510	510			
SPLSTIM	7AC	0			
SPLSTIML	7AC	18			
SPLSTRCC	6B4				
SPLSTRK	6CC				
SPLTCBPT	744				
SPLTEXT	580				
SPLTGM	0	7E8			
SPLTIMEE	790				
SPLTIMES	788				
SPLTKCYL	748				
SPLTKLEN	7AA	C			
SPLTRK	6C8				
SPLUCBPT	73C				
SPLUDSPA	588				
SPLUNIT	5E6				

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**\$DTESUBS Programming Interface Information**

Programming Interface Information

**\$DTESUBS**

End of Programming Interface Information

## \$DTESUBS Heading Information

**Common Name:** HASPSUBS DTE Work Area Extension  
**Macro ID:** \$DTESUBS  
**DSECT Name:** DTE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: \$GETMAIN services (JES2 Private)  
 Key: 1  
 Residency: VIRTUAL - anywhere REAL - anywhere  
**Size:** See DSUBLEN  
**Created by:** \$DTEDYN ATTACH SUBPOOL: \$GETMAIN services (JES2 PRIVATE) KEY = 1  
**Pointed to by:** DSUB origin begins at the DTE work area extension field DTEWORK. The general purpose subtask chain head (\$DTEGSUB) is located in the HCT. \$DTE's representing non-busy subtasks are chained off the \$STQORG in the HCT.  
 FREQUENCY: The GSUBNUM parameter on the SUBTDEF initialization statement will be maintained in the \$STDGSUB field in the HCT. This will contain the number of DSUB work areas required. The default is 10.  
**Serialization:** No special serialization is necessary.  
**Function:** The \$DTESUBS DSECT maps the work area extension for the HASPSUBS subtask(s).

## \$DTESUBS Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASPSUBS DTE work area ext
1296	(510)	BITSTRING	1	DSUBFLG1	Flags
		1... ....		DSUB1NSQ	"B'10000000" SQD invalid or unavailable
		.1.. ....		DSUB1DEC	"B'01000000" Subtask count decremented
1297	(511)	BITSTRING	3		Reserved
1300	(514)	ADDRESS	4	DSUBSQD	Address of work SQD
1304	(518)	ADDRESS	4	DSUBNXT	Address of next subtask in chain
1308	(51C)	ADDRESS	4	DSUBSAVE	Address of save area used by called routine

Comment

Subtask VRA and recovery fields.

End of Comment

1312	(520)	ADDRESS	4	DSUBLOC	HA\$PSUBS base address
1316	(524)	SIGNED	2	DSUBABND	Subtask abend count
1318	(526)	BITSTRING	2		Reserved
1320	(528)	CHARACTER	8	DSUBRNAM	Routine name
1328	(530)	ADDRESS	4	DSUBCLRA	\$SUBIT caller address
1332	(534)	CHARACTER	8	DSUBMOD	\$SUBIT caller module name
1340	(53C)	SIGNED	4	DSUBOFF	\$SUBIT caller offset
1344	(540)	BITSTRING	1	DSUBFOOT	Subtask footprint flag byte
		1... ....		DSUBFTWK	"B'10000000" Set prior to obtaining work
		.1.. ....		DSUBFTST	"B'01000000" Set prior to processing request
		..1. ....		DSUBFTCL	"B'00100000" Set prior to calling routine
		...1 ....		DSUBFTRC	"B'00010000" Set following return from routine
		.... 1..		DSUBFTPS	"B'00001000" Set following caller post
		.... .1..		DSUBFTSQ	"B'00000100" Set prior to subtask queuing
		.... ..1.		DSUBFTWT	"B'00000010" Set prior to subtask wait



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1345	(541)	BITSTRING	3		Reserved
1345	(541)	X'34'	0	DSUBLEN	**-DTEWORK" HASPSUBS work area length

**\$DTESUBS Cross Reference**

Name	Hex Offset	Hex Value
DSUBABND	524	
DSUBCLRA	530	
DSUBFLG1	510	
DSUBFOOT	540	
DSUBFTCL	540	20
DSUBFTPS	540	8
DSUBFTRC	540	10
DSUBFTSQ	540	4
DSUBFTST	540	40
DSUBFTWK	540	80
DSUBFTWT	540	2
DSUBLEN	541	34
DSUBLOC	520	
DSUBMOD	534	
DSUBNXT	518	
DSUBOFF	53C	
DSUBRNAM	528	
DSUBSAVE	51C	
DSUBSQD	514	
DSUB1DEC	510	40
DSUB1NSQ	510	80
DTE	0	

## \$DTESUBS Cross Reference

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**\$DTEVTAM Programming Interface Information**

Programming Interface Information

**\$DTEVTAM**

End of Programming Interface Information

## \$DTEVTAM Heading Information

**Common Name:** HASPVTAM SUBTASK DTE WORK AREA EXTENSION  
**Macro ID:** \$DTEVTAM  
**DSECT Name:** DTE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** Offset:  
 Length:  
**Storage Attributes:** Subpool: \$GETMAIN SERVICES (JES2 PRIVATE)  
 Key: 1  
**Size:** SEE DSMFLEN  
**Created by:** \$DTEDYN ATTACH  
**Pointed to by:** DVTM ORIGIN BEGINS AT THE DTE WORK AREA  
 EXTENSION FIELD DTEWORK. THE HASPVTAM DTE  
 CHAIN HEAD (\$DTEVTM) IS LOCATED IN THE HCT.  
**Serialization:** THIS WORK AREA IS USED SERIALLY BY THE  
 HASPVTAM SUBTASK. NO SPECIAL SERIALIZATION  
 IS NECESSARY.  
**Function:** THIS DSECT MAPS THE ENTIRE WORK AREA EXTENSION FOR HASPVTAM  
 SUBTASK. THE WORK AREAS ARE USED TO PASS PARAMETERS, THAT MUST  
 REMAIN BELOW THE 16M LINE, TO VTAM.

## \$DTEVTAM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASPVTAM DTE WORK AREA EXTENSION
1296	(510)	ADDRESS	1	DVTMPWDL	LENGTH OF NODE PASSWORD
1297	(511)	CHARACTER	8	DVTMPSWD	NODE PASSWORD
1305	(519)	ADDRESS	1	DVTMAPNL	LENGTH OF APPL NAME
1306	(51A)	CHARACTER	8	DVTMAPLN	APPL NAME
1306	(51A)	X'12'	0	DVTMLN	"*-DTEWORK" LENGTH OF WORK AREA

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**\$DTEWTO Programming Interface information**

Programming Interface information

\$DTEWTO

End of Programming Interface information

### \$DTEWTO Heading Information

**Common Name:** HASPWTO Subtask DTE Work Area Extension (DWTO)  
**Macro ID:** \$DTEWTO  
**DSECT Name:** DTE (\$DTEWTO is part of the DTE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'DTE '  
 Offset: DTEID-DTE  
 Length: 4

**Storage Attributes:** Subpool: see \$DTE  
 Key: see \$DTE  
 Residency: see \$DTE

**Size:** See the DTELEN equate for the length of the base DTE, and the DWTOLEN equate for the length of a WTO DTE extension.

**Created by:** \$DTEWTO ATTACH called during JES2 initialization. The subtask (and DTE) definitions are defined by the \$DTEWTO definitions.

**Pointed to by:** The \$DTEWTO field of the \$HCT data area points into \$DTEORG/\$DTELAST chain to the one WTO DTE. See \$DTE for other pointer fields that apply to all DTE types.

**Serialization:** This area is used serially by callers using \$WTO \$CWTO, or \$BLDMSG (under the main task) and by the HASPWTO subtask. Fields that should be used only by the main task begin at label CSARDWRK.

**Function:** The Write To Operator subtask DTE work area DSECT, \$DTEWTO, describes the work area extension to the DTE for that subtask. The mapping defines the fields after label DTEWORK.

The \$DTEWTO area is used by the write-to-operator routine running under the JES2 main task. It is also used by the one (and only one) HASPWTO subtask.

### \$DTEWTO Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DTE	HASPCON DTE WORK AREA EXT
1296	(510)	DBL WORD	8	CSA (0)	
Comment					
-----					
NOTE: LIST FORM WTO MUST BE FIRST DUE TO REDEFINITION OF WORK AREA FOR MGCR.					
-----					
NORMAL WTO FORMAT					
-----					
End of Comment					
1296	(510)	SIGNED	4	CSAWTOL (0)	
1296	(510)	ADDRESS	2		TEXT LENGTH
1298	(512)	BITSTRING	2		MCSFLAGS
1300	(514)	CHARACTER	53		
1425	(591)	ADDRESS	1		VERSION LEVEL

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1426	(592)	BITSTRING	1		MISCELLANEOUS FLAGS
1427	(593)	ADDRESS	1		REPLY LENGTH
1428	(594)	ADDRESS	1		LENGTH OF WPX
1429	(595)	BITSTRING	2		EXTENDED MCS FLAGS
1431	(597)	ADDRESS	2		RESERVED
1433	(599)	ADDRESS	4		REPLY BUFFER ADDRESS
1437	(59D)	ADDRESS	4		REPLY ECB ADDRESS
1441	(5A1)	ADDRESS	4		CONNECT ID
1445	(5A5)	BITSTRING	2		DESCRIPTOR CODES
1447	(5A7)	ADDRESS	2		RESERVED
1449	(5A9)	BITSTRING	16		
1465	(5B9)	BITSTRING	2		MESSAGE TYPE
1467	(5BB)	ADDRESS	2		MESSAGE'S PRIORITY
1469	(5BD)	CHARACTER	8		JOB ID
1477	(5C5)	CHARACTER	8		JOB NAME
1485	(5CD)	CHARACTER	8		RETRIEVAL KEY
1493	(5D5)	ADDRESS	4		TOKEN FOR DOM
1497	(5D9)	ADDRESS	4		CONSOLE ID
1501	(5DD)	CHARACTER	8		SYSTEM NAME
1509	(5E5)	CHARACTER	8		CONSOLE NAME
1517	(5ED)	ADDRESS	4		REPLY CONSOLE NAME/ID ADDR
1521	(5F1)	ADDRESS	4		CART ADDRESS
1525	(5F5)	ADDRESS	4		WSPARM ADDRESS
1525	(5F5)	X'5F9'	0	CSAWPXEN	*** END OF WPX

Comment

-----  
 Extensions for MLWTO. These must IMMEDIATELY follow  
 the WPX (generated by the WTO list form)  
 -----

End of Comment

1529	(5F9)	ADDRESS	2	CSALINET	LINE TYPE FIELD
1531	(5FB)	BITSTRING	1	CSALAREA	AREA ID
1532	(5FC)	BITSTRING	1	CSALNUM	NUMBER OF LINES
1532	(5FC)	X'5FD'	0	CSAMLEND	*** End of MLWTO extensions

Comment

-----  
 Map the fields prior to and including the message text  
 -----

End of Comment

1296	(510)	BITSTRING	4	CSAMCS34 (0)	MCS flags and length
1296	(510)	SIGNED	2	CSAMSGL	MESSAGE LENGTH + 4
1298	(512)	SIGNED	2	CSAMCS	MCS FLAGS
1300	(514)	CHARACTER	125	CSAMSG	TEXT
1300	(514)	X'81'	0	CSASLEN	**_CSAMSGL" STANDARD WTO LENGTH
1300	(514)	X'591'	0	CSATRIL	*** START OF TRAILER FIELDS
1300	(514)	X'6C'	0	CSALSIZ	"CSAMLEND-CSATRIL" Length of WPX plus MLWTO extensions

Comment

-----  
 ENSURE WORK AREA IS LARGE ENOUGH FOR SVC 34  
 PARAMETERS.  
 -----

End of Comment

1425	(591)	CHARACTER	1		ROOM FOR COMMAND UTOKEN
1425	(591)	X'5E1'	0	DWTO34ND	*** End of SVC 34 work area

## \$DTEWTO Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
----- END OF WPL AND MGCR PARAMETER LIST AREA -----					
End of Comment					
1506	(5E2)	ADDRESS	2	(0)	See comment box in macro source for what to do if this stmt has err
1536	(600)	SIGNED	4	(0)	Full word align
1536	(600)	CHARACTER	8	CSAJOBID	Job ID
1544	(608)	BITSTRING	3	CSANFM (0)	SYSTEM ID OF SENDER
1544	(608)	BITSTRING	2		NODE NUMBER
1546	(60A)	BITSTRING	1		NODE QUALIFIER
1547	(60B)	BITSTRING	1		RESERVED
Comment					
----- Workarea for HASPCON PCE level service routines -----					
End of Comment					
1548	(60C)	BITSTRING	2	CSARDWRK	LOGICAL ROUTING WORK AREA
1550	(60E)	ADDRESS	1	CSAW (4)	
1566	(61E)	BITSTRING	8		
1566	(61E)	X'2A'	0	CSAWLEN	**"-CSAW"
1592	(638)	BITSTRING	1	DWTOFLG1	Flags
		1... ....		DWTO1WAT	"B'10000000" \$WAIT tolerated by caller
1600	(640)	DBL WORD	8	(0)	
1600	(640)	X'130'	0	DWTOLEN	**"-DTEWORK" LENGTH OF WORK AREA

## \$DTEWTO Cross Reference

Name	Hex Offset	Hex Value
CSA	510	
CSAJOBID	600	40404040
CSALAREA	5FB	0
CSALINET	5F9	
CSALNUM	5FC	1
CSALSIZ	514	6C
CSAMCS	512	
CSAMCS34	510	
CSAMLEND	5FC	5FD
CSAMSG	514	
CSAMSGL	510	
CSANFM	608	
CSARDWRK	60C	0
CSASLEN	514	81
CSATRIL	514	591
CSAW	60E	
CSAWLEN	61E	2A
CSAWPXEN	5F5	5F9
CSAWTOL	510	
DTE	0	
DWTOFLG1	638	
DWTOLEN	640	130
DWTO1WAT	638	80
DWTO34ND	591	5E1



## \$DWA Heading Information

**Common Name:** HASP \$DILBERT Work Area  
**Macro ID:** \$DWA  
**DSECT Name:** DWA  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** DWAEYE  
 Offset: DWAEYE-DWA  
 Length: L'DWAEYE

**Storage Attributes:** Subpool: 1  
 Key: 1  
 Residency: Virtual and real storage are anywhere in the private storage of the JES2 address space.

**Size:** See DWASIZE

**Created by:** \$DILBERT service

**Pointed to by:** Field \$DILHEAD in the \$HCT data area  
 Field \$DILTAL in the \$HCT data area  
 Field DWANEXT in the \$DWA data area  
 Field DWAPREV in the \$DWA data area  
 Field DWANXTEL in the \$DWA data area  
 Field DWAPRVEL in the \$DWA data area

**Serialization:** None Required

**Function:** Represent requests made using the \$DILBERT macro instruction that specifies a routine to be called when the BERT lock for a specific job is released.

## \$DWA Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DWA	, HASP \$DILBERT Work Area
0	(0)	CHARACTER	4	DWAEYE	Eyecatcher
4	(4)	BITSTRING	1	DWATYPE	Type
5	(5)	BITSTRING	1	DWAPFLG1	Flags See \$DILFLG1 in \$PARMLST
6	(6)	BITSTRING	1	DWAPFLG2	Flags See \$DILFLG2 in \$PARMLST
7	(7)	BITSTRING	1	DWAFLAG9	Internal flags
		1... ....		DWA9QUED	"B'10000000" DWA was queued
Comment					
Backend processing is required when the processing at the end of calling the processing routine which was required to update the BERTs would have required a \$WAIT in \$DOGBERT.					
End of Comment					
		.1.. ....		DWA9BEND	"B'01000000" Backend processing req.
		..1. ....		DWA9NBRT	"B'00100000" Failed ... BERT shortage
		...1 ....		DWA9PROS	"B'00010000" DWA being processed now
		.... 1..		DWA9SPEC	"B'00001000" Use SPECIAL=YES
		.... .1..		DWA9HEAD	"B'00000100" Head of side queue
8	(8)	ADDRESS	4	DWANEXT	Address of next DWA
12	(C)	ADDRESS	4	DWAPREV	Address of previous DWA
16	(10)	BITSTRING	4	DWAPARM0	Parameter for register 0
20	(14)	BITSTRING	4	DWAPRMA1	Parameter for AR1
24	(18)	ADDRESS	4	DWARTN	Address of routine
28	(1C)	BITSTRING	4	DWAIMMED	Immediate instruction to executed
32	(20)	ADDRESS	4	DWAPCE	Address of PCE to \$POST

## \$DWA Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
36	(24)	ADDRESS	4	DWACALR	Address of \$DILBERT caller (for diagnostic purposes)
40	(28)	SIGNED	4	DWASTCK	Time of \$DILBERT call (for diagnostic purposes)
44	(2C)	ADDRESS	4	DWANXTEL	Next DWA for element (side queue pointer)
48	(30)	ADDRESS	4	DWAPRVEL	Previous DWA for element (side queue pointer)
52	(34)	SIGNED	4	DWAORG (0)	Common origin

Comment

Parameters specific to TYPE=JQE

End of Comment

52	(34)	SIGNED	4	DWAJQOFF	JQE Offset
56	(38)	BITSTRING	4	DWAJBKEY	Job Key
60	(3C)	ADDRESS	4	DWAJQA	Address of JQA
64	(40)	SIGNED	4	DWABERTS	BERTs required to process
68	(44)	SIGNED	4	DWABSTCK	TOD last time we tried
72	(48)	ADDRESS	1	DWADOGJ	ACTION
73	(49)	ADDRESS	1	(3)	
76	(4C)	ADDRESS	2		

Comment

End of DWA

End of Comment

80	(50)	DBL WORD	8	(0)	Ensure doubleword size
80	(50)	X'50'	0	DWASIZE	**"DWA" Length of DWA

## \$DWA Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DWA	0		DWA9PROS	7	10
DWABERTS	40		DWA9QUED	7	80
DWABSTCK	44		DWA9SPEC	7	8
DWACALR	24				
DWADOGJ	48				
DWAEYE	0				
DWAFLAG9	7				
DWAIMMED	1C				
DWAJBKEY	38				
DWAJQA	3C				
DWAJQOFF	34				
DWANEXT	8				
DWANXTEL	2C				
DWAORG	34				
DWAPARM0	10				
DWAPCE	20				
DWAPFLG1	5				
DWAPFLG2	6				
DWAPREV	C				
DWAPRMA1	14				
DWAPRVEL	30				
DWARTN	18				
DWASIZE	50	50			
DWASTCK	28				
DWATYPE	4				
DWA9BEND	7	40			
DWA9HEAD	7	4			
DWA9NBRT	7	20			

## \$ENFPARM Heading Information

**Common Name:** ENF parameter list required for the ENFREQ macro  
**Macro ID:** \$ENFPARM  
**DSECT Name:** ENFPARM  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: 241  
 Key: 1  
 Residency: Any  
**Size:** See ENFPSIZE  
**Created by:** JES2  
**Pointed to by:** Address contained in a register for use with the ENFREQ service  
**Serialization:** None  
**Function:** Maps the list form of the ENFREQ parameter list as well as storage for the ENFPTR field required by the ENFREQ macro.

## \$ENFPARM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ENFPARM	DSECT for ENF parms
0	(0)	SIGNED	4	ENFPENF (0)	START OF ENF PARAMETER LIST
0	(0)	ADDRESS	2		LENGTH OF ENF PARAMETER LIST
2	(2)	ADDRESS	2		REQUESTED ENF ACTION
4	(4)	ADDRESS	4		EVENT CODE
8	(8)	ADDRESS	1		FLAG FIELD
9	(9)	ADDRESS	1		MASK FOR COMPARING QUALIFIERS
10	(A)	ADDRESS	1		KEY FOR FREEPRM
11	(B)	ADDRESS	1		SUBPOOL FOR FREEPRM
12	(C)	ADDRESS	4		QUALIFIER
16	(10)	ADDRESS	4		EXIT ROUTINE ADDRESS
20	(14)	ADDRESS	4		Address of caller's parameters
24	(18)	ADDRESS	4		TOKEN
28	(1C)	ADDRESS	4		Length of caller's parameters
32	(20)	ADDRESS	2		VERSION OF PARM LIST
34	(22)	ADDRESS	2		RESERVED FIELD
36	(24)	ADDRESS	4		RETURN ADDRESS
40	(28)	CHARACTER	8		ESTABLISHER NAME
48	(30)	CHARACTER	8		LISTEN EXIT NAME
56	(38)	ADDRESS	4		LISTENER NUMBER (RETURNED)
60	(3C)	CHARACTER	4		SPECIAL EXIT RETURN CODE
64	(40)	ADDRESS	4	ENFPPTR	Area for ENFPTR - required by ENFREQ macro
64	(40)	X'44'	0	ENFPSIZE	"*-ENFPARM" Size of parameter area

## \$ENFPARM Cross Reference

## \$ENFPARM Cross Reference

Name	Hex Offset	Hex Value
ENFPARM	0	
ENFPENF	0	
ENFPPTR	40	
ENFPSIZE	40	44

---

**\$ENFWORK Programming Interface information**

Programming Interface information

**\$ENFWORK**

End of Programming Interface information

## \$ENFWORK Heading Information

**Common Name:** HASP ENF LISTEN Processor  
**Macro ID:** \$ENFWORK  
**DSECT Name:** PCE (\$ENFWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol ENNPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** The \$ENFPCE field of the \$HCT data area points into the \$PCEORG/\$PCELAST chain to the first ENF LISTEN PCE. Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type. See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization  
**Function:** The fields in this work area are used by a JES2 ENF LISTEN Processor and by its support routines and exits. \$ENFWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$ENFWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEENFID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

## \$ENFWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	16	ENNTQE	TQE for deregistration wait
256	(100)	DBL WORD	8	(0)	Force double-word alignment
256	(100)	X'10'	0	ENNPCEWS	**"-PCEWORK" Length of \$ENF PCE

## \$EOMWORK Heading Information

**Common Name:** JES2 End of Memory PCE Work Area  
**Macro ID:** \$EOMWORK  
**DSECT Name:** PCE (\$EOMWORK is part of the PCE DSECT)  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'PCE '  
 Offset: PCEEYE-PCE  
 Length: 4

**Storage Attributes:** Subpool: See \$PCE  
 Key: See \$PCE  
 Residency: See \$PCE

**Size:** See symbol EOMPCEWL for the length of this work area. The overall length of the PCE is stored in field PCELENG.

**Created by:** See \$PCE  
**Pointed to by:** The \$EOMPCE field of the \$HCT data area  
 The EMSPCE field of the \$DTEEOM data area  
 See \$PCE for other pointer fields that apply to all PCE types.

**Serialization:** Normal PCE dispatch serialization  
**Function:** The fields in this work area are used by the JES2 End of Memory Processor. \$EOMWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$EOMWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEEOMID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

### \$EOMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	ADDRESS	4	EOMDTE	Address of our EOMDTE
244	(F4)	BITSTRING	4		Reserved for future use
248	(F8)	DBL WORD	8	(0)	Alignment
248	(F8)	X'8'	0	EOMPCEWL	"*-PCEWORK" Length of misc PCE work area

## \$EOMWORK Map



---

# \$ERA Programming Interface information

Programming Interface information

**\$ERA**

The following field is **NOT** programming interface information:

- ERAPRE

End of Programming Interface information

## \$ERA Heading Information

**Common Name:** JES2 Error Recovery Area  
**Macro ID:** \$ERA  
**DSECT Name:** ERA  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** ERA  
 Offset: ERAERAID-ERA  
 Length: L'ERAERAID

**Storage Attributes:** Subpool: 0, Also refer to \$DTE and \$TRCA  
 Key: 1, Also refer to \$DTE and \$TRCA  
 Residency: Anywhere. Also refer to the \$DTE and \$TRCA in which an \$ERA is imbedded.

**Size:** See ERALENG  
**Created by:** \$ANALYZE routine in HASPTERM getmains an \$ERA.  
 An emergency \$ERA exists as part of the \$TRCA.  
 An \$ERA is also created as part of the \$DTE.

**Pointed to by:** ERAPREV field of the \$ERA data area  
 PCEERA field of the \$PCE data area  
 PREERA field of the \$PRE data area  
 SPNERA field of the \$SPNWORK data area  
 TRCAERA field of the \$TRCA data area

**Serialization:** Fields are serialized implicitly, by being changeable by only one task, either the JES2 main task or a JES2 subtask.

**Function:** Provides work areas and communication fields required for processing abends in the JES2 address space and possible later recovery.

The \$ERA is imbedded in the \$DTE at field DTEERA for use in a subtask. An emergency \$ERA is imbedded in the \$TRCA at field TRCAEERA. The \$ERA is also getmained separately from other control blocks.

## \$ERA Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ERA	HASP ERROR RECOVERY AREA
0	(0)	CHARACTER	4	ERAERAID	EBCDIC ID - 'ERA '
0	(0)	X'0'	0	ERAVN	"0" VERSION NUMBER CURRENTLY 0
4	(4)	ADDRESS	1	ERAERAVN	CONTROL BLOCK VERSION NUMBER
5	(5)	BITSTRING	1	ERAERAVN	CONTROL BLOCK VERSION NUMBER
6	(6)	BITSTRING	2	ERAERAVN	CONTROL BLOCK VERSION NUMBER
8	(8)	ADDRESS	4	ERADOMID	DOM ID OF HASP095
12	(C)	ADDRESS	4	ERAERPL	IF HASP CAT. ERROR ERPL ADDRESS - OTHERWISE 0
16	(10)	SIGNED	4	ERACODE	CATASTROPHIC ERROR REASON CODE

Comment

ERROR LOCATION AND ENVIRONMENT INFORMATION SECTION

End of Comment

20	(14)	ADDRESS	4	ERAFADDR	FAILING ADDR FOR ERROR
24	(18)	SIGNED	4	ERAJLMOD (0)	MODMAP-STYLE ENTRY, JES2 LMOD
40	(28)	SIGNED	4	ERAELMOD (0)	MODMAP-STYLE ENTRY, ERROR LMOD
56	(38)	SIGNED	4	ERAESECT (0)	MODMAP-STYLE ENTRY, ERROR CSECT
72	(48)	SIGNED	4	ERAESRGS (3)	REGS 0,1,2 ON ENTRY TO \$ABEND

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
72	(48)	X'48'	0	ERAESRG0	"ERAESRGS,4" REG 0 ON ENTRY TO ESTAE ROUTINE
72	(48)	X'4C'	0	ERAESRG1	"ERAESRGS+4,4" REG 1 ON ENTRY TO ESTAE ROUTINE
72	(48)	X'4C'	0	ERASDWA	"ERAESRG1,4,C'A" ADDRESS OF SDWA
72	(48)	X'50'	0	ERAESRG2	"ERAESRGS+8,4" REG 2 ON ENTRY TO ESTAE ROUTINE
84	(54)	CHARACTER	8	ERAMODN	Mod name for event record
92	(5C)	CHARACTER	8	ERAMODO	Mod offset for event record
100	(64)	ADDRESS	4	ERAPRE	A(ASSOCIATED PRE)
104	(68)	ADDRESS	4	ERAPREV	ACTIVE ERA, IF ANY, WHEN ERROR OCCURRED- OTHERWISE 0
108	(6C)	ADDRESS	4	ERAPSVAD	SAVE AREA LEVEL ASSOCIATED WITH ERR
112	(70)	ADDRESS	4	ERACPCE	VALUE OF \$CURPCE AT TIME OF ERR
116	(74)	SIGNED	2	ERAPRECT	NUMBER OF PRES POINTING TO ERA

Comment

\$SETRP SECTION - FOLLOWING FIELDS SET BY \$SETRP -  
DEFAULT VALUES ESTABLISHED IN \$RETRY FRONTEND

End of Comment

118	(76)	BITSTRING	1	ERASETRP	OPTION - I.E. RESUME, TERMINATE, OR PERCOLATE
119	(77)	BITSTRING	1		RESERVED
120	(78)	ADDRESS	4	ERARZOOM	ADDRESS OF POINT OF RESUMPTION (FROM RESUME=)

Comment

END OF \$SETRP SECTION  
END OF \$SETRP SECTION  
REGISTER SECTION -

- ON ENTRY TO PROCESSOR RECOVERY ROUTINE ERAREGS REGISTERS ARE AS THEY WERE AT TIME OF ERROR. IF \$ERROR, ANY REGISTERS WIPED OUT BY \$ERROR HAVE BEEN RESET TO VALUES PRIOR TO EXECUTION OF THE \$ERROR MACRO. (NOTE THAT THESE REGISTER VALUES ARE FROM SDWASRSV AS OPOSED TO SDWAGRSV)
- ON RETURN TO \$RETRY FROM PROCESSOR RECOVERY ROUTINE, IF \$SETRP RESUME= IS SPECIFIED, THESE VALUES (ERAREGS) DETERMINE THE REGISTER CONTENTS AT POINT OF RESUMPTION, WITH THE EXECPTION OF R11 (ALWAYS R11), R13 (ALWAYS PCE ADDRESS) AND R15 (ADDRESS OF POINT OF RESUMPTION)

End of Comment

124	(7C)	BITSTRING	64	ERACREGS	COPY OF REGISTER VALUES PLACED IN ERAREGS IN \$ABEND, REGARDLESS OF CHANGES TO ERAREGS BY RTNS
188	(BC)	BITSTRING	64	ERAREGS	Register save area
188	(BC)	SIGNED	4	ERAREG0	REGISTER 0
192	(C0)	SIGNED	4	ERAREG1	REGISTER 1
196	(C4)	SIGNED	4	ERAREG2	REGISTER 2
200	(C8)	SIGNED	4	ERAREG3	REGISTER 3
204	(CC)	SIGNED	4	ERAREG4	REGISTER 4
208	(D0)	SIGNED	4	ERAREG5	REGISTER 5
212	(D4)	SIGNED	4	ERAREG6	REGISTER 6
216	(D8)	SIGNED	4	ERAREG7	REGISTER 7
220	(DC)	SIGNED	4	ERAREG8	REGISTER 8
224	(E0)	SIGNED	4	ERAREG9	REGISTER 9
228	(E4)	SIGNED	4	ERAREG10	REGISTER 10
232	(E8)	SIGNED	4	ERAREG11	REGISTER 11
236	(EC)	SIGNED	4	ERAREG12	REGISTER 12
240	(F0)	SIGNED	4	ERAREG13	REGISTER 13
244	(F4)	SIGNED	4	ERAREG14	REGISTER 14
248	(F8)	SIGNED	4	ERAREG15	REGISTER 15
252	(FC)	BITSTRING	64	ERAAREGS	Copy of access registers at time of error. These are NOT restored if we resume.
316	(13C)	BITSTRING	8	ERAPSW	Last JES2 related PSW

## \$ERA Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
324	(144)	BITSTRING	1	ERAINCD	Interrupt code (second byte)
325	(145)	BITSTRING	1	ERAILC	Instruction length count
326	(146)	BITSTRING	2		Reserved
328	(148)	ADDRESS	4	ERATEA	Translation exception addr
332	(14C)	ADDRESS	4	ERAREGRB	RB that contains JES2 regs (points to RB prefix)
336	(150)	BITSTRING	12		Reserved for future use
348	(15C)	SIGNED	4	(0)	ROUND TO FULLWORD
348	(15C)	X'15C'	0	ERALENG	**"-ERA" LENGTH (ROUNDED TO FULLWORD)

Comment

### ERAFLAGS BIT DEFINITIONS

End of Comment

1... ....	ERAEMERG	"X'80" EMERGENCY ERA, DONT'T FREEMAIN
.1.. ....	ERAXMS	"X'40" HOME ASID NOT PRIMARY AT ERROR
..1. ....	ERAFRBLC	"X'20" ERAFADDR CAME FROM \$RBFADDR
...1 ....	ERACSAM	"X'10" LOAD MODULE WITH ERROR IN CSA
.... 1...	ERAARMOD	"X'08" ASC=ARMODE at time of ABEND
.... .1..	ERAS1J2M	"X'04" 1st JES2 modules found in HASP088 message traceback
.... ..1.	ERARSVF6	"X'02" RESERVED FOR FUTURE USE
.... ...1	ERARSVF7	"X'01" RESERVED FOR FUTURE USE

Comment

### ERASETRP BIT DEFINITIONS

End of Comment

1... ....	ERATRPTM	"X'80" TERMINATE
.1.. ....	ERATRPPC	"X'40" PERCOLATE
..1. ....	ERATRPRE	"X'20" RESUME
...1 ....	ERAHVRGS	"X'10" ERA HAS REGS (ON IF SDWA EXISTS)
.... 1...	ERATRPR0	"X'08" RESERVED FOR FUTURE USE
.... .1..	ERATRPR1	"X'04" RESERVED FOR FUTURE USE
.... ..1.	ERATRPR2	"X'02" RESERVED FOR FUTURE USE
.... ...1	ERATRPR3	"X'01" RESERVED FOR FUTURE USE

## \$ERA Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ERA	0		ERAILC	145	
ERAAREGS	FC		ERAINCD	144	
ERAARMOD	15C	8	ERAJLMOD	18	
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ERAFLAGS	5		ERAREG14	F4	
ERAFRBLC	15C	20	ERAREG15	F8	
ERAHVRGS	15C	10	ERAREG2	C4	

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
ERAREG3	C8	
ERAREG4	CC	
ERAREG5	D0	
ERAREG6	D4	
ERAREG7	D8	
ERAREG8	DC	
ERAREG9	E0	
ERARSVF6	15C	2
ERARSVF7	15C	1
ERARZOOM	78	
ERASDWA	48	4C
ERASETRP	76	
ERAS1J2M	15C	4
ERATEA	148	
ERATRPPC	15C	40
ERATRPRE	15C	20
ERATRPR0	15C	8
ERATRPR1	15C	4
ERATRPR2	15C	2
ERATRPR3	15C	1
ERATRPTM	15C	80
ERAVN	0	0
ERAXMS	15C	40



## \$ERPL Heading Information

**Common Name:** \$ERROR parameter list

**Macro ID:** \$ERPL

**DSECT Name:** ERPL

**Owning Component:** JES2 (SC1BH)

**Eye-Catcher ID:** none

**Storage Attributes:** Subpool: The subpool of the associated code module  
 Key: The key of the associated code module  
 Residency: The residency is that of the associated code module. Virtual and real storage may be above or below 16M, in the private storage of a JES2 or FSS address space, or in common storage.

**Size:** See the ERPLLENG equate.

**Created by:** ERPLs are created during an assembly of a module, in the expansion of a \$ERROR macro. A table of fixed ERPLs is also defined in the JES2 main task's ABEND routine, representing system ABENDs (e.g SOCx).

**Pointed to by:** The way that ERPL is pointed to depends on the environment (JES2, USER, SUBTASK or FSS).  
 - During an ABEND initiated by a \$ERROR macro in the JES2 assembly environment, the \$ERRERPL field of the HCT control block points to the associated ERPL.  
 - During an ABEND initiated by a \$ERROR macro in the USER or SUBTASK environment, the ERPL is expanded immediately after the ABEND macro expansion. Its address is therefore located from the ABEND SDWA control block's SDWANXT2 field.  
 - While processing an error in a \$ERROR macro in the FSS assembly environment, \$ERROR expands to a call of the error processing routine instead of an ABEND. The ERPL is the call parameter list, in register 14.

**Serialization:** ERPLs are assembled into modules, and are read-only,

**Function:** Two types of ERPLs exist: those generated by the \$ERROR macro in the JES2, USER, SUBTASK and FSS assembly environments and those that are fixed.

The first type of ERPL is a parameter list generated by the \$ERROR macro that describes an error situation in which JES2 code recognizes the error and chooses to issue an ABNED. Recovery of the task may or may not be attempted, depending on the situation. The ERPL defines the JES2 error code, message text describing the error, and flags.

The second type of ERPL is a fixed ERPL defined to the JES2 main task ESTAE routine that maps certain well known system errors, such as SOCx ABENDs.

## \$ERPL Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ERPL	HASP \$ERROR PARM LIST DSECT
0	(0)	CHARACTER	4	ERPLCODE	\$ERROR CODE, W/O '\$', LEFT JUSTIFIED
4	(4)	CHARACTER	8	ERPLMOD	Module with \$ERROR
12	(C)	CHARACTER	8	ERPLSEQ	SEQ number of \$ERROR

## \$ERPL Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
20	(14)	BITSTRING	1	ERPLFLAG	FLAGS
		1... ..		ERPLTXTF	"X'80" IF ON THIS ERPL HAS TEXT, ELSE ERPLTEXT CONTAINS ADDR. OF ERPL CONTAINING TEXT
		.1.. ..		ERPLTERM	"X'40" TERMINATE, IF ON RECOVERY ATTEMPTS NOT PERMITTED
		..1. ....		ERPLRIPL	"X'20" INDICATES AN ERROR REQUIRING RE-IPL
		...1 ....		ERPLTREG	"X'10" On indicates R0 at ABEND has addr of error text
		.... 1...		ERPLDIS	"X'08" \$DISTERR in disguise
		.... .1..		ERPLRVO	"X'04" RECVOPTS was specified
		.... ..1.		ERPLDMAS	"X'02" Dump all MAS members

Comment

The next two fields must be in this order

End of Comment

21	(15)	SIGNED	1	ERPLTXTL	LENGTH OF TEXT IF ANY, ELSE UNUSED
22	(16)	ADDRESS	4	ERPLTEXT	ADDR. OF ERPL CONTAINING TEXT, OR TEXT, DEPENDING ON ERPLTXTF (NO ALIGNMENT IS INTENTIONAL)

Comment

The next field is only here if ERPLRVO is on. If ERPLTEXT contains text, this field, if specified, immediately follows that text.

End of Comment

26	(1A)	CHARACTER	8	ERPLRCVO	RECVOPTS to use in recovery
26	(1A)	X'22'	0	ERPLLENG	"*-ERPL" LENGTH OF ERPL

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DISTITLE	
0	(0)	SIGNED	1	DISDMPL	Length of title
1	(1)	CHARACTER	26	DISTEXT	Fixed message
27	(1B)	CHARACTER	8	DISSYM	Symbol of disastrous error
27	(1B)	X'22'	0	DISTLEN	"*-DISTEXT" Length of title

## \$ERPL Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DISDMPL	0		ERPLTXTL	15	
DISSYM	1B				
DISTEXT	1				
DISTITLE	0				
DISTLEN	1B	22			
ERPL	0				
ERPLCODE	0				
ERPLDIS	14	8			
ERPLDMAS	14	2			
ERPLFLAG	14				
ERPLLENG	1A	22			
ERPLMOD	4				
ERPLRCVO	1A				
ERPLRIPL	14	20			
ERPLRVO	14	4			
ERPLSEQ	C				
ERPLTERM	14	40			
ERPLTEXT	16				
ERPLTREG	14	10			
ERPLTXTF	14	80			



---

## **\$EVT Programming Interface information**

Programming Interface information

**\$EVT**

End of Programming Interface information

## \$EVT Heading Information

**Common Name:** HASP ENF LISTEN Event DSECT  
**Macro ID:** \$EVT  
**DSECT Name:** EVT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'EVT '  
 Offset: EVTID-EVT  
 Length: L'EVTID

**Storage Attributes:** Subpool: 231  
 Key: 1  
 Residency: Virtual and real storage are anywhere, above or below 16M, in ECSA.

**Size:** See EVTLLEN  
**Created by:** HASCENF  
**Pointed to by:** CCTENFLF field of the \$HCCT data area for the LIFO stack of EVTs queued by HASCENF  
 CCTENFFF field of the \$HCCT data area for the FIFO queue of EVTs reordered by the Event processor in HASPMISC  
 EVTNEXT field of the \$EVT data area for EVTs on the LIFO or FIFO queue

**Serialization:** -The EVTs on the LIFO stack (CCTEVTFLF) are serialized using compare-and-swap.  
 -The EVTs on the FIFO queue (CCTEVTFFF) are not serialized since they are referred to only by the JES2 main task.

**Function:** The EVT defines ENF LISTEN events which have been queued, by the ENF LISTEN exits in HASCENF, for processing by the JES2 main task.

## \$EVT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	EVT	
0	(0)	CHARACTER	4	EVTID	EVT identifier
4	(4)	ADDRESS	1	EVTVRSN	Current version in storage
4	(4)	X'1'	0	EVTCURVN	"1" Current version number
5	(5)	CHARACTER	1		Reserved
6	(6)	SIGNED	2	EVTTYPE	Type - for a branch table
6	(6)	X'0'	0	EVT41GL	"0" Event type 41 - WLMENF12
6	(6)	X'4'	0	EVT41CP	"4" Event type 41 - WLMENF22
6	(6)	X'8'	0	EVT42	"8" Event type 42 - SRMENF15
6	(6)	X'C'	0	EVT56	"12" Event type 56 - reset job
6	(6)	X'10'	0	EVT57CM	"16" Event type 57 - command
6	(6)	X'14'	0	EVT57RV	"20" Event type 57 - recovery
8	(8)	ADDRESS	4	EVTNEXT	Next EVT on queue

Comment

Event parameters as passed to LISTEN exit

End of Comment

16	(10)	DBL WORD	8	EVTPARMS (0)	Event Parameters
16	(10)	CHARACTER	4		Event 41 parameters
16	(10)	CHARACTER	4		Event 42 parameters
16	(10)	CHARACTER	84		Event 56 parameters
16	(10)	CHARACTER	48		Event 57 parameters

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
100	(64)	X'54'	0	EVTPARML	** -EVTPARMS" Length of largest parms
104	(68)	DBL WORD	8	(0)	Round length to double word
104	(68)	X'68'	0	EVTLENG	** -EVT" EVT Length

**\$EVT Cross Reference**

Name	Hex Offset	Hex Value
EVT	0	
EVTCURVN	4	1
EVTID	0	
EVTLENG	68	68
EVTNEXT	8	
EVTPARML	64	54
EVTPARMS	10	
EVTTYPE	6	
EVTVRSN	4	
EVT41CP	6	4
EVT41GL	6	0
EVT42	6	8
EVT56	6	C
EVT57CM	6	10
EVT57RV	6	14

## \$EVT Cross Reference

---

## Appendix A. Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen-readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size.

---

### Using assistive technologies

Assistive technology products, such as screen-readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.

---

### Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to *z/OS TSO/E Primer* and *z/OS ISPF User's Guide Volume 1* for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.



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## Programming Interface Information

This book primarily documents information that is NOT intended to be used as Programming Interfaces of OS/390.

This book also documents intended Programming Interfaces that allow the customer to write programs to obtain the services of OS/390.

This information is identified where it occurs, either by an introductory statement to a chapter or section or by the following marking:

```
┌────────── Product-Sensitive Programming Interface ───────────┐
                                     Data Area Name
└────────── End of Product-Sensitive Programming Interface ────┘
```

Unless otherwise specified, for data areas classified as programming interfaces, the **MACRO ID** in the header is part of the programming interface. **ALL** other header information is included for diagnostic purposes **ONLY**.

Since a *data area name* that is designated as part of the programming interface is one of the following:

- MACRO ID
- DSECT NAME
- commonly-used name

before including the *data area name* in a program, refer to the data area header for the applicable **MACRO ID**.

When an entire data area is classified as a programming interface, "RESERVED FOR USER" fields are part of the interface; all other "**RESERVED ...**" fields are **NOT** part of the interface.

If only certain fields in a data area are intended or not intended for use as a programming interface, the specific field name(s) are differentiated within this book.

For a field that is part of the programming interface, the only information that is part of the interface for writing programs is:

- field name
- data type
- field length
- description (purpose or allowed values)

**INCLUDE ONLY** data area: **ONLY** the MACRO ID is the programming interface. The data area itself is **NOT** a programming interface.

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- DFSMSdfp
- DFSMSdss
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 \$DTE SUBS 330  
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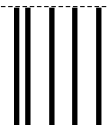


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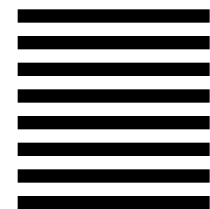
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