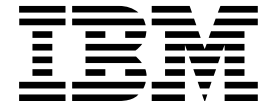


OS/390



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



OS/390



# 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 Appendix A, "Notices" on page 345.

**Eighth Edition, September 2000**

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This edition applies to Version 2 Release 10 of OS/390 (5647-A01) and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Contents

<b>About This Book</b> . . . . .	vii
Who Should Use This Book . . . . .	vii
How To Use This Book . . . . .	vii
The Header . . . . .	viii
Data Area Map . . . . .	ix
Cross Reference . . . . .	x
<b>Summary of Changes</b> . . . . .	xi
<b>JES2 Data Areas - Volume 1 (\$ALINDEX-\$EVT)</b> . . . . .	1
<b>\$ALINDEX Programming Interface information</b> . . . . .	3
<b>\$APT Programming Interface information</b> . . . . .	7
<b>\$ARMG Heading Information</b> . . . . .	11
<b>\$ARMT Heading Information</b> . . . . .	13
<b>\$ARMWORK Heading Information</b> . . . . .	15
<b>\$ASYWORK Heading Information</b> . . . . .	21
<b>\$AUXCB Heading Information</b> . . . . .	23
<b>\$BERT Heading Information</b> . . . . .	25
<b>\$BERTTAB Programming Interface information</b> . . . . .	29
<b>\$BLDMSGL Programming Interface information</b> . . . . .	31
<b>\$BUFFER Programming Interface information</b> . . . . .	35
<b>\$CADDR Heading Information</b> . . . . .	47
<b>\$CAT Programming Interface information</b> . . . . .	57
<b>\$CATBERT Heading Information</b> . . . . .	63
<b>\$CCE Heading Information</b> . . . . .	67
<b>\$CCW Programming Interface Information</b> . . . . .	69
<b>\$CHK Programming Interface information</b> . . . . .	75
<b>\$CIRWORK Programming Interface information</b> . . . . .	79
<b>\$CK Programming Interface information</b> . . . . .	99
<b>\$CKGPAR Heading Information</b> . . . . .	109
<b>\$CKM Heading Information</b> . . . . .	113
<b>\$CKPRECV Heading Information</b> . . . . .	137
<b>\$CKPTQCB Heading Information</b> . . . . .	143

<b>\$CKPWORK Programming Interface information</b>	145
<b>\$CKW Heading Information</b>	149
<b>\$CKX Heading Information</b>	163
<b>\$CMB Programming Interface information</b>	173
<b>\$CNVWORK Programming Interface information</b>	179
<b>\$COMWORK Programming Interface information</b>	183
<b>\$CPCWORK Programming Interface information</b>	197
<b>\$CPEBE Programming Interface Information</b>	199
<b>\$CPINDEX Programming Interface information</b>	201
<b>\$CPMASTR Programming Interface information</b>	205
<b>\$CPPWORK Programming Interface information</b>	209
<b>\$CPXWORK Programming Interface information</b>	211
<b>\$CTOKEN Heading Information</b>	213
<b>\$CTW Heading Information</b>	215
<b>\$CVCB Heading Information</b>	217
<b>\$DAS Programming Interface information</b>	221
<b>\$DCT Programming Interface information</b>	227
<b>\$DCTTAB Programming Interface information</b>	259
<b>\$DILWORK Heading Information</b>	263
<b>\$DSB Heading Information</b>	265
<b>\$DSCT Programming Interface information</b>	267
<b>\$DSSCB Heading Information</b>	271
<b>\$DSWA Programming Interface information</b>	275
<b>\$DTE Programming Interface information</b>	279
<b>\$DTEACCT Programming Interface information</b>	287
<b>\$DTEALOC Heading Information</b>	289
<b>\$DTECKCF Heading Information</b>	291
<b>\$DTECKVR Heading Information</b>	293
<b>\$DTECNV Programming Interface information</b>	295
<b>\$DTEIMG Programming Interface Information</b>	303

<b>\$DTEOFF Programming Interface information</b> . . . . .	305
<b>\$DTESPL Programming Interface information</b> . . . . .	311
<b>\$DTESUBS Programming Interface Information</b> . . . . .	317
<b>\$DTEVTAM Programming Interface Information</b> . . . . .	321
<b>\$DTEWTO Programming Interface information</b> . . . . .	323
<b>\$DWA Heading Information</b> . . . . .	327
<b>\$ENFPARM Heading Information</b> . . . . .	329
<b>\$ENFWORK Programming Interface information</b> . . . . .	331
<b>\$ERA Programming Interface information</b> . . . . .	333
<b>\$ERPL Heading Information</b> . . . . .	339
<b>\$EVT Programming Interface information</b> . . . . .	341
<b>Appendix A. Notices</b> . . . . .	345
<b>Index</b> . . . . .	X-1





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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

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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>OS/390 JES2 Data Areas, Vol 1 \$ALINDEX-\$EVT</i>	SY28-1096
<i>OS/390 JES2 Data Areas, Vol 2 \$FCLWORK-\$OUTWORK</i>	SY28-1097
<i>OS/390 JES2 Data Areas, Vol 3 \$PADDR-\$XRQ</i>	SY28-1098

## 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.

---

# Summary of Changes

| **Summary of Changes**  
| **for SY28-1096-07**  
| **OS/390 Version 2 Release 10**

| The book contains information previously presented in SY28-1096-06, which supports OS/390 Version 2 Release 8.

| **New Information:** The following data area has been added:

- | • \$DTECKCF

| This book includes terminology, maintenance, and editorial changes.

**Summary of Changes**  
**for SY28-1096-06**  
**OS/390 Version 2 Release 8**

**Changed Information:** The following data areas have been changed:

- \$CADDR
- \$CIRWORK
- \$CK
- \$CKGPAR
- \$CKPRECV
- \$CKPWORK
- \$CKW
- \$CTW
- \$DTE
- \$DTECKVR

**Summary of Changes**  
**for SY28-1096-05**  
**OS/390 Release 7**

**Changed Information**

- \$BERT
- \$BERTTAB
- \$BUFFER
- \$CADDR
- \$CIRWORK
- \$CK
- \$CKGPAR
- \$CKPRECV
- \$CKPWORK
- \$CKW
- \$CPINDEX
- \$CTW
- \$CVCB
- \$DILWORK
- \$DTEOFF
- \$DTESPL
- \$DWA

**Summary of Changes**  
**for SY28-1096-04**  
**OS/390 Release 5**

The following is new information:

- \$CTOKEN
- \$ENFPARM

This book includes terminology, maintenance, and editorial changes.

**Summary of Changes  
for SY28-1096-03  
OS/390 Release 4**

***New Information:***

- \$BERT
- \$BERTTAB
- \$CATBERT
- \$CVCB
- \$DILWORK
- \$DWA
- \$ENFWORK
- \$EVT

This book includes terminology, maintenance, and editorial changes.

**Summary of Changes  
for LY28-1096-02  
OS/390 Release 3**

***New Information:***

- \$ALINDEX
- \$AUXCB
- \$DSB

This book includes terminology, maintenance, and editorial changes.

**Summary of Changes  
for LY28-1096-01  
OS/390 Release 2**

This book includes terminology, maintenance, and editorial changes.

**Summary of Changes  
for LY28-1096-00  
OS/390 Release 1**

***New Information***

- \$CKPTQCB

This book contains information previously presented in *MVS/ESA JES2 Data Areas, Volume 1 (\$APT - \$ERPL)*, LY28-1873, which supports MVS/ESA System Product Version 5.

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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'8'	0	ALIENAME	"0,8,C'C" The name of the ALET
8	(8)	X'8 00004'	0	ALIEALET	"8,4,C'A" The ALET itself
8	(8)	X'C 00001'	0	ALIEFLAG	"12,1,C'B" ALET flag byte
8	(8)	BITSTRING	0	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
40	(28)	X'30	0	ALISTEND	**"ALISTART" Size of the pre-defined ALETs
40	(28)	X'3	0	ALISTNUM	"ALISTEND/ALIELEN" Number of pre-defined ALETs
40	(28)	X'38	0	ALISTD	**"ALINDEX" Size of all pre-defined ALETs
56	(38)	SIGNED	4	ALIWSTRT (0)	Start of dynamic ALETs

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
56	(38)	BITSTRING	0	ALIWORK (0)	Dynamic ALET area
56	(38)	X'CO '	0	ALIWLEN	"*-ALIWSTRT" Size of the dynamic ALET area
56	(38)	X'FF '	0	ALINUMEN	"(*-ALISTART)/ALIELEN" Total number of entries
56	(38)	X' '	0	ALILEN	"4096" Size of the ALINDEX table

**\$ALINDEX Cross Reference**

Name	Hex Offset	Hex Value	
ALICKVR	28	C3D2E5D9	
ALIEALET	8	8	00004
ALIEFCOM	8	80	
ALIEFLAG	8	C	00001
ALIELEN	8	10	
ALIENAME	8	8	
ALIID	0	C1D3C9E7	
ALIIRDS	18	C9D9C4E2	
ALILEN	38		
ALINUMEN	38	FF	
ALISAPID	8	E2C1D7C9	
ALISTART	8		
ALISTD	28	38	
ALISTEND	28	30	
ALISTNUM	28	3	
ALIVNUM	4	1	
ALIVRSN	4		
ALIWLEN	38	C0	
ALIWORK	38		
ALIWSTRT	38		

## \$ALINDEX Cross Reference

---

## \$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
17	(11)	BITSTRING	0	APTFINS	"B'10000000" APPL IN SESSION
17	(11)	BITSTRING	0	APTFOPDP	"B'01000000" OPNDST ISSUED-AWAITING RESPONSE
17	(11)	BITSTRING	0	APTFOPSP	"B'00100000" OPNSEC ISSUED-AWAITING
17	(11)	BITSTRING	0	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>
APTAPLID	8	40404040
APTCHAIN	18	
APTCTAB	10	
APTFDYN	11	10
APTFEAT	12	
APTFINS	11	80
APTFLAGS	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
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

## \$ARMG Cross Reference

## \$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	ARMTETYP	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	ARMTFLG1	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'10	0	ARMTSIZE	**"ARMT" Size of ARMT

## \$ARMT Cross Reference

### \$ARMT Cross Reference

Name	Hex Offset	Hex Value
ARMTEAID	9	
ARMTEBSY	7	
ARMTDEV	8	
ARMTEFL1	5	
ARMTETYP	6	
ARMTFLG1	A	
ARMTRC	C	
ARMTRSV1	B	
ARMTSAID	4	
ARMTSBSY	2	
ARMTSDEV	3	
ARMTSFL1	0	
ARMTSIZE	10	10
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
0	(0)	BITSTRING	0		Warm PCE fields
0	(0)	ADDRESS	4	ARMSTRB	Active main task request block
4	(4)	ADDRESS	4	ARMSSPJ	SSOB extension from active request
8	(8)	SIGNED	4	ARMLINES	LINES counter
12	(C)	SIGNED	4	ARMPUNCH	PUNCH counter
16	(10)	SIGNED	4	ARMXOUT	Records counter
20	(14)	SIGNED	4	ARMPAGES	PAGES counter
24	(18)	SIGNED	4	ARMBYTES	BYTES counter
28	(1C)	SIGNED	4	ARMDSKEY	DS key of last PDDB counted
32	(20)	ADDRESS	4	ARMSQD	SQD for \$SUBIT
36	(24)	ADDRESS	4	ARMQYJQE	JQE whose registration is currently being verified
40	(28)	BITSTRING	0	ARMSAF	System affinity work area
40	(28)	BITSTRING	1	ARMFLAG1	Flags
40	(28)	BITSTRING	0	ARM1ACTV	"B'10000000" \$ACTIVE done
40	(28)	BITSTRING	0	ARM1JLOK	"B'01000000" Job lock acquired
40	(28)	BITSTRING	0	ARM1WARM	"B'00100000" Job was warm started
40	(28)	BITSTRING	0	ARM1INVQ	"B'00010000" Invalidate current registration query
41	(29)	BITSTRING	1	ARMFLAG2	Serialized flag byte UPDATE USING OIL/NIL
41	(29)	BITSTRING	0	ARM2MAIL	"B'10000000" Messages have arrived
42	(2A)	BITSTRING	2	ARMRSV1	Reserved for future use
44	(2C)	SIGNED	4	ARMMSGA	XCF message address
48	(30)	SIGNED	4	ARMMSGL	XCF message length

# \$ARMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
52	(34)	BITSTRING	8	ARMMSGTK	XCF message token
60	(3C)	BITSTRING	0	ARMCTRAC	Current trace 26 record
60	(3C)	BITSTRING	1	ARMPTRAC	Previous trace 26 record
Comment					
List form macros					
End of Comment					
64	(40)	DBL WORD	8	(0)	
64	(40)	BITSTRING	160	ARMLSTFM	List form macros
224	(E0)	CHARACTER	1	ARMLSEND (0)	End of list form area
Comment					
MACDATE -93/05/10-<1>					
End of Comment					
64	(40)	SIGNED	2	M00M0002 (0)	IXZXIXMB-1
64	(40)	DBL WORD	8	ARMIXMB (0)	++ IXZXIXMB PARM LIST
64	(40)	BITSTRING	1	ARMIXMB_XVERSION	++ INPUT XVERSION
65	(41)	CHARACTER	6	ARMIXMB_XEYECATCH	++ CONSTANT XEYECATCH
71	(47)	CHARACTER	1	ARMIXMB_XRSV0001	++ RESERVED XRSV0001
72	(48)	CHARACTER	16	ARMIXMB_XMBOXNAME	++ XMBOXNAME
88	(58)	ADDRESS	4	ARMIXMB_XPOSTXIT	++ XPOSTXIT
92	(5C)	ADDRESS	4	ARMIXMB_XPOSTDATA	++ XPOSTDATA
96	(60)	SIGNED	4	ARMIXMB_XPOSTALET	++ XPOSTALET
100	(64)	SIGNED	4	ARMIXMB_XGROUPTOKEN	++ XGROUPTOKEN
104	(68)	BITSTRING	1	ARMIXMB_XSYSEVENTS	++ FIELD_LABEL
104	(68)	BITSTRING	0	ARMIXMB_XSYSEVENT_YES	"B'10000000" ++ XSYSEVENT.YES KEYWORD
104	(68)	BITSTRING	0	ARMIXMB_XSYSEVENT_NO	"B'01000000" ++ XSYSEVENT.NO KEYWORD
104	(68)	X'29	0	ARMIXMBL	"*-ARMIXMB" ++ LENGTH OF PLIST
Comment					
IXZXIXMB-1					
End of Comment					
106	(6A)	ADDRESS	2	(0)	Ensure area fits
Comment					
MACDATE -93/05/10-<1>					
End of Comment					
64	(40)	SIGNED	2	M00M0005 (0)	IXZXIXRM-1
64	(40)	DBL WORD	8	ARMIXRM (0)	++ IXZXIXRM PARM LIST
64	(40)	BITSTRING	1	ARMIXRM_XVERSION	++ INPUT XVERSION
65	(41)	CHARACTER	6	ARMIXRM_XEYECATCH	++ CONSTANT XEYECATCH
71	(47)	CHARACTER	1	ARMIXRM_XRSV0001	++ RESERVED XRSV0001

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
72	(48)	CHARACTER	16	ARMIXRM_XMBOXNAME	++ XMBOXNAME
88	(58)	ADDRESS	4	ARMIXRM_XDATA	++ XDATA
92	(5C)	SIGNED	4	ARMIXRM_XDATALEN	++ XDATALEN
96	(60)	BITSTRING	8	ARMIXRM_XMSGTOKEN	++ XMSGTOKEN
104	(68)	SIGNED	4	ARMIXRM_XGROUPTOKEN	++ XGROUPTOKEN
108	(6C)	BITSTRING	1	ARMIXRM_XMSGFETCH	++ INPUT
108	(6C)	BITSTRING	0	ARMIXRM_XMSGFETCH_ALL	"B'10000000" ++ XMSGFETCH.ALL KEYWORD
108	(6C)	BITSTRING	0	ARMIXRM_XMSGFETCH_MESSAGES	"B'01000000" ++ XMSGFETCH.MESSAGES KEYWORD
108	(6C)	BITSTRING	0	ARMIXRM_XMSGFETCH_SYSEVENT	"B'00100000" ++ XMSGFETCH.SYSEVENT KEYWORD
108	(6C)	BITSTRING	0	ARMIXRM_XMSGFETCH_ACKS	"B'00010000" ++ XMSGFETCH.ACKS KEYWORD
109	(6D)	BITSTRING	1	ARMIXRM_XKEYS	++ FIELD_LABEL
109	(6D)	BITSTRING	0	ARMIXRM_KEYUSED_MSGFETCH	"B'10000000" ++ KEYUSED.MSGFETCH KEYWORD
109	(6D)	X'2E	0	ARMIXRML	** -ARMIXRM" ++ LENGTH OF PLIST

Comment

IXZXIRM-1

End of Comment

110	(6E)	ADDRESS	2	(0)	Ensure area fits
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Comment

MACDATE -93/06/10-<1>

End of Comment

64	(40)	SIGNED	2	M00M0006 (0)	IXZXIAC-1
64	(40)	DBL WORD	8	ARMIXAC (0)	++ IXZXIAC PARM LIST
64	(40)	BITSTRING	1	ARMIXAC_XVERSION	++ INPUT XVERSION
65	(41)	CHARACTER	6	ARMIXAC_XEYECATCH	++ CONSTANT XEYECATCH
71	(47)	BITSTRING	1	ARMIXAC_XSTB	++ INPUT
71	(47)	BITSTRING	0	ARMIXAC_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
71	(47)	BITSTRING	0	ARMIXAC_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
72	(48)	BITSTRING	8	ARMIXAC_XMSGTOKEN	++ XMSGTOKEN
80	(50)	ADDRESS	4	ARMIXAC_XDATA	++ XDATA
84	(54)	SIGNED	4	ARMIXAC_XDATALEN	++ XDATALEN
88	(58)	SIGNED	4	ARMIXAC_XUSERRC	++ XUSERRC
92	(5C)	SIGNED	4	ARMIXAC_XGROUPTOKEN	++ XGROUPTOKEN
96	(60)	SIGNED	4	ARMIXAC_XSYSRC	++ XSYSRC
100	(64)	SIGNED	4	ARMIXAC_XSYSRSN	++ XSYSRSN
104	(68)	BITSTRING	1	ARMIXAC_XKEYS	

## \$ARMWORK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++ FIELD_LABEL
104	(68)	BITSTRING	0	ARMIXAC_KEYUSED_DATA	"B'10000000" ++ KEYUSED.DATA KEYWORD
104	(68)	BITSTRING	0	ARMIXAC_KEYUSED_DATALEN	"B'01000000" ++ KEYUSED.DATALEN KEYWORD
104	(68)	BITSTRING	0	ARMIXAC_KEYUSED_USERRC	"B'00100000" ++ KEYUSED.USERRC KEYWORD
104	(68)	BITSTRING	0	ARMIXAC_KEYUSED_SYSRC	"B'00010000" ++ KEYUSED.SYSRC KEYWORD
104	(68)	BITSTRING	0	ARMIXAC_KEYUSED_SYSRSN	"B'00001000" ++ KEYUSED.SYSRSN KEYWORD
105	(69)	BITSTRING	1	ARMIXAC_XMSGATTR	++ INPUT
105	(69)	BITSTRING	0	ARMIXAC_XMSGATTR_J3CONNECT	"B'10000000" ++ XMSGATTR.J3CONNECT KEYWORD
105	(69)	BITSTRING	0	ARMIXAC_XMSGATTR_EXPRESS	"B'01000000" ++ XMSGATTR.EXPRESS KEYWORD
105	(69)	X'2A	0	ARMIXACL	**ARMIXAC" ++ LENGTH OF PLIST
Comment					
IXZXIAC-1					
End of Comment					
106	(6A)	ADDRESS	2	(0)	Ensure area fits
224	(E0)	X'	0	ARMPCEWS	**PCEWORK" ARM PCE work area length

## \$ARMWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ARMBYTES	18			48	
ARMCTRAC	3C		ARMIXAC_XSTB	47	
ARMDSKEY	1C		ARMIXAC_XSTB_NO		
ARMFLAG1	28			47	80
ARMFLAG2	29		ARMIXAC_XSTB_YES		
ARMIXAC	40			47	40
ARMIXAC_KEYUSED_DATA			ARMIXAC_XSYSRC	60	
	68	80			
ARMIXAC_KEYUSED_DATALEN			ARMIXAC_XSYSRSN	64	
	68	40			
ARMIXAC_KEYUSED_SYSRC			ARMIXAC_XUSERRC	58	
	68	10			
ARMIXAC_KEYUSED_SYSRSN			ARMIXAC_XVERSION	40	
	68	8			
ARMIXAC_KEYUSED_USERRC			ARMIXACL	69	2A
	68	20	ARMIXMB	40	
ARMIXAC_XDATA			ARMIXMB_XEYECATCH		
	50			41	
ARMIXAC_XDATALEN			ARMIXMB_XGROUPTOKEN	64	
	54				
ARMIXAC_XEYECATCH			ARMIXMB_XMBOXNAME	48	
	41				
ARMIXAC_XGROUPTOKEN			ARMIXMB_XPOSTALET	60	
	5C				
ARMIXAC_XKEYS			ARMIXMB_XPOSTDATA	5C	
	68				
ARMIXAC_XMSGATTR			ARMIXMB_XPOSTXIT	58	
	69				
ARMIXAC_XMSGATTR_EXPRESS			ARMIXMB_XRSV0001	47	
	69	40			
ARMIXAC_XMSGATTR_J3CONNECT			ARMIXMB_XSYSEVENT_NO	68	40
	69	80			
ARMIXAC_XMSGTOKEN			ARMIXMB_XSYSEVENT_YES		



Name	Hex Offset	Hex Value
	68	80
ARMIXMB_XSYSEVENTS	68	
ARMIXMB_XVERSION	40	
ARMIXMBL	68	29
ARMIXRM	40	
ARMIXRM_KEYUSED_MSGFETCH	6D	80
ARMIXRM_XDATA	58	
ARMIXRM_XDATALEN	5C	
ARMIXRM_XEYECATCH	41	
ARMIXRM_XGROUPTOKEN	68	
ARMIXRM_XKEYS	6D	
ARMIXRM_XMBOXNAME	48	
ARMIXRM_XMSGFETCH	6C	
ARMIXRM_XMSGFETCH_ACKS	6C	10
ARMIXRM_XMSGFETCH_ALL	6C	80
ARMIXRM_XMSGFETCH_MESSAGES	6C	40
ARMIXRM_XMSGFETCH_SYSEVENT	6C	20
ARMIXRM_XMSGTOKEN	60	
ARMIXRM_XRSV0001	47	
ARMIXRM_XVERSION	40	
ARMIXRML	6D	2E
ARMLINES	8	
ARMLSEND	E0	
ARMLSTFM	40	
ARMMSGGA	2C	
ARMMSGGL	30	
ARMMSGTK	34	
ARMMTRB	0	
ARMPAGES	14	
ARMPCEWS	E0	
ARMPTRAC	3C	
ARMPUNCH	C	
ARMQYJQE	24	
ARMRSV1	2A	
ARMSAF	28	
ARMSQD	20	
ARMSSPJ	4	
ARMXOUT	10	
ARM1ACTV	28	80
ARM1INVQ	28	10
ARM1JLOK	28	40
ARM1WARM	28	20
ARM2MAIL	29	80
M00M0002	40	
M00M0005	40	
M00M0006	40	

## \$ARMWORK Cross Reference

## \$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
0	(0)	DBL WORD	8	(0)	Force double-word alignment
0	(0)	X' '	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:** HASCAUX  
**Pointed to by:** CCTAUXCB field of the \$HCCT data area  
**Serialization:** Only updated by HASCAUX 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)	SIGNED	4	AXBSTART (0)	ASCRE start PARMs
16	(10)	ADDRESS	2	AXBSTRLN	Length of start parms
18	(12)	CHARACTER	124	AXBSTRDA	
142	(8E)	BITSTRING	24	AXBODA	ASCRE output area (IHAASEO)
168	(A8)	SIGNED	4	AXBECB	Main task wait ECB
172	(AC)	ADDRESS	4	AXBPWORK	Address of working storage in the AUX address space.
176	(B0)	DBL WORD	8	(0)	
176	(B0)	X'B0'	0	AXBLEN	**-"AUXCB" Length of AUXCB

### \$AUXCB Cross Reference

Name	Hex Offset	Hex Value
AXBECB	A8	
AXBID	0	C1E4E7C2
AXBLEN	B0	B0
AXBNAME	8	D1C5E2F2
AXBODA	8E	
AXBPWORK	AC	
AXBSTART	10	
AXBSTRDA	12	C9C5C1E2
AXBSTRLN	10	
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	BRTINT	"\$DGBINT" Internal control block
0	(0)	X' '	0	BRTJQE	"\$DGBJQE" JQE extension
0	(0)	X' '	0	BRTCAT	"\$DGBCAT" Class attribute table
0	(0)	X' '	0	BRTWSCQ	"\$DGBWSCQ" WLM service class queue
0	(0)	BITSTRING	0	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
0	(0)	BITSTRING	0	BRTIICNT	"X'FE'" Continued in next BERT
0	(0)	BITSTRING	0	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
1	(1)	BITSTRING	0	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'4'	0	BRTPQHED	"0,4,C'F" Queue head part of entry
28	(1C)	X'4 00004'	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**

Name	Hex Offset	Hex Value	
BERTVERS	0	1	
BRTCAT	0		
BRTCB	1		
BRTDATA	A		
BRTFREE	0	FF	
BRTIDATA	2		
BRTIICNT	0	FE	
BRTIID	0		
BRTIEND	0	FF	
BRTILEN	1		
BRTINT	0		
BRTIPLN	1	2	
BRTJQE	0		
BRTLEN	A	40	
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	4	
BRTPQHM	3C	3	
BRTPQHNM	1C	4	00004
BRTPREN	8	A	
BRTPSIZE	3C	40	
BRTPWSCN	38		
BRTPWSCQ	34		
BRTSEQ	4		
BRTTYPE	0		
BRTWALLY	0		
BRTWSCQ	0		
BRTOFLAG	2		
BRTOFLG0	1		
BRTOKEY	9		
BRTOLEN1	1	2	
BRTOLEN2	9	9	
BRTLOCK	0		
BRTONXT1	3		
BRTONXT2	6		
BRTOUSEQ	1	F0	

## \$BERT Cross Reference

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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' '	0	BRTTJQE	"\$DGBJQE" JQE extension
8	(8)	X' '	0	BRTTCAT	"\$DGCAT" Class attribute table
8	(8)	X' '	0	BRTTWSCQ	"\$DGBWSCQ" WLM service class queue
8	(8)	X' '	0	BRTTDYN	"\$DGBDYN" Dynamically defined type
9	(9)	BITSTRING	1	BRTTFLAG	General flag byte
9	(9)	BITSTRING	0	BRTTUSER	"B'10000000" USER table entry (not user)
9	(9)	BITSTRING	0	BRTTKEY	"B'01000000" This entry describes a flag
9	(9)	BITSTRING	0	BRTTOFFV	"B'00100000" The offset of this entry is dynamically generated
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
BRTTCAT	8		BRTTUSER	9	80
BRTTDYN	8		BRTTWSCQ	8	
BRTTELEN	18	18			
BRTTFILL	D				
BRTTFLAG	9				
BRTTJQE	8				
BRTTKEY	9	40			
BRTTLEN	C				
BRTTNAME	0				
BRTTOFF	A				
BRTTOFFV	9	20			
BRTTTNAM	10				
BRTTTYPE	8				

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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	BLDHUHD	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 0004'	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	BLDFLAG1	Flag byte
57	(39)	BITSTRING	0	BLD1WTO	"B'10000000" BUILD WTO OR MLWTO MF=L
57	(39)	BITSTRING	0	BLD1WTO	"B'01000000" BUILD WTO MF=L
57	(39)	BITSTRING	0	BLD1CMB	"B'00100000" BUILD CMB
57	(39)	BITSTRING	0	BLD1WAIT	"B'00010000" \$WAIT IS ALLOWED
57	(39)	BITSTRING	0	BLD1JQE	"B'00001000" Prefix job id from JQE
57	(39)	BITSTRING	0	BLD1JID	"B'00000100" Prefix job id from given id
57	(39)	BITSTRING	0	BLD1REPV	"B'00000010" Reply vector proc. required
57	(39)	BITSTRING	0	BLD1GETW	"B'00000001" This area obtained via \$GETWORK
58	(3A)	BITSTRING	1	BLDISPER	'DISPER' character
59	(3B)	BITSTRING	1	BLDFLAG2	Flag byte 2
59	(3B)	BITSTRING	0	BLD2LOGO	"B'10000000" LOGONLY=YES is specified
59	(3B)	BITSTRING	0	BLD2ROUT	"B'01000000" Route codes are set
59	(3B)	BITSTRING	0	BLD2DESC	"B'00100000" Descriptor codes are set
59	(3B)	BITSTRING	0	BLD2LONG	"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	
BLDADDR	18		
BLDCART	8		
BLDCBA	10		
BLDCNCT	18	24	00004
BLDCONID	4		
BLDDDESC	32		
BLDDOMID	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	
BLD1WTO	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  $X = \text{MAX} (\$NOPRCCW*8+PCIESIZE+JOESIZE,$   
-  $\$NOPUCCW*8+PCIESIZE+JOESIZE,$   
-  $(\$TCELSIZ*4-3)*4$

**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  
 ICEOUTHQ 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).

Various fields in the processor work areas,  
 parameter lists and exit parameter lists (XPL).

**Serialization:**

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	BFPSWEL	"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					
12	(C)	BITSTRING	0	BUFFIX	"B'10000000" Page-fix request
12	(C)	BITSTRING	0	BUFMULT	"B'01000000" Multiple buffer request

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
12	(C)	BITSTRING	0	BUFIQB	"B'00100000" IOB in front of the buffer
12	(C)	BITSTRING	0	BUFRPL	"B'00010000" RPL IN FRONT OF BUFFER
12	(C)	BITSTRING	0	BUFDECB	"B'00001000" DECB IN FRONT OF BUFFER
12	(C)	BITSTRING	0	BUFBPMT	"B'00000111" Buffer type (see below)
12	(C)	BITSTRING	0	BPMTBSC	"B'00000001" BSC buffer type
12	(C)	BITSTRING	0	BPMTCB	"B'00000010" CB buffer type
12	(C)	BITSTRING	0	BPMTBASP	"B'00000011" HASP buffer type
12	(C)	BITSTRING	0	BPMPAGE	"B'00000100" PAGE buffer type
12	(C)	BITSTRING	0	BPMTTP	"B'00000101" Print/Punch buffer type
12	(C)	BITSTRING	0	BPMTVTAM	"B'00000110" VTAM buffer type
12	(C)	X'21	0	BUFBCS	"BUFLOCAL+BUFIQB+BPMTBSC"
12	(C)	X'22	0	BUFCB	"BUFLOCAL+BUFIQB+BPMTCB"
12	(C)	X'23	0	BUFHASP	"BUFLOCAL+BUFIQB+BPMTBASP"
12	(C)	X'16	0	BUFTAM	"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	BUFTP	"BUFLOCAL+BUFIQB+BPMTTP"
13	(D)	CHARACTER	1	BUFCBCC	I/O COMPLETION CODE
13	(D)	BITSTRING	0	BUFCFCB	"X'01" HASPIMAG - BAD FCB
14	(E)	BITSTRING	1	BUFLAG1	Buffer flag byte
14	(E)	BITSTRING	0	BFPDMGR	"B'10000000" BUFFER BELONGS TO PATH MGR
14	(E)	BITSTRING	0	BUF1WIN	"B'01000000" WRITE IN PROGRESS
14	(E)	BITSTRING	0	BUF1SINT	"B'00100000" Simulated I/O error
14	(E)	BITSTRING	0	BUF1PERM	"B'00010000" Permanent I/O error
14	(E)	BITSTRING	0	BUF1CHEN	"B'00001000" Channel end appendage processed buffer
14	(E)	BITSTRING	0	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
16	(10)	X'10	0	BFPADB	"BFPDCT" In HAM, addr of owning SDB
20	(14)	ADDRESS	4	BFPWF	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	IOBDSCT (0)	BUFFER CONTROL AREA
24	(18)	BITSTRING	1	IOBFLAG1	I/O FLAGS
24	(18)	BITSTRING	0	IOBCMDCH	"B'01000000" Command chaining used in channel program
24	(18)	BITSTRING	0	IOBUNREL	"B'00000010" Unrelated flag (i.e. nonsequential)
24	(18)	BITSTRING	0	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	IOBEBPT	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
44	(2C)	BITSTRING	0	IOBGDPOL	"B'10000000" Not used by JES2
44	(2C)	BITSTRING	0	IOBCC3WE	"B'01000000" User requests that IOS POST when an 'all paths lost' condition is detected
44	(2C)	BITSTRING	0	IOBPMERR	"B'00100000" Not used by JES2
44	(2C)	BITSTRING	0	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					
44	(2C)	BITSTRING	0	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 00001'	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
80	(50)	BITSTRING	0	BUFM1CKP	"B'10000000" Control block needs to be written to SPOOL
80	(50)	BITSTRING	0	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	BUFMEMW9	Ninth memory-only word
100	(64)	X'38 00030'	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					
Reserved - 2 bytes					
Job number - 2 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)	BITSTRING	2		Reserved
118	(76)	SIGNED	2	HDBJOBNO	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	BUFFIOBSZ	** -IOBDSECT" IOB LENGTH
136	(88)	SIGNED	4	TPBUFST (0)	START OF REMOTE BUFFER WORK SPACE
136	(88)	X'78	0	\$MAXTPBS	"(4096+7-(TPBUFST-BFPDSECT))/8*8" Max bisynch buffer size



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
136	(88)	X'	0	\$SNABFMX	"(32768-256)" Max SNA buffer size
Comment					
HASPAM BUFFER FOR PBUFS, UBUFS, AND HBUFS.					
End of Comment					
Comment					
BFDLENG, BFDFLAG1, AND BFDFLAG2 MUST BE TOGETHER FOR COMPARE AND SWAP IN HASPAM					
End of Comment					
24	(18)	ADDRESS	2	BFDLENG	LENGTH
26	(1A)	BITSTRING	1	BFDFLAG1	FLAG BYTE 1
26	(1A)	BITSTRING	0	BFD1EOB	"B'10000000" END-OF-BUFFER INDICATOR
26	(1A)	BITSTRING	0	BFD1INU	"B'01000000" BUFFER IN USE BY USER
26	(1A)	BITSTRING	0	BFD1NIL	"B'00010000" BUFFER TO BE IGNORED
Comment					
BFDFLAG1 FLAGS, FOR OTHER THAN INTERNAL READER					
End of Comment					
26	(1A)	BITSTRING	0	BFD1GSG	"B'00001000" HGMOVE SPAN ENTRY FLAG
26	(1A)	BITSTRING	0	BFD1IOC	"B'00000100" PBF I/O IS COMPLETE
26	(1A)	BITSTRING	0	BFD1PSP	"B'00000010" HPMOVE SPANNING RECORD
Comment					
BFDFLAG1 FLAGS, FOR INTERNAL READER ONLY					
End of Comment					
26	(1A)	BITSTRING	0	BFD1IEOF	"B'00001000" PUT REQUEST FOR EOF
26	(1A)	BITSTRING	0	BFD1IDEL	"B'00000100" PUT REQ FOR DEL OR PURGE
26	(1A)	BITSTRING	0	BFD1IERQ	"B'00000010" ENDREQ REQUEST
26	(1A)	BITSTRING	0	BFD1ICLS	"B'00000001" CLOSE REQUEST
27	(1B)	BITSTRING	1	BFDFLAG2	FLAG BYTE 2
27	(1B)	BITSTRING	0	BFD2IOC	"B'10000000" UBF NOT PRIMED BY HCEGET
27	(1B)	BITSTRING	0	BFD2FRST	"B'01000000" FIRST PBF OF TRACK-CELL
27	(1B)	BITSTRING	0	BFD2IOE	"B'00100000" I/O ERROR ENCOUNTERED
27	(1B)	BITSTRING	0	BFD2IJBK	"B'00010000" INVALID JOB KEY DETECTED
27	(1B)	BITSTRING	0	BFD2IDSK	"B'00001000" INVALID DATASET KEY DETECTED
27	(1B)	BITSTRING	0	BFD2SRBF	"B'00000100" SRB FAILED TO OBTAIN BUFFER
27	(1B)	BITSTRING	0	BFD2RPBF	"B'00000010" TRY AGAIN TO FILL PBF
28	(1C)	BITSTRING	1	BFDFLAG3	FLAG BYTE 3
28	(1C)	BITSTRING	0	BFD3PUT1	"B'10000000" INDICATE FIRST PUT IS DONE IN A SEGMENT
28	(1C)	BITSTRING	0	BFD3SETP	"B'01000000" SETPRT IS REQUIRED FOR SEGMENTATION
28	(1C)	BITSTRING	0	BFD3SUPD	"B'00100000" SEGMENTATION IS SUSPENDED
29	(1D)	CHARACTER	3		RESERVED
32	(20)	SIGNED	4	BFDTRK	TRACK ADDRESS OF BUFFER
36	(24)	ADDRESS	4	BFDTCB	TCB ADDRESS FOR FREEMAIN
40	(28)	ADDRESS	4	BFDASCB	ASCB ADDRESS FOR FREEMAIN
44	(2C)	ADDRESS	4	BFDLOC	CURRENT LOCATION IN BUFFER
48	(30)	SIGNED	4	BFDLEN (0)	OUTPUT - LENGTH REMAINING
48	(30)	SIGNED	4	BFDECB	INPUT - ECB ON WHICH TO WAIT
56	(38)	DBL WORD	8	(0)	ALIGNMENT FOR BFD RBA
56	(38)	CHARACTER	8	BFD RBA	RELATIVE BLOCK ADDRESS
64	(40)	SIGNED	4	BFD RCT	RECORD COUNTER
68	(44)	SIGNED	4	BFD PGCT	LOGICAL PAGE COUNTER USE FOR SEGMENTATION
72	(48)	CHARACTER	8	BFD FSRBA	FIRST SEG SPANNED RBA ADDR
72	(48)	X'40	0	BFD RECT	"BUF MEMW1" Save area for record count
72	(48)	X'44	0	BFD PAGCT	"BUF MEMW2" Save area for page count

## \$BUFFER Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
72	(48)	X'48 '	0	BFDBYTCT	"BUFMEMW3" Save area for byte count
72	(48)	X'53 '	0	BFDFLAG4	"BUFMEMF4" Flag byte 4
72	(48)	BITSTRING	0	BFD4CNT	"B'10000000" Counts updated in buffer
72	(48)	X' '	0	BFD5IZE	"4096" LENGTH OF DATA SET BUFFER

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'5'	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

5	(5)	BITSTRING	0	SPBSYNAD	"B'10000000" PERM I/O ERROR HAS OCCURED
5	(5)	BITSTRING	0	SPBEODAD	"B'01000000" END OF DATA HAS OCCURED
5	(5)	BITSTRING	0	SPBSKIP	"B'00100000" BUFFER IS TO BE SKIPPED

\$BUFFER Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
\$MAXTPBS	88	78	BUFCHNCT	42	
\$SNABFMX	88		BUFCHOFF	41	
BFDASCB	28		BUFDECB	C	8
BFDBYTCT	48	48	BUFECBCC	D	
BFDECB	30		BUFFIX	C	80
BFDFLAG1	1A		BUFFLAG1	E	
BFDFLAG2	1B		BUFHASP	C	23
BFDFLAG3	1C		BUFIOB	C	20
BFDFLAG4	48	53	BUFIOBSZ	80	70
BFDFSRBA	48		BUFLOCAL	C	
BFDLEN	30		BUFMEM	64	38
BFDLENG	18		BUFMEMD1	38	
BFDLOC	2C		BUFMEMF1	50	
BFDPAGCT	48	44	BUFMEMF2	51	
BFDPGCT	44		BUFMEMF3	52	
BFDRBA	38		BUFMEMF4	53	
BFDRCT	40		BUFMEMW1	40	
BFDRECCCT	48	40	BUFMEMW2	44	
BFDSize	48		BUFMEMW3	48	
BFDTCB	24		BUFMEMW4	4C	
BFDTRK	20		BUFMEMW5	54	
BFD1EOB	1A	80	BUFMEMW6	58	
BFD1GSG	1A	8	BUFMEMW7	5C	
BFD1ICLS	1A	1	BUFMEMW8	60	
BFD1IDEL	1A	4	BUFMEMW9	64	
BFD1IEOF	1A	8	BUFMFLG1	50	50
BFD1IERQ	1A	2	BUFMULT	C	40
BFD1INU	1A	40	BUFM1CKP	50	80
BFD1IOC	1A	4	BUFM1CK2	50	40
BFD1NIL	1A	10	BUFPAGE	C	24
BFD1PSP	1A	2	BUFPP	C	25
BFD2FRST	1B	40	BUFRPL	C	10
BFD2IDSK	1B	8	BUFSPXFR	C	C
BFD2IJBK	1B	10	BUFSTART	68	
BFD2IOC	1B	80	BUFTYPE	C	
BFD2IOE	1B	20	BUFVTAM	C	16
BFD2RPBF	1B	2	BUF1CHEN	E	8
BFD2SRBF	1B	4	BUF1DASD	E	4
BFD3PUT1	1C	80	BUF1PERM	E	10
BFD3SETP	1C	40	BUF1SINT	E	20
BFD3SUPD	1C	20	BUF1WIN	E	40
BFD4CNT	48	80	HDBDSKEY	7C	
BFPBAT	4		HDBID	68	
BFPDCT	10		HDBJBKEY	78	
BFPEWF	14		HDBJNAME	6C	
BFPID	0		HDBJOBNO	76	
BFPLEN	14	18	HDBKEY	78	
BFPSDB	10	10	HDBNXTRK	80	
BFPSWEL	4	4	HDBSPLNG	7C	18
BFPTHMGR	E	80	HDBSTART	84	88
BPMTBSC	C	1	IOBCCW1	48	
BPMTCB	C	2	IOBCCW2	50	
BPMTHASP	C	3	IOBCCW3	58	
BPMTPAGE	C	4	IOBCCW4	60	
BPMTTP	C	5	IOBCCW5	68	
BPMTVTAM	C	6	IOBCCW6	70	
BUFBPMT	C	7	IOBCCW7	78	
BUFBCS	C	21	IOBCCW8	80	
BUFCB	C	22	IOBCC3WE	2C	40
BUFCFCB	D	1	IOBCEF	2C	10
BUFCHAIN	8		IOBCMDCH	18	40
BUFCHECB	44		IOBCSW	21	
BUFCHEQ	44		IOBCBPT	2C	

## \$BUFFER Cross Reference

Name	Hex Offset	Hex Value	
IOBDSECT	18		
IOBECBCC	1C		
IOBECBPT	1C		
IOBECBSV	34	35	00001
IOBERRCT	36		
IOBFLAG1	18		
IOBFLAG2	19		
IOBFLAG3	20		
IOBFLAG4	2C		
IOBGDPOL	2C	80	
IOBINCAM	34		
IOBJES3I	2C	2	
IOBPMERR	2C	20	
IOBREPM	30		
IOBRESTR	30		
IOBRSTRT	18	1	
IOBSEEK	39		
IOBSENS0	1A		
IOBSENS1	1B		
IOBSIOCC	28		
IOBSTART	28		
IOBUNREL	18	2	
IOBXTENT	38		
LCBACK	41		
LCBMCB	40		
LCBRCB	42		
PPBCBOFF	5E		
PPBCCWNX	4C		
PPBCMTTR	58		
PPBCRCB	5C		
PPBDISPL	66		
PPBFLAG1	40	40	
PPBLVCCC	54		
PPBLVCCN	50		
PPBNBOFF	65		
PPBNMTTR	5F		
PPBNRCB	63		
PPBPCIE	48		
SPBCHAN2	18		
SPBDLEN	3		
SPBEOBAD	5	40	
SPBEOFAB	5	2	
SPBEOFID	5	3	
SPBEOFOK	5	1	
SPBFDATA	1C		
SPBFLAG1	22		
SPBHDR	5	5	
SPBRCB	0		
SPBRDATA	5		
SPBRECNT	20		
SPBSKIP	5	20	
SPBSRCB	1		
SPBSTART	36		
SPBSYNAD	5	80	
SPBTYPD	5	1	
SPBTYP	2		
SPBTYP	5	3	
SPBTYP	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@HALOCRP	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@HFOPSUB	ACB FAKE OPEN ROUTINE
88	(58)	ADDRESS	4	C@HOCSETUP	RESTART/OPEN/CLOSE SETUP ROUTINE
92	(5C)	ADDRESS	4	C@SSVCLSC	CONVERTER FAKE CLOSE
96	(60)	ADDRESS	4	C@SSVOPNC	CONVERTER FAKE OPEN
Comment					
MODULE HASCDSO ENTRY POINT.					
End of Comment					
100	(64)	ADDRESS	4	C@\$ALESERV	ALET management service
104	(68)	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					
108	(6C)	ADDRESS	4	C@ENFISSUE	ENF issue service
112	(70)	ADDRESS	4	CADDRENFBE (0)	Start of ENF entries
112	(70)	ADDRESS	4	CADDR@ENF35	Code 35 - CF structure
116	(74)	ADDRESS	4	CADDR#ENF35	status change
120	(78)	ADDRESS	4	CADDR@ENF41GL	Code 41 - VARY WLM,POLICY=
124	(7C)	ADDRESS	4	CADDR#ENF41GL	in goal mode done
128	(80)	ADDRESS	4	CADDR@ENF41CP	Code 41 - VARY WLM,POLICY=
132	(84)	ADDRESS	4	CADDR#ENF41CP	in compatibility mode done
136	(88)	ADDRESS	4	CADDR@ENF42	Code 42 - MODIFY WLM,
140	(8C)	ADDRESS	4	CADDR#ENF42	MODE=GOAL done
144	(90)	ADDRESS	4	CADDR@ENF56	Code 56 - RESET job
148	(94)	ADDRESS	4	CADDR#ENF56	command issued
152	(98)	ADDRESS	4	CADDR@ENF57CM	Code 57 - MODIFY WLM,
156	(9C)	ADDRESS	4	CADDR#ENF57CM	RESOURCE command issued
160	(A0)	ADDRESS	4	CADDR@ENF57RV	Code 57 - Scheduling chg
164	(A4)	ADDRESS	4	CADDR#ENF57RV	due to WLM recovery
164	(A4)	X'7	0	CADDRENFNUM	"(*-CADDRENFBE)/8" Number of ENF entries
Comment					
MODULE HASC GGKY ROUTINES LISTED ALPHABETICALLY					
End of Comment					
168	(A8)	ADDRESS	4	C@\$GKGET	Get grouping keys
172	(AC)	ADDRESS	4	C@\$GKINIT	Initialize grouping keys
176	(B0)	ADDRESS	4	C@\$GKTERM	Terminate grouping keys
Comment					
MODULE HASC GGST ROUTINES LISTED ALPHABETICALLY					
End of Comment					
180	(B4)	ADDRESS	4	C@\$GASSIGN	Assign grouping token
184	(B8)	ADDRESS	4	C@\$GSINIT	Initialize grouping strings
188	(BC)	ADDRESS	4	C@\$GSTERM	Terminate grouping strings
Comment					
Module HASCHAM routines listed alphabetically					
End of Comment					
192	(C0)	ADDRESS	4	CADDR@HAMAVT	HAM appendage vector table, not for \$CALL, data only
196	(C4)	ADDRESS	4	C@ABEND722	Issue 722 ABEND
200	(C8)	ADDRESS	4	C@HAMNULL	'Null' acsmeth interface
204	(CC)	ADDRESS	4	C@HAMPSTER	HAM Post Exit routine
208	(D0)	ADDRESS	4	C@HASPAMI	Access method interface
212	(D4)	ADDRESS	4	C@HCNVFDAD	Convert MTTR to MBBCCHHR
216	(D8)	ADDRESS	4	CADDR@HERNOEOD	

## \$CADDR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
220	(DC)	ADDRESS	4	C@HINTRDR	End-of-data HAMSV 'return code' (erret address) INTERNAL READER ACCESS METHOD
Comment					
MODULE HASCJBST ROUTINES LISTED ALPHABETICALLY					
End of Comment					
224	(E0)	ADDRESS	4	C@HFJOBLOG	PLACE TITLE IN JES2 JOB LOG
228	(E4)	ADDRESS	4	C@HFJLOGTM	Add date line to JOB LOG
232	(E8)	ADDRESS	4	C@HJE000	COMMON JOB TERMINATION ROUTINE
236	(EC)	ADDRESS	4	C@HJSMASL	MAKE A SLOT FOR A SYSTEM PDDB
240	(F0)	ADDRESS	4	C@JBFOUND	JOB SELECT SET UP ROUTINE
244	(F4)	ADDRESS	4	C@JBSELECT	JOB SELECT SELECTION ROUTINE
248	(F8)	ADDRESS	4	C@JOBSTATS	UPDATE JCT STATS ROUTINE
252	(FC)	ADDRESS	4	C@JSOPSSDS	OPEN SUBSYSTEM DATASETS ROUTINE
256	(100)	ADDRESS	4	C@JSREOPEN	JOB SELECT DS REOPEN RTN
260	(104)	ADDRESS	4	C@MRGSWBS	MERGE SWBS INTO PDDBS FOR JESDS
Comment					
MODULE HASCJBTR ROUTINES LISTED ALPHABETICALLY					
End of Comment					
264	(108)	ADDRESS	4	C@\$UCBINDX	Reset Attn Index in UCB
268	(10C)	ADDRESS	4	C@EOBLOB	Clean up BLOB
272	(110)	ADDRESS	4	C@EOTFDCON	ISSUE FSI DISCONNECT REQUEST
Comment					
MODULE HASLINK ROUTINES LISTED ALPHABETICALLY					
End of Comment					
276	(114)	ADDRESS	4	C@\$CRETRN	\$RETURN SERVICE ROUTINE
280	(118)	ADDRESS	4	C@\$CSAVE	\$SAVE SERVICE ROUTINE
284	(11C)	ADDRESS	4	C@\$FBUFFRTN	Routine to free buffers with LOCAL lock held
288	(120)	ADDRESS	4	C@\$FRECEL	FREE A CSA CELL
292	(124)	ADDRESS	4	C@\$GETCEL	OBTAIN A CSA CELL
296	(128)	ADDRESS	4	C@\$GETHP	HIGH PRIVATE STORAGE CELLS
300	(12C)	ADDRESS	4	C@\$HGFMMAIN	HGFMMAIN GET/FREE MAIN SERVICES
304	(130)	ADDRESS	4	C@\$MLTFBUF	MULTIPLE BUFFER FREE ROUTINE
308	(134)	ADDRESS	4	C@\$MSDDUMP	Multi System Dump Routine
312	(138)	ADDRESS	4	C@\$SSIBEGN	SSI INTERFACE BEGIN ROUTINE
316	(13C)	ADDRESS	4	C@\$SSIEND	SSI INTERFACE END ROUTINE
320	(140)	ADDRESS	4	C@\$SYMREC	ENTRY TO \$SYMREC ROUTINE
324	(144)	ADDRESS	4	C@FINDMOD	Find LMT/MIT for a module containing a given address
328	(148)	ADDRESS	4	C@FRETRE	FREE TCB RECOVERY ELEMENT
332	(14C)	ADDRESS	4	C@GETTRE	GET TCB RECOVERY ELEMENT
336	(150)	ADDRESS	4	C@MBSCATTN	BSC CTC Attention routine
340	(154)	ADDRESS	4	C@RECOVERY	SSI RECOVERY ROUTINE
344	(158)	ADDRESS	4	C@SSIFINE	SSI INTERFACE FINISH ROUTINE
348	(15C)	ADDRESS	4	C@SSISESTA	SSI \$ESTAE ROUTINE
352	(160)	ADDRESS	4	C@SSISSETUP	SSI INTERFACE SETUP ROUTINE
356	(164)	ADDRESS	4	CADDR@CNTBITAB	TRT table for \$CNTBIT macro
Comment					
Module HASCOFST entries listed alphabetically					
End of Comment					
360	(168)	ADDRESS	4	CADDR@OCOOFST	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.



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MODULE HASCPPOOL ROUTINES LISTED ALPHABETICALLY					
End of Comment					
364	(16C)	ADDRESS	4	C@CPBUILD	CPool build entry point
368	(170)	ADDRESS	4	C#CPBUILD	CPool build PC number
372	(174)	ADDRESS	4	C@CPBREC	CPool build recovery rtn
376	(178)	ADDRESS	4	C@CPDELETE	CPool delete entry point
380	(17C)	ADDRESS	4	C#CPDELETE	CPool delete PC number
384	(180)	ADDRESS	4	C@CPDREC	CPool delete recovery rtn
388	(184)	ADDRESS	4	C@CPEXPAND	CPool expand entry point
392	(188)	ADDRESS	4	C#CPEXPAND	CPool expand PC number
396	(18C)	ADDRESS	4	C@CPXREC	CPool expand recovery rtn
400	(190)	ADDRESS	4	C@CPFREE	CPool free entry point
404	(194)	ADDRESS	4	C#CPFREE	CPool free PC number
408	(198)	ADDRESS	4	C@CPFREC	CPool free recovery rtn
412	(19C)	ADDRESS	4	C@CPGET	CPool get entry point
416	(1A0)	ADDRESS	4	C#CPGET	CPool get PC number
420	(1A4)	ADDRESS	4	C@CPGREC	CPool get recovery rtn
424	(1A8)	ADDRESS	4	C@CPINIT	CPool initialization
428	(1AC)	ADDRESS	4	C@CPMODIFY	CPool modify entry point
432	(1B0)	ADDRESS	4	C#CPMODIFY	CPool modify PC number
436	(1B4)	ADDRESS	4	C@CPMREC	CPool modify recovery rtn
440	(1B8)	ADDRESS	4	C@CPQCELL	CPool query cell entry pt
444	(1BC)	ADDRESS	4	C#CPQCELL	CPool query call PC number
448	(1C0)	ADDRESS	4	C@CPQCREC	CPool query cell recovery
452	(1C4)	ADDRESS	4	C@CPQEXT	CPool query extent entry pt
456	(1C8)	ADDRESS	4	C#CPQEXT	CPool query extent PC numb
460	(1CC)	ADDRESS	4	C@CPQXREC	CPool query extent recovery
464	(1D0)	ADDRESS	4	C@CPQPPOOL	CPool query pool entry pt
468	(1D4)	ADDRESS	4	C#CPQPPOOL	CPool query pool PC number
472	(1D8)	ADDRESS	4	C@CPQPREC	CPool query pool recovery
476	(1DC)	ADDRESS	4	C@CPTERM	CPool termination
480	(1E0)	ADDRESS	4	CADDR@CPLTABS	CPool table of JES2 pools, not for \$CALL, data only

Comment

MODULE HASCRQUE ROUTINES LISTED ALPHABETICALLY

End of Comment					
484	(1E4)	ADDRESS	4	C@\$RQUEACT	Activate service
488	(1E8)	ADDRESS	4	C@\$RQUECMP	Wait for completion
492	(1EC)	ADDRESS	4	C@\$RQUEDEA	Deactivate service
496	(1F0)	ADDRESS	4	C@\$RQUEEXE	Execute request
500	(1F4)	ADDRESS	4	C@\$RQUEGET	Get request
504	(1F8)	ADDRESS	4	C@\$RQUERET	Return request

Comment

Module HASCSAPI Routines listed alphabetically

End of Comment					
508	(1FC)	ADDRESS	4	C@CSPEOX	Scan SAPIDs for terminating TCB or memory

Comment

MODULE HASCSJI ROUTINES LISTED ALPHABETICALLY

End of Comment					
512	(200)	ADDRESS	4	C@DATASERV	JOB INFORMATION SERVICE

## \$CADDR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MODULE HASCSIRQ ROUTINES LISTED ALPHABETICALLY					
End of Comment					
516	(204)	ADDRESS	4	C@\$DESTCHK	AUTHORIZE TRANSMIT TO DEST
520	(208)	ADDRESS	4	C@SFNDSJB	Find current SJB
524	(20C)	ADDRESS	4	C@TSCNVJB	CONVERT EXT JOB ID TO JOB NUM
528	(210)	ADDRESS	4	C@USERDEST	VERIFY DESTINATION
532	(214)	ADDRESS	4	C@USERSUB	USER/SUBTASK EXIT EFFECTOR
536	(218)	ADDRESS	4	C@USRNEWND	Assign new node to dest
540	(21C)	ADDRESS	4	C@WTALOGQ	Flush S35D Joblog queue
Comment					
Module HASCSISC routines listed alphabetically					
End of Comment					
544	(220)	ADDRESS	4	C@CNVDEVID	Convert DEVID to EBCDIC
548	(224)	ADDRESS	4	C@PRJBCLD	Process job class info
Comment					
Module HASCSJFA Routines Listed Alphabetically					
End of Comment					
552	(228)	ADDRESS	4	C@HSJFACC	MVS SJFACC Routine
Comment					
Module HASCSJFS Routines Listed Alphabetically					
End of Comment					
556	(22C)	ADDRESS	4	C@HASJFREQ	SJFREQ Service Routine
560	(230)	ADDRESS	4	C@HASJIDST	IPADDR/DEST Process - CSJFS
564	(234)	ADDRESS	4	C@SJFSWBRD	SWB Read Service Routine
568	(238)	ADDRESS	4	C@SWBTUMRG	SWB Merge Service Routine
572	(23C)	ADDRESS	4	C@TUXTRACT	TU extraction - HASCSJFS
Comment					
Module HASCSRAX routines listed alphabetically					
End of Comment					
576	(240)	ADDRESS	4	C@GETJ2AUX	Access aux address space
580	(244)	ADDRESS	4	C@DELJ2AUX	Delete aux address space
Comment					
MODULE HASCSRDS ROUTINES LISTED ALPHABETICALLY					
End of Comment					
584	(248)	ADDRESS	4	C@\$CBIO	CONTROL BLOCK I/O ROUTINE ADDR
588	(24C)	ADDRESS	4	C@\$DCTCHEK	Verify a DCT routine
592	(250)	ADDRESS	4	C@\$FNDRLOT	FIND REUSEABLE SPIN IOT
596	(254)	ADDRESS	4	C@\$IOTBLD	BUILD AN IOT ROUTINE
600	(258)	ADDRESS	4	C@\$PDBFIND	FIND A Pddb ROUTINE
604	(25C)	ADDRESS	4	C@\$SDBCHEK	Verify a SDB/DCT routine
608	(260)	ADDRESS	4	C@\$SDBFREE	FREE AN SDB
612	(264)	ADDRESS	4	C@\$SDBINIT	INITIALIZE AN SDB
616	(268)	ADDRESS	4	C@\$VERIFY	\$VERIFY SERVICE ROUTINE ADDRESS
620	(26C)	ADDRESS	4	C@DSNCMP	SYSIN/SYSOUT DATASET COMPRESS
624	(270)	ADDRESS	4	C@DSNVFY	SYSIN/SYSOUT DATASET VERIFY

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
628	(274)	ADDRESS	4	C@ENF58BLD	Build ENF58 parm lists
632	(278)	ADDRESS	4	C@HALCLASS	CHECK SYSOUT CLASS FOR HOLD RTN
636	(27C)	ADDRESS	4	CADDR@HASPVTAB	\$VERIFY control block table
640	(280)	ADDRESS	4	C@HCBCK	CHECKPOINT HASP CONTROL BLOCKS
644	(284)	ADDRESS	4	C@HCBFM	FREEMAIN CONTROL BLOCK STORAGE
648	(288)	ADDRESS	4	C@HCBGM	GETMAIN CONTROL BLOCK STORAGE
652	(28C)	ADDRESS	4	C@HFCLSUB	FAKE CLOSE DATASETS
656	(290)	ADDRESS	4	C@HFCLTRNC	TRUNCATE A BUFFER ROUTINE
660	(294)	ADDRESS	4	C@HJSRETAB	REBUILD SDB TAB
664	(298)	ADDRESS	4	C@HONEWOUT	OPEN NEW OUTPUT DATASET RTN
668	(29C)	ADDRESS	4	C@HOOLDINP	OPEN OLD INPUT DATASET RTN
672	(2A0)	ADDRESS	4	C@HOOLDOUT	OPEN OLD OUTPUT DATASET RTN
676	(2A4)	ADDRESS	4	C@MTTRVAL	VALIDATE MTTR ROUTINE
680	(2A8)	ADDRESS	4	C@MTTR0VAL	Validate MTTR (R = 0 OK)
684	(2AC)	ADDRESS	4	C@NJEHDRDU	NJE header read routine
688	(2B0)	ADDRESS	4	C@OLDJOE	Old JOE
692	(2B4)	ADDRESS	4	C@SIGIOU	Signature Rcd I/O Routine
696	(2B8)	ADDRESS	4	C@SYMTT	Generate SIGIO SYMREC rtn
700	(2BC)	ADDRESS	4	C@USENF58	User environment ENF58 rtn

Comment

MODULE HASCSRIC ROUTINES LISTED ALPHABETICALLY

End of Comment

704	(2C0)	ADDRESS	4	C@\$POST	POST HASP TASK
708	(2C4)	ADDRESS	4	C@\$RACROUT	ISSUE SAF CALL
712	(2C8)	ADDRESS	4	C@\$STRAK	ALLOCATE TRACK ADDRESS
716	(2CC)	ADDRESS	4	C@\$SVJLOK	GET JOB COM QUEUES LOCK RTN
720	(2D0)	ADDRESS	4	C@\$SVJTEST	TEST FOR JCQ LOCK OWNERSHIP
724	(2D4)	ADDRESS	4	C@\$SVJUNLK	RELEASE JOB COM QUEUES LOCK RTN
728	(2D8)	ADDRESS	4	C@\$TRACER	EVENT TRACE FACILITY
732	(2DC)	ADDRESS	4	C@\$TRAREL	\$TRACE RELEASE ENTRY POINT
736	(2E0)	ADDRESS	4	C@\$VFLI	SIMULATE VFL INSTRUCTION
740	(2E4)	ADDRESS	4	C@\$XMPOST	CROSS MEMORY POST ROUTINE
744	(2E8)	ADDRESS	4	C@BERTREAD	CSA \$DOGBERT Fetch support
748	(2EC)	ADDRESS	4	C@BLOBMNT	2nd phase BLOB commit
752	(2F0)	ADDRESS	4	C#BLOBMNT	2nd phase BLOB commit PC #
756	(2F4)	ADDRESS	4	C@BLOBMNTA	2nd phase BLOB commit ARR
760	(2F8)	ADDRESS	4	C@CATBFREE	Free unused \$CATBERT
764	(2FC)	ADDRESS	4	C@CATREAD	CSA \$DOGCAT Fetch support
768	(300)	ADDRESS	4	C@CKPTVERS	Obtain/release ckpt version
772	(304)	ADDRESS	4	C@GRPASGN	ASSIGN GROUPING TOKEN
776	(308)	ADDRESS	4	C@HCNVTIME	USED BY C/T FOR A TOD CONVERSION ROUTINE IN HASCSRIC
780	(30C)	ADDRESS	4	C@HKYMERGE	MERGE OUTPUT JCL KEYWORDS RTN
784	(310)	ADDRESS	4	C@HOSWB	GET SWB ERROR ROUTINE
788	(314)	ADDRESS	4	C@HSJFLSP	FREE SJF STORAGE ROUTINE
792	(318)	ADDRESS	4	C@JQERead	CSA \$DOGJQE Fetch support
796	(31C)	ADDRESS	4	C@PDDBUPD	Update PDDD
800	(320)	ADDRESS	4	C@PPSOSJB	PURGE PSO FROM SJB ROUTINE
804	(324)	ADDRESS	4	C@PREWTO	WTO PREPROCESSING ROUTINE
808	(328)	ADDRESS	4	C@PRTAUTH	JESNEWS & SYSOUT DATA SET AUTHORIZATION
812	(32C)	ADDRESS	4	C@PSQUEUE	PSO QUEUE ROUTINE
816	(330)	ADDRESS	4	C@RECBORT	PSO,STATUS,CANCEL recovery
820	(334)	ADDRESS	4	C@RRWORTN	Issue chain of WTO msgs
824	(338)	ADDRESS	4	C@SSVXDEF	EXIT DEFINITION ROUTINE
828	(33C)	ADDRESS	4	C@TBADTGBQ	Queue bad TGB to HASPSPOL
832	(340)	ADDRESS	4	C@TQUEBTG	CHECK FOR I/O ERROR ROUTINE
836	(344)	ADDRESS	4	C@TSETLOCK	GET LOCAL AND CMS LOCKS ROUTINE
840	(348)	ADDRESS	4	C@TSFRELOK	FREE LOCAL AND CMS LOCKS RTN
844	(34C)	ADDRESS	4	C@TSQUEUE	Queue SJB to HASP work queue
848	(350)	ADDRESS	4	C@WSCREAD	CSA \$WSCJQE Fetch support

## \$CADDR Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MODULE HASCSRJB ROUTINES LISTED ALPHABETICALLY					
End of Comment					
852	(354)	ADDRESS	4	C@\$JBIDBLD	JOB ID BUILD ROUTINE
856	(358)	ADDRESS	4	C@\$QLOCC	Locate JQE for a job #
860	(35C)	ADDRESS	4	C@\$SJBFIN	FIND AN SJB
864	(360)	ADDRESS	4	C@\$SJBLOCK	LOCK AN SJB
868	(364)	ADDRESS	4	C@\$SJBREQ	REQUEUE AN SJB
872	(368)	ADDRESS	4	C@\$SJBUNLK	UNLOCK AN SJB
876	(36C)	ADDRESS	4	C@HETSOUT	SAVES STATUS ON INTERRUPT
880	(370)	ADDRESS	4	C@SJBFREE	FREE AN SJB
884	(374)	ADDRESS	4	C@SJBINIT	CREATE AN SJB
888	(378)	ADDRESS	4	C@SJOBINT	SJOB initialization
892	(37C)	ADDRESS	4	C@TSHABDQ	DEQUEUE TSO SJB
896	(380)	ADDRESS	4	C@TSUABQS	SCAN FOR TSO SJB
Comment					
Module HASCUBSR routines listed alphabetically					
End of Comment					
900	(384)	ADDRESS	4	C@UBSRB	Unwritten buffer SRB rtn
Comment					
Module HASCXJCT routines listed alphabetically					
End of Comment					
904	(388)	ADDRESS	4	C@\$JCTXADD	Add \$JCT extension
908	(38C)	ADDRESS	4	C@\$JCTXEXP	Expand \$JCT extension
912	(390)	ADDRESS	4	C@\$JCTXGET	Locate \$JCT extension
916	(394)	ADDRESS	4	C@\$JCTXREM	Delete \$JCT extension
Comment					
RESERVED FOR FUTURE USE FIELDS--(LAST ENTRIES IN CADDR)					
End of Comment					
920	(398)	ADDRESS	4	CADDREQE (0)	End of fields that must be non-zero after loading common storage modules and resolving CADDR values from module MTEs
920	(398)	ADDRESS	4	(4)	Reserved for future use
920	(398)	X'A8	0	CADDRLEN	**"CADDR" LENGTH OF THE CADDR TABLE

## \$CADDR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C#BLOBMNT	2F0		C@\$CBIO	248	
C#CPBUILD	170		C@\$CRETRN	114	
C#CPDELETE	17C		C@\$CSAVE	118	
C#CPEXPAND	188		C@\$DCTCHK	24C	
C#CPFREE	194		C@\$DESTCHK	204	
C#CPGET	1A0		C@\$DSCTBLD	1C	
C#CPMODIFY	1B0		C@\$FBUFRN	11C	
C#CPQCELL	1BC		C@\$FNDRLOT	250	
C#CPQEXT	1C8		C@\$FRECEL	120	
C#CPQPOOL	1D4		C@\$GASSIGN	B4	
C@\$POST	2C0		C@\$GETCEL	124	
C@\$SALESERV	64		C@\$GETHP	128	
C@\$ALLDAU	14		C@\$GKGET	A8	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C@\$GKINIT	AC		C@CPJCLTRM	C	
C@\$GKTERM	B0		C@CPMODIFY	1AC	
C@\$GSINIT	B8		C@CPMREC	1B4	
C@\$GSTERM	BC		C@CPQCELL	1B8	
C@\$HGFMAIN	12C		C@CPQCREC	1C0	
C@\$IOTBLD	254		C@CPQEXT	1C4	
C@\$JBIDBLD	354		C@CPQPOOL	1D0	
C@\$JCTXADD	388		C@CPQPREC	1D8	
C@\$JCTXEXP	38C		C@CPQXREC	1CC	
C@\$JCTXGET	390		C@CPTERM	1DC	
C@\$JCTXREM	394		C@CPXREC	18C	
C@\$MLTFBUF	130		C@CSPEOX	1FC	
C@\$MSDDUMP	134		C@DATASERV	200	
C@\$PDBBLD	20		C@DELJ2AUX	244	
C@\$PDBDEFS	24		C@DSNCMP	26C	
C@\$PDBFIND	258		C@DSNVFY	270	
C@\$QLOCC	358		C@DSOPEN	50	
C@\$RACROUT	2C4		C@DSPSERV	68	
C@\$RQUEACT	1E4		C@ENFISSUE	6C	
C@\$RQUECMP	1E8		C@ENF58BLD	274	
C@\$RQUEDEA	1EC		C@EOBLOB	10C	
C@\$RQUEEXE	1F0		C@EOTFDCON	110	
C@\$RQUEGET	1F4		C@FINDMOD	144	
C@\$RQUERET	1F8		C@FRETRE	148	
C@\$SDBCHEK	25C		C@GETJ2AUX	240	
C@\$SDBFREE	260		C@GETTRE	14C	
C@\$SDBINIT	264		C@GRPASGN	304	
C@\$SJBFIN	35C		C@HALCLASS	278	
C@\$SJBLOCK	360		C@HALFDSNR	28	
C@\$SJBREQ	364		C@HALJMERG	2C	
C@\$SJBUNLK	368		C@HALOCR	30	
C@\$SSIBEGN	138		C@HALOPDBI	34	
C@\$SSIEND	13C		C@HALSSALP	38	
C@\$STRAK	2C8		C@HALUNAL	3C	
C@\$SVJLOK	2CC		C@HAMNULL	C8	
C@\$SVJTEST	2D0		C@HAMPSTER	CC	
C@\$SVJUNLK	2D4		C@HAOUTSCN	40	
C@\$SYMREC	140		C@HASJFREQ	22C	
C@\$TRACER	2D8		C@HASJIDST	230	
C@\$TRAREL	2DC		C@HASPAMI	D0	
C@\$UALDAU	18		C@HCBCK	280	
C@\$UCBINDX	108		C@HCBFM	284	
C@\$VERIFY	268		C@HCBGM	288	
C@\$VFLI	2E0		C@HCNVFDAD	D4	
C@\$XMPOST	2E4		C@HCNVTIME	308	
C@ABEND722	C4		C@HETSOUT	36C	
C@ARMEQJ	10		C@HFCLSUB	28C	
C@BERTREAD	2E8		C@HFCLTRNC	290	
C@BLOBMNT	2EC		C@HFJLOGTM	E4	
C@BLOBMNTA	2F4		C@HFJOBLOG	E0	
C@CATBFREE	2F8		C@HFOPSUB	54	
C@CATREAD	2FC		C@HINTRDR	DC	
C@CKPTVERS	300		C@HIOTSPIN	44	
C@CNVDEVID	220		C@HJE000	E8	
C@CPBREC	174		C@HJSMASL	EC	
C@CPBUILD	16C		C@HJSRETAB	294	
C@CPDELETE	178		C@HKYMERGE	30C	
C@CPDREC	180		C@HNDUPDTE	48	
C@CPEXPAND	184		C@HOCSETUP	58	
C@CPFREC	198		C@HONEWOUT	298	
C@CPFREE	190		C@HOOLDINP	29C	
C@CPGET	19C		C@HOOLDOUT	2A0	
C@CPGREC	1A4		C@HOSWB	310	
C@CPINIT	1A8		C@HPOSTIR	4C	
C@CPJCLINI	8		C@HSJFACC	228	

## \$CADDR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C@HSJFLSP	314		CADDR@CPLTABS		
C@JBFOUND	F0			1E0	
C@JBSELECT	F4		CADDR@ENF35	70	
C@JOBSTATS	F8		CADDR@ENF41CP		
C@JQEREAD	318			80	
C@JSOPSSDS	FC		CADDR@ENF41GL		
C@JSREOPEN	100			78	
C@MBCATTN	150		CADDR@ENF42	88	
C@MRGSWBS	104		CADDR@ENF56	90	
C@MTTRVAL	2A4		CADDR@ENF57CM		
C@MTTR0VAL	2A8			98	
C@NJEHDRDU	2AC		CADDR@ENF57RV		
C@OLDJOE	2B0			A0	
C@PDDBUPD	31C		CADDR@HAMAVT	C0	
C@PPSOSJB	320		CADDR@HASPVTAB		
C@PREWTO	324			27C	
C@PRJBCLD	224		CADDR@HERNOEOD		
C@PRTAUTH	328			D8	
C@PSQUEUE	32C		CADDR@OCOOFFST		
C@RECABORT	330			168	
C@RECOVERY	154		CADDRENFBEQ	70	
C@RRWTORTN	334		CADDRENFNUM	A4	7
C@SFNDSJB	208		CADDREQE	398	
C@SIGIOU	2B4		CADDREQS	8	
C@SJBFFREE	370		CADDRID	0	C3C1C4C4
C@SJBINIT	374		CADDRLEN	398	A8
C@SJFSWBRD	234		CADDRVNM	4	7
C@SJOBINT	378		CADDRVSN	4	
C@SSIFINE	158				
C@SSISESTA	15C				
C@SSISETUP	160				
C@SSVCLSC	5C				
C@SSVOPNC	60				
C@SSVXDEF	338				
C@SWBTUMRG	238				
C@SYMTT	2B8				
C@TBADTGBQ	33C				
C@TQUEBTG	340				
C@TSCNVJB	20C				
C@TSETLOCK	344				
C@TSFRELOK	348				
C@TSHABDQ	37C				
C@TSQUEUE	34C				
C@TSUABQS	380				
C@TUXTRACT	23C				
C@UBSRB	384				
C@USENF58	2BC				
C@USERDEST	210				
C@USERSUB	214				
C@USRNEWND	218				
C@WSCREAD	350				
C@WTALOGQ	21C				
CADDR#ENF35	74				
CADDR#ENF41CP					
	84				
CADDR#ENF41GL					
	7C				
CADDR#ENF42	8C				
CADDR#ENF56	94				
CADDR#ENF57CM					
	9C				
CADDR#ENF57RV					
	A4				
CADDR@CNTBITAB					
	164				

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## \$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

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 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
8	(8)	BITSTRING	0	CATCNAME	"B'00000001" PROGRAMMER NAME REQ'D
8	(8)	BITSTRING	0	CATCNUMB	"B'00000010" ACCOUNT NUMBER REQUIRED
8	(8)	X'3	0	CATCALL	"CATCNAME+CATCNUMB" JOB AND NUMBER REQUIRED
8	(8)	BITSTRING	0	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.
25	(19)	BITSTRING	0	CATCBLPY	"B'00000001" PROCESS BYPASS LABEL PARM
26	(1A)	CHARACTER	1	CATCOCG (4)	OPERATOR COMMAND GROUP
26	(1A)	BITSTRING	0	CATCGSYS	"B'00000100" GROUP 1 COMMANDS (SYS)
26	(1A)	BITSTRING	0	CATCGIO	"B'00000010" GROUP 2 COMMANDS (I/O)
26	(1A)	BITSTRING	0	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 00018'	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
41	(29)	BITSTRING	0	CAT1CDP	"B'10000000" CONDITIONALLY PURGE OUTPUT FOR JOBS IN THIS CLASS
41	(29)	X' '	0	CAT1NODP	"\$ODPURGE" NORMAL OUTDISP=PURGE
41	(29)	X' '	0	CAT1NODW	"\$ODWRITE" NORMAL OUTDISP=WRITE
41	(29)	X' '	0	CAT1NODH	"\$ODHOLD" NORMAL OUTDISP=HOLD
41	(29)	X' '	0	CAT1NODK	"\$ODKEEP" NORMAL OUTDISP=KEEP
41	(29)	X' '	0	CAT1NODL	"\$ODLEAVE" NORMAL OUTDISP=LEAVE
42	(2A)	BITSTRING	1	CATFLAG2	ABNORMAL OUTDISP FOR JESDS
42	(2A)	X' '	0	CAT2AODP	"\$ODPURGE" ABNORMAL OUTDISP=PURGE
42	(2A)	X' '	0	CAT2AODW	"\$ODWRITE" ABNORMAL OUTDISP=WRITE
42	(2A)	X' '	0	CAT2AODH	"\$ODHOLD" ABNORMAL OUTDISP=HOLD
42	(2A)	X' '	0	CAT2AODK	"\$ODKEEP" ABNORMAL OUTDISP=KEEP
42	(2A)	X' '	0	CAT2AODL	"\$ODLEAVE" ABNORMAL OUTDISP=LEAVE
43	(2B)	BITSTRING	1	CATFLAG3	Processing flags
43	(2B)	BITSTRING	0	CAT3WLM	"B'10000000" WLM managed class
43	(2B)	BITSTRING	0	CAT3SPEC	"B'01000000" Special class (STC/TSU)
43	(2B)	BITSTRING	0	CAT3PSEU	"B'00100000" Pseudo-class queue (not set in real CATs)
43	(2B)	BITSTRING	0	CAT3RBLD	"B'00010000" Pseudo-class queue for rebuild queue
43	(2B)	BITSTRING	0	CAT3RECO	"B'00001000" Pseudo CAT used for JQE and CAT reconciliation
43	(2B)	BITSTRING	0	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 Cross Reference

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	CATQHEAD	Offset of first JQE in class (CKPT only)
84	(54)	CHARACTER	16	CATSCHED	Default SCHENV, JOB classes only
100	(64)	CHARACTER	1	CATMCLAS	Default message class, TSU and STC classes only
101	(65)	BITSTRING	3		Reserved
104	(68)	DBL WORD	8	(0)	Ensure double word bdy
104	(68)	X'68	0	CATLEN	**CAT" Length of CAT
104	(68)	X'68	0	CATLLEN	**CAT" Full length of CAT

Comment					
SPECIAL CLASS DEFINITIONS					
End of Comment					
104	(68)	BITSTRING	0	CATSTCCL	"X'D0" SYSTEM TASK CLASS
104	(68)	BITSTRING	0	CATTSUCL	"X'E0" FOREGROUND TIME SHARING CLASS
104	(68)	X'5B	0	CATSTCID	"C'\$" SYSTEM TASK DISPLAY ID
104	(68)	X'7C	0	CATTSUID	"C'@" FOREGROUND TIME SHARING DISPLAY ID
104	(68)	BITSTRING	0	CATNENT	"X'FF'-X'C0'+1" NUMBER OF ENTRIES IN CAT

## \$CAT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CATCACCT	8		CATCURJ	40	
CATCALL	8	3	CATCVER	18	F2
CATCBLP	19		CATFLAG1	29	
CATCBLPY	19	1	CATFLAG2	2A	
CATCDSPL	18	F1	CATFLAG3	2B	
CATCEXEC	18	F0	CATIMER	4C	
CATCGALL	1A	7	CATJBOPT	1	
CATCGCON	1A	1	CATJOBFL	0	
CATCGIO	1A	2	CATJQER	48	
CATCGSYS	1A	4	CATLEN	68	68
CATCIGN	18	F3	CATLLEN	68	68
CATCLASS	34		CATMAXJ	3C	
CATCLJCL	1E		CATMAXT	44	
CATCMND	18		CATMCLAS	64	
CATCMNTE	B		CATNENT	68	40
CATCNAM	8	1	CATOPSWT	28	
CATCNONE	8		CATPERFM	5	
CATCNUMB	8	2	CATPROCN	2	
CATCOCG	1A		CATQHEAD	50	
CATCONVP	1F	8	CATSCHED	54	
CATCPBGN	8		CATSMFLG	4	
CATCREGN	13		CATSTCCL	68	D0
CATCRGA	17		CATSTCID	68	5B
CATCRGN	13		CATTSUCL	68	E0
CATCSECS	11		CATTSUID	68	7C
CATCSWAL	8	4	CATXBM	2C	
CATCTIME	B		CAT1CDP	29	80
CATCTMSG	1F		CAT1NODH	29	

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
CAT1NODK	29	
CAT1NODL	29	
CAT1NODP	29	
CAT1NODW	29	
CAT2AODH	2A	
CAT2AODK	2A	
CAT2AODL	2A	
CAT2AODP	2A	
CAT2AODW	2A	
CAT3PSEU	2B	20
CAT3RBLD	2B	10
CAT3RECO	2B	8
CAT3SINV	2B	4
CAT3SPEC	2B	40
CAT3WLM	2B	80

## \$CAT Cross Reference

## \$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  
**Serialization:** This control block is updated during JES2 initializaion 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'C'	0	CBRMAPE	"0,12,C'X'" BERT map entry
4	(4)	X'4'	0	CBRMADDR	"0,4,C'A'" Address of BERT translate table
4	(4)	X'4 00001'	0	CBRMCNT	"4,1,C'F'" Number of table entries (Not including id 0 record)
4	(4)	X'5 00001'	0	CBRMFLAG	"5,1,C'B'" Flags
4	(4)	BITSTRING	0	CBRMFJ2	"B'10000000'" Type is JES2-defined
4	(4)	X'6 00002'	0	CBRMSIZE	"6,2,C'H'" Max entry size (highest offset set)
4	(4)	X'8 00002'	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
25	(19)	BITSTRING	1	CBRJQEF	Flag byte

## \$CATBERT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
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' '	0	CBRMAXID	"\$DGBDYN-1" Max usable CB type
56	(38)	X' '	0	CBRDYNPT	"CBRMAPS+CBRMADDR+(\$DGBDYN*CBRMLen),4,C'A" Dynamic BRTRANS pointer
56	(38)	X' '	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'8'	0	CBRBMPFX	"0,8" Prefix area
56	(38)	X'4'	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' '	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		Reserved
14	(E)	X'F 00001'	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	
BRTRCBT	9		
BRTRCOFF	A		
BRTRFILL	E	F	00001
BRTRID	8		
BRTRLEN	C		
BRTRMAXI	8		
BRTRNAME	0		
BRTRSIZE	E	12	
CBRBMPFX	38	8	
CBRBMPTR	38	4	
CBRCATF	25		
CBRCATL	26		
CBRCATS	28		
CBRDYNPT	38		
CBRINTF	D		
CBRINTL	E		
CBRINTS	10		
CBRJQEF	19		
CBRJQEL	1A		
CBRJQES	1C		
CBRMADDR	4	4	
CBRMAPCT	38	4	
CBRMAPE	4	C	
CBRMAPS	8		
CBRMAXID	38		
CBRMBYTE	4	8	00002
CBRMCAT	20		
CBRMCNT	4	4	00001
CBRMFJ2	4	80	
CBRMFLAG	4	5	00001
CBRMINT	8		
CBRMJQE	14		
CBRMLEN	4	C	
CBRMSIZE	4	6	00002
CBRMSTRV	2		
CBRMWSCQ	2C		
CBRNCAT	24		
CBRNINT	C		
CBRNJQE	18		
CBRNTYPE	1		
CBRNWSCQ	30		
CBRSIZE	38		
CBRVERCT	4		
CBRVERS	0		
CBRVERSN	0	1	
CBRWSCQF	31		
CBRWSCQL	32		
CBRWSCQS	34		

## \$CATBERT Cross Reference



## \$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
5	(5)	BITSTRING	0	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
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

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**\$CCW Programming Interface Information**

Programming Interface Information

**\$CCW**

End of Programming Interface Information

**\$CCW Heading Information**

**Common Name:** HASP Channel Command Word Equates  
**Macro ID:** \$CCW  
**DSECT Name:** None  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Offset:** N/A  
**Subpool and Key:** N/A  
**Size:** N/A  
**Created by:** N/A  
**Pointed to by:** N/A  
**Serialization:** N/A  
**Function:** CCW mapping and operation code equates.

**\$CCW Map**

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0		
0	(0)	X'1'	0	CCWOP	"0,1" OPERATION
0	(0)	X'1'	0	CCWCMD	"0,1" (ALIAS COMMAND CODE)
0	(0)	X'1 00003'	0	CCWADDR	"1,3" DATA (TARGET) ADDRESS
0	(0)	X'4 00001'	0	CCWFLAG	"4,1" FLAG BYTES
0	(0)	X'5 00001'	0	CCWRESVD	"5,1" RESERVED
0	(0)	X'6 00002'	0	CCWCOUNT	"6,2" LENGTH
0	(0)	X'6 00002'	0	CCWLEN	"6,2" LENGTH

Comment

Basic CCW fields (format 1)

End of Comment

0	(0)	X'1'	0	CCW1OP	"0,1" Operation
0	(0)	X'1'	0	CCW1CMD	"0,1" (Alias command code)
0	(0)	X'1 00001'	0	CCW1FLAG	"1,1" Flag byte
0	(0)	X'2 00002'	0	CCW1CNT	"2,2" Length
0	(0)	X'2 00002'	0	CCW1LEN	"2,2" (Alias length)
0	(0)	X'1 00003'	0	CCW1RESV	"CCW1FLAG,L'CCW1FLAG+L'CCW1CNT" Area that must be zero in a TIC
0	(0)	X'4 00004'	0	CCW1ADDR	"4,4" Data (target) address

Comment

BASIC COMMAND CODES

End of Comment

0	(0)	BITSTRING	0	WRITE	"X'01" WRITE
0	(0)	BITSTRING	0	PRINT	"X'01" PRINT (ON PRINTERS)
0	(0)	BITSTRING	0	PUNCH	"X'01" PUNCH (ON PUNCHES)
0	(0)	BITSTRING	0	SRCH	"X'01" SEARCH (USED WITH MODIFIER)
0	(0)	BITSTRING	0	READ	"X'02" READ
0	(0)	BITSTRING	0	CNTRL	"X'03" CONTROL
0	(0)	BITSTRING	0	NOP	"X'03" NO OPERATION
0	(0)	BITSTRING	0	SNS	"X'04" SENSE
0	(0)	BITSTRING	0	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

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
CCW FLAG VALUES					
End of Comment					
0	(0)	BITSTRING	0	DC	"X'80" DATA CHAINING
0	(0)	BITSTRING	0	CC	"X'40" COMMAND CHAINING
0	(0)	BITSTRING	0	SLI	"X'20" SUPPRESS INCORRECT LENGTH
0	(0)	BITSTRING	0	SKIP	"X'10" SUPPRESS DATA TRANSFER
0	(0)	BITSTRING	0	PCI	"X'08" PGM CONTROLLED INTERRUPT
0	(0)	BITSTRING	0	IDA	"X'04" CHANNEL INDIRECT ADDRESSING
Comment					
DIRECT ACCESS DEVICE -- CONTROL COMMANDS					
End of Comment					
0	(0)	BITSTRING	0	ORIENT	"X'28'+CNTRL" ORIENT - (2305 ONLY)
0	(0)	BITSTRING	0	RECALIB	"X'10'+CNTRL" RECALIBRATE
0	(0)	BITSTRING	0	SEEK	"X'04'+CNTRL" SEEK
0	(0)	BITSTRING	0	SEEKCYL	"X'08'+CNTRL" SEEK CYLINDER
0	(0)	BITSTRING	0	SEEKHD	"X'18'+CNTRL" SEEK HEAD
0	(0)	BITSTRING	0	SPACNT	"X'0C'+CNTRL" SPACE COUNT
0	(0)	BITSTRING	0	SETFMSK	"X'1C'+CNTRL" SET FILE MASK
0	(0)	BITSTRING	0	SETS	"X'20'+CNTRL" SET SECTOR - (RPS ONLY)
0	(0)	BITSTRING	0	SETSECTR	"X'20'+CNTRL" SET SECTOR - (RPS ONLY)
0	(0)	BITSTRING	0	RESTORE	"X'14'+CNTRL" RESTORE
0	(0)	BITSTRING	0	VARYSNS	"X'24'+CNTRL" VARY SENSING - (2305 ONLY)
0	(0)	BITSTRING	0	LOCRC	"X'44'+CNTRL" LOCATE RECORD - (EXT. C-K-D)
Comment					
DIRECT ACCESS DEVICE -- SEARCH COMMAND MODIFIERS					
End of Comment					
0	(0)	BITSTRING	0	EQ	"X'20" SEARCH EQUAL MODIFIER
0	(0)	BITSTRING	0	HI	"X'40" SEARCH HI MODIFIER
0	(0)	BITSTRING	0	HIEQ	"X'60" SEARCH HI OR EQUAL MODIFIER
0	(0)	BITSTRING	0	CNTNU	"X'04" SEARCH CONTINUE (2314 ONLY)
Comment					
DIRECT ACCESS DEVICE -- SENSE COMMAND MODIFIERS					
End of Comment					
0	(0)	BITSTRING	0	RSVDISK	"X'90" DEVICE RESERVE
0	(0)	BITSTRING	0	RLSDISK	"X'B0" DEVICE RELEASE
Comment					
DIRECT ACCESS DEVICE -- FIELD MODIFIERS					
End of Comment					
0	(0)	BITSTRING	0	HA	"X'18" HOME ADDRESS FIELD
0	(0)	BITSTRING	0	CNT	"X'10" COUNT (ID) FIELD
0	(0)	BITSTRING	0	ID	"X'10" ID (COUNT) FIELD
0	(0)	BITSTRING	0	REC0	"X'14" RECORD ZERO
0	(0)	BITSTRING	0	DATA	"X'04" DATA FIELD
0	(0)	BITSTRING	0	KEY	"X'08" KEY FIELD
0	(0)	BITSTRING	0	KD	"X'0C" KEY AND DATA FIELD
0	(0)	BITSTRING	0	KDK	"X'1C" COUNT, KEY AND DATA FIELDS
0	(0)	BITSTRING	0	IPL	"X'00" IPL RECORD
0	(0)	BITSTRING	0	SECTOR	"X'20" SECTOR

## \$CCW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	BITSTRING	0	MT	"X'80'" MULTI-TRACK OPERATION
Comment					
PRINTER DEVICE -- CONTROL COMMANDS					
End of Comment					
0	(0)	BITSTRING	0	LOADUCS	"X'F8'+CNTRL" LOAD UCS BUFFER
0	(0)	BITSTRING	0	LOADUSCF	"X'F0'+CNTRL" LOAD UCS BUFFER (FOLDED)
0	(0)	BITSTRING	0	FOLDUCS	"X'40'+CNTRL" FOLD UCS BUFFER
0	(0)	BITSTRING	0	UNFLDUCS	"X'20'+CNTRL" UNFOLD UCS BUFFER
0	(0)	BITSTRING	0	GATEUCS	"X'E8'+CNTRL" GATE/LOAD UCS BUFFER
0	(0)	BITSTRING	0	BLKDATAC	"X'70'+CNTRL" BLOCK DATA CHECK
0	(0)	BITSTRING	0	ALWDATAC	"X'78'+CNTRL" ALLOW DATA CHECK
0	(0)	BITSTRING	0	LOADFCB	"X'60'+CNTRL" LOAD FCB
0	(0)	BITSTRING	0	RAISCOVR	"X'68'+CNTRL" RAISE COVER
Comment					
PRINTER DEVICE -- READ COMMANDS					
End of Comment					
0	(0)	BITSTRING	0	READPLB	"X'00'+READ" READ PRINT INE BUFFER
0	(0)	BITSTRING	0	READUCS	"X'08'+READ" READ UCS BUFFER
0	(0)	BITSTRING	0	READFCB	"X'10'+READ" READ FCB
Comment					
PRINTER DEVICE -- SPACING AND CHANNEL MODIFIERS					
End of Comment					
0	(0)	BITSTRING	0	IMED	"X'03" IMMEDIATE COMMAND (FORMS CONTROL)
0	(0)	BITSTRING	0	SPAC1	"X'08" PRINT WITH 1 SPACE
0	(0)	BITSTRING	0	SPAC2	"X'10" PRINT WITH 2 SPACES
0	(0)	BITSTRING	0	SPAC3	"X'18" PRINT WITH 3 SPACES
0	(0)	BITSTRING	0	SKPCH0	"X'00'+X'80" SKIP TO CHANNEL 0
0	(0)	BITSTRING	0	SKPCH1	"X'08'+X'80" SKIP TO CHANNEL 1
0	(0)	BITSTRING	0	SKPCH2	"X'10'+X'80" SKIP TO CHANNEL 2
0	(0)	BITSTRING	0	SKPCH3	"X'18'+X'80" SKIP TO CHANNEL 3
0	(0)	BITSTRING	0	SKPCH4	"X'20'+X'80" SKIP TO CHANNEL 4
0	(0)	BITSTRING	0	SKPCH5	"X'28'+X'80" SKIP TO CHANNEL 5
0	(0)	BITSTRING	0	SKPCH6	"X'30'+X'80" SKIP TO CHANNEL 6
0	(0)	BITSTRING	0	SKPCH7	"X'38'+X'80" SKIP TO CHANNEL 7
0	(0)	BITSTRING	0	SKPCH8	"X'40'+X'80" SKIP TO CHANNEL 8
0	(0)	BITSTRING	0	SKPCH9	"X'48'+X'80" SKIP TO CHANNEL 9
0	(0)	BITSTRING	0	SKPCH10	"X'50'+X'80" SKIP TO CHANNEL 10
0	(0)	BITSTRING	0	SKPCH11	"X'58'+X'80" SKIP TO CHANNEL 11
0	(0)	BITSTRING	0	SKPCH12	"X'60'+X'80" SKIP TO CHANNEL 12
Comment					
NON-IMPACT PRINTER DEVICE (3800) -- CONTROL COMMANDS					
End of Comment					
0	(0)	BITSTRING	0	INITPRT	"X'34'+CNTRL" INITIALIZE PRINTER
0	(0)	BITSTRING	0	SELXTAB0	"X'44'+CNTRL" SELECT TRANSLATE TABLE 0
0	(0)	BITSTRING	0	SELXTAB1	"X'54'+CNTRL" SELECT TRANSLATE TABLE 1
0	(0)	BITSTRING	0	SELXTAB2	"X'64'+CNTRL" SELECT TRANSLATE TABLE 2
0	(0)	BITSTRING	0	SELXTAB3	"X'74'+CNTRL" SELECT TRANSLATE TABLE 3
0	(0)	BITSTRING	0	CLEARPRT	"X'84'+CNTRL" CLEAR PRINTER
0	(0)	BITSTRING	0	PRTEOT	"X'04'+CNTRL" END-OF-TRANSMISSION
0	(0)	BITSTRING	0	OFFSTACK	"X'04'+CNTRL" OR OFFSET-STACK
0	(0)	BITSTRING	0	MARKFORM	"X'14'+CNTRL" MARK FORM
0	(0)	BITSTRING	0	LOADWCGM	"X'50'+CNTRL" LOAD CHARACTER MODULE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	BITSTRING	0	LDCOPYNO	"X'20'+CNTRL" LOAD COPY NUMBER
0	(0)	BITSTRING	0	SETFLASH	"X'40'+CNTRL" LOAD FLASH FRAME
0	(0)	BITSTRING	0	SETOVRLY	"X'40'+CNTRL" OR OVERLAY CONTROL SEQ.
Comment					
NON-IMPACT PRINTER DEVICE (3800) -- SPECAIL WRITE COMMANDS					
End of Comment					
0	(0)	BITSTRING	0	LDCHARMD	"X'24'+WRITE" LOAD CHARACTER MODIFICATION
0	(0)	BITSTRING	0	LDCOPYMD	"X'34'+WRITE" LOAD COPY MODIFICATION

**\$CCW Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ALWDATAC	0	7B	NOP	0	3
BLKDATAC	0	73	OFFSTACK	0	7
CC	0	40	ORIENT	0	2B
CCWADDR	0	1	00003	0	8
CCWCMD	0	1	PRINT	0	1
CCWCOUNT	0	6	00002	0	7
CCWFLAG	0	4	00001	0	1
CCWLEN	0	6	00002	0	6B
CCWOP	0	1	READ	0	2
CCWRESVD	0	5	00001	0	12
CCW1ADDR	0	4	00004	0	6
CCW1CMD	0	1	READPLB	0	2
CCW1CNT	0	2	00002	0	A
CCW1FLAG	0	1	00001	0	13
CCW1LEN	0	2	00002	0	14
CCW1OP	0	1	RESTORE	0	17
CCW1RESV	0	1	00003	0	B0
CKD	0	1C	RLSDISK	0	90
CLEARPRT	0	87	RSVDISK	0	20
CNT	0	10	SECTOR	0	7
CNTNU	0	4	SEEK	0	B
CNTRL	0	3	SEEKCYL	0	1B
DATA	0	4	SEEKHD	0	47
DC	0	80	SELXTAB0	0	57
EQ	0	20	SELXTAB1	0	67
FOLDUCS	0	43	SELXTAB2	0	77
GATEUCS	0	EB	SELXTAB3	0	43
HA	0	18	SETFLASH	0	1F
HI	0	40	SETFMSK	0	43
HIEQ	0	60	SETOVRLY	0	23
ID	0	10	SETS	0	23
IDA	0	4	SETSECTR	0	10
IMED	0	3	SKIP	0	80
INITPRT	0	37	SKPCH0	0	88
IPL	0	C	SKPCH1	0	D0
KD	0	8	SKPCH10	0	D8
KEY	0	8	SKPCH11	0	E0
LDCHARMD	0	25	SKPCH12	0	90
LDCOPYMD	0	35	SKPCH2	0	98
LDCOPYNO	0	23	SKPCH3	0	A0
LOADFCB	0	63	SKPCH4	0	A8
LOADUCS	0	FB	SKPCH5	0	B0
LOADUSCF	0	F3	SKPCH6	0	B8
LOADWCGM	0	53	SKPCH7	0	C0
LOCRCD	0	47	SKPCH8	0	C8
MARKFORM	0	17	SKPCH9	0	20
MT	0	80	SLI	0	4
			SNS	0	4

## \$CCW Cross Reference

Name	Hex Offset	Hex Value
SPACNT	0	F
SPAC1	0	8
SPAC2	0	10
SPAC3	0	18
SRCH	0	1
TIC	0	8
UNFLDUCS	0	23
VARYSNS	0	27
WRITE	0	1
WRITEIO	0	5



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**\$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' '	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
- Reserved - 2 bytes
- Job number - 2 bytes
- Job key - 4 bytes
- Dataset key - 4 bytes (or reserved if not applicable)

End of Comment					
0	(0)	CHARACTER	4	CHKJID	Eyecatcher
4	(4)	CHARACTER	8	CHKJNAME	Job name
12	(C)	BITSTRING	2		Reserved
14	(E)	SIGNED	2	CHKJOBNO	Job number
16	(10)	SIGNED	4	CHKJBKEY	Job key
20	(14)	BITSTRING	4		Reserved
20	(14)	X'18 '	0	CHKSPLNG	**-CHKJID"
24	(18)	DBL WORD	8	IAZCHK (0)	
24	(18)	X'18 '	0	CHK	"IAZCHK" ALTERNATE DSECT NAME

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
24	(18)	CHARACTER	4	CHKID	CHKPT RECORD AREA ID
28	(1C)	SIGNED	2	CHKLNGLTH	CHKPT LENGTH
30	(1E)	SIGNED	2		RESERVED
32	(20)	CHARACTER	64	CHKJESWK	TO BE FILLED IN BY JES
96	(60)	CHARACTER	8	CHKRBA	JES EQUIVALENT OF A RBA
104	(68)	SIGNED	4	CHKDEV	DEVICE TYPE
108	(6C)	SIGNED	4	CHKMOD	MODEL NUMBER
112	(70)	SIGNED	4	CHKCOPY	COPY COUNT
116	(74)	SIGNED	4	CHKTRNC	TRANSMISSION COUNT
120	(78)	SIGNED	4	CHKREC	LOGICAL RECORD COUNT(FROM SPOOL)
124	(7C)	SIGNED	4	CHKPAGE	PHYSICAL SHEET COUNT
128	(80)	CHARACTER	8	CHKPROD	PRODUCT THAT CREATED CKPT REC
136	(88)	SIGNED	4	CHKVER	VERSION OF PRODUCT
140	(8C)	SIGNED	4	CHKRELS	RELEASE OF PRODUCT
144	(90)	SIGNED	4	CHKMODF	MODIFICATION LEVEL OF PRODUCT
148	(94)	SIGNED	4	CHKSERV	SERVICE LEVEL OF PRODUCT
148	(94)	X'80	0	CHKLEN	**-CHK"
32	(20)	SIGNED	2	CHKJRCB	OFFSET TO RCB IN BUFFER
34	(22)	SIGNED	2	CHKPDDDB	DISPLACEMENT OF PDDDB INTO IOT
36	(24)	SIGNED	4	CHKPPCT	PDDDB PAGE COUNT
40	(28)	SIGNED	4	CHKTLNC	TOTAL JOE LINE COUNT
44	(2C)	SIGNED	4	CHKTPCT	TOTAL JOE PAGE COUNT (PHYSICAL)
48	(30)	BITSTRING	4	CHKMTTR	DATA BUFFER SPOOL ADDR (MTTR)
52	(34)	BITSTRING	4	CHKIOTTC	IOT TRACK ADDR (MTTR)
56	(38)	BITSTRING	1	CHKCOPYC	CURRENT COPY NUMBER
57	(39)	BITSTRING	1	CHKBOFF	CURRENT OFFSET INTO TRACKCELL
58	(3A)	BITSTRING	1	CHKCPYG	CURRENT OFFSET INTO COPY GROUP
59	(3B)	BITSTRING	1	CHKTNDS	TOTAL JOE DATASET COUNT

Comment

KEEP NEXT TWO FIELDS TOGETHER FOR \$DU COMMAND

End of Comment

60	(3C)	SIGNED	4	CHKCRECN	CURRENT RECORD NUMBER
64	(40)	SIGNED	4	CHKCPAGN	CURRENT PAGE NUMBER
64	(40)	X'20 00024'	0	CHKDATA	"CHKJESWK, *-CHKJESWK" CHK DATA AREA
68	(44)	CHARACTER	12	CHKJOID (0)	JOE ID BLOCK FOR CHK VALIDATION
68	(44)	CHARACTER	8	CHKJOENM	JOE OUTPUT GROUP NAME(JOENAME)
76	(4C)	CHARACTER	2	CHKJOID1	JOE OUTPUT GROUP ID (JOEID1)
78	(4E)	CHARACTER	2	CHKJOID2	JOE OUTPUT GROUP ID (JOEID2)
80	(50)	BITSTRING	2		Reserved for future use
82	(52)	SIGNED	2	CHKPPHPC	PDDDB PHYSICAL PAGE COUNT
96	(60)	BITSTRING	1		Reserved
97	(61)	BITSTRING	4	CHKRDATA	DATA BUFFER TRACK ADDRESS
101	(65)	BITSTRING	3	CHKRBNRN	RECORD NUMBER WITHIN BUFFER
152	(98)	SIGNED	4	(0)	PRESERVE FULL WORD ALIGNMENT
152	(98)	X'98	0	CHKAZLNG	**-CHKDSECT" Length of DSECT

Comment

FLAG EQUATES FOR \$#CHK MACRO INLINE PARAMETER LIST

End of Comment

152	(98)	BITSTRING	0	CHK1RD	"B'10000000" TYPE=READ OPTION \$#CHK MACRO
152	(98)	BITSTRING	0	CHK1WR	"B'01000000" TYPE=WRITE OPTION \$#CHK MACRO
152	(98)	BITSTRING	0	CHK1YW	"B'00100000" WAIT=YES OPTION \$#CHK MACRO
152	(98)	BITSTRING	0	CHK1NW	"B'00010000" WAIT=NO OPTION \$#CHK MACRO
152	(98)	BITSTRING	0	CHK1RS5	"B'00001000" RESERVED FOR FUTURE USE
152	(98)	BITSTRING	0	CHK1RS6	"B'00000100" RESERVED FOR FUTURE USE
152	(98)	BITSTRING	0	CHK1RS7	"B'00000010" RESERVED FOR FUTURE USE
152	(98)	BITSTRING	0	CHK1RS8	"B'00000001" RESERVED FOR FUTURE USE

## \$CHK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
FLAG EQUATES FOR \$#ALCHK MACRO INLINE PARAMETER LIST					
End of Comment					
152	(98)	BITSTRING	0	CHK2WRI	"B'10000000" WRIOT=YES OPTION \$#ALCHK MACRO
152	(98)	BITSTRING	0	CHK2WRJ	"B'01000000" WRJCT=YES OPTION \$#ALCHK MACRO
152	(98)	BITSTRING	0	CHK2IOT	"B'00100000" IOT ADDR PASSED TO \$#ALCHK
152	(98)	BITSTRING	0	CHK2JCT	"B'00010000" JCT ADDR PASSED TO \$#ALCHK
152	(98)	BITSTRING	0	CHK2YJL	"B'00001000" LOCK=YES OPTION \$#ALCHK MACRO
152	(98)	BITSTRING	0	CHK2QUE	"B'00000100" Use \$CKPTQUE to update JOE
152	(98)	BITSTRING	0	CHK2RS7	"B'00000010" RESERVED FOR FUTURE USE
152	(98)	BITSTRING	0	CHK2RS8	"B'00000001" RESERVED FOR FUTURE USE

## \$CHK Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
CHK	18	18		CHK1NW	98	10
CHKAZLNG	98	98		CHK1RD	98	80
CHKBOFF	39			CHK1RS5	98	8
CHKCOPY	70			CHK1RS6	98	4
CHKCOPYC	38			CHK1RS7	98	2
CHKCPAGN	40			CHK1RS8	98	1
CHKCPYG	3A			CHK1WR	98	40
CHKCRECN	3C			CHK1YW	98	20
CHKDATA	40	20	00024	CHK2IOT	98	20
CHKDEV	68			CHK2JCT	98	10
CHKID	18			CHK2QUE	98	4
CHKIOTTC	34			CHK2RS7	98	2
CHKJBKEY	10			CHK2RS8	98	1
CHKJESWK	20			CHK2WRI	98	80
CHKJID	0			CHK2WRJ	98	40
CHKJNAME	4			CHK2YJL	98	8
CHKJOBNO	E			IAZCHK	18	
CHKJOENM	44					
CHKJOID	44					
CHKJOID1	4C					
CHKJOID2	4E					
CHKJRCB	20					
CHKLEN	94	80				
CHKLNGLTH	1C					
CHKMOD	6C					
CHKMODF	90					
CHKMTTR	30					
CHKPAGE	7C					
CHKPDDB	22					
CHKPPCT	24					
CHKPPHPC	52					
CHKPROD	80					
CHKRBA	60					
CHKRBARN	65					
CHKRDATA	61					
CHKREC	78					
CHKRELS	8C					
CHKSERV	94					
CHKSPLNG	14	18				
CHKSTART	0					
CHKTLNC	28					
CHKTNDS	3B					
CHKTPCT	2C					
CHKTRNC	74					
CHKVER	88					

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**\$CIRWORK Programming Interface information**

Programming Interface information

**\$CIRWORK**

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					
0	(0)	BITSTRING	1	CIRFLAG1	GENERAL USAGE FLAG 1
0	(0)	BITSTRING	0	CIRF1JEX	"B'10000000" JQE extensions rebuilt
0	(0)	BITSTRING	0	CIRF1HPI	"B'01000000" CURRENT IRPL STMT FROM PARMLIB
0	(0)	BITSTRING	0	CIRF1CI	"B'00100000" CURRENT IRPL STMT FROM CONSOLE
0	(0)	BITSTRING	0	CIRF1XI	"B'00010000" CURRENT IRPL STMT FROM EXIT 19
0	(0)	BITSTRING	0	CIRF1PER	"B'00001000" ERROR(S) IN SOME IRPL STMTS
0	(0)	BITSTRING	0	CIRF1CAN	"B'00000100" CANCEL STATEMENT PROCESSED
0	(0)	BITSTRING	0	CIRF1SSW	"B'00000010" SINGLE SYSTEM WARM START

Offsets						
Dec	Hex	Type/Value	Len	Name (Dim)	Description	
0	(0)	BITSTRING	0	CIRF1SER	"B'00000001" SCAN PROCESSING DIAG ERROR MSG	
1	(1)	BITSTRING	1	CIRFLAG2	GENERAL USAGE FLAG 2	
1	(1)	BITSTRING	0	CIRF2EOF	"B'10000000" EOF OCCURRED FOR PARMLIB	
1	(1)	BITSTRING	0	CIRF2RRD	"B'01000000" REREAD NECESSARY FOR PARMLIB	
1	(1)	BITSTRING	0	CIRF2HPO	"B'00100000" HASPPARM (FIRST) OPEN DONE	
1	(1)	BITSTRING	0	CIRF2CM	"B'00010000" IRPL IN CONSOLE MODE	
1	(1)	BITSTRING	0	CIRF2ECM	"B'00001000" IRPL IN 'ERROR' CONSOLE MODE	
1	(1)	BITSTRING	0	CIRF2SSE	"B'00000100" IRPL, SUPPRESS INITSTMT ERRORS	
1	(1)	BITSTRING	0	CIRF2CMA	"B'00000010" ENDING COMMA ON INIT PARM	
1	(1)	BITSTRING	0	CIRF2CMT	"B'00000001" NON-COMplete COMMENT ON INIT PARM	
2	(2)	ADDRESS	1	CIRFLAG3	GENERAL USAGE FLAG 3	
2	(2)	BITSTRING	0	CIRF3LST	"B'10000000" IRPL 'LIST' IN EFFECT	
2	(2)	BITSTRING	0	CIRF3LOG	"B'01000000" IRPL 'LOG' IN EFFECT	
2	(2)	BITSTRING	0	CIRF3MID	"B'00100000" MSGID NOT SUPPL. IN DIAG TEXT	
2	(2)	BITSTRING	0	CIRF3BDV	"B'00010000" Bad Verify during patching	
2	(2)	BITSTRING	0	CIRF3IO1	"B'00001000" I/O error on CKPT1	
2	(2)	BITSTRING	0	CIRF3IO2	"B'00000100" I/O error on CKPT2	
2	(2)	BITSTRING	0	CIRF3VE1	"B'00000010" Validation error on CKPT1	
2	(2)	BITSTRING	0	CIRF3VE2	"B'00000001" Validation error on CKPT2	
2	(2)	X'F	0	CIRF3ERR	"CIRF3IO1+CIRF3IO2+CIRF3VE1+CIRF3VE2" Mask to test for any CKPT errors	
2	(2)	X'C	0	CIRF3I12	"CIRF3IO1+CIRF3IO2" I/O error on both datasets	
2	(2)	X'3	0	CIRF3V12	"CIRF3VE1+CIRF3VE2" Validation error on both	
2	(2)	X'9	0	CIRF3I1V	"CIRF3IO1+CIRF3VE2" I/O error on CKPT1, val. error on CKPT2	
2	(2)	X'6	0	CIRF3V1I	"CIRF3VE1+CIRF3IO2" Val. error on CKPT1, I/O error on CKPT2	
3	(3)	BITSTRING	1	CIRFLAG4	GENERAL USAGE FLAG 4	
3	(3)	BITSTRING	0	CIRF4ILL	"B'10000000" INIT LMOD LOADED, NOT HASJES20	
3	(3)	BITSTRING	0	CIRF4XER	"B'01000000" ERRORS IN EXIT ROUTINE ADDR	
3	(3)	BITSTRING	0	CIRF4SCN	"B'00100000" \$STMTLOG CALLED FROM NPLDISP	
3	(3)	BITSTRING	0	CIRF4RES	"B'00010000" EXIT RTN NOT IN CSA/LPA	
3	(3)	BITSTRING	0	CIRF4RER	"B'00001000" Error in reader route code	
3	(3)	BITSTRING	0	CIRF4CHM	"B'00000100" Chain current DCT via MDCTDCT	
3	(3)	BITSTRING	0	CIRF4CHD	"B'00000010" Chain Current DCT via DCTDCB	
3	(3)	BITSTRING	0	CIRF4RTE	"B'00000001" Invalid Route code found	
4	(4)	SIGNED	4		RESERVED FOR FUTURE USE	
8	(8)	DBL WORD	8	CIRREPLY	WTOR REPLY AREA	
16	(10)	DBL WORD	8	CIRDWORK	DOUBLE WORD WORK AREA	
24	(18)	ADDRESS	4	CIRHCT	ADDR OF THE HCT	
28	(1C)	SIGNED	4	CIRECB	ECB FOR GENERAL INIT USAGE	

Comment

IROPTS FIELDS REQUIRED THROUGHOUT INITIALIZATION

End of Comment

32	(20)	ADDRESS	4	CIRWXIT0	"V(HASPXIT0)" HASPXIT0 ADDR IN HASPINIT LMOD
36	(24)	ADDRESS	4	CIREXIT0	HASPXIT0 LOAD MODULE ADDR OR 0
40	(28)	ADDRESS	4	CIROPTPF	ADDR OF THE OS PARM FIELD
44	(2C)	BITSTRING	100	CIROPTS	HASP OPTIONS STRING

Comment

INIT fields for Priority aging and jesplex resource thresholds

End of Comment

144	(90)	ADDRESS	2	CIRJQRAT	Priority aging rate
146	(92)	ADDRESS	1	CIRJQHI	Job priority aging upper
147	(93)	ADDRESS	1	CIRJQLOW	and lower limits
148	(94)	ADDRESS	2	CIRJORAT	Output priority aging rate
150	(96)	ADDRESS	2	CIRJOHI	Output priority aging upper
152	(98)	ADDRESS	2	CIRJOLOW	and lower limits

## \$CIRWORK Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
154	(9A)	ADDRESS	2	CIRJQPRC	JQE threshold percentage
156	(9C)	ADDRESS	2	CIRJOPRC	JOE threshold percentage
158	(9E)	ADDRESS	2	CIRJNPRC	Job num threshold percent
160	(A0)	ADDRESS	2	CIRTGPRC	Track grp threshold percent
162	(A2)	ADDRESS	2	CIRBTPRC	BERT threshold percentage

Comment

### IRPL GENERAL PROCESSING FIELDS

End of Comment

164	(A4)	ADDRESS	4	CIRSTMTW	ADDRESS OF IRPL STMT BUFFER
168	(A8)	ADDRESS	4	CIRSTMTT	Address of IRPL translated statement buffer
172	(AC)	SIGNED	4	CIRSYMBP (0)	Symbol service parm list
172	(AC)	ADDRESS	4		Addr of translated length
176	(B0)	ADDRESS	4		Addr of return code
180	(B4)	SIGNED	4	CIRTRANL	Length of translated str.
184	(B8)	SIGNED	4	CIRTRANR	RC from translation service
188	(BC)	SIGNED	2	CIRSTMTC	CURRENT IRPL STATEMENT COUNT
190	(BE)	SIGNED	2	CIRNLLCT	NPLLOG LINE COUNTER (50-1)
192	(C0)	SIGNED	2	CIRNLPCT	NPLLOG CURRENT PAGE NUMBER
194	(C2)	BITSTRING	1	CIRIRPL1	Flag used in IRPL
194	(C2)	BITSTRING	0	CIRP1AST	"B'10000000" Asterisk is last char on a line within a comment
195	(C3)	BITSTRING	1		Reserved for future use
196	(C4)	SIGNED	4	CIRSDLCT	\$SCAN DISPLAY LINE COUNT
200	(C8)	ADDRESS	4	CIRX0XRT	ADDR OF XRT FOR EXIT 0
204	(CC)	SIGNED	1	CIRX0#RT	# of exit 0 routines
205	(CD)	ADDRESS	3		RESERVED FOR FUTURE USE

Comment

### SUBROUTINE ADDRESSES

End of Comment

208	(D0)	ADDRESS	4	CIRNPLLG	"V(NPLLOG)" ADDRESS OF IRPL LOGGING ROUTINE
212	(D4)	ADDRESS	4		RESERVED FOR FUTURE USE
216	(D8)	ADDRESS	4		RESERVED For Future Use
220	(DC)	ADDRESS	4	CIRNQMSG	"V(NQUERY)" ADDRESS FOR QUERY MESSAGE
224	(E0)	ADDRESS	4	CIRNDLAY	"V(NDELAY)" Address for NDELAY routine

Comment

### DCT PROCESSING FIELDS

End of Comment

228	(E4)	ADDRESS	4	CIRPDCT	PREVIOUS DCT POINTER FOR USE WHEN GENERATING \$DCTPOOL DCTS
232	(E8)	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

236	(EC)	BITSTRING	24	CIRSTIMS	REMOTE STIMERM SET PARM LIST
236	(EC)	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					
260	(104)	BITSTRING	16	CIRSTIMC	REMOTE STIMERM TEST/CANCEL PARM LIST
260	(104)	X'10	0	CIRSTMCL	"*-CIRSTIMC" Length of parm list
276	(114)	SIGNED	4	CIRNDCHN	Chain of NDELAY elements
276	(114)	X'4'	0	CIRNDEYE	"0,4,C'C'" Eyecatcher
276	(114)	X'4 00004'	0	CIRNDNXT	"4,4,C'A'" Addr of next element
276	(114)	X'8 00004'	0	CIRNDSTI	"8,4,C'F'" STIMERM ID=id-area
276	(114)	X'C 00004'	0	CIRNDMSG	"12,4,C'A'" Addr of message text
276	(114)	X'10 00004'	0	CIRNDDOM	"16,4,C'F'" NDELAY DOM id
276	(114)	X'14	0	CIRNDLEN	"20" NDELAY element length
280	(118)	DBL WORD	8		Reserved for future use

Comment					
MISCELLANEOUS FIELDS					

End of Comment					
288	(120)	DBL WORD	8	CIRCMTSV	HOLD THE ADDR AND LEN OF STMT CURRENTLY RUNNING IN COMMENT-SCAN
296	(128)	SIGNED	2		Reserved for future use
298	(12A)	BITSTRING	1	CIRFLAG5	General usage flag 5
298	(12A)	BITSTRING	0	CIR5IRDD	"B'10000000" IRDA has completed
298	(12A)	BITSTRING	0	CIR5BRTE	"B'00000010" BERT errors detected
298	(12A)	BITSTRING	0	CIR5RRTE	"B'00000001" Error building RRT
299	(12B)	BITSTRING	1		Reserved for future use
300	(12C)	SIGNED	4	CIRXRTNS	TOTAL NO. OF EXIT ROUTINES
304	(130)	ADDRESS	4	CIRJBMIN	MINIMUM LOCAL JOB NUMBER
308	(134)	ADDRESS	4	CIRJBMAX	MAXIMUM LOCAL JOB NUMBER
308	(134)	X'	0	CIRXEMN	"WPLHXT-WPL+47,2" EXIT NUMBER IN INIT MSG864
308	(134)	X'	0	CIRGEMR	"WPLHXT-WPL+44,10" GETMAIN ERROR MSG REASON
308	(134)	X'	0	CIRINFMR	"WPLTX-T-WPL+9+48,45" Reason text in MSG HASP448
312	(138)	ADDRESS	4	CIRACCTJ	ADDR OF JES2-TO-NET NETACCT ELEMENTS
316	(13C)	ADDRESS	4	CIRACCTN	ADDR OF NET-TO-JES2 NETACCT ELEMENTS
320	(140)	BITSTRING	6	CIRTGEDM	NUM TRACK GROUP EDIT MASK

Comment					
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 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					
326	(146)	CHARACTER	24	CIRROPSL	TSUCLASS DEFAULTS
350	(15E)	CHARACTER	24	CIRROPST	STCCCLASS DEFAULTS
374	(176)	CHARACTER	24	CIRROPSU	JOBCLASS DEFAULTS
398	(18E)	SIGNED	2		RESERVED FOR FUTURE USE
400	(190)	ADDRESS	4	CIRVOLT B	ADDR OF VOLUME ALLOCATION TABLE
404	(194)	ADDRESS	4	CIRCMTDB	ADDR OF 1ST TEMP COMMAND AREA
408	(198)	ADDRESS	4	CIRTSTOR	ADDR OF TEMPORARY STORAGE
412	(19C)	ADDRESS	4	CIRTDC TS	ADDR OF PERMANENT DCT STORAGE
416	(1A0)	SIGNED	4	CIRSNALC	COUNT OF UNIT=SNA LINES
420	(1A4)	ADDRESS	4	CIRZIP	ZAPJOB ZIP chain
424	(1A8)	ADDRESS	4	CIRBTGFA	ADDR OF FIRST BTG TABLE ENTRY
428	(1AC)	ADDRESS	4	CIRBTGLA	ADDR OF LAST BTG TABLE ENTRY
432	(1B0)	BITSTRING	0	CIRSPT (0)	SMF IDs for CPU 1-32

# \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
432	(1B0)	SIGNED	4	CIRX0PS (0)	PARAMETER LIST FOR EXIT 0
432	(1B0)	ADDRESS	4	CIROPTA	ADDR OF OPTIONS (OS OR WTOR)
436	(1B4)	ADDRESS	4	CIROPTL	LENGTH OF OPTIONS (OS OR WTOR)
440	(1B8)	ADDRESS	4	CIRDOMID	\$\$WTO DOM ID
444	(1BC)	ADDRESS	4	CIRCNECT	WTO CONNECT message number
448	(1C0)	CHARACTER	8	CIRIQNAM	ENQ queue/resource name,
456	(1C8)	CHARACTER	8	CIRIRNAM	used for most of init time
464	(1D0)	ADDRESS	2		Reserved for future use
466	(1D2)	SIGNED	2	CIRLNENM	Number of lines with dedicated sub-devices
468	(1D4)	SIGNED	4	CIRNUMJT	Total number of NJTs
472	(1D8)	SIGNED	4	CIRNUMJR	Total number of NJRs
476	(1DC)	SIGNED	4	CIRNUMST	Total number of NSTs
480	(1E0)	SIGNED	4	CIRNUMSR	Total number of NSRs
484	(1E4)	SIGNED	4	CIRBLDM (0)	Control block ID
488	(1E8)	BITSTRING	4		Console ID
492	(1EC)	ADDRESS	4		Address of the CART
496	(1F0)	ADDRESS	4		Pointer for JOBID
500	(1F4)	ADDRESS	4		Control block address
504	(1F8)	ADDRESS	4		Display routine address
508	(1FC)	ADDRESS	4	(6)	6 word work area
532	(214)	BITSTRING	2		ROUT code for Message
534	(216)	BITSTRING	2		Not used
536	(218)	CHARACTER	4		Message ID
540	(21C)	CHARACTER	1		Separator character
541	(21D)	ADDRESS	1		Flag byte 1
542	(21E)	ADDRESS	1		'DISPER'
543	(21F)	ADDRESS	1		Flag byte 2
544	(220)	BITSTRING	16		Not used
560	(230)	ADDRESS	4	(0)	Ensure multiple of 4
560	(230)	ADDRESS	2	(0)	
560	(230)	CHARACTER	300	CIRMWORK	Message building work area
864	(360)	DBL WORD	8	(0)	Ensure double alignment

Comment

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

End of Comment

864	(360)	BITSTRING	1	CIRGWORK	General work area
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Comment

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

864	(360)	BITSTRING	2	CIRSCMLN	Scan message length
866	(362)	CHARACTER	80	CIRSCMSG	Scan message text
866	(362)	X'52	0	CIRGW1LN	**CIRGWORK" Length of first mapping

Comment

-----  
 Second mapping of CIRGWORK used by IRPL  
 -----

End of Comment

864	(360)	BITSTRING	0	CIRS99RB	SVC 99 REQUEST BLOCK
864	(360)	SIGNED	4	CIRS99PT (0)	SVC 99 REQUEST BLOCK POINTER
864	(360)	CHARACTER	121	CIRNLLNE (0)	NPLLOG OUTPUT LINE
864	(360)	CHARACTER	1	CIRNLLCC	CARRIAGE CONTROL

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
865	(361)	CHARACTER	10	CIRNLLSR	STATEMENT/DIAGNOSTIC SOURCE
878	(36E)	CHARACTER	5	CIRNLLSH	STATEMENT NUMBER TEXT
883	(373)	CHARACTER	6	CIRNLLSN	STATEMENT NUMBER
883	(373)	X'1E '	0	CIRNLLL1	**-CIRNLLSR" LENGTH OF FIRST PART OF LINE
895	(37F)	CHARACTER	10		BLANKS
905	(389)	CHARACTER	80	CIRNLLST	STATEMENT (ALL OR PART)
988	(3DC)	SIGNED	4	CIRX19PS (0)	PARAMETER LIST FOR EXIT 19
988	(3DC)	ADDRESS	4	CIRSTMTA	IRPL PARM STATEMENT ADDR
992	(3E0)	ADDRESS	4	CIRSTMTL	IRPL PARM STATEMENT LEN
996	(3E4)	ADDRESS	4	CIRINSSA	EXIT 19 INSERT STATEMENT ADDR
1000	(3E8)	ADDRESS	4	CIRINSSL	EXIT 19 INSERT STATEMENT LEN
1004	(3EC)	ADDRESS	1	CIRSWARN	\$SCAN WARNING MASK
1005	(3ED)	ADDRESS	3		RESERVED FOR FUTURE USE
1008	(3F0)	ADDRESS	4	CIRPLWRK	IRPL 24 bit work area
1008	(3F0)	X'94 '	0	CIRGW2LN	**-CIRGWORK" Length of second mapping

Comment

-----  
 Third mapping of CIRGWORK used by IRPOSTPL  
 -----

End of Comment

864	(360)	X' '	0	CIRGW3LN	**-CIRGWORK" Length of third mapping
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Comment

-----  
 Fourth mapping of CIRGWORK used by IRDA  
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End of Comment

864	(360)	CHARACTER	8	CIRCURRC	\$CKVTAB current value for \$HASP496 message
872	(368)	CHARACTER	8	CIRPREVC	\$CKVTAB previous value for \$HASP496 message
880	(370)	ADDRESS	4	CIRSPLF	FIRST SPL IN WORK CHAIN
884	(374)	ADDRESS	4	CIRSPLL	LAST SPL IN WORK CHAIN
888	(378)	ADDRESS	4	CIRMSTRS	ADDR OF MSTR REC SAVE AREA
892	(37C)	ADDRESS	4	CIRTOTA	ADDR OF TEMP TRACK-1 TABLE
896	(380)	ADDRESS	4	CIRCURDS	CKG ADDRESS OF CURRENT DS
900	(384)	ADDRESS	4	CIRALTDS	CKG address of other DS
904	(388)	SIGNED	4	CIRCOUNT	LOCK RETRY COUNT
908	(38C)	SIGNED	2	CIRCLREC	SIZE OF CHLOG FROM INIT
910	(38E)	BITSTRING	1	CIRIRDA2	IRDA flags 2

Comment

CIRIRDA2 bit definitions

End of Comment

910	(38E)	BITSTRING	0	CIRCKVWR	"B'10000000" Init deck error encountered
910	(38E)	BITSTRING	0	CIRCKVER	"B'01000000" Only a warning is needed
910	(38E)	BITSTRING	0	CIRCKVTM	"B'00100000" Terminating error detected
911	(38F)	BITSTRING	1		Reserved

Comment

CTRACE PLISTVER=1,MF=L CTRACE parameter list  
 MACDATE -98/06/17-<2>

End of Comment

0	(0)	X'90 '	0	M00M0005	"CIRCTLST" ++ CTRACE NAME
912	(390)	DBL WORD	8	CIRCTLST (0)	++ CTRACE PARM LIST
912	(390)	BITSTRING	1	CIRCTLST_XVERSION	++ INPUT XVERSION

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
913	(391)	CHARACTER	3	CIRCTLST_XRSV0000	++ RESERVED XRSV0000
916	(394)	SIGNED	4	CIRCTLST_XSERVICE	++ XSERVICE
916	(394)	X'1 '	0	CIRCTLST_DEFINE	"1" ++ XSERVICE.DEFINE KEYWORD
916	(394)	X'2 '	0	CIRCTLST_DELETE	"2" ++ XSERVICE.DELETE KEYWORD
920	(398)	CHARACTER	8	CIRCTLST_XNAME	++ XNAME
928	(3A0)	CHARACTER	8	CIRCTLST_XSTARTNAM	++ XSTARTNAM
936	(3A8)	CHARACTER	8	CIRCTLST_XFMTTAB	++ XFMTTAB
944	(3B0)	BITSTRING	1	CIRCTLST_XFLG1	++ FIELD_LABEL
944	(3B0)	BITSTRING	0	CIRCTLST_XASIDS_YES	"B'10000000" ++ XASIDS.YES KEYWORD
944	(3B0)	BITSTRING	0	CIRCTLST_XBUFFER_YES	"B'01000000" ++ XBUFFER.YES KEYWORD
944	(3B0)	BITSTRING	0	CIRCTLST_XJOBS_YES	"B'00100000" ++ XJOBS.YES KEYWORD
944	(3B0)	BITSTRING	0	CIRCTLST_KEYUSED_MINOPS	"B'00010000" ++ KEYUSED.MINOPS KEYWORD
944	(3B0)	BITSTRING	0	CIRCTLST_XMOD_YES	"B'00001000" ++ XMOD.YES KEYWORD
944	(3B0)	BITSTRING	0	CIRCTLST_XBUFDEFIN_YES	"B'00000100" ++ XBUFDEFIN.YES KEYWORD
944	(3B0)	BITSTRING	0	CIRCTLST_XWTR_YES	"B'00000010" ++ XWTR.YES KEYWORD
945	(3B1)	BITSTRING	1	CIRCTLST_XFLG2	++ FIELD_LABEL
945	(3B1)	BITSTRING	0	CIRCTLST_XLIKEHEAD_YES	"B'10000000" ++ XLIKEHEAD.YES KEYWORD
945	(3B1)	BITSTRING	0	CIRCTLST_XHEAD_YES	"B'01000000" ++ XHEAD.YES KEYWORD
945	(3B1)	BITSTRING	0	CIRCTLST_XHEADOPTS_YES	"B'00100000" ++ XHEADOPTS.YES KEYWORD
945	(3B1)	BITSTRING	0	CIRCTLST_XMANYSUBS_YES	"B'00010000" ++ XMANYSUBS.YES KEYWORD
945	(3B1)	BITSTRING	0	CIRCTLST_XWTRMODE_PAGEABLE	"B'00001000" ++ XWTRMODE.PAGEABLE KEYWORD
945	(3B1)	BITSTRING	0	CIRCTLST_XWTRMODE_DREF	"B'00000100" ++ XWTRMODE.DREF KEYWORD
945	(3B1)	BITSTRING	0	CIRCTLST_XWTRMODE_FIXED	"B'00000010" ++ XWTRMODE.FIXED KEYWORD
946	(3B2)	BITSTRING	1	CIRCTLST_XFLG3	++ FIELD_LABEL
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_SUB	"B'10000000" ++ KEYUSED.SUB KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_PARM	"B'01000000" ++ KEYUSED.PARM KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_BUFMIN	"B'00100000" ++ KEYUSED.BUFMIN KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_BUFMAX	"B'00010000" ++ KEYUSED.BUFMAX KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_BUFDFLT	"B'00001000" ++ KEYUSED.BUFDFLT KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_SSRC	"B'00000100" ++ KEYUSED.SSRC KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_SSR SNC	"B'00000010" ++ KEYUSED.SSR SNC KEYWORD
946	(3B2)	BITSTRING	0	CIRCTLST_KEYUSED_IFNOSUBS	"B'00000001" ++ KEYUSED.IFNOSUBS KEYWORD

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
947	(3B3)	BITSTRING	1	CIRCTLST_XFLG4	++ FIELD_LABEL
947	(3B3)	BITSTRING	0	CIRCTLST_KEYUSED_USERDATA	"B'10000000" ++ KEYUSED.USERDATA KEYWORD
948	(3B4)	ADDRESS	4	CIRCTLST_XLNKPARM	++ FIELD_LABEL XLNKPARM
952	(3B8)	ADDRESS	4	CIRCTLST_XMINOPS_ADDR	++ ADDR XMINOPS
956	(3BC)	BITSTRING	2	CIRCTLST_XMINOPS_LEN	++ FIELD_LABEL XMINOPS_LEN
958	(3BE)	CHARACTER	16	CIRCTLST_XUSERDATA	++ XUSERDATA
974	(3CE)	CHARACTER	2	CIRCTLST_XRVS0002	++ FIELD_LABEL XRVS0002
976	(3D0)	SIGNED	4	CIRCTLST_XBUFMIN	++ XBUFMIN
980	(3D4)	SIGNED	4	CIRCTLST_XBUFMAX	++ XBUFMAX
984	(3D8)	SIGNED	4	CIRCTLST_XBUFDFLT	++ XBUFDFLT
988	(3DC)	ADDRESS	4	CIRCTLST_XSUB_ADDR	++ ADDR XSUB
992	(3E0)	BITSTRING	2	CIRCTLST_XSUB_LEN	++ FIELD_LABEL XSUB_LEN
994	(3E2)	CHARACTER	2	CIRCTLST_XRVS0003	++ FIELD_LABEL XRVS0003
996	(3E4)	CHARACTER	8	CIRCTLST_XPARAM	++ XPARAM
1004	(3EC)	SIGNED	4	CIRCTLST_XSSRC	++ XSSRC
1008	(3F0)	SIGNED	4	CIRCTLST_XSSRSNC	++ XSSRSNC
1008	(3F0)	X'F4	0	CIRCTLST_PL_END	*** ++ END OF BASE PLIST
1008	(3F0)	X'64	0	CIRCTLSTL	**CIRCTLST" ++ LENGTH OF PLIST

Comment

CTRACE-2

End of Comment

1012	(3F4)	ADDRESS	4	(0)	Force work alignment
1012	(3F4)	BITSTRING	16	CIRCTUSR (0)	CTRACE userdata
1012	(3F4)	ADDRESS	4	CIRCTBUF	Addr of data area
1016	(3F8)	ADDRESS	4	CIRCTBLN	Length of data area
1020	(3FC)	SIGNED	2	CIRCTASI	Address space id of data
1022	(3FE)	BITSTRING	6		Reserved
1028	(404)	CHARACTER	8	CIRCTNAM	CTRACE component name
1036	(40C)	BITSTRING	1	CIRJOTES	JOT ERROR SWITCH
1037	(40D)	BITSTRING	1	CIRIRDAF	IRDA ERROR SWITCH

Comment

CIRIRDAF BIT DEFINITIONS

End of Comment

1037	(40D)	BITSTRING	0	CIRWMER	"B'10000000" SPL VOL ERROR DURING WARM START
1037	(40D)	BITSTRING	0	CIREXPRF	"B'01000000" EXTRA VOLUMES WITH SPOOL PREFIX
1037	(40D)	BITSTRING	0	CIRMAXQT	"B'00100000" MAX VOLUMES, OPERATOR SAID QUIT
1037	(40D)	BITSTRING	0	CIRSPLGE	"B'00010000" EXTENT TOO LARGE FOR TRCK GRPS
1037	(40D)	BITSTRING	0	CIRCLGSZ	"B'00001000" LOG SIZE MUST BE CALCULATED
1037	(40D)	BITSTRING	0	CIRJOTEC	"B'00000010" JOT Error correction comp.
1037	(40D)	BITSTRING	0	CIRJOTRB	"B'00000001" JOT rebuild completed
1037	(40D)	X'3	0	CIRJOTV	"CIRJOTEC+CIRJOTRB" JOT Verification Completed

# \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1038	(40E)	BITSTRING	1	CIRIRDA1	IRDA FLAG BYTE
Comment					
CIRIRDA1 BIT DEFINITIONS					
End of Comment					
1038	(40E)	BITSTRING	0	CIRMSGIS	"B'10000000" HASP488 MESSAGE ISSUED
1038	(40E)	BITSTRING	0	CIRFWDDS	"B'01000000" A FORWARDED DATASET FOUND
1038	(40E)	BITSTRING	0	CIRDONFW	"B'00100000" FORWARDED DS PROC DONE
1038	(40E)	BITSTRING	0	CIRFFWD	"B'00010000" A DS HAS BEEN FORWARDED
1038	(40E)	BITSTRING	0	CIRCHUIS	"B'00001000" INUSE INDICATOR HAS CHANGED
1038	(40E)	BITSTRING	0	CIRI460	"B'00000100" HASP460 was issued
1038	(40E)	BITSTRING	0	CIRI416	"B'00000010" Need to issue HASP416
1038	(40E)	BITSTRING	0	CIRNODAT	"B'00000001" CKPT data not useable
1039	(40F)	BITSTRING	1	CIRPARMF	PARAMETER FLAG BYTE
1040	(410)	SIGNED	4	CIRPARML (0)	GENERIC PARM LIST
1040	(410)	SIGNED	4	CIRPARM1	PARM 1
1044	(414)	SIGNED	4	CIRPARM2	PARM 2
1048	(418)	SIGNED	4	CIRPARM3	PARM 3
1052	(41C)	SIGNED	4	CIRPARM4	PARM 4
1056	(420)	SIGNED	4	CIRPARM5	PARM 5
1060	(424)	SIGNED	4	CIRPARM6	PARM 6
1060	(424)	X'F 00019'	0	CIRPARMS	"CIRPARMF,*-CIRPARMF" FULL PARAMETER LIST
1064	(428)	SIGNED	4	CIRFWCNT	COUNT FORWARDED DATA SET
1068	(42C)	CHARACTER	0	CIRCKPT1	CKPT1 SPEC SAVE AREA
1068	(42C)	CHARACTER	0	CIRCKPT2	CKPT2 SPEC SAVE AREA
1068	(42C)	CHARACTER	0	CIRCHFES	CURRENT STATE OF CKPT ALOC
1068	(42C)	BITSTRING	0	CIRIDMEM	'In-Doubt' members mask
1068	(42C)	ADDRESS	4	CIRM791W	CBADDR for HASP791 message
1072	(430)	SIGNED	4	CIRECBLS (0)	List of ECBs to wait on
1072	(430)	ADDRESS	4	CIRECBA1	Pointer to ECB 1
1076	(434)	ADDRESS	4	CIRECBA2	Pointer to ECB 2
1080	(438)	ADDRESS	4	CIRECBA3	Pointer to ECB 3
1084	(43C)	SIGNED	4	CIRECB1	1st ECB
1088	(440)	SIGNED	4	CIRECB2	2nd ECB
1092	(444)	SIGNED	4	CIRECB3	3rd ECB
1096	(448)	CHARACTER	70	CIRDIAGR	Init dialog reason text
1096	(448)	X'2E	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 -02/18/00-<1>

End of Comment

0	(0)	X'60	0	M00M0008	"CIRCAPU" ++ IOSCAPU NAME
864	(360)	DBL WORD	8	CIRCAPU (0)	++ IOSCAPU PARM LIST
864	(360)	BITSTRING	1	CIRCAPU_XVERSION	++ INPUT XVERSION
865	(361)	BITSTRING	1	CIRCAPU_XFLAGS1	++ FIELD_LABEL
865	(361)	BITSTRING	0	CIRCAPU_KEYUSED_CAPTUCB	"B'10000000" ++ KEYUSED.CAPTUCB KEYWORD
865	(361)	BITSTRING	0	CIRCAPU_KEYUSED_UCAPTUCB	"B'01000000" ++ KEYUSED.UCAPTUCB KEYWORD

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
865	(361)	BITSTRING	0	CIRCAPU_KEYUSED_CAPTOACT	"B'00100000" ++ KEYUSED.CAPTOACT KEYWORD
865	(361)	BITSTRING	0	CIRCAPU_KEYUSED_ASID	"B'00010000" ++ KEYUSED.ASID KEYWORD
865	(361)	BITSTRING	0	CIRCAPU_KEYUSED_UCBPTR	"B'00001000" ++ KEYUSED.UCBPTR KEYWORD
865	(361)	BITSTRING	0	CIRCAPU_KEYUSED_CAPTPTR	"B'00000100" ++ KEYUSED.CAPTPTR KEYWORD
866	(362)	CHARACTER	2	CIRCAPU_XRESERVED1	++ FIELD_LABEL XRESERVED1
868	(364)	ADDRESS	4	CIRCAPU_XUCBPTR	++ XUCBPTR
872	(368)	ADDRESS	4	CIRCAPU_XCAPTPTR	++ XCAPTPTR
876	(36C)	CHARACTER	1	CIRCAPU_XRESERVED2	++ FIELD_LABEL XRESERVED2
877	(36D)	BITSTRING	1	CIRCAPU_XMASK	++ FIELD_LABEL
877	(36D)	BITSTRING	0	CIRCAPU_XMSIFREE_YES	"B'10000000" ++ XMSIFREE.YES KEYWORD
877	(36D)	BITSTRING	0	CIRCAPU_XLASTING_YES	"B'01000000" ++ XLASTING.YES KEYWORD
877	(36D)	BITSTRING	0	CIRCAPU_XCAPTCOM_YES	"B'00100000" ++ XCAPTCOM.YES KEYWORD
878	(36E)	BITSTRING	2	CIRCAPU_XASID	++ XASID
880	(370)	CHARACTER	16	CIRCAPU_XRESERVED3	++ FIELD_LABEL XRESERVED3
880	(370)	X'20	0	CIRCAPUL	**CIRCAPU" ++ LENGTH OF PLIST
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					
864	(360)	ADDRESS	4	CIRSJLSP	SJF LOCAL STORAGE POINTER
868	(364)	ADDRESS	4	CIRSJPTR	SWB SJF POINTER
872	(368)	BITSTRING	0	CIRSJEXP	SJF EXTRACT PARAMETER LIST
872	(368)	CHARACTER	0	CIRFPTX	FOOTPRINT AREA FOR \$GKINIT
872	(368)	SIGNED	1	CIRFPLN	FOOTPRINT LENGTH
873	(369)	CHARACTER	3	CIRRSV1	RESERVED FOR FUTURE USE
873	(369)	X'C	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					
864	(360)	CHARACTER	120	CIRM500A	
864	(360)	X'78	0	CIRGW7LN	**CIRGWORK" Length of seventh mapping

## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
Eighth mapping of CIRGWORK used by IRFINAL, IRNJE and IRRJE.					
-----					
End of Comment					
864	(360)	SIGNED	4	CIRCMSTR (0)	Full word alignment
864	(360)	CHARACTER	4		CPLTAB ID
868	(364)	ADDRESS	1		CPLTAB Version
869	(365)	ADDRESS	1		Sub Pool ID (non-JES2 AS)
870	(366)	ADDRESS	1		Sub Pool number (JES2 AS)
871	(367)	ADDRESS	1		Storage Key
872	(368)	ADDRESS	4		CPINDEX offset
876	(36C)	CHARACTER	8		Cell Type
884	(374)	ADDRESS	4		Cell size
888	(378)	ADDRESS	1		General flags
889	(379)	ADDRESS	1		Location flags
890	(37A)	ADDRESS	1		Data space flags
891	(37B)	BITSTRING	1		Reserved for future use
892	(37C)	ADDRESS	4		Limit of num of cells
896	(380)	ADDRESS	4		Primary cell count
900	(384)	ADDRESS	4		Secondary cell count
900	(384)	X'28	0	CIRGW8LN	**CIRGWORK" Length of eighth mapping
Comment					
-----					
Ninth mapping of CIRGWORK used by IRSSI					
-----					
End of Comment					
864	(360)	ADDRESS	4	CIRETDEF	Local ETDEF work area
Comment					
-----					
This is mapping of CIRGWORK used by CSVDYNEX for Multi System Dump					
-----					
MACDATE -11/10/99-<0>					
-----					
End of Comment					
0	(0)	X'68	0	M00M0012	"CIRDYNEX" ++ CSVDYNEX NAME
872	(368)	DBL WORD	8	CIRDYNEX (0)	++ CSVDYNEX PARM LIST
872	(368)	BITSTRING	1	CIRDYNEX_XVERSION	++ INPUT XVERSION
873	(369)	BITSTRING	1	CIRDYNEX_XREQUEST	++ XREQUEST
873	(369)	X' '	0	CIRDYNEX_XREQUEST_DEFINE	"0" ++ XREQUEST.DEFINE KEYWORD
873	(369)	X'1	0	CIRDYNEX_XREQUEST_ADD	"1" ++ XREQUEST.ADD KEYWORD
873	(369)	X'2	0	CIRDYNEX_XREQUEST_MODIFY	"2" ++ XREQUEST.MODIFY KEYWORD
873	(369)	X'3	0	CIRDYNEX_XREQUEST_DELETE	"3" ++ XREQUEST.DELETE KEYWORD
873	(369)	X'4	0	CIRDYNEX_XREQUEST_UNDEFINE	"4" ++ XREQUEST.UNDEFINE KEYWORD
873	(369)	X'5	0	CIRDYNEX_XREQUEST_ATTRIB	"5" ++ XREQUEST.ATTRIB KEYWORD
873	(369)	X'6	0	CIRDYNEX_XREQUEST_LIST	





## \$CIRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
881	(371)	BITSTRING	0	CIRDYNEX_XRETINFO_ALL	"B'01000000" ++ XRETINFO.LOWEST KEYWORD
881	(371)	BITSTRING	0	CIRDYNEX_XRETINFO_LAST	"B'00100000" ++ XRETINFO.ALL KEYWORD
881	(371)	BITSTRING	0	CIRDYNEX_XQTYPE_ADD	"B'00010000" ++ XRETINFO.LAST KEYWORD
882	(372)	BITSTRING	1	CIRDYNEX_XPOS	"B'00001000" ++ XQTYPE.ADD KEYWORD
882	(372)	X' '	0	CIRDYNEX_XPOS_SYSTEM	++ XPOS "0" ++ XPOS.SYSTEM KEYWORD
882	(372)	X'1 '	0	CIRDYNEX_XPOS_LAST	"1" ++ XPOS.LAST KEYWORD
882	(372)	X'2 '	0	CIRDYNEX_XPOS_FIRST	"2" ++ XPOS.FIRST KEYWORD
883	(373)	BITSTRING	1	CIRDYNEX_XEXAAVER	++ XEXAAVER
883	(373)	X' '	0	CIRDYNEX_XEXAAVER_0	"0" ++ XEXAAVER.0 KEYWORD
883	(373)	X'1 '	0	CIRDYNEX_XEXAAVER_1	"1" ++ XEXAAVER.1 KEYWORD
884	(374)	CHARACTER	4	CIRDYNEX_XRSV0002	++ RESERVED XRSV0002
888	(378)	CHARACTER	16	CIRDYNEX_XEXITNAME	++ XEXITNAME
904	(388)	CHARACTER	8	CIRDYNEX_XMODNAME	++ XMODNAME
912	(390)	ADDRESS	4	CIRDYNEX_XCMDINFO_ADDR	++ ADDR XCMDINFO
916	(394)	SIGNED	4	CIRDYNEX_XABENDNUM	++ XABENDNUM
920	(398)	SIGNED	4	CIRDYNEX_XRCTO	++ XRCTO
924	(39C)	SIGNED	4	CIRDYNEX_XRCFROM	++ XRCFROM
928	(3A0)	SIGNED	4	CIRDYNEX_XKEEPRC	++ XKEEPRC
932	(3A4)	BITSTRING	1	CIRDYNEX_XKEEPRCCOMP	++ XKEEPRCCOMP
932	(3A4)	X' '	0	CIRDYNEX_XKEEPRCCOMP_EQ	"0" ++ XKEEPRCCOMP.EQ KEYWORD
932	(3A4)	X'1 '	0	CIRDYNEX_XKEEPRCCOMP_NE	"1" ++ XKEEPRCCOMP.NE KEYWORD
932	(3A4)	X'2 '	0	CIRDYNEX_XKEEPRCCOMP_GT	"2" ++ XKEEPRCCOMP.GT KEYWORD
932	(3A4)	X'3 '	0	CIRDYNEX_XKEEPRCCOMP_LT	"3" ++ XKEEPRCCOMP.LT KEYWORD
932	(3A4)	X'4 '	0	CIRDYNEX_XKEEPRCCOMP_GE	"4" ++ XKEEPRCCOMP.GE KEYWORD
932	(3A4)	X'5 '	0	CIRDYNEX_XKEEPRCCOMP_LE	"5" ++ XKEEPRCCOMP.LE KEYWORD
933	(3A5)	BITSTRING	1	CIRDYNEX_XRCCOMPARE	++ XRCCOMPARE
933	(3A5)	X' '	0	CIRDYNEX_XRCCOMPARE_EQ	"0" ++ XRCCOMPARE.EQ KEYWORD
933	(3A5)	X'1 '	0	CIRDYNEX_XRCCOMPARE_NE	"1" ++ XRCCOMPARE.NE KEYWORD
933	(3A5)	X'2 '	0	CIRDYNEX_XRCCOMPARE_GT	"2" ++ XRCCOMPARE.GT KEYWORD
933	(3A5)	X'3 '	0	CIRDYNEX_XRCCOMPARE_LT	"3" ++ XRCCOMPARE.LT KEYWORD
933	(3A5)	X'4 '	0	CIRDYNEX_XRCCOMPARE_GE	"4" ++ XRCCOMPARE.GE KEYWORD
933	(3A5)	X'5 '	0	CIRDYNEX_XRCCOMPARE_LE	"5" ++ XRCCOMPARE.LE KEYWORD

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
934	(3A6)	CHARACTER	1	CIRDYNEX_XRSV0003	"5" ++ XRCCOMPARE.LE KEYWORD ++ RESERVED XRSV0003
935	(3A7)	BITSTRING	1	CIRDYNEX_XEXRETVER	++ XEXRETVER
935	(3A7)	X' '	0	CIRDYNEX_XEXRETVER_0	"0" ++ XEXRETVER.0 KEYWORD
935	(3A7)	X'1 '	0	CIRDYNEX_XEXRETVER_1	"1" ++ XEXRETVER.1 KEYWORD
936	(3A8)	SIGNED	4	CIRDYNEX_XCALLSTOPRC	++ XCALLSTOPRC
940	(3AC)	CHARACTER	44	CIRDYNEX_XRSVNNNN	++ RESERVED XRSVNNNN
940	(3AC)	X'D8 '	0	CIRDYNEX_PL_END	*** ++ END OF BASE PLIST
916	(394)	SIGNED	4	CIRDYNEX_XADDABENDNUM	++ XADDABENDNUM
932	(3A4)	BITSTRING	1	CIRDYNEX_XKEEPRCCVAL	++ XKEEPRCCVAL
933	(3A5)	BITSTRING	1	CIRDYNEX_XRCCVAL	++ XRCCVAL
940	(3AC)	ADDRESS	4	CIRDYNEX_XWORKAREA_ADDR	++ ADDR XWORKAREA
944	(3B0)	ADDRESS	4	CIRDYNEX_XRETAREA_ADDR	++ ADDR XRETAREA
948	(3B4)	SIGNED	4	CIRDYNEX_XRETAREA_ALET	++ ALET XRETAREA
952	(3B8)	SIGNED	4	CIRDYNEX_XRETLEN	++ XRETLEN
956	(3BC)	ADDRESS	4	CIRDYNEX_XRUB_ADDR	++ ADDR XRUB
960	(3C0)	SIGNED	4	CIRDYNEX_XRUB_ALET	++ ALET XRUB
964	(3C4)	CHARACTER	8	CIRDYNEX_XNEXTTOKEN	++ XNEXTTOKEN
972	(3CC)	ADDRESS	4	CIRDYNEX_XSDWA_ADDR	++ ADDR XSDWA
940	(3AC)	ADDRESS	4	CIRDYNEX_XANSAREA_ADDR	++ ADDR XANSAREA
944	(3B0)	SIGNED	4	CIRDYNEX_XANSAREA_ALET	++ ALET XANSAREA
948	(3B4)	SIGNED	4	CIRDYNEX_XANSLEN	++ XANSLEN
940	(3AC)	ADDRESS	4	CIRDYNEX_XDSNAME_ADDR	++ ADDR XDSNAME
944	(3B0)	SIGNED	4	CIRDYNEX_XDSNAME_ALET	++ ALET XDSNAME
948	(3B4)	CHARACTER	8	CIRDYNEX_XJOBNAME	++ XJOBNAME
956	(3BC)	ADDRESS	4	CIRDYNEX_XMODADDR	++ XMODADDR
960	(3C0)	CHARACTER	8	CIRDYNEX_XPARAM	++ XPARAM
948	(3B4)	CHARACTER	8	CIRDYNEX_XSTOKEN	++ XSTOKEN
984	(3D8)	X'70 '	0	CIRDYNEXL	**CIRDYNEX" ++ LENGTH OF PLIST
Comment					
CSV DYNEX-0					
End of Comment					
0	(0)	X'78 '	0	CIRGW9LN	**CIRGWORK" Length of ninth mapping

## \$CIRWORK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
-----					
End of CIRGWORK mappings.					
-----					
					End of Comment
984	(3D8)	ADDRESS	2	(0)	Ensure that
984	(3D8)	ADDRESS	2	(0)	CIRGWORK is
984	(3D8)	ADDRESS	2	(0)	larger than
984	(3D8)	ADDRESS	2	(0)	each of the
984	(3D8)	ADDRESS	2	(0)	individual
984	(3D8)	ADDRESS	2	(0)	mappings of
984	(3D8)	ADDRESS	2	(0)	the data
984	(3D8)	ADDRESS	2	(0)	area
1464	(5B8)	SIGNED	4	(0)	
1464	(5B8)	X' '	0	CIRWLEN	** -PCEWORK" LENGTH OF CIR PCE WORK
1464	(5B8)	X'B8 '	0	CIRLEN	** -PCE" LENGTH OF INIT PCE

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CIRACCTJ	138			370	
CIRACCTN	13C		CIRCAPU_XUCBPTR		
CIRALTDS	384			364	
CIRBLDM	1E4	C2D3C440	CIRCAPU_XVERSION		
CIRBTGFA	1A8			360	
CIRBTGLA	1AC		CIRCAPUL	370	20
CIRBTPRC	A2		CIRCHFES	42C	
CIRCAPU	360		CIRCHIUS	40E	8
CIRCAPU_KEYUSED_ASID			CIRCKPT1	42C	
	361	10	CIRCKPT2	42C	
CIRCAPU_KEYUSED_CAPTOACT			CIRCKVER	38E	40
	361	20	CIRCKVTM	38E	20
CIRCAPU_KEYUSED_CAPTPTR			CIRCKVWR	38E	80
	361	4	CIRCLGSZ	40D	8
CIRCAPU_KEYUSED_CAPTUCB			CIRCLREC	38C	
	361	80	CIRCMTDB	194	
CIRCAPU_KEYUSED_UCAPTUCB			CIRCMSTR	360	
	361	40	CIRCMTSV	120	0
CIRCAPU_KEYUSED_UCBPTR			CIRCNECT	1BC	
	361	8	CIRCOUNT	388	
CIRCAPU_XASID			CIRCTASI	3FC	
	36E		CIRCTBLN	3F8	
CIRCAPU_XCAPTCOM_YES			CIRCTBUF	3F4	
	36D	20	CIRCTLST	390	
CIRCAPU_XCAPTPTR			CIRCTLST_DEFINE		
	368			394	1
CIRCAPU_XFLAGS1			CIRCTLST_DELETE		
	361			394	2
CIRCAPU_XLASTING_YES			CIRCTLST_KEYUSED_BUFDFLT		
	36D	40		3B2	8
CIRCAPU_XMASK			CIRCTLST_KEYUSED_BUFMAX		
	36D			3B2	10
CIRCAPU_XMSIFREE_YES			CIRCTLST_KEYUSED_BUFMIN		
	36D	80		3B2	20
CIRCAPU_XRESERVED1			CIRCTLST_KEYUSED_IFNOSUBS		
	362			3B2	1
CIRCAPU_XRESERVED2			CIRCTLST_KEYUSED_MINOPS		
	36C			3B0	10
CIRCAPU_XRESERVED3			CIRCTLST_KEYUSED_PARM		

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	3B2	40	CIRCTLST_XSSRSNC		
CIRCTLST_KEYUSED_SSRC				3F0	
	3B2	4	CIRCTLST_XSTARTNAM		
CIRCTLST_KEYUSED_SSRSNC				3A0	
	3B2	2	CIRCTLST_XSUB_ADDR		
CIRCTLST_KEYUSED_SUB				3DC	
	3B2	80	CIRCTLST_XSUB_LEN		
CIRCTLST_KEYUSED_USERDATA				3E0	
	3B3	80	CIRCTLST_XUSERDATA		
CIRCTLST_PL_END				3BE	
	3F0	F4	CIRCTLST_XVERSION		
CIRCTLST_XASIDS_YES				390	
	3B0	80	CIRCTLST_XWTR_YES		
CIRCTLST_XBUFDEFIN_YES				3B0	2
	3B0	4	CIRCTLST_XWTRMODE_DREF		
CIRCTLST_XBUFDFLT				3B1	4
	3D8		CIRCTLST_XWTRMODE_FIXED		
CIRCTLST_XBUFFER_YES				3B1	2
	3B0	40	CIRCTLST_XWTRMODE_PAGEABLE		
CIRCTLST_XBUFMAX				3B1	8
	3D4		CIRCTLSTL		64
CIRCTLST_XBUFMIN			CIRCTNAM		404
	3D0		CIRCTUSR		3F4
CIRCTLST_XFLG1			CIRCURDS		380
	3B0		CIRCURRC		360
CIRCTLST_XFLG2			CIRDIAGR		448
	3B1		CIRDOMID		1B8
CIRCTLST_XFLG3			CIRDONFW		40E 20
	3B2		CIRDWORK		10 0
CIRCTLST_XFLG4			CIRDYNEX		368
	3B3		CIRDYNEX_KEYUSED_CALLSTOPRC		
CIRCTLST_XFMTTAB				36A	80
	3A8		CIRDYNEX_KEYUSED_KEEPRC		
CIRCTLST_XHEAD_YES				36A	20
	3B1	40	CIRDYNEX_KEYUSED_RCFROM		
CIRCTLST_XHEADOPTS_YES				36A	40
	3B1	20	CIRDYNEX_KEYUSED_STOKEN		
CIRCTLST_XJOBS_YES				370	1
	3B0	20	CIRDYNEX_PL_END		
CIRCTLST_XLIKEHEAD_YES				3AC	D8
	3B1	80	CIRDYNEX_XABENDCONSEC_YES		
CIRCTLST_XLNKPARM				370	4
	3B4		CIRDYNEX_XABENDNUM		
CIRCTLST_XMANYSUBS_YES				394	
	3B1	10	CIRDYNEX_XADDABENDNUM		
CIRCTLST_XMINOPS_ADDR				394	
	3B8		CIRDYNEX_XAMODE		
CIRCTLST_XMINOPS_LEN				36B	
	3BC		CIRDYNEX_XAMODE_DEFINED		
CIRCTLST_XMOD_YES				36B	2
	3B0	8	CIRDYNEX_XAMODE_24		
CIRCTLST_XNAME				36B	1
	398		CIRDYNEX_XAMODE_31		
CIRCTLST_XPARM				36B	
	3E4		CIRDYNEX_XANSAREA_ADDR		
CIRCTLST_XRSV0000				3AC	
	391		CIRDYNEX_XANSAREA_ALET		
CIRCTLST_XRVS0002				3B0	
	3CE		CIRDYNEX_XANSLEN		
CIRCTLST_XRVS0003				3B4	
	3E2		CIRDYNEX_XANYKEY_YES		
CIRCTLST_XSERVICE				370	8
	394		CIRDYNEX_XCALLSTOPRC		
CIRCTLST_XSSRC				3A8	
	3EC		CIRDYNEX_XCMDINFO_ADDR		

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	390		CIRDYNEX_XPERSIST_ADDRESSSPACE		
CIRDYNEX_XDSNAME_ADDR	3AC			370	20
CIRDYNEX_XDSNAME_ALET	3B0		CIRDYNEX_XPERSIST_IPL	370	10
CIRDYNEX_XEXAAVER	373		CIRDYNEX_XPOS		
CIRDYNEX_XEXAAVER_0	373			372	
CIRDYNEX_XEXAAVER_1	373	1	CIRDYNEX_XPOS_FIRST	372	2
CIRDYNEX_XEXITNAME	378		CIRDYNEX_XPOS_LAST	372	1
CIRDYNEX_XEXRETVER	3A7		CIRDYNEX_XPOS_SYSTEM	372	
CIRDYNEX_XEXRETVER_0	3A7			371	8
CIRDYNEX_XEXRETVER_1	3A7	1	CIRDYNEX_XRCCOMPARE	3A5	
CIRDYNEX_XFASTPATH_YES	36A	10	CIRDYNEX_XRCCOMPARE_EQ	3A5	
CIRDYNEX_XFLAGS	36A		CIRDYNEX_XRCCOMPARE_GE	3A5	4
CIRDYNEX_XFLAGS2	370		CIRDYNEX_XRCCOMPARE_GT	3A5	2
CIRDYNEX_XFLAGS3	371		CIRDYNEX_XRCCOMPARE_LE	3A5	5
CIRDYNEX_XFORCE_YES	370	40	CIRDYNEX_XRCCOMPARE_LT	3A5	3
CIRDYNEX_XJOBNAME	3B4		CIRDYNEX_XRCCOMPARE_NE	3A5	1
CIRDYNEX_XKEEPRC	3A0		CIRDYNEX_XRCCVAL	3A5	
CIRDYNEX_XKEEPRCCOMP	3A4		CIRDYNEX_XRCFROM	39C	
CIRDYNEX_XKEEPRCCOMP_EQ	3A4		CIRDYNEX_XRCTO	398	
CIRDYNEX_XKEEPRCCOMP_GE	3A4	4	CIRDYNEX_XREENTRANT_REQ	36A	8
CIRDYNEX_XKEEPRCCOMP_GT	3A4	2	CIRDYNEX_XREQUEST	369	
CIRDYNEX_XKEEPRCCOMP_LE	3A4	5		369	
CIRDYNEX_XKEEPRCCOMP_LT	3A4	3	CIRDYNEX_XREQUEST_ACTIVATE	369	A
CIRDYNEX_XKEEPRCCOMP_NE	3A4	1	CIRDYNEX_XREQUEST_ADD	369	1
CIRDYNEX_XKEEPRCCVAL	3A4		CIRDYNEX_XREQUEST_ATTRIB	369	5
CIRDYNEX_XKEY	36C		CIRDYNEX_XREQUEST_CALL	369	7
CIRDYNEX_XLINKSTACKOK_NO	370	2	CIRDYNEX_XREQUEST_DEFINE	369	
CIRDYNEX_XMESSAGE_ERROR	36A	4	CIRDYNEX_XREQUEST_DELETE	369	3
CIRDYNEX_XMODADDR	3BC		CIRDYNEX_XREQUEST_LIST	369	6
CIRDYNEX_XMODNAME	388		CIRDYNEX_XREQUEST_MODIFY	369	2
CIRDYNEX_XNEXTTOKEN	3C4		CIRDYNEX_XREQUEST_PROCESSDP	369	9
CIRDYNEX_XONEMODULE_YES	370	80	CIRDYNEX_XREQUEST_QUERY	369	B
CIRDYNEX_XPARAM	3C0		CIRDYNEX_XREQUEST_RECOVER	369	8
			CIRDYNEX_XREQUEST_REPLACE	369	C
			CIRDYNEX_XREQUEST_UNDEFIN	369	4
			CIRDYNEX_XRETAREA_ADDR		

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	3B0		CIRF2CM	1	10
CIRDYNEX_XRETAREA_ALET			CIRF2CMA	1	2
	3B4		CIRF2CMT	1	1
CIRDYNEX_XRETINFO_ALL			CIRF2ECM	1	8
	371	20	CIRF2EOF	1	80
CIRDYNEX_XRETINFO_HIGHEST			CIRF2HPO	1	20
	371	80	CIRF2RRD	1	40
CIRDYNEX_XRETINFO_LAST			CIRF2SSE	1	4
	371	10	CIRF3BDV	2	10
CIRDYNEX_XRETINFO_LOWEST			CIRF3ERR	2	F
	371	40	CIRF3IO1	2	8
CIRDYNEX_XRETLEN			CIRF3IO2	2	4
	3B8		CIRF3I1V	2	9
CIRDYNEX_XRSVNNNN			CIRF3I12	2	C
	3AC		CIRF3LOG	2	40
CIRDYNEX_XRSV0002			CIRF3LST	2	80
	374		CIRF3MID	2	20
CIRDYNEX_XRSV0003			CIRF3VE1	2	2
	3A6		CIRF3VE2	2	1
CIRDYNEX_XRUB_ADDR			CIRF3V1I	2	6
	3BC		CIRF3V12	2	3
CIRDYNEX_XRUB_ALET			CIRF4CHD	3	2
	3C0		CIRF4CHM	3	4
CIRDYNEX_XSDWA_ADDR			CIRF4ILL	3	80
	3CC		CIRF4RER	3	8
CIRDYNEX_XSTATE_ACTIVE			CIRF4RES	3	10
	36A	2	CIRF4RTE	3	1
CIRDYNEX_XSTATE_INACTIVE			CIRF4SCN	3	20
	36A	1	CIRF4XER	3	40
CIRDYNEX_XSTOKEN			CIRGEMR	134	
	3B4		CIRGWORK	360	
CIRDYNEX_XVERSION			CIRGW1LN	362	52
	368		CIRGW2LN	3F0	94
CIRDYNEX_XWORKAREA_ADDR			CIRGW3LN	360	
	3AC		CIRGW4LN	448	2E
CIRDYNEXL	3D8	70	CIRGW5LN	0	20
CIRECB	1C	0	CIRGW6LN	369	C
CIRECBA1	430		CIRGW7LN	360	78
CIRECBA2	434		CIRGW8LN	384	28
CIRECBA3	438		CIRGW9LN	0	78
CIRECBLS	430		CIRHCT	18	
CIRECB1	43C		CIRIDMEM	42C	
CIRECB2	440		CIRINFMR	134	
CIRECB3	444		CIRINSSA	3E4	
CIRETDEF	360		CIRINSSL	3E8	
CIREXIT0	24		CIRIQNAM	1C0	E2E8E2E9
CIREXPRF	40D	40	CIRIRDAF	40D	0
CIRFFWD	40E	10	CIRIRDA1	40E	0
CIRFLAG1	0	0	CIRIRDA2	38E	0
CIRFLAG2	1	0	CIRIRNAM	1C8	C9D5C9E3
CIRFLAG3	2		CIRIRPL1	C2	0
CIRFLAG4	3	0	CIRI416	40E	2
CIRFLAG5	12A	0	CIRI460	40E	4
CIRFPLN	368		CIRJBMAX	134	
CIRFPTX	368		CIRJBMIN	130	
CIRFWCNT	428		CIRJNPRC	9E	
CIRFWDDS	40E	40	CIRJOHI	96	FF0
CIRF1CAN	0	4	CIRJLOW	98	0
CIRF1CI	0	20	CIRJOPRC	9C	
CIRF1HPI	0	40	CIRJORAT	94	0
CIRF1JEX	0	80	CIRJOTEC	40D	2
CIRF1PER	0	8	CIRJOTES	40C	
CIRF1SER	0	1	CIRJOTRB	40D	1
CIRF1SSW	0	2	CIRJOTV	40D	3
CIRF1XI	0	10	CIRJQHI	92	

## \$CIRWORK Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
CIRJQLOW	93			CIRSPLF	370	
CIRJQPRC	9A			CIRSPLGE	40D	10
CIRJQRAT	90	0		CIRSPLL	374	
CIRLEN	5B8	B8		CIRSPT	1B0	
CIRLNENM	1D2	0		CIRSTIMC	104	0
CIRMAXQT	40D	20		CIRSTIMS	EC	0
CIRMSGIS	40E	80		CIRSTMCL	104	10
CIRMSTRS	378			CIRSTMSL	EC	18
CIRMWORK	230			CIRSTMTA	3DC	
CIRM500A	360			CIRSTMTC	BC	0
CIRM791W	42C			CIRSTMTL	3E0	
CIRNDCHN	114	0		CIRSTMTT	A8	
CIRNDDOM	114	10	00004	CIRSTMTW	A4	
CIRNDEYE	114	4		CIRSWARN	3EC	
CIRNDLAY	E0			CIRSYMBP	AC	
CIRNDLEN	114	14		CIRS99PT	360	
CIRNDMSG	114	C	00004	CIRS99RB	360	
CIRNDNXT	114	4	00004	CIRTDCTS	19C	
CIRNDSTI	114	8	00004	CIRTGEDM	140	40202020
CIRNLLCC	360			CIRTGPRC	A0	
CIRNLLCT	BE	1		CIRTOTA	37C	
CIRNLLL1	373	1E		CIRTRANL	B4	0
CIRNLLNE	360			CIRTRANR	B8	0
CIRNLLSH	36E			CIRTSTOR	198	
CIRNLLSN	373			CIRVOLTB	190	
CIRNLLSR	361			CIRWLEN	5B8	
CIRNLLST	389			CIRWMER	40D	80
CIRNLPCT	C0	0		CIRWXIT0	20	
CIRNODAT	40E	1		CIRXEMN	134	
CIRNPLLG	D0			CIRXRTNS	12C	0
CIRNQMSG	DC			CIRX0#RT	CC	
CIRNUMJR	1D8	0		CIRXOPS	1B0	
CIRNUMJT	1D4	0		CIRX0XRT	C8	
CIRNUMSR	1E0	0		CIRX19PS	3DC	
CIRNUMST	1DC	0		CIRZIP	1A4	
CIROPTA	1B0			CIR5BRTE	12A	2
CIROPTL	1B4			CIR5IRDD	12A	80
CIROPTPF	28			CIR5RTE	12A	1
CIROPTS	2C	0		M00M0005	0	90
CIRPARMF	40F			M00M0008	0	60
CIRPARML	410			M00M0012	0	68
CIRPARMS	424	F	00019			
CIRPARM1	410					
CIRPARM2	414					
CIRPARM3	418					
CIRPARM4	41C					
CIRPARM5	420					
CIRPARM6	424					
CIRPDCT	E4					
CIRPDCT2	E8					
CIRPLWRK	3F0					
CIRPREVC	368					
CIRP1AST	C2	80				
CIRREPLY	8	0				
CIRROPSL	146	F0F0F0F0				
CIRROPST	15E	F0F0F0F0				
CIRROPSU	176	F0F0F0F0				
CIRRSV1	369					
CIRSCMLN	360					
CIRSCMSG	362					
CIRSDLCT	C4	0				
CIRSJEXP	368					
CIRSJLSP	360					
CIRSJPTR	364					
CIRSNALC	1A0	0				



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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 and change log records

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 -----					
IOBSTART (CKBSTART) must always point to a below the line CCW. We will point to this TIC and then branch to the real CCWs above the line.					
End of Comment					
56	(38)	BITSTRING	1	CKBFLAG1	CKB I/O Flags
56	(38)	BITSTRING	0	CKB1EXCP	"B'10000000" I/O NEEDED/ISSUED TO DS
56	(38)	BITSTRING	0	CKB1SHFL	"B'01000000" CCW PACKETS SHUFFLED
56	(38)	BITSTRING	0	CKB1SPCI	"B'00100000" PCI flag to be turned on
56	(38)	BITSTRING	0	CKB1CFIO	"B'00010000" CF I/O needed/issued
56	(38)	BITSTRING	0	CKB1NOPP	"B'00000100" NOP CCW issued to obtain hardware reserve
57	(39)	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					
57	(39)	BITSTRING	0	CKB2RCHK	"B'10000000" READ OF CHECK RECD REQ'D
57	(39)	BITSTRING	0	CKB2WCHK	"B'01000000" WRITE OF CHECK RECD REQ'D
57	(39)	BITSTRING	0	CKB2TLCK	"B'00100000" TEST OF LOCK RECD REQ'D
57	(39)	BITSTRING	0	CKB2RLCK	"B'00010000" READ OF LOCK RECD REQ'D
57	(39)	BITSTRING	0	CKB2RMST	"B'00001000" READ OF MASTER RECD REQ'D
57	(39)	BITSTRING	0	CKB2RLOG	"B'00000100" READ OF CHANGE LOG REQ'D
57	(39)	BITSTRING	0	CKB2WLCK	"B'00000010" WRITE OF LOCK RECD REQ'D

# \$CK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
57	(39)	BITSTRING	0	CKB2MSLI	"B'00000001" SUPPRESS LENGTH ERROR ON MASTER RECORD READ
58	(3A)	BITSTRING	1	CKBFLAG3	Reserved for future IBM Use
59	(3B)	BITSTRING	1	CKBNREC	RECORD COUNT FROM CKDNREC
60	(3C)	SIGNED	4	CKBECB (0)	CKPT I/O XECB
60	(3C)	ADDRESS	4	CKBCKA	Addr of checkpoint address table for this data set (one entry per record)
64	(40)	SIGNED	4	CKBSIZE (0)	SIZE OF ENTIRE CKB
64	(40)	BITSTRING	1		SUBPOOL CKB IS IN
65	(41)	BITSTRING	3		LENGTH OF CKB
68	(44)	ADDRESS	4	CKBTRK1T	ADDR OF TRACK ONE TABLE
72	(48)	SIGNED	2	CKBRETRY	ERROR RETRY COUNTER
74	(4A)	SIGNED	2	CKBERRCT	(APPENDAGE FIELD) ERROR RETRY COUNTER
76	(4C)	ADDRESS	4	CKBERCCW	CCW address from IOB
80	(50)	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	68	CKBLRDAT	LOCK DATA INPUT AREA
104	(68)	SIGNED	4	CKBLRSYS	Member ID (\$SIDBUSY) Fld
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

172	(AC)	X'38	0	CKBLROTL	**-CKBLROTH" Size of lock data to be moved to "check record" when CKPT is on CF
172	(AC)	ADDRESS	2	(0)	Ensure hard coded
172	(AC)	ADDRESS	2	(0)	length is correct

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
172	(AC)	X'44	0	CKBLKRLN	**CKBLRDAT" SIZE OF DATA AREA OF LOCK
Comment					
Lock record write buffer					
End of Comment					
176	(B0)	DBL WORD	8	CKBLWKEY	STORAGE AREA FOR WRITING
176	(B0)	X'B0 00008'	0	CKBLWKYP	"CKBLWKEY,8,C'C" Define character version of field since PLX and the offset table don't handle doublewords well
184	(B8)	BITSTRING	68	CKBLWDAT	LOCK RECORD KEY AND DATA
184	(B8)	SIGNED	4	CKBLWSYS	Member ID (\$SIDBUSY) Fld
188	(BC)	SIGNED	4	CKBLWLVI	Level indicator field
192	(C0)	CHARACTER	4	CKBLWSID	\$SID field
196	(C4)	CHARACTER	360	CKBLWOTH (0)	Area to copy to check record if CKPT on CF
Comment					

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.

End of Comment					
196	(C4)	CHARACTER	8	CKBLWPLN	MVS sysplex name
204	(CC)	BITSTRING	4	CKBLWSYT	MVS system id/token
208	(D0)	BITSTRING	8	CKBLWPLI	MVS sysplex id
216	(D8)	BITSTRING	8	CKBLWMTK	XCF member token
224	(E0)	CHARACTER	8	CKBLWMVS	MVS System Name
Comment					

End of data to be mapped together for XCFQSTAT.

End of Comment					
252	(FC)	X'38	0	CKBLWOTL	**CKBLWOTH" Size of lock data to be moved to "check record" when CKPT is on CF
252	(FC)	ADDRESS	2	(0)	Ensure hard coded
252	(FC)	ADDRESS	2	(0)	length is correct
Comment					

Check record buffer

End of Comment					
256	(100)	DBL WORD	8	CKBCKDAT (0)	START OF CHECK RECORD DATA
256	(100)	CHARACTER	372	CKBCKREC (0)	Size of Check record (Offset table needs hard coded values)
256	(100)	BITSTRING	1	CKBCKHFM	CKPT DS FILE NAMES, FLAGS
256	(100)	X'134'	0	CKBCKHFP	"CKBCKHFM,308,C'C" Get character version for offset table
256	(100)	ADDRESS	2	(0)	Ensure lengths are
256	(100)	ADDRESS	2	(0)	correct
256	(100)	SIGNED	1	CKBFORWD	Dataset forwarded indicator
257	(101)	BITSTRING	1		Reserved for future use
258	(102)	BITSTRING	6	CKBLVOTH	Level of other checkpoint (CKBCKLEV of other CKB)
264	(108)	BITSTRING	32	CKBSVDEF	WLM Service Definition ID
296	(128)	SIGNED	4	CKBWRTIM	Time data set last written
304	(130)	DBL WORD	8	(0)	
304	(130)	DBL WORD	8	CKBCKLEV	Level of all data in ckpt
304	(130)	X'30 00008'	0	CKBCKLVP	"CKBCKLEV,8,C'C" Define character version of field since PLX and the offset table don't handle doublewords well

# \$CK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
304	(130)	X'34 00004'	0	CKBCKLVH	"CKBCKLEV+4,4,C'F" Full word version of level number of 4K pages
312	(138)	DBL WORD	8	CKB4KLEV	Level of 4K pages in ckpt
312	(138)	X'38 00008'	0	CKB4KLVP	"CKB4KLEV,8,C'C" Define character version of field since PLX and the offset table don't handle doublewords well
312	(138)	X'3C 00004'	0	CKB4KLVH	"CKB4KLEV+4,4,C'F" Full word version of level number of 4K pages
320	(140)	SIGNED	1	CKBCKVAL (0)	CHECK VALUE
320	(140)	X'44	0	CKBCKRLN	"*-CKBCKDAT" LENGTH OF CHECK RECORD
324	(144)	ADDRESS	2	(0)	Make sure hardcoded
324	(144)	ADDRESS	2	(0)	length is accurate

Comment

Other data buffers

End of Comment

328	(148)	DBL WORD	8	CKBVERIFY	STORAGE FOR READ-COUNT
336	(150)	BITSTRING	8		Reserved for future IBM use
336	(150)	X'80	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

344	(158)	SIGNED	4	(0)	Ensure word alignment
344	(158)	BITSTRING	0	CKBIOBE	Reserve space for IOB extension
344	(158)	SIGNED	4	(0)	Ensure word alignment
344	(158)	BITSTRING	1	CKBIEDB	Reserve space for I/O error data block

Comment

CCW packets

Note: These channel programs are copied to HASPCKDS in routine KBLDCKB. Any changes to these channel programs MUST be copied into CKDS.

End of Comment

344	(158)	DBL WORD	8	CKBCCWS (0)	Channel program area
-----	-------	----------	---	-------------	----------------------

Comment

-----  
Channel program used by KTRK1IO  
-----

End of Comment

360	(168)	DBL WORD	8	CKBLOCKV (0)	Lock verification
408	(198)	DBL WORD	8	CKBCHCKR (0)	Check record read
448	(1C0)	DBL WORD	8	CKBLOCKR (0)	Lock record read
488	(1E8)	DBL WORD	8	CKBLOCK (0)	Lock record write KEY+DATA
528	(210)	DBL WORD	8	CKBCHECK (0)	Check record read/write
568	(238)	DBL WORD	8	CKBMSTR (0)	Master record read/write
600	(258)	X'8	0	CKBCCWSL	"*-CKBCCWS" Len of normal track 1 CCWs

Offsets

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

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 -----

608	(260)	DBL WORD	8	CKBT1DAT (0)	Start of data areas
608	(260)	BITSTRING	16	CKBLOCKD	Lock record data area
624	(270)	BITSTRING	16	CKBCHEKD	Check record data area
640	(280)	BITSTRING	1	CKBMSTRD	Master record data area
640	(280)	X'30	0	CKBT1DLN	"*-CKBT1DAT" Length of data areas
640	(280)	X'3	0	CKBT1DNM	"CKBT1DLN/CKDLEN" Number of track 1 records
656	(290)	BITSTRING	16	CKBCHKD2	Special check read
672	(2A0)	BITSTRING	16	CKBLCKD2	Special lock read
688	(2B0)	SIGNED	4	CKBIDAWS (0)	Master record IDAWs

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 -----

816	(330)	BITSTRING	16	CKBCHLGD	Change log data area
832	(340)	DBL WORD	8	CKBCHLOG (0)	Change log positioning CCWs
856	(358)	X'18	0	CKBCHL1L	"CKBCHLRW-CKBCHLOG" Len of trk1 change log CCWs
856	(358)	X'58	0	CKBMINLN	"CKBCHLRW-CKB" Length of CKB without change log R/W CCWs, and final TIC.
856	(358)	X'	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
0	(0)	BITSTRING	0	CKDWRITE	"X'01" - WRITE DATA
0	(0)	BITSTRING	0	CKDFMT	"X'03" - FORMAT WRITE
0	(0)	BITSTRING	0	CKDREAD	"X'06" - READ DATA
0	(0)	BITSTRING	0	CKDWTRAK	"X'0B" - Write Track
1	(1)	BITSTRING	1	CKDAUX	AUXILIARY BYTE
1	(1)	BITSTRING	0	CKDAXTL	"X'80" - USE TRANFER 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

## \$CK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
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	CKDCCCHR (0)	CCHHR value
2	(2)	BITSTRING	4		CCHH calue
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
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
CKACC	0		CKBCHCKR	198	
CKACCHHR	0		CKBCHECK	210	
CKACHLOG	8		CKBCHEKD	270	
CKAELEN	5	6	CKBCHKD2	290	
CKAFIRST	C	10	CKBCHLGD	330	
CKAHH	2		CKBCHLOG	340	
CKAID	0	C3D2C140	CKBCHL1L	358	18
CKANEXT	5	6	CKBCKA	3C	
CKAPLEN	C	10	CKBCKDAT	100	
CKAR	4		CKBCKHFM	100	
CKASECT	5		CKBCKHFP	100	134
CKASIZE	4		CKBCKLEV	130	
CKA4KPAG	C		CKBCKLVH	130	34 00004
CKBASLEN	358		CKBCKLVP	130	30 00008
CKBCCWS	158		CKBCKREC	100	
CKBCCWSL	258	8	CKBCKRLN	140	44
CKBCFSZE	150	80	CKBCKVAL	140	



## \$CK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKBCSW	8	0	CKBT1DLN	280	30
CKBDCBP	14		CKBT1DNM	280	3
CKBECB	3C		CKBVERFY	148	
CKBECBCC	4		CKBWRTIM	128	
CKBECBP	4		CKB1CFIO	38	10
CKBERCCW	4C		CKB1EXCP	38	80
CKBERCC2	50		CKB1NOPP	38	4
CKBERRCT	4A		CKB1SHFL	38	40
CKBFLAG1	38		CKB1SPCI	38	20
CKBFLAG2	39		CKB2MSLI	39	1
CKBFLAG3	3A		CKB2RCHK	39	80
CKBFORWD	100		CKB2RLCK	39	10
CKBIDAWS	2B0		CKB2RLOG	39	4
CKBIEDB	158		CKB2RMST	39	8
CKBIFLG1	0	42	CKB2TLCK	39	20
CKBIFLG2	1	0	CKB2WCHK	39	40
CKBIFLG4	14		CKB2WLCK	39	2
CKBIOB	0		CKB4KLEV	138	
CKBIOBE	158		CKB4KLVH	138	3C
CKBIRRCT	1C	0	CKB4KLVV	138	38
CKBKEY	58		CKDADDR	0	
CKBLCKD2	2A0		CKDAUX	1	
CKBLKRLN	AC	44	CKDAXTL	1	80
CKBLOCK	1E8		CKDBB	0	
CKBLOCKD	260		CKDCCHH	4	
CKBLOCKR	1C0		CKDCCHHR	2	
CKBLOCKV	168		CKDCCHH1	8	
CKBLRDAT	68		CKDCCHR1	8	
CKBLRKEY	60		CKDFMT	0	3
CKBLRLVI	6C		CKDIPARM	0	
CKBLRMTK	88		CKDLEN	E	10
CKBLRMVS	90		CKDLEN2	7	8
CKBLROTH	74		CKDNEXT	E	10
CKBLROTL	AC	38	CKDNREC	3	
CKBLRPLI	80		CKDOPER	0	
CKBLRPLN	74		CKDREAD	0	6
CKBLRSID	70		CKDREC	6	
CKBLRSYS	68		CKDREC1	C	
CKBLRSYT	7C		CKDSECT	7	
CKBLVOTH	102		CKDSECT1	D	
CKBLWDAT	B8		CKDTLEN	E	
CKBLWKEY	B0		CKDWRITE	0	1
CKBLWKYP	B0	B0	CKDWTRAK	0	B
CKBLWLVV	BC				
CKBLWMTK	D8				
CKBLWMVS	E0				
CKBLWOTH	C4				
CKBLWOTL	FC	38			
CKBLWPLI	D0				
CKBLWPLN	C4				
CKBLWSID	C0				
CKBLWSYS	B8				
CKBLWSYT	CC				
CKBMINLN	358	58			
CKBMSTR	238				
CKBMSTRD	280				
CKBNREC	3B				
CKBRETRY	48				
CKBSEEK	20	0			
CKBSENSE	2	0			
CKBSIZE	40				
CKBSTART	10				
CKBSVDEF	108				
CKBTRK1T	44				
CKBT1DAT	260				

## \$CK Cross Reference

## \$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
5	(5)	BITSTRING	0	CKG1ESUP	"B'10000000" SUPPRESS I/O ERROR MESSAGES FOR THIS DATA SET
5	(5)	BITSTRING	0	CKG1LOKD	"B'01000000" THIS FILE HAS BEEN LOCKED
5	(5)	BITSTRING	0	CKG1ITRP	"B'00100000" THIS FILE HAS HAD INTERRUPTED I/O
5	(5)	BITSTRING	0	CKG1IOER	"B'00010000" THIS FILE HAS HAD AN I/O ERROR
5	(5)	BITSTRING	0	CKG1LOUT	"B'00001000" TRACK 1 I/O INCOMPLETE
5	(5)	BITSTRING	0	CKG1IOE	"B'00000100" KFORMAT I/O ERROR
5	(5)	BITSTRING	0	CKG1IONC	"B'00000010" KFORMAT I/O INCOMPLETE
6	(6)	BITSTRING	1	CKGFLAG2	Second flag byte
6	(6)	BITSTRING	0	CKG2DASD	"B'10000000" Checkpoint resides on DASD
6	(6)	BITSTRING	0	CKG2CF	"B'01000000" Checkpoint resides on CF
6	(6)	BITSTRING	0	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
6	(6)	BITSTRING	0	CKG2ALOC	"B'00010000" Data set allocated
6	(6)	BITSTRING	0	CKG2RBLD	"B'00001000" A CF rebuild is in progress
6	(6)	BITSTRING	0	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	CKG3MOVE	CKB CF Request footprints
69	(45)	BITSTRING	0	CKG3MOVE	"B'10000000" IXLLIST MOVE Request
69	(45)	BITSTRING	0	CKG3RITE	"B'01000000" IXLLIST WRITE Request
69	(45)	BITSTRING	0	CKG3READ	"B'00100000" IXLLIST READ Request
69	(45)	BITSTRING	0	CKG3LOCK	"B'00010000" IXLLIST LOCK Request
69	(45)	BITSTRING	0	CKG3RLST	"B'00001000" IXLLIST READLIST Request
69	(45)	BITSTRING	0	CKG3DELM	"B'00000100" IXLLIST DELETE MULT rqst
70	(46)	BITSTRING	1	CKGFLAG4	Fourth flag byte
70	(46)	BITSTRING	0	CKG4LE0B	"B'10000000" List 0 LEIDs are built
70	(46)	BITSTRING	0	CKG4LE1B	"B'01000000" List 1 LEIDs are built
70	(46)	BITSTRING	0	CKG4COND	"B'00100000" Get LOCK conditionally
70	(46)	BITSTRING	0	CKG4STEL	"B'00010000" Steal the CF lock from CKGSCNID holder
70	(46)	BITSTRING	0	CKG4NOCK	"B'00001000" No check record found for data set on CF
70	(46)	BITSTRING	0	CKG4WCFL	"B'00000100" Waiting for CF lock
70	(46)	BITSTRING	0	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.
70	(46)	BITSTRING	0	CKG4VALR	"B'00000001" Validation error
71	(47)	BITSTRING	1	CKGFLAG5	CCW 1 I/O Error flags
71	(47)	BITSTRING	0	CKG5NDTR	"B'10000000" No data written on error
71	(47)	BITSTRING	0	CKG5DTRS	"B'01000000" Data written on error
71	(47)	BITSTRING	0	CKG5CHKR	"B'00100000" Error on CHECK record
71	(47)	BITSTRING	0	CKG5LCKR	"B'00010000" Error on LOCK record
71	(47)	BITSTRING	0	CKG5MSTR	"B'00001000" Error on MASTER record
71	(47)	BITSTRING	0	CKG5LOGR	"B'00000100" Error on Change log recd
71	(47)	BITSTRING	0	CKG5PAGR	"B'00000010" Error on 4K page record
71	(47)	BITSTRING	0	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	0	CKGXECB	XECB for asynch IXL reqs
104	(68)	SIGNED	4	CKGRECB	ECB portion of XECB for CF locking requests
104	(68)	BITSTRING	0	CKGRXECB	XECB for CF locking request
104	(68)	ADDRESS	4	CKGLIST0	Addr of LIST0 data buffer
108	(6C)	SIGNED	4	CKGT1NUM	Number of elements in a Track1 CF access
112	(70)	SIGNED	1	CKGLOBLT	ID of List0 Leid builder
113	(71)	SIGNED	1	CKGL1BLT	ID of List1 Leid builder
114	(72)	BITSTRING	1	CKGECBTP	I/O completion code for \$HASP291 message
115	(73)	SIGNED	1	CKGSCNID	Steal lock from CONID
116	(74)	ADDRESS	4	CKGRDBF1	Pointer to 64K buffer for IXLLIST READ_LIST requests
120	(78)	ADDRESS	4	CKGRDBF2	Pointer to second 64K buffer for IXLLIST READ_LIST requests
124	(7C)	ADDRESS	4	CKGCFLST	Pointer to CFLIST
128	(80)	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
132	(84)	ADDRESS	4	CKGBFLST	Pointer to BUFLIST storage
136	(88)	ADDRESS	4	CKGLAAS	Addr of set of answer areas
140	(8C)	SIGNED	4	CKGCFSTZ	Size of work area obtained when first structure is connected to
144	(90)	SIGNED	4		Reserved for future IBM use
144	(90)	X'94	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

148	(94)	ADDRESS	2	(0)	Verify CKGCONTK
148	(94)	ADDRESS	2	(0)	and CONCONTOKEN are same length
148	(94)	ADDRESS	2	(0)	Verify CKGCONID
148	(94)	ADDRESS	2	(0)	and CONACONID are the same length

### \$CKGPAR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKGALPRM	7		CKGRDBF2	78	
CKGANSA	64		CKGRECB	68	
CKGBFLST	84		CKGRWTKN	80	
CKGCFERR	4C		CKGRXECB	68	
CKGCFLST	7C		CKGSCNID	73	
CKGCFRC	54		CKGSIZE	90	94
CKGCFREX	5A		CKGTOKEN	1C	
CKGCFRIN	58		CKGTOT	28	
CKGCFRRC	50		CKGT1NUM	6C	
CKGCFRSN	58		CKGVER	4	
CKGCFSIZ	30		CKGVNR	4	2
CKGCFSZE	8C		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
CKGECEB	68		CKG2ALOC	6	10
CKGECEBTP	72		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	88		CKG4COND	46	20
CKGLEID	60		CKG4DUPC	46	2
CKGLIST0	68		CKG4LE0B	46	80
CKGLOBLT	70		CKG4LE1B	46	40
CKGL1BLT	71		CKG4NOCK	46	8
CKGMSGID	5C		CKG4STEL	46	10
CKGPARM	24		CKG4VALR	46	1
CKGRDBF1	74		CKG4WCFL	46	4

## \$CKGPAR Cross Reference

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
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
8	(8)	BITSTRING	0	CKMS1MBD	"B'10000000" (I.) - This member MUST be driver (owns the Q's)
8	(8)	BITSTRING	0	CKMS1DRV	"B'01000000" (.O) - CKRRSTRT has determined this is the initial driving member
8	(8)	BITSTRING	0	CKMS1OPV	"B'00100000" (IO) - Use OPVERIFY=YES during this reconfiguration
8	(8)	BITSTRING	0	CKMS1HUP	"B'00010000" (I.) - HFAM update is pending
9	(9)	BITSTRING	1	CKMSFLG2	(IO) Flag byte 2 (Used for reconfiguration reason)
9	(9)	BITSTRING	0	CKMS2IO1	"B'10000000" (IO) - I/O error on CKPT1
9	(9)	BITSTRING	0	CKMS2IO2	"B'01000000" (IO) - I/O error on CKPT2
9	(9)	X'C0 '	0	CKMS2IOE	"CKMS2IO1+CKMS2IO2" (.O) - I/O error on CKPTn
9	(9)	BITSTRING	0	CKMS2CKV	"B'00100000" (IO) - CKPT on volatile CF

# \$CKM Map

## Offsets

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

Comment

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

End of Comment

24	(18)	X' '	0	CKMSRCOK	"0" STRT processing completed
24	(18)	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

24	(18)	DBL WORD	8	(0)	Alignment
24	(18)	BITSTRING	0	CKMCPARM (0)	CKRRSYNC parameter list
24	(18)	DBL WORD	8	CKMCBEGN (0)	Beginning of CKRRSYNC parms
24	(18)	BITSTRING	1	CKMCFLG1	(IO) Flag byte 1 for CKRRSYNC
24	(18)	BITSTRING	0	CKMC1DMF	"B'10000000" (.O) - Driving member failed
24	(18)	BITSTRING	0	CKMC1NDM	"B'01000000" (.O) - This member is new driver (This bit only set for transitions, and NOT on subsequent syncs)
24	(18)	BITSTRING	0	CKMC1OKW	"B'00100000" (IO) - OK for this non-driving member to wait for driver without issuing a delay message. Always zero on return
25	(19)	BITSTRING	3		
28	(1C)	CHARACTER	0	CKMCCDMN	(.O) Name of current/new driving member
28	(1C)	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

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



Offsets

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

40	(28)	SIGNED	4	CKMCICON	(I.) Condition on entering CKRRSYNC call	
40	(28)	X' '	0	CKMCCCNL	"0" (.O) - Null condition (member not participating or failed)	
40	(28)	X'4	'	0	CKMCCCOK	"4" (IO) - OK condition (previous action successful or no condition to report)
40	(28)	X'8	'	0	CKMCCCUS	"8" (IO) - Unsuccessful result from previous action
44	(2C)	BITSTRING	0	CKMCCONV	(.O) (On driver only) A vector containing the condition from each member	
44	(2C)	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

48	(30)	SIGNED	4	CKMCIRSN	(I.) Reason code on entry to CKRRSYNC call
52	(34)	BITSTRING	1	CKMCRSNV	(.O) (On driver only) A vector containing reason codes for each member

Comment

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

End of Comment

52	(34)	BITSTRING	0	CKMCHFAM	(IO) Copy of HFAM from driver when CKRRSYNC called
52	(34)	BITSTRING	4		Reserved for future use
56	(38)	DBL WORD	8	CKMCEND (0)	End of CKRRSYNC parm list

Comment

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

End of Comment

56	(38)	X' '	0	CKMCRCOK	"0" SYNC processing completed	
56	(38)	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					
56	(38)	X' '	0	CKMDRCOK	"0" DONE processing completed
56	(38)	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					
56	(38)	DBL WORD	8	CKMIDATA (0)	Beginning of internal data
56	(38)	CHARACTER	8	CKMIIEYE	Internal data eyecatcher (set by CKRRINIT)
64	(40)	ADDRESS	4	CKMICKXA	Addr of CKX used to build messages and acks (obtained by CKRRINIT)
68	(44)	ADDRESS	4	CKMICKXS	Addr of CKX used to save last received msg or ack (obtained by CKRRINIT)
72	(48)	SIGNED	4	CKMICRST	Reconfig start time (BIN)
76	(4C)	SIGNED	4	CKMICRSD	Start date (YYYYMMDD)
80	(50)	SIGNED	4	CKMICRET	Reconfig end time (BIN)
84	(54)	SIGNED	4	CKMICRED	End date (YYYYMMDD)
88	(58)	SIGNED	4	CKMICRSE	Count of system events received during reconfig
92	(5C)	SIGNED	4	CKMICRIF	Count of IXZXIXIF requests issued in reconfiguration
96	(60)	SIGNED	4	CKMIXECB (0)	XECB to wait on
Comment					
-----					
General status flag byte					
-----					
End of Comment					
96	(60)	BITSTRING	1	CKMIFLG1	General status flag byte 1
96	(60)	BITSTRING	0	CKMI1CAP	"B'10000000" - Reconfiguration capable
96	(60)	BITSTRING	0	CKMI1RST	"B'01000000" - Reconfiguration started
96	(60)	BITSTRING	0	CKMI1CAN	"B'00100000" - Reconfiguration cancelled by JES2
97	(61)	BITSTRING	3		Reserved
Comment					
-----					
Mailbox names (set by CKRRINIT)					
-----					
End of Comment					

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
100	(64)	CHARACTER	1	CKMIMBNS	
100	(64)	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
100	(64)	SIGNED	4	CKMISTBI	STIMERM wait time for other members in 100th's of seconds
100	(64)	X'3'	0	CKMISECI	"3" Wait time for IXZXIXIF to complete in seconds
104	(68)	SIGNED	4	CKMISTIF	STIMERM wait time for IXZXIXIF in 100th's of seconds
104	(68)	X'64'	0	CKMIFFC	"100" Interval between IXZXIXIF requests in 100th's of seconds
108	(6C)	SIGNED	4	CKMIFFI	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

112	(70)	ADDRESS	4	CKMICKMA	Pointer to \$CKM used by IXZXIXMB for POSTDATA= and STIMERM for PARM=
116	(74)	ADDRESS	4	CKMIHCTA	Addr of \$HCT for post exit
116	(74)	X'4'	0	CKMIPXRP	"4" Post exit reason code for incorrect exit parm list
116	(74)	X'8'	0	CKMIPXRD	"8" Post exit reason code for incorrect post data
116	(74)	X'C'	0	CKMIPXRM	"12" Post exit reason code for incorrect mailbox name
120	(78)	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

128	(80)	DBL WORD	8	CKMICLR1 (0)	Begin area to clear on STRT
-----	------	----------	---	--------------	-----------------------------

Comment

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

End of Comment

128	(80)	BITSTRING	1	CKMIFLG2	General status flag byte 2
128	(80)	BITSTRING	0	CKMI2NIH	"B'10000000" - Reconfig initiated from elsewhere assumed
128	(80)	BITSTRING	0	CKMI2ONE	"B'01000000" - Single member reconfig (Set by IFGETVER rtn)
128	(80)	BITSTRING	0	CKMI2RCO	"B'00100000" - Reconfig is committed (First driving member was committed)
128	(80)	BITSTRING	0	CKMI2DCO	"B'00010000" - Driving member is (re)committed
128	(80)	BITSTRING	0	CKMI2DRV	"B'00001000" - We are driving member
128	(80)	BITSTRING	0	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
128	(80)	BITSTRING	0	CKMI2DFP	"B'00000010" - Driving member failed is pending for next call to CKRRSYNC
128	(80)	BITSTRING	0	CKMI2WSG	"B'00000001" - This non-driving member waiting for a sync go-ahead message
129	(81)	BITSTRING	1	CKMIFLG3	General status flag byte 3
129	(81)	BITSTRING	0	CKMI3RDD	"B'10000000" - Ready for driver decommit
129	(81)	BITSTRING	0	CKMI3IFT	"B'01000000" - STIMERM used to control frequency of IXZXIXIF requests is set
130	(82)	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					
131	(83)	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					
132	(84)	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					
136	(88)	SIGNED	4	CKMIDMNO	Current/last committed
140	(8C)	CHARACTER	0	CKMIDMNA	driver number and name
140	(8C)	SIGNED	4	CKMIDCNO	Current/last candidate
144	(90)	CHARACTER	0	CKMIDCNA	driver number and name (zeros unless driver is being selected)
144	(90)	BITSTRING	0	CKMIMMPM	Participating member mask
144	(90)	BITSTRING	4		Reserved
End of Comment					
Timing data					
End of Comment					
152	(98)	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					
152	(98)	BITSTRING	24	CKMISTMS	REMOTE STIMERM SET PARM LIST
152	(98)	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					
176	(B0)	BITSTRING	16	CKMISTMC	REMOTE STIMERM TEST/CANCEL PARM LIST
176	(B0)	X'10	0	CKMISTCL	**-CKMISTMC" Length of parm list
192	(C0)	DBL WORD	8	(0)	Alignment
192	(C0)	SIGNED	4	CKMISTMI	STIMERM ID=id-area while waiting for response from IXZXIXIF service
196	(C4)	SIGNED	4	CKMISTMM	STIMERM ID=id-area while waiting for msg, ack or system event
200	(C8)	SIGNED	4	CKMISTME	STIMERM ID=id-area used for postponed IXZXIXIF request
204	(CC)	SIGNED	4	CKMISTEI	STIMERM interval set for postponed IXZXIXIF request
208	(D0)	BITSTRING	1	CKMISTF	Interval timer flag byte (This byte is serialized with OIL and NIL)
208	(D0)	BITSTRING	0	CKMISTFI	"B'10000000" STIMERM interval expired IXZXIXIF service
208	(D0)	BITSTRING	0	CKMISTFM	"B'01000000" STIMERM interval expired for msg, ack or sys event
208	(D0)	BITSTRING	0	CKMISTFE	"B'00100000" STIMERM interval expired for postponed IXZXIXIF request
209	(D1)	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					
216	(D8)	DBL WORD	8	CKMICLR2 (0)	Begin area to clear on SYNC or DONE calls
Comment					
----- Information returned from IFGETVER routine -----					
End of Comment					
216	(D8)	BITSTRING	1	CKMIIFG	IFGETVER flags
216	(D8)	BITSTRING	0	CKMIIFGD	"B'10000000" - Failed driver candidate's state indicates driver
216	(D8)	BITSTRING	0	CKMIIFGC	"B'01000000" - Failed driver XCF user state shows committed
217	(D9)	BITSTRING	3		Reserved
220	(DC)	BITSTRING	0	CKMIMMRC	Reconfig capable mask
220	(DC)	BITSTRING	0	CKMIMMST	Reconfig started mask
220	(DC)	BITSTRING	0	CKMIMMMD	Member MUST drive mask
220	(DC)	BITSTRING	0	CKMIMMCO	Reconfig committed mask
220	(DC)	BITSTRING	0	CKMIMMDR	Driving member mask

## \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
220	(DC)	SIGNED	4	CKMIICNO	Candidate for driving member (based on CKPT level and MUST drive)
224	(E0)	CHARACTER	0	CKMIICNA	Candidate's name
224	(E0)	SIGNED	4	CKMIIDNO	Driving member number (Based on XMAUC1DR bit of lowest participating mem)
228	(E4)	CHARACTER	0	CKMIIDNA	Driving member name
228	(E4)	CHARACTER	0	CKMIMEMV	Vector of member names
228	(E4)	BITSTRING	0	CKMIMCLV	Vector member CKPT levels from XMAUCRLV in member's XCF user state
228	(E4)	SIGNED	4	CKMIIFTS	BIN time stamp of last IXZXIXIF completion
Comment					
-----					
Bit mapped work mask for member states, etc.					
-----					
End of Comment					
232	(E8)	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					
232	(E8)	X'1	0	CKMIWUST	"1" Expecting "started"
232	(E8)	X'2	0	CKMIWUDR	"2" Expecting "driving member" (issued by non-drivers)
232	(E8)	X'3	0	CKMIWUCO	"3" Expecting "reconfiguration committed" (issued by driver only)
232	(E8)	X'4	0	CKMIWUDD	"4" Expecting "driver done" (issued by non-drivers waiting for driver to revert to capable only)
232	(E8)	X'5	0	CKMIWUAD	"5" Expecting "all done" (every participating member to revert to capable only)
232	(E8)	BITSTRING	1	CKMIWUDM	Mask of delayed members w/ pending user state change
Comment					
-----					
Driver selection information					
-----					
End of Comment					
232	(E8)	SIGNED	4	(0)	Alignment
232	(E8)	BITSTRING	0	CKMIDS (0)	Driver selection info
232	(E8)	SIGNED	4	CKMIDSBG (0)	Begin driver selection info
232	(E8)	BITSTRING	1	CKMIDFLG	Reconfig reason flags
232	(E8)	BITSTRING	0	CKMIDFOV	"B'10000000" - Use OPVERIFY=YES
232	(E8)	BITSTRING	0	CKMIDFI1	"B'01000000" - I/O error on CKPT1
232	(E8)	BITSTRING	0	CKMIDFI2	"B'00100000" - I/O error on CKPT2
232	(E8)	X'60	0	CKMIDFIO	"CKMIDFI1+CKMIDFI2" - I/O error on CKPTn
232	(E8)	BITSTRING	0	CKMIDFCV	"B'00010000" - CKPT on volatile CF
232	(E8)	BITSTRING	0	CKMIDFOR	"B'00001000" - Operator requested dialog
232	(E8)	BITSTRING	0	CKMIDFCN	"B'00000100" - Cancelled by JES2
232	(E8)	BITSTRING	0	CKMIDFHU	"B'00000010" - Pending HFAM update
233	(E9)	BITSTRING	3		Reserved
236	(EC)	SIGNED	4	CKMIDSOS	Operation sequence number
240	(F0)	BITSTRING	0	CKMIDCON	Console ID or zero
240	(F0)	SIGNED	4	CKMIDSI1	Number of CKPT1 I/O errors

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
244	(F4)	SIGNED	4	CKMIDSI2	Number of CKPT2 I/O errors
248	(F8)	CHARACTER	0	CKMIDNAM	Name of driving member
248	(F8)	CHARACTER	0	CKMIDPMV	Participating memb names
248	(F8)	BITSTRING	0	CKMIDSHF	HFAM to initially use for this reconfig instance
248	(F8)	SIGNED	4	CKMIDSEN (0)	End driver selection info

Comment

Reason codes for \$K28 errors

End of Comment

248	(F8)	X'1	'	0	CKMIECKM	"1" CKM eyecatcher error
248	(F8)	X'2	'	0	CKMIESND	"2" STRT called again w/o DONE
248	(F8)	X'3	'	0	CKMIECNS	"3" SYNC called before STRT
248	(F8)	X'4	'	0	CKMIECAN	"4" SYNC called after reconfig cancelled by JES2
248	(F8)	X'5	'	0	CKMIEDNS	"5" DONE called before STRT
248	(F8)	X'6	'	0	CKMIESTE	"6" More than one reconfig reason in parm list
248	(F8)	X'7	'	0	CKMIECTE	"7" Sync type (CKMCTYPE) mismatch detected by this non-driving member
248	(F8)	X'8	'	0	CKMIESWD	"8" Non-driving member called CKRRSYNC when driving member called CKRRDONE
248	(F8)	X'9	'	0	CKMIEDWS	"9" Non-driving member called CKRRDONE when driving member called CKRRSYNC
248	(F8)	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

248	(F8)	SIGNED		4	CKMIKRG (2)	R14, R15 at time of error
256	(100)	SIGNED		4	CKMIKRSN (0)	\$Kxx reason code set from
256	(100)	BITSTRING		1	CKMIKR SF	- (CKMIFUNC) Function code
257	(101)	BITSTRING		1	CKMIKR SS	- (CKMIFLG2) Status flags
258	(102)	ADDRESS		1	CKMIKR ST	- (CKMIXERT) Error type
259	(103)	ADDRESS		1	CKMIKR SX	- (CKMILSTX) Last IXZXIXxx
260	(104)	ADDRESS		1	CKMIKXXX	\$Kxx error code index
260	(104)	X'1	'	0	CKMIK29	"1" - Fail with \$K29 error - JESXCF data
260	(104)	X'2	'	0	CKMIK30	"2" - Fail with \$K30 error - HASPCKRR internal logic
260	(104)	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

261	(105)	BITSTRING	1	CKMIFUNC	Function being performed
261	(105)	BITSTRING	0	CKMIFURM	"B'11100000" - CKRRxxxx routine mask
261	(105)	BITSTRING	0	CKMIFURI	"B'00100000" - CKRRINIT routine called
261	(105)	BITSTRING	0	CKMIFURS	"B'01000000" - CKRRSTRT routine called
261	(105)	BITSTRING	0	CKMIFURC	"B'01100000" - CKRRSYNC routine called
261	(105)	BITSTRING	0	CKMIFURD	"B'10000000" - CKRRDONE routine called
261	(105)	BITSTRING	0	CKMIFUDR	"B'00010000" - Driver path if bit on (set/reset by mult rtns)
261	(105)	BITSTRING	0	CKMIFUIF	"B'00001000" - In routine IFGETVER
261	(105)	BITSTRING	0	CKMIFUWU	"B'00000100" - In routine WUSTATE
261	(105)	BITSTRING	0	CKMIFUDS	"B'00000010" - In routine DSELECT
261	(105)	BITSTRING	0	CKMIFUIM	"B'00000001" - In routine IMPROC

Comment

### Last IXZXIXxx function footprint

End of Comment

262	(106)	ADDRESS	1	CKMILSTX	Last JESXCF function
262	(106)	X'1	0	CKMILXAC	"1" - Acknowledge message
262	(106)	X'2	0	CKMILXIF	"2" - Obtain member information
262	(106)	X'3	0	CKMILXMB	"3" - Create mailbox
262	(106)	X'4	0	CKMILXMC	"4" - Clear mailbox
262	(106)	X'5	0	CKMILXMD	"5" - Delete mailbox
262	(106)	X'6	0	CKMILXRM	"6" - Receive message
262	(106)	X'7	0	CKMILXSM	"7" - Send message
262	(106)	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

263	(107)	ADDRESS	1	CKMIXERT	Error type
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Comment

Error types for JESXCF related \$K29 or \$K34 errors

End of Comment



Offsets

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

Comment

Error types for HASPCKRR internal logic \$K30 errors

End of Comment

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

Comment

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

End of Comment

264	(108)	SIGNED		4	CKMIRTNC	Last IXZXIXxx return code (except for IXZXIXUS)
268	(10C)	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					
272	(110)	SIGNED	4	CKMIIFRC	Last IFGETVER return code
276	(114)	SIGNED	4	CKMIIMRC	Last IMPROC return code
280	(118)	SIGNED	4		Reserved
Comment					
Data associated with IXZXIXxx services					
-----					
General use data					
-----					
End of Comment					
280	(118)	X'8	0	CKMITOKL	"8" Length of JESXCF msg token
284	(11C)	SIGNED	4	CKMICRML	Current residual msg length
288	(120)	SIGNED	4	CKMIMSGL	Length of msg/ack to send
292	(124)	CHARACTER	1	CKMISMNA	XCF member name to send to
Comment					
Data returned from IXZXIXIF for member information					
-----					
End of Comment					
292	(124)	BITSTRING	1	CKMIIFRT	Request token (REQTOKEN=)
Comment					
Data returned from IXZXIXRM for a system event					
-----					
End of Comment					
300	(12C)	ADDRESS	4	CKMIRMED	Addr of message (DATA=)
304	(130)	SIGNED	4	CKMIRMEL	Length of msg (DATALEN=)
308	(134)	BITSTRING	1	CKMIRMET	Message token (MSGTOKEN=)
Comment					
Data returned from IXZXIXRM for a message or ack					
-----					
End of Comment					
316	(13C)	ADDRESS	4	CKMIRMMD	Addr of message (DATA=)
320	(140)	SIGNED	4	CKMIRMML	Length of msg (DATALEN=)
324	(144)	BITSTRING	8	CKMIRMMT	Message token (MSGTOKEN=)
332	(14C)	SIGNED	4		Reserved
336	(150)	SIGNED	4	CKMIRMSN	Sending member number (set by IMPROC routine)
340	(154)	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					
348	(15C)	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					
348	(15C)	SIGNED	4	CKMIBMSG (0)	Control block ID
352	(160)	BITSTRING	4		Console ID
356	(164)	ADDRESS	4		Address of the CART
360	(168)	ADDRESS	4		Pointer for JOBID
364	(16C)	ADDRESS	4		Control block address
368	(170)	ADDRESS	4		Display routine address
372	(174)	ADDRESS	4	(6)	6 word work area
396	(18C)	BITSTRING	2		ROUT code for Message
398	(18E)	BITSTRING	2		Not used
400	(190)	CHARACTER	4		Message ID
404	(194)	CHARACTER	1		Separator character
405	(195)	ADDRESS	1		Flag byte 1
406	(196)	ADDRESS	1		'DISPER'
407	(197)	ADDRESS	1		Flag byte 2
408	(198)	BITSTRING	16		Not used
424	(1A8)	ADDRESS	4	(0)	Ensure multiple of 4
424	(1A8)	ADDRESS	2	(0)	
0	(0)	X'4C '	0	CKMIBMLN	** -CKMIBMSG" Length of \$BLDMSG MF=L
424	(1A8)	SIGNED	4	CKMID254	DOM ID for HASP254/709 msg
428	(1AC)	BITSTRING	0	CKMID257	DOM ID vector for HASP257
428	(1AC)	CHARACTER	0	CKMIDMCM	HASP257 causing member name
428	(1AC)	ADDRESS	1	CKMIDMAC	HASP257 waiting for action
428	(1AC)	X'1 '	0	CKMIDMA1	"1" - Reconfig starting
428	(1AC)	X'2 '	0	CKMIDMA2	"2" - Driver commit
428	(1AC)	X'3 '	0	CKMIDMA3	"3" - Reconfig commit
428	(1AC)	X'4 '	0	CKMIDMA4	"4" - JESXCF msg from driver
428	(1AC)	X'5 '	0	CKMIDMA5	"5" - JESXCF ack from non-drv
428	(1AC)	X'6 '	0	CKMIDMA6	"6" - Driver decommit
428	(1AC)	X'7 '	0	CKMIDMA7	"7" - Reconfig decommit
429	(1AD)	CHARACTER	2	CKMIDMMT	First two chars of CKXMEYE for HASP257 message
431	(1AF)	BITSTRING	5		Reserved
Comment					
List form macros for JESXCF services					
End of Comment					
440	(1B8)	DBL WORD	8	CKMIXLST (0)	JESXCF list form macros
Comment					
----- IXZXIXAC MF=(L,CKMIIXAC) Acknowledge message MACDATE -93/06/10-<1>					
End of Comment					
440	(1B8)	SIGNED	2	M00M0005 (0)	IXZXIXAC-1
440	(1B8)	DBL WORD	8	CKMIIXAC (0)	++ IXZXIXAC PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXAC_XVERSION	

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
441	(1B9)	CHARACTER	6	CKMIIXAC_XEYECATCH	++ INPUT XVERSION ++ CONSTANT XEYECATCH
447	(1BF)	BITSTRING	1	CKMIIXAC_XSTB	++ INPUT
447	(1BF)	BITSTRING	0	CKMIIXAC_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
447	(1BF)	BITSTRING	0	CKMIIXAC_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
448	(1C0)	BITSTRING	8	CKMIIXAC_XMSGTOKEN	++ XMSGTOKEN
456	(1C8)	ADDRESS	4	CKMIIXAC_XDATA	++ XDATA
460	(1CC)	SIGNED	4	CKMIIXAC_XDATALEN	++ XDATALEN
464	(1D0)	SIGNED	4	CKMIIXAC_XUSERRC	++ XUSERRC
468	(1D4)	SIGNED	4	CKMIIXAC_XGROUPTOKEN	++ XGROUPTOKEN
472	(1D8)	SIGNED	4	CKMIIXAC_XSYSRC	++ XSYSRC
476	(1DC)	SIGNED	4	CKMIIXAC_XSYSRSN	++ XSYSRSN
480	(1E0)	BITSTRING	1	CKMIIXAC_XKEYS	++ FIELD_LABEL
480	(1E0)	BITSTRING	0	CKMIIXAC_KEYUSED_DATA	"B'10000000" ++ KEYUSED.DATA KEYWORD
480	(1E0)	BITSTRING	0	CKMIIXAC_KEYUSED_DATALEN	"B'01000000" ++ KEYUSED.DATALEN KEYWORD
480	(1E0)	BITSTRING	0	CKMIIXAC_KEYUSED_USERRC	"B'00100000" ++ KEYUSED.USERRC KEYWORD
480	(1E0)	BITSTRING	0	CKMIIXAC_KEYUSED_SYSRC	"B'00010000" ++ KEYUSED.SYSRC KEYWORD
480	(1E0)	BITSTRING	0	CKMIIXAC_KEYUSED_SYSRSN	"B'00001000" ++ KEYUSED.SYSRSN KEYWORD
481	(1E1)	BITSTRING	1	CKMIIXAC_XMSGATTR	++ INPUT
481	(1E1)	BITSTRING	0	CKMIIXAC_XMSGATTR_J3CONNECT	"B'10000000" ++ XMSGATTR.J3CONNECT KEYWORD
481	(1E1)	BITSTRING	0	CKMIIXAC_XMSGATTR_EXPRESS	"B'01000000" ++ XMSGATTR.EXPRESS KEYWORD
481	(1E1)	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'B8	0	M00M0006	"CKMIIXIF" ++ IXZXIXIF NAME
440	(1B8)	DBL WORD	8	CKMIIXIF (0)	++ IXZXIXIF PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXIF_XVERSION	++ INPUT XVERSION
441	(1B9)	CHARACTER	6	CKMIIXIF_XEYECATCH	++ CONSTANT XEYECATCH
447	(1BF)	CHARACTER	1	CKMIIXIF_XRSV0001	++ RESERVED XRSV0001
448	(1C0)	SIGNED	4	CKMIIXIF_XGROUPTOKEN	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
452	(1C4)	CHARACTER	16	CKMIIXIF_XREQMBOX	++ XGROUPTOKEN
468	(1D4)	CHARACTER	8	CKMIIXIF_XREQTOKEN	++ XREQMBOX ++ XREQTOKEN
476	(1DC)	ADDRESS	4	CKMIIXIF_XANSAREA	++ XANSAREA
480	(1E0)	SIGNED	4	CKMIIXIF_XANSLEN	++ XANSLEN
484	(1E4)	BITSTRING	1	CKMIIXIF_XINFOLVL	++ INPUT
484	(1E4)	BITSTRING	0	CKMIIXIF_XINFOLVL_GROUP	"B'10000000" ++ XINFOLVL.GROUP KEYWORD
484	(1E4)	BITSTRING	0	CKMIIXIF_XINFOLVL_MEMBER	"B'01000000" ++ XINFOLVL.MEMBER KEYWORD
485	(1E5)	BITSTRING	1	CKMIIXIF_XKEYS	++ FIELD_LABEL
485	(1E5)	BITSTRING	0	CKMIIXIF_KEYUSED_REQMBOX	"B'10000000" ++ KEYUSED.REQMBOX KEYWORD
485	(1E5)	BITSTRING	0	CKMIIXIF_KEYUSED_ANSAREA	"B'01000000" ++ KEYUSED.ANSAREA KEYWORD
485	(1E5)	BITSTRING	0	CKMIIXIF_KEYUSED_GROUPTOKEN	"B'00100000" ++ KEYUSED.GROUPTOKEN KEYWORD
485	(1E5)	BITSTRING	0	CKMIIXIF_KEYUSED_GROUPNAME	"B'00010000" ++ KEYUSED.GROUPNAME KEYWORD
486	(1E6)	BITSTRING	1	CKMIIXIF_XSTATE	++ INPUT
486	(1E6)	BITSTRING	0	CKMIIXIF_XSTATE_ANY	"B'10000000" ++ XSTATE.ANY KEYWORD
486	(1E6)	BITSTRING	0	CKMIIXIF_XSTATE_ACTIVE	"B'01000000" ++ XSTATE.ACTIVE KEYWORD
487	(1E7)	BITSTRING	1	CKMIIXIF_XSYSTEM	++ INPUT
487	(1E7)	BITSTRING	0	CKMIIXIF_XSYSTEM_ANY	"B'10000000" ++ XSYSTEM.ANY KEYWORD
487	(1E7)	BITSTRING	0	CKMIIXIF_XSYSTEM_CURRENT	"B'01000000" ++ XSYSTEM.CURRENT KEYWORD
488	(1E8)	BITSTRING	1	CKMIIXIF_XPOLYJES	++ INPUT
488	(1E8)	BITSTRING	0	CKMIIXIF_XPOLYJES_YES	"B'10000000" ++ XPOLYJES.YES KEYWORD
488	(1E8)	BITSTRING	0	CKMIIXIF_XPOLYJES_NO	"B'01000000" ++ XPOLYJES.NO KEYWORD
489	(1E9)	BITSTRING	2	CKMIIXIF_XFUNCTION	++ INPUT
		....		CKMIIXIF_XFUNCTION_ARM	"B'1000000000000000" ++ XFUNCTION.ARM KEYWORD
491	(1EB)	CHARACTER	8	CKMIIXIF_XGROUPNAME	++ XGROUPNAME
491	(1EB)	X'3B	0	CKMIIXIFL	**_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					
440	(1B8)	SIGNED	2	M00M0007 (0)	IXZXIXMB-1

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
440	(1B8)	DBL WORD	8	CKMIIXMB (0)	++ IXZXIXMB PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXMB_XVERSION	++ INPUT XVERSION
441	(1B9)	CHARACTER	6	CKMIIXMB_XEYECATCH	++ CONSTANT XEYECATCH
447	(1BF)	CHARACTER	1	CKMIIXMB_XRSV0001	++ RESERVED XRSV0001
448	(1C0)	CHARACTER	16	CKMIIXMB_XMBOXNAME	++ XMBOXNAME
464	(1D0)	ADDRESS	4	CKMIIXMB_XPOSTXIT	++ XPOSTXIT
468	(1D4)	ADDRESS	4	CKMIIXMB_XPOSTDATA	++ XPOSTDATA
472	(1D8)	SIGNED	4	CKMIIXMB_XPOSTALET	++ XPOSTALET
476	(1DC)	SIGNED	4	CKMIIXMB_XGROUPTOKEN	++ XGROUPTOKEN
480	(1E0)	BITSTRING	1	CKMIIXMB_XSYSEVENTS	++ FIELD_LABEL
480	(1E0)	BITSTRING	0	CKMIIXMB_XSYSEVENT_YES	"B'10000000" ++ XSYSEVENT.YES KEYWORD
480	(1E0)	BITSTRING	0	CKMIIXMB_XSYSEVENT_NO	"B'01000000" ++ XSYSEVENT.NO KEYWORD
480	(1E0)	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

440	(1B8)	SIGNED	2	M00M0010 (0)	IXZXIXMC-1
440	(1B8)	DBL WORD	8	CKMIIXMC (0)	++ IXZXIXMC PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXMC_XVERSION	++ INPUT XVERSION
441	(1B9)	CHARACTER	6	CKMIIXMC_XEYECATCH	++ CONSTANT XEYECATCH
447	(1BF)	BITSTRING	1	CKMIIXMC_XSTB	++ INPUT
447	(1BF)	BITSTRING	0	CKMIIXMC_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
447	(1BF)	BITSTRING	0	CKMIIXMC_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
448	(1C0)	CHARACTER	16	CKMIIXMC_XMBOXNAME	++ XMBOXNAME
464	(1D0)	SIGNED	4	CKMIIXMC_XGROUPTOKEN	++ XGROUPTOKEN
464	(1D0)	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					
440	(1B8)	SIGNED	2	M00M0011 (0)	IXZXIXMD-1
440	(1B8)	DBL WORD	8	CKMIIXMD (0)	++ IXZXIXMD PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXMD_XVERSION	++ INPUT XVERSION
441	(1B9)	CHARACTER	6	CKMIIXMD_XEYECATCH	++ CONSTANT XEYECATCH
447	(1BF)	BITSTRING	1	CKMIIXMD_XSTB	++ INPUT
447	(1BF)	BITSTRING	0	CKMIIXMD_XSTB_NO	"B'10000000" ++ XSTB.NO KEYWORD
447	(1BF)	BITSTRING	0	CKMIIXMD_XSTB_YES	"B'01000000" ++ XSTB.YES KEYWORD
448	(1C0)	CHARACTER	16	CKMIIXMD_XMBOXNAME	++ XMBOXNAME
464	(1D0)	SIGNED	4	CKMIIXMD_XGROUPTOKEN	++ XGROUPTOKEN
464	(1D0)	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					
440	(1B8)	SIGNED	2	M00M0012 (0)	IXZXIXRM-1
440	(1B8)	DBL WORD	8	CKMIIXRM (0)	++ IXZXIXRM PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXRM_XVERSION	++ INPUT XVERSION
441	(1B9)	CHARACTER	6	CKMIIXRM_XEYECATCH	++ CONSTANT XEYECATCH
447	(1BF)	CHARACTER	1	CKMIIXRM_XRSV0001	++ RESERVED XRSV0001
448	(1C0)	CHARACTER	16	CKMIIXRM_XMBOXNAME	++ XMBOXNAME
464	(1D0)	ADDRESS	4	CKMIIXRM_XDATA	++ XDATA
468	(1D4)	SIGNED	4	CKMIIXRM_XDATALEN	++ XDATALEN
472	(1D8)	BITSTRING	8	CKMIIXRM_XMSGTOKEN	++ XMSGTOKEN
480	(1E0)	SIGNED	4	CKMIIXRM_XGROUPTOKEN	++ XGROUPTOKEN
484	(1E4)	BITSTRING	1	CKMIIXRM_XMSGFETCH	++ INPUT
484	(1E4)	BITSTRING	0	CKMIIXRM_XMSGFETCH_ALL	"B'10000000" ++ XMSGFETCH.ALL KEYWORD
484	(1E4)	BITSTRING	0	CKMIIXRM_XMSGFETCH_MESSAGES	"B'01000000" ++ XMSGFETCH.MESSAGES KEYWORD
484	(1E4)	BITSTRING	0	CKMIIXRM_XMSGFETCH_SYSEVENT	"B'00100000" ++ XMSGFETCH.SYSEVENT KEYWORD
484	(1E4)	BITSTRING	0	CKMIIXRM_XMSGFETCH_ACKS	

# \$CKM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
485	(1E5)	BITSTRING	1	CKMIIXRM_XKEYS	"B'00010000" ++ XMSGFETCH.ACKS KEYWORD
485	(1E5)	BITSTRING	0	CKMIIXRM_KEYUSED_MSGFETCH	++ FIELD_LABEL
485	(1E5)	X'2E	0	CKMIIXRML	"B'10000000" ++ KEYUSED.MSGFETCH KEYWORD "-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					
440	(1B8)	SIGNED	2	M00M0013 (0)	IXZXIXSM-1
440	(1B8)	DBL WORD	8	CKMIIXSM (0)	++ IXZXIXSM PARM LIST
440	(1B8)	BITSTRING	1	CKMIIXSM_XVERSION	++ INPUT XVERSION
441	(1B9)	CHARACTER	6	CKMIIXSM_XEYECATCH	++ CONSTANT XEYECATCH
447	(1BF)	BITSTRING	1	CKMIIXSM_XMSGATTR	++ INPUT
447	(1BF)	BITSTRING	0	CKMIIXSM_XMSGATTR_J3CONNECT	"B'10000000" ++ XMSGATTR.J3CONNECT KEYWORD
447	(1BF)	BITSTRING	0	CKMIIXSM_XMSGATTR_EXPRESS	"B'01000000" ++ XMSGATTR.EXPRESS KEYWORD
448	(1C0)	CHARACTER	16	CKMIIXSM_XMBOXNAME	++ XMBOXNAME
464	(1D0)	CHARACTER	16	CKMIIXSM_XMEMBER	++ XMEMBER
480	(1E0)	ADDRESS	4	CKMIIXSM_XDATA	++ XDATA
484	(1E4)	SIGNED	4	CKMIIXSM_XDATALEN	++ XDATALEN
488	(1E8)	BITSTRING	8	CKMIIXSM_XREQTOKEN	++ XREQTOKEN
496	(1F0)	CHARACTER	16	CKMIIXSM_XREQMBOX	++ XREQMBOX
512	(200)	SIGNED	4	CKMIIXSM_XDATAALET	++ XDATAALET
516	(204)	SIGNED	4	CKMIIXSM_XRESPDALT	++ XRESPDALT
520	(208)	SIGNED	4	CKMIIXSM_XECB	++ XECB
524	(20C)	SIGNED	4	CKMIIXSM_XEXIT	++ XEXIT
528	(210)	BITSTRING	8	CKMIIXSM_XCONNECT	++ XCONNECT
536	(218)	SIGNED	4	CKMIIXSM_XGROUPTOKEN	++ XGROUPTOKEN
540	(21C)	SIGNED	4	CKMIIXSM_XUSERRC	++ XUSERRC
544	(220)	SIGNED	4	CKMIIXSM_XRESPDATA	++ XRESPDATA
548	(224)	SIGNED	4	CKMIIXSM_XRESPDLEN	++ XRESPDLEN
552	(228)	CHARACTER	4	CKMIIXSM_XRSV00001	++ RESERVED XRSV00001
556	(22C)	BITSTRING	8	CKMIIXSM_XMSGTOKEN	



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
564	(234)	SIGNED	4	CKMIIXSM_XSYNCECB	++ XMSGTOKEN
568	(238)	BITSTRING	1	CKMIIXSM_XREQTYPE	++ FIELD_LABEL XSYNCECB
568	(238)	BITSTRING	0	CKMIIXSM_XREQTYPE_ASYNC	++ INPUT "B'10000000" ++ XREQTYPE.ASYNC KEYWORD
568	(238)	BITSTRING	0	CKMIIXSM_XREQTYPE_SYNC	"B'01000000" ++ XREQTYPE.SYNC KEYWORD
568	(238)	BITSTRING	0	CKMIIXSM_XREQTYPE_ASYNCACK	"B'00100000" ++ XREQTYPE.ASYNCACK KEYWORD
568	(238)	BITSTRING	0	CKMIIXSM_XREQTYPE_COMM	"B'00010000" ++ XREQTYPE.COMM KEYWORD
569	(239)	BITSTRING	1	CKMIIXSM_XSEGTYPE	++ INPUT
569	(239)	BITSTRING	0	CKMIIXSM_XSEGTYPE_SINGLE	"B'10000000" ++ XSEGTYPE.SINGLE KEYWORD
569	(239)	BITSTRING	0	CKMIIXSM_XSEGTYPE_FIRST	"B'01000000" ++ XSEGTYPE.FIRST KEYWORD
569	(239)	BITSTRING	0	CKMIIXSM_XSEGTYPE_MIDDLE	"B'00100000" ++ XSEGTYPE.MIDDLE KEYWORD
569	(239)	BITSTRING	0	CKMIIXSM_XSEGTYPE_LAST	"B'00010000" ++ XSEGTYPE.LAST KEYWORD
569	(239)	BITSTRING	0	CKMIIXSM_XSEGTYPE_ABORT	"B'00001000" ++ XSEGTYPE.ABORT KEYWORD
570	(23A)	BITSTRING	1	CKMIIXSM_XKEYS	++ FIELD_LABEL
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_REQTYPE	"B'10000000" ++ KEYUSED.REQTYPE KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_REQTOKEN	"B'01000000" ++ KEYUSED.REQTOKEN KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_REQMBOX	"B'00100000" ++ KEYUSED.REQMBOX KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_EXIT	"B'00010000" ++ KEYUSED.EXIT KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_SEGTYPE	"B'00001000" ++ KEYUSED.SEGTYPE KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_CONNECT	"B'00000100" ++ KEYUSED.CONNECT KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_MSGTOKEN	"B'00000010" ++ KEYUSED.MSGTOKEN KEYWORD
570	(23A)	BITSTRING	0	CKMIIXSM_KEYUSED_MSGATTR	"B'00000001" ++ KEYUSED.MSGATTR KEYWORD
571	(23B)	BITSTRING	1	CKMIIXSM_XKEYS1	++ FIELD_LABEL
571	(23B)	BITSTRING	0	CKMIIXSM_KEYUSED_ECB	"B'10000000" ++ KEYUSED.ECB KEYWORD
571	(23B)	BITSTRING	0	CKMIIXSM_KEYUSED_DATAALET	"B'01000000" ++ KEYUSED.DATAALET KEYWORD
571	(23B)	X'84	0	CKMIIXSML	**CKMIIXSM" ++ LENGTH OF PLIST

Comment

IXZXIXSM-1

End of Comment

576	(240)	DBL WORD	8	(0)	Alignment
576	(240)	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
576	(240)	DBL WORD	8	(0)	Alignment
576	(240)	X'68	0	CKMICL2L	**_CKMICLR2" Length of area to clear in CKRRSTRT
576	(240)	X'C0	0	CKMICL1L	**_CKMICLR1" Length of area to clear in CKRRSYNC or CKRRDONE
576	(240)	X'8	0	CKMIEND	**_CKMIDATA" Length of internal data
Comment					
End of \$CKM data area					
End of Comment					
576	(240)	X'40	0	CKMLEN	**_CKM" Length of \$CKM data area

## \$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKMCACCT	24	4	CKMICRSE	58	
CKMCACF1	24	10	CKMICRST	48	
CKMCACF2	24	14	CKMID	0	
CKMCACNL	24		CKMIDATA	38	
CKMCACOC	24	C	CKMIDCNA	90	
CKMCACRT	24	8	CKMIDCNO	8C	
CKMCACS1	24	18	CKMIDCON	F0	
CKMCACS2	24	1C	CKMIDFCN	E8	4
CKMCACT	24		CKMIDFCV	E8	10
CKMCACU1	24	20	CKMIDFHU	E8	2
CKMCACU2	24	24	CKMIDFIO	E8	60
CKMCBEGN	18		CKMIDFI1	E8	40
CKMCCCNL	28		CKMIDFI2	E8	20
CKMCCCOK	28	4	CKMIDFLG	E8	
CKMCCCUS	28	8	CKMIDFOR	E8	8
CKMCCDMN	1C		CKMIDFOV	E8	80
CKMCCONM	2C		CKMIDMAC	1AC	
CKMCCONV	2C		CKMIDMA1	1AC	1
CKMCEND	38		CKMIDMA2	1AC	2
CKMCFLG1	18		CKMIDMA3	1AC	3
CKMCHFAM	34		CKMIDMA4	1AC	4
CKMCICON	28		CKMIDMA5	1AC	5
CKMCIRSN	30		CKMIDMA6	1AC	6
CKMCIPARM	18		CKMIDMA7	1AC	7
CKMCRCDF	38	4	CKMIDMCM	1AC	
CKMCRCOK	38		CKMIDMMT	1AD	
CKMCRSNV	34		CKMIDMNA	8C	
CKMCTYPE	1C		CKMIDMNO	88	
CKMC1DMF	18	80	CKMIDNAM	F8	
CKMC1NDM	18	40	CKMIDPMV	F8	
CKMC1OKW	18	20	CKMIDS	E8	
CKMDRCOK	38		CKMIDSBG	E8	
CKMDRCRC	38	4	CKMIDSEN	F8	
CKMIBMLN	0	4C	CKMIDSHF	F8	
CKMIBMSG	15C	C2D3C440	CKMIDS11	F0	
CKMICKMA	70		CKMIDS12	F4	
CKMICKXA	40		CKMIDSOS	EC	
CKMICKXS	44		CKMID254	1A8	
CKMICLR1	80		CKMID257	1AC	
CKMICLR2	D8		CKMIECAN	F8	4
CKMICL1L	240	C0	CKMIECKM	F8	1
CKMICL2L	240	68	CKMIECNS	F8	3
CKMICRED	54		CKMIECTE	F8	7
CKMICRET	50		CKMIEDNS	F8	5
CKMICRIF	5C		CKMIEDWS	F8	9
CKMICRML	11C		CKMIEIEC	F8	A
CKMICRSD	4C		CKMIEND	240	8

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKMIESND	F8	2		1B9	
CKMIESTE	F8	6	CKMIIXAC_XGROUPTOKEN	1D4	
CKMIESWD	F8	8	CKMIIXAC_XKEYS	1E0	
CKMIFCT	83		CKMIIXAC_XMSGATTR	1E1	
CKMIFLG1	60		CKMIIXAC_XMSGATTR_EXPRESS	1E1	40
CKMIFLG2	80		CKMIIXAC_XMSGATTR_J3CONNECT	1E1	80
CKMIFLG3	81		CKMIIXAC_XMSGTOKEN	1C0	
CKMIFUDR	105	10	CKMIIXAC_XSTB	1BF	
CKMIFUDS	105	2	CKMIIXAC_XSTB_NO	1BF	80
CKMIFUIF	105	8	CKMIIXAC_XSTB_YES	1BF	40
CKMIFUIM	105	1	CKMIIXAC_XSYSRC	1D8	
CKMIFUNC	105		CKMIIXAC_XSYSRSN	1DC	
CKMIFURC	105	60	CKMIIXAC_XUSERRC	1D0	
CKMIFURD	105	80	CKMIIXAC_XVERSION	1B8	
CKMIFURI	105	20	CKMIIXACL	1E1	2A
CKMIFURM	105	E0	CKMIIXIF	1B8	
CKMIFURS	105	40	CKMIIXIF_KEYUSED_ANSAREA	1E5	40
CKMIFUWU	105	4	CKMIIXIF_KEYUSED_GROUPNAME	1E5	10
CKMIHCTA	74		CKMIIXIF_KEYUSED_GROUPTOKEN	1E5	20
CKMIICNA	E0		CKMIIXIF_KEYUSED_REQMBOX	1E5	80
CKMIICNO	DC		CKMIIXIF_XANSAREA	1DC	
CKMIIDNA	E4		CKMIIXIF_XANSLEN	1E0	
CKMIIDNO	E0		CKMIIXIF_XEYECATCH	1B9	
CKMIIEAD	107	D	CKMIIXIF_XFUNCTION	1E9	
CKMIIEDE	107	A	CKMIIXIF_XFUNCTION_ARM	1E9	
CKMIIEDF	107	7	CKMIIXIF_XGROUPNAME	1EB	
CKMIIEEY	107	E	CKMIIXIF_XGROUPTOKEN	1C0	
CKMIIEHD	107	B	CKMIIXIF_XINFOLVL	1E4	
CKMIIEIL	107	1	CKMIIXIF_XINFOLVL_GROUP	1E4	80
CKMIIEIM	107	9	CKMIIXIF_XINFOLVL_MEMBER	1E4	40
CKMIIEIN	107	5	CKMIIXIF_XKEYS	1E5	
CKMIIEIR	107	8	CKMIIXIF_XPOLYJES	1E8	
CKMIIEMD	107	C	CKMIIXIF_XPOLYJES_NO	1E8	40
CKMIIEMH	107	F	CKMIIXIF_XPOLYJES_YES	1E8	80
CKMIIEMS	107	4			
CKMIIEMT	107	3			
CKMIIEOS	107	6			
CKMIIESU	107	2			
CKMIIEUN	107				
CKMIIEYE	38				
CKMIIFFC	68	64			
CKMIIFFI	6C				
CKMIIFG	D8				
CKMIIFGC	D8	40			
CKMIIFGD	D8	80			
CKMIIFRC	110				
CKMIIFRT	124				
CKMIIFTS	E4				
CKMIIMRC	114				
CKMIIXAC	1B8				
CKMIIXAC_KEYUSED_DATA	1E0	80			
CKMIIXAC_KEYUSED_DATALEN	1E0	40			
CKMIIXAC_KEYUSED_SYSRC	1E0	10			
CKMIIXAC_KEYUSED_SYRSN	1E0	8			
CKMIIXAC_KEYUSED_USERRC	1E0	20			
CKMIIXAC_XDATA	1C8				
CKMIIXAC_XDATALEN	1CC				
CKMIIXAC_XEYECATCH					

## \$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKMIIIF_XREQMBOX	1C4		CKMIIIF_XREQMBOX	1D0	
CKMIIIF_XREQTOKEN	1D4		CKMIIIF_XREQTOKEN	1C0	
CKMIIIF_XRSV0001	1BF		CKMIIIF_XSTB	1BF	
CKMIIIF_XSTATE	1E6		CKMIIIF_XSTB_NO	1BF	80
CKMIIIF_XSTATE_ACTIVE	1E6	40	CKMIIIF_XSTB_YES	1BF	40
CKMIIIF_XSTATE_ANY	1E6	80	CKMIIIF_XVERSION	1B8	
CKMIIIF_XSYSTEM	1E7		CKMIIIF_XMDL	1D0	1C
CKMIIIF_XSYSTEM_ANY	1E7	80	CKMIIIF_XMRM	1B8	
CKMIIIF_XSYSTEM_CURRENT	1E7	40	CKMIIIF_XMRM_KEYUSED_MSGFETCH	1E5	80
CKMIIIF_XVERSION	1B8		CKMIIIF_XMRM_XDATA	1D0	
CKMIIIFL	1EB	3B	CKMIIIF_XMRM_XDATALEN	1D4	
CKMIIIFMB	1B8		CKMIIIF_XMRM_XEYECATCH	1B9	
CKMIIIFMB_XEYECATCH	1B9		CKMIIIF_XMRM_XGROUPTOKEN	1E0	
CKMIIIFMB_XGROUPTOKEN	1DC		CKMIIIF_XMRM_XKEYS	1E5	
CKMIIIFMB_XMBOXNAME	1C0		CKMIIIF_XMRM_XMBOXNAME	1C0	
CKMIIIFMB_XPOSTALET	1D8		CKMIIIF_XMRM_XMSGFETCH	1E4	
CKMIIIFMB_XPOSTDATA	1D4		CKMIIIF_XMRM_XMSGFETCH_ACKS	1E4	10
CKMIIIFMB_XPOSTXIT	1D0		CKMIIIF_XMRM_XMSGFETCH_ALL	1E4	80
CKMIIIFMB_XRSV0001	1BF		CKMIIIF_XMRM_XMSGFETCH_MESSAGES	1E4	40
CKMIIIFMB_XSYSEVENT_NO	1E0	40	CKMIIIF_XMRM_XMSGFETCH_SYSEVENT	1E4	20
CKMIIIFMB_XSYSEVENT_YES	1E0	80	CKMIIIF_XMRM_XMSGTOKEN	1D8	
CKMIIIFMB_XSYSEVENTS	1E0		CKMIIIF_XMRM_XRSV0001	1BF	
CKMIIIFMB_XVERSION	1B8		CKMIIIF_XMRM_XVERSION	1B8	
CKMIIIFMBL	1E0	29	CKMIIIF_XRML	1E5	2E
CKMIIIFMC	1B8		CKMIIIF_XSM	1B8	
CKMIIIFMC_XEYECATCH	1B9		CKMIIIF_XSM_KEYUSED_CONNECT	23A	4
CKMIIIFMC_XGROUPTOKEN	1D0		CKMIIIF_XSM_KEYUSED_DATAALET	23B	40
CKMIIIFMC_XMBOXNAME	1C0		CKMIIIF_XSM_KEYUSED_ECB	23B	80
CKMIIIFMC_XSTB	1BF		CKMIIIF_XSM_KEYUSED_EXIT	23A	10
CKMIIIFMC_XSTB_NO	1BF	80	CKMIIIF_XSM_KEYUSED_MSGATTR	23A	1
CKMIIIFMC_XSTB_YES	1BF	40	CKMIIIF_XSM_KEYUSED_MSGTOKEN	23A	2
CKMIIIFMC_XVERSION	1B8		CKMIIIF_XSM_KEYUSED_REQMBOX	23A	20
CKMIIIFMCL	1D0	1C	CKMIIIF_XSM_KEYUSED_REQTOKEN	23A	40
CKMIIIFMD	1B8		CKMIIIF_XSM_KEYUSED_REQTYPE	23A	80
CKMIIIFMD_XEYECATCH	1B9		CKMIIIF_XSM_KEYUSED_SEGTYPE	23A	8
CKMIIIFMD_XGROUPTOKEN	1B9				

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKMIIISM_XCONNECT	210			239	80
CKMIIISM_XDATA	1E0		CKMIIISM_XSYNCECB	234	
CKMIIISM_XDATAALET	200		CKMIIISM_XUSERRC	21C	
CKMIIISM_XDATALEN	1E4		CKMIIISM_XVERSION	1B8	
CKMIIISM_XECB	208		CKMIIISM_XML	23B	84
CKMIIISM_XEXIT	20C		CKMIKRGS	F8	
CKMIIISM_XEYECATCH	1B9		CKMIKRFS	100	
CKMIIISM_XGROUPTOKEN	218		CKMIKRSN	100	
CKMIIISM_XKEYS	23A		CKMIKRSS	101	
CKMIIISM_XKEYS1	23B		CKMIKRST	102	
CKMIIISM_XMBOXNAME	1C0		CKMIKRST	103	
CKMIIISM_XMEMBER	1D0		CKMIKRXX	104	
CKMIIISM_XMSGATTR	1BF		CKMIK29	104	1
CKMIIISM_XMSGATTR_EXPRESS	1BF	40	CKMIK30	104	2
CKMIIISM_XMSGATTR_J3CONNECT	1BF	80	CKMIK34	104	3
CKMIIISM_XMSGTOKEN	22C		CKMILSTX	106	
CKMIIISM_XREQMBOX	1F0		CKMILXAC	106	1
CKMIIISM_XREQTOKEN	1E8		CKMILXIF	106	2
CKMIIISM_XREQTYPE	238		CKMILXMB	106	3
CKMIIISM_XREQTYPE_ASYNC	238	80	CKMILXMC	106	4
CKMIIISM_XREQTYPE_ASYNCACK	238	20	CKMILXMD	106	5
CKMIIISM_XREQTYPE_COMM	238	10	CKMILXRM	106	6
CKMIIISM_XREQTYPE_SYNC	238	40	CKMILXSM	106	7
CKMIIISM_XRESPDALT	204		CKMILXUS	106	8
CKMIIISM_XRESPDATA	220		CKMIMBNR	64	
CKMIIISM_XRESPDLEN	224		CKMIMBNS	64	
CKMIIISM_XRSV00001	228		CKMIMCLV	E4	
CKMIIISM_XSEGTYPE	239		CKMIMEMV	E4	
CKMIIISM_XSEGTYPE_ABORT	239	8	CKMIMMCO	DC	
CKMIIISM_XSEGTYPE_FIRST	239	40	CKMIMMDR	DC	
CKMIIISM_XSEGTYPE_LAST	239	10	CKMIMMMD	DC	
CKMIIISM_XSEGTYPE_MIDDLE	239	20	CKMIMMPM	90	
CKMIIISM_XSEGTYPE_SINGLE	239	20	CKMIMMRC	DC	
			CKMIMMST	DC	
			CKMIMMWK	E8	
			CKMIMMGL	120	
			CKMIOSEQ	84	
			CKMIPXRD	74	8
			CKMIPXRM	74	C
			CKMIPXRP	74	4
			CKMIRMAC	154	
			CKMIRMED	12C	
			CKMIRMEL	130	
			CKMIRMET	134	
			CKMIRMMD	13C	
			CKMIRMML	140	
			CKMIRMMT	144	
			CKMIRMSN	150	
			CKMIRSNC	10C	
			CKMIRTNC	108	
			CKMISECI	64	3
			CKMISECS	0	F
			CKMISMNA	124	
			CKMISMRT	15C	
			CKMISTBI	64	
			CKMISTCL	B0	10
			CKMISTEI	CC	
			CKMISTF	D0	
			CKMISTFE	D0	20
			CKMISTFI	D0	80
			CKMISTFM	D0	40
			CKMISTIF	68	

## \$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKMISTMC	B0	0	CKMSLEVN	10	
CKMISTME	C8		CKMSMEMV	10	
CKMISTMI	C0		CKMSNIOE	C	
CKMISTMM	C4		CKMSPARM	8	
CKMISTMS	98	0	CKMSRCCN	18	4
CKMISTSL	98	18	CKMSRCOK	18	
CKMITOKL	118	8	CKMS1DRV	8	40
CKMIWUAD	E8	5	CKMS1HUP	8	10
CKMIWUCO	E8	3	CKMS1MBD	8	80
CKMIWUDD	E8	4	CKMS1OPV	8	20
CKMIWUDM	E8		CKMS2CAN	9	8
CKMIWUDR	E8	2	CKMS2CKV	9	20
CKMIWUST	E8	1	CKMS2IOE	9	C0
CKMIXEAC	107	1A	CKMS2IO1	9	80
CKMIXEAE	107	19	CKMS2IO2	9	40
CKMIXEAO	107	1B	CKMS2OPR	9	10
CKMIXECB	60		CKMVERN	4	1
CKMIXEDA	107	2	CKMVERSN	4	
CKMIXEEC	107	B	M00M0005	1B8	
CKMIXEEE	107	5	M00M0006	0	B8
CKMIXEEL	107	A	M00M0007	1B8	
CKMIXEEO	107	9	M00M0010	1B8	
CKMIXEER	107	6	M00M0011	1B8	
CKMIXEES	107	7	M00M0012	1B8	
CKMIXEEV	107	8	M00M0013	1B8	
CKMIXEIB	107	16			
CKMIXEID	107	14			
CKMIXEIE	107	10			
CKMIXEIG	107	12			
CKMIXEIL	107	11			
CKMIXEIN	107	18			
CKMIXEIO	107	15			
CKMIXEIP	107	13			
CKMIXEIU	107	17			
CKMIXERC	107	1			
CKMIXERT	107				
CKMIXESE	107	C			
CKMIXESI	107	F			
CKMIXESM	107	E			
CKMIXESO	107	D			
CKMIXEZL	107	3			
CKMIXEZT	107	4			
CKMIXLLN	240	88			
CKMIXLST	1B8				
CKMI1CAN	60	20			
CKMI1CAP	60	80			
CKMI1RST	60	40			
CKMI2DCO	80	10			
CKMI2DFP	80	2			
CKMI2DMF	80	4			
CKMI2DRV	80	8			
CKMI2NIH	80	80			
CKMI2ONE	80	40			
CKMI2RCO	80	20			
CKMI2WSG	80	1			
CKMI3IFT	81	40			
CKMI3RDD	81	80			
CKMLEN	240	40			
CKMSBEGN	8				
CKMSDCON	C				
CKMSDNAM	10				
CKMSEND	18				
CKMSFLG1	8				
CKMSFLG2	9				
CKMSHFAM	10				

## \$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
12	(C)	BITSTRING	0	CKR1LIM	"B'10000000" MAIN TASK LIMITED CALLER
12	(C)	BITSTRING	0	CKR1IOER	"B'01000000" REASON FOR CALL IS I/O ERROR
12	(C)	BITSTRING	0	CKR1RECO	"B'00100000" REASON FOR CALL IS RECONFIG
12	(C)	BITSTRING	0	CKR1INIT	"B'00010000" REASON FOR CALL IS INIT
12	(C)	BITSTRING	0	CKR1THIS	"B'00001000" MOST UP TO DATE QUEUES ARE IN THIS SYSTEM'S MEMORY
12	(C)	BITSTRING	0	CKR1OTH	"B'00000100" SOME OTHER SYSTEM HAS THE MOST UP DATE QUEUES
12	(C)	BITSTRING	0	CKR1STAT	"B'00000010" USE THE \$STATUS BYTE TO DETERMINE IF WE HAVE MOST UP-TO-DATE COPY OF THE QUEUES
12	(C)	BITSTRING	0	CKR1QUSE	"B'00000001" TURN OFF \$QSONDA WHEN FINISHED
13	(D)	BITSTRING	1	CKRFLAG2	Flag byte
13	(D)	BITSTRING	0	CKR2RECR	"B'10000000" RECURSIVE ERROR PENDING
13	(D)	BITSTRING	0	CKR2MIOE	"B'01000000" The checkpoint reconfig was resulted from the I/O error on my system
13	(D)	BITSTRING	0	CKR2OPT7	"B'00100000" OPTION 7/8 PROCESSING
13	(D)	BITSTRING	0	CKR2DEL	"B'00010000" DELETE IS VALID RESPONSE TO HASP237, HASP273, HASP278
13	(D)	BITSTRING	0	CKR2CREA	"B'00000100" CREATE IS VALID RESPONSE TO HASP278 MESSAGE
13	(D)	BITSTRING	0	CKR2NCRE	"B'00000010" CREATE IS INVALID RESPONSE TO FIRST HASP278 MESSAGE
13	(D)	BITSTRING	0	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
15	(F)	BITSTRING	1	CKRFLAG4	Flag byte
15	(F)	BITSTRING	0	CKR4ILEV	"B'10000000" Increment \$CKPTLEV
15	(F)	BITSTRING	0	CKR4CFV	"B'01000000" REASON=VOLATILE when dialog is entered
15	(F)	BITSTRING	0	CKR4OPV	"B'00100000" Verify reconfiguration with operator possibly due to OPVERIFY=YES specified
15	(F)	BITSTRING	0	CKR4FWC1	"B'00010000" Forward CKPT1
15	(F)	BITSTRING	0	CKR4FWC2	"B'00001000" Forward CKPT2
15	(F)	BITSTRING	0	CKR4OAR	"B'00000100" Operator assistance requested (this is used for the issuance of HASP235 message)
16	(10)	BITSTRING	1	CKRFLAG5	DISPER flag for HASPMSG
16	(10)	BITSTRING	0	CKR5CRC	"B'10000000" Reconfig Complete -255
16	(10)	BITSTRING	0	CKR5CRCO	"B'01000000" Reconfig Cancelled by Operator -255
16	(10)	BITSTRING	0	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
112	(70)	ADDRESS	4	CKRSVHF	ANCHOR FOR SAVED HFAM'S
116	(74)	CHARACTER	8	CKRCKPTD	'CKPTDEF' when needed
124	(7C)	CHARACTER	144	CKRESPON	ALL REPLIES TO WTOR'S COME HERE
Comment					
----- \$BLDMSG MF=L List form of \$BLDMSG					
End of Comment					
268	(10C)	SIGNED	4	CKRMSGL (0)	Control block ID
272	(110)	BITSTRING	4		Console ID
276	(114)	ADDRESS	4		Address of the CART
280	(118)	ADDRESS	4		Pointer for JOBID
284	(11C)	ADDRESS	4		Control block address
288	(120)	ADDRESS	4		Display routine address
292	(124)	ADDRESS	4	(6)	6 word work area
316	(13C)	BITSTRING	2		ROUT code for Message
318	(13E)	BITSTRING	2		Not used
320	(140)	CHARACTER	4		Message ID
324	(144)	CHARACTER	1		Separator character
325	(145)	ADDRESS	1		Flag byte 1
326	(146)	ADDRESS	1		'DISPER'
327	(147)	ADDRESS	1		Flag byte 2
328	(148)	BITSTRING	16		Not used
344	(158)	ADDRESS	4	(0)	Ensure multiple of 4
344	(158)	ADDRESS	2	(0)	
344	(158)	ADDRESS	4	CKRCKGW	Spare CKG pointer
348	(15C)	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					
356	(164)	SIGNED	4	CKRSDBLD (0)	Control block ID
360	(168)	BITSTRING	4		Console ID
364	(16C)	ADDRESS	4		Address of the CART
368	(170)	ADDRESS	4		Pointer for JOBID
372	(174)	ADDRESS	4		Control block address
376	(178)	ADDRESS	4		Display routine address
380	(17C)	ADDRESS	4	(6)	6 word work area
404	(194)	BITSTRING	2		ROUT code for Message
406	(196)	BITSTRING	2		Not used
408	(198)	CHARACTER	4		Message ID
412	(19C)	CHARACTER	1		Separator character
413	(19D)	ADDRESS	1		Flag byte 1
414	(19E)	ADDRESS	1		'DISPER'
415	(19F)	ADDRESS	1		Flag byte 2
416	(1A0)	BITSTRING	16		Not used
432	(1B0)	ADDRESS	4	(0)	Ensure multiple of 4
432	(1B0)	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					
432	(1B0)	BITSTRING	72	CKRVECTR	RESPONSE VECTOR
504	(1F8)	BITSTRING	0	CKRHFAME	TEMPORARY HFAME
504	(1F8)	BITSTRING	1	CKRMFLAG	FLAG BYTE USED FOR MESSAGE CREATION
Comment					
PARAMETER LIST FOR KTRK1IO ROUTINE					
End of Comment					
508	(1FC)	ADDRESS	4	CKRPARMX (0)	PARAMETER LIST FOR \$CALLS
508	(1FC)	ADDRESS	4	CKRTCKG1	ADDRESS OF CKG1
512	(200)	ADDRESS	4	CKRTCKG2	ADDRESS OF CKG2
516	(204)	ADDRESS	4	CKRTKYR1	ADDRESS OF KEY COMP FOR DS1
520	(208)	ADDRESS	4	CKRTKYR2	ADDRESS OF KEY COMP FOR DS2
524	(20C)	ADDRESS	4	CKRTKYW1	ADDRESS KEY WRITE FOR DS1
528	(210)	ADDRESS	4	CKRTKYW2	ADDRESS KEY WRITE FOR DS2
528	(210)	X'FC 00018'	0	CKRPARM	"CKRPARMX,*-CKRPARMX" PARAMETER LIST
508	(1FC)	BITSTRING	0	CKRTQE	TQE AREA
532	(214)	ADDRESS	4	CKRCVCKG	ADDRESS OF CKG WHICH HAS HAD AN I/O ERROR AS A COMPANION
536	(218)	ADDRESS	4		RESERVED FOR FUTURE USE
540	(21C)	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					
540	(21C)	X' '	0	CKRPROC	"0" Process the function
540	(21C)	X'4 '	0	CKRFNSH	"4" Finish up remaining work
540	(21C)	X'8 '	0	CKRCLEN	"8" Clean up the work
540	(21C)	X'C '	0	CKRDRVF	"12" Handle driver failure
540	(21C)	X'1C '	0	CKRSIZE	"*-CKR" SIZE OF WORK AREA

## \$CKPRECV Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKRACODE	20		CKRDM235	2C	
CKRAERRC	1C		CKRDM237	30	
CKRCACT	18		CKRDM270	34	
CKRCKG	4		CKRDM271	38	
CKRCKGW	158		CKRDM272	3C	
CKRCKG2	8		CKRDM273	40	
CKRCKPTD	74		CKRDM275	44	
CKRCLEN	21C	8	CKRDM276	48	
CKRCOUNT	14		CKRDM277	4C	
CKRCVCKG	214		CKRDM278	50	
CKRDMFST	28		CKRDM281	54	
CKRDMINT	6C		CKRDM282	58	
CKRDMMLST	6C	6C	CKRDM284	5C	
CKRDM233	28		CKRDM285	60	

Name	Hex Offset	Hex Value	
CKRDM294	64		
CKRDM299	68		
CKRDRVF	21C	C	
CKRECB	70		
CKRECLST	15C		
CKRESPON	7C		
CKRFLAG1	C		
CKRFLAG2	D		
CKRFLAG3	E		
CKRFLAG4	F		
CKRFLAG5	10		
CKRFNSH	21C	4	
CKRHFAME	1F8		
CKRID	0		
CKRMFLAG	1F8		
CKRMSG	10C	C2D3C440	
CKRPARM	210	FC	00018
CKRPARMX	1FC		
CKRPROC	21C		
CKRRTCD1	24		
CKRSVHF	70		
CKRSDBLD	164	C2D3C440	
CKRSIZE	21C	1C	
CKRTCKG1	1FC		
CKRTCKG2	200		
CKRTKYR1	204		
CKRTKYR2	208		
CKRTKYW1	20C		
CKRTKYW2	210		
CKRTQE	1FC		
CKRVECTR	1B0		
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
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
0	(0)	ADDRESS	4	CKPXREQ	Pointer to XREQ area
4	(4)	SIGNED	4		Reserved for future use
8	(8)	DBL WORD	8	CKPGTLKT	TIME SYSTEM GOT CKPT LOCK
16	(10)	DBL WORD	8	CKPRLSET	TIME SYSTEM GAVE UP LOCK
24	(18)	SIGNED	4	CKPHLTIM	Checkpoint held time
28	(1C)	SIGNED	4	CKPDRMTM	Checkpoint dormancy time
32	(20)	SIGNED	2	CKPUWORK	General work area
34	(22)	BITSTRING	0	CKPUMASK	General work mask
34	(22)	BITSTRING	1	CKPFLAG1	FLAG BYTE --
34	(22)	BITSTRING	0	CKP1FILL	"B'10000000" TGB HAS BEEN FILLED
34	(22)	BITSTRING	0	CKP1OFLW	"B'00100000" CH LOG IS OVERFLOWING
34	(22)	BITSTRING	0	CKP1SFMI	"B'00010000" SPOOL FULL MSG ISSUED
34	(22)	BITSTRING	0	CKP1PCAP	"B'00001000" APPLCOPY SUBTASK POSTED
34	(22)	BITSTRING	0	CKP1VLEN	"B'00000100" CURRENT CB IS IN VARIABLE LENGTH SECTION OF CKPT
34	(22)	BITSTRING	0	CKP1LHBS	"B'00000010" CKPQSOLD is zero because the lock was held by the system
34	(22)	BITSTRING	0	CKP1STOP	"B'00000001" When reach end of DAS chain, do not start over (used in KBLOB)
36	(24)	SIGNED	2		RESERVED FOR FUTURE USE
38	(26)	SIGNED	2	CKPSRCHO	SEARCH OFFSET WITHIN EXTENT
40	(28)	SIGNED	4	(0)	
40	(28)	BITSTRING	0	CKPSTQE	\$STIMER QUEUE ELEMENT
40	(28)	BITSTRING	0	CKPMITQE	\$STIMER QUEUE ELEMENT FOR MAX INTERVAL TO WAIT BEFORE INITIATING A CHECKPOINT WRITE
40	(28)	BITSTRING	0	CKPAPECB	HASPCKAP ECB
40	(28)	SIGNED	4	CKPAPTIM	TIME OF LAST HASPCKAP POST



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
44	(2C)	SIGNED	4	CKPBTIME	SPOOL WARNING TIME STAMP
48	(30)	ADDRESS	4	CKPPALA	ADDRESS OF PAGE ADDR LIST
52	(34)	ADDRESS	4	CKPTRPTR	ADDRESS OF THE CHECKPOINT TRACE WORK AREA
56	(38)	ADDRESS	4	CKPCLENT	ADDRESS OF THE NEXT AVAILABLE ENTRY IN THE CHANGE LOG
60	(3C)	SIGNED	4	CKPUSER1	RESERVED FOR USER
64	(40)	SIGNED	4	CKPUSER2	RESERVED FOR USER
68	(44)	SIGNED	4	CKPSTCK	TIMER SAVE AREA
72	(48)	SIGNED	4	CKPDASN	ADDRESS OF NEXT DAS FOR BLOB
76	(4C)	BITSTRING	0	CKPBLMPR	Previous mask of volumes in the BLOB (from last time through KBLOB)
76	(4C)	BITSTRING	0	CKPBLMSK	Mask of volumes in BLOB with affinity for this member
76	(4C)	BITSTRING	0	CKPBLMFN	Mask of vols in BLOB at end of KBLOB (may include vols without affinity for the member)
76	(4C)	BITSTRING	0	CKPBLMWK	Work mask for KBLOB
76	(4C)	BITSTRING	1		Reserved for future use
77	(4D)	BITSTRING	1	CKPDASP2	'M' of next DAS to use when filling BLOB round- robin from the DASes
78	(4E)	SIGNED	2	CKPRETRY	I/O ERROR RETRY COUNTER +1
80	(50)	CHARACTER	4	CKPRLSID	SYSTEM NAME AND AFFINITY
84	(54)	ADDRESS	1	CKPRLAFF	FROM \$ESYS,RESET=
85	(55)	BITSTRING	1	CKPBLCNT	COUNT OF SPOOLS IN BLOB
86	(56)	SIGNED	2	CKPTGESZ	Max num of entries in BLOB
88	(58)	SIGNED	4	CKPQLOCK (0)	Query Lock work area
88	(58)	SIGNED	4	CKPQSSID	System ID of lock holder
92	(5C)	CHARACTER	16	CKPQSSNM	System name of lock holder
92	(5C)	X'14	0	CKPQLLEN	**-CKPQLOCK" Length of Query Lock
92	(5C)	X'5B	0	CKPSTLID	"CKPQSSID+3" 1 byte lock id to be cleared via \$SYS,RESET=
108	(6C)	SIGNED	4	CKPQSOLD	System ID of previous CF lock holder
112	(70)	DBL WORD	8	CKPCSTRT	STCK WHEN CKPT STARTED CYCLE (KRESERVE ISSUED)
120	(78)	ADDRESS	4	CKPECMBF	Addr of first CMB for reset of checkpoint lock FIFO q
124	(7C)	ADDRESS	4	CKPECNID	Console id for reset lock messages
128	(80)	CHARACTER	8	CKPECART	CART for reset lock msgs
136	(88)	ADDRESS	4	CKPKITPS	Address of KIT PSTs
140	(8C)	SIGNED	4		Reserved
144	(90)	DBL WORD	8	(0)	
144	(90)	X'	0	CKPPCEWS	**-PCEWORK" LENGTH OF PCE WORK AREA

\$CKPWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKPAPECB	28		CKPPCEWS	90	
CKPAPTIM	28		CKPQLLEN	5C	14
CKPBLCNT	55		CKPQLOCK	58	
CKPBLMFN	4C		CKPQSOLD	6C	
CKPBLMPR	4C		CKPQSSID	58	
CKPBLMSK	4C		CKPQSSNM	5C	
CKPBLMWK	4C		CKPRETRY	4E	
CKPBTIME	2C		CKPRLAFF	54	
CKPCLENT	38		CKPRLSET	10	
CKPCSTRT	70		CKPRLSID	50	
CKPDASN	48		CKPSRCHO	26	
CKPDASP2	4D		CKPSTCK	44	
CKPDRMTM	1C		CKPSTLID	5C	5B
CKPECART	80		CKPSTQE	28	
CKPECMBF	78		CKPTGESZ	56	
CKPECNID	7C		CKPTRPTR	34	
CKPFLAG1	22		CKPUMASK	22	
CKPGTLKT	8		CKPUSER1	3C	
CKPHLTIM	18		CKPUSER2	40	
CKPKITPS	88		CKPUWORK	20	
CKPMITQE	28		CKPXREQ	0	
CKPPALA	30		CKP1FILL	22	80

## \$CKPWORK Cross Reference

Name	Hex Offset	Hex Value
CKP1LHBS	22	2
CKP1OFLW	22	20
CKP1PCAP	22	8
CKP1SFMI	22	10
CKP1STOP	22	1
CKP1VLEN	22	4

## \$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 CKWLNATH

**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	CKWPCICT	COUNT OF CCW PACKETS CHAINED BEFORE THE PCI BIT IS TURNED ON
5	(5)	X'FF	0	CKWPAKCT	"255" Count of packets to skip
6	(6)	BITSTRING	1	CKWFLAG1	Ckpt work area flags
6	(6)	BITSTRING	0	CKW1FNLW	"B'10000000" FINAL CHECKPOINT DS WRITE
6	(6)	BITSTRING	0	CKW1OFLW	"B'01000000" CHANGE LOG OVERFLOWING
6	(6)	BITSTRING	0	CKW1ESUP	"B'00100000" SUPPRESS I/O ERROR MESSAGES
6	(6)	BITSTRING	0	CKW1S266	"B'00010000" SUPPRESS 266/267 MESSAGES DURING KFORMAT ROUTINE
6	(6)	BITSTRING	0	CKWLDIAG	"B'00001000" THE CHECKPOINT WAS RECONFIGURED (SET BY DIALOG, RESET AFTER OBTAINING THE LOCK)
6	(6)	BITSTRING	0	CKW1SPIO	"B'00000100" SPLIT THE IO ACROSS 2 CALLS TO KPRIMW (ONE TO START THE I/O ONE TO WAIT FOR IT)
6	(6)	BITSTRING	0	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
7	(7)	BITSTRING	0	CKW2R1LS	"B'10000000" LAST CKPT PHASE WAS RD 1
7	(7)	BITSTRING	0	CKW2R2LS	"B'01000000" LAST CKPT PHASE WAS RD 2
7	(7)	BITSTRING	0	CKW2PWLS	"B'00100000" LAST CKPT PHASE WAS PRM W
7	(7)	BITSTRING	0	CKW2IWLS	"B'00010000" LAST CKPT PHASE WAS INT W
7	(7)	BITSTRING	0	CKW2FWLS	"B'00001000" LAST CKPT PHASE WAS FIN W
7	(7)	BITSTRING	0	CKW2FMLS	"B'00000100" LAST CKPT PHASE WAS FMT W
8	(8)	BITSTRING	1	CKWSCAN	\$SCAN Work byte
8	(8)	BITSTRING	0	CKWSCF	"B'10000000" STRNAME= was specified
8	(8)	BITSTRING	0	CKWSDSN	"B'01000000" DSN= was just specified
8	(8)	BITSTRING	0	CKWSVOL	"B'00100000" VOL= was just specified

## \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
8	(8)	X'E0	0	CKWSCNL	"CKWSCF+CKWSDSN+CKWSVOL" (NEW)CKPTn level bits
8	(8)	BITSTRING	0	CKWSNCN	"B'00000001" NEWCKPTn was changed
8	(8)	X'1	0	CKWSCDL	"CKWSNCN" CKPTDEF level bits
9	(9)	BITSTRING	1	CKWFLAG3	CKPT Work flag 3
9	(9)	BITSTRING	0	CKW3R2WP	"B'00010000" Wrapping active for READ2
9	(9)	BITSTRING	0	CKW3PWWP	"B'00001000" Wrapping active for primary write
10	(A)	BITSTRING	1	CKWFLAG4	CKPT Work Flag 4
10	(A)	BITSTRING	0	CKW4WTO1	"B'10000000" VOLATILE=ONECKPT=WTOR
10	(A)	BITSTRING	0	CKW4IGN1	"B'01000000" VOLATILE=ONECKPT=IGNORE
10	(A)	BITSTRING	0	CKW4DIA1	"B'00100000" VOLATILE=ONECKPT=DIALOG
10	(A)	BITSTRING	0	CKW4WTOR	"B'00010000" VOLATILE=ALLCKPT=WTOR
10	(A)	BITSTRING	0	CKW4IGNO	"B'00001000" VOLATILE=ALLCKPT=IGNORE
10	(A)	BITSTRING	0	CKW4DIAG	"B'00000100" VOLATILE=ALLCKPT=DIALOG
11	(B)	BITSTRING	1	CKWFLAG5	CKPT Work Flag 5
11	(B)	BITSTRING	0	CKW51VOL	"B'10000000" CKPT1 is volatile
11	(B)	BITSTRING	0	CKW51NVL	"B'01000000" CKPT1 is non-volatile
11	(B)	BITSTRING	0	CKW52VOL	"B'00100000" CKPT2 is volatile
11	(B)	BITSTRING	0	CKW52NVL	"B'00010000" CKPT2 is non-volatile
11	(B)	BITSTRING	0	CKW5STRL	"B'00001000" Need STRLIST on SDUMPX
11	(B)	BITSTRING	0	CKW5PROT	"B'00000100" CKPT memory 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	CKWERRREG (16)	SAVE AREA FOR REGS IF ERROR
108	(6C)	ADDRESS	4	CKWCURCG	CKG OF DS BEING PROCESSED
112	(70)	SIGNED	2	CKWLIRCT	LOST INTERRUPT RETRY COUNTER
114	(72)	SIGNED	2		Reserved

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

116	(74)	SIGNED	4	CKWCKPTN	Number of \$CKPTs issued
120	(78)	DBL WORD	8	CKWVMSWT	Amount of wall-clock time in microseconds that JES2 is idle (MVS WAIT)
128	(80)	DBL WORD	8	CKWQSUSE	Amount of wall-clock time in microseconds that PCEs were actively using the queues (\$QSUSE)
136	(88)	SIGNED	4	CKWWTM	Total PCE wait time before obtaining the queues (in units of 16 microseconds)
140	(8C)	SIGNED	4	CKWCKPSZ	Size of checkpoint data

Comment

CKC fixed area work area

End of Comment

144	(90)	ADDRESS	4	CKWCKCLP	1st non-page fixed byte at beginning of CKC
148	(94)	ADDRESS	4	CKWCKCSP	Start of page fixed area at end of CKC
152	(98)	ADDRESS	4	CKWCKCLW	Max low area in CKC used

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
156	(9C)	ADDRESS	4	CKWCKCHW	Max high area in CKC used
160	(A0)	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

164	(A4)	SIGNED	2	CKWRECNT	Current adjacent record cnt
166	(A6)	BITSTRING	1	CKWRWOP	The R/W CCW op code
167	(A7)	BITSTRING	1	CKWCCWFL	CCW build flag byte
167	(A7)	BITSTRING	0	CKWCECKD	"B'10000000" Build ECKD CCWs
167	(A7)	BITSTRING	0	CKWCADJ	"B'01000000" Adjacent records flag
167	(A7)	BITSTRING	0	CKWC1ST	"B'00100000" 1st CCW packet added
168	(A8)	ADDRESS	4	CKWCCWA	Pointer to last used CCW
172	(AC)	ADDRESS	4	CKWCKDA	Pointer to available data area
176	(B0)	ADDRESS	4	CKWCTLBA	1st CTLB used to build CCWs
180	(B4)	ADDRESS	4	CKWCTLB0	Zero-th byte of CTLBs
184	(B8)	ADDRESS	4	CKWFIXST	Starting addr of fix-list
188	(BC)	SIGNED	4	CKWCLSTA	Record # for previous CCWs
192	(C0)	ADDRESS	4	CKWSHLST	Address of share list
196	(C4)	ADDRESS	4	CKWIOLST	Address of I/O needed list

Comment

General parameter list

End of Comment

200	(C8)	SIGNED	4	(0)	
200	(C8)	BITSTRING	0	CKWPARMS (0)	GENERAL PARAMETER LIST
200	(C8)	ADDRESS	4	CKWPARAM1	PARAMETER WORD 1
204	(CC)	ADDRESS	4	CKWPARAM2	PARAMETER WORD 2
208	(D0)	ADDRESS	4	CKWPARAM3	PARAMETER WORD 3
212	(D4)	ADDRESS	4	CKWPARAM4	PARAMETER WORD 4
216	(D8)	ADDRESS	4	CKWPARAM5	PARAMETER WORD 5
220	(DC)	ADDRESS	4	CKWPARAM6	PARAMETER WORD 6
220	(DC)	X'18	0	CKWPARML	"*-CKWPARMS" LENGTH OF GENERAL PARM LIST
224	(E0)	BITSTRING	8	CKWLKEY1	CKPT1 LOCK KEY COMPARAND VAL
232	(E8)	BITSTRING	8	CKWLKEY2	CKPT2 LOCK KEY COMPARAND VAL
240	(F0)	BITSTRING	8	CKWLKVL1	CKPT1 LOCK KEY WRITE VALUE
248	(F8)	BITSTRING	8	CKWLKVL2	CKPT2 LOCK KEY WRITE VALUE
256	(100)	SIGNED	4	CKWKT1RC	KTRK1IO - RETURN CODE SAVE
260	(104)	SIGNED	4	CKWCT1RC	CFTRK1IO - return code save
264	(108)	SIGNED	4	CKWCFAIL	CFTRK1IO - failing CKG
268	(10C)	SIGNED	4	CKWDFAIL	KTRK1IO - failing CKG
272	(110)	ADDRESS	4	CKWCFTD	CF Trace data table
280	(118)	DBL WORD	8	CKWKT1PK	KTRK1IO - 1ST CCW PACKET (PSEUDO TIC CCW)
288	(120)	DBL WORD	8	CKWINITM	Time IRDA got the CKPT data set lock
296	(128)	DBL WORD	8	CKWCFWTM	Time CKPT started waiting for CF (CFWAIT)
304	(130)	SIGNED	4	CKWCFWRE	R14 at time CFWAIT called
308	(134)	SIGNED	4		Reserved
312	(138)	SIGNED	4	CKWRECB (0)	CKPT RESERVE ECB
312	(138)	BITSTRING	0	CKWKSTQE	TIMER ELEMENT FOR CKPT SERVICES
312	(138)	SIGNED	4	CKWQECB (0)	KWRITE HASP272 msg ecb
312	(138)	CHARACTER	8	CKWQREPL	KWRITE HASP272 reply area
320	(140)	BITSTRING	4	CKWCONID	Dialog console id

# \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
DOM IDs for HASP256 message					
-----					
End of Comment					
324	(144)	SIGNED	4	CKWDRNC1	DOMID FOR \$HASP256 NEWCKPT1
328	(148)	SIGNED	4	CKWDRNC2	DOMID FOR \$HASP256 NEWCKPT2
332	(14C)	CHARACTER	80	CKWMSG	MESSAGE WORK AREA
Comment					
----- \$BLDMSG MF=L List form of \$BLDMSG					
End of Comment					
412	(19C)	SIGNED	4	CKWBLSMG (0)	Control block ID
416	(1A0)	BITSTRING	4		Console ID
420	(1A4)	ADDRESS	4		Address of the CART
424	(1A8)	ADDRESS	4		Pointer for JOBID
428	(1AC)	ADDRESS	4		Control block address
432	(1B0)	ADDRESS	4		Display routine address
436	(1B4)	ADDRESS	4	(6)	6 word work area
460	(1CC)	BITSTRING	2		ROUT code for Message
462	(1CE)	BITSTRING	2		Not used
464	(1D0)	CHARACTER	4		Message ID
468	(1D4)	CHARACTER	1		Separator character
469	(1D5)	ADDRESS	1		Flag byte 1
470	(1D6)	ADDRESS	1		'DISPER'
471	(1D7)	ADDRESS	1		Flag byte 2
472	(1D8)	BITSTRING	16		Not used
488	(1E8)	ADDRESS	4	(0)	Ensure multiple of 4
488	(1E8)	ADDRESS	2	(0)	
488	(1E8)	SIGNED	4	CKWPPL (0)	PURGE PARAMETER LIST
488	(1E8)	SIGNED	4	(0)	ALIGN TO FULL WORD BOUNDARY
488	(1E8)	CHARACTER	12	CKWSTAR (0)	STAR PARM LIST MAP
488	(1E8)	SIGNED	4	STARUCBA (0)	UCB ADDRESS
488	(1E8)	SIGNED	4	STARDCTA (0)	DEVICE TABLE ADDRESS
488	(1E8)	BITSTRING	3		
491	(1EB)	BITSTRING	1	STARTYPE	DEVICE TYPE
492	(1EC)	BITSTRING	1	STARFLGS	FUNCTION AND OPTIONS
492	(1EC)	BITSTRING	0	STARFUNC	"B'10000000" FUNCTION: 0=TRKBAL, 1=TRKCAP
492	(1EC)	BITSTRING	0	STARMAXS	"B'01000000" 1=MAXSIZE REQUESTED
492	(1EC)	BITSTRING	0	STARREMV	"B'00100000" 1=REMOVE REQUESTED
492	(1EC)	BITSTRING	0	STARUBAL	"B'00010000" 1=CALLER PROVIDED BALANCE
492	(1EC)	BITSTRING	0	STARLAST	"B'00001000" 1=SPECIAL LAST RCD REQUEST
492	(1EC)	BITSTRING	0	STARDTU	"B'00000110" DVCT ENTRY SOURCE FLAGS: 00=DVCT ENTRY ADDRESS PROVIDED 01=RESERVED 10=UCB ADDRESS PROVIDED 11=DEVICE TYPE PROVIDED
492	(1EC)	BITSTRING	0	STARLOC	"B'00000001" LOC=ANY. DEVTAB OR UCB ABOVE THE LINE
493	(1ED)	BITSTRING	1		RESERVED
494	(1EE)	SIGNED	2	STARBAL	TRACK BALANCE
496	(1F0)	SIGNED	4	STARRKDD (0)	RECORD INFO AS DEFINED BELOW
496	(1F0)	BITSTRING	1	STARR	RECORD NUMBER
497	(1F1)	BITSTRING	1	STARKL	KEY LENGTH
498	(1F2)	SIGNED	2	STARDL	DATA LENGTH
500	(1F4)	ADDRESS	4	CKWRESVS (0)	RESERVE MF=L BEGINS HERE
Comment					
MACRO-DATE = 05/05/95					
End of Comment					

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
500	(1F4)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
500	(1F4)	ADDRESS	4		PREFIX - ECB ADDRESS
500	(1F4)	X'F8	0	CKWRESV	*** X02113
504	(1F8)	ADDRESS	1		PELLAST flag byte. X02113
505	(1F9)	ADDRESS	1		PELMILEN - RNAME length.
506	(1FA)	BITSTRING	1		
Comment					
PELFLAG - flag byte 2.					
End of Comment					
507	(1FB)	ADDRESS	1		PELRET - return code byte.
508	(1FC)	ADDRESS	4		QNAME ADDRESS
512	(200)	ADDRESS	4		RNAME ADDRESS
516	(204)	ADDRESS	4		PELUCBAA - address to pointer to UCB.
516	(204)	X'F4 00014'	0	CKWRESVL	"CKWRESVS,*-CKWRESVS" MF=L FORM OF RESERVE
500	(1F4)	ADDRESS	4	CKWDEQS (0)	DEQ MF=L BEGINS HERE
Comment					
MACRO-DATE = 05/05/95					
End of Comment					
500	(1F4)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
500	(1F4)	X'F4	0	CKWDEQ	*** X02113
500	(1F4)	ADDRESS	1		PELLAST flag byte. X02113
501	(1F5)	ADDRESS	1		PELMILEN - RNAME length.
502	(1F6)	BITSTRING	1		
Comment					
PELFLAG - flag byte 2.					
End of Comment					
503	(1F7)	ADDRESS	1		PELRET - return code byte.
504	(1F8)	ADDRESS	4		QNAME ADDRESS
508	(1FC)	ADDRESS	4		RNAME ADDRESS
512	(200)	ADDRESS	4		PELUCBAA - address to pointer to UCB.
512	(200)	X'F4 00010'	0	CKWDEQL	"CKWDEQS,*-CKWDEQS" MF=L FORM OF DEQ
Comment					
MACDATE -04/12/94-<0>					
End of Comment					
500	(1F4)	SIGNED	2	M00M0008 (0)	IXLPURGE-0
504	(1F8)	DBL WORD	8	CKWCFPUR (0)	++ IXLPURGE PARM LIST
504	(1F8)	BITSTRING	1	CKWCFPUR_XVERSION	++ INPUT XVERSION
505	(1F9)	BITSTRING	1	CKWCFPUR_XSCOPEFLAGS	++ FIELD_LABEL
505	(1F9)	BITSTRING	0	CKWCFPUR_XSCOPE_STOKEN	"B'10000000" ++ XSCOPE.STOKEN KEYWORD
505	(1F9)	BITSTRING	0	CKWCFPUR_XSCOPE_TTOKEN	"B'01000000" ++ XSCOPE.TTOKEN KEYWORD
505	(1F9)	BITSTRING	0	CKWCFPUR_XSCOPE_CONTOKEN	"B'00100000" ++ XSCOPE.CONTOKEN KEYWORD
506	(1FA)	CHARACTER	2	CKWCFPUR_XRSV0001	++ RESERVED XRSV0001
508	(1FC)	CHARACTER	8	CKWCFPUR_XSTOKEN	++ XSTOKEN
516	(204)	CHARACTER	16	CKWCFPUR_XTTOKEN	++ XTTOKEN

# \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
532	(214)	CHARACTER	16	CKWCFPUR_XCONTOKEN	++ XCONTOKEN
548	(224)	CHARACTER	8	CKWCFPUR_XREQID	++ XREQID
548	(224)	X'34	0	CKWCFPURL	"*-CKWCFPUR" ++ LENGTH OF PLIST
Comment					
IXLPURGE-0					
End of Comment					
0	(0)	X'F8 00034'	0	CKWCFPRL	"CKWCFPUR,*-CKWCFPUR" Length of IXLPURGE
0	(0)	X'F8	0	M00M0011	"CKWXLIST" ++ IXLLIST NAME
504	(1F8)	DBL WORD	8	CKWXLIST (0)	++ IXLLIST PARM LIST
504	(1F8)	CHARACTER	96	CKWXLIST_XSHL_DATA	++ FIELD_LABEL XSHL_DATA
600	(258)	CHARACTER	4	CKWXLIST_XMOB_DATA	++ FIELD_LABEL XMOB_DATA
604	(25C)	CHARACTER	112	CKWXLIST_XMCB_DATA1	++ FIELD_LABEL XMCB_DATA1
716	(2CC)	CHARACTER	20	CKWXLIST_XMCB_DATA2	++ FIELD_LABEL XMCB_DATA2
716	(2CC)	X'E0	0	CKWXLIST_PL_END	*** ++ END OF BASE PLIST
504	(1F8)	BITSTRING	1	CKWXLIST_XVERSION	++ INPUT XVERSION
505	(1F9)	BITSTRING	1	CKWXLIST_XCMDCODE	++ FIELD_LABEL XCMDCODE
506	(1FA)	CHARACTER	4	CKWXLIST_XSHLFLGS	++ FIELD_LABEL XSHLFLGS
510	(1FE)	CHARACTER	2	CKWXLIST_XRSV0102	++ RESERVED XRSV0102
512	(200)	BITSTRING	1	CKWXLIST_XCOMPCONID	++ FIELD_LABEL XCOMPCONID
513	(201)	BITSTRING	1	CKWXLIST_XBUFSTGKEY	++ XBUFSTGKEY
514	(202)	BITSTRING	2	CKWXLIST_XANSLEN	++ XANSLEN
516	(204)	CHARACTER	16	CKWXLIST_XCONTOKEN	++ XCONTOKEN
532	(214)	CHARACTER	12	CKWXLIST_XDATADDR	++ FIELD_LABEL XDATADDR
544	(220)	CHARACTER	8	CKWXLIST_XADJADDR	++ FIELD_LABEL XADJADDR
552	(228)	CHARACTER	8	CKWXLIST_XANSADDR	++ FIELD_LABEL XANSADDR
560	(230)	CHARACTER	8	CKWXLIST_XREQDATA	++ XREQDATA
568	(238)	CHARACTER	8	CKWXLIST_XREQID	++ XREQID
576	(240)	CHARACTER	16	CKWXLIST_XOPTIONALDATA	++ FIELD_LABEL XOPTIONALDATA
592	(250)	CHARACTER	8	CKWXLIST_XRSV0103	++ RESERVED XRSV0103
506	(1FA)	BITSTRING	1	CKWXLIST_XSHLFLGS1	++ FIELD_LABEL
506	(1FA)	BITSTRING	0	CKWXLIST_KEYUSED_BUFFER	"B'10000000" ++ KEYUSED.BUFFER KEYWORD
506	(1FA)	BITSTRING	0	CKWXLIST_KEYUSED_BUFLIST	"B'01000000" ++ KEYUSED.BUFLIST KEYWORD
506	(1FA)	BITSTRING	0	CKWXLIST_KEYUSED_ADJAREA	"B'00100000" ++ KEYUSED.ADJAREA KEYWORD
506	(1FA)	BITSTRING	0	CKWXLIST_KEYUSED_ANSAREA	"B'00010000" ++ KEYUSED.ANSAREA KEYWORD



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
506	(1FA)	BITSTRING	0	CKWXLIST_XPAGEABLE_NO	"B'00001000" ++ XPAGEABLE.NO KEYWORD
506	(1FA)	BITSTRING	0	CKWXLIST_KEYUSED_BUFSTGKEY	"B'00000100" ++ KEYUSED.BUFSTGKEY KEYWORD
506	(1FA)	BITSTRING	0	CKWXLIST_XBUFADDRTYPE_REAL	"B'00000010" ++ XBUFADDRTYPE.REAL KEYWORD
507	(1FB)	BITSTRING	1	CKWXLIST_XSHLFLGS2	++ FIELD_LABEL
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_SYNCECB	"B'10000000" ++ XMODE.SYNCECB KEYWORD
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_SYNCEXIT	"B'01000000" ++ XMODE.SYNCEXIT KEYWORD
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_SYNCTOKEN	"B'00100000" ++ XMODE.SYNCTOKEN KEYWORD
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_ASYNCECB	"B'00010000" ++ XMODE.ASYNCECB KEYWORD
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_ASYNCEXIT	"B'00001000" ++ XMODE.ASYNCEXIT KEYWORD
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_ASYNCTOKEN	"B'00000100" ++ XMODE.ASYNCTOKEN KEYWORD
507	(1FB)	BITSTRING	0	CKWXLIST_XMODE_ASYNCFNORESPONSE	"B'00000010" ++ XMODE.ASYNCFNORESPONSE KEYWORD
508	(1FC)	BITSTRING	1	CKWXLIST_XSHLFLGS3	++ FIELD_LABEL
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKOPER_SET	"B'10000000" ++ XLOCKOPER.SET KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKOPER_RESET	"B'01000000" ++ XLOCKOPER.RESET KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKOPER_NOTHELD	"B'00100000" ++ XLOCKOPER.NOTHELD KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKOPER_HELD	"B'00010000" ++ XLOCKOPER.HELD KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKOPER_TEST	"B'00001000" ++ XLOCKOPER.TEST KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKOPER_READNEXT	"B'00000100" ++ XLOCKOPER.READNEXT KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_XLOCKMODE_COND	"B'00000010" ++ XLOCKMODE.COND KEYWORD
508	(1FC)	BITSTRING	0	CKWXLIST_KEYUSED_LOCKCOMP	"B'00000001" ++ KEYUSED.LOCKCOMP KEYWORD
509	(1FD)	BITSTRING	1	CKWXLIST_XSHLFLGS4	++ FIELD_LABEL
509	(1FD)	BITSTRING	0	CKWXLIST_XTYPE_ADJDATA	"B'10000000" ++ XTYPE.ADJDATA KEYWORD
509	(1FD)	BITSTRING	0	CKWXLIST_XTYPE_ECONTROLS	"B'01000000" ++ XTYPE.ECONTROLS KEYWORD
509	(1FD)	BITSTRING	0	CKWXLIST_KEYUSED_EXTRESTOKEN	"B'00100000" ++ KEYUSED.EXTRESTOKEN KEYWORD
509	(1FD)	BITSTRING	0	CKWXLIST_RCVRYREQASYNC	"B'00000001" ++ MACUSED.LIST KEYWORD
516	(204)	CHARACTER	13	CKWXLIST_XRSV0201	++ RESERVED XRSV0201
529	(211)	BITSTRING	1	CKWXLIST_XCONID	++ FIELD_LABEL XCONID
530	(212)	CHARACTER	2	CKWXLIST_XRSV0202	++ RESERVED XRSV0202
532	(214)	SIGNED	4	CKWXLIST_XBUFFER_ALET	++ ALET XBUFFER
536	(218)	SIGNED	4	CKWXLIST_XBUFSIZE	++ XBUFSIZE
540	(21C)	ADDRESS	4	CKWXLIST_XBUFFER	++ XBUFFER
532	(214)	SIGNED	4	CKWXLIST_XBUFALET	++ XBUFALET

## \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
536	(218)	SIGNED	4	CKWXLIST_XBUFLIST_ALET	++ ALET XBUFLIST
540	(21C)	ADDRESS	4	CKWXLIST_XBUFLIST	++ XBUFLIST
544	(220)	SIGNED	4	CKWXLIST_XADJAREA_ALET	++ ALET XADJAREA
548	(224)	ADDRESS	4	CKWXLIST_XADJAREA	++ XADJAREA
544	(220)	SIGNED	4	CKWXLIST_XMOSVECTOR_ALET	++ ALET XMOSVECTOR
548	(224)	ADDRESS	4	CKWXLIST_XMOSVECTOR	++ XMOSVECTOR
552	(228)	SIGNED	4	CKWXLIST_XANSAREA_ALET	++ ALET XANSAREA
556	(22C)	ADDRESS	4	CKWXLIST_XANSAREA	++ XANSAREA
560	(230)	ADDRESS	4	CKWXLIST_XREQECB	++ XREQECB
564	(234)	CHARACTER	4	CKWXLIST_XRSV0203	++ RESERVED XRSV0203
560	(230)	SIGNED	4	CKWXLIST_XREQTOKEN_ALET	++ ALET XREQTOKEN
564	(234)	ADDRESS	4	CKWXLIST_XREQTOKEN	++ XREQTOKEN
576	(240)	CHARACTER	8	CKWXLIST_XLOCKDATA	++ XLOCKDATA
584	(248)	CHARACTER	8	CKWXLIST_XRSV0204	++ RESERVED XRSV0204
576	(240)	CHARACTER	16	CKWXLIST_XEXTRESTOKEN	++ XEXTRESTOKEN
576	(240)	CHARACTER	8	CKWXLIST_XEXTRESTOKENKTN	++ FIELD_LABEL XEXTRESTOKENKTN
584	(248)	CHARACTER	8	CKWXLIST_XEXTRESTOKENPSVN	++ FIELD_LABEL XEXTRESTOKENPSVN
600	(258)	BITSTRING	2	CKWXLIST_XCMDLEN	++ FIELD_LABEL XCMDLEN
602	(25A)	BITSTRING	1	CKWXLIST_XBUFNUM	++ XBUFNUM
603	(25B)	BITSTRING	1	CKWXLIST_XBUFINCRNUM	++ XBUFINCRNUM
604	(25C)	CHARACTER	1	CKWXLIST_XCCA	++ FIELD_LABEL XCCA
605	(25D)	CHARACTER	1	CKWXLIST_XCCB	++ FIELD_LABEL XCCB
606	(25E)	CHARACTER	2	CKWXLIST_XRSV0501	++ RESERVED XRSV0501
608	(260)	BITSTRING	4	CKWXLIST_XCMDFLGS1	++ FIELD_LABEL XCMDFLGS1
612	(264)	CHARACTER	4	CKWXLIST_XB8TO11	++ FIELD_LABEL XB8TO11
616	(268)	SIGNED	4	CKWXLIST_XLOCKINDEX	++ XLOCKINDEX
620	(26C)	SIGNED	4	CKWXLIST_XLISTNUM	++ XLISTNUM
624	(270)	CHARACTER	12	CKWXLIST_XENTRYID	++ XENTRYID
636	(27C)	CHARACTER	8	CKWXLIST_XNEWVERS	++ XNEWVERS
644	(284)	CHARACTER	8	CKWXLIST_XVERSCOMP	++ XVERSCOMP
652	(28C)	CHARACTER	16	CKWXLIST_XAUTHCOMP1	++ FIELD_LABEL XAUTHCOMP1
668	(29C)	CHARACTER	16	CKWXLIST_XNEWAUTH1	++ FIELD_LABEL XNEWAUTH1

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
684	(2AC)	CHARACTER	32	CKWXLIST_XLISTDESC	++ XLISTDESC
608	(260)	CHARACTER	1	CKWXLIST_XCMDFLGS1A	++ FIELD_LABEL XCMDFLGS1A
609	(261)	CHARACTER	1	CKWXLIST_XCMDFLGS1B	++ FIELD_LABEL XCMDFLGS1B
610	(262)	CHARACTER	1	CKWXLIST_XCMDFLGS1C	++ FIELD_LABEL XCMDFLGS1C
611	(263)	CHARACTER	1	CKWXLIST_XCMDFLGS1D	++ FIELD_LABEL XCMDFLGS1D
608	(260)	BITSTRING	1	CKWXLIST_XELEMNUM	++ XELEMNUM
608	(260)	BITSTRING	1	CKWXLIST_XDBS	++ FIELD_LABEL XDBS
611	(263)	CHARACTER	1	CKWXLIST_XUID3	++ FIELD_LABEL XUID3
612	(264)	CHARACTER	3	CKWXLIST_XRSV0502	++ RESERVED XRSV0502
615	(267)	CHARACTER	1	CKWXLIST_XCGLM	++ FIELD_LABEL XCGLM
612	(264)	BITSTRING	2	CKWXLIST_XSTARTINDEX	++ XSTARTINDEX
614	(266)	BITSTRING	2	CKWXLIST_XENDINDEX	++ XENDINDEX
616	(268)	SIGNED	4	CKWXLIST_XVECTORINDEX	++ XVECTORINDEX
624	(270)	SIGNED	4	CKWXLIST_XLISTLIMIT	++ XLISTLIMIT
628	(274)	CHARACTER	8	CKWXLIST_XRSV0601	++ RESERVED XRSV0601
652	(28C)	CHARACTER	16	CKWXLIST_XENTRYNAME	++ XENTRYNAME
652	(28C)	CHARACTER	16	CKWXLIST_XENTRYKEY	++ XENTRYKEY
652	(28C)	CHARACTER	16	CKWXLIST_XKEYCOMP	++ XKEYCOMP
652	(28C)	CHARACTER	1	CKWXLIST_XUID2	++ FIELD_LABEL XUID2
653	(28D)	CHARACTER	15	CKWXLIST_XRSV0602	++ RESERVED XRSV0602
668	(29C)	CHARACTER	8	CKWXLIST_XRESTOKEN	++ XRESTOKEN
676	(2A4)	CHARACTER	8	CKWXLIST_XRSV0603	++ RESERVED XRSV0603
668	(29C)	BITSTRING	2	CKWXLIST_XFIRSTELEM	++ XFIRSTELEM
670	(29E)	BITSTRING	2	CKWXLIST_XLASTELEM	++ XLASTELEM
672	(2A0)	CHARACTER	8	CKWXLIST_XRSV0604	++ RESERVED XRSV0604
680	(2A8)	CHARACTER	1	CKWXLIST_XCMDFLGS2A	++ FIELD_LABEL XCMDFLGS2A
681	(2A9)	CHARACTER	3	CKWXLIST_XRSV0605	++ RESERVED XRSV0605
684	(2AC)	CHARACTER	1	CKWXLIST_XUID1	++ FIELD_LABEL XUID1
685	(2AD)	CHARACTER	31	CKWXLIST_XRSV0606	++ RESERVED XRSV0606
716	(2CC)	CHARACTER	16	CKWXLIST_XMOVETOKEY0	++ FIELD_LABEL XMOVETOKEY0
732	(2DC)	SIGNED	4	CKWXLIST_XMOVETOLIST0	++ FIELD_LABEL XMOVETOLIST0
736	(2E0)	X'E8	0	CKWXLISTL	**-CKWXLIST" ++ LENGTH OF PLIST

# \$CKW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
IXLLIST-3					
End of Comment					
0	(0)	X'F8 000E8'	0	CKWCFLSL	"CKWXLIST,*-CKWXLIST" Length of IXLLIST
500	(1F4)	CHARACTER	144	CKWSTRL	Area for STRLIST on SDUMPX
736	(2E0)	ADDRESS	4	CKWVRL	Pointer to VRL area
740	(2E4)	SIGNED	4	CKWVRLN	Total number of VRL entries
744	(2E8)	ADDRESS	4	CKWVRLP	Pointer to free VRL
748	(2EC)	SIGNED	4	CKWVRLC	Count of entries in use
Comment					
IARVSERV MF=(L,CKWVSERV) List form of IARVSERV macro MACDATE -06/25/98-<0>					
End of Comment					
0	(0)	X'F0 '	0	M00M0012	"CKWVSERV" ++ IARVSERV NAME
752	(2F0)	DBL WORD	8	CKWVSERV (0)	++ IARVSERV PARM LIST
752	(2F0)	BITSTRING	1	CKWVSERV_XVERSION	++ INPUT XVERSION
753	(2F1)	BITSTRING	1	CKWVSERV_XSERVICE	++ XSERVICE
753	(2F1)	X'1 '	0	CKWVSERV_SHARE	"1" ++ XSERVICE.SHARE KEYWORD
753	(2F1)	X'2 '	0	CKWVSERV_UNSHARE	"2" ++ XSERVICE.UNSHARE KEYWORD
753	(2F1)	X'3 '	0	CKWVSERV_CHANGEACCESS	"3" ++ XSERVICE.CHANGEACCESS KEYWORD
753	(2F1)	X'4 '	0	CKWVSERV_SHARESEG	"4" ++ XSERVICE.SHARESEG KEYWORD
754	(2F2)	BITSTRING	1	CKWVSERV_XFLAGS1	++ FIELD_LABEL
754	(2F2)	BITSTRING	0	CKWVSERV_TARGET_VIEW_RO	"B'10000000" ++ XTARGET_VIEW.READONLY KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_TARGET_VIEW_SW	"B'01000000" ++ XTARGET_VIEW.SHAREDWRITE KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_TARGET_VIEW_UW	"B'00100000" ++ XTARGET_VIEW.UNIQUEWRITE KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_TARGET_VIEW_TW	"B'00010000" ++ XTARGET_VIEW.TARGETWRITE KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_TARGET_VIEW_LS	"B'00001000" ++ XTARGET_VIEW.LIKESOURCE KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_TARGET_VIEW_NA	"B'00000100" ++ XTARGET_VIEW.HIDDEN KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_COPYNOW	"B'00000010" ++ KEYUSED.COPYNOW KEYWORD
754	(2F2)	BITSTRING	0	CKWVSERV_RETAIN_YES	"B'00000001" ++ XRETAIN.YES KEYWORD
755	(2F3)	BITSTRING	1	CKWVSERV_XFLAGS2	++ FIELD_LABEL
755	(2F3)	BITSTRING	0	CKWVSERV_XPARTIALPAGE_YES	"B'10000000" ++ XPARTIALPAGE.YES KEYWORD
756	(2F4)	SIGNED	4	CKWVSERV_XNUMRANGE	++ XNUMRANGE
760	(2F8)	ADDRESS	4	CKWVSERV_XRANGLIST	++ XRANGLIST
760	(2F8)	X'C '	0	CKWVSERVL	**CKWVSERV" ++ LENGTH OF PLIST

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
IARVSERV-0					
End of Comment					
0	(0)	X'FC	0	CKWLNGLTH	**"-CKW" LENGTH OF CKW

**\$CKW Cross Reference**

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
CKWBLMSG	19C	C2D3C440		CKWDEQS	1F4	
CKWCADJ	A7	40		CKWDFAIL	10C	
CKWCCWA	A8			CKWDRNC1	144	
CKWCCWFL	A7			CKWDRNC2	148	
CKWCECKD	A7	80		CKWERREG	2C	
CKWCFAIL	108			CKWFIXST	B8	
CKWCFLSL	0	F8	000E8	CKWFLAG1	6	
CKWCFPRL	0	F8	00034	CKWFLAG2	7	
CKWCFPUR	1F8			CKWFLAG3	9	
CKWCFPUR_XCONTOKEN				CKWFLAG4	A	
	214			CKWFLAG5	B	
CKWCFPUR_XREQID				CKWID	0	C3D2E640
	224			CKWINITM	120	
CKWCFPUR_XRSV0001				CKWIOLST	C4	
	1FA			CKWIO24K	1C	
CKWCFPUR_XSCOPE_CONTOKEN				CKWKSTQE	138	
	1F9	20		CKWKT1PK	118	
CKWCFPUR_XSCOPE_STOKEN				CKWKT1RC	100	
	1F9	80		CKWLDIAG	6	8
CKWCFPUR_XSCOPE_TTOKEN				CKWLIRCT	70	
	1F9	40		CKWLKEY1	E0	
CKWCFPUR_XSCOPEFLAGS				CKWLKEY2	E8	
	1F9			CKWLKIT	14	
CKWCFPUR_XSTOKEN				CKWLKNUM	18	
	1FC			CKWLKVL1	F0	
CKWCFPUR_XTTOKEN				CKWLKVL2	F8	
	204			CKWLNGLTH	0	FC
CKWCFPUR_XVERSION				CKWMAXRC	1A	
	1F8			CKWMSG	14C	
CKWCFPURL	224	34		CKWMVSWT	78	
CKWCFTD	110			CKWPAKCT	5	FF
CKWCFWRE	130			CKWPARML	DC	18
CKWCFWTM	128			CKWPARMS	C8	
CKWCKCHW	9C			CKWPARM1	C8	
CKWCKCLP	90			CKWPARM2	CC	
CKWCKCLW	98			CKWPARM3	D0	
CKWCKCSP	94			CKWPARM4	D4	
CKWCKCTM	A0			CKWPARM5	D8	
CKWCKDA	AC			CKWPARM6	DC	
CKWCKMA	20			CKWPCICT	5	
CKWCKPSZ	8C			CKWPPL	1E8	
CKWCKPTN	74			CKWPPLA	24	
CKWCLSTA	BC			CKWQECB	138	
CKWCONID	140			CKWQREPL	138	40404040
CKWCTLBA	B0			CKWQSUSE	80	
CKWCTLB0	B4			CKWRCID	10	
CKWCTWA	28			CKWRECB	138	
CKWCT1RC	104			CKWRECF3	C	
CKWCURCG	6C			CKWRECNT	A4	
CKWC1ST	A7	20		CKWRESV	1F4	F8
CKWDEQ	1F4	F4		CKWRESVL	204	F4
CKWDEQL	200	F4	00010	CKWRESVS	1F4	00014

## \$CKW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKWRESV1	D			1FA	80
CKWRWOP	A6		CKWXLIST_KEYUSED_BUFLIST		
CKWSCAN	8			1FA	40
CKWSCDL	8	1	CKWXLIST_KEYUSED_BUFSTGKEY		
CKWSCF	8	80		1FA	4
CKWSCNL	8	E0	CKWXLIST_KEYUSED_EXTRESTOKEN		
CKWSDSN	8	40		1FD	20
CKWSHLST	C0		CKWXLIST_KEYUSED_LOCKCOMP		
CKWSNCN	8	1		1FC	1
CKWSTAR	1E8		CKWXLIST_PL_END		
CKWSTRL	1F4			2CC	E0
CKWSVOL	8	20	CKWXLIST_RCVRYREQASYNC		
CKWVERN	4	3		1FD	1
CKWVERSN	4		CKWXLIST_XADJADDR		
CKWVRL	2E0			220	
CKWVRLC	2EC		CKWXLIST_XADJAREA		
CKWVRLN	2E4			224	
CKWVRLP	2E8		CKWXLIST_XADJAREA_ALET		
CKWVSERV	2F0			220	
CKWVSERV_CHANGEACCESS			CKWXLIST_XANSADDR		
	2F1	3		228	
CKWVSERV_COPYNOW			CKWXLIST_XANSAREA		
	2F2	2		22C	
CKWVSERV_RETAIN_YES			CKWXLIST_XANSAREA_ALET		
	2F2	1		228	
CKWVSERV_SHARE			CKWXLIST_XANSLEN		
	2F1	1		202	
CKWVSERV_SHARESEG			CKWXLIST_XAUTHCOMP1		
	2F1	4		28C	
CKWVSERV_TARGET_VIEW_LS			CKWXLIST_XBUFADDRTYPE_REAL		
	2F2	8		1FA	2
CKWVSERV_TARGET_VIEW_NA			CKWXLIST_XBUFALET		
	2F2	4		214	
CKWVSERV_TARGET_VIEW_RO			CKWXLIST_XBUFFER		
	2F2	80		21C	
CKWVSERV_TARGET_VIEW_SW			CKWXLIST_XBUFFER_ALET		
	2F2	40		214	
CKWVSERV_TARGET_VIEW_TW			CKWXLIST_XBUFINCRNUM		
	2F2	10		25B	
CKWVSERV_TARGET_VIEW_UW			CKWXLIST_XBUFLIST		
	2F2	20		21C	
CKWVSERV_UNSHARE			CKWXLIST_XBUFLIST_ALET		
	2F1	2		218	
CKWVSERV_XFLAGS1			CKWXLIST_XBUFNUM		
	2F2			25A	
CKWVSERV_XFLAGS2			CKWXLIST_XBUFSIZE		
	2F3			218	
CKWVSERV_XNUMRANGE			CKWXLIST_XBUFSTGKEY		
	2F4			201	
CKWVSERV_XPARTIALPAGE_YES			CKWXLIST_XB8TO11		
	2F3	80		264	
CKWVSERV_XRANGLIST			CKWXLIST_XCCA		
	2F8			25C	
CKWVSERV_XSERVICE			CKWXLIST_XCCB		
	2F1			25D	
CKWVSERV_XVERSION			CKWXLIST_XCGLM		
	2F0			267	
CKWVSERVL	2F8	C	CKWXLIST_XCMDCODE		
CKWWTTM	88			1F9	
CKWXLIST	1F8		CKWXLIST_XCMDFLGS1		
CKWXLIST_KEYUSED_ADJAREA				260	
	1FA	20	CKWXLIST_XCMDFLGS1A		
CKWXLIST_KEYUSED_ANSAREA				260	
	1FA	10	CKWXLIST_XCMDFLGS1B		
CKWXLIST_KEYUSED_BUFFER				261	

Name	Hex Offset	Hex Value
CKWXLIST_XCMDFLGS1C		
	262	
CKWXLIST_XCMDFLGS1D		
	263	
CKWXLIST_XCMDFLGS2A		
	2A8	
CKWXLIST_XCMDLEN		
	258	
CKWXLIST_XCOMPONID		
	200	
CKWXLIST_XCONID		
	211	
CKWXLIST_XCONTOKEN		
	204	
CKWXLIST_XDATADDR		
	214	
CKWXLIST_XDBS		
	260	
CKWXLIST_XELEMNUM		
	260	
CKWXLIST_XENDINDEX		
	266	
CKWXLIST_XENTRYID		
	270	
CKWXLIST_XENTRYKEY		
	28C	
CKWXLIST_XENTRYNAME		
	28C	
CKWXLIST_XEXTRESTOKEN		
	240	
CKWXLIST_XEXTRESTOKENPSVN		
	248	
CKWXLIST_XEXTRESTOKENTKN		
	240	
CKWXLIST_XFIRSTELEM		
	29C	
CKWXLIST_XKEYCOMP		
	28C	
CKWXLIST_XLASTELEM		
	29E	
CKWXLIST_XLISTDESC		
	2AC	
CKWXLIST_XLISTLIMIT		
	270	
CKWXLIST_XLISTNUM		
	26C	
CKWXLIST_XLOCKDATA		
	240	
CKWXLIST_XLOCKINDEX		
	268	
CKWXLIST_XLOCKMODE_COND		
	1FC	2
CKWXLIST_XLOCKOPER_HELD		
	1FC	10
CKWXLIST_XLOCKOPER_NOTHELD		
	1FC	20
CKWXLIST_XLOCKOPER_READNEXT		
	1FC	4
CKWXLIST_XLOCKOPER_RESET		
	1FC	40
CKWXLIST_XLOCKOPER_SET		
	1FC	80
CKWXLIST_XLOCKOPER_TEST		
	1FC	8
CKWXLIST_XMCB_DATA1		

Name	Hex Offset	Hex Value
	25C	
CKWXLIST_XMCB_DATA2		
	2CC	
CKWXLIST_XMOB_DATA		
	258	
CKWXLIST_XMODE_ASYNCCECB		
	1FB	10
CKWXLIST_XMODE_ASYNCEXIT		
	1FB	8
CKWXLIST_XMODE_ASYNCNORESPONSE		
	1FB	2
CKWXLIST_XMODE_ASYNCCTOKEN		
	1FB	4
CKWXLIST_XMODE_SYNCECB		
	1FB	80
CKWXLIST_XMODE_SYNCEXIT		
	1FB	40
CKWXLIST_XMODE_SYNCTOKEN		
	1FB	20
CKWXLIST_XMOSVECTOR		
	224	
CKWXLIST_XMOSVECTOR_ALET		
	220	
CKWXLIST_XMOVETOKEY0		
	2CC	
CKWXLIST_XMOVETOLIST0		
	2DC	
CKWXLIST_XNEWAUTH1		
	29C	
CKWXLIST_XNEWVERS		
	27C	
CKWXLIST_XOPTIONALDATA		
	240	
CKWXLIST_XPAGEABLE_NO		
	1FA	8
CKWXLIST_XREQDATA		
	230	
CKWXLIST_XREQECB		
	230	
CKWXLIST_XREQID		
	238	
CKWXLIST_XREQTOKEN		
	234	
CKWXLIST_XREQTOKEN_ALET		
	230	
CKWXLIST_XRESTOKEN		
	29C	
CKWXLIST_XRSV0102		
	1FE	
CKWXLIST_XRSV0103		
	250	
CKWXLIST_XRSV0201		
	204	
CKWXLIST_XRSV0202		
	212	
CKWXLIST_XRSV0203		
	234	
CKWXLIST_XRSV0204		
	248	
CKWXLIST_XRSV0501		
	25E	
CKWXLIST_XRSV0502		
	264	
CKWXLIST_XRSV0601		
	274	

## \$CKW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKWXLIST_XRSV0602	28D		CKW52NVL	B	10
CKWXLIST_XRSV0603	2A4		CKW52VOL	B	20
CKWXLIST_XRSV0604	2A0		M00M0008	1F4	
CKWXLIST_XRSV0605	2A9		M00M0011	0	F8
CKWXLIST_XRSV0606	2AD		M00M0012	0	F0
CKWXLIST_XSHL_DATA	1F8		STARBAL	1EE	
CKWXLIST_XSHLFLGS	1FA		STARBDCTA	1E8	
CKWXLIST_XSHLFLGS1	1FA		STARBDL	1F2	
CKWXLIST_XSHLFLGS2	1FB		STARBDTU	1EC	6
CKWXLIST_XSHLFLGS3	1FC		STARBDLGS	1EC	
CKWXLIST_XSHLFLGS4	1FD		STARBDLUNC	1EC	80
CKWXLIST_XSTARTINDEX	264		STARBDL	1F1	
CKWXLIST_XTYPE_ADJDATA	1FD	80	STARBDLAST	1EC	8
CKWXLIST_XTYPE_ECONTROLS	1FD	40	STARBDLOC	1EC	1
CKWXLIST_XUID1	2AC		STARBDLMAXS	1EC	40
CKWXLIST_XUID2	28C		STARBDL	1F0	
CKWXLIST_XUID3	263		STARBDREMV	1EC	20
CKWXLIST_XVECTORINDEX	268		STARBDLKDD	1F0	
CKWXLIST_XVERSCOMP	284		STARBDTYPE	1EB	
CKWXLIST_XVERSION	1F8		STARBDUBAL	1EC	10
CKWXLISTL	2E0	E8	STARBDUCBA	1E8	
CKW1ESUP	6	20			
CKW1FNLW	6	80			
CKW1OFLW	6	40			
CKW1SPIO	6	4			
CKW1SPSC	6	2			
CKW1S266	6	10			
CKW2FMLS	7	4			
CKW2FWLS	7	8			
CKW2IWLS	7	10			
CKW2PWLS	7	20			
CKW2R1LS	7	80			
CKW2R2LS	7	40			
CKW3PWWP	9	8			
CKW3R2WP	9	10			
CKW4DIAG	A	4			
CKW4DIA1	A	20			
CKW4IGNO	A	8			
CKW4IGN1	A	40			
CKW4WTOR	A	10			
CKW4WTO1	A	80			
CKW5PROT	B	4			
CKW5STRL	B	8			
CKW51NVL	B	40			
CKW51VOL	B	80			



## \$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
52	(34)	BITSTRING	0	CKXFCTFA	"B'10000000" - Tell receiver to issue \$K25 error code
52	(34)	BITSTRING	0	CKXFCTFI	"B'01000000" - Tell receiver to pretend it never got this msg
52	(34)	BITSTRING	0	CKXFCTFC	"B'00100000" - Tell driving member to issue \$K25 after next driver commit
52	(34)	BITSTRING	0	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=ASYNCAK 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

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.

### 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
72	(48)	BITSTRING	0	CKXA1FOV	"B'10000000" - OPVERIFY=YES on this memb
72	(48)	BITSTRING	0	CKXA1FI1	"B'01000000" - I/O error on CKPT1
72	(48)	BITSTRING	0	CKXA1FI2	"B'00100000" - I/O error on CKPT2
72	(48)	BITSTRING	0	CKXA1FCV	"B'00010000" - CKPT on volatile CF
72	(48)	BITSTRING	0	CKXA1FOR	"B'00001000" - Operator dialog request
72	(48)	BITSTRING	0	CKXA1HUP	"B'00000100" - HFAM update is pending
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	0	CKXA1SEQ	Operation sequence number
76	(4C)	BITSTRING	0	CKXA1CON	Console ID or zero
76	(4C)	BITSTRING	0	CKXA1HFM	Copy of HFAM for NEWCKPTn specifications on member
76	(4C)	SIGNED	4	CKXA1END (0)	End of ack message
76	(4C)	X'48	0	CKXA1HCL	"328" If you change this constant
76	(4C)	ADDRESS	2	(0)	or get an assembly
76	(4C)	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
72	(48)	BITSTRING	0	CKXM2FOV	"B'10000000" - Use OPVERIFY=YES
72	(48)	BITSTRING	0	CKXM2FI1	"B'01000000" - I/O error on CKPT1
72	(48)	BITSTRING	0	CKXM2FI2	"B'00100000" - I/O error on CKPT2
72	(48)	BITSTRING	0	CKXM2FCV	"B'00010000" - CKPT on volatile CF
72	(48)	BITSTRING	0	CKXM2FOR	"B'00001000" - Operator dialog
72	(48)	BITSTRING	0	CKXM2FCN	"B'00000100" - Cancelled by JES2
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	0	CKXM2SEQ	Highest operation sequence
76	(4C)	BITSTRING	0	CKXM2CON	Console ID or zero
76	(4C)	SIGNED	0	CKXM2NI1	Number of CKPT1 I/O errors
76	(4C)	SIGNED	0	CKXM2NI2	Number of CKPT2 I/O errors
76	(4C)	CHARACTER	0	CKXM2NAM	Name of new driving member
76	(4C)	CHARACTER	0	CKXM2PMV	Vector of member names participating in orig driver selection
76	(4C)	BITSTRING	0	CKXM2HFM	HFAM to initially use for this reconfig instance
76	(4C)	SIGNED	4	CKXM2END (0)	End of message
76	(4C)	X'D4	0	CKXM2HCL	"468" If you change this constant
76	(4C)	ADDRESS	2	(0)	or get an assembly
76	(4C)	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
72	(48)	BITSTRING	0	CKXM3DMF	"B'10000000" - Driving member failed
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	0	CKXM3SEQ	Operation sequence number
76	(4C)	CHARACTER	0	CKXM3TYP	Sync point type
76	(4C)	SIGNED	0	CKXM3ACT	Requested action
76	(4C)	CHARACTER	0	CKXM3HFM	Driver's current HFAM
76	(4C)	SIGNED	4	CKXM3END (0)	End of message
76	(4C)	X'50	0	CKXM3HCL	"336" If you change this constant
76	(4C)	ADDRESS	2	(0)	or get an assembly
76	(4C)	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	0	CKXA3TYP	Sync point type
72	(48)	CHARACTER	0	CKXA3CON	Non-driver's condition
72	(48)	CHARACTER	0	CKXA3RSN	Non-driver's reason code
72	(48)	SIGNED	4	CKXA3END (0)	End of ack message
72	(48)	X'18	0	CKXA3HCL	"24" If you change this constant
72	(48)	ADDRESS	2	(0)	or get an assembly
72	(48)	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	0	CKXM4TYP	Sync point type
72	(48)	SIGNED	4	CKXM4END (0)	End of message
72	(48)	X'10	0	CKXM4HCL	"16" 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

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	0	CKXA4TYP	Sync point type
72	(48)	SIGNED	4	CKXA4END (0)	End of ack message
72	(48)	X'10	0	CKXA4HCL	"16" 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

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	0	CKXM5SEQ	Operation sequence number
72	(48)	SIGNED	4	CKXM5END (0)	End of message
72	(48)	X'C	0	CKXM5HCL	"12" If you change this constant
72	(48)	ADDRESS	2	(0)	or get an assembly

## \$CKX Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
72	(48)	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					
76	(4C)	SIGNED	4	(0)	Alignment
76	(4C)	X'4C	0	CKXMAXLN	** -CKX" Max \$CKX data area length

## \$CKX Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKXA1	3C	3	CKXA4HCL	48	10
CKXA1BEG	40		CKXA4MSG	40	
CKXA1CON	4C		CKXA4TYP	48	
CKXA1END	4C		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	4C	48	CKXFCTFD	34	10
CKXA1HFM	4C		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	4C	4C
CKXA2HCL	48	8	CKXMEYE	40	
CKXA2MSG	40		CKXMSG	40	
CKXA3	3C	7	CKXMSGLN	10	
CKXA3BEG	40		CKXMTYPE	3C	
CKXA3CON	48		CKXM0	3C	1
CKXA3END	48		CKXM0BEG	40	
CKXA3EYE	40		CKXM0END	48	
CKXA3HCL	48	18	CKXM0EYE	40	
CKXA3MSG	40		CKXM0HCL	48	8
CKXA3RSN	48		CKXM0MSG	40	
CKXA3TYP	48		CKXM1	3C	2
CKXA4	3C	9	CKXM1BEG	40	
CKXA4BEG	40		CKXM1END	48	
CKXA4END	48		CKXM1EYE	40	
CKXA4EYE	40		CKXM1HCL	48	8



Name	Hex Offset	Hex Value
CKXM1MSG	40	
CKXM2	3C	4
CKXM2BEG	40	
CKXM2CON	4C	
CKXM2END	4C	
CKXM2EYE	40	
CKXM2FCN	48	4
CKXM2FCV	48	10
CKXM2FI1	48	40
CKXM2FI2	48	20
CKXM2FLG	48	
CKXM2FOR	48	8
CKXM2FOV	48	80
CKXM2HCL	4C	D4
CKXM2HFM	4C	
CKXM2MSG	40	
CKXM2NAM	4C	
CKXM2NI1	4C	
CKXM2NI2	4C	
CKXM2PMV	4C	
CKXM2SEQ	4C	
CKXM3	3C	6
CKXM3ACT	4C	
CKXM3BEG	40	
CKXM3DMF	48	80
CKXM3END	4C	
CKXM3EYE	40	
CKXM3FLG	48	
CKXM3HCL	4C	50
CKXM3HFM	4C	
CKXM3MSG	40	
CKXM3SEQ	4C	
CKXM3TYP	4C	
CKXM4	3C	8
CKXM4BEG	40	
CKXM4END	48	
CKXM4EYE	40	
CKXM4HCL	48	10
CKXM4MSG	40	
CKXM4TYP	48	
CKXM5	3C	A
CKXM5BEG	40	
CKXM5END	48	
CKXM5EYE	40	
CKXM5HCL	48	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	
5	(5)	BITSTRING	0	CMB2GETM	"B'10000000" GETMAINED CMB (FOR CMDS)	
5	(5)	BITSTRING	0	CMB2GMTK	"B'01000000" \$GETMAINED TOKEN	
5	(5)	BITSTRING	0	CMB2AUTO	"B'00100000" CMB from auto command	
5	(5)	BITSTRING	0	CMB2INIT	"B'00010000" CMB from initialization	
5	(5)	BITSTRING	0	CMB2IFF	"B'00001000" IFF indicator from SSINOUS	
5	(5)	BITSTRING	0	CMB2LGON	"B'00000100" User is logged on-indicator	
5	(5)	BITSTRING	0	CMB2NOTF	"B'00000010" THIS IS A NOTIFY CMB	
5	(5)	BITSTRING	0	CMB2DMC	"B'00000001" CMB obtained for DEMANDCMB	
6	(6)	BITSTRING	1	CMBFLAG4	General flag byte 4	
6	(6)	BITSTRING	0	CMB4LOGO	"B'00000001" Issue msg to HRDCPY only	
6	(6)	BITSTRING	0	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	
27	(1B)	BITSTRING	0	CMB3TOK	"B'10000000" COMMAND HAS A TOKEN ASSOCIATED WITH IT	
27	(1B)	BITSTRING	0	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	20	CMBFNORM (0)	FORMATTED AREA FOR NORMAL CMD
68	(44)	BITSTRING	36	CMBFRTE (0)	FORMATTED AREA FOR ROUTE CMD
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

Comment

## CMBFLAG DEFINITIONS

End of Comment

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

Comment

## CMBPRIO DEFINITIONS

End of Comment

96	(60)	BITSTRING	0	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

96	(60)	BITSTRING	0	CMBTYPEX	"B'11110000" RESERVED BITS
96	(60)	BITSTRING	0	CMBTYPEP	"B'00000001" Formatted DOM CMB
96	(60)	BITSTRING	0	CMBTYPEF	"B'00000010" Formatted command in CMBMSG
96	(60)	BITSTRING	0	CMBTYPE4	"B'00000100" MSG TEXT ONLY IN NMRMSG
96	(60)	BITSTRING	0	CMBTYPE4	"B'00001000" RESERVED BIT

Comment

## CMBFOP DEFINITIONS

End of Comment

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

Comment

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CMBFFLG DEFINITIONS

End of Comment

96	(60)	BITSTRING	0	CMBFFLGJ	"X'03" BATCH JOB TYPE WHEN ZEROES
96	(60)	BITSTRING	0	CMBFFLGS	"X'01" STC JOB TYPE
96	(60)	BITSTRING	0	CMBFFLGT	"X'02" TSU JOB TYPE
96	(60)	BITSTRING	0	CMBFFLGO	"X'80" CANCEL OR ROUTE OUTPUT
96	(60)	BITSTRING	0	CMBFFLGD	"X'40" CANCEL EXECUTION WITH DUMP

**\$CMB Cross Reference**

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

## \$CMB Cross Reference

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
CMB3TOK	1B	80
CMB4EMER	6	80
CMB4LOGO	6	1



---

**\$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
0	(0)	BITSTRING	1	JPCESTAT	PROCESSOR STATUS BYTE
0	(0)	BITSTRING	0	JPCEDUPL	"B'10000000" Duplicate logon tried
0	(0)	BITSTRING	0	JPCEJCTV	"B'01000000" JCT VALID
0	(0)	BITSTRING	0	JPCECNWT	"B'00010000" This PCE cannot wait for OS CNVT
1	(1)	CHARACTER	1	JPCECLAS	ORIGINAL JOB CLASS
2	(2)	CHARACTER	1	JPCEPRIO	ORIGINAL JOB PRIORITY
3	(3)	BITSTRING	1		RESERVED FOR FUTURE USE
4	(4)	ADDRESS	4	JPCEDETE	SUBTASK DTE ADDRESS
8	(8)	ADDRESS	4	JPCEJCTA	JCT BUFFER ADDR FOR PCE
12	(C)	ADDRESS	4	JPCEIOT	ADDRESS OF ALLOCATION IOT
16	(10)	BITSTRING	0	JPCEJCTQ	HASP TIMER QUEUE ELEMENT
16	(10)	SIGNED	4	JPCEBSIZ	TOTAL PERMANENT BUFFER STORAGE
20	(14)	ADDRESS	4	JPCEJCTSUM	\$ESTAE RESUME ADDR, IF ANY
24	(18)	SIGNED	4	JPCEJCTT	MTTR OF JCT, CHANGED BY PROCESSOR WHEN NEW MTTR SET OF JCT
28	(1C)	ADDRESS	4		RESERVED FOR FUTURE IBM USE
32	(20)	SIGNED	4	JPCEDOM	ADDRESS OF CMB TO BE \$DOM'D



## \$CNVWORK Cross Reference

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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
0	(0)	BITSTRING	1		\$RDRWORK len (for HASPRJCS)
Comment					
SPOOL MASK WORK AREA - USED WITH V=VOLSER OPERAND					
End of Comment					
0	(0)	BITSTRING	1	COMSPMSK	VOLUME SERIAL MASK
Comment					
SECURITY RELATED TOKEN OF ISSUER OF COMMAND					
End of Comment					
0	(0)	CHARACTER	0	COMSECT	SECURITY TOKEN
0	(0)	ADDRESS	4	COMSQD	ADDRESS OF SQD OR ZERO
4	(4)	BITSTRING	1	COMFLAG2	Second CMB flag (CMBFLAG2)
8	(8)	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					
12	(C)	SIGNED	4	COMENTBG	See above comment box
Comment					
-----					
Parameters for IEAVM173 (WPL message extract service)					
-----					
End of Comment					
16	(10)	ADDRESS	4	COMMLTEA	Address of MLTE
20	(14)	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					
20	(14)	SIGNED	4	COMWTOPL (0)	START OF WTO PARAMETERS
20	(14)	CHARACTER	1	COMFLAG	FLAGS FOR CMB
21	(15)	CHARACTER	1	COMLEVEL	LIST LEVEL AND PRIORITY
22	(16)	CHARACTER	1	COMTYPE	FORMAT TYPE
23	(17)	CHARACTER	1	COMML	LENGTH OF MESSAGE
24	(18)	SIGNED	4	(0)	
24	(18)	ADDRESS	3	COMTO (0)	TO SYSTEM NODE INFORMATION
24	(18)	SIGNED	2	COMTONOD	NODE NUMBER (BINARY)
26	(1A)	BITSTRING	1	COMTOQUL	NODE QUALIFIER
27	(1B)	BITSTRING	1	COMFLAG3	CMB General flag byte 3
28	(1C)	CHARACTER	8	COMCART	COMMAND AND RESPONSE TOKEN
36	(24)	CHARACTER	1	COMUCM	FOR DOWN LEVEL COMPATIBILITY
37	(25)	CHARACTER	1	COMUCMA	MCS CONSOLE AREA
38	(26)	CHARACTER	2	COMLINET	LINE TYPE FOR MLWTO
40	(28)	CHARACTER	4	COMUCMID	4-BYTE MCS CONSOLE ID
44	(2C)	CHARACTER	2	COMDESC	MCS DESCRIPTOR CODES
46	(2E)	CHARACTER	2	COMROUT	MCS ROUTE CODES
48	(30)	CHARACTER	4	COMDOMID	MCS DOM ID
52	(34)	SIGNED	2	COMRMT	REMOTE NUMBER
54	(36)	CHARACTER	8	COMUSER	TSO USER ID
54	(36)	X'2A	0	COMWTOLG	"*-COMWTOPL" LENGTH OF WTO PARM LIST
62	(3E)	ADDRESS	2	(0)	Verify that lengths of
62	(3E)	ADDRESS	2	(0)	parameter lists are OK
Comment					
FUNCTION WORK SPACE					
-----					
End of Comment					
62	(3E)	CHARACTER	4	COMINCON	SOURCE CONSOLE UCMID
66	(42)	CHARACTER	1	COMAUTH	SOURCE CONSOLE AUTHORITY
67	(43)	CHARACTER	8	COMACEID	AUTOMATIC COMMAND ELEMENT ID

## \$COMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
76	(4C)	SIGNED	4	COMJROUT (0)	JOB QUEUING ROUTE CODE FROM CMB (BINARY)
76	(4C)	SIGNED	2	COMJNOD	NODE ID
78	(4E)	SIGNED	2	COMJRMT	REMOTE ID
80	(50)	SIGNED	4	COMJSCAT	SAVE AREA FOR \$CFJSCAN CAT
84	(54)	SIGNED	4	COMWORK	SINGLE PRECISION WORK AREA
88	(58)	DBL WORD	8	COMDWORK	DOUBLE PRECISION WORK AREA
96	(60)	DBL WORD	8	COMWREGS (2)	REGISTER SAVE AREA
112	(70)	SIGNED	4	COMFWORK	FULL WORD WORK AREA
116	(74)	ADDRESS	1	COMBWORK	ONE BYTE WORK AREA
117	(75)	BITSTRING	1	COMGFLG1	GENERAL FLAG BYTE
117	(75)	BITSTRING	0	COMG1APO	"B'10000000" APOSTROPHE SWITCH IS ON
117	(75)	BITSTRING	0	COMG1REQ	"B'01000000" CMB MUST BE REQUEUED
117	(75)	BITSTRING	0	COMG1PAR	"B'00100000" CLOSING PAREN SWITCH IS ON
117	(75)	BITSTRING	0	COMG1CON	"B'00010000" MASTER CONSOLE RETRY BIT
117	(75)	BITSTRING	0	COMG1SSI	"B'00001000" SSI FORMATTED COMMAND
117	(75)	BITSTRING	0	COMG1\$MN	"B'00000100" \$M/\$N command found
117	(75)	BITSTRING	0	COMG1UAC	"B'00000010" Unauthorized console
117	(75)	BITSTRING	0	COMG1SJR	"B'00000001" A single job being processed by a job list command
118	(76)	BITSTRING	1	COMGFLG2	Command level general flag

Comment

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

End of Comment

118	(76)	X'76	0	CPOFLAG	"COMGFLG2"
118	(76)	BITSTRING	0	CPOFCLS	"B'10000000" FLAG FOR CLASS STRING EXISTS
118	(76)	BITSTRING	0	CPOFCNCL	"B'01000000" FLAG FOR CANCEL HELD DS
118	(76)	BITSTRING	0	CPOFRTE	"B'00100000" FLAG FOR RE-ROUTING DESIRED
118	(76)	BITSTRING	0	CPOPROT	"B'00010000" PROTECTED keyword given
118	(76)	BITSTRING	0	CPOFALL	"B'00001000" FLAG FOR 'ALL' OPERAND
118	(76)	BITSTRING	0	CPOFAGHR	"B'00000100" FLAG FOR CUT OFF AGE/HOURS
118	(76)	BITSTRING	0	CPOFQR	"B'00000010" Q= and/or R= was specified
118	(76)	BITSTRING	0	CPOFNJO	"B'00000001" Flag destid on Network Q
119	(77)	BITSTRING	1	COMPWORK	For "PROTECTED" keyword use
120	(78)	SIGNED	2	COMLCCA	FLAGS AND AREA OF 'L='
120	(78)	BITSTRING	0	COMFLGJ	"B'00000011" BATCH JOB TYPE WHEN ZEROES
120	(78)	BITSTRING	0	COMFFLGS	"B'00000001" STC JOB TYPE
120	(78)	BITSTRING	0	COMFFLGT	"B'00000010" TSU JOB TYPE
122	(7A)	CHARACTER	10	COMCONNM	SYMBOLIC CONSOLE NAME AND OUT-OF-LINE AREA

Comment

COMMAND EDIT ROUTINE FLAGS

End of Comment

122	(7A)	X'56	0	COMLFLG	"COMWORK+2" FLAG BYTE
122	(7A)	X'1	0	COMLFLGR	"1" UCM CMD FROM REMOTE SYSTEM
122	(7A)	X'2	0	COMLFLGC	"2" CONSOLE HAS BEEN SPECIFIED
122	(7A)	X'4	0	COMLFLGA	"4" AREA HAS BEEN SPECIFIED

Comment

COMMAND INPUT PASSED TO \$SCAN

End of Comment

132	(84)	CHARACTER	132	COMINPUT	COMMAND INPUT PASSED TO \$SCAN
264	(108)	SIGNED	4	COMSDLCT	COUNT OF \$SCAN DISPLAY LINES
268	(10C)	SIGNED	4	COMTDLCT	Count of total lines displayed for commands partially implemented via \$SCAN
272	(110)	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

276	(114)	CHARACTER	2	COMMID	MESSAGE ID
276	(114)	X'14 '	0	COMLNGTH	"COMMID" Command length
278	(116)	CHARACTER	1024	COMMAND	COMMAND AND MESSAGE AREA
278	(116)	X'17 '	0	COMVERB	"COMMAND+1" LOCATION OF COMMAND VERB
278	(116)	X'18 '	0	COMOPRND	"COMMAND+2" LOCATION OF FIRST OPERAND
278	(116)	X'DE 00001'	0	COMSAFL	"COMMAND+200,1" Length and command image
278	(116)	X'DF 00096'	0	COMSAFC	"COMSAFL+1,150" for \$SEAS CMDAUTH call
1302	(516)	CHARACTER	8	COMJNAME	MESSAGE AREA EXTENSION/JOBNAME
1310	(51E)	CHARACTER	0	CURRCMD	Mirror of Command
1310	(51E)	SIGNED	2	COMMNDLN	Length of data in CURRCMD
1312	(520)	ADDRESS	4	COMXWCA	Address of CXWC DSECT
1316	(524)	ADDRESS	4	COMLJBRG	Ptr to last job range

Comment

OPERAND POINTER AREA

End of Comment

1320	(528)	SIGNED	4	COMPNTER (20)	AREA FOR OPERAND POINTERS
1320	(528)	X'50 '	0	COMPNTRL	**COMPNTER" Length of operand ptr area
1400	(578)	ADDRESS	2	(0)	Force assembly error IF AREA TOO SMALL FOR USE BY \$DM
1400	(578)	SIGNED	4	COMNULOP	NULL OPERAND
1404	(57C)	BITSTRING	20	COMPINDX	COMPNTER/CDUTABLE INDEX BYTES
1424	(590)	SIGNED	4	(0)	
1424	(590)	SIGNED	4	COMINXSV	SAVE AREA FOR COMPINDX POINTER
1428	(594)	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

1432	(598)	BITSTRING	248	COMREGSV	REGISTER SAVE/WORK AREA
------	-------	-----------	-----	----------	-------------------------

Comment

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

End of Comment

1680	(690)	BITSTRING	18	COMRWORK	WORK AREA FOR SUBMITTING EBCDIC ROUTES TO \$DEST/USERDEST
1698	(6A2)	BITSTRING	1	COMRFLG1	FLAG BYTE FOR ROUTECODES
1698	(6A2)	BITSTRING	0	COMR1GNC	"B'01000000" Indicates the userid in COMUWORK contains a least one generic character
1698	(6A2)	BITSTRING	0	COMR1UNN	"B'00100000" INDICATES WHETHER OR NOT SPECIAL LOCAL ROUTING IS INCLUDED IN RANGE
1698	(6A2)	BITSTRING	0	COMR1RAL	"B'00010000" Indicates that route code ranges are allowed
1698	(6A2)	BITSTRING	0	COMR1DFT	"B'00001000" INDICATES COMREGSV+2 IS TO BE USED FOR THE DEFAULT NODE INSTEAD OF COMJNOD
1698	(6A2)	BITSTRING	0	COMR1GEN	"B'00000100" INDICATES WHETHER OR NOT A GEN. USERID IS ALLOWED
1698	(6A2)	BITSTRING	0	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
1698	(6A2)	BITSTRING	0	COMR1RPR	"B'00000001" INDICATES ROUTECODE CONTAINED (
1699	(6A3)	BITSTRING	1		RESERVED FOR FUTURE USE
1700	(6A4)	CHARACTER	8	COMUWORK	HI-END USERID FROM \$DEST
1700	(6A4)	X'2'	0	COMNODE	"0,2,C'H" Offset/length of node
1700	(6A4)	X'2 00002'	0	COMRMTE	"2,2,C'H" Offset/length of rmt
1700	(6A4)	X'4 00008'	0	COMUSEID	"4,8,C'D" Offset/length of userid
1700	(6A4)	X'4 '	0	COMNRLEN	"L'COMNODE+L'COMRMT" Length of node+remote
1700	(6A4)	X'8 '	0	COMUCNT	"8" COUNTER FOR EXAMINING GENERIC USERIDS
1708	(6AC)	BITSTRING	1		Reserved
Comment					
-----					
More flag bytes					
-----					
End of Comment					
1709	(6AD)	BITSTRING	1	COMSFLG1	Flag byte for specific cmds
1709	(6AD)	BITSTRING	0	COMS1WT	"B'10000000" Waited 1 sec in \$PJES2 for system to quiesce
Comment					
-----					
Next 2 bits used for Joblist commands					
-----					
End of Comment					
1709	(6AD)	BITSTRING	0	COMS1JQ	"B'01000000" JOBQ specified as object
1709	(6AD)	BITSTRING	0	COMS1JST	"B'00100000" J, S, or T specified
1709	(6AD)	BITSTRING	0	COMS1HIT	"B'00010000" JOE found flag
1709	(6AD)	BITSTRING	0	COMS1RTS	"B'00001000" \$T RMT switched BSC<--->SNA
1709	(6AD)	BITSTRING	0	COMS1MAX	"B'00000100" Maximum hi range specified
1709	(6AD)	BITSTRING	0	COMS1FLT	"B'00000010" Job queue filter required
1709	(6AD)	BITSTRING	0	COMS1RBD	"B'00000001" Include rebuild queue in job scan
1710	(6AE)	BITSTRING	2		Reserved for future use
Comment					
-----					
\$CFSEL macro/service routine communication area					
-----					
End of Comment					
1712	(6B0)	ADDRESS	4	COMSCOTE	Address of current entry in operand pointer table
1716	(6B4)	ADDRESS	4	COMSRTNA	Address of selected routine (or zero if no match)
1720	(6B8)	SIGNED	4	COMSSLEN	Length of matching string (or zero if no match)
1724	(6BC)	SIGNED	4	COMSRLEN	Residual operand length (or input operand length if no match)
Comment					
-----					
Area for specifications for filter type operands					
-----					
End of Comment					
1728	(6C0)	CHARACTER	8	COMJNAM	STORE OUTPUT JOE NAME
1736	(6C8)	SIGNED	2	COMJID1	STORE OUTPUT JOE 1ST ID
1738	(6CA)	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
1740	(6CC)	SIGNED	4	(0)	Word alignment
1740	(6CC)	BITSTRING	0	COJWORK	Work-JOE area for \$TO/\$R
1740	(6CC)	BITSTRING	0	COCHAR	Char-JOE area for \$TO/\$R
1740	(6CC)	BITSTRING	1	COMLFLG	Flag byte for \$L and \$TO
1740	(6CC)	BITSTRING	0	COMLTMAX	"B'10000000" DISP MAX reached for current set of \$HAS686 msgs
Comment					
----- Field needed for \$CFJSCAN Processing -----					
End of Comment					
1741	(6CD)	BITSTRING	2		Reserved for future use
1743	(6CF)	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					
1744	(6D0)	BITSTRING	0	COMAFMSK	System affinity mask
1744	(6D0)	BITSTRING	1	COMOSAFM	Old system affinity mask
Comment					
----- ENQ/DEQ parameter lists -----					
MACRO-DATE = 95/03/03					
End of Comment					
1744	(6D0)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
1744	(6D0)	X'D0	0	COMRDRNQ	*** X02113
1744	(6D0)	ADDRESS	1		PELLAST flag byte. X02113
1745	(6D1)	ADDRESS	1		PELMILEN - RNAME length.
1746	(6D2)	BITSTRING	1		
Comment					
PELFLAG - flag byte 2.					
End of Comment					
1747	(6D3)	ADDRESS	1		PELRET - return code byte.
1748	(6D4)	ADDRESS	4		QNAME ADDRESS
1752	(6D8)	ADDRESS	4		RNAME ADDRESS
1752	(6D8)	X'C	0	COMENQL	**-COMRDRNQ' Length of ENQ
Comment					
MACRO-DATE = 05/05/95					
End of Comment					
1756	(6DC)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
1756	(6DC)	X'DC	0	COMRDRDQ	*** X02113
1756	(6DC)	ADDRESS	1		PELLAST flag byte. X02113
1757	(6DD)	ADDRESS	1		PELMILEN - RNAME length.
1758	(6DE)	BITSTRING	1		

## \$COMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
PELFLAG - flag byte 2.					
End of Comment					
1759	(6DF)	ADDRESS	1		PELRET - return code byte.
1760	(6E0)	ADDRESS	4		QNAME ADDRESS
1764	(6E4)	ADDRESS	4		RNAME ADDRESS
1764	(6E4)	X'C '	0	COMDEQL	**_COMRDRDQ" Length of DEQ
1764	(6E4)	X' '	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					
1432	(598)	BITSTRING	40	COMFCMDA (0)	FORMATTED COMMAND AREA
1432	(598)	CHARACTER	1	COMFOP	FORMATTED COMMAND OPTION CODE
1433	(599)	CHARACTER	1	COMFFLG	FORMATTED COMMAND FLAG BYTE
1434	(59A)	SIGNED	2	COMFJID	JOB IDENTIFICATION
1436	(59C)	CHARACTER	8	COMFORGN	ORIGINATING NODE NAME
1444	(5A4)	CHARACTER	8	COMFJNAM	JOB NAME
1452	(5AC)	CHARACTER	8	COMFD	DESTINATION NODE NAME (ROUTE CMD)
1460	(5B4)	CHARACTER	8	COMFR	REMOTE NAME (ROUTE CMD)
1468	(5BC)	SIGNED	4	COMFJNO	Job number identifier
1468	(5BC)	X'C0 '	0	COMFEND	*** END OF FORMATTED COMMAND AREA
1468	(5BC)	X'28 '	0	COMFL	**_COMFOP" LENGTH OF FORMATTED CMD AREA
1472	(5C0)	ADDRESS	2	(0)	Ensure area fits within COMREGSV
Comment					
-----					
SSI FORMATTED CMD WORKAREA (USED BY HASPCFCP)					
-----					
End of Comment					
1320	(528)	CHARACTER	80	COSIWORK (0)	
1320	(528)	BITSTRING	40	COSICMDA (0)	FORMATTED COMMAND AREA
1320	(528)	CHARACTER	1	COSIOP	FORMATTED COMMAND OPTION CODE
1321	(529)	CHARACTER	1	COSIFLG	FLAG BYTE (SEE COMFFLG DEF.)
1322	(52A)	SIGNED	2	COSIJID	JOB IDENTIFICATION
1324	(52C)	CHARACTER	8	COSIORGN	ORIGINATING NODE NAME
1332	(534)	CHARACTER	8	COSIJNAM	JOB NAME
1340	(53C)	CHARACTER	8	COSID	DESTINATION NODE NAME (ROUTE CMD)
1348	(544)	CHARACTER	8	COSIR	REMOTE NAME (ROUTE CMD)
1356	(54C)	SIGNED	4	COSIJNO	Job number identifier
1356	(54C)	X'50 '	0	COSIEND	*** END OF FORMATTED COMMAND AREA
1356	(54C)	X'28 '	0	COSIL	**_COSICMDA" LENGTH OF FORMATTED CMD AREA
1360	(550)	SIGNED	4	COSILINK	USED TO SAVE LINK REGISTER
1364	(554)	SIGNED	4	COSIJQER	USED TO SAVE PTR TO JQE
1368	(558)	SIGNED	4	COSISAV0	USED TO SAVE R0 CONTENTS
1372	(55C)	SIGNED	2	COSINOD#	ORIGINATING NODE # (BINARY)
1374	(55E)	CHARACTER	1	COSIEFOP	EFFECTIVE CMD OPTION CODE
1375	(55F)	BITSTRING	1		RESERVED FOR FUTURE USE
1375	(55F)	X'38 '	0	COMSIL	**_COSIWORK" Length of this remapping
1376	(560)	ADDRESS	2	(0)	Ensure area fits within COMPNTER

Offsets

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

Comment

COMFOP DEFINITIONS

End of Comment

1376	(560)	X'1 '	0	COMFOPD	"1" DISPLAY JOB COMMAND (\$GD)
1376	(560)	X'2 '	0	COMFOPC	"2" CANCEL JOB COMMAND (\$GC)
1376	(560)	X'3 '	0	COMFOPA	"3" RELEASE JOB COMMAND (\$GA)
1376	(560)	X'4 '	0	COMFOPH	"4" HOLD JOB COMMAND (\$GH)
1376	(560)	X'5 '	0	COMFOPR	"5" ROUTE JOB COMMAND (\$GR)

Comment

COMFFLG DEFINITIONS

End of Comment

1376	(560)	BITSTRING	0	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
1376	(560)	BITSTRING	0	COMFFLGD	"B'01000000" CANCEL EXECUTION WITH A DUMP
1376	(560)	BITSTRING	0	COMFFLGN	"B'00100000" COSIFJNO is job number

Comment

\$R COMMAND WORK AREA

End of Comment

1432	(598)	SIGNED	4	CRXWORKA (0)	\$R COMMAND WORK AREA
1432	(598)	SIGNED	4	CRXOLDRT	SAVE AREA FOR OLD ROUTECDE
1436	(59C)	SIGNED	4	CRXNEWRT	SAVE AREA FOR NEW ROUTECDE
1440	(5A0)	SIGNED	4	CRXCLSPT	SAVE AREA FOR CLASS PTR
1444	(5A4)	SIGNED	2	CRXJOBNO	SAVE AREA FOR JOB NUMBER
1446	(5A6)	BITSTRING	1	CRXOUTD	OUTDISP PROCESSING FLAGS
1446	(5A6)	BITSTRING	0	CRXODLST	"B'10000000" PARENTHESIZED OPERAND LIST CURRENTLY BEING PROCESSED
1446	(5A6)	X' '	0	CRXODW	"\$ODWRITE" PROCESS OUTDISP=WRITE
1446	(5A6)	X' '	0	CRXODH	"\$ODHOLD" PROCESS OUTDISP=HOLD
1446	(5A6)	X' '	0	CRXODK	"\$ODKEEP" PROCESS OUTDISP=KEEP
1446	(5A6)	X' '	0	CRXODL	"\$ODLEAVE" PROCESS OUTDISP=LEAVE
1446	(5A6)	X' '	0	CRXODANY	"\$ODANY" ANY OUTDISP SETTINGS
1447	(5A7)	BITSTRING	1	CRXFLAG1	\$R command flag byte
1447	(5A7)	BITSTRING	0	CRX1GENC	"B'10000000" CRXOLDUS contains generic characters ('*' or '?')
1448	(5A8)	BITSTRING	37	CRXCLASL	Q= CLASS LIST (36 + BLANK)
1488	(5D0)	SIGNED	4	(0)	FULL WORD ALIGNMENT
1488	(5D0)	CHARACTER	8	CRXOLDUS	SAVE AREA FOR OLD ROUTE CD
1496	(5D8)	CHARACTER	8	CRXNEWUS	SAVE AREA FOR NEW ROUTE CD
1504	(5E0)	CHARACTER	8	CRXNEWND	SAVE AREA FOR NEW NODE NAME
1504	(5E0)	X'50 '	0	CRXLEN	"*-CRXWORKA" LENGTH OF \$R WORK AREA
1512	(5E8)	ADDRESS	2	(0)	CHECK FOR OVERLAP

Comment

MESSAGE TEXT FOR PRMODE SYSTEM TABLE ERROR

End of Comment

278	(116)	CHARACTER	66	CTPRTEXT	PRMODE TABLE MESSAGE
344	(158)	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					
1532	(5FC)	BITSTRING	1	CRJFLAG	Flags for JOE/JQE commands
1532	(5FC)	X'65	0	CRJLEN	**_-COMREGSV" Length of remapped area
1534	(5FE)	ADDRESS	2	(0)	Check for overlap
Comment					
Flag definitions for CRJFLAG					
End of Comment					
1534	(5FE)	BITSTRING	0	CRJFLGCF	"B'10000000" PSTCFVQE has been invoked
Comment					
DISPLAY UNIT FLAG DEFINITIONS					
End of Comment					
1534	(5FE)	X'94	0	CDUFLAG1	"COMOPFLG" CDUFLAG1 DEFINITION
1534	(5FE)	BITSTRING	0	CDUFLGRP	"B'10000000" GROUP DISPLAY REQUEST
1534	(5FE)	BITSTRING	0	CDUFLTYP	"B'11000000" TYPE-GROUP DISPLAY REQ
1534	(5FE)	BITSTRING	0	CDUFLRMT	"B'00100000" REMOTE SUB-DISPLAY REQ
1534	(5FE)	BITSTRING	0	CDUFLRAT	"B'00010000" RAT BASED DISPLAY REQ
1534	(5FE)	BITSTRING	0	CDUFLONE	"B'00001000" SINGLE DCT DISPLAY REQ
1534	(5FE)	BITSTRING	0	CDUFLCLS	"B'00000100" DCT CLASS SKIP REQUEST
1534	(5FE)	BITSTRING	0	CDUFLLU	"B'00000010" SNA LUNAME SUBDISPLAY
1534	(5FE)	BITSTRING	0	CDUFLMOD	"B'00000001" MODIFIER OPERAND ONLY
1534	(5FE)	X'95	0	CDUDEVTP	"COMOPFLG+1" TYPE-GROUP DCT TYPE
1534	(5FE)	X'96	0	CDUMASK	"COMOPFLG+2" BRANCH MASK VALUE
1534	(5FE)	X'97	0	CDUFLAG2	"COMOPFLG+3" CDUFLAG2 DEFINITION
1534	(5FE)	BITSTRING	0	CDUFLSUB	"B'10000000" RMT SUB-DSPLY IN PROGR
1534	(5FE)	BITSTRING	0	CDUFLONG	"B'01000000" FORCE LONG DISPLAY
1534	(5FE)	BITSTRING	0	CDUFLFND	"B'00100000" DEVICE FOUND IN DSPLY
1534	(5FE)	BITSTRING	0	CDUFLOPR	"B'00010000" NON-MODIFIER OPERANDS
1534	(5FE)	BITSTRING	0	CDUFLACT	"B'00001000" ACTIVE ONLY MODIFIER
1534	(5FE)	BITSTRING	0	CDUFLSTR	"B'00000100" STARTED ONLY MODIFIER
1534	(5FE)	BITSTRING	0	CDUFLSHT	"B'00000010" SHORT MODIFIER
1534	(5FE)	BITSTRING	0	CDUFXSUB	"B'00000001" XFR SUB-DISPLAY
1534	(5FE)	X'98 0000C'	0	CDUDEVN	"COMREGSV,12" Device name for \$DU
Comment					
-----					
Definitions for HASP608 job information message					
OPT= operand of the \$CFJMSG macro.					
-----					
End of Comment					
1534	(5FE)	BITSTRING	0	COFN	"X'01" DISPLAY NORMAL JOBS
1534	(5FE)	BITSTRING	0	COFS	"X'02" DISPLAY SYSTEM JOBS
1534	(5FE)	BITSTRING	0	COFT	"X'04" DISPLAY LOGON JOBS
1534	(5FE)	X'7	0	COFJ	"COFN+COFS+COFT" DISPLAY ALL JOBS
1534	(5FE)	BITSTRING	0	COFX	"X'08" DISPLAY JOBS IN EXECUTION
1534	(5FE)	BITSTRING	0	COFD	"X'10" DISPLAY JOBS ON DEVICES
1534	(5FE)	X'1F	0	COFA	"COFJ+COFX+COFD" DISPLAY ACTIVE JOBS
1534	(5FE)	BITSTRING	0	COFI	"X'20" DISPLAY PRE-XEQ QUEUED JOBS
1534	(5FE)	BITSTRING	0	COFO	"X'40" DISPLAY POST-XEQ QUEUED JOBS
1534	(5FE)	BITSTRING	0	COFP	"X'80" DISPLAY QUEUED FOR PRT/PUN
1534	(5FE)	X'E7	0	COFQ	"COFJ+COFI+COFO+COFP" DISPLAY QUEUED JOBS

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1534	(5FE)	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

1534	(5FE)	BITSTRING	0	COFLNGFG	"B'00000001" LONG OPERAND SPECIFIED FLAG
1534	(5FE)	BITSTRING	0	COFPREFIX	"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

1534	(5FE)	X'16 00003'	0	COFJOB	"COMMAND,3" TEXT 'JOB', 'STC', OR 'TSU'
1534	(5FE)	X'19 00005'	0	COFJNO	"COFJOB+3,5" JOB NUMBER WITH LEADING BLANK
1534	(5FE)	X'1F 00008'	0	COFJNAME	"COFJNO+6,8" JOB NAME

Comment

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

End of Comment

1534	(5FE)	X'28 00008'	0	COFQUE	"COFJNAME+9,8" TEXT 'AWAITING'
1534	(5FE)	X'F8 00001'	0	COFOPT	"COMMAND+L'COMMAND-30,1" OPTION SPECIFIED
1534	(5FE)	X'F9 00001'	0	COFNULL	"COFOPT+1,1" Place holder for COFAFF
1534	(5FE)	X'FA 00001'	0	COFOPT2	"COFNULL+1,1" 2ND OPTION FLAG
1534	(5FE)	X'FB 00002'	0	COFSEC	"COFOPT2+1,2" SECURITY FIELD FOR \$WTO'S
1534	(5FE)	X'FD 00002'	0	COFLNGTH	"COFSEC+2,2" LENGTH OF MSG
1534	(5FE)	X'E9 '	0	COFSIZE	"COFLNGTH+L'COFLNGTH-COFJOB" Size of work area
1534	(5FE)	CHARACTER	1	(0)	Ensure work area fits within COMMAND field
1534	(5FE)	X'D0 '	0	COFAFF	"COMOSAFM" System affinity mask
1534	(5FE)	X'D0 '	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

1534	(5FE)	BITSTRING	2		Account for largest section
1536	(600)	SIGNED	4	(0)	Ensure full-word align
1536	(600)	X' '	0	COMPCEWS	**-PCEWORK" LENGTH OF WORK AREA

## \$COMWORK Cross Reference

### \$COMWORK Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
CDUDEVN	5FE	98	0000C	COMFD	5AC	
CDUDEVTP	5FE	95		COMFEND	5BC	C0
CDUFLACT	5FE	8		COMFFLG	599	
CDUFLAG1	5FE	94		COMFFLGD	560	40
CDUFLAG2	5FE	97		COMFFLGJ	78	3
CDUFLCLS	5FE	4		COMFFLGN	560	20
CDUFLFND	5FE	20		COMFFLGO	560	80
CDUFLGRP	5FE	80		COMFFLGS	78	1
CDUFLLU	5FE	2		COMFFLGT	78	2
CDUFLMOD	5FE	1		COMFJID	59A	
CDUFLONE	5FE	8		COMFJNAM	5A4	
CDUFLONG	5FE	40		COMFJNO	5BC	
CDUFLOPR	5FE	10		COMFJNO	5BC	28
CDUFLRAT	5FE	10		COMFLAG	14	
CDUFLRMT	5FE	20		COMFLAG2	4	
CDUFLSHT	5FE	2		COMFLAG3	1B	
CDUFLSTR	5FE	4		COMFOP	598	
CDUFLSUB	5FE	80		COMFOPA	560	3
CDUFLTYP	5FE	C0		COMFOPC	560	2
CDUFXSUB	5FE	1		COMFOPD	560	1
CDUMASK	5FE	96		COMFOPH	560	4
COCHAR	6CC			COMFOPR	560	5
COFA	5FE	1F		COMFORGN	59C	
COFAFF	5FE	D0		COMFR	5B4	
COFAFWRK	5FE	D0		COMFWORK	70	
COFD	5FE	10		COMGFLG1	75	
COFI	5FE	20		COMGFLG2	76	
COFJ	5FE	7		COMG1\$MN	75	4
COFJNAME	5FE	1F	00008	COMG1APO	75	80
COFJNO	5FE	19	00005	COMG1CON	75	10
COFJOB	5FE	16	00003	COMG1PAR	75	20
COFLNGFG	5FE	1		COMG1REQ	75	40
COFLNGTH	5FE	FD	00002	COMG1SJR	75	1
COFN	5FE	1		COMG1SSI	75	8
COFNUL	5FE	F9	00001	COMG1UAC	75	2
COFO	5FE	40		COMINCON	3E	
COFOPT	5FE	F8	00001	COMINPUT	84	
COFOPT2	5FE	FA	00001	COMINXSV	590	
COFP	5FE	80		COMJID1	6C8	
COFPREFX	5FE	2		COMJID2	6CA	
COFQ	5FE	E7		COMJNAM	6C0	
COFQUE	5FE	28	00008	COMJNAME	516	
COFS	5FE	2		COMJNOD	4C	
COFSEC	5FE	FB	00002	COMJRMT	4E	
COFSIZE	5FE	E9		COMJRROUT	4C	
COFT	5FE	4		COMJSCAT	50	
COFU	5FE	FF		COMLCCA	78	
COFX	5FE	8		COMLEVEL	15	
COJWORK	6CC			COMLFLG	7A	56
COMACEID	43			COMLFLGA	7A	4
COMAFMSK	6D0			COMLFLGC	7A	2
COMAUTH	42			COMLFLGR	7A	1
COMBWORK	74			COMLINET	26	
COMCART	1C			COMLJBRG	524	
COMCONNM	7A			COMLNGTH	114	14
COMDEQL	6E4	C		COMLTFLG	6CC	
COMDESC	2C			COMLTMAX	6CC	80
COMDOMID	30			COMMAND	116	
COMDWORK	58			COMMAXL	6E4	
COMENQL	6D8	C		COMMID	114	
COMENTBG	C			COMMML	17	
COMework	54			COMMLTE	14	
COMFCMDA	598			COMMLTEA	10	



Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
COMMNDLN	51E			COMWTOPL	14	
COMNODE	6A4	2		COMXWCA	520	
COMNRLEN	6A4	4		COSICMDA	528	
COMNULOP	578			COSID	53C	
COMOPFLG	594			COSIEFOP	55E	
COMOPRND	116	18		COSIEND	54C	50
COMOSAFM	6D0			COSIFLG	529	
COMPCEWS	600			COSIJID	52A	
COMPINDX	57C			COSIJNAM	534	
COMPNTER	528			COSIJNO	54C	
COMPNTRL	528	50		COSIJQER	554	
COMPWORK	77			COSIL	54C	28
COMPXEQ	8			COSILINK	550	
COMQUE	6CF			COSINOD#	55C	
COMRRDRQ	6DC	DC		COSIOP	528	
COMRDRNQ	6D0	D0		COSIORGN	52C	
COMREGSV	598			COSIR	544	
COMRFLG1	6A2			COSISAV0	558	
COMRMT	34			COSIWORK	528	
COMRMTE	6A4	2	00002	CPOFAGHR	76	4
COMROUT	2E			CPOFALL	76	8
COMRWORK	690			CPOFCLS	76	80
COMR1DFT	6A2	8		CPOFCNCL	76	40
COMR1GEN	6A2	4		CPOFLAG	76	76
COMR1GNA	6A2	2		CPOFNJO	76	1
COMR1GNC	6A2	40		CPOFQR	76	2
COMR1RAL	6A2	10		CPOFRTE	76	20
COMR1RPR	6A2	1		CPOPROT	76	10
COMR1UNN	6A2	20		CRJFLAG	5FC	
COMSAFC	116	DF	00096	CRJFLGCF	5FE	80
COMSAFL	116	DE	00001	CRJLEN	5FC	65
COMSCOTE	6B0			CRXCLASL	5A8	
COMSDLCT	108			CRXCLSPT	5A0	
COMSECT	0			CRXFLAG1	5A7	
COMSFLG1	6AD			CRXJOBNO	5A4	
COMSIL	55F	38		CRXLEN	5E0	50
COMSPMSK	0			CRXNEWND	5E0	
COMSQD	0			CRXNEWRT	59C	
COMSRLEN	6BC			CRXNEWUS	5D8	
COMSRTNA	6B4			CRXODANY	5A6	
COMSSLEN	6B8			CRXODH	5A6	
COMSTAB	110			CRXODK	5A6	
COMS1FLT	6AD	2		CRXODL	5A6	
COMS1HIT	6AD	10		CRXODLST	5A6	80
COMS1JQ	6AD	40		CRXODW	5A6	
COMS1JST	6AD	20		CRXOLDRT	598	
COMS1MAX	6AD	4		CRXOLDUS	5D0	
COMS1RBD	6AD	1		CRXOUTD	5A6	
COMS1RTS	6AD	8		CRXWORKA	598	
COMS1WT	6AD	80		CRX1GENC	5A7	80
COMTDLCT	10C			CTPRTEXT	116	
COMTO	18			CURRCMD	51E	
COMTONOD	18					
COMTOQUL	1A					
COMTYPE	16					
COMUCM	24					
COMUCMA	25					
COMUCMID	28					
COMUCNT	6A4	8				
COMUSEID	6A4	4	00008			
COMUSER	36					
COMUWORK	6A4					
COMVERB	116	17				
COMWREGS	60					
COMWTOLG	36	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

---

**\$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 HASCPOOL  
**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	
CPEBMAST	20	
CPEBXNUM	1C	
CPEID	0	C3D7C5C2
CPENEXT	8	
CPESIZE	20	24
CPEVNUM	4	1
CPEVRSN	4	
CPEXXADD	14	
CPEXXSZ	18	

---

## **\$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, SAPID, SMF, SPXFR, 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
2	(2)	BITSTRING	0	CPIEMPTY	"B'10000000" Empty entry in user area
2	(2)	BITSTRING	0	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 00004'	0	CPIBAT_C	"CPIBAT,4,C'A" BAT Common pool equate
8	(8)	ADDRESS	4	CPIBSC	BSC CPMASSTR addr, subpool BSCPPOOL
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 00004'	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
40	(28)	ADDRESS	4	CPIB32K	B32K CPMASSTR addr, subpool B32KPOOL
44	(2C)	ADDRESS	4	CPINMAP	NMAP CPMASSTR addr, subpool NMAPPOOL



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
48	(30)	ADDRESS	4	CPINSA	NSA CPMASSTR addr, subpool NSAPOL
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	CPIRNT	RNT CPMASSTR addr, subpool RNTPOOL
68	(44)	ADDRESS	4	CPISAPID	SAPID CPMASSTR addr, location DATASPACE
68	(44)	X'44 00004'	0	CPISAPID_C	"CPISAPID,4,C'A" SAPID Common pool equate
72	(48)	ADDRESS	4	CPITJEV	TJEV CPMASSTR addr, location DATASPACE
72	(48)	X'48 00004'	0	CPITJEV_C	"CPITJEV,4,C'A" TJEV Common pool equate
76	(4C)	ADDRESS	4	CPISMF	SMF CPMASSTR addr, subpool SMFPOOL
80	(50)	ADDRESS	4	CPITRE	TRE CPMASSTR addr, subpool 230
84	(54)	ADDRESS	4	CPIVTAM	VTAM CPMASSTR addr, subpool VTAMPOOL
88	(58)	ADDRESS	4	CPIXRQ	XRQ CPMASSTR addr, subpool XRQPOOL
88	(58)	X'58 '	0	CPISTEND	**CPISTART" Size of the CPLTABs
88	(58)	X'5C '	0	CPISTD	**CPINDEX" Size of the standard cell types
88	(58)	X'4 '	0	CPIOFLEN	"4" Length of offset field
92	(5C)	SIGNED	4	CPIWSTRT (0)	Start of the work cell types
92	(5C)	ADDRESS	4	CPIWORK (0)	User-defined CPMASSTR's
92	(5C)	X' '	0	CPIWLEN	**CPIWSTRT" Size of the work cell types
92	(5C)	X' '	0	CPILEN	"4096-\$CSBPRFX" Size of the CPINDEX table

\$CPINDEX Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
CPIBAT	4			CPIXRQ	58	
CPIBAT_C	4	4	00004	CPI1CSA	2	40
CPIBSC	8					
CPIB32K	28					
CPICB	C					
CPICMB	10					
CPIEMPTY	2	80				
CPIEVT	14					
CPIEVT_C	14	14	00004			
CPIFLAG1	2					
CPIFLAG2	3					
CPIHASP	18					
CPIHEDR	1C					
CPIICE	20					
CPILEN	5C					
CPILOCK	1					
CPINAT	24					
CPINMAP	2C					
CPINSA	30					
CPINTQ	34					
CPIOFLEN	58	4				
CPIPAGE	38					
CPIPP	3C					
CPIRNT	40					
CPISAPID	44					
CPISAPID_C	44	44	00004			
CPISMF	4C					
CPISTART	4					
CPISTD	58	5C				
CPISTEND	58	58				
CPITJEV	48					
CPITJEV_C	48	48	00004			
CPITRE	50					
CPIVNUM	0	1				
CPIVRSN	0					
CPIVTAM	54					
CPIWLEN	5C					
CPIWORK	5C					
CPIWSTRT	5C					



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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
24	(18)	BITSTRING	0	CPM1FALL	"B'10000000" FREEMAIN setup storage
24	(18)	BITSTRING	0	CPM1ALTP	"B'01000000" Alternate cell pool
24	(18)	BITSTRING	0	CPM1REAL	"B'00100000" The real CPMASSTR
24	(18)	BITSTRING	0	CPM1PRIM	"B'00010000" Primary extent allocated
25	(19)	BITSTRING	1	CPMFLAG2	CPMASTR pool attribute flag
25	(19)	BITSTRING	0	CPM2ABOV	"B'10000000" Storage is above
25	(19)	BITSTRING	0	CPM2BELO	"B'01000000" Storage is below
25	(19)	BITSTRING	0	CPM2DSP	"B'00100000" Cell pool in a data space
25	(19)	BITSTRING	0	CPM2CSA	"B'00010000" Cell pool is in CSA
25	(19)	BITSTRING	0	CPM2NCLR	"B'00001000" Don't clear cell storage between uses (up to caller to clear)
25	(19)	BITSTRING	0	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)
26	(1A)	BITSTRING	0	CPM3FPRO	"B'10000000" FPROT=YES specified
26	(1A)	BITSTRING	0	CPM3NPRO	"B'01000000" FPROT=NO specified
26	(1A)	BITSTRING	0	CPM3MSTR	"B'00100000" OWNER=MASTER specified

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
26	(1A)	BITSTRING	0	CPM3CURR	"B'00010000" OWNER=CURRENT specified
26	(1A)	BITSTRING	0	CPM3AUX	"B'00001000" OWNER=AUX specified
26	(1A)	BITSTRING	0	CPM3LOCL	"B'00000100" SCOPE=LOCAL specified
26	(1A)	BITSTRING	0	CPM3ALL	"B'00000010" SCOPE=ALL specified
26	(1A)	BITSTRING	0	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	CPMTSIZE	"*-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	CPMCPINX	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		CPMTSIZE	24	28
CPMCPAB	2C		CPMTYPE	C	
CPMCPEBE	34		CPMVNUM	4	2
CPMCPINX	30		CPMVRSN	4	
CPMCSIZE	14		CPM1ALTP	18	40
CPMDSB	40		CPM1FALL	18	80
CPMDSLEN	4C		CPM1PRIM	18	10
CPMDSPOL	48		CPM1REAL	18	20
CPMDSSTR	48		CPM2ABOV	19	80
CPMFLAG1	18		CPM2BELO	19	40
CPMFLAG2	19		CPM2CSA	19	10
CPMFLAG3	1A		CPM2DSP	19	20
CPMGEND	1C		CPM2NCLR	19	8
CPMID	0	C3D7D4D9	CPM2RANY	19	4
CPMKEY	7		CPM3ALL	1A	2
CPMLEN	28		CPM3AUX	1A	8
CPMLIMIT	1C		CPM3COMM	1A	1
CPMOFFST	8		CPM3CURR	1A	10
CPMPRMSZ	20		CPM3FPRO	1A	80
CPMSCPAB	4C	40	CPM3LOCL	1A	4
CPMSCPEB	4C	80	CPM3MSTR	1A	20
CPMSECSZ	24		CPM3NPRO	1A	40
CPMSIZE	4C	50			
CPMSUBP	6				
CPMSUBP2	5				
CPMTCBAD	38				

## \$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 parm list

## \$CPXWORK Cross Reference

Name	Hex Offset	Hex Value
CPXWAVAI	1C	
CPXWCELL	18	
CPXWCPEB	8	
CPXWEBLN	C	
CPXWEXTN	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
0	(0)	SIGNED	4	CTK2JOBN	Job number
4	(4)	BITSTRING	4	CTK2JOBK	Job identifier key
8	(8)	SIGNED	4	CTK2DSID	Data set number
12	(C)	BITSTRING	4	CTK2MTTR	IOT MTTR for data set
16	(10)	CHARACTER	12	CTK2JOEI (0)	JOE Identification block
16	(10)	CHARACTER	8	CTK2JONM	JOE's output group name
24	(18)	SIGNED	2	CTK2JOI1	JOE'S output group 1st id
26	(1A)	SIGNED	2	CTK2JOI2	JOE'S output group 2nd id
28	(1C)	SIGNED	4	CTK2PDBO	Offset of Pddb within IOT
32	(20)	BITSTRING	31		Reserved
63	(3F)	BITSTRING	1	CTK2FLG1	Flag byte
63	(3F)	BITSTRING	0	CTK21TCT	"B'10000000" Token represents a data set (Created as a result of a dynamic allocation request)
63	(3F)	BITSTRING	0	CTK21TJO	"B'01000000" Token represents a JOE rather than a data set
63	(3F)	BITSTRING	0	CTK21TSA	"B'00100000" Token represents a data set (Returned as a result of a SAPI Put/Get Request)
63	(3F)	X' '	0	CTK2SIZE	**-"CTKNJESD" Length of HASP section
64	(40)	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					
		.... .1..		CTK2BCT1	"B'11111111111100000000000000000000',4,C'B"
		.... .1..		CTK2BCT2	"B'00000000000000000000000000000000',4,C'B"
64	(40)	BITSTRING	0	CTK2BJO1	"B'11111111000000001111111111110000',4,C'B"
		.... .1..		CTK2BJO2	"B'00000000000000000000000000000000',4,C'B"
		.... .1..		CTK2BJB1	"B'11111111000000000000000000000000',4,C'B"
		.... .1..		CTK2BJB2	"B'00000000000000000000000000000000',4,C'B"
64	(40)	BITSTRING	0	CTK2BDS1	"B'11111111111100000000000000001111',4,C'B"
		.... .1..		CTK2BDS2	"B'00000000000000000000000000000000',4,C'B"

## \$CTOKEN Cross Reference

Name	Hex Offset	Hex Value	
CTK2BCT1	40	4	
CTK2BCT2	40	4	
CTK2BDS1	40	F	00004
CTK2BDS2	40	4	
CTK2BJB1	40	4	
CTK2BJB2	40	4	
CTK2BJO1	40	F0	00004
CTK2BJO2	40	4	
CTK2DSID	8		
CTK2FLG1	3F		
CTK2JOBK	4		
CTK2JOBN	0		
CTK2JOEI	10		
CTK2JOI1	18		
CTK2JOI2	1A		
CTK2JONM	10		
CTK2MTTR	C		
CTK2PDBO	1C		
CTK2SIZE	3F		
CTK21TCT	3F	80	
CTK21TJO	3F	40	
CTK21TSA	3F	20	

## \$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
5	(5)	BITSTRING	0	CTW1RD1	"B'10000000" THIS DATA IS FOR READ 1
5	(5)	BITSTRING	0	CTW1RD2	"B'01000000" THIS DATA IS FOR READ 2
5	(5)	BITSTRING	0	CTW1PRMW	"B'00100000" THIS DATA IS FOR THE PRIM WRITE
5	(5)	BITSTRING	0	CTW1INTW	"B'00010000" THIS DATA IS FOR AN INTERMEDIATE WRITE
5	(5)	BITSTRING	0	CTW1FINW	"B'00001000" THIS DATA IS FOR FINAL WRITE
5	(5)	BITSTRING	0	CTW1PRIO	"B'00000100" THIS DATA WAS AFFECTED BY PRIORITY AGING
5	(5)	BITSTRING	0	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	CTWLEVNMM	LEVEL NUMBER OF DATASET

Comment

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 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).  
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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	2	CTWKITNM	Number of CTENT entries
110	(6E)	SIGNED	2		Reserved for future use
110	(6E)	X'70	0	CTWFXEND	"*-CTW" END OF FIXED PORTION OF CTW
112	(70)	SIGNED	4	CTWCTNTS (0)	START OF CTENT INFORMATION:
112	(70)	X'4'	0	CTWCTNMP	"0,4" NUM OF PAGES FOR THIS CTENT
112	(70)	X'4 00004'	0	CTWCTNMC	"4,4" NUMBER OF CONTROL BLOCKS FOR THIS CTENT
112	(70)	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
CTWAVTIM	44		CTWVERN	4	2
CTWCKPTN	5C		CTWWTPCE	3C	
CTWCKPWT	18		CTWWTTM	68	
CTWCLNBU	48		CTW1CKDS	5	2
CTWCLNCB	34		CTW1FINW	5	8
CTWCLNPA	1C		CTW1INTW	5	10
CTWCLNPU	20		CTW1PRIO	5	4
CTWCLPR1	24		CTW1PRMW	5	20
CTWCTLEN	70	8	CTW1RD1	5	80
CTWCTNMC	70	4	CTW1RD2	5	40
CTWCTNMP	70	4			
CTWCTNTS	70				
CTWDATA	8				
CTWDRMTM	50				
CTWFLAG1	5				
CTWFXEND	6E	70			
CTWHLTIM	4C				
CTWIOSTP	10				
CTWIOSTR	8				
CTWKITNM	6C				
CTWLEVNMM	58				
CTWLID	0	C3E3E640			
CTWMAXDR	30				
CTWMINDR	2C				
CTWMINHL	28				
CTWMVSWT	60				
CTWMXTIM	40				
CTWNMPCE	38				
CTWPGNCL	54				
CTWQSUSE	64				
CTWVER	4				

---

## \$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
5	(5)	BITSTRING	0	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)	SIGNED	4	CVCB_ENQ_CT	Count of shared ENQs
60	(3C)	BITSTRING	0	CVCB_USED	"B'10000000" Version used this cycle
64	(40)	CHARACTER	8	CVCB_TIME	Time stamp for version
72	(48)	CHARACTER	8	CVCB_MAJOR (0)	Major name for ENQ
72	(48)	CHARACTER	4	CVCB_SYS	'SYSZ'
76	(4C)	CHARACTER	4	CVCB_JESID	Subsystem name
80	(50)	CHARACTER	8	CVCB_MINOR (0)	Minor name for ENQ
80	(50)	CHARACTER	4	CVCB_ENQ_ID	'CVCB'
84	(54)	SIGNED	4	CVCB_VERSION_NUMBER	Version numb of this CVCB
88	(58)	SIGNED	4	(0)	Alignment
88	(58)	X'58	0	CVCBSIZE	"*-CVCB" Size of the CVCB

**\$CVCB Cross Reference**

Name	Hex Offset	Hex Value
CVCB_\$CATBERT_ADDR	14	
CVCB_ADDRS	18	
CVCB_BERT_ADDR	38	
CVCB_CBVN	4	
CVCB_ENQ_CT	3C	
CVCB_ENQ_ID	50	
CVCB_ENQ_SKIP_COUNT	7	
CVCB_FDMP	5	80
CVCB_FLAG	5	
CVCB_HCT_ADDR	24	
CVCB_ID	0	
CVCB_JESID	4C	
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	48	
CVCB_MASTER_REC	C	
CVCB_MINOR	50	
CVCB_NEXT	8	
CVCB_QSE_ADDR	20	
CVCB_SYS	48	
CVCB_TIME	40	
CVCB_USED	3C	80
CVCB_VERSION_NUMBER	54	
CVCB_4K_PAGES	10	
CVCBCVNO	4	2
CVCBSIZE	58	58

## \$CVCB Cross Reference

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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
7	(7)	BITSTRING	0	DASDRAIN	"B'10000000" SPOOL IS DRAINING
7	(7)	BITSTRING	0	DASHALT	"B'01000000" SPOOL IS HALTING
7	(7)	BITSTRING	0	DASTART	"B'00100000" SPOOL IS STARTING
7	(7)	BITSTRING	0	DASEXSTS	"B'00010000" SPOOL EXISTS
7	(7)	BITSTRING	0	DASSELEC	"B'00001000" SELECTION MAY OCCUR
7	(7)	BITSTRING	0	DASALLOC	"B'00000100" ALLOCATION MAY OCCUR
7	(7)	BITSTRING	0	DASFINAL	"B'00000010" Final Command Processing (Obsolete , Do not test or turn on)
7	(7)	BITSTRING	0	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	0	DASMASK	SPOOL MASK FOR THIS DAS MAPPED IN CSA FOR EXIT 12
8	(8)	SIGNED	4	DASTKCYL	NR OF TRACKS/CYLINDER ON DEVICE
12	(C)	BITSTRING	2	DASNOTGE	NUMBER OF TG'S IN EXTENT
14	(E)	SIGNED	2	DASNORTK	NUMBER OF RECORDS PER TRACK
16	(10)	SIGNED	4	DASTRK (0)	ABSOLUTE TRACK NUMBERS (TT)
16	(10)	BITSTRING	2	DASLOTRK	LOWER ABSOLUTE TRACK NO.
18	(12)	BITSTRING	2	DASUPTRK	UPPER ABSOLUTE TRACK NO.
20	(14)	SIGNED	2	DASNOTGP	NUMBER OF TRACKS PER GROUP
22	(16)	SIGNED	2	DASMTCSZ	MINIMUM TRACKCELL SIZE
24	(18)	BITSTRING	1	DASTYPE	UCB DEVICE TYPE (UCBTBYT4)

Comment

-----  
 DASFLAG4 is updated by JES2 maintask only.  
 There is no serialization.  
 -----

End of Comment

25	(19)	BITSTRING	1	DASFLAG4	Fourth flag byte
----	------	-----------	---	----------	------------------

Comment

-----  
 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

25	(19)	BITSTRING	0	DAS4SIG	"B'10000000" Extent has signature rclds
25	(19)	BITSTRING	0	DAS4MFMT	"B'01000000" Extent needs to be mini-formatted

## \$DAS Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
End of Comment					
25	(19)	BITSTRING	0	DAS4SFMT	"B'00100000" DAS is on \$DASWRKQ performing mini-format
25	(19)	BITSTRING	0	DAS4PFMT	"B'00010000" DAS is on \$DASWRKQ pending mini-format
25	(19)	BITSTRING	0	DAS4ECKD	"B'00001000" Extent is on ECKD device
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					
26	(1A)	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.					
End of Comment					
26	(1A)	BITSTRING	0	DASSYAFF	Spool system affinity
26	(1A)	SIGNED	2	DASCTGA	CSA only mapping of track groups allocated
28	(1C)	SIGNED	2	DASCSAC (0)	End of area copied to CSA
28	(1C)	X'1C	0	DASSIZCO	**-"DAS" Len of area copied to CSA
28	(1C)	BITSTRING	64	DASRPS	RPS Table for this device
28	(1C)	X'5C	0	DASSIZC	**-"DAS" Length of DAS mapped in CSA
32	(20)	DBL WORD	8		RESERVED FOR FUTURE USE
40	(28)	SIGNED	4	DASTRAKQ	OFFSET OF NEXT DAS IN THE TGM
44	(2C)	SIGNED	4	DASWORKQ	OFFSET OF NXT DAS ON CMD WORK Q
48	(30)	SIGNED	2	DASJOBNO	LOWEST JOB NUMBER USING EXTENT WHILE HALTING OR DRAINING
50	(32)	SIGNED	2	DASNOBYM	NUMBER OF BYTES IN A MAP
52	(34)	SIGNED	4	DASMAPO	OFFSET OF THIS MAP FROM \$TGMAP
56	(38)	SIGNED	2	DASTGSIZ	TG SIZE ON THIS VOLUME, ROUNDED FOR NUMBER OF BUFS PER TRACK
58	(3A)	SIGNED	2		RESERVED FOR FUTURE USE
60	(3C)	BITSTRING	1	DASFLAG2	COMMAND FLAG BYTE
60	(3C)	BITSTRING	0	DASCDRN	"B'10000000" DRAIN COMMAND HAS BEEN ISSUED
60	(3C)	BITSTRING	0	DASCHALT	"B'01000000" HALT COMMAND HAS BEEN ISSUED
60	(3C)	BITSTRING	0	DASCSTRT	"B'00100000" START COMMAND HAS BEEN ISSUED
60	(3C)	BITSTRING	0	DASCFMT	"B'00010000" FORMAT REQUESTED
60	(3C)	BITSTRING	0	DASINACT	"B'00001000" THIS VOLUME IS INACTIVE
60	(3C)	BITSTRING	0	DASBLOB	"B'00000100" CKPT must remove from BLOB
60	(3C)	BITSTRING	0	DASINIT	"B'00000010" INITIAL START HAS BEEN PERFORMED
60	(3C)	BITSTRING	0	DASJOBWT	"B'00000001" HALT/DRAIN WAITING JOBS
60	(3C)	X'F0	0	DASCMNDS	"DASCDRN+DASCHALT+DASCSTRT+DASCFMT"
61	(3D)	BITSTRING	1	DASFLAG3	FLAG BYTE
61	(3D)	BITSTRING	0	DAS3ITGM	"B'10000000" This extent on DASTRAKQ
61	(3D)	BITSTRING	0	DAS3SYSA	"B'01000000" System affinity set for this volume
62	(3E)	BITSTRING	1	DASCMD2	Member nr issuing new cmd
63	(3F)	BITSTRING	1		Reserved for future use

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
THE NEXT FOUR FIELDS MUST BE KEPT TOGETHER. ROUTINE DADCKALL IN HASPSPOL DEPENDS ON THESE FIELDS BEING CONTIGUOUS.					
End of Comment					
64	(40)	SIGNED	4	DASINDIC (0)	INDICATOR FIELDS
64	(40)	BITSTRING	0	DASALOCs	Sys. with ext alloc'ed
64	(40)	BITSTRING	0	DASDONE	Cmd done on these systems
64	(40)	BITSTRING	0	DASBUSY	Cmd being done on systems
64	(40)	ADDRESS	1	DASCMDID	SYSID of sys issuing cmd
64	(40)	X'1 '	0	DASINDLN	**-'DASINDIC' Length of indicator fields
65	(41)	BITSTRING	0	DASERROR	Affinity of system with command error
65	(41)	BITSTRING	1	DASERCDE (0)	ERROR CODES FOR SYSTEMS
65	(41)	X' '	0	DASERLEN	**-'DASERCDE' LENGTH OF ALL ERROR CODES
68	(44)	SIGNED	4	(0)	ALIGN END OF DAS
68	(44)	X'44 '	0	DASSIZ	**-'DAS' LENGTH OF DSECT
68	(44)	X'7 '	0	DASVRSN	"7" VERSION OF THE DAS

Comment					
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.					
End of Comment					
68	(44)	X'4 00001'	0	DASMNTER	"4,L'DASERCDE" VOLUME NOT MOUNTED
68	(44)	X'8 00001'	0	DASDUPER	"8,L'DASERCDE" DUPLICATE SPOOL VOLUMES
68	(44)	X'C 00001'	0	DASALCER	"12,L'DASERCDE" ALLOCATION ERROR
68	(44)	X'10 00001'	0	DASPMTER	"16,L'DASERCDE" PREVIOUS MOUNTED VOL NOT MOUNTED
68	(44)	X'14 00001'	0	DASEXTER	"20,L'DASERCDE" EXTENT ERROR
68	(44)	X'18 00001'	0	DASFMTER	"24,L'DASERCDE" PREV. MOUNTED VOL NOT FORMATTED

Comment					
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.					
End of Comment					
68	(44)	X'2'	0	DASEXTGA	"0,2" NO. TG'S ALLOC. - 16 BITS
68	(44)	X'2 '	0	DASEXLEN	"L'DASEXTGA" LENGTH OF DAS EXTENSION

## \$DAS Cross Reference

## \$DAS Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
DASACTIV	7	C		DASTRK	10	
DASALCER	44	C	00001	DATYPE	18	0
DASALLOC	7	4		DASUPTRK	12	0
DASALOCS	40			DASVOLID	0	40404040
DASAVAIL	7	CC		DASVRSN	44	7
DASBLOB	3C	4		DASWORKQ	2C	0
DASBUSY	40			DAS3ITGM	3D	80
DASCDRN	3C	80		DAS3SYSA	3D	40
DASCFMT	3C	10		DAS4ECKD	19	8
DASCHALT	3C	40		DAS4MFMT	19	40
DASCMDID	40			DAS4PFMT	19	10
DASCMD2	3E	0		DAS4SFMT	19	20
DASCMNDS	3C	F0		DAS4SIG	19	80
DASCSAC	1C					
DASCSTRT	3C	20				
DASCTGA	1A					
DASDONE	40					
DASDRAIN	7	80				
DASDUPER	44	8	00001			
DASERCDE	41					
DASERLEN	41					
DASERROR	41					
DASEXLEN	44	2				
DASEXSTS	7	10				
DASEXTER	44	14	00001			
DASEXTGA	44	2				
DASEXTNO	6	0				
DASFINAL	7	2				
DASFLAG	7	0				
DASFLAG2	3C	0				
DASFLAG3	3D	0				
DASFLAG4	19					
DASFMTER	44	18	00001			
DASHALT	7	40				
DASINACT	3C	8				
DASINDIC	40					
DASINDLN	40	1				
DASINIT	3C	2				
DASIOOK	7	48				
DASJOBNO	30	0				
DASJOBWT	3C	1				
DASLOTRK	10	0				
DASMAPO	34	0				
DASMASK	8					
DASMNTER	44	4	00001			
DASMTCSZ	16	1				
DASNOBYM	32	0				
DASNORTK	E	0				
DASNOTGE	C	0				
DASNOTGP	14	0				
DASPMTER	44	10	00001			
DASRPS	1C	0				
DASRPSF	7	1				
DASRPSO	1A					
DASSELEC	7	8				
DASSIZ	44	44				
DASSIZC	1C	5C				
DASSIZCO	1C	1C				
DASSYAFF	1A					
DASTART	7	20				
DASTGSIZ	38	0				
DASTKCYL	8	0				
DASTRAKQ	28	0				



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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

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## \$DCT Heading Information

<b>Common Name:</b>	Device Control Table
<b>Macro ID:</b>	\$DCT
<b>DSECT Name:</b>	DCT
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'DCT '
	Offset: DCTID-DCT
	Length: 4
<b>Storage Attributes:</b>	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.
<b>Size:</b>	Size is of varying lengths. See \$DCTTABs and the length equates throughout DCT for the length specifications for each DCT type.
<b>Created by:</b>	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.
<b>Pointed to by:</b>	<ul style="list-style-type: none"><li>- the PCEDCT field of the associated \$PCE data area, if any</li><li>- chaining fields, and associated-device fields, in related \$DCT data areas, including DCTCHAIN, DCTFSSCH, MDCTADCT, MDCTDCT, XDCTDCT, MDCTACT, XDCTACTV, MDCTSDCT</li><li>- the CCTIRDRS and CCTDCTMD fields of the \$HCCT data area</li><li>- anchor fields for all \$DCTs in the \$HCT data area, including \$DCTPOOL and \$DCTPOOL2</li><li>- 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</li><li>- I/O, request, and status anchors in the \$HCT data area</li><li>- fields within the \$MLMWORK data area, including MLMSNALG, MLMSNAAL, MLMLOGQ, MLMXLDCT</li><li>- fields within other device-managing JES2 processor work areas, like \$MLMWORK, including the \$RCPWORK, \$NPMWORK, and \$XFRWORK data area, and subtask \$DTEOFF data area</li><li>- 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</li><li>- fields within parameters lists for JES2 exits, in the \$XPL data area, typically labeled XnnnDCT, where nnn is the exit number</li></ul>
<b>Serialization:</b>	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					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	DCT	DEVICE CONTROL TABLE DSECT
Comment					
GENERAL DCT FOUNDATION - REQUIRED AND COMMON TO ALL DCTS. NOTE THAT THE FOLLOWING FIELDS (THROUGH DCTDEVTP) MUST CORRESPOND EXACTLY TO THE PCEDADCT AND PPPDADCT 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
8	(8)	BITSTRING	0	DCTINUSE	"B'10000000" DCT is in use
8	(8)	BITSTRING	0	DCTDRAIN	"B'01000000" DCT is drained
8	(8)	BITSTRING	0	DCTHOLD	"B'00100000" DCT is held
8	(8)	BITSTRING	0	DCTUNAL	"B'00010000" DCT is unallocated
8	(8)	BITSTRING	0	DCTRRTAM	"B'00001000" DCT in process by RTAM
8	(8)	BITSTRING	0	DCTSTRT	"B'00000100" SPOF xmitter/receiver START INDICATOR
8	(8)	BITSTRING	0	DCTPATTN	"B'00000100" Local reader attention pending
8	(8)	BITSTRING	0	DCTATTN	"B'00000010" DCT is set for attention processing
8	(8)	BITSTRING	0	DCTPAUSE	"B'00000001" DCT is paused
9	(9)	BITSTRING	1	DCTFLAGS	OPERATOR COMMAND FLAGS
9	(9)	BITSTRING	0	DCTSTOP	"B'10000000" \$Z command
9	(9)	BITSTRING	0	DCTDELET	"B'01000000" \$C command
9	(9)	BITSTRING	0	DCTRSTRT	"B'00100000" \$E command
9	(9)	BITSTRING	0	DCTRPT	"B'00010000" \$N command
9	(9)	BITSTRING	0	DCTSOFF2	"B'00010000" MDCTSTAT/DCTSOFF shadow for line DCTs, used only during CMD \$SCAN, \$N LINE not supported
9	(9)	BITSTRING	0	DCTBKSP	"B'00001000" \$B command
9	(9)	BITSTRING	0	DCTHOLDJ	"B'00000100" \$T...H command
9	(9)	BITSTRING	0	DCTSPACE	"B'00000011" \$T...K=X command
9	(9)	BITSTRING	0	DCTSP2	"B'00000010" Force double spacing
9	(9)	BITSTRING	0	DCTSP1	"B'00000001" Force single spacing
9	(9)	BITSTRING	0	DCTLOGAL	"B'00000001" \$TLNEx,E=Y command
10	(A)	BITSTRING	1	DCTFLAG2	MORE DCT FLAGS
10	(A)	BITSTRING	0	DCTRACE	"B'10000000" Device eligible for I/O tracing
10	(A)	BITSTRING	0	DCTERMNR	"B'01000000" Stream terminated by receiver
10	(A)	BITSTRING	0	DCTRBBFF	"B'00100000" NJE Route buffer full
10	(A)	BITSTRING	0	DCTRRDY	"B'00010000" NJE Route receiver ready
10	(A)	BITSTRING	0	DCT2POST	"B'00001000" SNA line manager is waiting to be \$POSTed
10	(A)	BITSTRING	0	DCT2PTRC	"B'00000100" Processor tracing on (TR=P), only used to save PCETRACE value across \$PCEDYN PCE activity
10	(A)	BITSTRING	0	DCT2RSP	"B'00000010" NJE device open/close wait
10	(A)	BITSTRING	0	DCTRTE	"B'00000001" Route codes (HASPINIT only)
10	(A)	BITSTRING	0	DCTOPEN	"B'00000001" NJE/RJE device open req
11	(B)	BITSTRING	1	DCTFSSFL	DCT FLAGS FOR AN FSS OWNED DVC
11	(B)	BITSTRING	0	DCTSTART	"B'10000000" Device is being started
11	(B)	BITSTRING	0	DCTFCKMD	"B'01000000" CKPT mode page 'ON', TIME 'OFF'
11	(B)	BITSTRING	0	DCTFDFLT	"B'00100000" Reset setup defaults
11	(B)	BITSTRING	0	DCTFSYNC	"B'00010000" Dev parm changes require synch order
11	(B)	BITSTRING	0	DCTFSET	"B'00001000" Dev parm changes require set order
11	(B)	BITSTRING	0	DCTCMODF	"B'00000100" Change mode to FSS mode

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
11	(B)	BITSTRING	0	DCTCMODJ	"B'00000010" Change mode to JES mode
11	(B)	BITSTRING	0	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)
26	(1A)	BITSTRING	1	DCTDEVTP	DEVICE TYPE

Comment

Start of DEVICE TYPE definition

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:

Test for a local printer:

```
CLI DCTDEVTP,DCTPRT Local printer?
BNE SKIPIT No, skip it
```

Test for a local or remote printer or punch:

```
TM DCTDEVTP,DCTPRPU Prt/punch or transmitter?
BZ SKIPIT No, skip it
TM DCTDEVTP,DCTNET Transmitter?
BO SKIPIT Yes, skip it
```

EQU X'00' RESERVED FOR PCEDARD  
EQU X'01' RESERVED FOR PCEDAWR

End of Comment

26	(1A)	BITSTRING	0	DCTRJE	"X'02" REMOTE JOB ENTRY DEVICE
26	(1A)	BITSTRING	0	DCTINT	"X'04" INTERNAL DEVICE
26	(1A)	BITSTRING	0	DCTNET	"X'08" NETWORK REMOTE DEVICE
26	(1A)	BITSTRING	0	DCTDVTPX	"X'40" EXTRA FLAG TO FURTHER IDENTIFY DCT DEVICE TYPES, PROVIDING UNIQUE IDS ACROSS ALL DCT TYPES
26	(1A)	BITSTRING	0	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
26	(1A)	BITSTRING	0	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
26	(1A)	BITSTRING	0	DCTPRT	"X'20" LOCAL PRINTER
26	(1A)	X'22	0	DCTRPR	"DCTRJE+DCTPRT" REMOTE PRINTER
26	(1A)	BITSTRING	0	DCTPUN	"X'30" LOCAL PUNCH
26	(1A)	X'32	0	DCTRPU	"DCTRJE+DCTPUN" REMOTE PUNCH
26	(1A)	X'20	0	DCTPRPU	"DCTPRT" PRINTER OR PUNCH
26	(1A)	X'30	0	DCTRPP	"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

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
27	(1B)	BITSTRING	0	DCT3JWS	"B'10000000" Dev uses JOB work sel
27	(1B)	BITSTRING	0	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
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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 a remote or network device.  
 E.G. TM DCTDEVID,DCTRMTID Remote device?

End of Comment

57	(39)	BITSTRING	0	DCTRDRID	"B'00010000" Card reader
57	(39)	BITSTRING	0	DCTPRTID	"B'00100000" Printer
57	(39)	BITSTRING	0	DCTPUNID	"B'00110000" Punch
57	(39)	BITSTRING	0	DCTNJRID	"B'01000000" Job transmitter
57	(39)	BITSTRING	0	DCTNJRID	"B'01010000" Job reader
57	(39)	BITSTRING	0	DCTNSTID	"B'01100000" Sysout transmitter
57	(39)	BITSTRING	0	DCTNSRID	"B'01110000" Sysout receiver

## \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
57	(39)	BITSTRING	0	DCTRMTID	"B'10000000" Remote device
Comment					
<p>-----</p> <p>DCTXFRID is valid only when combined with one of the transmitter/receiver bit equates.</p> <p>-----</p>					
End of Comment					
57	(39)	BITSTRING	0	DCTXFRID	"B'00001111" Spool transfer device
Comment					
<p>-----</p> <p>DCTRTEID is valid only when combined with the job receiver or job transmitter equate.</p> <p>-----</p>					
End of Comment					
57	(39)	BITSTRING	0	DCTRTEID	"B'00001000" Route device
Comment					
<p>-----</p> <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> <p>-----</p>					
End of Comment					
57	(39)	BITSTRING	0	DCTSFSID	"B'00000001" SJFR pseudo device
57	(39)	BITSTRING	0	DCTSPNID	"B'00000010" Spin pseudo device - to prevent JOE from getting selected while waiting for checkpoint write
57	(39)	BITSTRING	0	DCTCOMID	"B'00000011" Command pseudo device
57	(39)	BITSTRING	0	DCTPRGID	"B'00000100" Psuedo device indicating JOE is being purged
57	(39)	BITSTRING	0	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					
57	(39)	BITSTRING	0	DCTSAPID	"B'00001101" Sysout API
57	(39)	BITSTRING	0	DCTOUTID	"B'00001110" TSO Output command device
57	(39)	BITSTRING	0	DCTXWTID	"B'00001111" External writer device

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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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 00002'	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
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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

Comment

DEVICE EXTENSION ORG POINT - OPTIONAL.

End of Comment

104	(68)	DBL WORD	8	DCTEXORG (0)	DCT DEVICE EXTENSION ORIGIN
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## \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
SNA LOGON DCT FOUNDATION EXTENSION					
End of Comment					
80	(50)	ADDRESS	4		ADDR OF NEXT ACTIVE LOGON DCT
84	(54)	ADDRESS	4	MDCTICE	ADDR OF FIRST LOGGED ON ICE
88	(58)	ADDRESS	4		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		APPLICATION ACTION FLAGS
95	(5F)	BITSTRING	1		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
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		UNIT FOR LOCAL DEVICES, LINES
Comment					
SNA LINE DCT FOUNDATION EXTENSION					
End of Comment					
80	(50)	ADDRESS	4		ADDR OF NEXT ACTIVE LINE DCT
84	(54)	ADDRESS	4		ADDR OF FIRST ALLOCATED ICE
88	(58)	ADDRESS	4		ADDR OF FIRST REMOTE DCT
92	(5C)	BITSTRING	1		LINE CHARACTERISTICS
93	(5D)	BITSTRING	1		TERMINAL TYPE
94	(5E)	BITSTRING	1		LINE ACTION FLAGS
95	(5F)	BITSTRING	1		LINE STATUS FLAGS
96	(60)	ADDRESS	4	MDCTWICE	ADDR OF ICE IN WAIT-TIME DELAY
100	(64)	CHARACTER	4		UNIT FOR LOCALS/LINES ('SNA')
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
84	(54)	ADDRESS	4		RESERVED
88	(58)	ADDRESS	4		ADDR OF NEXT REMOTE DCT
92	(5C)	BITSTRING	1		LINE CHARACTERISTICS



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
93	(5D)	BITSTRING	1		TERMINAL TYPE
94	(5E)	BITSTRING	1		RESERVED
95	(5F)	BITSTRING	1		REMOTE STATUS FLAGS
96	(60)	SIGNED	2		MULTI-LEAVING BUFFER SIZE - 5
98	(62)	BITSTRING	2		REMOTE FUNCTION CONTROL SEQUENCE
100	(64)	CHARACTER	4		RESERVED
100	(64)	X'68	0	MDCTRFXE	***

Comment

SNA REMOTE DCT FOUNDATION EXTENSION

End of Comment

80	(50)	BITSTRING	1		REMOTE DEVICE MAX RECORD LENGTH
81	(51)	BITSTRING	1	MDCTSEL	REMOTE DEVICE DATASTREAM SELECT
82	(52)	BITSTRING	1		TERMINAL DATA FORMAT
83	(53)	BITSTRING	1		TERMINAL FEATURES
84	(54)	ADDRESS	4		ADDR OF ASSOCIATED ICE
88	(58)	ADDRESS	4		ADDR OF NEXT REMOTE DCT
92	(5C)	BITSTRING	1		LINE CHARACTERISTICS
93	(5D)	BITSTRING	1		TERMINAL TYPE
94	(5E)	BITSTRING	1	MDCTFLG1	REMOTE FLAG BYTE
95	(5F)	BITSTRING	1		REMOTE STATUS FLAGS
96	(60)	ADDRESS	2		MAXIMUM RU SIZE
98	(62)	BITSTRING	1		RESERVED
99	(63)	ADDRESS	1	MDCTCHLM	OUTSTANDING CHAIN LIMIT
100	(64)	CHARACTER	4		RESERVED

Comment

INTERNAL READER FOUNDATION EXTENSION

End of Comment

80	(50)	ADDRESS	4	RIDECBP	ADDRESS OF INTERNAL READER ECB
84	(54)	ADDRESS	4	RIDASCBP	ADDRESS OF ASCB
88	(58)	ADDRESS	4	RIDERRET	ADDRESS OF XMPOST ERROR EXIT
92	(5C)	ADDRESS	4	RIDHCCT	ADDRESS OF HCCT
96	(60)	SIGNED	4	RIDECB	INTERNAL READER ECB
100	(64)	SIGNED	2	RIDLRECL	LRECL of intrdr dataset
102	(66)	BITSTRING	1	RIDRECFM	RECFM of intrdr dataset, bits defined in DCB under DCBRECFM
103	(67)	BITSTRING	1	RIDFLAG1	Miscellaneous flag byte, serialized by SJB lock
103	(67)	BITSTRING	0	RID1LRDF	"B'10000000" OPEN set default LRECL or lrecl value specified by user at open intrdr time is to be overridden.
103	(67)	BITSTRING	0	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
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

# \$DCT Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
100	(64)	X'68	0	DCTSREND	***

Comment					
READER DCT EXTENSION					
End of Comment					

104	(68)	SIGNED	2	DCTXEQND	DEFAULT EXECUTION NODE
106	(6A)	BITSTRING	1	DCTRDFL1	Reader flags
106	(6A)	BITSTRING	0	DCTR1IND	"B'10000000" Independent mode
107	(6B)	BITSTRING	1		Reserved for future use
108	(6C)	SIGNED	4	DCTRDRT (0)	READER ROUTE CODE
108	(6C)	SIGNED	2	DCTRDNOD	NODE NUMBER
110	(6E)	SIGNED	2	DCTRDRT	REMOTE NUMBER
112	(70)	SIGNED	4	DCTPRINT (0)	DEFAULT PRINT ROUTE CODE
112	(70)	SIGNED	2	DCTPRNOD	NODE NUMBER
114	(72)	SIGNED	2	DCTPRRTE	LOCAL PRINTER/REMOTE NUMBER
116	(74)	CHARACTER	8	DCTPRSER	PRINT USERID
124	(7C)	SIGNED	4	DCTPUNCH (0)	DEFAULT PUNCH ROUTE CODE
124	(7C)	SIGNED	2	DCTPUNOD	NODE NUMBER
126	(7E)	SIGNED	2	DCTPURTE	LOCAL PUNCH/REMOTE NUMBER
128	(80)	CHARACTER	8	DCTPUSER	PUNCH USERID
136	(88)	BITSTRING	0	DCTSIAFF	Default system affinity
136	(88)	BITSTRING	1	DCTRAUTH	READER COMMAND AUTHORITY
137	(89)	CHARACTER	1	DCTJCLAS	DEFAULT JOB CLASS
138	(8A)	CHARACTER	1	DCTMCLAS	DEFAULT MSGCLASS
139	(8B)	BITSTRING	1	DCTPRINC	PRIORITY INCREMENT
140	(8C)	BITSTRING	1	DCTPRIM	PRIORITY LIMIT
140	(8C)	X'8D	0	DCTIRORG	*** END OF COMMON READER DCT FIELDS
144	(90)	SIGNED	4	DCTRDEND (0)	END OF READER DCT
144	(90)	X'90	0	DCTJREND	*** END OF JOB RECEIVER DCT

Comment					
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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					
104	(68)	BITSTRING	1	DCTWORK	JOB RECEIVER WORK AREA

Offsets

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

CTWSP--\$WSP PREFIX=DCT,DSECT=NO Generate \$GET parms

End of Comment

144	(90)	DBL WORD	8	DCTWSP (0)	HASP WSP
144	(90)	SIGNED	4	DCTCWS (0)	Start of common work select
144	(90)	CHARACTER	4	DCTID2	
144	(90)	X'6 '	0	DCTVLEN	"6" Length of volume
144	(90)	X'4 '	0	DCTVOLMX	"4" Maximum number of volumes
148	(94)	SIGNED	1	DCTNMVOL	Number of volumes
149	(95)	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

152	(98)	BITSTRING	0	DCTVOL (0)	Device select volume list
152	(98)	X'4 '	0	DCTWSENT	"4" Length of ws entry
152	(98)	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

152	(98)	X'16 '	0	DCTMAXWS	"19+1+2" Number of criteria that will fit in xxxWSREQ
176	(B0)	SIGNED	4	(0)	
176	(B0)	CHARACTER	1	DCTWSBEG (0)	Beginning of WS list
176	(B0)	BITSTRING	1	DCTWSPRI	WS priority flag
176	(B0)	BITSTRING	0	DCTQVAL	"B'10000000" Class optimum WS prio
176	(B0)	BITSTRING	0	DCTRVAL	"B'01000000" Route optimum WS prio
176	(B0)	BITSTRING	0	DCTQWS	"B'00100000" Use class list for WS
176	(B0)	BITSTRING	0	DCTSLASH	"B'00010000" Optional criteria switch
176	(B0)	BITSTRING	0	DCTVOLFL	"B'00001000" Use volume for WS
176	(B0)	BITSTRING	0	DCTWSRNG	"B'00000100" Select by range specified
176	(B0)	BITSTRING	0	DCTWSRGS	"B'00000010" Range criterion after slash
176	(B0)	BITSTRING	0	DCTRWS	"B'00000001" Select by route specified
177	(B1)	BITSTRING	1	DCTWSPR2	2nd WS priority flag
177	(B1)	BITSTRING	0	DCTWSODP	"B'10000000" Outdisp specified in WS or Outdisp is not valid WS criterion for dev
177	(B1)	BITSTRING	0	DCTWSLIM	"B'01000000" Limit specified in WS
177	(B1)	BITSTRING	0	DCTSLIM	"B'00100000" Limit is after slash
177	(B1)	BITSTRING	0	DCTWSCTK	"B'00010000" Select by CTOKEN
177	(B1)	BITSTRING	0	DCTODPNV	"B'00001000" Outdisp is not a valid WS criterion for dev; forced to WRITE/KEEP
178	(B2)	BITSTRING	1	DCTQPOS	Position of Q in WS-list
179	(B3)	BITSTRING	1	DCTLPOS	Position of LIM in WS-list
180	(B4)	BITSTRING	1	DCTRPOS	Position of RC in WS-list
181	(B5)	BITSTRING	1	DCTPPOS	Position of P in WS-list
182	(B6)	SIGNED	2	DCTONODE	Job's origin node number

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
note that a value of X'FF' for xxxQPOS, xxxLPOS, xxxRPOS, xxxPPOS indicates that position has not been calculated					
End of Comment					
182	(B6)	BITSTRING	0	DCTPOSNL	"X'FF'" Position has not been set
184	(B8)	BITSTRING	1	DCTWSREQ	Work selection via ws parm
184	(B8)	X'B0 00060'	0	DCTWS	"DCTWSBEG,*-DCTWSBEG,C'X'" Max length ws list
272	(110)	ADDRESS	4	DCTWSTB	Addr of related ws table pair
272	(110)	X'4	0	DCTRCMAX	"4" Define maximum route codes
272	(110)	X'2'	0	DCTNODE	"0,2,C'H'" Offset/len of node in rc
272	(110)	X'2 00002'	0	DCTROUTE	"2,2,C'H'" Offset/length of remote in rc
272	(110)	X'4 00008'	0	DCTUSEID	"4,8,C'D'" Offset/len of userid in rc
272	(110)	X'C	0	DCTRCLEN	"L'DCTNODE+L'DCTROUTE+L'DCTUSEID" Len of rc
272	(110)	X'4	0	DCTNRLEN	"L'DCTNODE+L'DCTROUTE" Len of node and route
276	(114)	CHARACTER	0	DCTRC (0)	Space for route codes
324	(144)	ADDRESS	2	(0)	xxxNRC must follow xxxRC
324	(144)	CHARACTER	8	DCTJOBNM	Job name for device work select
332	(14C)	CHARACTER	8	DCTCURJB	Job name of element last selected
340	(154)	CHARACTER	8	DCTCRUID	Value for creator= keyword
348	(15C)	ADDRESS	1	DCTNRC	Number of route codes
349	(15D)	BITSTRING	1	DCTRTEQ	and route output queue flag
349	(15D)	BITSTRING	0	DCTWSLOC	"B'10000000" Scan local output queue
349	(15D)	BITSTRING	0	DCTWSRMT	"B'01000000" Scan remote output queue
349	(15D)	BITSTRING	0	DCTWSNET	"B'00100000" Scan network queue
349	(15D)	BITSTRING	0	DCTWSUSE	"B'00010000" Scan userid queue
349	(15D)	BITSTRING	0	DCTINDIR	"B'10000000" Indirect routing flag (HASPINIT ONLY)
350	(15E)	BITSTRING	2		Reserved for future use
352	(160)	SIGNED	4	DCTJNUML	Device select low job number
356	(164)	SIGNED	4	DCTJNUMH	Device select high job number
360	(168)	ADDRESS	4	(2)	Reserved for future use
368	(170)	CHARACTER	37	DCTCLASS	Class list, terminated by blank
405	(195)	BITSTRING	1		Reserved for future use
406	(196)	BITSTRING	1	DCTWSFG1	Device select flags
406	(196)	BITSTRING	0	DCTWSHLD	"B'10000000" Select held jobs
406	(196)	BITSTRING	0	DCTWSHNS	"B'01000000" Hold operand not specified
406	(196)	BITSTRING	0	DCTWSNOT	"B'00100000" Send notify message
406	(196)	BITSTRING	0	DCTWSFJR	"B'00010000" Select within JOB range
406	(196)	BITSTRING	0	DCTWSFST	"B'00001000" Select within STC range
406	(196)	BITSTRING	0	DCTWSFST	"B'00000100" Select within TSU range
406	(196)	BITSTRING	0	DCTWSFAP	"B'00000010" Select APPC initiators
406	(196)	BITSTRING	0	DCTWSANY	"B'00011110" Select any range
407	(197)	BITSTRING	1		Reserved for future use
408	(198)	SIGNED	4	DCTWRNUM	Writer ID number for JOE/Writer exclude list
412	(19C)	BITSTRING	8	DCTWRASI	Writer ID address space level used for JOE/Writer exclude list
420	(1A4)	CHARACTER	8	DCTDEVN2	Device name of form: For non-SAPI DCTDEVN For SAPI jobname.sss2appl
420	(1A4)	X'A4 00011'	0	DCTDEVNC	"DCTDEVN2,*-DCTDEVN2,C'C'" Complete device name
437	(1B5)	BITSTRING	1	DCTDEVT2	Device type (copy of DCTDEVT1)
438	(1B6)	BITSTRING	3	DCTDEVI2	Device identity (copy of DCTDEVID)
441	(1B9)	BITSTRING	3		Reserved for future use
444	(1BC)	SIGNED	4	DCTLMLO	Device lower limit (records)
448	(1C0)	SIGNED	4	DCTLMHI	Device upper limit (records)
452	(1C4)	SIGNED	4	(0)	Force alignment
452	(1C4)	X'34	0	DCTCWSLN	"*-DCTCWS" Length of common criteria fields
Comment					
Job work selection criteria fields					
End of Comment					
144	(90)	SIGNED	4	DCTJWS (0)	Start of job work selection

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
144	(90)	BITSTRING	308		Fields common with sysout select
452	(1C4)	BITSTRING	0	DCTSAF	Device select affinity list
452	(1C4)	ADDRESS	4	DCTSAFPT	System affinity list pointer
456	(1C8)	CHARACTER	8	DCTSRVCL	Service class
464	(1D0)	CHARACTER	16	DCTSCHE	Scheduling environment
464	(1D0)	X'50	0	DCTJWSLN	**-DCTJWS" Length of job work selection

Comment

Sysout work selection criteria fields

End of Comment

144	(90)	SIGNED	4	DCTSWS (0)	Start of sysout work selection
144	(90)	BITSTRING	308		Fields common with sysout select
452	(1C4)	CHARACTER	8	DCTFORMS	Current print/punch forms id
460	(1CC)	CHARACTER	8	DCTWFORM (0)	Forms for work selection
460	(1CC)	X'CC 00008'	0	DCTWFORC	"DCTWFORM, *-DCTWFORM,C'C" Forms
460	(1CC)	CHARACTER	4	DCTFCB	Printer fcb (carriage tape) id
464	(1D0)	CHARACTER	4	DCTUCS	Printer ucs id
468	(1D4)	CHARACTER	4	DCTFLASH	Printer overlay frame
472	(1D8)	CHARACTER	4	DCTFLSHD	N/I-printer overlay default
476	(1DC)	SIGNED	4	DCTPLIML	Device lower limit (pages)
480	(1E0)	SIGNED	4	DCTPLIMH	Device upper limit (pages)
484	(1E4)	SIGNED	4	DCTAGE	Age in seconds since JOE creation
488	(1E8)	CHARACTER	8	DCTWTRID	Ext wtr name for work select
496	(1F0)	BITSTRING	0	DCTPRMD	Prmode index list
496	(1F0)	ADDRESS	4	DCTPRTBL	Address of PRMODE table or zero
500	(1F4)	BITSTRING	1	DCTWSFG2	Device select flag
500	(1F4)	BITSTRING	0	DCTWSDSH	"B'10000000" Select held output
500	(1F4)	BITSTRING	0	DCTNIBRS	"B'01000000" Select bursted output
500	(1F4)	BITSTRING	0	DCTWSDAN	"B'00100000" Select held/non-held output
500	(1F4)	BITSTRING	0	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

500	(1F4)	BITSTRING	0	DCTWSIP	"B'00001000" Select only IP-format
500	(1F4)	BITSTRING	0	DCTWSBTH	"B'00000100" Select both IP and non-IP
501	(1F5)	BITSTRING	1	DCT1STFL	Device select flag byte
501	(1F5)	X' '	0	DCT1SODW	"\$ODWRITE" Select OUTDISP=WRITE
501	(1F5)	X' '	0	DCT1SODH	"\$ODHOLD" Select OUTDISP=HOLD
501	(1F5)	X' '	0	DCT1SODK	"\$ODKEEP" Select OUTDISP=KEEP
501	(1F5)	X' '	0	DCT1SODL	"\$ODLEAVE" Select OUTDISP=LEAVE
501	(1F5)	X' '	0	DCT1SODA	"\$ODANY" Check all bit settings
502	(1F6)	BITSTRING	2		Reserved for future use
504	(1F8)	ADDRESS	4	DCTGTW	Address of \$#GET Trace work area
508	(1FC)	ADDRESS	4	DCTASAPI	Address of SAPID (ALET is in \$SAPTOK in HCT)
512	(200)	ADDRESS	4	DCTNACTV	Next active DCT address
516	(204)	ADDRESS	4	DCTPACTV	Previous active DCT address
520	(208)	BITSTRING	1	DCTWSFG3	WSP status flag
520	(208)	BITSTRING	0	DCTWS3QD	"B'10000000" DCT is on an active DCT Q
521	(209)	BITSTRING	3		Reserved for future use

# \$DCT Map

## Offsets

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

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

524	(20C)	ADDRESS	4	DCTPJOE	Next JOE to process
528	(210)	ADDRESS	4	(0)	Align on a full word
528	(210)	X'80	0	DCTSWSLN	**"DCTSWS" Length of sysout selection
528	(210)	X'80	0	DCTLENG	**"DCTCWS" Length of WSP

Comment

### SNA LOGON DCT EXTENSION

End of Comment

104	(68)	CHARACTER	8		APPLICATION PASSWORD
112	(70)	ADDRESS	2	MDCTSUNCT	COUNT OF LOGGED ON TERMINALS
114	(72)	ADDRESS	1		RESERVED FOR SNA LOGON DCTS
115	(73)	ADDRESS	1	MDCTAPNL	APPLICATION NAME LENGTH
116	(74)	CHARACTER	8	MDCTAPPL	APPLICATION NAME
124	(7C)	SIGNED	4	MDCTLOGN	COUNT OF LOGONS TO APPL
128	(80)	SIGNED	4	MDCTNICE	LOGON FAILED FOR ICE COUNT
132	(84)	SIGNED	4	MDCTNLNE	LOGON FAILED FOR LINE COUNT
136	(88)	SIGNED	4	MDCTINVL	LOGON FAILED FOR DATA COUNT
140	(8C)	SIGNED	4	MDCTABRT	SESSION ABNORMAL TERM COUNT
144	(90)	SIGNED	4		RESERVED FOR FUTURE USE
152	(98)	DBL WORD	8	MDCTRAWK (0)	ACTIVE RECEIVE ANY BUFFER WORK
152	(98)	SIGNED	2	MDCTRALM	ACTIVE RECEIVE ANY BUFFER LIMIT
154	(9A)	SIGNED	2	MDCTRACT	ACTIVE RECEIVE ANY BUFFER COUNT
156	(9C)	ADDRESS	4	MDCTRABF	ACTIVE RECEIVE ANY BUFFER CHAIN
160	(A0)	DBL WORD	8	MDCTRQWK (0)	QUEUED RECEIVE ANY BUFFER WORK
160	(A0)	SIGNED	2	MDCTRQLM	QUEUED RECEIVE ANY BUFFER LIMIT
162	(A2)	SIGNED	2	MDCTRQCT	QUEUED RECEIVE ANY BUFFER COUNT
164	(A4)	ADDRESS	4	MDCTRQBF	QUEUED RECEIVE ANY BUFFER CHAIN
168	(A8)	DBL WORD	8	MDCTEXWK (0)	EXIT ROUTINE WORK AREA
168	(A8)	SIGNED	4	MDCTEXCD (0)	EXIT ROUT. ACTION CODE WORKAREA
168	(A8)	BITSTRING	3		RESERVED
171	(AB)	BITSTRING	1	MDCTXCOD	EXIT ROUTINE REQ ACTION CODE
172	(AC)	ADDRESS	4	MDCTEXIT	ADDR OF NEXT SCHED LOGON DCT
176	(B0)	SIGNED	4	MDCTLGND (0)	END OF SNA LOGON DCT

Comment

### BSC LINE DCT EXTENSION

End of Comment

104	(68)	CHARACTER	8	MDCTPSWD	RJE LINE PASSWORD
112	(70)	ADDRESS	4	MDCTOBUF	RJE OUTPUT BUFFER CHAIN
116	(74)	SIGNED	4	MDCTIMOK	TIME OF LAST TRANSMISSION
120	(78)	ADDRESS	4	MDCTRAT	ADDRESS OF RAT ENTRY (RJE) ADDRESS OF NIT ENTRY (NJE)
124	(7C)	ADDRESS	4	MDCTCODE	ADDRESS OF RJE CODE TABLE
128	(80)	BITSTRING	0	MDCTOTAL (0)	DCT EVENT COUNTERS
128	(80)	SIGNED	4	MDCTXCP	LINE COUNTS - TOTAL EXCPS
132	(84)	SIGNED	4	MDCTNAK	NAKS TO WRITE TEXT

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
136	(88)	SIGNED	4	MDCTDCK	DATA CHECKS TO READ TEXT
140	(8C)	SIGNED	4	MDCTTO	TIMEOUTS TO READ TEXT
144	(90)	SIGNED	4	MDCTREM	ALL OTHER ERRORS
148	(94)	BITSTRING	0	MDCTCNTS (0)	DCT SESSION EVENT COUNTERS
148	(94)	SIGNED	4	MDCTSXCP	SESSION COUNTS - TOTAL EXCPS
152	(98)	SIGNED	4	MDCTSNAK	NAKS TO WRITE TEXT
156	(9C)	SIGNED	4	MDCTSACK	DATA CHECKS TO READ TEXT
160	(A0)	SIGNED	4	MDCTSTO	TIMEOUTS TO READ TEXT
164	(A4)	SIGNED	4	MDCTSREM	ALL OTHER ERRORS
168	(A8)	BITSTRING	1	MDCTPMBC	NETWORK PATH MGR BUF COUNT
169	(A9)	BITSTRING	1	MDCTPMFL	NETWORK PATH MGR FLAGS
170	(AA)	SIGNED	2	MDCTDCNT	DEDICATED LINE DCT COUNT
172	(AC)	ADDRESS	4	MDCTACT (0)	ACTIVE HARDWARE RJE DCT
172	(AC)	ADDRESS	4	MDCTNM	NETWORK MULTIPLE TRUNK QUEUE
176	(B0)	ADDRESS	4	MDCTNA	NETWORK ACTIVE QUEUE
180	(B4)	SIGNED	2	MDCTNR	NETWORK HALF LINE RESISTANCE
182	(B6)	SIGNED	2	MDCTNNR	NETWORK NODE TO NODE RESISTANCE
184	(B8)	ADDRESS	4	MDCTNCES	NETWORK CONNECT EVENT SEQUENCE
188	(BC)	BITSTRING	1	MDCTNFL2	NETWORK FLAGS II
189	(BD)	BITSTRING	1	MDCTNFL3	Network flags III
190	(BE)	BITSTRING	1		Reserved for future use
191	(BF)	CHARACTER	1	MDCTLNCC	Last NCC signon record sent
192	(C0)	SIGNED	2	MDCTOPCT	COUNT OF OPEN RJE PROCESSORS
194	(C2)	BITSTRING	1	MDCTNFL	NETWORK FLAGS
195	(C3)	SIGNED	1	MDCTCMCT	CONSOLE MESSAGE COUNT
195	(C3)	X'AC 00018'	0	MDCTNETA	"MDCTNM,*-MDCTNM" NETWORK AREA FOR \$NPMWORK
196	(C4)	BITSTRING	8	MDCTNEGR	PENDING NEGATIVE XMTTER RESPONSES
204	(CC)	SIGNED	4	MDCTNO (0)	LINE ROUTE CODE
204	(CC)	ADDRESS	2	MDCTNODE	NODE NUMBER
206	(CE)	ADDRESS	1	MDCTQUAL	QUALIFIER
207	(CF)	ADDRESS	1		RESERVED FOR FUTURE USE
208	(D0)	ADDRESS	4	MDCTNMAP	NETWORK PATH MAN NOTIFY MAP
212	(D4)	ADDRESS	4	MDCTRNTA	REACHABLE NODES TABLE ADDR, ZERO UNLESS LINE IN NJE USE RNT=1 BIT PER NODE
216	(D8)	CHARACTER	8	MDCTNPAS	PASSWORD to send to node (BSC Only)
224	(E0)	SIGNED	4	MDCTMDOM	\$HASP500 DOM ID
228	(E4)	SIGNED	4	MDCTIFEA	NJE signon feature flags supported by this line
232	(E8)	ADDRESS	4	MDCTNLDV (0)	Numbers of line subdevices
232	(E8)	ADDRESS	1	MDCTJTNM	LINE <sub>nn</sub> JTNUM= value
233	(E9)	ADDRESS	1	MDCTJRNM	LINE <sub>nn</sub> JRNUM= value
234	(EA)	ADDRESS	1	MDCTSTNM	LINE <sub>nn</sub> STNUM= value
235	(EB)	ADDRESS	1	MDCTSRNM	LINE <sub>nn</sub> SRNUM= value
236	(EC)	ADDRESS	4	MDCTMRT	MRT address
240	(F0)	ADDRESS	4	MDCTMRRT	MRRT address
244	(F4)	SIGNED	4	MDCTNOTS	RCP CMB Throw-away time
248	(F8)	SIGNED	4	MDCTLEND (0)	END OF LINE DCT

Comment

SNA LINE DCT EXTENSION

End of Comment

104	(68)	CHARACTER	8		RJE LINE PASSWORD
112	(70)	ADDRESS	2		ALLOCATED SESSION COUNT
114	(72)	SIGNED	2		RESERVED
116	(74)	SIGNED	4		TIME OF LAST TRANSMISSION
120	(78)	ADDRESS	4		MDCTRAT ADDRESS OF RAT ENTRY (RJE) ADDRESS OF NIT ENTRY (NJE)
124	(7C)	ADDRESS	4	MDCTATE	APT address for automatic restart from NPM recovery
128	(80)	SIGNED	4	MDCTVREQ	TOTAL COUNT OF VTAM REQ PROCESSED
132	(84)	SIGNED	4	MDCTXRSP	TOTAL COUNT OF EXCEPTION RESP
136	(88)	SIGNED	4	MDCTLUST	TOTAL COUNT OF LUSTAT RECEIVED
140	(8C)	SIGNED	4	MDCTBIDR	TOTAL COUNT OF BID REJECTED
144	(90)	SIGNED	4	MDCTMPER	TOTAL COUNT OF TEMPORARY ERRORS

# \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
148	(94)	SIGNED	4	MDCTSCNT (5)	REMOTE COUNTS
168	(A8)	BITSTRING	1		NETWORK PATH MGR BUF COUNT
169	(A9)	BITSTRING	1		NETWORK PATH MGR FLAGS
170	(AA)	SIGNED	2		DEDICATED LINE DCT COUNT
172	(AC)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
176	(B0)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
180	(B4)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE FROM APT
182	(B6)	SIGNED	2		MDCTNNR NJE TOTAL CONNECTION RESISTANCE
184	(B8)	ADDRESS	4		MDCTNCES NJE CONNECTION EVENT SEQUENCE
188	(BC)	BITSTRING	1		MDCTNFL2 Network flags II
189	(BD)	BITSTRING	1		MDCTNFL3 Network flags III
190	(BE)	BITSTRING	1		Reserved for future use
191	(BF)	CHARACTER	1		MDCTLNCC Last signon NCC record sent
192	(C0)	SIGNED	2		MDCTOPCT COUNT OF OPEN RJE PROCESSORS
194	(C2)	BITSTRING	1		MDCTNFL NETWORK FLAGS
195	(C3)	SIGNED	1		CONSOLE MESSAGE COUNT
196	(C4)	BITSTRING	8		RESERVED
204	(CC)	ADDRESS	4		LINE ROUTE CODE
208	(D0)	ADDRESS	4		NETWORK PATH MAN NOTIFY MAP
212	(D4)	ADDRESS	4		REACHABLE NODES TABLE ADDR
216	(D8)	CHARACTER	8	MDCTATMP	APPL NAME (SNA ONLY)
224	(E0)	SIGNED	4		\$HASP500 DOM ID
228	(E4)	SIGNED	4		NJE signon feature flags supported by this line
232	(E8)	ADDRESS	1		MDCTJTNM LINEnn JTNUM= value
233	(E9)	ADDRESS	1		MDCTJRNM LINEnn JRNUM= value
234	(EA)	ADDRESS	1		MDCTSTNM LINEnn STNUM= value
235	(EB)	ADDRESS	1		MDCTSRNM LINEnn SRNUM= value
236	(EC)	ADDRESS	4		MDCTMRT MRT address
240	(F0)	ADDRESS	4		MDCTMRRT MRRT address
244	(F4)	SIGNED	4		MDCTNOTS RCP CMB Throw-away time
248	(F8)	SIGNED	4	(0)	SNA LINE DCT END (MDCTLEND)

Comment

MAS LINE DCT EXTENSION

End of Comment

104	(68)	ADDRESS	0	MDCTAFTK (0)	Affinity token for member
104	(68)	CHARACTER	8		Reserved
112	(70)	BITSTRING	1	MDCTMEMB	ID of associated member
113	(71)	BITSTRING	3		Reserved
116	(74)	SIGNED	4		Time of last transmission
120	(78)	ADDRESS	4		MDCTRAT Address of NIT entry
124	(7C)	ADDRESS	4	MDCTNATP	NATP chain for response to member signon propagation
128	(80)	ADDRESS	4	MDCTNPCH	Chain of permanent NATPs
132	(84)	ADDRESS	4	MDCTNQSE	QSE address
136	(88)	ADDRESS	4	MDCTMDNQ	Member down chain field
140	(8C)	SIGNED	4	MDCTMTIM	Time last MAS I/J sent to this member
144	(90)	SIGNED	4	MDCTMDID	\$HASP501 DOM id
148	(94)	SIGNED	4	(5)	Reserved
168	(A8)	BITSTRING	1		NETWORK PATH MGR BUF COUNT
169	(A9)	BITSTRING	1		NETWORK PATH MGR FLAGS
170	(AA)	SIGNED	2		Reserved
172	(AC)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
176	(B0)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
180	(B4)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE
182	(B6)	SIGNED	2		MDCTNNR NJE TOTAL RESISTANCE
184	(B8)	ADDRESS	4		MDCTNCES NJE CONNECT EVENT SEQUENCE
188	(BC)	BITSTRING	1		MDCTNFL2 Network flags II
189	(BD)	BITSTRING	1		MDCTNFL3 Network flags III
190	(BE)	BITSTRING	1		Reserved for future use
191	(BF)	CHARACTER	1		MDCTLNCC Reserved
192	(C0)	SIGNED	2		Reserved
194	(C2)	BITSTRING	1		MDCTNFL Network flags



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
195	(C3)	SIGNED	1		Reserved
196	(C4)	BITSTRING	8		RESERVED
204	(CC)	ADDRESS	4		MDCTNO LINE ROUTE CODE
208	(D0)	ADDRESS	4		MDCTNMAP NETWORK PATH MAN NOTIFY MAP
212	(D4)	ADDRESS	4		MDCTRNTA REACHABLE NODES TABLE ADDR
216	(D8)	CHARACTER	8		APPL NAME (SNA ONLY)
224	(E0)	SIGNED	4		MDCTMDOM \$HASP500 DOM ID
228	(E4)	SIGNED	4		NJE signon feature flags supported by this line
232	(E8)	ADDRESS	1		LINE <sub>nn</sub> JTNUM= value
233	(E9)	ADDRESS	1		LINE <sub>nn</sub> JRNUM= value
234	(EA)	ADDRESS	1		LINE <sub>nn</sub> STNUM= value
235	(EB)	ADDRESS	1		LINE <sub>nn</sub> SRNUM= value
236	(EC)	ADDRESS	4		MDCTMRT MRT address
240	(F0)	ADDRESS	4		MDCTMRRT MRRT address
244	(F4)	SIGNED	4		MDCTNOTS RCP CMB Throw-away time
248	(F8)	SIGNED	4	(0)	MAS LINE DCT END (MDCTLEND)

Comment

INTERNAL READER DCT EXTENSION

End of Comment

141	(8D)	BITSTRING	1	RIDFLAGS	INTERNAL READER FLAGS
144	(90)	ADDRESS	4	RIDUBF	ADDRESS OF UNPRTECTD BUFFER (IBF)
148	(94)	ADDRESS	4	RIDPBF	ADDRESS OF PROTECTED BUFFER (JBF)
152	(98)	ADDRESS	4	RIDPBFO	OFFSET IN PROTECTED BUFFER
156	(9C)	CHARACTER	8	RIDJOBID	INTERNAL READER JOB ID
164	(A4)	ADDRESS	4	RIDEOMP	ADDRESS OF EOM ECB
168	(A8)	ADDRESS	4	RIDEOMA	ADDRESS OF ASCB TO POST
172	(AC)	ADDRESS	4	RIDEOMER	ERROR RETURN FOR XMPOST
176	(B0)	ADDRESS	4	RIDEOME	EOM ECB
180	(B4)	CHARACTER	8	RIDJBID	ID OF CURRENT OWNER
188	(BC)	CHARACTER	8	RIDJNAM	NAME OF CURRENT OWNER
196	(C4)	CHARACTER	8	RIDSUSR	'USER' FROM OWNER'S ACEE
204	(CC)	CHARACTER	8	RIDSGRP	'GROUP' FROM OWNER'S ACEE
212	(D4)	SIGNED	4	RIDLOCK	Lock for SVC 111 internal reader services
216	(D8)	ADDRESS	4	RIDSJB	SJB address
220	(DC)	CHARACTER	8	RIDRSV2	RESERVED
228	(E4)	SIGNED	4	(0)	ENSURE FULLWORD ALIGNMENT
228	(E4)	BITSTRING	1	RIDXECB	XECB TO POST INTRDR PCE

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

228	(E4)	X'4	'	0	RIDCAVAL	"4" HASPAM WANTS RDR TO GET PAST THE \$GETUNIT AND START RDR'ING (USED IN RIDXECB)
228	(E4)	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)
228	(E4)	X'C	'	0	RIDCDONE	"12" RDR IS NOTIFYING AM THAT THE LAST BUFFER HAS BEEN PROCESSED (IN RIDECEB)
228	(E4)	ADDRESS		4	RIDSAA	ADDRESS OF SAVE AREA
232	(E8)	SIGNED		4	RIDALET	ALET OF PBUF DATASPACE
236	(EC)	BITSTRING		1	RIDFLAG2	SERIALIZED FLAG BYTE (UPDATE USING OIL/NIL ONLY)
236	(EC)	BITSTRING		0	RID2ERRD	"B'10000000" HASPRDR HAS DETECTED AN INTERNAL ERROR.
236	(EC)	BITSTRING		0	RID2ERAM	"B'01000000" HASPAM HAS DETECTED AN INTERNAL ERROR.

## \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
237	(ED)	BITSTRING	1	RIDFLAGA	UNSERIALIZED flag byte (*SET IN ALLOCATION ONLY*)
237	(ED)	BITSTRING	0	RIDALOCL	"B'10000000" Force SYSAFF to local
237	(ED)	BITSTRING	0	RIDAHOLD	"B'01000000" Force TYPRUN=HOLD
238	(EE)	BITSTRING	1	RIDFLAG3	FLAG BYTE
238	(EE)	BITSTRING	0	RID3BLIM	"B'10000000" Honor BYTES= values for internal readers
239	(EF)	CHARACTER	1	RIDRSV3	RESERVED FOR FUTURE USE
240	(F0)	SIGNED	4	RIDCTEND (0)	END OF INTERNAL READER DCT
240	(F0)	X' '	0	RIDBUFSZ	"8192" SIZE OF INTERNAL READER BUFFERS

Comment

LOCAL/RMT PRINT/PUNCH DCT EXTENSION.

End of Comment

144	(90)	BITSTRING	384		SPACE FOR SYSOUT WORK SELECTION
528	(210)	CHARACTER	4	DCTNIFCB	3800 INSTALLATN DEFAULT FCB
532	(214)	CHARACTER	4	DCTDDFCB	DEVICE DEFAULT FCB
536	(218)	BITSTRING	1	DCTINDEX	PRINTER INDEX VALUE
537	(219)	BITSTRING	1	DCTPPFL	PRINT/PUNCH FLAGS
538	(21A)	BITSTRING	1	DCTPPSW	PRINT/PUNCH SWITCHES
539	(21B)	BITSTRING	1	DCTPPSW2	PRINT/PUNCH SWITCHES
540	(21C)	BITSTRING	1	DCTPPSW3	PRINT/PUNCH SWITCHES
541	(21D)	BITSTRING	1	DCTPPSW4	PRINT/PUNCH SWITCHES
542	(21E)	BITSTRING	1	DCTPPSW5	PRINT/PUNCH Switches
542	(21E)	BITSTRING	0	DCT5C1ON	"B'10000000" Chnl 1 is only new page
542	(21E)	BITSTRING	0	DCT5CALL	"B'01000000" All chnls are new page
542	(21E)	BITSTRING	0	DCT5UCS	"B'00100000" UCS has been modified via a \$T command
542	(21E)	BITSTRING	0	DCT5TFSS	"B'00010000" FSSID is to be removed
542	(21E)	BITSTRING	0	DCT5DNRC	"B'00001000" Device not responding condition
542	(21E)	BITSTRING	0	DCT5\$SPN	"B'00000100" \$Sprt for FSS prt pending
542	(21E)	BITSTRING	0	DCT5\$PPN	"B'00000010" \$Pprt for FSS prt pending
542	(21E)	BITSTRING	0	DCT5FSAT	"B'00000001" FSA level rolling trace on
543	(21F)	BITSTRING	1		Reserved for future use
544	(220)	CHARACTER	4	DCTCHAR1	N/I-PRINTER XLATE TABLE 1
548	(224)	CHARACTER	4	DCTCHAR2	N/I-PRINTER XLATE TABLE 2
552	(228)	CHARACTER	4	DCTCHAR3	N/I-PRINTER XLATE TABLE 3
556	(22C)	CHARACTER	4	DCTCHAR4	N/I-PRINTER XLATE TABLE 4
560	(230)	CHARACTER	4	DCTMODF	N/I-PRINTER MODIFY IDENTIFIER
564	(234)	ADDRESS	2	DCTLDPID	3800 LOST DATA PAGE ID G38E
566	(236)	BITSTRING	1	DCTDCPTN	DEFAULT COMPACTION TABLE NUMBER
567	(237)	BITSTRING	1	DCTACPTN	ACTIVE COMPACTION TABLE NUMBER
568	(238)	SIGNED	2	DCTCKPTP	NO. OF LOGICAL PAGES/CKPT
570	(23A)	SIGNED	2	DCTCKPTL	NO. OF LINES/LOGICAL PAGE
572	(23C)	SIGNED	2	DCTCKPTT	AMT OF TIME BEFORE FORCED CKPT
574	(23E)	SIGNED	2	DCTNPRO	TIME BEFORE NON PROCESS RUN OUT
576	(240)	ADDRESS	4	DCTPRTRN	ADDRESS OF DEFAULT TRAN TABLE
580	(244)	ADDRESS	4	DCTCCWTB	ADDRESS OF DEFAULT CCW TRN TBLE
584	(248)	SIGNED	4	DCTCSW	PRINT INTERVENTION REQ AREA
584	(248)	X'4C	0	DCTPREND	*** PRINT/PUNCH DCT EXTENSION END

Comment

SPOOL OFFLOAD DEVICE DCT EXTENSION

End of Comment

104	(68)	ADDRESS	4	XDCTDTE	ADDRESS OF SUB-TASK DTE
108	(6C)	SIGNED	4	XDCTSEQN	NUM BLOCKS READ FOR LOAD CKPT
112	(70)	SIGNED	2	XDCTXNUM	DEVICE NUMBER
114	(72)	SIGNED	2	XDCTSUBR	SUB-TASK REQUEST
116	(74)	SIGNED	2	XDCTSUBC	SUB-TASK REQ COMPLETION CODE
118	(76)	BITSTRING	1	XDCTUNCT	UNIT COUNT
119	(77)	BITSTRING	1	XDCTFLG1	FLAG BYTE
120	(78)	BITSTRING	1	XDCTFLG2	FLAG BYTE
121	(79)	BITSTRING	1	XDCTVOLS	OFFLOAD VOLUME COUNT

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
122	(7A)	BITSTRING	1	XDCTLABL	LABEL TYPE (SL,NL,...)
123	(7B)	BITSTRING	2	XDCTRTPD	RETENTION PERIOD IN DAYS
125	(7D)	CHARACTER	8	XDCTUNIT	DEFAULT UNIT NAME
133	(85)	BITSTRING	1	XDCTOFSL	Offload archive bits
134	(86)	BITSTRING	2	XDCTFREE	RESERVED FOR FUTURE USAGE

Comment

THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER

End of Comment

136	(88)	SIGNED	4	XDCTTIME	TIME OFFLOAD DATA SET ALLOCATED
140	(8C)	SIGNED	4	XDCTDATE	DATE OFFLOAD DATA SET ALLOCATED

Comment

THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER

End of Comment

144	(90)	SIGNED	4	XDCTTVER	TIME VERIFICATION STAMP
148	(94)	SIGNED	4	XDCTDVER	DATE VERIFICATION STAMP
152	(98)	ADDRESS	4	XDCTCMPQ	XFRDCT SUB-TASK COMPLETION Q
156	(9C)	ADDRESS	4	XDCTBUFQ	Q OF BUFFERS WAITING COMPLETION
160	(A0)	ADDRESS	4	XDCTACTV	QUEUE OF ACTIVE XFR DCTS
164	(A4)	BITSTRING	1	XDCTERCT	READ ERROR COUNT
165	(A5)	BITSTRING	1	XDCTOPCT	COUNT OF RECV/TRANS DCTS OPEN
166	(A6)	SIGNED	2	XDCTMAXB	Max buffers allowed to hold
168	(A8)	CHARACTER	44	XDCTDSN	OFFLOAD DATASET NAME
212	(D4)	SIGNED	4	DCTXFEND (0)	END OF OFFLOAD DCT EXTENSION

Comment

JOB TRANSMITTER DCT EXTENSION

End of Comment

144	(90)	BITSTRING	336		SPACE FOR JOB WORK SELECTION
480	(1E0)	BITSTRING	1	DCTJTDSP	DISPOSITION FLAGS
480	(1E0)	BITSTRING	0	DCTJTDPG	"B'10000000" PURGE JOB AFTER DUMP
480	(1E0)	BITSTRING	0	DCTJTDHD	"B'01000000" HOLD JOB AFTER DUMP
480	(1E0)	BITSTRING	0	DCTJTDKP	"B'00100000" KEEP JOB AFTER DUMP
480	(1E0)	X'E1	0	DCTOJEND	*** OFFLOAD JOB XMITTER DCT EXT END
480	(1E0)	X'E1	0	DCTJTEND	*** NETWORK JOB XMITTER

Comment

SYSOUT TRANSMITTER DCT EXTENSION.

End of Comment

144	(90)	BITSTRING	384		SPACE FOR SYSOUT WORK SELECTION
528	(210)	BITSTRING	1	DCTSTDSP	DISPOSITION FLAG
528	(210)	BITSTRING	0	DCTSTDPG	"B'10000000" PURGE DATA SET AFTER DUMP
528	(210)	BITSTRING	0	DCTSTDHD	"B'01000000" HOLD DATA SET AFTER DUMP
528	(210)	BITSTRING	0	DCTSTDKP	"B'00100000" KEEP DATA SET AFTER DUMP
529	(211)	BITSTRING	3		Reserved for future use
529	(211)	X'14	0	DCTOSEND	*** OFFLOAD SYSOUT XMITTER EXT END
529	(211)	X'14	0	DCTSTEND	*** NETWORK SYSOUT XMITTER

Comment

OFFLOAD JOB RECEIVER DCT EXTENSION

End of Comment

144	(90)	BITSTRING	336		SPACE FOR JOB WORK SELECTION
480	(1E0)	BITSTRING	4	DCTJRSAF	DEVICE MODIFY AFFINITY (EBCDIC)

## \$DCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
484	(1E4)	BITSTRING	0	DCTJRMSF	DEVICE MODIFY AFFINITY (FLAGS)
484	(1E4)	BITSTRING	1	DCT1JRFL	DEVICE MODIFY FLAG BYTE
484	(1E4)	BITSTRING	0	DCT1JHLD	"B'10000000" HOLD JOB MODIFY FLAG
484	(1E4)	BITSTRING	0	DCT1JHNL	"B'01000000" HOLD NOT TO BE MODIFIED
485	(1E5)	CHARACTER	1	DCTJRMCL	DEVICE MODIFY JOB CLASS
486	(1E6)	BITSTRING	1		RESERVED FOR FUTURE USE
487	(1E7)	ADDRESS	4	DCTJRMNO	DEVICE MODIFY NODE NUMBER
487	(1E7)	X'E9	0	DCTOJRLN	*** JOB RECEIVER DCT END

Comment

OFFLOAD SYSOUT RECEIVER DCT EXTENSION

End of Comment

144	(90)	BITSTRING	384		SPACE FOR SYSOUT WORK SELECTION
528	(210)	BITSTRING	1	DCT1SRFL	DEVICE MODIFY FLAG BYTE
528	(210)	BITSTRING	0	DCT1SHLD	"B'10000000" SET HELD POST-EXECUTION JOBS
528	(210)	BITSTRING	0	DCT1SHNL	"B'01000000" HOLD NOT TO BE MODIFIED
528	(210)	BITSTRING	0	DCT1SDSH	"B'00100000" SET HELD OUTPUT
528	(210)	BITSTRING	0	DCT1SDNL	"B'00010000" DSHOLD NOT TO BE MODIFIED
528	(210)	BITSTRING	0	DCT1SBUR	"B'00001000" SET BURSTED OUTPUT
528	(210)	BITSTRING	0	DCT1SBNL	"B'00000100" BURST NOT TO BE MODIFIED
529	(211)	BITSTRING	1	DCT2SRFL	DEVICE MODIFY FLAG2 BYTE
529	(211)	X' '	0	DCT2MODW	"\$ODWRITE" MODIFY OUTDISP=WRITE
529	(211)	X' '	0	DCT2MODH	"\$ODHOLD" MODIFY OUTDISP=HOLD
529	(211)	X' '	0	DCT2MODK	"\$ODKEEP" MODIFY OUTDISP=KEEP
529	(211)	X' '	0	DCT2MODL	"\$ODLEAVE" MODIFY OUTDISP=LEAVE
529	(211)	X' '	0	DCT2MODA	"\$ODANY" CHECK ALL BIT SETTINGS
530	(212)	BITSTRING	1	DCT3SRFL	DEVICE SELECT FLAG3 BYTE
530	(212)	X' '	0	DCT3SODW	"\$ODWRITE" SELECT OUTDISP=WRITE
530	(212)	X' '	0	DCT3SODH	"\$ODHOLD" SELECT OUTDISP=HOLD
530	(212)	X' '	0	DCT3SODK	"\$ODKEEP" SELECT OUTDISP=KEEP
530	(212)	X' '	0	DCT3SODL	"\$ODLEAVE" SELECT OUTDISP=LEAVE
530	(212)	X' '	0	DCT3SODA	"\$ODANY" CHECK ALL BIT SETTINGS
531	(213)	CHARACTER	1	DCTSRMCL	DEVICE MODIFY JOB CLASS
532	(214)	CHARACTER	12	DCTSRMNO	DEVICE MODIFY NODE NUMBER
544	(220)	CHARACTER	4	DCTSRMFC	DEVICE MODIFY FCB ID
548	(224)	CHARACTER	4	DCTSRMFL	DEVICE MODIFY FLASH
552	(228)	CHARACTER	4	DCTSRMUC	DEVICE MODIFY UCS ID
556	(22C)	CHARACTER	8	DCTSRMPR	DEVICE MODIFY PRMODE LIST
564	(234)	CHARACTER	8	DCTSRMFO	DEVICE MODIFY FORMS ID
572	(23C)	CHARACTER	1	DCTSRMWI	DEVICE MODIFY WRITER ID
572	(23C)	X'44	0	DCTOREND	*** SYSOUT RECEIVER DCT END

Comment

DCTSTAT2

End of Comment

572	(23C)	BITSTRING	0	DCTCIP	"B'10000000" COMMAND IN PROGRESS
572	(23C)	BITSTRING	0	DCTGTDCB	"B'01000000" DEVICE NEEDS A DCB
572	(23C)	BITSTRING	0	DCTGTBSM	"B'00100000" DEVICE NEEDS A BSAM DCB
572	(23C)	BITSTRING	0	DCTNEWFS	"B'00010000" DCT FSS-OWNERSHIP IS TO BE CHANGED TO THE FSS IN DCTFSSNW
572	(23C)	BITSTRING	0	DCT\$TFLS	"B'00001000" \$T FLASH INDICATOR
572	(23C)	BITSTRING	0	DCTR190	"B'00000100" RMT PRPU WILL STOP FOR A REPLY TO SETUP MESSAGE
572	(23C)	BITSTRING	0	DCT\$TNSP	"B'00000010" \$T FSS PRT.. non setup parameters change require FSACB updates

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MDCTATTN					
End of Comment					
572	(23C)	BITSTRING	0	MDCTIMER	"B'10000000" TIMED ACTION REQUESTED
572	(23C)	BITSTRING	0	MDCTPAWS	"B'01000000" LINE PAUSE REQUESTED
572	(23C)	BITSTRING	0	MDCTJOB1	"B'00100000" JOB POST INDICATOR 1
572	(23C)	BITSTRING	0	MDCTJOB2	"B'00010000" JOB POST INDICATOR 2
572	(23C)	X'30	0	MDCTJOB	"MDCTJOB1+MDCTJOB2" JOB POST INDICATION
572	(23C)	BITSTRING	0	MDCTDSC	"B'00001000" LINE DISCONNECT SEQUENCE
Comment					
EQU B'00000100' RESERVED FOR FUTURE USE					
End of Comment					
572	(23C)	BITSTRING	0	MDCTSTRT	"B'00000010" START VERIFICATION REQUIRED
572	(23C)	BITSTRING	0	MDCTATT8	"B'00000001" RESERVED FOR FUTURE USE
Comment					
MDCTSTAT					
End of Comment					
572	(23C)	BITSTRING	0	DCTLEASE	"B'10000000" DEDICATED LINE
572	(23C)	BITSTRING	0	DCTADS	"B'10000000" ABNORMAL END OF DATA
572	(23C)	BITSTRING	0	DCTSHARE	"B'01000000" SHARED LINE
572	(23C)	BITSTRING	0	DCTETX	"B'00100000" AN ETX HAS BEEN RECEIVED
572	(23C)	BITSTRING	0	DCTFLUSH	"B'00100000" STREAM HAS BEEN TERMINATED
572	(23C)	BITSTRING	0	DCTSOFF	"B'00010000" SIGNOFF RCVD OR DISCONNECT REQD
572	(23C)	BITSTRING	0	DCTEOF	"B'00010000" AN EOF HAS BEEN DETECTED
572	(23C)	BITSTRING	0	DCTSINON	"B'00001000" REMOTE DCT IS ATTACHED TO LNE DCT
572	(23C)	BITSTRING	0	DCTSHMSG	"B'00000100" Message issued for denied nonshare req (Init only)
572	(23C)	BITSTRING	0	DCTPOST	"B'00000100" I/O COMPLETE FLAG
572	(23C)	BITSTRING	0	DCTABORT	"B'00000010" TRANSMISSION WAS ABORTED
572	(23C)	BITSTRING	0	DCTPBUF	"B'00000001" REMOTE OUTPUT BUFFER INDICATOR
572	(23C)	BITSTRING	0	DCTPSUSP	"B'00000001" REMOTE DEVICE HAS BEEN SUSPENDED
Comment					
XDCTSTAT					
End of Comment					
572	(23C)	BITSTRING	0	XDCTOPEN	"B'10000000" \$EXTP OPEN ISSUED
572	(23C)	BITSTRING	0	XDCTERR	"B'01000000" I/O ERROR INDICATOR
Comment					
EQU B'00100000' DCTFLUSH					
EQU B'00010000' DCTEOF					
End of Comment					
572	(23C)	BITSTRING	0	XDCTMSG	"B'00001000" FORCE DRAINED MESSAGE
572	(23C)	BITSTRING	0	XDCTSKIP	"B'00000100" RECEIVER SKIPPING BUFFER

# \$DCT Map

Offsets						
Dec	Hex	Type/Value	Len	Name (Dim)	Description	
Comment						
EQU B'00000010' DCTABORT						
EQU B'00000001' DCTPBUF						
MDCTLINE						
End of Comment						
572	(23C)	BITSTRING	0	DCTPTRSP	"B'10000000" TRANSPARENCY	
572	(23C)	BITSTRING	0	DCTPASCII	"B'01000000" USASCII CODE	
572	(23C)	BITSTRING	0	DCTPCTC	"B'00100000" CHANNEL-TO-CHANNEL ADAPTER	
572	(23C)	BITSTRING	0	DCTPHASP	"B'00010000" HASP-TO-HASP	
572	(23C)	BITSTRING	0	DCTPCOMP	"B'00001000" COMPRESS-EXPAND FEATURE	
572	(23C)	BITSTRING	0	DCTPNADS	"B'00000100" NO ABORTIVE DISCONNECT	
572	(23C)	BITSTRING	0	DCTPWIDE	"B'00000010" WIDE-BAND LINE	
572	(23C)	BITSTRING	0	DCTPFULL	"B'00000001" FULL-DUPLEX LINE	
Comment						
MDCTTYPE						
End of Comment						
572	(23C)	BITSTRING	0	DCTPSNA	"B'10000000" SNA LU TYPE TERMINAL	
572	(23C)	BITSTRING	0	DCTPCPU	"B'01000000" BSC CPU TYPE TERMINAL	
572	(23C)	BITSTRING	0	DCTPHDW	"B'00100000" BSC HARDWARE TERMINAL	
572	(23C)	BITSTRING	0	DCTPSUBC	"B'00001111" LOW ORDER 4 BITS (X'0F) FOR DEVICE SUB-CLASSIFICATION	
572	(23C)	X'81	'	0	DCTPLU1	"DCTPSNA+X'01" SNA LU TYPE 1
572	(23C)	X'41	'	0	DCTP20S2	"DCTPCPU+X'01" 360/20 SUBMODEL 2
572	(23C)	X'42	'	0	DCTP20S5	"DCTPCPU+X'02" 360/20 SUBMODEL 5
572	(23C)	X'43	'	0	DCTP20S6	"DCTPCPU+X'03" 360/20 SUBMODEL 6
572	(23C)	X'44	'	0	DCTP360	"DCTPCPU+X'04" SYSTEM/360
572	(23C)	X'45	'	0	DCTP1130	"DCTPCPU+X'05" 1130
572	(23C)	X'46	'	0	DCTPSYS3	"DCTPCPU+X'06" SYSTEM/3
572	(23C)	X'47	'	0	DCTPCRS7	"DCTPCPU+X'07" RESERVED FOR FUTURE USE
572	(23C)	X'48	'	0	DCTPSY36	"DCTPCPU+X'08" SYSTEM 36 (BSC MODE)
572	(23C)	X'49	'	0	DCTP370	"DCTPCPU+X'09" SYSTEM/370
572	(23C)	X'4A	'	0	DCTP20S4	"DCTPCPU+X'0A" 360/20 SUBMODEL 4
572	(23C)	X'4B	'	0	DCTP2922	"DCTPCPU+X'0B" 2922
572	(23C)	X'21	'	0	DCTP2770	"DCTPHDW+X'01" 2770
572	(23C)	X'22	'	0	DCTP3781	"DCTPHDW+X'02" 3781
572	(23C)	X'23	'	0	DCTP3740	"DCTPHDW+X'03" 3740
572	(23C)	X'24	'	0	DCTP3780	"DCTPHDW+X'04" 3780
572	(23C)	X'25	'	0	DCTP2780	"DCTPHDW+X'05" 2780
Comment						
MDCTSEL						
End of Comment						
572	(23C)	BITSTRING	0	DCTPOUTB	"B'10000000" OUTBOUND DEVICE SELECTION	
Comment						
MDCTPMFL						
End of Comment						
572	(23C)	BITSTRING	0	DCTNPLIM	"B'10000000" PATH MANAGER BUFFER LIMIT REACHED	
Comment						
MDCTFMT						
End of Comment						

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
572	(23C)	BITSTRING	0	DCTPBLK	"B'10000000" BLOCKED RECORDS
572	(23C)	BITSTRING	0	DCTPVAR	"B'01000000" VARIABLE LENGTH RECORDS
572	(23C)	BITSTRING	0	DCTPROG	"B'00100000" MULTI-LEAVING INTERFACE
572	(23C)	BITSTRING	0	DCTPFCB	"B'00001000" DEVICE FCB HAS BEEN LOADED

Comment

CTPPRES EQU B'00000100' COMPRESSED DATASTREAM ACTIVE

End of Comment

572	(23C)	BITSTRING	0	DCTPALTC	"B'00000010" ALTERNATE CODE SELECTED
572	(23C)	BITSTRING	0	DCTPCPCT	"B'00000001" COMPACTED DATASTREAM ACTIVE
572	(23C)	BITSTRING	0	DCTHOLDS	"B'00010000" NJE TRANSMISSION HOLD STREAM

Comment

MDCTFEAT

CTPTRSP EQU B'10000000' TERMINAL TRANSPARENCY

End of Comment

572	(23C)	BITSTRING	0	DCTPMRF	"B'00000010" MULTIPLE-RECORD FEATURE
572	(23C)	BITSTRING	0	DCTPBEXP	"B'01000000" BUFFER EXPANSION FEATURE
572	(23C)	BITSTRING	0	DCTPABEX	"B'00100000" ADDITIONAL BUFFER EXPANSION
572	(23C)	BITSTRING	0	DCTPNDST	"B'00100000" MEDIA NOT BASIC EXCHANGE
572	(23C)	BITSTRING	0	DCTPTAB	"B'00010000" HORIZONTAL FORMAT CONTROL
572	(23C)	BITSTRING	0	DCTPCCTL	"B'00010000" CARRIAGE CONTROL
572	(23C)	BITSTRING	0	DCTPSHDR	"B'00001000" SETUP HEADER FEATURE
572	(23C)	BITSTRING	0	DCTPPRES	"B'00000100" COMPRESS-EXPAND FEATURE

Comment

CTPALTC EQU B'00000010' ALTERNATE CODE SELECTED

CTPCPCT EQU B'00000001' COMPACTION FEATURE

DCTRAUTH

End of Comment

572	(23C)	BITSTRING	0	DCTREJRM	"B'00001000" REMOTE RESTRICTION
572	(23C)	BITSTRING	0	DCTREJJB	"B'00000100" RESTRICTED FROM JOB COMMANDS
572	(23C)	BITSTRING	0	DCTREJDV	"B'00000010" RESTRICTED FROM DEVICE COMMANDS
572	(23C)	BITSTRING	0	DCTREJSY	"B'00000001" RESTRICTED FROM SYSTEM COMMANDS

Comment

MDCTNFL

End of Comment

572	(23C)	BITSTRING	0	MDCTNFLL	"B'10000000" THIS END LOW NODE
572	(23C)	BITSTRING	0	MDCTNFLC	"B'01000000" CONCURRENCE REQUIRED
572	(23C)	BITSTRING	0	MDCTNFLE	"B'00100000" RESET REQUIRED
572	(23C)	BITSTRING	0	MDCTNFLQ	"B'00010000" ON ACTIVE QUEUE
572	(23C)	BITSTRING	0	MDCTNFLS	"B'00001000" SECONDARY TRUNK
572	(23C)	BITSTRING	0	MDCTNFLI	"B'00000100" SIGNON INPUT EXPECTED
572	(23C)	BITSTRING	0	MDCTNFLP	"B'00000010" Signon is pending MAS validation
572	(23C)	BITSTRING	0	MDCTNJEH	"B'00000001" SEND NJE HDR TO SESSION PARTNR

Comment

MDCTNFL2

End of Comment

572	(23C)	BITSTRING	0	MDCTNF2R	"B'10000000" THIS LINE REQUIRES RESTART
572	(23C)	BITSTRING	0	MDCTNF2S	"B'01000000" RESTART OF THIS LINE IS AS SECONDARY
572	(23C)	BITSTRING	0	MDCTNF2N	"B'00100000" Restart line after draining it

# \$DCT Map

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
572	(23C)	BITSTRING	0	MDCTNF2A	"B'00010000" Signon of NJE line as primary trunk has completed
572	(23C)	BITSTRING	0	MDCTNF2D	"B'00001000" The transmitter/receiver DCTs for this line are assigned at init and should not be freed
572	(23C)	BITSTRING	0	MDCTNF2I	"B'00000100" Received 'I' record, awaiting MAS validation
572	(23C)	BITSTRING	0	MDCTNF2J	"B'00000010" Received 'J' record, awaiting MAS validation

Comment

MDCTNFL3

End of Comment

572	(23C)	BITSTRING	0	MDCTNF3M	"B'10000000" Multi-trunk bit set from MAS validation
572	(23C)	BITSTRING	0	MDCTNF3J	"B'01000000" Multi-trunk bit set from 'J' record
572	(23C)	BITSTRING	0	MDCTNF3E	"B'00000001" \$EXTP PUT failed for other than buffer shortage while transmitting NMR

Comment

RIDFLAGS

End of Comment

572	(23C)	BITSTRING	0	RIDALLOC	"B'00100000" THIS INTERNAL READER IS ALLOCATED
572	(23C)	BITSTRING	0	RIDEND	"B'00010000" Internal reader is closing (processing last buffer)
572	(23C)	BITSTRING	0	RIDSKIP	"B'00001000" INTERNAL READER SKIPPING FOR JOB
572	(23C)	BITSTRING	0	RIDEOM	"B'00000100" EOM IN PROGRESS
572	(23C)	BITSTRING	0	RID1ROUT	"B'00000010" A default print/punch routing has been passed
572	(23C)	BITSTRING	0	RIDPOSTI	"B'00000001" INTENT TO POST INTERNAL RDR

Comment

DCTPPFL

End of Comment

572	(23C)	BITSTRING	0	DCTEJECT	"B'10000000" PRINTER IS AT TOP OF PAGE
572	(23C)	BITSTRING	0	DCTRPSSE	"B'01000000" REMOTE PRINTER - SUPPRESS PAGE EJECT ON RMT SIGNON
572	(23C)	BITSTRING	0	DCTRUSBC	"B'01000000" REMOTE PUNCH - SUPPRESS BLANK CARD TO FLUSH PUNCH BETWEEN/AFTER DATA SETS
572	(23C)	BITSTRING	0	DCTALIGN	"B'00100000" PRINTER WILL ACCEPT ALIGNMENT
572	(23C)	BITSTRING	0	DCTRANS	"B'00010000" PRINTER TRANSLATION SPECIFIED
572	(23C)	BITSTRING	0	DCTTCEL	"B'00001000" TRACK-CELL DESPOOLING
572	(23C)	BITSTRING	0	DCTRMFCB	"B'00000100" REMOTE PRINTER HAS FCB FEATURE
572	(23C)	BITSTRING	0	DCTSUSPD	"B'00000010" OUTPUT SUSPEND IS ALLOWED

Comment

CTPAUSE EQU B'00000001' OPERATOR SET PAUSE=YES  
DCTPPSW

End of Comment

572	(23C)	BITSTRING	0	DCTPPSWC	"B'10000000" FCB CARRIAGE ALTERED
572	(23C)	BITSTRING	0	DCTPPSWB	"B'00100000" FCB NOT STANDARD
572	(23C)	BITSTRING	0	DCTPPSWS	"B'00010000" SUPPRESS SEPARATOR PAGES
572	(23C)	BITSTRING	0	DCTPPSWT	"B'00001000" UCS TRAIN ALTERED
572	(23C)	BITSTRING	0	DCTPPSWU	"B'00000100" UCS NOT STANDARD
572	(23C)	BITSTRING	0	DCTPPSWI	"B'00000010" DEVICE IDLE MESSAGE ISSUED
572	(23C)	BITSTRING	0	DCTPPSWO	"B'00000001" OPERATOR ACTION ALLOWED

Comment

DCTPPSW2

End of Comment



Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
572	(23C)	BITSTRING	0	DCTNIPRT	"B'10000000" N/I-PRINTER DCT IDENTIFIER
572	(23C)	BITSTRING	0	DCTSTFSS	"B'01000000" Device can only be successfully started if in FSS mode (for example, AFP1 devices)
572	(23C)	BITSTRING	0	DCTNIMRK	"B'00100000" N/I-PRT FORMS MARK ALTERED
572	(23C)	BITSTRING	0	DCTCKJAM	"B'00010000" N/I-CANCEL KEY OR PAPER JAM G38E
572	(23C)	BITSTRING	0	DCTNINIT	"B'00001000" N/I-PRINTER INITIALIZATION SWITCH
572	(23C)	BITSTRING	0	DCTSEPNL	"B'00000100" N/I DON'T LOAD DEFAULT FOR SEP
572	(23C)	BITSTRING	0	DCTSDESW	"B'00000010" NOSEPD/SEPDS SWITCH
572	(23C)	BITSTRING	0	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

572	(23C)	BITSTRING	0	DCTDOPN	"B'10000000" DCB HAS BEEN OPENED
572	(23C)	BITSTRING	0	DCTS3TFC	"B'01000000" FCB has been modified via a \$T command
572	(23C)	BITSTRING	0	DCTUCSBL	"B'00100000" USE 4245 BLDL/LOAD FLAG
572	(23C)	BITSTRING	0	DCT3UCSV	"B'00010000" PERFORM 424X UCS VERIFY
572	(23C)	BITSTRING	0	DCTS3CNO	"B'00001000" COPYMARKS NONE
572	(23C)	BITSTRING	0	DCTS3CDS	"B'00000100" COPYMARKS ON DATASET LEVEL
572	(23C)	BITSTRING	0	DCTS3CJB	"B'00000010" COPYMARKS ON JOB LEVEL
572	(23C)	BITSTRING	0	DCTS3CON	"B'00000001" COPYMARKS CONSTANT
572	(23C)	X'F	0	DCTS3CPY	"DCTS3CNO+DCTS3CDS+DCTS3CJB+DCTS3CON" COPYMARKS reset

Comment

DCTPPSW4

End of Comment

572	(23C)	BITSTRING	0	DCTS4NPS	"B'10000000" NO DATA SET PRESELECTION
572	(23C)	BITSTRING	0	DCTS4NHLT	"B'01000000" DO NOT HALT DEV FOR SETUP
572	(23C)	BITSTRING	0	DCTS4NHOR	"B'00100000" SETUP=NOHALT OVERRIDE
572	(23C)	BITSTRING	0	DCTS4OPI	"B'00010000" INTERVENTION-REQUIRED CONDITION
572	(23C)	BITSTRING	0	DCTS4TUN	"B'00001000" Unit has been modified via \$T command
572	(23C)	BITSTRING	0	DCTS4AIS	"B'00000100" Send data ASIS to remote
572	(23C)	BITSTRING	0	DCT4TRNY	"B'00000010" TRANS=YES
572	(23C)	BITSTRING	0	DCT4TRNN	"B'00000001" TRANS=NO

Comment

XDCTFLG1

End of Comment

572	(23C)	BITSTRING	0	XDCT1DMP	"B'10000000" TRANSMIT (DUMP)
572	(23C)	BITSTRING	0	XDCT1LOD	"B'01000000" RECEIVE (LOAD)
572	(23C)	BITSTRING	0	XDCT1SUB	"B'00100000" SUBTASK OPERATING ON THIS DCT
572	(23C)	BITSTRING	0	XDCT1ALC	"B'00010000" OFFLOAD DATASET ALLOCATED
572	(23C)	BITSTRING	0	XDCT1CLS	"B'00001000" CLOSE ISSUED FOR OFFLOAD DCT
572	(23C)	BITSTRING	0	XDCT1VER	"B'00000100" RECORD VERIFICATION ERROR
572	(23C)	BITSTRING	0	XDCT1RD	"B'00000010" READ IN PROGRESS FOR OFFLOAD
572	(23C)	BITSTRING	0	XDCT1STR	"B'00000001" OFFLOAD DEVICE BEING RESTARTED

Comment

XDCTFLG2

End of Comment

572	(23C)	BITSTRING	0	XDCT2ST	"B'10000000" OFFLOAD XMIT/RECEIVE CAN BEGIN
572	(23C)	BITSTRING	0	XDCT2PRO	"B'01000000" SAF PROTECTION IF DISP=NEW

## \$DCT Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
572	(23C)	BITSTRING	0	XDCT2NDF	"B'00100000" Node of offload and this node are different
572	(23C)	BITSTRING	0	XDCT2NVR	"B'00010000" Skip checks of time/date stamp from first record
Comment					
MDCTFLG1 SNA REMOTE DCT FLAG BYTE					
End of Comment					
572	(23C)	BITSTRING	0	MDCT1OUT	"B'10000000" OUTPUT EXISTS FOR THIS DEV
572	(23C)	BITSTRING	0	MDCT1EOT	"B'01000000" ACKN END-OF-TRANS (ATC) FLG

## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCT\$FCLS	23C	8	DCTDRAIN	8	40
DCT\$TNSP	23C	2	DCTDVTPX	1A	40
DCTABORT	23C	2	DCTEJECT	23C	80
DCTACB	10		DCTEOF	23C	10
DCTACPTN	237		DCTERMNR	A	40
DCTADS	23C	80	DCTETX	23C	20
DCTAGE	1E4		DCTEWF	14	
DCTALIGN	23C	20	DCTEXORG	68	
DCTARMID	39	5	DCTFCB	1CC	
DCTASAPI	1FC		DCTFCKMD	B	40
DCTATTN	8	2	DCTFDFLT	B	20
DCTBFCKP	23C	1	DCTFEORG	50	
DCTBKSP	9	8	DCTFLAGS	9	
DCTBUFAD	C		DCTFLAG2	A	
DCTBUFCN	18		DCTFLAG3	1B	
DCTBUFLM	18	14	DCTFLASH	1D4	
DCTCCWTB	244		DCTFLGFW	8	
DCTCHAIN	24		DCTFLSHD	1D8	
DCTCHAR1	220		DCTFLUSH	23C	20
DCTCHAR2	224		DCTFORMS	1C4	
DCTCHAR3	228		DCTFSAID	4A	
DCTCHAR4	22C		DCTFSET	B	8
DCTCIP	23C	80	DCTFSID	48	
DCTCKJAM	23C	10	DCTFSSCH	44	
DCTCKPTL	23A		DCTFSSFL	B	
DCTCKPTP	238		DCTFSSID	48	
DCTCKPTT	23C		DCTFSSMD	B	1
DCTCLASS	170		DCTFSSNM	44	
DCTCMODF	B	4	DCTFSSNW	44	
DCTCMODJ	B	2	DCTFSYNC	B	10
DCTCOMID	39	3	DCTGTBSM	23C	20
DCTCRUID	154		DCTGTDCB	23C	40
DCTCSW	248		DCTGTW	1F8	
DCTCURJB	14C		DCTHOLD	8	20
DCTCWS	90		DCTHOLDJ	9	4
DCTCWSLN	1C4	34	DCTHOLDS	23C	10
DCTDALEN	1B	18	DCTID	0	
DCTDCB	10		DCTID2	90	E6E2D740
DCTDCPTN	236		DCTINDEX	218	
DCTDDFCB	214		DCTINDIR	15D	80
DCTDELETE	9	40	DCTINR	1A	14
DCTDEVID	39		DCTINRID	39	
DCTDEVI2	1B6		DCTINT	1A	4
DCTDEVN	28		DCTINUSE	8	80
DCTDEVN2	1A4	A4	00011	8C	8D
DCTDEVN2	1A4		DCTJCLAS	89	
DCTDEVTP	1A		DCTJNUMH	164	
DCTDEVT2	1B5		DCTJNUML	160	
DCTDOPN	23C	80	DCTJOBNM	144	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCTJREND	90	90	DCTPAUSE	8	1
DCTJRMCL	1E5		DCTPBEXP	23C	40
DCTJRMNO	1E7		DCTPBLK	23C	80
DCTJRMFS	1E4		DCTPBUF	23C	1
DCTJRSAF	1E0		DCTPCCTL	23C	10
DCTJTDHD	1E0	40	DCTPCE	4	
DCTJTDKP	1E0	20	DCTPCOMP	23C	8
DCTJTDPG	1E0	80	DCTPCPCT	23C	1
DCTJTDSP	1E0		DCTPCPU	23C	40
DCTJTEND	1E0	E1	DCTPCRS7	23C	47
DCTJWS	90		DCTPCTC	23C	20
DCTJWSLN	1D0	50	DCTPFCB	23C	8
DCTLDPID	234		DCTPFULL	23C	1
DCTLEASE	23C	80	DCTPHASP	23C	10
DCTLENG	210	80	DCTPHDW	23C	20
DCTLIMHI	1C0		DCTPJOE	20C	
DCTLIMLO	1BC		DCTPLIMH	1E0	
DCTLNE	1A	2	DCTPLIML	1DC	
DCTLOG	1A	6	DCTPLU1	23C	81
DCTLOGAL	9	1	DCTPMRF	23C	2
DCTLPOS	B3		DCTPNADS	23C	4
DCTLRECL	38		DCTPNDS	23C	20
DCTMAXWS	98	16	DCTPOSNL	B6	FF
DCTMCLAS	8A		DCTPOST	23C	4
DCTMLNE	1A	E	DCTPOUTB	23C	80
DCTMODF	230		DCTPPFL	219	
DCTNACTV	200		DCTPPOS	B5	
DCTNET	1A	8	DCTPPRES	23C	4
DCTNEWFS	23C	10	DCTPPSW	21A	
DCTNIBRS	1F4	40	DCTPPSWB	23C	20
DCTNIFCB	210		DCTPPSWC	23C	80
DCTNIMRK	23C	20	DCTPPSWI	23C	2
DCTNINIT	23C	8	DCTPPSWO	23C	1
DCTNIPRT	23C	80	DCTPPSWS	23C	10
DCTNJR	1A	18	DCTPPSWT	23C	8
DCTNJRID	39	50	DCTPPSWU	23C	4
DCTNJT	1A	38	DCTPPSW2	21B	
DCTNJTID	39	40	DCTPPSW3	21C	
DCTNMVOL	94		DCTPPSW4	21D	
DCTNODE	110	2	DCTPPSW5	21E	
DCTNPLIM	23C	80	DCTPREND	248	4C
DCTNPRO	23E		DCTPRGID	39	4
DCTNRC	15C		DCTPRINC	8B	
DCTNRLEN	110	4	DCTPRINT	70	
DCTNRR	1A	58	DCTPRLIM	8C	
DCTNRT	1A	78	DCTPRMD	1F0	
DCTNSR	1A	8	DCTPRNOD	70	
DCTNSRID	39	70	DCTPROG	23C	20
DCTNST	1A	28	DCTPRPU	1A	20
DCTNSTID	39	60	DCTPRRTE	72	
DCTNUM	39	3A	DCTPRSER	74	
DCTODPNV	B1	8	DCTPRT	1A	20
DCTOFF	1A	84	DCTPRTBL	1F0	
DCTOJEND	1E0	E1	DCTPRTID	39	20
DCTOJRLN	1E7	E9	DCTPRTRN	240	
DCTONODE	B6		DCTPSHDR	23C	8
DCTOPEN	A	1	DCTPSNA	23C	80
DCTOREND	23C	44	DCTPSUBC	23C	F
DCTOSEND	211	14	DCTPSUSP	23C	1
DCTOUTID	39	E	DCTPSYS3	23C	46
DCTPABEX	23C	20	DCTPSY36	23C	48
DCTPACTV	204		DCTPTAB	23C	10
DCTPALTC	23C	2	DCTPTRSP	23C	80
DCTPASCI	23C	40	DCTPUN	1A	30
DCTPATTN	8	4	DCTPUNCH	7C	

00002

## \$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value	
DCTPUNID	39	30	DCTSAF	1C4		
DCTPUNOD	7C		DCTSAFPT	1C4		
DCTPURTE	7E		DCTSAPID	39	D	
DCTPUSER	80		DCTSCHE	1D0		
DCTPVAR	23C	40	DCTSDSSW	23C	2	
DCTPWIDE	23C	2	DCTSEEK	10		
DCTP1130	23C	45	DCTSEPNL	23C	4	
DCTP20S2	23C	41	DCTSFSID	39	1	
DCTP20S4	23C	4A	DCTSHARE	23C	40	
DCTP20S5	23C	42	DCTSHMSG	23C	4	
DCTP20S6	23C	43	DCTSIAFF	88		
DCTP2770	23C	21	DCTSINON	23C	8	
DCTP2780	23C	25	DCTSLASH	B0	10	
DCTP2922	23C	4B	DCTSLIM	B1	20	
DCTP360	23C	44	DCTSNHLT	23C	40	
DCTP370	23C	49	DCTSNHOR	23C	20	
DCTP3740	23C	23	DCTSOFF	23C	10	
DCTP3780	23C	24	DCTSOFF2	9	10	
DCTP3781	23C	22	DCTSPACE	9	3	
DCTQPOS	B2		DCTSPNID	39	2	
DCTQVAL	B0	80	DCTSPOF	1A	80	
DCTQWS	B0	20	DCTSP1	9	1	
DCTRACE	A	80	DCTSP2	9	2	
DCTRANS	23C	10	DCTSREND	64	68	
DCTRAUTH	88		DCTSRMCL	213		
DCTRBFF	A	20	DCTSRMFC	220		
DCTRC	114		DCTSRMFL	224		
DCTRCLN	110	C	DCTSRMFO	234		
DCTRCLMAX	110	4	DCTSRMNO	214		
DCTRCON	1A	42	DCTSRMPR	22C		
DCTRDEND	90		DCTSRMUC	228		
DCTRDFL1	6A		DCTSRMWI	23C		
DCTRDNOD	6C		DCTSRVCL	1C8		
DCTRDONE	39	2	DCTSTART	B	80	
DCTRDR	1A	10	DCTSTAT	8		
DCTRDRID	39	10	DCTSTAT2	1C		
DCTRDRT	6C		DCTSTDHD	210	40	
DCTRDRTE	6E		DCTSTDKP	210	20	
DCTREJDV	23C	2	DCTSTDPG	210	80	
DCTREJJB	23C	4	DCTSTDSP	210		
DCTREJRM	23C	8	DCTSTEND	211	14	
DCTREJSY	23C	1	DCTSTFSS	23C	40	
DCTRJE	1A	2	DCTSTOP	9	80	
DCTRJI	1A	50	DCTSTRT	8	4	
DCTRJR	1A	12	DCTSUSPD	23C	2	
DCTRMFCB	23C	4	DCTSWS	90		
DCTRMID	39	80	DCTSWSLN	210	80	
DCTROUTE	110	2	00002	DCTS3CDS	23C	4
DCTRPOS	B4		DCTS3CJB	23C	2	
DCTRPP	1A	30	DCTS3CNO	23C	8	
DCTRPR	1A	22	DCTS3CON	23C	1	
DCTRPSSE	23C	40	DCTS3CPY	23C	F	
DCTRPT	9	10	DCTS3TFC	23C	40	
DCTRPU	1A	32	DCTS4AIS	23C	4	
DCTRRDY	A	10	DCTS4NPS	23C	80	
DCTRSTRT	9	20	DCTS4OPI	23C	10	
DCTRSTAM	8	8	DCTS4TUN	23C	8	
DCTRTE	A	1	DCTTCEL	23C	8	
DCTRTEID	39	8	DCTTODNE	39	1	
DCTRTEQ	15D		DCTTOKA	34		
DCTRUSBC	23C	40	DCTUCB	30		
DCTRVAL	B0	40	DCTUCS	1D0		
DCTRWS	B0	1	DCTUCSBL	23C	20	
DCTR1IND	6A	80	DCTUNAL	8	10	
DCTR190	23C	4	DCTUNIT	64		

## \$DCT Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
DCTUSEID	110	4	00008	DCT1SHNL	210	40
DCTUSER0	3C			DCT1SODA	1F5	
DCTUSER1	40			DCT1SODH	1F5	
DCTVOL	98			DCT1SODK	1F5	
DCTVOLEN	90	6		DCT1SODL	1F5	
DCTVOLFL	B0	8		DCT1SODW	1F5	
DCTVOLMX	90	4		DCT1SRFL	210	
DCTWFORC	1CC	CC	00008	DCT1STFL	1F5	
DCTWFORM	1CC			DCT2MODA	211	
DCTWKBUF	44			DCT2MODH	211	
DCTWORK	68			DCT2MODK	211	
DCTWRASI	19C			DCT2MODL	211	
DCTWRNUM	198			DCT2MODW	211	
DCTWS	B8	B0	00060	DCT2POST	A	8
DCTWSANY	196	1E		DCT2PTRC	A	4
DCTWSBEG	B0			DCT2RSP	A	2
DCTWSBNS	1F4	10		DCT2SRFL	211	
DCTWSBTH	1F4	4		DCT3JWS	1B	80
DCTWSCTK	B1	10		DCT3SODA	212	
DCTWSDAN	1F4	20		DCT3SODH	212	
DCTWSDSH	1F4	80		DCT3SODK	212	
DCTWSENT	98	4		DCT3SODL	212	
DCTWSFAP	196	2		DCT3SODW	212	
DCTWSFG1	196			DCT3SRFL	212	
DCTWSFG2	1F4			DCT3SWS	1B	40
DCTWSFG3	208			DCT3UCSV	23C	10
DCTWSFJR	196	10		DCT4TRNN	23C	1
DCTWSFST	196	8		DCT4TRNY	23C	2
DCTWSFTS	196	4		DCT5\$PPN	21E	2
DCTWSHLD	196	80		DCT5\$SPN	21E	4
DCTWSHNS	196	40		DCT5CALL	21E	40
DCTWSIP	1F4	8		DCT5C1ON	21E	80
DCTWSLIM	B1	40		DCT5DNRC	21E	8
DCTWSLOC	15D	80		DCT5FSAT	21E	1
DCTWSNET	15D	20		DCT5TFSS	21E	10
DCTWSNOT	196	20		DCT5TUCS	21E	20
DCTWSODP	B1	80		MDCTABRT	8C	
DCTWSP	90			MDCTACT	AC	
DCTWSPRI	B0			MDCTADCT	50	
DCTWSPRL	98	8		MDCTAFTK	68	
DCTWSPR2	B1			MDCTAPNL	73	
DCTWSREQ	B8			MDCTAPPL	74	
DCTWSRGS	B0	2		MDCTATE	7C	
DCTWSRMT	15D	40		MDCTATMP	D8	
DCTWSRNG	B0	4		MDCTATTN	5E	
DCTWSTB	110			MDCTATT8	23C	1
DCTWSUSE	15D	10		MDCTATYP	5D	
DCTWS3QD	208	80		MDCTBFSZ	60	
DCTWTRID	1E8			MDCTBIDR	8C	
DCTXEQND	68			MDCTCHLM	63	
DCTXFEND	D4			MDCTCMCT	C3	
DCTXFRID	39	F		MDCTCNTS	94	
DCTXJR	1A	90		MDCTCODE	7C	
DCTXJT	1A	B0		MDCTDCK	88	
DCTXSR	1A	80		MDCTDCNT	AA	
DCTXST	1A	A0		MDCTDCT	58	
DCTXWTID	39	F		MDCTDSC	23C	8
DCT1JHLD	1E4	80		MDCTERCT	57	
DCT1JHNL	1E4	40		MDCTEXCD	A8	
DCT1JRFL	1E4			MDCTEXIT	AC	
DCT1SBNL	210	4		MDCTEXWK	A8	
DCT1SBUR	210	8		MDCTFCS	62	
DCT1SDNL	210	10		MDCTFEAT	53	
DCT1SDSH	210	20		MDCTFLG1	5E	
DCT1SHLD	210	80		MDCTFMT	52	

## \$DCT Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
MDCTICE	54			MDCTOBUF	70	
MDCTIFEA	E4			MDCTOPCT	C0	
MDCTIMER	23C	80		MDCTOTAL	80	
MDCTIMOK	74			MDCTPAWS	23C	40
MDCTINVL	88			MDCTPMBC	A8	
MDCTJOB	23C	30		MDCTPMFL	A9	
MDCTJOB1	23C	20		MDCTPSWD	68	
MDCTJOB2	23C	10		MDCTPWDL	63	
MDCTJRNM	E9			MDCTQUAL	CE	
MDCTJTNM	E8			MDCTRABF	9C	
MDCTLEND	F8			MDCTTRACT	9A	
MDCTLGND	B0			MDCTRALM	98	
MDCTLINE	5C			MDCTRAT	78	
MDCTLNCC	BF			MDCTRAWK	98	
MDCTLOGN	7C			MDCTRCB	51	
MDCTLUST	88			MDCTRECL	50	
MDCTMDID	90			MDCTREM	90	
MDCTMDNQ	88			MDCTRFXE	64	68
MDCTMDOM	E0			MDCTRNTA	D4	
MDCTMEMB	70			MDCTRQBF	A4	
MDCTMODE	56			MDCTRQCT	A2	
MDCTMPER	90			MDCTRQLM	A0	
MDCTMRRT	F0			MDCTRQWK	A0	
MDCTMRT	EC			MDCTRSEQ	54	
MDCTMTIM	8C			MDCTSCNT	94	
MDCTNA	B0			MDCTSDCK	9C	
MDCTNAK	84			MDCTSDCT	C	
MDCTNATP	7C			MDCTSEL	51	
MDCTNCES	B8			MDCTSNAK	98	
MDCTNEGR	C4	0		MDCTSNT	70	
MDCTNETA	C3	AC	00018	MDCTSREM	A4	
MDCTNFL	C2			MDCTSRNM	EB	
MDCTNFLC	23C	40		MDCTSTAT	5F	
MDCTNFLF	23C	20		MDCTSTNM	EA	
MDCTNFLI	23C	4		MDCTSTO	A0	
MDCTNFLL	23C	80		MDCTSTRT	23C	2
MDCTNFLP	23C	2		MDCTSUSP	62	
MDCTNFLQ	23C	10		MDCTSXCP	94	
MDCTNFLS	23C	8		MDCTTO	8C	
MDCTNFL2	BC			MDCTTSEQ	55	
MDCTNFL3	BD			MDCTTYPE	5D	
MDCTNF2A	23C	10		MDCTVREQ	80	
MDCTNF2D	23C	8		MDCTWICE	60	
MDCTNF2I	23C	4		MDCTXCOD	AB	
MDCTNF2J	23C	2		MDCTXCP	80	
MDCTNF2N	23C	20		MDCTXERR	5C	
MDCTNF2R	23C	80		MDCTXRSP	84	
MDCTNF2S	23C	40		MDCT1EOT	23C	40
MDCTNF3E	23C	1		MDCT1OUT	23C	80
MDCTNF3J	23C	40		RIDAHOOLD	ED	40
MDCTNF3M	23C	80		RIDALET	E8	
MDCTNICE	80			RIDALLOC	23C	20
MDCTNJEH	23C	1		RIDALOCL	ED	80
MDCTNLDV	E8			RIDASCBP	54	
MDCTNLNE	84			RIDBUFSZ	F0	
MDCTNM	AC			RIDCAVAL	E4	4
MDCTNMAP	D0			RIDCDATA	E4	8
MDCTNNR	B6			RIDCDONE	E4	C
MDCTNO	CC			RIDCTEND	F0	
MDCTNODE	CC			RIDECB	60	
MDCTNOTS	F4			RIDECBP	50	
MDCTNPAS	D8			RIDEND	23C	10
MDCTNPCH	80			RIDEOM	23C	4
MDCTNQSE	84			RIDEOMA	A8	
MDCTNR	B4			RIDEOME	B0	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
RIDEOMER	AC		XDCT1ALC	23C	10
RIDEOMP	A4		XDCT1CLS	23C	8
RIDERRET	58		XDCT1DMP	23C	80
RIDFLAGA	ED		XDCT1LOD	23C	40
RIDFLAGS	8D		XDCT1RD	23C	2
RIDFLAG1	67		XDCT1STR	23C	1
RIDFLAG2	EC		XDCT1SUB	23C	20
RIDFLAG3	EE		XDCT1VER	23C	4
RIDHCCT	5C		XDCT2NDF	23C	20
RIDJBID	B4		XDCT2NVR	23C	10
RIDJNAM	BC		XDCT2PRO	23C	40
RIDJOBID	9C		XDCT2ST	23C	80
RIDLOCK	D4				
RIDLRECL	64				
RIDPBF	94				
RIDPBFO	98				
RIDPOST1	23C	1			
RIDRECFM	66				
RIDRSV2	DC				
RIDRSV3	EF				
RIDSAA	E4				
RIDSGRP	CC				
RIDSJB	D8				
RIDSKIP	23C	8			
RIDSUSR	C4				
RIDUBF	90				
RIDXECB	E4				
RID1LRDF	67	80			
RID1ROUT	23C	2			
RID1UDCB	67	40			
RID2ERAM	EC	40			
RID2ERRD	EC	80			
RID3BLIM	EE	80			
XDCTACTV	A0				
XDCTBUFQ	9C				
XDCTCMPQ	98				
XDCTDATE	8C				
XDCTDCT	54				
XDCTDSN	A8				
XDCTDTE	68				
XDCTDVER	94				
XDCTERCT	A4				
XDCTERR	23C	40			
XDCTFLG1	77				
XDCTFLG2	78				
XDCTFREE	86				
XDCTLABL	7A				
XDCTMAXB	A6				
XDCTMSG	23C	8			
XDCTOFSL	85				
XDCTOPCT	A5				
XDCTOPEN	23C	80			
XDCTRCB	51				
XDCTRTPD	7B				
XDCTSEQN	6C				
XDCTSKIP	23C	4			
XDCTSTAT	50				
XDCTSUBC	74				
XDCTSUBR	72				
XDCTTIME	88				
XDCTTVR	90				
XDCTUNCT	76				
XDCTUNIT	7D				
XDCTVOLS	79				
XDCTXNUM	70				





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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
40	(28)	BITSTRING	0	DTAB1DEU	"B'10000000" ENTRY IS USER DTAB ENTRY
40	(28)	BITSTRING	0	DTAB1DEH	"B'01000000" ENTRY IS HASP DTAB ENTRY
40	(28)	BITSTRING	0	DTAB1PCE	"B'00100000" DCTS OF THIS TYPE EACH HAVE CORRESPONDING PCES
40	(28)	BITSTRING	0	DTAB1MP	"B'00010000" DCTS OF THIS TYPE ARE MANAGED AS AS A GROUP BY ONE PCE
40	(28)	BITSTRING	0	DTAB1PPU	"B'00001000" PCEPTR FIELD IN THE UCT
40	(28)	BITSTRING	0	DTAB1PPH	"B'00000100" PCEPTR FIELD IN THE HCT
41	(29)	BITSTRING	1	DTABFLG2	SECOND FLAG BYTE
41	(29)	BITSTRING	0	DTAB2CHU	"B'10000000" CHAIN FIELD IN THE UCT
41	(29)	BITSTRING	0	DTAB2CHH	"B'01000000" CHAIN FIELD IN THE HCT
41	(29)	BITSTRING	0	DTAB2CTU	"B'00100000" COUNT FIELD IN THE UCT
41	(29)	BITSTRING	0	DTAB2CTH	"B'00010000" COUNT FIELD IN THE HCT
41	(29)	BITSTRING	0	DTAB2SUB	"B'00001000" DCT HAS SUBTYPE CHAIN (PARENT)
41	(29)	BITSTRING	0	DTAB2POL	"B'00000100" DCT IS IN \$DCTPOOL CHAIN

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
41	(29)	BITSTRING	0	DTAB2DCB	"B'00000010" EXCP DCB AND DEB FOR DCT
41	(29)	BITSTRING	0	DTAB2BSM	"B'00000001" BSAM DCB BUILT FOR THIS DCT
42	(2A)	BITSTRING	1	DTABFLG3	Third flag
42	(2A)	BITSTRING	0	DTAB3JWS	"B'10000000" Dev does JOB work sel
42	(2A)	BITSTRING	0	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
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			
DTAB2CHU	29	80			



## \$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)	X' '	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
97	(61)	BITSTRING	0	DSB2FPRO	"B'10000000" DS is fetch protected
97	(61)	BITSTRING	0	DSB2OWNM	"B'00100000" OWNER=MASTER specified
97	(61)	BITSTRING	0	DSB2OWNC	"B'00010000" OWNER=CURRENT specified

## \$DSB Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
97	(61)	BITSTRING	0	DSB2OWNA	"B'00001000" OWNER=AUX specified
97	(61)	BITSTRING	0	DSB2SCLO	"B'00000100" SCOPE=LOCAL data space
97	(61)	BITSTRING	0	DSB2SCAL	"B'00000010" SCOPE=ALL data space
97	(61)	BITSTRING	0	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
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
5	(5)	BITSTRING	0	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	
DSCTLEN	5C	70
DSESTK	18	
DSFLAG1	5	
DSID	0	C4E2C3E3
DSJBN	8	
DSSTRD	2C	
DSSTRT	28	
DSTPUIID	38	
DSUID	30	
DSUSERF	5C	
DSUSUNDF	5	80
DSVERN	4	1
DSVERS	4	
DSWKID	10	
DSXSTK	20	

## \$DSCT Cross Reference

## \$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 PCIEOWF
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

72	(48)	BITSTRING	0	DSS1OPEN	"B'10000000" DATA SET HAS BEEN \$DSOPENED
72	(48)	BITSTRING	0	DSS1NCLS	"B'01000000" \$DSCLOSE DATA SET IN ERROR
72	(48)	BITSTRING	0	DSS1PUTS	"B'00100000" A \$DSPUT HAS BEEN COMPLETED
72	(48)	BITSTRING	0	DSS1FRST	"B'00010000" \$DSCLOSE READ FIRST RECORD OF THE ORIGINAL DATA SET
72	(48)	BITSTRING	0	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	
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
5	(5)	BITSTRING	0	DSWAI1CR	"B'10000000" Create request
5	(5)	BITSTRING	0	DSWAI1EX	"B'01000000" Extend request
5	(5)	BITSTRING	0	DSWAI1RL	"B'00100000" Release request
5	(5)	BITSTRING	0	DSWAI1DE	"B'00010000" Delete request
6	(6)	BITSTRING	1	DSWAIFL2	\$DSPSERV Parameter flag (flags must be the same as CPMFLAG3)
6	(6)	BITSTRING	0	DSWAI2FY	"B'10000000" FPROT=YES specified
6	(6)	BITSTRING	0	DSWAI2FN	"B'01000000" FPROT=NO specified
6	(6)	BITSTRING	0	DSWAI2OM	"B'00100000" OWNER=MASTER specified
6	(6)	BITSTRING	0	DSWAI2OC	"B'00010000" OWNER=CURRENT specified
6	(6)	BITSTRING	0	DSWAI2OA	"B'00001000" OWNER=AUX specified
6	(6)	BITSTRING	0	DSWAI2SL	"B'00000100" SCOPE=LOCAL specified
6	(6)	BITSTRING	0	DSWAI2SA	"B'00000010" SCOPE=ALL specified
6	(6)	BITSTRING	0	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
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	DSWARSD1	7	
DSWAEND	2C		DSWASIZE	2C	2C
DSWAIBLK	28	34	DSWASRBF	28	38
DSWAID	0		DSWASTRT	28	
DSWAI1FL1	5		DSWATTKF	28	3C
DSWAI1FL2	6		DSWASERS	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			
DSWAI2SL	6	4			

## \$DSWA Cross Reference

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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)
0	(0)	ADDRESS	4	DTELPVS	ADDR OF LAST/CURRENT SAVE AREA
4	(4)	ADDRESS	1	DTELEVEL	DTE CONTROL BLOCK VERSION LEVEL
5	(5)	BITSTRING	1	DTESTID	SUBTASK IDENTIFIER
6	(6)	SIGNED	2	DTE SIZE	SIZE OF DTE + WORK AREA EXT.
8	(8)	BITSTRING	1	DTEFLAG1	DTE FLAG BYTE 1
8	(8)	BITSTRING	0	DTE1ACTV	"B'10000000" SUBTASK ACTIVE
8	(8)	BITSTRING	0	DTE1TERM	"B'01000000" SUBTASK SHUTDOWN REQUESTED
8	(8)	BITSTRING	0	DTE1AUTO	"B'00100000" AUTOMATICALLY STARTED BY IRMVS
8	(8)	BITSTRING	0	DTE1STAE	"B'00010000" SUBTASK DETACHED WITH STAE=YES
8	(8)	BITSTRING	0	DTE1SUB0	"B'00001000" SUBTASK ATTACHED WITH SZERO=NO
8	(8)	BITSTRING	0	DTE1ECB	"B'00000100" JES2 WAITING FOR SUBTASK POST
8	(8)	BITSTRING	0	DTE1XECB	"B'00000010" PCE \$WAITING FOR SUBTASK POST
8	(8)	BITSTRING	0	DTE1PJ2	"B'00000001" JES2 IS COMMING DOWN CLEAN (\$HCCT WILL BE FREEMAINED)
9	(9)	BITSTRING	1	DTEFLAG2	DTE FLAG BYTE 2
9	(9)	BITSTRING	0	DTE2IERR	"B'10000000" SUBTASK INITIALIZATION FAILED
9	(9)	BITSTRING	0	DTE2TRAC	"B'01000000" TASK ELIGIBLE FOR TRACING
9	(9)	BITSTRING	0	DTE2CRTM	"B'00100000" Subtask being cancelled by maintask via CALLRTM
9	(9)	BITSTRING	0	DTE2\$CD	"B'00010000" Subtask cancelled with dump
10	(A)	BITSTRING	1	DTEFLAG3	DTE initialization opt flag
10	(A)	BITSTRING	0	DTE3REQD	"B'10000000" This subtask is essential, abnormal term will also terminate maintask (\$Z03)
11	(B)	BITSTRING	1		RESERVED FOR FUTURE USE
12	(C)	ADDRESS	4	DTENEXT	FORWARD CHAIN FIELD (\$DTEORG)
16	(10)	ADDRESS	4	DTEPREV	BACKWARD CHAIN FIELD (\$DTELAST)
20	(14)	ADDRESS	4	DTETCB	SUBTASK TCB ADDRESS
24	(18)	ADDRESS	4	DTEPCE	RELATED PCE ADDRESS OR ZERO, SET TO CURRENT PCE BY DTEDYN UNLESS INIT., MAY BE RESET
28	(1C)	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					
32	(20)	SIGNED	4	DTEIECB	SUBTASK INITIALIZATION ECB
32	(20)	BITSTRING	0	DTEIXECB	SUBTASK INITIALIZATION XECB
Comment					
SUBTASK WORK ECB'S MUST BE KEPT TOGETHER					
End of Comment					
36	(24)	SIGNED	4	DTEWECB	SUBTASK WORK ECB
36	(24)	BITSTRING	0	DTEWXECB	SUBTASK WORK XECB
Comment					
SUBTASK TERMINATION ECB'S MUST BE KEPT TOGETHER					
End of Comment					
40	(28)	SIGNED	4	DTETECB	SUBTASK TERMINATION ECB
40	(28)	BITSTRING	0	DTETXECB	SUBTASK TERMINATION XECB
Comment					
SUBTASK TERMINATION ECB LIST, MUST BE KEPT TOGETHER					
End of Comment					
44	(2C)	ADDRESS	4	DTEECBL1	JES2 TERMINATION ECBLIST
48	(30)	ADDRESS	4	DTEECBL2	AND STIMER EXIT ROUTINE ECB
52	(34)	SIGNED	4	DTEJECB	(ALL USED ONLY IN HASPTERM)
Comment					
END OF ECB AREAS THAT MUST BE KEPT TOGETHER					
End of Comment					
56	(38)	CHARACTER	8	DTENAME	SUBTASK EBCDIC NAME
64	(40)	ADDRESS	4	DTEVRXAD	SUBTASK RECOVERY VRA EXIT ADDR
68	(44)	ADDRESS	4	DTEESXAD	SUBTASK RCVY CLEAN UP EXIT ADDR
72	(48)	ADDRESS	4	DTERTXAD	SUBTASK RCVY RETRY EXIT ADDR
Comment					
SUBTASK ESTAE RECOVERY WORK AREA.					
End of Comment					
76	(4C)	BITSTRING	1	DTEABFLG	SUBTASK RECOVERY ESTAE FLAG
76	(4C)	BITSTRING	0	DTEABEND	"B'10000000" SUBTASK ABEND IN PROGRESS
76	(4C)	BITSTRING	0	DTEABVRA	"B'01000000" SUBTASK VRA EXIT ACTIVE
76	(4C)	BITSTRING	0	DTEABESX	"B'00100000" SUBTASK CLEAN UP EXIT ACTIVE
76	(4C)	BITSTRING	0	DTEABSTR	"B'00010000" SUBTASK RETRY EXIT ACTIVE
76	(4C)	BITSTRING	0	DTEABREC	"B'00001000" SUBTASK RETRY RECURSION FLAG
77	(4D)	BITSTRING	3		RESERVED FOR FUTURE USE
80	(50)	BITSTRING	0	DTEERA	SUBTASK ERA
80	(50)	BITSTRING	0	DTETRCA	SUBTASK TRCA
80	(50)	SIGNED	4	DTESDECB	SUBTASK ESTAE SDUMP ECB



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
SUBTASK ESTAE SDUMP PARAMETER LIST					
End of Comment					
84	(54)	SIGNED	4	DTESDLST (0)	SDUMP PARAMETER LIST
84	(54)	ADDRESS	1		FLAG BYTE
85	(55)	ADDRESS	1		FLAG BYTE
86	(56)	ADDRESS	1		FLAG BYTE
87	(57)	ADDRESS	1		FLAG BYTE
88	(58)	ADDRESS	4		ADDRESS OF DCB
92	(5C)	ADDRESS	4		ADDRESS OF STORAGE LIST
96	(60)	ADDRESS	4		ADDRESS OF USER DATA
100	(64)	ADDRESS	4		ADDRESS OF ECB/SRB
104	(68)	ADDRESS	2		CURRENT ASID
106	(6A)	ADDRESS	2		OTHER ASID
108	(6C)	ADDRESS	4		ADDRESS OF ASID LIST
112	(70)	ADDRESS	4		ADDRESS OF SUMLIST/SUMLSTA LIST
116	(74)	ADDRESS	4		RESERVED
120	(78)	ADDRESS	4		RESERVED
124	(7C)	ADDRESS	1		FLAG BYTE
125	(7D)	ADDRESS	1		CONTROL FLAG BYTE
126	(7E)	ADDRESS	1		TYPE FLAG BYTE
127	(7F)	ADDRESS	1		VERSION
128	(80)	ADDRESS	1		EXIT FLAG BYTE
129	(81)	ADDRESS	1		EXIT FLAG BYTE
130	(82)	ADDRESS	1		SDATA OPTIONS
131	(83)	ADDRESS	1		RESERVED SDATA OPTIONS
132	(84)	ADDRESS	4		ADDRESS OF SUBPLST
136	(88)	ADDRESS	4		ADDRESS OF KEYLIST
140	(8C)	ADDRESS	4		RESERVED
144	(90)	ADDRESS	4		ALET OF DCB PARAMETER
148	(94)	ADDRESS	4		ALET OF STORAGE PARAM
152	(98)	ADDRESS	4		ALET OF HDR PARAMETER
156	(9C)	ADDRESS	4		ALET OF ASIDLST PARAM
160	(A0)	ADDRESS	4		ALET OF SUMLIST PARAM
164	(A4)	ADDRESS	4		ALET OF SUBPLST PARAM
168	(A8)	ADDRESS	4		ALET OF KEYLIST PARAM
172	(AC)	ADDRESS	4		ADDRESS OF LISTD
176	(B0)	ADDRESS	4		ALET OF LISTD PARAM
180	(B4)	ADDRESS	4		ADDRESS OF SUMLSTL
184	(B8)	ADDRESS	4		ALET FOR SUMLSTL PARAM
188	(BC)	ADDRESS	4	(2)	RESERVED
200	(C8)	DBL WORD	8	(0)	
200	(C8)	CHARACTER	108	DTEAWRKA	SUBTASK ESTAE WORK AREA
200	(C8)	X'E8	0	DTEASAVL	**"DTEABFLG" LENGTH OF RECOVERY WORK AREA
Comment					

GENERAL PARAMETER LIST AREA AND RESERVED USER FIELDS

End of Comment					
308	(134)	SIGNED	4	DTEPARML (2)	8 BYTE PARAMETER LIST
308	(134)	X'34 00004'	0	DTEPARM	"DTEPARML,4,C'A" parm list @ from attach or
308	(134)	X'38 00004'	0	DTEPARM2	"DTEPARML+4,4,C'A" 2 work parm for subtsk use
316	(13C)	SIGNED	4	DTEUSER1	RESERVED FOR USER
320	(140)	SIGNED	4	DTEUSER2	RESERVED FOR USER
324	(144)	SIGNED	4	DTEUSER3	RESERVED FOR USER
328	(148)	SIGNED	4	DTEUSER4	RESERVED FOR USER
336	(150)	DBL WORD	8	DTEWORK (0)	VARIABLE LEN SUBTASK WORK AREA
336	(150)	X'2	0	DTEVERSN	"2" DTE CONTROL BLOCK VERSION LEVEL
336	(150)	X'50	0	DTELEN	**"DTE" LENGTH OF DTE DSECT FOUNDATION

## \$DTE Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
DTESTID -- SUBTASK IDENTIFIER EQUATES (USER SUBTASK IDS SHOULD BEGIN AT 255 AND WORK DOWN TOWARDS THE JES2 SUBTASK IDS)					
End of Comment					
336	(150)	X' '	0	DTEIDIMG	"0" HASPIMAG SUBTASK ID; work area mapped by \$DTEIMAG
336	(150)	X'1 '	0	DTEIDALC	"1" HOSALLOC SUBTASK ID; work area mapped by \$DTEALOC
336	(150)	X'2 '	0	DTEIDSPL	"2" HOSPOOL SUBTASK ID; work area mapped by \$DTEspl
336	(150)	X'3 '	0	DTEIDSMF	"3" HASPACCT SUBTASK ID; work area mapped by \$DTEACCT
336	(150)	X'4 '	0	DTEIDVTM	"4" HASPVTAM SUBTASK ID; work area mapped by \$DTEVTAM
336	(150)	X'5 '	0	DTEIDWTO	"5" HASPWTO SUBTASK ID; work area mapped by \$DTEWTO
336	(150)	X'6 '	0	DTEIDCNV	"6" HOSCNVT SUBTASK ID; work area mapped by \$DTECNV
336	(150)	X'7 '	0	DTEIDOFF	"7" HASPOFF SUBTASK ID; work area mapped by \$DTEOFF
336	(150)	X'8 '	0	DTEIDCVR	"8" HASPCKVR SUBTASK ID; work area mapped by \$DTECKVR
336	(150)	X'9 '	0	DTEIDSUB	"9" HASPSUBS SUBTASK ID; work area mapped by \$DTEsubs
336	(150)	X'A '	0	DTEIDCCF	"10" HASPCKCF SUBTASK ID; work area mapped by \$DTECKCF

## \$DTE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DTEABEND	4C	80	DTELPSV	0	
DTEABESX	4C	20	DTENAME	38	
DTEABFLG	4C		DTENEXT	C	
DTEABREC	4C	8	DTEPARM	134	34 00004
DTEABSTR	4C	10	DTEPARML	134	
DTEABVRA	4C	40	DTEPARM2	134	38 00004
DTEASAVL	C8	E8	DTEPCE	18	
DTEAWRKA	C8		DTEPREV	10	
DTEECBL1	2C		DTERTXAD	48	
DTEECBL2	30		DTESDECB	50	
DTEERA	50		DTESDLST	54	
DTEESXAD	44		DTESIZE	6	
DTEFLAG1	8		DTESTID	5	
DTEFLAG2	9		DTETCB	14	
DTEFLAG3	A		DTETECB	28	
DTEHCT	1C		DTETRCA	50	
DTEID	0		DTETXECB	28	
DTEIDALC	150	1	DTEUSER1	13C	
DTEIDCCF	150	A	DTEUSER2	140	
DTEIDCNV	150	6	DTEUSER3	144	
DTEIDCVR	150	8	DTEUSER4	148	
DTEIDIMG	150		DTEVERSN	150	2
DTEIDOFF	150	7	DTEVRXAD	40	
DTEIDSMF	150	3	DTEWECB	24	
DTEIDSPL	150	2	DTEWORK	150	
DTEIDSUB	150	9	DTEWXECB	24	
DTEIDVTM	150	4	DTE1ACTV	8	80
DTEIDWTO	150	5	DTE1AUTO	8	20
DTEIECB	20		DTE1ECB	8	4
DTEIXECB	20		DTE1PJ2	8	1
DTEJECB	34		DTE1STAE	8	10
DTELEN	150	50	DTE1SUB0	8	8
DTELEVEL	4		DTE1TERM	8	40

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>
DTE1XECB	8	2
DTE2\$CD	9	10
DTE2CRTM	9	20
DTE2IERR	9	80
DTE2TRAC	9	40
DTE3REQD	A	80

## \$DTE Cross Reference

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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 SMFEWTM 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
0	(0)	BITSTRING	0	DSMFJMR	JMR BUFFER WORK AREA
0	(0)	SIGNED	4	DSMFWRK (5)	5 WORD WORKAREA FOR SMFEWTM
20	(14)	BITSTRING	4		Reserved for future use
20	(14)	X' '	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.
0	(0)	X' '	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.
0	(0)	DBL WORD	8	(0)	Ensure alignment
0	(0)	X' '	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.
0	(0)	DBL WORD	8	DCKVTSM	Time of last 'full' sampling
0	(0)	X' '	0	DCKVLEN	**"DTEWORK" LENGTH OF WORK AREA

## \$DTECKVR Map

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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
0	(0)	BITSTRING	1	DCNVSTAT	PROCESSOR STATUS BYTE
0	(0)	BITSTRING	0	DCNVAOPN	"B'10000000" ACBS SUCCESSFULLY 'FAKE' OPENED
0	(0)	BITSTRING	0	DCNV DST	"B'00100000" DATA SET TYPE - BIT ON -> SYSIN BIT OFF -> SYSOUT
1	(1)	BITSTRING	3		RESERVED FOR FUTURE USE
4	(4)	SIGNED	4	DCNVSAVE (15)	ESTAE REGISTER SAVE AREA
64	(40)	ADDRESS	4	DCNV SJBP	ADDRESS OF CONVERSION TASK SJB
68	(44)	ADDRESS	4	DCNV IOT	ADDRESS OF ALLOCATION IOT

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
72	(48)	ADDRESS	4	DCNVADDR	ADDRESS OF JCL CONVERTER
76	(4C)	ADDRESS	4	DCNVCAT	Address of CAT for job
80	(50)	CHARACTER	4		Reserved for future use
84	(54)	SIGNED	4	DCNVDCB (0)	ALIGN LIST TO FULLWORD
84	(54)	ADDRESS	1		OPTION BYTE
85	(55)	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

88	(58)	SIGNED	4	DCNVPARM (0)	EXIT 6 PARAMETER LIST
88	(58)	ADDRESS	4	DCNVUWAA	ADDR OF EXIT 6 USER WORK AREA
92	(5C)	ADDRESS	4	DCNVP2A	IF R0=0 THEN INTERNAL TEXT IMAGE ADDRESS ELSE IF R0=4 THEN CONVERTER RETURN CODE ADDRESS
96	(60)	ADDRESS	4	DCNVDTEA	ADDRESS OF DTE
100	(64)	ADDRESS	4	DCNVJCTA	ADDRESS OF JCT BUFFER
104	(68)	ADDRESS	4	DCNVCNMB	ADDRESS OF CONVERTER MESSAGE BUFFER
108	(6C)	ADDRESS	4	DCNVCPTR	POINTER TO CONVERTER'S MESSAGE BUFFER
112	(70)	ADDRESS	4	DCNVWAVE	ADDR OF THE WAVE CONTROL BLOCK FOR \$SEAS CALLS
116	(74)	SIGNED	2	DCNVJBNO	JOB NUMBER SAVE AREA
118	(76)	ADDRESS	1	DCNVJBTY	JOB TYPE SAVE AREA
119	(77)	ADDRESS	1		RESERVED FOR FUTURE USE

Comment

Start of general work areas, cleared en mass at startup.

End of Comment

119	(77)	X'78	0	DCNVCLR	*** START OF WORK AREA CLEARED IN CONVERTER SUB-TASK INITIALIZATION
120	(78)	CHARACTER	8	DCNVDDNM	DDNAME OF PROCLIB NOW OPEN
128	(80)	CHARACTER	0	DCNVCNPR	CONVERTER ENTRY LIST
128	(80)	CHARACTER	36	DCNVQMPA	QUEUE MNGR PARM AREA
164	(A4)	SIGNED	4	DCNVSYMA (0)	SYSTEM SYMBOLICS DATA AREA
164	(A4)	CHARACTER	7	DCNVSYM1	&SYSUID KEYWORD
171	(AB)	CHARACTER	8	DCNVSYMU	&SYSUID PARAMETER VALUE
180	(B4)	SIGNED	2	DCNVCOM	CONSOLE ID FOR CONVERSION
184	(B8)	ADDRESS	4	DCNVIOTA	INPUT IOT FOR TEXT EXIT
188	(BC)	SIGNED	4	DCNVPDBO	OFFSET OF LAST INPUT PDDB
192	(C0)	CHARACTER	1	DCNVRD	JOB CARD RD= PARAMETER
193	(C1)	BITSTRING	1	DCNVFLG1	SERIALIZED FLAG BYTE (UPDATE USING OIL/NIL ONLY)
193	(C1)	BITSTRING	0	DCNV1REO	"B'10000000" REOPEN PROCLIB DATA SET
193	(C1)	BITSTRING	0	DCNV1CLR	"B'01000000" CLOSE has been issued once for job in XCNVRTY
194	(C2)	SIGNED	2	DCNVITDL	LENGTH OF INTERNAL TEXT
196	(C4)	ADDRESS	4	DCNVAR0	XRT @ for trace ID 13
200	(C8)	CHARACTER	8	DCNVPERF	Performance Group for job from //JOB JCL statement (left justified, blank fill)
208	(D0)	CHARACTER	16	DCNVSCHE	Scheduling environment for job (left justified, blank fill)
224	(E0)	SIGNED	4	DCNVERC1	USER EXIT RETURN CODE 1
228	(E4)	SIGNED	4	DCNVERC2	USER EXIT RETURN CODE 2
232	(E8)	SIGNED	4	DCNVESV1 (18)	USER EXIT SAVE AREA 1
304	(130)	SIGNED	4	DCNVESV2 (18)	USER EXIT SAVE AREA 2
376	(178)	DBL WORD	8	(0)	
376	(178)	CHARACTER	200	DCNVWORK	MESSAGE WORK AREA
376	(178)	X'78	0	DCNVETXT	"DCNVWORK" END OF TEXT ADDRESS
376	(178)	X'80	0	DCNVUDSN	"DCNVWORK+8" USER DSN ADDRESS
376	(178)	X'84	0	DCNVITXT	"DCNVWORK+12" INTERNAL TEXT ADDRESS
376	(178)	X'88	0	DCNVDSN	"DCNVWORK+16" INTERNAL TEXT DSN ADDRESS
376	(178)	X'8C	0	DCNVPDDB	"DCNVWORK+20" SYSIN PDDB ADDRESS
576	(240)	BITSTRING	16	DCNVUWA	EXIT USER WORK AREA

# \$DTECNV Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
592	(250)	CHARACTER	8	DCNVJDVT	JDVT NAME
Comment					
CONVERSION EXIT LIST					
End of Comment					
600	(258)	SIGNED	4	DCNVXLST (0)	CONVERSION EXIT LIST
600	(258)	BITSTRING	0	DCNVXLHD	EXIT LIST HEADER
600	(258)	BITSTRING	1	DCNVXLTE	INTERNAL TEXT EXIT ENTRY
600	(258)	X' '	0	DCNVXLLEN	**DCNVXLTE" LENGTH OF EXIT LIST ENTRY
600	(258)	SIGNED	4	DCNVDEBS (0)	ADDRESS OF DEB'S FOR ACB'S
600	(258)	CHARACTER	0	DCNVDEBJ	DEB FOR JCL DATA SET
600	(258)	CHARACTER	0	DCNVDEBI	DEB FOR JCL IMAGE DATA SET
600	(258)	CHARACTER	0	DCNVDEBM	DEB FOR SYSTEM MSG DATA SET
600	(258)	CHARACTER	0	DCNVDEBT	DEB FOR INTERNAL TEXT DATA SET
600	(258)	ADDRESS	1	DCNUIDL	USERID LENGTH + VALUE
600	(258)	X'59 00008'	0	DCNUID	"DCNUIDL+1,8,C'C" USERID FOR THIS JOB
609	(261)	ADDRESS	1	DCNGRPL	GROUP LENGTH + VALUE
609	(261)	X'62 00008'	0	DCNGRP	"DCNGRPL+1,8,C'C" GROUP FOR THIS JOB
618	(26A)	ADDRESS	1	DCNPASL	PASSWORD LENGTH + VALUE
618	(26A)	X'6B 00008'	0	DCNPAS	"DCNPASL+1,8,C'C" PASSWORD FOR THIS JOB
627	(273)	ADDRESS	1	DCNNPASL	NEW PASSWORD LEN + VALUE
627	(273)	X'74 00008'	0	DCNNPAS	"DCNNPASL+1,8,C'C" NEW PASSWORD FOR THIS JOB
627	(273)	X'4 '	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					
DCNVPROC DCB DSORG=PO,MACRF=R,RECFM=FB,LRECL=80, DDNAME= ,EXLST= -					
End of Comment					
636	(27C)	SIGNED	4	(0)	DCNVPROC ORIGIN DATA CONTROL BLOCK
636	(27C)	SIGNED	4	DCNVPROC (0)	ORIGIN ON WORD BOUNDARY DIRECT ACCESS DEVICE INTERFACE
636	(27C)	BITSTRING	16		FDAD, DVTBL
652	(28C)	ADDRESS	4		KEYLEN, DEVT, TRBAL COMMON ACCESS METHOD INTERFACE
656	(290)	ADDRESS	1		BUFNO, NUMBER OF BUFFERS
657	(291)	ADDRESS	3		BUFCB, BUFFER POOL CONTROL BLOCK
660	(294)	ADDRESS	2		BUFL, BUFFER LENGTH
662	(296)	BITSTRING	2		DSORG, DATA SET ORGANIZATION
664	(298)	ADDRESS	4		IOBAD FOR EXCP OR RESERVED FOUNDATION EXTENSION
668	(29C)	BITSTRING	1		BFTEK, BFALN, DCBE INDICATORS
669	(29D)	ADDRESS	3		EODAD (END OF DATA ROUTINE ADDRESS)
672	(2A0)	BITSTRING	1		RECFM (RECORD FORMAT)
673	(2A1)	ADDRESS	3		EXLST (EXIT LIST ADDRESS) FOUNDATION BLOCK
676	(2A4)	CHARACTER	8		DDNAME
684	(2AC)	BITSTRING	1		OFLGS (OPEN FLAGS)
685	(2AD)	BITSTRING	1		IFLGS (IOS FLAGS)
686	(2AE)	BITSTRING	2		MACR (MACRO FORMAT) BSAM-BPAM-QSAM INTERFACE
688	(2B0)	BITSTRING	1		OPTCD, OPTION CODES
689	(2B1)	ADDRESS	3		CHECK OR INTERNAL QSAM SYNCHRONIZING RTN.
692	(2B4)	ADDRESS	4		SYNAD, SYNCHRONOUS ERROR RTN. (3 BYTES)
696	(2B8)	SIGNED	2		INTERNAL ACCESS METHOD FLAGS
698	(2BA)	ADDRESS	2		BLKSIZE, BLOCK SIZE
700	(2BC)	SIGNED	4		INTERNAL ACCESS METHOD FLAGS
704	(2C0)	ADDRESS	4		INTERNAL ACCESS METHOD USE BSAM-BPAM INTERFACE
708	(2C4)	ADDRESS	1		NCP, MAX NUM OF OUTSTANDING READ/WRITES
709	(2C5)	ADDRESS	3		EOBR, INTERNAL ACCESS METHOD USE



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
712	(2C8)	ADDRESS	4		EOBW, INTERNAL ACCESS METHOD USE
716	(2CC)	ADDRESS	1	(2)	FLAGS AND EITHER DIRCT OR BUFOFF
718	(2CE)	ADDRESS	2		LRECL
720	(2D0)	ADDRESS	4		CNTRL, NOTE, POINT

Comment

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DCNVJCL ACB FOR JCL DATA SET

End of Comment					
724	(2D4)	SIGNED	4	(0)	DCNVJCL ORIGIN
724	(2D4)	SIGNED	4	DCNVJCL (0)	
724	(2D4)	BITSTRING	1		. ACB IDENTIFICATION
725	(2D5)	ADDRESS	1		ACB SUBTYPE X04SVHS
726	(2D6)	ADDRESS	2		. ACB LENGTH X03004HS
728	(2D8)	ADDRESS	4		. AMB LIST POINTER
732	(2DC)	ADDRESS	4		. INTERFACE ROUTINE POINTER
736	(2E0)	BITSTRING	1		MACRF(1) X04SVHS
737	(2E1)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
738	(2E2)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
739	(2E3)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
740	(2E4)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
742	(2E6)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
744	(2E8)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
745	(2E9)	ADDRESS	1		SHARED RESOURCE POOL ID
746	(2EA)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
748	(2EC)	BITSTRING	1		. RECFM=A
749	(2ED)	BITSTRING	1		READ INTEGRITY OPTIONS
750	(2EE)	BITSTRING	2		. DSORG=ACB
752	(2F0)	ADDRESS	4		X04SVHS
756	(2F4)	ADDRESS	4		. PASSWORD POINTER
760	(2F8)	ADDRESS	4		. EXIT LIST POINTER
764	(2FC)	CHARACTER	8		
772	(304)	BITSTRING	1		OFLAGS
773	(305)	ADDRESS	1		. ERFLAGS
774	(306)	BITSTRING	1		INFLGS(1) X04SVHS
775	(307)	BITSTRING	1		INFLGS(2) X04SVHS
776	(308)	ADDRESS	4		. OPENJ JFCB POINTER
780	(30C)	ADDRESS	4		BUFFER SPACE
784	(310)	ADDRESS	2		. BLOCK SIZE
786	(312)	ADDRESS	2		. RECORD SIZE
788	(314)	ADDRESS	4		. USER WORKAREA POINTER
792	(318)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
796	(31C)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Comment

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DCNVJCLI ACB FOR JCL IMAGES DATA SET

End of Comment					
800	(320)	SIGNED	4	(0)	DCNVJCLI ORIGIN
800	(320)	SIGNED	4	DCNVJCLI (0)	
800	(320)	BITSTRING	1		. ACB IDENTIFICATION
801	(321)	ADDRESS	1		ACB SUBTYPE X04SVHS
802	(322)	ADDRESS	2		. ACB LENGTH X03004HS
804	(324)	ADDRESS	4		. AMB LIST POINTER
808	(328)	ADDRESS	4		. INTERFACE ROUTINE POINTER
812	(32C)	BITSTRING	1		MACRF(1) X04SVHS
813	(32D)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
814	(32E)	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
815	(32F)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
816	(330)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
818	(332)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
820	(334)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
821	(335)	ADDRESS	1		SHARED RESOURCE POOL ID
822	(336)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
824	(338)	BITSTRING	1		. RECFM=A
825	(339)	BITSTRING	1		READ INTEGRITY OPTIONS
826	(33A)	BITSTRING	2		. DSORG=ACB
828	(33C)	ADDRESS	4		X04SVHS
832	(340)	ADDRESS	4		. PASSWORD POINTER
836	(344)	ADDRESS	4		. EXIT LIST POINTER
840	(348)	CHARACTER	8		
848	(350)	BITSTRING	1		OFLAGS
849	(351)	ADDRESS	1		. ERFLAGS
850	(352)	BITSTRING	1		INFLGS(1) X04SVHS
851	(353)	BITSTRING	1		INFLGS(2) X04SVHS
852	(354)	ADDRESS	4		. OPENJ JFCB POINTER
856	(358)	ADDRESS	4		BUFFER SPACE
860	(35C)	ADDRESS	2		. BLOCK SIZE
862	(35E)	ADDRESS	2		. RECORD SIZE
864	(360)	ADDRESS	4		. USER WORKAREA POINTER
868	(364)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
872	(368)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Comment

### DCNVMSG ACB FOR SYSTEM MSGS DATA SET

End of Comment

876	(36C)	SIGNED	4	(0)	DCNVMSG ORIGIN
876	(36C)	SIGNED	4	DCNVMSG (0)	
876	(36C)	BITSTRING	1		. ACB IDENTIFICATION
877	(36D)	ADDRESS	1		ACB SUBTYPE X04SVHS
878	(36E)	ADDRESS	2		. ACB LENGTH X03004HS
880	(370)	ADDRESS	4		. AMB LIST POINTER
884	(374)	ADDRESS	4		. INTERFACE ROUTINE POINTER
888	(378)	BITSTRING	1		MACRF(1) X04SVHS
889	(379)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
890	(37A)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
891	(37B)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
892	(37C)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
894	(37E)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
896	(380)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
897	(381)	ADDRESS	1		SHARED RESOURCE POOL ID
898	(382)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
900	(384)	BITSTRING	1		. RECFM=A
901	(385)	BITSTRING	1		READ INTEGRITY OPTIONS
902	(386)	BITSTRING	2		. DSORG=ACB
904	(388)	ADDRESS	4		X04SVHS
908	(38C)	ADDRESS	4		. PASSWORD POINTER
912	(390)	ADDRESS	4		. EXIT LIST POINTER
916	(394)	CHARACTER	8		
924	(39C)	BITSTRING	1		OFLAGS
925	(39D)	ADDRESS	1		. ERFLAGS
926	(39E)	BITSTRING	1		INFLGS(1) X04SVHS
927	(39F)	BITSTRING	1		INFLGS(2) X04SVHS
928	(3A0)	ADDRESS	4		. OPENJ JFCB POINTER
932	(3A4)	ADDRESS	4		BUFFER SPACE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
936	(3A8)	ADDRESS	2		. BLOCK SIZE
938	(3AA)	ADDRESS	2		. RECORD SIZE
940	(3AC)	ADDRESS	4		. USER WORKAREA POINTER
944	(3B0)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
948	(3B4)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Comment

DCNVTXT ACB FOR INTERNAL TEXT DATA SET

End of Comment

952	(3B8)	SIGNED	4	(0)	DCNVTXT ORIGIN
952	(3B8)	SIGNED	4	DCNVTXT (0)	
952	(3B8)	BITSTRING	1		. ACB IDENTIFICATION
953	(3B9)	ADDRESS	1		ACB SUBTYPE X04SVHS
954	(3BA)	ADDRESS	2		. ACB LENGTH X03004HS
956	(3BC)	ADDRESS	4		. AMB LIST POINTER
960	(3C0)	ADDRESS	4		. INTERFACE ROUTINE POINTER
964	(3C4)	BITSTRING	1		MACRF(1) X04SVHS
965	(3C5)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
966	(3C6)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
967	(3C7)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
968	(3C8)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
970	(3CA)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
972	(3CC)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
973	(3CD)	ADDRESS	1		SHARED RESOURCE POOL ID
974	(3CE)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
976	(3D0)	BITSTRING	1		. RECFM=A
977	(3D1)	BITSTRING	1		READ INTEGRITY OPTIONS
978	(3D2)	BITSTRING	2		. DSORG=ACB
980	(3D4)	ADDRESS	4		X04SVHS
984	(3D8)	ADDRESS	4		. PASSWORD POINTER
988	(3DC)	ADDRESS	4		. EXIT LIST POINTER
992	(3E0)	CHARACTER	8		
1000	(3E8)	BITSTRING	1		OFLAGS
1001	(3E9)	ADDRESS	1		. ERFLAGS
1002	(3EA)	BITSTRING	1		INFLGS(1) X04SVHS
1003	(3EB)	BITSTRING	1		INFLGS(2) X04SVHS
1004	(3EC)	ADDRESS	4		. OPENJ JFCB POINTER
1008	(3F0)	ADDRESS	4		BUFFER SPACE
1012	(3F4)	ADDRESS	2		. BLOCK SIZE
1014	(3F6)	ADDRESS	2		. RECORD SIZE
1016	(3F8)	ADDRESS	4		. USER WORKAREA POINTER
1020	(3FC)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
1024	(400)	ADDRESS	4		. PTR TO APPLICATION NAME X03004
1024	(400)	X' '	0	DCNVLEN	** -DTEWORK' LENGTH OF THE CNVT DTE DSECT

## \$DTECNV Cross Reference

### \$DTECNV Cross Reference

Name	Hex Offset	Hex Value		Name	Hex Offset	Hex Value
DCNGRP	261	62	00008	DCNVUWA	240	
DCNGRPL	261			DCNVUWAA	58	
DCNNPAS	273	74	00008	DCNVWAVE	70	
DCNNPASL	273			DCNVWORK	178	
DCNPAS	26A	6B	00008	DCNVXLEN	258	
DCNPASL	26A			DCNVXLHD	258	
DCNUID	258	59	00008	DCNVXLST	258	
DCNUIDL	258			DCNVXLTE	258	
DCNVADDR	48			DCNV1CLR	C1	40
DCNVAOPN	0	80		DCNV1REO	C1	80
DCNVAR0	C4					
DCNVCAT	4C					
DCNVCLR	77	78				
DCNVCLRL	273	4				
DCNVCNMB	68					
DCNVCNPR	80					
DCNVCOM	B4	0				
DCNVCPTR	6C					
DCNVDCB	54					
DCNVDDNM	78					
DCNVDEBI	258					
DCNVDEBJ	258					
DCNVDEBM	258					
DCNVDEBS	258					
DCNVDEBT	258					
DCNV DST	0	20				
DCNV DTEA	60					
DCNVERC1	E0					
DCNVERC2	E4					
DCNVESV1	E8					
DCNVESV2	130					
DCNVETXT	178	78				
DCNVFLG1	C1					
DCNVIDSN	178	88				
DCNVIOT	44					
DCNVIOTA	B8					
DCNVITDL	C2					
DCNVITXT	178	84				
DCNVJBNO	74					
DCNVJBTY	76					
DCNVJCL	2D4					
DCNVJCLI	320					
DCNVJCTA	64					
DCNVJDVT	250					
DCNVLEN	400					
DCNVMSG	36C					
DCNV PARM	58					
DCNV PDBO	BC					
DCNV Pddb	178	8C				
DCNV PERF	C8					
DCNV PROC	27C					
DCNV P2A	5C					
DCNV QMPA	80					
DCNV RD	C0					
DCNV SAVE	4					
DCNV SCHE	D0					
DCNV S JBP	40					
DCNV STAT	0					
DCNV SYMA	A4					
DCNV SYMU	AB					
DCNV SYM1	A4					
DCNV TXT	3B8					
DCNV UDSN	178	80				

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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:** \$DTEIDYN 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
0	(0)	CHARACTER	8	DIMGNAME	NAME OF LOADED MODULE
0	(0)	X'3 '	0	DIMGBYT3	"DIMGNAME+3" IMAGE NAME PREFIX BYTE
8	(8)	SIGNED	4	DIMGDCB	ADDRESS OF IMAGELIB DCB
12	(C)	SIGNED	4	DIMGBFAD	BUFFER ADDRESS FOR ESTAE
16	(10)	SIGNED	4	DIMGABCC	ABEND COMP CODE FOR RETRY
20	(14)	SIGNED	4	DIMGSDCB	ADDRESS OF PRT DCB FOR SETPRT
24	(18)	CHARACTER	80	DIMGMSG	MESSAGE AREA
104	(68)	BITSTRING	1	DIMGFLG1	IMAGE LOADER FLAG BYTE
104	(68)	BITSTRING	0	DIMG1ABD	"B'10000000" IMAGE LOADER ABEND FLAG
104	(68)	BITSTRING	0	DIMG1DEL	"B'01000000" DELETE RTN FLAG IN ESTAE
104	(68)	X' '	0	DIMGLEN	** -DTEWORK" LENGTH OF WORK AREA

## \$DTEIMG Cross Reference

Name	Hex Offset	Hex Value
DIMGABCC	10	
DIMGBFAD	C	
DIMGBYT3	0	3
DIMGDCB	8	
DIMGFLG1	68	
DIMGLEN	68	
DIMGMSG	18	
DIMGNAME	0	
DIMGSDCB	14	
DIMG1ABD	68	80
DIMG1DEL	68	40

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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:** \$DTEDYN 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 \$\$ command against a drained device. The subtask (and DTE) definitions are defined in the \$DTETAB 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 \$\$ command. The JES2 \$DTEDYN 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
0	(0)	DBL WORD	8	DOFWSTRT (0)	
0	(0)	X'4 '	0	DOFOPENR	"04" SUB-TASK REQUEST CODE FOR OPEN
0	(0)	X'8 '	0	DOFCLOSR	"08" SUB-TASK REQUEST CODE FOR CLOSE
0	(0)	X'C '	0	DOFCHEKR	"12" SUB-TASK REQUEST CODE FOR CHECK DATA CONTROL BLOCK
0	(0)	SIGNED	4	DOFDCBST (0)	ORIGIN ON WORD BOUNDARY DIRECT ACCESS DEVICE INTERFACE
0	(0)	BITSTRING	16		FDAD, DVTBL
16	(10)	ADDRESS	4		KEYLEN, DEVT, TRBAL COMMON ACCESS METHOD INTERFACE
20	(14)	ADDRESS	1		BUFNO, NUMBER OF BUFFERS
21	(15)	ADDRESS	3		BUFCB, BUFFER POOL CONTROL BLOCK



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
24	(18)	ADDRESS	2		BUFL, BUFFER LENGTH
26	(1A)	BITSTRING	2		DSORG, DATA SET ORGANIZATION
28	(1C)	ADDRESS	4		IOBAD FOR EXCP OR RESERVED FOUNDATION EXTENSION
32	(20)	BITSTRING	1		BFTEK, BFALN, DCBE INDICATORS
33	(21)	ADDRESS	3		EODAD (END OF DATA ROUTINE ADDRESS)
36	(24)	BITSTRING	1		RECFM (RECORD FORMAT)
37	(25)	ADDRESS	3		EXLST (EXIT LIST ADDRESS) FOUNDATION BLOCK
40	(28)	CHARACTER	8		DDNAME
48	(30)	BITSTRING	1		OFLGS (OPEN FLAGS)
49	(31)	BITSTRING	1		IFLGS (IOS FLAGS)
50	(32)	BITSTRING	2		MACR (MACRO FORMAT) BSAM-BPAM-QSAM INTERFACE
52	(34)	BITSTRING	1		OPTCD, OPTION CODES
53	(35)	ADDRESS	3		CHECK OR INTERNAL QSAM SYNCHRONIZING RTN.
56	(38)	ADDRESS	4		SYNAD, SYNCHRONOUS ERROR RTN. (3 BYTES)
60	(3C)	SIGNED	2		INTERNAL ACCESS METHOD FLAGS
62	(3E)	ADDRESS	2		BLKSIZE, BLOCK SIZE
64	(40)	SIGNED	4		INTERNAL ACCESS METHOD FLAGS
68	(44)	ADDRESS	4		INTERNAL ACCESS METHOD USE BSAM-BPAM INTERFACE
72	(48)	ADDRESS	1		NCP, MAX NUM OF OUTSTANDING READ/Writes
73	(49)	ADDRESS	3		EOBR, INTERNAL ACCESS METHOD USE
76	(4C)	ADDRESS	4		EOBW, INTERNAL ACCESS METHOD USE
80	(50)	ADDRESS	1	(2)	FLAGS AND EITHER DIRCT OR BUFOFF
82	(52)	ADDRESS	2		LRECL
84	(54)	ADDRESS	4		CNTRL, NOTE, POINT
84	(54)	X'58'	0	DOFDCB	"DOFDCBST,*-DOFDCBST" DEFINE BASE AND LENGTH OF DCB
88	(58)	SIGNED	4	DOFDECB	EVENT CONTROL BLOCK
92	(5C)	BITSTRING	1		TYPE FIELD
93	(5D)	BITSTRING	1		TYPE FIELD
94	(5E)	ADDRESS	2		LENGTH
96	(60)	ADDRESS	4		DCB ADDRESS
100	(64)	ADDRESS	4		AREA ADDRESS
104	(68)	ADDRESS	4		RECORD POINTER WORD

Comment

OFFLOAD DATA SET HEADER RECORD

End of Comment

108	(6C)	BITSTRING	80	DOFHDBUF	OFFLOAD DATASET HEADER RECORD
108	(6C)	ADDRESS	1	DOFHVRSN	VERSION NUMBER
108	(6C)	X'2	0	DOFHVRS1	"2" Current version number
109	(6D)	BITSTRING	3		RESERVED
112	(70)	SIGNED	4	DOFHTIME	TIME VERIFICATION STAMP
116	(74)	SIGNED	4	DOFHDATE	DATE VERIFICATION STAMP
120	(78)	CHARACTER	8	DOFHNODE	Node name offload done on
120	(78)	X'14	0	DOFHDLN	"*-DOFHVRSN" Length of header record
128	(80)	ADDRESS	2	(0)	Generate assembly error if remapping is larger than base area
128	(80)	SIGNED	4	(0)	
128	(80)	ADDRESS	1	DOFABND	FLAGS FOR ESTAEX
129	(81)	ADDRESS	1		SECOND FLAG BYTE
130	(82)	ADDRESS	1		THIRD FLAG BYTE
131	(83)	ADDRESS	1		VERSION NUMBER
132	(84)	ADDRESS	4		TOKEN VALUE AREA
136	(88)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED
140	(8C)	ADDRESS	4		ALET FOR PARM LIST
144	(90)	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
148	(94)	ADDRESS	4	DOFDAST	
152	(98)	ADDRESS	1	DOFDARB	LENGTH OF RB
153	(99)	ADDRESS	1		ALLOCATE VERB CODE
154	(9A)	ADDRESS	1	(2)	FLAGS1 = DON'T USE EXISTING ALLOC
156	(9C)	SIGNED	2	DOFDAERR (2)	ERROR AND INFO CODE
160	(A0)	ADDRESS	4	DOFDATPP	POINTER TO TU POINTERS
164	(A4)	ADDRESS	4		RESERVED
168	(A8)	ADDRESS	1	(4)	FLAGS 2 FIELD
172	(AC)	ADDRESS	4	DOFDATP1	
176	(B0)	ADDRESS	4	DOFDATP2	
180	(B4)	ADDRESS	4	DOFDATP3	
184	(B8)	ADDRESS	4	DOFDATP4	
188	(BC)	ADDRESS	4	DOFDATP5	
192	(C0)	ADDRESS	4	DOFDATP6	
196	(C4)	ADDRESS	4	DOFDATP7	
200	(C8)	ADDRESS	4	DOFDATP8	
204	(CC)	ADDRESS	4	DOFDATP9	
208	(D0)	ADDRESS	4	DOFDATPA	
212	(D4)	ADDRESS	2	DOFDATU1	DSN=
218	(DA)	CHARACTER	44	DOFDADSN	.....
262	(106)	ADDRESS	2	DOFDATU2	
268	(10C)	BITSTRING	1	DOFDADSP	DISP=OLD
269	(10D)	ADDRESS	2	DOFDATU3	RETURN DD NAME
275	(113)	CHARACTER	8	DOFDADDN	
283	(11B)	ADDRESS	2	DOFDATU4	UNITCT=
289	(121)	ADDRESS	1	DOFDAUCT	NN
290	(122)	ADDRESS	2	DOFDATU5	DISP=CATLG
297	(129)	ADDRESS	2	DOFDATU6 (3)	UNIT=
303	(12F)	CHARACTER	8	DOFDAUNI	NAME (FROM XDCTUNIT)
311	(137)	ADDRESS	2	DOFDATU7 (3)	VOLUME COUNT
317	(13D)	ADDRESS	1	DOFDAVOL	MAXIMUM VOLUMES = 255
318	(13E)	ADDRESS	2	DOFDATU8 (3)	LABEL=
324	(144)	ADDRESS	1	DOFDALBL	LABEL TYPE (SL,NL,AL,...)
325	(145)	ADDRESS	2	DOFDATU9 (3)	RETENTION PERIOD
331	(14B)	ADDRESS	2	DOFDARPD	IN DAYS
333	(14D)	ADDRESS	2	DOFDATUA (2)	SAF PROTECTION OPTION

Comment

## DYNAMIC UN-ALLOCATE PARAMETER LIST

End of Comment

340	(154)	ADDRESS	4	DOFDUST	
344	(158)	ADDRESS	1	DOFDURB	LENGTH OF RB
345	(159)	ADDRESS	1		UNALLOCATE VERB CODE
346	(15A)	ADDRESS	1	(2)	FLAGS1 = DON'T USE EXISTING ALLOC
348	(15C)	SIGNED	2	(2)	ERROR AND INFO CODE
352	(160)	ADDRESS	4	DOFDUTPP	POINTER TO TU POINTERS
356	(164)	ADDRESS	4		RESERVED
360	(168)	ADDRESS	1	(4)	FLAGS 2 FIELD
364	(16C)	ADDRESS	4	DOFDUTP1	
368	(170)	ADDRESS	2	DOFDUTU1	DD NAME
374	(176)	CHARACTER	8	DOFDUDDN	
384	(180)	ADDRESS	4	DOFOPRM	OPEN/CLOSE PARAMETER LIST
388	(184)	SIGNED	4	DOFABDCC	ABEND COMPLETION CODE
392	(188)	ADDRESS	4	DOFDCTPT	POINTER TO DCT FOR RECOVERY
396	(18C)	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					
400	(190)	BITSTRING	1	DOFFLAG	FLAG FOR SYNAD ROUTINE
400	(190)	BITSTRING	0	DOFSYNAD	"B'10000000" I/O ERROR HAS OCCURED
400	(190)	BITSTRING	0	DOFEODAD	"B'01000000" END OF DATA HAS OCCURED
400	(190)	X' '	0	DOFSYBUF	"DOFFLAG-(SPBFLAG1-BFPDSECT)" Beginning of pseudo-buffer
401	(191)	BITSTRING	3		Reserved for future use
Comment					
Work area for messages issued from the offload subtask					
End of Comment					
404	(194)	SIGNED	4	(0)	
404	(194)	SIGNED	4	DOFMSGA (0)	
404	(194)	ADDRESS	2		TEXT LENGTH
406	(196)	BITSTRING	2		MCSFLAGS
408	(198)	ADDRESS	4		MESSAGE TEXT ADDRESS
412	(19C)	ADDRESS	1		VERSION LEVEL
413	(19D)	BITSTRING	1		MISCELLANEOUS FLAGS
414	(19E)	ADDRESS	1		REPLY LENGTH
415	(19F)	ADDRESS	1		LENGTH OF WPX
416	(1A0)	BITSTRING	2		EXTENDED MCS FLAGS
418	(1A2)	ADDRESS	2		RESERVED
420	(1A4)	ADDRESS	4		REPLY BUFFER ADDRESS
424	(1A8)	ADDRESS	4		REPLY ECB ADDRESS
428	(1AC)	ADDRESS	4		CONNECT ID
432	(1B0)	BITSTRING	2		DESCRIPTOR CODES
434	(1B2)	ADDRESS	2		RESERVED
436	(1B4)	BITSTRING	16		
452	(1C4)	BITSTRING	2		MESSAGE TYPE
454	(1C6)	ADDRESS	2		MESSAGE'S PRIORITY
456	(1C8)	CHARACTER	8		JOB ID
464	(1D0)	CHARACTER	8		JOB NAME
472	(1D8)	CHARACTER	8		RETRIEVAL KEY
480	(1E0)	ADDRESS	4		TOKEN FOR DOM
484	(1E4)	ADDRESS	4		CONSOLE ID
488	(1E8)	CHARACTER	8		SYSTEM NAME
496	(1F0)	CHARACTER	8		CONSOLE NAME
504	(1F8)	ADDRESS	4		REPLY CONSOLE NAME/ID ADDR
508	(1FC)	ADDRESS	4		CART ADDRESS
512	(200)	ADDRESS	4		WSPARM ADDRESS
512	(200)	X'70	0	DOFMSGAL	** -DOFMSGA"
516	(204)	ADDRESS	2	DOFMSGL	
518	(206)	CHARACTER	100	DOFMSG	
518	(206)	X'6A	0	DOFWLEN	** -DOFWSTRT"

## \$DTEOFF Cross Reference

### \$DTEOFF Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DOFABDCC	184		DOFWLEN	206	6A
DOFABND	80		DOFWSTRT	0	
DOFCHEKR	0	C	DOFWTECB	18C	0
DOFCLOSR	0	8			
DOFDADDN	113				
DOFDADSN	DA				
DOFDADSP	10C	1			
DOFDAERR	9C	0			
DOFDALBL	144				
DOFDARB	98				
DOFDARPD	14B				
DOFDAST	94				
DOFDATPA	D0				
DOFDATPP	A0				
DOFDATP1	AC				
DOFDATP2	B0				
DOFDATP3	B4				
DOFDATP4	B8				
DOFDATP5	BC				
DOFDATP6	C0				
DOFDATP7	C4				
DOFDATP8	C8				
DOFDATP9	CC				
DOFDATUA	14D				
DOFDATU1	D4				
DOFDATU2	106				
DOFDATU3	10D				
DOFDATU4	11B				
DOFDATU5	122				
DOFDATU6	129				
DOFDATU7	137				
DOFDATU8	13E				
DOFDATU9	145				
DOFDAUCT	121				
DOFDAUNI	12F				
DOFDAVOL	13D				
DOFDCB	54	58			
DOFDCBST	0				
DOFDCTPT	188				
DOFDECB	58	0			
DOFDUDDN	176				
DOFDURB	158				
DOFDUST	154				
DOFDUTPP	160				
DOFDUTP1	16C				
DOFDUTU1	170				
DOFEODAD	190	40			
DOFFLAG	190	0			
DOFHDATE	74	0			
DOFHDBUF	6C	0			
DOFHDLEN	78	14			
DOFHNODE	78	40404040			
DOFHTIME	70	0			
DOFHVRSN	6C				
DOFHVRS1	6C	2			
DOFMSG	206	40404040			
DOFMSGA	194				
DOFMSGAL	200	70			
DOFMSGL	204				
DOFOPENR	0	4			
DOFOPRM	180				
DOFSYBUF	190				
DOFSYNAD	190	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
0	(0)	X' '	0	SPLSTART	*** START OF SPL MAPPING
0	(0)	SIGNED	4	SPLSAVE (18)	STANDARD 18-WORD SAVE AREA
72	(48)	BITSTRING	1	SPLFLG1	REQUEST FLAG BYTE
73	(49)	BITSTRING	1	SPLFLG2	ERROR FLAG BYTE
74	(4A)	BITSTRING	1	SPLFLG3	Subtask status flags
74	(4A)	BITSTRING	0	SPL3TGBG	"B'10000000" Formatting 1st trk in TG
74	(4A)	BITSTRING	0	SPL3ECKD	"B'01000000" This is ECKD device
75	(4B)	BITSTRING	1		Reserved for future use
76	(4C)	SIGNED	2	SPLLENG	WORK AREA LENGTH
78	(4E)	SIGNED	2		Reserved for future use
80	(50)	ADDRESS	4	SPLCHAIN	ADDRESS OF NEXT WORK AREA
84	(54)	ADDRESS	4	SPLECB	ADDR OF ECB FOR HOSPOOL SUBTASK
88	(58)	ADDRESS	4	SPLDYNAL	ADDRESS OF DYNAMIC ALLOCATE RB
92	(5C)	SIGNED	4	SPLDYNRB (0)	DYNAMIC ALLOCATE RB
112	(70)	ADDRESS	4	SPLTEXT (0)	LIST OF TEXT UNIT POINTERS
112	(70)	ADDRESS	4	SPLDDTA	POINTER TO DDNAME TEXT UNIT
116	(74)	ADDRESS	4	SPLDSNTA	POINTER TO DSNAME TEXT UNIT
120	(78)	ADDRESS	4	SPLUDSPA (0)	POINTER TO DISP. TEXT UNIT FOR UNALLOCATION REQUESTS
120	(78)	ADDRESS	4	SPLVOLTA	POINTER TO VOLUME SERIAL TXT UNIT
124	(7C)	ADDRESS	4	SPLUNITA	POINTER TO UNIT NAME TEXT UNIT

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
128	(80)	ADDRESS	4	SPLDSPTA	POINTER TO DISPOSITION TEXT UNIT
132	(84)	BITSTRING	6	SPLDDTXT	DDNAME TEXT
138	(8A)	CHARACTER	8	SPLDDNAM	DDNAME
146	(92)	BITSTRING	6	SPLDSTXT	DSNAME TEXT
152	(98)	CHARACTER	44	SPLDSNAM	DSNAME
196	(C4)	BITSTRING	6	SPLVLTXT	VOLUME SERIAL TEXT
202	(CA)	CHARACTER	6	SPLVOLID	VOLUME SERIAL
208	(D0)	BITSTRING	6	SPLUNTXT	UNIT TEXT
214	(D6)	CHARACTER	5	SPLUNIT	Unit Name (or Type)
222	(DE)	BITSTRING	7	SPLDPTXT	DISPOSITION TEXT, DISPOSITION
232	(E8)	SIGNED	4	SPLCMLST (4)	CAMLST FOR OBTAIN
248	(F8)	DBL WORD	8	SPLDSCB (0)	OBTAIN WORK AREA
396	(18C)	SIGNED	4	SPLDVA (0)	DEVTYPE WORK AREA
396	(18C)	CHARACTER	8	SPLSTRCC (0)	VOLUME'S FIRST EXTENT
396	(18C)	SIGNED	2	SPLWOLIM (2)	LOWER CCHH OF FIRST EXTENT
400	(190)	SIGNED	2	SPLUPLIM (2)	UPPER CCHH OF FIRST EXTENT
404	(194)	SIGNED	4	SPLTRK (0)	ABSOLUTE TRACK NUMBERS
404	(194)	BITSTRING	2	SPLWTRK	LOWER ABSOLUTE TRACK NO.
406	(196)	BITSTRING	2	SPLUPTRK	UPPER ABSOLUTE TRACK NO.
408	(198)	SIGNED	4	SPLECB	DIRECT ACCESS I/O WAIT ECB
412	(19C)	SIGNED	4	SPLIOB (11)	DIRECT ACCESS IOB
412	(19C)	X'A0	0	SPLDCB	**"-40" DIRECT ACCESS DCB ORIGIN
456	(1C8)	SIGNED	4	(3)	DIRECT ACCESS DCB
468	(1D4)	SIGNED	4	SPLDEB (12)	DIRECT ACCESS DEB
516	(204)	ADDRESS	4	SPLUCBPT	UCB ADDRESS
520	(208)	ADDRESS	4	SPLCAPA	Last captured UCB
524	(20C)	ADDRESS	4	SPLTCBPT	TCB ADDRESS (USED DURING INIT.)
528	(210)	SIGNED	4	SPLTKCYL	NUMBER OF HEADS PER CYLINDER
532	(214)	SIGNED	2	SPLNORTK	NUMBER OF RECORDS PER TRACK
534	(216)	SIGNED	2	SPLNOTGP	NUMBER OF TRACKS PER GROUP
536	(218)	BITSTRING	2	SPLNMTRK	NUMBER OF TRACKS IN EXTENT
538	(21A)	SIGNED	2	SPLNOBYM	NUMBER OF BYTES IN TGM ENTRY
540	(21C)	SIGNED	4	SPLNUMTG	NUMBER OF USABLE TRACK GROUPS
544	(220)	ADDRESS	4	SPLGMAIN	CCW WORK AREA SIZE
548	(224)	ADDRESS	4	SPLWCKDL	Addr of last Write CKD CCW
552	(228)	ADDRESS	4	SPLOCPRM	Addr locate rcd parm area
556	(22C)	ADDRESS	4		Reserved for future use
560	(230)	DBL WORD	8	SPLCCWS (0)	CCWS FOR READ COUNT-KEY-DATA
560	(230)	DBL WORD	8	SPLCCW1	1ST CCW
568	(238)	DBL WORD	8	SPLCCW2	2ND CCW
576	(240)	DBL WORD	8	SPLCCW3	3RD CCW
584	(248)	DBL WORD	8	SPLRDCT	READ-IN AREA
592	(250)	DBL WORD	8	SPLTIMES	Start of trackgroup format
600	(258)	DBL WORD	8	SPLTIMEE	End of trackgroup format
608	(260)	ADDRESS	4	SPLCFLDS	POINTER TO 8 BEFORE 1ST COUNT FLD
612	(264)	SIGNED	4	SPLOPCL (0)	ALIGN LIST TO FULLWORD
612	(264)	ADDRESS	1		OPTION BYTE
613	(265)	ADDRESS	3		DCB ADDRESS
613	(265)	X'4	0	SPLOCLEN	**"-SPLOPCL" Length of OPEN, CLOSE workarea
616	(268)	ADDRESS	4	SPLRECTK	DVCT OR UCB ADDR, OR DEVTYPE
620	(26C)	BITSTRING	1		FLAG BYTE
621	(26D)	BITSTRING	1		RESERVED
622	(26E)	ADDRESS	2		TRACK BALANCE
624	(270)	ADDRESS	1		RECORD NUMBER
625	(271)	ADDRESS	1		KEY LENGTH
626	(272)	ADDRESS	2		DATA LENGTH
626	(272)	X'C	0	SPLTKLEN	**"-SPLRECTK" LENGTH OF WORK AREA (FOR DTESPL IPCS MODEL)

Comment

MACDATE = 08/19/88

End of Comment

# \$DTEspl Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
628	(274)	BITSTRING	24	SPLSTIM	REMOTE STIMERM SET PARM LIST
628	(274)	X'18	0	SPLSTIML	**-SPLSTIM" Length of MF=L form
Comment					
MACDATE -02/18/00-<1>					
End of Comment					
0	(0)	X'90	0	M00M0005	"SPLCAPU" ++ IOSCAPU NAME
656	(290)	DBL WORD	8	SPLCAPU (0)	++ IOSCAPU PARM LIST
656	(290)	BITSTRING	1	SPLCAPU_XVERSION	++ INPUT XVERSION
657	(291)	BITSTRING	1	SPLCAPU_XFLAGS1	++ FIELD_LABEL
657	(291)	BITSTRING	0	SPLCAPU_KEYUSED_CAPTUCB	"B'10000000" ++ KEYUSED.CAPTUCB KEYWORD
657	(291)	BITSTRING	0	SPLCAPU_KEYUSED_UCAPTUCB	"B'01000000" ++ KEYUSED.UCAPTUCB KEYWORD
657	(291)	BITSTRING	0	SPLCAPU_KEYUSED_CAPTOACT	"B'00100000" ++ KEYUSED.CAPTOACT KEYWORD
657	(291)	BITSTRING	0	SPLCAPU_KEYUSED_ASID	"B'00010000" ++ KEYUSED.ASID KEYWORD
657	(291)	BITSTRING	0	SPLCAPU_KEYUSED_UCBPTR	"B'00001000" ++ KEYUSED.UCBPTR KEYWORD
657	(291)	BITSTRING	0	SPLCAPU_KEYUSED_CAPTPTR	"B'00000100" ++ KEYUSED.CAPTPTR KEYWORD
658	(292)	CHARACTER	2	SPLCAPU_XRESERVED1	++ FIELD_LABEL XRESERVED1
660	(294)	ADDRESS	4	SPLCAPU_XUCBPTR	++ XUCBPTR
664	(298)	ADDRESS	4	SPLCAPU_XCAPTPTR	++ XCAPTPTR
668	(29C)	CHARACTER	1	SPLCAPU_XRESERVED2	++ FIELD_LABEL XRESERVED2
669	(29D)	BITSTRING	1	SPLCAPU_XMASK	++ FIELD_LABEL
669	(29D)	BITSTRING	0	SPLCAPU_XMSIFREE_YES	"B'10000000" ++ XMSIFREE.YES KEYWORD
669	(29D)	BITSTRING	0	SPLCAPU_XLASTING_YES	"B'01000000" ++ XLASTING.YES KEYWORD
669	(29D)	BITSTRING	0	SPLCAPU_XCAPTCOM_YES	"B'00100000" ++ XCAPTCOM.YES KEYWORD
670	(29E)	BITSTRING	2	SPLCAPU_XASID	++ XASID
672	(2A0)	CHARACTER	16	SPLCAPU_XRESERVED3	++ FIELD_LABEL XRESERVED3
672	(2A0)	X'20	0	SPLCAPUL	**-SPLCAPU" ++ LENGTH OF PLIST
Comment					
IOSCAPU-1					
End of Comment					
0	(0)	X'F8 00050'	0	SPLMSG	"SPLDSCB,80" SUBTASK MESSAGE AREA
0	(0)	X'48 0000A'	0	SPLWORK	"SPLDSCB+L'SPLMSG,10" SUBTASK MESSAGE WORK AREAS
0	(0)	X'52 00004'	0	SPLCC	"SPLWORK+L'SPLWORK,4" SUBTASK ABEND COMPLETION CODE
0	(0)	X'B0	0	SPLTGM	*** START OF VOLUME TRACK GROUP MAP



Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
SPLFLG1 - REQUEST FLAGS					
End of Comment					
0	(0)	BITSTRING	0	SPL1FMT	"B'10000000" VOLUME TO BE FORMATTED
0	(0)	BITSTRING	0	SPL1NFMT	"B'01000000" VOLUME NOT TO BE FORMATTED
0	(0)	BITSTRING	0	SPL1MFMT	"B'00100000" Volume to be mini-formatted
0	(0)	BITSTRING	0	SPL1UNAL	"B'00010000" VOLUME TO BE UNALLOCATED
0	(0)	BITSTRING	0	SPL1ALLO	"B'00001000" Volume to be allocated
0	(0)	BITSTRING	0	SPL1BAD	"B'00000100" TASK ATTACHED FOR BADTRACK
0	(0)	BITSTRING	0	SPL1WFMT	"B'00000010" Volume was formatted
0	(0)	BITSTRING	0	SPL1PACE	"B'00000001" I/O pacing requested
Comment					
SPLFLG2 - ERROR FLAGS					
End of Comment					
0	(0)	BITSTRING	0	SPL2OBT	"B'10000000" OBTAIN ERROR
0	(0)	BITSTRING	0	SPL2FMT	"B'01000000" I/O ERROR DURING FORMATTING
0	(0)	BITSTRING	0	SPL2RDER	"B'00100000" SPOOL READ OR BLOCK LENGTH ERROR
0	(0)	BITSTRING	0	SPL2UNAL	"B'00010000" DYNAMIC ALLOCATE ERROR
0	(0)	BITSTRING	0	SPL2ABND	"B'00001000" SUB-TASK ABENDED
0	(0)	BITSTRING	0	SPL2DVTP	"B'00000100" DEVTYPE ERROR
0	(0)	BITSTRING	0	SPL2EXT	"B'00000010" Extent error
0	(0)	BITSTRING	0	SPL2RSV7	"B'00000001" RESERVED FOR FUTURE USE

**\$DTEspl Cross Reference**

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
M00M0005	0	90	SPLCAPU_XRESERVED2	29C	
SPLCAPA	208		SPLCAPU_XRESERVED3	2A0	
SPLCAPU	290		SPLCAPU_XUCBPTR	294	
SPLCAPU_KEYUSED_ASID	291	10	SPLCAPU_XVERSION	290	
SPLCAPU_KEYUSED_CAPTOACT	291	20	SPLCAPUL	2A0	20
SPLCAPU_KEYUSED_CAPTPTR	291	4	SPLCC	0	52 00004
SPLCAPU_KEYUSED_CAPTUCB	291	80	SPLCCWS	230	
SPLCAPU_KEYUSED_UCAPTUCB	291	40	SPLCCW1	230	
SPLCAPU_KEYUSED_UCBPTR	291	8	SPLCCW2	238	
SPLCAPU_XASID	29E		SPLCCW3	240	
SPLCAPU_XCAPTCOM_YES	29D	20	SPLCFLDS	260	
SPLCAPU_XCAPTPTR	298		SPLCHAIN	50	
SPLCAPU_XFLAGS1	291		SPLCMLST	E8	
SPLCAPU_XLASTING_YES	29D	40	SPLDCB	19C	A0
SPLCAPU_XMASK	29D		SPLDDNAM	8A	
SPLCAPU_XMSIFREE_YES	29D	80	SPLDDTA	70	
SPLCAPU_XRESERVED1	292		SPLDDTXT	84	
			SPLDEB	1D4	
			SPLDPTXT	DE	
			SPLDSCB	F8	
			SPLDSNAM	98	
			SPLDSNTA	74	
			SPLDSPTA	80	
			SPLDSTXT	92	
			SPLDVA	18C	
			SPLDYNAL	58	
			SPLDYNRB	5C	

## \$DTESPL Cross Reference

Name	Hex Offset	Hex Value	
SPLECB	198		
SPLECBBA	54		
SPLFLG1	48		
SPLFLG2	49		
SPLFLG3	4A		
SPLGMAIN	220		
SPLIOB	19C		
SPLLENG	4C		
SPLMSG	0	F8	00050
SPLNMTRK	218		
SPLNOBYM	21A		
SPLNORTK	214		
SPLNOTGP	216		
SPLNUMTG	21C		
SPLOCLEN	265	4	
SPLOCPRM	228		
SPLOPCL	264		
SPLOWLIM	18C		
SPLOWTRK	194		
SPLRDCT	248		
SPLRECTK	268		
SPLSAVE	0		
SPLSTART	0		
SPLSTIM	274	0	
SPLSTIML	274	18	
SPLSTRCC	18C		
SPLTCBPT	20C		
SPLTEXT	70		
SPLTGM	0	B0	
SPLTIMEE	258		
SPLTIMES	250		
SPLTKCYL	210		
SPLTKLEN	272	C	
SPLTRK	194		
SPLUCBPT	204		
SPLUDSPA	78		
SPLUNIT	D6		
SPLUNITA	7C		
SPLUNTXT	D0		
SPLUPLIM	190		
SPLUPTRK	196		
SPLVLTXT	C4		
SPLVOLID	CA		
SPLVOLTA	78		
SPLWCKDL	224		
SPLWORK	0	48	0000A
SPL1ALLO	0	8	
SPL1BAD	0	4	
SPL1FMT	0	80	
SPL1MFMT	0	20	
SPL1NFMT	0	40	
SPL1PACE	0	1	
SPL1UNAL	0	10	
SPL1WFMT	0	2	
SPL2ABND	0	8	
SPL2DVTP	0	4	
SPL2EXT	0	2	
SPL2FMT	0	40	
SPL2OBT	0	80	
SPL2RDER	0	20	
SPL2RSV7	0	1	
SPL2UNAL	0	10	
SPL3ECKD	4A	40	
SPL3TGBG	4A	80	

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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
0	(0)	BITSTRING	1	DSUBFLG1	Flags
0	(0)	BITSTRING	0	DSUB1NSQ	"B'10000000" SQD invalid or unavailable
0	(0)	BITSTRING	0	DSUB1DEC	"B'01000000" Subtask count decremented
1	(1)	BITSTRING	3		Reserved
4	(4)	ADDRESS	4	DSUBSQD	Address of work SQD
8	(8)	ADDRESS	4	DSUBNXT	Address of next subtask in chain
12	(C)	ADDRESS	4	DSUBSAVE	Address of save area used by called routine

Comment

Subtask VRA and recovery fields.

End of Comment

16	(10)	ADDRESS	4	DSUBLOC	HA\$PSUBS base address
20	(14)	SIGNED	2	DSUBABND	Subtask abend count
22	(16)	BITSTRING	2		Reserved
24	(18)	CHARACTER	8	DSUBRNAM	Routine name
32	(20)	ADDRESS	4	DSUBCLRA	\$SUBIT caller address
36	(24)	CHARACTER	8	DSUBMOD	\$SUBIT caller module name
44	(2C)	SIGNED	4	DSUBOFF	\$SUBIT caller offset
48	(30)	BITSTRING	1	DSUBFOOT	Subtask footprint flag byte
48	(30)	BITSTRING	0	DSUBFTWK	"B'10000000" Set prior to obtaining work
48	(30)	BITSTRING	0	DSUBFTST	"B'01000000" Set prior to processing request
48	(30)	BITSTRING	0	DSUBFTCL	"B'00100000" Set prior to calling routine
48	(30)	BITSTRING	0	DSUBFTRC	"B'00010000" Set following return from routine
48	(30)	BITSTRING	0	DSUBFTPS	"B'00001000" Set following caller post
48	(30)	BITSTRING	0	DSUBFTSQ	"B'00000100" Set prior to subtask queuing
48	(30)	BITSTRING	0	DSUBFTWT	"B'00000010" Set prior to subtask wait

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
49	(31)	BITSTRING	3		Reserved
49	(31)	X' '	0	DSUBLEN	"*-DTEWORK" HASPSUBS work area length

**\$DTESUBS Cross Reference**

Name	Hex Offset	Hex Value
DSUBABND	14	
DSUBCLRA	20	
DSUBFLG1	0	
DSUBFOOT	30	
DSUBFTCL	30	20
DSUBFTPS	30	8
DSUBFTRC	30	10
DSUBFTSQ	30	4
DSUBFTST	30	40
DSUBFTWK	30	80
DSUBFTWT	30	2
DSUBLEN	31	
DSUBLOC	10	
DSUBMOD	24	
DSUBNXT	8	
DSUBOFF	2C	
DSUBRNAM	18	
DSUBSAVE	C	
DSUBSQD	4	
DSUB1DEC	0	40
DSUB1NSQ	0	80

## \$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
0	(0)	ADDRESS	1	DVTMPWDL	LENGTH OF NODE PASSWORD
1	(1)	CHARACTER	8	DVTMPSWD	NODE PASSWORD
9	(9)	ADDRESS	1	DVTMAPNL	LENGTH OF APPL NAME
10	(A)	CHARACTER	8	DVTMAPLN	APPL NAME
10	(A)	X' '	0	DVTMLN	"*-DTEWORK" LENGTH OF WORK AREA



---

**\$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
0	(0)	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					
0	(0)	SIGNED	4	CSAWTOL (0)	
0	(0)	ADDRESS	2		TEXT LENGTH
2	(2)	BITSTRING	2		MCSFLAGS
4	(4)	CHARACTER	53		
129	(81)	ADDRESS	1		VERSION LEVEL

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
130	(82)	BITSTRING	1		MISCELLANEOUS FLAGS
131	(83)	ADDRESS	1		REPLY LENGTH
132	(84)	ADDRESS	1		LENGTH OF WPX
133	(85)	BITSTRING	2		EXTENDED MCS FLAGS
135	(87)	ADDRESS	2		RESERVED
137	(89)	ADDRESS	4		REPLY BUFFER ADDRESS
141	(8D)	ADDRESS	4		REPLY ECB ADDRESS
145	(91)	ADDRESS	4		CONNECT ID
149	(95)	BITSTRING	2		DESCRIPTOR CODES
151	(97)	ADDRESS	2		RESERVED
153	(99)	BITSTRING	16		
169	(A9)	BITSTRING	2		MESSAGE TYPE
171	(AB)	ADDRESS	2		MESSAGE'S PRIORITY
173	(AD)	CHARACTER	8		JOB ID
181	(B5)	CHARACTER	8		JOB NAME
189	(BD)	CHARACTER	8		RETRIEVAL KEY
197	(C5)	ADDRESS	4		TOKEN FOR DOM
201	(C9)	ADDRESS	4		CONSOLE ID
205	(CD)	CHARACTER	8		SYSTEM NAME
213	(D5)	CHARACTER	8		CONSOLE NAME
221	(DD)	ADDRESS	4		REPLY CONSOLE NAME/ID ADDR
225	(E1)	ADDRESS	4		CART ADDRESS
229	(E5)	ADDRESS	4		WSPARM ADDRESS
229	(E5)	X'E9	0	CSAWPXEN	*** END OF WPX

Comment

-----  
 Extensions for MLWTO. These must IMMEDIATELY follow  
 the WPX (generated by the WTO list form)  
 -----

End of Comment

233	(E9)	ADDRESS	2	CSALINET	LINE TYPE FIELD
235	(EB)	BITSTRING	1	CSALAREA	AREA ID
236	(EC)	BITSTRING	1	CSALNUM	NUMBER OF LINES
236	(EC)	X'ED	0	CSAMLEND	*** End of MLWTO extensions

Comment

-----  
 Map the fields prior to and including the message text  
 -----

End of Comment

0	(0)	BITSTRING	4	CSAMCS34 (0)	MCS flags and length
0	(0)	SIGNED	2	CSAMSGL	MESSAGE LENGTH + 4
2	(2)	SIGNED	2	CSAMCS	MCS FLAGS
4	(4)	CHARACTER	125	CSAMSG	TEXT
4	(4)	X'81	0	CSASLEN	**_CSAMSGL" STANDARD WTO LENGTH
4	(4)	X'81	0	CSATRIL	*** START OF TRAILER FIELDS
4	(4)	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

129	(81)	CHARACTER	1		ROOM FOR COMMAND UTOKEN
129	(81)	X'81	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					
130	(82)	ADDRESS	2	(0)	See comment box in macro source for what to do if this stmt has err
240	(F0)	SIGNED	4	(0)	Full word align
240	(F0)	CHARACTER	8	CSAJOBID	Job ID
248	(F8)	BITSTRING	3	CSANFM (0)	SYSTEM ID OF SENDER
248	(F8)	BITSTRING	2		NODE NUMBER
250	(FA)	BITSTRING	1		NODE QUALIFIER
251	(FB)	BITSTRING	1		RESERVED

Comment

-----  
Workarea for HASPCON PCE level service routines  
-----

End of Comment					
252	(FC)	BITSTRING	2	CSARDWRK	LOGICAL ROUTING WORK AREA
252	(FC)	X' '	0	CSAWLEN	"*-CSAW"
254	(FE)	BITSTRING	1	DWTOFLG1	Flags
254	(FE)	BITSTRING	0	DWTO1WAT	"B'10000000" \$WAIT tolerated by caller
256	(100)	DBL WORD	8	(0)	
256	(100)	X' '	0	DWTOLEN	"*-DTEWORK" LENGTH OF WORK AREA

## \$DTEWTO Cross Reference

Name	Hex Offset	Hex Value
CSA	0	
CSAJOBID	F0	40404040
CSALAREA	EB	0
CSALINET	E9	
CSALNUM	EC	1
CSALSIZ	4	6C
CSAMCS	2	
CSAMCS34	0	
CSAMLEND	EC	ED
CSAMSG	4	
CSAMSGL	0	
CSANFM	F8	
CSARDWRK	FC	0
CSASLEN	4	81
CSATRAIL	4	81
CSAWLEN	FC	
CSAWPXEN	E5	E9
CSAWTOL	0	
DWTOFLG1	FE	
DWTOLEN	100	
DWTO1WAT	FE	80
DWTO34ND	81	81

## \$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

**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	DWAFLAG1	Flags See \$DILFLG1 in \$PARMLST
6	(6)	BITSTRING	1	DWAFLAG2	More flags
6	(6)	BITSTRING	0	DWA2QUED	"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

6	(6)	BITSTRING	0	DWA2BEND	"B'01000000" Backend processing req.
6	(6)	BITSTRING	0	DWA2NBRT	"B'00100000" Failed ... BERT shortage
6	(6)	BITSTRING	0	DWA2PROS	"B'00010000" DWA being processed now
7	(7)	BITSTRING	1		Reserved for future use
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)	ADDRESS	4	DWARTN	Address of routine
24	(18)	BITSTRING	4	DWAIMMED	Immediate instruction to executed
28	(1C)	ADDRESS	4	DWAPCE	Address of PCE to \$POST
32	(20)	ADDRESS	4	DWACALR	Address of \$DILBERT caller (for diagnostic purposes)
36	(24)	SIGNED	4	DWASTCK	Time of \$DILBERT call (for diagnostic purposes)
40	(28)	SIGNED	4	DWAORG (0)	Common origin

## \$DWA Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
-----					
Parameters specific to TYPE=JQE					
-----					
End of Comment					
40	(28)	SIGNED	4	DWAJQOFF	JQE Offset
44	(2C)	BITSTRING	4	DWAJBKEY	Job Key
48	(30)	ADDRESS	4	DWAJQA	Address of JQA
52	(34)	SIGNED	4	DWABERTS	BERTs required to process
56	(38)	SIGNED	4	DWABSTCK	TOD last time we tried
Comment					
-----					
End of DWA					
-----					
End of Comment					
64	(40)	DBL WORD	8	(0)	Ensure doubleword size
64	(40)	X'40	0	DWASIZE	**-DWA" Length of DWA

## \$DWA Cross Reference

Name	Hex Offset	Hex Value
DWABERTS	34	
DWABSTCK	38	
DWACALR	20	
DWAEYE	0	
DWAFLAG1	5	
DWAFLAG2	6	
DWAIMMED	18	
DWAJBKEY	2C	
DWAJQA	30	
DWAJQOFF	28	
DWANEXT	8	
DWAORG	28	
DWAPARM0	10	
DWAPCE	1C	
DWAPREV	C	
DWARTN	14	
DWASIZE	40	40
DWASTCK	24	
DWATYPE	4	
DWA2BEND	6	40
DWA2NBRT	6	20
DWA2PROS	6	10
DWA2QUED	6	80

## \$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	ENFPTR	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
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
0	(0)	BITSTRING	0	ENNTQE	TQE for deregistration wait
0	(0)	DBL WORD	8	(0)	Force double-word alignment
0	(0)	X' '	0	ENNPCEWS	**-"PCEWORK" Length of \$ENF PCE

---

**\$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	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
24	(18)	SIGNED	4	ERAELMOD (0)	MODMAP-STYLE ENTRY, ERROR LMOD
24	(18)	SIGNED	4	ERAESECT (0)	MODMAP-STYLE ENTRY, ERROR CSECT
24	(18)	SIGNED	4	ERAESRGS (3)	REGS 0,1,2 ON ENTRY TO \$ABEND

Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
24	(18)	X'18 00004'	0	ERAESRG0	"ERAESRGS,4" REG 0 ON ENTRY TO ESTAE ROUTINE
24	(18)	X'1C 00004'	0	ERAESRG1	"ERAESRGS+4,4" REG 1 ON ENTRY TO ESTAE ROUTINE
24	(18)	X'1C 00004'	0	ERASDWA	"ERAESRG1,4,C'A" ADDRESS OF SDWA
24	(18)	X'20 00004'	0	ERAESRG2	"ERAESRGS+8,4" REG 2 ON ENTRY TO ESTAE ROUTINE
36	(24)	CHARACTER	8	ERAMODN	Mod name for event record
44	(2C)	CHARACTER	8	ERAMODO	Mod offset for event record
52	(34)	ADDRESS	4	ERAPRE	A(ASSOCIATED PRE)
56	(38)	ADDRESS	4	ERAPREV	ACTIVE ERA, IF ANY, WHEN ERROR OCCURRED- OTHERWISE 0
60	(3C)	ADDRESS	4	ERAPSVAD	SAVE AREA LEVEL ASSOCIATED WITH ERR
64	(40)	ADDRESS	4	ERACPCE	VALUE OF \$CURPCE AT TIME OF ERR
68	(44)	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

70	(46)	BITSTRING	1	ERASETRP	OPTION - I.E. RESUME, TERMINATE, OR PERCOLATE
71	(47)	BITSTRING	1		RESERVED
72	(48)	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

76	(4C)	BITSTRING	64	ERACREGS	COPY OF REGISTER VALUES PLACED IN ERAREGS IN \$ABEND, REGARDLESS OF CHANGES TO ERAREGS BY RTNS
140	(8C)	BITSTRING	64	ERAREGS	Register save area
140	(8C)	SIGNED	4	ERAREG0	REGISTER 0
144	(90)	SIGNED	4	ERAREG1	REGISTER 1
148	(94)	SIGNED	4	ERAREG2	REGISTER 2
152	(98)	SIGNED	4	ERAREG3	REGISTER 3
156	(9C)	SIGNED	4	ERAREG4	REGISTER 4
160	(A0)	SIGNED	4	ERAREG5	REGISTER 5
164	(A4)	SIGNED	4	ERAREG6	REGISTER 6
168	(A8)	SIGNED	4	ERAREG7	REGISTER 7
172	(AC)	SIGNED	4	ERAREG8	REGISTER 8
176	(B0)	SIGNED	4	ERAREG9	REGISTER 9
180	(B4)	SIGNED	4	ERAREG10	REGISTER 10
184	(B8)	SIGNED	4	ERAREG11	REGISTER 11
188	(BC)	SIGNED	4	ERAREG12	REGISTER 12
192	(C0)	SIGNED	4	ERAREG13	REGISTER 13
196	(C4)	SIGNED	4	ERAREG14	REGISTER 14
200	(C8)	SIGNED	4	ERAREG15	REGISTER 15
204	(CC)	BITSTRING	64	ERAAREGS	Copy of access registers at time of error. These are NOT restored if we resume.
268	(10C)	BITSTRING	8	ERAPSW	Last JES2 related PSW

## \$ERA Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
276	(114)	BITSTRING	1	ERAINCD	Interrupt code (second byte)
277	(115)	BITSTRING	1	ERAILC	Instruction length count
278	(116)	BITSTRING	2		Reserved
280	(118)	ADDRESS	4	ERATEA	Translation exception addr
284	(11C)	ADDRESS	4	ERAREGRB	RB that contains JES2 regs (points to RB prefix)
288	(120)	BITSTRING	12		Reserved for future use
300	(12C)	SIGNED	4	(0)	ROUND TO FULLWORD
300	(12C)	X'2C	0	ERALENG	**"-ERA" LENGTH (ROUNDED TO FULLWORD)

Comment

### ERAFLAGS BIT DEFINITIONS

End of Comment

300	(12C)	BITSTRING	0	ERAEMERG	"X'80" EMERGENCY ERA, DONT'T FREEMAIN
300	(12C)	BITSTRING	0	ERAXMS	"X'40" HOME ASID NOT PRIMARY AT ERROR
300	(12C)	BITSTRING	0	ERAFRBLC	"X'20" ERAFADDR CAME FROM \$RBFADDR
300	(12C)	BITSTRING	0	ERACSAM	"X'10" LOAD MODULE WITH ERROR IN CSA
300	(12C)	BITSTRING	0	ERAARMOD	"X'08" ASC=ARMODE at time of ABEND
300	(12C)	BITSTRING	0	ERAS1J2M	"X'04" 1st JES2 modules found in HASP088 message traceback
300	(12C)	BITSTRING	0	ERARSVF6	"X'02" RESERVED FOR FUTURE USE
300	(12C)	BITSTRING	0	ERARSVF7	"X'01" RESERVED FOR FUTURE USE

Comment

### ERASETRP BIT DEFINITIONS

End of Comment

300	(12C)	BITSTRING	0	ERATRPTM	"X'80" TERMINATE
300	(12C)	BITSTRING	0	ERATRPPC	"X'40" PERCOLATE
300	(12C)	BITSTRING	0	ERATRPPE	"X'20" RESUME
300	(12C)	BITSTRING	0	ERAHVRGS	"X'10" ERA HAS REGS (ON IF SDWA EXISTS)
300	(12C)	BITSTRING	0	ERATRPR0	"X'08" RESERVED FOR FUTURE USE
300	(12C)	BITSTRING	0	ERATRPR1	"X'04" RESERVED FOR FUTURE USE
300	(12C)	BITSTRING	0	ERATRPR2	"X'02" RESERVED FOR FUTURE USE
300	(12C)	BITSTRING	0	ERATRPR3	"X'01" RESERVED FOR FUTURE USE

## \$ERA Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ERAAREGS	CC		ERAINCD	114	
ERAARMOD	12C	8	ERAJLMOD	18	
ERACODE	10		ERALENG	12C	2C
ERACPCE	40		ERAMODN	24	
ERACREGS	4C		ERAMODO	2C	
ERACSAM	12C	10	ERAPRE	34	
ERADOMID	8		ERAPRECT	44	
ERAELMOD	18		ERAPREV	38	
ERAEMERG	12C	80	ERAPSVAD	3C	
ERAERAID	0	C5D9C140	ERAPSW	10C	
ERAERAVN	4		ERAREGRB	11C	
ERAERPL	C		ERAREGS	8C	
ERAESECT	18		ERAREG0	8C	
ERAESRGS	18		ERAREG1	90	
ERAESRG0	18	18	ERAREG10	B4	
ERAESRG1	18	1C	ERAREG11	B8	
ERAESRG2	18	20	ERAREG12	BC	
ERAFADDR	14		ERAREG13	C0	
ERAFLAGS	5		ERAREG14	C4	
ERAFRBLC	12C	20	ERAREG15	C8	
ERAHVRGS	12C	10	ERAREG2	94	
ERAILC	115		ERAREG3	98	

<b>Name</b>	<b>Hex Offset</b>	<b>Hex Value</b>	
ERAREG4	9C		
ERAREG5	A0		
ERAREG6	A4		
ERAREG7	A8		
ERAREG8	AC		
ERAREG9	B0		
ERARSVF6	12C	2	
ERARSVF7	12C	1	
ERARZOOM	48		
ERASDWA	18	1C	00004
ERASETRP	46		
ERAS1J2M	12C	4	
ERATEA	118		
ERATRPPC	12C	40	
ERATRPRE	12C	20	
ERATRPR0	12C	8	
ERATRPR1	12C	4	
ERATRPR2	12C	2	
ERATRPR3	12C	1	
ERATRPTM	12C	80	
ERAVN	0		
ERAXMS	12C	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
20	(14)	BITSTRING	0	ERPLTXTF	"X'80" IF ON THIS ERPL HAS TEXT, ELSE ERPLTEXT CONTAINS ADDR. OF ERPL CONTAINING TEXT
20	(14)	BITSTRING	0	ERPLTERM	"X'40" TERMINATE, IF ON RECOVERY ATTEMPTS NOT PERMITTED
20	(14)	BITSTRING	0	ERPLRIPL	"X'20" INDICATES AN ERROR REQUIRING RE-IPL
20	(14)	BITSTRING	0	ERPLTREG	"X'10" On indicates R0 at ABEND has addr of error text
20	(14)	BITSTRING	0	ERPLDIS	"X'08" \$DISTERR in disguise
20	(14)	BITSTRING	0	ERPLRVO	"X'04" RECVOPTS was specified
20	(14)	BITSTRING	0	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
DISDMPL	0	
DISSYM	1B	
DISTEXT	1	
DISTLEN	1B	22
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
ERPLTXTL	15	

---

**\$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	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	0		Event 41 parameters
16	(10)	CHARACTER	0		Event 42 parameters
16	(10)	CHARACTER	0		Event 56 parameters
16	(10)	CHARACTER	0		Event 57 parameters

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
16	(10)	X' '	0	EVTPARML	** -EVTPARMS" Length of largest parms
16	(10)	DBL WORD	8	(0)	Round length to double word
16	(10)	X'10 '	0	EVTLENG	** -EVT" EVT Length

**\$EVT Cross Reference**

Name	Hex Offset	Hex Value
EVTCURVN	4	1
EVTID	0	
EVTLENG	10	10
EVTNEXT	8	
EVTPARML	10	
EVTPARMS	10	
EVTTYPE	6	
EVTVRSN	4	
EVT41CP	6	4
EVT41GL	6	
EVT42	6	8
EVT56	6	C
EVT57CM	6	10
EVT57RV	6	14

## \$EVT Cross Reference

---

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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)

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## Index

### Special Characters

\$ERROR parameter list 339

#### A

ALET index table 4

ARM support PCE work area 15

AUX address space control block 23

#### B

BERT table entry 30

Build Message Parameter List 32

#### C

Cell Control Element 67

Cell Pool Extent Block Element 200

Cell Pool Index table 202

Cell Pool Master Element 206

Checkpoint Generalized Parameter List 109

Checkpoint recovery parameter list 137

Checkpoint request queue element 143

Checkpoint Routine Work Area 149

Checkpoint Trace Work Area DSECT 215

Checkpoint Version Control Block 217

Class Attribute Table 58

Client Token mapping 213

Collector Attribute Table for BERTs 63

Common storage address table 47

Component Ownership

JES2 (SC1BH)

\$ALINDEX 4

\$APT 8

\$ARMG 11

\$ARMT 13

\$ARMWORK 15

\$ASYWORK 21

\$AUXCB 23

\$BERT 25

\$BERTTAB 30

\$BLDMSG 32

\$BUFFER 36

\$CADDR 47

\$CAT 58

\$CATBERT 63

\$CCE 67

\$CCW 70

\$CHK 76

\$CIRWORK 80

\$CK 100

\$CKGPAR 109

\$CKM 113

Component Ownership (*continued*)

JES2 (SC1BH) (*continued*)

\$CKPRECV 137

\$CKPTQCB 143

\$CKPWORK 146

\$CKW 149

\$CKX 163

\$CMB 174

\$CNVWORK 180

\$COMWORK 184

\$CPCWORK 198

\$CPEBE 200

\$CPINDEX 202

\$CPMASTR 206

\$CPPWORK 210

\$CPXWORK 212

\$CTOKEN 213

\$CTW 215

\$CVCB 217

\$DAS 222

\$DCT 228

\$DCTTAB 260

\$DILWORK 263

\$DSB 265

\$DSCT 268

\$DSSCB 271

\$DSWA 276

\$DTE 280

\$DTEACCT 288

\$DTEALOC 289

\$DTECKCF 291

\$DTECKVR 293

\$DTECNV 296

\$DTEIMG 304

\$DTEOFF 306

\$DTE SPL 312

\$DTE SUBS 318

\$DTEVTAM 322

\$DTEWTO 324

\$DWA 327

\$ENFPARM 329

\$ENFWORK 332

\$ERA 334

\$ERPL 339

\$EVT 342

Console Message Buffer 174

CPOOL Query Cell Work Area Mapping 198

CPOOL Query Extent Work Area Mapping 212

CPOOL Query Pool Work Area Mapping 210

## Index

### D

Data Set Control Table 268  
Data Set Services Control Block 271  
Data Space Control Block 265  
Data Space Services Work Area 276  
DCT Table Entry DSECT 260  
Device Control Table 228  
Direct Access Spool Data Set 222

### E

ENF parameter list required for the ENFREQ macro 329

### H

HASP \$DILBERT Work Area 327  
HASP Allocation Subtask DTE work area DSECT 289  
HASP Block Extension Reuse Table 25  
HASP Buffer 36  
HASP Channel Command Word Equates 70  
HASP Checkpoint block and CCW DSECTS 100  
HASP Checkpoint on CF DTE work area 291  
HASP Checkpoint PCE Work Area DSECT 146  
HASP Checkpoint Version DTE work area 293  
HASP Daughter Task Element 280  
HASP Dynamic Spool Allocation DTE Work Area 312  
HASP ENF LISTEN Event DSECT 342  
HASP ENF LISTEN Processor 332  
HASPACCT subtask DTE work area extension 288  
HASPIMAG SUBTASK DTE WORK AREA  
EXTENSTION 304  
HASPSUBS DTE Work Area Extension 318  
HASPVTAM SUBTASK DTE WORK AREA  
EXTENSION 322  
HASPWTO Subtask DTE Work Area Extension  
(DWTO) 324

### J

JCL Conversion subtask DTE work area 296  
JES2 ARM support JESXCF message 11  
JES2 ARM support trace record 13  
JES2 Asynchronous I/O PCE Work Area 21  
JES2 BERT Lock POST Processor 263  
JES2 Checkpoint Inter-member Communications Area 113  
JES2 Checkpoint Reconfiguration JESXCF Messages 163  
JES2 Command PCE Work Area 184  
JES2 Common Initialization Routines PCE Work Area 80  
JES2 Error Recovery Area 334  
JES2 FSI Checkpoint Record 76  
JES2 JCL Conversion PCE Work Area 180

### M

Macro IDs  
\$ALINDEX 4

### Macro IDs (continued)

\$APT 8  
\$ARMG 11  
\$ARMT 13  
\$ARMWORK 15  
\$ASYWORK 21  
\$AUXCB 23  
\$BERT 25  
\$BERTTAB 30  
\$BLDMSGL 32  
\$BUFFER 36  
\$CADDR 47  
\$CAT 58  
\$CATBERT 63  
\$CCE 67  
\$CCW 70  
\$CHK 76  
\$CIRWORK 80  
\$CK 100  
\$CKGPAR 109  
\$CKM 113  
\$CKPRECV 137  
\$CKPTQCB 143  
\$CKPWORK 146  
\$CKW 149  
\$CKX 163  
\$CMB 174  
\$CNVWORK 180  
\$COMWORK 184  
\$CPCWORK 198  
\$CPEBE 200  
\$CPINDEX 202  
\$CPMASTR 206  
\$CPPWORK 210  
\$CPXWORK 212  
\$CTOKEN 213  
\$CTW 215  
\$CVCB 217  
\$DAS 222  
\$DCT 228  
\$DCTTAB 260  
\$DILWORK 263  
\$DSB 265  
\$DSCT 268  
\$DSSCB 271  
\$DSWA 276  
\$DTE 280  
\$DTEACCT 288  
\$DTEALOC 289  
\$DTECKCF 291  
\$DTECKVR 293  
\$DTECNV 296  
\$DTEIMG 304  
\$DTEOFF 306  
\$DTESPL 312  
\$DTESUBS 318

Macro IDs (*continued*)

\$DTEVTAM 322  
 \$DTEWTO 324  
 \$DWA 327  
 \$ENFPARM 329  
 \$ENFWORK 332  
 \$ERA 334  
 \$ERPL 339  
 \$EVT 342

**N**

NJE/SNA Application Table 8

**P**

## Programming Interface information

## Programming Interface information

\$ALINDEX 3  
 \$APT 7  
 \$BERTTAB 29  
 \$BLDMSGL 31  
 \$BUFFER 35  
 \$CAT 57  
 \$CHK 75  
 \$CIRWORK 79  
 \$CK 99  
 \$CKPWORK 145  
 \$CMB 173  
 \$CNVWORK 179  
 \$COMWORK 183  
 \$CPCWORK 197  
 \$CPINDEX 201  
 \$CPMASTR 205  
 \$CPPWORK 209  
 \$CPXWORK 211  
 \$DAS 221  
 \$DCT 227  
 \$DCTTAB 259  
 \$DSCT 267  
 \$DSWA 275  
 \$DTE 279  
 \$DTEACCT 287  
 \$DTECNV 295  
 \$DTEOFF 305  
 \$DTEspl 311  
 \$DTEWTO 323  
 \$ENFWORK 331  
 \$ERA 333  
 \$EVT 341

**S**

Spool Offload subtask DTE Work Area 306

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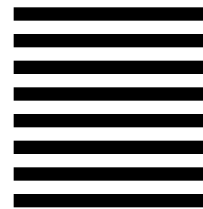
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