z/OS

JES2 Data Areas
Volume 1

GA32-0997-00

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Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 349.

First Edition, September, 2013

This edition applies to Version 2 Release 1 of z/OS (5650-ZOS) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

About this information

This information is a graphic presentation of many data areas used by the z/OS operating system and by application programs. The data areas are one or more of the following:

- Programming interfaces
- Needed for debugging or diagnosis.

This information supports z/OS (5650-ZOS).

Who should use this information

This informatation 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 information should have a working knowledge of the functions and logic of the operating system.

How to use this information

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

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

The header

The header includes some or all of the following:

Common Name: The descriptive name of the data area.

Macro ID: 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.

DSECT Name: Name of the DSECT (dummy control section) created by the mapping macro.

Owning Component: Component name and component identifier in parentheses.

Eye-Catcher ID: Character string identifier of the eye-catcher (sometimes called the **control block id**) within the mapping macro. The offset and length of the eye-catcher are also included.

Storage Attributes: The storage attributes of the data area, including the following:

- **Main Storage:** Central storage attributes of the data area.
- **Virtual Storage:** Virtual storage attributes of the data area.
- **Auxiliary Storage:** Spool storage attributes of the data area.
- **Subpool and Key:** 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.

Size: The size of the data area in decimal bytes.

Created by: Module, macro, or component whose use creates the data area.

Pointed to by: Registers or data area fields that contain the address of the data area.

Serialization: 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:

- Lock or locks
- ENQ and DEQ macros
- Compare and Swap (CS) instruction

- Disablement, which is disabling interruptions by setting bits in the program status word (PSW) of the program using the data area

Function: 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/Value**	**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
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 10 fields, the cross reference shows the following:

Name The name of the field, bit, or mask.

Hex Offset The hexadecimal offset of the field into the data area. For bits, the hexadecimal offset of the field containing the bit.

Hex Value Values are shown only for bits, equates, and initialized character strings. For bits, the hexadecimal value shown implies the position of the bit in the field containing the bit.

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

Name	Hex Offset	Hex Value
ANYBIT	F0	80

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

```
240    (F0)  FIXED      4   ANYWORD     CONTROL WORD
240    (F0)  BITSTRING  1   ANYBYTE     FLAG BYTE

             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.

Programming interface information

This document contains information NOT intended to be used as programming interfaces of z/OS.

This document also contains intended programming interfaces that allow the customer to write programs to obtain the services of z/OS.

This information is identified where it occurs, either by an introductory statement to a chapter or section or by the following marking:

Programming Interface information

End of Programming Interface information

Unless otherwise specified, for data areas classified as programming interfaces, the **MACRO ID** and **DSECT NAME(S)** in the header are 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**.

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 the data area.

For data areas classified as programming interfaces, “RESERVED FOR USER” fields are part of the interface; all other **“RESERVED ...”** fields are **NOT** part of the interface.

For a field that is part of the programming interface, the only information that is part of the interface for writing programs is:

- field name
- data type
- field length
- description (purpose or allowed values)

INCLUDE ONLY data area: **ONLY** the MACRO ID is the programming interface. The DSECT NAME, constants,and data area itself are **NOT** part of the programming interface.

TOKEN ONLY data area: **ONLY** the address of the data area is a programming interface. The DSECT NAME, constants, and data area itself are **NOT** part of the programming interface.

$ALINDEX Information

$ALINDEX Programming Interface information

Programming Interface information

$ALINDEX

End of Programming Interface information

$ALINDEX Heading Information

Common Name: ALET index table
Macro ID: $ALINDEX
DSECT Name: ALINDEX
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: ALIX
Offset: ALIID-ALINDEX
Length: L'ALIID
Storage Attributes: Subpool: 229
Key: 1
Residency: Extended private in any address space using JES2 services. Virtual and real storage can be anywhere.
Size: See ALILEN
Created by: $ALESERV routine in HASCDSS
Pointed to by: HXBALIDX field of the HASXB data area
Serialization: Compare and Swap logic will be used to insert an ALET into the table for the pre-defined ALETs.
Function: This table is used to index into the JES2 maintained ALETs. It contains data space names and the ALET for this address space to access a space. Pre-defined types are listed first. User defined types are listed later. This table is built and maintained by the $ALESERV service.

$ALINDEX Map

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
152	(98)	CHARACTER	8	ALITBUF	TCP/IP comm buffers
168	(A8)	CHARACTER	8	ALIWTO	SJBLOGQH S35Ds
184	(B8)	CHARACTER	8	ALIJQRB	JQE request blocks
184	(B8)	X'C0'	0	ALISTEND	"*-ALISTART" Size of the pre-defined ALETs
184	(B8)	X'C'	0	ALISTNUM	"ALISTEND/ALIELEN" Number of pre-defined ALETs
184	(B8)	X'C8'	0	ALISTD	"*-ALINDEX" Size of all pre-defined ALETs
200	(C8)	SIGNED	4	ALIWSTRT (0)	Start of dynamic ALETs
200	(C8)	BITSTRING	0	ALIWORK (0)	Dynamic ALET area
200	(C8)	X'F30'	0	ALIWLEN	"*-ALIWSTRT" Size of the dynamic ALET area
200	(C8)	X'FF'	0	ALINUMEN	"(*-ALISTART)/ALIELEN" Total number of entries
200	(C8)	X'1000'	0	ALILEN	"4096" Size of the ALINDEX table

$ALINDEX Cross Reference

Name	Hex Offset	Hex Value
ALIASDS	18	C1E2C4E2
ALICKVR	28	C3D2E5D9
ALIEALET	8	8
ALIEFCOM	8	80
ALIEFLAG	8	C
ALIELEN	8	10
ALIENAME	8	0
ALIID	0	C1D3C9E7
ALIJQRB	B8	D1D8D9C2
ALILEN	C8	1000
ALINAT	68	D5C1E340
ALINDEX	0	
ALINIT	78	D5C9E340
ALINUMEN	C8	FF
ALIPCL	88	D7C3D340
ALIPSO	38	D7E2D640
ALISAPID	8	E2C1D7C9
ALISTAC	48	E2E3C1C3
ALISTART	8	
ALISTD	B8	C8
ALISTEND	B8	C0
ALISTNUM	B8	C
ALITBUF	98	E3C2E4C6
ALITJEV	58	E3D1C5E5
ALIVNUM	4	1
ALIVRSN	4	
ALIWLEN	C8	F30
ALIWORK	C8	
ALIWSTRT	C8	
ALIWTO	A8	E6E3D640

$ALIWORK Information

$ALIWORK Heading Information

Common Name: JES2 ALICE Processor
Macro ID: $ALIWORK
DSECT Name: PCE ($ALIWORK 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 ALCPCEWS 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 $ALIPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the ALICET 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 ALICE Processor and by its support routines and exits. $DILWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $ALIWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEALIID in the second byte of field PCEID.

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

$ALIWORK Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
4096	(1000)	ADDRESS	4	ALCJVECT	Address of jobs processed vector
4100	(1004)	SIGNED	4	ALCJLEN	Length of job vector
4104	(1008)	SIGNED	4	ALCHJKEY	Job key for late arrival
4108	(100C)	ADDRESS	4	ALCJVADR	Address within vector for current job
4112	(1010)	SIGNED	4	ALCJVBIT	Bit with byte for curr job
4112	(1010)	X'EDC'	0	ALCPCEWS	"*-PCEWORK" Length of $ALICE PCE

$APT Information

$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 STMNT
16	(10)	CHARACTER	1	APTCTAB	COMPACTION TABLE NUMBER
17	(11)	BITSTRING	1	APTFLAGS	APPL TABLE FLAG BYTE
		1...		APTFINS	"B'10000000'" APPL IN SESSION
		.1..		APTFOPDP	"B'01000000'" OPNDST ISSUED-AWAITING RESPONSE
		..1.		APTFOPSP	"B'00100000'" OPNSEC ISSUED-AWAITING
		...1		APTFDYN	"B'00010000'" DYNAMICALLY ALLOCATED APT, NOT DUE TO APPL INIT STMT OR $ADD
		.... 1...		APTFANCY	"B'00001000'" Automatically start/restart NJE to this APPL
		.... .1..		APTFANCN	"B'00000100'" Never Automatically start/restart NJE to this APPL
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
40	(28)	SIGNED	2	APTANINT	Restart interval (minutes)
42	(2A)	BITSTRING	2		Reserved
44	(2C)	SIGNED	4	APTANTIM	NJE disconnect time (STCK)
48	(30)	ADDRESS	8	APTCDCT	CDCT address
56	(38)	ADDRESS	4	APTLOGD	Address of LOGON DCT
60	(3C)	ADDRESS	4	APTLIND	Address of LINE DCT
60	(3C)	X'40'	0	APTLEN	"*-APT" LENGTH OF APT

$APT Cross Reference

Name	Hex Offset	Hex Value
APT	0	
APTANINT	28	
APTANTIM	2C	
APTAPLID	8	40404040
APTCDCT	30	
APTCHAIN	18	
APTCTAB	10	
APTFANCN	11	4
APTFANCY	11	8
APTFDYN	11	10
APTFEAT	12	
APTFINS	11	80
APTFLAGS	11	0
APTFOPDP	11	40
APTFOPSP	11	20
APTID	0	
APTLEN	3C	40
APTLIND	3C	
APTLINE	24	
APTLMODE	1C	
APTLOGD	38	
APTLOGN	26	
APTNODE	14	0
APTREST	16	
APTRIDFM	13	
APTVRNUM	0	1
APTVRSN	4	

$ARMG Information

$ARMG Heading Information

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

$ARMG Map

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

$ARMG Cross Reference

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

$ARMT Information

$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
5	(5)	CHARACTER	8	ARMTSCLS	Job class
				Comment	
				Contents of JQE fields at end of ARM request	
				End of Comment	
13	(D)	BITSTRING	1	ARMTEFL1	JQEFLAG1
14	(E)	BITSTRING	1	ARMTETYP	JQETYPE
15	(F)	BITSTRING	1	ARMTEBSY	JQEBUSY
16	(10)	BITSTRING	1	ARMTEDEV	JQEDEVID
17	(11)	BITSTRING	1	ARMTEAID	JQEARMID
18	(12)	CHARACTER	8	ARMTECLS	Job class
				Comment	
				Miscellaneous fields	
				End of Comment	
26	(1A)	BITSTRING	1	ARMTFLG1	ARMFLAG1 in $ARMWORK
27	(1B)	BITSTRING	1	ARMTRSV1	Reserved for future use
28	(1C)	SIGNED	4	ARMTRC	MTRBRC
				Comment	
				SSPJ contents at end of request	
				End of Comment	
32	(20)	BITSTRING	1	ARMTSSPJ	SSPJ
32	(20)	X'50'	0	ARMTSIZE	"*-ARMT" Size of ARMT

$ARMT Cross Reference

Name	Hex Offset	Hex Value
ARMT	0	
ARMTEAID	11	
ARMTEBSY	F	
ARMTECLS	12	
ARMTEDEV	10	
ARMTEFL1	D	
ARMTETYP	E	
ARMTFLG1	1A	
ARMTRC	1C	
ARMTRSV1	1B	
ARMTSAID	4	
ARMTSBSY	2	
ARMTSCLS	5	
ARMTSDEV	3	
ARMTSFL1	0	
ARMTSIZE	20	50
ARMTSSPJ	20	
ARMTSTYP	1	

$ARMWORK Information

$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
312	(138)	BITSTRING	296		Warm PCE fields
608	(260)	ADDRESS	4	ARMMTRB	Active main task request block
612	(264)	ADDRESS	4	ARMSSPJ	SSOB extension from active request
616	(268)	SIGNED	4	ARMLINES	LINES counter
620	(26C)	SIGNED	4	ARMPUNCH	PUNCH counter
624	(270)	SIGNED	4	ARMXOUT	Records counter
628	(274)	SIGNED	4	ARMPAGES	PAGES counter
632	(278)	SIGNED	4	ARMBYTES	BYTES counter
636	(27C)	SIGNED	4	ARMDSKEY	DS key of last PDDB counted
640	(280)	ADDRESS	4	ARMSQD	SQD for $SUBIT
644	(284)	ADDRESS	4	ARMQYJQE	JQE whose registration is currently being verified
648	(288)	BITSTRING	4	ARMSAF	System affinity work area
652	(28C)	BITSTRING	1	ARMFLAG1	Flags
		1...		ARM1ACTV	"B'10000000'" $ACTIVE done
		.1..		ARM1JLOK	"B'01000000'" Job lock acquired
		..1.		ARM1WARM	"B'00100000'" Job was warm started
		...1		ARM1INVQ	"B'00010000'" Invalidate current registration query
653	(28D)	BITSTRING	1	ARMFLAG2	Serialized flag byte UPDATE USING OIL/NIL
		1...		ARM2MAIL	"B'10000000'" Messages have arrived
654	(28E)	BITSTRING	2	ARMRSV1	Reserved for future use
656	(290)	SIGNED	4	ARMMSGA	XCF message address

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
660	(294)	SIGNED	4	ARMMSGL	XCF message length
664	(298)	BITSTRING	8	ARMMSGTK	XCF message token
672	(2A0)	BITSTRING	80	ARMCTRAC	Current trace 26 record
752	(2F0)	BITSTRING	1	ARMPTRAC	Previous trace 26 record
				Comment	
				List form macros	
				End of Comment	
832	(340)	DBL WORD	8	(0)	
832	(340)	BITSTRING	160	ARMLSTFM	List form macros
992	(3E0)	CHARACTER	1	ARMLSEND (0)	End of list form area
				Comment	
				MACDATE -93/05/10-<1>	
				End of Comment	
832	(340)	SIGNED	2	M00M1032 (0)	IXZXIXMB-1
832	(340)	DBL WORD	8	ARMIXMB (0)	++ IXZXIXMB PARM LIST
832	(340)	BITSTRING	1	ARMIXMB_XVERSION	
					++ INPUT XVERSION
833	(341)	CHARACTER	6	ARMIXMB_XEYECATCH	
					++ CONSTANT XEYECATCH
839	(347)	CHARACTER	1	ARMIXMB_XRSV0001	
					++ RESERVED XRSV0001
840	(348)	CHARACTER	16	ARMIXMB_XMBOXNAME	
					++ XMBOXNAME
856	(358)	ADDRESS	4	ARMIXMB_XPOSTXIT	
					++ XPOSTXIT
860	(35C)	ADDRESS	4	ARMIXMB_XPOSTDATA	
					++ XPOSTDATA
864	(360)	SIGNED	4	ARMIXMB_XPOSTALET	
					++ XPOSTALET
868	(364)	SIGNED	4	ARMIXMB_XGROUPTOKEN	
					++ XGROUPTOKEN
872	(368)	BITSTRING	1	ARMIXMB_XSYSEVENTS	
					++ FIELD_LABEL
		1...		ARMIXMB_XSYSEVENT_YES	
					"B'10000000'" ++ XSYSEVENT.YES KEYWORD
		.1..		ARMIXMB_XSYSEVENT_NO	
					"B'01000000'" ++ XSYSEVENT.NO KEYWORD
872	(368)	X'29'	0	ARMIXMBL	"*-ARMIXMB" ++ LENGTH OF PLIST
				Comment	
				IXZXIXMB-1	
				End of Comment	
874	(36A)	ADDRESS	2	(0)	Ensure area fits
				Comment	
				MACDATE -93/05/10-<1>	
				End of Comment	
832	(340)	SIGNED	2	M00M1034 (0)	IXZXIXRM-1
832	(340)	DBL WORD	8	ARMIXRM (0)	++ IXZXIXRM PARM LIST
832	(340)	BITSTRING	1	ARMIXRM_XVERSION	
					++ INPUT XVERSION
833	(341)	CHARACTER	6	ARMIXRM_XEYECATCH	
					++ CONSTANT XEYECATCH
839	(347)	CHARACTER	1	ARMIXRM_XRSV0001	

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
					++ RESERVED XRSV0001
840	(348)	CHARACTER	16	ARMIXRM_XMBOXNAME	
					++ XMBOXNAME
856	(358)	ADDRESS	4	ARMIXRM_XDATA	
					++ XDATA
860	(35C)	SIGNED	4	ARMIXRM_XDATALEN	
					++ XDATALEN
864	(360)	BITSTRING	8	ARMIXRM_XMSGTOKEN	
					++ XMSGTOKEN
872	(368)	SIGNED	4	ARMIXRM_XGROUPTOKEN	
					++ XGROUPTOKEN
876	(36C)	BITSTRING	1	ARMIXRM_XMSGFETCH	
					++ INPUT
		1...		ARMIXRM_XMSGFETCH_ALL	
					"B'10000000'" ++ XMSGFETCH.ALL KEYWORD
		.1..		ARMIXRM_XMSGFETCH_MESSAGES	
					"B'01000000'" ++ XMSGFETCH.MESSAGES KEYWORD
		..1.		ARMIXRM_XMSGFETCH_SYSEVENT	
					"B'00100000'" ++ XMSGFETCH.SYSEVENT KEYWORD
		...1		ARMIXRM_XMSGFETCH_ACKS	
					"B'00010000'" ++ XMSGFETCH.ACKS KEYWORD
877	(36D)	BITSTRING	1	ARMIXRM_XKEYS	
					++ FIELD_LABEL
		1...		ARMIXRM_KEYUSED_MSGFETCH	
					"B'10000000'" ++ KEYUSED.MSGFETCH KEYWORD
877	(36D)	X'2E'	0	ARMIXRML	"*-ARMIXRM" ++ LENGTH OF PLIST

Comment

IXZXIXRM-1

End of Comment

878	(36E)	ADDRESS	2	(0)	Ensure area fits

Comment

MACDATE -11/12/03-<1>

End of Comment

0	(0)	X'340'	0	M00M1035	"ARMIXAC" ++ IXZXIXAC NAME
832	(340)	DBL WORD	8	ARMIXAC (0)	++ IXZXIXAC PARM LIST
832	(340)	BITSTRING	1	ARMIXAC_XVERSION	
					++ INPUT XVERSION
833	(341)	CHARACTER	6	ARMIXAC_XEYECATCH	
					++ CONSTANT XEYECATCH
839	(347)	BITSTRING	1	ARMIXAC_XSTB	++ INPUT
		1...		ARMIXAC_XSTB_NO	
					"B'10000000'" ++ XSTB.NO KEYWORD
		.1..		ARMIXAC_XSTB_YES	
					"B'01000000'" ++ XSTB.YES KEYWORD
840	(348)	BITSTRING	8	ARMIXAC_XMSGTOKEN	
					++ XMSGTOKEN
848	(350)	ADDRESS	4	ARMIXAC_XDATA	
					++ XDATA
852	(354)	SIGNED	4	ARMIXAC_XDATALEN	
					++ XDATALEN
856	(358)	SIGNED	4	ARMIXAC_XUSERRC	
					++ XUSERRC
860	(35C)	SIGNED	4	ARMIXAC_XGROUPTOKEN	
					++ XGROUPTOKEN
864	(360)	SIGNED	4	ARMIXAC_XSYSRC	
					++ XSYSRC
868	(364)	SIGNED	4	ARMIXAC_XSYSRSN	
					++ XSYSRSN

$ARMWORK Cross Reference

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
872	(368)	BITSTRING	1	ARMIXAC_XKEYS	++ FIELD_LABEL
		1...		ARMIXAC_KEYUSED_DATA	"B'10000000'" ++ KEYUSED.DATA KEYWORD
		.1..		ARMIXAC_KEYUSED_DATALEN	"B'01000000'" ++ KEYUSED.DATALEN KEYWORD
		..1.		ARMIXAC_KEYUSED_USERRC	"B'00100000'" ++ KEYUSED.USERRC KEYWORD
		...1		ARMIXAC_KEYUSED_SYSRC	"B'00010000'" ++ KEYUSED.SYSRC KEYWORD
		.... 1...		ARMIXAC_KEYUSED_SYSRSN	"B'00001000'" ++ KEYUSED.SYSRSN KEYWORD
873	(369)	BITSTRING	1	ARMIXAC_XMSGATTR	++ INPUT
		1...		ARMIXAC_XMSGATTR_J3CONNECT	"B'10000000'" ++ XMSGATTR.J3CONNECT KEYWORD
		.1..		ARMIXAC_XMSGATTR_EXPRESS	"B'01000000'" ++ XMSGATTR.EXPRESS KEYWORD
873	(369)	X'2A'	0	ARMIXACL	"*-ARMIXAC" ++ LENGTH OF PLIST
		Comment			
		IXZXIXAC-1			
		End of Comment			
874	(36A)	ADDRESS	2	(0)	Ensure area fits
992	(3E0)	X'2A8'	0	ARMPCEWS	"*-PCEWORK" ARM PCE work area length

$ARMWORK Cross Reference

Name	Hex Offset	Hex Value
ARMBYTES	278	
ARMCTRAC	2A0	
ARMDSKEY	27C	
ARMFLAG1	28C	
ARMFLAG2	28D	
ARMIXAC	340	
ARMIXAC_KEYUSED_DATA	368	80
ARMIXAC_KEYUSED_DATALEN	368	40
ARMIXAC_KEYUSED_SYSRC	368	10
ARMIXAC_KEYUSED_SYSRSN	368	8
ARMIXAC_KEYUSED_USERRC	368	20
ARMIXAC_XDATA	350	
ARMIXAC_XDATALEN	354	
ARMIXAC_XEYECATCH	341	
ARMIXAC_XGROUPTOKEN	35C	
ARMIXAC_XKEYS	368	
ARMIXAC_XMSGATTR	369	
ARMIXAC_XMSGATTR_EXPRESS	369	40
ARMIXAC_XMSGATTR_J3CONNECT	369	80
ARMIXAC_XMSGTOKEN	348	
ARMIXAC_XSTB	347	
ARMIXAC_XSTB_NO	347	80
ARMIXAC_XSTB_YES	347	40
ARMIXAC_XSYSRC	360	
ARMIXAC_XSYSRSN	364	
ARMIXAC_XUSERRC	358	
ARMIXAC_XVERSION	340	
ARMIXACL	369	2A
ARMIXMB	340	
ARMIXMB_XEYECATCH	341	
ARMIXMB_XGROUPTOKEN	364	
ARMIXMB_XMBOXNAME	348	
ARMIXMB_XPOSTALET	360	
ARMIXMB_XPOSTDATA	35C	
ARMIXMB_XPOSTXIT	358	
ARMIXMB_XRSV0001	347	
ARMIXMB_XSYSEVENT_NO		

Name	Hex Offset	Hex Value
	368	40
ARMIXMB_XSYSEVENT_YES		
	368	80
ARMIXMB_XSYSEVENTS		
	368	
ARMIXMB_XVERSION		
	340	
ARMIXMBL	368	29
ARMIXRM	340	
ARMIXRM_KEYUSED_MSGFETCH		
	36D	80
ARMIXRM_XDATA		
	358	
ARMIXRM_XDATALEN		
	35C	
ARMIXRM_XEYECATCH		
	341	
ARMIXRM_XGROUPTOKEN		
	368	
ARMIXRM_XKEYS		
	36D	
ARMIXRM_XMBOXNAME		
	348	
ARMIXRM_XMSGFETCH		
	36C	
ARMIXRM_XMSGFETCH_ACKS		
	36C	10
ARMIXRM_XMSGFETCH_ALL		
	36C	80
ARMIXRM_XMSGFETCH_MESSAGES		
	36C	40
ARMIXRM_XMSGFETCH_SYSEVENT		
	36C	20
ARMIXRM_XMSGTOKEN		
	360	
ARMIXRM_XRSV0001		
	347	
ARMIXRM_XVERSION		
	340	
ARMIXRML	36D	2E
ARMLINES	268	
ARMLSEND	3E0	
ARMLSTFM	340	
ARMMSGA	290	
ARMMSGL	294	
ARMMSGTK	298	
ARMMTRB	260	
ARMPAGES	274	
ARMPCEWS	3E0	2A8
ARMPTRAC	2F0	
ARMPUNCH	26C	
ARMQYJQE	284	
ARMRSV1	28E	
ARMSAF	288	
ARMSQD	280	
ARMSSPJ	264	
ARMXOUT	270	
ARM1ACTV	28C	80
ARM1INVQ	28C	10
ARM1JLOK	28C	40
ARM1WARM	28C	20
ARM2MAIL	28D	80
M00M1032	340	
M00M1034	340	
M00M1035	0	340
PCE	0	

$ASDS Information

$ASDS Heading Information

Common Name: Address Space Data Space dsect
Macro ID: $ASDS
DSECT Name: ASDS
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'JES2ASDS'
Offset: ASDSEYEC
Length: L'ASDSEYEC
Storage Attributes: Subpool: 0
Key: 1
Residency: Created via $DSPSERV CREATE SCOPE=ALL. In the JES2ASDS data space.
Size: See the ASDSLEN equate for the ASDS DSECT and the ASDSELEN equate for the ASDSENT DSECT.
Created by: The Address Space Data Space is created toward the end of initialization in module HASPIRMA routine IRFINAL. The ASDS DSECT is initialized at that time. An entry is created in the ASDS array every time an address space is started. The entry is described by the ASDSENT DSECT.
Pointed to by: The CCTASDS field of the $HCCT data area in CSA is the base pointer to first entry in the data space. Each address space can get an ALET to the data space using the $ALESERV ADD service for NAME=ASDS. CCTASDS-ASDSLEN gives a pointer to the header data. CCTASDS+ADSDELEN updates the pointer to the next entry.
Serialization: JES2 main task serialization for creating and removing ASDS entries. Some fields are updated in the user environment, but those are not updated by the JES2 main task.
Read the NOTES section for further information.
Function: The Address Space Data Space entry will contain shadowed information about jobs going into execution phase. This information will be used by SSIs to extract information about jobs instead of accessing the job's SJB, which can be a volatile control block.

$ASDS Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	ASDS	HASP Address Space Data Space DSECT
0	(0)	CHARACTER	8	ASDSEYEC	IRMA.ASDS Eyecatcher-set to unique data space name
8	(8)	ADDRESS	4	ASDSSTRT	IRMA.Origin of ASDS data space
12	(C)	ADDRESS	4	ASDSDSB	IRMA.Address of CSA DSB
16	(10)	SIGNED	4	ASDSHIGH	JXQ/UJB.Highest ASID used in ASDS. Full word required for Compare & Swap updt
20	(14)	SIGNED	2	ASDSJ2IH	JXQ.JES2 Initiator Chain Head
22	(16)	SIGNED	2	ASDSJ2IT	JXQ.JES2 Initiator Chain Tail
24	(18)	SIGNED	2	ASDSWLMH	JXQ.WLM Initiator Chain Head
26	(1A)	SIGNED	2	ASDSWLMT	JXQ.WLM Initiator Chain Tail

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
28	(1C)	SIGNED	2	ASDSSTCH	JXQ.Started Task Chain Head
30	(1E)	SIGNED	2	ASDSSTCT	JXQ.Started Task Chain Tail
32	(20)	SIGNED	2	ASDSTSUH	JXQ.TSO Job Chain Head
34	(22)	SIGNED	2	ASDSTSUT	JXQ.TSO Job Chain Tail
36	(24)	SIGNED	2	ASDSRQJH	JXQ.Request Job ID Chain Head
38	(26)	SIGNED	2	ASDSRQJT	JXQ.Request Job ID Chain Tail
40	(28)	SIGNED	2	ASDSOTHH	JXQ.Uncategorized A/S Chain Hd
42	(2A)	SIGNED	2	ASDSOTHT	JXQ.Uncategorized A/S Chain TL
44	(2C)	BITSTRING	4		Reserved
48	(30)	SIGNED	4	(0)	Align on word boundary
48	(30)	X'30'	0	ASDSLEN	"*-ASDS" ASDS header length

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	ASDSENT	HASP ASDS Entry DSECT
0	(0)	SIGNED	2	ASEASID	JXQ.ASID of address space
2	(2)	SIGNED	2	ASENEXT	JXQ.Next ASDS entry of this address space type
4	(4)	SIGNED	2	ASEPREV	JXQ.Previous ASDS entry of this address space type
6	(6)	BITSTRING	1	ASEFLAG1	Flag indicator
		1...		ASE1J2I	"B'10000000'" JXQ.JES2 Initiator
		.1..		ASE1WLMI	"B'01000000'" JXQ.WLM Initiator
		..1.		ASE1STC	"B'00100000'" JXQ.STC (not JES2 initiator, Req Job ID)
		...1		ASE1TSO	"B'00010000'" JXQ.Entry for TSO user
		.... 1...		ASE1RQJ	"B'00001000'" JXQ.Request Job ID
		.... .1..		ASE1OTHR	"B'00000100'" JXQ.Uncategorized addr sp
		.... ..1.		ASE1AJOB	"B'00000010'" JXQ.Active job in addr sp
		1		ASE1GONE	"B'00000001'" JXQ.Addr space terminated
		....		ASE1NOTU	"B'00000000'" JXQ.ASDS entry not used b4
7	(7)	BITSTRING	1		Reserved
8	(8)	BITSTRING	8	ASEASCBT	JXQ.Address space token
16	(10)	CHARACTER	8	ASEAJBID	JXQ.Address space job ID (for STC, TSU and INIT jobid)
		Comment			

		Job fields			

		End of Comment			
24	(18)	CHARACTER	8	ASEJCLAS	JXQ.Batch job's job class
32	(20)	CHARACTER	8	ASEJOBNM	JXQ.Batch job name
40	(28)	CHARACTER	8	ASEJOBID	JXQ.Batch job ID
48	(30)	CHARACTER	8	ASEUSRID	UJB.Batch job user ID
56	(38)	CHARACTER	8	ASESECLB	UJB.Batch job security lbl
64	(40)	CHARACTER	8	ASEWSCN	JXQ.Batch job service class
72	(48)	ADDRESS	4	ASECSCB	UJB.Address of CSCB (in common storage)
		Comment			

		Initiator fields			

		End of Comment			
76	(4C)	ADDRESS	4	ASIPIT	JXQ.Addr of JES2 Init PIT (in common storage)
80	(50)	CHARACTER	8	ASIWSCNO	JXQ.WLM Initiator service class
88	(58)	BITSTRING	1	ASIWLMIS	JXQ.WLM Initiator Status
		1...		ASIWLMIA	"B'10000000'" WLM Initiator Active
		.1..		ASIWLMII	"B'01000000'" WLM Initiator Inact (selecting job)

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

					The following two settings are used to request state changes for WLM Initiators and are not a status setting found in field ASIWLMIS (but the settings cannot conflict with other ASIWLMIS status values).

					End of Comment
		.... ..1.		ASIWLMIT	"B'00000010'" Initialize/create WLM Initiator ASDS ent
		1		ASIWLMDS	"B'00000001'" Destroy/remove WLM Initiator ASDS ent
89	(59)	BITSTRING	7		Reserved
89	(59)	X'60'	0	ASDSELEN	"*-ASDSENT" ASDS entry length
96	(60)	ADDRESS	2	(0)	Ensure header length less than entry length

$ASDS Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ASDS	0		ASIPIT	4C	
ASDSDSB	C		ASIWLMDS	58	1
ASDSELEN	59	60	ASIWLMIA	58	80
ASDSENT	0		ASIWLMII	58	40
ASDSEYEC	0	D1C5E2F2	ASIWLMIS	58	
ASDSHIGH	10		ASIWLMIT	58	2
ASDSJ2IH	14		ASIWSCNO	50	
ASDSJ2IT	16				
ASDSLEN	30	30			
ASDSOTHH	28				
ASDSOTHT	2A				
ASDSRQJH	24				
ASDSRQJT	26				
ASDSSTCH	1C				
ASDSSTCT	1E				
ASDSSTRT	8				
ASDSTSUH	20				
ASDSTSUT	22				
ASDSWLMH	18				
ASDSWLMT	1A				
ASEAJBID	10				
ASEASCBT	8				
ASEASID	0				
ASECSCB	48				
ASEFLAG1	6				
ASEJCLAS	18				
ASEJOBID	28				
ASEJOBNM	20				
ASENEXT	2				
ASEPREV	4				
ASESECLB	38				
ASEUSRID	30				
ASEWSCN	40				
ASE1AJOB	6	2			
ASE1GONE	6	1			
ASE1J2I	6	80			
ASE1NOTU	6	0			
ASE1OTHR	6	4			
ASE1RQJ	6	8			
ASE1STC	6	20			
ASE1TSO	6	10			
ASE1WLMI	6	40			

$ASSTTAB Information

$ASSTTAB Heading Information

Common Name: Migration assistant table
Macro ID: $ASSTTAB
DSECT Name: ASSTTAB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'ASST'
Offset: ASSTAB-ASST
Length: 4
Storage Attributes: Subpool: 0 for the JES2 main copy;
Key: 1
Residency: Virtual is in 31 bit storage in the JES2 address space. There are no restrictions on real storage.
Size: See ASSTTSZ
Created by: Source DAS migration phase DAS7PHAS = DAS7SET1.
Pointed to by: ASTTABLE field of the $DTEASST data area
Serialization: Each field is set either by SPOL PCE or migration assistant subtask. See fields for further definition.
Function: The ASSTTAB is owned by a migration assistant subtask. There are 253 entries in the table. Each entry may represent an active spool migration Source -> Target. An entry is actively in use if the source volid is set within the entry.

$ASSTTAB Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	ASSTTAB	Migartion table entry
0	(0)	CHARACTER	4	ASSTID	Table ID -> ASST
		Comment			

		ASSMIGRA, ASSVOLID set at $ASSTTAB initialization			

		End of Comment			
4	(4)	BITSTRING	1	ASSMIGRA	Migration specifc info
		1...		ASSMOVE	"B'10000000'" Migration is a move
		.1..		ASSMERGE	"B'01000000'" Migration is a merge
		..1.		ASSATTH	"B'00100000'" Assistant attached unique JES XCF group
		...1		ASSRECV	"B'00010000'" $ASSTTAB created under ASSISTANT or or FULL-RECOVERY
5	(5)	CHARACTER	6	ASSVOLID	Source volser. If set - then denotes entry inuse.
11	(B)	BITSTRING	1	ASSCOMPL	Migration percent complete

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

				Source DAS information: (Used for dataset deallocation).	
				State captured early on in phase - DAS7SET1 on call to $ASSTTAB initialization.	
				This information will used at the end of migration to deallocate each member from the original source dataset. This allows the customer to roll the DASD out at migration end.	

				End of Comment	
12	(C)	BITSTRING	1	ASSSRCST	Source dataset info
16	(10)	SIGNED	4	(0)	Alignment
16	(10)	BITSTRING	32	ASSENQTK	ISGENQ token
48	(30)	ADDRESS	4	ASSUCBPT	UCB address
52	(34)	ADDRESS	4	ASSSRDAS	Source DAS address
56	(38)	CHARACTER	8	ASSGROUP	Note: migration XCF group name. Note: XX is source DASEXTNO.
64	(40)	CHARACTER	16	ASSMEMNM	Member name - used for attach of XCF group
80	(50)	SIGNED	4	ASJDIAG	JESXCF service diag area
84	(54)	ADDRESS	4	ASSTOKEN	JESXCF group token to use when sending to MG$VOLSER
88	(58)	BITSTRING	8	ASSSRESV	Reserved
96	(60)	BITSTRING	1	ASSSREXT	Extent number of source
				Comment	
				END soucce DAS information: Target volume dataset information	
				End of Comment	
97	(61)	BITSTRING	32	ASSTNQTK	ISGENQ token - Only move
129	(81)	BITSTRING	64	ASSTRPS	RPS Table for this device Move and merge
				Comment	

				The following fields are valid for both move and merge. ASSTDEBE, ASSTKCYL, ASSTEXTN, ASSTFLG1, ASSTNRTK, ASSTSTRT	

				End of Comment	
193	(C1)	BITSTRING	19	ASSTDEBE	DEB extent for this volume
212	(D4)	SIGNED	4	ASSTKCYL	Tracks per cylinder
216	(D8)	BITSTRING	1	ASSTEXTN	Extent number of target
217	(D9)	BITSTRING	1	ASSTFLG1	Target flag byte
		1...		ASST1RPS	"B'10000000'" RPS supported
218	(DA)	SIGNED	2	ASSTNRTK	Number of records per track
220	(DC)	SIGNED	4	ASSTSTRT	Start track of data set
				Comment	

				Both ASSTRACS and ASSTBITB are set at ASSTTAB init called from DADMSET1.	

				End of Comment	
224	(E0)	SIGNED	4	ASSTRACS	Number of tracks represented by track bitmap.
232	(E8)	ADDRESS	8	ASSTBITB	Address of bitmap in 64 bit common storage

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				END target DAS information: Miscellaneous information:	
				End of Comment	
240	(F0)	BITSTRING	4	ASMEMACK	Copy of migrator ACK list for start phase 1, start phase 2, end migration or cancel.
244	(F4)	BITSTRING	1	ASMIGTSK	Current migrator subtask state
245	(F5)	ADDRESS	1	ASSMIGTR	Migrator ID to be used when ACKING a migrator request
				Comment	
				TLBM information	
				End of Comment	
248	(F8)	SIGNED	4	ASSTLBM	Relative track at which the TLBM starts on target volume.
252	(FC)	SIGNED	4	ASRECORD	Number of records consumed by TLBM
256	(100)	BITSTRING	1	ASTLBM	TLBM state
		1...		ASTLBMWR	"B'10000000'" TLBM has been written to target dataset
260	(104)	SIGNED	4	(0)	Align
				Comment	
				End TLBM information	
				End of Comment	
260	(104)	CHARACTER	10		QWORD alignment
272	(110)		16	(0)	Quadword alignment
272	(110)	X'110'	0	ASSENTLN	"*-ASSTTAB" Length of table entry
272	(110)	X'10CD0'	0	ASSTABSZ	"ASSENTLN*253" Table length

$ASSTTAB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ASJDIAG	50		ASSTNQTK	61	
ASMEMACK	F0		ASSTNRTK	DA	
ASMIGTSK	F4	0	ASSTOKEN	54	
ASRECORD	FC		ASSTRACS	E0	
ASSATTH	4	20	ASSTRPS	81	0
ASSCOMPL	B		ASSTSTRT	DC	
ASSENQTK	10		ASSTTAB	0	
ASSENTLN	110	110	ASST1RPS	D9	80
ASSGROUP	38	E2E8E2D4	ASSUCBPT	30	
ASSMEMNM	40		ASSVOLID	5	
ASSMERGE	4	40	ASTLBM	100	
ASSMIGRA	4		ASTLBMWR	100	80
ASSMIGTR	F5				
ASSMOVE	4	80			
ASSRECV	4	10			
ASSSRCST	C				
ASSSRDAS	34				
ASSSRESV	58				
ASSSREXT	60				
ASSTABSZ	110	10CD0			
ASSTBITB	E8				
ASSTDEBE	C1				
ASSTEXTN	D8				
ASSTFLG1	D9				
ASSTID	0				
ASSTKCYL	D4				
ASSTLBM	F8				

$ASYWORK Information

$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
312	(138)	DBL WORD	8	(0)	Force double-word alignment
312	(138)	X'0'	0	ASYPCEWS	"*-PCEWORK" Length of work area

$AUXCB Information

$AUXCB Heading Information

Common Name: AUX address space control block
Macro ID: $AUXCB
DSECT Name: AUXCB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: AUXC
Offset: AXBID
Length: L'AXBID
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M) in common storage (CSA).
Size: See AXBLEN
Created by: HASCSRAX
Pointed to by: CCTAUXCB field of the $HCCT data area
Serialization: Only updated by HASCSRAX while running under the JES2 main task.
Function: This DSECT maps the data associated with the JES2 AUX address address space. It is used during JES2 initialization and termination processing to create and later delete the address space.

$AUXCB Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	AUXCB	, Define DSECT
0	(0)	CHARACTER	4	AXBID	Eyecatcher
4	(4)	ADDRESS	1	AXBVER	Version
4	(4)	X'1'	0	AXBVERN	"1" Current version
5	(5)	BITSTRING	3		Reserved for future use
8	(8)	CHARACTER	8	AXBNAME	Address space name
16	(10)	BITSTRING	24	AXBODA	ASCRE output area (IHAASEO)
40	(28)	SIGNED	4	AXBECB	Main task wait ECB
44	(2C)	SIGNED	4	AXBSTECB	Main task subtask term ECB
48	(30)	ADDRESS	4	AXBPWORK	Address of working storage in the AUX address space.
56	(38)	DBL WORD	8	(0)	
56	(38)	X'38'	0	AXBLEN	"*-AUXCB" Length of AUXCB

$AUXCB Cross Reference

Name	Hex Offset	Hex Value
AUXCB	0	
AXBECB	28	
AXBID	0	C1E4E7C2
AXBLEN	38	38
AXBNAME	8	D1C5E2F2
AXBODA	10	
AXBPWORK	30	
AXBSTECB	2C	
AXBVER	4	
AXBVERN	4	1

$BERT Information

$BERT Heading Information

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

$BERT Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	BERT	, Block Extension Reuse Table
0	(0)	X'1'	0	BERTVERS	"1" BERT version number
0	(0)	BITSTRING	4	BRTWALLY (0)	Composite of TYPE and CB
0	(0)	BITSTRING	1	BRTTYPE	Control block type
0	(0)	X'0'	0	BRTINT	"$DGBINT" Internal control block
0	(0)	X'1'	0	BRTJQE	"$DGBJQE" JQE extension
0	(0)	X'2'	0	BRTCAT	"$DGBCAT" Class attribute table
0	(0)	X'3'	0	BRTWSCQ	"$DGBWSCQ" WLM service class queue
		1111 1111		BRTFREE	"X'FF'" Free BERT
1	(1)	BITSTRING	3	BRTCB	Related control block index
4	(4)	BITSTRING	1	BRTSEQ	Sequence number
5	(5)	BITSTRING	3	BRTNEXT	Next BERT in CB chain
8	(8)	BITSTRING	2		Reserved for future use
8	(8)	X'A'	0	BRTPRLEN	"*-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
Comment					
Special wally values for internal BERTs used by the DOGBERT service internally.					
End of Comment					
		....		BRTWYDYN	"X'00000000'" Wally for dynamic heads (BRTPBERT.BRTNEXT chain)
10	(A)	BITSTRING	0	BRTWYNAM	"X'00001000'" Named internal CBs header (BRTPINTH chain)
10	(A)	BITSTRING	0	BRTWYNIB	"X'00800000'" Named internal CBs combined with CB number

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	BERTI0	, Type 0 BERTIE
0	(0)	BITSTRING	1	BRT0LOCK	Lock byte (QSESIBSY value)
1	(1)	BITSTRING	1	BRT0FLG0	Type 0 flag byte
		1111		BRT0USEQ	"B'11110000'" Update sequence counter (4 bit count)
1	(1)	X'2'	0	BRT0LEN1	"*-BERTI0" Minimum type 0 BERTIE
2	(2)	BITSTRING	1	BRT0FLAG	General flags for chaining
3	(3)	BITSTRING	3	BRT0NXT1	1st CB chain field
6	(6)	BITSTRING	3	BRT0NXT2	2nd CB chain field
9	(9)	BITSTRING	1	BRT0KEY (0)	Search key
9	(9)	X'9'	0	BRT0LEN2	"*-BERTI0" Size with search key (plus key len)

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

Comment

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

End of Comment

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

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

				BRTPINTH is a pointer to a chain of BERTs that represents the internal named BERT pointer structure. Named internal BERTs each have a number assigned using the BERTMAP and that number indexes into this structure. The 0th entry in the pointer structure is not used.	

				End of Comment	
60	(3C)	SIGNED	4	BRTPINTH	Named internal BERT pointer structure
60	(3C)	X'40'	0	BRTPSIZE	"*-BRTPREF" Size of prefix area
64	(40)	ADDRESS	2	(0)	Verify size

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

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	BRTCNT	, BERT count array
0	(0)	CHARACTER	8	BRTCNAME	Name of BERT entry
8	(8)	BITSTRING	1	BRTCID	Control block type
9	(9)	BITSTRING	3		Reserved
12	(C)	SIGNED	4	BRTCMAIN	Sequence one BERT count
16	(10)	SIGNED	4	BRTCNUM	Total BERT count
16	(10)	X'14'	0	BRTCLEN	"*-BRTCNT" Size of an entry
16	(10)	X'1400'	0	BRTCSIZE	"BRTCLEN*256" Size of a full array

$BERT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
BERT	0		BRTIIEND	0	FF
BERTIE	0		BRTILEN	1	
BERTI0	0		BRTINT	0	0
BERTVERS	0	1	BRTIPLEN	1	2
BRTCAT	0	2	BRTJQE	0	1
BRTCB	1		BRTLEN	A	40
BRTCID	8		BRTMAP	0	
BRTCLEN	10	14	BRTMID	9	
BRTCMAIN	C		BRTMLEN	C	14
BRTCNAME	0		BRTMNAME	0	
BRTCNT	0		BRTMTYPE	8	
BRTCNUM	10		BRTNEXT	5	
BRTCSIZE	10	1400	BRTPBERT	0	
BRTDATA	A		BRTPCAT	2C	
BRTFREE	0	FF	BRTPCATN	30	
BRTIDATA	2		BRTPFNUM	10	
BRTIICNT	0	FE	BRTPFREE	C	
BRTIID	0		BRTPINTH	3C	

$BERT Cross Reference

Name	Hex Offset	Hex Value
BRTPJQE	24	
BRTPJQEN	28	
BRTPLEN	A	
BRTPMAP	14	
BRTPMXTY	18	
BRTPQHDL	1C	8
BRTPQHDN	38	3
BRTPQHDS	24	
BRTPQHED	1C	0
BRTPQHMX	38	3
BRTPQHNM	1C	4
BRTPREF	0	
BRTPRLEN	8	A
BRTPSIZE	3C	40
BRTPWSCN	38	
BRTPWSCQ	34	
BRTSEQ	4	
BRTTYPE	0	
BRTWALLY	0	
BRTWSCQ	0	3
BRTWYDYN	A	0
BRTWYNAM	A	1000
BRTWYNIB	A	800000
BRT0FLAG	2	
BRT0FLG0	1	
BRT0KEY	9	
BRT0LEN1	1	2
BRT0LEN2	9	9
BRT0LOCK	0	
BRT0NXT1	3	
BRT0NXT2	6	
BRT0USEQ	1	F0

$BERTTAB Information

$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 expantion 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'	0	BRTTINT	"$DGBINT" Named internal CB
8	(8)	X'1'	0	BRTTJQE	"$DGBJQE" JQE extension
8	(8)	X'2'	0	BRTTCAT	"$DGBCAT" Class attribute table
8	(8)	X'3'	0	BRTTWSCQ	"$DGBWSCQ" WLM service class queue
8	(8)	X'FF'	0	BRTTDYN	"$DGBDYN" Dynamically defined type
9	(9)	BITSTRING	1	BRTTFLAG	General flag byte
		1...		BRTTUSER	"B'10000000'" USER table (not HASP)
		.1..		BRTTKEY	"B'01000000'" This entry describes a flag
		..1.		BRTTOFFV	"B'00100000'" The offset of this entry is dynamically generated
		...1		BRTTOLAP	"B'00010000'" This entry may overlap other entries in this CB
10	(A)	SIGNED	2	BRTTOFF	Offset of data area
12	(C)	BITSTRING	1	BRTTLEN	Length of section
13	(D)	BITSTRING	1	BRTTFILL	Fill character
14	(E)	BITSTRING	2		Reserved
16	(10)	CHARACTER	8	BRTTTNAM	CB type name
24	(18)	SIGNED	4	(0)	Align BRTT entry
24	(18)	X'18'	0	BRTTELEN	"*-BRTT" Length of BRTT entry DSECT

$BERTTAB Cross Reference

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

$BLDMSGL Information

$BLDMSGL Programming Interface information

Programming Interface information

$BLDMSGL

End of Programming Interface information

$BLDMSGL Heading Information

Common Name: Build Message Parameter List
Macro ID: $BLDMSGL
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.

$BLDMSGL Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	BLD	HASP $BLDMSG PARM LIST DSECT
0	(0)	CHARACTER	4	BLDID	EBCDIC CONTROL BLOCK ID, SET BY $GETWORK VIA USE=BLD
4	(4)	BITSTRING	4	BLDCONID	Console id
8	(8)	ADDRESS	4	BLDCART	Address of the CART
12	(C)	ADDRESS	4	BLDJOBID	Pointer for given jobid
16	(10)	ADDRESS	4	BLDCBA	Control block address
20	(14)	ADDRESS	4	BLDISPR	Display routine address
24	(18)	ADDRESS	4	BLDADDR (6)	Work area definitions
				Comment	
				WORK AREA DEFINITION IF BLD1WTOR IS ON	
				End of Comment	
24	(18)	ADDRESS	4	BLDECB	ADDRESS OF ECB
28	(1C)	ADDRESS	4	BLDREPLY	ADDRESS OF REPLY AREA
32	(20)	ADDRESS	4	BLDLEN	LENGTH OF REPLY AREA
36	(24)	BITSTRING	8	BLDWORK (0)	Work area used by $REPLY
36	(24)	SIGNED	4	BLDDOMID	MESSAGE ID USED IN DOM MACRO
40	(28)	SIGNED	4	BLDHUHDM	DOM ID FOR HUH MESSAGE
44	(2C)	ADDRESS	4	BLDREPV	Address of reply vector
				Comment	
				WORK AREA DEFINITION IF BLD1WTO OR BLD1CMB IS ON	
				End of Comment	
24	(18)	X'24'	0	BLDCNNCT	"BLDDOMID,4,C'F'" CONNECT ID FOR MULTI-LINE WTO
48	(30)	ADDRESS	4	BLDCR11	R11 of caller for $BLDMSG
52	(34)	BITSTRING	2	BLDROUT	Route code for message
54	(36)	BITSTRING	2	BLDDESC	Descriptor codes for msg
56	(38)	CHARACTER	4	BLDMSGID	MESSAGE ID
60	(3C)	BITSTRING	1	BLDSEPAR	Separator character

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
61	(3D)	BITSTRING	1	BLDFLAG1	Flag byte
		1...		BLD1WTO	"B'10000000'" BUILD WTO OR MLWTO MF=L
		.1..		BLD1WTOR	"B'01000000'" BUILD WTOR MF=L
		..1.		BLD1CMB	"B'00100000'" BUILD CMB
		...1		BLD1WAIT	"B'00010000'" $WAIT IS ALLOWED
		.... 1...		BLD1JQE	"B'00001000'" Prefix job id from JQE
		.... .1..		BLD1JID	"B'00000100'" Prefix job id from given id
		.... ..1.		BLD1REPV	"B'00000010'" Reply vector proc. required
		1		BLD1GETW	"B'00000001'" This area obtained via $GETWORK
62	(3E)	BITSTRING	1	BLDISPER	'DISPER' character
63	(3F)	BITSTRING	1	BLDFLAG2	Flag byte 2
		1...		BLD2LOGO	"B'10000000'" LOGONLY=YES is specified
		.1..		BLD2ROUT	"B'01000000'" Route codes are set
		..1.		BLD2DESC	"B'00100000'" Descriptor codes are set
		...1		BLD2LONG	"B'00010000'" LONG=YES is specified
		.... 1...		BLD2GETC	"B'00001000'" This area obtained via $GETHP
		.... .1..		BLD2HCCT	"B'00000100'" Display routine R11=HCCT
		.... ..1.		BLD2HCT	"B'00000010'" Display routine R11=HCT
		1		BLD2NMUL	"B'00000001'" MULTI=NO is specified
64	(40)	BITSTRING	1	BLDFLAG3	Flag byte 3
		1...		BLD3BRAN	"B'10000000'" BRANCH=YES is specified
		.1..		BLD3DEST	"B'01000000'" DEST= is specified
65	(41)	CHARACTER	8	BLDDESTN	Symbolic name of dest.
73	(49)	BITSTRING	15		Reserved for future use
88	(58)	ADDRESS	4	(0)	Ensure multiple of 4
88	(58)	X'58'	0	BLDSIZE	"*-BLD"

$BLDMSGL Cross Reference

Name	Hex Offset	Hex Value
BLD	0	
BLDADDR	18	
BLDCART	8	
BLDCBA	10	
BLDCNNCT	18	24
BLDCONID	4	
BLDCR11	30	
BLDDESC	36	
BLDDESTN	41	
BLDDOMID	24	
BLDECB	18	
BLDFLAG1	3D	
BLDFLAG2	3F	
BLDFLAG3	40	
BLDHUHDM	28	
BLDID	0	
BLDISPER	3E	
BLDISPR	14	
BLDJOBID	C	
BLDLEN	20	
BLDMSGID	38	
BLDREPLY	1C	
BLDREPV	2C	
BLDROUT	34	
BLDSEPAR	3C	
BLDSIZE	58	58
BLDWORK	24	
BLD1CMB	3D	20
BLD1GETW	3D	1
BLD1JID	3D	4
BLD1JQE	3D	8
BLD1REPV	3D	2
BLD1WAIT	3D	10
BLD1WTO	3D	80
BLD1WTOR	3D	40
BLD2DESC	3F	20
BLD2GETC	3F	8
BLD2HCCT	3F	4
BLD2HCT	3F	2
BLD2LOGO	3F	80
BLD2LONG	3F	10
BLD2NMUL	3F	1
BLD2ROUT	3F	40
BLD3BRAN	40	80
BLD3DEST	40	40

$BUFFER Information

$BUFFER Programming Interface information

Programming Interface information

$BUFFER

End of Programming Interface information

$BUFFER Heading Information

Common Name: HASP Buffer
Macro ID: $BUFFER
DSECT Name: BFPDSECT, SPBRECD, BFD
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, GBUF and SUBST 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 + (BUFFER PREFIX AREA)
- WHERE X = 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
$MIGRIOQ 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
ICEOUTHD 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
SDBCBFC 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 and/or the Local lock in the USER environment and JES2 reentrancy techniques in the JES2 main task environment.

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 INDENTIFIER
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			
		1...		BUFFIX	"B'10000000'" Page-fix request
		.1..		BUFMULT	"B'01000000'" Multiple buffer request

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1.		BUFIOB	"B'00100000'" IOB in front of the buffer
		...1		BUFRPL	"B'00010000'" RPL IN FRONT OF BUFFER
		.... 1...		BUFDECB	"B'00001000'" DECB IN FRONT OF BUFFER
		.... .111		BUFBPMT	"B'00000111'" Buffer type (see below)
		1		BPMTBSC	"B'00000001'" BSC buffer type
		.... ..1.		BPMTCB	"B'00000010'" CB buffer type
		11		BPMTHASP	"B'00000011'" HASP buffer type
		.... .1..		BPMTPAGE	"B'00000100'" PAGE buffer type
		.... .1.1		BPMTPP	"B'00000101'" Print/Punch buffer type
		.... .11.		BPMTVTAM	"B'00000110'" VTAM buffer type
		.... .111		BPMTHAM	"B'00000111'" HAM HDB buffer
		1111 1111		BPMTUSCB	"B'11111111'" User environment CB buffer
12	(C)	X'21'	0	BUFBSC	"BUFLOCAL+BUFIOB+BPMTBSC"
12	(C)	X'22'	0	BUFCB	"BUFLOCAL+BUFIOB+BPMTCB"
12	(C)	X'23'	0	BUFHASP	"BUFLOCAL+BUFIOB+BPMTHASP"
12	(C)	X'16'	0	BUFVTAM	"BUFRPL+BPMTVTAM"
12	(C)	X'24'	0	BUFPAGE	"BUFLOCAL+BUFIOB+BPMTPAGE"
12	(C)	X'C'	0	BUFSPXFR	"BUFLOCAL+BUFDECB+BPMTPAGE"
12	(C)	X'25'	0	BUFPP	"BUFLOCAL+BUFIOB+BPMTPP"
13	(D)	CHARACTER	1	BUFECBCC	I/O COMPLETION CODE
		1		BUFCCFCB	"X'01'" HASPIMAG - BAD FCB
14	(E)	BITSTRING	1	BUFFLAG1	Buffer flag byte
		1...		BFPTHMGR	"B'10000000'" BUFFER BELONGS TO PATH MGR

Comment

WARNING - The bit below has a different use depending on the Environment.

End of Comment

		.1..		BUF1WIN	"B'01000000'" User ENV - Write in progress flag (only used by USER ENV I/O)
		.1..		BUF1EXVR	"B'01000000'" Main Task ENV - On REDO issue EXCPVR instead of EXCP (only used by MAIN TASK I/O).
		..1.		BUF1SINT	"B'00100000'" Simulated I/O error
		...1		BUF1PERM	"B'00010000'" Permanent I/O error
		.... 1...		BUF1CHEN	"B'00001000'" Channel end appendage processed buffer
		.... .1..		BUF1DASD	"B'00000100'" I/O to DASD device
		.... ..1.		BUF1REDO	"B'00000010'" Redo I/O (only used by MAIN TASK I/O).
		1		BUF1MIGO	"B'00000001'" During spool migration, override mapped volume consideration (only used by MAIN TASK I/O).
15	(F)	BITSTRING	1	BUFMIGTC	Migration transition count (only used by MAIN TASK I/O).
16	(10)	ADDRESS	4	BFPDCT	ADDRESS OF DEVICE CONTROL TABLE
20	(14)	ADDRESS	4	BFPEWF	PCE WITH EWF TO POST OR EXIT ADDRESS
20	(14)	X'18'	0	BFPLEN	"*-BFPDSECT" LENGTH OF BUFFER PREFIX

Comment

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

End of Comment

24	(18)	CHARACTER	1	IOBDSECT (0)	BUFFER CONTROL AREA
24	(18)	BITSTRING	1	IOBFLAG1	I/O FLAGS
		.1..		IOBCMDCH	"B'01000000'" Command chaining used in channel program
		.... .1..		IOBIOERR	"B'00000100'" Exceptional condition. After CEA returns and this bit is on, the error is considered permanent.
		.... ..1.		IOBUNREL	"B'00000010'" Unrelated flag (i.e. nonsequential)
		1		IOBRSTRT	"B'00000001'" Restart address in IOB to be used
25	(19)	CHARACTER	1	IOBFLAG2	I/O FLAGS

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
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)	ADDRESS	4	IOBECBPT	ADDRESS OF HASP EVENT CONTROL BLOCK
32	(20)	ADDRESS	4	IOBCMD31 (0)	Ending CCW addr if IOBEFMT1
32	(20)	CHARACTER	1	IOBFLAG3	I/O FLAGS
33	(21)	CHARACTER	7	IOBCSW	CHANNEL STATUS WORD

Comment

```
DS AL3 Command address
DS B CSW unit status flags
EQU X'80' Attention
EQU X'40' Status modifier
EQU X'20' Control unit end
EQU X'10' Busy
EQU X'08' Channel end
EQU X'04' Device end
EQU X'02' Unit check
EQU X'01' Unit exception
DS B CSW channel status flags
EQU X'80' Program control interrupt
EQU X'40' Incorrect length
EQU X'20' Program check
EQU X'10' Protection check
EQU X'08' Channel data check
EQU X'04' Channel control check
EQU X'02' Interface control check
EQU X'01' Chaining check
DS XL2 Last two bytes of IOBCSW
```

End of Comment

40	(28)	CHARACTER	1	IOBSIOCC (0)	SIO CONDITION CODE
40	(28)	ADDRESS	4	IOBSTART	ADDRESS OF CHANNEL PROGRAM
44	(2C)	BITSTRING	1	IOBFLAG4 (0)	Flag byte
		1...		IOBGDPOL	"B'10000000'" Not used by JES2
		.1..		IOBCC3WE	"B'01000000'" User requests that IOS POST when an 'all paths lost' condition is detected
		..1.		IOBPMERR	"B'00100000'" Not used by JES2
		...1		IOBCEF	"B'00010000'" IOB common extension is available

Comment

```
EQU B'00001100' Not used by JES2 (reserved)
```

End of Comment

		.... ..1.		IOBJES3I	"B'00000010'" Not used by JES2

Comment

```
EQU B'00000001' Not used by JES2 (reserved)
```

End of Comment

44	(2C)	ADDRESS	4	IOBDCBPT	ADDRESS OF DATA CONTROL BLOCK
48	(30)	CHARACTER	1	IOBREPM (0)	REPOSITION MODIFIER
48	(30)	ADDRESS	4	IOBRESTR	RESTART ADDRESS OF CHANNEL PROGRAM
52	(34)	CHARACTER	1	TPBMXREC (0)	MAXIMUM RJE OUTPUT RECORD COUNT
52	(34)	SIGNED	2	IOBINCAM	BLOCK COUNT INCREMENT
52	(34)	X'35'	0	IOBECBSV	"IOBINCAM+1,1" I/O COMPLETION SAVE AREA
54	(36)	SIGNED	2	IOBERRCT	ERROR COUNT
56	(38)	CHARACTER	1	TPBLCCC (0)	LAST REMOTE OUTPUT COMMAND OP.
56	(38)	ADDRESS	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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		End of fields that are a remapping of the IOB control block in the mapping macro IEZIOB. Note that last 4 bytes of IOBSEEK overlap TPBFDATA, which is not used in a buffer for DASD I/O.			
			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	BUFCHEQ	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)	BITSTRING	6	PPBCMQTR	Current punch
90	(5A)	CHARACTER	2	PPBCRCB	restart fields
92	(5C)	CHARACTER	1	PPBCBOFF	(keep together)
93	(5D)	BITSTRING	6	PPBNMQTR	Next punch
99	(63)	CHARACTER	2	PPBNRCB	restart fields
101	(65)	CHARACTER	1	PPBNBOFF	(keep together)
102	(66)	CHARACTER	2	PPBDISPL	OFFSET OF 2ND IOB BUFFER
60	(3C)	SIGNED	4	PPBLVCCC	LAST VALID CCW IN CURRENT AREA

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			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 neccessary bit definitions defined in corresponding DSECT.			

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
104	(68)	ADDRESS	2	(0)	See above

Comment

Start of data area in SPOOL buffers

End of Comment

104	(68)	DBL WORD	8	BUFSTART (0)	START OF BUFFER WORK SPACE

Comment

The following sub-section, generated by the SPID
macro, must reside immediately after the I/O control
data in every spool buffer.
The following fields are defined:
Eyecatcher - 4 bytes
Job name - 8 bytes
Job number - 4 bytes
Job key - 4 bytes
Dataset key - 4 bytes (or reserved if not applicable)

End of Comment

104	(68)	CHARACTER	4	HDBID	Eyecatcher
108	(6C)	CHARACTER	8	HDBJNAME	Job name
116	(74)	SIGNED	4	HDBJBNUM	Job number
120	(78)	BITSTRING	8	HDBKEY (0)	Record verification key
120	(78)	SIGNED	4	HDBJBKEY	Job key
124	(7C)	SIGNED	4	HDBDSKEY	Dataset key
124	(7C)	X'18'	0	HDBSPLNG	"*-HDBID"
128	(80)	SIGNED	4	HDBNXTRK	HASP DATA BLOCK CHAIN TRACK
132	(84)	SIGNED	4		Reserved
132	(84)	X'88'	0	HDBSTART	"*" HASP DATA BLOCK START

Comment

BSC TP buffer fields

End of Comment

104	(68)	DBL WORD	8	IOBCCW5	CHANNEL COMMAND WORD 5
112	(70)	DBL WORD	8	IOBCCW6	CHANNEL COMMAND WORD 6
120	(78)	DBL WORD	8	IOBCCW7	CHANNEL COMMAND WORD 7
128	(80)	DBL WORD	8	IOBCCW8	CHANNEL COMMAND WORD 8
128	(80)	X'70'	0	BUFIOBSZ	"*-IOBDSECT" IOB LENGTH
136	(88)	SIGNED	4	TPBUFST (0)	START OF REMOTE BUFFER WORK SPACE
136	(88)	X'F78'	0	$MAXTPBS	"(4096+7-(TPBUFST-BFPDSECT))/8*8" Max bisynch buffer size
136	(88)	X'7F00'	0	$SNABFMX	"(32768-256)" Max SNA buffer size

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
54	(36)	BITSTRING	1	SPBSTART (0)	START OF DATA SECTION OF BUFFER

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	SPBRECD	, START OF LOGICAL RECORD
0	(0)	BITSTRING	1	SPBRCB	RECORD RCB
1	(1)	BITSTRING	1	SPBSRCB	RECORD SRCB
2	(2)	BITSTRING	1	SPBTYPE	RECORD TYPE
3	(3)	BITSTRING	2	SPBDLEN	RECORD LENGTH FOR DATA RECORD
5	(5)	BITSTRING	1	SPBRDATA (0)	START OF DATA PORTION OF RECORD
5	(5)	X'0'	0	SPBHDR	"SPBRCB,*-SPBRCB" DISPL AND LENGTH OF RECORD HDR
5	(5)	X'3'	0	SPBEOFID	"SPBDLEN" EOF TYPE FOR EOF RECORD
				Comment	
				SPBTYPE DEFINITIONS	
				End of Comment	
5	(5)	X'1'	0	SPBTYPD	"1" TYPE IS DATA RECORD
5	(5)	X'2'	0	SPBTYPEF	"2" TYPE IS EOF RECORD
5	(5)	X'3'	0	SPBTYPEB	"3" TYPE IS END OF BUFFER RECORD
				Comment	
				SPBEOFID DEFINITIONS	
				End of Comment	
5	(5)	X'1'	0	SPBEOFOK	"1" NORMAL EOF REACHED
5	(5)	X'2'	0	SPBEOFAB	"2" ABNORMAL EOF REACHED
				Comment	
				SPBFLAG1 DEFINITIONS	
				End of Comment	
		1...		SPBSYNAD	"B'10000000'" PERM I/O ERROR HAS OCCURED
		.1..		SPBEODAD	"B'01000000'" END OF DATA HAS OCCURED
		..1.		SPBSKIP	"B'00100000'" BUFFER IS TO BE SKIPPED

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	BFD	Start of HAM buffer prefix
0	(0)	CHARACTER	4	BFDID	Buffer identifier
4	(4)	SIGNED	4	BFDBAT	Address of auxiliary buffer
8	(8)	ADDRESS	4	BFDCHAIN	Buffer chain field
12	(C)	BITSTRING	1	BFDTYPE	Buffer type (see BUFTYPE)
13	(D)	BITSTRING	1	BFDMIGT	Migration transition count captured from DAS when I/O is queued
14	(E)	SIGNED	2	BFDLEN	Length remaining in buffer
16	(10)	DBL WORD	8	(0)	Alignment for BFDCCWS
16	(10)	BITSTRING	56	BFDCCWS	CCWs for write processing
16	(10)	CHARACTER	8	BFDFSRBA	First seg spanned RBA addr
24	(18)	SIGNED	4	BFDSPNRG (4)	Suspended GET R2-R5
40	(28)	SIGNED	4	BFDSPNR9	R9 and
44	(2C)	SIGNED	4	BFDSPNRC	R12 save area
48	(30)	ADDRESS	4	BFDSCDR	SPOOL data record in UBF (indexed DS GET)
52	(34)	BITSTRING	7	BFDSCDWK	SCDR work area (part of BUFMEMD1)
59	(3B)	BITSTRING	1	BFDCCWRK	Carriage control work area
60	(3C)	BITSTRING	1	BFDFLAG3	More flags: (also part of BUFMEMD1)
		1...		BFD3RDYR	"B'10000000'" record with result of sym substitution is in a substitution buffer in SDBYSUBF

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
64	(40)	SIGNED	8	BFDCRECN	Current record number (also BUFMEMW1/BUFMEMW2)
72	(48)	ADDRESS	4	BFDSDB	In HAM, addr of owning SDB
72	(48)	X'48'	0	BFDPCE	"BFDSDB,4,C'A'" In HAM, addr of owning PCE
76	(4C)	BITSTRING	1	BFDECBCC (0)	I/O completion code
76	(4C)	SIGNED	4	BFDECB	ECB on which to wait (also BUFMEMW4)
80	(50)	BITSTRING	1	BFDFLAG1	Flag byte 1 (also BUFMEMF1)
		1...		BFD1EOB	"B'10000000'" END-OF-BUFFER indicator
		.1..		BFD1PUAC	"B'01000000'" PUT update active
		..1.		BFD1MQTR	"B'00100000'" BFDTRK contains an MQTR
		...1		BFD1ENDR	"B'00010000'" ENDREQ created buffer
		.... 1...		BFD1RSKP	"B'00001000'" Records skipped due to I/O error on GET
		Comment			
		BFDFLAG1 flags, for internal reader only			
		End of Comment			
		.... 1...		BFD1IEOF	"B'00001000'" PUT request for EOF
		.... .1..		BFD1IDEL	"B'00000100'" PUT req for DEL or PURGE
		.... ..1.		BFD1IERQ	"B'00000010'" ENDREQ request
		1		BFD1ICLS	"B'00000001'" CLOSE request
81	(51)	BITSTRING	1	BFDFLAG2	Flag byte 2 (also IOTFLAG5, BUFMEMF2)
		1...		BFD2CSDB	"B'10000000'" Buffer queue for HAM PUT
		.1..		BFD2CSFR	"B'01000000'" HAM PUT should free bfr
		..1.		BFD2RPBF	"B'00100000'" Try again to fill PBF
		...1		BFD2IOE	"B'00010000'" I/O error encountered
		.... 1...		BFD2PCE	"B'00001000'" PCE owns I/O
		.... .1..		BFD2SRBF	"B'00000100'" SRB failed to obtain bfr
		.... ..1.		BFD2MGSK	"B'00000010'" Skip migration processing
		1		BFD2SOVR	"B'00000001'" Source override - use source DAS for I/O
		Comment			

		BFDTRK/BFDTRKQ use BUFMEMF3/BUFMEMF4/BUFMEMW5			

		End of Comment			
82	(52)	BITSTRING	4	BFDTRK (0)	Track address of buffer
82	(52)	BITSTRING	6	BFDTRKQ	MQTR address of buffer
		Comment			

		BFDRBA uses BUFMEMW6/BUFMEMW7			

		End of Comment			
88	(58)	DBL WORD	8	(0)	Alignment for BFDRBA
88	(58)	CHARACTER	8	BFDRBA	Relative block address
96	(60)	ADDRESS	4	BFDTCB	TCB address for FREEMAIN
100	(64)	ADDRESS	4	BFDLOC	Current location in buffer
104	(68)	DBL WORD	8	BFDSTART (0)	Start of data in buffer
		Comment			

		Fields only used for substitution buffer (TYPE=SUBST).			

		End of Comment			
104	(68)	SIGNED	4	BFDYSLEN	Allocated buffer size
108	(6C)	SIGNED	4	BFDYSSAV (18)	Save area for HAM use

$BUFFER Cross Reference

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
180	(B4)	CHARACTER	20	BFDYSRCN	Left adjusted printable record number (logging)
200	(C8)	SIGNED	4	BFDYSRNL	Length of rec number
204	(CC)	CHARACTER	12	BFDYSTRN	Printable truncate position (used for logging)
216	(D8)	BITSTRING	1	BFDYSPRM (0)	Substitution service parameter list
216	(D8)	BITSTRING	1	(0)	End of SUBST fields
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	ADDRESS	2	(0)	
216	(D8)	X'1000'	0	BFDSIZE	"4096" Length of data set buffer
216	(D8)	X'798'	0	$MINBFSZ	"(2048+7-(BUFSTART-BFPDSECT))/8*8" Min HASP buffer size
216	(D8)	X'F98'	0	$MAXBFSZ	"(4096+7-(BUFSTART-BFPDSECT))/8*8" Max HASP buffer size

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	SCDREC	,
0	(0)	ADDRESS	1	SCDLEN	Length of record
1	(1)	BITSTRING	6	SCDSTCKE	STCKE of PUT
1	(1)	X'7'	0	SCDTSLEN	"*-SCDREC" Length of PUT timestamp

$BUFFER Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
$MAXBFSZ	D8	F98	BFDTRKQ	52	
$MAXTPBS	88	F78	BFDTYPE	C	
$MINBFSZ	D8	798	BFDYSLEN	68	
$SNABFMX	88	7F00	BFDYSPRM	D8	
BFD	0		BFDYSRCN	B4	
BFDBAT	4		BFDYSRNL	C8	
BFDCCWRK	3B		BFDYSSAV	6C	
BFDCCWS	10		BFDYSTRN	CC	
BFDCHAIN	8		BFD1ENDR	50	10
BFDCRECN	40		BFD1EOB	50	80
BFDECB	4C		BFD1ICLS	50	1
BFDECBCC	4C		BFD1IDEL	50	4
BFDFLAG1	50		BFD1IEOF	50	8
BFDFLAG2	51		BFD1IERQ	50	2
BFDFLAG3	3C		BFD1MQTR	50	20
BFDFSRBA	10		BFD1PUAC	50	40
BFDID	0		BFD1RSKP	50	8
BFDLEN	E		BFD2CSDB	51	80
BFDLOC	64		BFD2CSFR	51	40
BFDMIGT	D		BFD2IOE	51	10
BFDPCE	48	48	BFD2MGSK	51	2
BFDRBA	58		BFD2PCE	51	8
BFDSCDR	30		BFD2RPBF	51	20
BFDSCDWK	34		BFD2SOVR	51	1
BFDSDB	48		BFD2SRBF	51	4
BFDSIZE	D8	1000	BFD3RDYR	3C	80
BFDSPNRC	2C		BFPBAT	4	
BFDSPNRG	18		BFPDCT	10	
BFDSPNR9	28		BFPDSECT	0	
BFDSTART	68		BFPEWF	14	
BFDTCB	60		BFPID	0	
BFDTRK	52		BFPLEN	14	18

Name	Hex Offset	Hex Value
BFPSWEL	4	4
BFPTHMGR	E	80
BPMTBSC	C	1
BPMTCB	C	2
BPMTHAM	C	7
BPMTHASP	C	3
BPMTPAGE	C	4
BPMTPP	C	5
BPMTUSCB	C	FF
BPMTVTAM	C	6
BUFBPMT	C	7
BUFBSC	C	21
BUFCB	C	22
BUFCCFCB	D	1
BUFCHAIN	8	
BUFCHECB	44	
BUFCHEQ	44	
BUFCHNCT	42	
BUFCHOFF	41	
BUFDECB	C	8
BUFECBCC	D	
BUFFIX	C	80
BUFFLAG1	E	
BUFHASP	C	23
BUFIOB	C	20
BUFIOBSZ	80	70
BUFLOCAL	C	0
BUFMEM	64	38
BUFMEMD1	38	
BUFMEMF1	50	
BUFMEMF2	51	
BUFMEMF3	52	
BUFMEMF4	53	
BUFMEMW1	40	
BUFMEMW2	44	
BUFMEMW3	48	
BUFMEMW4	4C	
BUFMEMW5	54	
BUFMEMW6	58	
BUFMEMW7	5C	
BUFMFLG1	50	50
BUFMIGTC	F	
BUFMULT	C	40
BUFM1CKP	50	80
BUFM1CK2	50	40
BUFPAGE	C	24
BUFPP	C	25
BUFRPL	C	10
BUFSJIOB	60	
BUFSPXFR	C	C
BUFSTART	68	
BUFTYPE	C	
BUFVTAM	C	16
BUFWRTBK	64	
BUF1CHEN	E	8
BUF1DASD	E	4
BUF1EXVR	E	40
BUF1MIGO	E	1
BUF1PERM	E	10
BUF1REDO	E	2
BUF1SINT	E	20
BUF1WIN	E	40
HDBDSKEY	7C	
HDBID	68	
HDBJBKEY	78	
HDBJBNUM	74	
HDBJNAME	6C	
HDBKEY	78	
HDBNXTRK	80	
HDBSPLNG	7C	18
HDBSTART	84	88
IOBCCW1	48	
IOBCCW2	50	
IOBCCW3	58	
IOBCCW4	60	
IOBCCW5	68	
IOBCCW6	70	
IOBCCW7	78	
IOBCCW8	80	
IOBCC3WE	2C	40
IOBCEF	2C	10
IOBCMDCH	18	40
IOBCMD31	20	
IOBCSW	21	
IOBDCBPT	2C	
IOBDSECT	18	
IOBECBCC	1C	
IOBECBPT	1C	
IOBECBSV	34	35
IOBERRCT	36	
IOBFLAG1	18	
IOBFLAG2	19	
IOBFLAG3	20	
IOBFLAG4	2C	
IOBGDPOL	2C	80
IOBINCAM	34	
IOBIOERR	18	4
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	5C	
PPBCCWNX	4C	
PPBCMQTR	54	
PPBCRCB	5A	
PPBDISPL	66	
PPBFLAG1	40	40
PPBLVCCC	3C	
PPBLVCCN	50	
PPBNBOFF	65	
PPBNMQTR	5D	
PPBNRCB	63	
PPBPCIE	48	
SCDLEN	0	
SCDREC	0	
SCDSTCKE	1	
SCDTSLEN	1	7
SPBCHAN2	18	
SPBDLEN	3	

$BUFFER Cross Reference

Name	Hex Offset	Hex Value
SPBEODAD	5	40
SPBEOFAB	5	2
SPBEOFID	5	3
SPBEOFOK	5	1
SPBFDATA	1C	
SPBFLAG1	22	
SPBHDR	5	0
SPBRCB	0	
SPBRDATA	5	
SPBRECD	0	
SPBRECNT	20	
SPBSKIP	5	20
SPBSRCB	1	
SPBSTART	36	
SPBSYNAD	5	80
SPBTYPD	5	1
SPBTYPE	2	
SPBTYPEB	5	3
SPBTYPEF	5	2
TPBFDATA	3C	
TPBLCCAD	38	
TPBLCCC	38	
TPBMXREC	34	
TPBRECNT	3C	
TPBUFST	88	

$CADDR Information

$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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
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
				Comment	
				MODULE HASCARMS ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
8	(8)	ADDRESS	4	C@CPJAFF	Set local affinity
12	(C)	ADDRESS	4	C@CPJCLINI	Initialize PJCL queue
16	(10)	ADDRESS	4	C@CPJCLTRM	Terminate PJCL queue
				Comment	
				MODULE HASCARSO ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
20	(14)	ADDRESS	4	C@ARMEOJ	Notify ARM of end of job
				Comment	
				MODULE HASCBLDM ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
24	(18)	ADDRESS	4	C@$MSGDISR	$BLDMSG default display rtn
28	(1C)	ADDRESS	4	C@$MSGSCAN	$BLDMSG service routine
32	(20)	ADDRESS	4	C@$REPLY	$REPLY service routine
36	(24)	ADDRESS	4	C@PREJOBNM	Display current jobname
40	(28)	ADDRESS	4	C@PREREPGC	Display record/page count in HASP150 routine
				Comment	
				Module HASCCNVS routines listed alphabetically	
				End of Comment	
44	(2C)	ADDRESS	4	C@CALLCI	Convert and interpret a job
48	(30)	ADDRESS	4	C@CNVCLNUP	C/I subtask cleanup routine
52	(34)	ADDRESS	4	C@CNVSETUP	C/I subtask setup routine
56	(38)	ADDRESS	4	C@COPNPROC	PROCLIB OPEN/CLOSE routine
60	(3C)	ADDRESS	4	C@JCISUB	C/I subtask in C/I addrspac
64	(40)	ADDRESS	4	C@PROCALCS	Subtask PROCLIB allocation
68	(44)	ADDRESS	4	C@XCNRECOV	General CNVS subtask recov
72	(48)	ADDRESS	4	C@XINTKEY	Locate internal text string
76	(4C)	ADDRESS	4	C@XJDTKEY	Locate internal text string (JDT keyword)
				Comment	
				Module HASCDAU Routines Listed Alphabetically	
				End of Comment	
80	(50)	ADDRESS	4	C@$ALLDAU	Allocate daughter IOT
84	(54)	ADDRESS	4	C@$UALDAU	Unallocate daughter IOT
				Comment	
				MODULE HASCDSAL ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
88	(58)	ADDRESS	4	C@$DSCTBLD	Fill in DSCT
92	(5C)	ADDRESS	4	C@$PDBBLD	GET A PDDB SLOT ROUTINE
96	(60)	ADDRESS	4	C@$PDBDEFS	Default some PDDB fields
100	(64)	ADDRESS	4	C@HALFDSNR	Find data set name
104	(68)	ADDRESS	4	C@HALOMERG	Find MERGE=YES SWB

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
108	(6C)	ADDRESS	4	C@HALOPDBI	FINISH SYSOUT PDDB INIT
112	(70)	ADDRESS	4	C@HALRDCAT	Read data set catalog
116	(74)	ADDRESS	4	C@HALUNAL	UNALLOCATE A DATASET ROUTINE
120	(78)	ADDRESS	4	C@HIOTSPIN	SPIN THE ARGUMENT IOT
124	(7C)	ADDRESS	4	C@HNDUPDTE	Update SWB NOTIFY keyword
128	(80)	ADDRESS	4	C@HNOTIFY	Determine nodes/userids for notify msg
132	(84)	ADDRESS	4	C@HBSRBLDL	Rebuild syslog chain
136	(88)	ADDRESS	4	C@JESLOGC	JESLOG conversion routine
				Comment	
				MODULE HASCDSOC ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
140	(8C)	ADDRESS	4	C@DSOPEN	DATA SET OPEN ROUTINE
144	(90)	ADDRESS	4	C@HFEXFSPC	SPC Finalization
148	(94)	ADDRESS	4	C@HFEXJESL	Extend JESLOG data set
152	(98)	ADDRESS	4	C@HFEXSDET	JESLOG/Spin-any Spin determination
156	(9C)	ADDRESS	4	C@HFEXSPIN	Spin JESLOG/Spin-any D S
160	(A0)	ADDRESS	4	C@HFOPSUB	ACB FAKE OPEN ROUTINE
164	(A4)	ADDRESS	4	C@HOCSETUP	RESTART/OPEN/CLOSE SETUP ROUTINE
168	(A8)	ADDRESS	4	C@SSVCLSC	CONVERTER FAKE CLOSE
172	(AC)	ADDRESS	4	C@SSVOPNC	CONVERTER FAKE OPEN
				Comment	
				MODULE HASCDSS ENTRY POINT.	
				End of Comment	
176	(B0)	ADDRESS	4	C@$ALESERV	ALET management service
180	(B4)	ADDRESS	4	C@DSPSERV	Data space service entry
				Comment	
				Module HASCENF routines and tokens listed alphabetically.	
				End of Comment	
184	(B8)	ADDRESS	4	C@ENFISSUE	ENF issue service
188	(BC)	ADDRESS	4	K@ENF58CDC	Copy ENF 58 info to CDCT
192	(C0)	ADDRESS	4	K@ENF70CDC	Copy ENF 70 info to CDCT
				Comment	
				---------- The list of ENF routines must be contiguous and the routines must appear in the same order as the ENFREQ LISTENs appear in the $CSVLIST macro. ----------	
				End of Comment	
196	(C4)	ADDRESS	4	CADDRENFBEG (0)	Start of ENF entries
196	(C4)	ADDRESS	4	CADDR@ENF35	Code 35 - CF structure
200	(C8)	ADDRESS	4	CADDR#ENF35	status change
204	(CC)	ADDRESS	4	CADDR@ENF41GL	Code 41 - VARY WLM,POLICY=
208	(D0)	ADDRESS	4	CADDR#ENF41GL	in goal mode done
212	(D4)	ADDRESS	4	CADDR@ENF41CP	Code 41 - VARY WLM,POLICY=
216	(D8)	ADDRESS	4	CADDR#ENF41CP	in compatibility mode done
220	(DC)	ADDRESS	4	CADDR@ENF42	Code 42 - MODIFY WLM,

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
224	(E0)	ADDRESS	4	CADDR#ENF42	MODE=GOAL done
228	(E4)	ADDRESS	4	CADDR@ENF46	Code 46 - OMVS active
232	(E8)	ADDRESS	4	CADDR#ENF46	or inactive
236	(EC)	ADDRESS	4	CADDR@ENF51	Code 51 - GRS local ENQ
240	(F0)	ADDRESS	4	CADDR#ENF51	contention
244	(F4)	ADDRESS	4	CADDR@ENF56	Code 56 - RESET job
248	(F8)	ADDRESS	4	CADDR#ENF56	command issued
252	(FC)	ADDRESS	4	CADDR@ENF57CM	Code 57 - MODIFY WLM,
256	(100)	ADDRESS	4	CADDR#ENF57CM	RESOURCE command issued
260	(104)	ADDRESS	4	CADDR@ENF57RV	Code 57 - Scheduling chg
264	(108)	ADDRESS	4	CADDR#ENF57RV	due to WLM recovery
268	(10C)	ADDRESS	4	CADDR@ENF58NR	Code 58 - ENF for data set
272	(110)	ADDRESS	4	CADDR#ENF58NR	event
276	(114)	ADDRESS	4	CADDR@ENF62RL	Code 62 - RACF RACLIST
280	(118)	ADDRESS	4	CADDR#ENF62RL	class change
284	(11C)	ADDRESS	4	CADDR@ENF62RF	Code 62 - RACF RACLIST
288	(120)	ADDRESS	4	CADDR#ENF62RF	REFRESH class change
292	(124)	ADDRESS	4	CADDR@ENF62NR	Code 62 - RACF NORACLIST
296	(128)	ADDRESS	4	CADDR#ENF62NR	class change
300	(12C)	ADDRESS	4	CADDR@ENF70NR	Code 70 - JES job change
304	(130)	ADDRESS	4	CADDR#ENF70NR	event
304	(130)	X'E'	0	CADDRENFNUM	"(*-CADDRENFBEG)/8" Number of ENF entries
				Comment	
				MODULE HASCGGKY ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
308	(134)	ADDRESS	4	C@$GKGET	Get grouping keys
312	(138)	ADDRESS	4	C@$GKINIT	Initialize grouping keys
316	(13C)	ADDRESS	4	C@$GKTERM	Terminate grouping keys
				Comment	
				MODULE HASCGGST ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
320	(140)	ADDRESS	4	C@$GASSIGN	Assign grouping token
324	(144)	ADDRESS	4	C@$GSINIT	Initialize grouping strings
328	(148)	ADDRESS	4	C@$GSTERM	Terminate grouping strings
				Comment	
				Module HASCHAM routines listed alphabetically	
				End of Comment	
332	(14C)	ADDRESS	4	CADDR@HAMAVT	HAM appendage vector table, not for $CALL, data only
336	(150)	ADDRESS	4	C@HAMNULL	'Null' acsmeth interface
340	(154)	ADDRESS	4	C@HAMPSTER	HAM Post Exit routine
344	(158)	ADDRESS	4	C@HASPAMI	Access method interface

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
348	(15C)	ADDRESS	4	C@HGETCHN	Get next buffer/record
352	(160)	ADDRESS	4	K@HPOSTECB	Post a HAM ECB
				Comment	
				Module HASCINJR routines listed alphabetically	
				End of Comment	
356	(164)	ADDRESS	4	C@CCLSSYSI	Common CLOSE sysin data set
360	(168)	ADDRESS	4	C@CEXITACT	Accounting card exit (53)
364	(16C)	ADDRESS	4	C@CEXITCRD	RDR card exits (52 and 54)
368	(170)	ADDRESS	4	C@CINITJRW	Initialize new JRW
372	(174)	ADDRESS	4	C@CIOTCLN	Common clean up IOT service
376	(178)	ADDRESS	4	C@CIRDRPUT	Internal reader PUT service
380	(17C)	ADDRESS	4	C@CJOBBLD	Common job build service
384	(180)	ADDRESS	4	C@CJOBVFY	Common job verification
388	(184)	ADDRESS	4	C@CLEANJRW	Clean storage assoc w JRW
392	(188)	ADDRESS	4	C@CPROCCRD	Common JCL/JECL card proc
396	(18C)	ADDRESS	4	C@CPUT	Common JCL PUT service
400	(190)	ADDRESS	4	C@CSETVECT	Set routine address vector
404	(194)	ADDRESS	4	C@CSPLOPN	Common OPEN spool data set
408	(198)	ADDRESS	4	C@CXMTRTNE	Common XMIT processing rtn
412	(19C)	ADDRESS	4	C@IRCLNUP	Internal Reader Cleanup
				Comment	
				MODULE HASCJBST ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
416	(1A0)	ADDRESS	4	C@$ASDCCLR	ASDS entry clear
420	(1A4)	ADDRESS	4	C@$ASDCUPD	ASDS entry update
424	(1A8)	ADDRESS	4	C@BLDSYSDS	Build system data sets
428	(1AC)	ADDRESS	4	C@GRPINIT	Initialize grouping strings
432	(1B0)	ADDRESS	4	C@HFJOBLOG	PLACE TITLE IN JES2 JOB LOG
436	(1B4)	ADDRESS	4	C@HFJLOGTM	Add date line to JOB LOG
440	(1B8)	ADDRESS	4	C@HFJDLINE	Create date line
444	(1BC)	ADDRESS	4	C@HJE000	COMMON JOB TERMINATION ROUTINE
448	(1C0)	ADDRESS	4	C@HJSMAKSL	MAKE A SLOT FOR A SYSTEM PDDB
452	(1C4)	ADDRESS	4	C@JBFOUND	JOB SELECT SET UP ROUTINE
456	(1C8)	ADDRESS	4	C@JBSELECT	JOB SELECT SELECTION ROUTINE
460	(1CC)	ADDRESS	4	C@JOBSTATS	UPDATE JCT STATS ROUTINE
464	(1D0)	ADDRESS	4	C@JSOPSSDS	OPEN SUBSYSTEM DATASETS ROUTINE
468	(1D4)	ADDRESS	4	C@JSREOPEN	JOB SELECT DS REOPEN RTN
472	(1D8)	ADDRESS	4	C@SWAREAD	SWA read/relocate service
				Comment	
				MODULE HASCJBTR ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
476	(1DC)	ADDRESS	4	C@$UCBINDX	Reset Attn Index in UCB
480	(1E0)	ADDRESS	4	C@CLEANBAT	Cleanup BATs
484	(1E4)	ADDRESS	4	C@EOBLOB	Clean up BLOB
488	(1E8)	ADDRESS	4	C@EOTFDCON	ISSUE FSI DISCONNECT REQUEST
				Comment	
				MODULE HASCLINK ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
492	(1EC)	ADDRESS	4	C@$CGETABL	$GETABLE service routine
496	(1F0)	ADDRESS	4	C@$CRETANY	$RETURN SERVICE ROUTINE
500	(1F4)	ADDRESS	4	C@$CRETRN	$RETURN SERVICE ROUTINE
504	(1F8)	ADDRESS	4	C@$CSAVANY	$SAVE SERVICE ROUTINE

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
508	(1FC)	ADDRESS	4	C@$CSAVE	$SAVE SERVICE ROUTINE
512	(200)	ADDRESS	4	C@$DYNLPA	Dynamic LPA exit routine
516	(204)	ADDRESS	4	C@$ECBEXIT	ECB post processing exit
520	(208)	ADDRESS	4	C@$ECBPOST	Post ECB from POST exit
524	(20C)	ADDRESS	4	C@$FBUFRTN	Routine to free buffers with LOCAL lock held
528	(210)	ADDRESS	4	C@$FRECEL	FREE A CSA CELL
532	(214)	ADDRESS	4	C@$GETCEL	OBTAIN A CSA CELL
536	(218)	ADDRESS	4	K@$GETHP	HIGH PRIVATE STORAGE CELLS
540	(21C)	ADDRESS	4	C@$HGFMAIN	HGFMAIN GET/FREE MAIN SERVICES (REGS=SAVE/REGS=USE)
544	(220)	ADDRESS	4	K@$HGFMANK	HGFMAIN GET/FREE MAIN SERVICES (REGS=SYSTEM)
548	(224)	ADDRESS	4	C@$MLTFBUF	MULTIPLE BUFFER FREE ROUTINE
552	(228)	ADDRESS	4	K@$MODLOC	Locate a module (MVS style)
556	(22C)	ADDRESS	4	C@$MSDDUMP	Multi System Dump Routine
560	(230)	ADDRESS	4	C@$SSIAUTH	SSI authorization service
564	(234)	ADDRESS	4	C#$SSIAUTH	SSI auth PC number
568	(238)	ADDRESS	4	C@$SSIBEGN	SSI INTERFACE BEGIN ROUTINE
572	(23C)	ADDRESS	4	C@$SSIEND	SSI INTERFACE END ROUTINE
576	(240)	ADDRESS	4	C@$SYMREC	ENTRY TO $SYMREC ROUTINE
580	(244)	ADDRESS	4	C@ABNDADJ	Adjust ABEND loc for ILC
584	(248)	ADDRESS	4	C@ABNDSKIP	Determine if SDUMP needed
588	(24C)	ADDRESS	4	C@FINDMOD	Find LMT/MIT for a module containing a given address
592	(250)	ADDRESS	4	C@FRETRE	FREE TCB RECOVERY ELEMENT
596	(254)	ADDRESS	4	C@GETTRE	GET TCB RECOVERY ELEMENT
600	(258)	ADDRESS	4	C@FINDLMOD	Locate load module by addr
604	(25C)	ADDRESS	4	C@MBSCATTN	BSC CTC Attention routine
608	(260)	ADDRESS	4	C@RECOVERY	SSI RECOVERY ROUTINE
612	(264)	ADDRESS	4	C@SSIFINE	SSI INTERFACE FINISH ROUTINE
616	(268)	ADDRESS	4	C@SSISESTA	SSI $ESTAE ROUTINE
620	(26C)	ADDRESS	4	C@SSISETUP	SSI INTERFACE SETUP ROUTINE
624	(270)	ADDRESS	4	CADDR@CNTBITAB	TRT table for $CNTBIT macro
628	(274)	ADDRESS	4	CADDR@TRJNAME	Table for BAD_JOBNAME_CHAR

Comment

Module HASCNJAS entries listed alphabetically

End of Comment

632	(278)	ADDRESS	4	C@$FRETBUF	$FRETBUF service
636	(27C)	ADDRESS	4	C@$GETTBUF	$GETTBUF service
640	(280)	ADDRESS	4	C@$NSSTLOK	Obtain/Release NSST lock
644	(284)	ADDRESS	4	C@DELJ2SRV	Delete JES2 server addrspc
648	(288)	ADDRESS	4	C@GETJ2SRV	Start JES2 server addrspc

Comment

MODULE HASCNJE ROUTINES listed alphabetically

End of Comment

652	(28C)	ADDRESS	4	C@NJEFOPEN	NJE Fake Open
656	(290)	ADDRESS	4	C@NJEFREBF	Free NJE CB buffers
660	(294)	ADDRESS	4	C@NJEHBLD	NJE Header build routine
664	(298)	ADDRESS	4	C@NJEHDADD	Add NJE header section
668	(29C)	ADDRESS	4	C@NJEHDEXP	Expand NJE header section
672	(2A0)	ADDRESS	4	C@NJEHDMAK	Create NJE header
676	(2A4)	ADDRESS	4	C@NJEHDRDU	NJE header read routine
680	(2A8)	ADDRESS	4	C@NJEHDREM	Delete NJE header section
684	(2AC)	ADDRESS	4	C@NJEHDVAL	HDR/TRL Validate routine
688	(2B0)	ADDRESS	4	C@NJEHDWRU	NJE header write routine
692	(2B4)	ADDRESS	4	C@NJEPORCV	NJE post-receive header rtn
696	(2B8)	ADDRESS	4	C@NJEPRXMT	NJE pre-xmit header rtn
700	(2BC)	ADDRESS	4	C@NJETBLD	Build job trailer

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
704	(2C0)	ADDRESS	4	C@NJETRACE	NJE rolling trace
708	(2C4)	ADDRESS	4	C@HASPNACT	Entry to HASPNACT routine
712	(2C8)	ADDRESS	4	C@PREMG529	MSG529 $BLDMSG TEXT prescan
716	(2CC)	ADDRESS	4	C@RNODEBAD	Entry to RNODEBAD routine

Comment

Module HASCNJEX entries listed alphabetically

End of Comment

720	(2D0)	ADDRESS	4	C@NJEXARR	NJE/TCP recovery ARR
724	(2D4)	ADDRESS	4	C@NJEXASEA	Server early addrspc init
728	(2D8)	ADDRESS	4	C@NJEXASIN	Server addrspc init
732	(2DC)	ADDRESS	4	C@NJEXASRQ	Server addrspc request
736	(2E0)	ADDRESS	4	C@NJEXASTM	Server addrspc term
740	(2E4)	ADDRESS	4	C@NJEXCREQ	Connection Request
744	(2E8)	ADDRESS	4	C@NJEXIREC	Server inbound NCC/NMR
748	(2EC)	ADDRESS	4	C@NJEXISIN	Server inbound SYSIN
752	(2F0)	SIGNED	4	C#NJEXISIN	NJE/TCP inbound SYSIN PC
756	(2F4)	ADDRESS	4	C@NJEXISOT	Server inbound SYSOUT
760	(2F8)	SIGNED	4	C#NJEXISOT	NJE/TCP inbound SYSOUT PC
764	(2FC)	ADDRESS	4	C@NJEXOSIN	Server outbound SYSIN
768	(300)	SIGNED	4	C#NJEXOSIN	NJE/TCP outbound SYSIN PC
772	(304)	ADDRESS	4	C@NJEXOSOT	Server outbound SYSOUT
776	(308)	SIGNED	4	C#NJEXOSOT	NJE/TCP outbound SYSOUT PC
780	(30C)	ADDRESS	4	C@NJEXSTIN	Server subtask init
784	(310)	ADDRESS	4	C@NJEXSTNM	Server subtask message
788	(314)	SIGNED	4	C#NJEXSTNM	NJE/TCP subtask message PC
792	(318)	ADDRESS	4	C@NJEXSTRQ	Server subtask request
796	(31C)	SIGNED	4	C#NJEXSTRQ	NJE/TCP subtask request PC
800	(320)	ADDRESS	4	C@NJEXSTTM	Server subtask term
804	(324)	ADDRESS	4	C@NJEXTRAC	Tracing routine
808	(328)	SIGNED	4	C#NJEXTRAC	NJE/TCP general trace PC

Comment

Module HASCNJGP entries listed alphabetically

End of Comment

812	(32C)	ADDRESS	4	C@HA$CNJGP	Entry point for GP subtask
816	(330)	ADDRESS	4	C@NJGPRCOV	Recovery routine
820	(334)	ADDRESS	4	C@$CSUBIT	$SUBIT Routine

Comment

Module HASCNJJR entries listed alphabetically

End of Comment

824	(338)	ADDRESS	4	C@NJJRJOBH	Process NJE job header
828	(33C)	ADDRESS	4	C@NJJRMAIN	NETSRV addrspc main line
832	(340)	ADDRESS	4	C@NJJRTERM	Job rcvr resource cleanup
836	(344)	ADDRESS	4	C@NJOBWTO	Job rcvr notify message
840	(348)	ADDRESS	4	C@RNJEHDTR	Verify/expand job headers

Comment

Module HASCNJJT entries listed alphabetically

End of Comment

844	(34C)	ADDRESS	4	C@NJJTJOBH	Build job header
848	(350)	ADDRESS	4	C@NJJTJOBT	Build job trailer
852	(354)	ADDRESS	4	C@NJJTMAIN	NETSRV addrspc main line
856	(358)	ADDRESS	4	C@NJJTNTFY	Job Xmitter Notify Message
860	(35C)	ADDRESS	4	C@NJJTTERM	Job Xmitter Cleanup rtn

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
864	(360)	ADDRESS	4	C@NJTAUTH	JESSPOOL class authorizatin
				Comment	
				Module HASCNJRC entries listed alphabetically	
				End of Comment	
868	(364)	ADDRESS	4	C@NJEABSNP	Entry point for subtask
				Comment	
				Module HASCNJRQ entries listed alphabetically	
				End of Comment	
872	(368)	ADDRESS	4	C@HA$CNJRQ	Entry point for subtask
876	(36C)	ADDRESS	4	C@NJRQRCOV	Recovery routine
880	(370)	ADDRESS	4	C@NJRQENQ	Queue request to server
				Comment	
				Module HASCNJSR entries listed alphabetically	
				End of Comment	
884	(374)	ADDRESS	4	C@NJSRJOBH	Process NJE job header
888	(378)	ADDRESS	4	C@NJSRJOBT	Process NJE job trailer
892	(37C)	ADDRESS	4	C@NJSRMAIN	NETSRV addrspc main line
896	(380)	ADDRESS	4	C@NJSRNTFY	Process NJE notify message
900	(384)	ADDRESS	4	C@NJSRPDDB	Process dataset header
904	(388)	ADDRESS	4	C@NJSRSIGN	Build sign-on message
908	(38C)	ADDRESS	4	C@NJSRTERM	SYSOUT Receiver Cleanup rtn
912	(390)	ADDRESS	4	C@NJSRNCOD	Encode nodename
916	(394)	ADDRESS	4	C@NSRAUTH	NJE authority checking
920	(398)	ADDRESS	4	C@NJSROPTB	Extract OPTB values to PDDB
				Comment	
				MODULE HASCNJST ROUTINES listed alphabetically	
				End of Comment	
924	(39C)	ADDRESS	4	C@NJSTMAIN	NETSRV addrspc main line
928	(3A0)	ADDRESS	4	C@NJSTOPTB	OPTB section subroutine
932	(3A4)	ADDRESS	4	C@NJSTTERM	SYSOUT Xmitter Cleanup rtn
936	(3A8)	ADDRESS	4	C@NSTAUTH	Data set authorization rtn.
940	(3AC)	ADDRESS	4	C@NSTCDSH	Update dataset header
944	(3B0)	ADDRESS	4	C@NSTCJBH	Update Job Header
948	(3B4)	ADDRESS	4	C@NSTCJBT	Update Job Trailer
				Comment	
				Module HASCOFST entries listed alphabetically	
				End of Comment	
952	(3B8)	ADDRESS	4	CADDR@OCOOFFST	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.
				Comment	
				Module HASCPHAM routines listed alphabetically	
				End of Comment	
956	(3BC)	ADDRESS	4	C@ABEND722	Issue 722 ABEND
960	(3C0)	ADDRESS	4	C@ALCSSTB	Allocate substitution buf
964	(3C4)	ADDRESS	4	C#ALCSSTB	Allocate SST buf PC number

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
968	(3C8)	ADDRESS	4	C@ALCSBRY	Allocate SST buf ARR rtn
972	(3CC)	ADDRESS	4	C@CNIN2OUT	Convert SDB from input to output mode
976	(3D0)	ADDRESS	4	C@FREPBLOK	Free protected block
980	(3D4)	ADDRESS	4	C@FRESDBLK	Unserialize the SDB
984	(3D8)	ADDRESS	4	C@GETPBLOK	Obtain GET protected block
988	(3DC)	ADDRESS	4	C@GETSDBLK	Serialize the SDB
992	(3E0)	ADDRESS	4	C@HINTRDR	Prot INTRDR service entry
996	(3E4)	ADDRESS	4	C#HINTRDR	Prot INTRDR PC number
1000	(3E8)	ADDRESS	4	C@HINTRREC	Prot INTRDR recovery rtn
1004	(3EC)	ADDRESS	4	C@HIOCHECK	Start HAM I/O if needed
1008	(3F0)	ADDRESS	4	C#HIOCHECK	Start HAM I/O PC number
1012	(3F4)	ADDRESS	4	C@HIOCKRY	Start HAM I/O recovery rtn
1016	(3F8)	ADDRESS	4	C@HMIGTRK	Track processing during volume migration
1020	(3FC)	ADDRESS	4	C@HPUTFULL	Write complete HDB/IOT
1024	(400)	ADDRESS	4	C@HWAITBUF	Wait for all I/O to end
1028	(404)	ADDRESS	4	C@LOGISST	Log symbol substitution
1032	(408)	ADDRESS	4	C#LOGISST	Log sym subst PC number
1036	(40C)	ADDRESS	4	C@LOGSTRY	Log sym subst recovery rtn
1040	(410)	ADDRESS	4	C@OBTGBAT	Obtain BAT for GET request
1044	(414)	ADDRESS	4	C@PROTENDR	Protected Endreq entry pt
1048	(418)	ADDRESS	4	C#PROTENDR	Protected Endreq PC number
1052	(41C)	ADDRESS	4	C@PRENRREC	Protected Endreq recov rtn
1056	(420)	ADDRESS	4	C@PROTGET	Protected Get entry point
1060	(424)	ADDRESS	4	C#PROTGET	Protected Get PC number
1064	(428)	ADDRESS	4	C@PRGETREC	Protected Get recovery rtn
1068	(42C)	ADDRESS	4	C@PROTPUT	Protected Put entry point
1072	(430)	ADDRESS	4	C#PROTPUT	Protected Put PC number
1076	(434)	ADDRESS	4	C@PRPUTREC	Protected Put recovery rtn
1080	(438)	ADDRESS	4	C@PROTPNT	Protected Point entry point
1084	(43C)	ADDRESS	4	C#PROTPNT	Protected Point PC number
1088	(440)	ADDRESS	4	C@PRPNTREC	Protected Point recovery rt
1092	(444)	ADDRESS	4	C@PROTSRB	Protected Get SRB entry pnt
1096	(448)	ADDRESS	4	C#PROTSRB	Protected Get SRB PC number
1100	(44C)	ADDRESS	4	C@PRSRBREC	Protected SRB recovery rtn
1104	(450)	ADDRESS	4	C@RELGBAT	Release BAT for GET request
1108	(454)	ADDRESS	4	C@SVCADDCT	Add packed decimal
1112	(458)	ADDRESS	4	C@UPDDSCA	Update current DSCA pointer
Comment					
MODULE HASCPOOL ROUTINES LISTED ALPHABETICALLY					
End of Comment					
1116	(45C)	ADDRESS	4	C@CPBUILD	CPool build entry point
1120	(460)	ADDRESS	4	C#CPBUILD	CPool build PC number
1124	(464)	ADDRESS	4	C@CPBREC	CPool build recovery rtn
1128	(468)	ADDRESS	4	C@CPCONTRA	CPool contract service
1132	(46C)	ADDRESS	4	C#CPCONTRA	CPool contract PC number
1136	(470)	ADDRESS	4	C@CPCREC	CPool contract recovery rtn
1140	(474)	ADDRESS	4	C@CPDELETE	CPool delete entry point
1144	(478)	ADDRESS	4	C#CPDELETE	CPool delete PC number
1148	(47C)	ADDRESS	4	C@CPDREC	CPool delete recovery rtn
1152	(480)	ADDRESS	4	C@CPEXPAND	CPool expand entry point
1156	(484)	ADDRESS	4	C#CPEXPAND	CPool expand PC number
1160	(488)	ADDRESS	4	C@CPXREC	CPool expand recovery rtn
1164	(48C)	ADDRESS	4	C@CPFREE	CPool free entry point
1168	(490)	ADDRESS	4	C#CPFREE	CPool free PC number
1172	(494)	ADDRESS	4	C@CPFREC	CPool free recovery rtn
1176	(498)	ADDRESS	4	C@CPGET	CPool get entry point
1180	(49C)	ADDRESS	4	C#CPGET	CPool get PC number
1184	(4A0)	ADDRESS	4	C@CPGREC	CPool get recovery rtn
1188	(4A4)	ADDRESS	4	C@CPINIT	CPool initialization
1192	(4A8)	ADDRESS	4	C@CPMODIFY	CPool modify entry point
1196	(4AC)	ADDRESS	4	C#CPMODIFY	CPool modify PC number

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1200	(4B0)	ADDRESS	4	C@CPMREC	CPool modify recovery rtn
1204	(4B4)	ADDRESS	4	C@CPQCELL	CPool query cell entry pt
1208	(4B8)	ADDRESS	4	C#CPQCELL	CPool query call PC number
1212	(4BC)	ADDRESS	4	C@CPQCREC	CPool query cell recovery
1216	(4C0)	ADDRESS	4	C@CPQEXT	CPool query extent entry pt
1220	(4C4)	ADDRESS	4	C#CPQEXT	CPool query extent PC numb
1224	(4C8)	ADDRESS	4	C@CPQXREC	CPool query extent recovery
1228	(4CC)	ADDRESS	4	C@CPQPOOL	CPool query pool entry pt
1232	(4D0)	ADDRESS	4	C#CPQPOOL	CPool query pool PC number
1236	(4D4)	ADDRESS	4	C@CPQPREC	CPool query pool recovery
1240	(4D8)	ADDRESS	4	C@CPTERM	CPool termination
1244	(4DC)	ADDRESS	4	CADDR@CPLTABS	CPool table of JES2 pools, not for $CALL, data only
				Comment	
				MODULE HASCQUEU ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
1248	(4E0)	ADDRESS	4	K@AVLINST	AVL tree insert
1252	(4E4)	ADDRESS	4	K@AVLTRVS	AVL tree traversal
				Comment	
				MODULE HASCRQUE ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
1256	(4E8)	ADDRESS	4	C@$RQUEACT	Activate service
1260	(4EC)	ADDRESS	4	C@$RQUECMP	Wait for completion
1264	(4F0)	ADDRESS	4	C@$RQUEDEA	Deactivate service
1268	(4F4)	ADDRESS	4	C@$RQUEDEQ	Dequeue MTRB service
1272	(4F8)	ADDRESS	4	C@$RQUEEXE	Execute request
1276	(4FC)	ADDRESS	4	C@$RQUEGET	Get request
1280	(500)	ADDRESS	4	C@$RQURET	Return request
				Comment	
				Module HASCSAPI Routines listed alphabetically	
				End of Comment	
1284	(504)	ADDRESS	4	C@CSPEOX	Scan SAPIDs for terminating TCB or memory
				Comment	
				Module HASCSCAN Routines listed alphabetically	
				End of Comment	
1288	(508)	ADDRESS	4	C@$SCAN	$SCAN main routine
1292	(50C)	ADDRESS	4	C@$SCANB	$SCANB service routine
1296	(510)	ADDRESS	4	C@$SCANCOM	$SCANCOM service routine
1300	(514)	ADDRESS	4	C@$SCAND	$SCAN Main routine
1304	(518)	ADDRESS	4	C@BACKRETN	BACKRETN Service Routine
1308	(51C)	ADDRESS	4	C@PREDNAME	PRESCAN to display keyword
1312	(520)	ADDRESS	4	C@PREFILT	Prescan to apply filters
1316	(524)	ADDRESS	4	C@RESTORE	RESTORE Service Routine
1320	(528)	ADDRESS	4	C@SCANDIAG	$SCANDIA Service routine
1324	(52C)	ADDRESS	4	C@SCNDBRNG	RESTORE Service Routine
1328	(530)	ADDRESS	4	CADDR@SCNDIAGT	Diagnostic message table
1332	(534)	ADDRESS	4	C@SCNDGRTN	RESTORE Service Routine
1336	(538)	ADDRESS	4	C@SCNDVVAL	RESTORE Service Routine

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
		MODULE HASCSIJI ROUTINES LISTED ALPHABETICALLY			
				End of Comment	
1340	(53C)	ADDRESS	4	C@DATASERV	JOB INFORMATION SERVICE
1344	(540)	ADDRESS	4	C@REFRDSRV	Refresh non-CKPT data
				Comment	
		Module HASCSIJP routines listed alphabetically			
				End of Comment	
1348	(544)	ADDRESS	4	K@JPXIBLD	Build JESplex info array subroutine
1352	(548)	ADDRESS	4	C@PRIPRINI	Initiator processing entry
1356	(54C)	ADDRESS	4	C@PRITORD	Initiator data SSI
1360	(550)	ADDRESS	4	C@PRJPCLS	Job class data SSI
1364	(554)	ADDRESS	4	C@PRJPLEX	JESplex data SSI
1368	(558)	ADDRESS	4	C@PRJPNJN	NJE node SSI
1372	(55C)	ADDRESS	4	C@PRJPSPL	Spool data SSI
1376	(560)	ADDRESS	4	K@PRSMIGD	Spool data SSI - Migration data subroutine
				Comment	
		MODULE HASCSIRQ ROUTINES LISTED ALPHABETICALLY			
				End of Comment	
1380	(564)	ADDRESS	4	C@$DESTCHK	AUTHORIZE TRANSMIT TO DEST
1384	(568)	ADDRESS	4	C@$NOTIFY	Send notify message
1388	(56C)	ADDRESS	4	K@MCSFLUSH	MCS flush routine
1392	(570)	ADDRESS	4	C@TSCNVJB	CONVERT EXT JOB ID TO JOB NUM
1396	(574)	ADDRESS	4	K@USERDEST	VERIFY DESTINATION
1400	(578)	ADDRESS	4	C@USERSUB	USER/SUBTASK EXIT EFFECTOR
1404	(57C)	ADDRESS	4	C@USRNEWND	Assign new node to dest
1408	(580)	ADDRESS	4	C@WTALOGQ	Flush S35D Joblog queue
1412	(584)	ADDRESS	4	C@WTASRBQI	Schedule JOBLOG SRB immed
				Comment	
		Module HASCSISC routines listed alphabetically			
				End of Comment	
1416	(588)	ADDRESS	4	K@CNVDEVID	Convert DEVID to EBCDIC
1420	(58C)	ADDRESS	4	K@CRJOES	Create JOEs from PDDB
1424	(590)	ADDRESS	4	C@CVDEVID	Process device ID to name conversion
1428	(594)	ADDRESS	4	K@ESWFREE	Free ESWORK area
1432	(598)	ADDRESS	4	K@MODJXACK	MODJOB ACK rsp msg exit rtn
1436	(59C)	ADDRESS	4	C@PRJBCLD	Process job class info
1440	(5A0)	ADDRESS	4	C@PRSPLIO	Process spool I/O info
				Comment	
		Module HASCSJFA Routines Listed Alphabetically			
				End of Comment	
1444	(5A4)	ADDRESS	4	C@HSJFACC	MVS SJFACC Routine
				Comment	
		Module HASCSJFS Routines Listed Alphabetically			
				End of Comment	
1448	(5A8)	ADDRESS	4	C@HASJFREQ	SJFREQ Service Routine

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1452	(5AC)	ADDRESS	4	C@HASJIDST	IPADDR/DEST Process - CSJFS
1456	(5B0)	ADDRESS	4	C@SFLOPDDB	Locate PDDB using CTOKEN
1460	(5B4)	ADDRESS	4	C@SJFSWBRD	SWB Read Service Routine
1464	(5B8)	ADDRESS	4	C@SWBTUMRG	SWB Merge Service Routine
1468	(5BC)	ADDRESS	4	C@TUXTRACT	TU extraction - HASCSJFS
				Comment	
				Module HASCSRAX routines listed alphabetically	
				End of Comment	
1472	(5C0)	ADDRESS	4	C@GETJ2AUX	Access aux address space
1476	(5C4)	ADDRESS	4	C@DELJ2AUX	Delete aux address space
1480	(5C8)	ADDRESS	4	C@SRX9177	Issue HASP9177 for cross system data retrieval
				Comment	
				Module HASCSRCI routines listed alphabetically	
				End of Comment	
1484	(5CC)	ADDRESS	4	C@CMNFCICB	Free CICB data area
1488	(5D0)	ADDRESS	4	C@CMNINIT	JES2 C/I address space init
1492	(5D4)	ADDRESS	4	C@CMNPPROC	Mange C/I addrspac PROCLIBs
1496	(5D8)	ADDRESS	4	C@CMNPSUBT	Mange JES2 C/I subtask
1500	(5DC)	ADDRESS	4	C@DELJ2CI	Delete C/I subtask/AS
1504	(5E0)	ADDRESS	4	C@GETJ2CI	Create C/I subtask/AS
1508	(5E4)	ADDRESS	4	C@J2CIREC	JES2 C/I main task recovery
				Comment	
				MODULE HASCSRDS ROUTINES LISTED ALPHABETICALLY	
				End of Comment	
1512	(5E8)	ADDRESS	4	K@$CBIO	CONTROL BLOCK I/O ROUTINE ADDR
1516	(5EC)	ADDRESS	4	C@$FNDRIOT	FIND REUSEABLE SPIN IOT
1520	(5F0)	ADDRESS	4	C@$IOTBLD	BUILD AN IOT ROUTINE
1524	(5F4)	ADDRESS	4	C@$PDBFIND	FIND A PDDB ROUTINE
1528	(5F8)	ADDRESS	4	C@$PDBNEXT	Find next PDDB same key
1532	(5FC)	ADDRESS	4	C@$SDBCHEK	Verify a SDB/DCT routine
1536	(600)	ADDRESS	4	C@$SDBFREE	FREE AN SDB
1540	(604)	ADDRESS	4	C@$SDBINIT	INITIALIZE AN SDB
1544	(608)	ADDRESS	4	C@$VERIFY	$VERIFY SERVICE ROUTINE ADDRESS
1548	(60C)	ADDRESS	4	C@ASOKADD	Add ASOK for SDB
1552	(610)	ADDRESS	4	C@ASOKDEL	Delete ASOK for SDB
1556	(614)	ADDRESS	4	C@ASOKGC	Garbage collect ASOKs
1560	(618)	ADDRESS	4	C@DSNCMP	SYSIN/SYSOUT DATASET COMPRESS
1564	(61C)	ADDRESS	4	C@DSNVFY	SYSIN/SYSOUT DATASET VERIFY
1568	(620)	ADDRESS	4	C@DSNMSRV	SYSIN/SYSOUT Dataset Name service
1572	(624)	ADDRESS	4	C@ENF58BLD	Build ENF58 parm lists
1576	(628)	ADDRESS	4	C@HALCLASS	CHECK SYSOUT CLASS FOR HOLD RTN
1580	(62C)	ADDRESS	4	C@HALUPCAT	Update data set catalog
1584	(630)	ADDRESS	4	CADDR@HASPVTAB	$VERIFY control block table
1588	(634)	ADDRESS	4	C@HCBCK	CHECKPOINT HASP CONTROL BLOCKS
1592	(638)	ADDRESS	4	C@HCBFM	FREEMAIN CONTROL BLOCK STORAGE
1596	(63C)	ADDRESS	4	C@HCBGM	GETMAIN CONTROL BLOCK STORAGE
1600	(640)	ADDRESS	4	C@HFCLSUB	FAKE CLOSE DATASETS
1604	(644)	ADDRESS	4	C@HFCLTRNC	TRUNCATE A BUFFER ROUTINE
1608	(648)	ADDRESS	4	C@HJSRETAB	REBUILD SDB TAB
1612	(64C)	ADDRESS	4	C@HONEWOUT	OPEN NEW OUTPUT DATASET RTN
1616	(650)	ADDRESS	4	C@HOOLDINP	OPEN OLD INPUT DATASET RTN
1620	(654)	ADDRESS	4	C@HOOLDOUT	OPEN OLD OUTPUT DATASET RTN
1624	(658)	ADDRESS	4	C@JSMTSRV	Job symbol table service
1628	(65C)	ADDRESS	4	C@MQTRVAL	Validate MQTR routine

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1632	(660)	ADDRESS	4	C@MQTR0VAL	Validate MQTR (R = 0 OK)
1636	(664)	ADDRESS	4	C@MTTRVAL	VALIDATE MTTR ROUTINE
1640	(668)	ADDRESS	4	C@MTTR0VAL	Validate MTTR (R = 0 OK)
1644	(66C)	ADDRESS	4	C@OLDJOE	Old JOE
1648	(670)	ADDRESS	4	C@PDDBUPD	Update PDDB
1652	(674)	ADDRESS	4	C@SIGIOU	Signature Rcd I/O Routine
1656	(678)	ADDRESS	4	C@SYMTT	Generate SIGIO SYMREC rtn
1660	(67C)	ADDRESS	4	C@SYSOVFY	SYSOUT validation routine
1664	(680)	ADDRESS	4	C@USENF58	User environment ENF58 rtn
Comment					
MODULE HASCSRIC ROUTINES LISTED ALPHABETICALLY					
End of Comment					
1668	(684)	ADDRESS	4	C@$$POST	POST HASP TASK
1672	(688)	ADDRESS	4	K@$BITMAP	$BITMAP service
1676	(68C)	ADDRESS	4	C@$MGIOMSG	SEND MIGRATION MESSAGE FOR BUFFER MAIN TASK I/O.
1680	(690)	ADDRESS	4	C@$MGIOSJM	SEND MIGRATION MESSAGE FOR SJIOB MAIN TASK I/O.
1684	(694)	ADDRESS	4	C@$RACROUT	ISSUE SAF CALL
1688	(698)	ADDRESS	4	C@$STRAK	ALLOCATE TRACK ADDRESS
1692	(69C)	ADDRESS	4	C@$SVJLOK	GET JOB COM QUEUES LOCK RTN
1696	(6A0)	ADDRESS	4	C@$SVJLOK2	Secondary locking routine
1700	(6A4)	ADDRESS	4	C@$SVJTEST	TEST FOR JCQ LOCK OWNERSHIP
1704	(6A8)	ADDRESS	4	C@$SVJUNLK	RELEASE JOB COM QUEUES LOCK RTN
1708	(6AC)	ADDRESS	4	C@$TRACER	EVENT TRACE FACILITY
1712	(6B0)	ADDRESS	4	C@$TRAREL	$TRACE RELEASE ENTRY POINT
1716	(6B4)	ADDRESS	4	C@$TRCFILT	$TRACE filter routine
1720	(6B8)	ADDRESS	4	C@$VFLI	SIMULATE VFL INSTRUCTION
1724	(6BC)	ADDRESS	4	C@$XMPOST	CROSS MEMORY POST ROUTINE
1728	(6C0)	ADDRESS	4	C@$XMPOSTX	Extended cross memory post
1732	(6C4)	ADDRESS	4	C@BERTREAD	CSA $DOGBERT Fetch support
1736	(6C8)	ADDRESS	4	C@BRTCOUNT	BERT count service
1740	(6CC)	ADDRESS	4	C@CATBFREE	Free unused $CATBERT
1744	(6D0)	ADDRESS	4	K@CATREAD	CSA $DOGCAT Fetch support
1748	(6D4)	ADDRESS	4	C@CATTREE	CAT tree support
1752	(6D8)	ADDRESS	4	C@CKPTVERS	Obtain/release ckpt version
1756	(6DC)	ADDRESS	4	K@DJBREAD	CSA $DOGDJB Fetch support
1760	(6E0)	ADDRESS	4	C@DOMCHECK	Seclabel Dominance check
1764	(6E4)	ADDRESS	4	C@FIFOBLK	FIFO Block/Release
1768	(6E8)	ADDRESS	4	C@FIFODEQ	Remove elmnt from FIFO que
1772	(6EC)	ADDRESS	4	C@FIFOENQ	Place element on FIFO queue
1776	(6F0)	ADDRESS	4	C@FIFOGTQ	Dechain entire FIFO queue
1780	(6F4)	ADDRESS	4	K@GOFDSERV	GET/FREE DSERV addr
1784	(6F8)	ADDRESS	4	C@GRPASGN	ASSIGN GROUPING TOKEN
1788	(6FC)	ADDRESS	4	C@HCNVTIME	USED BY C/T FOR A TOD CONVERSION ROUTINE IN HASCSRIC
1792	(700)	ADDRESS	4	C@HKYMERGE	MERGE OUTPUT JCL KEYWORDS RTN
1796	(704)	ADDRESS	4	C@HOSWB	GET SWB ERROR ROUTINE
1800	(708)	ADDRESS	4	C@HSJFLSP	FREE SJF STORAGE ROUTINE
1804	(70C)	ADDRESS	4	K@JOEREAD	CSA $DOGJOE Fetch support
1808	(710)	ADDRESS	4	K@JQEREAD	CSA $DOGJQE Fetch support
1812	(714)	ADDRESS	4	C@PPSOSJB	PURGE PSO FROM SJB ROUTINE
1816	(718)	ADDRESS	4	C@PREWTO	WTO PREPROCESSING ROUTINE
1820	(71C)	ADDRESS	4	C@PRTAUTH	JESNEWS & SYSOUT DATA SET AUTHORIZATION
1824	(720)	ADDRESS	4	C@PSQUEUE	PSO QUEUE ROUTINE
1828	(724)	ADDRESS	4	C@RECABORT	PSO,STATUS,CANCEL recovery
1832	(728)	ADDRESS	4	C@RRWTORTN	Issue chain of WTO msgs
1836	(72C)	ADDRESS	4	C@SECLEXTR	SECLABEL extract affinity
1840	(730)	ADDRESS	4	C@SSVXDEF	EXIT DEFINITION ROUTINE
1844	(734)	ADDRESS	4	C@TBADTGBQ	Queue bad TGB to HASPSPOL
1848	(738)	ADDRESS	4	C@TOKENSR	TOKEN retrieve service
1852	(73C)	ADDRESS	4	C@TRKCELL	Track Cell allocation
1856	(740)	ADDRESS	4	C#TRKCELL	Track Cell allocation PC #

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1860	(744)	ADDRESS	4	C@TRKCELLA	Track Cell allocation ARR
1864	(748)	ADDRESS	4	C@TSETLOCK	GET LOCAL AND CMS LOCKS ROUTINE
1868	(74C)	ADDRESS	4	C@TSFRELOK	FREE LOCAL AND CMS LOCKS RTN
1872	(750)	ADDRESS	4	K@WSCREAD	CSA $WSCJQE Fetch support
1876	(754)	ADDRESS	4	C@XBFPITCH	JESXCF directed PROTSRB
1880	(758)	ADDRESS	4	C@XCFXMBN	Build JESXCF member name for XSYS data rtv group
1884	(75C)	ADDRESS	4	C@XMXSRB	Extended post SRB routine
1888	(760)	ADDRESS	4	C@XMXRMTR	Extended post RMTR routine
1892	(764)	ADDRESS	4	C@XSYSINIT	Init cross system interface for data retrieval
1896	(768)	ADDRESS	4	C@XSYSTERM	Term cross system interface for data retrieval

Comment

Module HASCSRIP Routines Listed Alphabetically

End of Comment

1900	(76C)	ADDRESS	4	C@$LOGMSG	JOBLOG/SYSMSGS access rtn
1904	(770)	ADDRESS	4	C@CJOBKILL	Abort job
1908	(774)	ADDRESS	4	C@CJOBEND	Job end processing
1912	(778)	ADDRESS	4	C@HASPRCCS	Control Card (JECL) scan
1916	(77C)	ADDRESS	4	C@HASPRDDS	Dataset services
1920	(780)	ADDRESS	4	C@HASPRSCN	Accounting field scan rtn
1924	(784)	ADDRESS	4	C@JOBCLASV	Job class validation
1928	(788)	ADDRESS	4	C@JOBCLVAL	Job class - subtask
1932	(78C)	ADDRESS	4	C@JOBVALM	Job validation
1936	(790)	ADDRESS	4	C@RACCTSET	Parse ACCT field for SAF
1940	(794)	ADDRESS	4	C@RANLZCRD	Analyze New Card Image
1944	(798)	ADDRESS	4	C@RCARDSCN	Scan keywords on JCL/JECL
1948	(79C)	ADDRESS	4	C@RDELRJCB	Delete all queued RJCBs
1952	(7A0)	ADDRESS	4	C@RDELWTO	Job deleted WTO
1956	(7A4)	ADDRESS	4	C@RESTINFO	Scan keywords on JCL/JECL
1960	(7A8)	ADDRESS	4	C@REXTENMG	Extend msgs with FROM info
1964	(7AC)	ADDRESS	4	C@RFRERJCB	Free one/all RJCBs
1968	(7B0)	ADDRESS	4	C@RGETRJCB	Get an RJCB
1972	(7B4)	ADDRESS	4	C@RGETSPOF	Get SPOF section
1976	(7B8)	ADDRESS	4	C@RJOBDEF	Set JQE/JCT defaults
1980	(7BC)	ADDRESS	4	C@RJOBONMG	Issue ON READER message
1984	(7C0)	ADDRESS	4	C@RMSGQUE	Queue message to be issued
1988	(7C4)	ADDRESS	4	C@RNJCOMSG	NJE skipping message
1992	(7C8)	ADDRESS	4	C@RNJEONMG	NJE S&F ON READER message
1996	(7CC)	ADDRESS	4	C@RPDBBLD	Create system PDDBs
2000	(7D0)	ADDRESS	4	C@RPDBINIT	Complete system PDDBs
2004	(7D4)	ADDRESS	4	C@RPDBSEC	System PDDB init routine
2008	(7D8)	ADDRESS	4	C@RPROCJCL	Process JCL statement
2012	(7DC)	ADDRESS	4	C@RPRCRCCS	Process RCCS header
2016	(7E0)	ADDRESS	4	C@RPSTCXIT	Post exits 2,4,52,54 proc
2020	(7E4)	ADDRESS	4	C@RPUTSCAN	Stip PASSWORDs at PUT

Comment

MODULE HASCSRJB ROUTINES LISTED ALPHABETICALLY

End of Comment

2024	(7E8)	ADDRESS	4	K@$JBIDBLD	JOB ID BUILD ROUTINE
2028	(7EC)	ADDRESS	4	K@$JCORBLD	Job Correlator build rtn
2032	(7F0)	ADDRESS	4	C@$JCTINIT	Initialize a JCT
2036	(7F4)	ADDRESS	4	C@$JQESERV	JQE Request service
2040	(7F8)	ADDRESS	4	K@$QLOCC	Locate JQE for a job #
2044	(7FC)	ADDRESS	4	C@$SJBFIND	FIND AN SJB
2048	(800)	ADDRESS	4	C@$SJBLOCK	LOCK AN SJB
2052	(804)	ADDRESS	4	C@$SJBRQ	REQUEUE AN SJB
2056	(808)	ADDRESS	4	C@$SJBUNLK	UNLOCK AN SJB
2060	(80C)	ADDRESS	4	C@AUDSAF	Audit job removal
2064	(810)	ADDRESS	4	C@ENF70BLD	Build ENF 70 parm lists

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
2068	(814)	ADDRESS	4	C@ENF78BLD	Build ENF 78 parm lists
2072	(818)	ADDRESS	4	C@FREEJCT	Free JCT and related stor
2076	(81C)	ADDRESS	4	C@HETSOUT	SAVES STATUS ON INTERRUPT
2080	(820)	ADDRESS	4	C@SJBFREE	FREE AN SJB
2084	(824)	ADDRESS	4	C@SJBINIT	CREATE AN SJB
2088	(828)	ADDRESS	4	K@SJIOBINT	SJIOB initialization
2092	(82C)	ADDRESS	4	C@STEALOCK	Steal SJB/SDB lock
2096	(830)	ADDRESS	4	C@USENF70	Issue ENF 70

Comment

Module HASCSRJM routines listed alphabetically

End of Comment

2100	(834)	ADDRESS	4	C@GETJ2MON	Access monitor addr space
2104	(838)	ADDRESS	4	C@DELJ2MON	Delete monitor addr space
2108	(83C)	ADDRESS	4	C@MONSSIRQ	Monitor SSI request service

Comment

Module HASCUBSR routines listed alphabetically

End of Comment

2112	(840)	ADDRESS	4	C@UBSRB	Unwritten buffer SRB rtn

Comment

Module HASCXJCT routines listed alphabetically

End of Comment

2116	(844)	ADDRESS	4	C@$JCTXADD	Add $JCT extension
2120	(848)	ADDRESS	4	C@$JCTXEXP	Expand $JCT extension
2124	(84C)	ADDRESS	4	C@$JCTXGET	Locate $JCT extension
2128	(850)	ADDRESS	4	C@$JCTXREM	Delete $JCT extension

Comment

MVS entry points listed alphabetically

End of Comment

2132	(854)	ADDRESS	4	C@CSRC4ACT	MVS CPOOL Activate extent
2136	(858)	ADDRESS	4	C@CSRC4BLD	MVS CPOOL Build routine
2140	(85C)	ADDRESS	4	C@CSRC4CON	MVS CPOOL Connect storage
2144	(860)	ADDRESS	4	C@CSRC4DAC	MVS CPOOL Deactivate extent
2148	(864)	ADDRESS	4	C@CSRC4DIS	MVS CPOOL Disconn storage
2152	(868)	ADDRESS	4	C@CSRC4EXP	MVS CPOOL Expand routine
2156	(86C)	ADDRESS	4	C@CSRC4QCL	MVS CPOOL Query cell rtn
2160	(870)	ADDRESS	4	C@CSRC4QEX	MVS CPOOL Query extent rtn
2164	(874)	ADDRESS	4	C@CSRC4QPL	MVS CPOOL Query pool rtn
2168	(878)	ADDRESS	4	C@CSRC4RFR	MVS CPOOL Free routine
2172	(87C)	ADDRESS	4	C@CSRC4RGT	MVS CPOOL Get routine
2176	(880)	ADDRESS	4	C@IEANTCR	MVS NAME/TOKEN Create rtn
2180	(884)	ADDRESS	4	C@IEANTDL	MVS NAME/TOKEN Delete rtn
2184	(888)	ADDRESS	4	C@IEANTRT	MVS NAME/TOKEN Retrieve rtn
2188	(88C)	ADDRESS	4	C@IEAVM703	MVS message extract routine
2192	(890)	ADDRESS	4	C@IEAVH709	MVS MCS flush routine

Comment

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

End of Comment

$CADDR Cross Reference

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
2196	(894)	ADDRESS	4	CADDREQE (0)	End of fields that must be non-zero after loading common storage modules and resolving CADDR values from module MTEs

Comment

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

End of Comment

2196	(894)	X'894'	0	CADDRLEN	"*-CADDR" LENGTH OF THE CADDR TABLE

$CADDR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
C#$SSIAUTH	234		C@$FNDRIOT	5EC	
C#ALCSSTB	3C4		C@$FRECEL	210	
C#CPBUILD	460		C@$FRETBUF	278	
C#CPCONTRA	46C		C@$GASSIGN	140	
C#CPDELETE	478		C@$GETCEL	214	
C#CPEXPAND	484		C@$GETTBUF	27C	
C#CPFREE	490		C@$GKGET	134	
C#CPGET	49C		C@$GKINIT	138	
C#CPMODIFY	4AC		C@$GKTERM	13C	
C#CPQCELL	4B8		C@$GSINIT	144	
C#CPQEXT	4C4		C@$GSTERM	148	
C#CPQPOOL	4D0		C@$HGFMAIN	21C	
C#HINTRDR	3E4		C@$IOTBLD	5F0	
C#HIOCHECK	3F0		C@$JCTINIT	7F0	
C#LOGISST	408		C@$JCTXADD	844	
C#NJEXISIN	2F0		C@$JCTXEXP	848	
C#NJEXISOT	2F8		C@$JCTXGET	84C	
C#NJEXOSIN	300		C@$JCTXREM	850	
C#NJEXOSOT	308		C@$JQESERV	7F4	
C#NJEXSTNM	314		C@$LOGMSG	76C	
C#NJEXSTRQ	31C		C@$MGIOMSG	68C	
C#NJEXTRAC	328		C@$MGIOSJM	690	
C#PROTENDR	418		C@$MLTFBUF	224	
C#PROTGET	424		C@$MSDDUMP	22C	
C#PROTPNT	43C		C@$MSGDISR	18	
C#PROTPUT	430		C@$MSGSCAN	1C	
C#PROTSRB	448		C@$NOTIFY	568	
C#TRKCELL	740		C@$NSSTLOK	280	
C@$$POST	684		C@$PDBBLD	5C	
C@$ALESERV	B0		C@$PDBDEFS	60	
C@$ALLDAU	50		C@$PDBFIND	5F4	
C@$ASDCCLR	1A0		C@$PDBNEXT	5F8	
C@$ASDCUPD	1A4		C@$RACROUT	694	
C@$CGETABL	1EC		C@$REPLY	20	
C@$CRETANY	1F0		C@$RQUEACT	4E8	
C@$CRETRN	1F4		C@$RQUECMP	4EC	
C@$CSAVANY	1F8		C@$RQUEDEA	4F0	
C@$CSAVE	1FC		C@$RQUEDEQ	4F4	
C@$CSUBIT	334		C@$RQUEEXE	4F8	
C@$DESTCHK	564		C@$RQUEGET	4FC	
C@$DSCTBLD	58		C@$RQUERET	500	
C@$DYNLPA	200		C@$SCAN	508	
C@$ECBEXIT	204		C@$SCANB	50C	
C@$ECBPOST	208		C@$SCANCOM	510	
C@$FBUFRTN	20C		C@$SCAND	514	

Name	Hex Offset	Hex Value
C@$SDBCHEK	5FC	
C@$SDBFREE	600	
C@$SDBINIT	604	
C@$SJBFIND	7FC	
C@$SJBLOCK	800	
C@$SJBRQ	804	
C@$SJBUNLK	808	
C@$SSIAUTH	230	
C@$SSIBEGN	238	
C@$SSIEND	23C	
C@$STRAK	698	
C@$SVJLOK	69C	
C@$SVJLOK2	6A0	
C@$SVJTEST	6A4	
C@$SVJUNLK	6A8	
C@$SYMREC	240	
C@$TRACER	6AC	
C@$TRAREL	6B0	
C@$TRCFILT	6B4	
C@$UALDAU	54	
C@$UCBINDX	1DC	
C@$VERIFY	608	
C@$VFLI	6B8	
C@$XMPOST	6BC	
C@$XMPOSTX	6C0	
C@ABEND722	3BC	
C@ABNDADJ	244	
C@ABNDSKIP	248	
C@ALCSBRY	3C8	
C@ALCSSTB	3C0	
C@ARMEOJ	14	
C@ASOKADD	60C	
C@ASOKDEL	610	
C@ASOKGC	614	
C@AUDSAF	80C	
C@BACKRETN	518	
C@BERTREAD	6C4	
C@BLDSYSDS	1A8	
C@BRTCOUNT	6C8	
C@CALLCI	2C	
C@CATBFREE	6CC	
C@CATTREE	6D4	
C@CCLSSYSI	164	
C@CEXITACT	168	
C@CEXITCRD	16C	
C@CINITJRW	170	
C@CIOTCLN	174	
C@CIRDRPUT	178	
C@CJOBBLD	17C	
C@CJOBEND	774	
C@CJOBKILL	770	
C@CJOBVFY	180	
C@CKPTVERS	6D8	
C@CLEANBAT	1E0	
C@CLEANJRW	184	
C@CMNFCICB	5CC	
C@CMNINIT	5D0	
C@CMNPPROC	5D4	
C@CMNPSUBT	5D8	
C@CNIN2OUT	3CC	
C@CNVCLNUP	30	
C@CNVSETUP	34	
C@COPNPROC	38	
C@CPBREC	464	
C@CPBUILD	45C	
C@CPCONTRA	468	
C@CPCREC	470	
C@CPDELETE	474	
C@CPDREC	47C	
C@CPEXPAND	480	
C@CPFREC	494	
C@CPFREE	48C	
C@CPGET	498	
C@CPGREC	4A0	
C@CPINIT	4A4	
C@CPJAFF	8	
C@CPJCLINI	C	
C@CPJCLTRM	10	
C@CPMODIFY	4A8	
C@CPMREC	4B0	
C@CPQCELL	4B4	
C@CPQCREC	4BC	
C@CPQEXT	4C0	
C@CPQPOOL	4CC	
C@CPQPREC	4D4	
C@CPQXREC	4C8	
C@CPROCCRD	188	
C@CPTERM	4D8	
C@CPUT	18C	
C@CPXREC	488	
C@CSETVECT	190	
C@CSPEOX	504	
C@CSPLOPN	194	
C@CSRC4ACT	854	
C@CSRC4BLD	858	
C@CSRC4CON	85C	
C@CSRC4DAC	860	
C@CSRC4DIS	864	
C@CSRC4EXP	868	
C@CSRC4QCL	86C	
C@CSRC4QEX	870	
C@CSRC4QPL	874	
C@CSRC4RFR	878	
C@CSRC4RGT	87C	
C@CVDEVID	590	
C@CXMTRTNE	198	
C@DATASERV	53C	
C@DELJ2AUX	5C4	
C@DELJ2CI	5DC	
C@DELJ2MON	838	
C@DELJ2SRV	284	
C@DOMCHECK	6E0	
C@DSNCMP	618	
C@DSNMSRV	620	
C@DSNVFY	61C	
C@DSOPEN	8C	
C@DSPSERV	B4	
C@ENFISSUE	B8	
C@ENF58BLD	624	
C@ENF70BLD	810	
C@ENF78BLD	814	
C@EOBLOB	1E4	
C@EOTFDCON	1E8	
C@FIFOBLK	6E4	
C@FIFODEQ	6E8	
C@FIFOENQ	6EC	
C@FIFOGTQ	6F0	
C@FINDLMOD	258	
C@FINDMOD	24C	
C@FREEJCT	818	

Name	Hex Offset	Hex Value
C@FREPBLOK	3D0	
C@FRESDBLK	3D4	
C@FRETRE	250	
C@GETJ2AUX	5C0	
C@GETJ2CI	5E0	
C@GETJ2MON	834	
C@GETJ2SRV	288	
C@GETPBLOK	3D8	
C@GETSDBLK	3DC	
C@GETTRE	254	
C@GRPASGN	6F8	
C@GRPINIT	1AC	
C@HA$CNJGP	32C	
C@HA$CNJRQ	368	
C@HALCLASS	628	
C@HALFDSNR	64	
C@HALOMERG	68	
C@HALOPDBI	6C	
C@HALRDCAT	70	
C@HALUNAL	74	
C@HALUPCAT	62C	
C@HAMNULL	150	
C@HAMPSTER	154	
C@HASJFREQ	5A8	
C@HASJIDST	5AC	
C@HASPAMI	158	
C@HASPNACT	2C4	
C@HASPRCCS	778	
C@HASPRDDS	77C	
C@HASPRSCN	780	
C@HBSRBLDL	84	
C@HCBCK	634	
C@HCBFM	638	
C@HCBGM	63C	
C@HCNVTIME	6FC	
C@HETSOUT	81C	
C@HFCLSUB	640	
C@HFCLTRNC	644	
C@HFEXFSPC	90	
C@HFEXJESL	94	
C@HFEXSDET	98	
C@HFEXSPIN	9C	
C@HFJDLINE	1B8	
C@HFJLOGTM	1B4	
C@HFJOBLOG	1B0	
C@HFOPSUB	A0	
C@HGETCHN	15C	
C@HINTRDR	3E0	
C@HINTRREC	3E8	
C@HIOCHECK	3EC	
C@HIOCKRY	3F4	
C@HIOTSPIN	78	
C@HJE000	1BC	
C@HJSMAKSL	1C0	
C@HJSRETAB	648	
C@HKYMERGE	700	
C@HMIGTRK	3F8	
C@HNDUPDTE	7C	
C@HNOTIFY	80	
C@HOCSETUP	A4	
C@HONEWOUT	64C	
C@HOOLDINP	650	
C@HOOLDOUT	654	
C@HOSWB	704	
C@HPUTFULL	3FC	
C@HSJFACC	5A4	
C@HSJFLSP	708	
C@HWAITBUF	400	
C@IEANTCR	880	
C@IEANTDL	884	
C@IEANTRT	888	
C@IEAVH709	890	
C@IEAVM703	88C	
C@IRCLNUP	19C	
C@JBFOUND	1C4	
C@JBSELECT	1C8	
C@JCISUB	3C	
C@JESLOGC	88	
C@JOBCLASV	784	
C@JOBCLVAL	788	
C@JOBSTATS	1CC	
C@JOBVALM	78C	
C@JSMTSRV	658	
C@JSOPSSDS	1D0	
C@JSREOPEN	1D4	
C@J2CIREC	5E4	
C@LOGISST	404	
C@LOGSTRY	40C	
C@MBSCATTN	25C	
C@MONSSIRQ	83C	
C@MQTRVAL	65C	
C@MQTR0VAL	660	
C@MTTRVAL	664	
C@MTTR0VAL	668	
C@NJEABSNP	364	
C@NJEFOPEN	28C	
C@NJEFREBF	290	
C@NJEHBLD	294	
C@NJEHDADD	298	
C@NJEHDEXP	29C	
C@NJEHDMAK	2A0	
C@NJEHDRDU	2A4	
C@NJEHDREM	2A8	
C@NJEHDVAL	2AC	
C@NJEHDWRU	2B0	
C@NJEPORCV	2B4	
C@NJEPRXMT	2B8	
C@NJETBLD	2BC	
C@NJETRACE	2C0	
C@NJEXARR	2D0	
C@NJEXASEA	2D4	
C@NJEXASIN	2D8	
C@NJEXASRQ	2DC	
C@NJEXASTM	2E0	
C@NJEXCREQ	2E4	
C@NJEXIREC	2E8	
C@NJEXISIN	2EC	
C@NJEXISOT	2F4	
C@NJEXOSIN	2FC	
C@NJEXOSOT	304	
C@NJEXSTIN	30C	
C@NJEXSTNM	310	
C@NJEXSTRQ	318	
C@NJEXSTTM	320	
C@NJEXTRAC	324	
C@NJGPRCOV	330	
C@NJJRJOBH	338	
C@NJJRMAIN	33C	
C@NJJRTERM	340	
C@NJJTJOBH	34C	

Name	Hex Offset	Hex Value
C@NJJTJOBT	350	
C@NJJTMAIN	354	
C@NJJTNTFY	358	
C@NJJTTERM	35C	
C@NJOBWTO	344	
C@NJRQENQ	370	
C@NJRQRCOV	36C	
C@NJSRJOBH	374	
C@NJSRJOBT	378	
C@NJSRMAIN	37C	
C@NJSRNCOD	390	
C@NJSRNTFY	380	
C@NJSROPTB	398	
C@NJSRPDDB	384	
C@NJSRSIGN	388	
C@NJSRTERM	38C	
C@NJSTMAIN	39C	
C@NJSTOPTB	3A0	
C@NJSTTERM	3A4	
C@NJTAUTH	360	
C@NSRAUTH	394	
C@NSTAUTH	3A8	
C@NSTCDSH	3AC	
C@NSTCJBH	3B0	
C@NSTCJBT	3B4	
C@OBTGBAT	410	
C@OLDJOE	66C	
C@PDDBUPD	670	
C@PPSOSJB	714	
C@PREDNAME	51C	
C@PREFILT	520	
C@PREJOBNM	24	
C@PREMG529	2C8	
C@PRENRREC	41C	
C@PREREPGC	28	
C@PREWTO	718	
C@PRGETREC	428	
C@PRIPRINI	548	
C@PRITORD	54C	
C@PRJBCLD	59C	
C@PRJPCLS	550	
C@PRJPLEX	554	
C@PRJPNJN	558	
C@PRJPSPL	55C	
C@PROCALCS	40	
C@PROTENDR	414	
C@PROTGET	420	
C@PROTPNT	438	
C@PROTPUT	42C	
C@PROTSRB	444	
C@PRPNTREC	440	
C@PRPUTREC	434	
C@PRSPLIO	5A0	
C@PRSRBREC	44C	
C@PRTAUTH	71C	
C@PSQUEUE	720	
C@RACCTSET	790	
C@RANLZCRD	794	
C@RCARDSCN	798	
C@RDELRJCB	79C	
C@RDELWTO	7A0	
C@RECABORT	724	
C@RECOVERY	260	
C@REFRDSRV	540	
C@RELGBAT	450	
C@RESTINFO	7A4	
C@RESTORE	524	
C@REXTENMG	7A8	
C@RFRERJCB	7AC	
C@RGETRJCB	7B0	
C@RGETSPOF	7B4	
C@RJOBDEF	7B8	
C@RJOBONMG	7BC	
C@RMSGQUE	7C0	
C@RNJCOMSG	7C4	
C@RNJEHDTR	348	
C@RNJEONMG	7C8	
C@RNODEBAD	2CC	
C@RPDBBLD	7CC	
C@RPDBINIT	7D0	
C@RPDBSEC	7D4	
C@RPRCRCCS	7DC	
C@RPROCJCL	7D8	
C@RPSTCXIT	7E0	
C@RPUTSCAN	7E4	
C@RRWTORTN	728	
C@SCANDIAG	528	
C@SCNDBRNG	52C	
C@SCNDGRTN	534	
C@SCNDVVAL	538	
C@SECLEXTR	72C	
C@SFLOPDDB	5B0	
C@SIGIOU	674	
C@SJBFREE	820	
C@SJBINIT	824	
C@SJFSWBRD	5B4	
C@SRX9177	5C8	
C@SSIFINE	264	
C@SSISESTA	268	
C@SSISETUP	26C	
C@SSVCLSC	A8	
C@SSVOPNC	AC	
C@SSVXDEF	730	
C@STEALOCK	82C	
C@SVCADDCT	454	
C@SWAREAD	1D8	
C@SWBTUMRG	5B8	
C@SYMTT	678	
C@SYSOVFY	67C	
C@TBADTGBQ	734	
C@TOKENSR	738	
C@TRKCELL	73C	
C@TRKCELLA	744	
C@TSCNVJB	570	
C@TSETLOCK	748	
C@TSFRELOK	74C	
C@TUXTRACT	5BC	
C@UBSRB	840	
C@UPDDSCA	458	
C@USENF58	680	
C@USENF70	830	
C@USERSUB	578	
C@USRNEWND	57C	
C@WTALOGQ	580	
C@WTASRBQI	584	
C@XBFPITCH	754	
C@XCFXMBN	758	
C@XCNRECOV	44	
C@XINTKEY	48	
C@XJDTKEY	4C	

$CADDR Cross Reference

Name	Hex Offset	Hex Value
C@XMXRMTR	760	
C@XMXSRB	75C	
C@XSYSINIT	764	
C@XSYSTERM	768	
CADDR	0	
CADDR#ENF35	C8	
CADDR#ENF41CP	D8	
CADDR#ENF41GL	D0	
CADDR#ENF42	E0	
CADDR#ENF46	E8	
CADDR#ENF51	F0	
CADDR#ENF56	F8	
CADDR#ENF57CM	100	
CADDR#ENF57RV	108	
CADDR#ENF58NR	110	
CADDR#ENF62NR	128	
CADDR#ENF62RF	120	
CADDR#ENF62RL	118	
CADDR#ENF70NR	130	
CADDR@CNTBITAB	270	
CADDR@CPLTABS	4DC	
CADDR@ENF35	C4	
CADDR@ENF41CP	D4	
CADDR@ENF41GL	CC	
CADDR@ENF42	DC	
CADDR@ENF46	E4	
CADDR@ENF51	EC	
CADDR@ENF56	F4	
CADDR@ENF57CM	FC	
CADDR@ENF57RV	104	
CADDR@ENF58NR	10C	
CADDR@ENF62NR	124	
CADDR@ENF62RF	11C	
CADDR@ENF62RL	114	
CADDR@ENF70NR	12C	
CADDR@HAMAVT	14C	
CADDR@HASPVTAB	630	
CADDR@OCOOFFST	3B8	
CADDR@SCNDIAGT	530	
CADDR@TRJNAME	274	
CADDRENFBEG	C4	
CADDRENFNUM	130	E
CADDREQE	894	
CADDREQS	8	
CADDRID	0	C3C1C4C4
CADDRLEN	894	894
CADDRVNM	4	7
CADDRVSN	4	
K@$BITMAP	688	
K@$CBIO	5E8	
K@$GETHP	218	
K@$HGFMANK	220	
K@$JBIDBLD	7E8	
K@$JCORBLD	7EC	
K@$MODLOC	228	
K@$QLOCC	7F8	
K@AVLINST	4E0	
K@AVLTRVS	4E4	
K@CATREAD	6D0	
K@CNVDEVID	588	
K@CRJOES	58C	
K@DJBREAD	6DC	
K@ENF58CDC	BC	
K@ENF70CDC	C0	
K@ESWFREE	594	
K@GOFDSERV	6F4	
K@HPOSTECB	160	
K@JOEREAD	70C	
K@JPXIBLD	544	
K@JQEREAD	710	
K@MCSFLUSH	56C	
K@MODJXACK	598	
K@PRSMIGD	560	
K@SJIOBINT	828	
K@USERDEST	574	
K@WSCREAD	750	

$CAT Information

$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') multipying 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
		Comment			
		Start of memory-only segment (not checkpointed) NOTE: - This section also exists in GRPOBJ elements (see $CLASGRP).			
		End of Comment			
0	(0)	SIGNED	2	CATMEM (0)	Start of memory-only sect
		Comment			
		---------- CAT cache binary AVL tree 'node' data : - For performance, each checkpointed (BERT resident) CAT is cached in memory as part of a balanced binary AVL tree. - The tree is rebuilt whenever a CAT is added or removed. ----------			
		End of Comment			
0	(0)	ADDRESS	4	CATLEFT	Pointer to lower CAT in binary tree.
4	(4)	ADDRESS	4	CATRIGHT	Pointer to higher CAT in binary tree.
8	(8)	SIGNED	2	CATAVBAL	AVL tree balance factor - used while building the binary tree.

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

		Memory only flags :			

		End of Comment			
10	(A)	BITSTRING	1	CATFLAG5	Memory-only flags
		1...		CAT5ANOM	"B'10000000'" ON = This job class has anomalies. Set in HASPJQS::CATHMAX.
		.1..		CAT5NOWK	"B'01000000'" ON = No selectable work exists for this job class (within the current checkpoint cycle). Set by $QGET processing and cleared by HASPJQS::CATHMAX (at ckpt cycle) and when a job is added to the class.
		..1.		CAT5CKPT	"B'00100000'" ON = BERT resident CAT fields have changed. Alerts checkpoint cycle processing to write this CAT. SET by $DOGCAT when a CAT is updated. RESET by the checkpoint cycle when written (see $CATCWRT routine).
		Comment			

		Other bookkeeping data :			

		End of Comment			
11	(B)	BITSTRING	1	CATPSQTP	The associated JQETYPE of this CAT.
12	(C)	SIGNED	4	CATELNUM	One-based element number of this cache element.
		Comment			

		CAT/GRPOBJ cache element name. This will be equal to CATCLASS if a CAT element or GRPNAME if a GRPOBJ element.			

		End of Comment			
16	(10)	CHARACTER	8	CATELNAM	CAT cache element name.
		Comment			

		FETCHNEXT Class group (GRPOBJ) bookkeeping info:			
		- CATGRP@ : FETCHNEXT group address/indicator :			
		o If NOT ZERO - Processing a group and this addr points to the corresponding GRPOBJ. A FETCHNEXT= will locate the next CAT in the group.			
		o If ZERO - The CAT is NOT part of group processing. A FETCHNEXT= will locate the next 'sequential' CAT.			
		- CATGRPC1 : The first CAT visited in the group. Since the GRPOBJ is a circular chain, this is used as the end condition to determine when group processing is complete.			

		End of Comment			
24	(18)	ADDRESS	4	CATGRP@	FETCHNEXT GRPOBJ address/ indicator.
28	(1C)	CHARACTER	8	CATGRPC1	First CAT processed in GRPOBJ circular chain.
28	(1C)	X'24'	0	CATMEMLN	"*-CATMEM" Size of memory only section

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
		Start of CATBASE BERT segment.			
				End of Comment	
28	(1C)	X'7'	0	CATVERSN	"7" CAT version
36	(24)	BITSTRING	1	CATJOBFL	HASP JOB FLAGS, COPIED INTO THE JCTJOBFL FIELD, FLAG VALUES ARE DEFINED IN $JCT
37	(25)	BITSTRING	1	CATJBOPT	HASP JOB OPTIONS, COPIED INTO THE JCTJBOPT FIELD, FLAG VALUES ARE DEFINED IN $JCT
38	(26)	CHARACTER	2	CATPROCN	PROCEDURE LIBRARY NUMBER
40	(28)	BITSTRING	1	CATSMFLG	HASP SMF FLAGS, COPIED INTO THE JCTSMFLG FIELD, FLAG VALUES ARE DEFINED IN $JCT
41	(29)	CHARACTER	3	CATPERFM	DEFAULT PERFORMANCE GROUP
				Comment	
		The following fields are defined in aggregate by the CATCONVP symbol (below) and represent the converter defaults mapped by the converter parameter list (IEFCNPRM). The fields covered by CATCONVP must match those mapped by IEFCNPRM.			
				End of Comment	
44	(2C)	SIGNED	4	CATCPBGN (0)	START OF CONVERTER PARMS
44	(2C)	CHARACTER	1	CATCACCT	ACCOUNTING INFO REQUIRED
		....		CATCNONE	"B'00000000'" NO INFO IS REQUIRED
		1		CATCNAME	"B'00000001'" PROGRAMMER NAME REQ'D
		.... ..1.		CATCNUMB	"B'00000010'" ACCOUNT NUMBER REQUIRED
44	(2C)	X'3'	0	CATCALL	"CATCNAME+CATCNUMB" JOB AND NUMBER REQUIRED
		.... .1..		CATCSWAL	"B'00000100'" SWA ABOVE 16M LINE
45	(2D)	CHARACTER	2		RESERVED
47	(2F)	CHARACTER	8	CATCTIME (0)	DFLT JOB STEP INTL TIME
47	(2F)	CHARACTER	6	CATCMNTE	MAXIMUM MINUTES
53	(35)	CHARACTER	2	CATCSECS	MAXIMUM SECONDS
55	(37)	CHARACTER	5	CATCREGN (0)	DEFAULT JOB STEP REGION
55	(37)	CHARACTER	4	CATCRGN	NUMERIC SPECIFICATION
59	(3B)	CHARACTER	1	CATCRGA	KILOBYTES OR MEGABYTES SPECIFICATION
60	(3C)	CHARACTER	1	CATCMND	COMMAND DISPOSITION
60	(3C)	X'F0'	0	CATCEXEC	"C'0'" PASS THE COMMAND THROUGH
60	(3C)	X'F1'	0	CATCDSPL	"C'1'" DISPLAY AND THEN PASS CMND
60	(3C)	X'F2'	0	CATCVER	"C'2'" ASK OPERATOR DISPOSITION
60	(3C)	X'F3'	0	CATCIGN	"C'3'" IGNORE THE COMMAND
61	(3D)	CHARACTER	1	CATCBLP	BYPASS LABEL PROCESSING OPT.
		1		CATCBLPY	"B'00000001'" PROCESS BYPASS LABEL PARM
62	(3E)	CHARACTER	1	CATCOCG (4)	OPERATOR COMMAND GROUP
		.... .1..		CATCGSYS	"B'00000100'" GROUP 1 COMMANDS (SYS)
		.... ..1.		CATCGIO	"B'00000010'" GROUP 2 COMMANDS (I/O)
		1		CATCGCON	"B'00000001'" GROUP 3 COMMANDS (CONS)
62	(3E)	X'7'	0	CATCGALL	"CATCGSYS+CATCGIO+CATCGCON" ALL GROUPS
66	(42)	CHARACTER	1	CATCLJCL	DEFAULT MSGLEVEL, JCL LISTED IF NO MSGLEVEL
67	(43)	CHARACTER	1	CATCTMSG	ALLOCATION TERMINATION MSGS
67	(43)	X'2C'	0	CATCONVP	"CATCPBGN,*-CATCPBGN" FULL CONVERTER PARAMETERS
68	(44)	BITSTRING	1	CATCFLG1	Converter parm byte
		1...		CATCNQAU	"B'10000000'" - Automatically downgrade SYSDSN ENQs to SHR control when no longer needed EXCLUSIVE
		.1..		CATCNQDS	"B'01000000'" - Do not allow the DSENQSHR JCL keyword on a job statement. This disables the SYSDSN ENQ downgrade function. - Both bits off allows the function (ALLOW)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		..1.		CATSYSYM	"B'00100000'" - System symbols substitution in batch jobs is supported
69	(45)	BITSTRING	7		Reserved for potential expansion of IEFCNPRM
				Comment	

					End of converter parameters mapped by IEFCNPRM

				End of Comment	
76	(4C)	BITSTRING	1	CATOPSWT	CONVERTER OPTION SWITCHES
77	(4D)	BITSTRING	1	CATFLAG1	NORMAL OUTDISP FOR JESDS
		1...		CAT1CDP	"B'10000000'" CONDITIONALLY PURGE OUTPUT FOR JOBS IN THIS CLASS
77	(4D)	X'10'	0	CAT1NODP	"$ODPURGE" NORMAL OUTDISP=PURGE
77	(4D)	X'8'	0	CAT1NODW	"$ODWRITE" NORMAL OUTDISP=WRITE
77	(4D)	X'4'	0	CAT1NODH	"$ODHOLD" NORMAL OUTDISP=HOLD
77	(4D)	X'2'	0	CAT1NODK	"$ODKEEP" NORMAL OUTDISP=KEEP
77	(4D)	X'1'	0	CAT1NODL	"$ODLEAVE" NORMAL OUTDISP=LEAVE
78	(4E)	BITSTRING	1	CATFLAG2	ABNORMAL OUTDISP FOR JESDS
78	(4E)	X'10'	0	CAT2AODP	"$ODPURGE" ABNORMAL OUTDISP=PURGE
78	(4E)	X'8'	0	CAT2AODW	"$ODWRITE" ABNORMAL OUTDISP=WRITE
78	(4E)	X'4'	0	CAT2AODH	"$ODHOLD" ABNORMAL OUTDISP=HOLD
78	(4E)	X'2'	0	CAT2AODK	"$ODKEEP" ABNORMAL OUTDISP=KEEP
78	(4E)	X'1'	0	CAT2AODL	"$ODLEAVE" ABNORMAL OUTDISP=LEAVE
79	(4F)	BITSTRING	1	CATFLAG3	Processing flags
		1...		CAT3WLM	"B'10000000'" WLM managed class
		.1..		CAT3SPEC	"B'01000000'" Special class (STC/TSU)
		..1.		CAT3PSEU	"B'00100000'" Pseudo-class queue (not set in real CATs)
		...1		CAT3RBLD	"B'00010000'" Pseudo-class queue for rebuild queue
		.... 1...		CAT3RECO	"B'00001000'" Pseudo CAT used for JQE and CAT reconciliation
		.... .1..		CAT3SINV	"B'00000100'" Default SCHENV (CATSCHED) no longer defined
		.... ..1.		CAT3DUOK	"B'00000010'" Duplicate job names OK this job class
		1		CAT3LSRC	"B'00000001'" JOBRC=LASTRC specified for this job class
80	(50)	CHARACTER	8	CATXBM	PROCNAME FOR XBM/2 JOB
88	(58)	CHARACTER	8	CATCLASS	Name of this job class.
96	(60)	SIGNED	4	CATMAXJ	Max executing jobs in this class in the JESPlex
				Comment	

					CATCURJ is altered by $QBUSY, QADCHAIN and QDECHAIN only
					---
				End of Comment	
100	(64)	SIGNED	4	CATCURJ	Current executing jobs in this class in the JESPlex
104	(68)	SIGNED	4	CATMAXT	TOD when Max executing jobs reached
108	(6C)	SIGNED	4	CATJQER	Number of JQEs waiting for timer reconciliation (only present in CATs with CAT3RECO on)
112	(70)	SIGNED	4	CATIMER	TOD when queue held
116	(74)	ADDRESS	4	CATQHDI	First JQE in class; CKPT only (index)
120	(78)	CHARACTER	16	CATSCHED	Default SCHENV, JOB classes only
136	(88)	CHARACTER	1	CATMCLAS	Default message class, TSU and STC classes only
137	(89)	BITSTRING	6	CATJLOG	JES log control
144	(90)	ADDRESS	4	(0)	Word align
144	(90)	SIGNED	4	CATXITD1	Reserved for Exit use
148	(94)	SIGNED	4	CATXITD2	Reserved for Exit use
152	(98)	SIGNED	4	(0)	Align section length
152	(98)	X'74'	0	CATLEN1	"*-CATJOBFL" Length of main CATBASE BERT segment.

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		Start of CATQAFF BERT segment.			
			End of Comment		
152	(98)	BITSTRING	4	CATQAFF	Members to which the class has affinity
156	(9C)	BITSTRING	1	CATMBRMX	Members on which CATJACT is less than CATJMACT
156	(9C)	X'8'	0	CATLEN4	"*-CATQAFF" Length of affinity/max CATQAFF BERT segment.
			Comment		
		Start of CATACT BERT segment.			
			End of Comment		
160	(A0)	BITSTRING	1	CATFLAG4	Flags
		1...		CAT4JDUP	"B'10000000'" At least one duplicate job in this class
		.1..		CAT4INAC	"B'01000000'" This CAT is inactive and no new work can be selected from it.
		..1.		CAT4PERM	"B'00100000'" Permanent CAT (cannot be deleted).
161	(A1)	BITSTRING	3		Reserved for future use
164	(A4)	SIGNED	4	CATJACT (0)	Batch jobs active
164	(A4)	X'84'	0	CATLEN2	"*-CATFLAG4" Length of job active CATACT BERT segment.
			Comment		
		Start of CATGROUP BERT segment.			
			End of Comment		
292	(124)	CHARACTER	8	CATGPNAM	If not all zeroes, this CAT belongs to a class group and this is the name of the group.
300	(12C)	CHARACTER	8	CATGPNXT	If not all zeroes, this CAT belongs to a class group and this is the name of the NEXT CAT in this class group
300	(12C)	X'10'	0	CATLEN5	"*-CATGPNAM" Length of class group CATGROUP BERT segment.
			Comment		
		Start of CATMACT BERT segment.			
			End of Comment		
308	(134)	SIGNED	4	CATJMACT (0)	Batch job activity maximum
308	(134)	X'80'	0	CATLEN3	"*-CATJMACT" Length of max active CATMACT BERT segment.
440	(1B8)	DBL WORD	8	(0)	Ensure double word bdy
440	(1B8)	X'1B8'	0	CATLEN	"*-CAT" Length of CAT
440	(1B8)	X'1B8'	0	CATLLEN	"*-CAT" Full length of CAT
			Comment		
		SPECIAL CLASS DEFINITIONS			
			End of Comment		
		11.1		CATSTCCL	"X'D0'" SYSTEM TASK CLASS
		111.		CATTSUCL	"X'E0'" FOREGROUND TIME SHARING CLASS
440	(1B8)	X'5B'	0	CATSTCID	"C'$'" SYSTEM TASK DISPLAY ID
440	(1B8)	X'7C'	0	CATTSUID	"C'@'" FORGROUND TIME SHARING DISPLAY ID
		.1..		CATNENT	"X'FF'-X'C0'+1" NUMBER OF ENTRIES IN CAT

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CATCHDR	CACHE HEADER

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	SIGNED	4	CATCHNUM	Number of elements in cache
4	(4)	SIGNED	4	CATCHESZ	Byte size of a cache element. Includes PREBERT, CAT/GRPOBJ, and additional user BERT data
8	(8)	SIGNED	4	CATCHSIZ	Total size of the cache - in BYTES.
12	(C)	SIGNED	2	CATCHCNT	JNTCATCT value captured when the cache is built. Used to determine if the cache is current.
14	(E)	BITSTRING	1	CATFLAG6	CAT Cache header flags
		1...		CAT6TREE	"B'10000000'" Binary tree has been successfully built
15	(F)	BITSTRING	1		Reserved
16	(10)	ADDRESS	4	CATCROOT	Root node in cache AVL tree. Points to CAT cache entry.
20	(14)	BITSTRING	64	CATIPATH	Array of 2 byte elements used to track path taken when inserting a cache element within AVL tree. 0 -> left subtree path 1 -> right subtree path Supports 2 to the 32th distinct values and tree depths up to 32. Only used when tree is built.
20	(14)	X'40'	0	CATIPATL	"*-CATIPATH" Length
20	(14)	CHARACTER	8	CATPRVCN	Prev CAT/GRP name before CAT cache entry refresh
28	(1C)	ADDRESS	4	CATPRVLE	Previous pointer to lower CAT in tree before CAT cache entry refresh
32	(20)	ADDRESS	4	CATPRVRI	Previous pointer to higher CAT in tree before CAT cache entry refresh
36	(24)	SIGNED	2	CATPRVBL	Previous cache entry balance factor before CAT cache entry refresh
84	(54)	CHARACTER	8	CATCHSRC	Search value (job class name) used to locate a cache element.
84	(54)	X'5C'	0	CATCHLEN	"*-CATCHDR" Size of cache header.
92	(5C)	SIGNED	2	CATCHELM (0)	Cache elements start here.
92	(5C)	X'32'	0	CATCINEL	"50" Storage will be created for CATCINEL # of elements the first time the cache is created.

$CAT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CAT	0		CATCNUMB	2C	2
CATAVBAL	8		CATCOCG	3E	
CATCACCT	2C		CATCONVP	43	2C
CATCALL	2C	3	CATCPBGN	2C	
CATCBLP	3D		CATCREGN	37	
CATCBLPY	3D	1	CATCRGA	3B	
CATCDSPL	3C	F1	CATCRGN	37	
CATCEXEC	3C	F0	CATCROOT	10	
CATCFLG1	44		CATCSECS	35	
CATCGALL	3E	7	CATCSWAL	2C	4
CATCGCON	3E	1	CATCTIME	2F	
CATCGIO	3E	2	CATCTMSG	43	
CATCGSYS	3E	4	CATCURJ	64	
CATCHCNT	C		CATCVER	3C	F2
CATCHDR	0		CATELNAM	10	
CATCHELM	5C		CATELNUM	C	
CATCHESZ	4		CATFLAG1	4D	
CATCHLEN	54	5C	CATFLAG2	4E	
CATCHNUM	0		CATFLAG3	4F	
CATCHSIZ	8		CATFLAG4	A0	
CATCHSRC	54		CATFLAG5	A	
CATCIGN	3C	F3	CATFLAG6	E	
CATCINEL	5C	32	CATGPNAM	124	
CATCLASS	58		CATGPNXT	12C	
CATCLJCL	42		CATGRP@	18	
CATCMND	3C		CATGRPC1	1C	
CATCMNTE	2F		CATIMER	70	
CATCNAME	2C	1	CATIPATH	14	
CATCNONE	2C	0	CATIPATL	14	40
CATCNQAU	44	80	CATJACT	A4	
CATCNQDS	44	40	CATJBOPT	25	

$CAT Cross Reference

Name	Hex Offset	Hex Value
CATJLOG	89	
CATJMACT	134	
CATJOBFL	24	
CATJQER	6C	
CATLEFT	0	
CATLEN	1B8	1B8
CATLEN1	98	74
CATLEN2	A4	84
CATLEN3	134	80
CATLEN4	9C	8
CATLEN5	12C	10
CATLLEN	1B8	1B8
CATMAXJ	60	
CATMAXT	68	
CATMBRMX	9C	
CATMCLAS	88	
CATMEM	0	
CATMEMLN	1C	24
CATNENT	1B8	40
CATOPSWT	4C	
CATPERFM	29	
CATPROCN	26	
CATPRVBL	24	
CATPRVCN	14	
CATPRVLE	1C	
CATPRVRI	20	
CATPSQTP	B	
CATQAFF	98	
CATQHDI	74	
CATRIGHT	4	
CATSCHED	78	
CATSMFLG	28	
CATSTCCL	1B8	D0
CATSTCID	1B8	5B
CATSYSYM	44	20
CATTSUCL	1B8	E0
CATTSUID	1B8	7C
CATVERSN	1C	7
CATXBM	50	
CATXITD1	90	
CATXITD2	94	
CAT1CDP	4D	80
CAT1NODH	4D	4
CAT1NODK	4D	2
CAT1NODL	4D	1
CAT1NODP	4D	10
CAT1NODW	4D	8
CAT2AODH	4E	4
CAT2AODK	4E	2
CAT2AODL	4E	1
CAT2AODP	4E	10
CAT2AODW	4E	8
CAT3DUOK	4F	2
CAT3LSRC	4F	1
CAT3PSEU	4F	20
CAT3RBLD	4F	10
CAT3RECO	4F	8
CAT3SINV	4F	4
CAT3SPEC	4F	40
CAT3WLM	4F	80
CAT4INAC	A0	40
CAT4JDUP	A0	80
CAT4PERM	A0	20
CAT5ANOM	A	80
CAT5CKPT	A	20
CAT5NOWK	A	40
CAT6TREE	E	80

$CATBERT Information

$CATBERT Heading Information

Common Name: Collector Attribute Table for BERTs
Macro ID: $CATBERT
DSECT Name: CATBERT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CATB
Offset: -8 (in the JES2 CSA storage prefix)
Length: 4
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual storage is anywhere (below or above 16M) in ECSA. Real storage is anywhere.
Size: See CBRSIZE (plus an 8 byte prefix)
Created by: JES2 initialization processing
Pointed to by: CCTCBRT field of the HCCT data area
CVCB_$CATBERT_ADDR field of the CVCB data area
Serialization: This control block is updated during JES2 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'0'	0	CBRMAPE	"0,12,C'X'" BERT map entry
4	(4)	X'0'	0	CBRMADDR	"0,4,C'A'" Address of BERT translate table
4	(4)	X'4'	0	CBRMCNT	"4,1,C'F'" Number of table entries (Not including id 0 record)
4	(4)	X'5'	0	CBRMFLAG	"5,1,C'B'" Flags
		1...		CBRMFJ2	"B'10000000'" Type is JES2-defined
4	(4)	X'6'	0	CBRMSIZE	"6,2,C'H'" Max entry size (highest offset set)
4	(4)	X'8'	0	CBRMBYTE	"8,2,C'H'" Bytes of BERT data needed
4	(4)	X'C'	0	CBRMLEN	"L'CBRMAPE" Size of BERT map tabl entry

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

				Note for internal BERTs, the BERT translation table is used to store the number assigned to the BERT. Other fields are not used.	

				End of Comment	
8	(8)	SIGNED	4	CBRMAPS (0)	--+ Table of BERT maps
8	(8)	ADDRESS	4	CBRMINT	| Internal CB
12	(C)	SIGNED	1	CBRNINT	| Number of entries
13	(D)	BITSTRING	1	CBRINTF	| Flag byte
14	(E)	SIGNED	2	CBRINTL	| Max size (always zero)
16	(10)	SIGNED	2	CBRINTS	| Bytes in BERTs (zero)
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
26	(1A)	SIGNED	2	CBRJQEL	| Max JQE size
28	(1C)	SIGNED	2	CBRJQES	| Bytes in BERTs
30	(1E)	SIGNED	2		| Reserved
32	(20)	ADDRESS	4	CBRMCAT	| CAT control blocks
36	(24)	SIGNED	1	CBRNCAT	| Number of entries
37	(25)	BITSTRING	1	CBRCATF	| Flag byte
38	(26)	SIGNED	2	CBRCATL	| Max CAT size
40	(28)	SIGNED	2	CBRCATS	| Bytes in BERTs
42	(2A)	SIGNED	2		| Reserved
44	(2C)	ADDRESS	4	CBRMWSCQ	| WSCQ control blocks
48	(30)	SIGNED	1	CBRNWSCQ	| Number of entries
49	(31)	BITSTRING	1	CBRWSCQF	| Flag byte
50	(32)	SIGNED	2	CBRWSCQL	| Max WSCQ size
52	(34)	SIGNED	2	CBRWSCQS	| Bytes in BERTs
54	(36)	SIGNED	2		| Reserved
56	(38)	SIGNED	4	(0)	--+ End of table
56	(38)	X'4'	0	CBRMAPCT	"(*-CBRMAPS)/CBRMLEN" Number of table entries
56	(38)	X'FE'	0	CBRMAXID	"$DGBDYN-1" Max usable CB type
56	(38)	X'BFC'	0	CBRDYNPT	"CBRMAPS+CBRMADDR+($DGBDYN*CBRMLEN),4,C'A'" Dynamic BRTRANS pointer
56	(38)	X'C08'	0	CBRSIZE	"(CBRMAPS-CATBERT)+(CBRMAXID+1+1)*CBRMLEN" Size of CATBERT
				Comment	
				BERT translation table Bert translation tables are obtained in CSA and consist of a prefix area, containing storage pointers from area to area, followed by several (up to 253) BRTRANS areas. The prefix area contains a chain pointer that is used to free the CSA on a clean shutdown of JES2.	
				End of Comment	
56	(38)	X'0'	0	CBRBMPFX	"0,8" Prefix area
56	(38)	X'0'	0	CBRBMPTR	"0,4" Prefix area chain pointer

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	BRTRANS	, BERT translation table
0	(0)	CHARACTER	8	BRTRNAME	Name (Zero if not in use)
8	(8)	BITSTRING	1	BRTRID	BERTIE id

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
8	(8)	X'FD'	0	BRTRMAXI	"BRTIICNT-1" Max usable BERTIE ID
9	(9)	BITSTRING	1	BRTRCBT	CB type (same as $PARMLST)
10	(A)	SIGNED	2	BRTRCOFF	Offset into CB of data
12	(C)	BITSTRING	1	BRTRLEN	Length of data
13	(D)	BITSTRING	1	BRTRFLG1	Flag bytes
		1...		BRTRF1OL	"B'10000000'" Offset overlaps allowed
		.1..		BRTRF1J2	"B'01000000'" Type is JES2-defined
14	(E)	X'F'	0	BRTRFILL	"BRTRFCLI+1,1" Fill character
14	(E)	X'12'	0	BRTRSIZE	"*-BRTRANS" Length of a table entry

$CATBERT Cross Reference

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

$CCE Information

$CCE Heading Information

Common Name: Cell Control Element
Macro ID: $CCE
DSECT Name: CCE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CCE
Offset: CCEID-CCE
Length: L'CCEID
Storage Attributes: Subpool: 231
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M) in common storage.
Size: See CCEL
Created by: $GETCEL in HASCLINK
Pointed to by: CCTCSACH field of the HCCT data area
CCECCE field of the CCE data area
PSOCCE field of the PSO data area
S35DCCE field of the S35D data area
Serialization: Compare and swap logic is used to place CCEs on the CCTCSACH chain. Once on the chain, they are never removed. Compare and swap logic must also be used to update field CCEKEY1. CCEKEY1 is a claim field that must be obtained prior to modifying any other CCE field. If CCEKEY1 field is 0 then there is no owner of the CCE.
Function: CCE's represent CSA cells of variable length (allocated in blocks of 256 bytes). The CCEs are chain from the CCTCSACH field in the HCCT control block. Once on this chain, a CCE will never be removed. The cell represented by each CCE is chained from the CCECLOC field of the CCE. The CCE describes who the owner of the cell is and what properties are associated with the cell (how large it is, whether it is a primary cell or not, how the cell may be freed). For more information on the CCEs, look at routines $GETCEL and $FRECEL in HASCLINK.

$CCE Map

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

$CCE Cross Reference

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
20	(14)	ADDRESS	4	CCEKEY2	SECONDARY KEY--USUALLY A TCB ADDRESS OR 0
20	(14)	X'18'	0	CCEL	"*-CCE"

$CCE Cross Reference

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

$CCW Information

$CCW Programming Interface information

Programming Interface information

$CCW

End of Programming Interface information

$CCW Heading Information

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

$CCW Map

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	$CCWS	, CCW equates DSECT
				Comment	
				Basic CCW fields (format 0)	
				End of Comment	
0	(0)	X'0'	0	CCWOP	"0,1" OPERATION
0	(0)	X'0'	0	CCWCMD	"0,1" (ALIAS COMMAND CODE)
0	(0)	X'1'	0	CCWADDR	"1,3" DATA (TARGET) ADDRESS
0	(0)	X'4'	0	CCWFLAG	"4,1" FLAG BYTES
0	(0)	X'5'	0	CCWRESVD	"5,1" RESERVED
0	(0)	X'6'	0	CCWCOUNT	"6,2" LENGTH
0	(0)	X'6'	0	CCWLEN	"6,2" LENGTH
				Comment	
				Basic CCW fields (format 1)	
				End of Comment	
0	(0)	X'0'	0	CCW1OP	"0,1" Operation
0	(0)	X'0'	0	CCW1CMD	"0,1" (Alias command code)
0	(0)	X'1'	0	CCW1FLAG	"1,1" Flag byte
0	(0)	X'2'	0	CCW1CNT	"2,2" Length
0	(0)	X'2'	0	CCW1LEN	"2,2" (Alias length)
0	(0)	X'1'	0	CCW1RESV	"CCW1FLAG,L'CCW1FLAG+L'CCW1CNT" Area that must be zero in a TIC
0	(0)	X'4'	0	CCW1ADDR	"4,4" Data (target) address

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
		BASIC COMMAND CODES			
				End of Comment	
		1		WRITE	"X'01'" WRITE
		1		PRINT	"X'01'" PRINT (ON PRINTERS)
		1		PUNCH	"X'01'" PUNCH (ON PUNCHES)
		1		SRCH	"X'01'" SEARCH (USED WITH MODIFIER)
		.... ..1.		READ	"X'02'" READ
		11		CNTRL	"X'03'" CONTROL
		11		NOP	"X'03'" NO OPERATION
		.... .1..		SNS	"X'04'" SENSE
		.... 1...		TIC	"X'08'" TRANSFER IN CHANNEL
0	(0)	X'6'	0	READIO	"READ+SNS" READ AND SENSE COMMAND
0	(0)	X'5'	0	WRITEIO	"WRITE+SNS" WRITE AND SENSE COMMAND
				Comment	
		CCW FLAG VALUES			
				End of Comment	
		1...		DC	"X'80'" DATA CHAINING
		.1..		CC	"X'40'" COMMAND CHAINING
		..1.		SLI	"X'20'" SURPRESS INCORRECT LENGTH
		...1		SKIP	"X'10'" SUPRESS DATA TRANSFER
		.... 1...		PCI	"X'08'" PGM CONTROLLED INTERRUPT
		.... .1..		IDA	"X'04'" CHANNEL INDIRECT ADDRESSING
		.... ..1.		SUS	"X'02'" Suspend
		1		MIDA	"X'01'" Modified indirect data addr
				Comment	
		DIRECT ACCESS DEVICE -- CONTROL COMMANDS			
				End of Comment	
		..1. 1.11		ORIENT	"X'28'+CNTRL" ORIENT - (2305 0NLY)
		...1 ..11		RECALIB	"X'10'+CNTRL" RECALIBRATE
		.... .111		SEEK	"X'04'+CNTRL" SEEK
		.... 1.11		SEEKCYL	"X'08'+CNTRL" SEEK CYLINDER
		...1 1.11		SEEKHD	"X'18'+CNTRL" SEEK HEAD
		 1111		SPACNT	"X'0C'+CNTRL" SPACE COUNT
		...1 1111		SETFMSK	"X'1C'+CNTRL" SET FILE MASK
		..1. ..11		SETS	"X'20'+CNTRL" SET SECTOR - (RPS ONLY)
		..1. ..11		SETSECTR	"X'20'+CNTRL" SET SECTOR - (RPS ONLY)
		...1 .111		RESTORE	"X'14'+CNTRL" RESTORE
		..1. .111		VARYSNS	"X'24'+CNTRL" VARY SENSING - (2305 ONLY)
		.1.. .111		LOCRCD	"X'44'+CNTRL" LOCATE RECORD - (EXT. C-K-D)
				Comment	
		Direct Access Device -- Locate record operators			
				End of Comment	
		1		LROWRITE	"X'01'" - Write data
		11		LROFMT	"X'03'" - Format write
		.... .11.		LROREAD	"X'06'" - Read data
		.... 1.11		LROWTRAK	"X'0B'" - Write Track
		.... 11..		LRORTRAK	"X'0C'" - Read Track

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		Direct Access Device -- Track operations			
		End of Comment			
		1.1. .11.		READTRD	"X'A4'+READ" Read track data
		1.1. .1.1		WRITETRD	"X'A4'+WRITE" Write track data
		Comment			
		DIRECT ACCESS DEVICE -- SEARCH COMMAND MODIFIERS			
		End of Comment			
		..1.		EQ	"X'20'" SEARCH EQUAL MODIFIER
		.1..		HI	"X'40'" SEARCH HI MODIFIER
		.11.		HIEQ	"X'60'" SEARCH HI OR EQUAL MODIFIER
		.... .1..		CNTNU	"X'04'" SEARCH CONTINUE (2314 ONLY)
		Comment			
		DIRECT ACCESS DEVICE -- SENSE COMMAND MODIFIERS			
		End of Comment			
		1..1		RSVDISK	"X'90'" DEVICE RESERVE
		1.11		RLSDISK	"X'B0'" DEVICE RELEASE
		Comment			
		DIRECT ACCESS DEVICE -- FIELD MODIFIERS			
		End of Comment			
		...1 1...		HA	"X'18'" HOME ADDRESS FIELD
		...1		CNT	"X'10'" COUNT (ID) FIELD
		...1		ID	"X'10'" ID (COUNT) FIELD
		...1 .1..		REC0	"X'14'" RECORD ZERO
		.... .1..		DATA	"X'04'" DATA FIELD
		.... 1...		KEY	"X'08'" KEY FIELD
		.... 11..		KD	"X'0C'" KEY AND DATA FIELD
		...1 11..		CKD	"X'1C'" COUNT, KEY AND DATA FIELDS
		....		IPL	"X'00'" IPL RECORD
		..1.		SECTOR	"X'20'" SECTOR
		1...		UPDT	"X'80'" Update
		1...		MT	"X'80'" MULTI-TRACK OPERATION
		Comment			
		PRINTER DEVICE -- CONTROL COMMANDS			
		End of Comment			
		1111 1.11		LOADUCS	"X'F8'+CNTRL" LOAD UCS BUFFER
		1111 ..11		LOADUSCF	"X'F0'+CNTRL" LOAD UCS BUFFER (FOLDED)
		.1.. ..11		FOLDUCS	"X'40'+CNTRL" FOLD UCS BUFFER
		..1. ..11		UNFLDUCS	"X'20'+CNTRL" UNFOLD UCS BUFFER
		111. 1.11		GATEUCS	"X'E8'+CNTRL" GATE/LOAD UCS BUFFER
		.111 ..11		BLKDATAC	"X'70'+CNTRL" BLOCK DATA CHECK
		.111 1.11		ALWDATAC	"X'78'+CNTRL" ALLOW DATA CHECK
		.11. ..11		LOADFCB	"X'60'+CNTRL" LOAD FCB
		.11. 1.11		RAISCOVR	"X'68'+CNTRL" RAISE COVER

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

$CCW Cross Reference

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		MIDA - Modified indirect data addressing mapping			
		End of Comment			
0	(0)	X'0'	0	MIDAW	"0,16" Midaw definition
		Comment			
		EQU 0,5 Reserved			
		End of Comment			
0	(0)	X'5'	0	MIDAWFLG	"5,1" Flag byte
		1...		MIDAWFLS	"B'10000000'" Last MIDAW
		.1..		MIDAWFSK	"B'01000000'" Skip (read only)
		..1.		MIDAWFIN	"B'00100000'" Data-transfer-interruption
0	(0)	X'6'	0	MIDAWCNT	"6,2" Count of data to transfer
0	(0)	X'8'	0	MIDAWADR	"8,8" Address of data

$CCW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
$CCWS	0		LDCOPYNO	0	23
ALWDATAC	0	7B	LOADFCB	0	63
BLKDATAC	0	73	LOADUCS	0	FB
CC	0	40	LOADUSCF	0	F3
CCWADDR	0	1	LOADWCGM	0	53
CCWCMD	0	0	LOCRCD	0	47
CCWCOUNT	0	6	LROFMT	0	3
CCWFLAG	0	4	LROREAD	0	6
CCWLEN	0	6	LRORTRAK	0	C
CCWOP	0	0	LROWRITE	0	1
CCWRESVD	0	5	LROWTRAK	0	B
CCW1ADDR	0	4	MARKFORM	0	17
CCW1CMD	0	0	MIDA	0	1
CCW1CNT	0	2	MIDAW	0	0
CCW1FLAG	0	1	MIDAWADR	0	8
CCW1LEN	0	2	MIDAWCNT	0	6
CCW1OP	0	0	MIDAWFIN	0	20
CCW1RESV	0	1	MIDAWFLG	0	5
CKD	0	1C	MIDAWFLS	0	80
CLEARPRT	0	87	MIDAWFSK	0	40
CNT	0	10	MT	0	80
CNTNU	0	4	NOP	0	3
CNTRL	0	3	OFFSTACK	0	7
DATA	0	4	ORIENT	0	2B
DC	0	80	PCI	0	8
EQ	0	20	PRINT	0	1
FOLDUCS	0	43	PRTEOT	0	7
GATEUCS	0	EB	PUNCH	0	1
HA	0	18	RAISCOVR	0	6B
HI	0	40	READ	0	2
HIEQ	0	60	READFCB	0	12
ID	0	10	READIO	0	6
IDA	0	4	READPLB	0	2
IMED	0	3	READTRD	0	A6
INITPRT	0	37	READUCS	0	A
IPL	0	0	RECALIB	0	13
KD	0	C	REC0	0	14
KEY	0	8	RESTORE	0	17
LDCHARMD	0	25	RLSDISK	0	B0
LDCOPYMD	0	35	RSVDISK	0	90

Name	Hex Offset	Hex Value
SECTOR	0	20
SEEK	0	7
SEEKCYL	0	B
SEEKHD	0	1B
SELXTAB0	0	47
SELXTAB1	0	57
SELXTAB2	0	67
SELXTAB3	0	77
SETFLASH	0	43
SETFMSK	0	1F
SETOVRLY	0	43
SETS	0	23
SETSECTR	0	23
SKIP	0	10
SKPCH0	0	80
SKPCH1	0	88
SKPCH10	0	D0
SKPCH11	0	D8
SKPCH12	0	E0
SKPCH2	0	90
SKPCH3	0	98
SKPCH4	0	A0
SKPCH5	0	A8
SKPCH6	0	B0
SKPCH7	0	B8
SKPCH8	0	C0
SKPCH9	0	C8
SLI	0	20
SNS	0	4
SPACNT	0	F
SPAC1	0	8
SPAC2	0	10
SPAC3	0	18
SRCH	0	1
SUS	0	2
TIC	0	8
UNFLDUCS	0	23
UPDT	0	80
VARYSNS	0	27
WRITE	0	1
WRITEIO	0	5
WRITETRD	0	A5

$CDCWORK Information

$CDCWORK Heading Information

Common Name: JES2 Cross-member device status PCE work area
Macro ID: $CDCWORK
DSECT Name: PCE ($CDCWORK 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 CDCPCEWS 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 $CDCPCE 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 CDC Processor and by its support routines and exits. $CDCWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $CDCWORK are actually part of the PCE DSECT, but only map PCEs with the value PCECDCID in the second byte of field PCEID.

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

$CDCWORK Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
312	(138)	CHARACTER	16	CDCMBNAM	Mailbox name for dev data
328	(148)	SIGNED	4	CDCXCECB (0)	XECB for XCF posts
352	(160)	ADDRESS	4	CDCXBUFA	Address of current XREQ
356	(164)	ADDRESS	4	CDCXBUFP	Current data area pointer
360	(168)	SIGNED	4	CDCXBUFL	Current data area length
364	(16C)	BITSTRING	8	CDCXTOKN	Current XCF message token
372	(174)	ADDRESS	4	CDCACKPT	Acknowledgement XREQ ptr
376	(178)	ADDRESS	4	CDCSNDBF	Address of send buffer
380	(17C)	SIGNED	4	CDCERRCT	ABEND count
384	(180)	BITSTRING	4	CDCMEMUP	Previous member up mask
388	(184)	BITSTRING	4	CDCCDCUP	Previous CDC up mask
392	(188)	BITSTRING	4	CDCWRKAF	Working affinity mask
396	(18C)	BITSTRING	4	CDCNITAF	Aff mask for NIT updates
400	(190)	ADDRESS	4	CDCSHEAD	Head/Tail of
404	(194)	ADDRESS	4	CDCSTAIL	synch elements

Comment

List form macros for JESXCF services

End of Comment

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
408	(198)	DBL WORD	8	(0)	
408	(198)	BITSTRING	160	CDCIXLST	JESXCF list form macros
568	(238)	DBL WORD	8	CDCIXEND (0)	End of list form area
				Comment	
				------- IXZXIXAC MF=(L,CDCXIXAC) Acknowledge message MACDATE -11/12/03-<1>	
				End of Comment	
0	(0)	X'198'	0	M00M1050	"CDCXIXAC" ++ IXZXIXAC NAME
408	(198)	DBL WORD	8	CDCXIXAC (0)	++ IXZXIXAC PARM LIST
408	(198)	BITSTRING	1	CDCXIXAC_XVERSION	++ INPUT XVERSION
409	(199)	CHARACTER	6	CDCXIXAC_XEYECATCH	++ CONSTANT XEYECATCH
415	(19F)	BITSTRING	1	CDCXIXAC_XSTB	++ INPUT
		1...		CDCXIXAC_XSTB_NO	"B'10000000'" ++ XSTB.NO KEYWORD
		.1..		CDCXIXAC_XSTB_YES	"B'01000000'" ++ XSTB.YES KEYWORD
416	(1A0)	BITSTRING	8	CDCXIXAC_XMSGTOKEN	++ XMSGTOKEN
424	(1A8)	ADDRESS	4	CDCXIXAC_XDATA	++ XDATA
428	(1AC)	SIGNED	4	CDCXIXAC_XDATALEN	++ XDATALEN
432	(1B0)	SIGNED	4	CDCXIXAC_XUSERRC	++ XUSERRC
436	(1B4)	SIGNED	4	CDCXIXAC_XGROUPTOKEN	++ XGROUPTOKEN
440	(1B8)	SIGNED	4	CDCXIXAC_XSYSRC	++ XSYSRC
444	(1BC)	SIGNED	4	CDCXIXAC_XSYSRSN	++ XSYSRSN
448	(1C0)	BITSTRING	1	CDCXIXAC_XKEYS	++ FIELD_LABEL
		1...		CDCXIXAC_KEYUSED_DATA	"B'10000000'" ++ KEYUSED.DATA KEYWORD
		.1..		CDCXIXAC_KEYUSED_DATALEN	"B'01000000'" ++ KEYUSED.DATALEN KEYWORD
		..1.		CDCXIXAC_KEYUSED_USERRC	"B'00100000'" ++ KEYUSED.USERRC KEYWORD
		...1		CDCXIXAC_KEYUSED_SYSRC	"B'00010000'" ++ KEYUSED.SYSRC KEYWORD
		.... 1...		CDCXIXAC_KEYUSED_SYSRSN	"B'00001000'" ++ KEYUSED.SYSRSN KEYWORD
449	(1C1)	BITSTRING	1	CDCXIXAC_XMSGATTR	++ INPUT
		1...		CDCXIXAC_XMSGATTR_J3CONNECT	"B'10000000'" ++ XMSGATTR.J3CONNECT KEYWORD
		.1..		CDCXIXAC_XMSGATTR_EXPRESS	"B'01000000'" ++ XMSGATTR.EXPRESS KEYWORD
449	(1C1)	X'2A'	0	CDCXIXACL	"*-CDCXIXAC" ++ LENGTH OF PLIST
				Comment	
				IXZXIXAC-1	
				End of Comment	
450	(1C2)	ADDRESS	2	(0)	Ensure area fits

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
------- IXZXIXMB MF=(L,CDCXIXMB) Create mailbox MACDATE -93/05/10-<1>					
				End of Comment	
408	(198)	SIGNED	2	M00M1052 (0)	IXZXIXMB-1
408	(198)	DBL WORD	8	CDCXIXMB (0)	++ IXZXIXMB PARM LIST
408	(198)	BITSTRING	1	CDCXIXMB_XVERSION	
					++ INPUT XVERSION
409	(199)	CHARACTER	6	CDCXIXMB_XEYECATCH	
					++ CONSTANT XEYECATCH
415	(19F)	CHARACTER	1	CDCXIXMB_XRSV0001	
					++ RESERVED XRSV0001
416	(1A0)	CHARACTER	16	CDCXIXMB_XMBOXNAME	
					++ XMBOXNAME
432	(1B0)	ADDRESS	4	CDCXIXMB_XPOSTXIT	
					++ XPOSTXIT
436	(1B4)	ADDRESS	4	CDCXIXMB_XPOSTDATA	
					++ XPOSTDATA
440	(1B8)	SIGNED	4	CDCXIXMB_XPOSTALET	
					++ XPOSTALET
444	(1BC)	SIGNED	4	CDCXIXMB_XGROUPTOKEN	
					++ XGROUPTOKEN
448	(1C0)	BITSTRING	1	CDCXIXMB_XSYSEVENTS	
					++ FIELD_LABEL
		1...		CDCXIXMB_XSYSEVENT_YES	
					"B'10000000'" ++ XSYSEVENT.YES KEYWORD
		.1..		CDCXIXMB_XSYSEVENT_NO	
					"B'01000000'" ++ XSYSEVENT.NO KEYWORD
448	(1C0)	X'29'	0	CDCXIXMBL	"*-CDCXIXMB" ++ LENGTH OF PLIST
				Comment	
		IXZXIXMB-1			
				End of Comment	
450	(1C2)	ADDRESS	2	(0)	Ensure area fits
				Comment	
------- IXZXIXMD MF=(L,CDCXIXMD) Delete mailbox MACDATE -93/05/10-<1>					
				End of Comment	
408	(198)	SIGNED	2	M00M1053 (0)	IXZXIXMD-1
408	(198)	DBL WORD	8	CDCXIXMD (0)	++ IXZXIXMD PARM LIST
408	(198)	BITSTRING	1	CDCXIXMD_XVERSION	
					++ INPUT XVERSION
409	(199)	CHARACTER	6	CDCXIXMD_XEYECATCH	
					++ CONSTANT XEYECATCH
415	(19F)	BITSTRING	1	CDCXIXMD_XSTB	
					++ INPUT
		1...		CDCXIXMD_XSTB_NO	
					"B'10000000'" ++ XSTB.NO KEYWORD
		.1..		CDCXIXMD_XSTB_YES	
					"B'01000000'" ++ XSTB.YES KEYWORD
416	(1A0)	CHARACTER	16	CDCXIXMD_XMBOXNAME	
					++ XMBOXNAME
432	(1B0)	SIGNED	4	CDCXIXMD_XGROUPTOKEN	
					++ XGROUPTOKEN
432	(1B0)	X'1C'	0	CDCXIXMDL	"*-CDCXIXMD" ++ LENGTH OF PLIST

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
				IXZXIXMD-1	
				End of Comment	
436	(1B4)	ADDRESS	2	(0)	Ensure area fits
				Comment	
				------- IXZXIXRM MF=(L,CDCXIXRM) Receive message MACDATE -93/05/10-<1>	
				End of Comment	
408	(198)	SIGNED	2	M00M1054 (0)	IXZXIXRM-1
408	(198)	DBL WORD	8	CDCXIXRM (0)	++ IXZXIXRM PARM LIST
408	(198)	BITSTRING	1	CDCXIXRM_XVERSION	++ INPUT XVERSION
409	(199)	CHARACTER	6	CDCXIXRM_XEYECATCH	++ CONSTANT XEYECATCH
415	(19F)	CHARACTER	1	CDCXIXRM_XRSV0001	++ RESERVED XRSV0001
416	(1A0)	CHARACTER	16	CDCXIXRM_XMBOXNAME	++ XMBOXNAME
432	(1B0)	ADDRESS	4	CDCXIXRM_XDATA	++ XDATA
436	(1B4)	SIGNED	4	CDCXIXRM_XDATALEN	++ XDATALEN
440	(1B8)	BITSTRING	8	CDCXIXRM_XMSGTOKEN	++ XMSGTOKEN
448	(1C0)	SIGNED	4	CDCXIXRM_XGROUPTOKEN	++ XGROUPTOKEN
452	(1C4)	BITSTRING	1	CDCXIXRM_XMSGFETCH	++ INPUT
		1...		CDCXIXRM_XMSGFETCH_ALL	"B'10000000'" ++ XMSGFETCH.ALL KEYWORD
		.1..		CDCXIXRM_XMSGFETCH_MESSAGES	"B'01000000'" ++ XMSGFETCH.MESSAGES KEYWORD
		..1.		CDCXIXRM_XMSGFETCH_SYSEVENT	"B'00100000'" ++ XMSGFETCH.SYSEVENT KEYWORD
		...1		CDCXIXRM_XMSGFETCH_ACKS	"B'00010000'" ++ XMSGFETCH.ACKS KEYWORD
453	(1C5)	BITSTRING	1	CDCXIXRM_XKEYS	++ FIELD_LABEL
		1...		CDCXIXRM_KEYUSED_MSGFETCH	"B'10000000'" ++ KEYUSED.MSGFETCH KEYWORD
453	(1C5)	X'2E'	0	CDCXIXRML	"*-CDCXIXRM" ++ LENGTH OF PLIST
				Comment	
				IXZXIXRM-1	
				End of Comment	
454	(1C6)	ADDRESS	2	(0)	Ensure area fits
568	(238)	DBL WORD	8	(0)	Force double-word alignment
568	(238)	X'100'	0	CDCPCEWS	"*-PCEWORK" Length of work area

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CDCSYN	
0	(0)	ADDRESS	4	CDCSYNNX	Next pointer ($FIFOENQ)
4	(4)	ADDRESS	4	CDCSYNPR	Prev pointer ($FIFOENQ)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
8	(8)	BITSTRING	1	CDCSYNTY	Type (See CDCTTYPE)
9	(9)	BITSTRING	3		Reserved
12	(C)	ADDRESS	4	CDCSYNAD	Control block address
12	(C)	X'10'	0	CDCSYNLN	"*-CDCSYN" Length of element

$CDCWORK Cross Reference

Name	Hex Offset	Hex Value
CDCACKPT	174	
CDCCDCUP	184	
CDCERRCT	17C	
CDCIXEND	238	
CDCIXLST	198	
CDCMBNAM	138	E2E8E2D1
CDCMEMUP	180	
CDCNITAF	18C	
CDCPCEWS	238	100
CDCSHEAD	190	
CDCSNDBF	178	
CDCSTAIL	194	
CDCSYN	0	
CDCSYNAD	C	
CDCSYNLN	C	10
CDCSYNNX	0	
CDCSYNPR	4	
CDCSYNTY	8	
CDCWRKAF	188	
CDCXBUFA	160	
CDCXBUFL	168	
CDCXBUFP	164	
CDCXCECB	148	
CDCXIXAC	198	
CDCXIXAC_KEYUSED_DATA	1C0	80
CDCXIXAC_KEYUSED_DATALEN	1C0	40
CDCXIXAC_KEYUSED_SYSRC	1C0	10
CDCXIXAC_KEYUSED_SYSRSN	1C0	8
CDCXIXAC_KEYUSED_USERRC	1C0	20
CDCXIXAC_XDATA	1A8	
CDCXIXAC_XDATALEN	1AC	
CDCXIXAC_XEYECATCH	199	
CDCXIXAC_XGROUPTOKEN	1B4	
CDCXIXAC_XKEYS	1C0	
CDCXIXAC_XMSGATTR	1C1	
CDCXIXAC_XMSGATTR_EXPRESS	1C1	40
CDCXIXAC_XMSGATTR_J3CONNECT	1C1	80
CDCXIXAC_XMSGTOKEN	1A0	
CDCXIXAC_XSTB	19F	
CDCXIXAC_XSTB_NO	19F	80
CDCXIXAC_XSTB_YES	19F	40
CDCXIXAC_XSYSRC	1B8	
CDCXIXAC_XSYSRSN	1BC	
CDCXIXAC_XUSERRC	1B0	
CDCXIXAC_XVERSION	198	
CDCXIXACL	1C1	2A
CDCXIXMB	198	
CDCXIXMB_XEYECATCH	199	
CDCXIXMB_XGROUPTOKEN	1BC	
CDCXIXMB_XMBOXNAME	1A0	
CDCXIXMB_XPOSTALET	1B8	
CDCXIXMB_XPOSTDATA	1B4	
CDCXIXMB_XPOSTXIT	1B0	
CDCXIXMB_XRSV0001	19F	
CDCXIXMB_XSYSEVENT_NO	1C0	40
CDCXIXMB_XSYSEVENT_YES	1C0	80
CDCXIXMB_XSYSEVENTS	1C0	
CDCXIXMB_XVERSION	198	
CDCXIXMBL	1C0	29
CDCXIXMD	198	
CDCXIXMD_XEYECATCH	199	
CDCXIXMD_XGROUPTOKEN	1B0	
CDCXIXMD_XMBOXNAME	1A0	
CDCXIXMD_XSTB	19F	
CDCXIXMD_XSTB_NO	19F	80
CDCXIXMD_XSTB_YES	19F	40
CDCXIXMD_XVERSION	198	
CDCXIXMDL	1B0	1C
CDCXIXRM	198	
CDCXIXRM_KEYUSED_MSGFETCH	1C5	80

$CDCWORK Cross Reference

Name	Hex Offset	Hex Value
CDCXIXRM_XDATA		
	1B0	
CDCXIXRM_XDATALEN		
	1B4	
CDCXIXRM_XEYECATCH		
	199	
CDCXIXRM_XGROUPTOKEN		
	1C0	
CDCXIXRM_XKEYS		
	1C5	
CDCXIXRM_XMBOXNAME		
	1A0	
CDCXIXRM_XMSGFETCH		
	1C4	
CDCXIXRM_XMSGFETCH_ACKS		
	1C4	10
CDCXIXRM_XMSGFETCH_ALL		
	1C4	80
CDCXIXRM_XMSGFETCH_MESSAGES		
	1C4	40
CDCXIXRM_XMSGFETCH_SYSEVENT		
	1C4	20
CDCXIXRM_XMSGTOKEN		
	1B8	
CDCXIXRM_XRSV0001		
	19F	
CDCXIXRM_XVERSION		
	198	
CDCXIXRML	1C5	2E
CDCXTOKN	16C	
M00M1050	0	198
M00M1052	198	
M00M1053	198	
M00M1054	198	
PCE	0	

$CHK Information

$CHK Programming Interface information

Programming Interface information

$CHK

End of Programming Interface information

$CHK Heading Information

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

$CHK Map

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

Comment

The following sub-section, generated by the SPID
macro, must reside immediately after the I/O control
data in every spool buffer.
The following fields are defined:
Eyecatcher - 4 bytes
Job name - 8 bytes
Job number - 4 bytes
Job key - 4 bytes
Dataset key - 4 bytes (or reserved if not applicable)

End of Comment

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

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

Comment

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

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
$VC1PXXX=PTM HBB5530 950915 VLC: BCP PTM xxx Ext Classifi					
$R04LWLM=WLM HBB6604 970317 J_K2: Misc fixes					
$R04P498=WLM HBB6604 970331 J_S1:					
$Z05LENF=ENVIRON HBB7708 021003 .: ENF 58 for checkpoints					
A000000-999999 CREATED FOR MVS 1.3.3					
01 NOTES:					
None					
%GOTO CHKDCL;					
End of Comment					
128	(80)	DBL WORD	8	(0)	
128	(80)	X'80'	0	IAZCHK	"*,0,C'J'"
128	(80)	X'80'	0	CHK	"IAZCHK,0,C'J'" Alternate DSECT name
128	(80)	CHARACTER	4	CHKID	CHKPT RECORD AREA ID
132	(84)	SIGNED	2	CHKLNGTH	CHKPT LENGTH
134	(86)	SIGNED	2		RESERVED
136	(88)	CHARACTER	64	CHKJESWK	TO BE FILLED IN BY JES
200	(C8)	CHARACTER	8	CHKRBA	JES EQUIVALENT OF A RBA
208	(D0)	SIGNED	4	CHKDEV	DEVICE TYPE
212	(D4)	SIGNED	4	CHKMOD	MODEL NUMBER
216	(D8)	SIGNED	4	CHKCOPY	COPY COUNT
220	(DC)	SIGNED	4	CHKTRNC	TRANSMISSION COUNT
224	(E0)	SIGNED	4	CHKREC	LOGICAL RECORD COUNT(FROM SPOOL)
228	(E4)	SIGNED	4	CHKPAGE	PHYSICAL SHEET COUNT
232	(E8)	CHARACTER	8	CHKPROD	PRODUCT THAT CREATED CKPT REC
240	(F0)	SIGNED	4	CHKVER	VERSION OF PRODUCT
244	(F4)	SIGNED	4	CHKRELS	RELEASE OF PRODUCT
248	(F8)	SIGNED	4	CHKMODF	MODIFICATION LEVEL OF PRODUCT
252	(FC)	SIGNED	4	CHKSERV	SERVICE LEVEL OF PRODUCT
252	(FC)	X'80'	0	CHKLEN	"*-CHK"
Comment					

The following fields overlay the 64 byte CHKJESWK area generated by IAZCHK.					

End of Comment					
136	(88)	SIGNED	2	CHKJRCB	OFFSET TO RCB IN BUFFER
138	(8A)	SIGNED	2	CHKPDDB	DISPLACEMENT OF PDDB INTO IOT
140	(8C)	SIGNED	4	CHKPPCT	PDDB PAGE COUNT
144	(90)	SIGNED	4	CHKTLNC	TOTAL JOE LINE COUNT
148	(94)	SIGNED	4	CHKTPCT	TOTAL JOE PAGE COUNT (PHYSICAL)
152	(98)	BITSTRING	4	CHKMTTR_Z11	Data buffer track address (MQTR) Only valid at version CHKVER0.
156	(9C)	BITSTRING	4	CHKIOTTC_Z11	IOT track address (MQTR). (MQTR) Only valid at version CHKVER0.
160	(A0)	BITSTRING	1	CHKCOPYC	CURRENT COPY NUMBER
161	(A1)	BITSTRING	1	CHKBOFF	CURRENT OFFSET INTO TRACKCELL
162	(A2)	BITSTRING	1	CHKCPYG	CURRENT OFFSET INTO COPY GROUP
163	(A3)	BITSTRING	1	CHKTNDS	TOTAL JOE DATASET COUNT
Comment					
KEEP NEXT TWO FIELDS TOGETHER FOR $DU COMMAND					
End of Comment					
164	(A4)	SIGNED	4	CHKCRECN	CURRENT RECORD NUMBER
168	(A8)	SIGNED	4	CHKCPAGN	CURRENT PAGE NUMBER
172	(AC)	CHARACTER	12	CHKJOID (0)	JOE ID BLOCK FOR CHK VALIDATION
172	(AC)	CHARACTER	8	CHKJOENM	JOE OUTPUT GROUP NAME(JOENAME)
180	(B4)	CHARACTER	2	CHKJOID1	JOE OUTPUT GROUP ID (JOEID1)
182	(B6)	CHARACTER	2	CHKJOID2	JOE OUTPUT GROUP ID (JOEID2)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
184	(B8)	BITSTRING	1		Reserved for future use
185	(B9)	SIGNED	1	CHKVERS	CHK version:
185	(B9)	X'0'	0	CHKVER0	"0" Pre-z/OS 1.12 (MTTRs)
185	(B9)	X'C'	0	CHKVER12	"12" z/OS 1.12+ (MQTRs)
186	(BA)	SIGNED	2	CHKPPHPC	PDDB PHYSICAL PAGE COUNT
188	(BC)	BITSTRING	6	CHKMQTR	Data buffer track address (MQTR). Only valid at version CHKVER12 and greater.
194	(C2)	BITSTRING	6	CHKIOTTK	IOT track address (MQTR). Only valid at version CHKVER12 and greater.
194	(C2)	X'88'	0	CHKDATA	"CHKJESWK,*-CHKJESWK" CHK DATA AREA

Comment

The following fields overlay the 8 byte CHKRBA area generated by IAZCHK.

End of Comment

200	(C8)	BITSTRING	1		Reserved
201	(C9)	BITSTRING	4	CHKRBATA	Data buffer Track Address (MTTR)
205	(CD)	BITSTRING	3	CHKRBARN	RECORD NUMBER WITHIN BUFFER
256	(100)	SIGNED	4	(0)	PRESERVE FULL WORD ALIGNMENT
256	(100)	X'100'	0	CHKAZLNG	"*-CHKDSECT" Length of DSECT

Comment

FLAG EQUATES FOR $#CHK MACRO INLINE PARM LIST

End of Comment

1...	CHK1RD	"B'10000000'" TYPE=READ OPTION $#CHK MACRO
.1..	CHK1WR	"B'01000000'" TYPE=WRITE OPTION $#CHK MACRO
..1.	CHK1YW	"B'00100000'" WAIT=YES OPTION $#CHK MACRO
...1	CHK1NW	"B'00010000'" WAIT=NO OPTION $#CHK MACRO
.... 1...	CHK1RS5	"B'00001000'" RESERVED FOR FUTURE USE
.... .1..	CHK1RS6	"B'00000100'" RESERVED FOR FUTURE USE
.... ..1.	CHK1RS7	"B'00000010'" RESERVED FOR FUTURE USE
....1	CHK1RS8	"B'00000001'" RESERVED FOR FUTURE USE

Comment

FLAG EQUATES FOR $#ALCHK MACRO INLINE PARM LIST

End of Comment

1...	CHK2WRI	"B'10000000'" WRIOT=YES OPTION $#ALCHK MACRO
.1..	CHK2WRJ	"B'01000000'" WRJCT=YES OPTION $#ALCHK MACRO
..1.	CHK2IOT	"B'00100000'" IOT ADDR PASSED TO $#ALCHK
...1	CHK2JCT	"B'00010000'" JCT ADDR PASSED TO $#ALCHK
.... 1...	CHK2YJL	"B'00001000'" LOCK=YES OPTION $#ALCHK MACRO
.... .1..	CHK2QUE	"B'00000100'" Use $CKPTQUE to update JOE
.... ..1.	CHK2RS7	"B'00000010'" RESERVED FOR FUTURE USE
....1	CHK2RS8	"B'00000001'" RESERVED FOR FUTURE USE

$CHK Cross Reference

Name	Hex Offset	Hex Value
CHK	80	80
CHKAZLNG	100	100
CHKBOFF	A1	
CHKCOPY	D8	
CHKCOPYC	A0	
CHKCPAGN	A8	
CHKCPYG	A2	
CHKCRECN	A4	
CHKDATA	C2	88
CHKDEV	D0	
CHKDSECT	0	
CHKID	80	
CHKIOTTC_Z11	9C	
CHKIOTTK	C2	
CHKJBKEY	78	
CHKJBNUM	74	
CHKJESWK	88	
CHKJID	68	
CHKJNAME	6C	
CHKJOENM	AC	
CHKJOID	AC	
CHKJOID1	B4	
CHKJOID2	B6	
CHKJRCB	88	
CHKLEN	FC	80
CHKLNGTH	84	
CHKMOD	D4	
CHKMODF	F8	
CHKMQTR	BC	
CHKMTTR_Z11	98	
CHKPAGE	E4	
CHKPDDB	8A	
CHKPPCT	8C	
CHKPPHPC	BA	
CHKPROD	E8	
CHKRBA	C8	
CHKRBARN	CD	
CHKRBATA	C9	
CHKREC	E0	
CHKRELS	F4	
CHKSERV	FC	
CHKSPLNG	7C	18
CHKSTART	0	68
CHKTLNC	90	
CHKTNDS	A3	
CHKTPCT	94	
CHKTRNC	DC	
CHKVER	F0	
CHKVERS	B9	
CHKVER0	B9	0
CHKVER12	B9	C
CHK1NW	100	10
CHK1RD	100	80
CHK1RS5	100	8
CHK1RS6	100	4
CHK1RS7	100	2
CHK1RS8	100	1
CHK1WR	100	40
CHK1YW	100	20
CHK2IOT	100	20
CHK2JCT	100	10
CHK2QUE	100	4
CHK2RS7	100	2
CHK2RS8	100	1
CHK2WRI	100	80
CHK2WRJ	100	40
CHK2YJL	100	8
IAZCHK	80	80

$CICB Information

$CICB Heading Information

Common Name: C/I address space control block
Macro ID: $CICB
DSECT Name: CICB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CICB
Offset: CCBID-CICB
Length: L'CCBID
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual is in 31 bit storage and real can in in 64 bit storage. The $MONCB resides in common storage.
Size: See CCBLEN
Created by: HASPCNVT PCE
Pointed to by: CCBNEXT field of the $CICB data area
CIPCICB field of the $CNVWORK data area
DCNVCICB field of the $DTECNV data area
CCTCICB field of the $HCCT data area
Serialization: Created when a C/I address space is being started. Otherwise it is updated by the C/I address space main task and only updated by it.
Function: This DSECT maps the CSA data associated with a JES2 C/I address space. It serves as an anchor for all data areas related to the C/I subtasks.

$CICB Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CICB	, JES2 C/I address space CB
0	(0)	CHARACTER	8	CCBID	Eyecatcher
8	(8)	ADDRESS	1	CCBVER	CB version
8	(8)	X'1'	0	CCBVERN	"1" Current version number
9	(9)	SIGNED	1	CCBSEQ	Address space sequence number
10	(A)	BITSTRING	1	CCBSTAT	Status flags for the address
		1...		CCBSTERM	"B'10000000'" Terminate address space
		.1..		CCBSEOM	"B'01000000'" Address space went through EOM
11	(B)	BITSTRING	1	CCBREQS	Requests flags for main task
		1...		CCBRPROC	"B'10000000'" Scan for PROCLIBs to process
		.1..		CCBRSUBS	"B'01000000'" Scan for subtask work
12	(C)	ADDRESS	4	CCBNEXT	Next CICB on CCTCCB chain
16	(10)	ADDRESS	4	CCBCIWRK	CI work area in JES2 CI addr space
20	(14)	CHARACTER	8	CCBNAME	Address space name
28	(1C)	CHARACTER	8	CCBPROG	PROG= to run the address space
36	(24)	BITSTRING	8	CCBPRTKN	Token for CSVDYLPA DELETE request
44	(2C)	BITSTRING	24	CCBODA	ASCRE output area (IHAASEO)
68	(44)	SIGNED	4	CCBCECB	Completion ECB (from subtask)
72	(48)	SIGNED	4	CCBWECB	Work ECB address (to subtask)
76	(4C)	ADDRESS	4	CCBCIPRM	Address space CIPARM chain
80	(50)	ADDRESS	4	CCBCIPWR	CIPARM work queue
84	(54)	ADDRESS	4	CCBPAD	PROCLIB PAD to be allocated
88	(58)	DBL WORD	8	(0)	Alignment
88	(58)	X'58'	0	CCBLEN	"*-CICB" Length of work area

$CICB Cross Reference

Name	Hex Offset	Hex Value
CCBCECB	44	
CCBCIPRM	4C	
CCBCIPWR	50	
CCBCIWRK	10	
CCBID	0	C3C9C3C2
CCBLEN	58	58
CCBNAME	14	D1C5E2F2
CCBNEXT	C	
CCBODA	2C	
CCBPAD	54	
CCBPROG	1C	C8C1E291
CCBPRTKN	24	
CCBREQS	B	
CCBRPROC	B	80
CCBRSUBS	B	40
CCBSEOM	A	40
CCBSEQ	9	
CCBSTAT	A	
CCBSTERM	A	80
CCBVER	8	
CCBVERN	8	1
CCBWECB	48	
CICB	0	

$CID Information

$CID Heading Information

Common Name: Connect ID cell
Macro ID: $CID
DSECT Name: CID
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'CID'
Offset: CIDEYE-CID
Length: 4
Storage Attributes: Subpool: see CIDPOOL
Key: 1
Residency: Virtual storage belw 2Gb, real storage anywhwere, in the private storage of the JES2 address space. In a JES2 NJE Server address sPace
Size: See CIDSIZE
Created by: HASPCON under WTO subtask
Pointed to by: CSACIDCH field of the $DTEWTO data area
CSACID field of the $DTEWTO data area
Serialization: Used by $HASPWTO subtask only.
Function: Contains the connect id for a multiline WTO.

$CID Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CID	
0	(0)	CHARACTER	4	CIDEYE	NSCT eyecatcher
4	(4)	ADDRESS	4	CIDNEXT	Chain pointer
8	(8)	ADDRESS	4	CIDPCE	PCE address
12	(C)	SIGNED	4	CIDCONCT	Connect id for MLWTO
16	(10)	BITSTRING	1	CIDFLAG1	Flags
		1...		CID1LONG	"B'10000000'" Consoles truncated MLWTO for being too long
		.1..		CID1TRNC	"B'01000000'" Most recent line was truncated
17	(11)	BITSTRING	3		Reserved
17	(11)	X'14'	0	CIDSIZE	"*-CID" Length of data area

$CID Cross Reference

Name	Hex Offset	Hex Value
CID	0	
CIDCONCT	C	
CIDEYE	0	C3C9C440
CIDFLAG1	10	
CIDNEXT	4	
CIDPCE	8	
CIDSIZE	11	14
CID1LONG	10	80
CID1TRNC	10	40

$CIPARM Information

$CIPARM Heading Information

Common Name: C/I subtask parm list
Macro ID: $CIPARM
DSECT Name: CIPARM
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CIPARM
Offset: CIPID-CIPARM
Length: L'CIPID
Storage Attributes: Subpool: N/A
Key: 1
Residency: Located in the PAD JES2 $CPOOL in the PSO data space.
Size: See CIPLEN
Created by: HASPCNVT PCE
Pointed to by: CIPCIPA field of the $CIPARM data area
JPCECIP field of the $CNVWORK data area
DCNVCIP field of the $DTECNV data area
CCTCIP field of the $HCCT data area
Serialization: Fields are access by the CNVT PCE when the C/I subtask is waiting for work and by the C/I subtask while the PCE is waiting for conversion to complete.
Function: This data area is used to pass information about jobs to be processed by C/I from the main task to the C/I subtask (either in the JES2 address space or in a JES2 C/I address space). This area should only be used to pass data not as a generic work area.

$CIPARM Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CIPARM	, JES2 C/I subtask parm list
0	(0)	CHARACTER	8	CIPID	Eyecatcher
8	(8)	ADDRESS	1	CIPVER	CB version
8	(8)	X'1'	0	CIPVERN	"1" Current version number
		Comment			

		There are 3 sequence numbers for each subtask, all are zero based. For subtasks in the JES2 address space, only CIPSEQ is set.			
		CIPSEQ - Overall sequence number, corresponds to PCESEQ. Set by PCE.			
		CIPASSEQ - Sequence number of owning JES2CI address space. Corresponds to CCBSEQ. Set by GETJ2CI service when address space is created.			
		CIPSTSEQ - Sequence number of C/I subtask within the JES2CI address space. Set by GETJ2CI service when subtask is created.			

		End of Comment			
9	(9)	SIGNED	1	CIPSEQ	Converter sequence number

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
10	(A)	SIGNED	1	CIPASSEQ	Address space sequence nubmer
11	(B)	SIGNED	1	CIPSTSEQ	Subtask seqence number
12	(C)	ADDRESS	4	CIPCIPA	Next CIPARM on CCTCIP chain
16	(10)	ADDRESS	4	CIPPCE	Related PCE address
20	(14)	ADDRESS	4	CIPCICB	CICB for owning address space (zero if JES2 subtask)
24	(18)	ADDRESS	4	CIPCCBNX	Next CIPARM on CICB CCBCIPRM chain
28	(1C)	ADDRESS	4	CIPCCBWR	Next CIPARM on CICB CCBCIPWR chain
32	(20)	ADDRESS	1	CIPWRFUN	Work request
32	(20)	X'1'	0	CIPWRSTR	"1" Subtask start processeing
32	(20)	X'2'	0	CIPWREND	"2" Subtask terminate request
33	(21)	BITSTRING	1		Reserved
34	(22)	BITSTRING	2	CIPASID	Owning CI address space
36	(24)	ADDRESS	4	CIPDTEA	Associated DTE address
40	(28)	BITSTRING	16	CIPTTOKN	CI subtask TTOKEN
56	(38)	ADDRESS	4	CIPWECBA	Work ECB address (PCE->subtask)
60	(3C)	ADDRESS	4	CIPCECBA	Completion ECB addr (subtask->PCE)
64	(40)	BITSTRING	1	CIPJFLAG	Job flags for communication between PCE and subtask
		1...		CIPJFSY	"B'10000000'" Subtask captured system symbol table
		.1..		CIPJFCV	"B'01000000'" Job has symbols to pass to converter
		..1.		CIPJFIN	"B'00100000'" Job has datasets with symbol substitution
		...1		CIPNOCLS	"B'00010000'" PCE did not find JOBCLASS - subtask must cut proper messages
65	(41)	BITSTRING	1	CIPFLG1	Serialized flag byte (Update using OIL/NIL only)
		1...		CIP1REO	"B'10000000'" Reopen PROCLIB data set
		.1..		CIP1CPRC	"B'01000000'" Close all PROCLIB DDs
		..1.		CIP1CRTM	"B'00100000'" CALLRTM requested
		...1		CIP1CRDP	"B'00010000'" CALLRTM w DUMP requested
		.... 1...		CIP1SHTD	"B'00001000'" Shutdown subtask request
		.... .1..		CIP1TERM	"B'00000100'" Subtask has terminated
		.... ..1.		CIP1COMP	"B'00000010'" Subtask completed request
66	(42)	BITSTRING	9		Reserved

Comment

Parameters passed into subtask

End of Comment

76	(4C)	SIGNED	4	CIPINPST (0)	Start of input area
76	(4C)	SIGNED	4	CIPJQEOF	Offset to JQE to process
80	(50)	ADDRESS	4	CIPJQEA	JQE address (in CKPT)
84	(54)	SIGNED	4	CIPJBKEY	Job key of job to process
88	(58)	CHARACTER	8	CIPJCLAS	JOBCLASS of the job
96	(60)	ADDRESS	4	CIPJPAD	PROCLIB PAD address in data space
100	(64)	BITSTRING	1	CIPOFLAG	Option flags
		1...		CIPOINTR	"B'10000000'" Invoke the interpreter after conversion
		.1..		CIPONWAT	"B'01000000'" This is a no wait CNVTR
		..1.		CIPOWEE	"B'00100000'" Wait for Exclusive ENQ
101	(65)	BITSTRING	7		Reserved
101	(65)	X'4C'	0	CIPINPCL	"CIPINPST,*-CIPINPST" Input area to clear

Comment

Assigned PROCLIB addresses

End of Comment

108	(6C)	ADDRESS	4	CIPOPAD	PROCLIB PAD subtask has OPEN
112	(70)	ADDRESS	4	CIPPAD0	PROC00 PAD address in data space
116	(74)	BITSTRING	4		Reserved

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

				Parameters returned from the subtask	

				End of Comment	
120	(78)	SIGNED	4	CIPOUTST (0)	Start of output area
120	(78)	SIGNED	4	CIPMNBCP	Minimum MVS level for job
124	(7C)	CHARACTER	8	CIPPERF	Performance Group for job from //JOB JCL statement (left justified, blank fill)
132	(84)	CHARACTER	16	CIPSCHE	Scheduling environment for job (left justified, blank fill)
148	(94)	BITSTRING	1	CIPSTAT	Status flags
		1...		CIPSAOPN	"B'10000000'" ACBs successfully 'fake' opened
		.1..		CIPSJLSP	"B'01000000'" Set spin eligible in JQA
		..1.		CIPSINTR	"B'00100000'" Job was interpreted
				Comment	

				Converter processing return codes in CIPJRETN are displayed in text format in message HASP305. New reason code should be added there.	

				End of Comment	
149	(95)	BITSTRING	1	CIPJRETN	JES processing return code
149	(95)	X'0'	0	CIPJROK	"0" Processing successful
149	(95)	X'4'	0	CIPJRAER	"4" $DOGJQE/$DOGCAT error
149	(95)	X'8'	0	CIPJRIOE	"8" I/O error reading CBs
149	(95)	X'C'	0	CIPJWIOE	"12" I/O error writing CBs
149	(95)	X'10'	0	CIPJROPE	"16" Data set open error
149	(95)	X'14'	0	CIPJEXIT	"20" Exit indicated error
149	(95)	X'18'	0	CIPJABND	"24" Subtask ABEND
149	(95)	X'1C'	0	CIPJBCAN	"28" Job canceled
150	(96)	BITSTRING	3	CIPFRSN	Fake open failure info
153	(99)	BITSTRING	3		Reserved
160	(A0)	DBL WORD	8	CIPPRFST (0)	Performance stats for SUBSPERF
160	(A0)	DBL WORD	8	CIPQTIME	C/I queue time (micro)
168	(A8)	DBL WORD	8	CIPRTIME	C/I run time (micro)
176	(B0)	DBL WORD	8	CIPCTIME	C/I CPU time (micro)
176	(B0)	X'78'	0	CIPOUTCL	"CIPOUTST,*-CIPOUTST" Output area to clear
184	(B8)	BITSTRING	8		Reserved
192	(C0)	DBL WORD	8	(0)	Allignment
192	(C0)	X'C0'	0	CIPLEN	"*-CIPARM" Length of work area
192	(C0)	DBL WORD	8	CIPJCTST (0)	Start of JCT area

$CIPARM Cross Reference

Name	Hex Offset	Hex Value
CIPARM	0	
CIPASID	22	
CIPASSEQ	A	
CIPCCBNX	18	
CIPCCBWR	1C	
CIPCECBA	3C	
CIPCICB	14	
CIPCIPA	C	
CIPCTIME	B0	
CIPDTEA	24	
CIPFLG1	41	
CIPFRSN	96	
CIPID	0	C3C9D7C1
CIPINPCL	65	4C
CIPINPST	4C	
CIPJABND	95	18
CIPJBCAN	95	1C
CIPJBKEY	54	
CIPJCLAS	58	
CIPJCTST	C0	
CIPJEXIT	95	14
CIPJFCV	40	40
CIPJFIN	40	20
CIPJFLAG	40	
CIPJFSY	40	80
CIPJPAD	60	
CIPJQEA	50	
CIPJQEOF	4C	
CIPJRAER	95	4
CIPJRETN	95	
CIPJRIOE	95	8
CIPJROK	95	0
CIPJROPE	95	10
CIPJWIOE	95	C
CIPLEN	C0	C0
CIPMNBCP	78	
CIPNOCLS	40	10
CIPOFLAG	64	
CIPOINTR	64	80
CIPONWAT	64	40
CIPOPAD	6C	
CIPOUTCL	B0	78
CIPOUTST	78	
CIPOWEE	64	20
CIPPAD0	70	
CIPPCE	10	
CIPPERF	7C	
CIPPRFST	A0	
CIPQTIME	A0	
CIPRTIME	A8	
CIPSAOPN	94	80
CIPSCHE	84	
CIPSEQ	9	
CIPSINTR	94	20
CIPSJLSP	94	40
CIPSTAT	94	
CIPSTSEQ	B	
CIPTTOKN	28	
CIPVER	8	
CIPVERN	8	1
CIPWECBA	38	
CIPWREND	20	2
CIPWRFUN	20	
CIPWRSTR	20	1
CIP1COMP	41	2
CIP1CPRC	41	40
CIP1CRDP	41	10
CIP1CRTM	41	20
CIP1REO	41	80
CIP1SHTD	41	8
CIP1TERM	41	4

$CIRWORK Information

$CIRWORK Programming Interface information

Programming Interface information

$CIRWORK

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

- CIRPRMWR

End of Programming Interface information

$CIRWORK Heading Information

Common Name: JES2 Common Initialization Routines PCE Work Area
Macro ID: $CIRWORK
DSECT Name: PCE ($CIRWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: The subpool of the HASPIRA module
Key: 1
Residency: Virtual storage is below 16M and real storage is anywhere (above or below 16M) in the private storage of the JES2 address space.
Size: See symbol CIRWLEN for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: The initialization base PCE along with this work area is assembled into the HASPIRA module, which is contained in the HASPINIT or HASJES20 load module. The base PCE is defined statically using constants and this work area is generated by coding this macro with a DSECT=NO operand.
Pointed to by: See $PCE for other pointer fields that apply to all PCE types.
Serialization: None
Function: The fields in this work area are used by the JES2 Initialization Processor and by its support routines and exits. $CIRWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $CIRWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEINTID in the second byte of field PCEID.

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

$CIRWORK Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
				Comment	
				GENERAL FLAG BYTES AND FIELDS COMMON TO ALL IRS	
				End of Comment	
312	(138)	BITSTRING	1	CIRFLAG1	GENERAL USAGE FLAG 1
		1...		CIRF1HPI	"B'10000000'" Current IRPL stmt from PARMLIB
		.1..		CIRF1INC	"B'01000000'" Current IRPL stmt INCLUDEd
		..1.		CIRF1CI	"B'00100000'" CURRENT IRPL STMT FROM CONSOLE
		...1		CIRF1XI	"B'00010000'" CURRENT IRPL STMT FROM EXIT 19
		.... 1...		CIRF1PER	"B'00001000'" ERROR(S) IN SOME IRPL STMTS
		.... .1..		CIRF1CAN	"B'00000100'" CANCEL STATEMENT PROCESSED
		.... ..1.		CIRF1SSW	"B'00000010'" SINGLE SYSTEM WARM START
		1		CIRF1SER	"B'00000001'" SCAN PROCESSING DIAG ERROR MSG
313	(139)	BITSTRING	1	CIRFLAG2	GENERAL USAGE FLAG 2

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		1...		CIRF2JEX	"B'10000000'" JQE extensions rebuilt
		.1..		CIRF2RRD	"B'01000000'" REREAD NECESSARY FOR PARMLIB
		..1.		CIRF2HPO	"B'00100000'" HASPPARM (FIRST) OPEN DONE
		...1		CIRF2CM	"B'00010000'" IRPL IN CONSOLE MODE
		.... 1...		CIRF2ECM	"B'00001000'" IRPL IN 'ERROR' CONSOLE MODE
		.... .1..		CIRF2SSE	"B'00000100'" IRPL, SUPPRESS INITSTMT ERRORS
		.... ..1.		CIRF2CMA	"B'00000010'" ENDING COMMA ON INIT PARM
		1		CIRF2CMT	"B'00000001'" NON-COMPLETE COMMENT ON INIT PARM
314	(13A)	ADDRESS	1	CIRFLAG3	GENERAL USAGE FLAG 3
		1...		CIRF3LST	"B'10000000'" IRPL 'LIST' IN EFFECT
		.1..		CIRF3LOG	"B'01000000'" IRPL 'LOG' IN EFFECT
		..1.		CIRF3MID	"B'00100000'" MSGID NOT SUPPL. IN DIAG TEXT
		...1		CIRF3BDV	"B'00010000'" Bad Verify during patching
		.... 1...		CIRF3IO1	"B'00001000'" I/O error on CKPT1
		.... .1..		CIRF3IO2	"B'00000100'" I/O error on CKPT2
		.... ..1.		CIRF3VE1	"B'00000010'" Validation error on CKPT1
		1		CIRF3VE2	"B'00000001'" Validation error on CKPT2
314	(13A)	X'F'	0	CIRF3ERR	"CIRF3IO1+CIRF3IO2+CIRF3VE1+CIRF3VE2" Mask to test for any CKPT errors
314	(13A)	X'C'	0	CIRF3I12	"CIRF3IO1+CIRF3IO2" I/O error on both datasets
314	(13A)	X'3'	0	CIRF3V12	"CIRF3VE1+CIRF3VE2" Validation error on both
314	(13A)	X'9'	0	CIRF3I1V	"CIRF3IO1+CIRF3VE2" I/O error on CKPT1, val. error on CKPT2
314	(13A)	X'6'	0	CIRF3V1I	"CIRF3VE1+CIRF3IO2" Val. error on CKPT1, I/O error on CKPT2
315	(13B)	BITSTRING	1	CIRFLAG4	GENERAL USAGE FLAG 4
		1...		CIRF4ILL	"B'10000000'" INIT LMOD LOADED, NOT HASJES20
		.1..		CIRF4XER	"B'01000000'" ERRORS IN EXIT ROUTINE ADDRS
		..1.		CIRF4SCN	"B'00100000'" $STMTLOG CALLED FROM NPLDISP
		...1		CIRF4RES	"B'00010000'" EXIT RTN NOT IN CSA/LPA
		.... 1...		CIRF4RER	"B'00001000'" Error in reader route code
		.... .1..		CIRF4CHM	"B'00000100'" Chain current DCT via MDCTDCT
		.... ..1.		CIRF4CHD	"B'00000010'" Chain Current DCT via DCTDCB
		1		CIRF4RTE	"B'00000001'" Invalid Route code found
316	(13C)	ADDRESS	4	CIRCKPVR	CKPT VER-REP requests
320	(140)	DBL WORD	8	CIRREPLY	WTOR REPLY AREA
328	(148)	DBL WORD	8	CIRDWORK	DOUBLE WORD WORK AREA
336	(150)	ADDRESS	4	CIRHCT	ADDR OF THE HCT
340	(154)	SIGNED	4	CIRECB	ECB FOR GENERAL INIT USAGE
		Comment			
		IROPTS FIELDS REQUIRED THROUGHOUT INITIALIZATION			
		End of Comment			
344	(158)	ADDRESS	4	CIRWXIT0	"V(HASPXIT0)" HASPXIT0 ADDR IN HASPINIT LMOD
348	(15C)	ADDRESS	4	CIREXIT0	HASPXIT0 LOAD MODULE ADDR OR 0
352	(160)	ADDRESS	4	CIROPTPF	ADDR OF THE OS PARM FIELD
356	(164)	BITSTRING	100	CIROPTS	HASP OPTIONS STRING
		Comment			
		INIT fields for Priority aging and jesplex resource thresholds			
		End of Comment			
456	(1C8)	ADDRESS	2	CIRJQRAT	Priority aging rate
458	(1CA)	ADDRESS	1	CIRJQHI	Job priority aging upper
459	(1CB)	ADDRESS	1	CIRJQLOW	and lower limits
460	(1CC)	ADDRESS	2	CIRJORAT	Output priority aging rate
462	(1CE)	ADDRESS	2	CIRJOHI	Output priority aging upper
464	(1D0)	ADDRESS	2	CIRJOLOW	and lower limits
466	(1D2)	ADDRESS	2	CIRJQPRC	JQE threshold percentage
468	(1D4)	ADDRESS	2	CIRJOPRC	JOE threshold percentage

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
470	(1D6)	ADDRESS	2	CIRJNPRC	Job num threshold percent
472	(1D8)	ADDRESS	2	CIRTGPRC	Track grp threshold percent
474	(1DA)	ADDRESS	2	CIRBTPRC	BERT threshold percentage
				Comment	
				IRPL GENERAL PROCESSING FIELDS	
				End of Comment	
476	(1DC)	ADDRESS	4	CIRSTMTW	ADDRESS OF IRPL STMT BUFFER
480	(1E0)	ADDRESS	4	CIRSTMTT	Address of IRPL translated statement buffer
484	(1E4)	SIGNED	4	CIRSYMBP (0)	Symbol service parm list
496	(1F0)	ADDRESS	4		Addr of translated length
508	(1FC)	ADDRESS	4		Addr of return code
512	(200)	SIGNED	4	CIRTRANL	Length of translated str.
516	(204)	SIGNED	4	CIRTRANR	RC from translation service
520	(208)	SIGNED	2	CIRSTMTC	CURRENT IRPL STATEMENT COUNT
522	(20A)	SIGNED	2	CIRNLLCT	NPLLOG LINE COUNTER (50-1)
524	(20C)	SIGNED	2	CIRNLPCT	NPLLOG CURRENT PAGE NUMBER
526	(20E)	BITSTRING	1	CIRIRPL1	Flag used in IRPL
		1...		CIRP1AST	"B'10000000'" Asterisk is last char on a line within a comment
527	(20F)	BITSTRING	1		Reserved for future use
528	(210)	SIGNED	4	CIRSDLCT	$SCAN DISPLAY LINE COUNT
532	(214)	ADDRESS	4	CIRX0XRT	ADDR OF XRT FOR EXIT 0
536	(218)	SIGNED	1	CIRX0#RT	# of exit 0 routines
537	(219)	ADDRESS	3		RESERVED FOR FUTURE USE
				Comment	
				SUBROUTINE ADDRESSES	
				End of Comment	
540	(21C)	ADDRESS	4	CIRNPLLG	"V(NPLLOG)" ADDRESS OF IRPL LOGGING ROUTINE
544	(220)	ADDRESS	4		RESERVED FOR FUTURE USE
548	(224)	ADDRESS	4		RESERVED For Future Use
552	(228)	ADDRESS	4	CIRNQMSG	"V(NQUERY)" ADDRESS FOR QUERY MESSAGE
556	(22C)	ADDRESS	4	CIRNDLAY	"V(NDELAY)" Address for NDELAY routine
				Comment	
				DCT PROCESSING FIELDS	
				End of Comment	
560	(230)	ADDRESS	4	CIRPDCT	PREVIOUS DCT POINTER FOR USE WHEN GENERATING $DCTPOOL DCTS
564	(234)	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	
568	(238)	BITSTRING	24	CIRSTIMS	REMOTE STIMERM SET PARM LIST
568	(238)	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	
592	(250)	BITSTRING	16	CIRSTIMC	REMOTE STIMERM TEST/CANCEL PARM LIST
592	(250)	X'10'	0	CIRSTMCL	"*-CIRSTIMC" Length of parm list
608	(260)	SIGNED	4	CIRNDCHN	Chain of NDELAY elements
608	(260)	X'0'	0	CIRNDEYE	"0,4,C'C'" Eyecatcher
608	(260)	X'4'	0	CIRNDNXT	"4,4,C'A'" Addr of next element
608	(260)	X'8'	0	CIRNDSTI	"8,4,C'F'" STIMERM ID=id-area
608	(260)	X'C'	0	CIRNDMSG	"12,4,C'A'" Addr of message text
608	(260)	X'10'	0	CIRNDDOM	"16,4,C'F'" NDELAY DOM id
608	(260)	X'14'	0	CIRNDLEN	"20" NDELAY element length
616	(268)	DBL WORD	8		Reserved for future use
				Comment	
		MISCELLANEOUS FIELDS			
				End of Comment	
624	(270)	DBL WORD	8	CIRCMTSV	HOLD THE ADDR AND LEN OF STMT CUR- RENTLY RUNNING IN COMMENT-SCAN
632	(278)	SIGNED	2		Reserved for future use
634	(27A)	BITSTRING	1	CIRFLAG5	General usage flag 5
		1...		CIR5IRDD	"B'10000000'" IRDA has completed
		..1.		CIR5DSEQ	"B'00100000'" Parmlib Dataset is Seq.
		...1		CIR5HPRM	"B'00010000'" HASPPARM specified
		.1..		CIR5QWIK	"B'01000000'" Jobqueue or JOT rebuilt
		.... 1...		CIR5DMEM	"B'00001000'" Default member specified
		.... .1..		CIR5LPRM	"B'00000100'" Logical Parmlib at EOF
		.... ..1.		CIR5BRTE	"B'00000010'" BERT errors detected
		1		CIR5RRTE	"B'00000001'" Error building RRT
635	(27B)	BITSTRING	1	CIRFLAG6	General usage flag 6
		1...		CIR6DERR	"B'10000000'" Device build error
		.1..		CIR6CLSE	"B'01000000'" Default job class error
		..1.		CIR6SKZL	"B'00100000'" Do not issue z/OS level WTOR when mismatch
636	(27C)	ADDRESS	4	CIRJBMIN	MINIMUM LOCAL JOB NUMBER
640	(280)	ADDRESS	4	CIRJBMAX	MAXIMUM LOCAL JOB NUMBER
640	(280)	X'3C'	0	CIRXEMN	"WPLHTXT-WPL+47,2" EXIT NUMBER IN INIT MSG864
640	(280)	X'48'	0	CIRXEMNM	"WPLHTXT-WPL+59,8" EXIT ROUTINE NAME IN MSG864
640	(280)	X'39'	0	CIRGEMR	"WPLHTXT-WPL+44,10" GETMAIN ERROR MSG REASON
640	(280)	X'3D'	0	CIRINFMR	"WPLTXT-WPL+9+48,45" Reason text in MSG HASP448
644	(284)	ADDRESS	4	CIRACCTJ	ADDR OF JES2-TO-NET NETACCT ELEMENTS
648	(288)	ADDRESS	4	CIRACCTN	ADDR OF NET-TO-JES2 NETACCT ELEMENTS
652	(28C)	BITSTRING	6	CIRTGEDM	NUM TRACK GROUP EDIT MASK
				Comment	

		The TSUCLASS, STCCLASS 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	
658	(292)	CHARACTER	24	CIRROPSL	TSUCLASS DEFAULTS
682	(2AA)	CHARACTER	24	CIRROPST	STCCLASS DEFAULTS
706	(2C2)	CHARACTER	24	CIRROPSU	JOBCLASS DEFAULTS
730	(2DA)	SIGNED	2		RESERVED FOR FUTURE USE
732	(2DC)	ADDRESS	4	CIRVOLTB	ADDR OF VOLUME ALLOCATION TABLE

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
736	(2E0)	ADDRESS	4	CIRCMDTB	ADDR OF 1ST TEMP COMMAND AREA
740	(2E4)	ADDRESS	4	CIRTSTOR	ADDR OF TEMPORARY STORAGE
744	(2E8)	ADDRESS	4	CIRTDCTS	ADDR OF PERMANENT DCT STORAGE
748	(2EC)	SIGNED	4	CIRBSCLC	COUNT OF UNIT=nnn LINES
752	(2F0)	SIGNED	4	CIRSNALC	COUNT OF UNIT=SNA LINES
756	(2F4)	SIGNED	4	CIRTCPLC	COUNT OF UNIT=TCP LINES
760	(2F8)	ADDRESS	4	CIRZIP	ZAPJOB ZIP chain
764	(2FC)	ADDRESS	4	CIRBTGFA	ADDR OF FIRST BTG TABLE ENTRY
768	(300)	ADDRESS	4	CIRBTGLA	ADDR OF LAST BTG TABLE ENTRY
772	(304)	BITSTRING	0	CIRSPT (0)	SMF IDs for CPU 1-32
900	(384)	SIGNED	4	CIRX0PS (0)	PARAMETER LIST FOR EXIT 0
900	(384)	ADDRESS	4	CIROPTA	ADDR OF OPTIONS (OS OR WTOR)
904	(388)	ADDRESS	4	CIROPTL	LENGTH OF OPTIONS (OS OR WTOR)
908	(38C)	ADDRESS	4	CIRDOMID	$$WTO DOM ID
912	(390)	ADDRESS	4	CIRCNECT	WTO CONNECT message number
916	(394)	CHARACTER	8	CIRIQNAM	ENQ queue/resource name,
924	(39C)	CHARACTER	8	CIRIRNAM	used for most of init time
932	(3A4)	ADDRESS	2		Reserved for future use
934	(3A6)	SIGNED	2	CIRLNENM	Number of lines with dedicated sub-devices
936	(3A8)	SIGNED	4	CIRNUMJT	Total number of NJTs
940	(3AC)	SIGNED	4	CIRNUMJR	Total number of NJRs
944	(3B0)	SIGNED	4	CIRNUMST	Total number of NSTs
948	(3B4)	SIGNED	4	CIRNUMSR	Total number of NSRs
952	(3B8)	SIGNED	4	CIRN3800	Number of 3800 printers
956	(3BC)	SIGNED	4	CIRNFSSP	Number of printers in FSS mode
960	(3C0)	SIGNED	4	CIRNTCLF	Number of FSS printer with TRKCELL=YES
964	(3C4)	SIGNED	4	CIRNTCLP	Number of printer with TRKCELL=YES
968	(3C8)	SIGNED	4	CIRBLDM (0)	Control block ID
972	(3CC)	BITSTRING	4		Console ID
976	(3D0)	ADDRESS	4		Address of the CART
980	(3D4)	ADDRESS	4		Pointer for JOBID
984	(3D8)	ADDRESS	4		Control block address
988	(3DC)	ADDRESS	4		Display routine address
992	(3E0)	ADDRESS	4	(6)	6 word work area
1016	(3F8)	ADDRESS	4		Caller's R11 value
1020	(3FC)	BITSTRING	2		ROUT code for Message
1022	(3FE)	BITSTRING	2		Not used
1024	(400)	CHARACTER	4		Message ID
1028	(404)	CHARACTER	1		Separator character
1029	(405)	ADDRESS	1		Flag byte 1
1030	(406)	ADDRESS	1		'DISPER'
1031	(407)	ADDRESS	1		Flag byte 2
1032	(408)	ADDRESS	1		Flag byte 3
1033	(409)	CHARACTER	8		Symbolic name of dest.
1041	(411)	BITSTRING	15		Not used
1056	(420)	ADDRESS	4	(0)	Ensure multiple of 4
1056	(420)	ADDRESS	2	(0)	
1056	(420)	CHARACTER	300	CIRMWORK	Message building work area
1360	(550)	DBL WORD	8	(0)	Ensure double alignment

Comment

General work area for short-term usage by IRs

End of Comment

1360	(550)	BITSTRING	1	CIRGWORK	General work area

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

				First mapping of CIRGWORK used by IROPTS	

				End of Comment	
1360	(550)	BITSTRING	2	CIRSCMLN	Scan message length
1362	(552)	CHARACTER	80	CIRSCMSG	Scan message text
1442	(5A2)	BITSTRING	2		Reserved
1444	(5A4)	SIGNED	4	CIRRUB (0)	HASP.$EXIT0 parameters
1444	(5A4)	BITSTRING	2		Regs to set (0,1,11,13)
1446	(5A6)	BITSTRING	2		Unused, must be 0
1448	(5A8)	SIGNED	4	CIRRUBR0	R0 on entry to HASP.$EXIT0
1452	(5AC)	SIGNED	4	CIRRUBR1	R1 on entry to HASP.$EXIT0
1456	(5B0)	SIGNED	4	CIRRUBRB	R11 on entry to HASP.$EXIT0
1460	(5B4)	SIGNED	4	CIRRUBRD	R13 on entry to HASP.$EXIT0
1464	(5B8)	DBL WORD	8	CIRNXTOK	NEXTTOKEN value
1472	(5C0)	CHARACTER	8	CIRX0RNM	Name of last routine
1480	(5C8)	BITSTRING	32	CIRCSRET	Return parameters, enough for one routine.
1512	(5E8)	ADDRESS	4	CIRANSA	Address of CSVDYNEX LIST answer area
1516	(5EC)	SIGNED	4	CIRANSAL	Length of answer area MACDATE -03/23/12-<0>
0	(0)	X'5F0'	0	M00M1073	"CIREXDYN" ++ CSVDYNEX NAME
1520	(5F0)	DBL WORD	8	CIREXDYN (0)	++ CSVDYNEX PARM LIST
1520	(5F0)	BITSTRING	1	CIREXDYN_XVERSION	
					++ INPUT XVERSION
1521	(5F1)	BITSTRING	1	CIREXDYN_XREQUEST	
					++ XREQUEST
1521	(5F1)	X'0'	0	CIREXDYN_XREQUEST_DEFINE	
					"0" ++ XREQUEST.DEFINE KEYWORD
1521	(5F1)	X'1'	0	CIREXDYN_XREQUEST_ADD	
					"1" ++ XREQUEST.ADD KEYWORD
1521	(5F1)	X'2'	0	CIREXDYN_XREQUEST_MODIFY	
					"2" ++ XREQUEST.MODIFY KEYWORD
1521	(5F1)	X'3'	0	CIREXDYN_XREQUEST_DELETE	
					"3" ++ XREQUEST.DELETE KEYWORD
1521	(5F1)	X'4'	0	CIREXDYN_XREQUEST_UNDEFINE	
					"4" ++ XREQUEST.UNDEFINE KEYWORD
1521	(5F1)	X'5'	0	CIREXDYN_XREQUEST_ATTRIB	
					"5" ++ XREQUEST.ATTRIB KEYWORD
1521	(5F1)	X'6'	0	CIREXDYN_XREQUEST_LIST	
					"6" ++ XREQUEST.LIST KEYWORD
1521	(5F1)	X'7'	0	CIREXDYN_XREQUEST_CALL	
					"7" ++ XREQUEST.CALL KEYWORD
1521	(5F1)	X'8'	0	CIREXDYN_XREQUEST_RECOVER	
					"8" ++ XREQUEST.RECOVER KEYWORD
1521	(5F1)	X'9'	0	CIREXDYN_XREQUEST_PROCESSDP	
					"9" ++ XREQUEST.PROCESSDP KEYWORD
1521	(5F1)	X'A'	0	CIREXDYN_XREQUEST_ACTIVATE	
					"10" ++ XREQUEST.ACTIVATE KEYWORD
1521	(5F1)	X'B'	0	CIREXDYN_XREQUEST_QUERY	
					"11" ++ XREQUEST.QUERY KEYWORD
1521	(5F1)	X'C'	0	CIREXDYN_XREQUEST_REPLACE	
					"12" ++ XREQUEST.REPLACE KEYWORD
1522	(5F2)	BITSTRING	1	CIREXDYN_XFLAGS	
					++ FIELD_LABEL
		1...		CIREXDYN_KEYUSED_CALLSTOPRC	
					"B'10000000'" ++ KEYUSED.CALLSTOPRC KEYWORD
		.1..		CIREXDYN_KEYUSED_RCFROM	
					"B'01000000'" ++ KEYUSED.RCFROM KEYWORD
		..1.		CIREXDYN_KEYUSED_KEEPRC	
					"B'00100000'" ++ KEYUSED.KEEPRC KEYWORD
		...1		CIREXDYN_XFASTPATH_YES	

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
					"B'00010000'" ++ XFASTPATH.YES KEYWORD
		.... 1...		CIREXDYN_XREENTRANT_REQ	
					"B'00001000'" ++ XREENTRANT.REQ KEYWORD
		.... .1..		CIREXDYN_XMESSAGE_ERROR	
					"B'00000100'" ++ XMESSAGE.ERROR KEYWORD
		.... ..1.		CIREXDYN_XSTATE_ACTIVE	
					"B'00000010'" ++ XSTATE.ACTIVE KEYWORD
		1		CIREXDYN_XSTATE_INACTIVE	
					"B'00000001'" ++ XSTATE.INACTIVE KEYWORD
1523	(5F3)	BITSTRING	1	CIREXDYN_XAMODE	
					++ XAMODE
1523	(5F3)	X'0'	0	CIREXDYN_XAMODE_31	
					"0" ++ XAMODE.31 KEYWORD
1523	(5F3)	X'1'	0	CIREXDYN_XAMODE_24	
					"1" ++ XAMODE.24 KEYWORD
1523	(5F3)	X'2'	0	CIREXDYN_XAMODE_DEFINED	
					"2" ++ XAMODE.DEFINED KEYWORD
1524	(5F4)	SIGNED	4	CIREXDYN_XKEY	
					++
1528	(5F8)	BITSTRING	1	CIREXDYN_XFLAGS2	
					++ FIELD_LABEL
		1...		CIREXDYN_XONEMODULE_YES	
					"B'10000000'" ++ XONEMODULE.YES KEYWORD
		.1..		CIREXDYN_XFORCE_YES	
					"B'01000000'" ++ XFORCE.YES KEYWORD
		..1.		CIREXDYN_XPERSIST_ADDRESSSPACE	
					"B'00100000'" ++ XPERSIST.ADDRESSSPACE KEYWORD
		...1		CIREXDYN_XPERSIST_IPL	
					"B'00010000'" ++ XPERSIST.IPL KEYWORD
		.... 1...		CIREXDYN_XANYKEY_YES	
					"B'00001000'" ++ XANYKEY.YES KEYWORD
		.... .1..		CIREXDYN_XABENDCONSEC_YES	
					"B'00000100'" ++ XABENDCONSEC.YES KEYWORD
		.... ..1.		CIREXDYN_XLINKSTACKOK_NO	
					"B'00000010'" ++ XLINKSTACKOK.NO KEYWORD
		1		CIREXDYN_KEYUSED_STOKEN	
					"B'00000001'" ++ KEYUSED.STOKEN KEYWORD
1529	(5F9)	BITSTRING	1	CIREXDYN_XFLAGS3	
					++ FIELD_LABEL
		1...		CIREXDYN_XRETINFO_HIGHEST	
					"B'10000000'" ++ XRETINFO.HIGHEST KEYWORD
		.1..		CIREXDYN_XRETINFO_LOWEST	
					"B'01000000'" ++ XRETINFO.LOWEST KEYWORD
		..1.		CIREXDYN_XRETINFO_ALL	
					"B'00100000'" ++ XRETINFO.ALL KEYWORD
		...1		CIREXDYN_XRETINFO_LAST	
					"B'00010000'" ++ XRETINFO.LAST KEYWORD
		.... 1...		CIREXDYN_XQTYPE_ADD	
					"B'00001000'" ++ XQTYPE.ADD KEYWORD
		.... .1..		CIREXDYN_XLOCAL_YES	
					"B'00000100'" ++ XLOCAL.YES KEYWORD
		.... ..1.		CIREXDYN_XPERSIST_JOBSTEPTASK	
					"B'00000010'" ++ XPERSIST.JOBSTEPTASK KEYWORD
		1		CIREXDYN_XWILDCARDSTAR_NO	
					"B'00000001'" ++ XWILDCARDSTAR.NO KEYWORD
1530	(5FA)	BITSTRING	1	CIREXDYN_XPOS	
					++ XPOS
1530	(5FA)	X'0'	0	CIREXDYN_XPOS_SYSTEM	
					"0" ++ XPOS.SYSTEM KEYWORD
1530	(5FA)	X'1'	0	CIREXDYN_XPOS_LAST	
					"1" ++ XPOS.LAST KEYWORD
1530	(5FA)	X'2'	0	CIREXDYN_XPOS_FIRST	
					"2" ++ XPOS.FIRST KEYWORD
1531	(5FB)	BITSTRING	1	CIREXDYN_XEXAAVER	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++ XEXAAVER
1531	(5FB)	X'0'	0	CIREXDYN_XEXAAVER_0	
					"0" ++ XEXAAVER.0 KEYWORD
1531	(5FB)	X'1'	0	CIREXDYN_XEXAAVER_1	
					"1" ++ XEXAAVER.1 KEYWORD
1531	(5FB)	X'2'	0	CIREXDYN_XEXAAVER_2	
					"2" ++ XEXAAVER.2 KEYWORD
1532	(5FC)	CHARACTER	4	CIREXDYN_XRSV0002	
					++ RESERVED
1536	(600)	CHARACTER	16	CIREXDYN_XEXITNAME	
					++
1552	(610)	CHARACTER	8	CIREXDYN_XMODNAME	
					++
1560	(618)	ADDRESS	4	CIREXDYN_XCMDINFO_ADDR	
					++ ADDR
1564	(61C)	SIGNED	4	CIREXDYN_XABENDNUM	
					++
1568	(620)	SIGNED	4	CIREXDYN_XRCTO	
					++
1572	(624)	SIGNED	4	CIREXDYN_XRCFROM	
					++
1576	(628)	SIGNED	4	CIREXDYN_XKEEPRC	
					++
1580	(62C)	BITSTRING	1	CIREXDYN_XKEEPRCCOMP	
					++ XKEEPRCCOMP
1580	(62C)	X'0'	0	CIREXDYN_XKEEPRCCOMP_EQ	
					"0" ++ XKEEPRCCOMP.EQ KEYWORD
1580	(62C)	X'1'	0	CIREXDYN_XKEEPRCCOMP_NE	
					"1" ++ XKEEPRCCOMP.NE KEYWORD
1580	(62C)	X'2'	0	CIREXDYN_XKEEPRCCOMP_GT	
					"2" ++ XKEEPRCCOMP.GT KEYWORD
1580	(62C)	X'3'	0	CIREXDYN_XKEEPRCCOMP_LT	
					"3" ++ XKEEPRCCOMP.LT KEYWORD
1580	(62C)	X'4'	0	CIREXDYN_XKEEPRCCOMP_GE	
					"4" ++ XKEEPRCCOMP.GE KEYWORD
1580	(62C)	X'5'	0	CIREXDYN_XKEEPRCCOMP_LE	
					"5" ++ XKEEPRCCOMP.LE KEYWORD
1581	(62D)	BITSTRING	1	CIREXDYN_XRCCOMPARE	
					++ XRCCOMPARE
1581	(62D)	X'0'	0	CIREXDYN_XRCCOMPARE_EQ	
					"0" ++ XRCCOMPARE.EQ KEYWORD
1581	(62D)	X'1'	0	CIREXDYN_XRCCOMPARE_NE	
					"1" ++ XRCCOMPARE.NE KEYWORD
1581	(62D)	X'2'	0	CIREXDYN_XRCCOMPARE_GT	
					"2" ++ XRCCOMPARE.GT KEYWORD
1581	(62D)	X'3'	0	CIREXDYN_XRCCOMPARE_LT	
					"3" ++ XRCCOMPARE.LT KEYWORD
1581	(62D)	X'4'	0	CIREXDYN_XRCCOMPARE_GE	
					"4" ++ XRCCOMPARE.GE KEYWORD
1581	(62D)	X'5'	0	CIREXDYN_XRCCOMPARE_LE	
					"5" ++ XRCCOMPARE.LE KEYWORD
1582	(62E)	BITSTRING	1	CIREXDYN_XFLAGS4	
					++ FIELD_LABEL
		1...		CIREXDYN_KEYUSED_PRECALLADDR	
					"B'10000000'" ++ KEYUSED.PRECALLADDR KEYWORD
		.1..		CIREXDYN_XEXITTYPE_INSTALLATION	
					"B'01000000'" ++ XEXITTYPE.INSTALLATION KEYWORD
		..1.		CIREXDYN_XEXITTYPE_PROGRAM	
					"B'00100000'" ++ XEXITTYPE.PROGRAM KEYWORD
		...1		CIREXDYN_XEXITTYPE_NOTPROGRAM	
					"B'00010000'" ++ XEXITTYPE.NOTPROGRAM KEYWORD
		.... 1...		CIREXDYN_XMESSAGE_FOUNDBUTERROR	
					"B'00001000'" ++ XMESSAGE.FOUNDBUTERROR KEYWORD
		.... .1..		CIREXDYN_XADDRSPACE_ANY	

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
					"B'00000100'" ++ XADDRSPACE.ANY KEYWORD
		1		CIREXDYN_XLOADAPF_YES	
					"B'00000001'" ++ XLOADAPF.YES KEYWORD
1583	(62F)	BITSTRING	1	CIREXDYN_XEXRETVER	
					++ XEXRETVER
1583	(62F)	X'0'	0	CIREXDYN_XEXRETVER_0	
					"0" ++ XEXRETVER.0 KEYWORD
1583	(62F)	X'1'	0	CIREXDYN_XEXRETVER_1	
					"1" ++ XEXRETVER.1 KEYWORD
1584	(630)	SIGNED	4	CIREXDYN_XCALLSTOPRC	
					++
1588	(634)	CHARACTER	44	CIREXDYN_XRSVNNNN	
					++ RESERVED
1588	(634)	X'660'	0	CIREXDYN_PL_END	
					"*" ++ END OF BASE PLIST
1564	(61C)	SIGNED	4	CIREXDYN_XADDABENDNUM	
					++
1580	(62C)	BITSTRING	1	CIREXDYN_XKEEPRCCVAL	
					++
1581	(62D)	BITSTRING	1	CIREXDYN_XRCCVAL	
					++
1588	(634)	ADDRESS	4	CIREXDYN_XWORKAREA_ADDR	
					++ ADDR
1592	(638)	ADDRESS	4	CIREXDYN_XRETAREA_ADDR	
					++ ADDR
1596	(63C)	SIGNED	4	CIREXDYN_XRETAREA_ALET	
					++ ALET
1600	(640)	SIGNED	4	CIREXDYN_XRETLEN	
					++
1604	(644)	ADDRESS	4	CIREXDYN_XRUB_ADDR	
					++ ADDR
1608	(648)	SIGNED	4	CIREXDYN_XRUB_ALET	
					++ ALET
1612	(64C)	CHARACTER	8	CIREXDYN_XNEXTTOKEN	
					++
1620	(654)	ADDRESS	4	CIREXDYN_XSDWA_ADDR	
					++ ADDR
1624	(658)	ADDRESS	4	CIREXDYN_XPRECALLWA_ADDR	
					++ ADDR
1588	(634)	ADDRESS	4	CIREXDYN_XANSAREA_ADDR	
					++ ADDR
1592	(638)	SIGNED	4	CIREXDYN_XANSAREA_ALET	
					++ ALET
1596	(63C)	SIGNED	4	CIREXDYN_XANSLEN	
					++
1588	(634)	ADDRESS	4	CIREXDYN_XPRECALLADDR	
					++
1588	(634)	ADDRESS	4	CIREXDYN_XDSNAME_ADDR	
					++ ADDR
1592	(638)	SIGNED	4	CIREXDYN_XDSNAME_ALET	
					++ ALET
1596	(63C)	CHARACTER	8	CIREXDYN_XJOBNAME	
					++
1604	(644)	ADDRESS	4	CIREXDYN_XMODADDR	
					++
1608	(648)	CHARACTER	8	CIREXDYN_XPARAM	
					++
1596	(63C)	CHARACTER	8	CIREXDYN_XSTOKEN	
					++
1632	(660)	X'70'	0	CIREXDYNL	"*-CIREXDYN" ++ LENGTH OF PLIST

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
				CSVDYNEX-0	
				End of Comment	
1632	(660)	DBL WORD	8	CIRXAREA (0)	CSVDYNEX WORKAREA= area
2144	(860)	SIGNED	4	CIRX0SAV (18)	CSVDYNEX FASTPATH save area
2144	(860)	X'358'	0	CIRGW1LN	"*-CIRGWORK" Length of first mapping
				Comment	

				Second mapping of CIRGWORK used by IRPL and IRSETUP	

				End of Comment	
1360	(550)	BITSTRING	20	CIRS99RB	SVC 99 REQUEST BLOCK
1380	(564)	SIGNED	4	CIRS99PT (0)	SVC 99 REQUEST BLOCK POINTER
1384	(568)	CHARACTER	121	CIRNLLNE (0)	NPLLOG OUTPUT LINE
1384	(568)	CHARACTER	1	CIRNLLCC	CARRIAGE CONTROL
1385	(569)	CHARACTER	10	CIRNLLSR	STATEMENT/DIAGNOSTIC SOURCE
1398	(576)	CHARACTER	5	CIRNLLSH	STATEMENT NUMBER TEXT
1403	(57B)	CHARACTER	6	CIRNLLSN	STATEMENT NUMBER
1403	(57B)	X'1E'	0	CIRNLLL1	"*-CIRNLLSR" LENGTH OF FIRST PART OF LINE
1415	(587)	CHARACTER	10		BLANKS
1425	(591)	CHARACTER	80	CIRNLLST	STATEMENT (ALL OR PART)
1508	(5E4)	SIGNED	4	CIRX19PS (0)	PARAMETER LIST FOR EXIT 19
1508	(5E4)	ADDRESS	4	CIRSTMTA	IRPL PARM STATEMENT ADDR
1512	(5E8)	ADDRESS	4	CIRSTMTL	IRPL PARM STATEMENT LEN
1516	(5EC)	ADDRESS	4	CIRINSSA	EXIT 19 INSERT STATEMENT ADDR
1520	(5F0)	ADDRESS	4	CIRINSSL	EXIT 19 INSERT STATEMENT LEN
1524	(5F4)	ADDRESS	1	CIRSWARN	$SCAN WARNING MASK
1525	(5F5)	ADDRESS	3		RESERVED FOR FUTURE USE
1528	(5F8)	ADDRESS	4	CIRPLWRK	IRPL 24 bit work area
1532	(5FC)	ADDRESS	4	CIRPRDCB	Original PARMLIB DCB
1536	(600)	ADDRESS	4	CIRPRMWR	Alt PARMLIB work areas
1540	(604)	ADDRESS	4	CIRLPARM	Logical parmlib Readbuf adr
1544	(608)	SIGNED	4	CIRLRCNT	Logical dataset rec counter
				Comment	

				Fields used to save the current PARMLIB data set name.	

				End of Comment	
1548	(60C)	BITSTRING	204	CIRIPRW	Init PRW data area
1752	(6D8)	ADDRESS	4	CIRIDSNE	Current INIDSNE address -1 ind no free slots
1756	(6DC)	ADDRESS	4	CIRCONDS	Console INIDSNE address
				Comment	
				UCBLOOK MF=(L,CIRUCLK) MACDATE -03/18/08-<3>	
				End of Comment	
0	(0)	X'6E0'	0	M00M1075	"CIRUCLK" ++ UCBLOOK NAME
1760	(6E0)	DBL WORD	8	CIRUCLK (0)	++ UCBLOOK PARM LIST
1760	(6E0)	BITSTRING	1	CIRUCLK_XVERSION	++ INPUT XVERSION
1761	(6E1)	BITSTRING	1	CIRUCLK_XSCHSET	++

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1762	(6E2)	BITSTRING	2	CIRUCLK_XDEVN	
					++
1764	(6E4)	CHARACTER	4	CIRUCLK_XDEVNCHAR	
					++
1768	(6E8)	CHARACTER	6	CIRUCLK_XVOLSER	
					++
1774	(6EE)	BITSTRING	1	CIRUCLK_XDEVCLASS	
					++ XDEVCLASS
1774	(6EE)	X'0'	0	CIRUCLK_XDEVCLASS_DASDTAPE	
					"0" ++ XDEVCLASS.DASDTAPE KEYWORD
1774	(6EE)	X'1'	0	CIRUCLK_XDEVCLASS_TAPE	
					"1" ++ XDEVCLASS.TAPE KEYWORD
1774	(6EE)	X'2'	0	CIRUCLK_XDEVCLASS_DASD	
					"2" ++ XDEVCLASS.DASD KEYWORD
1775	(6EF)	BITSTRING	1	CIRUCLK_XRESERVED2	
					++ FIELD_LABEL
		1...		CIRUCLK_XNOTFIND_YES	
					"B'10000000'" ++ XNOTFIND.YES KEYWORD
1776	(6F0)	ADDRESS	4	CIRUCLK_XUCBPTR	
					++
1780	(6F4)	CHARACTER	5	CIRUCLK_XCOMPID	
					++
1785	(6F9)	BITSTRING	1	CIRUCLK_XMASK	
					++ FIELD_LABEL
		1...		CIRUCLK_XNONBASE_YES	
					"B'10000000'" ++ XNONBASE.YES KEYWORD
		.1..		CIRUCLK_XDYNAMIC_NO	
					"B'01000000'" ++ XDYNAMIC.NO KEYWORD
		..1.		CIRUCLK_XRANGE_3DIGIT	
					"B'00100000'" ++ XRANGE.3DIGIT KEYWORD
		...1		CIRUCLK_XLOC_ANY	
					"B'00010000'" ++ XLOC.ANY KEYWORD
		.... 1...		CIRUCLK_XSPECIAL_YES	
					"B'00001000'" ++ XSPECIAL.YES KEYWORD
		1		CIRUCLK_XUNBOUND_ALIAS_YES	
					"B'00000001'" ++ XUNBOUND_ALIAS.YES KEYWORD
1786	(6FA)	BITSTRING	1	CIRUCLK_XFLAGS	
					++ FIELD_LABEL
		1...		CIRUCLK_KEYUSED_DEVN	
					"B'10000000'" ++ KEYUSED.DEVN KEYWORD
		.1..		CIRUCLK_KEYUSED_DEVNCHAR	
					"B'01000000'" ++ KEYUSED.DEVNCHAR KEYWORD
		..1.		CIRUCLK_KEYUSED_VOLSER	
					"B'00100000'" ++ KEYUSED.VOLSER KEYWORD
		...1		CIRUCLK_KEYUSED_LASTING	
					"B'00010000'" ++ KEYUSED.LASTING KEYWORD
		.... 1...		CIRUCLK_KEYUSED_COMPID	
					"B'00001000'" ++ KEYUSED.COMPID KEYWORD
		.... .1..		CIRUCLK_KEYUSED_HELP	
					"B'00000100'" ++ KEYUSED.HELP KEYWORD
		.... ..1.		CIRUCLK_KEYUSED_PIN	
					"B'00000010'" ++ KEYUSED.PIN KEYWORD
		1		CIRUCLK_KEYUSED_PINPATHS	
					"B'00000001'" ++ KEYUSED.PINPATHS KEYWORD
1787	(6FB)	BITSTRING	1	CIRUCLK_XFLAGS2	
					++ FIELD_LABEL
		1...		CIRUCLK_KEYUSED_UCBCXPTR	
					"B'10000000'" ++ KEYUSED.UCBCXPTR KEYWORD
		.1..		CIRUCLK_KEYUSED_UCBPXPTR	
					"B'01000000'" ++ KEYUSED.UCBPXPTR KEYWORD
		..1.		CIRUCLK_KEYUSED_LDEVNCHAR	
					"B'00100000'" ++ KEYUSED.LDEVNCHAR KEYWORD
		...1		CIRUCLK_KEYUSED_SCHSET	
					"B'00010000'" ++ KEYUSED.SCHSET KEYWORD

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1788	(6FC)	ADDRESS	4	CIRUCLK_XTEXT_ADDR	++ ADDR
1792	(700)	SIGNED	4	CIRUCLK_XTEXT_ALET	++ ALET
1796	(704)	CHARACTER	8	CIRUCLK_XPTOKEN	++
1804	(70C)	CHARACTER	8	CIRUCLK_XHELP	++
1812	(714)	ADDRESS	4	CIRUCLK_XIOCTOKEN_ADDR	++ ADDR
1816	(718)	SIGNED	4	CIRUCLK_XIOCTOKEN_ALET	++ ALET
1820	(71C)	ADDRESS	4	CIRUCLK_XUCBPAREA_ADDR	++ ADDR
1824	(720)	SIGNED	4	CIRUCLK_XUCBPAREA_ALET	++ ALET
1828	(724)	ADDRESS	4	CIRUCLK_XUCBCXPTR	++
1832	(728)	ADDRESS	4	CIRUCLK_XUCBPXPTR	++
1836	(72C)	CHARACTER	5	CIRUCLK_XLDEVNCHAR	++
1841	(731)	CHARACTER	3	CIRUCLK_XRESERVED1	++ FIELD_LABEL
1841	(731)	X'54'	0	CIRUCLKL	"*-CIRUCLK" ++ LENGTH OF PLIST
				Comment	
				UCBLOOK-3	
				End of Comment	
0	(0)	X'1E4'	0	CIRGW2LN	"*-CIRGWORK" Length of second mapping
				Comment	

				Third mapping of CIRGWORK used by IRPOSTPL	

				End of Comment	
1360	(550)	X'0'	0	CIRGW3LN	"*-CIRGWORK" Length of third mapping
				Comment	

				Fourth mapping of CIRGWORK used by IRDA	

				End of Comment	
1360	(550)	CHARACTER	8	CIRCURRC	$CKVTAB current value for $HASP496 message
1368	(558)	CHARACTER	8	CIRPREVC	$CKVTAB previous value for $HASP496 message
1376	(560)	SIGNED	4	CIRJQENC	$CKVTAB cur number of JQEs
1380	(564)	SIGNED	4	CIRJQENP	$CKVTAB prev number of JQEs
1384	(568)	ADDRESS	4	CIRSPLF	FIRST SPL IN WORK CHAIN
1388	(56C)	ADDRESS	4	CIRSPLL	LAST SPL IN WORK CHAIN
1392	(570)	ADDRESS	4	CIRMSTRS	ADDR OF MSTR REC SAVE AREA
1396	(574)	ADDRESS	4	CIRTOTA	ADDR OF TEMP TRACK-1 TABLE
1400	(578)	ADDRESS	4	CIRTVECT	Addr of DAS temp vector
1404	(57C)	ADDRESS	4	CIRCURDS	CKG ADDRESS OF CURRENT DS
1408	(580)	ADDRESS	4	CIRALTDS	CKG address of other DS
1412	(584)	ADDRESS	4	CIRLFJQE	Address of last JQE put on free queue ($QREBLD only)
1416	(588)	ADDRESS	4	CIRCTENT	CTENT table used by IRDA
1420	(58C)	ADDRESS	4	CIRCTEND	End of CTENT table
1424	(590)	SIGNED	4	CIRCOUNT	LOCK RETRY COUNT

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1428	(594)	SIGNED	2	CIRCLREC	SIZE OF CHLOG FROM INIT
1430	(596)	BITSTRING	1	CIRIRDA2	IRDA flags 2
				Comment	
				CIRIRDA2 bit definitions	
				End of Comment	
		1...		CIRCKVWR	"B'10000000'" Init deck error encountered
		.1..		CIRCKVER	"B'01000000'" Only a warning is needed
		..1.		CIRCKVTM	"B'00100000'" Terminating error detected
1431	(597)	BITSTRING	1		Reserved
				Comment	
				CTRACE PLISTVER=1,MF=L CTRACE parameter list MACDATE -05/04/12-<3>	
				End of Comment	
0	(0)	X'598'	0	M00M1076	"CIRCTLST" ++ CTRACE NAME
1432	(598)	DBL WORD	8	CIRCTLST (0)	++ CTRACE PARM LIST
1432	(598)	BITSTRING	1	CIRCTLST_XVERSION	++ INPUT XVERSION
1433	(599)	CHARACTER	3	CIRCTLST_XRSV0000	++ RESERVED
1436	(59C)	SIGNED	4	CIRCTLST_XSERVICE	++ XSERVICE
1436	(59C)	X'1'	0	CIRCTLST_DEFINE	"1" ++ XSERVICE.DEFINE KEYWORD
1436	(59C)	X'2'	0	CIRCTLST_DELETE	"2" ++ XSERVICE.DELETE KEYWORD
1440	(5A0)	CHARACTER	8	CIRCTLST_XNAME	++
1448	(5A8)	CHARACTER	8	CIRCTLST_XSTARTNAM	++
1456	(5B0)	CHARACTER	8	CIRCTLST_XFMTTAB	++
1464	(5B8)	BITSTRING	1	CIRCTLST_XFLG1	++ FIELD_LABEL
		1...		CIRCTLST_XASIDS_YES	"B'10000000'" ++ XASIDS.YES KEYWORD
		.1..		CIRCTLST_XBUFFER_YES	"B'01000000'" ++ XBUFFER.YES KEYWORD
		..1.		CIRCTLST_XJOBS_YES	"B'00100000'" ++ XJOBS.YES KEYWORD
		...1		CIRCTLST_KEYUSED_MINOPS	"B'00010000'" ++ KEYUSED.MINOPS KEYWORD
		.... 1...		CIRCTLST_XMOD_YES	"B'00001000'" ++ XMOD.YES KEYWORD
		.... .1..		CIRCTLST_XBUFDEFIN_YES	"B'00000100'" ++ XBUFDEFIN.YES KEYWORD
		.... ..1.		CIRCTLST_XWTR_YES	"B'00000010'" ++ XWTR.YES KEYWORD
1465	(5B9)	BITSTRING	1	CIRCTLST_XFLG2	++ FIELD_LABEL
		1...		CIRCTLST_XLIKEHEAD_YES	"B'10000000'" ++ XLIKEHEAD.YES KEYWORD
		.1..		CIRCTLST_XHEAD_YES	"B'01000000'" ++ XHEAD.YES KEYWORD
		..1.		CIRCTLST_XHEADOPTS_YES	"B'00100000'" ++ XHEADOPTS.YES KEYWORD
		...1		CIRCTLST_XMANYSUBS_YES	"B'00010000'" ++ XMANYSUBS.YES KEYWORD
		.... 1...		CIRCTLST_XWTRMODE_PAGEABLE	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					"B'00001000'" ++ XWTRMODE.PAGEABLE KEYWORD
		.... .1..		CIRCTLST_XWTRMODE_DREF	
					"B'00000100'" ++ XWTRMODE.DREF KEYWORD
		.... ..1.		CIRCTLST_XWTRMODE_FIXED	
					"B'00000010'" ++ XWTRMODE.FIXED KEYWORD
1466	(5BA)	BITSTRING	1	CIRCTLST_XFLG3	
					++ FIELD_LABEL
		1...		CIRCTLST_KEYUSED_SUB	
					"B'10000000'" ++ KEYUSED.SUB KEYWORD
		.1..		CIRCTLST_KEYUSED_PARM	
					"B'01000000'" ++ KEYUSED.PARM KEYWORD
		..1.		CIRCTLST_KEYUSED_BUFMIN	
					"B'00100000'" ++ KEYUSED.BUFMIN KEYWORD
		...1		CIRCTLST_KEYUSED_BUFMAX	
					"B'00010000'" ++ KEYUSED.BUFMAX KEYWORD
		.... 1...		CIRCTLST_KEYUSED_BUFDFLT	
					"B'00001000'" ++ KEYUSED.BUFDFLT KEYWORD
		.... .1..		CIRCTLST_KEYUSED_SSRC	
					"B'00000100'" ++ KEYUSED.SSRC KEYWORD
		.... ..1.		CIRCTLST_KEYUSED_SSRSNC	
					"B'00000010'" ++ KEYUSED.SSRSNC KEYWORD
		1		CIRCTLST_KEYUSED_IFNOSUBS	
					"B'00000001'" ++ KEYUSED.IFNOSUBS KEYWORD
1467	(5BB)	BITSTRING	1	CIRCTLST_XFLG4	
					++ FIELD_LABEL
		1...		CIRCTLST_KEYUSED_USERDATA	
					"B'10000000'" ++ KEYUSED.USERDATA KEYWORD
1468	(5BC)	ADDRESS	4	CIRCTLST_XLNKPARM	
					++ FIELD_LABEL
1472	(5C0)	ADDRESS	4	CIRCTLST_XMINOPS_ADDR	
					++ ADDR
1476	(5C4)	BITSTRING	2	CIRCTLST_XMINOPS_LEN	
					++ FIELD_LABEL
1478	(5C6)	CHARACTER	16	CIRCTLST_XUSERDATA	
					++
1494	(5D6)	CHARACTER	2	CIRCTLST_XRVS0002	
					++ FIELD_LABEL
1496	(5D8)	SIGNED	4	CIRCTLST_XBUFMIN	
					++
1500	(5DC)	SIGNED	4	CIRCTLST_XBUFMAX	
					++
1504	(5E0)	SIGNED	4	CIRCTLST_XBUFDFLT	
					++
1508	(5E4)	ADDRESS	4	CIRCTLST_XSUB_ADDR	
					++ ADDR
1512	(5E8)	BITSTRING	2	CIRCTLST_XSUB_LEN	
					++ FIELD_LABEL
1514	(5EA)	CHARACTER	2	CIRCTLST_XRVS0003	
					++ FIELD_LABEL
1516	(5EC)	CHARACTER	8	CIRCTLST_XPARM	
					++
1524	(5F4)	SIGNED	4	CIRCTLST_XSSRC	
					++
1528	(5F8)	SIGNED	4	CIRCTLST_XSSRSNC	
					++
1528	(5F8)	X'5FC'	0	CIRCTLST_PL_END	
					"*" ++ END OF BASE PLIST
1528	(5F8)	X'64'	0	CIRCTLSTL	"*-CIRCTLST" ++ LENGTH OF PLIST

Comment

CTRACE-3

End of Comment

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1532	(5FC)	ADDRESS	4	(0)	Force work alignment
1532	(5FC)	BITSTRING	16	CIRCTUSR (0)	CTRACE userdata
1532	(5FC)	ADDRESS	4	CIRCTBUF	Addr of data area
1536	(600)	ADDRESS	4	CIRCTBLN	Length of data area
1540	(604)	SIGNED	2	CIRCTASI	Address space id of data
1542	(606)	BITSTRING	6		Reserved
1548	(60C)	CHARACTER	8	CIRCTNAM	CTRACE component name
1556	(614)	BITSTRING	1	CIRJOTES	JOT ERROR SWITCH
1557	(615)	BITSTRING	1	CIRIRDAF	IRDA ERROR SWITCH
		Comment			
		CIRIRDAF BIT DEFINITIONS			
		End of Comment			
		1...		CIRWMER	"B'10000000'" SPL VOL ERROR DURING WARM START
		.1..		CIREXPRF	"B'01000000'" EXTRA VOLUMES WITH SPOOL PREFIX
		..1.		CIRMAXQT	"B'00100000'" MAX VOLUMES, OPERATOR SAID QUIT
		...1		CIRSPLGE	"B'00010000'" EXTENT TOO LARGE FOR TRCK GRPS
		.... 1...		CIRCLGSZ	"B'00001000'" LOG SIZE MUST BE CALCULATED
		.... ..1.		CIRJOTEC	"B'00000010'" JOT Error correction comp.
		1		CIRJOTRB	"B'00000001'" JOT rebuild completed
1557	(615)	X'3'	0	CIRJOTV	"CIRJOTEC+CIRJOTRB" JOT Verification Completed
1558	(616)	BITSTRING	1	CIRIRDA1	IRDA FLAG BYTE
		Comment			
		CIRIRDA1 BIT DEFINITIONS			
		End of Comment			
		1...		CIRMSGIS	"B'10000000'" HASP488 MESSAGE ISSUED
		.1..		CIRFWDDS	"B'01000000'" A FORWARDED DATASET FOUND
		..1.		CIRDONFW	"B'00100000'" FORWARDED DS PROC DONE
		...1		CIRFFWD	"B'00010000'" A DS HAS BEEN FORWARDED
		.... 1...		CIRCHIUS	"B'00001000'" INUSE INDICATOR HAS CHANGED
		.... .1..		CIRI460	"B'00000100'" HASP460 was issued
		.... ..1.		CIRI416	"B'00000010'" Need to issue HASP416
		1		CIRNODAT	"B'00000001'" CKPT data not useable
1559	(617)	BITSTRING	1	CIRPARMF	PARAMETER FLAG BYTE
1560	(618)	SIGNED	4	CIRPARML (0)	GENERIC PARM LIST
1560	(618)	SIGNED	4	CIRPARM1	PARM 1
1564	(61C)	SIGNED	4	CIRPARM2	PARM 2
1568	(620)	SIGNED	4	CIRPARM3	PARM 3
1572	(624)	SIGNED	4	CIRPARM4	PARM 4
1576	(628)	SIGNED	4	CIRPARM5	PARM 5
1580	(62C)	SIGNED	4	CIRPARM6	PARM 6
1580	(62C)	X'617'	0	CIRPARMS	"CIRPARMF,*-CIRPARMF" FULL PARAMETER LIST
1584	(630)	SIGNED	4	CIRFWCNT	COUNT FORWARDED DATA SET
1588	(634)	CHARACTER	72	CIRCKPT1	CKPT1 SPEC SAVE AREA
1660	(67C)	CHARACTER	72	CIRCKPT2	CKPT2 SPEC SAVE AREA
1732	(6C4)	CHARACTER	144	CIRCHFES	CURRENT STATE OF CKPT ALOC
1876	(754)	BITSTRING	4	CIRIDMEM	'In-Doubt' members mask
1880	(758)	ADDRESS	4	CIRM791W	CBADDR for HASP791 message
1884	(75C)	SIGNED	4	CIRECBLS (0)	List of ECBs to wait on
1884	(75C)	ADDRESS	4	CIRECBA1	Pointer to ECB 1
1888	(760)	ADDRESS	4	CIRECBA2	Pointer to ECB 2
1892	(764)	SIGNED	4	CIRECB1	1st ECB
1896	(768)	SIGNED	4	CIRECB2	2nd ECB
1900	(76C)	CHARACTER	70	CIRDIAGR	Init dialog reason text

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
		UCBLOOK MF=(L,CIRUCBL) MACDATE -03/18/08-<3>			
				End of Comment	
0	(0)	X'7B8'	0	M00M1077	"CIRUCBL" ++ UCBLOOK NAME
1976	(7B8)	DBL WORD	8	CIRUCBL (0)	++ UCBLOOK PARM LIST
1976	(7B8)	BITSTRING	1	CIRUCBL_XVERSION	++ INPUT XVERSION
1977	(7B9)	BITSTRING	1	CIRUCBL_XSCHSET	++
1978	(7BA)	BITSTRING	2	CIRUCBL_XDEVN	++
1980	(7BC)	CHARACTER	4	CIRUCBL_XDEVNCHAR	++
1984	(7C0)	CHARACTER	6	CIRUCBL_XVOLSER	++
1990	(7C6)	BITSTRING	1	CIRUCBL_XDEVCLASS	++ XDEVCLASS
1990	(7C6)	X'0'	0	CIRUCBL_XDEVCLASS_DASDTAPE	"0" ++ XDEVCLASS.DASDTAPE KEYWORD
1990	(7C6)	X'1'	0	CIRUCBL_XDEVCLASS_TAPE	"1" ++ XDEVCLASS.TAPE KEYWORD
1990	(7C6)	X'2'	0	CIRUCBL_XDEVCLASS_DASD	"2" ++ XDEVCLASS.DASD KEYWORD
1991	(7C7)	BITSTRING	1	CIRUCBL_XRESERVED2	++ FIELD_LABEL
		1...		CIRUCBL_XNOTFIND_YES	"B'10000000'" ++ XNOTFIND.YES KEYWORD
1992	(7C8)	ADDRESS	4	CIRUCBL_XUCBPTR	++
1996	(7CC)	CHARACTER	5	CIRUCBL_XCOMPID	++
2001	(7D1)	BITSTRING	1	CIRUCBL_XMASK	++ FIELD_LABEL
		1...		CIRUCBL_XNONBASE_YES	"B'10000000'" ++ XNONBASE.YES KEYWORD
		.1..		CIRUCBL_XDYNAMIC_NO	"B'01000000'" ++ XDYNAMIC.NO KEYWORD
		..1.		CIRUCBL_XRANGE_3DIGIT	"B'00100000'" ++ XRANGE.3DIGIT KEYWORD
		...1		CIRUCBL_XLOC_ANY	"B'00010000'" ++ XLOC.ANY KEYWORD
		.... 1...		CIRUCBL_XSPECIAL_YES	"B'00001000'" ++ XSPECIAL.YES KEYWORD
		1		CIRUCBL_XUNBOUND_ALIAS_YES	"B'00000001'" ++ XUNBOUND_ALIAS.YES KEYWORD
2002	(7D2)	BITSTRING	1	CIRUCBL_XFLAGS	++ FIELD_LABEL
		1...		CIRUCBL_KEYUSED_DEVN	"B'10000000'" ++ KEYUSED.DEVN KEYWORD
		.1..		CIRUCBL_KEYUSED_DEVNCHAR	"B'01000000'" ++ KEYUSED.DEVNCHAR KEYWORD
		..1.		CIRUCBL_KEYUSED_VOLSER	"B'00100000'" ++ KEYUSED.VOLSER KEYWORD
		...1		CIRUCBL_KEYUSED_LASTING	"B'00010000'" ++ KEYUSED.LASTING KEYWORD
		.... 1...		CIRUCBL_KEYUSED_COMPID	"B'00001000'" ++ KEYUSED.COMPID KEYWORD
		.... .1..		CIRUCBL_KEYUSED_HELP	"B'00000100'" ++ KEYUSED.HELP KEYWORD
		.... ..1.		CIRUCBL_KEYUSED_PIN	

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					"B'00000010'" ++ KEYUSED.PIN KEYWORD
		1		CIRUCBL_KEYUSED_PINPATHS	
					"B'00000001'" ++ KEYUSED.PINPATHS KEYWORD
2003	(7D3)	BITSTRING	1	CIRUCBL_XFLAGS2	
					++ FIELD_LABEL
		1...		CIRUCBL_KEYUSED_UCBCXPTR	
					"B'10000000'" ++ KEYUSED.UCBCXPTR KEYWORD
		.1..		CIRUCBL_KEYUSED_UCBPXPTR	
					"B'01000000'" ++ KEYUSED.UCBPXPTR KEYWORD
		..1.		CIRUCBL_KEYUSED_LDEVNCHAR	
					"B'00100000'" ++ KEYUSED.LDEVNCHAR KEYWORD
		...1		CIRUCBL_KEYUSED_SCHSET	
					"B'00010000'" ++ KEYUSED.SCHSET KEYWORD
2004	(7D4)	ADDRESS	4	CIRUCBL_XTEXT_ADDR	
					++ ADDR
2008	(7D8)	SIGNED	4	CIRUCBL_XTEXT_ALET	
					++ ALET
2012	(7DC)	CHARACTER	8	CIRUCBL_XPTOKEN	
					++
2020	(7E4)	CHARACTER	8	CIRUCBL_XHELP	
					++
2028	(7EC)	ADDRESS	4	CIRUCBL_XIOCTOKEN_ADDR	
					++ ADDR
2032	(7F0)	SIGNED	4	CIRUCBL_XIOCTOKEN_ALET	
					++ ALET
2036	(7F4)	ADDRESS	4	CIRUCBL_XUCBPAREA_ADDR	
					++ ADDR
2040	(7F8)	SIGNED	4	CIRUCBL_XUCBPAREA_ALET	
					++ ALET
2044	(7FC)	ADDRESS	4	CIRUCBL_XUCBCXPTR	
					++
2048	(800)	ADDRESS	4	CIRUCBL_XUCBPXPTR	
					++
2052	(804)	CHARACTER	5	CIRUCBL_XLDEVNCHAR	
					++
2057	(809)	CHARACTER	3	CIRUCBL_XRESERVED1	
					++ FIELD_LABEL
2057	(809)	X'54'	0	CIRUCBLL	"*-CIRUCBL" ++ LENGTH OF PLIST

Comment

UCBLOOK-3

End of Comment

0	(0)	X'2BC'	0	CIRGW4LN	"*-CIRGWORK" Length of fourth mapping

Comment

Fifth mapping of CIRGWORK used by IRURDEV

End of Comment

Comment

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

End of Comment

0	(0)	X'550'	0	M00M1078	"CIRCAPU" ++ IOSCAPU NAME
1360	(550)	DBL WORD	8	CIRCAPU (0)	++ IOSCAPU PARM LIST
1360	(550)	BITSTRING	1	CIRCAPU_XVERSION	
					++ INPUT XVERSION

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1361	(551)	BITSTRING	1	CIRCAPU_XFLAGS1	
					++ FIELD_LABEL
		1...		CIRCAPU_KEYUSED_CAPTUCB	
					"B'10000000'" ++ KEYUSED.CAPTUCB KEYWORD
		.1..		CIRCAPU_KEYUSED_UCAPTUCB	
					"B'01000000'" ++ KEYUSED.UCAPTUCB KEYWORD
		..1.		CIRCAPU_KEYUSED_CAPTOACT	
					"B'00100000'" ++ KEYUSED.CAPTOACT KEYWORD
		...1		CIRCAPU_KEYUSED_ASID	
					"B'00010000'" ++ KEYUSED.ASID KEYWORD
		.... 1...		CIRCAPU_KEYUSED_UCBPTR	
					"B'00001000'" ++ KEYUSED.UCBPTR KEYWORD
		.... .1..		CIRCAPU_KEYUSED_CAPTPTR	
					"B'00000100'" ++ KEYUSED.CAPTPTR KEYWORD
1362	(552)	CHARACTER	2	CIRCAPU_XRESERVED1	
					++ FIELD_LABEL XRESERVED1
1364	(554)	ADDRESS	4	CIRCAPU_XUCBPTR	
					++ XUCBPTR
1368	(558)	ADDRESS	4	CIRCAPU_XCAPTPTR	
					++ XCAPTPTR
1372	(55C)	CHARACTER	1	CIRCAPU_XRESERVED2	
					++ FIELD_LABEL XRESERVED2
1373	(55D)	BITSTRING	1	CIRCAPU_XMASK	
					++ FIELD_LABEL
		1...		CIRCAPU_XMSIFREE_YES	
					"B'10000000'" ++ XMSIFREE.YES KEYWORD
		.1..		CIRCAPU_XLASTING_YES	
					"B'01000000'" ++ XLASTING.YES KEYWORD
		..1.		CIRCAPU_XCAPTCOM_YES	
					"B'00100000'" ++ XCAPTCOM.YES KEYWORD
		...1		CIRCAPU_XCAPTCOM_NEVER	
					"B'00010000'" ++ XCAPTCOM.NEVER KEYWORD
1374	(55E)	BITSTRING	2	CIRCAPU_XASID	
					++ XASID
1376	(560)	CHARACTER	16	CIRCAPU_XRESERVED3	
					++ FIELD_LABEL XRESERVED3
1376	(560)	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

1360	(550)	ADDRESS	4	CIRSJLSP	SJF LOCAL STORAGE POINTER
1364	(554)	ADDRESS	4	CIRSJPTR	SWB SJF POINTER
1368	(558)	BITSTRING	256	CIRSJEXP	SJF EXTRACT PARAMETER LIST
1624	(658)	CHARACTER	32	CIRFPTX	FOOTPRINT AREA FOR $GKINIT
1656	(678)	SIGNED	1	CIRFPLN	FOOTPRINT LENGTH
1657	(679)	CHARACTER	3	CIRRSV1	RESERVED FOR FUTURE USE
1657	(679)	X'12C'	0	CIRGW6LN	"*-CIRGWORK" Length of sixth mapping

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				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	
1360	(550)	CHARACTER	120	CIRM500A	
1360	(550)	X'78'	0	CIRGW7LN	"*-CIRGWORK" Length of seventh mapping
				Comment	

				Eighth mapping of CIRGWORK used by IRFINAL, IRNJE and IRRJE.	

				End of Comment	
1360	(550)	SIGNED	4	CIRCMSTR (0)	Full word alignment
1360	(550)	CHARACTER	4		CPLTAB ID
1364	(554)	ADDRESS	1		CPLTAB Version
1365	(555)	ADDRESS	1		Sub Pool ID (non-JES2 AS)
1366	(556)	ADDRESS	1		Sub Pool number (JES2 AS)
1367	(557)	ADDRESS	1		Storage Key
1368	(558)	ADDRESS	4		CPINDEX offset
1372	(55C)	CHARACTER	8		Cell Type
1380	(564)	CHARACTER	8		Data space name
1388	(56C)	ADDRESS	4		Cell size
1392	(570)	ADDRESS	1		General flags
1393	(571)	ADDRESS	1		Location flags
1394	(572)	ADDRESS	1		Data space flags
1395	(573)	BITSTRING	1		Reserved for future use
1396	(574)	ADDRESS	4		Limit of num of cells
1400	(578)	ADDRESS	4		Primary cell count
1404	(57C)	ADDRESS	4		Secondary cell count
				Comment	
				IARVSERV MF=(L,CIRVSERV) List form of IARVSERV macro MACDATE -05/08/12-<0>	
				End of Comment	
0	(0)	X'580'	0	M00M1082	"CIRVSERV" ++ IARVSERV NAME
1408	(580)	DBL WORD	8	CIRVSERV (0)	++ IARVSERV PARM LIST
1408	(580)	BITSTRING	1	CIRVSERV_XVERSION	++ INPUT XVERSION
1409	(581)	BITSTRING	1	CIRVSERV_XSERVICE	++ XSERVICE
1409	(581)	X'1'	0	CIRVSERV_SHARE	"1" ++ XSERVICE.SHARE KEYWORD
1409	(581)	X'2'	0	CIRVSERV_UNSHARE	"2" ++ XSERVICE.UNSHARE KEYWORD
1409	(581)	X'3'	0	CIRVSERV_CHANGEACCESS	"3" ++ XSERVICE.CHANGEACCESS KEYWORD
1409	(581)	X'4'	0	CIRVSERV_SHARESEG	"4" ++ XSERVICE.SHARESEG KEYWORD
1410	(582)	BITSTRING	1	CIRVSERV_XFLAGS1	++ FIELD_LABEL
		1...		CIRVSERV_TARGET_VIEW_RO	"B'10000000'" ++ XTARGET_VIEW.READONLY KEYWORD
		.1..		CIRVSERV_TARGET_VIEW_SW	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					"B'01000000'" ++ XTARGET_VIEW.SHAREDWRITE KEYWORD
		..1.		CIRVSERV_TARGET_VIEW_UW	
					"B'00100000'" ++ XTARGET_VIEW.UNIQUEWRITE KEYWORD
		...1		CIRVSERV_TARGET_VIEW_TW	
					"B'00010000'" ++ XTARGET_VIEW.TARGETWRITE KEYWORD
		.... 1...		CIRVSERV_TARGET_VIEW_LS	
					"B'00001000'" ++ XTARGET_VIEW.LIKESOURCE KEYWORD
		.... .1..		CIRVSERV_TARGET_VIEW_NA	
					"B'00000100'" ++ XTARGET_VIEW.HIDDEN KEYWORD
		.... ..1.		CIRVSERV_COPYNOW	
					"B'00000010'" ++ KEYUSED.COPYNOW KEYWORD
		1		CIRVSERV_RETAIN_YES	
					"B'00000001'" ++ XRETAIN.YES KEYWORD
1411	(583)	BITSTRING	1	CIRVSERV_XFLAGS2	
					++ FIELD_LABEL
		1...		CIRVSERV_XPARTIALPAGE_YES	
					"B'10000000'" ++ XPARTIALPAGE.YES KEYWORD
1412	(584)	SIGNED	4	CIRVSERV_XNUMRANGE	
					++
1416	(588)	ADDRESS	4	CIRVSERV_XRANGLIST	
					++
1416	(588)	X'C'	0	CIRVSERVL	"*-CIRVSERV" ++ LENGTH OF PLIST
				Comment	
				IARVSERV-0	
				End of Comment	
1420	(58C)	ADDRESS	4	CIRVRLP	Pointer to range list
1424	(590)	SIGNED	4	CIRVRL (7)	IARVSERV range list
1452	(5AC)	ADDRESS	4	CIRVRETC	Return code for $HASP564
1456	(5B0)	ADDRESS	4	CIRVRSNC	Reason code for $HASP564
1460	(5B4)	BITSTRING	1	CIRFLAGV	NIT Data space error flag
		1...		CIRFV$DS	"B'10000000'" $DSPSERV service failed
		.1..		CIRFVIAR	"B'01000000'" IARVSERV service failed
		..1.		CIRFVNBL	"B'00100000'" 'NOT EXTEND' message
		...1		CIRFVNFD	"B'00010000'" 'NOT FOUND' message
		.... 1...		CIRFVNSH	"B'00001000'" 'NOT SHARED' message
		.... .1..		CIRFVRC	"B'00000100'" Include return code
		.... ..1.		CIRFVRS	"B'00000010'" Include reason code
1461	(5B5)	BITSTRING	1	CIRASKEY	ASDS data space storage key
1462	(5B6)	BITSTRING	2		Reserved for future use
1464	(5B8)	SIGNED	4	CIRASALT	ALET for ASDS data space
1468	(5BC)	ADDRESS	4	CIRASDSB	Addr of ASDS CSA DSB
1472	(5C0)	CHARACTER	8	CIRASNAM	Gen name of ASDS data space
1472	(5C0)	X'78'	0	CIRGW8LN	"*-CIRGWORK" Length of eighth mapping
				Comment	

				Ninth mapping of CIRGWORK used by IRSSI	

				End of Comment	
1360	(550)	ADDRESS	4	CIRETDEF	Local ETDEF work area

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
		This is mapping of CIRGWORK used by CSVDYNEX for Multi System Dump			
		MACDATE -03/23/12-<0>			
				End of Comment	
0	(0)	X'558'	0	M00M1083	"CIRDYNEX" ++ CSVDYNEX NAME
1368	(558)	DBL WORD	8	CIRDYNEX (0)	++ CSVDYNEX PARM LIST
1368	(558)	BITSTRING	1	CIRDYNEX_XVERSION	++ INPUT XVERSION
1369	(559)	BITSTRING	1	CIRDYNEX_XREQUEST	++ XREQUEST
1369	(559)	X'0'	0	CIRDYNEX_XREQUEST_DEFINE	"0" ++ XREQUEST.DEFINE KEYWORD
1369	(559)	X'1'	0	CIRDYNEX_XREQUEST_ADD	"1" ++ XREQUEST.ADD KEYWORD
1369	(559)	X'2'	0	CIRDYNEX_XREQUEST_MODIFY	"2" ++ XREQUEST.MODIFY KEYWORD
1369	(559)	X'3'	0	CIRDYNEX_XREQUEST_DELETE	"3" ++ XREQUEST.DELETE KEYWORD
1369	(559)	X'4'	0	CIRDYNEX_XREQUEST_UNDEFINE	"4" ++ XREQUEST.UNDEFINE KEYWORD
1369	(559)	X'5'	0	CIRDYNEX_XREQUEST_ATTRIB	"5" ++ XREQUEST.ATTRIB KEYWORD
1369	(559)	X'6'	0	CIRDYNEX_XREQUEST_LIST	"6" ++ XREQUEST.LIST KEYWORD
1369	(559)	X'7'	0	CIRDYNEX_XREQUEST_CALL	"7" ++ XREQUEST.CALL KEYWORD
1369	(559)	X'8'	0	CIRDYNEX_XREQUEST_RECOVER	"8" ++ XREQUEST.RECOVER KEYWORD
1369	(559)	X'9'	0	CIRDYNEX_XREQUEST_PROCESSDP	"9" ++ XREQUEST.PROCESSDP KEYWORD
1369	(559)	X'A'	0	CIRDYNEX_XREQUEST_ACTIVATE	"10" ++ XREQUEST.ACTIVATE KEYWORD
1369	(559)	X'B'	0	CIRDYNEX_XREQUEST_QUERY	"11" ++ XREQUEST.QUERY KEYWORD
1369	(559)	X'C'	0	CIRDYNEX_XREQUEST_REPLACE	"12" ++ XREQUEST.REPLACE KEYWORD
1370	(55A)	BITSTRING	1	CIRDYNEX_XFLAGS	++ FIELD_LABEL
		1...		CIRDYNEX_KEYUSED_CALLSTOPRC	"B'10000000'" ++ KEYUSED.CALLSTOPRC KEYWORD
		.1..		CIRDYNEX_KEYUSED_RCFROM	"B'01000000'" ++ KEYUSED.RCFROM KEYWORD
		..1.		CIRDYNEX_KEYUSED_KEEPRC	"B'00100000'" ++ KEYUSED.KEEPRC KEYWORD
		...1		CIRDYNEX_XFASTPATH_YES	"B'00010000'" ++ XFASTPATH.YES KEYWORD
		.... 1...		CIRDYNEX_XREENTRANT_REQ	"B'00001000'" ++ XREENTRANT.REQ KEYWORD
		.... .1..		CIRDYNEX_XMESSAGE_ERROR	"B'00000100'" ++ XMESSAGE.ERROR KEYWORD
		.... ..1.		CIRDYNEX_XSTATE_ACTIVE	"B'00000010'" ++ XSTATE.ACTIVE KEYWORD
		1		CIRDYNEX_XSTATE_INACTIVE	"B'00000001'" ++ XSTATE.INACTIVE KEYWORD
1371	(55B)	BITSTRING	1	CIRDYNEX_XAMODE	++ XAMODE
1371	(55B)	X'0'	0	CIRDYNEX_XAMODE_31	"0" ++ XAMODE.31 KEYWORD

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1371	(55B)	X'1'	0	CIRDYNEX_XAMODE_24	"1" ++ XAMODE.24 KEYWORD
1371	(55B)	X'2'	0	CIRDYNEX_XAMODE_DEFINED	"2" ++ XAMODE.DEFINED KEYWORD
1372	(55C)	SIGNED	4	CIRDYNEX_XKEY	++
1376	(560)	BITSTRING	1	CIRDYNEX_XFLAGS2	++ FIELD_LABEL
		1...		CIRDYNEX_XONEMODULE_YES	"B'10000000'" ++ XONEMODULE.YES KEYWORD
		.1..		CIRDYNEX_XFORCE_YES	"B'01000000'" ++ XFORCE.YES KEYWORD
		..1.		CIRDYNEX_XPERSIST_ADDRESSSPACE	"B'00100000'" ++ XPERSIST.ADDRESSSPACE KEYWORD
		...1		CIRDYNEX_XPERSIST_IPL	"B'00010000'" ++ XPERSIST.IPL KEYWORD
		.... 1...		CIRDYNEX_XANYKEY_YES	"B'00001000'" ++ XANYKEY.YES KEYWORD
		.... .1..		CIRDYNEX_XABENDCONSEC_YES	"B'00000100'" ++ XABENDCONSEC.YES KEYWORD
		.... ..1.		CIRDYNEX_XLINKSTACKOK_NO	"B'00000010'" ++ XLINKSTACKOK.NO KEYWORD
		1		CIRDYNEX_KEYUSED_STOKEN	"B'00000001'" ++ KEYUSED.STOKEN KEYWORD
1377	(561)	BITSTRING	1	CIRDYNEX_XFLAGS3	++ FIELD_LABEL
		1...		CIRDYNEX_XRETINFO_HIGHEST	"B'10000000'" ++ XRETINFO.HIGHEST KEYWORD
		.1..		CIRDYNEX_XRETINFO_LOWEST	"B'01000000'" ++ XRETINFO.LOWEST KEYWORD
		..1.		CIRDYNEX_XRETINFO_ALL	"B'00100000'" ++ XRETINFO.ALL KEYWORD
		...1		CIRDYNEX_XRETINFO_LAST	"B'00010000'" ++ XRETINFO.LAST KEYWORD
		.... 1...		CIRDYNEX_XQTYPE_ADD	"B'00001000'" ++ XQTYPE.ADD KEYWORD
		.... .1..		CIRDYNEX_XLOCAL_YES	"B'00000100'" ++ XLOCAL.YES KEYWORD
		.... ..1.		CIRDYNEX_XPERSIST_JOBSTEPTASK	"B'00000010'" ++ XPERSIST.JOBSTEPTASK KEYWORD
		1		CIRDYNEX_XWILDCARDSTAR_NO	"B'00000001'" ++ XWILDCARDSTAR.NO KEYWORD
1378	(562)	BITSTRING	1	CIRDYNEX_XPOS	++ XPOS
1378	(562)	X'0'	0	CIRDYNEX_XPOS_SYSTEM	"0" ++ XPOS.SYSTEM KEYWORD
1378	(562)	X'1'	0	CIRDYNEX_XPOS_LAST	"1" ++ XPOS.LAST KEYWORD
1378	(562)	X'2'	0	CIRDYNEX_XPOS_FIRST	"2" ++ XPOS.FIRST KEYWORD
1379	(563)	BITSTRING	1	CIRDYNEX_XEXAAVER	++ XEXAAVER
1379	(563)	X'0'	0	CIRDYNEX_XEXAAVER_0	"0" ++ XEXAAVER.0 KEYWORD
1379	(563)	X'1'	0	CIRDYNEX_XEXAAVER_1	"1" ++ XEXAAVER.1 KEYWORD
1379	(563)	X'2'	0	CIRDYNEX_XEXAAVER_2	"2" ++ XEXAAVER.2 KEYWORD
1380	(564)	CHARACTER	4	CIRDYNEX_XRSV0002	++ RESERVED
1384	(568)	CHARACTER	16	CIRDYNEX_XEXITNAME	++
1400	(578)	CHARACTER	8	CIRDYNEX_XMODNAME	++

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1408	(580)	ADDRESS	4	CIRDYNEX_XCMDINFO_ADDR	++ ADDR
1412	(584)	SIGNED	4	CIRDYNEX_XABENDNUM	++
1416	(588)	SIGNED	4	CIRDYNEX_XRCTO	++
1420	(58C)	SIGNED	4	CIRDYNEX_XRCFROM	++
1424	(590)	SIGNED	4	CIRDYNEX_XKEEPRC	++
1428	(594)	BITSTRING	1	CIRDYNEX_XKEEPRCCOMP	++ XKEEPRCCOMP
1428	(594)	X'0'	0	CIRDYNEX_XKEEPRCCOMP_EQ	"0" ++ XKEEPRCCOMP.EQ KEYWORD
1428	(594)	X'1'	0	CIRDYNEX_XKEEPRCCOMP_NE	"1" ++ XKEEPRCCOMP.NE KEYWORD
1428	(594)	X'2'	0	CIRDYNEX_XKEEPRCCOMP_GT	"2" ++ XKEEPRCCOMP.GT KEYWORD
1428	(594)	X'3'	0	CIRDYNEX_XKEEPRCCOMP_LT	"3" ++ XKEEPRCCOMP.LT KEYWORD
1428	(594)	X'4'	0	CIRDYNEX_XKEEPRCCOMP_GE	"4" ++ XKEEPRCCOMP.GE KEYWORD
1428	(594)	X'5'	0	CIRDYNEX_XKEEPRCCOMP_LE	"5" ++ XKEEPRCCOMP.LE KEYWORD
1429	(595)	BITSTRING	1	CIRDYNEX_XRCCOMPARE	++ XRCCOMPARE
1429	(595)	X'0'	0	CIRDYNEX_XRCCOMPARE_EQ	"0" ++ XRCCOMPARE.EQ KEYWORD
1429	(595)	X'1'	0	CIRDYNEX_XRCCOMPARE_NE	"1" ++ XRCCOMPARE.NE KEYWORD
1429	(595)	X'2'	0	CIRDYNEX_XRCCOMPARE_GT	"2" ++ XRCCOMPARE.GT KEYWORD
1429	(595)	X'3'	0	CIRDYNEX_XRCCOMPARE_LT	"3" ++ XRCCOMPARE.LT KEYWORD
1429	(595)	X'4'	0	CIRDYNEX_XRCCOMPARE_GE	"4" ++ XRCCOMPARE.GE KEYWORD
1429	(595)	X'5'	0	CIRDYNEX_XRCCOMPARE_LE	"5" ++ XRCCOMPARE.LE KEYWORD
1430	(596)	BITSTRING	1	CIRDYNEX_XFLAGS4	++ FIELD_LABEL
		1...		CIRDYNEX_KEYUSED_PRECALLADDR	"B'10000000'" ++ KEYUSED.PRECALLADDR KEYWORD
		.1..		CIRDYNEX_XEXITTYPE_INSTALLATION	"B'01000000'" ++ XEXITTYPE.INSTALLATION KEYWORD
		..1.		CIRDYNEX_XEXITTYPE_PROGRAM	"B'00100000'" ++ XEXITTYPE.PROGRAM KEYWORD
		...1		CIRDYNEX_XEXITTYPE_NOTPROGRAM	"B'00010000'" ++ XEXITTYPE.NOTPROGRAM KEYWORD
		.... 1...		CIRDYNEX_XMESSAGE_FOUNDBUTERROR	"B'00001000'" ++ XMESSAGE.FOUNDBUTERROR KEYWORD
		.... .1..		CIRDYNEX_XADDRSPACE_ANY	"B'00000100'" ++ XADDRSPACE.ANY KEYWORD
		1		CIRDYNEX_XLOADAPF_YES	"B'00000001'" ++ XLOADAPF.YES KEYWORD
1431	(597)	BITSTRING	1	CIRDYNEX_XEXRETVER	++ XEXRETVER
1431	(597)	X'0'	0	CIRDYNEX_XEXRETVER_0	"0" ++ XEXRETVER.0 KEYWORD
1431	(597)	X'1'	0	CIRDYNEX_XEXRETVER_1	"1" ++ XEXRETVER.1 KEYWORD
1432	(598)	SIGNED	4	CIRDYNEX_XCALLSTOPRC	++
1436	(59C)	CHARACTER	44	CIRDYNEX_XRSVNNNN	++ RESERVED

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1436	(59C)	X'5C8'	0	CIRDYNEX_PL_END	"*" ++ END OF BASE PLIST
1412	(584)	SIGNED	4	CIRDYNEX_XADDABENDNUM	++
1428	(594)	BITSTRING	1	CIRDYNEX_XKEEPRCCVAL	++
1429	(595)	BITSTRING	1	CIRDYNEX_XRCCVAL	++
1436	(59C)	ADDRESS	4	CIRDYNEX_XWORKAREA_ADDR	++ ADDR
1440	(5A0)	ADDRESS	4	CIRDYNEX_XRETAREA_ADDR	++ ADDR
1444	(5A4)	SIGNED	4	CIRDYNEX_XRETAREA_ALET	++ ALET
1448	(5A8)	SIGNED	4	CIRDYNEX_XRETLEN	++
1452	(5AC)	ADDRESS	4	CIRDYNEX_XRUB_ADDR	++ ADDR
1456	(5B0)	SIGNED	4	CIRDYNEX_XRUB_ALET	++ ALET
1460	(5B4)	CHARACTER	8	CIRDYNEX_XNEXTTOKEN	++
1468	(5BC)	ADDRESS	4	CIRDYNEX_XSDWA_ADDR	++ ADDR
1472	(5C0)	ADDRESS	4	CIRDYNEX_XPRECALLWA_ADDR	++ ADDR
1436	(59C)	ADDRESS	4	CIRDYNEX_XANSAREA_ADDR	++ ADDR
1440	(5A0)	SIGNED	4	CIRDYNEX_XANSAREA_ALET	++ ALET
1444	(5A4)	SIGNED	4	CIRDYNEX_XANSLEN	++
1436	(59C)	ADDRESS	4	CIRDYNEX_XPRECALLADDR	++
1436	(59C)	ADDRESS	4	CIRDYNEX_XDSNAME_ADDR	++ ADDR
1440	(5A0)	SIGNED	4	CIRDYNEX_XDSNAME_ALET	++ ALET
1444	(5A4)	CHARACTER	8	CIRDYNEX_XJOBNAME	++
1452	(5AC)	ADDRESS	4	CIRDYNEX_XMODADDR	++
1456	(5B0)	CHARACTER	8	CIRDYNEX_XPARAM	++
1444	(5A4)	CHARACTER	8	CIRDYNEX_XSTOKEN	++
1480	(5C8)	X'70'	0	CIRDYNEXL	"*-CIRDYNEX" ++ LENGTH OF PLIST
				Comment	
				CSVDYNEX-0	
				End of Comment	
0	(0)	X'78'	0	CIRGW9LN	"*-CIRGWORK" Length of ninth mapping
				Comment	
				---------- End of CIRGWORK mappings. ----------	
				End of Comment	
1480	(5C8)	ADDRESS	2	(0)	Ensure that
1480	(5C8)	ADDRESS	2	(0)	CIRGWORK is

$CIRWORK Cross Reference

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1480	(5C8)	ADDRESS	2	(0)	larger than
1480	(5C8)	ADDRESS	2	(0)	each of the
1480	(5C8)	ADDRESS	2	(0)	individual
1480	(5C8)	ADDRESS	2	(0)	mappings of
1480	(5C8)	ADDRESS	2	(0)	the data
1480	(5C8)	ADDRESS	2	(0)	area
1480	(5C8)	ADDRESS	2	(0)	
2260	(8D4)	SIGNED	4	(0)	
2260	(8D4)	X'79C'	0	CIRWLEN	"*-PCEWORK" LENGTH OF CIR PCE WORK
2260	(8D4)	X'8D4'	0	CIRLEN	"*-PCE" LENGTH OF INIT PCE

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	NGDAS	
0	(0)	CHARACTER	3	NGDEYE	Eye catcher
3	(3)	BITSTRING	1	NGDFLAG1	Universal flag byte
		1...		NGD1RBLD	"B'10000000'" Rebuild has been performed
3	(3)	X'4'	0	NGDHDR	"*-NGDAS" Header length
4	(4)	SIGNED	2	NGDDATA (0)	
4	(4)	CHARACTER	6	NGDVOLID	EBCDIC VOLSER ID
10	(A)	BITSTRING	1	NGDFLAG2	Individual volume flag byte
		1...		NGD2TRKQ	"B'10000000'" Should be on TRAK q
		.1..		NGD2WRKQ	"B'01000000'" Should be on WORK q
		..1.		NGD2CORR	"B'00100000'" DAS is corrupted
11	(B)	BITSTRING	1	NGDRBLDR	DAS rebuild reason
12	(C)	SIGNED	4	NGDTKCYL	Number of tracks per cyl
16	(10)	SIGNED	2	NGDNORTK	Number of recs per track
20	(14)	SIGNED	4	NGDTRKRC	RECY based tracks in DS
24	(18)	SIGNED	4	NGDMAPSZ	Number of bytes in map
28	(1C)	SIGNED	2	NGDMTCSZ	Minimum trackcell size
30	(1E)	SIGNED	2	NGDTGSIZ	Trackgroup size
32	(20)	BITSTRING	4	NGDEDONE	Expected DONE mask
36	(24)	CHARACTER	44	NGDDSN	Data set name work area
36	(24)	X'4C'	0	NGDASLEN	"*-NGDDATA" Size of temp vector entry

$CIRWORK Cross Reference

Name	Hex Offset	Hex Value
CIRACCTJ	284	
CIRACCTN	288	
CIRALTDS	580	
CIRANSA	5E8	
CIRANSAL	5EC	
CIRASALT	5B8	
CIRASDSB	5BC	
CIRASKEY	5B5	
CIRASNAM	5C0	
CIRBLDM	3C8	C2D3C440
CIRBSCLC	2EC	0
CIRBTGFA	2FC	
CIRBTGLA	300	
CIRBTPRC	1DA	
CIRCAPU	550	
CIRCAPU_KEYUSED_ASID	551	10
CIRCAPU_KEYUSED_CAPTOACT	551	20
CIRCAPU_KEYUSED_CAPTPTR	551	4
CIRCAPU_KEYUSED_CAPTUCB	551	80
CIRCAPU_KEYUSED_UCAPTUCB	551	40
CIRCAPU_KEYUSED_UCBPTR	551	8
CIRCAPU_XASID	55E	
CIRCAPU_XCAPTCOM_NEVER	55D	10
CIRCAPU_XCAPTCOM_YES	55D	20
CIRCAPU_XCAPTPTR	558	
CIRCAPU_XFLAGS1	551	
CIRCAPU_XLASTING_YES	55D	40
CIRCAPU_XMASK	55D	
CIRCAPU_XMSIFREE_YES	55D	80
CIRCAPU_XRESERVED1	552	
CIRCAPU_XRESERVED2		

Name	Hex Offset	Hex Value
	55C	
CIRCAPU_XRESERVED3		
	560	
CIRCAPU_XUCBPTR		
	554	
CIRCAPU_XVERSION		
	550	
CIRCAPUL	560	20
CIRCHFES	6C4	
CIRCHIUS	616	8
CIRCKPT1	634	
CIRCKPT2	67C	
CIRCKPVR	13C	
CIRCKVER	596	40
CIRCKVTM	596	20
CIRCKVWR	596	80
CIRCLGSZ	615	8
CIRCLREC	594	
CIRCMDTB	2E0	
CIRCMSTR	550	
CIRCMTSV	270	0
CIRCNECT	390	
CIRCONDS	6DC	
CIRCOUNT	590	
CIRCSRET	5C8	
CIRCTASI	604	
CIRCTBLN	600	
CIRCTBUF	5FC	
CIRCTEND	58C	
CIRCTENT	588	
CIRCTLST	598	
CIRCTLST_DEFINE		
	59C	1
CIRCTLST_DELETE		
	59C	2
CIRCTLST_KEYUSED_BUFDFLT		
	5BA	8
CIRCTLST_KEYUSED_BUFMAX		
	5BA	10
CIRCTLST_KEYUSED_BUFMIN		
	5BA	20
CIRCTLST_KEYUSED_IFNOSUBS		
	5BA	1
CIRCTLST_KEYUSED_MINOPS		
	5B8	10
CIRCTLST_KEYUSED_PARM		
	5BA	40
CIRCTLST_KEYUSED_SSRC		
	5BA	4
CIRCTLST_KEYUSED_SSRSNC		
	5BA	2
CIRCTLST_KEYUSED_SUB		
	5BA	80
CIRCTLST_KEYUSED_USERDATA		
	5BB	80
CIRCTLST_PL_END		
	5F8	5FC
CIRCTLST_XASIDS_YES		
	5B8	80
CIRCTLST_XBUFDEFIN_YES		
	5B8	4
CIRCTLST_XBUFDFLT		
	5E0	
CIRCTLST_XBUFFER_YES		
	5B8	40
CIRCTLST_XBUFMAX		
	5DC	
CIRCTLST_XBUFMIN		
	5D8	
CIRCTLST_XFLG1		
	5B8	
CIRCTLST_XFLG2		
	5B9	
CIRCTLST_XFLG3		
	5BA	
CIRCTLST_XFLG4		
	5BB	
CIRCTLST_XFMTTAB		
	5B0	
CIRCTLST_XHEAD_YES		
	5B9	40
CIRCTLST_XHEADOPTS_YES		
	5B9	20
CIRCTLST_XJOBS_YES		
	5B8	20
CIRCTLST_XLIKEHEAD_YES		
	5B9	80
CIRCTLST_XLNKPARM		
	5BC	
CIRCTLST_XMANYSUBS_YES		
	5B9	10
CIRCTLST_XMINOPS_ADDR		
	5C0	
CIRCTLST_XMINOPS_LEN		
	5C4	
CIRCTLST_XMOD_YES		
	5B8	8
CIRCTLST_XNAME		
	5A0	
CIRCTLST_XPARM		
	5EC	
CIRCTLST_XRSV0000		
	599	
CIRCTLST_XRVS0002		
	5D6	
CIRCTLST_XRVS0003		
	5EA	
CIRCTLST_XSERVICE		
	59C	
CIRCTLST_XSSRC		
	5F4	
CIRCTLST_XSSRSNC		
	5F8	
CIRCTLST_XSTARTNAM		
	5A8	
CIRCTLST_XSUB_ADDR		
	5E4	
CIRCTLST_XSUB_LEN		
	5E8	
CIRCTLST_XUSERDATA		
	5C6	
CIRCTLST_XVERSION		
	598	
CIRCTLST_XWTR_YES		
	5B8	2
CIRCTLST_XWTRMODE_DREF		
	5B9	4
CIRCTLST_XWTRMODE_FIXED		
	5B9	2
CIRCTLST_XWTRMODE_PAGEABLE		

Name	Hex Offset	Hex Value
	5B9	8
CIRCTLSTL	5F8	64
CIRCTNAM	60C	
CIRCTUSR	5FC	
CIRCURDS	57C	
CIRCURRC	550	
CIRDIAGR	76C	
CIRDOMID	38C	
CIRDONFW	616	20
CIRDWORK	148	0
CIRDYNEX	558	
CIRDYNEX_KEYUSED_CALLSTOPRC	55A	80
CIRDYNEX_KEYUSED_KEEPRC	55A	20
CIRDYNEX_KEYUSED_PRECALLADDR	596	80
CIRDYNEX_KEYUSED_RCFROM	55A	40
CIRDYNEX_KEYUSED_STOKEN	560	1
CIRDYNEX_PL_END	59C	5C8
CIRDYNEX_XABENDCONSEC_YES	560	4
CIRDYNEX_XABENDNUM	584	
CIRDYNEX_XADDABENDNUM	584	
CIRDYNEX_XADDRSPACE_ANY	596	4
CIRDYNEX_XAMODE	55B	
CIRDYNEX_XAMODE_DEFINED	55B	2
CIRDYNEX_XAMODE_24	55B	1
CIRDYNEX_XAMODE_31	55B	0
CIRDYNEX_XANSAREA_ADDR	59C	
CIRDYNEX_XANSAREA_ALET	5A0	
CIRDYNEX_XANSLEN	5A4	
CIRDYNEX_XANYKEY_YES	560	8
CIRDYNEX_XCALLSTOPRC	598	
CIRDYNEX_XCMDINFO_ADDR	580	
CIRDYNEX_XDSNAME_ADDR	59C	
CIRDYNEX_XDSNAME_ALET	5A0	
CIRDYNEX_XEXAAVER	563	
CIRDYNEX_XEXAAVER_0	563	0
CIRDYNEX_XEXAAVER_1	563	1
CIRDYNEX_XEXAAVER_2	563	2
CIRDYNEX_XEXITNAME	568	
CIRDYNEX_XEXITTYPE_INSTALLATION	596	40
CIRDYNEX_XEXITTYPE_NOTPROGRAM	596	10
CIRDYNEX_XEXITTYPE_PROGRAM	596	20
CIRDYNEX_XEXRETVER	597	
CIRDYNEX_XEXRETVER_0	597	0
CIRDYNEX_XEXRETVER_1	597	1
CIRDYNEX_XFASTPATH_YES	55A	10
CIRDYNEX_XFLAGS	55A	
CIRDYNEX_XFLAGS2	560	
CIRDYNEX_XFLAGS3	561	
CIRDYNEX_XFLAGS4	596	
CIRDYNEX_XFORCE_YES	560	40
CIRDYNEX_XJOBNAME	5A4	
CIRDYNEX_XKEEPRC	590	
CIRDYNEX_XKEEPRCCOMP	594	
CIRDYNEX_XKEEPRCCOMP_EQ	594	0
CIRDYNEX_XKEEPRCCOMP_GE	594	4
CIRDYNEX_XKEEPRCCOMP_GT	594	2
CIRDYNEX_XKEEPRCCOMP_LE	594	5
CIRDYNEX_XKEEPRCCOMP_LT	594	3
CIRDYNEX_XKEEPRCCOMP_NE	594	1
CIRDYNEX_XKEEPRCCVAL	594	
CIRDYNEX_XKEY	55C	
CIRDYNEX_XLINKSTACKOK_NO	560	2
CIRDYNEX_XLOADAPF_YES	596	1
CIRDYNEX_XLOCAL_YES	561	4
CIRDYNEX_XMESSAGE_ERROR	55A	4
CIRDYNEX_XMESSAGE_FOUNDBUTERROR	596	8
CIRDYNEX_XMODADDR	5AC	
CIRDYNEX_XMODNAME	578	
CIRDYNEX_XNEXTTOKEN	5B4	
CIRDYNEX_XONEMODULE_YES	560	80
CIRDYNEX_XPARAM		

Name	Hex Offset	Hex Value
	5B0	
CIRDYNEX_XPERSIST_ADDRESSSPACE		
	560	20
CIRDYNEX_XPERSIST_IPL		
	560	10
CIRDYNEX_XPERSIST_JOBSTEPTASK		
	561	2
CIRDYNEX_XPOS		
	562	
CIRDYNEX_XPOS_FIRST		
	562	2
CIRDYNEX_XPOS_LAST		
	562	1
CIRDYNEX_XPOS_SYSTEM		
	562	0
CIRDYNEX_XPRECALLADDR		
	59C	
CIRDYNEX_XPRECALLWA_ADDR		
	5C0	
CIRDYNEX_XQTYPE_ADD		
	561	8
CIRDYNEX_XRCCOMPARE		
	595	
CIRDYNEX_XRCCOMPARE_EQ		
	595	0
CIRDYNEX_XRCCOMPARE_GE		
	595	4
CIRDYNEX_XRCCOMPARE_GT		
	595	2
CIRDYNEX_XRCCOMPARE_LE		
	595	5
CIRDYNEX_XRCCOMPARE_LT		
	595	3
CIRDYNEX_XRCCOMPARE_NE		
	595	1
CIRDYNEX_XRCCVAL		
	595	
CIRDYNEX_XRCFROM		
	58C	
CIRDYNEX_XRCTO		
	588	
CIRDYNEX_XREENTRANT_REQ		
	55A	8
CIRDYNEX_XREQUEST		
	559	
CIRDYNEX_XREQUEST_ACTIVATE		
	559	A
CIRDYNEX_XREQUEST_ADD		
	559	1
CIRDYNEX_XREQUEST_ATTRIB		
	559	5
CIRDYNEX_XREQUEST_CALL		
	559	7
CIRDYNEX_XREQUEST_DEFINE		
	559	0
CIRDYNEX_XREQUEST_DELETE		
	559	3
CIRDYNEX_XREQUEST_LIST		
	559	6
CIRDYNEX_XREQUEST_MODIFY		
	559	2
CIRDYNEX_XREQUEST_PROCESSDP		
	559	9
CIRDYNEX_XREQUEST_QUERY		
	559	B
CIRDYNEX_XREQUEST_RECOVER		
	559	8
CIRDYNEX_XREQUEST_REPLACE		
	559	C
CIRDYNEX_XREQUEST_UNDEFINE		
	559	4
CIRDYNEX_XRETAREA_ADDR		
	5A0	
CIRDYNEX_XRETAREA_ALET		
	5A4	
CIRDYNEX_XRETINFO_ALL		
	561	20
CIRDYNEX_XRETINFO_HIGHEST		
	561	80
CIRDYNEX_XRETINFO_LAST		
	561	10
CIRDYNEX_XRETINFO_LOWEST		
	561	40
CIRDYNEX_XRETLEN		
	5A8	
CIRDYNEX_XRSVNNNN		
	59C	
CIRDYNEX_XRSV0002		
	564	
CIRDYNEX_XRUB_ADDR		
	5AC	
CIRDYNEX_XRUB_ALET		
	5B0	
CIRDYNEX_XSDWA_ADDR		
	5BC	
CIRDYNEX_XSTATE_ACTIVE		
	55A	2
CIRDYNEX_XSTATE_INACTIVE		
	55A	1
CIRDYNEX_XSTOKEN		
	5A4	
CIRDYNEX_XVERSION		
	558	
CIRDYNEX_XWILDCARDSTAR_NO		
	561	1
CIRDYNEX_XWORKAREA_ADDR		
	59C	
CIRDYNEXL	5C8	70
CIRECB	154	0
CIRECBA1	75C	
CIRECBA2	760	
CIRECBLS	75C	
CIRECB1	764	
CIRECB2	768	
CIRETDEF	550	
CIREXDYN	5F0	
CIREXDYN_KEYUSED_CALLSTOPRC		
	5F2	80
CIREXDYN_KEYUSED_KEEPRC		
	5F2	20
CIREXDYN_KEYUSED_PRECALLADDR		
	62E	80
CIREXDYN_KEYUSED_RCFROM		
	5F2	40
CIREXDYN_KEYUSED_STOKEN		
	5F8	1
CIREXDYN_PL_END		
	634	660
CIREXDYN_XABENDCONSEC_YES		
	5F8	4

Name	Hex Offset	Hex Value
CIREXDYN_XABENDNUM	61C	
CIREXDYN_XADDABENDNUM	61C	
CIREXDYN_XADDRSPACE_ANY	62E	4
CIREXDYN_XAMODE	5F3	
CIREXDYN_XAMODE_DEFINED	5F3	2
CIREXDYN_XAMODE_24	5F3	1
CIREXDYN_XAMODE_31	5F3	0
CIREXDYN_XANSAREA_ADDR	634	
CIREXDYN_XANSAREA_ALET	638	
CIREXDYN_XANSLEN	63C	
CIREXDYN_XANYKEY_YES	5F8	8
CIREXDYN_XCALLSTOPRC	630	
CIREXDYN_XCMDINFO_ADDR	618	
CIREXDYN_XDSNAME_ADDR	634	
CIREXDYN_XDSNAME_ALET	638	
CIREXDYN_XEXAAVER	5FB	
CIREXDYN_XEXAAVER_0	5FB	0
CIREXDYN_XEXAAVER_1	5FB	1
CIREXDYN_XEXAAVER_2	5FB	2
CIREXDYN_XEXITNAME	600	
CIREXDYN_XEXITTYPE_INSTALLATION	62E	40
CIREXDYN_XEXITTYPE_NOTPROGRAM	62E	10
CIREXDYN_XEXITTYPE_PROGRAM	62E	20
CIREXDYN_XEXRETVER	62F	
CIREXDYN_XEXRETVER_0	62F	0
CIREXDYN_XEXRETVER_1	62F	1
CIREXDYN_XFASTPATH_YES	5F2	10
CIREXDYN_XFLAGS	5F2	
CIREXDYN_XFLAGS2	5F8	
CIREXDYN_XFLAGS3	5F9	
CIREXDYN_XFLAGS4	62E	
CIREXDYN_XFORCE_YES	5F8	40
CIREXDYN_XJOBNAME	63C	
CIREXDYN_XKEEPRC	628	
CIREXDYN_XKEEPRCCOMP	62C	
CIREXDYN_XKEEPRCCOMP_EQ	62C	0
CIREXDYN_XKEEPRCCOMP_GE	62C	4
CIREXDYN_XKEEPRCCOMP_GT	62C	2
CIREXDYN_XKEEPRCCOMP_LE	62C	5
CIREXDYN_XKEEPRCCOMP_LT	62C	3
CIREXDYN_XKEEPRCCOMP_NE	62C	1
CIREXDYN_XKEEPRCCVAL	62C	
CIREXDYN_XKEY	5F4	
CIREXDYN_XLINKSTACKOK_NO	5F8	2
CIREXDYN_XLOADAPF_YES	62E	1
CIREXDYN_XLOCAL_YES	5F9	4
CIREXDYN_XMESSAGE_ERROR	5F2	4
CIREXDYN_XMESSAGE_FOUNDBUTERROR	62E	8
CIREXDYN_XMODADDR	644	
CIREXDYN_XMODNAME	610	
CIREXDYN_XNEXTTOKEN	64C	
CIREXDYN_XONEMODULE_YES	5F8	80
CIREXDYN_XPARAM	648	
CIREXDYN_XPERSIST_ADDRESSSPACE	5F8	20
CIREXDYN_XPERSIST_IPL	5F8	10
CIREXDYN_XPERSIST_JOBSTEPTASK	5F9	2
CIREXDYN_XPOS	5FA	
CIREXDYN_XPOS_FIRST	5FA	2
CIREXDYN_XPOS_LAST	5FA	1
CIREXDYN_XPOS_SYSTEM	5FA	0
CIREXDYN_XPRECALLADDR	634	
CIREXDYN_XPRECALLWA_ADDR	658	
CIREXDYN_XQTYPE_ADD	5F9	8
CIREXDYN_XRCCOMPARE	62D	
CIREXDYN_XRCCOMPARE_EQ	62D	0

Name	Hex Offset	Hex Value
CIREXDYN_XRCCOMPARE_GE	62D	4
CIREXDYN_XRCCOMPARE_GT	62D	2
CIREXDYN_XRCCOMPARE_LE	62D	5
CIREXDYN_XRCCOMPARE_LT	62D	3
CIREXDYN_XRCCOMPARE_NE	62D	1
CIREXDYN_XRCCVAL	62D	
CIREXDYN_XRCFROM	624	
CIREXDYN_XRCTO	620	
CIREXDYN_XREENTRANT_REQ	5F2	8
CIREXDYN_XREQUEST	5F1	
CIREXDYN_XREQUEST_ACTIVATE	5F1	A
CIREXDYN_XREQUEST_ADD	5F1	1
CIREXDYN_XREQUEST_ATTRIB	5F1	5
CIREXDYN_XREQUEST_CALL	5F1	7
CIREXDYN_XREQUEST_DEFINE	5F1	0
CIREXDYN_XREQUEST_DELETE	5F1	3
CIREXDYN_XREQUEST_LIST	5F1	6
CIREXDYN_XREQUEST_MODIFY	5F1	2
CIREXDYN_XREQUEST_PROCESSDP	5F1	9
CIREXDYN_XREQUEST_QUERY	5F1	B
CIREXDYN_XREQUEST_RECOVER	5F1	8
CIREXDYN_XREQUEST_REPLACE	5F1	C
CIREXDYN_XREQUEST_UNDEFINE	5F1	4
CIREXDYN_XRETAREA_ADDR	638	
CIREXDYN_XRETAREA_ALET	63C	
CIREXDYN_XRETINFO_ALL	5F9	20
CIREXDYN_XRETINFO_HIGHEST	5F9	80
CIREXDYN_XRETINFO_LAST	5F9	10
CIREXDYN_XRETINFO_LOWEST	5F9	40
CIREXDYN_XRETLEN	640	
CIREXDYN_XRSVNNNN	634	
CIREXDYN_XRSV0002	5FC	
CIREXDYN_XRUB_ADDR	644	
CIREXDYN_XRUB_ALET	648	
CIREXDYN_XSDWA_ADDR	654	
CIREXDYN_XSTATE_ACTIVE	5F2	2
CIREXDYN_XSTATE_INACTIVE	5F2	1
CIREXDYN_XSTOKEN	63C	
CIREXDYN_XVERSION	5F0	
CIREXDYN_XWILDCARDSTAR_NO	5F9	1
CIREXDYN_XWORKAREA_ADDR	634	
CIREXDYNL	660	70
CIREXIT0	15C	
CIREXPRF	615	40
CIRFFWD	616	10
CIRFLAGV	5B4	
CIRFLAG1	138	0
CIRFLAG2	139	0
CIRFLAG3	13A	
CIRFLAG4	13B	0
CIRFLAG5	27A	0
CIRFLAG6	27B	0
CIRFPLN	678	
CIRFPTX	658	
CIRFV$DS	5B4	80
CIRFVIAR	5B4	40
CIRFVNBL	5B4	20
CIRFVNFD	5B4	10
CIRFVNSH	5B4	8
CIRFVRC	5B4	4
CIRFVRS	5B4	2
CIRFWCNT	630	
CIRFWDDS	616	40
CIRF1CAN	138	4
CIRF1CI	138	20
CIRF1HPI	138	80
CIRF1INC	138	40
CIRF1PER	138	8
CIRF1SER	138	1
CIRF1SSW	138	2
CIRF1XI	138	10
CIRF2CM	139	10
CIRF2CMA	139	2
CIRF2CMT	139	1
CIRF2ECM	139	8
CIRF2HPO	139	20
CIRF2JEX	139	80
CIRF2RRD	139	40
CIRF2SSE	139	4
CIRF3BDV	13A	10
CIRF3ERR	13A	F
CIRF3IO1	13A	8
CIRF3IO2	13A	4
CIRF3I1V	13A	9
CIRF3I12	13A	C
CIRF3LOG	13A	40
CIRF3LST	13A	80
CIRF3MID	13A	20
CIRF3VE1	13A	2

Name	Hex Offset	Hex Value
CIRF3VE2	13A	1
CIRF3V1I	13A	6
CIRF3V12	13A	3
CIRF4CHD	13B	2
CIRF4CHM	13B	4
CIRF4ILL	13B	80
CIRF4RER	13B	8
CIRF4RES	13B	10
CIRF4RTE	13B	1
CIRF4SCN	13B	20
CIRF4XER	13B	40
CIRGEMR	280	39
CIRGWORK	550	
CIRGW1LN	860	358
CIRGW2LN	0	1E4
CIRGW3LN	550	0
CIRGW4LN	0	2BC
CIRGW5LN	0	20
CIRGW6LN	679	12C
CIRGW7LN	550	78
CIRGW8LN	5C0	78
CIRGW9LN	0	78
CIRHCT	150	
CIRIDMEM	754	
CIRIDSNE	6D8	
CIRINFMR	280	3D
CIRINSSA	5EC	
CIRINSSL	5F0	
CIRIPRW	60C	0
CIRIQNAM	394	E2E8E2E9
CIRIRDAF	615	0
CIRIRDA1	616	0
CIRIRDA2	596	0
CIRIRNAM	39C	C9D5C9E3
CIRIRPL1	20E	0
CIRI416	616	2
CIRI460	616	4
CIRJBMAX	280	
CIRJBMIN	27C	
CIRJNPRC	1D6	
CIRJOHI	1CE	FF0
CIRJOLOW	1D0	0
CIRJOPRC	1D4	
CIRJORAT	1CC	0
CIRJOTEC	615	2
CIRJOTES	614	
CIRJOTRB	615	1
CIRJOTV	615	3
CIRJQENC	560	
CIRJQENP	564	
CIRJQHI	1CA	
CIRJQLOW	1CB	
CIRJQPRC	1D2	
CIRJQRAT	1C8	0
CIRLEN	8D4	8D4
CIRLFJQE	584	
CIRLNENM	3A6	0
CIRLPARM	604	
CIRLRCNT	608	
CIRMAXQT	615	20
CIRMSGIS	616	80
CIRMSTRS	570	
CIRMWORK	420	
CIRM500A	550	
CIRM791W	758	
CIRNDCHN	260	0
CIRNDDOM	260	10
CIRNDEYE	260	0
CIRNDLAY	22C	
CIRNDLEN	260	14
CIRNDMSG	260	C
CIRNDNXT	260	4
CIRNDSTI	260	8
CIRNFSSP	3BC	0
CIRNLLCC	568	
CIRNLLCT	20A	1
CIRNLLL1	57B	1E
CIRNLLNE	568	
CIRNLLSH	576	
CIRNLLSN	57B	
CIRNLLSR	569	
CIRNLLST	591	
CIRNLPCT	20C	0
CIRNODAT	616	1
CIRNPLLG	21C	
CIRNQMSG	228	
CIRNTCLF	3C0	0
CIRNTCLP	3C4	0
CIRNUMJR	3AC	0
CIRNUMJT	3A8	0
CIRNUMSR	3B4	0
CIRNUMST	3B0	0
CIRNXTOK	5B8	
CIRN3800	3B8	0
CIROPTA	384	
CIROPTL	388	
CIROPTPF	160	
CIROPTS	164	0
CIRPARMF	617	
CIRPARML	618	
CIRPARMS	62C	617
CIRPARM1	618	
CIRPARM2	61C	
CIRPARM3	620	
CIRPARM4	624	
CIRPARM5	628	
CIRPARM6	62C	
CIRPDCT	230	
CIRPDCT2	234	
CIRPLWRK	5F8	
CIRPRDCB	5FC	
CIRPREVC	558	
CIRPRMWR	600	
CIRP1AST	20E	80
CIRREPLY	140	0
CIRROPSL	292	F0F0F0F0
CIRROPST	2AA	F0F0F0F0
CIRROPSU	2C2	F0F0F0F0
CIRRSV1	679	
CIRRUB	5A4	
CIRRUBRB	5B0	
CIRRUBRD	5B4	
CIRRUBR0	5A8	
CIRRUBR1	5AC	
CIRSCMLN	550	
CIRSCMSG	552	
CIRSDLCT	210	0
CIRSJEXP	558	
CIRSJLSP	550	
CIRSJPTR	554	

Name	Hex Offset	Hex Value
CIRSNALC	2F0	0
CIRSPLF	568	
CIRSPLGE	615	10
CIRSPLL	56C	
CIRSPT	304	0
CIRSTIMC	250	0
CIRSTIMS	238	0
CIRSTMCL	250	10
CIRSTMSL	238	18
CIRSTMTA	5E4	
CIRSTMTC	208	0
CIRSTMTL	5E8	
CIRSTMTT	1E0	
CIRSTMTW	1DC	
CIRSWARN	5F4	
CIRSYMBP	1E4	0
CIRS99PT	564	
CIRS99RB	550	
CIRTCPLC	2F4	0
CIRTDCTS	2E8	
CIRTGEDM	28C	40202020
CIRTGPRC	1D8	
CIRTOTA	574	
CIRTRANL	200	0
CIRTRANR	204	0
CIRTSTOR	2E4	
CIRTVECT	578	
CIRUCBL	7B8	
CIRUCBL_KEYUSED_COMPID	7D2	8
CIRUCBL_KEYUSED_DEVN	7D2	80
CIRUCBL_KEYUSED_DEVNCHAR	7D2	40
CIRUCBL_KEYUSED_HELP	7D2	4
CIRUCBL_KEYUSED_LASTING	7D2	10
CIRUCBL_KEYUSED_LDEVNCHAR	7D3	20
CIRUCBL_KEYUSED_PIN	7D2	2
CIRUCBL_KEYUSED_PINPATHS	7D2	1
CIRUCBL_KEYUSED_SCHSET	7D3	10
CIRUCBL_KEYUSED_UCBCXPTR	7D3	80
CIRUCBL_KEYUSED_UCBPXPTR	7D3	40
CIRUCBL_KEYUSED_VOLSER	7D2	20
CIRUCBL_XCOMPID	7CC	
CIRUCBL_XDEVCLASS	7C6	
CIRUCBL_XDEVCLASS_DASD	7C6	2
CIRUCBL_XDEVCLASS_DASDTAPE	7C6	0
CIRUCBL_XDEVCLASS_TAPE	7C6	1
CIRUCBL_XDEVN	7BA	
CIRUCBL_XDEVNCHAR	7BC	
CIRUCBL_XDYNAMIC_NO	7D1	40
CIRUCBL_XFLAGS	7D2	
CIRUCBL_XFLAGS2	7D3	
CIRUCBL_XHELP	7E4	
CIRUCBL_XIOCTOKEN_ADDR	7EC	
CIRUCBL_XIOCTOKEN_ALET	7F0	
CIRUCBL_XLDEVNCHAR	804	
CIRUCBL_XLOC_ANY	7D1	10
CIRUCBL_XMASK	7D1	
CIRUCBL_XNONBASE_YES	7D1	80
CIRUCBL_XNOTFIND_YES	7C7	80
CIRUCBL_XPTOKEN	7DC	
CIRUCBL_XRANGE_3DIGIT	7D1	20
CIRUCBL_XRESERVED1	809	
CIRUCBL_XRESERVED2	7C7	
CIRUCBL_XSCHSET	7B9	
CIRUCBL_XSPECIAL_YES	7D1	8
CIRUCBL_XTEXT_ADDR	7D4	
CIRUCBL_XTEXT_ALET	7D8	
CIRUCBL_XUCBCXPTR	7FC	
CIRUCBL_XUCBPAREA_ADDR	7F4	
CIRUCBL_XUCBPAREA_ALET	7F8	
CIRUCBL_XUCBPTR	7C8	
CIRUCBL_XUCBPXPTR	800	
CIRUCBL_XUNBOUND_ALIAS_YES	7D1	1
CIRUCBL_XVERSION	7B8	
CIRUCBL_XVOLSER	7C0	
CIRUCBLL	809	54
CIRUCLK	6E0	
CIRUCLK_KEYUSED_COMPID	6FA	8
CIRUCLK_KEYUSED_DEVN	6FA	80
CIRUCLK_KEYUSED_DEVNCHAR	6FA	40
CIRUCLK_KEYUSED_HELP	6FA	4

Name	Hex Offset	Hex Value
CIRUCLK_KEYUSED_LASTING	6FA	10
CIRUCLK_KEYUSED_LDEVNCHAR	6FB	20
CIRUCLK_KEYUSED_PIN	6FA	2
CIRUCLK_KEYUSED_PINPATHS	6FA	1
CIRUCLK_KEYUSED_SCHSET	6FB	10
CIRUCLK_KEYUSED_UCBCXPTR	6FB	80
CIRUCLK_KEYUSED_UCBPXPTR	6FB	40
CIRUCLK_KEYUSED_VOLSER	6FA	20
CIRUCLK_XCOMPID	6F4	
CIRUCLK_XDEVCLASS	6EE	
CIRUCLK_XDEVCLASS_DASD	6EE	2
CIRUCLK_XDEVCLASS_DASDTAPE	6EE	0
CIRUCLK_XDEVCLASS_TAPE	6EE	1
CIRUCLK_XDEVN	6E2	
CIRUCLK_XDEVNCHAR	6E4	
CIRUCLK_XDYNAMIC_NO	6F9	40
CIRUCLK_XFLAGS	6FA	
CIRUCLK_XFLAGS2	6FB	
CIRUCLK_XHELP	70C	
CIRUCLK_XIOCTOKEN_ADDR	714	
CIRUCLK_XIOCTOKEN_ALET	718	
CIRUCLK_XLDEVNCHAR	72C	
CIRUCLK_XLOC_ANY	6F9	10
CIRUCLK_XMASK	6F9	
CIRUCLK_XNONBASE_YES	6F9	80
CIRUCLK_XNOTFIND_YES	6EF	80
CIRUCLK_XPTOKEN	704	
CIRUCLK_XRANGE_3DIGIT	6F9	20
CIRUCLK_XRESERVED1	731	
CIRUCLK_XRESERVED2	6EF	
CIRUCLK_XSCHSET	6E1	
CIRUCLK_XSPECIAL_YES	6F9	8
CIRUCLK_XTEXT_ADDR	6FC	
CIRUCLK_XTEXT_ALET	700	
CIRUCLK_XUCBCXPTR	724	
CIRUCLK_XUCBPAREA_ADDR	71C	
CIRUCLK_XUCBPAREA_ALET	720	
CIRUCLK_XUCBPTR	6F0	
CIRUCLK_XUCBPXPTR	728	
CIRUCLK_XUNBOUND_ALIAS_YES	6F9	1
CIRUCLK_XVERSION	6E0	
CIRUCLK_XVOLSER	6E8	
CIRUCLKL	731	54
CIRVOLTB	2DC	
CIRVRETC	5AC	
CIRVRL	590	
CIRVRLP	58C	
CIRVRSNC	5B0	
CIRVSERV	580	
CIRVSERV_CHANGEACCESS	581	3
CIRVSERV_COPYNOW	582	2
CIRVSERV_RETAIN_YES	582	1
CIRVSERV_SHARE	581	1
CIRVSERV_SHARESEG	581	4
CIRVSERV_TARGET_VIEW_LS	582	8
CIRVSERV_TARGET_VIEW_NA	582	4
CIRVSERV_TARGET_VIEW_RO	582	80
CIRVSERV_TARGET_VIEW_SW	582	40
CIRVSERV_TARGET_VIEW_TW	582	10
CIRVSERV_TARGET_VIEW_UW	582	20
CIRVSERV_UNSHARE	581	2
CIRVSERV_XFLAGS1	582	
CIRVSERV_XFLAGS2	583	
CIRVSERV_XNUMRANGE	584	
CIRVSERV_XPARTIALPAGE_YES	583	80
CIRVSERV_XRANGLIST	588	
CIRVSERV_XSERVICE	581	
CIRVSERV_XVERSION	580	
CIRVSERVL	588	C

Name	Hex Offset	Hex Value
CIRWLEN	8D4	79C
CIRWMER	615	80
CIRWXIT0	158	
CIRXAREA	660	
CIRXEMN	280	3C
CIRXEMNM	280	48
CIRX0#RT	218	
CIRX0PS	384	
CIRX0RNM	5C0	
CIRX0SAV	860	
CIRX0XRT	214	
CIRX19PS	5E4	
CIRZIP	2F8	
CIR5BRTE	27A	2
CIR5DMEM	27A	8
CIR5DSEQ	27A	20
CIR5HPRM	27A	10
CIR5IRDD	27A	80
CIR5LPRM	27A	4
CIR5QWIK	27A	40
CIR5RRTE	27A	1
CIR6CLSE	27B	40
CIR6DERR	27B	80
CIR6SKZL	27B	20
M00M1073	0	5F0
M00M1075	0	6E0
M00M1076	0	598
M00M1077	0	7B8
M00M1078	0	550
M00M1082	0	580
M00M1083	0	558
NGDAS	0	
NGDASLEN	24	4C
NGDDATA	4	
NGDDSN	24	40404040
NGDEDONE	20	0
NGDEYE	0	
NGDFLAG1	3	
NGDFLAG2	A	
NGDHDR	3	4
NGDMAPSZ	18	
NGDMTCSZ	1C	
NGDNORTK	10	
NGDRBLDR	B	
NGDTGSIZ	1E	
NGDTKCYL	C	
NGDTRKRC	14	
NGDVOLID	4	
NGD1RBLD	3	80
NGD2CORR	A	20
NGD2TRKQ	A	80
NGD2WRKQ	A	40
PCE	0	

$CIWORK Information

$CIWORK Heading Information

Common Name: C/I subtask work areas
Macro ID: $CIWORK
DSECT Name: CIWORK and CIWORKB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CIWORK CIWORKB
Offset: CIWID-CIWORK CIWBID-CIWORKB
Length: L'CIWID L'CIWBID
Storage Attributes: Subpool: 10
Key: 1
Residency: Private storage is in either the JES2 address space or the JES2 CI address space. The CIW is located in 31 bit virtual and 64 bit real storage. The CIWB is located in 24 bit virtual and 64 bit real (due to requirments of DFSMS and the interpreter).
Size: See CIWLEN (31 bit) and CIWBLEN (24 bit)
Created by: HASPCNVS C/I subtask
Pointed to by: DCNVCIW field of the $DTECNV data area
DCNVCIWB field of the $DTECNV data area
Serialization: None required
Function: This part maps two private data areas used by the JES2 converter interpreter subtasks. The CIWB is the 24 bit storage work area that contains paramters to services that must be in 24 bit storage. The CIW contains all the other work areas (in 31 bit storage).

$CIWORK Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CIWORK	, JES2 C/I 31 bit work area
0	(0)	CHARACTER	8	CIWID	Eyecatcher
8	(8)	ADDRESS	1	CIWVER	CB version
8	(8)	X'1'	0	CIWVERN	"1" Current version number
9	(9)	BITSTRING	3		Reserved
12	(C)	ADDRESS	4	CIWDTE	Related DTE address
16	(10)	ADDRESS	4	CIWCIWB	Related CIWB address
20	(14)	ADDRESS	4		
		Comment			
		MACDATE 03/11/11			
		End of Comment			
24	(18)	ADDRESS	4	CIWPOSTE	. 1ST WORD - ECB ADDRESS
28	(1C)	ADDRESS	4		. 2ND WORD - ASCB ADDRESS
32	(20)	ADDRESS	4		. 3RD WORD - ERRET ADDRESS
36	(24)	ADDRESS	4		. 4TH WORD - BYTE0,ECBKEY
36	(24)	X'18'	0	CIWPECB	"CIWPOSTE" Address of ECB
36	(24)	X'1C'	0	CIWPASCB	"CIWPOSTE+4,4,C'A'" ADDRESS OF HASP ASCB
36	(24)	X'24'	0	CIWPECBK	"CIWPOSTE+12,1" Storage key of HASP ECB
36	(24)	X'10'	0	CIWPSTLN	"*-CIWPOSTE" Length of POST MF=L
40	(28)	BITSTRING	1	CIWSTAT	Processor status byte
		1...		CIWSJCTV	"B'10000000'" Valid JCT read
		.1..		CIWSDST	"B'01000000'" Data set type - bit on -> SYSIN bit off -> SYSOUT
		..1.		CIWSCAS	"B'00100000'" Alternate system symbols must be captured

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
41	(29)	BITSTRING	3	CIWFRSN (0)	Fake open failure info

Comment

See HASCDSOC for values

End of Comment

41	(29)	BITSTRING	1	CIWDSKY	Data set failure occured on
42	(2A)	BITSTRING	1	CIWROUT	Routine that found error
43	(2B)	BITSTRING	1	CIWFAIL	Return code from routine
44	(2C)	ADDRESS	4	CIWADDR	Address of JCL converter
48	(30)	ADDRESS	4	CIWINTA	Address of JCL interpreter
52	(34)	ADDRESS	4	CIWSPLR	Address of SWA SPOOOLer
56	(38)	ADDRESS	4	CIWSJBP	Address of conversion task SJB
60	(3C)	ADDRESS	4	CIWACEE	Save area for ACEE pointer
64	(40)	ADDRESS	4	CIWJSCBO	Save area for old JSCB
68	(44)	ADDRESS	4	CIWJSCBN	Save area for new JSCB
72	(48)	ADDRESS	4	CIWCPTR	Pointer to converter's message buffer
76	(4C)	ADDRESS	4	CIWWAVE	Addr of the WAVE control block for $SEAS calls
80	(50)	ADDRESS	4	CIWDSRVA	Address of DSERV area
84	(54)	BITSTRING	4		Reserved
88	(58)	DBL WORD	8	CIWSTIME	CALLCI start time
96	(60)	DBL WORD	8	CIWSCPU	CALLCI start CPU

Comment

XPL and parameter list for exits 6 and 59.
Field CIWPARM thru CIWCIWA make up the exit 6 paramater list for compatibility and should be kept together.

End of Comment

104	(68)	SIGNED	4	(0)	Ensure alignment
104	(68)	BITSTRING	40	CIWXPL	Exit 6/59 work area
120	(78)	SIGNED	4	CIWPARM (0)	Exit 6 parameter list
120	(78)	ADDRESS	4	CIWUWAA	Addr of exit 6 user work area
124	(7C)	ADDRESS	4	CIWP2A	If R0=0 then internal text image address Else If R0=4 then converter return code address
128	(80)	ADDRESS	4	CIWDTEA	Address of DTE
132	(84)	ADDRESS	4	CIWJCTA	Address of JCT buffer
136	(88)	ADDRESS	4	CIWCNMB	Address of converter message buffer
140	(8C)	ADDRESS	4	CIWCIWA	Address of C/I work area

Comment

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

End of Comment

144	(90)	SIGNED	4	CIWCLR (0)	Start of work area cleared in converter sub-task initialization
144	(90)	ADDRESS	4	CIWCATA	Address of CAT for job
148	(94)	CHARACTER	8	CIWJCLAS	JOBCLASS of job
156	(9C)	CHARACTER	1	CIW1CLAS	1 character JOBCLASS of job
157	(9D)	BITSTRING	3		Reserved
160	(A0)	ADDRESS	4	CIWJQAA	Address of JQA for job
164	(A4)	BITSTRING	6	CIWJCTRK	MQTR of JCT
170	(AA)	SIGNED	1	CIWJPRIO	JOBCLASS of job
171	(AB)	ADDRESS	1		Reserved
172	(AC)	SIGNED	4	CIWJKEY	Job key save area
176	(B0)	ADDRESS	4	CIWPAD	Addr of current(open) PAD
180	(B4)	SIGNED	4	CIWPADL	and PAD data space ALET
184	(B8)	BITSTRING	8	CIWPCRT	Open PAD create time
192	(C0)	ADDRESS	4	CIWPD00	Addr of PROC00 PAD
196	(C4)	ADDRESS	4	CIWJPAD	Address of PAD for job
200	(C8)	CHARACTER	120	CIWCNPR	Converter entry list

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
320	(140)	BITSTRING	32	CIWITSPP	SWA SPOOLer parm list
352	(160)	SIGNED	4	CIWSYMA (0)	System symbolics data area
352	(160)	CHARACTER	7	CIWSYM1	&SYSUID keyword
359	(167)	CHARACTER	8	CIWSYMU	&SYSUID parameter value
368	(170)	SIGNED	2	CIWCOM	Console id for conversion
370	(172)	BITSTRING	2		Reserved
372	(174)	ADDRESS	4	CIWIOT	Address of allocation IOT
376	(178)	ADDRESS	4	CIWIOT1	Addr of IOT containing last PDDB before 1st input stream PDDB
380	(17C)	SIGNED	4	CIWPDB1	Offset of above CIWIOT1 PDDB
384	(180)	SIGNED	4	CIWLIND	Index value of last input stream data set processed
388	(184)	SIGNED	4	CIWISNR	Index value of current input stream data set
392	(188)	ADDRESS	4	CIWIOTA	Input IOT for text exit
396	(18C)	SIGNED	4	CIWPDBO	Offset of last input PDDB
400	(190)	ADDRESS	1	CIWUIDL	USERID length + value
400	(190)	X'191'	0	CIWUID	"CIWUIDL+1,8,C'C'" USERID for this job
409	(199)	ADDRESS	1	CIWGRPL	GROUP length + value
409	(199)	X'19A'	0	CIWGRP	"CIWGRPL+1,8,C'C'" GROUP for this job
418	(1A2)	ADDRESS	1	CIWPASL	PASSWORD length + value
418	(1A2)	X'1A3'	0	CIWPAS	"CIWPASL+1,8,C'C'" PASSWORD for this job
427	(1AB)	ADDRESS	1	CIWNPASL	New PASSWORD len + value
427	(1AB)	X'1AC'	0	CIWNPAS	"CIWNPASL+1,8,C'C'" New PASSWORD for this job
436	(1B4)	CHARACTER	1	CIWRD	Job card RD= parameter
437	(1B5)	BITSTRING	1	CIWFLG1	Serialized flag byte (Update using OIL/NIL only)
		.1..		CIW1CLR	"B'01000000'" CLOSE has been issued once for job in XCNVRTY
438	(1B6)	SIGNED	2	CIWITDL	Length of internal text
440	(1B8)	ADDRESS	4	CIWAR0	XRT @ for trace ID 13
444	(1BC)	SIGNED	4	CIWERC1	User exit return code 1
448	(1C0)	SIGNED	4	CIWERC2	User exit return code 2
452	(1C4)	SIGNED	4	CIWERC3	User exit return code 3
456	(1C8)	BITSTRING	168	CIWESV1	CNVT exit save area 1
624	(270)	DBL WORD	8	(0)	
624	(270)	CHARACTER	200	CIWWORK	Message work area
624	(270)	X'270'	0	CIWETXT	"CIWWORK" End of text address
624	(270)	X'278'	0	CIWUDSN	"CIWWORK+8" User DSN address
624	(270)	X'27C'	0	CIWITXT	"CIWWORK+12" Internal text address
624	(270)	X'280'	0	CIWIDSN	"CIWWORK+16" Internal text DSN address
624	(270)	X'284'	0	CIWPDDB	"CIWWORK+20" SYSIN PDDB address
824	(338)	BITSTRING	16	CIWUWA	Exit user work area
840	(348)	BITSTRING	6	CIWJLOG	JES log control

Comment

CONVERSION EXIT LIST

End of Comment

848	(350)	SIGNED	4	CIWXLST (0)	Conversion exit list
848	(350)	BITSTRING	1	CIWXLHD	Exit list header

Comment

Converter exit entries

End of Comment

856	(358)	BITSTRING	8	CIWXLTE	Internal text exit entry
864	(360)	BITSTRING	8	CIWXOPN	SYSIN open exit
872	(368)	BITSTRING	8	CIWXPUT	SYSIN put exit
880	(370)	BITSTRING	1	CIWXCLS	SYSIN close exit.
880	(370)	X'20'	0	CIWXLEN	"*-CIWXLTE" Len of exit list entries

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
888	(378)	DBL WORD	8	(0)	Alighnment
888	(378)	BITSTRING	1	CIWSAVE2	Save area for SYSIN exits
				Comment	

				Work Area for SYSIN open exit	

				End of Comment	
1056	(420)	ADDRESS	4	CIWSPDDB	SYSIN PDDB address
1060	(424)	BITSTRING	1	CIWDEVTP	1st Byte of device type
1061	(425)	BITSTRING	3		Reserved
1064	(428)	ADDRESS	4	CIWIOTL	Address of last IOT
1068	(42C)	SIGNED	2	CIWIOTCT	Instream IOT count
1070	(42E)	SIGNED	2	CIWCDLRL	Card lrecl (always 80 for SYSIN exit)
1072	(430)	SIGNED	2	CIWDEFLR	Default LRECL (80)
1074	(432)	BITSTRING	1	CIWDEFRF	Default record format
1075	(433)	BITSTRING	1	CIWINFLG	Input flag value
1076	(434)	SIGNED	4	CIWDSKEY	Dataset key
1080	(438)	BITSTRING	1	CIWDELRS	Failure reason code
1081	(439)	BITSTRING	1	CIWPRLBE	PROCLIB failure reason
1081	(439)	X'1'	0	CIWEROPN	"1" Open failure
1081	(439)	X'2'	0	CIWERDEF	"2" Not defined
1081	(439)	X'3'	0	CIWERLRL	"3" LRECL not valid
1081	(439)	X'4'	0	CIWERBLK	"4" BLKSIZE not valid
1081	(439)	X'5'	0	CIWERBLC	"5" BLKSIZE/LRECL combo
1082	(43A)	BITSTRING	6		Reserved
1088	(440)	CHARACTER	8	CIWPROCL	PROCLIB DD name for message
1096	(448)	DBL WORD	8	(0)	Force Dword alignment
1096	(448)	BITSTRING	48	CIWCRTSY	Parm block for HASPRDDS.
1144	(478)	BITSTRING	32	CIWOPNSP	Open SPOOL parm list
1176	(498)	BITSTRING	28	CIWPUTPL	JRWPUTPL for sysin dataset
1204	(4B4)	ADDRESS	4	CIWSYTBL	Ptr to symbol table for converter use (see macro IEFSJSYD)
1208	(4B8)	SIGNED	4	CIWBLDM (0)	Control block ID
1212	(4BC)	BITSTRING	4		Console ID
1216	(4C0)	ADDRESS	4		Address of the CART
1220	(4C4)	ADDRESS	4		Pointer for JOBID
1224	(4C8)	ADDRESS	4		Control block address
1228	(4CC)	ADDRESS	4		Display routine address
1232	(4D0)	ADDRESS	4	(6)	6 word work area
1256	(4E8)	ADDRESS	4		Caller's R11 value
1260	(4EC)	BITSTRING	2		ROUT code for Message
1262	(4EE)	BITSTRING	2		Not used
1264	(4F0)	CHARACTER	4		Message ID
1268	(4F4)	CHARACTER	1		Separator character
1269	(4F5)	ADDRESS	1		Flag byte 1
1270	(4F6)	ADDRESS	1		'DISPER'
1271	(4F7)	ADDRESS	1		Flag byte 2
1272	(4F8)	ADDRESS	1		Flag byte 3
1273	(4F9)	CHARACTER	8		Symbolic name of dest.
1281	(501)	BITSTRING	15		Not used
1296	(510)	ADDRESS	4	(0)	Ensure multiple of 4
1296	(510)	ADDRESS	2	(0)	
				Comment	

				Work Area for Job Correlator	

				End of Comment	
1296	(510)	CHARACTER	1	CIWJCOR	PCEJQE Job Correlator

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1296	(510)	X'4C0'	0	CIWCLRL	"*-CIWCLR" END OF WORK AREA CLEARED IN CONVERTER SUBTASK INITIALIZATION
1296	(510)	X'550'	0	CIWLEN	"*-CIWORK" Length of work area

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CIWORKB	, JES2 C/I 24 bit work area
0	(0)	CHARACTER	8	CIWBID	Eyecatcher
8	(8)	ADDRESS	1	CIWBVER	CB version
8	(8)	X'1'	0	CIWBVERN	"1" Current version number
9	(9)	BITSTRING	3		Reserved
12	(C)	ADDRESS	4	CIWBDTE	Related DTE address

Comment

Interpreter processing work areas

End of Comment

16	(10)	BITSTRING	96	CIWBNEL	Interpreter parm list
112	(70)	BITSTRING	256	CIWBJICA	JES/Interpreter comm area
368	(170)	BITSTRING	168	CIWBSAV	24 bit save area
536	(218)	BITSTRING	36	CIWBQMPA	Queue mngr parm area
572	(23C)	BITSTRING	8	CIWBJDVT	JDVT name
580	(244)	SIGNED	4	CIWBDEBS (0)	Address of DEB's for ACB's
580	(244)	BITSTRING	32	CIWBDEBJ	DEB for JCL data set
612	(264)	BITSTRING	32	CIWBDEBI	DEB for JCL image data set
644	(284)	BITSTRING	32	CIWBDEBM	DEB for system msg data set
676	(2A4)	BITSTRING	32	CIWBDEBT	DEB for internal text data set
708	(2C4)	BITSTRING	32	CIWBDEBA	DEB for SWA blocks DS
740	(2E4)	BITSTRING	148	CIWBJMR	JMR work area
888	(378)	SIGNED	4	CIWBCL (0)	ALIGN LIST TO FULLWORD
888	(378)	ADDRESS	1		OPTION BYTE
889	(379)	ADDRESS	3		DCB ADDRESS
889	(379)	X'378'	0	CIWBCLOS	"CIWBCL,*-CIWBCL"
892	(37C)	SIGNED	4	CIWBOP (0)	ALIGN LIST TO FULLWORD
892	(37C)	ADDRESS	1		OPTION BYTE
893	(37D)	ADDRESS	3		DCB ADDRESS
893	(37D)	X'37C'	0	CIWBOPEN	"CIWBOP,*-CIWBOP"

Comment

DCB for PROCLIB, and ACBs for the JES datasets.
CIWBPROC DCB for PROCLIB data set
IWBPROC DCB DSORG=PO,MACRF=R,RECFM=FB,LRECL=80,
DDNAME= ,EXLST= -

End of Comment

896	(380)	SIGNED	4	(0)	CIWBPROC Origin DATA CONTROL BLOCK
896	(380)	SIGNED	4	CIWBPROC (0)	ORIGIN ON WORD BOUNDARY DIRECT ACCESS DEVICE INTERFACE
896	(380)	BITSTRING	16		FDAD, DVTBL
912	(390)	ADDRESS	4		KEYLEN, DEVT, TRBAL COMMON ACCESS METHOD INTERFACE
916	(394)	ADDRESS	1		BUFNO, NUMBER OF BUFFERS
917	(395)	ADDRESS	3		BUFCB, BUFFER POOL CONTROL BLOCK
920	(398)	ADDRESS	2		BUFL, BUFFER LENGTH
922	(39A)	BITSTRING	2		DSORG, DATA SET ORGANIZATION
924	(39C)	ADDRESS	4		IOBAD FOR EXCP OR RESERVED FOUNDATION EXTENSION
928	(3A0)	BITSTRING	1		BFTEK, BFALN, DCBE INDICATORS

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
929	(3A1)	ADDRESS	3		EODAD (END OF DATA ROUTINE ADDRESS)
932	(3A4)	BITSTRING	1		RECFM (RECORD FORMAT)
933	(3A5)	ADDRESS	3		EXLST (EXIT LIST ADDRESS) FOUNDATION BLOCK
936	(3A8)	CHARACTER	8		DDNAME
944	(3B0)	BITSTRING	1		OFLGS (OPEN FLAGS)
945	(3B1)	BITSTRING	1		IFLGS (IOS FLAGS)
946	(3B2)	BITSTRING	2		MACR (MACRO FORMAT) BSAM-BPAM-QSAM INTERFACE
948	(3B4)	BITSTRING	1		OPTCD, OPTION CODES
949	(3B5)	ADDRESS	3		CHECK OR INTERNAL QSAM SYNCHRONIZING RTN.
952	(3B8)	ADDRESS	4		SYNAD, SYNCHRONOUS ERROR RTN. (3 BYTES)
956	(3BC)	SIGNED	2		INTERNAL ACCESS METHOD FLAGS
958	(3BE)	ADDRESS	2		BLKSIZE, BLOCK SIZE
960	(3C0)	SIGNED	4		INTERNAL ACCESS METHOD FLAGS
964	(3C4)	ADDRESS	4		INTERNAL ACCESS METHOD USE BSAM-BPAM INTERFACE
968	(3C8)	ADDRESS	1		NCP, MAX NUM OF OUTSTANDING READ/WRITES
969	(3C9)	ADDRESS	3		EOBR, INTERNAL ACCESS METHOD USE
972	(3CC)	ADDRESS	4		EOBW, INTERNAL ACCESS METHOD USE
976	(3D0)	ADDRESS	1	(2)	FLAGS AND EITHER DIRCT OR BUFOFF
978	(3D2)	ADDRESS	2		LRECL
980	(3D4)	ADDRESS	4		CNTRL, NOTE, POINT
Comment					
CIWBJCL ACB for JCL data set					
End of Comment					
984	(3D8)	SIGNED	4	(0)	CIWBJCL Origin
984	(3D8)	SIGNED	4	CIWBJCL (0)	
984	(3D8)	BITSTRING	1		. ACB IDENTIFICATION
985	(3D9)	ADDRESS	1		ACB SUBTYPE X04SVHS
986	(3DA)	ADDRESS	2		. ACB LENGTH X03004HS
988	(3DC)	ADDRESS	4		. AMB LIST POINTER
992	(3E0)	ADDRESS	4		. INTERFACE ROUTINE POINTER
996	(3E4)	BITSTRING	1		MACRF(1) X04SVHS
997	(3E5)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
998	(3E6)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
999	(3E7)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
1000	(3E8)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
1002	(3EA)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
1004	(3EC)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
1005	(3ED)	ADDRESS	1		SHARED RESOURCE POOL ID
1006	(3EE)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
1008	(3F0)	BITSTRING	1		. RECFM=A
1009	(3F1)	BITSTRING	1		READ INTEGRITY OPTIONS
1010	(3F2)	BITSTRING	2		. DSORG=ACB
1012	(3F4)	ADDRESS	4		X04SVHS
1016	(3F8)	ADDRESS	4		. PASSWORD POINTER
1020	(3FC)	ADDRESS	4		. EXIT LIST POINTER
1024	(400)	CHARACTER	8		
1032	(408)	BITSTRING	1		OFLAGS
1033	(409)	ADDRESS	1		. ERFLAGS
1034	(40A)	BITSTRING	1		INFLGS(1) X04SVHS
1035	(40B)	BITSTRING	1		INFLGS(2) X04SVHS
1036	(40C)	ADDRESS	4		. OPENJ JFCB POINTER
1040	(410)	ADDRESS	4		BUFFER SPACE
1044	(414)	ADDRESS	2		. BLOCK SIZE
1046	(416)	ADDRESS	2		. RECORD SIZE
1048	(418)	ADDRESS	4		. USER WORKAREA POINTER
1052	(41C)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
1056	(420)	ADDRESS	4		. PTR TO APPLICATION NAME X03004

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
				CIWBJCLI ACB for JCL images data set	
				End of Comment	
1060	(424)	SIGNED	4	(0)	CIWBJCLI origin
1060	(424)	SIGNED	4	CIWBJCLI (0)	
1060	(424)	BITSTRING	1		. ACB IDENTIFICATION
1061	(425)	ADDRESS	1		ACB SUBTYPE X04SVHS
1062	(426)	ADDRESS	2		. ACB LENGTH X03004HS
1064	(428)	ADDRESS	4		. AMB LIST POINTER
1068	(42C)	ADDRESS	4		. INTERFACE ROUTINE POINTER
1072	(430)	BITSTRING	1		MACRF(1) X04SVHS
1073	(431)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
1074	(432)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
1075	(433)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
1076	(434)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
1078	(436)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
1080	(438)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
1081	(439)	ADDRESS	1		SHARED RESOURCE POOL ID
1082	(43A)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
1084	(43C)	BITSTRING	1		. RECFM=A
1085	(43D)	BITSTRING	1		READ INTEGRITY OPTIONS
1086	(43E)	BITSTRING	2		. DSORG=ACB
1088	(440)	ADDRESS	4		X04SVHS
1092	(444)	ADDRESS	4		. PASSWORD POINTER
1096	(448)	ADDRESS	4		. EXIT LIST POINTER
1100	(44C)	CHARACTER	8		
1108	(454)	BITSTRING	1		OFLAGS
1109	(455)	ADDRESS	1		. ERFLAGS
1110	(456)	BITSTRING	1		INFLGS(1) X04SVHS
1111	(457)	BITSTRING	1		INFLGS(2) X04SVHS
1112	(458)	ADDRESS	4		. OPENJ JFCB POINTER
1116	(45C)	ADDRESS	4		BUFFER SPACE
1120	(460)	ADDRESS	2		. BLOCK SIZE
1122	(462)	ADDRESS	2		. RECORD SIZE
1124	(464)	ADDRESS	4		. USER WORKAREA POINTER
1128	(468)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
1132	(46C)	ADDRESS	4		. PTR TO APPLICATION NAME X03004
				Comment	
				CIWBMSG ACB for system msgs data set	
				End of Comment	
1136	(470)	SIGNED	4	(0)	CIWBMSG Origin
1136	(470)	SIGNED	4	CIWBMSG (0)	
1136	(470)	BITSTRING	1		. ACB IDENTIFICATION
1137	(471)	ADDRESS	1		ACB SUBTYPE X04SVHS
1138	(472)	ADDRESS	2		. ACB LENGTH X03004HS
1140	(474)	ADDRESS	4		. AMB LIST POINTER
1144	(478)	ADDRESS	4		. INTERFACE ROUTINE POINTER
1148	(47C)	BITSTRING	1		MACRF(1) X04SVHS
1149	(47D)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
1150	(47E)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
1151	(47F)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
1152	(480)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
1154	(482)	ADDRESS	2		. NUMBER OF INDEX BUFFERS

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1156	(484)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
1157	(485)	ADDRESS	1		SHARED RESOURCE POOL ID
1158	(486)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
1160	(488)	BITSTRING	1		. RECFM=A
1161	(489)	BITSTRING	1		READ INTEGRITY OPTIONS
1162	(48A)	BITSTRING	2		. DSORG=ACB
1164	(48C)	ADDRESS	4		X04SVHS
1168	(490)	ADDRESS	4		. PASSWORD POINTER
1172	(494)	ADDRESS	4		. EXIT LIST POINTER
1176	(498)	CHARACTER	8		
1184	(4A0)	BITSTRING	1		OFLAGS
1185	(4A1)	ADDRESS	1		. ERFLAGS
1186	(4A2)	BITSTRING	1		INFLGS(1) X04SVHS
1187	(4A3)	BITSTRING	1		INFLGS(2) X04SVHS
1188	(4A4)	ADDRESS	4		. OPENJ JFCB POINTER
1192	(4A8)	ADDRESS	4		BUFFER SPACE
1196	(4AC)	ADDRESS	2		. BLOCK SIZE
1198	(4AE)	ADDRESS	2		. RECORD SIZE
1200	(4B0)	ADDRESS	4		. USER WORKAREA POINTER
1204	(4B4)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
1208	(4B8)	ADDRESS	4		. PTR TO APPLICATION NAME X03004
Comment					
CIWBTXT ACB for internal text data set					
End of Comment					
1212	(4BC)	SIGNED	4	(0)	CIWBTXT Origin
1212	(4BC)	SIGNED	4	CIWBTXT (0)	
1212	(4BC)	BITSTRING	1		. ACB IDENTIFICATION
1213	(4BD)	ADDRESS	1		ACB SUBTYPE X04SVHS
1214	(4BE)	ADDRESS	2		. ACB LENGTH X03004HS
1216	(4C0)	ADDRESS	4		. AMB LIST POINTER
1220	(4C4)	ADDRESS	4		. INTERFACE ROUTINE POINTER
1224	(4C8)	BITSTRING	1		MACRF(1) X04SVHS
1225	(4C9)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
1226	(4CA)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
1227	(4CB)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
1228	(4CC)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
1230	(4CE)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
1232	(4D0)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
1233	(4D1)	ADDRESS	1		SHARED RESOURCE POOL ID
1234	(4D2)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
1236	(4D4)	BITSTRING	1		. RECFM=A
1237	(4D5)	BITSTRING	1		READ INTEGRITY OPTIONS
1238	(4D6)	BITSTRING	2		. DSORG=ACB
1240	(4D8)	ADDRESS	4		X04SVHS
1244	(4DC)	ADDRESS	4		. PASSWORD POINTER
1248	(4E0)	ADDRESS	4		. EXIT LIST POINTER
1252	(4E4)	CHARACTER	8		
1260	(4EC)	BITSTRING	1		OFLAGS
1261	(4ED)	ADDRESS	1		. ERFLAGS
1262	(4EE)	BITSTRING	1		INFLGS(1) X04SVHS
1263	(4EF)	BITSTRING	1		INFLGS(2) X04SVHS
1264	(4F0)	ADDRESS	4		. OPENJ JFCB POINTER
1268	(4F4)	ADDRESS	4		BUFFER SPACE
1272	(4F8)	ADDRESS	2		. BLOCK SIZE
1274	(4FA)	ADDRESS	2		. RECORD SIZE
1276	(4FC)	ADDRESS	4		. USER WORKAREA POINTER
1280	(500)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1284	(504)	ADDRESS	4		. PTR TO APPLICATION NAME X03004
				Comment	
				CIWBSWA ACB for SWA blocks data set	
				End of Comment	
1288	(508)	SIGNED	4	(0)	CIWBSWA origin
1288	(508)	SIGNED	4	CIWBSWA (0)	
1288	(508)	BITSTRING	1		. ACB IDENTIFICATION
1289	(509)	ADDRESS	1		ACB SUBTYPE X04SVHS
1290	(50A)	ADDRESS	2		. ACB LENGTH X03004HS
1292	(50C)	ADDRESS	4		. AMB LIST POINTER
1296	(510)	ADDRESS	4		. INTERFACE ROUTINE POINTER
1300	(514)	BITSTRING	1		MACRF(1) X04SVHS
1301	(515)	BITSTRING	1		MACRF(2) X04SVHS FOR NUMERIC IN PARENS
1302	(516)	ADDRESS	1		. NO OF CONCURRENT X04SVHS STRINGS FOR AIX PATH X04SVHS FOR NUMERIC IN PARENS
1303	(517)	ADDRESS	1		. NUMBER OF STRINGS X04SVHS FOR NUMERIC IN PARENS
1304	(518)	ADDRESS	2		. NUMBER OF DATA BUFFERS FOR NUMERIC IN PARENS
1306	(51A)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
1308	(51C)	BITSTRING	1		MACRF(3) X04SVHS FOR NUMERIC IN PARENS
1309	(51D)	ADDRESS	1		SHARED RESOURCE POOL ID
1310	(51E)	ADDRESS	2		. JES BUFFER POOL/NUMBER X04SVHS OF JOURNAL BUFFERS
1312	(520)	BITSTRING	1		. RECFM=A
1313	(521)	BITSTRING	1		READ INTEGRITY OPTIONS
1314	(522)	BITSTRING	2		. DSORG=ACB
1316	(524)	ADDRESS	4		X04SVHS
1320	(528)	ADDRESS	4		. PASSWORD POINTER
1324	(52C)	ADDRESS	4		. EXIT LIST POINTER
1328	(530)	CHARACTER	8		
1336	(538)	BITSTRING	1		OFLAGS
1337	(539)	ADDRESS	1		. ERFLAGS
1338	(53A)	BITSTRING	1		INFLGS(1) X04SVHS
1339	(53B)	BITSTRING	1		INFLGS(2) X04SVHS
1340	(53C)	ADDRESS	4		. OPENJ JFCB POINTER
1344	(540)	ADDRESS	4		BUFFER SPACE
1348	(544)	ADDRESS	2		. BLOCK SIZE
1350	(546)	ADDRESS	2		. RECORD SIZE
1352	(548)	ADDRESS	4		. USER WORKAREA POINTER
1356	(54C)	ADDRESS	4		CONTROL BLOCK MANIPULATION WORKAREA POINTER
1360	(550)	ADDRESS	4		. PTR TO APPLICATION NAME X03004
1360	(550)	X'554'	0	CIWBLEN	"*-CIWORKB" Length of work area

$CIWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CIWACEE	3C		CIWBJCLI	424	
CIWADDR	2C		CIWBJDVT	23C	
CIWAR0	1B8		CIWBJICA	70	
CIWBCL	378		CIWBJMR	2E4	
CIWBCLOS	379	378	CIWBLDM	4B8	C2D3C440
CIWBDEBA	2C4		CIWBLEN	550	554
CIWBDEBI	264		CIWBMSG	470	
CIWBDEBJ	244		CIWBNEL	10	
CIWBDEBM	284		CIWBOP	37C	
CIWBDEBS	244		CIWBOPEN	37D	37C
CIWBDEBT	2A4		CIWBPROC	380	
CIWBDTE	C		CIWBQMPA	218	
CIWBID	0	C3C9E6D6	CIWBSAV	170	
CIWBJCL	3D8		CIWBSWA	508	

Name	Hex Offset	Hex Value
CIWBTXT	4BC	
CIWBVER	8	
CIWBVERN	8	1
CIWCATA	90	
CIWCDLRL	42E	
CIWCIWA	8C	
CIWCIWB	10	
CIWCLR	90	
CIWCLRL	510	4C0
CIWCNMB	88	
CIWCNPR	C8	
CIWCOM	170	0
CIWCPTR	48	
CIWCRTSY	448	0
CIWDEFLR	430	
CIWDEFRF	432	
CIWDELRS	438	
CIWDEVTP	424	
CIWDSKEY	434	
CIWDSKY	29	
CIWDSRVA	50	
CIWDTE	C	
CIWDTEA	80	
CIWERBLC	439	5
CIWERBLK	439	4
CIWERC1	1BC	
CIWERC2	1C0	
CIWERC3	1C4	
CIWERDEF	439	2
CIWERLRL	439	3
CIWEROPN	439	1
CIWESV1	1C8	
CIWETXT	270	270
CIWFAIL	2B	
CIWFLG1	1B5	
CIWFRSN	29	
CIWGRP	199	19A
CIWGRPL	199	
CIWID	0	C3C9E6D6
CIWIDSN	270	280
CIWINFLG	433	
CIWINTA	30	
CIWIOT	174	
CIWIOTA	188	
CIWIOTCT	42C	
CIWIOTL	428	
CIWIOT1	178	
CIWISNR	184	
CIWITDL	1B6	
CIWITSPP	140	
CIWITXT	270	27C
CIWJCLAS	94	
CIWJCOR	510	
CIWJCTA	84	
CIWJCTRK	A4	
CIWJKEY	AC	
CIWJLOG	348	
CIWJPAD	C4	
CIWJPRIO	AA	
CIWJQAA	A0	
CIWJSCBN	44	
CIWJSCBO	40	
CIWLEN	510	550
CIWLIND	180	
CIWNPAS	1AB	1AC
CIWNPASL	1AB	
CIWOPNSP	478	
CIWORK	0	
CIWORKB	0	
CIWPAD	B0	
CIWPADL	B4	
CIWPARM	78	
CIWPAS	1A2	1A3
CIWPASCB	24	1C
CIWPASL	1A2	
CIWPCRT	B8	
CIWPDBO	18C	
CIWPDB1	17C	
CIWPDDB	270	284
CIWPD00	C0	
CIWPECB	24	18
CIWPECBK	24	24
CIWPOSTE	18	
CIWPRLBE	439	
CIWPROCL	440	
CIWPSTLN	24	10
CIWPUTPL	498	
CIWP2A	7C	
CIWRD	1B4	
CIWROUT	2A	
CIWSAVE2	378	
CIWSCAS	28	20
CIWSCPU	60	
CIWSDST	28	40
CIWSJBP	38	
CIWSJCTV	28	80
CIWSPDDB	420	
CIWSPLR	34	
CIWSTAT	28	
CIWSTIME	58	
CIWSYMA	160	
CIWSYMU	167	
CIWSYM1	160	
CIWSYTBL	4B4	
CIWUDSN	270	278
CIWUID	190	191
CIWUIDL	190	
CIWUWA	338	
CIWUWAA	78	
CIWVER	8	
CIWVERN	8	1
CIWWAVE	4C	
CIWWORK	270	
CIWXCLS	370	
CIWXLEN	370	20
CIWXLHD	350	
CIWXLST	350	
CIWXLTE	358	
CIWXOPN	360	
CIWXPL	68	
CIWXPUT	368	
CIW1CLAS	9C	
CIW1CLR	1B5	40

$CK Information

$CK Programming Interface information

Programming Interface information

$CK

End of Programming Interface information

$CK Heading Information

Common Name: HASP Checkpoint block and CCW DSECTS
Macro ID: $CK
DSECT Name: CKA CKAE CKB CKDDSECT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: CKBPOOL (See $HASPEQU)
Key: 1
Residency: For CKBs that represent checkpoint data sets on DASD: Virtual and real storage of the CKB is below 16M in the private storage of the JES2 address space. The CKB is page fixed for the life of JES2 and must lie on a 2K boundary to ensure that the check and lock buffers do not cross a 2K boundary. The virtual and real storage for the CKA and CKAEs are anywhere in JES2 address space. For CKBs that represent checkpoint data sets on a coupling facility: Virtual and real storage of the CKB is above 16M in the private storage of the JES2 address space.
Size: CKB for data set on DASD
CKBASLEN
CKB for data set on Coupling Facility
CKBCFSZE
CKA+CKAE for data set on DASD only
CKAPLEN + number_of_4K_records in CKPT data set
* CKAELEN
CKBSIZE in the CK contains the total length.
Created by: CKPTALOC called during initialization or from the checkpoint dialog.
Pointed to by: CKB
- The $CKBCRNT field in the $HCT data area
- The CKGCKB field in the $CKGPAR data area
CKA
- The CKBCKA field in the CKB data area

Serialization: These control blocks are used to direct I/O to the checkpoint data set. Checkpoint I/O should only be issued by the initialization and checkpoint PCEs. They are not used by other subtasks or PCEs.
Function: Control block for I/O operations directed to a checkpoint data set.

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

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

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

$CK Map

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				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	CKBDCBP	ADDRESS OF DCB
24	(18)	ADDRESS	4		CHANNEL PROGRAM RESTART
28	(1C)	SIGNED	2	CKBIRRCT (2)	ERROR COUNTS
				Comment	

		Direct access IOB extension (8 bytes)			

				End of Comment	
32	(20)	BITSTRING	8	CKBSEEK	INITIAL SEEK ADDRESS
				Comment	

		End of IOB			

				End of Comment	
40	(28)	BITSTRING	1	CKBFLAG1	CKB I/O Flags
		1...		CKB1EXCP	"B'10000000'" I/O NEEDED/ISSUED TO DS
		.1..		CKB1SHFL	"B'01000000'" CCW PACKETS SHUFFLED
		..1.		CKB1SPCI	"B'00100000'" PCI flag to be turned on
		...1		CKB1CFIO	"B'00010000'" CF I/O needed/issued
41	(29)	BITSTRING	1	CKBFLAG2	CKB Processing flags
				Comment	
		CKBFLAG2 DEFINITIONS ARE PASSED AS INPUT TO KTRK1IO ROUTINE. THEY INDICATE THE OPERATIONS TO BE PERFORMED BY KTRK1IO. CKB2TLCK IMPLIES READ OF LOCK RECORD IF TEST-LOCK FAILS.			
				End of Comment	
		1...		CKB2RCHK	"B'10000000'" READ OF CHECK RECD REQ'D
		.1..		CKB2WCHK	"B'01000000'" WRITE OF CHECK RECD REQ'D
		..1.		CKB2TLCK	"B'00100000'" TEST OF LOCK RECD REQ'D
		...1		CKB2RLCK	"B'00010000'" READ OF LOCK RECD REQ'D
		.... 1...		CKB2RMST	"B'00001000'" READ OF MASTER RECD REQ'D
		.... .1..		CKB2RLOG	"B'00000100'" READ OF CHANGE LOG REQ'D
		.... ..1.		CKB2WLCK	"B'00000010'" WRITE OF LOCK RECD REQ'D
		1		CKB2MSLI	"B'00000001'" SUPPRESS LENGTH ERROR ON MASTER RECORD READ
42	(2A)	BITSTRING	1	CKBFLAG3	Reserved for future IBM Use
43	(2B)	BITSTRING	1	CKBNREC	RECORD COUNT FROM CKDNREC
44	(2C)	SIGNED	4	CKBECB (0)	CKPT I/O XECB
68	(44)	ADDRESS	4	CKBCKA	Addr of checkpoint address table for this data set (one entry per record)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
72	(48)	SIGNED	4	CKBSIZE (0)	SIZE OF ENTIRE CKB
72	(48)	BITSTRING	1		SUBPOOL CKB IS IN
73	(49)	BITSTRING	3		LENGTH OF CKB
76	(4C)	ADDRESS	4	CKBTRK1T	ADDR OF TRACK ONE TABLE
80	(50)	SIGNED	2	CKBRETRY	ERROR RETRY COUNTER
82	(52)	SIGNED	2	CKBERRCT	(APPENDAGE FIELD) ERROR RETRY COUNTER
84	(54)	ADDRESS	4	CKBERCCW	CCW address from IOB
88	(58)	ADDRESS	4	CKBERCC2	CCW address from IEDB

Comment

Key data area used in the search key operations

End of Comment

96	(60)	DBL WORD	8	(0)	
96	(60)	BITSTRING	8	CKBKEY	SEARCH KEY CCW ARGUMENT

Comment

Lock record read buffer

End of Comment

104	(68)	DBL WORD	8	(0)	
104	(68)	BITSTRING	8	CKBLRKEY	Key portion of lock record
112	(70)	BITSTRING	372	CKBLRDAT	LOCK DATA INPUT AREA
112	(70)	SIGNED	4	CKBLRSYS	Member ID ($SIDBUSY) Fld
116	(74)	SIGNED	4	CKBLRLVI	Level indicator field
120	(78)	CHARACTER	4	CKBLRSID	$SID field
124	(7C)	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

124	(7C)	CHARACTER	8	CKBLRPLN	MVS sysplex name
132	(84)	BITSTRING	4	CKBLRSYT	MVS system id/token
136	(88)	BITSTRING	8	CKBLRPLI	MVS sysplex id
144	(90)	BITSTRING	8	CKBLRMTK	XCF member token
152	(98)	CHARACTER	8	CKBLRMVS	MVS System Name

Comment

End of data to be mapped together for XCFQSTAT.

End of Comment

484	(1E4)	X'168'	0	CKBLROTL	"*-CKBLROTH" Size of lock data to be moved to "check record" when CKPT is on CF
484	(1E4)	ADDRESS	2	(0)	Ensure hard coded
484	(1E4)	ADDRESS	2	(0)	length is correct
484	(1E4)	X'174'	0	CKBLKRLN	"*-CKBLRDAT" SIZE OF DATA AREA OF LOCK

Comment

Lock record write buffer

End of Comment

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
488	(1E8)	DBL WORD	8	CKBLWKEY	STORAGE AREA FOR WRITING
488	(1E8)	X'1E8'	0	CKBLWKYP	"CKBLWKEY,8,C'C'" Define character version of field since PLX and the offset table don't handle doublewords well
496	(1F0)	BITSTRING	372	CKBLWDAT	LOCK RECORD KEY AND DATA
496	(1F0)	SIGNED	4	CKBLWSYS	Member ID ($SIDBUSY) Fld
500	(1F4)	SIGNED	4	CKBLWLVI	Level indicator field
504	(1F8)	CHARACTER	4	CKBLWSID	$SID field
508	(1FC)	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	
508	(1FC)	CHARACTER	8	CKBLWPLN	MVS sysplex name
516	(204)	BITSTRING	4	CKBLWSYT	MVS system id/token
520	(208)	BITSTRING	8	CKBLWPLI	MVS sysplex id
528	(210)	BITSTRING	8	CKBLWMTK	XCF member token
536	(218)	CHARACTER	8	CKBLWMVS	MVS System Name
				Comment	

				End of data to be mapped together for XCFQSTAT.	

				End of Comment	
868	(364)	X'168'	0	CKBLWOTL	"*-CKBLWOTH" Size of lock data to be moved to "check record" when CKPT is on CF
868	(364)	ADDRESS	2	(0)	Ensure hard coded
868	(364)	ADDRESS	2	(0)	length is correct
				Comment	
				Check record buffer	
				End of Comment	
872	(368)	DBL WORD	8	CKBCKDAT (0)	START OF CHECK RECORD DATA
872	(368)	CHARACTER	372	CKBCKREC (0)	Size of Check record (Offset table needs hard coded values)
872	(368)	BITSTRING	1	CKBCKHFM	CKPT DS FILE NAMES, FLAGS
872	(368)	X'368'	0	CKBCKHFP	"CKBCKHFM,308,C'C'" Get character version for offset table
1180	(49C)	ADDRESS	2	(0)	Ensure lengths are
1180	(49C)	ADDRESS	2	(0)	correct
1180	(49C)	SIGNED	1	CKBFORWD	Dataset forwarded indicator
1181	(49D)	BITSTRING	1	CKBCKFLG	Flag byte
		1...		CKBCKGMT	"B'10000000'" CKBWRTIM is in GMT
		.1..		CKBCKCKM	"B'01000000'" GMT offsets on all members are not within 1 minute (skip checks in HASPIRDA)
1182	(49E)	BITSTRING	6	CKBLVOTH	Level of other checkpoint (CKBCKLEV of other CKB)
1188	(4A4)	BITSTRING	32	CKBSVDEF	WLM Service Definition ID
1220	(4C4)	SIGNED	4	CKBWRTIM	Time data set last written
1224	(4C8)	DBL WORD	8	(0)	
1224	(4C8)	DBL WORD	8	CKBCKLEV	Level of all data in ckpt
1224	(4C8)	X'4C8'	0	CKBCKLVP	"CKBCKLEV,8,C'C'" Define character version of field since PLX and the offset table don't handle doublewords well
1224	(4C8)	X'4CC'	0	CKBCKLVH	"CKBCKLEV+4,4,C'F'" Full word version of level number of 4K pages
1232	(4D0)	DBL WORD	8	CKB4KLEV	Level of 4K pages in ckpt

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1232	(4D0)	X'4D0'	0	CKB4KLVP	"CKB4KLEV,8,C'C'" Define character version of field since PLX and the offset table don't handle doublewords well
1232	(4D0)	X'4D4'	0	CKB4KLVH	"CKB4KLEV+4,4,C'F'" Full word version of level number of 4K pages
1240	(4D8)	SIGNED	1	CKBCKVAL (0)	CHECK VALUE
1240	(4D8)	X'174'	0	CKBCKRLN	"*-CKBCKDAT" LENGTH OF CHECK RECORD
1244	(4DC)	ADDRESS	2	(0)	Make sure hardcoded
1244	(4DC)	ADDRESS	2	(0)	length is accurate

Comment

Other data buffers

End of Comment

1248	(4E0)	DBL WORD	8	CKBVERFY	STORAGE FOR READ-COUNT
1256	(4E8)	BITSTRING	8		Reserved for future IBM use
1256	(4E8)	X'500'	0	CKBCFSZE	"((*-CKB+63)/64)*64" Size of CKB when CKPT is on a CF

Comment

IOB extension (IOBE) and IOS diagnostic area (IEDB)
for CKPT DASD I/O.

End of Comment

1264	(4F0)	SIGNED	4	(0)	Ensure word alignment
1264	(4F0)	BITSTRING	48	CKBIOBE	Reserve space for IOB extension
1312	(520)	SIGNED	4	(0)	Ensure word alignment
1312	(520)	BITSTRING	48	CKBIEDB	Reserve space for I/O error data block
1360	(550)	ADDRESS	4	CKBLMTIC	TIC in last mstr rec CCW packet
1364	(554)	SIGNED	4		Reserved

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

1368	(558)	DBL WORD	8	CKBCCWS (0)	Channel program area

Comment

Channel program used by KTRK1IO

End of Comment

1384	(568)	DBL WORD	8	CKBLOCKV (0)	Lock verification
1432	(598)	DBL WORD	8	CKBCHCKR (0)	Check record read
1472	(5C0)	DBL WORD	8	CKBLOCKR (0)	Lock record read
1512	(5E8)	DBL WORD	8	CKBLOCK (0)	Lock record write KEY+DATA
1552	(610)	DBL WORD	8	CKBCHECK (0)	Check record read/write
1592	(638)	DBL WORD	8	CKBMSTR (0)	Master record read/write
1624	(658)	X'28'	0	CKBMSTCL	"*-CKBMSTR" Len of master record CCWs
1632	(660)	BITSTRING	40	CKBMSTX2	2nd extra mst rec CCWs
1672	(688)	BITSTRING	40	CKBMSTX3	3rd extra mst rec CCWs
1712	(6B0)	BITSTRING	40	CKBMSTX4	4th extra mst rec CCWs
1752	(6D8)	BITSTRING	40	CKBMSTX5	5th extra mst rec CCWs
1792	(700)	BITSTRING	40	CKBMSTX6	6th extra mst rec CCWs
1832	(728)	BITSTRING	40	CKBMSTX7	7th extra mst rec CCWs
1872	(750)	BITSTRING	1	CKBMSTX8	8th extra mst rec CCWs
1872	(750)	X'220'	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	
1912	(778)	DBL WORD	8	CKBT1DAT (0)	Start of data areas
1912	(778)	BITSTRING	16	CKBLOCKD	Lock record data area
1928	(788)	BITSTRING	16	CKBCHEKD	Check record data area
1944	(798)	BITSTRING	1	CKBMSTRD	Master record data area
1944	(798)	X'30'	0	CKBT1DLN	"*-CKBT1DAT" Length of data areas
1944	(798)	X'3'	0	CKBT1DNM	"CKBT1DLN/CKDLEN" Number of track 1 records
				Comment	

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

				End of Comment	
1960	(7A8)	BITSTRING	16	CKBMSTD2	2nd extra mstr rec area
1976	(7B8)	BITSTRING	16	CKBMSTD3	3rd extra mstr rec area
1992	(7C8)	BITSTRING	16	CKBMSTD4	4th extra mstr rec area
2008	(7D8)	BITSTRING	16	CKBMSTD5	5th extra mstr rec area
2024	(7E8)	BITSTRING	16	CKBMSTD6	6th extra mstr rec area
2040	(7F8)	BITSTRING	16	CKBMSTD7	7th extra mstr rec area
2056	(808)	BITSTRING	16	CKBMSTD8	8th extra mstr rec area
2072	(818)	BITSTRING	16	CKBCHKD2	Special check read
2088	(828)	BITSTRING	16	CKBLCKD2	Special lock read
2104	(838)	SIGNED	4	CKBIDAWS (0)	Master record IDAWs
2904	(B58)	ADDRESS	4	CKBIDAW1	IDAW for 1st MSTR rec CCW
2908	(B5C)	ADDRESS	4	CKBIDAW2	IDAW for 2nd MSTR rec CCW
2912	(B60)	ADDRESS	4	CKBIDAW3	IDAW for 3rd MSTR rec CCW
2916	(B64)	ADDRESS	4	CKBIDAW4	IDAW for 4th MSTR rec CCW
2920	(B68)	ADDRESS	4	CKBIDAW5	IDAW for 5th MSTR rec CCW
2924	(B6C)	ADDRESS	4	CKBIDAW6	IDAW for 6th MSTR rec CCW
2928	(B70)	ADDRESS	4	CKBIDAW7	IDAW for 7th MSTR rec CCW
2932	(B74)	ADDRESS	4	CKBIDAW8	IDAW for 8th MSTR rec CCW
				Comment	

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

				End of Comment	
2936	(B78)	BITSTRING	16	CKBCHLGD	Change log data area
2952	(B88)	DBL WORD	8	CKBCHLOG (0)	Change log positioning CCWs
2976	(BA0)	X'18'	0	CKBCHL1L	"CKBCHLRW-CKBCHLOG" Len of trk1 change log CCWs
2976	(BA0)	X'BA0'	0	CKBMINLN	"CKBCHLRW-CKB" Length of CKB without change log R/W CCWs, and final TIC.
2976	(BA0)	X'1000'	0	CKBASLEN	"((*-CKB+2047)/2048)*2048" CKB length

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CKDDSECT	
		Comment			
		Locate record parameter list (ECKD devices only)			
		End of Comment			
0	(0)	BITSTRING	16	CKDIPARM (0)	LOCATE RECORD PARAMETER LIST FOR PRIMARY
0	(0)	BITSTRING	1	CKDOPER	OPERATION BYTE
		1		CKDWRITE	"X'01'" - WRITE DATA
		11		CKDFMT	"X'03'" - FORMAT WRITE
		.... .11.		CKDREAD	"X'06'" - READ DATA
		.... 1.11		CKDWTRAK	"X'0B'" - Write Track
1	(1)	BITSTRING	1	CKDAUX	AUXILIARY BYTE
		1...		CKDAXTL	"X'80'" - USE 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
13	(D)	BITSTRING	1	CKDSECT1	SECTOR NUMBER
14	(E)	BITSTRING	2	CKDTLEN	TRANSFER LENGTH FACTOR
14	(E)	X'10'	0	CKDLEN	"*-CKDDSECT" Len of standard data packet
14	(E)	X'10'	0	CKDNEXT	"*" Label to addr next packet
		Comment			
		Short CKD format for CKD devices only			
		End of Comment			
0	(0)	BITSTRING	6	CKDADDR (0)	(00CCHH) Seek address (BBCCHH)
0	(0)	BITSTRING	2	CKDBB	BB value (always zero)
2	(2)	BITSTRING	5	CKDCCHHR (0)	CCHHR value
2	(2)	BITSTRING	4		CCHH 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
CKA	0	
CKACC	0	
CKACCHHR	0	
CKACHLOG	8	
CKAE	0	
CKAELEN	5	6
CKAFIRST	C	10
CKAHH	2	
CKAID	0	C3D2C140
CKANEXT	5	6
CKAPLEN	C	10
CKAR	4	
CKASECT	5	
CKASIZE	4	
CKA4KPAG	C	
CKB	0	
CKBASLEN	BA0	1000
CKBCCWS	558	
CKBCCWSL	750	220
CKBCFSZE	4E8	500
CKBCHCKR	598	
CKBCHECK	610	
CKBCHEKD	788	
CKBCHKD2	818	
CKBCHLGD	B78	
CKBCHLOG	B88	
CKBCHL1L	BA0	18
CKBCKA	44	
CKBCKCKM	49D	40
CKBCKDAT	368	
CKBCKFLG	49D	
CKBCKGMT	49D	80
CKBCKHFM	368	
CKBCKHFP	368	368
CKBCKLEV	4C8	
CKBCKLVH	4C8	4CC
CKBCKLVP	4C8	4C8
CKBCKREC	368	
CKBCKRLN	4D8	174
CKBCKVAL	4D8	
CKBCSW	8	0
CKBDCBP	14	
CKBECB	2C	
CKBECBCC	4	
CKBECBP	4	
CKBERCCW	54	
CKBERCC2	58	
CKBERRCT	52	
CKBFLAG1	28	
CKBFLAG2	29	
CKBFLAG3	2A	
CKBFORWD	49C	
CKBIDAWS	838	
CKBIDAW1	B58	
CKBIDAW2	B5C	
CKBIDAW3	B60	
CKBIDAW4	B64	
CKBIDAW5	B68	
CKBIDAW6	B6C	
CKBIDAW7	B70	
CKBIDAW8	B74	
CKBIEDB	520	
CKBIFLG1	0	42
CKBIFLG2	1	0
CKBIFLG4	14	
CKBIOB	0	
CKBIOBE	4F0	
CKBIRRCT	1C	0
CKBKEY	60	
CKBLCKD2	828	
CKBLKRLN	1E4	174
CKBLMTIC	550	
CKBLOCK	5E8	
CKBLOCKD	778	
CKBLOCKR	5C0	
CKBLOCKV	568	
CKBLRDAT	70	
CKBLRKEY	68	
CKBLRLVI	74	
CKBLRMTK	90	
CKBLRMVS	98	
CKBLROTH	7C	
CKBLROTL	1E4	168
CKBLRPLI	88	
CKBLRPLN	7C	
CKBLRSID	78	
CKBLRSYS	70	
CKBLRSYT	84	
CKBLVOTH	49E	
CKBLWDAT	1F0	
CKBLWKEY	1E8	
CKBLWKYP	1E8	1E8
CKBLWLVI	1F4	
CKBLWMTK	210	
CKBLWMVS	218	
CKBLWOTH	1FC	
CKBLWOTL	364	168
CKBLWPLI	208	
CKBLWPLN	1FC	
CKBLWSID	1F8	
CKBLWSYS	1F0	
CKBLWSYT	204	
CKBMINLN	BA0	BA0
CKBMSTCL	658	28
CKBMSTD2	7A8	
CKBMSTD3	7B8	
CKBMSTD4	7C8	
CKBMSTD5	7D8	
CKBMSTD6	7E8	
CKBMSTD7	7F8	
CKBMSTD8	808	
CKBMSTR	638	
CKBMSTRD	798	
CKBMSTX2	660	0
CKBMSTX3	688	0
CKBMSTX4	6B0	0
CKBMSTX5	6D8	0
CKBMSTX6	700	0
CKBMSTX7	728	0
CKBMSTX8	750	0
CKBNREC	2B	
CKBRETRY	50	
CKBSEEK	20	0
CKBSENSE	2	0
CKBSIZE	48	
CKBSTART	10	

Name	Hex Offset	Hex Value
CKBSVDEF	4A4	
CKBTRK1T	4C	
CKBT1DAT	778	
CKBT1DLN	798	30
CKBT1DNM	798	3
CKBVERFY	4E0	
CKBWRTIM	4C4	
CKB1CFIO	28	10
CKB1EXCP	28	80
CKB1SHFL	28	40
CKB1SPCI	28	20
CKB2MSLI	29	1
CKB2RCHK	29	80
CKB2RLCK	29	10
CKB2RLOG	29	4
CKB2RMST	29	8
CKB2TLCK	29	20
CKB2WCHK	29	40
CKB2WLCK	29	2
CKB4KLEV	4D0	
CKB4KLVH	4D0	4D4
CKB4KLVP	4D0	4D0
CKDADDR	0	
CKDAUX	1	
CKDAXTL	1	80
CKDBB	0	
CKDCCHH	4	
CKDCCHHR	2	
CKDCCHH1	8	
CKDCCHR1	8	
CKDDSECT	0	
CKDFMT	0	3
CKDIPARM	0	
CKDLEN	E	10
CKDLEN2	7	8
CKDNEXT	E	10
CKDNREC	3	
CKDOPER	0	
CKDREAD	0	6
CKDREC	6	
CKDREC1	C	
CKDSECT	7	
CKDSECT1	D	
CKDTLEN	E	
CKDWRITE	0	1
CKDWTRAK	0	B

$CKGPAR Information

$CKGPAR Heading Information

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

$CKGPAR Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CKG	
0	(0)	CHARACTER	4	CKGID	CONTROL BLOCK EYE CATCHER
4	(4)	SIGNED	1	CKGVER	VERSION IDENTIFIER
4	(4)	X'2'	0	CKGVNR	"2" Version number
5	(5)	BITSTRING	1	CKGFLAG1	FLAGS
		1...		CKG1ESUP	"B'10000000'" SUPRESS I/O ERROR MESSAGES FOR THIS DATA SET
		.1..		CKG1LOKD	"B'01000000'" THIS FILE HAS BEEN LOCKED
		..1.		CKG1ITRP	"B'00100000'" THIS FILE HAS HAD INTERRUPTED I/O
		...1		CKG1IOER	"B'00010000'" THIS FILE HAS HAD AN I/O ERROR
		.... 1...		CKG1LOUT	"B'00001000'" TRACK 1 I/O INCOMPLETE
		.... .1..		CKG1IOE	"B'00000100'" KFORMAT I/O ERROR
		.... ..1.		CKG1IONC	"B'00000010'" KFORMAT I/O INCOMPLETE
6	(6)	BITSTRING	1	CKGFLAG2	Second flag byte
		1...		CKG2DASD	"B'10000000'" Checkpoint resides on DASD
		.1..		CKG2CF	"B'01000000'" Checkpoint resides on CF
		..1.		CKG2FCON	"B'00100000'" This was the first connect to the structure, and as such, caused the actual allocation of the struct. in the Coupling Facility. Used by KFORMAT
		...1		CKG2ALOC	"B'00010000'" Data set allocated
		.... 1...		CKG2RBLD	"B'00001000'" A CF rebuild is in progress
		.... .1..		CKG2NEWR	"B'00000100'" A structure could be used to satisfy this allocation
		.... ..1.		CKG2CYL	"B'00000010'" Data set allocated on EAV cylinder managed-EAS storage.
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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
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
36	(24)	ADDRESS	4	CKGDCB	ADDRESS OF THE DCB
40	(28)	ADDRESS	4	CKGTOT	ADDR OF THE TRACK 1 TABLE (TOT)
44	(2C)	SIGNED	4	CKGCF4KL	Size, in 4K elements, the structure is lacking
48	(30)	SIGNED	4	CKGCFSIZ	Size, in 1K units, of the CF structure
52	(34)	CHARACTER	16	CKGCONTK	Connection Token (only used if data set in CF)
68	(44)	SIGNED	1	CKGCONID	Connection Id (only used if data set in CF)
69	(45)	BITSTRING	1	CKGFLAG3	CKB CF Request footprints
		1...		CKG3MOVE	"B'10000000'" IXLLIST MOVE Request
		.1..		CKG3RITE	"B'01000000'" IXLLIST WRITE Request
		..1.		CKG3READ	"B'00100000'" IXLLIST READ Request
		...1		CKG3LOCK	"B'00010000'" IXLLIST LOCK Request
		.... 1...		CKG3RLST	"B'00001000'" IXLLIST READLIST Request
		.... .1..		CKG3DELM	"B'00000100'" IXLLIST DELETE MULT rqst
70	(46)	BITSTRING	1	CKGFLAG4	Fourth flag byte
		1...		CKG4LE0B	"B'10000000'" List 0 LEIDs are built
		.1..		CKG4LE1B	"B'01000000'" List 1 LEIDs are built
		..1.		CKG4COND	"B'00100000'" Get LOCK conditionally
		...1		CKG4STEL	"B'00010000'" Steal the CF lock from CKGSCNID holder
		.... 1...		CKG4NOCK	"B'00001000'" No check record found for data set on CF
		.... .1..		CKG4WCFL	"B'00000100'" Waiting for CF lock
		.... ..1.		CKG4DUPC	"B'00000010'" Duplicate connection - when this data set was allocated on CF, NEWCKPTn pointed to the same str as CKPTn; however, we can only have one connection active to a given str at time.
		1		CKG4VALR	"B'00000001'" Validation error
71	(47)	BITSTRING	1	CKGFLAG5	CCW 1 I/O Error flags
		1...		CKG5NDTR	"B'10000000'" No data written on error
		.1..		CKG5DTRS	"B'01000000'" Data written on error
		..1.		CKG5CHKR	"B'00100000'" Error on CHECK record
		...1		CKG5LCKR	"B'00010000'" Error on LOCK record
		.... 1...		CKG5MSTR	"B'00001000'" Error on MASTER record
		.... .1..		CKG5LOGR	"B'00000100'" Error on Change log recd
		.... ..1.		CKG5PAGR	"B'00000010'" Error on 4K page record
		1		CKG5VERP	"B'00000001'" Error on verify CCWs
72	(48)	BITSTRING	1	CKGFLAG6	CCW 2 I/O Error flags Bit definitions are the same as CKGFLAG5
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	BITSTRING	4	CKGERROR (0)	Error flag word (set by CFALOC, used by PRE536 to display variable text of HASP536 message)
76	(4C)	BITSTRING	3	CKGCFERR	$OFFSTBL only supports
79	(4F)	BITSTRING	1		bit string of length 24.
80	(50)	SIGNED	4	CKGCFRRC	CF Service return code
84	(54)	SIGNED	4	CKGCFRC	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	24	CKGXECB	XECB for asynch IXL reqs
128	(80)	SIGNED	4	CKGRECB	ECB portion of XECB for CF locking requests
128	(80)	BITSTRING	24	CKGRXECB	XECB for CF locking request
152	(98)	ADDRESS	4	CKGLIST0	Addr of LIST0 data buffer
156	(9C)	SIGNED	4	CKGT1NUM	Number of elements in a Track1 CF access
160	(A0)	SIGNED	1	CKGL0BLT	ID of List0 Leid builder
161	(A1)	SIGNED	1	CKGL1BLT	ID of List1 Leid builder
162	(A2)	BITSTRING	1	CKGECBTP	I/O completion code for $HASP291 message
163	(A3)	SIGNED	1	CKGSCNID	Steal lock from CONID
164	(A4)	ADDRESS	4	CKGRDBF1	Pointer to 64K buffer for IXLLIST READ_LIST requests
168	(A8)	ADDRESS	4	CKGRDBF2	Pointer to second 64K buffer for IXLLIST READ_LIST requests

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
172	(AC)	ADDRESS	4	CKGCFLST	Pointer to CFLIST
176	(B0)	ADDRESS	4	CKGRWTKN	Pointer to storage to hold tokens returned from an IXLLIST READ or WRITE
180	(B4)	ADDRESS	4	CKGBFLST	Pointer to BUFLIST storage
184	(B8)	ADDRESS	4	CKGLAAS	Addr of set of answer areas
188	(BC)	SIGNED	4	CKGCFSZE	Size of work area obtained when first structure is connected to
192	(C0)	ADDRESS	4	CKGCFQUD	CFQU data area pointer
196	(C4)	SIGNED	4		Reserved for future IBM use
196	(C4)	X'C8'	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

200	(C8)	ADDRESS	2	(0)	Verify CKGCONTK
200	(C8)	ADDRESS	2	(0)	and CONCONTOKEN are same length
200	(C8)	ADDRESS	2	(0)	Verify CKGCONID
200	(C8)	ADDRESS	2	(0)	and CONACONID are the same length

$CKGPAR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKG	0		CKGLIST0	98	
CKGALPRM	7		CKGL0BLT	A0	
CKGANSA	64		CKGL1BLT	A1	
CKGBFLST	B4		CKGMSGID	5C	
CKGCFERR	4C		CKGPARM	24	
CKGCFLST	AC		CKGRDBF1	A4	
CKGCFQUD	C0		CKGRDBF2	A8	
CKGCFRC	54		CKGRECB	80	
CKGCFREX	5A		CKGRWTKN	B0	
CKGCFRIN	58		CKGRXECB	80	
CKGCFRRC	50		CKGSCNID	A3	
CKGCFRSN	58		CKGSIZE	C4	C8
CKGCFSIZ	30		CKGTOKEN	1C	
CKGCFSZE	BC		CKGTOT	28	
CKGCF4KL	2C		CKGT1NUM	9C	
CKGCKB	14		CKGVER	4	
CKGCKC	18		CKGVNR	4	2
CKGCONID	44		CKGXECB	68	
CKGCONTK	34		CKG1ESUP	5	80
CKGDCB	24		CKG1IOE	5	4
CKGDTE	20		CKG1IOER	5	10
CKGECB	68		CKG1IONC	5	2
CKGECBTP	A2		CKG1ITRP	5	20
CKGERROR	4C		CKG1LOKD	5	40
CKGFILE	8		CKG1LOUT	5	8
CKGFLAG1	5		CKG2ALOC	6	10
CKGFLAG2	6		CKG2CF	6	40
CKGFLAG3	45		CKG2CYL	6	2
CKGFLAG4	46		CKG2DASD	6	80
CKGFLAG5	47		CKG2FCON	6	20
CKGFLAG6	48		CKG2NEWR	6	4
CKGHFAME	10		CKG2RBLD	6	8
CKGID	0	C3D2C740	CKG3DELM	45	4
CKGLAAS	B8		CKG3LOCK	45	10
CKGLEID	60		CKG3MOVE	45	80

$CKGPAR Cross Reference

Name	Hex Offset	Hex Value
CKG3READ	45	20
CKG3RITE	45	40
CKG3RLST	45	8
CKG4COND	46	20
CKG4DUPC	46	2
CKG4LE0B	46	80
CKG4LE1B	46	40
CKG4NOCK	46	8
CKG4STEL	46	10
CKG4VALR	46	1
CKG4WCFL	46	4
CKG5CHKR	47	20
CKG5DTRS	47	40
CKG5LCKR	47	10
CKG5LOGR	47	4
CKG5MSTR	47	8
CKG5NDTR	47	80
CKG5PAGR	47	2
CKG5VERP	47	1

$CKM Information

$CKM Heading Information

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

$CKM Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CKM	, Checkpoint inter-member communications area
0	(0)	CHARACTER	4	CKMID	Control block eyecatcher
4	(4)	ADDRESS	1	CKMVERSN	Control block version
4	(4)	X'1'	0	CKMVERN	"1" Current version number
5	(5)	BITSTRING	3		Reserved for future use
		Comment			
		Input/Output for routine CKRRSTRT callers. Fields in section are named CKMSxxxx. | "S" for start Output fields are available to caller until the next CKRRDONE call.			
		End of Comment			
8	(8)	DBL WORD	8	(0)	Alignment
8	(8)	BITSTRING	0	CKMSPARM (0)	CKRRSTRT parameter list
8	(8)	DBL WORD	8	CKMSBEGN (0)	Beginning of CKRRSTRT parms
8	(8)	BITSTRING	1	CKMSFLG1	(IO) Flag byte 1 for CKRRSTRT
		1...		CKMS1MBD	"B'10000000'" (I.) - This member MUST be driver (owns the Q's)
		.1..		CKMS1DRV	"B'01000000'" (.O) - CKRRSTRT has determined this is the initial driving member
		..1.		CKMS1OPV	"B'00100000'" (IO) - Use OPVERIFY=YES during this reconfiguration
		...1		CKMS1HUP	"B'00010000'" (I.) - HFAM update is pending
9	(9)	BITSTRING	1	CKMSFLG2	(IO) Flag byte 2 (Used for reconfiguration reason)
		1...		CKMS2IO1	"B'10000000'" (IO) - I/O error on CKPT1
		.1..		CKMS2IO2	"B'01000000'" (IO) - I/O error on CKPT2
9	(9)	X'C0'	0	CKMS2IOE	"CKMS2IO1+CKMS2IO2" (.O) - I/O error on CKPTn

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1.		CKMS2CKV	"B'00100000'" (IO) - CKPT on volatile CF
		...1		CKMS2OPR	"B'00010000'" (IO) - Operator requested dialog
		.... 1...		CKMS2CAN	"B'00001000'" (.O) - Reconfiguration cancelled by JES2
10	(A)	BITSTRING	2		Reserved for future use
12	(C)	BITSTRING	4	CKMSDCON	(IO) Console ID or zero
16	(10)	SIGNED	4	CKMSNIOE	(.O) Number of members with I/O errors on CKPTn (Check CKMSFLG2 bits for "n")
20	(14)	CHARACTER	4	CKMSDNAM	(.O) Name of driving member (Original driving member, use CKMCCDMN after syncs)
24	(18)	BITSTRING	8	CKMSLEVN	(I.) Checkpoint level number
32	(20)	CHARACTER	128	CKMSMEMV	(.O) Vector of member names at original driver selection
160	(A0)	BITSTRING	308	CKMSHFAM	(IO) Copy of HFAM to initially use for this reconfig
468	(1D4)	BITSTRING	4		Reserved for future use
472	(1D8)	DBL WORD	8	CKMSEND (0)	End of CKRRSTRT parm list

Comment

CKRRSTRT return codes

End of Comment

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

Comment

Input/Output for routine CKRRSYNC callers.
Fields in section are named CKMCxxxx.
| "C" for sync
Output fields are available to caller until the
next CKRRSYNC or CKRRDONE call.

End of Comment

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

Comment

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

End of Comment

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
488	(1E8)	X'18'	0	CKMCACS1	"24" - Suspend CKPT1
488	(1E8)	X'1C'	0	CKMCACS2	"28" - Suspend CKPT2
488	(1E8)	X'20'	0	CKMCACU1	"32" - Start using CKPT1
488	(1E8)	X'24'	0	CKMCACU2	"36" - Start using CKPT2
				Comment	

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

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

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

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

				Latest $HFAM from driving member	

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

				CKRRSYNC return codes	

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

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

				CKRRDONE return codes	

				End of Comment	
1072	(430)	X'0'	0	CKMDRCOK	"0" DONE processing completed
1072	(430)	X'4'	0	CKMDRCRC	"4" Re-enter CKPT reconfig (Start-up request for new reconfig was received)
				Comment	
				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.	
				End of Comment	
1072	(430)	DBL WORD	8	CKMIDATA (0)	Beginning of internal data
1072	(430)	CHARACTER	8	CKMIIEYE	Internal data eyecatcher (set by CKRRINIT)
1080	(438)	ADDRESS	4	CKMICKXA	Addr of CKX used to build messages and acks (obtained by CKRRINIT)
1084	(43C)	ADDRESS	4	CKMICKXS	Addr of CKX used to save last received msg or ack (obtained by CKRRINIT)
1088	(440)	DBL WORD	8	CKMICRST	Reconfig start TOD (STCK)
1096	(448)	DBL WORD	8	CKMICRET	Reconfig end TOD (STCK)
1104	(450)	SIGNED	4	CKMICRSE	Count of system events received during reconfig
1108	(454)	SIGNED	4	CKMICRIF	Count of IXZXIXIF requests issued in reconfiguration
1112	(458)	SIGNED	4	CKMIXECB (0)	XECB to wait on
				Comment	

				General status flag byte	

				End of Comment	
1136	(470)	BITSTRING	1	CKMIFLG1	General status flag byte 1
		1...		CKMI1CAP	"B'10000000'" - Reconfiguration capable
		.1..		CKMI1RST	"B'01000000'" - Reconfiguration started
		..1.		CKMI1CAN	"B'00100000'" - Reconfiguration cancelled by JES2
1137	(471)	BITSTRING	3		Reserved
				Comment	

				Mailbox names (set by CKRRINIT)	

				End of Comment	
1140	(474)	CHARACTER	1	CKMIMBNS	
1156	(484)	CHARACTER	1	CKMIMBNR	

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

Comment

Delay time constants (set by CKRRINIT)

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'F'	0	CKMISECS	"15" Wait time for other members in seconds
1172	(494)	SIGNED	4	CKMISTBI	STIMERM wait time for other members in 100th's of seconds
1172	(494)	X'3'	0	CKMISECI	"3" Wait time for IXZXIXIF to complete in seconds
1176	(498)	SIGNED	4	CKMISTIF	STIMERM wait time for IXZXIXIF in 100th's of seconds
1176	(498)	X'64'	0	CKMIIFFC	"100" Interval between IXZXIXIF requests in 100th's of seconds
1180	(49C)	SIGNED	4	CKMIIFFI	STIMERM wait time between IXZXIXIF requests in 100th's of seconds

Comment

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

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1184	(4A0)	ADDRESS	4	CKMICKMA	Pointer to $CKM used by IXZXIXMB for POSTDATA= and STIMERM for PARM=
1188	(4A4)	ADDRESS	4	CKMIHCTA	Addr of $HCT for post exit
1188	(4A4)	X'4'	0	CKMIPXRP	"4" Post exit reason code for incorrect exit parm list
1188	(4A4)	X'8'	0	CKMIPXRD	"8" Post exit reason code for incorrect post data
1188	(4A4)	X'C'	0	CKMIPXRM	"12" Post exit reason code for incorrect mailbox name
1192	(4A8)	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

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1200	(4B0)	DBL WORD	8	CKMICLR1 (0)	Begin area to clear on STRT

Comment

Reconfiguration status flags

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1200	(4B0)	BITSTRING	1	CKMIFLG2	General status flag byte 2
		1...		CKMI2NIH	"B'10000000'" - Reconfig initiated from elsewhere assumed
		.1..		CKMI2ONE	"B'01000000'" - Single member reconfig (Set by IFGETVER rtn)
		..1.		CKMI2RCO	"B'00100000'" - Reconfig is committed (First driving member was committed)
		...1		CKMI2DCO	"B'00010000'" - Driving member is (re)committed
		.... 1...		CKMI2DRV	"B'00001000'" - We are driving member
		.... .1..		CKMI2DMF	"B'00000100'" - Driving member failed during this SYNC/DONE (or was previously pending)
		.... ..1.		CKMI2DFP	"B'00000010'" - Driving member failed is pending for next call to CKRRSYNC

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1		CKMI2WSG	"B'00000001'" - This non-driving member waiting for a sync go-ahead message
1201	(4B1)	BITSTRING	1	CKMIFLG3	General status flag byte 3
		1...		CKMI3RDD	"B'10000000'" - Ready for driver decommit
		.1..		CKMI3IFT	"B'01000000'" - STIMERM used to control frequency of IXZXIXIF requests is set
1202	(4B2)	BITSTRING	1		Reserved

Comment

The following byte is permanently dedicated for IBM int rnal 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

1203	(4B3)	CHARACTER	1	CKMIFCT	FCT test byte

Comment

Reconfiguration operation sequence number
Starts at zero on exit from CKRRSTRT and increments by one for each CKRRSYNC and by one more for CKRRDONE.

End of Comment

1204	(4B4)	SIGNED	4	CKMIOSEQ	Operation sequence number

Comment

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.

End of Comment

1208	(4B8)	SIGNED	4	CKMIDMNO	Current/last committed
1212	(4BC)	CHARACTER	4	CKMIDMNA	driver number and name
1216	(4C0)	SIGNED	4	CKMIDCNO	Current/last candidate
1220	(4C4)	CHARACTER	4	CKMIDCNA	driver number and name (zeros unless driver is being selected)
1224	(4C8)	BITSTRING	4	CKMIMMPM	Participating member mask
1228	(4CC)	BITSTRING	4		Reserved

Comment

Timing data

End of Comment

1232	(4D0)	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	
1232	(4D0)	BITSTRING	24	CKMISTMS	REMOTE STIMERM SET PARM LIST
1232	(4D0)	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	
1256	(4E8)	BITSTRING	16	CKMISTMC	REMOTE STIMERM TEST/CANCEL PARM LIST
1256	(4E8)	X'10'	0	CKMISTCL	"*-CKMISTMC" Length of parm list
1272	(4F8)	DBL WORD	8	(0)	Alignment
1272	(4F8)	SIGNED	4	CKMISTMI	STIMERM ID=id-area while waiting for response from IXZXIXIF service
1276	(4FC)	SIGNED	4	CKMISTMM	STIMERM ID=id-area while waiting for msg, ack or system event
1280	(500)	SIGNED	4	CKMISTME	STIMERM ID=id-area used for postponed IXZXIXIF request
1284	(504)	SIGNED	4	CKMISTEI	STIMERM interval set for postponed IXZXIXIF request
1288	(508)	BITSTRING	1	CKMISTF	Interval timer flag byte (This byte is serialized with OIL and NIL)
		1...		CKMISTFI	"B'10000000'" STIMERM interval expired IXZXIXIF service
		.1..		CKMISTFM	"B'01000000'" STIMERM interval expired for msg, ack or sys event
		..1.		CKMISTFE	"B'00100000'" STIMERM interval expired for postponed IXZXIXIF request
1289	(509)	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	
1296	(510)	DBL WORD	8	CKMICLR2 (0)	Begin area to clear on SYNC or DONE calls
				Comment	
---------- Information returned from IFGETVER routine ----------					
				End of Comment	
1296	(510)	BITSTRING	1	CKMIIFG	IFGETVER flags
		1...		CKMIIFGD	"B'10000000'" - Failed driver candidate's state indicates driver
		.1..		CKMIIFGC	"B'01000000'" - Failed driver XCF user state shows committed
1297	(511)	BITSTRING	3		Reserved
1300	(514)	BITSTRING	4	CKMIMMRC	Reconfig capable mask
1304	(518)	BITSTRING	4	CKMIMMST	Reconfig started mask
1308	(51C)	BITSTRING	4	CKMIMMMD	Member MUST drive mask
1312	(520)	BITSTRING	4	CKMIMMCO	Reconfig committed mask
1316	(524)	BITSTRING	4	CKMIMMDR	Driving member mask

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1320	(528)	SIGNED	4	CKMIICNO	Candidate for driving member (based on CKPT level and MUST drive)
1324	(52C)	CHARACTER	4	CKMIICNA	Candidate's name
1328	(530)	SIGNED	4	CKMIIDNO	Driving member number (Based on XMAUC1DR bit of lowest participating mem)
1332	(534)	CHARACTER	4	CKMIIDNA	Driving member name
1336	(538)	CHARACTER	128	CKMIMEMV	Vector of member names
1464	(5B8)	BITSTRING	160	CKMIMCLV	Vector member CKPT levels from XMAUCRLV in member's XCF user state
1624	(658)	SIGNED	4	CKMIIFTS	BIN time stamp of last IXZXIXIF completion
		Comment			

		Bit mapped work mask for member states, etc.			

		End of Comment			
1628	(65C)	BITSTRING	4	CKMIMMWK	Member affinity work mask
1632	(660)	BITSTRING	1	CKMERRAF	Mask of systems to dump
		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			
1632	(660)	X'1'	0	CKMIWUST	"1" Expecting "started"
1632	(660)	X'2'	0	CKMIWUDR	"2" Expecting "driving member" (issued by non-drivers)
1632	(660)	X'3'	0	CKMIWUCO	"3" Expecting "reconfiguration committed" (issued by driver only)
1632	(660)	X'4'	0	CKMIWUDD	"4" Expecting "driver done" (issued by non-drivers waiting for driver to revert to capable only)
1632	(660)	X'5'	0	CKMIWUAD	"5" Expecting "all done" (every participating member to revert to capable only)
1636	(664)	BITSTRING	1	CKMIWUDM	Mask of delayed members w/ pending user state change
		Comment			

		Driver selection information			

		End of Comment			
1640	(668)	SIGNED	4	(0)	Alignment
1640	(668)	BITSTRING	0	CKMIDS (0)	Driver selection info
1640	(668)	SIGNED	4	CKMIDSBG (0)	Begin driver selection info
1640	(668)	BITSTRING	1	CKMIDFLG	Reconfig reason flags
		1...		CKMIDFOV	"B'10000000'" - Use OPVERIFY=YES
		.1..		CKMIDFI1	"B'01000000'" - I/O error on CKPT1
		..1.		CKMIDFI2	"B'00100000'" - I/O error on CKPT2
1640	(668)	X'60'	0	CKMIDFIO	"CKMIDFI1+CKMIDFI2" - I/O error on CKPTn
		...1		CKMIDFCV	"B'00010000'" - CKPT on volatile CF
		.... 1...		CKMIDFOR	"B'00001000'" - Operator requested dialog
		.... .1..		CKMIDFCN	"B'00000100'" - Cancelled by JES2
		.... ..1.		CKMIDFHU	"B'00000010'" - Pending HFAM update
1641	(669)	BITSTRING	3		Reserved
1644	(66C)	SIGNED	4	CKMIDSOS	Operation sequence number
1648	(670)	BITSTRING	4	CKMIDCON	Console ID or zero

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
1652	(674)	SIGNED	4	CKMIDSI1	Number of CKPT1 I/O errors
1656	(678)	SIGNED	4	CKMIDSI2	Number of CKPT2 I/O errors
1660	(67C)	CHARACTER	4	CKMIDNAM	Name of driving member
1664	(680)	CHARACTER	128	CKMIDPMV	Participating memb names
1792	(700)	BITSTRING	308	CKMIDSHF	HFAM to initially use for this reconfig instance
2100	(834)	SIGNED	4	CKMIDSEN (0)	End driver selection info

Comment

Reason codes for $K28 errors

End of Comment

2100	(834)	X'1'	0	CKMIECKM	"1" CKM eyecatcher error
2100	(834)	X'2'	0	CKMIESND	"2" STRT called again w/o DONE
2100	(834)	X'3'	0	CKMIECNS	"3" SYNC called before STRT
2100	(834)	X'4'	0	CKMIECAN	"4" SYNC called after reconfig cancelled by JES2
2100	(834)	X'5'	0	CKMIEDNS	"5" DONE called before STRT
2100	(834)	X'6'	0	CKMIESTE	"6" More than one reconfig reason in parm list
2100	(834)	X'7'	0	CKMIECTE	"7" Sync type (CKMCTYPE) mismatch detected by this non-driving member
2100	(834)	X'8'	0	CKMIESWD	"8" Non-driving member called CKRRSYNC when driving member called CKRRDONE
2100	(834)	X'9'	0	CKMIEDWS	"9" Non-driving member called CKRRDONE when driving member called CKRRSYNC
2100	(834)	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

2100	(834)	SIGNED	4	CKMIKRGS (3)	R14, R15, R0 at time of error
2112	(840)	SIGNED	4	CKMIKRSN (0)	$Kxx reason code set from
2112	(840)	BITSTRING	1	CKMIKRSF	- (CKMIFUNC) Function code
2113	(841)	BITSTRING	1	CKMIKRSS	- (CKMIFLG2) Status flags
2114	(842)	ADDRESS	1	CKMIKRST	- (CKMIXERT) Error type
2115	(843)	ADDRESS	1	CKMIKRSX	- (CKMILSTX) Last IXZXIXxx
2116	(844)	ADDRESS	1	CKMIKXX	$Kxx error code index
2116	(844)	X'1'	0	CKMIK29	"1" - Fail with $K29 error - JESXCF data
2116	(844)	X'2'	0	CKMIK30	"2" - Fail with $K30 error - HASPCKRR internal logic
2116	(844)	X'3'	0	CKMIK34	"3" - Fail with $K34 error - JESXCF return code

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			
2117	(845)	BITSTRING	1	CKMIFUNC	Function being performed
		111.		CKMIFURM	"B'11100000'" - CKRRxxxx routine mask
		..1.		CKMIFURI	"B'00100000'" - CKRRINIT routine called
		.1..		CKMIFURS	"B'01000000'" - CKRRSTRT routine called
		.11.		CKMIFURC	"B'01100000'" - CKRRSYNC routine called
		1...		CKMIFURD	"B'10000000'" - CKRRDONE routine called
		...1		CKMIFUDR	"B'00010000'" - Driver path if bit on (set/reset by mult rtns)
		.... 1...		CKMIFUIF	"B'00001000'" - In routine IFGETVER
		.... .1..		CKMIFUWU	"B'00000100'" - In routine WUSTATE
		.... ..1.		CKMIFUDS	"B'00000010'" - In routine DSELECT
		1		CKMIFUIM	"B'00000001'" - In routine IMPROC
		Comment			
		Last IXZXIXxx function footprint			
		End of Comment			
2118	(846)	ADDRESS	1	CKMILSTX	Last JESXCF function
2118	(846)	X'1'	0	CKMILXAC	"1" - Acknowledge message
2118	(846)	X'2'	0	CKMILXIF	"2" - Obtain member information
2118	(846)	X'3'	0	CKMILXMB	"3" - Create mailbox
2118	(846)	X'4'	0	CKMILXMC	"4" - Clear mailbox
2118	(846)	X'5'	0	CKMILXMD	"5" - Delete mailbox
2118	(846)	X'6'	0	CKMILXRM	"6" - Receive message
2118	(846)	X'7'	0	CKMILXSM	"7" - Send message
2118	(846)	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			
2119	(847)	ADDRESS	1	CKMIXERT	Error type
		Comment			
		Error types for JESXCF related $K29 or $K34 errors			
		End of Comment			

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
2119	(847)	X'1'	0	CKMIXERC	"1" - Unexpected return code (Used for $K34 only)
2119	(847)	X'2'	0	CKMIXEDA	"2" - IXZXIXRM DATA= addr is 0
2119	(847)	X'3'	0	CKMIXEZL	"3" - IXZXIXRM DATALEN is 0
2119	(847)	X'4'	0	CKMIXEZT	"4" - IXZXIXSM/IF REQTOKEN is 0
2119	(847)	X'5'	0	CKMIXEEE	"5" - YIXEN eyecatcher error
2119	(847)	X'6'	0	CKMIXEER	"6" - YIXEN system RC is not 0
2119	(847)	X'7'	0	CKMIXEES	"7" - YIXEN rsn code is not 0
2119	(847)	X'8'	0	CKMIXEEV	"8" - YIXEN not for sys event
2119	(847)	X'9'	0	CKMIXEEO	"9" - YIXEN msg offset is 0
2119	(847)	X'A'	0	CKMIXEEL	"10" - YIXEN msg length is 0
2119	(847)	X'B'	0	CKMIXEEC	"11" - YIXEN inconsistent length
2119	(847)	X'C'	0	CKMIXESE	"12" - YIXSE eyecatcher error
2119	(847)	X'D'	0	CKMIXESO	"13" - YIXSE msg offset is 0
2119	(847)	X'E'	0	CKMIXESM	"14" - YIXSE offset points past end of msg
2119	(847)	X'F'	0	CKMIXESI	"15" - YIXSE not for member info
2119	(847)	X'10'	0	CKMIXEIE	"16" - YIXIF eyecatcher error
2119	(847)	X'11'	0	CKMIXEIL	"17" - YIXIF length greater than remaining msg len
2119	(847)	X'12'	0	CKMIXEIG	"18" - YIXIF group name error
2119	(847)	X'13'	0	CKMIXEIP	"19" - YIXIF member name not blank padded
2119	(847)	X'14'	0	CKMIXEID	"20" - YIXIF duplicate member #
2119	(847)	X'15'	0	CKMIXEIO	"21" - YIXIF offset inconsistent with YIXIF length
2119	(847)	X'16'	0	CKMIXEIB	"22" - YIXIF offset past msg end
2119	(847)	X'17'	0	CKMIXEIU	"23" - YIXIF own memb # missing
2119	(847)	X'18'	0	CKMIXEIN	"24" - YIXIF own name mismatch
2119	(847)	X'19'	0	CKMIXEAE	"25" - YIXAC eyecatcher error
2119	(847)	X'1A'	0	CKMIXEAC	"26" - YIXAC inconsistent length
2119	(847)	X'1B'	0	CKMIXEAO	"27" - YIXAC msg offset is 0

Comment

Error types for HASPCKRR internal logic $K30 errors

End of Comment

2119	(847)	X'0'	0	CKMIIEUN	"0" Unknown error type
2119	(847)	X'1'	0	CKMIIEIL	"1" Internal logic error
2119	(847)	X'2'	0	CKMIIESU	"2" Non-start-up msg received in start-up mailbox
2119	(847)	X'3'	0	CKMIIEMT	"3" Unexpected msg type received
2119	(847)	X'4'	0	CKMIIEMS	"4" Cannot find a REQTOKEN in CKMISMRT token vector
2119	(847)	X'5'	0	CKMIIEIN	"5" Message type does not match envelope
2119	(847)	X'6'	0	CKMIIEOS	"6" Sync operation sequence number mismatch
2119	(847)	X'7'	0	CKMIIEDF	"7" Inconsistent view of driver failed status
2119	(847)	X'8'	0	CKMIIEIR	"8" Unexpected return code from IMPROC
2119	(847)	X'9'	0	CKMIIEIM	"9" Invalid member number passed to subroutine
2119	(847)	X'A'	0	CKMIIEDE	"10" Non-zero DOM ID found on a DOMDELAY verify call
2119	(847)	X'B'	0	CKMIIEHD	"11" We are driving when there is another driver with a lower member number
2119	(847)	X'C'	0	CKMIIEMD	"12" Multiple members with MUST in XCF user state and we aren't the lowest MUST drive member #
2119	(847)	X'D'	0	CKMIIEAD	"13" IMPROC is processing an appl msg, but we do not have a driver or driver candidate
2119	(847)	X'E'	0	CKMIIEEY	"14" Invalid CKX eyecatcher
2119	(847)	X'F'	0	CKMIIEMH	"15" Invalid msg type passed to MHEADER routine

Comment

IXZXIXxx macro return and reason codes

End of Comment

2120	(848)	SIGNED	4	CKMIRTNC	Last IXZXIXxx return code (except for IXZXIXUS)
2124	(84C)	SIGNED	4	CKMIRSNC	Last IXZXIXxx reason code (except for IXZXIXUS)

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

				Other footprints	

				End of Comment	
2128	(850)	SIGNED	4	CKMIIFRC	Last IFGETVER return code
2132	(854)	SIGNED	4	CKMIIMRC	Last IMPROC return code
2136	(858)	SIGNED	4		Reserved
				Comment	
				Data associated with IXZXIXx services	

				General use data	

				End of Comment	
2136	(858)	X'8'	0	CKMITOKL	"8" Length of JESXCF msg token
2140	(85C)	SIGNED	4	CKMICRML	Current residual msg length
2144	(860)	SIGNED	4	CKMIMSGL	Length of msg/ack to send
2148	(864)	CHARACTER	1	CKMISMNA	XCF member name to send to
				Comment	

				Data returned from IXZXIXIF for member information	

				End of Comment	
2164	(874)	BITSTRING	1	CKMIIFRT	Request token (REQTOKEN=)
				Comment	

				Data returned from IXZXIXRM for a system event	

				End of Comment	
2172	(87C)	ADDRESS	4	CKMIRMED	Addr of message (DATA=)
2176	(880)	SIGNED	4	CKMIRMEL	Length of msg (DATALEN=)
2180	(884)	BITSTRING	1	CKMIRMET	Message token (MSGTOKEN=)
				Comment	

				Data returned from IXZXIXRM for a message or ack	

				End of Comment	
2188	(88C)	ADDRESS	4	CKMIRMMD	Addr of message (DATA=)
2192	(890)	SIGNED	4	CKMIRMML	Length of msg (DATALEN=)
2196	(894)	BITSTRING	8	CKMIRMMT	Message token (MSGTOKEN=)
2204	(89C)	SIGNED	4		Reserved
2208	(8A0)	SIGNED	4	CKMIRMSN	Sending member number (set by IMPROC routine)
2212	(8A4)	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	
2220	(8AC)	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	
2476	(9AC)	SIGNED	4	CKMIBMSG (0)	Control block ID
2480	(9B0)	BITSTRING	4		Console ID
2484	(9B4)	ADDRESS	4		Address of the CART
2488	(9B8)	ADDRESS	4		Pointer for JOBID
2492	(9BC)	ADDRESS	4		Control block address
2496	(9C0)	ADDRESS	4		Display routine address
2500	(9C4)	ADDRESS	4	(6)	6 word work area
2524	(9DC)	ADDRESS	4		Caller's R11 value
2528	(9E0)	BITSTRING	2		ROUT code for Message
2530	(9E2)	BITSTRING	2		Not used
2532	(9E4)	CHARACTER	4		Message ID
2536	(9E8)	CHARACTER	1		Separator character
2537	(9E9)	ADDRESS	1		Flag byte 1
2538	(9EA)	ADDRESS	1		'DISPER'
2539	(9EB)	ADDRESS	1		Flag byte 2
2540	(9EC)	ADDRESS	1		Flag byte 3
2541	(9ED)	CHARACTER	8		Symbolic name of dest.
2549	(9F5)	BITSTRING	15		Not used
2564	(A04)	ADDRESS	4	(0)	Ensure multiple of 4
2564	(A04)	ADDRESS	2	(0)	
0	(0)	X'58'	0	CKMIBMLN	"*-CKMIBMSG" Length of $BLDMSG MF=L
2564	(A04)	SIGNED	4	CKMID254	DOM ID for HASP254/709 msg
2568	(A08)	BITSTRING	128	CKMID257	DOM ID vector for HASP257
2696	(A88)	CHARACTER	4	CKMIDMCM	HASP257 causing member name
2700	(A8C)	ADDRESS	1	CKMIDMAC	HASP257 waiting for action
2700	(A8C)	X'1'	0	CKMIDMA1	"1" - Reconfig starting
2700	(A8C)	X'2'	0	CKMIDMA2	"2" - Driver commit
2700	(A8C)	X'3'	0	CKMIDMA3	"3" - Reconfig commit
2700	(A8C)	X'4'	0	CKMIDMA4	"4" - JESXCF msg from driver
2700	(A8C)	X'5'	0	CKMIDMA5	"5" - JESXCF ack from non-drv
2700	(A8C)	X'6'	0	CKMIDMA6	"6" - Driver decommit
2700	(A8C)	X'7'	0	CKMIDMA7	"7" - Reconfig decommit
2701	(A8D)	CHARACTER	2	CKMIDMMT	First two chars of CKXMEYE for HASP257 message
2703	(A8F)	BITSTRING	5		Reserved
				Comment	
				List form macros for JESXCF services	
				End of Comment	
2712	(A98)	DBL WORD	8	CKMIXLST (0)	JESXCF list form macros
				Comment	
				------- IXZXIXAC MF=(L,CKMIIXAC) Acknowledge message MACDATE -11/12/03-<1>	
				End of Comment	

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	X'A98'	0	M00M1066	"CKMIIXAC" ++ IXZXIXAC NAME
2712	(A98)	DBL WORD	8	CKMIIXAC (0)	++ IXZXIXAC PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXAC_XVERSION	
					++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXAC_XEYECATCH	
					++ CONSTANT XEYECATCH
2719	(A9F)	BITSTRING	1	CKMIIXAC_XSTB	
					++ INPUT
		1...		CKMIIXAC_XSTB_NO	
					"B'10000000'" ++ XSTB.NO KEYWORD
		.1..		CKMIIXAC_XSTB_YES	
					"B'01000000'" ++ XSTB.YES KEYWORD
2720	(AA0)	BITSTRING	8	CKMIIXAC_XMSGTOKEN	
					++ XMSGTOKEN
2728	(AA8)	ADDRESS	4	CKMIIXAC_XDATA	
					++ XDATA
2732	(AAC)	SIGNED	4	CKMIIXAC_XDATALEN	
					++ XDATALEN
2736	(AB0)	SIGNED	4	CKMIIXAC_XUSERRC	
					++ XUSERRC
2740	(AB4)	SIGNED	4	CKMIIXAC_XGROUPTOKEN	
					++ XGROUPTOKEN
2744	(AB8)	SIGNED	4	CKMIIXAC_XSYSRC	
					++ XSYSRC
2748	(ABC)	SIGNED	4	CKMIIXAC_XSYSRSN	
					++ XSYSRSN
2752	(AC0)	BITSTRING	1	CKMIIXAC_XKEYS	
					++ FIELD_LABEL
		1...		CKMIIXAC_KEYUSED_DATA	
					"B'10000000'" ++ KEYUSED.DATA KEYWORD
		.1..		CKMIIXAC_KEYUSED_DATALEN	
					"B'01000000'" ++ KEYUSED.DATALEN KEYWORD
		..1.		CKMIIXAC_KEYUSED_USERRC	
					"B'00100000'" ++ KEYUSED.USERRC KEYWORD
		...1		CKMIIXAC_KEYUSED_SYSRC	
					"B'00010000'" ++ KEYUSED.SYSRC KEYWORD
		.... 1...		CKMIIXAC_KEYUSED_SYSRSN	
					"B'00001000'" ++ KEYUSED.SYSRSN KEYWORD
2753	(AC1)	BITSTRING	1	CKMIIXAC_XMSGATTR	
					++ INPUT
		1...		CKMIIXAC_XMSGATTR_J3CONNECT	
					"B'10000000'" ++ XMSGATTR.J3CONNECT KEYWORD
		.1..		CKMIIXAC_XMSGATTR_EXPRESS	
					"B'01000000'" ++ XMSGATTR.EXPRESS KEYWORD
2753	(AC1)	X'2A'	0	CKMIIXACL	"*-CKMIIXAC" ++ LENGTH OF PLIST

Comment

IXZXIXAC-1

End of Comment

Comment

------- IXZXIXIF MF=(L,CKMIIXIF) Obtain member information
MACDATE -11/12/03-<2>

End of Comment

0	(0)	X'A98'	0	M00M1068	"CKMIIXIF" ++ IXZXIXIF NAME
2712	(A98)	DBL WORD	8	CKMIIXIF (0)	++ IXZXIXIF PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXIF_XVERSION	
					++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXIF_XEYECATCH	
					++ CONSTANT XEYECATCH

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
2719	(A9F)	CHARACTER	1	CKMIIXIF_XRSV0001	++ RESERVED XRSV0001
2720	(AA0)	SIGNED	4	CKMIIXIF_XGROUPTOKEN	++ XGROUPTOKEN
2724	(AA4)	CHARACTER	16	CKMIIXIF_XREQMBOX	++ XREQMBOX
2740	(AB4)	CHARACTER	8	CKMIIXIF_XREQTOKEN	++ XREQTOKEN
2748	(ABC)	ADDRESS	4	CKMIIXIF_XANSAREA	++ XANSAREA
2752	(AC0)	SIGNED	4	CKMIIXIF_XANSLEN	++ XANSLEN
2756	(AC4)	BITSTRING	1	CKMIIXIF_XINFOLVL	++ INPUT
		1...		CKMIIXIF_XINFOLVL_GROUP	"B'10000000'" ++ XINFOLVL.GROUP KEYWORD
		.1..		CKMIIXIF_XINFOLVL_MEMBER	"B'01000000'" ++ XINFOLVL.MEMBER KEYWORD
2757	(AC5)	BITSTRING	1	CKMIIXIF_XKEYS	++ FIELD_LABEL
		1...		CKMIIXIF_KEYUSED_REQMBOX	"B'10000000'" ++ KEYUSED.REQMBOX KEYWORD
		.1..		CKMIIXIF_KEYUSED_ANSAREA	"B'01000000'" ++ KEYUSED.ANSAREA KEYWORD
		..1.		CKMIIXIF_KEYUSED_GROUPTOKEN	"B'00100000'" ++ KEYUSED.GROUPTOKEN KEYWORD
		...1		CKMIIXIF_KEYUSED_GROUPNAME	"B'00010000'" ++ KEYUSED.GROUPNAME KEYWORD
2758	(AC6)	BITSTRING	1	CKMIIXIF_XSTATE	++ INPUT
		1...		CKMIIXIF_XSTATE_ANY	"B'10000000'" ++ XSTATE.ANY KEYWORD
		.1..		CKMIIXIF_XSTATE_ACTIVE	"B'01000000'" ++ XSTATE.ACTIVE KEYWORD
2759	(AC7)	BITSTRING	1	CKMIIXIF_XSYSTEM	++ INPUT
		1...		CKMIIXIF_XSYSTEM_ANY	"B'10000000'" ++ XSYSTEM.ANY KEYWORD
		.1..		CKMIIXIF_XSYSTEM_CURRENT	"B'01000000'" ++ XSYSTEM.CURRENT KEYWORD
2760	(AC8)	BITSTRING	1	CKMIIXIF_XPOLYJES	++ INPUT
		1...		CKMIIXIF_XPOLYJES_YES	"B'10000000'" ++ XPOLYJES.YES KEYWORD
		.1..		CKMIIXIF_XPOLYJES_NO	"B'01000000'" ++ XPOLYJES.NO KEYWORD
2761	(AC9)	BITSTRING	2	CKMIIXIF_XFUNCTION	++ INPUT
2761	(AC9)	BITSTRING	0	CKMIIXIF_XFUNCTION_ARM	"B'1000000000000000'" ++ XFUNCTION.ARM KEYWORD
2763	(ACB)	CHARACTER	8	CKMIIXIF_XGROUPNAME	++ XGROUPNAME
2763	(ACB)	X'3B'	0	CKMIIXIFL	"*-CKMIIXIF" ++ LENGTH OF PLIST

Comment

IXZXIXIF-2

End of Comment

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
------- IXZXIXMB MF=(L,CKMIIXMB) Create mailbox MACDATE -93/05/10-<1>					
				End of Comment	
2712	(A98)	SIGNED	2	M00M1069 (0)	IXZXIXMB-1
2712	(A98)	DBL WORD	8	CKMIIXMB (0)	++ IXZXIXMB PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXMB_XVERSION	
					++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXMB_XEYECATCH	
					++ CONSTANT XEYECATCH
2719	(A9F)	CHARACTER	1	CKMIIXMB_XRSV0001	
					++ RESERVED XRSV0001
2720	(AA0)	CHARACTER	16	CKMIIXMB_XMBOXNAME	
					++ XMBOXNAME
2736	(AB0)	ADDRESS	4	CKMIIXMB_XPOSTXIT	
					++ XPOSTXIT
2740	(AB4)	ADDRESS	4	CKMIIXMB_XPOSTDATA	
					++ XPOSTDATA
2744	(AB8)	SIGNED	4	CKMIIXMB_XPOSTALET	
					++ XPOSTALET
2748	(ABC)	SIGNED	4	CKMIIXMB_XGROUPTOKEN	
					++ XGROUPTOKEN
2752	(AC0)	BITSTRING	1	CKMIIXMB_XSYSEVENTS	
					++ FIELD_LABEL
		1...		CKMIIXMB_XSYSEVENT_YES	
					"B'10000000'" ++ XSYSEVENT.YES KEYWORD
		.1..		CKMIIXMB_XSYSEVENT_NO	
					"B'01000000'" ++ XSYSEVENT.NO KEYWORD
2752	(AC0)	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	
2712	(A98)	SIGNED	2	M00M1070 (0)	IXZXIXMC-1
2712	(A98)	DBL WORD	8	CKMIIXMC (0)	++ IXZXIXMC PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXMC_XVERSION	
					++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXMC_XEYECATCH	
					++ CONSTANT XEYECATCH
2719	(A9F)	BITSTRING	1	CKMIIXMC_XSTB	
					++ INPUT
		1...		CKMIIXMC_XSTB_NO	
					"B'10000000'" ++ XSTB.NO KEYWORD
		.1..		CKMIIXMC_XSTB_YES	
					"B'01000000'" ++ XSTB.YES KEYWORD
2720	(AA0)	CHARACTER	16	CKMIIXMC_XMBOXNAME	
					++ XMBOXNAME
2736	(AB0)	SIGNED	4	CKMIIXMC_XGROUPTOKEN	
					++ XGROUPTOKEN
2736	(AB0)	X'1C'	0	CKMIIXMCL	"*-CKMIIXMC" ++ LENGTH OF PLIST

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
				IXZXIXMC-1	
				End of Comment	
				Comment	
				------- IXZXIXMD MF=(L,CKMIIXMD) Delete mailbox MACDATE -93/05/10-<1>	
				End of Comment	
2712	(A98)	SIGNED	2	M00M1071 (0)	IXZXIXMD-1
2712	(A98)	DBL WORD	8	CKMIIXMD (0)	++ IXZXIXMD PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXMD_XVERSION	++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXMD_XEYECATCH	++ CONSTANT XEYECATCH
2719	(A9F)	BITSTRING	1	CKMIIXMD_XSTB	++ INPUT
		1...		CKMIIXMD_XSTB_NO	"B'10000000'" ++ XSTB.NO KEYWORD
		.1..		CKMIIXMD_XSTB_YES	"B'01000000'" ++ XSTB.YES KEYWORD
2720	(AA0)	CHARACTER	16	CKMIIXMD_XMBOXNAME	++ XMBOXNAME
2736	(AB0)	SIGNED	4	CKMIIXMD_XGROUPTOKEN	++ XGROUPTOKEN
2736	(AB0)	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	
2712	(A98)	SIGNED	2	M00M1072 (0)	IXZXIXRM-1
2712	(A98)	DBL WORD	8	CKMIIXRM (0)	++ IXZXIXRM PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXRM_XVERSION	++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXRM_XEYECATCH	++ CONSTANT XEYECATCH
2719	(A9F)	CHARACTER	1	CKMIIXRM_XRSV0001	++ RESERVED XRSV0001
2720	(AA0)	CHARACTER	16	CKMIIXRM_XMBOXNAME	++ XMBOXNAME
2736	(AB0)	ADDRESS	4	CKMIIXRM_XDATA	++ XDATA
2740	(AB4)	SIGNED	4	CKMIIXRM_XDATALEN	++ XDATALEN
2744	(AB8)	BITSTRING	8	CKMIIXRM_XMSGTOKEN	++ XMSGTOKEN
2752	(AC0)	SIGNED	4	CKMIIXRM_XGROUPTOKEN	++ XGROUPTOKEN
2756	(AC4)	BITSTRING	1	CKMIIXRM_XMSGFETCH	++ INPUT
		1...		CKMIIXRM_XMSGFETCH_ALL	

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					"B'10000000'" ++ XMSGFETCH.ALL KEYWORD
		.1..		CKMIIXRM_XMSGFETCH_MESSAGES	
					"B'01000000'" ++ XMSGFETCH.MESSAGES KEYWORD
		..1.		CKMIIXRM_XMSGFETCH_SYSEVENT	
					"B'00100000'" ++ XMSGFETCH.SYSEVENT KEYWORD
		...1		CKMIIXRM_XMSGFETCH_ACKS	
					"B'00010000'" ++ XMSGFETCH.ACKS KEYWORD
2757	(AC5)	BITSTRING	1	CKMIIXRM_XKEYS	
					++ FIELD_LABEL
		1...		CKMIIXRM_KEYUSED_MSGFETCH	
					"B'10000000'" ++ KEYUSED.MSGFETCH KEYWORD
2757	(AC5)	X'2E'	0	CKMIIXRML	"*-CKMIIXRM" ++ LENGTH OF PLIST

Comment

IXZXIXRM-1

End of Comment

Comment

------- IXZXIXSM MF=(L,CKMIIXSM) Send message
MACDATE -10/16/01-<2>

End of Comment

0	(0)	X'A98'	0	M00M1073	"CKMIIXSM" ++ IXZXIXSM NAME
2712	(A98)	DBL WORD	8	CKMIIXSM (0)	++ IXZXIXSM PARM LIST
2712	(A98)	BITSTRING	1	CKMIIXSM_XVERSION	
					++ INPUT XVERSION
2713	(A99)	CHARACTER	6	CKMIIXSM_XEYECATCH	
					++ CONSTANT XEYECATCH
2719	(A9F)	BITSTRING	1	CKMIIXSM_XMSGATTR	
					++ INPUT
		1...		CKMIIXSM_XMSGATTR_J3CONNECT	
					"B'10000000'" ++ XMSGATTR.J3CONNECT KEYWORD
		.1..		CKMIIXSM_XMSGATTR_EXPRESS	
					"B'01000000'" ++ XMSGATTR.EXPRESS KEYWORD
2720	(AA0)	CHARACTER	16	CKMIIXSM_XMBOXNAME	
					++ XMBOXNAME
2736	(AB0)	CHARACTER	16	CKMIIXSM_XMEMBER	
					++ XMEMBER
2752	(AC0)	ADDRESS	4	CKMIIXSM_XDATA	
					++ XDATA
2756	(AC4)	SIGNED	4	CKMIIXSM_XDATALEN	
					++ XDATALEN
2760	(AC8)	BITSTRING	8	CKMIIXSM_XREQTOKEN	
					++ XREQTOKEN
2768	(AD0)	CHARACTER	16	CKMIIXSM_XREQMBOX	
					++ XREQMBOX
2784	(AE0)	SIGNED	4	CKMIIXSM_XDATAALET	
					++ XDATAALET
2788	(AE4)	SIGNED	4	CKMIIXSM_XRESPDALT	
					++ XRESPDALT
2792	(AE8)	SIGNED	4	CKMIIXSM_XECB	
					++ XECB
2796	(AEC)	SIGNED	4	CKMIIXSM_XEXIT	
					++ XEXIT
2800	(AF0)	BITSTRING	8	CKMIIXSM_XCONNECT	
					++ XCONNECT
2808	(AF8)	SIGNED	4	CKMIIXSM_XGROUPTOKEN	
					++ XGROUPTOKEN
2812	(AFC)	SIGNED	4	CKMIIXSM_XUSERRC	
					++ XUSERRC
2816	(B00)	SIGNED	4	CKMIIXSM_XRESPDATA	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++ XRESPDATA
2820	(B04)	SIGNED	4	CKMIIXSM_XRESPDLEN	
					++ XRESPDLEN
2824	(B08)	CHARACTER	4	CKMIIXSM_XRSV00001	
					++ RESERVED XRSV00001
2828	(B0C)	BITSTRING	8	CKMIIXSM_XMSGTOKEN	
					++ XMSGTOKEN
2836	(B14)	SIGNED	4	CKMIIXSM_XRIPSIZE	
					++ XRIPSIZE
2840	(B18)	BITSTRING	1	CKMIIXSM_XREQTYPE	
					++ INPUT
		1...		CKMIIXSM_XREQTYPE_ASYNC	
					"B'10000000'" ++ XREQTYPE.ASYNC KEYWORD
		.1..		CKMIIXSM_XREQTYPE_SYNC	
					"B'01000000'" ++ XREQTYPE.SYNC KEYWORD
		..1.		CKMIIXSM_XREQTYPE_ASYNCACK	
					"B'00100000'" ++ XREQTYPE.ASYNCACK KEYWORD
		...1		CKMIIXSM_XREQTYPE_COMM	
					"B'00010000'" ++ XREQTYPE.COMM KEYWORD
2841	(B19)	BITSTRING	1	CKMIIXSM_XSEGTYPE	
					++ INPUT
		1...		CKMIIXSM_XSEGTYPE_SINGLE	
					"B'10000000'" ++ XSEGTYPE.SINGLE KEYWORD
		.1..		CKMIIXSM_XSEGTYPE_FIRST	
					"B'01000000'" ++ XSEGTYPE.FIRST KEYWORD
		..1.		CKMIIXSM_XSEGTYPE_MIDDLE	
					"B'00100000'" ++ XSEGTYPE.MIDDLE KEYWORD
		...1		CKMIIXSM_XSEGTYPE_LAST	
					"B'00010000'" ++ XSEGTYPE.LAST KEYWORD
		.... 1...		CKMIIXSM_XSEGTYPE_ABORT	
					"B'00001000'" ++ XSEGTYPE.ABORT KEYWORD
2842	(B1A)	BITSTRING	1	CKMIIXSM_XKEYS	
					++ FIELD_LABEL
		1...		CKMIIXSM_KEYUSED_REQTYPE	
					"B'10000000'" ++ KEYUSED.REQTYPE KEYWORD
		.1..		CKMIIXSM_KEYUSED_REQTOKEN	
					"B'01000000'" ++ KEYUSED.REQTOKEN KEYWORD
		..1.		CKMIIXSM_KEYUSED_REQMBOX	
					"B'00100000'" ++ KEYUSED.REQMBOX KEYWORD
		...1		CKMIIXSM_KEYUSED_EXIT	
					"B'00010000'" ++ KEYUSED.EXIT KEYWORD
		.... 1...		CKMIIXSM_KEYUSED_SEGTYPE	
					"B'00001000'" ++ KEYUSED.SEGTYPE KEYWORD
		.... .1..		CKMIIXSM_KEYUSED_CONNECT	
					"B'00000100'" ++ KEYUSED.CONNECT KEYWORD
		.... ..1.		CKMIIXSM_KEYUSED_MSGTOKEN	
					"B'00000010'" ++ KEYUSED.MSGTOKEN KEYWORD
		1		CKMIIXSM_KEYUSED_MSGATTR	
					"B'00000001'" ++ KEYUSED.MSGATTR KEYWORD
2843	(B1B)	BITSTRING	1	CKMIIXSM_XKEYS1	
					++ FIELD_LABEL
		1...		CKMIIXSM_KEYUSED_ECB	
					"B'10000000'" ++ KEYUSED.ECB KEYWORD
		.1..		CKMIIXSM_KEYUSED_DATAALET	
					"B'01000000'" ++ KEYUSED.DATAALET KEYWORD
		..1.		CKMIIXSM_KEYUSED_RELEASE_CADS	
					"B'00100000'" ++ KEYUSED.RELEASE_CADS KEYWORD
		...1		CKMIIXSM_KEYUSED_RIPSIZE	
					"B'00010000'" ++ KEYUSED.RIPSIZE KEYWORD
2843	(B1B)	X'84'	0	CKMIIXSML	"*-CKMIIXSM" ++ LENGTH OF PLIST

$CKM Cross Reference

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
		IXZXIXSM-2			
				End of Comment	
2848	(B20)	DBL WORD	8	(0)	Alignment
2848	(B20)	X'88'	0	CKMIXLLN	"*-CKMIXLST" Length of longest list form
				Comment	
		End of data internal to CKRRxxxx routines			
				End of Comment	
2848	(B20)	DBL WORD	8	(0)	Alignment
2848	(B20)	X'610'	0	CKMICL2L	"*-CKMICLR2" Length of area to clear in CKRRSTRT
2848	(B20)	X'670'	0	CKMICL1L	"*-CKMICLR1" Length of area to clear in CKRRSYNC or CKRRDONE
2848	(B20)	X'6F0'	0	CKMIEND	"*-CKMIDATA" Length of internal data
				Comment	
		End of $CKM data area			
				End of Comment	
2848	(B20)	X'B20'	0	CKMLEN	"*-CKM" Length of $CKM data area PRINT ON

$CKM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKM	0		CKMDRCRC	430	4
CKMCACCT	1E8	4	CKMERRAF	660	
CKMCACF1	1E8	10	CKMIBMLN	0	58
CKMCACF2	1E8	14	CKMIBMSG	9AC	C2D3C440
CKMCACNL	1E8	0	CKMICKMA	4A0	
CKMCACOC	1E8	C	CKMICKXA	438	
CKMCACRT	1E8	8	CKMICKXS	43C	
CKMCACS1	1E8	18	CKMICLR1	4B0	
CKMCACS2	1E8	1C	CKMICLR2	510	
CKMCACT	1E8		CKMICL1L	B20	670
CKMCACU1	1E8	20	CKMICL2L	B20	610
CKMCACU2	1E8	24	CKMICRET	448	
CKMCBEGN	1D8		CKMICRIF	454	
CKMCCCNL	1EC	0	CKMICRML	85C	
CKMCCCOK	1EC	4	CKMICRSE	450	
CKMCCCUS	1EC	8	CKMICRST	440	
CKMCCDMN	1DC		CKMID	0	
CKMCCONM	270		CKMIDATA	430	
CKMCCONV	1F0		CKMIDCNA	4C4	
CKMCEND	430		CKMIDCNO	4C0	
CKMCFLG1	1D8		CKMIDCON	670	
CKMCHFAM	2F8		CKMIDFCN	668	4
CKMCICON	1EC		CKMIDFCV	668	10
CKMCIRSN	274		CKMIDFHU	668	2
CKMCPARM	1D8		CKMIDFIO	668	60
CKMCRCDF	430	4	CKMIDFI1	668	40
CKMCRCOK	430	0	CKMIDFI2	668	20
CKMCRSNV	278		CKMIDFLG	668	
CKMCTYPE	1E0		CKMIDFOR	668	8
CKMC1DMF	1D8	80	CKMIDFOV	668	80
CKMC1NDM	1D8	40	CKMIDMAC	A8C	
CKMC1OKW	1D8	20	CKMIDMA1	A8C	1
CKMDRCOK	430	0	CKMIDMA2	A8C	2

Name	Hex Offset	Hex Value
CKMIDMA3	A8C	3
CKMIDMA4	A8C	4
CKMIDMA5	A8C	5
CKMIDMA6	A8C	6
CKMIDMA7	A8C	7
CKMIDMCM	A88	
CKMIDMMT	A8D	
CKMIDMNA	4BC	
CKMIDMNO	4B8	
CKMIDNAM	67C	
CKMIDPMV	680	
CKMIDS	668	
CKMIDSBG	668	
CKMIDSEN	834	
CKMIDSHF	700	
CKMIDSI1	674	
CKMIDSI2	678	
CKMIDSOS	66C	
CKMID254	A04	
CKMID257	A08	
CKMIECAN	834	4
CKMIECKM	834	1
CKMIECNS	834	3
CKMIECTE	834	7
CKMIEDNS	834	5
CKMIEDWS	834	9
CKMIEIEC	834	A
CKMIEND	B20	6F0
CKMIESND	834	2
CKMIESTE	834	6
CKMIESWD	834	8
CKMIFCT	4B3	
CKMIFLG1	470	
CKMIFLG2	4B0	
CKMIFLG3	4B1	
CKMIFUDR	845	10
CKMIFUDS	845	2
CKMIFUIF	845	8
CKMIFUIM	845	1
CKMIFUNC	845	
CKMIFURC	845	60
CKMIFURD	845	80
CKMIFURI	845	20
CKMIFURM	845	E0
CKMIFURS	845	40
CKMIFUWU	845	4
CKMIHCTA	4A4	
CKMIICNA	52C	
CKMIICNO	528	
CKMIIDNA	534	
CKMIIDNO	530	
CKMIIEAD	847	D
CKMIIEDE	847	A
CKMIIEDF	847	7
CKMIIEEY	847	E
CKMIIEHD	847	B
CKMIIEIL	847	1
CKMIIEIM	847	9
CKMIIEIN	847	5
CKMIIEIR	847	8
CKMIIEMD	847	C
CKMIIEMH	847	F
CKMIIEMS	847	4
CKMIIEMT	847	3
CKMIIEOS	847	6
CKMIIESU	847	2
CKMIIEUN	847	0
CKMIIEYE	430	
CKMIIFFC	498	64
CKMIIFFI	49C	
CKMIIFG	510	
CKMIIFGC	510	40
CKMIIFGD	510	80
CKMIIFRC	850	
CKMIIFRT	874	
CKMIIFTS	658	
CKMIIMRC	854	
CKMIIXAC	A98	
CKMIIXAC_KEYUSED_DATA	AC0	80
CKMIIXAC_KEYUSED_DATALEN	AC0	40
CKMIIXAC_KEYUSED_SYSRC	AC0	10
CKMIIXAC_KEYUSED_SYSRSN	AC0	8
CKMIIXAC_KEYUSED_USERRC	AC0	20
CKMIIXAC_XDATA	AA8	
CKMIIXAC_XDATALEN	AAC	
CKMIIXAC_XEYECATCH	A99	
CKMIIXAC_XGROUPTOKEN	AB4	
CKMIIXAC_XKEYS	AC0	
CKMIIXAC_XMSGATTR	AC1	
CKMIIXAC_XMSGATTR_EXPRESS	AC1	40
CKMIIXAC_XMSGATTR_J3CONNECT	AC1	80
CKMIIXAC_XMSGTOKEN	AA0	
CKMIIXAC_XSTB	A9F	
CKMIIXAC_XSTB_NO	A9F	80
CKMIIXAC_XSTB_YES	A9F	40
CKMIIXAC_XSYSRC	AB8	
CKMIIXAC_XSYSRSN	ABC	
CKMIIXAC_XUSERRC	AB0	
CKMIIXAC_XVERSION	A98	
CKMIIXACL	AC1	2A
CKMIIXIF	A98	
CKMIIXIF_KEYUSED_ANSAREA	AC5	40
CKMIIXIF_KEYUSED_GROUPNAME	AC5	10
CKMIIXIF_KEYUSED_GROUPTOKEN	AC5	20
CKMIIXIF_KEYUSED_REQMBOX	AC5	80

Name	Hex Offset	Hex Value
CKMIIXIF_XANSAREA	ABC	
CKMIIXIF_XANSLEN	AC0	
CKMIIXIF_XEYECATCH	A99	
CKMIIXIF_XFUNCTION	AC9	
CKMIIXIF_XFUNCTION_ARM	AC9	8000
CKMIIXIF_XGROUPNAME	ACB	
CKMIIXIF_XGROUPTOKEN	AA0	
CKMIIXIF_XINFOLVL	AC4	
CKMIIXIF_XINFOLVL_GROUP	AC4	80
CKMIIXIF_XINFOLVL_MEMBER	AC4	40
CKMIIXIF_XKEYS	AC5	
CKMIIXIF_XPOLYJES	AC8	
CKMIIXIF_XPOLYJES_NO	AC8	40
CKMIIXIF_XPOLYJES_YES	AC8	80
CKMIIXIF_XREQMBOX	AA4	
CKMIIXIF_XREQTOKEN	AB4	
CKMIIXIF_XRSV0001	A9F	
CKMIIXIF_XSTATE	AC6	
CKMIIXIF_XSTATE_ACTIVE	AC6	40
CKMIIXIF_XSTATE_ANY	AC6	80
CKMIIXIF_XSYSTEM	AC7	
CKMIIXIF_XSYSTEM_ANY	AC7	80
CKMIIXIF_XSYSTEM_CURRENT	AC7	40
CKMIIXIF_XVERSION	A98	
CKMIIXIFL	ACB	3B
CKMIIXMB	A98	
CKMIIXMB_XEYECATCH	A99	
CKMIIXMB_XGROUPTOKEN	ABC	
CKMIIXMB_XMBOXNAME	AA0	
CKMIIXMB_XPOSTALET	AB8	
CKMIIXMB_XPOSTDATA	AB4	
CKMIIXMB_XPOSTXIT	AB0	
CKMIIXMB_XRSV0001	A9F	
CKMIIXMB_XSYSEVENT_NO	AC0	40
CKMIIXMB_XSYSEVENT_YES	AC0	80
CKMIIXMB_XSYSEVENTS	AC0	
CKMIIXMB_XVERSION	A98	
CKMIIXMBL	AC0	29
CKMIIXMC	A98	
CKMIIXMC_XEYECATCH	A99	
CKMIIXMC_XGROUPTOKEN	AB0	
CKMIIXMC_XMBOXNAME	AA0	
CKMIIXMC_XSTB	A9F	
CKMIIXMC_XSTB_NO	A9F	80
CKMIIXMC_XSTB_YES	A9F	40
CKMIIXMC_XVERSION	A98	
CKMIIXMCL	AB0	1C
CKMIIXMD	A98	
CKMIIXMD_XEYECATCH	A99	
CKMIIXMD_XGROUPTOKEN	AB0	
CKMIIXMD_XMBOXNAME	AA0	
CKMIIXMD_XSTB	A9F	
CKMIIXMD_XSTB_NO	A9F	80
CKMIIXMD_XSTB_YES	A9F	40
CKMIIXMD_XVERSION	A98	
CKMIIXMDL	AB0	1C
CKMIIXRM	A98	
CKMIIXRM_KEYUSED_MSGFETCH	AC5	80
CKMIIXRM_XDATA	AB0	
CKMIIXRM_XDATALEN	AB4	
CKMIIXRM_XEYECATCH	A99	
CKMIIXRM_XGROUPTOKEN	AC0	
CKMIIXRM_XKEYS	AC5	
CKMIIXRM_XMBOXNAME	AA0	
CKMIIXRM_XMSGFETCH	AC4	
CKMIIXRM_XMSGFETCH_ACKS	AC4	10
CKMIIXRM_XMSGFETCH_ALL	AC4	80
CKMIIXRM_XMSGFETCH_MESSAGES	AC4	40
CKMIIXRM_XMSGFETCH_SYSEVENT	AC4	20

Name	Hex Offset	Hex Value
CKMIIXRM_XMSGTOKEN	AB8	
CKMIIXRM_XRSV0001	A9F	
CKMIIXRM_XVERSION	A98	
CKMIIXRML	AC5	2E
CKMIIXSM	A98	
CKMIIXSM_KEYUSED_CONNECT	B1A	4
CKMIIXSM_KEYUSED_DATAALET	B1B	40
CKMIIXSM_KEYUSED_ECB	B1B	80
CKMIIXSM_KEYUSED_EXIT	B1A	10
CKMIIXSM_KEYUSED_MSGATTR	B1A	1
CKMIIXSM_KEYUSED_MSGTOKEN	B1A	2
CKMIIXSM_KEYUSED_RELEASE_CADS	B1B	20
CKMIIXSM_KEYUSED_REQMBOX	B1A	20
CKMIIXSM_KEYUSED_REQTOKEN	B1A	40
CKMIIXSM_KEYUSED_REQTYPE	B1A	80
CKMIIXSM_KEYUSED_RIPSIZE	B1B	10
CKMIIXSM_KEYUSED_SEGTYPE	B1A	8
CKMIIXSM_XCONNECT	AF0	
CKMIIXSM_XDATA	AC0	
CKMIIXSM_XDATAALET	AE0	
CKMIIXSM_XDATALEN	AC4	
CKMIIXSM_XECB	AE8	
CKMIIXSM_XEXIT	AEC	
CKMIIXSM_XEYECATCH	A99	
CKMIIXSM_XGROUPTOKEN	AF8	
CKMIIXSM_XKEYS	B1A	
CKMIIXSM_XKEYS1	B1B	
CKMIIXSM_XMBOXNAME	AA0	
CKMIIXSM_XMEMBER	AB0	
CKMIIXSM_XMSGATTR	A9F	
CKMIIXSM_XMSGATTR_EXPRESS	A9F	40
CKMIIXSM_XMSGATTR_J3CONNECT	A9F	80
CKMIIXSM_XMSGTOKEN	B0C	
CKMIIXSM_XREQMBOX	AD0	
CKMIIXSM_XREQTOKEN	AC8	
CKMIIXSM_XREQTYPE	B18	
CKMIIXSM_XREQTYPE_ASYNC	B18	80
CKMIIXSM_XREQTYPE_ASYNCACK	B18	20
CKMIIXSM_XREQTYPE_COMM	B18	10
CKMIIXSM_XREQTYPE_SYNC	B18	40
CKMIIXSM_XRESPDALT	AE4	
CKMIIXSM_XRESPDATA	B00	
CKMIIXSM_XRESPDLEN	B04	
CKMIIXSM_XRIPSIZE	B14	
CKMIIXSM_XRSV00001	B08	
CKMIIXSM_XSEGTYPE	B19	
CKMIIXSM_XSEGTYPE_ABORT	B19	8
CKMIIXSM_XSEGTYPE_FIRST	B19	40
CKMIIXSM_XSEGTYPE_LAST	B19	10
CKMIIXSM_XSEGTYPE_MIDDLE	B19	20
CKMIIXSM_XSEGTYPE_SINGLE	B19	80
CKMIIXSM_XUSERRC	AFC	
CKMIIXSM_XVERSION	A98	
CKMIIXSML	B1B	84
CKMIKRGS	834	
CKMIKRSF	840	
CKMIKRSN	840	
CKMIKRSS	841	
CKMIKRST	842	
CKMIKRSX	843	
CKMIKXX	844	
CKMIK29	844	1
CKMIK30	844	2
CKMIK34	844	3
CKMILSTX	846	
CKMILXAC	846	1
CKMILXIF	846	2
CKMILXMB	846	3
CKMILXMC	846	4
CKMILXMD	846	5
CKMILXRM	846	6
CKMILXSM	846	7
CKMILXUS	846	8
CKMIMBNR	484	
CKMIMBNS	474	
CKMIMCLV	5B8	
CKMIMEMV	538	
CKMIMMCO	520	
CKMIMMDR	524	

Name	Hex Offset	Hex Value
CKMIMMMD	51C	
CKMIMMPM	4C8	
CKMIMMRC	514	
CKMIMMST	518	
CKMIMMWK	65C	
CKMIMSGL	860	
CKMIOSEQ	4B4	
CKMIPXRD	4A4	8
CKMIPXRM	4A4	C
CKMIPXRP	4A4	4
CKMIRMAC	8A4	
CKMIRMED	87C	
CKMIRMEL	880	
CKMIRMET	884	
CKMIRMMD	88C	
CKMIRMML	890	
CKMIRMMT	894	
CKMIRMSN	8A0	
CKMIRSNC	84C	
CKMIRTNC	848	
CKMISECI	494	3
CKMISECS	0	F
CKMISMNA	864	
CKMISMRT	8AC	
CKMISTBI	494	
CKMISTCL	4E8	10
CKMISTEI	504	
CKMISTF	508	
CKMISTFE	508	20
CKMISTFI	508	80
CKMISTFM	508	40
CKMISTIF	498	
CKMISTMC	4E8	0
CKMISTME	500	
CKMISTMI	4F8	
CKMISTMM	4FC	
CKMISTMS	4D0	0
CKMISTSL	4D0	18
CKMITOKL	858	8
CKMIWUAD	660	5
CKMIWUCO	660	3
CKMIWUDD	660	4
CKMIWUDM	664	
CKMIWUDR	660	2
CKMIWUST	660	1
CKMIXEAC	847	1A
CKMIXEAE	847	19
CKMIXEAO	847	1B
CKMIXECB	458	
CKMIXEDA	847	2
CKMIXEEC	847	B
CKMIXEEE	847	5
CKMIXEEL	847	A
CKMIXEEO	847	9
CKMIXEER	847	6
CKMIXEES	847	7
CKMIXEEV	847	8
CKMIXEIB	847	16
CKMIXEID	847	14
CKMIXEIE	847	10
CKMIXEIG	847	12
CKMIXEIL	847	11
CKMIXEIN	847	18
CKMIXEIO	847	15
CKMIXEIP	847	13
CKMIXEIU	847	17
CKMIXERC	847	1
CKMIXERT	847	
CKMIXESE	847	C
CKMIXESI	847	F
CKMIXESM	847	E
CKMIXESO	847	D
CKMIXEZL	847	3
CKMIXEZT	847	4
CKMIXLLN	B20	88
CKMIXLST	A98	
CKMI1CAN	470	20
CKMI1CAP	470	80
CKMI1RST	470	40
CKMI2DCO	4B0	10
CKMI2DFP	4B0	2
CKMI2DMF	4B0	4
CKMI2DRV	4B0	8
CKMI2NIH	4B0	80
CKMI2ONE	4B0	40
CKMI2RCO	4B0	20
CKMI2WSG	4B0	1
CKMI3IFT	4B1	40
CKMI3RDD	4B1	80
CKMLEN	B20	B20
CKMSBEGN	8	
CKMSDCON	C	
CKMSDNAM	14	
CKMSEND	1D8	
CKMSFLG1	8	
CKMSFLG2	9	
CKMSHFAM	A0	
CKMSLEVN	18	
CKMSMEMV	20	
CKMSNIOE	10	
CKMSPARM	8	
CKMSRCCN	1D8	4
CKMSRCOK	1D8	0
CKMS1DRV	8	40
CKMS1HUP	8	10
CKMS1MBD	8	80
CKMS1OPV	8	20
CKMS2CAN	9	8
CKMS2CKV	9	20
CKMS2IOE	9	C0
CKMS2IO1	9	80
CKMS2IO2	9	40
CKMS2OPR	9	10
CKMVERN	4	1
CKMVERSN	4	
M00M1066	0	A98
M00M1068	0	A98
M00M1069	A98	
M00M1070	A98	
M00M1071	A98	
M00M1072	A98	
M00M1073	0	A98

$CKPRECV Information

$CKPRECV Heading Information

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

$CKPRECV Map

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

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		ALL BIT CONFIGURATIONS FOR CKRFLAG3 ARE DEFINED IN $HASPEQU			
		End of Comment			
14	(E)	BITSTRING	1	CKRFLAG3	Flag byte (Shadowed in CKWRECF3)
15	(F)	BITSTRING	1	CKRFLAG4	Flag byte
		1...		CKR4ILEV	"B'10000000'" Increment $CKPTLEV
		.1..		CKR4CFV	"B'01000000'" REASON=VOLATILE when dialog is entered
		..1.		CKR4OPV	"B'00100000'" Verify reconfiguration with operator possibly due to OPVERIFY=YES specified
		...1		CKR4FWC1	"B'00010000'" Forward CKPT1
		.... 1...		CKR4FWC2	"B'00001000'" Forward CKPT2
		.... .1..		CKR4OAR	"B'00000100'" Operator assistance requested (this is used for the issuance of HASP235 message)
		.... ..1.		CKR4RSM1	"B'00000010'" Resume CKPT1
		1		CKR4RSM2	"B'00000001'" Resume CKPT2
16	(10)	BITSTRING	1	CKRFLAG5	DISPER flag for HASPMSG
		1...		CKR5CRC	"B'10000000'" Reconfig Complete -255
		.1..		CKR5CRCO	"B'01000000'" Reconfig Cancelled by Operator -255
		..1.		CKR5CRCJ	"B'00100000'" Reconfig Cancelled by JES2 -255
17	(11)	BITSTRING	1	CKRFLAG6	More invocation flags
		1...		CKR6SOFT	"B'10000000'" Soft error (detected by JES2)
		.1..		CKR62NDR	"B'01000000'" Secondary reason code exists
18	(12)	CHARACTER	2	CKR2NDR	Secondary reason code
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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
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	CKRDMLST	"*-4" LAST DOM ID
				Comment	
				THE WTOR ECB	
				End of Comment	
112	(70)	ADDRESS	4	CKRECB (0)	ECB USED FOR ALL WTOR'S
136	(88)	ADDRESS	4	CKRSAVHF	ANCHOR FOR SAVED HFAM'S
140	(8C)	CHARACTER	8	CKRCKPTD	'CKPTDEF' when needed
148	(94)	CHARACTER	144	CKRESPON	ALL REPLIES TO WTOR'S COME HERE
				Comment	
				------ $BLDMSG MF=L List form of $BLDMSG	
				End of Comment	
292	(124)	SIGNED	4	CKRMSGL (0)	Control block ID
296	(128)	BITSTRING	4		Console ID
300	(12C)	ADDRESS	4		Address of the CART
304	(130)	ADDRESS	4		Pointer for JOBID
308	(134)	ADDRESS	4		Control block address
312	(138)	ADDRESS	4		Display routine address
316	(13C)	ADDRESS	4	(6)	6 word work area
340	(154)	ADDRESS	4		Caller's R11 value
344	(158)	BITSTRING	2		ROUT code for Message
346	(15A)	BITSTRING	2		Not used
348	(15C)	CHARACTER	4		Message ID
352	(160)	CHARACTER	1		Separator character
353	(161)	ADDRESS	1		Flag byte 1
354	(162)	ADDRESS	1		'DISPER'
355	(163)	ADDRESS	1		Flag byte 2
356	(164)	ADDRESS	1		Flag byte 3
357	(165)	CHARACTER	8		Symbolic name of dest.
365	(16D)	BITSTRING	15		Not used
380	(17C)	ADDRESS	4	(0)	Ensure multiple of 4
380	(17C)	ADDRESS	2	(0)	
380	(17C)	ADDRESS	4	CKRCKGW	Spare CKG pointer
384	(180)	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	
392	(188)	SIGNED	4	CKRSDBLD (0)	Control block ID
396	(18C)	BITSTRING	4		Console ID
400	(190)	ADDRESS	4		Address of the CART
404	(194)	ADDRESS	4		Pointer for JOBID
408	(198)	ADDRESS	4		Control block address
412	(19C)	ADDRESS	4		Display routine address
416	(1A0)	ADDRESS	4	(6)	6 word work area
440	(1B8)	ADDRESS	4		Caller's R11 value
444	(1BC)	BITSTRING	2		ROUT code for Message
446	(1BE)	BITSTRING	2		Not used
448	(1C0)	CHARACTER	4		Message ID
452	(1C4)	CHARACTER	1		Separator character
453	(1C5)	ADDRESS	1		Flag byte 1

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
454	(1C6)	ADDRESS	1		'DISPER'
455	(1C7)	ADDRESS	1		Flag byte 2
456	(1C8)	ADDRESS	1		Flag byte 3
457	(1C9)	CHARACTER	8		Symbolic name of dest.
465	(1D1)	BITSTRING	15		Not used
480	(1E0)	ADDRESS	4	(0)	Ensure multiple of 4
480	(1E0)	ADDRESS	2	(0)	

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

480	(1E0)	BITSTRING	72	CKRVECTR	RESPONSE VECTOR
552	(228)	BITSTRING	72	CKRHFAME	TEMPORARY HFAME
624	(270)	BITSTRING	1	CKRMFLAG	FLAG BYTE USED FOR MESSAGE CREATION

Comment

PARAMETER LIST FOR KTRK1IO ROUTINE

End of Comment

628	(274)	ADDRESS	4	CKRPARMX (0)	PARAMETER LIST FOR $CALLS
628	(274)	ADDRESS	4	CKRTCKG1	ADDRESS OF CKG1
632	(278)	ADDRESS	4	CKRTCKG2	ADDRESS OF CKG2
636	(27C)	ADDRESS	4	CKRTKYR1	ADDRESS OF KEY COMP FOR DS1
640	(280)	ADDRESS	4	CKRTKYR2	ADDRESS OF KEY COMP FOR DS2
644	(284)	ADDRESS	4	CKRTKYW1	ADDRESS KEY WRITE FOR DS1
648	(288)	ADDRESS	4	CKRTKYW2	ADDRESS KEY WRITE FOR DS2
648	(288)	X'274'	0	CKRPARM	"CKRPARMX,*-CKRPARMX" PARAMETER LIST
628	(274)	BITSTRING	12	CKRTQE	TQE AREA
652	(28C)	ADDRESS	4	CKRCVCKG	ADDRESS OF CKG WHICH HAS HAD AN I/O ERROR AS A COMPANION
656	(290)	ADDRESS	4		RESERVED FOR FUTURE USE
660	(294)	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

660	(294)	X'0'	0	CKRPROC	"0" Process the function
660	(294)	X'4'	0	CKRFNSH	"4" Finish up remaining work
660	(294)	X'8'	0	CKRCLEN	"8" Clean up the work
660	(294)	X'C'	0	CKRDRVF	"12" Handle driver failure
660	(294)	X'294'	0	CKRSIZE	"*-CKR" SIZE OF WORK AREA

$CKPRECV Cross Reference

Name	Hex Offset	Hex Value
CKR	0	
CKRACODE	20	
CKRAERRC	1C	
CKRCACT	18	
CKRCKG	4	
CKRCKGW	17C	
CKRCKG2	8	
CKRCKPTD	8C	
CKRCLEN	294	8
CKRCOUNT	14	
CKRCVCKG	28C	
CKRDMFST	28	
CKRDMINT	6C	
CKRDMLST	6C	6C
CKRDM233	28	
CKRDM235	2C	
CKRDM237	30	
CKRDM270	34	
CKRDM271	38	
CKRDM272	3C	
CKRDM273	40	
CKRDM275	44	
CKRDM276	48	
CKRDM277	4C	
CKRDM278	50	
CKRDM281	54	
CKRDM282	58	
CKRDM284	5C	
CKRDM285	60	
CKRDM294	64	
CKRDM299	68	
CKRDRVF	294	C
CKRECB	70	
CKRECLST	180	
CKRESPON	94	
CKRFLAG1	C	
CKRFLAG2	D	
CKRFLAG3	E	
CKRFLAG4	F	
CKRFLAG5	10	
CKRFLAG6	11	
CKRFNSH	294	4
CKRHFAME	228	
CKRID	0	
CKRMFLAG	270	
CKRMSGL	124	C2D3C440
CKRPARM	288	274
CKRPARMX	274	
CKRPROC	294	0
CKRRTCD1	24	
CKRSAVHF	88	
CKRSDBLD	188	C2D3C440
CKRSIZE	294	294
CKRTCKG1	274	
CKRTCKG2	278	
CKRTKYR1	27C	
CKRTKYR2	280	
CKRTKYW1	284	
CKRTKYW2	288	
CKRTQE	274	
CKRVECTR	1E0	
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
CKR2NDR	12	
CKR2OPT7	D	20
CKR2RECR	D	80
CKR4CFV	F	40
CKR4FWC1	F	10
CKR4FWC2	F	8
CKR4ILEV	F	80
CKR4OAR	F	4
CKR4OPV	F	20
CKR4RSM1	F	2
CKR4RSM2	F	1
CKR5CRC	10	80
CKR5CRCJ	10	20
CKR5CRCO	10	40
CKR6SOFT	11	80
CKR62NDR	11	40

$CKPTQCB Information

$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
16	(10)	DBL WORD	8	CKQREGS (2)	R0 and R1 on entry to service.
32	(20)	ADDRESS	4	CKQRTNA	Address of routine
36	(24)	ADDRESS	4	CKQPCE	Address of associated PCE
36	(24)	X'28'	0	CKQLEN	"*-CKPTQCB" Length of CKPTQCB

$CKPTQCB Cross Reference

Name	Hex Offset	Hex Value
CKPTQCB	0	
CKQID	0	C3D2D840
CKQLEN	24	28
CKQNEXT	8	
CKQPCE	24	
CKQREGS	10	
CKQRTNA	20	
CKQVERN	4	1
CKQVERSN	4	

$CKPWORK Information

$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
312	(138)	ADDRESS	4	CKPXREQ	Pointer to XREQ area
316	(13C)	SIGNED	4		Reserved for future use
320	(140)	DBL WORD	8	CKPGTLKT	TIME SYSTEM GOT CKPT LOCK
328	(148)	DBL WORD	8	CKPRLSET	TIME SYSTEM GAVE UP LOCK
336	(150)	SIGNED	4	CKPHLTIM	Checkpoint held time
340	(154)	SIGNED	4	CKPDRMTM	Checkpoint dormancy time
344	(158)	SIGNED	2	CKPUWORK	General work area
346	(15A)	BITSTRING	4	CKPUMASK	General work mask
350	(15E)	BITSTRING	1	CKPFLAG1	FLAG BYTE --
		1...		CKP1FILL	"B'10000000'" TGB HAS BEEN FILLED
Comment					
COMPATABILITY					
End of Comment					
		.1..		CKP1JQTR	"B'01000000'" Reconcile JQTs needed
		..1.		CKP1OFLW	"B'00100000'" CH LOG IS OVERFLOWING
		...1		CKP1SFMI	"B'00010000'" SPOOL FULL MSG ISSUED
		.... 1...		CKP1PCAP	"B'00001000'" CKVR subtask posted
		.... .1..		CKP1VLEN	"B'00000100'" CURRENT CB IS IN VARIABLE LENGTH SECTION OF CKPT
		.... ..1.		CKP1LHBS	"B'00000010'" CKPQSOLD is zero because the lock was held by the system
		1		CKP1STOP	"B'00000001'" When reach end of DAS chain, do not start over (used in KBLOB)
351	(15F)	BITSTRING	1		Reserved for future use
352	(160)	SIGNED	4	CKPSRCHO	Search offset within extent

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
356	(164)	BITSTRING	12	CKPSTQE	$STIMER QUEUE ELEMENT
368	(170)	BITSTRING	12	CKPMITQE	$STIMER QUEUE ELEMENT FOR MAX INTERVAL TO WAIT BEFORE INITIATING A CHECKPOINT WRITE
380	(17C)	BITSTRING	24	CKPAPECB	HASPCKAP ECB
404	(194)	SIGNED	4	CKPAPTIM	TIME OF LAST HASPCKAP POST
408	(198)	SIGNED	4	CKPBTIME	SPOOL WARNING TIME STAMP
412	(19C)	ADDRESS	4	CKPPALA	ADDRESS OF PAGE ADDR LIST
416	(1A0)	ADDRESS	4	CKPTRPTR	ADDRESS OF THE CHECKPOINT TRACE WORK AREA
420	(1A4)	ADDRESS	4	CKPCLENT	ADDRESS OF THE NEXT AVAILABLE ENTRY IN THE CHANGE LOG
424	(1A8)	SIGNED	4	CKPUSER1	RESERVED FOR USER
428	(1AC)	SIGNED	4	CKPUSER2	RESERVED FOR USER
432	(1B0)	SIGNED	4	CKPSTCK	TIMER SAVE AREA
436	(1B4)	SIGNED	4	CKPDASN	ADDRESS OF NEXT DAS FOR BLOB
440	(1B8)	BITSTRING	32	CKPBLMPR	Previous mask of volumes in the BLOB (from last time through KBLOB)
472	(1D8)	BITSTRING	32	CKPBLMSK	Mask of volumes in BLOB with affinity for this member
504	(1F8)	BITSTRING	32	CKPBLMFN	Mask of vols in BLOB at end of KBLOB (may include vols without affinity for the member)
536	(218)	BITSTRING	32	CKPBLMWK	Work mask for KBLOB
568	(238)	BITSTRING	1		Reserved for future use
569	(239)	BITSTRING	1	CKPDASP2	'M' of next DAS to use when filling BLOB round- robin from the DASes
570	(23A)	SIGNED	2	CKPRETRY	I/O ERROR RETRY COUNTER +1
572	(23C)	CHARACTER	4	CKPRLSID	SYSTEM NAME AND AFFINITY
576	(240)	ADDRESS	1	CKPRLAFF	FROM $ESYS,RESET=
577	(241)	BITSTRING	1	CKPBLCNT	COUNT OF SPOOLS IN BLOB
578	(242)	SIGNED	2	CKPTGESZ	Max num of entries in BLOB
580	(244)	SIGNED	4	CKPQLOCK (0)	Query Lock work area
580	(244)	SIGNED	4	CKPQSSID	System ID of lock holder
584	(248)	CHARACTER	16	CKPQSSNM	System name of lock holder
600	(258)	ADDRESS	4	CKPQCKGA	CKG address
600	(258)	X'18'	0	CKPQLLEN	"*-CKPQLOCK" Length of Query Lock
600	(258)	X'247'	0	CKPSTLID	"CKPQSSID+3" 1 byte lock id to be cleared via $SYS,RESET=
604	(25C)	ADDRESS	4	CKPSQDA	Query lock SQD pointer
608	(260)	SIGNED	4	CKPQSOLD	System ID of previous CF lock holder
616	(268)	DBL WORD	8	CKPCSTRT	STCK WHEN CKPT STARTED CYCLE (KRESERVE ISSUED)
624	(270)	ADDRESS	4	CKPECMBF	Addr of first CMB for reset of checkpoint lock FIFO q
628	(274)	ADDRESS	4	CKPECNID	Console id for reset lock messages
632	(278)	CHARACTER	8	CKPECART	CART for reset lock msgs
640	(280)	ADDRESS	4	CKPKITPS	Address of KIT PSTs
644	(284)	SIGNED	4		Reserved
648	(288)	DBL WORD	8	(0)	
648	(288)	X'150'	0	CKPPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA

$CKPWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CKPAPECB	17C		CKPECNID	274	
CKPAPTIM	194		CKPFLAG1	15E	
CKPBLCNT	241		CKPGTLKT	140	
CKPBLMFN	1F8		CKPHLTIM	150	
CKPBLMPR	1B8		CKPKITPS	280	
CKPBLMSK	1D8		CKPMITQE	170	
CKPBLMWK	218		CKPPALA	19C	
CKPBTIME	198		CKPPCEWS	288	150
CKPCLENT	1A4		CKPQCKGA	258	
CKPCSTRT	268		CKPQLLEN	258	18
CKPDASN	1B4		CKPQLOCK	244	
CKPDASP2	239		CKPQSOLD	260	
CKPDRMTM	154		CKPQSSID	244	
CKPECART	278		CKPQSSNM	248	
CKPECMBF	270		CKPRETRY	23A	

$CKPWORK Cross Reference

Name	Hex Offset	Hex Value
CKPRLAFF	240	
CKPRLSET	148	
CKPRLSID	23C	
CKPSQDA	25C	
CKPSRCHO	160	
CKPSTCK	1B0	
CKPSTLID	258	247
CKPSTQE	164	
CKPTGESZ	242	
CKPTRPTR	1A0	
CKPUMASK	15A	
CKPUSER1	1A8	
CKPUSER2	1AC	
CKPUWORK	158	
CKPXREQ	138	
CKP1FILL	15E	80
CKP1JQTR	15E	40
CKP1LHBS	15E	2
CKP1OFLW	15E	20
CKP1PCAP	15E	8
CKP1SFMI	15E	10
CKP1STOP	15E	1
CKP1VLEN	15E	4
PCE	0	

$CKW Information

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

$CKW Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CKW	CKPT WORK AREA MAPPING
0	(0)	CHARACTER	4	CKWID	CONTROL BLOCK ID
4	(4)	ADDRESS	1	CKWVERSN	CONTROL BLOCK VERSION
4	(4)	X'3'	0	CKWVERN	"3" Version number
5	(5)	BITSTRING	1		Reserved
6	(6)	BITSTRING	1	CKWFLAG1	Ckpt work area flags
		1...		CKW1FNLW	"B'10000000'" FINAL CHECKPOINT DS WRITE
		.1..		CKW1OFLW	"B'01000000'" CHANGE LOG OVERFLOWING
		..1.		CKW1ESUP	"B'00100000'" SUPPRESS I/O ERROR MESSAGES
		...1		CKW1S266	"B'00010000'" SUPPRESS 266/267 MESSAGES DURING KFORMAT ROUTINE
		.... 1...		CKWLDIAG	"B'00001000'" THE CHECKPOINT WAS RECONFIGURED (SET BY DIALOG, RESET AFTER OBTAINING THE LOCK)
		.... .1..		CKW1SPIO	"B'00000100'" SPLIT THE IO ACROSS 2 CALLS TO KPRIMW (ONE TO START THE I/O ONE TO WAIT FOR IT)
		.... ..1.		CKW1SPSC	"B'00000010'" THIS IS THE SECOND CALL TO KPRIMW (TO WAIT FOR THE I/O IF IT WAS STARTED)
7	(7)	BITSTRING	1	CKWFLAG2	CKPT work area flags
		1...		CKW2R1LS	"B'10000000'" LAST CKPT PHASE WAS RD 1
		.1..		CKW2R2LS	"B'01000000'" LAST CKPT PHASE WAS RD 2
		..1.		CKW2PWLS	"B'00100000'" LAST CKPT PHASE WAS PRM W
		...1		CKW2IWLS	"B'00010000'" LAST CKPT PHASE WAS INT W
		.... 1...		CKW2FWLS	"B'00001000'" LAST CKPT PHASE WAS FIN W
		.... .1..		CKW2FMLS	"B'00000100'" LAST CKPT PHASE WAS FMT W
		1		CKW2INTR	"B'00000001'" INIT owner reset in lock
8	(8)	BITSTRING	1	CKWSCAN	$SCAN Work byte
		1...		CKWSCF	"B'10000000'" STRNAME= was specified
		.1..		CKWSDSN	"B'01000000'" DSN= was just specified
		..1.		CKWSVOL	"B'00100000'" VOL= was just specified

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
8	(8)	X'E0'	0	CKWSCNL	"CKWSCF+CKWSDSN+CKWSVOL" (NEW)CKPTn level bits
		1		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
		1...		CKW3FMFX	"B'10000000'" KFORMAT fixed pages for I/O to DASD
		.1..		CKW3FMCP	"B'01000000'" KFORMAT needs to copy pages to I/O area
		...1		CKW3R2WP	"B'00010000'" Wrapping active for READ2
		.... 1...		CKW3PWWP	"B'00001000'" Wrapping active for primary write
		.... .1..		CKW3NOPT	"B'00000100'" Do not optimize writes
10	(A)	BITSTRING	1	CKWFLAG4	CKPT Work Flag 4
		1...		CKW4WTO1	"B'10000000'" VOLATILE=ONECKPT=WTOR
		.1..		CKW4IGN1	"B'01000000'" VOLATILE=ONECKPT=IGNORE
		..1.		CKW4DIA1	"B'00100000'" VOLATILE=ONECKPT=DIALOG
		...1		CKW4WTOR	"B'00010000'" VOLATILE=ALLCKPT=WTOR
		.... 1...		CKW4IGNO	"B'00001000'" VOLATILE=ALLCKPT=IGNORE
		.... .1..		CKW4DIAG	"B'00000100'" VOLATILE=ALLCKPT=DIALOG
		.... ..1.		CKW4P1V	"B'00000010'" CKPT1 previously volatile
		1		CKW4P2V	"B'00000001'" CKPT2 previously volatile
11	(B)	BITSTRING	1	CKWFLAG5	CKPT Work Flag 5
		1...		CKW51VOL	"B'10000000'" CKPT1 is volatile
		.1..		CKW51NVL	"B'01000000'" CKPT1 is non-volatile
		..1.		CKW52VOL	"B'00100000'" CKPT2 is volatile
		...1		CKW52NVL	"B'00010000'" CKPT2 is non-volatile
		.... 1...		CKW5STRL	"B'00001000'" Need STRLIST on SDUMPX
		.... .1..		CKW5PROT	"B'00000100'" CKPT memory read-only
		.... ..1.		CKW5PMST	"B'00000010'" Master record is read-only
12	(C)	BITSTRING	1	CKWRECF3	Shadow copy of CKRFLAG3
13	(D)	BITSTRING	3	CKWRESV1	Reserved for future IBM use
16	(10)	BITSTRING	4	CKWRCID	Connection id of member holding the lock if the reserve data set is on a structure
20	(14)	ADDRESS	4	CKWLKIT	Local KIT information
24	(18)	SIGNED	2	CKWLKNUM	Number of local KITs
26	(1A)	BITSTRING	1		Reserved
27	(1B)	BITSTRING	1	CKWLSTSY	Prior memb that wrote CKPT
28	(1C)	SIGNED	4	CKWMAXRC	Maximum # of 4K CKPT pages
32	(20)	ADDRESS	4	CKWIO24K	I/O area to 4K page index
36	(24)	ADDRESS	4	CKWCKMA	Address of CKM control blk
40	(28)	ADDRESS	4	CKWPPLA	ADDRESS OF PAGE POINTER LIST
44	(2C)	ADDRESS	4	CKWCTWA	ADDRESS OF CKPT TRACE WORK AREA
48	(30)	SIGNED	4	CKWERREG (16)	SAVE AREA FOR REGS IF ERROR
112	(70)	ADDRESS	4	CKWCURCG	CKG OF DS BEING PROCESSED
116	(74)	SIGNED	4	CKWMSTRL	Len of $MASTERI page fixed
120	(78)	SIGNED	2	CKWLIRCT	LOST INTERRUPT RETRY COUNTER
122	(7A)	SIGNED	2	CKWPCIRC	Record count for PCIs
122	(7A)	X'7D0'	0	CKWPCICT	"2000" PCI frequency value

Comment

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

End of Comment

124	(7C)	SIGNED	4	CKWCKPTN	Number of $CKPTs issued
128	(80)	DBL WORD	8	CKWMVSWT	Amount of wall-clock time in microseconds that JES2 is idle (MVS WAIT)
136	(88)	DBL WORD	8	CKWQSUSE	Amount of wall-clock time in microseconds that PCEs were actively using the queues ($QSUSE)
144	(90)	SIGNED	4	CKWWTTM	Total PCE wait time before obtaining the queues (in units of 16 microseconds)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
148	(94)	SIGNED	4	CKWOPTCK	Number of $CKPTs (CALEs) skipped due to CKPT optimization
152	(98)	SIGNED	4	CKWOPT4K	Number of 4K pages skipped due to CKPT optimization
156	(9C)	SIGNED	4	CKWPAGCT	4K pages in current I/O
160	(A0)	SIGNED	4	CKWCBCNT	CBs in change log for I/O
164	(A4)	SIGNED	4	CKWCKPSZ	Size of checkpoint data
				Comment	
				CKC fixed area work area	
				End of Comment	
168	(A8)	ADDRESS	4	CKWCKCLP	1st non-page fixed byte at beginning of CKC
172	(AC)	ADDRESS	4	CKWCKCSP	Start of page fixed area at end of CKC
176	(B0)	ADDRESS	4	CKWCKCLW	Max low area in CKC used
180	(B4)	ADDRESS	4	CKWCKCHW	Max high area in CKC used
184	(B8)	ADDRESS	4	CKWCKCTM	Time of last CKC adjustment
				Comment	
				The following are work areas used in building channel programs (routines KB4KCCWS, KBCLCCWS)	
				End of Comment	
188	(BC)	SIGNED	2	CKWRECNT	Current adjacent record cnt
190	(BE)	BITSTRING	1	CKWRWOP	The R/W CCW op code
191	(BF)	BITSTRING	1	CKWCCWFL	CCW build flag byte
		1...		CKWCECKD	"B'10000000'" Build ECKD CCWs
		.1..		CKWCADJ	"B'01000000'" Adjacent records flag
		..1.		CKWC1ST	"B'00100000'" 1st CCW packet added
192	(C0)	ADDRESS	4	CKWCCWA	Pointer to last used CCW
196	(C4)	ADDRESS	4	CKWCKDA	Pointer to available data area
200	(C8)	ADDRESS	4	CKWCTLBA	1st CTLB used to build CCWs
204	(CC)	ADDRESS	4	CKWCTLB0	Zero-th byte of CTLBs
208	(D0)	ADDRESS	4	CKWFIXST	Starting addr of fix-list
212	(D4)	SIGNED	4	CKWCLSTA	Record # for previous CCWs
216	(D8)	ADDRESS	4	CKWSHLST	Address of share list
220	(DC)	ADDRESS	4	CKWIOLST	Address of I/O needed list
				Comment	
				General parameter list	
				End of Comment	
224	(E0)	SIGNED	4	(0)	
224	(E0)	BITSTRING	0	CKWPARMS (0)	GENERAL PARAMETER LIST
224	(E0)	ADDRESS	4	CKWPARM1	PARAMETER WORD 1
228	(E4)	ADDRESS	4	CKWPARM2	PARAMETER WORD 2
232	(E8)	ADDRESS	4	CKWPARM3	PARAMETER WORD 3
236	(EC)	ADDRESS	4	CKWPARM4	PARAMETER WORD 4
240	(F0)	ADDRESS	4	CKWPARM5	PARAMETER WORD 5
244	(F4)	ADDRESS	4	CKWPARM6	PARAMETER WORD 6
244	(F4)	X'18'	0	CKWPARML	"*-CKWPARMS" LENGTH OF GENERAL PARM LIST
248	(F8)	BITSTRING	8	CKWLKEY1	CKPT1 LOCK KEY COMPARAND VAL
256	(100)	BITSTRING	8	CKWLKEY2	CKPT2 LOCK KEY COMPARAND VAL
264	(108)	BITSTRING	8	CKWLKVL1	CKPT1 LOCK KEY WRITE VALUE
272	(110)	BITSTRING	8	CKWLKVL2	CKPT2 LOCK KEY WRITE VALUE
280	(118)	SIGNED	4	CKWKT1RC	KTRK1IO - RETURN CODE SAVE
284	(11C)	SIGNED	4	CKWCT1RC	CFTRK1IO - return code save
288	(120)	SIGNED	4	CKWCFAIL	CFTRK1IO - failing CKG
292	(124)	SIGNED	4	CKWDFAIL	KTRK1IO - failing CKG
296	(128)	ADDRESS	4	CKWCFTD	CF Trace data table
300	(12C)	SIGNED	4		Reserved
304	(130)	DBL WORD	8	CKWKT1PK	KTRK1IO - 1ST CCW PACKET (PSEUDO TIC CCW)
312	(138)	DBL WORD	8	CKWINITM	Time IRDA got the CKPT data set lock

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
320	(140)	DBL WORD	8	CKWCFWTM	Time CKPT started waiting for CF (CFWAIT)
328	(148)	SIGNED	4	CKWCFWRE	R14 at time CFWAIT called
332	(14C)	SIGNED	4	CKWFMCKG	CKG work area - KFORMAT
336	(150)	SIGNED	2	CKWXCFAS	XCF ASID
338	(152)	BITSTRING	6		Reserved for future use
344	(158)	DBL WORD	8	(0)	Align next field
344	(158)	CHARACTER	8	CKWCFLVL	$CKPTLEV when CF subtask is posted
344	(158)	X'15C'	0	CKWCFLVN	"CKWCFLVL+4,4,C'F'" 4 byte level for PLX code
352	(160)	DBL WORD	8	CKWR2LEV	CKPT level at last Read 2
360	(168)	DBL WORD	8	CKWWRLEV	CKPT level at last IW/FW
368	(170)	SIGNED	4	CKWRECB (0)	CKPT RESERVE ECB
392	(188)	BITSTRING	12	CKWKSTQE	TIMER ELEMENT FOR CKPT SERVICES
404	(194)	SIGNED	4	CKWQECB (0)	KWRITE HASP272 msg ecb
428	(1AC)	CHARACTER	8	CKWQREPL	KWRITE HASP272 reply area
436	(1B4)	BITSTRING	4	CKWCONID	Dialog console id
				Comment	

				DOM IDs for HASP256 message	

				End of Comment	
440	(1B8)	SIGNED	4	CKWDRNC1	DOMID FOR $HASP256 NEWCKPT1
444	(1BC)	SIGNED	4	CKWDRNC2	DOMID FOR $HASP256 NEWCKPT2
448	(1C0)	CHARACTER	80	CKWMSG	MESSAGE WORK AREA
				Comment	
				------- $BLDMSG MF=L List form of $BLDMSG	
				End of Comment	
528	(210)	SIGNED	4	CKWBLMSG (0)	Control block ID
532	(214)	BITSTRING	4		Console ID
536	(218)	ADDRESS	4		Address of the CART
540	(21C)	ADDRESS	4		Pointer for JOBID
544	(220)	ADDRESS	4		Control block address
548	(224)	ADDRESS	4		Display routine address
552	(228)	ADDRESS	4	(6)	6 word work area
576	(240)	ADDRESS	4		Caller's R11 value
580	(244)	BITSTRING	2		ROUT code for Message
582	(246)	BITSTRING	2		Not used
584	(248)	CHARACTER	4		Message ID
588	(24C)	CHARACTER	1		Separator character
589	(24D)	ADDRESS	1		Flag byte 1
590	(24E)	ADDRESS	1		'DISPER'
591	(24F)	ADDRESS	1		Flag byte 2
592	(250)	ADDRESS	1		Flag byte 3
593	(251)	CHARACTER	8		Symbolic name of dest.
601	(259)	BITSTRING	15		Not used
616	(268)	ADDRESS	4	(0)	Ensure multiple of 4
616	(268)	ADDRESS	2	(0)	
616	(268)	SIGNED	4	CKWPPL (0)	PURGE PARAMETER LIST
632	(278)	SIGNED	4	(0)	ALIGN TO FULL WORD BOUNDARY
632	(278)	CHARACTER	12	CKWSTAR (0)	STAR PARM LIST MAP
632	(278)	SIGNED	4	STARUCBA (0)	UCB ADDRESS
632	(278)	SIGNED	4	STARDCTA (0)	DEVICE TABLE ADDRESS
632	(278)	BITSTRING	3		
635	(27B)	BITSTRING	1	STARTYPE	DEVICE TYPE
636	(27C)	BITSTRING	1	STARFLGS	FUNCTION AND OPTIONS
		1...		STARFUNC	"B'10000000'" FUNCTION: 0=TRKBAL, 1=TRKCAP
		.1..		STARMAXS	"B'01000000'" 1=MAXSIZE REQUESTED
		..1.		STARREMV	"B'00100000'" 1=REMOVE REQUESTED
		...1		STARUBAL	"B'00010000'" 1=CALLER PROVIDED BALANCE

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		STARLAST	"B'00001000'" 1=SPECIAL LAST RCD REQUEST
		.... .11.		STARDTU	"B'00000110'" DVCT ENTRY SOURCE FLAGS: 00=DVCT ENTRY ADDRESS PROVIDED 01=RESERVED 10=UCB ADDRESS PROVIDED 11=DEVICE TYPE PROVIDED
		1		STARLOC	"B'00000001'" LOC=ANY. DEVTAB OR UCB ABOVE THE LINE
637	(27D)	BITSTRING	1		RESERVED
638	(27E)	SIGNED	2	STARBAL	TRACK BALANCE
640	(280)	SIGNED	4	STARRKDD (0)	RECORD INFO AS DEFINED BELOW
640	(280)	BITSTRING	1	STARR	RECORD NUMBER
641	(281)	BITSTRING	1	STARKL	KEY LENGTH
642	(282)	SIGNED	2	STARDL	DATA LENGTH
644	(284)	SIGNED	4		Reserved
648	(288)	DBL WORD	8	CKWRESVS (0)	ISGENQ MF=L begins here MACDATE -01/23/13-<2>
		1		CKWRESV_XCOND_NO	"X'01'"
		.... ..1.		CKWRESV_XCOND_YES	"X'02'"
		1		CKWRESV_XREQUEST_OBTAIN	"X'01'"
		.... ..1.		CKWRESV_XREQUEST_CHANGE	"X'02'"
		11		CKWRESV_XREQUEST_RELEASE	"X'03'"
0	(0)	X'288'	0	M00M1067	"CKWRESV" ++ ISGENQ NAME
648	(288)	DBL WORD	8	CKWRESV (0)	++ ISGENQ PARM LIST
648	(288)	BITSTRING	1	CKWRESV_XVERSION	++ INPUT XVERSION
649	(289)	CHARACTER	1	CKWRESV_XRSV0000	++ RESERVED
650	(28A)	BITSTRING	1	CKWRESV_XSCOPE	++ XSCOPE
650	(28A)	X'1'	0	CKWRESV_XSCOPE_STEP	"1" ++ XSCOPE.STEP KEYWORD
650	(28A)	X'2'	0	CKWRESV_XSCOPE_SYSTEM	"2" ++ XSCOPE.SYSTEM KEYWORD
650	(28A)	X'3'	0	CKWRESV_XSCOPE_SYSTEMS	"3" ++ XSCOPE.SYSTEMS KEYWORD
650	(28A)	X'3'	0	CKWRESV_XSCOPE_SYSPLEX	"3" ++ XSCOPE.SYSPLEX KEYWORD
651	(28B)	BITSTRING	1	CKWRESV_XCONTROL	++ XCONTROL
651	(28B)	X'1'	0	CKWRESV_XCONTROL_SHARED	"1" ++ XCONTROL.SHARED KEYWORD
651	(28B)	X'2'	0	CKWRESV_XCONTROL_EXCLUSIVE	"2" ++ XCONTROL.EXCLUSIVE KEYWORD
652	(28C)	BITSTRING	1	CKWRESV_XFLAGS1	++ FIELD_LABEL
		.1..		CKWRESV_XTEST_YES	"B'01000000'" ++ XTEST.YES KEYWORD
		..1.		CKWRESV_XCONTENTIONACT_FAIL	"B'00100000'" ++ XCONTENTIONACT.FAIL KEYWORD
		...1		CKWRESV_XWAITTYPE_ECB	"B'00010000'" ++ XWAITTYPE.ECB KEYWORD
		.... 1...		CKWRESV_XRESLIST_YES	"B'00001000'" ++ XRESLIST.YES KEYWORD
		.... .1..		CKWRESV_XENQMAX_NO	"B'00000100'" ++ XENQMAX.NO KEYWORD
		.... ..1.		CKWRESV_XRNL_NO	"B'00000010'" ++ XRNL.NO KEYWORD
		1		CKWRESV_XQNAME_DO_NOT_OVERRIDE	"B'00000001'" ++ XQNAME.DO_NOT_OVERRIDE KEYWORD
653	(28D)	BITSTRING	1	CKWRESV_XFLAGS2	++ FIELD_LABEL
		1...		CKWRESV_XRESERVEVOLUME_YES	

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
					"B'10000000'" ++ XRESERVEVOLUME.YES KEYWORD
		.1..		CKWRESV_XSYNCHRES_YES	
					"B'01000000'" ++ XSYNCHRES.YES KEYWORD
		..1.		CKWRESV_XSYNCHRES_NO	
					"B'00100000'" ++ XSYNCHRES.NO KEYWORD
		...1		CKWRESV_XCONTROL_DO_NOT_OVERRIDE	
					"B'00010000'" ++ XCONTROL.DO_NOT_OVERRIDE KEYWORD
		.... 1...		CKWRESV_XSCOPE_DO_NOT_OVERRIDE	
					"B'00001000'" ++ XSCOPE.DO_NOT_OVERRIDE KEYWORD
		.... .1..		CKWRESV_XRNL_DO_NOT_OVERRIDE	
					"B'00000100'" ++ XRNL.DO_NOT_OVERRIDE KEYWORD
		.... ..1.		CKWRESV_XSYNCHRES_DO_NOT_OVERRIDE	
					"B'00000010'" ++ XSYNCHRES.DO_NOT_OVERRIDE KEYWORD
		1		CKWRESV_XRNAME_DO_NOT_OVERRIDE	
					"B'00000001'" ++ XRNAME.DO_NOT_OVERRIDE KEYWORD
654	(28E)	BITSTRING	1	CKWRESV_XFLAGS3	
					++ FIELD_LABEL
		1...		CKWRESV_KEYUSED_CONTROL	
					"B'10000000'" ++ KEYUSED.CONTROL KEYWORD
		1		CKWRESV_XRNAMELEN_DO_NOT_OVERRIDE	
					"B'00000001'" ++ XRNAMELEN.DO_NOT_OVERRIDE KEYWORD
655	(28F)	BITSTRING	1	CKWRESV_XFLAGS4	
					++ FIELD_LABEL
		1		CKWRESV_XUCB@_DO_NOT_OVERRIDE	
					"B'00000001'" ++ XUCB@.DO_NOT_OVERRIDE KEYWORD
656	(290)	ADDRESS	8	CKWRESV_XRESTABLE_ADDR3164	
					++ ADDR3164
664	(298)	ADDRESS	8	CKWRESV_XENQTOKEN_ADDR3164	
					++ ADDR3164
672	(2A0)	ADDRESS	8	CKWRESV_XRETURNTABLE_ADDR3164	
680	(2A8)	ADDRESS	8	CKWRESV_XENQTOKENTBL_ADDR3164	
688	(2B0)	ADDRESS	8	CKWRESV_XRNAME_ADDR3164	
					++ ADDR3164
696	(2B8)	ADDRESS	8	CKWRESV_XANSAREA_ADDR3164	
					++ ADDR3164
704	(2C0)	CHARACTER	8	CKWRESV_XQNAME	
					++
712	(2C8)	CHARACTER	16	CKWRESV_XOWNINGTTOKEN	
					++
728	(2D8)	SIGNED	4	CKWRESV_XRESTABLE_ALET	
					++ ALET
732	(2DC)	SIGNED	4	CKWRESV_XENQTOKEN_ALET	
					++ ALET
736	(2E0)	SIGNED	4	CKWRESV_XRETURNTABLE_ALET	
					++ ALET
740	(2E4)	SIGNED	4	CKWRESV_XENQTOKENTBL_ALET	
					++ ALET
744	(2E8)	SIGNED	4	CKWRESV_XRNAME_ALET	
					++ ALET
748	(2EC)	SIGNED	4	CKWRESV_XANSAREA_ALET	
					++ ALET
752	(2F0)	SIGNED	4	CKWRESV_XANSLEN	
					++
756	(2F4)	ADDRESS	4	CKWRESV_XECB@	
					++
760	(2F8)	ADDRESS	4	CKWRESV_XUCB@	
					++
764	(2FC)	BITSTRING	2	CKWRESV_XNUMRES	
					++
766	(2FE)	BITSTRING	1	CKWRESV_XRNAMELEN	
					++

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
767	(2FF)	CHARACTER	1	CKWRESV_XRSV0001	++ RESERVED
768	(300)	CHARACTER	8	CKWRESV_XRSVNNNN	++ RESERVED
768	(300)	X'308'	0	CKWRESV_PL_END	"*" ++ END OF BASE PLIST
650	(28A)	BITSTRING	1	CKWRESV_XSCOPEVAL	++
651	(28B)	BITSTRING	1	CKWRESV_XCONTROLVAL	++
776	(308)	X'80'	0	CKWRESVL	"*-CKWRESV" ++ LENGTH OF PLIST
				Comment	
				ISGENQ-2	
				End of Comment	
				Comment	
				MACDATE -04/24/09-<0>	
				End of Comment	
0	(0)	X'288'	0	M00M1069	"CKWCFPUR" ++ IXLPURGE NAME
648	(288)	DBL WORD	8	CKWCFPUR (0)	++ IXLPURGE PARM LIST
648	(288)	BITSTRING	1	CKWCFPUR_XVERSION	++ INPUT XVERSION
649	(289)	BITSTRING	1	CKWCFPUR_XSCOPEFLAGS	++ FIELD_LABEL
		1...		CKWCFPUR_XSCOPE_STOKEN	"B'10000000'" ++ XSCOPE.STOKEN KEYWORD
		.1..		CKWCFPUR_XSCOPE_TTOKEN	"B'01000000'" ++ XSCOPE.TTOKEN KEYWORD
		..1.		CKWCFPUR_XSCOPE_CONTOKEN	"B'00100000'" ++ XSCOPE.CONTOKEN KEYWORD
650	(28A)	CHARACTER	2	CKWCFPUR_XRSV0001	++ RESERVED
652	(28C)	CHARACTER	8	CKWCFPUR_XSTOKEN	++
660	(294)	CHARACTER	16	CKWCFPUR_XTTOKEN	++
676	(2A4)	CHARACTER	16	CKWCFPUR_XCONTOKEN	++
692	(2B4)	CHARACTER	8	CKWCFPUR_XREQID	++
692	(2B4)	X'34'	0	CKWCFPURL	"*-CKWCFPUR" ++ LENGTH OF PLIST
				Comment	
				IXLPURGE-0	
				End of Comment	
0	(0)	X'288'	0	CKWCFPRL	"CKWCFPUR,*-CKWCFPUR" Length of IXLPURGE
0	(0)	X'288'	0	M00M1070	"CKWXLIST" ++ IXLLIST NAME
648	(288)	DBL WORD	8	CKWXLIST (0)	++ IXLLIST PARM LIST
648	(288)	CHARACTER	96	CKWXLIST_XSHL_DATA	++ FIELD_LABEL
744	(2E8)	CHARACTER	4	CKWXLIST_XMOB_DATA	++ FIELD_LABEL
748	(2EC)	CHARACTER	112	CKWXLIST_XMCB_DATA1	++ FIELD_LABEL
860	(35C)	CHARACTER	20	CKWXLIST_XMCB_DATA2	++ FIELD_LABEL
860	(35C)	X'370'	0	CKWXLIST_PL_END	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					"*" ++ END OF BASE PLIST
648	(288)	BITSTRING	1	CKWXLIST_XVERSION	
					++ INPUT XVERSION
649	(289)	BITSTRING	1	CKWXLIST_XCMDCODE	
					++ FIELD_LABEL
650	(28A)	CHARACTER	4	CKWXLIST_XSHLFLGS	
					++ FIELD_LABEL
654	(28E)	CHARACTER	2	CKWXLIST_XRSV0102	
					++ RESERVED
656	(290)	BITSTRING	1	CKWXLIST_XCOMPCONID	
					++ FIELD_LABEL
657	(291)	BITSTRING	1	CKWXLIST_XBUFSTGKEY	
					++
658	(292)	BITSTRING	2	CKWXLIST_XANSLEN	
					++
660	(294)	CHARACTER	16	CKWXLIST_XCONTOKEN	
					++
676	(2A4)	CHARACTER	12	CKWXLIST_XDATADDR	
					++ FIELD_LABEL
688	(2B0)	CHARACTER	8	CKWXLIST_XADJADDR	
					++ FIELD_LABEL
696	(2B8)	CHARACTER	8	CKWXLIST_XANSADDR	
					++ FIELD_LABEL
704	(2C0)	CHARACTER	8	CKWXLIST_XREQDATA	
					++
712	(2C8)	CHARACTER	8	CKWXLIST_XREQID	
					++
720	(2D0)	CHARACTER	16	CKWXLIST_XOPTIONALDATA	
					++ FIELD_LABEL
736	(2E0)	CHARACTER	8	CKWXLIST_XRSV0103	
					++ RESERVED
650	(28A)	BITSTRING	1	CKWXLIST_XSHLFLGS1	
					++ FIELD_LABEL
		1...		CKWXLIST_KEYUSED_BUFFER	
					"B'10000000'" ++ KEYUSED.BUFFER KEYWORD
		.1..		CKWXLIST_KEYUSED_BUFLIST	
					"B'01000000'" ++ KEYUSED.BUFLIST KEYWORD
		..1.		CKWXLIST_KEYUSED_ADJAREA	
					"B'00100000'" ++ KEYUSED.ADJAREA KEYWORD
		...1		CKWXLIST_KEYUSED_ANSAREA	
					"B'00010000'" ++ KEYUSED.ANSAREA KEYWORD
		.... 1...		CKWXLIST_XPAGEABLE_NO	
					"B'00001000'" ++ XPAGEABLE.NO KEYWORD
		.... .1..		CKWXLIST_KEYUSED_BUFSTGKEY	
					"B'00000100'" ++ KEYUSED.BUFSTGKEY KEYWORD
		.... ..1.		CKWXLIST_XBUFADDRTYPE_REAL	
					"B'00000010'" ++ XBUFADDRTYPE.REAL KEYWORD
651	(28B)	BITSTRING	1	CKWXLIST_XSHLFLGS2	
					++ FIELD_LABEL
		1...		CKWXLIST_XMODE_SYNCECB	
					"B'10000000'" ++ XMODE.SYNCECB KEYWORD
		.1..		CKWXLIST_XMODE_SYNCEXIT	
					"B'01000000'" ++ XMODE.SYNCEXIT KEYWORD
		..1.		CKWXLIST_XMODE_SYNCTOKEN	
					"B'00100000'" ++ XMODE.SYNCTOKEN KEYWORD
		...1		CKWXLIST_XMODE_ASYNCECB	
					"B'00010000'" ++ XMODE.ASYNCECB KEYWORD
		.... 1...		CKWXLIST_XMODE_ASYNCEXIT	
					"B'00001000'" ++ XMODE.ASYNCEXIT KEYWORD
		.... .1..		CKWXLIST_XMODE_ASYNCTOKEN	
					"B'00000100'" ++ XMODE.ASYNCTOKEN KEYWORD
		.... ..1.		CKWXLIST_XMODE_ASYNCNORESPONSE	
					"B'00000010'" ++ XMODE.ASYNCNORESPONSE KEYWORD
652	(28C)	BITSTRING	1	CKWXLIST_XSHLFLGS3	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++ FIELD_LABEL
		1...		CKWXLIST_XLOCKOPER_SET	
					"B'10000000'" ++ XLOCKOPER.SET KEYWORD
		.1..		CKWXLIST_XLOCKOPER_RESET	
					"B'01000000'" ++ XLOCKOPER.RESET KEYWORD
		..1.		CKWXLIST_XLOCKOPER_NOTHELD	
					"B'00100000'" ++ XLOCKOPER.NOTHELD KEYWORD
		...1		CKWXLIST_XLOCKOPER_HELDBY	
					"B'00010000'" ++ XLOCKOPER.HELDBY KEYWORD
		.... 1...		CKWXLIST_XLOCKOPER_TEST	
					"B'00001000'" ++ XLOCKOPER.TEST KEYWORD
		.... .1..		CKWXLIST_XLOCKOPER_READNEXT	
					"B'00000100'" ++ XLOCKOPER.READNEXT KEYWORD
		.... ..1.		CKWXLIST_XLOCKMODE_COND	
					"B'00000010'" ++ XLOCKMODE.COND KEYWORD
		1		CKWXLIST_KEYUSED_LOCKCOMP	
					"B'00000001'" ++ KEYUSED.LOCKCOMP KEYWORD
653	(28D)	BITSTRING	1	CKWXLIST_XSHLFLGS4	
					++ FIELD_LABEL
		1...		CKWXLIST_XTYPE_ADJDATA	
					"B'10000000'" ++ XTYPE.ADJDATA KEYWORD
		.1..		CKWXLIST_XTYPE_ECONTROLS	
					"B'01000000'" ++ XTYPE.ECONTROLS KEYWORD
		..1.		CKWXLIST_KEYUSED_EXTRESTOKEN	
					"B'00100000'" ++ KEYUSED.EXTRESTOKEN KEYWORD
		1		CKWXLIST_RCVRYREQASYNC	
					"B'00000001'" ++ MACUSED.LIST KEYWORD
660	(294)	CHARACTER	13	CKWXLIST_XRSV0201	
					++ RESERVED
673	(2A1)	BITSTRING	1	CKWXLIST_XCONID	
					++ FIELD_LABEL
674	(2A2)	CHARACTER	2	CKWXLIST_XRSV0202	
					++ RESERVED
676	(2A4)	SIGNED	4	CKWXLIST_XBUFFER_ALET	
					++ ALET
680	(2A8)	SIGNED	4	CKWXLIST_XBUFSIZE	
					++
684	(2AC)	ADDRESS	4	CKWXLIST_XBUFFER	
					++
676	(2A4)	SIGNED	4	CKWXLIST_XBUFALET	
					++
680	(2A8)	SIGNED	4	CKWXLIST_XBUFLIST_ALET	
					++ ALET
684	(2AC)	ADDRESS	4	CKWXLIST_XBUFLIST	
					++
688	(2B0)	SIGNED	4	CKWXLIST_XADJAREA_ALET	
					++ ALET
692	(2B4)	ADDRESS	4	CKWXLIST_XADJAREA	
					++
688	(2B0)	SIGNED	4	CKWXLIST_XMOSVECTOR_ALET	
					++ ALET
692	(2B4)	ADDRESS	4	CKWXLIST_XMOSVECTOR	
					++
696	(2B8)	SIGNED	4	CKWXLIST_XANSAREA_ALET	
					++ ALET
700	(2BC)	ADDRESS	4	CKWXLIST_XANSAREA	
					++
704	(2C0)	ADDRESS	4	CKWXLIST_XREQECB	
					++
708	(2C4)	CHARACTER	4	CKWXLIST_XRSV0203	
					++ RESERVED
704	(2C0)	SIGNED	4	CKWXLIST_XREQTOKEN_ALET	
					++ ALET
708	(2C4)	ADDRESS	4	CKWXLIST_XREQTOKEN	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++
720	(2D0)	CHARACTER	8	CKWXLIST_XLOCKDATA	
					++
728	(2D8)	CHARACTER	8	CKWXLIST_XRSV0204	
					++ RESERVED
720	(2D0)	CHARACTER	16	CKWXLIST_XEXTRESTOKEN	
					++
720	(2D0)	CHARACTER	8	CKWXLIST_XEXTRESTOKENTKN	
					++ FIELD_LABEL
728	(2D8)	CHARACTER	8	CKWXLIST_XEXTRESTOKENPSVN	
					++ FIELD_LABEL
744	(2E8)	BITSTRING	2	CKWXLIST_XCMDLEN	
					++ FIELD_LABEL
746	(2EA)	BITSTRING	1	CKWXLIST_XBUFNUM	
					++
747	(2EB)	BITSTRING	1	CKWXLIST_XBUFINCRNUM	
					++
748	(2EC)	CHARACTER	1	CKWXLIST_XCCA	
					++ FIELD_LABEL
749	(2ED)	CHARACTER	1	CKWXLIST_XCCB	
					++ FIELD_LABEL
750	(2EE)	CHARACTER	2	CKWXLIST_XRSV0501	
					++ RESERVED
752	(2F0)	BITSTRING	4	CKWXLIST_XCMDFLGS1	
					++ FIELD_LABEL
756	(2F4)	CHARACTER	4	CKWXLIST_XB8TO11	
					++ FIELD_LABEL
760	(2F8)	SIGNED	4	CKWXLIST_XLOCKINDEX	
					++
764	(2FC)	SIGNED	4	CKWXLIST_XLISTNUM	
					++
768	(300)	CHARACTER	12	CKWXLIST_XENTRYID	
					++
780	(30C)	CHARACTER	8	CKWXLIST_XNEWVERS	
					++
788	(314)	CHARACTER	8	CKWXLIST_XVERSCOMP	
					++
796	(31C)	CHARACTER	16	CKWXLIST_XAUTHCOMP1	
					++ FIELD_LABEL
812	(32C)	CHARACTER	16	CKWXLIST_XNEWAUTH1	
					++ FIELD_LABEL
828	(33C)	CHARACTER	32	CKWXLIST_XLISTDESC	
					++
752	(2F0)	CHARACTER	1	CKWXLIST_XCMDFLGS1A	
					++ FIELD_LABEL
753	(2F1)	CHARACTER	1	CKWXLIST_XCMDFLGS1B	
					++ FIELD_LABEL
754	(2F2)	CHARACTER	1	CKWXLIST_XCMDFLGS1C	
					++ FIELD_LABEL
755	(2F3)	CHARACTER	1	CKWXLIST_XCMDFLGS1D	
					++ FIELD_LABEL
752	(2F0)	BITSTRING	1	CKWXLIST_XELEMNUM	
					++
752	(2F0)	BITSTRING	1	CKWXLIST_XDBS	
					++ FIELD_LABEL
755	(2F3)	CHARACTER	1	CKWXLIST_XUID3	
					++ FIELD_LABEL
756	(2F4)	CHARACTER	3	CKWXLIST_XRSV0502	
					++ RESERVED
759	(2F7)	CHARACTER	1	CKWXLIST_XCGLM	
					++ FIELD_LABEL
756	(2F4)	BITSTRING	2	CKWXLIST_XSTARTINDEX	
					++
758	(2F6)	BITSTRING	2	CKWXLIST_XENDINDEX	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					++
760	(2F8)	SIGNED	4	CKWXLIST_XVECTORINDEX	
					++
768	(300)	SIGNED	4	CKWXLIST_XLISTLIMIT	
					++
772	(304)	CHARACTER	8	CKWXLIST_XRSV0601	
					++ RESERVED
796	(31C)	CHARACTER	16	CKWXLIST_XENTRYNAME	
					++
796	(31C)	CHARACTER	16	CKWXLIST_XENTRYKEY	
					++
796	(31C)	CHARACTER	16	CKWXLIST_XKEYCOMP	
					++
796	(31C)	CHARACTER	1	CKWXLIST_XUID2	
					++ FIELD_LABEL
797	(31D)	CHARACTER	15	CKWXLIST_XRSV0602	
					++ RESERVED
812	(32C)	CHARACTER	8	CKWXLIST_XRESTOKEN	
					++
820	(334)	CHARACTER	8	CKWXLIST_XRSV0603	
					++ RESERVED
812	(32C)	BITSTRING	2	CKWXLIST_XFIRSTELEM	
					++
814	(32E)	BITSTRING	2	CKWXLIST_XLASTELEM	
					++
816	(330)	CHARACTER	8	CKWXLIST_XRSV0604	
					++ RESERVED
824	(338)	CHARACTER	1	CKWXLIST_XCMDFLGS2A	
					++ FIELD_LABEL
825	(339)	CHARACTER	3	CKWXLIST_XRSV0605	
					++ RESERVED
828	(33C)	CHARACTER	1	CKWXLIST_XUID1	
					++ FIELD_LABEL
829	(33D)	CHARACTER	31	CKWXLIST_XRSV0606	
					++ RESERVED
860	(35C)	CHARACTER	16	CKWXLIST_XMOVETOKEY0	
					++ FIELD_LABEL
876	(36C)	SIGNED	4	CKWXLIST_XMOVETOLIST0	
					++ FIELD_LABEL
880	(370)	X'E8'	0	CKWXLISTL	"*-CKWXLIST" ++ LENGTH OF PLIST

Comment

IXLLIST-3

End of Comment

0	(0)	X'288'	0	CKWCFLSL	"CKWXLIST,*-CKWXLIST" Length of IXLLIST
880	(370)	ADDRESS	4	CKWVRL	Pointer to VRL area
884	(374)	SIGNED	4	CKWVRLN	Total number of VRL entries
888	(378)	ADDRESS	4	CKWVRLP	Pointer to free VRL
892	(37C)	SIGNED	4	CKWVRLC	Count of entries in use

Comment

IARVSERV MF=(L,CKWVSERV) List form of IARVSERV macro
MACDATE -05/08/12-<0>

End of Comment

0	(0)	X'380'	0	M00M1071	"CKWVSERV" ++ IARVSERV NAME
896	(380)	DBL WORD	8	CKWVSERV (0)	++ IARVSERV PARM LIST
896	(380)	BITSTRING	1	CKWVSERV_XVERSION	
					++ INPUT XVERSION
897	(381)	BITSTRING	1	CKWVSERV_XSERVICE	
					++ XSERVICE

$CKW Cross Reference

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
897	(381)	X'1'	0	CKWVSERV_SHARE	"1" ++ XSERVICE.SHARE KEYWORD
897	(381)	X'2'	0	CKWVSERV_UNSHARE	"2" ++ XSERVICE.UNSHARE KEYWORD
897	(381)	X'3'	0	CKWVSERV_CHANGEACCESS	"3" ++ XSERVICE.CHANGEACCESS KEYWORD
897	(381)	X'4'	0	CKWVSERV_SHARESEG	"4" ++ XSERVICE.SHARESEG KEYWORD
898	(382)	BITSTRING	1	CKWVSERV_XFLAGS1	++ FIELD_LABEL
		1...		CKWVSERV_TARGET_VIEW_RO	"B'10000000'" ++ XTARGET_VIEW.READONLY KEYWORD
		.1..		CKWVSERV_TARGET_VIEW_SW	"B'01000000'" ++ XTARGET_VIEW.SHAREDWRITE KEYWORD
		..1.		CKWVSERV_TARGET_VIEW_UW	"B'00100000'" ++ XTARGET_VIEW.UNIQUEWRITE KEYWORD
		...1		CKWVSERV_TARGET_VIEW_TW	"B'00010000'" ++ XTARGET_VIEW.TARGETWRITE KEYWORD
		.... 1...		CKWVSERV_TARGET_VIEW_LS	"B'00001000'" ++ XTARGET_VIEW.LIKESOURCE KEYWORD
		.... .1..		CKWVSERV_TARGET_VIEW_NA	"B'00000100'" ++ XTARGET_VIEW.HIDDEN KEYWORD
		.... ..1.		CKWVSERV_COPYNOW	"B'00000010'" ++ KEYUSED.COPYNOW KEYWORD
		1		CKWVSERV_RETAIN_YES	"B'00000001'" ++ XRETAIN.YES KEYWORD
899	(383)	BITSTRING	1	CKWVSERV_XFLAGS2	++ FIELD_LABEL
		1...		CKWVSERV_XPARTIALPAGE_YES	"B'10000000'" ++ XPARTIALPAGE.YES KEYWORD
900	(384)	SIGNED	4	CKWVSERV_XNUMRANGE	++
904	(388)	ADDRESS	4	CKWVSERV_XRANGLIST	++
904	(388)	X'C'	0	CKWVSERVL	"*-CKWVSERV" ++ LENGTH OF PLIST

Comment

IARVSERV-0

End of Comment

912	(390)	DBL WORD	8	CKWGMTOF	GMT offset of local member, including leap seconds
920	(398)	DBL WORD	8	CKWRESTM	Time CKPT got the reserve
920	(398)	X'3A0'	0	CKWLNGTH	"*-CKW" LENGTH OF CKW

$CKW Cross Reference

Name	Hex Offset	Hex Value
CKW	0	
CKWBLMSG	210	C2D3C440
CKWCADJ	BF	40
CKWCBCNT	A0	
CKWCCWA	C0	
CKWCCWFL	BF	
CKWCECKD	BF	80
CKWCFAIL	120	
CKWCFLSL	0	288
CKWCFLVL	158	
CKWCFLVN	158	15C
CKWCFPRL	0	288
CKWCFPUR	288	
CKWCFPUR_XCONTOKEN	2A4	
CKWCFPUR_XREQID	2B4	
CKWCFPUR_XRSV0001	28A	
CKWCFPUR_XSCOPE_CONTOKEN	289	20
CKWCFPUR_XSCOPE_STOKEN	289	80
CKWCFPUR_XSCOPE_TTOKEN	289	40
CKWCFPUR_XSCOPEFLAGS	289	
CKWCFPUR_XSTOKEN		

Name	Hex Offset	Hex Value
	28C	
CKWCFPUR_XTTOKEN		
	294	
CKWCFPUR_XVERSION		
	288	
CKWCFPURL	2B4	34
CKWCFTD	128	
CKWCFWRE	148	
CKWCFWTM	140	
CKWCKCHW	B4	
CKWCKCLP	A8	
CKWCKCLW	B0	
CKWCKCSP	AC	
CKWCKCTM	B8	
CKWCKDA	C4	
CKWCKMA	24	
CKWCKPSZ	A4	
CKWCKPTN	7C	
CKWCLSTA	D4	
CKWCONID	1B4	
CKWCTLBA	C8	
CKWCTLB0	CC	
CKWCTWA	2C	
CKWCT1RC	11C	
CKWCURCG	70	
CKWC1ST	BF	20
CKWDFAIL	124	
CKWDRNC1	1B8	
CKWDRNC2	1BC	
CKWERREG	30	
CKWFIXST	D0	
CKWFLAG1	6	
CKWFLAG2	7	
CKWFLAG3	9	
CKWFLAG4	A	
CKWFLAG5	B	
CKWFMCKG	14C	
CKWGMTOF	390	
CKWID	0	C3D2E640
CKWINITM	138	
CKWIOLST	DC	
CKWIO24K	20	
CKWKSTQE	188	
CKWKT1PK	130	
CKWKT1RC	118	
CKWLDIAG	6	8
CKWLIRCT	78	
CKWLKEY1	F8	
CKWLKEY2	100	
CKWLKIT	14	
CKWLKNUM	18	
CKWLKVL1	108	
CKWLKVL2	110	
CKWLNGTH	398	3A0
CKWLSTSY	1B	
CKWMAXRC	1C	
CKWMSG	1C0	
CKWMSTRL	74	
CKWMVSWT	80	
CKWOPTCK	94	
CKWOPT4K	98	
CKWPAGCT	9C	
CKWPARML	F4	18
CKWPARMS	E0	
CKWPARM1	E0	
CKWPARM2	E4	
CKWPARM3	E8	
CKWPARM4	EC	
CKWPARM5	F0	
CKWPARM6	F4	
CKWPCICT	7A	7D0
CKWPCIRC	7A	
CKWPPL	268	0
CKWPPLA	28	
CKWQECB	194	
CKWQREPL	1AC	40404040
CKWQSUSE	88	
CKWRCID	10	
CKWRECB	170	
CKWRECF3	C	
CKWRECNT	BC	
CKWRESTM	398	
CKWRESV	288	
CKWRESV_KEYUSED_CONTROL		
	28E	80
CKWRESV_PL_END		
	300	308
CKWRESV_XANSAREA_ADDR3164		
	2B8	
CKWRESV_XANSAREA_ALET		
	2EC	
CKWRESV_XANSLEN		
	2F0	
CKWRESV_XCOND_NO		
	0	1
CKWRESV_XCOND_YES		
	0	2
CKWRESV_XCONTENTIONACT_FAIL		
	28C	20
CKWRESV_XCONTROL		
	28B	
CKWRESV_XCONTROL_DO_NOT_OVERRIDE		
	28D	10
CKWRESV_XCONTROL_EXCLUSIVE		
	28B	2
CKWRESV_XCONTROL_SHARED		
	28B	1
CKWRESV_XCONTROLVAL		
	28B	
CKWRESV_XECB@		
	2F4	
CKWRESV_XENQMAX_NO		
	28C	4
CKWRESV_XENQTOKEN_ADDR3164		
	298	
CKWRESV_XENQTOKEN_ALET		
	2DC	
CKWRESV_XENQTOKENTBL_ADDR3164		
	2A8	
CKWRESV_XENQTOKENTBL_ALET		
	2E4	
CKWRESV_XFLAGS1		
	28C	
CKWRESV_XFLAGS2		
	28D	
CKWRESV_XFLAGS3		
	28E	
CKWRESV_XFLAGS4		
	28F	
CKWRESV_XNUMRES		

Name	Hex Offset	Hex Value
	2FC	
CKWRESV_XOWNINGTTOKEN		
	2C8	
CKWRESV_XQNAME		
	2C0	
CKWRESV_XQNAME_DO_NOT_OVERRIDE		
	28C	1
CKWRESV_XREQUEST_CHANGE		
	0	2
CKWRESV_XREQUEST_OBTAIN		
	0	1
CKWRESV_XREQUEST_RELEASE		
	0	3
CKWRESV_XRESERVEVOLUME_YES		
	28D	80
CKWRESV_XRESLIST_YES		
	28C	8
CKWRESV_XRESTABLE_ADDR3164		
	290	
CKWRESV_XRESTABLE_ALET		
	2D8	
CKWRESV_XRETURNTABLE_ADDR3164		
	2A0	
CKWRESV_XRETURNTABLE_ALET		
	2E0	
CKWRESV_XRNAME_ADDR3164		
	2B0	
CKWRESV_XRNAME_ALET		
	2E8	
CKWRESV_XRNAME_DO_NOT_OVERRIDE		
	28D	1
CKWRESV_XRNAMELEN		
	2FE	
CKWRESV_XRNAMELEN_DO_NOT_OVERRIDE		
	28E	1
CKWRESV_XRNL_DO_NOT_OVERRIDE		
	28D	4
CKWRESV_XRNL_NO		
	28C	2
CKWRESV_XRSVNNNN		
	300	
CKWRESV_XRSV0000		
	289	
CKWRESV_XRSV0001		
	2FF	
CKWRESV_XSCOPE		
	28A	
CKWRESV_XSCOPE_DO_NOT_OVERRIDE		
	28D	8
CKWRESV_XSCOPE_STEP		
	28A	1
CKWRESV_XSCOPE_SYSPLEX		
	28A	3
CKWRESV_XSCOPE_SYSTEM		
	28A	2
CKWRESV_XSCOPE_SYSTEMS		
	28A	3
CKWRESV_XSCOPEVAL		
	28A	
CKWRESV_XSYNCHRES_DO_NOT_OVERRIDE		
	28D	2
CKWRESV_XSYNCHRES_NO		
	28D	20
CKWRESV_XSYNCHRES_YES		
	28D	40
CKWRESV_XTEST_YES		
	28C	40
CKWRESV_XUCB@		
	2F8	
CKWRESV_XUCB@_DO_NOT_OVERRIDE		
	28F	1
CKWRESV_XVERSION		
	288	
CKWRESV_XWAITTYPE_ECB		
	28C	10
CKWRESVL	308	80
CKWRESVS	288	
CKWRESV1	D	
CKWRWOP	BE	
CKWR2LEV	160	
CKWSCAN	8	
CKWSCDL	8	1
CKWSCF	8	80
CKWSCNL	8	E0
CKWSDSN	8	40
CKWSHLST	D8	
CKWSNCN	8	1
CKWSTAR	278	
CKWSVOL	8	20
CKWVERN	4	3
CKWVERSN	4	
CKWVRL	370	
CKWVRLC	37C	
CKWVRLN	374	
CKWVRLP	378	
CKWVSERV	380	
CKWVSERV_CHANGEACCESS		
	381	3
CKWVSERV_COPYNOW		
	382	2
CKWVSERV_RETAIN_YES		
	382	1
CKWVSERV_SHARE		
	381	1
CKWVSERV_SHARESEG		
	381	4
CKWVSERV_TARGET_VIEW_LS		
	382	8
CKWVSERV_TARGET_VIEW_NA		
	382	4
CKWVSERV_TARGET_VIEW_RO		
	382	80
CKWVSERV_TARGET_VIEW_SW		
	382	40
CKWVSERV_TARGET_VIEW_TW		
	382	10
CKWVSERV_TARGET_VIEW_UW		
	382	20
CKWVSERV_UNSHARE		
	381	2
CKWVSERV_XFLAGS1		
	382	
CKWVSERV_XFLAGS2		
	383	
CKWVSERV_XNUMRANGE		
	384	
CKWVSERV_XPARTIALPAGE_YES		
	383	80
CKWVSERV_XRANGLIST		
	388	

Name	Hex Offset	Hex Value
CKWVSERV_XSERVICE	381	
CKWVSERV_XVERSION	380	
CKWVSERVL	388	C
CKWWRLEV	168	
CKWWTTM	90	
CKWXCFAS	150	
CKWXLIST	288	
CKWXLIST_KEYUSED_ADJAREA	28A	20
CKWXLIST_KEYUSED_ANSAREA	28A	10
CKWXLIST_KEYUSED_BUFFER	28A	80
CKWXLIST_KEYUSED_BUFLIST	28A	40
CKWXLIST_KEYUSED_BUFSTGKEY	28A	4
CKWXLIST_KEYUSED_EXTRESTOKEN	28D	20
CKWXLIST_KEYUSED_LOCKCOMP	28C	1
CKWXLIST_PL_END	35C	370
CKWXLIST_RCVRYREQASYNC	28D	1
CKWXLIST_XADJADDR	2B0	
CKWXLIST_XADJAREA	2B4	
CKWXLIST_XADJAREA_ALET	2B0	
CKWXLIST_XANSADDR	2B8	
CKWXLIST_XANSAREA	2BC	
CKWXLIST_XANSAREA_ALET	2B8	
CKWXLIST_XANSLEN	292	
CKWXLIST_XAUTHCOMP1	31C	
CKWXLIST_XBUFADDRTYPE_REAL	28A	2
CKWXLIST_XBUFALET	2A4	
CKWXLIST_XBUFFER	2AC	
CKWXLIST_XBUFFER_ALET	2A4	
CKWXLIST_XBUFINCRNUM	2EB	
CKWXLIST_XBUFLIST	2AC	
CKWXLIST_XBUFLIST_ALET	2A8	
CKWXLIST_XBUFNUM	2EA	
CKWXLIST_XBUFSIZE	2A8	
CKWXLIST_XBUFSTGKEY	291	
CKWXLIST_XB8TO11	2F4	
CKWXLIST_XCCA	2EC	
CKWXLIST_XCCB	2ED	
CKWXLIST_XCGLM	2F7	
CKWXLIST_XCMDCODE	289	
CKWXLIST_XCMDFLGS1	2F0	
CKWXLIST_XCMDFLGS1A	2F0	
CKWXLIST_XCMDFLGS1B	2F1	
CKWXLIST_XCMDFLGS1C	2F2	
CKWXLIST_XCMDFLGS1D	2F3	
CKWXLIST_XCMDFLGS2A	338	
CKWXLIST_XCMDLEN	2E8	
CKWXLIST_XCOMPCONID	290	
CKWXLIST_XCONID	2A1	
CKWXLIST_XCONTOKEN	294	
CKWXLIST_XDATADDR	2A4	
CKWXLIST_XDBS	2F0	
CKWXLIST_XELEMNUM	2F0	
CKWXLIST_XENDINDEX	2F6	
CKWXLIST_XENTRYID	300	
CKWXLIST_XENTRYKEY	31C	
CKWXLIST_XENTRYNAME	31C	
CKWXLIST_XEXTRESTOKEN	2D0	
CKWXLIST_XEXTRESTOKENPSVN	2D8	
CKWXLIST_XEXTRESTOKENTKN	2D0	
CKWXLIST_XFIRSTELEM	32C	
CKWXLIST_XKEYCOMP	31C	
CKWXLIST_XLASTELEM	32E	
CKWXLIST_XLISTDESC	33C	
CKWXLIST_XLISTLIMIT	300	
CKWXLIST_XLISTNUM	2FC	
CKWXLIST_XLOCKDATA	2D0	
CKWXLIST_XLOCKINDEX	2F8	
CKWXLIST_XLOCKMODE_COND		

Name	Hex Offset	Hex Value
	28C	2
CKWXLIST_XLOCKOPER_HELDBY		
	28C	10
CKWXLIST_XLOCKOPER_NOTHELD		
	28C	20
CKWXLIST_XLOCKOPER_READNEXT		
	28C	4
CKWXLIST_XLOCKOPER_RESET		
	28C	40
CKWXLIST_XLOCKOPER_SET		
	28C	80
CKWXLIST_XLOCKOPER_TEST		
	28C	8
CKWXLIST_XMCB_DATA1		
	2EC	
CKWXLIST_XMCB_DATA2		
	35C	
CKWXLIST_XMOB_DATA		
	2E8	
CKWXLIST_XMODE_ASYNCECB		
	28B	10
CKWXLIST_XMODE_ASYNCEXIT		
	28B	8
CKWXLIST_XMODE_ASYNCNORESPONSE		
	28B	2
CKWXLIST_XMODE_ASYNCTOKEN		
	28B	4
CKWXLIST_XMODE_SYNCECB		
	28B	80
CKWXLIST_XMODE_SYNCEXIT		
	28B	40
CKWXLIST_XMODE_SYNCTOKEN		
	28B	20
CKWXLIST_XMOSVECTOR		
	2B4	
CKWXLIST_XMOSVECTOR_ALET		
	2B0	
CKWXLIST_XMOVETOKEY0		
	35C	
CKWXLIST_XMOVETOLIST0		
	36C	
CKWXLIST_XNEWAUTH1		
	32C	
CKWXLIST_XNEWVERS		
	30C	
CKWXLIST_XOPTIONALDATA		
	2D0	
CKWXLIST_XPAGEABLE_NO		
	28A	8
CKWXLIST_XREQDATA		
	2C0	
CKWXLIST_XREQECB		
	2C0	
CKWXLIST_XREQID		
	2C8	
CKWXLIST_XREQTOKEN		
	2C4	
CKWXLIST_XREQTOKEN_ALET		
	2C0	
CKWXLIST_XRESTOKEN		
	32C	
CKWXLIST_XRSV0102		
	28E	
CKWXLIST_XRSV0103		
	2E0	
CKWXLIST_XRSV0201		
	294	
CKWXLIST_XRSV0202		
	2A2	
CKWXLIST_XRSV0203		
	2C4	
CKWXLIST_XRSV0204		
	2D8	
CKWXLIST_XRSV0501		
	2EE	
CKWXLIST_XRSV0502		
	2F4	
CKWXLIST_XRSV0601		
	304	
CKWXLIST_XRSV0602		
	31D	
CKWXLIST_XRSV0603		
	334	
CKWXLIST_XRSV0604		
	330	
CKWXLIST_XRSV0605		
	339	
CKWXLIST_XRSV0606		
	33D	
CKWXLIST_XSHL_DATA		
	288	
CKWXLIST_XSHLFLGS		
	28A	
CKWXLIST_XSHLFLGS1		
	28A	
CKWXLIST_XSHLFLGS2		
	28B	
CKWXLIST_XSHLFLGS3		
	28C	
CKWXLIST_XSHLFLGS4		
	28D	
CKWXLIST_XSTARTINDEX		
	2F4	
CKWXLIST_XTYPE_ADJDATA		
	28D	80
CKWXLIST_XTYPE_ECONTROLS		
	28D	40
CKWXLIST_XUID1		
	33C	
CKWXLIST_XUID2		
	31C	
CKWXLIST_XUID3		
	2F3	
CKWXLIST_XVECTORINDEX		
	2F8	
CKWXLIST_XVERSCOMP		
	314	
CKWXLIST_XVERSION		
	288	
CKWXLISTL	370	E8
CKW1ESUP	6	20
CKW1FNLW	6	80
CKW1OFLW	6	40
CKW1SPIO	6	4
CKW1SPSC	6	2
CKW1S266	6	10
CKW2FMLS	7	4
CKW2FWLS	7	8
CKW2INTR	7	1
CKW2IWLS	7	10

Name	Hex Offset	Hex Value
CKW2PWLS	7	20
CKW2R1LS	7	80
CKW2R2LS	7	40
CKW3FMCP	9	40
CKW3FMFX	9	80
CKW3NOPT	9	4
CKW3PWWP	9	8
CKW3R2WP	9	10
CKW4DIAG	A	4
CKW4DIA1	A	20
CKW4IGNO	A	8
CKW4IGN1	A	40
CKW4P1V	A	2
CKW4P2V	A	1
CKW4WTOR	A	10
CKW4WTO1	A	80
CKW5PMST	B	2
CKW5PROT	B	4
CKW5STRL	B	8
CKW51NVL	B	40
CKW51VOL	B	80
CKW52NVL	B	10
CKW52VOL	B	20
M00M1067	0	288
M00M1069	0	288
M00M1070	0	288
M00M1071	0	380
STARBAL	27E	
STARDCTA	278	
STARDL	282	
STARDTU	27C	6
STARFLGS	27C	
STARFUNC	27C	80
STARKL	281	
STARLAST	27C	8
STARLOC	27C	1
STARMAXS	27C	40
STARR	280	
STARREMV	27C	20
STARRKDD	280	
STARTYPE	27B	
STARUBAL	27C	10
STARUCBA	278	

$CKX Information

$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 IXZXIXSM macro instruction and areas in acknowledgement messages are created by the IXZXIXAC 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 IXZYIXAC 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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
4	(4)	ADDRESS	1	CKXVERSN	Sender's control block version
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 int rnal Function Component Test (FCT) use only. Warning: This section is used only for testing. Setting data in this section causes permanent waits or $K25 ABENDs.	

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

				JES2 checkpoint reconfiguration JESXCF message and acknowledgement types	

				End of Comment	
60	(3C)	SIGNED	4	CKXMTYPE	Message or ack type

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
60	(3C)	X'1'	0	CKXM0	"1" Start-up CKPT reconfig
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	CKXHDRLN	"*-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

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				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=ASYNCACK message. Use this section when CKXMTYPE is set to CKXM1. Fields in this section are named CKXM1xxx.	
				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 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
		1...		CKXA1FOV	"B'10000000'" - OPVERIFY=YES on this memb
		.1..		CKXA1FI1	"B'01000000'" - I/O error on CKPT1
		..1.		CKXA1FI2	"B'00100000'" - I/O error on CKPT2
		...1		CKXA1FCV	"B'00010000'" - CKPT on volatile CF
		.... 1...		CKXA1FOR	"B'00001000'" - Operator dialog request
		.... .1..		CKXA1HUP	"B'00000100'" - HFAM update is pending
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	4	CKXA1SEQ	Operation sequence number
80	(50)	BITSTRING	4	CKXA1CON	Console ID or zero
84	(54)	BITSTRING	308	CKXA1HFM	Copy of HFAM for NEWCKPTn specifications on member
392	(188)	SIGNED	4	CKXA1END (0)	End of ack message
392	(188)	X'148'	0	CKXA1HCL	"328" If you change this constant
392	(188)	ADDRESS	2	(0)	or get an assembly
392	(188)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		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=ASYNCACK message. Use this section when CKXMTYPE is set to CKXM2. Fields in this section are named CKXM2xxx.			
			End of Comment		
64	(40)	BITSTRING	0	CKXM2MSG (0)	Notification of driver (re)selection
64	(40)	SIGNED	4	CKXM2BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM2EYE	Message eyecatcher
72	(48)	BITSTRING	1	CKXM2FLG	Flag byte
		1...		CKXM2FOV	"B'10000000'" - Use OPVERIFY=YES
		.1..		CKXM2FI1	"B'01000000'" - I/O error on CKPT1
		..1.		CKXM2FI2	"B'00100000'" - I/O error on CKPT2
		...1		CKXM2FCV	"B'00010000'" - CKPT on volatile CF
		.... 1...		CKXM2FOR	"B'00001000'" - Operator dialog
		.... .1..		CKXM2FCN	"B'00000100'" - Cancelled by JES2
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	4	CKXM2SEQ	Highest operation sequence
80	(50)	BITSTRING	4	CKXM2CON	Console ID or zero
84	(54)	SIGNED	4	CKXM2NI1	Number of CKPT1 I/O errors
88	(58)	SIGNED	4	CKXM2NI2	Number of CKPT2 I/O errors
92	(5C)	CHARACTER	4	CKXM2NAM	Name of new driving member
96	(60)	CHARACTER	128	CKXM2PMV	Vector of member names participating in orig driver selection
224	(E0)	BITSTRING	308	CKXM2HFM	HFAM to initially use for this reconfig instance
532	(214)	SIGNED	4	CKXM2END (0)	End of message
532	(214)	X'1D4'	0	CKXM2HCL	"468" If you change this constant
532	(214)	ADDRESS	2	(0)	or get an assembly
532	(214)	ADDRESS	2	(0)	error, you MUST update CKXVERN
			Comment		
		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.			
			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

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		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=ASYNCACK message. Use this section when CKXMTYPE is set to CKXM3. Fields in this section are named CKXM3xxx.			
		End of Comment			
64	(40)	BITSTRING	0	CKXM3MSG (0)	Sync point action/cond
64	(40)	SIGNED	4	CKXM3BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM3EYE	Message eyecatcher
72	(48)	BITSTRING	1	CKXM3FLG	Flag byte
		1...		CKXM3DMF	"B'10000000'" - Driving member failed
73	(49)	BITSTRING	3		Reserved for future use
76	(4C)	SIGNED	4	CKXM3SEQ	Operation sequence number
80	(50)	CHARACTER	8	CKXM3TYP	Sync point type
88	(58)	SIGNED	4	CKXM3ACT	Requested action
92	(5C)	CHARACTER	308	CKXM3HFM	Driver's current HFAM
400	(190)	SIGNED	4	CKXM3END (0)	End of message
400	(190)	X'150'	0	CKXM3HCL	"336" If you change this constant
400	(190)	ADDRESS	2	(0)	or get an assembly
400	(190)	ADDRESS	2	(0)	error, you MUST update CKXVERN
		Comment			
		Ack message: Ack sync point action/condition req This message is used to acknowledge an action request and to inform the driving member of the non-driving member's condition. Use this section when CKXMTYPE is set to CKXA3. Fields in this section are named CKXA3xxx.			
		End of Comment			
64	(40)	BITSTRING	0	CKXA3MSG (0)	Ack sync and return condition data
64	(40)	SIGNED	4	CKXA3BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA3EYE	Message eyecatcher
72	(48)	CHARACTER	8	CKXA3TYP	Sync point type
80	(50)	CHARACTER	4	CKXA3CON	Non-driver's condition
84	(54)	CHARACTER	4	CKXA3RSN	Non-driver's reason code
88	(58)	SIGNED	4	CKXA3END (0)	End of ack message
88	(58)	X'18'	0	CKXA3HCL	"24" If you change this constant
88	(58)	ADDRESS	2	(0)	or get an assembly
88	(58)	ADDRESS	2	(0)	error, you MUST update CKXVERN

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				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 is 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=ASYNCACK message. Use this section when CKXMTYPE is set to CKXM4. Fields in this section are named CKXM4xxx.	
				End of Comment	
64	(40)	BITSTRING	0	CKXM4MSG (0)	Sync go-ahead
64	(40)	SIGNED	4	CKXM4BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM4EYE	Message eyecatcher
72	(48)	CHARACTER	8	CKXM4TYP	Sync point type
80	(50)	SIGNED	4	CKXM4END (0)	End of message
80	(50)	X'10'	0	CKXM4HCL	"16" If you change this constant
80	(50)	ADDRESS	2	(0)	or get an assembly
80	(50)	ADDRESS	2	(0)	error, you MUST update CKXVERN
				Comment	
				Ack message: Ack sync go-ahead Use this section when CKXMTYPE is set to CKXA4. Fields in this section are named CKXA4xxx.	
				End of Comment	
64	(40)	BITSTRING	0	CKXA4MSG (0)	Ack sync go-ahead
64	(40)	SIGNED	4	CKXA4BEG (0)	Beginning of ack message
64	(40)	CHARACTER	8	CKXA4EYE	Message eyecatcher
72	(48)	CHARACTER	8	CKXA4TYP	Sync point type
80	(50)	SIGNED	4	CKXA4END (0)	End of ack message
80	(50)	X'10'	0	CKXA4HCL	"16" If you change this constant
80	(50)	ADDRESS	2	(0)	or get an assembly
80	(50)	ADDRESS	2	(0)	error, you MUST update CKXVERN
				Comment	
				Message: Reconfiguration DONE This message is issued by the driving member to inform other members of the pending completion of this reconfiguration. Non-driving members do not exit this CKPT reconfiguration until they detect an XCF user state update indicating the reconfiguration has decommitted. This is a TYPE=ASYNCACK message. Use this section when CKXMTYPE is set to CKXM5. Fields in this section are named CKXM5xxx.	
				End of Comment	
64	(40)	BITSTRING	0	CKXM5MSG (0)	Reconfiguration DONE
64	(40)	SIGNED	4	CKXM5BEG (0)	Beginning of message
64	(40)	CHARACTER	8	CKXM5EYE	Message eyecatcher
72	(48)	SIGNED	4	CKXM5SEQ	Operation sequence number
76	(4C)	SIGNED	4	CKXM5END (0)	End of message
76	(4C)	X'C'	0	CKXM5HCL	"12" If you change this constant
76	(4C)	ADDRESS	2	(0)	or get an assembly

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

$CKX Cross Reference

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

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

$CLASGRP Information

$CLASGRP Heading Information

Common Name: Group Class Object
Macro ID: $CLASGRP
DSECT Name: GRPOBJ
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CGRP
Offset: GRPKEY-GRPOBJ
Length: L'GRPKEY
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual and real storage are in 31 bit storage in the private storage of the JES2 address space.
Size: See GRPSIZ
Created by: $DOGGRP - create jobclass group object
Pointed to by: Pointer returned by $DOGGRP service
Serialization: Update access is serialized by the BERT lock
Function: This macro along with $DOGGRP supports group (job class) services. The general services supported are:
- Create - Create job class group.
- Fetch - Returns a copy of the group object in a work area.
- Fetchnext - Return the current group object and locates the next group object.
- Return - Returns the group object to the checkpoint.
- Free - Removes the group object from the checkpoint

The group object layout is as follows:

```
----------------------
| Prebert            |
----------------------
| Memory only ...    |
| -- reserved for    |
| $DOGCAT cache code|
|                    |
| Length = CATMEMLN | --> See $CAT
----------------------
| Eye catcher - CGRP|
----------------------
| 8 char group name | --> Keyed BERT
----------------------
| 8 char class name | --> Next class to be used
----------------------
```

A group contains one 8 character job class. A group is a circular list of CATs linked by $CAT field CATGPNXT - 8 character name of next class in list.

$CLASGRP Map

$CLASGRP Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	GRPOBJ	
0	(0)	BITSTRING	36	GRPMEMO	Memory only section used by $DOGCAT - CAT cache service
36	(24)	CHARACTER	4	GRPID	Eye catcher
40	(28)	CHARACTER	8	GRPNAME	Group name - keyed BERT access
48	(30)	CHARACTER	8	GRPNXCL	Next class to be selected
48	(30)	X'38'	0	GRPSIZ	"*-GRPOBJ" Size of group object

$CMB Information

$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
CSACMB field of the $DTEWTO data area
CSACONWQ field of the $DTEWTO 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
CCTCMBFQ field of the $HCCT data area
CCTCOMMQ field of the $HCCT data area
CCTELCMB field of the $HCCT data area
CCTRCPCQ field of the $HCCT data area
RCPMSHDR field of the $RCPWORK data area
Serialization: Compare-and-swap logic must be used for queueing or de-queueing the CMB on most queues.
Function: Used to contain messages issued by JES2 or commands destined for JES2.

$CMB Map

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

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

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
104	(68)	CHARACTER	96	CMBTEXT	MESSAGE TEXT
200	(C8)	SIGNED	4	CMBEND (0)	END OF CMB
200	(C8)	X'C8'	0	CMBL	"CMBEND-CMB" LENGTH OF CMB
200	(C8)	X'D8'	0	CMBLGEND	"CMBEND+(L'CMBLGMSG-L'CMBMSG)" End of store-and-forwrd CMB
200	(C8)	X'D8'	0	CMBLGLEN	"CMBLGEND-CMB" Max length for store-and- forward CMB
				Comment	
				FORMATTED COMMAND DEFINITIONS	
				End of Comment	
68	(44)	BITSTRING	40	CMBFNORM (0)	Formatted area for normal command
68	(44)	BITSTRING	40	CMBFRTE (0)	Formatted area for route command
68	(44)	BITSTRING	1	CMBFOP	OPCODE
69	(45)	BITSTRING	1	CMBFFLG	FLAGS OR OPCODE MODIFIER
70	(46)	BITSTRING	2	CMBFJID	INITIAL JOB NUMBER
72	(48)	CHARACTER	8	CMBFORGN	ORIGIN NODE NAME
80	(50)	CHARACTER	8	CMBFJNAM	JOB NAME
88	(58)	CHARACTER	8	CMBFD	DESTINATION FOR ROUTE COMMAND
96	(60)	CHARACTER	8	CMBFR	REMOTE IF NOT IMPLIED BY CMBFD
104	(68)	BITSTRING	4	CMBFJNUM	Fullword job number
				Comment	
				CMBFLAG DEFINITIONS	
				End of Comment	
		1...		CMBFLAGC	"B'10000000'" CMB CONTAINS A COMMAND
		.1..		CMBFLAGW	"B'01000000'" CMB HAS RMT WORKSTATION NUM
		..1.		CMBFLAGT	"B'00100000'" CMB HAS TSO USER ID
		...1		CMBFLAGU	"B'00010000'" CMB HAS UCMID INFORMATION
		.... 1...		CMBFLAGR	"B'00001000'" CONSOLE IS ONLY REMOTE AUTHORIZED
		.... .1..		CMBFLAGJ	"B'00000100'" CONSOLE NOT JOB AUTHORIZED
		.... ..1.		CMBFLAGD	"B'00000010'" CONSOLE NOT DEVICE AUTHORIZED
		1		CMBFLAGS	"B'00000001'" CONSOLE NOT SYSTEM AUTHORIZED
104	(68)	X'60'	0	CMBFLAGQ	"CMBFLAGW+CMBFLAGT" CMB HAS EITHER REMOTE OR TSO USERID
				Comment	
				CMBPRIO DEFINITIONS	
				End of Comment	
		 1111		CMBPRIM	"B'00001111'" CMBPRIO PURIFYING MASK
				Comment	
				CMBTYPE DEFINITIONS WARNING: For CMBs which are to cross nodes, CMBTYPE becomes NMRTYPE and the following bits can take on meaning specified by NMRTYPE.	
				End of Comment	
		1111		CMBTYPEX	"B'11110000'" RESERVED BITS
		1		CMBTYPED	"B'00000001'" Formatted DOM CMB
		.... ..1.		CMBTYPEF	"B'00000010'" Formatted command in CMBMSG
		.... .1..		CMBTYPET	"B'00000100'" MSG TEXT ONLY IN NMRMSG
		.... 1...		CMBTYPE4	"B'00001000'" RESERVED BIT

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		Comment			
		CMBFOP DEFINITIONS			
		End of Comment			
104	(68)	X'1'	0	CMBFOPD	"1" DISPLAY JOB COMMAND
104	(68)	X'2'	0	CMBFOPC	"2" CANCEL JOB COMMAND
104	(68)	X'3'	0	CMBFOPA	"3" RELEASE JOB COMMAND
104	(68)	X'4'	0	CMBFOPH	"4" HOLD JOB COMMAND
104	(68)	X'5'	0	CMBFOPR	"5" ROUTE JOB COMMAND
		Comment			
		CMBFFLG DEFINITIONS			
		End of Comment			
		11		CMBFFLGJ	"X'03'" BATCH JOB TYPE WHEN ZEROES
		1		CMBFFLGS	"X'01'" STC JOB TYPE
		.... ..1.		CMBFFLGT	"X'02'" TSU JOB TYPE
		1...		CMBFFLGO	"X'80'" CANCEL OR ROUTE OUTPUT
		.1..		CMBFFLGD	"X'40'" CANCEL EXECUTION WITH DUMP

$CMB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CMB	0		CMBFOPC	68	2
CMBACEID	10		CMBFOPD	68	1
CMBCART	1C	40404040	CMBFOPH	68	4
CMBCLR	4	5	CMBFOPR	68	5
CMBCMB	C		CMBFORGN	48	40404040
CMBDESC	2C	0	CMBFR	60	40404040
CMBDOMID	30	0	CMBFRTE	44	
CMBEND	C8		CMBID	0	C3D4C240
CMBFD	58	40404040	CMBJOBID	4D	40404040
CMBFFLG	45	0	CMBJOBN	5F	40404040
CMBFFLGD	68	40	CMBL	C8	C8
CMBFFLGJ	68	3	CMBLEVEL	15	
CMBFFLGO	68	80	CMBLGEND	C8	D8
CMBFFLGS	68	1	CMBLGLEN	C8	D8
CMBFFLGT	68	2	CMBLGMSG	44	
CMBFJID	46	0	CMBLINET	26	0
CMBFJNAM	50	40404040	CMBMID	56	
CMBFJNUM	68	0	CMBML	17	0
CMBFLAG	14	0	CMBMSG	44	
CMBFLAGC	68	80	CMBPARML	43	30
CMBFLAGD	68	2	CMBPCE	10	
CMBFLAGJ	68	4	CMBPRIM	68	F
CMBFLAGQ	68	60	CMBPRIO	15	0
CMBFLAGR	68	8	CMBRMT	34	0
CMBFLAGS	68	1	CMBROUT	2E	0
CMBFLAGT	68	20	CMBTEXT	68	40404040
CMBFLAGU	68	10	CMBTIME	44	40404040
CMBFLAGW	68	40	CMBTO	18	
CMBFLAG2	5	0	CMBTOKA	8	
CMBFLAG3	1B	0	CMBTONOD	18	0
CMBFLAG4	6	0	CMBTOQUL	1A	0
CMBFM	40		CMBTYPE	16	0
CMBFMNOD	40	0	CMBTYPED	68	1
CMBFMQUL	42	0	CMBTYPEF	68	2
CMBFNORM	44		CMBTYPET	68	4
CMBFOP	44	0	CMBTYPEX	68	F0
CMBFOPA	68	3	CMBTYPE4	68	8

$CMB Cross Reference

Name	Hex Offset	Hex Value
CMBUCM	24	0
CMBUCMA	25	0
CMBUCMID	28	0
CMBUSER	36	40404040
CMBVRS	4	
CMBVRSN	4	1
CMBWTOLG	36	2A
CMBWTOPL	14	
CMB2AUTO	5	20
CMB2DMC	5	1
CMB2GETM	5	80
CMB2GMTK	5	40
CMB2IFF	5	8
CMB2INIT	5	10
CMB2LGON	5	4
CMB2NOTF	5	2
CMB3INTC	1B	40
CMB3TOK	1B	80
CMB4EMER	6	80
CMB4LOGO	6	1

$CNVWORK Information

$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
312	(138)	BITSTRING	24	JPCECECB	Work competion XECB
336	(150)	BITSTRING	1	JPCESTAT	PROCESSOR STATUS BYTE
		1...		JPCEDUPL	"B'10000000'" Duplicate logon tried
		...1		JPCENCWT	"B'00010000'" This PCE cannot wait for OS CNVT
337	(151)	CHARACTER	8	JPCECLAS	Original job class - 8 char
345	(159)	CHARACTER	1	JPCEPRIO	ORIGINAL JOB PRIORITY
346	(15A)	BITSTRING	1		RESERVED FOR FUTURE USE
348	(15C)	ADDRESS	4	JPCEDTE	SUBTASK DTE ADDRESS
352	(160)	ADDRESS	4	JPCEJCTA	JCT BUFFER ADDR FOR PCE
356	(164)	BITSTRING	12	JPCETQE	HASP TIMER QUEUE ELEMENT
368	(170)	BITSTRING	6	JPCEJCTK	MQTR OF JCT, CHANGED BY PROCESSOR WHEN NEW MQTR SET OF JCT
374	(176)	BITSTRING	2		RESERVED FOR FUTURE IBM USE
376	(178)	ADDRESS	4	JPCEXPLA	Address of XPL for Exit 44
380	(17C)	ADDRESS	4	JPCEPARM	NODE TABLE ADDRESS
384	(180)	ADDRESS	4		CONTROL BLOCK ADDRESS
388	(184)	ADDRESS	4		ADDRESS OF JQE
392	(188)	ADDRESS	1		QUEUE TYPE SPECIFIED

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
393	(189)	ADDRESS	1		WORK SELECTION TYPE FLAG
394	(18A)	ADDRESS	1		RESERVED FOR FUTURE USE
394	(18A)	X'17C'	0	JPCELST	"JPCEPARM,*-JPCEPARM" QGET PARAMETER LIST STORAGE
395	(18B)	BITSTRING	1	JPCEXRSP	EXIT 44 response byte Work area copy of $XPL response byte X044RESP
396	(18C)	CHARACTER	16	JPCESCHE	Default SCHENV
412	(19C)	BITSTRING	6	JPCEJLOG	JES log control
418	(1A2)	CHARACTER	16	JPCESCHH	Hold area for JQA SCHENV
434	(1B2)	CHARACTER	16	JPCESCHJ	Hold area for JCT SCHENV
452	(1C4)	ADDRESS	4	JPCECIP	CIPARM parm area address
456	(1C8)	ADDRESS	4	JPCECAT	CAT for job being converted
460	(1CC)	ADDRESS	4	JPCESQD	SQD address
464	(1D0)	BITSTRING	16	JPCETTKN	Subtask STOKEN work area
480	(1E0)	DBL WORD	8	JPCEPRFS (0)	Performance stats
480	(1E0)	DBL WORD	8	JPCEQTIM	C/I queue time (micro)
488	(1E8)	DBL WORD	8	JPCERTIM	C/I run time (micro)
496	(1F0)	DBL WORD	8	JPCECTIE	C/I CPU time (micro)
496	(1F0)	X'1E0'	0	JPCEPSTA	"JPCEPRFS,*-JPCEPRFS" All C/I performance stats
504	(1F8)	DBL WORD	8	(0)	Alighnment
504	(1F8)	X'C0'	0	JPCELEN	"*-PCEWORK" LENGTH OF PROCESSOR WORK SPACE

$CNVWORK Cross Reference

Name	Hex Offset	Hex Value
JPCECAT	1C8	
JPCECECB	138	
JPCECIP	1C4	
JPCECLAS	151	
JPCECTIE	1F0	
JPCEDTE	15C	
JPCEDUPL	150	80
JPCEJCTA	160	
JPCEJCTK	170	
JPCEJLOG	19C	
JPCELEN	1F8	C0
JPCELST	18A	17C
JPCENCWT	150	10
JPCEPARM	17C	
JPCEPRFS	1E0	
JPCEPRIO	159	
JPCEPSTA	1F0	1E0
JPCEQTIM	1E0	
JPCERTIM	1E8	
JPCESCHE	18C	
JPCESCHH	1A2	
JPCESCHJ	1B2	
JPCESQD	1CC	
JPCESTAT	150	
JPCETQE	164	
JPCETTKN	1D0	
JPCEXPLA	178	
JPCEXRSP	18B	
PCE	0	

$COMWORK Information

$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
		Comment			
		SPOOL MASK WORK AREA - USED WITH V=VOLSER OPERAND			
		End of Comment			
312	(138)	BITSTRING	1	COMSPMSK	VOLUME SERIAL MASK
		Comment			
		SECURITY RELATED TOKEN OF ISSUER OF COMMAND			
		End of Comment			
344	(158)	CHARACTER	80	COMSECT	SECURITY TOKEN
424	(1A8)	ADDRESS	4	COMSQD	ADDRESS OF SQD OR ZERO
428	(1AC)	BITSTRING	1	COMFLAG2	Second CMB flag (CMBFLAG2)
429	(1AD)	BITSTRING	3		Reserved
432	(1B0)	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	
436	(1B4)	SIGNED	4	COMENTBG	See above comment box
				Comment	
				Parameters for IEAVM173 (WPL message extract service)	
				End of Comment	
440	(1B8)	ADDRESS	4	COMMLTEA	Address of MLTE
444	(1BC)	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	
492	(1EC)	SIGNED	4	COMWTOPL (0)	START OF WTO PARAMETERS
492	(1EC)	CHARACTER	1	COMFLAG	FLAGS FOR CMB
493	(1ED)	CHARACTER	1	COMLEVEL	LIST LEVEL AND PRIORITY
494	(1EE)	CHARACTER	1	COMTYPE	FORMAT TYPE
495	(1EF)	CHARACTER	1	COMML	LENGTH OF MESSAGE
496	(1F0)	SIGNED	4	(0)	
496	(1F0)	ADDRESS	3	COMTO (0)	TO SYSTEM NODE INFORMATION
496	(1F0)	SIGNED	2	COMTONOD	NODE NUMBER (BINARY)
498	(1F2)	BITSTRING	1	COMTOQUL	NODE QUALIFIER
499	(1F3)	BITSTRING	1	COMFLAG3	CMB General flag byte 3
500	(1F4)	CHARACTER	8	COMCART	COMMAND AND RESPONSE TOKEN
508	(1FC)	CHARACTER	1	COMUCM	FOR DOWN LEVEL COMPATIBILITY
509	(1FD)	CHARACTER	1	COMUCMA	MCS CONSOLE AREA
510	(1FE)	CHARACTER	2	COMLINET	LINE TYPE FOR MLWTO
512	(200)	CHARACTER	4	COMUCMID	4-BYTE MCS CONSOLE ID
516	(204)	CHARACTER	2	COMDESC	MCS DESCRIPTOR CODES
518	(206)	CHARACTER	2	COMROUT	MCS ROUTE CODES
520	(208)	CHARACTER	4	COMDOMID	MCS DOM ID
524	(20C)	SIGNED	2	COMRMT	REMOTE NUMBER
526	(20E)	CHARACTER	8	COMUSER	TSO USER ID
526	(20E)	X'2A'	0	COMWTOLG	"*-COMWTOPL" LENGTH OF WTO PARM LIST
534	(216)	ADDRESS	2	(0)	Verify that lengths of
534	(216)	ADDRESS	2	(0)	parameter lists are OK
534	(216)	BITSTRING	2		Reserved
536	(218)	DBL WORD	8	(0)	Align
536	(218)	BITSTRING	16	COMSTRT	Time command started
				Comment	
				FUNCTION WORK SPACE	
				End of Comment	

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
552	(228)	CHARACTER	4	COMINCON	SOURCE CONSOLE UCMID
556	(22C)	CHARACTER	1	COMAUTH	SOURCE CONSOLE AUTHORITY
557	(22D)	CHARACTER	8	COMACEID	AUTOMATIC COMMAND ELEMENT ID
565	(235)	BITSTRING	3		Reserved
568	(238)	SIGNED	4	COMJROUT (0)	JOB QUEUING ROUTE CODE FROM CMB (BINARY)
568	(238)	SIGNED	2	COMJNOD	NODE ID
570	(23A)	SIGNED	2	COMJRMT	REMOTE ID
572	(23C)	SIGNED	4	COMJSCAT	SAVE AREA FOR $CFJSCAN CAT
576	(240)	ADDRESS	4	COMCRQ	Command request block head
580	(244)	SIGNED	4	COMEWORK	SINGLE PRECISION WORK AREA
584	(248)	DBL WORD	8	COMDWORK	DOUBLE PRECISION WORK AREA
592	(250)	DBL WORD	8	COMWREGS (2)	REGISTER SAVE AREA
608	(260)	SIGNED	4	COMFWORK	FULL WORD WORK AREA
612	(264)	ADDRESS	1	COMBWORK	ONE BYTE WORK AREA
613	(265)	BITSTRING	1	COMGFLG1	GENERAL FLAG BYTE
		1...		COMG1APO	"B'10000000'" APOSTROPHE SWITCH IS ON
		.1..		COMG1REQ	"B'01000000'" CMB MUST BE REQUEUED
		..1.		COMG1PAR	"B'00100000'" CLOSING PAREN SWITCH IS ON
		...1		COMG1CON	"B'00010000'" MASTER CONSOLE RETRY BIT
		.... 1...		COMG1SSI	"B'00001000'" SSI FORMATTED COMMAND
		.... .1..		COMG1$MN	"B'00000100'" $M/$N command found
		.... ..1.		COMG1UAC	"B'00000010'" Unauthorized console
		1		COMG1SJR	"B'00000001'" A single job being processed by a job list command
614	(266)	BITSTRING	1	COMGFLG2	Command level general flag

Comment

CPOFLAG and definitions for $PQ and $OQ commands

End of Comment

614	(266)	X'266'	0	CPOFLAG	"COMGFLG2"
		1...		CPOFCLS	"B'10000000'" FLAG FOR CLASS STRING EXISTS
		.1..		CPOFCNCL	"B'01000000'" FLAG FOR CANCEL HELD DS
		..1.		CPOFRTE	"B'00100000'" FLAG FOR RE-ROUTING DESIRED

Comment

EQU B'00010000' Reserved

End of Comment

		.... 1...		CPOFALL	"B'00001000'" FLAG FOR 'ALL' OPERAND
		.... .1..		CPOFAGHR	"B'00000100'" FLAG FOR CUT OFF AGE/HOURS
		.... ..1.		CPOFQR	"B'00000010'" Q= and/or R= was specified
		1		CPOFNJO	"B'00000001'" Flag destid on Network Q
615	(267)	BITSTRING	1	COMGFLG3	More genaral flags (Cleared at HASPCOME)
		1...		COMG3ECH	"B'10000000'" Command has been echoed
616	(268)	SIGNED	2	COMLCCA	FLAGS AND AREA OF ' L='
		11		COMFFLGJ	"B'00000011'" BATCH JOB TYPE WHEN ZEROES
		1		COMFFLGS	"B'00000001'" STC JOB TYPE
		.... ..1.		COMFFLGT	"B'00000010'" TSU JOB TYPE
618	(26A)	CHARACTER	10	COMCONNM	SYMBOLIC CONSOLE NAME AND OUT-OF-LINE AREA

Comment

COMMAND EDIT ROUTINE FLAGS

End of Comment

618	(26A)	X'246'	0	COMLFLG	"COMEWORK+2" FLAG BYTE
618	(26A)	X'1'	0	COMLFLGR	"1" UCM CMD FROM REMOTE SYSTEM
618	(26A)	X'2'	0	COMLFLGC	"2" CONSOLE HAS BEEN SPECIFIED
618	(26A)	X'4'	0	COMLFLGA	"4" AREA HAS BEEN SPECIFIED

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
		COMMAND INPUT PASSED TO $SCAN			
				End of Comment	
628	(274)	CHARACTER	132	COMINPUT	COMMAND INPUT PASSED TO $SCAN
760	(2F8)	SIGNED	4	COMSDLCT	COUNT OF $SCAN DISPLAY LINES
764	(2FC)	SIGNED	4	COMTDLCT	Count of total lines displayed for commands partially implemented via $SCAN
768	(300)	ADDRESS	4	COMSTAB	Address of $SCANTAB related to command
				Comment	
		COMMAND TEXT AREA			
				End of Comment	
772	(304)	CHARACTER	2	COMMID	MESSAGE ID
772	(304)	X'304'	0	COMLNGTH	"COMMID" Command length
774	(306)	CHARACTER	1024	COMMAND	COMMAND AND MESSAGE AREA
774	(306)	X'307'	0	COMVERB	"COMMAND+1" LOCATION OF COMMAND VERB
774	(306)	X'308'	0	COMOPRND	"COMMAND+2" LOCATION OF FIRST OPERAND
774	(306)	X'3CE'	0	COMSAFL	"COMMAND+200,1" Length and command image
774	(306)	X'3CF'	0	COMSAFC	"COMSAFL+1,150" for $SEAS CMDAUTH call
1798	(706)	CHARACTER	8	COMJNAME	MESSAGE AREA EXTENSION/JOBNAME
1806	(70E)	CHARACTER	8	COMPRVCM	Start of previous command
1814	(716)	CHARACTER	132	COMCURCM	Mirror of Command
1946	(79A)	SIGNED	2	COMMNDLN	Length of data in COMCURCM
1948	(79C)	ADDRESS	4	COMXWCA	Address of CXWC DSECT
1952	(7A0)	ADDRESS	4	COMLJBRG	Ptr to last job range
				Comment	
		OPERAND POINTER AREA			
				End of Comment	
1956	(7A4)	SIGNED	4	COMPNTER (20)	AREA FOR OPERAND POINTERS
1956	(7A4)	X'50'	0	COMPNTRL	"*-COMPNTER" Length of operand ptr area
2036	(7F4)	ADDRESS	2	(0)	Force assembly error IF AREA TOO SMALL FOR USE BY $DM
2036	(7F4)	SIGNED	4	COMNULOP	NULL OPERAND
2040	(7F8)	BITSTRING	20	COMPINDX	COMPNTER/CDUTABLE INDEX BYTES
2060	(80C)	SIGNED	4	(0)	
2060	(80C)	SIGNED	4	COMINXSV	SAVE AREA FOR COMPINDX POINTER
2064	(810)	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	
2068	(814)	BITSTRING	248	COMREGSV	REGISTER SAVE/WORK AREA
				Comment	
		---------- COFRTR work area for route code ranges ----------			
				End of Comment	
2316	(90C)	BITSTRING	18	COMRWORK	WORK AREA FOR SUBMITTING EBCDIC ROUTES TO $DEST/USERDEST

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
2334	(91E)	BITSTRING	1	COMRFLG1	FLAG BYTE FOR ROUTECODES
		.1..		COMR1GNC	"B'01000000'" Indicates the userid in COMUWORK contains a least one generic character
		..1.		COMR1UNN	"B'00100000'" INDICATES WHETHER OR NOT SPECIAL LOCAL ROUTING IS INCLUDED IN RANGE
		...1		COMR1RAL	"B'00010000'" Indicates that route code ranges are allowed
		.... 1...		COMR1DFT	"B'00001000'" INDICATES COMREGSV+2 IS TO BE USED FOR THE DEFAULT NODE INSTEAD OF COMJNOD
		.... .1..		COMR1GEN	"B'00000100'" INDICATES WHETHER OR NOT A GEN. USERID IS ALLOWED
		.... ..1.		COMR1GNA	"B'00000010'" Indicates that a generic userid was specified, implicitly or explicitly on first dest in range
		1		COMR1RPR	"B'00000001'" INDICATES ROUTECODE CONTAINED (
2335	(91F)	BITSTRING	1		RESERVED FOR FUTURE USE
2336	(920)	CHARACTER	8	COMUWORK	HI-END USERID FROM $DEST
2336	(920)	X'0'	0	COMNODE	"0,2,C'H'" Offset/length of node
2336	(920)	X'2'	0	COMRMTE	"2,2,C'H'" Offset/length of rmt
2336	(920)	X'4'	0	COMUSEID	"4,8,C'D'" Offset/length of userid
2336	(920)	X'4'	0	COMNRLEN	"L'COMNODE+L'COMRMT" Length of node+remote
2336	(920)	X'8'	0	COMUCNT	"8" COUNTER FOR EXAMINING GENERIC USERIDS
2344	(928)	BITSTRING	1		Reserved

Comment

More flag bytes

End of Comment

2345	(929)	BITSTRING	1	COMSFLG1	Flag byte for specific cmds
		1...		COMS1WT	"B'10000000'" Waited 1 sec in $PJES2 for system to quiesce

Comment

Next 2 bits used for Joblist commands

End of Comment

		.1..		COMS1JQ	"B'01000000'" JOBQ specified as object
		..1.		COMS1JST	"B'00100000'" J, S, or T specified
		...1		COMS1HIT	"B'00010000'" JOE found flag
		.... 1...		COMS1RTS	"B'00001000'" $T RMT switched BSC<--->SNA
		.... .1..		COMS1MAX	"B'00000100'" Maximum hi range specified
		.... ..1.		COMS1FLT	"B'00000010'" Job queue filter required
		1		COMS1RBD	"B'00000001'" Include rebuild queue in job scan
2346	(92A)	BITSTRING	1	COMSTABP	COMPCE id from STAB
2347	(92B)	BITSTRING	1		Reserved for future use

Comment

$CFSEL macro/service routine communication area

End of Comment

2348	(92C)	ADDRESS	4	COMSCOTE	Address of current entry in operand pointer table
2352	(930)	ADDRESS	4	COMSRTNA	Address of selected routine (or zero if no match)
2356	(934)	SIGNED	4	COMSSLEN	Length of matching string (or zero if no match)
2360	(938)	SIGNED	4	COMSRLEN	Residual operand length (or input operand length if no match)

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

				Area for specifications for filter type operands	

				End of Comment	
2364	(93C)	CHARACTER	8	COMJNAM	STORE OUTPUT JOE NAME
2372	(944)	SIGNED	2	COMJID1	STORE OUTPUT JOE 1ST ID
2374	(946)	SIGNED	2	COMJID2	STORE OUTPUT JOE 2ND ID
				Comment	

				$TO AND $R WORK AREA FOR JOES	

				End of Comment	
2376	(948)	SIGNED	4	(0)	Word alignment
2376	(948)	ADDRESS	4	COMJOAA	Address of JOA
2380	(94C)	BITSTRING	1	COMLTFLG	Flag byte for $L and $TO
		1...		COMLTMAX	"B'10000000'" DISPMAX reached for current set of $HAS686 msgs
				Comment	

				Field needed for $CFJSCAN Processing	

				End of Comment	
2381	(94D)	BITSTRING	2		Reserved for future use
2383	(94F)	BITSTRING	1	COMQUE	Requested Queue
				Comment	

				Free JOE work area	

				End of Comment	
2384	(950)	SIGNED	4	COMFJOEL	Indx of lowest JOE to free
2388	(954)	SIGNED	4	COMFJOEH	Indx of highest JOE to free
2388	(954)	X'950'	0	COMFJOEW	"COMFJOEL,*-COMFJOEL,C'F'" Composite field
				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	
2392	(958)	BITSTRING	4	COMAFMSK	System affinity mask
2396	(95C)	BITSTRING	1	COMOSAFM	Old system affinity mask

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

Comment

ENQ/DEQ parameter lists

MACRO-DATE = 06/24/03

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2400	(960)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
2400	(960)	X'960'	0	COMRDRNQ	"*" X02113
2400	(960)	ADDRESS	1		PELLAST flag byte. X02113
2401	(961)	ADDRESS	1		PELMILEN - RNAME length.
2402	(962)	BITSTRING	1		

Comment

PELFLAG - flag byte 2.

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2403	(963)	ADDRESS	1		PELRET - return code byte.
2404	(964)	ADDRESS	4		QNAME ADDRESS
2408	(968)	ADDRESS	4		RNAME ADDRESS
2408	(968)	X'C'	0	COMENQL	"*-COMRDRNQ" Length of ENQ

Comment

MACRO-DATE = 10/06/2004

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2412	(96C)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
2412	(96C)	X'96C'	0	COMRDRDQ	"*" X02113
2412	(96C)	ADDRESS	1		PELLAST flag byte. X02113
2413	(96D)	ADDRESS	1		PELMILEN - RNAME length.
2414	(96E)	BITSTRING	1		

Comment

PELFLAG - flag byte 2.

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2415	(96F)	ADDRESS	1		PELRET - return code byte.
2416	(970)	ADDRESS	4		QNAME ADDRESS
2420	(974)	ADDRESS	4		RNAME ADDRESS
2420	(974)	X'C'	0	COMDEQL	"*-COMRDRDQ" Length of DEQ
2420	(974)	X'840'	0	COMMAXL	"*-PCEWORK" Maximum length of COMWORK

Comment

Beginning of remappings of existing areas.

SUBSYSTEM-INDEPENDENT (SSI) FORMATTED COMMAND AREA

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2068	(814)	BITSTRING	40	COMFCMDA (0)	FORMATTED COMMAND AREA
2068	(814)	CHARACTER	1	COMFOP	FORMATTED COMMAND OPTION CODE
2069	(815)	CHARACTER	1	COMFFLG	FORMATTED COMMAND FLAG BYTE
2070	(816)	SIGNED	2	COMFJID	JOB IDENTIFICATION
2072	(818)	CHARACTER	8	COMFORGN	ORIGINATING NODE NAME
2080	(820)	CHARACTER	8	COMFJNAM	JOB NAME
2088	(828)	CHARACTER	8	COMFD	DESTINATION NODE NAME (ROUTE CMD)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
2096	(830)	CHARACTER	8	COMFR	REMOTE NAME (ROUTE CMD)
2104	(838)	SIGNED	4	COMFJNO	Job number identifier
2104	(838)	X'83C'	0	COMFEND	"*" END OF FORMATTED COMMAND AREA
2104	(838)	X'28'	0	COMFL	"*-COMFOP" LENGTH OF FORMATTED CMD AREA
2108	(83C)	ADDRESS	2	(0)	Ensure area fits within COMREGSV
				Comment	

				SSI FORMATTED CMD WORKAREA (USED BY HASPCFCP)	

				End of Comment	
1956	(7A4)	CHARACTER	80	COSIWORK (0)	
1956	(7A4)	BITSTRING	40	COSICMDA (0)	FORMATTED COMMAND AREA
1956	(7A4)	CHARACTER	1	COSIOP	FORMATTED COMMAND OPTION CODE
1957	(7A5)	CHARACTER	1	COSIFLG	FLAG BYTE (SEE COMFFLG DEF.)
1958	(7A6)	SIGNED	2	COSIJID	JOB IDENTIFICATION
1960	(7A8)	CHARACTER	8	COSIORGN	ORIGINATING NODE NAME
1968	(7B0)	CHARACTER	8	COSIJNAM	JOB NAME
1976	(7B8)	CHARACTER	8	COSID	DESTINATION NODE NAME (ROUTE CMD)
1984	(7C0)	CHARACTER	8	COSIR	REMOTE NAME (ROUTE CMD)
1992	(7C8)	SIGNED	4	COSIJNO	Job number identifier
1992	(7C8)	X'7CC'	0	COSIEND	"*" END OF FORMATTED COMMAND AREA
1992	(7C8)	X'28'	0	COSIL	"*-COSICMDA" LENGTH OF FORMATTED CMD AREA
1996	(7CC)	SIGNED	4	COSILINK	USED TO SAVE LINK REGISTER
2000	(7D0)	SIGNED	4	COSIJQER	USED TO SAVE PTR TO JQE
2004	(7D4)	SIGNED	4	COSISAV0	USED TO SAVE R0 CONTENTS
2008	(7D8)	SIGNED	2	COSINOD#	ORIGINATING NODE # (BINARY)
2010	(7DA)	CHARACTER	1	COSIEFOP	EFFECTIVE CMD OPTION CODE
2011	(7DB)	BITSTRING	1		RESERVED FOR FUTURE USE
2011	(7DB)	X'38'	0	COMSIL	"*-COSIWORK" Length of this remapping
2012	(7DC)	ADDRESS	2	(0)	Ensure area fits within COMPNTER
				Comment	
				COMFOP DEFINITIONS	
				End of Comment	
2012	(7DC)	X'1'	0	COMFOPD	"1" DISPLAY JOB COMMAND ($GD)
2012	(7DC)	X'2'	0	COMFOPC	"2" CANCEL JOB COMMAND ($GC)
2012	(7DC)	X'3'	0	COMFOPA	"3" RELEASE JOB COMMAND ($GA)
2012	(7DC)	X'4'	0	COMFOPH	"4" HOLD JOB COMMAND ($GH)
2012	(7DC)	X'5'	0	COMFOPR	"5" ROUTE JOB COMMAND ($GR)
				Comment	
				COMFFLG DEFINITIONS	
				End of Comment	
		1...		COMFFLGO	"B'10000000'" A) FOR COMFOPC ($GC) COMMAND - CANCEL OUTPUT AS OPPOSED TO EXECUTION B) FOR COMFOPR ($GR) COMMAND - ROUTE OUTPUT AS OPPOSED TO EXECUTION
		.1..		COMFFLGD	"B'01000000'" CANCEL EXECUTION WITH A DUMP
		..1.		COMFFLGN	"B'00100000'" COSIFJNO is job number
				Comment	
				$R COMMAND WORK AREA	
				End of Comment	
2068	(814)	SIGNED	4	CRXWORKA (0)	$R COMMAND WORK AREA
2068	(814)	SIGNED	4	CRXOLDRT	SAVE AREA FOR OLD ROUTECDE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
2072	(818)	SIGNED	4	CRXNEWRT	SAVE AREA FOR NEW ROUTECDE
2076	(81C)	SIGNED	4	CRXCLSPT	SAVE AREA FOR CLASS PTR
2080	(820)	SIGNED	4	CRXJBNUM	SAVE AREA FOR JOB NUMBER
2084	(824)	BITSTRING	1	CRXOUTD	OUTDISP PROCESSING FLAGS
		1...		CRXODLST	"B'10000000'" PARENTHESIZED OPERAND LIST CURRENTLY BEING PROCESSED
2084	(824)	X'8'	0	CRXODW	"$ODWRITE" PROCESS OUTDISP=WRITE
2084	(824)	X'4'	0	CRXODH	"$ODHOLD" PROCESS OUTDISP=HOLD
2084	(824)	X'2'	0	CRXODK	"$ODKEEP" PROCESS OUTDISP=KEEP
2084	(824)	X'1'	0	CRXODL	"$ODLEAVE" PROCESS OUTDISP=LEAVE
2084	(824)	X'F'	0	CRXODANY	"$ODANY" ANY OUTDISP SETTINGS
2085	(825)	BITSTRING	1	CRXFLAG1	$R command flag byte
		1...		CRX1GENC	"B'10000000'" CRXOLDUS contains generic characters ('*' or '?')
2086	(826)	BITSTRING	37	CRXCLASL	Q= CLASS LIST (36 + BLANK)
2124	(84C)	SIGNED	4	(0)	FULL WORD ALIGNMENT
2124	(84C)	CHARACTER	8	CRXOLDUS	SAVE AREA FOR OLD ROUTE CD
2132	(854)	CHARACTER	8	CRXNEWUS	SAVE AREA FOR NEW ROUTE CD
2140	(85C)	CHARACTER	8	CRXNEWND	SAVE AREA FOR NEW NODE NAME
2140	(85C)	X'50'	0	CRXLEN	"*-CRXWORKA" LENGTH OF $R WORK AREA
2148	(864)	ADDRESS	2	(0)	CHECK FOR OVERLAP
		Comment			
		MESSAGE TEXT FOR PRMODE SYSTEM TABLE ERROR			
		End of Comment			
774	(306)	CHARACTER	66	CTPRTEXT	PRMODE TABLE MESSAGE
840	(348)	ADDRESS	2	(0)	Generate assembly error if L'CTPRTEXT exceeds L'COMMAND
		Comment			
		Flag byte for PREJOE, PREJQE and PSTCFVQE			
		End of Comment			
2168	(878)	BITSTRING	1	CRJFLAG	Flags for JOE/JQE commands
2168	(878)	X'65'	0	CRJLEN	"*-COMREGSV" Length of remapped area
2170	(87A)	ADDRESS	2	(0)	Check for overlap
		Comment			
		Flag definitions for CRJFLAG			
		End of Comment			
		1...		CRJFLGCF	"B'10000000'" PSTCFVQE has been invoked
		Comment			
		DISPLAY UNIT FLAG DEFINITIONS			
		End of Comment			
2170	(87A)	X'810'	0	CDUFLAG1	"COMOPFLG" CDUFLAG1 DEFINITION
		1...		CDUFLGRP	"B'10000000'" GROUP DISPLAY REQUEST
		11..		CDUFLTYP	"B'11000000'" TYPE-GROUP DISPLAY REQ
		..1.		CDUFLRMT	"B'00100000'" REMOTE SUB-DISPLAY REQ
		...1		CDUFLRAT	"B'00010000'" RAT BASED DISPLAY REQ
		.... 1...		CDUFLONE	"B'00001000'" SINGLE DCT DISPLAY REQ
		.... .1..		CDUFLCLS	"B'00000100'" DCT CLASS SKIP REQUEST
		.... ..1.		CDUFLLU	"B'00000010'" SNA LUNAME SUBDISPLAY
		1		CDUFLMOD	"B'00000001'" MODIFIER OPERAND ONLY
2170	(87A)	X'811'	0	CDUDEVTP	"COMOPFLG+1" TYPE-GROUP DCT TYPE
2170	(87A)	X'812'	0	CDUMASK	"COMOPFLG+2" BRANCH MASK VALUE
2170	(87A)	X'813'	0	CDUFLAG2	"COMOPFLG+3" CDUFLAG2 DEFINITION
		1...		CDUFLSUB	"B'10000000'" RMT SUB-DSPLY IN PROGR

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		.1..		CDUFLONG	"B'01000000'" FORCE LONG DISPLAY
		..1.		CDUFLFND	"B'00100000'" DEVICE FOUND IN DSPLY
		...1		CDUFLOPR	"B'00010000'" NON-MODIFIER OPERANDS
		.... 1...		CDUFLACT	"B'00001000'" ACTIVE ONLY MODIFIER
		.... .1..		CDUFLSTR	"B'00000100'" STARTED ONLY MODIFIER
		.... ..1.		CDUFLSHT	"B'00000010'" SHORT MODIFIER
		1		CDUFXSUB	"B'00000001'" XFR SUB-DISPLAY
2170	(87A)	X'814'	0	CDUDEVN	"COMREGSV,12" Device name for $DU
				Comment	

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

				End of Comment	
		1		COFN	"X'01'" DISPLAY NORMAL JOBS
		.... ..1.		COFS	"X'02'" DISPLAY SYSTEM JOBS
		.... .1..		COFT	"X'04'" DISPLAY LOGON JOBS
2170	(87A)	X'7'	0	COFJ	"COFN+COFS+COFT" DISPLAY ALL JOBS
		.... 1...		COFX	"X'08'" DISPLAY JOBS IN EXECUTION
		...1		COFD	"X'10'" DISPLAY JOBS ON DEVICES
2170	(87A)	X'1F'	0	COFA	"COFJ+COFX+COFD" DISPLAY ACTIVE JOBS
		..1.		COFI	"X'20'" DISPLAY PRE-XEQ QUEUED JOBS
		.1..		COFO	"X'40'" DISPLAY POST-XEQ QUEUED JOBS
		1...		COFP	"X'80'" DISPLAY QUEUED FOR PRT/PUN
2170	(87A)	X'E7'	0	COFQ	"COFJ+COFI+COFO+COFP" DISPLAY QUEUED JOBS
2170	(87A)	X'FF'	0	COFU	"COFJ+COFI+COFO+COFX+COFP+COFD" DISPLAY UNCONDITIONAL
				Comment	

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

				End of Comment	
		1		COFLNGFG	"B'00000001'" LONG OPERAND SPECIFIED FLAG
		.... ..1.		COFPREFX	"B'00000010'" SPOOL PREFIX ALREADY PRINTED
				Comment	
					Define the COMMAND work area for use building the
					job related display messages.

					Define the fixed message start.

				End of Comment	
2170	(87A)	X'306'	0	COFJOB	"COMMAND,3" TEXT 'JOB', 'STC', OR 'TSU'
2170	(87A)	X'309'	0	COFJNO	"COFJOB+3,5" JOB NUMBER WITH LEADING BLANK
2170	(87A)	X'30F'	0	COFJNAME	"COFJNO+6,8" JOB NAME
				Comment	

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

				End of Comment	
2170	(87A)	X'318'	0	COFQUE	"COFJNAME+9,8" TEXT 'AWAITING'
2170	(87A)	X'6E8'	0	COFOPT	"COMMAND+L'COMMAND-30,1" OPTION SPECIFIED

$COMWORK Cross Reference

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
2170	(87A)	X'6E9'	0	COFNULL	"COFOPT+1,1" Place holder for COFAFF
2170	(87A)	X'6EA'	0	COFOPT2	"COFNULL+1,1" 2ND OPTION FLAG
2170	(87A)	X'6EB'	0	COFSECF	"COFOPT2+1,4" SECURITY FIELD FOR $WTO'S
2170	(87A)	X'6EF'	0	COFLNGTH	"COFSECF+4,2" LENGTH OF MSG
2170	(87A)	X'3EB'	0	COFSIZE	"COFLNGTH+L'COFLNGTH-COFJOB" Size of work area
2170	(87A)	CHARACTER	1	(0)	Ensure work area fits within COMMAND field
2170	(87A)	X'95C'	0	COFAFF	"COMOSAFM" System affinity mask
2170	(87A)	X'958'	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.

End of Comment

312	(138)	BITSTRING	2112		Account for largest section
2424	(978)	SIGNED	4	(0)	Ensure full-word align
2424	(978)	X'840'	0	COMPCEWS	"*-PCEWORK" LENGTH OF WORK AREA

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	COMREQ	Command Request block DSECT
0	(0)	CHARACTER	4	CRQID	Eyecatcher
4	(4)	ADDRESS	4	CRQNEXT	Next request on queue
8	(8)	BITSTRING	42	CRQWTOPL	Long WTO parm list
50	(32)	BITSTRING	82	CRQSECT	Security token
132	(84)	SIGNED	4	(0)	Set alignment
132	(84)	CHARACTER	4	CRQINCON	Input console UCMID
136	(88)	CHARACTER	1	CRQAUTH	Input console authority
137	(89)	BITSTRING	1	CRQGFLG1	General flag byte
138	(8A)	BITSTRING	1	CRQFLAG2	Second CMB flag
139	(8B)	BITSTRING	1		Reserved
140	(8C)	SIGNED	4	CRQJROUT	Route code from CMB
144	(90)	SIGNED	2	CRQLCCA	Flags and area of ' L=CCA'
146	(92)	SIGNED	2	CRQCMDLN	Command length
148	(94)	CHARACTER	10	CRQCONNM	Symbolic console name/area
158	(9E)	BITSTRING	2		Reserved
160	(A0)	CHARACTER	132	CRQCMD	Command
292	(124)	SIGNED	4	CRQPNTER (21)	Area for operand pointers
376	(178)	SIGNED	4	CRQLPTR	Offset of ptr to last oper
376	(178)	X'17C'	0	CRQLEN	"*-COMREQ" Length of request list

$COMWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CDUDEVN	87A	814	CDUFLOPR	87A	10
CDUDEVTP	87A	811	CDUFLRAT	87A	10
CDUFLACT	87A	8	CDUFLRMT	87A	20
CDUFLAG1	87A	810	CDUFLSHT	87A	2
CDUFLAG2	87A	813	CDUFLSTR	87A	4
CDUFLCLS	87A	4	CDUFLSUB	87A	80
CDUFLFND	87A	20	CDUFLTYP	87A	C0
CDUFLGRP	87A	80	CDUFXSUB	87A	1
CDUFLLU	87A	2	CDUMASK	87A	812
CDUFLMOD	87A	1	COFA	87A	1F
CDUFLONE	87A	8	COFAFF	87A	95C
CDUFLONG	87A	40	COFAFWRK	87A	958

Name	Hex Offset	Hex Value
COFD	87A	10
COFI	87A	20
COFJ	87A	7
COFJNAME	87A	30F
COFJNO	87A	309
COFJOB	87A	306
COFLNGFG	87A	1
COFLNGTH	87A	6EF
COFN	87A	1
COFNULL	87A	6E9
COFO	87A	40
COFOPT	87A	6E8
COFOPT2	87A	6EA
COFP	87A	80
COFPREFX	87A	2
COFQ	87A	E7
COFQUE	87A	318
COFS	87A	2
COFSECF	87A	6EB
COFSIZE	87A	3EB
COFT	87A	4
COFU	87A	FF
COFX	87A	8
COMACEID	22D	
COMAFMSK	958	
COMAUTH	22C	
COMBWORK	264	
COMCART	1F4	
COMCONNM	26A	
COMCRQ	240	
COMCURCM	716	
COMDEQL	974	C
COMDESC	204	
COMDOMID	208	
COMDWORK	248	
COMENQL	968	C
COMENTBG	1B4	
COMEWORK	244	
COMFCMDA	814	
COMFD	828	
COMFEND	838	83C
COMFFLG	815	
COMFFLGD	7DC	40
COMFFLGJ	268	3
COMFFLGN	7DC	20
COMFFLGO	7DC	80
COMFFLGS	268	1
COMFFLGT	268	2
COMFJID	816	
COMFJNAM	820	
COMFJNO	838	
COMFJOEH	954	
COMFJOEL	950	
COMFJOEW	954	950
COMFL	838	28
COMFLAG	1EC	
COMFLAG2	1AC	
COMFLAG3	1F3	
COMFOP	814	
COMFOPA	7DC	3
COMFOPC	7DC	2
COMFOPD	7DC	1
COMFOPH	7DC	4
COMFOPR	7DC	5
COMFORGN	818	
COMFR	830	
COMFWORK	260	
COMGFLG1	265	
COMGFLG2	266	
COMGFLG3	267	
COMG1$MN	265	4
COMG1APO	265	80
COMG1CON	265	10
COMG1PAR	265	20
COMG1REQ	265	40
COMG1SJR	265	1
COMG1SSI	265	8
COMG1UAC	265	2
COMG3ECH	267	80
COMINCON	228	
COMINPUT	274	
COMINXSV	80C	
COMJID1	944	
COMJID2	946	
COMJNAM	93C	
COMJNAME	706	
COMJNOD	238	
COMJOAA	948	
COMJRMT	23A	
COMJROUT	238	
COMJSCAT	23C	
COMLCCA	268	
COMLEVEL	1ED	
COMLFLG	26A	246
COMLFLGA	26A	4
COMLFLGC	26A	2
COMLFLGR	26A	1
COMLINET	1FE	
COMLJBRG	7A0	
COMLNGTH	304	304
COMLTFLG	94C	
COMLTMAX	94C	80
COMMAND	306	
COMMAXL	974	840
COMMID	304	
COMML	1EF	
COMMLTE	1BC	
COMMLTEA	1B8	
COMMNDLN	79A	
COMNODE	920	0
COMNRLEN	920	4
COMNULOP	7F4	
COMOPFLG	810	
COMOPRND	306	308
COMOSAFM	95C	
COMPCEWS	978	840
COMPINDX	7F8	
COMPNTER	7A4	
COMPNTRL	7A4	50
COMPRVCM	70E	
COMPXEQ	1B0	
COMQUE	94F	
COMRDRDQ	96C	96C
COMRDRNQ	960	960
COMREGSV	814	
COMREQ	0	
COMRFLG1	91E	
COMRMT	20C	
COMRMTE	920	2
COMROUT	206	

Name	Hex Offset	Hex Value
COMRWORK	90C	
COMR1DFT	91E	8
COMR1GEN	91E	4
COMR1GNA	91E	2
COMR1GNC	91E	40
COMR1RAL	91E	10
COMR1RPR	91E	1
COMR1UNN	91E	20
COMSAFC	306	3CF
COMSAFL	306	3CE
COMSCOTE	92C	
COMSDLCT	2F8	
COMSECT	158	
COMSFLG1	929	
COMSIL	7DB	38
COMSPMSK	138	
COMSQD	1A8	
COMSRLEN	938	
COMSRTNA	930	
COMSSLEN	934	
COMSTAB	300	
COMSTABP	92A	
COMSTRT	218	
COMS1FLT	929	2
COMS1HIT	929	10
COMS1JQ	929	40
COMS1JST	929	20
COMS1MAX	929	4
COMS1RBD	929	1
COMS1RTS	929	8
COMS1WT	929	80
COMTDLCT	2FC	
COMTO	1F0	
COMTONOD	1F0	
COMTOQUL	1F2	
COMTYPE	1EE	
COMUCM	1FC	
COMUCMA	1FD	
COMUCMID	200	
COMUCNT	920	8
COMUSEID	920	4
COMUSER	20E	
COMUWORK	920	
COMVERB	306	307
COMWREGS	250	
COMWTOLG	20E	2A
COMWTOPL	1EC	
COMXWCA	79C	
COSICMDA	7A4	
COSID	7B8	
COSIEFOP	7DA	
COSIEND	7C8	7CC
COSIFLG	7A5	
COSIJID	7A6	
COSIJNAM	7B0	
COSIJNO	7C8	
COSIJQER	7D0	
COSIL	7C8	28
COSILINK	7CC	
COSINOD#	7D8	
COSIOP	7A4	
COSIORGN	7A8	
COSIR	7C0	
COSISAV0	7D4	
COSIWORK	7A4	
CPOFAGHR	266	4
CPOFALL	266	8
CPOFCLS	266	80
CPOFCNCL	266	40
CPOFLAG	266	266
CPOFNJO	266	1
CPOFQR	266	2
CPOFRTE	266	20
CRJFLAG	878	
CRJFLGCF	87A	80
CRJLEN	878	65
CRQAUTH	88	
CRQCMD	A0	
CRQCMDLN	92	
CRQCONNM	94	
CRQFLAG2	8A	
CRQGFLG1	89	
CRQID	0	C3D9D840
CRQINCON	84	
CRQJROUT	8C	
CRQLCCA	90	
CRQLEN	178	17C
CRQLPTR	178	
CRQNEXT	4	
CRQPNTER	124	
CRQSECT	32	
CRQWTOPL	8	
CRXCLASL	826	
CRXCLSPT	81C	
CRXFLAG1	825	
CRXJBNUM	820	
CRXLEN	85C	50
CRXNEWND	85C	
CRXNEWRT	818	
CRXNEWUS	854	
CRXODANY	824	F
CRXODH	824	4
CRXODK	824	2
CRXODL	824	1
CRXODLST	824	80
CRXODW	824	8
CRXOLDRT	814	
CRXOLDUS	84C	
CRXOUTD	824	
CRXWORKA	814	
CRX1GENC	825	80
CTPRTEXT	306	
PCE	0	

$CPCWORK Information

$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: CPCWPARM
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	CPCWPARM	, CPOOL QCELL Work Mapping
0	(0)	ADDRESS	8	CPCWCELL_64	Cell address (64-bit)
0	(0)	X'4'	0	CPCWCELL	"CPCWCELL_64+4,4,C'A'" 31-bit version
8	(8)	DBL WORD	8	CPCWSTAT_64	Cell status (64-bit)
8	(8)	X'C'	0	CPCWSTAT	"CPCWSTAT_64+4,4,C'F'" 31-bit version
16	(10)	SIGNED	4	CPCWXNUM	Extent number for cell
20	(14)	SIGNED	4	CPCWRC	MVS service return code
24	(18)	SIGNED	4	CPCALET	ALET of cell
24	(18)	X'1C'	0	CPCWSIZE	"*-CPCWPARM" Size of parmlist

$CPEBE Information

$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: CPEID-CPEBE
Length: 4
Storage Attributes: Subpool: any
Key: any
Residency: Same as extent storage for cell pool The CPEBE (and the CPEB which follows) must be obtained on a quadword boundary.
Size: See CPESIZE
Created by: CPEXPAND Routine in HASCPOOL
(Main Task and User environments)
Pointed to by: CPEDNEXT field of the $CPEBE data area
CPENEXT field of the $CPEBE data area
CPMCPEBE field of the $CPMASTR data area
CPMCPEDS field of the $CPMASTR data area
Serialization: ENQ dueing CPEXPAND
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	1	CPEFLAG1	Flags
		1...		CPE1DISC	"B'10000000'" Disconnected extent
6	(6)	BITSTRING	2		Reserved for future use
8	(8)	ADDRESS	8	CPEBXADD	64-bit address of extent
16	(10)	ADDRESS	8	CPENEXT	Address of next CPEBE
24	(18)	ADDRESS	8	CPEBBADR	Address of CPEB/Bit map
32	(20)	DBL WORD	8	CPEBBSIZ	Size of CPEB/Bit map
40	(28)	DBL WORD	8	CPEXXSZ	Size of extent
48	(30)	SIGNED	4	CPEBXNUM	Extent number
52	(34)	SIGNED	4	CPEBMAST	CPMASTR offset in CPINDEX
56	(38)	SIGNED	4	CPEDNEXT	Next CPEBE on disconnected chain
56	(38)	X'40'	0	CPESIZE	"((*-CPEBE+15)/16)*16" Size of CPEBE rounded to quadword

$CPEBE Cross Reference

Name	Hex Offset	Hex Value
CPEBBADR	18	
CPEBBSIZ	20	
CPEBE	0	
CPEBMAST	34	
CPEBXADD	8	
CPEBXNUM	30	
CPEDNEXT	38	
CPEFLAG1	5	
CPEID	0	C3D7C5C2
CPENEXT	10	
CPESIZE	38	40
CPEVNUM	4	1
CPEVRSN	4	
CPEXXSZ	28	
CPE1DISC	5	80

$CPINDEX Information

$CPINDEX Programming Interface information

Programming Interface information

$CPINDEX

End of Programming Interface information

$CPINDEX Heading Information

Common Name: Cell Pool Index table
Macro ID: $CPINDEX
DSECT Name: CPINDEX
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: CPIX
Offset: -8 (in the JES2 CSA storage prefix)
Length: L'$CSBID
Storage Attributes: Subpool: 229 or 231
Key: 1
Residency: Extended private in any address space using JES2 services. One copy is located in ECSA. Virtual and real storage can be anywhere.
Size: See CPILEN + 8 byte prefix
Created by: CPINIT routine in HASCPOOL
Pointed to by: HXBCPIDX field of the HASXB data area
CCTCPIDX field of the HCCT data area
Serialization: Compare and Swap logic will be used to insert a $CPMASTR element in the pre-defined cell types. For the user-defined cell types, a lock for the $CPINDEX table must be held before entry can be inserted.
Function: This table is used to index into the Master Cell Pool Table ($CPMASTR). It contains index pointers into the $CPMASTR. Each of the pointer is associated with a Cell Type (BAT, BSC, CB, HASP, NMAP, NSA, NTQ, NAT, PAGE, PP, PROT, PSO, SAPID, SMF, SPXFR, STAC, TJEV, UNPROT, and VTAM).
A work cell type can be specified by the caller only in the USER environment. For example, TYPE=ccccc, where ccccc is any alphanumeric character, up to a length of 5 characters.

$CPINDEX Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CPINDEX	Cell Pool Index Table
0	(0)	BITSTRING	1	CPIVRSN	CPINDEX Version
0	(0)	X'1'	0	CPIVNUM	"1" Version number
1	(1)	BITSTRING	1	CPILOCK	CPINDEX lock
2	(2)	BITSTRING	1	CPIFLAG1	Flag 1
		1...		CPIEMPTY	"B'10000000'" Empty entry in user area
		.1..		CPI1CSA	"B'01000000'" CSA CPINDEX
3	(3)	BITSTRING	1	CPIFLAG2	Recovery footprints
4	(4)	SIGNED	4	CPISTART (0)	Start of CPLTABs
4	(4)	ADDRESS	4	CPIBAT	BAT CPMASTR addr, subpool BATPOOL
8	(8)	ADDRESS	4	CPIBSC	BSC CPMASTR addr, subpool BSCPOOL
12	(C)	ADDRESS	4	CPICB	CB CPMASTR addr, subpool CBPOOL
16	(10)	ADDRESS	4	CPICDCT	CDCT CPMASTR addr, location CSA64
16	(10)	X'10'	0	CPICDCT_C	"CPICDCT,4,C'A'" CDCT Common pool equate
20	(14)	ADDRESS	4	CPICDCTQS	CDCTQS CPMASTR addr, location CSA64
20	(14)	X'14'	0	CPICDCTQS_C	"CPICDCTQS,4,C'A'" CDCTQS Common pool equate
24	(18)	ADDRESS	4	CPICDCTRNT	CDCTRNT CPMASTR addr, location CSA64
24	(18)	X'18'	0	CPICDCTRNT_C	"CPICDCTRNT,4,C'A'" CDCTRNT Common pool equate
28	(1C)	ADDRESS	4	CPICID	CID CPMASTR addr, subpool CIDPOOL
32	(20)	ADDRESS	4	CPICMB	CMB CPMASTR addr, subpool CMBPOOL
36	(24)	ADDRESS	4	CPICNIT	CNIT CPMASTR addr, location CSA64
36	(24)	X'24'	0	CPICNIT_C	"CPICNIT,4,C'A'" CNIT Common pool equate

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
40	(28)	ADDRESS	4	CPIGPQE	GPQE CPMASTR addr, subpool GPQPOOL
44	(2C)	ADDRESS	4	CPIEVT	EVT CPMASTR addr, location DATASPACE
44	(2C)	X'2C'	0	CPIEVT_C	"CPIEVT,4,C'A'" EVT Common pool equate
48	(30)	ADDRESS	4	CPIHASP	HASP CPMASTR addr, subpool HASPPOOL
52	(34)	ADDRESS	4	CPIHEDR	HEDR CPMASTR addr, subpool HEDRPOOL
56	(38)	ADDRESS	4	CPIICE	ICE CPMASTR addr, subpool ICEPOOL
60	(3C)	ADDRESS	4	CPIIRE	IRE CPMASTR addr, location CSA
60	(3C)	X'3C'	0	CPIIRE_C	"CPIIRE,4,C'A'" IRE Common pool equate
64	(40)	ADDRESS	4	CPIJQRB	JQRB CPMASTR addr, location DATASPACE
64	(40)	X'40'	0	CPIJQRB_C	"CPIJQRB,4,C'A'" JQRB Common pool equate
68	(44)	ADDRESS	4	CPINAT	NAT CPMASTR addr, location DATASPACE
68	(44)	X'44'	0	CPINAT_C	"CPINAT,4,C'A'" NAT Common pool equate
72	(48)	ADDRESS	4	CPIB32K	B32K CPMASTR addr, subpool B32KPOOL
76	(4C)	ADDRESS	4	CPINMAP	NMAP CPMASTR addr, subpool NMAPPOOL
80	(50)	ADDRESS	4	CPINSA	NSA CPMASTR addr, subpool NSAPOOL
84	(54)	ADDRESS	4	CPINTQ	NTQ CPMASTR addr, subpool NTQPOOL
88	(58)	ADDRESS	4	CPIPAGE	PAGE CPMASTR addr, subpool PAGEPOOL
92	(5C)	ADDRESS	4	CPIPCL	PCL CPMASTR addr, location DATASPACE
92	(5C)	X'5C'	0	CPIPCL_C	"CPIPCL,4,C'A'" PCL Common pool equate
96	(60)	ADDRESS	4	CPIPP	PP CPMASTR addr, subpool PPPOOL
100	(64)	ADDRESS	4	CPIPSO	PSO CPMASTR addr, location DATASPACE
100	(64)	X'64'	0	CPIPSO_C	"CPIPSO,4,C'A'" PSO Common pool equate
104	(68)	ADDRESS	4	CPIPAD	PAD CPMASTR addr, location DATASPACE
104	(68)	X'68'	0	CPIPAD_C	"CPIPAD,4,C'A'" PAD Common pool equate
108	(6C)	ADDRESS	4	CPIRNT	RNT CPMASTR addr, subpool RNTPOOL
112	(70)	ADDRESS	4	CPIRDT	RDT CPMASTR addr, location DATASPACE
112	(70)	X'70'	0	CPIRDT_C	"CPIRDT,4,C'A'" RDT Common pool equate
116	(74)	ADDRESS	4	CPISAPID	SAPID CPMASTR addr, location DATASPACE
116	(74)	X'74'	0	CPISAPID_C	"CPISAPID,4,C'A'" SAPID Common pool equate
120	(78)	ADDRESS	4	CPISCWA	SCWA CPMASTR addr, subpool SCWAPOOL
124	(7C)	ADDRESS	4	CPISCWADSP	SCWADSP CPMASTR addr, subpool SCWDPOOL
128	(80)	ADDRESS	4	CPISJIO	SJIO CPMASTR addr, subpool 230
132	(84)	ADDRESS	4	CPISMF	SMF CPMASTR addr, subpool SMFPOOL
136	(88)	ADDRESS	4	CPISQD	SQD CPMASTR addr, subpool SQDPOOL
140	(8C)	ADDRESS	4	CPISTAC	STAC CPMASTR addr, location DATASPACE
140	(8C)	X'8C'	0	CPISTAC_C	"CPISTAC,4,C'A'" STAC Common pool equate
144	(90)	ADDRESS	4	CPITBUF	TBUF CPMASTR addr, location DATASPACE
144	(90)	X'90'	0	CPITBUF_C	"CPITBUF,4,C'A'" TBUF Common pool equate
148	(94)	ADDRESS	4	CPITJEV	TJEV CPMASTR addr, location DATASPACE
148	(94)	X'94'	0	CPITJEV_C	"CPITJEV,4,C'A'" TJEV Common pool equate
152	(98)	ADDRESS	4	CPITRE	TRE CPMASTR addr, subpool 230
156	(9C)	ADDRESS	4	CPIVTAM	VTAM CPMASTR addr, subpool VTAMPOOL
160	(A0)	ADDRESS	4	CPIWTO	WTO CPMASTR addr, location DATASPACE
160	(A0)	X'A0'	0	CPIWTO_C	"CPIWTO,4,C'A'" WTO Common pool equate
164	(A4)	ADDRESS	4	CPIXCWELT	XCWELT CPMASTR addr, subpool 229
168	(A8)	ADDRESS	4	CPIXCWNODE	XCWNODE CPMASTR addr, subpool 229
172	(AC)	ADDRESS	4	CPIXRQ	XRQ CPMASTR addr, subpool XRQPOOL
172	(AC)	X'AC'	0	CPISTEND	"*-CPISTART" Size of the CPLTABs
172	(AC)	X'B0'	0	CPISTD	"*-CPINDEX" Size of the standard cell types
172	(AC)	X'4'	0	CPIOFLEN	"4" Length of offset field
176	(B0)	SIGNED	4	CPIWSTRT (0)	Start of the work cell types
176	(B0)	ADDRESS	4	CPIWORK (0)	User-defined CPMASTER's
176	(B0)	X'F48'	0	CPIWLEN	"*-CPIWSTRT" Size of the work cell types
176	(B0)	X'FF8'	0	CPILEN	"4096-$CSBPRFX" Size of the CPINDEX table

$CPINDEX Cross Reference

Name	Hex Offset	Hex Value
CPIBAT	4	
CPIBSC	8	
CPIB32K	48	
CPICB	C	
CPICDCT	10	
CPICDCT_C	10	10
CPICDCTQS	14	
CPICDCTQS_C	14	14
CPICDCTRNT	18	
CPICDCTRNT_C	18	18
CPICID	1C	
CPICMB	20	
CPICNIT	24	
CPICNIT_C	24	24
CPIEMPTY	2	80
CPIEVT	2C	
CPIEVT_C	2C	2C
CPIFLAG1	2	
CPIFLAG2	3	
CPIGPQE	28	
CPIHASP	30	
CPIHEDR	34	
CPIICE	38	
CPIIRE	3C	
CPIIRE_C	3C	3C
CPIJQRB	40	
CPIJQRB_C	40	40
CPILEN	B0	FF8
CPILOCK	1	
CPINAT	44	
CPINAT_C	44	44
CPINDEX	0	
CPINMAP	4C	
CPINSA	50	
CPINTQ	54	
CPIOFLEN	AC	4
CPIPAD	68	
CPIPAD_C	68	68
CPIPAGE	58	
CPIPCL	5C	
CPIPCL_C	5C	5C
CPIPP	60	
CPIPSO	64	
CPIPSO_C	64	64
CPIRDT	70	
CPIRDT_C	70	70
CPIRNT	6C	
CPISAPID	74	
CPISAPID_C	74	74
CPISCWA	78	
CPISCWADSP	7C	
CPISJIO	80	
CPISMF	84	
CPISQD	88	
CPISTAC	8C	
CPISTAC_C	8C	8C
CPISTART	4	
CPISTD	AC	B0
CPISTEND	AC	AC
CPITBUF	90	
CPITBUF_C	90	90
CPITJEV	94	
CPITJEV_C	94	94
CPITRE	98	
CPIVNUM	0	1
CPIVRSN	0	
CPIVTAM	9C	
CPIWLEN	B0	F48
CPIWORK	B0	
CPIWSTRT	B0	
CPIWTO	A0	
CPIWTO_C	A0	A0
CPIXCWELT	A4	
CPIXCWNODE	A8	
CPIXRQ	AC	
CPI1CSA	2	40

$CPMASTR Information

$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: CPMASTR
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 CPMASTR element in the JES2 pre-defined cell types. To insert a user-defined cell type, a lock (CPILOCK) must be obtained before the CPMASTR 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 CPMASTR
12	(C)	CHARACTER	8	CPMTYPE	Cell Type
20	(14)	CHARACTER	8	CPMDSPN	Data space name
28	(1C)	SIGNED	4	CPMCSIZE	Cell Size
32	(20)	BITSTRING	1	CPMFLAG1	CPMASTR processing flags
		1...		CPM1FALL	"B'10000000'" FREEMAIN setup storage
		.1..		CPM1ALTP	"B'01000000'" Alternate cell pool
		..1.		CPM1REAL	"B'00100000'" The real CPMASTR
		...1		CPM1PRIM	"B'00010000'" Primary extent allocated
33	(21)	BITSTRING	1	CPMFLAG2	CPMASTR pool attribute flag
		1...		CPM2CP64	"B'10000000'" Storage is above the bar
		.1..		CPM2CP31	"B'01000000'" Storage is above the line
		..1.		CPM2CP24	"B'00100000'" Storage is below the line
		...1		CPM2DSP	"B'00010000'" Cell pool in a data space
		.... 1...		CPM2CSA	"B'00001000'" Cell pool is in common
		.... .1..		CPM2NCLR	"B'00000100'" Don't clear cell storage between uses (up to caller to clear)
		.... ..1.		CPM2RANY	"B'00000010'" Real storage can be above
		1		CPM2GDBS	"B'00000001'" Cell Don't have grd bytes
34	(22)	BITSTRING	1	CPMFLAG3	CPMASTR data space flags (Flags must be the same as in DSWAIFL2)
		1...		CPM3FPRO	"B'10000000'" FPROT=YES specified

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		.1..		CPM3NPRO	"B'01000000'" FPROT=NO specified
		..1.		CPM3MSTR	"B'00100000'" OWNER=MASTER specified
		...1		CPM3CURR	"B'00010000'" OWNER=CURRENT specified
		.... 1...		CPM3AUX	"B'00001000'" OWNER=AUX specified
		.... .1..		CPM3LOCL	"B'00000100'" SCOPE=LOCAL specified
		.... ..1.		CPM3ALL	"B'00000010'" SCOPE=ALL specified
		1		CPM3COMM	"B'00000001'" SCOPE=COMMON specified
35	(23)	BITSTRING	1		Reserved for future use
36	(24)	SIGNED	4	CPMGEND (0)	End of general CPMASTR
36	(24)	SIGNED	4	CPMLIMIT	Max limit for num of cell
40	(28)	SIGNED	4	CPMPRMSZ	Primary extent size (cells)
44	(2C)	SIGNED	4	CPMSECSZ	Secondary ext size (cells)
44	(2C)	X'30'	0	CPMTSIZE	"*-CPMASTR" CPMASTR portion that maps over CPLTAB
48	(30)	SIGNED	2	CPMLEN	Length of storage area (Includes CPMASTR and a CPAB that follows)
50	(32)	SIGNED	2		Reserved for future use
52	(34)	ADDRESS	4	CPMCPAB	CPAB addr
56	(38)	ADDRESS	4	CPMCPINX	CPINDEX addr
60	(3C)	ADDRESS	4	CPMTCBAD	TCB Address to use with STORAGE OBTAIN
64	(40)	ADDRESS	8	CPMCPEBE	Addr to first CPEBE
72	(48)	ADDRESS	8	CPMCPEDS	Chain of CPEBEs that represent disconnected extents (CDS to modify)
80	(50)	SIGNED	4	CPMALLOC	Num of allocated cells
84	(54)	BITSTRING	8	CPM64TOK	User token for shared 64 pl

Comment

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

End of Comment

92	(5C)	ADDRESS	4	CPMDSB	DSB address
96	(60)	DBL WORD	8	CPMDSPOL (0)	+-- Dataspace work storage pool
96	(60)	ADDRESS	4	CPMDSSTR	| Addr of available Block of | storage
100	(64)	SIGNED	4	CPMDSLEN	+-- Length of storage block
100	(64)	X'68'	0	CPMSIZE	"*-CPMASTR" Size of the CPMASTR

$CPMASTR Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CPMALLOC	50		CPMSIZE	64	68
CPMASTR	0		CPMSUBP	6	
CPMCPAB	34		CPMSUBP2	5	
CPMCPEBE	40		CPMTCBAD	3C	
CPMCPEDS	48		CPMTSIZE	2C	30
CPMCPINX	38		CPMTYPE	C	
CPMCSIZE	1C		CPMVNUM	4	2
CPMDSB	5C		CPMVRSN	4	
CPMDSLEN	64		CPM1ALTP	20	40
CPMDSPN	14		CPM1FALL	20	80
CPMDSPOL	60		CPM1PRIM	20	10
CPMDSSTR	60		CPM1REAL	20	20
CPMFLAG1	20		CPM2CP24	21	20
CPMFLAG2	21		CPM2CP31	21	40
CPMFLAG3	22		CPM2CP64	21	80
CPMGEND	24		CPM2CSA	21	8
CPMID	0	C3D7D4D9	CPM2DSP	21	10
CPMKEY	7		CPM2GDBS	21	1
CPMLEN	30		CPM2NCLR	21	4
CPMLIMIT	24		CPM2RANY	21	2
CPMOFFST	8		CPM3ALL	22	2
CPMPRMSZ	28		CPM3AUX	22	8
CPMSECSZ	2C		CPM3COMM	22	1

$CPMASTR Cross Reference

Name	Hex Offset	Hex Value
CPM3CURR	22	10
CPM3FPRO	22	80
CPM3LOCL	22	4
CPM3MSTR	22	20
CPM3NPRO	22	40
CPM64TOK	54	

$CPPWORK Information

$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: CPPWPARM
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	CPPWPARM	, CPOOL Query Pool Work Area
0	(0)	CHARACTER	8	CPPWUSER	User name or cell type
8	(8)	DBL WORD	8	CPPWCSIZ_64	Cell size
8	(8)	X'C'	0	CPPWCSIZ	"CPPWCSIZ_64+4,4,C'F'" 32-bit version
16	(10)	DBL WORD	8	CPPWCNUM_64	Total number of cells
16	(10)	X'14'	0	CPPWCNUM	"CPPWCNUM_64+4,4,C'F'" 32-bit version
24	(18)	DBL WORD	8	CPPWACNM_64	Number of available cells
24	(18)	X'1C'	0	CPPWACNM	"CPPWACNM_64+4,4,C'F'" 32-bit version
32	(20)	DBL WORD	8	CPPWNMXT_64	Number of extents
32	(20)	X'24'	0	CPPWNMXT	"CPPWNMXT_64+4,4,C'F'" 32-bit version
40	(28)	SIGNED	4	CPPWRC	MVS service return code
44	(2C)	SIGNED	4	CPPWALET	ALET to access pool
44	(2C)	X'30'	0	CPPWSIZE	"*-CPPWPARM" Size of parmlist

$CPPWORK Cross Reference

Name	Hex Offset	Hex Value
CPPWACNM	18	1C
CPPWACNM_64	18	
CPPWALET	2C	
CPPWCNUM	10	14
CPPWCNUM_64	10	
CPPWCSIZ	8	C
CPPWCSIZ_64	8	
CPPWNMXT	20	24
CPPWNMXT_64	20	
CPPWPARM	0	
CPPWRC	28	
CPPWSIZE	2C	30
CPPWUSER	0	

$CPXWORK Information

$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: CPXWPARM
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	CPXWPARM	, CPOOL Query Ext Work Area DSECT
0	(0)	SIGNED	4	CPXWEXTN	Extent number
4	(4)	SIGNED	4	CPXWSTAT	Extent status
8	(8)	ADDRESS	8	CPXWCPEB_64	CPEB addr for this extent
8	(8)	X'C'	0	CPXWCPEB	"CPXWCPEB_64+4,4,C'A'" 31-bit version
16	(10)	DBL WORD	8	CPXWEBLN_64	Length of CPEB in bytes
16	(10)	X'14'	0	CPXWEBLN	"CPXWEBLN_64+4,4,C'F'" 32-bit version
24	(18)	ADDRESS	8	CPXWSTOR_64	Storage address
24	(18)	X'1C'	0	CPXWSTOR	"CPXWSTOR_64+4,4,C'A'" 31-bit version
32	(20)	DBL WORD	8	CPXWSTSZ_64	Storage size
32	(20)	X'24'	0	CPXWSTSZ	"CPXWSTSZ_64+4,4,C'F'" 32-bit version
40	(28)	DBL WORD	8	CPXWCELL_64	Total number of cells in ext.
40	(28)	X'2C'	0	CPXWCELL	"CPXWCELL_64+4,4,C'F'" 32-bit version
48	(30)	DBL WORD	8	CPXWAVAI_64	Number of available cells
48	(30)	X'34'	0	CPXWAVAI	"CPXWAVAI_64+4,4,C'F'" 32-bit version
56	(38)	SIGNED	4	CPXWRC	MVS service return code
56	(38)	X'3C'	0	CPXWSIZE	"*-CPXWPARM" Size of parmlist

$CPXWORK Cross Reference

Name	Hex Offset	Hex Value
CPXWAVAI	30	34
CPXWAVAI_64	30	
CPXWCELL	28	2C
CPXWCELL_64	28	
CPXWCPEB	8	C
CPXWCPEB_64	8	
CPXWEBLN	10	14
CPXWEBLN_64	10	
CPXWEXTN	0	
CPXWPARM	0	
CPXWRC	38	
CPXWSIZE	38	3C
CPXWSTAT	4	
CPXWSTOR	18	1C
CPXWSTOR_64	18	
CPXWSTSZ	20	24
CPXWSTSZ_64	20	

$CSVPARM Information

$CSVPARM Programming Interface information

Programming Interface information

$CSVPARM

End of Programming Interface information

$CSVPARM Heading Information

Common Name: CSV $$$$LOAD/$$$$DEL Parm List
Macro ID: $CSVPARM
DSECT Name: CSVP
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'CSVP'
Offset: CSVPID-CSVP
Length: 4
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual is in 31 bit storage in the JES2 address space. Real can be anywhere in 64 bit storage.
Size: See CSVPLEN
Created by: The CSVP is created before $$$$LOAD or $$$$DEL is called.
Pointed to by: General register 1 on entry to the $$$$LOAD or $$$$DEL routine.
Serialization: None required.
Function: This DSECT provides the mapping for the parameters passed to the $$$$LOAD or $$$$DEL service routine.

$CSVPARM Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CSVP	
0	(0)	CHARACTER	4	CSVPID	Eye catcher
4	(4)	SIGNED	2	CSVPSIZE	Size of parameter list
6	(6)	ADDRESS	1	CSVPVER	Version number for base section
6	(6)	X'1'	0	CSVPVERN	"1" Version number equate for base
7	(7)	ADDRESS	1	CSVPTYPE	Routine identifier
7	(7)	X'1'	0	CSVPLOAD	"1" $$$$LOAD parameter list
7	(7)	X'2'	0	CSVPDEL	"2" $$$$DEL parameter list
8	(8)	ADDRESS	4	CSVPLMT	Related LMT address
12	(C)	ADDRESS	4	CSVPMIT	Related module/MIT address
16	(10)	SIGNED	4	(4)	Reserved
32	(20)	DBL WORD	8	CSVPORG (0)	Start of routine specific area
Comment					
$$$$LOAD parameter list					
End of Comment					
32	(20)	BITSTRING	1	CSVPLCMD	Reason for load
32	(20)	X'0'	0	CSVPLCJS	"0" JES2 performing load (internal)
32	(20)	X'1'	0	CSVPLCIN	"1" LOAD init statement
32	(20)	X'2'	0	CSVPLCAL	"2" $ADD LOAD command
32	(20)	X'3'	0	CSVPLCRL	"3" $T LOAD,REFRESH command
33	(21)	BITSTRING	1	CSVPLLOC	Where the module was loaded
33	(21)	X'1'	0	CSVPLPVT	"1" Loaded to JES2 private
33	(21)	X'2'	0	CSVPLCSA	"2" Loaded to common storage
33	(21)	X'3'	0	CSVPLLPA	"3" Loaded to LPA
34	(22)	BITSTRING	1	CSVPLMSC	Miscellaneous flags
		1...		CSVPLWPC	"B'10000000'" $$$$LOAD was previously called
35	(23)	BITSTRING	1		Reserved
36	(24)	ADDRESS	4	CSVPLOLD	For a $TLOAD REFRESH, LMT of module being replaced

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				Comment	
		CSVPL$DR contains the address of an additional $$$$DEL type routine (name does not matter) that will get control when the module is deleted (before the normal $$$$DEL routine). This routine can be used in the case of a force delete of a module where the storage has already been freed. In particular, when JES2 detects that MVS has deleted the module from LPA. Because the module storage no longer exists, this routine should be in a separate memory location.			
				End of Comment	
40	(28)	ADDRESS	4	CSVPL$DR	Addr of an additional $$$$DEL rtn
				Comment	
		$$$$LOAD return codes			
				End of Comment	
40	(28)	X'0'	0	CSVPLROK	"0" Continue load
				Comment	
		$$$$DEL parameter list			
				End of Comment	
32	(20)	BITSTRING	1	CSVPDCND	Reason for delete
32	(20)	X'0'	0	CSVPDCJS	"0" JES2 performing delete (internal)
32	(20)	X'1'	0	CSVPDCIN	"1" LOAD init statement
32	(20)	X'2'	0	CSVPDCDL	"2" $DEL LOAD command
32	(20)	X'3'	0	CSVPDCRL	"3" $T LOAD,REFRESH command
32	(20)	X'4'	0	CSVPDCTR	"4" $PJES2 processing
32	(20)	X'5'	0	CSVPDCSC	"5" Secondary call
33	(21)	BITSTRING	1	CSVPDIND	Call flags
		1...		CSVPDSND	"B'10000000'" Second call (after a RC 4/8)
		.1..		CSVPDFRC	"B'01000000'" Module being force deleted
		..1.		CSVPDFRE	"B'00100000'" Storage for module has been freed
34	(22)	BITSTRING	2		Reserved
36	(24)	ADDRESS	4	CSVPDNEW	For a $TLOAD REFRESH, LMT of new module that was loaded

$CSVPARM Cross Reference

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

					$$$$DEL return codes
					0 - Continue deletion normally. This routine will not be called again.
					4 - Do not delete the module now. JES2 will delete dynamic tables and exit routines but will not free the storage. This service will be called again under the MISC PCE once JES2 believes all users of the module are gone (with CSVPDSND set). If the second call again give a return code 4, $$$$DEL will be called again at about a 5 minute interval. JES2 may make a force delete call at any time.
					8 - Same processing as RC=4 except that JES2 will not make a second call under the MISC PCE. A second call will be made in the case of a force delete, or after a JES2 hot start (for CSA or LPA modules).

					End of Comment
36	(24)	X'0'	0	CSVPDROK	"0" Continue delete
36	(24)	X'4'	0	CSVPDRNN	"4" Do not physically delete module now
36	(24)	X'8'	0	CSVPDRND	"8" Never physically delete module
48	(30)	DBL WORD	8	(0)	Ensure alignment
48	(30)	X'30'	0	CSVPLEN	"*-CSVP" Length of CSV parm list

$CSVPARM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CSVP	0		CSVPLOAD	7	1
CSVPDCDL	20	2	CSVPLOLD	24	
CSVPDCIN	20	1	CSVPLPVT	21	1
CSVPDCJS	20	0	CSVPLROK	28	0
CSVPDCND	20		CSVPLWPC	22	80
CSVPDCRL	20	3	CSVPMIT	C	
CSVPDCSC	20	5	CSVPORG	20	
CSVPDCTR	20	4	CSVPSIZE	4	
CSVPDEL	7	2	CSVPTYPE	7	
CSVPDFRC	21	40	CSVPVER	6	
CSVPDFRE	21	20	CSVPVERN	6	1
CSVPDIND	21				
CSVPDNEW	24				
CSVPDRND	24	8			
CSVPDRNN	24	4			
CSVPDROK	24	0			
CSVPDSND	21	80			
CSVPID	0	C3E2E5D7			
CSVPL$DR	28				
CSVPLCAL	20	2			
CSVPLCIN	20	1			
CSVPLCJS	20	0			
CSVPLCMD	20				
CSVPLCRL	20	3			
CSVPLCSA	21	2			
CSVPLEN	30	30			
CSVPLLOC	21				
CSVPLLPA	21	3			
CSVPLMSC	22				
CSVPLMT	8				

$CTOKEN Information

$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:

- o A dynamic allocation request - Client token
- o As part of an ENF parameter list - Client token
- o Extended status (terse) - JOE token
- o Extended status (verbose) - data set token
- o SAPI putget - data set token

The JES2 dependent portion of the client token contains the information that JES2 needs to uniquely identify and locate the data set represented by the client token.

$CTOKEN Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CTOKEN	, HASP Client Token DSECT
16	(10)	SIGNED	4	CTK2JOBN	A.Job number
20	(14)	BITSTRING	4	CTK2JOBK	A.Job identifier key
24	(18)	SIGNED	4	CTK2DSID	CD.Data set number
28	(1C)	BITSTRING	4	CTK2MTTR	CD.IOT MTTR for data set
28	(1C)	X'1C'	0	CTK2MQTR_LO	"CTK2MTTR,L'CTK2MTTR,C'X'" CD.Low 4 bytes of MQTR if CTK21MQT is set
32	(20)	CHARACTER	12	CTK2JOEI (0)	J.JOE Identification block
32	(20)	CHARACTER	8	CTK2JONM	J.JOE's output group name
40	(28)	SIGNED	2	CTK2JOI1	J.JOE'S output group id1
42	(2A)	SIGNED	2	CTK2JOI2	J.JOE'S output group id2
44	(2C)	SIGNED	4	CTK2PDBO	D.Offset of PDDB within IOT
48	(30)	SIGNED	4	CTK2JOEN	J.Work JOE index
52	(34)	CHARACTER	8	CTK2JDVT	D.From JCTJDVT
60	(3C)	SIGNED	1	CTK2LINC	D.From JCTLINCT
61	(3D)	SIGNED	2	CTK2DSIN	CD.Data set instance number
63	(3F)	BITSTRING	14		Reserved
77	(4D)	BITSTRING	2	CTK2MQTR_HI	CD.High 2 bytes of MQTR if CTK21MQT is set
79	(4F)	BITSTRING	1	CTK2FLG1	A.Flag byte
		1...		CTK21TCT	"B'10000000'" C.Token represents a data set (Created as a result of a dynamic allocation request)
		.1..		CTK21TJO	"B'01000000'" J.Token represents a JOE rather than a data set

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1.		CTK21TSA	"B'00100000'" D.Token represents a data set (Returned as a result of a SAPI Put/Get Request, a verbose extended status or an FSS GETDS)
		...1		CTK21MQT	"B'00010000'" C.MQTR provided
79	(4F)	X'40'	0	CTK2SIZE	"*-CTKNJESD" Length of HASP section
80	(50)	ADDRESS	2	(0)	Generate assembly error if CTK2SIZE exceeds L'CTKNJESD
				Comment	
					The following equates provide values for the Bit Map based on which parts of the Client Token are valid to be used in comparisions. Two equates are required to map the Bit Map (each equate maps 32 bits). Mappings for the first 32 bits
				End of Comment	
		....		CTK2B_JOBN	"B'11110000000000000000000000000000',4,C'B'"
		....		CTK2B_JOBK	"B'00001111000000000000000000000000',4,C'B'"
80	(50)	BITSTRING	0	CTK2B_DSID	"B'00000000111100000000000000000000',4,C'B'"
80	(50)	BITSTRING	0	CTK2B_MTTR	"B'00000000000011110000000000000000',4,C'B'"
80	(50)	BITSTRING	0	CTK2B_JONM	"B'00000000000000001111111100000000',4,C'B'"
		11..		CTK2B_JOI1	"B'00000000000000000000000011000000',4,C'B'"
		..11		CTK2B_JOI2	"B'00000000000000000000000000110000',4,C'B'"
80	(50)	X'FFF0'	0	CTK2B_JOEI	"CTK2B_JONM+CTK2B_JOI1+CTK2B_JOI2,4,C'B'"
		 1111		CTK2B_PDBO	"B'00000000000000000000000000001111',4,C'B'"
				Comment	
					Mappings for the second 32 bits
				End of Comment	
		....		CTK2B_JOEN	"B'11110000000000000000000000000000',4,C'B'"
80	(50)	BITSTRING	0	CTK2B_JDVT	"B'00001111111100000000000000000000',4,C'B'"
80	(50)	BITSTRING	0	CTK2B_LINC	"B'00000000000010000000000000000000',4,C'B'"
80	(50)	BITSTRING	0	CTK2B_DSIN	"B'00000000000001100000000000000000',4,C'B'"
		1		CTK2B_FLG1	"B'00000000000000000000000000000001',4,C'B'"
		.... .11.		CTK2B_MQTR	"B'00000000000000000000000000000110',4,C'B'"
				Comment	
					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 JOE 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 data set token.
				End of Comment	
80	(50)	X'F00000'	0	CTK2BCT1	"CTK2B_JOBN+CTK2B_JOBK+CTK2B_DSID,4,C'B'"
		....		CTK2BCT2	"B'00000000000000000000000000000000',4,C'B'"
80	(50)	X'FFF0'	0	CTK2BJO1	"CTK2B_JOBN+CTK2B_JOBK+CTK2B_JOEI,4,C'B'"
		....		CTK2BJO2	"B'00000000000000000000000000000000',4,C'B'"
80	(50)	X'0'	0	CTK2BJB1	"CTK2B_JOBN+CTK2B_JOBK,4,C'B'"
		....		CTK2BJB2	"B'00000000000000000000000000000000',4,C'B'"
80	(50)	X'F0000F'	0	CTK2BDS1	"CTK2B_JOBN+CTK2B_JOBK+CTK2B_DSID+CTK2B_PDBO,4,C'B'"
		....		CTK2BDS2	"B'00000000000000000000000000000000',4,C'B'"

$CTOKEN Cross Reference

Name	Hex Offset	Hex Value
CTK2B_DSID	50	F00000
CTK2B_DSIN	50	60000
CTK2B_FLG1	50	1
CTK2B_JDVT	50	F00000
CTK2B_JOBK	50	0
CTK2B_JOBN	50	0
CTK2B_JOEI	50	FFF0
CTK2B_JOEN	50	0
CTK2B_JOI1	50	C0
CTK2B_JOI2	50	30
CTK2B_JONM	50	FF00
CTK2B_LINC	50	80000
CTK2B_MQTR	50	6
CTK2B_MTTR	50	F0000
CTK2B_PDBO	50	F
CTK2BCT1	50	F00000
CTK2BCT2	50	0
CTK2BDS1	50	F0000F
CTK2BDS2	50	0
CTK2BJB1	50	0
CTK2BJB2	50	0
CTK2BJO1	50	FFF0
CTK2BJO2	50	0
CTK2DSID	18	
CTK2DSIN	3D	
CTK2FLG1	4F	
CTK2JDVT	34	
CTK2JOBK	14	
CTK2JOBN	10	
CTK2JOEI	20	
CTK2JOEN	30	
CTK2JOI1	28	
CTK2JOI2	2A	
CTK2JONM	20	
CTK2LINC	3C	
CTK2MQTR_HI	4D	
CTK2MQTR_LO	1C	1C
CTK2MTTR	1C	
CTK2PDBO	2C	
CTK2SIZE	4F	40
CTK21MQT	4F	10
CTK21TCT	4F	80
CTK21TJO	4F	40
CTK21TSA	4F	20
CTOKEN	0	

$CTW Information

$CTW Heading Information

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

$CTW Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	CTW	
0	(0)	CHARACTER	4	CTWLID	CTW IDENTIFIER
4	(4)	BITSTRING	1	CTWVER	CTW VERSION IDENTIFIER
4	(4)	X'2'	0	CTWVERN	"2" CTW version number
5	(5)	BITSTRING	1	CTWFLAG1	FLAGS
		1...		CTW1RD1	"B'10000000'" THIS DATA IS FOR READ 1
		.1..		CTW1RD2	"B'01000000'" THIS DATA IS FOR READ 2
		..1.		CTW1PRMW	"B'00100000'" THIS DATA IS FOR THE PRIM WRITE
		...1		CTW1INTW	"B'00010000'" THIS DATA IS FOR AN INTERMEDIATE WRITE
		.... 1...		CTW1FINW	"B'00001000'" THIS DATA IS FOR FINAL WRITE
		.... .1..		CTW1PRIO	"B'00000100'" THIS DATA WAS AFFECTED BY PRIORITY AGING
		.... ..1.		CTW1CKDS	"B'00000010'" 0 IF I/O TO CKPT1, 1 IF I/O TO CKPT2
6	(6)	BITSTRING	2		RESERVED FOR FUTURE USE
8	(8)	SIGNED	2	CTWDATA (0)	START OF CTW DATA
8	(8)	DBL WORD	8	CTWIOSTR	I/O START TIME
16	(10)	DBL WORD	8	CTWIOSTP	I/O STOP TIME
24	(18)	SIGNED	4	CTWCKPWT	NUM OF TIMES THE CKPT PCE $WAITED BEFORE BEING DISPATCHED
28	(1C)	SIGNED	4	CTWCLNPA	NUMBER OF PAGES ALLOCATED TO CHANGE LOG
32	(20)	SIGNED	4	CTWCLNPU	NUM OF USED PAGES IN CHANGE LOG
36	(24)	SIGNED	4	CTWCLPR1	NUMBER OF CH LOG PAGES READ IN
40	(28)	SIGNED	4	CTWMINHL	MINHOLD VALUE
44	(2C)	SIGNED	4	CTWMINDR	MINDORM VALUE
48	(30)	SIGNED	4	CTWMAXDR	MAXDORM VALUE
52	(34)	SIGNED	4	CTWCLNCB	NUMBER OF CONTROL BLOCKS IN THE CHANGE LOG
56	(38)	SIGNED	4	CTWNMPCE	NUMBER OF PCES DEFINED
60	(3C)	SIGNED	4	CTWWTPCE	NUMBER OF PCES WAITING FOR CKPT
64	(40)	SIGNED	4	CTWMXTIM	MAXIMUM AMOUNT OF TIME A PCE HAS WAITED FOR CHECKPOINT
68	(44)	SIGNED	4	CTWAVTIM	AVERAGE AMOUNT OF TIME A PCE HAS WAITED FOR CHECKPOINT
72	(48)	SIGNED	4	CTWCLNBU	NUM OF USED BYTES IN THE CH LOG
76	(4C)	SIGNED	4	CTWHLTIM	CHECKPOINT HELD TIME

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
80	(50)	SIGNED	4	CTWDRMTM	CHECKPOINT DORMANCY TIME
84	(54)	SIGNED	4	CTWPGNCL	PAGES TRANS. IF NO CH LOG
88	(58)	SIGNED	4	CTWLEVNM	LEVEL NUMBER OF DATASET
		Comment			

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

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

$CTW Cross Reference

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

$CVCB Information

$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 JESxCKVx data spaces
Size: See CVCBSIZE
Created by: HASPCKVR
Pointed to by: SPUD_LATEST_VERSION field of $SCID data area
SPUD_FREE_QUEUE field of $SCID data area
SPUD_HOLD field of $SCID data area
DSRVCVPT field of IAZDSERV data area
DSRVCNPT field of IAZDSERV data area
Serialization: Serialization is handled by means of ENQ/DEQ.
HASPCKVR-Versioning 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 first data space as a version, the representative CVCB is placed in the SCID (Summary of Checkpoint Information) 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

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 SCID. 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	CVCBHDR	Checkpoint Version CB
0	(0)	CHARACTER	8	CVCB_EYE	Data space eye catcher
8	(8)	BITSTRING	8	CVCB_NEXT_SPC_TKN	Next space STOKEN
16	(10)	SIGNED	4	CVCB_NEXT_SPC_ALET	Next space ALET
16	(10)	X'14'	0	CVCBHSIZ	"*-CVCBHDR" Size of the CVCB header

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'5'	0	CVCBCVNO	"5" Current CB version number

Comment

CVCB_FLAG is cleared when a CVCB version is generated.

End of Comment

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

Comment

CVCB_ENQ_SKIP_COUNT is incremented every cycle when the CVCB_ENQ_CT is non-zero. When the count reaches a certain value, an ENQ is issued to verify the CVCB_ENQ_CT field. If the ENQ is obtained, then the CVCB_ENQ_CT is set to zero.

End of Comment

7	(7)	BITSTRING	1	CVCB_ENQ_SKIP_COUNT	ENQ check counter
8	(8)	SIGNED	4	CVCB_ALET	CVCB ALET
12	(C)	CHARACTER	8	CVCB_STOKEN	CVCB STOKEN
20	(14)	BITSTRING	16	CVCB_NEXT (0)	Next CVCB area
20	(14)	ADDRESS	4	CVCB_NEXT_ADDR	Next CVCB address
24	(18)	SIGNED	4	CVCB_NEXT_ALET	Next CVCB ALET
28	(1C)	BITSTRING	8	CVCB_NEXT_STOKEN	Next CVCB STOKEN
36	(24)	ADDRESS	4	CVCB_MASTER_REC	Address of master record
40	(28)	ADDRESS	4	CVCB_4K_PAGES	

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Address of 4K pages
44	(2C)	ADDRESS	4	CVCB_4K_PAGES_END	
					End of 4K pages area
48	(30)	ADDRESS	4	CVCB_$CATBERT_ADDR	
					Address of $CATBERT
52	(34)	SIGNED	4	CVCB_ADDRS (0)	Start of section address
52	(34)	ADDRESS	4	CVCB_JOT_ADDR	
					JOT start address
56	(38)	ADDRESS	4	CVCB_JOX_ADDR	
					JOX start address
60	(3C)	ADDRESS	4	CVCB_JQE_ADDR	
					JQE start address
64	(40)	ADDRESS	4	CVCB_QSE_ADDR	
					QSE start address
68	(44)	ADDRESS	4	CVCB_HCT_ADDR	
					HCT start address (Ckpt'ed)
72	(48)	ADDRESS	4	CVCB_JQEX_ADDR	
					JQE extension address
76	(4C)	ADDRESS	4	CVCB_KIT_ADDR	
					KITs start address
80	(50)	ADDRESS	4	CVCB_JNT_ADDR	
					JNT start address
84	(54)	ADDRESS	4	CVCB_JQX_ADDR	
					JQX start address
88	(58)	ADDRESS	4	CVCB_BERT_ADDR	
					BERT start address
92	(5C)	ADDRESS	4	CVCB_DAS_ADDR	
					DAS start address
96	(60)	ADDRESS	4	CVCB_TGM_ADDR	
					TGM start address
100	(64)	ADDRESS	4	CVCB_WQPOS_ADDR	
					Service cls posn address
104	(68)	ADDRESS	4	CVCB_WQPOS_ALET	
					Service cls posn ALET
108	(6C)	SIGNED	4	CVCB_ENQ_CT	Count of shared ENQs
		1...		CVCB_USED	"B'10000000'" Version used this cycle
112	(70)	CHARACTER	8	CVCB_TIME	Time stamp for version
120	(78)	CHARACTER	8	CVCB_MAJOR (0)	Major name for ENQ
120	(78)	CHARACTER	4	CVCB_SYS	'SYSZ'
124	(7C)	CHARACTER	4	CVCB_JESID	Subsystem name
128	(80)	CHARACTER	8	CVCB_MINOR (0)	Minor name for ENQ
128	(80)	CHARACTER	4	CVCB_ENQ_ID	'CVCB'
132	(84)	SIGNED	4	CVCB_VERSION_NUMBER	
					Version numb of this CVCB
136	(88)	SIGNED	4	(0)	Alignment
136	(88)	X'88'	0	CVCBSIZE	"*-CVCB" Size of the CVCB

$CVCB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CVCB	0			7	
CVCB_$CATBERT_ADDR			CVCB_EYE	0	
	30		CVCB_FDMP	5	80
CVCB_ADDRS	34		CVCB_FLAG	5	
CVCB_ALET	8		CVCB_HCT_ADDR		
CVCB_BERT_ADDR				44	
	58		CVCB_ID	0	
CVCB_CBVN	4		CVCB_JESID	7C	
CVCB_DAS_ADDR			CVCB_JNT_ADDR		
	5C			50	
CVCB_ENQ_CT	6C		CVCB_JOT_ADDR		
CVCB_ENQ_ID	80			34	
CVCB_ENQ_SKIP_COUNT			CVCB_JOX_ADDR		

$CVCB Cross Reference

Name	Hex Offset	Hex Value
	38	
CVCB_JQE_ADDR		
	3C	
CVCB_JQEX_ADDR		
	48	
CVCB_JQX_ADDR		
	54	
CVCB_KIT_ADDR		
	4C	
CVCB_MAJOR	78	
CVCB_MASTER_REC		
	24	
CVCB_MINOR	80	
CVCB_NEXT	14	
CVCB_NEXT_ADDR		
	14	
CVCB_NEXT_ALET		
	18	
CVCB_NEXT_SPC_ALET		
	10	
CVCB_NEXT_SPC_TKN		
	8	
CVCB_NEXT_STOKEN		
	1C	
CVCB_QSE_ADDR		
	40	
CVCB_STOKEN	C	
CVCB_SYS	78	
CVCB_TGM_ADDR		
	60	
CVCB_TIME	70	
CVCB_USED	6C	80
CVCB_VERSION_NUMBER		
	84	
CVCB_WQPOS_ADDR		
	64	
CVCB_WQPOS_ALET		
	68	
CVCB_4K_PAGES		
	28	
CVCB_4K_PAGES_END		
	2C	
CVCBCVNO	4	5
CVCBHDR	0	
CVCBHSIZ	10	14
CVCBSIZE	88	88

$DAS Information

$DAS Programming Interface information

Programming Interface information

$DAS

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

- DASMAPO

End of Programming Interface information

$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 DAS copies is ECSA. Real storage is anywhere.
Size: See DASSIZ for JES2 private storage
See DASSIZC for CSA copies
Note that CSA DAS must be quadword aligned and its size should be a multiple of a quadword
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 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 $SPOLNUM-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.

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

$DAS Map

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

Comment

The content of DASTRK is dependent on the data set type.

- If volume is in large data set format (DAS5LGDS on) then DASTRKLM is the largest relative track in the SPOOL data set. DAS5LGDS implies relative track addressing. Low track is always 1. To calculate absolute track address, add DASSTRK to the TTt address.
- If large data set is not active, but relative track addressing is active (DAS4RELT on), then DASLOTRK=1 and DASUPTRK is the upper relative track limit. To calculate absolute track address add DASSTRK to the TT address.
- If large data set and relative track addressing are both inactive, then DASLOTRK is the low absolute track address in the data set and DASUPTRK is the upper absolute track limit. TT is the absolute track address.

End of Comment

48	(30)	SIGNED	4	DASTRK (0)	Valid track range (TT)
48	(30)	SIGNED	4	DASTRKLM (0)	Upper track limit (if large data sets - DAS5LGDS on)
48	(30)	BITSTRING	2	DASLOTRK	Low value (1 if relative)
50	(32)	BITSTRING	2	DASUPTRK	Upper limit
52	(34)	SIGNED	2	DASNOTGP	NUMBER OF TRACKS PER GROUP
54	(36)	SIGNED	2	DASMTCSZ	MINIMUM TRACKCELL SIZE
56	(38)	BITSTRING	1	DASTYPE	UCB DEVICE TYPE (UCBTBYT4)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		DASFLAG4 is updated by JES2 maintask only. There is no serialization.			
			End of Comment		
57	(39)	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		
		1...		DAS4SIG	"B'10000000'" Extent has signature rcds
		.1..		DAS4MFMT	"B'01000000'" Extent needs to be mini-formatted
			Comment		
			End of Comment		
		..1.		DAS4SFMT	"B'00100000'" DAS is on $DASWRKQ performing mini-format
		...1		DAS4PFMT	"B'00010000'" DAS is on $DASWRKQ pending mini-format
		.... 1...		DAS4ECKD	"B'00001000'" Extent is on ECKD device
		.... .1..		DAS4RDTD	"B'00000100'" Extent supports read track data CCW
		.... ..1.		DAS4WTRD	"B'00000010'" Extent supports write track data CCW
		1		DAS4RELT	"B'00000001'" This extent uses relative track addresses
58	(3A)	ADDRESS	1	DASMIGTR	SYSID of migrator system - system housing migrator subtask. Note: this field is only valid if DASFLAG8 -> DAS8MGMV (volume is migrating - move) or DAS8MGMR (Volume is migrating - merge). Only valid for source of migration.
59	(3B)	BITSTRING	1		Reserved (was DASRPSO)
60	(3C)	CHARACTER	44	DASDSN	SPOOL data set name
104	(68)	SIGNED	4	DASTGNUM	Number of TGs in extent (if $SPLLGDS is on)
108	(6C)	SIGNED	4	DASJBNUM	Lowest job number using extent while either 1. halting or draining (DAS5POST off) or 2. POSTing jobs (DAS5POST on)
112	(70)	SIGNED	4	DASSTRK	First track of spool extent if relative addressing is being used (else 0)
116	(74)	BITSTRING	1	DASFLAG5	Fifth flag byte
		1...		DAS5LGDS	"B'10000000'" Large data set support active for volume
		.1..		DAS5IOHT	"B'01000000'" HALT command initiated by I/O error condition
		..1.		DAS5FALC	"B'00100000'" Volume fully allocated
		...1		DAS5POST	"B'00010000'" POSTing activity needed/ in process for final start spool command processing
		.... 1...		DAS5CYL	"B'00001000'" Data set allcated on EAV cylinder managed-EAS storage
117	(75)	BITSTRING	1	DASFLAG6	Sixth flag byte
		1...		DAS6MAX	"B'10000000'" MAX - $SSPL and MAX has been specified on SPACE keyword parm
		.1..		DAS6CYLS	"B'01000000'" CYL - $SSPL and CYL has been specified on SPACE keyword parm
		..1.		DAS6TRKS	"B'00100000'" TRK - $SSPL and TRK has been specified on SPACE keyword parm
		.... 1...		DAS6RESV	"B'00001000'" Upon migration completion - this volume must be left in reserved state. Note: this field is only valid if DASFLAG8 -> DAS8MGMV (volume is migrating - move) and only for a target volume.

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		.... .1..		DAS6RSTA	"B'00000100'" Volume is in reserved state. Selection may occur - but not allocation. This is an attribute verses state.
		.... ..1.		DAS6XTND	"B'00000010'" EXTEND command in progress
		1		DAS6XTER	"B'00000001'" EXTEND command in progress and failed before command completion. Used by Initialization to detect a data set size mismatch that should be allowed.
118	(76)	BITSTRING	4	DASSYAFF	Spool system affinity
122	(7A)	SIGNED	2		Reserved
124	(7C)	SIGNED	4	DASNUMTC	$SSPL and this field contains the number of cylinders or tracks requested for a new volume data set.
124	(7C)	BITSTRING	4	DASMAPTR	Mapped track number in target volume. This is absolute track. Valid only if a mapped volume - DASFLAG8 -> DAS8UPTG is true. Only valid for migration source volume.
128	(80)	CHARACTER	6	DASTARG	Represents target volser for a spool migration. This could be either a move or merge migration. If a move -- then this value is not only volser -- but also a named BERT which will house the target volumes DAS during phase 1 of the ensuing migration. Only valid for migration source volume. For a mapped volume this field will identify the target DAS even after the migration is successful.
134	(86)	BITSTRING	1	DAS7PHAS	Migration phase. Only valid for a migrating source volume.
		....		DAS7NOMG	"X'00'" No migration active
		.... .1..		DAS7PEND	"X'04'" Migration command pending. In this phase source and target data sets will be validated. Also source will be inactive OR draining/halting and beyond phase 1 processing. Required for both move and merge.
		.... 1...		DAS7SET1	"X'08'" Setup and initialize migration tasking envirmonment. One member becomes migrator -- migration subtask is attached. All MAS members have migration assistant subtask attached. Subtasks are ready for pending migration. Required for both move and merge.
		.... 11..		DAS7SET2	"X'0C'" Setup2 - Migration move - all members must allocate target volume - BERT backed DAS, reserve SRC TGM and size verification. Only move.
		...1		DAS7SET3	"X'10'" Source and target size size verification. Also TGM reservation. Required for merge.
		...1 .1..		DAS7PHA1	"X'14'" Phase 1 migration. Move and merge.
		...1 11..		DAS7PHA2	"X'1C'" Phase 2 migration. Move and merge.
Comment					

Migration cleanup phases					

End of Comment					
		..1.		DAS7CLUM	"X'20'" Migrator subtask cleanup is occuring (Backout or cancellation). Move and merge.
		..1. .1..		DAS7CLU3	"X'24'" Cleanup for migration phase DAS7SET3. (Backout or cancellation). Merge only
		..1. 1...		DAS7CLU2	"X'28'" Cleanup for migration phase DAS7SET2. (Backout or cancellation). Move only.
		..1. 11..		DAS7CLU1	"X'2C'" Cleanup for migration phase DAS7SET1. (Backout or cancellation). Move and merge.
135	(87)	BITSTRING	1	DASFLAG8	Migration flag 2
		1...		DAS8TARG	"B'10000000'" This volume is a migration target. Only valid for target - not source.
		.1..		DAS8TMOV	"B'01000000'" Target allocation was initiated by move verses merge. Only valid for target - not source.
		..1.		DAS8MGMV	"B'00100000'" Migrating - move. Only valid for migrating src.
		...1		DAS8MGMR	"B'00010000'" Migrating - merge. Only valid for migrating src.

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		DAS8UPTG	"B'00001000'" Mapped volume and runtime must update target TGM if and only if DASTARTS is also > 0. DAS8UPTG is set on at the atomic point of merge and stays set until the DAS goes away.
		.... .1..		DAS8MAPT	"B'00000100'" This volume is mapped-on by at least one volume.
		.... ..1.		DAS8CANC	"B'00000010'" Either error or operator has requested migration cancel.
		1		DAS8CNAK	"B'00000001'" Migration is being cancelled.
136	(88)	SIGNED	4	DASTRAKQ	OFFSET OF NEXT DAS IN THE TGM
140	(8C)	SIGNED	4	DASWORKQ	OFFSET OF NXT DAS ON CMD WORK Q
144	(90)	SIGNED	4	DASMAPSZ	Number of bytes in the track group map (if $SPLLGDS is on)
144	(90)	X'92'	0	DASNOBYM	"DASMAPSZ+2,2,C'X'" Number of bytes in the track group map (if $SPLLGDS is off)
148	(94)	SIGNED	4	DASMAPO	OFFSET OF THIS MAP FROM $TGMAP
152	(98)	SIGNED	2	DASTGSIZ	TG SIZE ON THIS VOLUME, ROUNDED FOR NUMBER OF BUFS PER TRACK
154	(9A)	SIGNED	2		RESERVED FOR FUTURE USE
156	(9C)	BITSTRING	1	DASFLAG2	COMMAND FLAG BYTE
		1...		DASCDRN	"B'10000000'" DRAIN COMMAND HAS BEEN ISSUED
		.1..		DASCHALT	"B'01000000'" HALT COMMAND HAS BEEN ISSUED
		..1.		DASCSTRT	"B'00100000'" START COMMAND HAS BEEN ISSUED
		...1		DASCFMT	"B'00010000'" FORMAT REQUESTED
		.... 1...		DASINACT	"B'00001000'" THIS VOLUME IS INACTIVE
		.... ..1.		DASINIT	"B'00000010'" INITIAL START HAS BEEN PERFORMED **note bit out of order**

Comment

The following two bits determine which phase (1-3)
the drain/halt command is currently processing.

Phase	DASBLOB	DASJOBWT
1	on	n/a
2	off	on
3	off	off

End of Comment

		.... .1..		DASBLOB	"B'00000100'" Indicates which phase of drain/halt processing has completed(acts as a gate to Phase 2, deallocation)
		1		DASJOBWT	"B'00000001'" HALT/DRAIN WAITING JOBS

Comment

Starting in z/OS 1.13 with the inclusion of the
Extend SPOOL command, DASCMNDS does not represent
all spool commands. Code needs to account for
command bits in DASFLAG2 and DASFLAGA.

End of Comment

156	(9C)	X'F0'	0	DASCMNDS	"DASCDRN+DASCHALT+DASCSTRT+DASCFMT"
156	(9C)	X'80'	0	DASCMND2	"DASCXTND"
157	(9D)	BITSTRING	1	DASFLAG3	FLAG BYTE
		1...		DAS3ITGM	"B'10000000'" This extent on DASTRAKQ
		.1..		DAS3SYSA	"B'01000000'" System affinity set for this volume

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
COMPATIBILITY Maintainence of DAS3CNCL is needed until HJE7740 (z/OS 1.9) cannot coexist in a MAS with the lowest supported release in a MAS. Example 1: +---+ +---+ +---+ +---+ |z12| |z13| ---> |z12| |z10| = GOOD! :-) +---+ +---+ +---+ +---+ Example 2: +---+ +---+ +---+ +---+ |z12| |z14| ---> |z12| |z10| = GOOD! :-) +---+ +---+ +---+ +---+ Example 3: +---+ +---+ +---+ +---+ |z12| |z11| ---> |z9 | |z11| = BAD! :-(+---+ +---+ +---+ +---+ Note: These examples assume ONLY n-2 releases are supported. So in other words, this bit can be deleted at z/14 development time. Also remove comements in SPOL and SXIT.					
			End of Comment		
		..1.		DAS3CNCL	"B'00100000'" Command issued with CANCEL operand
			Comment		
END COMPATIBILITY					
			End of Comment		
		...1		DAS3EFWZ	"B'00010000'" Extent signature record populated with zero
		.... 1...		DAS3STUN	"B'00001000'" Volume has more space than represented in map (i.e. this is stunted)
158	(9E)	BITSTRING	1	DASCMD2	Member nr issuing new cmd
159	(9F)	BITSTRING	1	DASFLAGA	Command Flag Byte #2
		1...		DASCXTND	"B'10000000'" Extend command issued
160	(A0)	SIGNED	2	DASCSAC (0)	End of area copied to CSA
160	(A0)	X'A0'	0	DASSIZCO	"*-DAS" Len of area copied to CSA

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	DASCSA	, CSA only DAS DSECT
0	(0)	SIGNED	4	DASCTGAL	CSA only mapping of track groups allocated
4	(4)	SIGNED	4	DASCLOTK	CSA only low track limit
8	(8)	SIGNED	4	DASCUPTK	CSA only upper track limit
12	(C)	BITSTRING	64	DASRPS	RPS Table for this device
76	(4C)	BITSTRING	32	DASENQTK	ISGENQ token
			Comment		
--- Start of DASMIGIO WARNING!!! - DASMIGIO and ASMMIGIO in $DTEASST must be kept in sync ---					
			End of Comment		
108	(6C)	SIGNED	4	DASMIGIO (0)	Start of migration I/O directives. This area must be atomically maintained. Area size is denoted below by DASMIGSZ.
108	(6C)	BITSTRING	1	DASFLAG9	Flag 9

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1...		DAS9NMIG	"B'10000000'" Before performing I/O -- runtime must interrogate member track level bitmap. Given a track, if relative bit is on -- then runtime must send an "I/O @Z13D015 permission request" to @Z13D015 migrator mailbox RN$<VOLSER>. VOLSER is source DAS - DASVOLID. Set by migration assistant subtask.
		.1..		DAS9MAPD	"B'01000000'" Source DAS is mapped to target and DASMAPTR must used to calculate corresponding track in target. Use DEB extent in DAS pointed by DASTRADD. Set by migration assistant subtask.
109	(6D)	ADDRESS	1	DASMIGT	Migration transition count informs in-flight I/O of important migration transitions. Captured at start of I/O and compared at I/O end. If count differs the I/O must be re-done. Always captured. Set by migration assistant subtask.
110	(6E)	BITSTRING	2		Reserved
110	(6E)	X'4'	0	DASMIGSZ	"*-DASMIGIO" Length of area which must be atomically updated.

Comment

End of DASMIGIO

End of Comment

112	(70)	ADDRESS	4	DASTRADD	If migration is a merge - then this points to target associated CSA entry.
120	(78)	ADDRESS	8	DASTBITM	Address of member track level bitmap. Located in 64 bit common storage. Only valid if DADFLAG9-> DASSNMIG. Set by SPOL PCE in DAS7SET2 or DAS7SET3.
128	(80)	SIGNED	4	DASTARTS	If this volume is mapped to another volume DAS8UPTG = ON, then this value marks start TG in target TGM. Transposer will use on all members. Note if this value is 0 then no data moved to target - in other words source was empty. If 0 - then transposer must no-op for this DAS.
132	(84)	ADDRESS	4	DASGRTOK	JESXCF group token used to create MG$VOLSER and RN$VOLSER mailboxes
136	(88)	BITSTRING	1	DASMGCMP	Migration percent complete Broadcast every so often to all MAS members.
137	(89)	BITSTRING	1	DASFLAGB	Flag B - Broadcast settings
		1...		DASBNCAN	"B'10000000'" Migration can no longer be cancelled. Broadcast to all MAS members when migration atomic point reached.
138	(8A)	BITSTRING	22		Reserved

Comment

DEB extent information in CSA DAS must be quadword
aligned due to hardware atomicity considerations
Use LPQ/STPQ to get/set this field.

End of Comment

160	(A0)		16	(0)	Align
160	(A0)	BITSTRING	1	DASDEBXT	DEB extent for this volume

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		DAS status is more complex starting with z/OS 1.13. Status includes the traditional settings in DASFLAG and may also need to incorporate SPOOL migration. DASSTAT combines these settings into a single status field that can be used by $SCAN. Prescan routine PREDSTS fills in this value.			
			End of Comment		
176	(B0)	BITSTRING	1	DASSTAT	Binary Status value
		...1		DASSTACT	"X'10'" SPOOL is active. Allocation may occur
		..1.		DASSTSTR	"X'20'" SPOOL is starting.
		..11		DASSTDRN	"X'30'" SPOOL is draining
		.1..		DASSTHLT	"X'40'" SPOOL is halting
		.1.1		DASSTEXT	"X'50'" SPOOL is extending
		.111		DASSTMIG	"X'70'" SPOOL is migrating
		.111 ...1		DASSTMMV	"X'71'" SPOOL is migrating-move
		.111 ..1.		DASSTMMG	"X'72'" SPOOL is migrating-merge
		1..1		DASSTMAP	"X'90'" SPOOL is mapped
		....		DASSTINA	"X'00'" SPOOL is inactive
177	(B1)	BITSTRING	3		Reserved
192	(C0)		16	(0)	Align - This must be the last declare before the end of the CSA DAS
192	(C0)	X'C0'	0	DASENDC	"*" End of CSA DAS
192	(C0)	X'C0'	0	DASCSALN	"*-DASCSA" CSA only portion of DAS len
192	(C0)	X'160'	0	DASSIZC	"DASSIZCO+DASCSALN" Length of CSA mapped DAS

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	DASCKPT	, CKPT only DAS DSECT
			Comment		
		THE NEXT FOUR FIELDS MUST BE KEPT TOGETHER. ROUTINE DADCKALL IN HASPSPOL DEPENDS ON THESE FIELDS BEING CONTIGUOUS.			
			End of Comment		
0	(0)	SIGNED	4	DASINDIC (0)	INDICATOR FIELDS
0	(0)	BITSTRING	4	DASALOCS	Sys. with ext alloc'ed
4	(4)	BITSTRING	4	DASDONE	Cmd done on these systems
8	(8)	BITSTRING	4	DASBUSY	Cmd being done on systems
12	(C)	ADDRESS	1	DASCMDID	SYSID of sys issuing cmd
12	(C)	X'D'	0	DASINDLN	"*-DASINDIC" Length of indicator fields
13	(D)	BITSTRING	4	DASERROR	Affinity of system with command error
17	(11)	BITSTRING	35	DASERCDE	Error reason code for each member
52	(34)	SIGNED	4	(0)	ALIGN END OF DAS
52	(34)	X'34'	0	DASCKPTL	"*-DASCKPT" CKPT only portion DAS len
52	(34)	X'D4'	0	DASSIZ	"DASSIZCO+DASCKPTL" Length of CKPT mapped DAS
52	(34)	X'8'	0	DASVRSN	"8" Version of the DAS

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
				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	
52	(34)	X'4'	0	DASMNTER	"4,L'DASERCDE" VOLUME NOT MOUNTED
52	(34)	X'8'	0	DASDUPER	"8,L'DASERCDE" DUPLICATE SPOOL VOLUMES
52	(34)	X'C'	0	DASALCER	"12,L'DASERCDE" ALLOCATION ERROR
52	(34)	X'10'	0	DASPMTER	"16,L'DASERCDE" PREVIOUS MOUNTED VOL NOT MOUNTED
52	(34)	X'14'	0	DASEXTER	"20,L'DASERCDE" EXTENT ERROR
52	(34)	X'18'	0	DASFMTER	"24,L'DASERCDE" PREV. MOUNTED VOL NOT FORMATTED
52	(34)	X'1C'	0	DASENQER	"28,L'DASERCDE" ENQ already held for volume
52	(34)	X'20'	0	DASUCBER	"32,L'DASERCDE" UCBINFO macro failed
52	(34)	X'24'	0	DASCDRER	"36,L'DASERCDE" IOSCDR macro failed
52	(34)	X'28'	0	DASNEDER	"40,L'DASERCDE" NED not found by IOSCDR
52	(34)	X'2C'	0	DASDIAGR	"44,L'DASERCDE" DIAGNOSE inst error
52	(34)	X'30'	0	DASDLSPC	"48,L'DASERCDE" LSPACE macro failed
52	(34)	X'34'	0	DASNOTRG	"52,L'DASERCDE" No track groups
52	(34)	X'38'	0	DASXTNDE	"56,L'DASERCDE" Extend SPOOL error
52	(34)	X'3C'	0	DASXTNSP	"60,L'DASERCDE" Extend SPOOL error - Insufficient space
52	(34)	X'40'	0	DASXTEXT	"64,L'DASERCDE" Extend SPOOL error - No extents in data set
52	(34)	X'44'	0	DASXTSIZ	"68,L'DASERCDE" Extend SPOOL error - Data set already req size
				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.			

		DAS extension sizes if large data set support is not active ($SPLLGDS off)			

				End of Comment	
52	(34)	X'0'	0	DASXTGA2	"0,2" Number of TGs allocated
52	(34)	X'2'	0	DASXTLN2	"L'DASXTGA2" Length of DAS extension
				Comment	

		DAS extension sizes if large data set support is active ($SPLLGDS on)			

				End of Comment	
52	(34)	X'0'	0	DASXTGA4	"0,4" Number of TGs allocated
52	(34)	X'4'	0	DASXTLN4	"L'DASXTGA4" Length of DAS extension

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	MIGR808	, HASP808 parms
0	(0)	CHARACTER	6	MIGRSRC	Migration source volume
6	(6)	CHARACTER	6	MIGRTAR	Migration target volume
12	(C)	BITSTRING	1	MIGRFRNT	Indication if upfront SRC and targ text should be cut. x'FF' - yes x'00' - no
13	(D)	BITSTRING	1	MIGRBACK	Requested backend text
		Comment			

		Following two fields only valid when migrator takeover message is being cut. MIGRFLAG -> MIGRFTAK			

		End of Comment			
14	(E)	CHARACTER	4	MIGDWNMR	Down or hot-startable member
18	(12)	CHARACTER	4	MIGTAKMR	Migrator takeover member
22	(16)	BITSTRING	1	MIGRFLAG	MIGR808 Flag
		1...		MIGRFMOV	"B'10000000'" Use MOVE completion text
		.1..		MIGRFMRG	"B'01000000'" Use MERGE completion text
		..1.		MIGRFTAK	"B'00100000'" Migrator takeover message
22	(16)	X'17'	0	MIGR8LEN	"*-MIGR808" Length of a HASP808 parms

$DAS Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DAS	0		DASERCDE	11	0
DASACTIV	7	C	DASERROR	D	0
DASALCER	34	C	DASEXSTS	7	10
DASALLOC	7	4	DASEXTER	34	14
DASALOCS	0	0	DASEXTNO	6	0
DASAVAIL	7	CC	DASFINAL	7	2
DASBLOB	9C	4	DASFLAG	7	0
DASBNCAN	89	80	DASFLAGA	9F	0
DASBUSY	8	0	DASFLAGB	89	0
DASCDRER	34	24	DASFLAG2	9C	0
DASCDRN	9C	80	DASFLAG3	9D	0
DASCFMT	9C	10	DASFLAG4	39	
DASCHALT	9C	40	DASFLAG5	74	
DASCKPT	0		DASFLAG6	75	
DASCKPTL	34	34	DASFLAG8	87	0
DASCLOTK	4	0	DASFLAG9	6C	
DASCMDID	C		DASFMTER	34	18
DASCMD2	9E	0	DASGRTOK	84	
DASCMNDS	9C	F0	DASHALT	7	40
DASCMND2	9C	80	DASINACT	9C	8
DASCSA	0		DASINDIC	0	
DASCSAC	A0		DASINDLN	C	D
DASCSALN	C0	C0	DASINIT	9C	2
DASCSTRT	9C	20	DASIOOK	7	48
DASCTGAL	0		DASJBNUM	6C	0
DASCUPTK	8	0	DASJOBWT	9C	1
DASCXTND	9F	80	DASLOTRK	30	0
DASDEBXT	A0		DASMAPO	94	0
DASDIAGR	34	2C	DASMAPSZ	90	
DASDLSPC	34	30	DASMAPTR	7C	
DASDONE	4	0	DASMASK	8	0
DASDRAIN	7	80	DASMGCMP	88	
DASDSN	3C	40404040	DASMIGIO	6C	
DASDUPER	34	8	DASMIGSZ	6E	4
DASENDC	C0	C0	DASMIGT	6D	
DASENQER	34	1C	DASMIGTR	3A	
DASENQTK	4C		DASMNTER	34	4

Name	Hex Offset	Hex Value
DASMTCSZ	36	1
DASNEDER	34	28
DASNOBYM	90	92
DASNORTK	2E	0
DASNOTGE	2C	0
DASNOTGP	34	0
DASNOTRG	34	34
DASNUMTC	7C	
DASPMTER	34	10
DASRPS	C	0
DASRPSF	7	1
DASSELEC	7	8
DASSIZ	34	D4
DASSIZC	C0	160
DASSIZCO	A0	A0
DASSTACT	B0	10
DASSTAT	B0	0
DASSTDRN	B0	30
DASSTEXT	B0	50
DASSTHLT	B0	40
DASSTINA	B0	0
DASSTMAP	B0	90
DASSTMIG	B0	70
DASSTMMG	B0	72
DASSTMMV	B0	71
DASSTRK	70	0
DASSTSTR	B0	20
DASSYAFF	76	
DASTARG	80	
DASTART	7	20
DASTARTS	80	
DASTBITM	78	
DASTGNUM	68	0
DASTGSIZ	98	0
DASTKCYL	28	0
DASTRADD	70	
DASTRAKQ	88	0
DASTRK	30	
DASTRKLM	30	
DASTYPE	38	0
DASUCBER	34	20
DASUPTRK	32	0
DASVOLID	0	40404040
DASVRSN	34	8
DASWORKQ	8C	0
DASXTEXT	34	40
DASXTGA2	34	0
DASXTGA4	34	0
DASXTLN2	34	2
DASXTLN4	34	4
DASXTNDE	34	38
DASXTNSP	34	3C
DASXTSIZ	34	44
DAS3CNCL	9D	20
DAS3EFWZ	9D	10
DAS3ITGM	9D	80
DAS3STUN	9D	8
DAS3SYSA	9D	40
DAS4ECKD	39	8
DAS4MFMT	39	40
DAS4PFMT	39	10
DAS4RDTD	39	4
DAS4RELT	39	1
DAS4SFMT	39	20
DAS4SIG	39	80
DAS4WTRD	39	2
DAS5CYL	74	8
DAS5FALC	74	20
DAS5IOHT	74	40
DAS5LGDS	74	80
DAS5POST	74	10
DAS6CYLS	75	40
DAS6MAX	75	80
DAS6RESV	75	8
DAS6RSTA	75	4
DAS6TRKS	75	20
DAS6XTER	75	1
DAS6XTND	75	2
DAS7CLUM	86	20
DAS7CLU1	86	2C
DAS7CLU2	86	28
DAS7CLU3	86	24
DAS7NOMG	86	0
DAS7PEND	86	4
DAS7PHAS	86	0
DAS7PHA1	86	14
DAS7PHA2	86	1C
DAS7SET1	86	8
DAS7SET2	86	C
DAS7SET3	86	10
DAS8CANC	87	2
DAS8CNAK	87	1
DAS8MAPT	87	4
DAS8MGMR	87	10
DAS8MGMV	87	20
DAS8TARG	87	80
DAS8TMOV	87	40
DAS8UPTG	87	8
DAS9MAPD	6C	40
DAS9NMIG	6C	80
MIGDWNMR	E	
MIGRBACK	D	
MIGRFLAG	16	
MIGRFMOV	16	80
MIGRFMRG	16	40
MIGRFRNT	C	
MIGRFTAK	16	20
MIGRSRC	0	
MIGRTAR	6	
MIGR8LEN	16	17
MIGR808	0	
MIGTAKMR	12	

$DAWNWRK Information

$DAWNWRK Heading Information

Common Name: JES2 DAWN Processor
Macro ID: $DAWNWRK
DSECT Name: PCE ($DAWNWRK 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 DWNPCEWL 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 $DAWNPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the DAWN 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 DAWN Processor and by its support routine and exits. $DAWNWRK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $DAWNWRK are actually part of PCE DSECT, but only map PCEs with the value PCEDWNID in the second byte of field PCEID.

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

$DAWNWRK Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
312	(138)	SIGNED	4	(6)	Reserved for future use
336	(150)	DBL WORD	8	(0)	Alignment
336	(150)	X'18'	0	DWNPCEWL	"*-PCEWORK" Length of DAWN PCE

$DCT Information

$DCT Programming Interface information

Programming Interface information

$DCT

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

- DCTACB
- DCTDCB
- DCTUCB
- MDCTPCL

End of Programming Interface information

$DCT Heading Information

Common Name: Device Control Table
Macro ID: $DCT
DSECT Name: DCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'DCT '
Offset: DCTID-DCT
Length: 4
Storage Attributes: Subpool: 2
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M) in the private storage of the JES2 address space.
Size: Size is of varying lengths. See $DCTTABs and the length equates throughout DCT for the length specifications for each DCT type.
Created by: Most DCTs are allocated using the $DCTDYN service during initialization or as a result of a $ADD command. Remote and network subdevices are obtained during JES2 initialization.
Pointed to by: - the PCEDCT field of the associated $PCE data area, if any
- chaining fields, and associated-device fields, in related $DCT data areas, including DCTCHAIN, DCTFSSCH, MDCTADCT, MDCTDCT, XDCTDCT, MDCTACT, XDCTACTV, MDCTSDCT
- anchor fields for all $DCTs in the $HCT data area, including $DCTPOOL and $DCTPOOL2
- anchor fields for each type of $DCT data area, in the $HCT or $UCT data area, as directed by each $DCT type's defining $DCTTAB specification
- I/O, request, and status anchors in the $HCT data area
- fields within the $MLMWORK data area, including MLMSNALG, MLMSNAAL, MLMLOGQ, MLMXLDCT
- fields within other device-managing JES2 processor work areas, like $MLMWORK, including the $RCPWORK, $NPMWORK, and $XFRWORK data area, and subtask $DTEOFF data area
- fields within RJE/NJE related data areas used for RJE terminal definition, NJE node definition, and I/O, including the RJE $RAT data area, NJE $NIT and $NITP and $PCT data areas, and VTAM $ICE data area
- fields within parameters lists for JES2 exits, in the $XPL data area, typically labeled XnnnDCT, where nnn is the exit number

The following fields are used to chain DCTs on the $#POST work queues:
- $NJEADCT field of the HCT data area
- $OFFADCT field of the HCT data area
- $LCLADCT field of the HCT data area
- DCTNACTV field of the DCT data area
- DCTPACTV field of the DCT data area

Serialization: Standard JES2 reentrancy techniques

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

$DCT Map

Offsets					
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)	SIGNED	2	DCTSIZE	DCT size in bytes
6	(6)	BITSTRING	2		Reserved
8	(8)	ADDRESS	4	DCTPCE	ADDRESS OF PROCESSOR CNTRL ELEM.
12	(C)	SIGNED	4	DCTFLGFW (0)	FOLLOWING FOUR FLAG BYTES MUST BE KEPT CONTIGUOUS FOR COMPARE AND SWAP PROCESSING
12	(C)	BITSTRING	1	DCTSTAT	STATUS FLAGS
		1...		DCTINUSE	"B'10000000'" DCT is in use
		.1..		DCTDRAIN	"B'01000000'" DCT is drained
		..1.		DCTHOLD	"B'00100000'" DCT is held
		...1		DCTUNAL	"B'00010000'" DCT is unallocated
		.... 1...		DCTRTAM	"B'00001000'" DCT in process by RTAM
		.... .1..		DCTSTRT	"B'00000100'" SPOF xmitter/receiver START INDICATOR
		.... .1..		DCTPATTN	"B'00000100'" Local reader attention pending
		.... ..1.		DCTATTN	"B'00000010'" DCT is set for attention processing
		1		DCTPAUSE	"B'00000001'" DCT is paused
13	(D)	BITSTRING	1	DCTFLAGS	OPERATOR COMMAND FLAGS
		1...		DCTSTOP	"B'10000000'" $Z command
		.1..		DCTDELET	"B'01000000'" $C command
		..1.		DCTRSTRT	"B'00100000'" $E command
		...1		DCTRPT	"B'00010000'" $N command
		...1		DCTSOFF2	"B'00010000'" MDCTSTAT/DCTSOFF shadow for line DCTs, used only during CMD $SCAN, $N LINE not supported
		.... 1...		DCTBKSP	"B'00001000'" $B command
		.... .1..		DCTHOLDJ	"B'00000100'" $T...,H command
		11		DCTSPACE	"B'00000011'" $T...,K=X command
		.... ..1.		DCTSP2	"B'00000010'" Force double spacing
		1		DCTSP1	"B'00000001'" Force single spacing
		1		DCTLOGAL	"B'00000001'" $TLNEx,E=Y command
14	(E)	BITSTRING	1	DCTFLAG2	MORE DCT FLAGS
		1...		DCTRACE	"B'10000000'" Device eligible for I/O tracing
		.1..		DCTERMNR	"B'01000000'" Stream terminated by receiver
		..1.		DCTRBFF	"B'00100000'" NJE Route buffer full
		...1		DCTRRDY	"B'00010000'" NJE Route receiver ready
		.... 1...		DCT2POST	"B'00001000'" SNA line manager is waiting to be $POSTed
		.... .1..		DCT2PTRC	"B'00000100'" Processor tracing on (TR=P), only used to save PCETRACE value across $PCEDYN PCE activity
		.... ..1.		DCT2RSP	"B'00000010'" NJE device open/close wait
		1		DCTRTE	"B'00000001'" Route codes (HASPINIT only)
		1		DCTOPEN	"B'00000001'" NJE/RJE device open req
15	(F)	BITSTRING	1	DCTFSSFL	DCT FLAGS FOR AN FSS OWNED DVC
		1...		DCTSTART	"B'10000000'" Device is being started
		.1..		DCTFCKMD	"B'01000000'" CKPT mode page 'ON', TIME 'OFF'

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1.		DCTFDFLT	"B'00100000'" Reset setup defaults
		...1		DCTFSYNC	"B'00010000'" Dev parm changes require synch order
		.... 1...		DCTFSET	"B'00001000'" Dev parm changes require set order
		.... .1..		DCTCMODF	"B'00000100'" Change mode to FSS mode
		.... ..1.		DCTCMODJ	"B'00000010'" Change mode to JES mode
		1		DCTFSSMD	"B'00000001'" DCT/PCE is in FSS mode
16	(10)	ADDRESS	4	DCTDCB (0)	ADDRESS OF DATA CONTROL BLOCK
16	(10)	ADDRESS	4	DCTACB (0)	ADDRESS OF ACB
16	(10)	SIGNED	4	DCTSEEK	MTTR value $EXCP
20	(14)	BITSTRING	4		Reserved
16	(10)	DBL WORD	8	DCTMQTRD (0)	MQTR value for $EXCP
16	(10)	BITSTRING	1	DCTSEEKF	'FF'x if MQTR is set
17	(11)	BITSTRING	1		Reserved
18	(12)	BITSTRING	6	DCTMQTR	MQTR value for $EXCP
24	(18)	ADDRESS	4	MDCTSDCT (0)	ADDR OF NXT SUSPND RMT DCT (SNA)
24	(18)	ADDRESS	4	DCTBUFAD	ADDRESS OF CURRENT BUFFER
28	(1C)	ADDRESS	4	DCTEWF	PCE WITH EWF TO POST OR EXIT ADDR
32	(20)	SIGNED	2	DCTBUFCN	Count of active buffers
32	(20)	X'14'	0	DCTBUFLM	"20" Max buffers for some DCT types (NOT enforced for all types)
34	(22)	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

		.... ..1.		DCTRJE	"X'02'" REMOTE JOB ENTRY DEVICE
		.... .1..		DCTINT	"X'04'" INTERNAL DEVICE
		.... 1...		DCTNET	"X'08'" NETWORK REMOTE DEVICE
		.1..		DCTDVTPX	"X'40'" EXTRA FLAG TO FURTHER IDENTIFY DCT DEVICE TYPES, PROVIDING UNIQUE IDS ACROSS ALL DCT TYPES
		1...		DCTSPOF	"X'80'" SPOOL OFFLOAD DEVICE
34	(22)	X'2'	0	DCTLNE	"DCTRJE" REMOTE JOB ENTRY LINE
34	(22)	X'E'	0	DCTMLNE	"DCTINT+DCTRJE+DCTNET" MAS JOB ENTRY LINE
34	(22)	X'6'	0	DCTLOG	"DCTINT+DCTRJE" APPLICATION LOGON DCT
34	(22)	X'C'	0	DCTSRV	"DCTINT+DCTNET" NJE SERVER DCT
		...1		DCTRDR	"X'10'" LOCAL CARD READER
34	(22)	X'12'	0	DCTRJR	"DCTRJE+DCTRDR" REMOTE CARD READER
34	(22)	X'14'	0	DCTINR	"DCTINT+DCTRDR" INTERNAL READER
34	(22)	X'50'	0	DCTRJI	"DCTDVTPX+DCTRDR" REQUEST-FOR-JOBID DCT
		..1.		DCTPRT	"X'20'" LOCAL PRINTER
34	(22)	X'22'	0	DCTRPR	"DCTRJE+DCTPRT" REMOTE PRINTER
		..11		DCTPUN	"X'30'" LOCAL PUNCH
34	(22)	X'32'	0	DCTRPU	"DCTRJE+DCTPUN" REMOTE PUNCH
34	(22)	X'20'	0	DCTPRPU	"DCTPRT" PRINTER OR PUNCH

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
34	(22)	X'30'	0	DCTRPP	"DCTRDR+DCTPRPU" READER, PRINTER, OR PUNCH
34	(22)	X'42'	0	DCTRCON	"DCTRJE+DCTDVTPX" REMOTE CONSOLE
34	(22)	X'18'	0	DCTNJR	"DCTNET+DCTRDR" NETWORK JOB RECEIVER
34	(22)	X'38'	0	DCTNJT	"DCTNJR+DCTPRPU" NETWORK JOB TRANSMITTER
34	(22)	X'8'	0	DCTNSR	"DCTNET" NETWORK SYSOUT RECEIVER
34	(22)	X'28'	0	DCTNST	"DCTNSR+DCTPRPU" NETWORK SYSOUT TRANSMITTER
34	(22)	X'58'	0	DCTNRR	"DCTNJR+DCTDVTPX" NETWORK ROUTE RECEIVER
34	(22)	X'78'	0	DCTNRT	"DCTNJT+DCTDVTPX" NETWORK ROUTE TRANSMITTER
34	(22)	X'90'	0	DCTXJR	"DCTSPOF+DCTRDR" SPOOL OFFLOAD JOB RECEIVER
34	(22)	X'B0'	0	DCTXJT	"DCTXJR+DCTPRPU" SPOOL OFFLOAD JOB TRANSMITTER
34	(22)	X'80'	0	DCTXSR	"DCTSPOF" SPOOL OFFLOAD SYSOUT RECEIVER
34	(22)	X'A0'	0	DCTXST	"DCTXSR+DCTPRPU" SPOOL OFFLOAD SYSOUT XMITTER
34	(22)	X'84'	0	DCTOFF	"DCTSPOF+DCTINT" SPOOL OFFLOAD MEDIA DEVICE
		Comment			
		End of DEVICE TYPE definition			
		End of Comment			
35	(23)	BITSTRING	1	DCTFLAG3	Flags
		1...		DCT3JWS	"B'10000000'" Dev uses JOB work sel
		.1..		DCT3SWS	"B'01000000'" Dev uses SYSOUT work sel
		..1.		DCT3IOER	"B'00100000'" $ASYNC error detected
35	(23)	X'1C'	0	DCTDALEN	"*-DCTPCE" LENGTH OF DA DCT FOR $EXCP
36	(24)	BITSTRING	1	DCTSTAT2	SECOND STATUS FLAG BYTE
37	(25)	BITSTRING	1	MDCTMLMQ	Expected MLM queue offset
38	(26)	SIGNED	2	DCTRSINT	Device restart interval (minutes)
40	(28)	BITSTRING	4	DCTRSTIM	Last device drain time (STCK)
44	(2C)	BITSTRING	1	DCTFLAG4	Flags
		1...		DCT4ARST	"B'10000000'" Automatically restart device
		.1..		DCT4NSYN	"B'01000000'" Skip CDCT synchronization
45	(2D)	BITSTRING	7		Reserved for future use
52	(34)	ADDRESS	4	DCTCHAIN	ADDRESS OF NEXT DCT
56	(38)	CHARACTER	8	DCTDEVN	EBCDIC DEVICE NAME
64	(40)	ADDRESS	4	DCTUCB	UCB ADDRESS
68	(44)	ADDRESS	4	DCTTOKA	SECURITY TOKEN ADDRESS - IF 0, JES TOKEN IS ASSOCIATED WITH DEVICE; ELSE, IS ADDRESS OF TOKEN
72	(48)	CHARACTER	8	DCTSECLB	SECLABEL for device
80	(50)	ADDRESS	8	DCTCDCTX	Addr of common storage extension (64-bit)
88	(58)	BITSTRING	1	DCTLRECL	DEVICE DEFAULT LRECL
		Comment			
		Start of DEVICE ID definition			
		End of Comment			
89	(59)	BITSTRING	3	DCTDEVID	DEVICE IDENTITY
		Comment			
		DCTDEVID (first byte only) --- Use CLI, not TM, to test DCTINRID since the equate value is 0. ---			
		End of Comment			
		....		DCTINRID	"B'00000000'" Internal reader

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		For the following devices, the low 4 bits may be used as a device number 'x': local device - always 0 remote device - RMTn.RDx, RMTn.PRx, RMTn.PUx network device - Ln.JRx, Ln.JTx, Ln.STx, Ln.SRx route device - always hex '8' (DCTRTEID) spof device - always hex 'F' (DCTXFRID) Use CLI to test for a local device. E.G. CLI DCTDEVID,DCTRDRID Local reader? Use TM to test for an RJE or an NJE E.G. TM DCTDEVID,DCTRMTID+DCTNJTID BM Is RJE or NJE BO Is Line or Logon BZ Is Local			
		End of Comment			
		...1		DCTRDRID	"B'00010000'" Card reader
		..1.		DCTPRTID	"B'00100000'" Printer
		..11		DCTPUNID	"B'00110000'" Punch
		.1..		DCTNJTID	"B'01000000'" Job transmitter
		.1.1		DCTNJRID	"B'01010000'" Job reader
		.11.		DCTNSTID	"B'01100000'" Sysout transmitter
		.111		DCTNSRID	"B'01110000'" Sysout receiver
		1...		DCTRMTID	"B'10000000'" Remote device
		Comment			
		B'10010000' DCTRMTID+DCTRDRID B'10100000' DCTRMTID+DCTPRTID B'10110000' DCTRMTID+DCTPUNID			
		End of Comment			
		11..		DCTLGNID	"B'11000000'" Logon
		11.1		DCTLNEID	"B'11010000'" Line
		111.		DCTSRVID	"B'11100000'" Server
		Comment			
		DCTXFRID is valid only when combined with one of the transmitter/receiver bit equates.			
		End of Comment			
		 1111		DCTXFRID	"B'00001111'" Spool transfer device
		1111 1111		DCTOFFID	"B'11111111'" Offload parent device
		Comment			
		DCTRTEID is valid only when combined with the job receiver or job transmitter equate.			
		End of Comment			
		.... 1...		DCTRTEID	"B'00001000'" Route device

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

					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.

				End of Comment	
		1		DCTSFSID	"B'00000001'" SJFR pseudo device
		.... ..1.		DCTSPNID	"B'00000010'" Spin pseudo device - to prevent JOE from getting selected while waiting for checkpoint write
		11		DCTCOMID	"B'00000011'" Command pseudo device
		.... .1..		DCTPRGID	"B'00000100'" Psuedo device indicating JOE is being purged
		.... .1.1		DCTARMID	"B'00000101'" ARM support processor
				Comment	
					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
				End of Comment	
		.... 11.1		DCTSAPID	"B'00001101'" Sysout API
		.... 111.		DCTOUTID	"B'00001110'" TSO Output command device
		 1111		DCTXWTID	"B'00001111'" External writer device
				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	
89	(59)	X'5A'	0	DCTNUM	"DCTDEVID+1,2,C'H'" DEVICE NUMBER
89	(59)	X'1'	0	DCTTODNE	"1" $TO has processed the JOE
89	(59)	X'2'	0	DCTRDONE	"2" $R or $GR has processed the JOE
				Comment	
					End of DEVICE ID definition
				End of Comment	
92	(5C)	SIGNED	4	DCTUSER0	RESERVED FOR USER
96	(60)	SIGNED	4	DCTUSER1	RESERVED FOR USER
				Comment	
					DCT FOUNDATION EXTENSION ORG POINT - REQUIRED.
				End of Comment	
104	(68)	DBL WORD	8	DCTFEORG (0)	DCT FOUNDATION EXT ORIGIN

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				LOCAL DEVICE FOUNDATION EXTENSION	
				End of Comment	
104	(68)	ADDRESS	4		RESERVED
108	(6C)	ADDRESS	4		RESERVED
112	(70)	ADDRESS	4		RESERVED
116	(74)	ADDRESS	4		RESERVED
120	(78)	ADDRESS	4		RESERVED
124	(7C)	CHARACTER	4	DCTUNIT	UNIT FOR LOCAL DEVICES, LINES
128	(80)	BITSTRING	8		Reserved
				Comment	
				---------- SNA LOGON DCT FOUNDATION EXTENSION ----------	
				End of Comment	
104	(68)	ADDRESS	4		MDCTADCT ADDR NEXT ACTIVE LOGON DCT
108	(6C)	ADDRESS	4	MDCTICE	ADDR OF FIRST LOGGED ON ICE
112	(70)	ADDRESS	4		MDCTDCT RESERVED FOR SNA LOGON DCTS
116	(74)	BITSTRING	1	MDCTXERR	VTAM EXIT ROUTINE ERROR CODE
117	(75)	BITSTRING	1	MDCTATYP	APPLICATION TYPE
118	(76)	BITSTRING	1		MDCTATTN APPLICATION ACTION FLAGS
119	(77)	BITSTRING	1		MDCTSTAT APPLICATION STATUS FLAGS
120	(78)	ADDRESS	2		RESERVED
122	(7A)	BITSTRING	1	MDCTSUSP	DCT SUSPEND FLAG
123	(7B)	ADDRESS	1	MDCTPWDL	APPLICATION PASSWORD LENGTH
124	(7C)	CHARACTER	4		RESERVED
128	(80)	BITSTRING	8		Not used
				Comment	
				---------- TCP NETSRV DCT FOUNDATION EXTENSION ----------	
				End of Comment	
104	(68)	ADDRESS	4		MDCTADCT Addr next active server DCT
108	(6C)	ADDRESS	4		RESERVED
112	(70)	ADDRESS	4		MDCTDCT RESERVED FOR NETSRV DCTs
116	(74)	BITSTRING	1		Not used
117	(75)	BITSTRING	1		MDCTTYPE APPLICATION TYPE
118	(76)	BITSTRING	1		MDCTATTN APPLICATION ACTION FLAGS
119	(77)	BITSTRING	1		MDCTSTAT APPLICATION STATUS FLAGS
120	(78)	ADDRESS	2		RESERVED
122	(7A)	BITSTRING	1		DCT SUSPEND FLAG
123	(7B)	ADDRESS	1		APPLICATION PASSWORD LENGTH
124	(7C)	CHARACTER	4		RESERVED
128	(80)	ADDRESS	4		MDCTPCL PCL address
132	(84)	BITSTRING	4		Not used
				Comment	
				---------- BSC LINE DCT FOUNDATION EXTENSION ----------	
				End of Comment	
104	(68)	ADDRESS	4	MDCTADCT	ADDR OF NEXT ACTIVE LINE DCT
108	(6C)	BITSTRING	1	MDCTRSEQ	RECEIVE SEQUENCE COUNT

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
109	(6D)	BITSTRING	1	MDCTTSEQ	TRANSMIT SEQUENCE COUNT
110	(6E)	BITSTRING	1	MDCTMODE	ADAPTER MODE SET VALUE
111	(6F)	ADDRESS	1	MDCTERCT	LINE ERROR COUNT
112	(70)	ADDRESS	4	MDCTDCT	ADDR OF FIRST REMOTE DCT
116	(74)	BITSTRING	1	MDCTLINE	LINE CHARACTERISTICS
117	(75)	BITSTRING	1	MDCTTYPE	TERMINAL TYPE
118	(76)	BITSTRING	1	MDCTATTN	LINE ACTION FLAGS
119	(77)	BITSTRING	1	MDCTSTAT	LINE STATUS FLAGS
120	(78)	SIGNED	2	MDCTBFSZ	MULTI-LEAVING BUFFER SIZE - 5
122	(7A)	BITSTRING	2	MDCTFCS	LAST RECEIVED FCS
124	(7C)	CHARACTER	4		MDCTUNIT UNIT FOR LOCAL DEVICES, LINES
128	(80)	ADDRESS	4	MDCTPCL	PCL pointer for persistent connections
132	(84)	BITSTRING	4		Not used

Comment

SNA LINE DCT FOUNDATION EXTENSION

End of Comment

104	(68)	ADDRESS	4		MDCTADCT ADDR OF NEXT ACTIVE LNE DCT
108	(6C)	ADDRESS	4		MDCTICE ADDR OF FIRST ALLOCATED ICE
112	(70)	ADDRESS	4		MDCTDCT ADDR OF FIRST REMOTE DCT
116	(74)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
117	(75)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
118	(76)	BITSTRING	1		MDCTATTN LINE ACTION FLAGS
119	(77)	BITSTRING	1		MDCTSTAT LINE STATUS FLAGS
120	(78)	ADDRESS	4	MDCTWICE	ADDR OF ICE IN WAIT-TIME DELAY
124	(7C)	CHARACTER	4		DCTUNIT UNIT FOR LCLS/LNES ('SNA ')
128	(80)	ADDRESS	4		MDCTPCL PCL pointer for persistent connections
132	(84)	BITSTRING	4		Not used

Comment

TCP/IP LINE DCT FOUNDATION EXTENSION

End of Comment

104	(68)	ADDRESS	4		MDCTADCT ADDR OF NEXT ACTIVE LNE DCT
108	(6C)	ADDRESS	4		Not used for TCP/IP
112	(70)	ADDRESS	4		MDCTDCT ADDR OF FIRST REMOTE DCT
116	(74)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
117	(75)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
118	(76)	BITSTRING	1		MDCTATTN LINE ACTION FLAGS
119	(77)	BITSTRING	1		MDCTSTAT LINE STATUS FLAGS
120	(78)	SIGNED	2		MDCTBFSZ MULTI-LEAVING BUFFER SIZE - 5
122	(7A)	BITSTRING	2		Not used for TCP/IP
124	(7C)	CHARACTER	4		DCTUNIT UNIT FOR LCLS/LNES ('TCP ')
128	(80)	ADDRESS	4		MDCTPCL PCL pointer for persistent connections
132	(84)	ADDRESS	4	MDCTQTBF	TBUF queued for line req (in jesxTBUF data space)

Comment

BSC REMOTE DCT FOUNDATION EXTENSION

End of Comment

104	(68)	BITSTRING	1	MDCTRECL	REMOTE DEVICE MAX RECORD LENGTH
105	(69)	BITSTRING	1	MDCTRCB	REMOTE DEVICE RECORD CNTRL BYTE
106	(6A)	BITSTRING	1	MDCTFMT	TERMINAL DATA FORMAT
107	(6B)	BITSTRING	1	MDCTFEAT	TERMINAL FEATURES

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
108	(6C)	ADDRESS	4		RESERVED
112	(70)	ADDRESS	4		MDCTDCT ADDR OF NEXT REMOTE DCT
116	(74)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
117	(75)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
118	(76)	BITSTRING	1		RESERVED
119	(77)	BITSTRING	1		MDCTSTAT REMOTE STATUS FLAGS
120	(78)	SIGNED	2		MDCTBFSZ MULTI-LEAVING BFR SIZE - 5
122	(7A)	BITSTRING	2		MDCTFCS REMOTE FUNCTION CTRL SEQ
124	(7C)	CHARACTER	4		DCTUNIT RESERVED
128	(80)	BITSTRING	8		Not used
128	(80)	X'88'	0	MDCTRFXE	"*"

Comment

SNA REMOTE DCT FOUNDATION EXTENSION

End of Comment

104	(68)	BITSTRING	1		MDCTRECL REMOTE DEV MAX RECORD LEN
105	(69)	BITSTRING	1	MDCTSEL	REMOTE DEVICE DATASTREAM SELECT
106	(6A)	BITSTRING	1		MDCTFMT TERMINAL DATA FORMAT
107	(6B)	BITSTRING	1		MDCTFEAT TERMINAL FEATURES
108	(6C)	ADDRESS	4		MDCTICE ADDR OF ASSOCIATED ICE
112	(70)	ADDRESS	4		MDCTDCT ADDR OF NEXT REMOTE DCT
116	(74)	BITSTRING	1		MDCTLINE LINE CHARACTERISTICS
117	(75)	BITSTRING	1		MDCTTYPE TERMINAL TYPE
118	(76)	BITSTRING	1	MDCTFLG1	REMOTE FLAG BYTE
119	(77)	BITSTRING	1		MDCTSTAT REMOTE STATUS FLAGS
120	(78)	ADDRESS	2		MDCTBFSZ MAXIMUM RU SIZE
122	(7A)	BITSTRING	1		RESERVED
123	(7B)	ADDRESS	1	MDCTCHLM	OUTSTANDING CHAIN LIMIT
124	(7C)	CHARACTER	4		RESERVED
128	(80)	BITSTRING	8		Not used

Comment

SPOOL OFFLOAD (XFR) DCT FOUNDATION EXTENSION

End of Comment

104	(68)	BITSTRING	1	XDCTSTAT	STATUS FLAG BYTE
105	(69)	BITSTRING	1	XDCTRCB	STREAM IDENTIFIER
106	(6A)	BITSTRING	2		RESERVED FOR FUTURE USE
108	(6C)	ADDRESS	4	XDCTDCT	PTR TO CHAIN OF RECV/TRANS DCTS
112	(70)	SIGNED	4	(3)	RESERVED FOR FUTURE USE
124	(7C)	CHARACTER	4		RESERVED
128	(80)	BITSTRING	8		Not used

Comment

Line transmitter/receiver DCT extension

End of Comment

104	(68)	ADDRESS	1		MDCTRECL DEVICE MAX RECORD LENGTH
105	(69)	ADDRESS	1		MDCTRCB DEVICE RECORD CNTRL BYTE
106	(6A)	ADDRESS	2		RESERVED
108	(6C)	ADDRESS	4		RESERVED
112	(70)	ADDRESS	4		MDCTDCT Address of next xmitter/ receiver
116	(74)	ADDRESS	4		RESERVED
120	(78)	ADDRESS	2		RESERVED

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
122	(7A)	ADDRESS	2		MDCTFCS LAST RECEIVED FCS
124	(7C)	ADDRESS	4		RESERVED
128	(80)	BITSTRING	8		Not used
128	(80)	X'88'	0	DCTSREND	"*"

Comment

DEVICE EXTENSION ORG POINT - OPTIONAL.

End of Comment

136	(88)	DBL WORD	8	DCTEXORG (0)	DCT DEVICE EXTENSION ORIGIN

Comment

READER DCT EXTENSION

End of Comment

136	(88)	SIGNED	2	DCTXEQND	DEFAULT EXECUTION NODE
138	(8A)	BITSTRING	1	DCTRDFL1	Reader flags
		1...		DCTR1IND	"B'10000000'" Independent mode
139	(8B)	BITSTRING	1		Reserved for future use
140	(8C)	SIGNED	4	DCTRDRT (0)	READER ROUTE CODE
140	(8C)	SIGNED	2	DCTRDNOD	NODE NUMBER
142	(8E)	SIGNED	2	DCTRDRTE	REMOTE NUMBER
144	(90)	SIGNED	4	DCTPRINT (0)	DEFAULT PRINT ROUTE CODE
144	(90)	SIGNED	2	DCTPRNOD	NODE NUMBER
146	(92)	SIGNED	2	DCTPRRTE	LOCAL PRINTER/REMOTE NUMBER
148	(94)	CHARACTER	8	DCTPRSER	PRINT USERID
156	(9C)	SIGNED	4	DCTPUNCH (0)	DEFAULT PUNCH ROUTE CODE
156	(9C)	SIGNED	2	DCTPUNOD	NODE NUMBER
158	(9E)	SIGNED	2	DCTPURTE	LOCAL PUNCH/REMOTE NUMBER
160	(A0)	CHARACTER	8	DCTPUSER	PUNCH USERID
168	(A8)	BITSTRING	4	DCTSIAFF	Default system affinity
172	(AC)	BITSTRING	1	DCTRAUTH	READER COMMAND AUTHORITY
173	(AD)	CHARACTER	8	DCTJCLA8	Default job class
181	(B5)	CHARACTER	1	DCTMCLAS	DEFAULT MSGCLASS
182	(B6)	BITSTRING	1	DCTPRINC	PRIORITY INCREMENT
183	(B7)	BITSTRING	1	DCTPRLIM	PRIORITY LIMIT
183	(B7)	X'B8'	0	DCTIRORG	"*" END OF COMMON READER DCT FIELDS
184	(B8)	SIGNED	4	DCTRDEND (0)	END OF READER DCT
184	(B8)	X'B8'	0	DCTJREND	"*" END OF JOB RECEIVER DCT

Comment

OPTIONAL SPECIFIC DEVICE EXTENSIONS. EACH DEVICE TYPE MAY
DEFINE DIFFERENT DEVICE EXTENSIONS. HOWEVER, TWO
COMMON BEGINNINGS EXIST FOR THE DEVICE EXTENSION - ONE FOR
DEVICES THAT REQUIRE JOB WORK SELECTION CRITERIA AND ONE
FOR DEVICES THAT REQUIRE SYSOUT WORK SELECTION CRITERIA.
NOTE THAT ANY DEVICE REQUIRING ONE OF THESE WORK SELECTION
SECTIONS MUST DEFINE THAT SECTION STARTING AT DCTEXORG.
FIRST, DEFINE FIELDS COMMON TO BOTH SETS OF CRITERIA.

End of Comment

136	(88)	BITSTRING	1	DCTWORK	JOB RECEIVER WORK AREA

Comment

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

End of Comment

184	(B8)	DBL WORD	8	DCTWSP (0)	HASP WSP

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
184	(B8)	SIGNED	4	DCTCWS (0)	Start of common work select
184	(B8)	CHARACTER	4	DCTID2	
184	(B8)	X'6'	0	DCTVOLEN	"6" Length of volume
184	(B8)	X'4'	0	DCTVOLMX	"4" Maximum number of volumes
188	(BC)	SIGNED	1	DCTNMVOL	Number of volumes
189	(BD)	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

192	(C0)	BITSTRING	0	DCTVOL (0)	Device select volume list
192	(C0)	X'4'	0	DCTWSENT	"4" Length of ws entry
192	(C0)	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 z/OS Release 13 the largest table is that
of the Sysout API which has 23 entries.

End of Comment

192	(C0)	X'19'	0	DCTMAXWS	"22+1+2" Number of criteria that will fit in xxxWSREQ
216	(D8)	SIGNED	4	(0)	
216	(D8)	CHARACTER	1	DCTWSBEG (0)	Beginning of WS list
216	(D8)	BITSTRING	1	DCTWSPRI	WS priority flag
		1...		DCTQVAL	"B'10000000'" Class optimum WS prio
		.1..		DCTRVAL	"B'01000000'" Route optimum WS prio
		..1.		DCTQWS	"B'00100000'" Use class list for WS
		...1		DCTSLASH	"B'00010000'" Optional criteria switch
		.... 1...		DCTVOLFL	"B'00001000'" Use volume for WS
		.... .1..		DCTWSRNG	"B'00000100'" Select by range specified
		.... ..1.		DCTWSRGS	"B'00000010'" Range criterion after slash
		1		DCTRWS	"B'00000001'" Select by route specifed
217	(D9)	BITSTRING	1	DCTWSPR2	2nd WS priority flag
		1...		DCTWSODP	"B'10000000'" Outdisp specified in WS or Outdisp is not valid WS criterion for dev
		.1..		DCTWSLIM	"B'01000000'" Limit specified in WS
		..1.		DCTSLLIM	"B'00100000'" Limit is after slash
		...1		DCTWSCTK	"B'00010000'" Select by CTOKEN
		.... 1...		DCTODPNV	"B'00001000'" Outdisp is not a valid WS criterion for dev; forced to WRITE/KEEP
218	(DA)	BITSTRING	1	DCTQPOS	Position of Q in WS-list
219	(DB)	BITSTRING	1	DCTLPOS	Position of LIM in WS-list
220	(DC)	BITSTRING	1	DCTRPOS	Position of RC in WS-list
221	(DD)	BITSTRING	1	DCTPPOS	Position of P in WS-list
222	(DE)	SIGNED	2	DCTONODE	Job's origin node number

Comment

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

End of Comment

		1111 1111		DCTPOSNL	"X'FF'" Position has not been set
224	(E0)	BITSTRING	1	DCTWSREQ	Work selection via ws parm
224	(E0)	X'D8'	0	DCTWS	"DCTWSBEG,*-DCTWSBEG,C'X'" Max length ws list

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
324	(144)	ADDRESS	4	DCTWSTB	Addr of related ws table pair
324	(144)	X'4'	0	DCTRCMAX	"4" Define maximum route codes
324	(144)	X'0'	0	DCTNODE	"0,2,C'H'" Offset/len of node in rc
324	(144)	X'2'	0	DCTROUTE	"2,2,C'H'" Offset/length of remote in rc
324	(144)	X'4'	0	DCTUSEID	"4,8,C'D'" Offset/len of userid in rc
324	(144)	X'C'	0	DCTRCLEN	"L'DCTNODE+L'DCTROUTE+L'DCTUSEID" Len of rc
324	(144)	X'4'	0	DCTNRLEN	"L'DCTNODE+L'DCTROUTE" Len of node and route
328	(148)	CHARACTER	0	DCTRC (0)	Space for route codes
376	(178)	ADDRESS	2	(0)	xxxNRC must follow xxxRC
376	(178)	CHARACTER	8	DCTJOBNM	Job name for device work select
384	(180)	CHARACTER	8	DCTCURJB	Job name of element last selected
392	(188)	CHARACTER	8	DCTCRUID	Value for creator= keyword
400	(190)	ADDRESS	1	DCTNRC	Number of route codes
401	(191)	BITSTRING	1	DCTRTEQ	and route output queue flag
		1...		DCTWSLOC	"B'10000000'" Scan local output queue
		.1..		DCTWSRMT	"B'01000000'" Scan remote output queue
		..1.		DCTWSNET	"B'00100000'" Scan network queue
		...1		DCTWSUSE	"B'00010000'" Scan userid queue
		1...		DCTINDIR	"B'10000000'" Indirect routing flag (HASPINIT ONLY)
402	(192)	BITSTRING	1	DCTWSFG5	Misc flags
		1...		DCT1GENC	"B'10000000'" Low job id has a generic
		.1..		DCT1GEN1	"B'01000000'" Low job id has generic '*' as the first character
403	(193)	BITSTRING	1		Reserved for future use
404	(194)	SIGNED	4	DCTJNUML	Device select low job number
408	(198)	SIGNED	4	DCTJNUMH	Device select high job number
412	(19C)	CHARACTER	8	DCTJCHRL	Character view of low job number
420	(1A4)	CHARACTER	8	DCTJCHRH	Character view of high job number
428	(1AC)	ADDRESS	4	(2)	Reserved for future use
436	(1B4)	BITSTRING	1	DCTWSFG1	Device select flags
		1...		DCTWSHLD	"B'10000000'" Select held jobs
		.1..		DCTWSHNS	"B'01000000'" Hold operand not specified
		..1.		DCTWSNOT	"B'00100000'" Send notify message
		...1		DCTWSFJR	"B'00010000'" Select within JOB range
		.... 1...		DCTWSFST	"B'00001000'" Select within STC range
		.... .1..		DCTWSFTS	"B'00000100'" Select within TSU range
		.... ..1.		DCTWSFAP	"B'00000010'" Select APPC initiators
		...1 111.		DCTWSANY	"B'00011110'" Select any range
437	(1B5)	BITSTRING	1	DCTWSFG4	Device select flags
		1...		DCTWSENL	"B'10000000'" Enforce line limits
		.1..		DCTWSENP	"B'01000000'" Enforce page limits

Comment

B'00111111' Reserved for future use

End of Comment

440	(1B8)	SIGNED	4	DCTWRNUM	Writer ID number for JOE/Writer exclude list
444	(1BC)	BITSTRING	8	DCTWRASI	Writer ID address space level used for JOE/Writer exclude list
452	(1C4)	CHARACTER	8	DCTDEVN2	Device name of form: For non-SAPI DCTDEVN For SAPI jobname.sss2appl
452	(1C4)	X'1C4'	0	DCTDEVNC	"DCTDEVN2,*-DCTDEVN2,C'C'" Complete device name
469	(1D5)	BITSTRING	1	DCTDEVT2	Device type (copy of DCTDEVTP)
470	(1D6)	BITSTRING	3	DCTDEVI2	Device identity (copy of DCTDEVID)
473	(1D9)	BITSTRING	3		Reserved for future use
476	(1DC)	SIGNED	4	DCTLIMLO	Device lower limit (records)
480	(1E0)	SIGNED	4	DCTLIMHI	Device upper limit (records)
484	(1E4)	SIGNED	4	(0)	Force alignment
484	(1E4)	X'12C'	0	DCTCWSLN	"*-DCTCWS" Length of common criteria fields

Comment

Job work selection criteria fields

End of Comment

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
184	(B8)	SIGNED	4	DCTJWS (0)	Start of job work selection
184	(B8)	BITSTRING	300		Fields common with sysout select
484	(1E4)	BITSTRING	4	DCTSAF	Device select affinity list
488	(1E8)	ADDRESS	4	DCTSAFPT	System affinity list pointer
492	(1EC)	CHARACTER	8	DCTSRVCL	Service class
500	(1F4)	CHARACTER	16	DCTSCHE	Scheduling environment
516	(204)	BITSTRING	1	DCTJWSFL	Job Work Selection flags
		1...		DCTJCFMT	"B'10000000'" Job Work Selection class list format : OFF = Class list contains up to 36 one char class names. ON = Class list contains a mixture of up to 8 eight char class names and class group names.
517	(205)	BITSTRING	1		Reserved
518	(206)	CHARACTER	64	DCTJCLAS	Job Work Selection class list, terminated by a blank. Contents depend on the Class list format bit (see above).
518	(206)	CHARACTER	36	DCTJCLS1	1 character class list (___JCFMT bit off)
518	(206)	CHARACTER	8	DCTJCLS8 (0)	8 character class list (___JCFMT bit on)
518	(206)	X'18E'	0	DCTJWSLN	"*-DCTJWS" Length of WSP for job work selection

Comment

Sysout work selection criteria fields

End of Comment

184	(B8)	SIGNED	4	DCTSWS (0)	Start of sysout work selection
184	(B8)	BITSTRING	300		Fields common with sysout select
484	(1E4)	CHARACTER	8	DCTFORMS	Current print/punch forms id
492	(1EC)	CHARACTER	37	DCTCLASS	SYSOUT Work Selection class list, terminated by blank. Contains a list of one byte values.
529	(211)	BITSTRING	3		Reserved
532	(214)	CHARACTER	64	DCTJCOR	Job Correlator
596	(254)	CHARACTER	8	DCTWFORM (0)	Forms for work selection
596	(254)	X'254'	0	DCTWFORC	"DCTWFORM,*-DCTWFORM,C'C'" Forms
660	(294)	CHARACTER	4	DCTFCB	Printer fcb (carriage tape) id
664	(298)	CHARACTER	4	DCTUCS	Printer ucs id
668	(29C)	CHARACTER	4	DCTFLASH	Printer overlay frame
672	(2A0)	CHARACTER	4	DCTFLSHD	N/I-printer overlay default
676	(2A4)	SIGNED	4	DCTPLIML	Device lower limit (pages)
680	(2A8)	SIGNED	4	DCTPLIMH	Device upper limit (pages)
684	(2AC)	SIGNED	4	DCTAGE	Age in seconds since JOE creation
688	(2B0)	CHARACTER	8	DCTWTRID	Ext wtr name for work select
696	(2B8)	BITSTRING	8	DCTPRMD	Prmode index list
704	(2C0)	ADDRESS	4	DCTPRTBL	Address of PRMODE table or zero
708	(2C4)	BITSTRING	1	DCTWSFG2	Device select flag
		1...		DCTWSDSH	"B'10000000'" Select held output
		.1..		DCTNIBRS	"B'01000000'" Select bursted output
		..1.		DCTWSDAN	"B'00100000'" Select held/non-held output
		...1		DCTWSBNS	"B'00010000'" Burst operand not specified

Comment

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

End of Comment

		.... 1...		DCTWSIP	"B'00001000'" Select only IP-format
		.... .1..		DCTWSBTH	"B'00000100'" Select both IP and non-IP
		.... ..1.		DCTWSTKN	"B'00000010'" Select by token mapped by $CTOKEN & blocked output is OK
709	(2C5)	BITSTRING	1	DCT1STFL	Device select flag byte
709	(2C5)	X'8'	0	DCT1SODW	"$ODWRITE" Select OUTDISP=WRITE

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
709	(2C5)	X'4'	0	DCT1SODH	"$ODHOLD" Select OUTDISP=HOLD
709	(2C5)	X'2'	0	DCT1SODK	"$ODKEEP" Select OUTDISP=KEEP
709	(2C5)	X'1'	0	DCT1SODL	"$ODLEAVE" Select OUTDISP=LEAVE
709	(2C5)	X'F'	0	DCT1SODA	"$ODANY" Check all bit settings
710	(2C6)	BITSTRING	2		Reserved for future use

Comment

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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 then one JOE in queue for this
device

End of Comment

712	(2C8)	ADDRESS	4	DCTPJOE	Next JOE to process
712	(2C8)	X'214'	0	DCTSWSCR	"*-DCTSWS" Length of WSP fields which represent SYSOUT work selection criteria

Comment

The following fields are used to manage WSP and
are not part of selection criteria.

End of Comment

716	(2CC)	ADDRESS	4	DCTGTW	Address of $#GET Trace work area
720	(2D0)	ADDRESS	4	DCTASAPI	Address of SAPID (ALET is in $SAPTOK in HCT)
724	(2D4)	ADDRESS	4	DCTNACTV	Next active DCT address SAPI - next WSP in chain
728	(2D8)	ADDRESS	4	DCTPACTV	Previous active DCT address SAPI - prev WSP in chain
732	(2DC)	BITSTRING	1	DCTWSFG3	WSP status flag
		1...		DCTWS3QD	"B'10000000'" DCT is on an active DCT Q SAPI - WSP is on a list of postable WSPs
		.1..		DCTWS3QT	"B'01000000'" SAPI - WSP is on list for selection on token
		..1.		DCTWS3QX	"B'00100000'" SAPI - WSP is on list for selection expression
		...1		DCTWS3CF	"B'00010000'" WSP classification for cache was performed
		.... 1...		DCTWS3XN	"B'00001000'" WSP expression is not compatible with cache key
733	(2DD)	BITSTRING	3		Reserved for future use

Comment

Cache list entries in xxxCLENT list represent this
WSP in the $#POST cache. (See XCWELT in $XCW.)
Cache nodes in the xxxCNODE list are the cache
nodes which point to this WSP as last scanned WSP.
(See XCWNODE in $XCW.)

End of Comment

736	(2E0)	ADDRESS	8	DCTCLENT	Ptr to cache list entries
744	(2E8)	ADDRESS	8	DCTCNODE	Ptr to cache nodes
752	(2F0)	ADDRESS	4	(0)	Align on a full word
752	(2F0)	X'238'	0	DCTSWSLN	"*-DCTSWS" Length of WSP for SYSOUT work selection
752	(2F0)	X'238'	0	DCTLENG	"*-DCTCWS" Allocation length of WSP

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		SNA LOGON DCT EXTENSION			
			End of Comment		
136	(88)	CHARACTER	8		APPLICATION PASSWORD
144	(90)	ADDRESS	2	MDCTSNCT	COUNT OF LOGGED ON TERMINALS
146	(92)	ADDRESS	1		RESERVED FOR SNA LOGON DCTS
147	(93)	ADDRESS	1	MDCTAPNL	APPLICATION NAME LENGTH
148	(94)	CHARACTER	8	MDCTAPPL	APPLICATION NAME
156	(9C)	SIGNED	4	MDCTLOGN	COUNT OF LOGONS TO APPL
160	(A0)	SIGNED	4	MDCTNICE	LOGON FAILED FOR ICE COUNT
164	(A4)	SIGNED	4	MDCTNLNE	LOGON FAILED FOR LINE COUNT
168	(A8)	SIGNED	4	MDCTINVL	LOGON FAILED FOR DATA COUNT
172	(AC)	SIGNED	4	MDCTABRT	SESSION ABNORMAL TERM COUNT
176	(B0)	SIGNED	4		RESERVED FOR FUTURE USE
184	(B8)	DBL WORD	8	MDCTRAWK (0)	ACTIVE RECEIVE ANY BUFFER WORK
184	(B8)	SIGNED	2	MDCTRALM	ACTIVE RECEIVE ANY BUFFER LIMIT
186	(BA)	SIGNED	2	MDCTRACT	ACTIVE RECEIVE ANY BUFFER COUNT
188	(BC)	ADDRESS	4	MDCTRABF	ACTIVE RECEIVE ANY BUFFER CHAIN
192	(C0)	DBL WORD	8	MDCTRQWK (0)	QUEUED RECEIVE ANY BUFFER WORK
192	(C0)	SIGNED	2	MDCTRQLM	QUEUED RECEIVE ANY BUFFER LIMIT
194	(C2)	SIGNED	2	MDCTRQCT	QUEUED RECEIVE ANY BUFFER COUNT
196	(C4)	ADDRESS	4	MDCTRQBF	QUEUED RECEIVE ANY BUFFER CHAIN
200	(C8)	DBL WORD	8	MDCTEXWK (0)	EXIT ROUTINE WORK AREA
200	(C8)	SIGNED	4	MDCTEXCD (0)	EXIT ROUT. ACTION CODE WORKAREA
200	(C8)	BITSTRING	3		RESERVED
203	(CB)	BITSTRING	1	MDCTXCOD	EXIT ROUTINE REQ ACTION CODE
204	(CC)	ADDRESS	4	MDCTEXIT	ADDR OF NEXT SCHED LOGON DCT
208	(D0)	SIGNED	4	MDCTLGND (0)	END OF SNA LOGON DCT
			Comment		
		TCP/IP NETSRV DCT extension			
			End of Comment		
136	(88)	CHARACTER	8	MDCTPGM	Program name
144	(90)	CHARACTER	8	MDCTPROC	Proc name
152	(98)	ADDRESS	2	MDCTKEEP	Default keep alive interval
154	(9A)	SIGNED	2	MDCTSBSZ	Server buffer size
156	(9C)	ADDRESS	4	MDCTSCK	SCK address
160	(A0)	CHARACTER	8	MDCTSOCK	Socket name
168	(A8)	ADDRESS	4	MDCTSSQD	SQD used to start server ASID
172	(AC)	SIGNED	2	MDCTASID	ASID of server addrspc
174	(AE)	BITSTRING	1	MDCTNFLG	NETSRV flags
		1...		MDCTNVRB	"B'10000000'" NETSRV Verbose mode at NETSRV level
		.1..		MDCTNTRC	"B'01000000'" NETSRV common tracing at NETSRV level
		..1.		MDCTNTRJ	"B'00100000'" NETSRV JES tracing at NETSRV level
175	(AF)	BITSTRING	1		Reserved
176	(B0)	CHARACTER	8	MDCTASNM	Address space name
184	(B8)	CHARACTER	8	MDCTSTAK	TCP/IP stack name
192	(C0)	SIGNED	4	MDCTSVND (0)	END OF TCP SERVER DCT

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					--
					BSC LINE DCT EXTENSION
					--
					End of Comment
136	(88)	CHARACTER	8	MDCTPSWD	RJE LINE PASSWORD
144	(90)	ADDRESS	4	MDCTOBUF	RJE OUTPUT BUFFER CHAIN
148	(94)	SIGNED	4	MDCTIMOK	TIME OF LAST TRANSMISSION
152	(98)	ADDRESS	4	MDCTRAT	ADDRESS OF RAT ENTRY (RJE) ADDRESS OF NIT ENTRY (NJE)
156	(9C)	ADDRESS	4	MDCTCODE	ADDRESS OF RJE CODE TABLE
160	(A0)	BITSTRING	0	MDCTOTAL (0)	DCT EVENT COUNTERS
160	(A0)	SIGNED	4	MDCTXCP	LINE COUNTS - TOTAL EXCPS
164	(A4)	SIGNED	4	MDCTNAK	NAKS TO WRITE TEXT
168	(A8)	SIGNED	4	MDCTDCK	DATA CHECKS TO READ TEXT
172	(AC)	SIGNED	4	MDCTTO	TIMEOUTS TO READ TEXT
176	(B0)	SIGNED	4	MDCTREM	ALL OTHER ERRORS
180	(B4)	BITSTRING	0	MDCTCNTS (0)	DCT SESSION EVENT COUNTERS
180	(B4)	SIGNED	4	MDCTSXCP	SESSION COUNTS - TOTAL EXCPS
184	(B8)	SIGNED	4	MDCTSNAK	NAKS TO WRITE TEXT
188	(BC)	SIGNED	4	MDCTSDCK	DATA CHECKS TO READ TEXT
192	(C0)	SIGNED	4	MDCTSTO	TIMEOUTS TO READ TEXT
196	(C4)	SIGNED	4	MDCTSREM	ALL OTHER ERRORS
200	(C8)	BITSTRING	1	MDCTPMBC	NETWORK PATH MGR BUF COUNT
201	(C9)	BITSTRING	1	MDCTPMFL	NETWORK PATH MGR FLAGS
202	(CA)	SIGNED	2	MDCTDCNT	DEDICATED LINE DCT COUNT
204	(CC)	ADDRESS	4	MDCTACT (0)	ACTIVE HARDWARE RJE DCT
204	(CC)	ADDRESS	4	MDCTNM	NETWORK MULTIPLE TRUNK QUEUE
208	(D0)	ADDRESS	4	MDCTNA	NETWORK ACTIVE QUEUE
212	(D4)	SIGNED	2	MDCTNR	NETWORK HALF LINE RESISTANCE
214	(D6)	SIGNED	2	MDCTNNR	NETWORK NODE TO NODE RESISTANCE
216	(D8)	ADDRESS	4	MDCTNCES	NETWORK CONNECT EVENT SEQUENCE
220	(DC)	BITSTRING	1	MDCTNFL2	NETWORK FLAGS II
221	(DD)	BITSTRING	1	MDCTNFL3	Network flags III
222	(DE)	BITSTRING	1		MDCTTFLG Reserved for future use
223	(DF)	CHARACTER	1	MDCTLNCC	Last NCC signon record sent
224	(E0)	SIGNED	2	MDCTOPCT	COUNT OF OPEN RJE PROCESSORS
226	(E2)	BITSTRING	1	MDCTNFL	NETWORK FLAGS
227	(E3)	SIGNED	1	MDCTCMCT	CONSOLE MESSAGE COUNT
227	(E3)	X'CC'	0	MDCTNETA	"MDCTNM,*-MDCTNM" NETWORK AREA FOR $NPMWORK
228	(E4)	BITSTRING	8	MDCTNEGR	PENDING NEGATIVE XMTTER RESPONSES
236	(EC)	SIGNED	4	MDCTNO (0)	LINE ROUTE CODE
236	(EC)	ADDRESS	2	MDCTNODE	NODE NUMBER
238	(EE)	ADDRESS	1	MDCTQUAL	QUALIFIER
239	(EF)	ADDRESS	1		RESERVED FOR FUTURE USE
240	(F0)	ADDRESS	4	MDCTNMAP	NETWORK PATH MAN NOTIFY MAP
244	(F4)	ADDRESS	4	MDCTRNTA	REACHABLE NODES TABLE ADDR, ZERO UNLESS LINE IN NJE USE RNT=1 BIT PER NODE
248	(F8)	CHARACTER	8	MDCTNPAS	PASSWORD to send to node (BSC Only)
256	(100)	SIGNED	4	MDCTMDOM	$HASP500 DOM ID
260	(104)	SIGNED	4	MDCTIFEA	NJE signon feature flags supported by this line
264	(108)	ADDRESS	4	MDCTNLDV (0)	Numbers of line subdevices
264	(108)	ADDRESS	1	MDCTJTNM	LINEnn JTNUM= value
265	(109)	ADDRESS	1	MDCTJRNM	LINEnn JRNUM= value
266	(10A)	ADDRESS	1	MDCTSTNM	LINEnn STNUM= value
267	(10B)	ADDRESS	1	MDCTSRNM	LINEnn SRNUM= value
268	(10C)	ADDRESS	4	MDCTMRT	MRT address
272	(110)	ADDRESS	4	MDCTMRRT	MRRT address
276	(114)	SIGNED	4	MDCTSONT (0)	Multi-trunk signon retry time
276	(114)	SIGNED	4	MDCTNOTS	RCP CMB Throw-away time
280	(118)	BITSTRING	8	MDCTIKEY	Secure NJE signon key

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
288	(120)	BITSTRING	8	MDCTISTR	Secure NJE random string
296	(128)	BITSTRING	8	MDCTESTR	Encrypted received string
304	(130)	ADDRESS	4	MDCTISWL	SWEL addr (secure signon)
308	(134)	SIGNED	4	MDCTRSTM	MDCTRSTM Disconnect time (STCK)
312	(138)	SIGNED	2	MDCTRSTI	MDCTRSTI Restart interval (minutes)
314	(13A)	BITSTRING	1		Reserved
315	(13B)	BITSTRING	1	MDCTRSTF	MDCTRSTF Flags
		1...		MDCTRFCY	"B'10000000'" Auto-restart NJE connection
		.1..		MDCTRFCN	"B'01000000'" Never Auto-restart
316	(13C)	SIGNED	2	MDCTLNOD	Associated node
320	(140)	SIGNED	4	MDCTLEND (0)	END OF LINE DCT

Comment

SNA LINE DCT EXTENSION

End of Comment

136	(88)	CHARACTER	8		MDCTPSWD RJE LINE PASSWORD
144	(90)	ADDRESS	2		MDCTSNCT ALLOCATED SESSION COUNT
146	(92)	SIGNED	2		RESERVED
148	(94)	SIGNED	4		MDCTIMOK TIME OF LAST TRANSMISSION
152	(98)	ADDRESS	4		MDCTRAT ADDRESS OF RAT ENTRY (RJE) ADDRESS OF NIT ENTRY (NJE)
156	(9C)	ADDRESS	4	MDCTATE	APT address for automatic restart from NPM recovery
160	(A0)	SIGNED	4	MDCTVREQ	TOTAL COUNT OF VTAM REQ PROCESSED
164	(A4)	SIGNED	4	MDCTXRSP	TOTAL COUNT OF EXCEPTION RESP
168	(A8)	SIGNED	4	MDCTLUST	TOTAL COUNT OF LUSTAT RECEIVED
172	(AC)	SIGNED	4	MDCTBIDR	TOTAL COUNT OF BID REJECTED
176	(B0)	SIGNED	4	MDCTMPER	TOTAL COUNT OF TEMPORARY ERRORS
180	(B4)	SIGNED	4	MDCTSCNT (5)	REMOTE COUNTS
200	(C8)	BITSTRING	1		MDCTPMBC NETWORK PATH MGR BUF COUNT
201	(C9)	BITSTRING	1		MDCTPMFL NETWORK PATH MGR FLAGS
202	(CA)	SIGNED	2		MDCTDCNT DEDICATED LINE DCT COUNT
204	(CC)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
208	(D0)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
212	(D4)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE FROM APT
214	(D6)	SIGNED	2		MDCTNNR NJE TOTAL CONNECTION RESISTANCE
216	(D8)	ADDRESS	4		MDCTNCES NJE CONNECTION EVENT SEQUENCE
220	(DC)	BITSTRING	1		MDCTNFL2 Network flags II
221	(DD)	BITSTRING	1		MDCTNFL3 Network flags III
222	(DE)	BITSTRING	1		MDCTTFLG Reserved for future use
223	(DF)	CHARACTER	1		MDCTLNCC Last signon NCC record sent
224	(E0)	SIGNED	2		MDCTOPCT COUNT OF OPEN RJE PROCESSORS
226	(E2)	BITSTRING	1		MDCTNFL NETWORK FLAGS
227	(E3)	SIGNED	1		MDCTCMCT CONSOLE MESSAGE COUNT
228	(E4)	BITSTRING	8		RESERVED
236	(EC)	ADDRESS	4		MDCTNO LINE ROUTE CODE
240	(F0)	ADDRESS	4		MDCTNMAP NETWORK PATH MAN NOTIFY MAP
244	(F4)	ADDRESS	4		MDCTRNTA REACHABLE NODES TABLE ADDR
248	(F8)	CHARACTER	8	MDCTATMP	APPL NAME (SNA ONLY)
256	(100)	SIGNED	4		MDCTMDOM $HASP500 DOM ID
260	(104)	SIGNED	4		MDCTIFEA NJE signon feature flags supported by this line
264	(108)	ADDRESS	1		MDCTJTNM LINEnn JTNUM= value
265	(109)	ADDRESS	1		MDCTJRNM LINEnn JRNUM= value
266	(10A)	ADDRESS	1		MDCTSTNM LINEnn STNUM= value
267	(10B)	ADDRESS	1		MDCTSRNM LINEnn SRNUM= value
268	(10C)	ADDRESS	4		MDCTMRT MRT address
272	(110)	ADDRESS	4		MDCTMRRT MRRT address
276	(114)	SIGNED	4		MDCTNOTS/MDCTSONT Time stamp
280	(118)	BITSTRING	8		MDCTIKEY Secure NJE signon key
288	(120)	BITSTRING	8		MDCTISTR Secure NJE random string
296	(128)	BITSTRING	8		MDCTESTR Encrypted received string

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
304	(130)	ADDRESS	4		MDCTISWL SWEL addr (secure signon)
308	(134)	SIGNED	4		MDCTRSTM Disconnect time (STCK)
312	(138)	SIGNED	2		MDCTRSTI Restart interval (minutes)
314	(13A)	BITSTRING	1		Reserved
315	(13B)	BITSTRING	1		MDCTRSTF Flags
316	(13C)	SIGNED	2		MDCTLNOD Flags
320	(140)	SIGNED	4	(0)	SNA LINE DCT END (MDCTLEND)
					Comment

					TCP LINE DCT EXTENSION

					End of Comment
136	(88)	CHARACTER	8		MDCTPSWD RJE LINE PASSWORD
144	(90)	ADDRESS	2		RESERVED
146	(92)	SIGNED	2		RESERVED
148	(94)	SIGNED	4		MDCTIMOK TIME OF LAST TRANSMISSION
152	(98)	ADDRESS	4		MDCTRAT ADDRESS OF NIT ENTRY (NJE)
156	(9C)	ADDRESS	4		MDCTSCK SCK address for related socket
160	(A0)	CHARACTER	8		MDCTSOCK Socket name
168	(A8)	ADDRESS	4	MDCTNDCT	Addr of NETSRV DCT
172	(AC)	SIGNED	4		RESERVED
176	(B0)	SIGNED	4		RESERVED
180	(B4)	SIGNED	4	(5)	REMOTE COUNTS
200	(C8)	BITSTRING	1		MDCTPMBC NETWORK PATH MGR BUF COUNT
201	(C9)	BITSTRING	1		MDCTPMFL NETWORK PATH MGR FLAGS
202	(CA)	SIGNED	2		MDCTDCNT DEDICATED LINE DCT COUNT
204	(CC)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
208	(D0)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
212	(D4)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE FROM APT
214	(D6)	SIGNED	2		MDCTNNR NJE TOTAL CONNECTION RESISTANCE
216	(D8)	ADDRESS	4		MDCTNCES NJE CONNECTION EVENT SEQUENCE
220	(DC)	BITSTRING	1		MDCTNFL2 Network flags II
221	(DD)	BITSTRING	1		MDCTNFL3 Network flags III
222	(DE)	BITSTRING	1	MDCTTFLG	TCP Flags
		1...		MDCTTDRN	"B'10000000'" STOP NRQ sent ($P)
		.1..		MDCTTVRB	"B'01000000'" NETSRV verbose mode at line level
		..1.		MDCTTTRC	"B'00100000'" NETSRV common tracing at line level
		...1		MDCTTTRJ	"B'00010000'" NETSRV JES tracing at line level
223	(DF)	CHARACTER	1		MDCTLNCC Last signon NCC record sent
224	(E0)	SIGNED	2		MDCTOPCT COUNT OF OPEN RJE PROCESSORS
226	(E2)	BITSTRING	1		MDCTNFL NETWORK FLAGS
227	(E3)	BITSTRING	1		MDCTCMCT CONSOLE MESSAGE COUNT
228	(E4)	BITSTRING	8		RESERVED
236	(EC)	ADDRESS	4		MDCTNO LINE ROUTE CODE
240	(F0)	ADDRESS	4		MDCTNMAP NETWORK PATH MAN NOTIFY MAP
244	(F4)	ADDRESS	4		MDCTRNTA REACHABLE NODES TABLE ADDR
248	(F8)	CHARACTER	8		MDCTNPAS Node Password
256	(100)	SIGNED	4		MDCTMDOM $HASP500 DOM ID
260	(104)	SIGNED	4		MDCTIFEA NJE signon feature flags supported by this line
264	(108)	ADDRESS	1		MDCTJTNM LINEnn JTNUM= value
265	(109)	ADDRESS	1		MDCTJRNM LINEnn JRNUM= value
266	(10A)	ADDRESS	1		MDCTSTNM LINEnn STNUM= value
267	(10B)	ADDRESS	1		MDCTSRNM LINEnn SRNUM= value
268	(10C)	ADDRESS	4		MDCTMRT MRT address
272	(110)	ADDRESS	4		MDCTMRRT MRRT address
276	(114)	SIGNED	4		MDCTNOTS/MDCTSONT Time stamp
280	(118)	BITSTRING	8		MDCTIKEY Secure NJE signon key
288	(120)	BITSTRING	8		MDCTISTR Secure NJE random string
296	(128)	BITSTRING	8		MDCTESTR Encrypted received string
304	(130)	ADDRESS	4		MDCTISWL SWEL addr (secure signon)
308	(134)	SIGNED	4		MDCTRSTM Disconnect time (STCK)

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
312	(138)	SIGNED	2		MDCTRSTI Restart interval (minutes)
314	(13A)	BITSTRING	1		Reserved
315	(13B)	BITSTRING	1		MDCTRSTF Flags
316	(13C)	SIGNED	2		MDCTLNOD Flags
320	(140)	SIGNED	4	(0)	TCP LINE DCT END (MDCTLEND)
Comment					

MAS LINE DCT EXTENSION					

End of Comment					
136	(88)	ADDRESS	0	MDCTAFTK (0)	Affinity token for member
136	(88)	CHARACTER	8		Reserved
144	(90)	BITSTRING	1	MDCTMEMB	ID of associated member
145	(91)	BITSTRING	3		Reserved
148	(94)	SIGNED	4		Time of last transmission
152	(98)	ADDRESS	4		MDCTRAT Address of NIT entry
156	(9C)	ADDRESS	4	MDCTNATP	NATP chain for response to member signon propagation
160	(A0)	ADDRESS	4	MDCTNPCH	Chain of permanent NATPs
164	(A4)	ADDRESS	4	MDCTNQSE	QSE address
168	(A8)	ADDRESS	4	MDCTMDNQ	Member down chain field
172	(AC)	SIGNED	4	MDCTMTIM	Time last MAS I/J sent to this member
176	(B0)	SIGNED	4	MDCTMDID	$HASP501 DOM id
180	(B4)	SIGNED	4	(5)	Reserved
200	(C8)	BITSTRING	1		NETWORK PATH MGR BUF COUNT
201	(C9)	BITSTRING	1		NETWORK PATH MGR FLAGS
202	(CA)	SIGNED	2		Reserved
204	(CC)	ADDRESS	4		MDCTNM NETWORK MULTI TRUNK QUEUE
208	(D0)	ADDRESS	4		MDCTNA NETWORK ACTIVE QUEUE
212	(D4)	SIGNED	2		MDCTNR NJE SESSION RESISTNCE
214	(D6)	SIGNED	2		MDCTNNR NJE TOTAL RESISTANCE
216	(D8)	ADDRESS	4		MDCTNCES NJE CONNECT EVENT SEQUENCE
220	(DC)	BITSTRING	1		MDCTNFL2 Network flags II
221	(DD)	BITSTRING	1		MDCTNFL3 Network flags III
222	(DE)	BITSTRING	1		MDCTTFLG Reserved for future use
223	(DF)	CHARACTER	1		MDCTLNCC Reserved
224	(E0)	SIGNED	2		Reserved
226	(E2)	BITSTRING	1		MDCTNFL Network flags
227	(E3)	SIGNED	1		Reserved
228	(E4)	BITSTRING	8		RESERVED
236	(EC)	ADDRESS	4		MDCTNO LINE ROUTE CODE
240	(F0)	ADDRESS	4		MDCTNMAP NETWORK PATH MAN NOTIFY MAP
244	(F4)	ADDRESS	4		MDCTRNTA REACHABLE NODES TABLE ADDR
248	(F8)	CHARACTER	8		APPL NAME (SNA ONLY)
256	(100)	SIGNED	4		MDCTMDOM $HASP500 DOM ID
260	(104)	SIGNED	4		NJE signon feature flags supported by this line
264	(108)	ADDRESS	1		LINEnn JTNUM= value
265	(109)	ADDRESS	1		LINEnn JRNUM= value
266	(10A)	ADDRESS	1		LINEnn STNUM= value
267	(10B)	ADDRESS	1		LINEnn SRNUM= value
268	(10C)	ADDRESS	4		MDCTMRT MRT address
272	(110)	ADDRESS	4		MDCTMRRT MRRT address
276	(114)	SIGNED	4		MDCTNOTS/MDCTSONT Time stamp
280	(118)	BITSTRING	8		Reserved
288	(120)	BITSTRING	8		Reserved
296	(128)	BITSTRING	8		Reserved
304	(130)	ADDRESS	4		Reserved
308	(134)	SIGNED	4		Reserved
312	(138)	SIGNED	2		Reserved
314	(13A)	BITSTRING	1		Reserved
315	(13B)	BITSTRING	1		Reserved
316	(13C)	SIGNED	2		Reserved

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
320	(140)	SIGNED	4	(0)	MAS LINE DCT END (MDCTLEND)

Comment

LOCAL/RMT PRINT/PUNCH DCT EXTENSION.

End of Comment

184	(B8)	BITSTRING	568		SPACE FOR SYSOUT WORK SELECTION
752	(2F0)	CHARACTER	8	DCTFSSNM	FSS NAME
760	(2F8)	ADDRESS	4	DCTFSSCH (0)	NEXT FSS DCT (INIT ONLY)
760	(2F8)	SIGNED	2	DCTFSSNW (0)	FSS ID TO CHANGE TO FOR NEW FSS (POST-INIT FSS-MODE DCT ONLY)
760	(2F8)	SIGNED	4	DCTWKBUF	ADDR OF PRINTER WORK BUFFER (POST-INIT JES-MODE DCT)
764	(2FC)	SIGNED	4	DCTFSID (0)	FSID OF DEVICE FSA, FSS MODE
764	(2FC)	SIGNED	2	DCTFSSID	FSS PORTION OF FSID
766	(2FE)	SIGNED	2	DCTFSAID	FSA PORTION OF FSID
768	(300)	CHARACTER	4	DCTNIFCB	3800 INSTALLATN DEFAULT FCB
772	(304)	CHARACTER	4	DCTDDFCB	DEVICE DEFAULT FCB
776	(308)	BITSTRING	1	DCTINDEX	PRINTER INDEX VALUE
777	(309)	BITSTRING	1	DCTPPFL	PRINT/PUNCH FLAGS
778	(30A)	BITSTRING	1	DCTPPSW	PRINT/PUNCH SWITCHES
779	(30B)	BITSTRING	1	DCTPPSW2	PRINT/PUNCH SWITCHES
780	(30C)	BITSTRING	1	DCTPPSW3	PRINT/PUNCH SWITCHES
781	(30D)	BITSTRING	1	DCTPPSW4	PRINT/PUNCH SWITCHES
782	(30E)	BITSTRING	1	DCTPPSW5	PRINT/PUNCH Switches
		1...		DCT5C1ON	"B'10000000'" Chnl 1 is only new page
		.1..		DCT5CALL	"B'01000000'" All chnls are new page
		..1.		DCT5TUCS	"B'00100000'" UCS has been modified via a $T command
		...1		DCT5TFSS	"B'00010000'" FSSID is to be removed
		.... 1...		DCT5DNRC	"B'00001000'" Device not responding condition
		.... .1..		DCT5$SPN	"B'00000100'" $Sprt for FSS prt pending
		.... ..1.		DCT5$PPN	"B'00000010'" $Pprt for FSS prt pending
		1		DCT5FROF	"B'00000001'" FSA level rolling trace off
783	(30F)	BITSTRING	1	DCTPPSW6	PRINT/PUNCH Switches
		1...		DCT6NOTR	"B'10000000'" TRC on OUTPUT card not honored
784	(310)	CHARACTER	4	DCTCHAR1	N/I-PRINTER XLATE TABLE 1
788	(314)	CHARACTER	4	DCTCHAR2	N/I-PRINTER XLATE TABLE 2
792	(318)	CHARACTER	4	DCTCHAR3	N/I-PRINTER XLATE TABLE 3
796	(31C)	CHARACTER	4	DCTCHAR4	N/I-PRINTER XLATE TABLE 4
800	(320)	CHARACTER	4	DCTMODF	N/I-PRINTER MODIFY IDENTIFIER
804	(324)	ADDRESS	2	DCTLDPID	3800 LOST DATA PAGE ID G38E
806	(326)	BITSTRING	1	DCTDCPTN	DEFAULT COMPACTION TABLE NUMBER
807	(327)	BITSTRING	1	DCTACPTN	ACTIVE COMPACTION TABLE NUMBER
808	(328)	SIGNED	2	DCTCKPTP	NO. OF LOGICAL PAGES/CKPT
810	(32A)	SIGNED	2	DCTCKPTL	NO. OF LINES/LOGICAL PAGE
812	(32C)	SIGNED	2	DCTCKPTT	AMT OF TIME BEFORE FORCED CKPT
814	(32E)	SIGNED	2	DCTNPRO	TIME BEFORE NON PROCESS RUN OUT
816	(330)	ADDRESS	4	DCTPRTRN	ADDRESS OF DEFAULT TRAN TABLE
820	(334)	ADDRESS	4	DCTCCWTB	ADDRESS OF DEFAULT CCW TRN TBLE
824	(338)	SIGNED	4	DCTCSW	PRINT INTERVENTION REQ AREA
824	(338)	X'33C'	0	DCTPREND	"*" PRINT/PUNCH DCT EXTENSION END

Comment

SPOOL OFFLOAD DEVICE DCT EXTENSION

End of Comment

136	(88)	ADDRESS	4	XDCTDTE	ADDRESS OF SUB-TASK DTE
140	(8C)	SIGNED	4	XDCTSEQN	NUM BLOCKS READ FOR LOAD CKPT
144	(90)	SIGNED	2	XDCTXNUM	DEVICE NUMBER
146	(92)	SIGNED	2	XDCTSUBR	SUB-TASK REQUEST
148	(94)	SIGNED	2	XDCTSUBC	SUB-TASK REQ COMPLETION CODE
150	(96)	BITSTRING	1	XDCTUNCT	UNIT COUNT

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
151	(97)	BITSTRING	1	XDCTFLG1	FLAG BYTE
152	(98)	BITSTRING	1	XDCTFLG2	FLAG BYTE
153	(99)	BITSTRING	1	XDCTVOLS	OFFLOAD VOLUME COUNT
154	(9A)	BITSTRING	1	XDCTLABL	LABEL TYPE (SL,NL,...)
155	(9B)	BITSTRING	2	XDCTRTPD	RETENTION PERIOD IN DAYS
157	(9D)	CHARACTER	8	XDCTUNIT	DEFAULT UNIT NAME
165	(A5)	BITSTRING	1	XDCTOFSL	Offload archive bits
166	(A6)	BITSTRING	2	XDCTFREE	RESERVED FOR FUTURE USAGE
		Comment			
		THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER			
		End of Comment			
168	(A8)	SIGNED	4	XDCTTIME	TIME OFFLOAD DATA SET ALLOCATED
172	(AC)	SIGNED	4	XDCTDATE	DATE OFFLOAD DATA SET ALLOCATED
		Comment			
		THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER			
		End of Comment			
176	(B0)	SIGNED	4	XDCTTVER	TIME VERIFICATION STAMP
180	(B4)	SIGNED	4	XDCTDVER	DATE VERIFICATION STAMP
184	(B8)	ADDRESS	4	XDCTCMPQ	XFRDCT SUB-TASK COMPLETION Q
188	(BC)	ADDRESS	4	XDCTBUFQ	Q OF BUFFERS WAITING COMPLETION
192	(C0)	ADDRESS	4	XDCTACTV	QUEUE OF ACTIVE XFR DCTS
196	(C4)	BITSTRING	1	XDCTERCT	READ ERROR COUNT
197	(C5)	BITSTRING	1	XDCTOPCT	COUNT OF RECV/TRANS DCTS OPEN
198	(C6)	SIGNED	2	XDCTMAXB	Max buffers allowed to hold
200	(C8)	CHARACTER	44	XDCTDSN	OFFLOAD DATASET NAME
244	(F4)	SIGNED	4	DCTXFEND (0)	END OF OFFLOAD DCT EXTENSION
		Comment			
		JOB TRANSMITTER DCT EXTENSION			
		End of Comment			
184	(B8)	BITSTRING	398		SPACE FOR JOB WORK SELECTION
582	(246)	BITSTRING	1	DCTJTDSP	DISPOSITION FLAGS
		1...		DCTJTDPG	"B'10000000'" PURGE JOB AFTER DUMP
		.1..		DCTJTDHD	"B'01000000'" HOLD JOB AFTER DUMP
		..1.		DCTJTDKP	"B'00100000'" KEEP JOB AFTER DUMP
582	(246)	X'247'	0	DCTOJEND	"*" OFFLOAD JOB XMITTER DCT EXT END
582	(246)	X'247'	0	DCTJTEND	"*" NETWORK JOB XMITTER
		Comment			
		SYSOUT TRANSMITTER DCT EXTENSION.			
		End of Comment			
184	(B8)	BITSTRING	568		SPACE FOR SYSOUT WORK SELECTION
752	(2F0)	BITSTRING	1	DCTSTDSP	DISPOSITION FLAG
		1...		DCTSTDPG	"B'10000000'" PURGE DATA SET AFTER DUMP
		.1..		DCTSTDHD	"B'01000000'" HOLD DATA SET AFTER DUMP
		..1.		DCTSTDKP	"B'00100000'" KEEP DATA SET AFTER DUMP
753	(2F1)	BITSTRING	3		Reserved for future use
753	(2F1)	X'2F4'	0	DCTOSEND	"*" OFFLOAD SYSOUT XMITTER EXT END
753	(2F1)	X'2F4'	0	DCTSTEND	"*" NETWORK SYSOUT XMITTER

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
			Comment		
		OFFLOAD JOB RECEIVER DCT EXTENSION			
			End of Comment		
184	(B8)	BITSTRING	398		SPACE FOR JOB WORK SELECTION
582	(246)	BITSTRING	4	DCTJRSAF	DEVICE MODIFY AFFINITY (EBCDIC)
586	(24A)	BITSTRING	4	DCTJRMSF	DEVICE MODIFY AFFINITY (FLAGS)
590	(24E)	BITSTRING	1	DCT1JRFL	DEVICE MODIFY FLAG BYTE
		1...		DCT1JHLD	"B'10000000'" HOLD JOB MODIFY FLAG
		.1..		DCT1JHNL	"B'01000000'" HOLD NOT TO BE MODIFIED
591	(24F)	CHARACTER	8	DCTJRMC8	Device modify job class
599	(257)	BITSTRING	1		RESERVED FOR FUTURE USE
600	(258)	ADDRESS	4	DCTJRMNO	DEVICE MODIFY NODE NUMBER
600	(258)	X'25A'	0	DCTOJRLN	"*" JOB RECEIVER DCT END
			Comment		
		OFFLOAD SYSOUT RECEIVER DCT EXTENSION			
			End of Comment		
184	(B8)	BITSTRING	568		SPACE FOR SYSOUT WORK SELECTION
752	(2F0)	BITSTRING	1	DCT1SRFL	DEVICE MODIFY FLAG BYTE
		1...		DCT1SHLD	"B'10000000'" SET HELD POST-EXECUTION JOBS
		.1..		DCT1SHNL	"B'01000000'" HOLD NOT TO BE MODIFIED
		.... 1...		DCT1SBUR	"B'00001000'" SET BURSTED OUTPUT
		.... .1..		DCT1SBNL	"B'00000100'" BURST NOT TO BE MODIFIED
753	(2F1)	BITSTRING	1	DCT2SRFL	DEVICE MODIFY FLAG2 BYTE
753	(2F1)	X'8'	0	DCT2MODW	"$ODWRITE" MODIFY OUTDISP=WRITE
753	(2F1)	X'4'	0	DCT2MODH	"$ODHOLD" MODIFY OUTDISP=HOLD
753	(2F1)	X'2'	0	DCT2MODK	"$ODKEEP" MODIFY OUTDISP=KEEP
753	(2F1)	X'1'	0	DCT2MODL	"$ODLEAVE" MODIFY OUTDISP=LEAVE
753	(2F1)	X'F'	0	DCT2MODA	"$ODANY" CHECK ALL BIT SETTINGS
754	(2F2)	BITSTRING	1	DCT3SRFL	DEVICE SELECT FLAG3 BYTE
754	(2F2)	X'8'	0	DCT3SODW	"$ODWRITE" SELECT OUTDISP=WRITE
754	(2F2)	X'4'	0	DCT3SODH	"$ODHOLD" SELECT OUTDISP=HOLD
754	(2F2)	X'2'	0	DCT3SODK	"$ODKEEP" SELECT OUTDISP=KEEP
754	(2F2)	X'1'	0	DCT3SODL	"$ODLEAVE" SELECT OUTDISP=LEAVE
754	(2F2)	X'F'	0	DCT3SODA	"$ODANY" CHECK ALL BIT SETTINGS
755	(2F3)	CHARACTER	1	DCTSRMCL	DEVICE MODIFY JOB CLASS
756	(2F4)	CHARACTER	12	DCTSRMNO	DEVICE MODIFY NODE NUMBER
768	(300)	CHARACTER	4	DCTSRMFC	DEVICE MODIFY FCB ID
772	(304)	CHARACTER	4	DCTSRMFL	DEVICE MODIFY FLASH
776	(308)	CHARACTER	4	DCTSRMUC	DEVICE MODIFY UCS ID
780	(30C)	CHARACTER	8	DCTSRMPR	DEVICE MODIFY PRMODE LIST
788	(314)	CHARACTER	8	DCTSRMFO	DEVICE MODIFY FORMS ID
796	(31C)	CHARACTER	1	DCTSRMWI	DEVICE MODIFY WRITER ID
796	(31C)	X'324'	0	DCTOREND	"*" SYSOUT RECEIVER DCT END
			Comment		
		DCTSTAT2			
			End of Comment		
		1...		DCTCIP	"B'10000000'" COMMAND IN PROGRESS
		.1..		DCTGTDCB	"B'01000000'" DEVICE NEEDS A DCB
		..1.		DCTGTBSM	"B'00100000'" DEVICE NEEDS A BSAM DCB
		...1		DCTNEWFS	"B'00010000'" DCT FSS-OWNERSHIP IS TO BE CHANGED TO THE FSS IN DCTFSSNW
		.... 1...		DCT$TFLS	"B'00001000'" $T FLASH INDICATOR
		.... .1..		DCTR190	"B'00000100'" RMT PRPU WILL STOP FOR A REPLY TO SETUP MESSAGE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... ..1.		DCT$TNSP	"B'00000010'" $T FSS PRT.. non setup parameters change require FSACB updates
		1		DCTRCVPG	"B'00000001'" NJE xmitter received 'permission granted'
		Comment			
		MDCTATTN			
		End of Comment			
		1...		MDCTIMER	"B'10000000'" TIMED ACTION REQUESTED
		.1..		MDCTPAWS	"B'01000000'" LINE PAUSE REQUESTED
		..1.		MDCTJOB1	"B'00100000'" JOB POST INDICATOR 1
		...1		MDCTJOB2	"B'00010000'" JOB POST INDICATOR 2
796	(31C)	X'30'	0	MDCTJOB	"MDCTJOB1+MDCTJOB2" JOB POST INDICATION
		.... 1...		MDCTDSC	"B'00001000'" LINE DISCONNECT SEQUENCE
		.... .1..		MDCTINTE	"B'00000100'" DISCINTV exceeded reason to be put in HASP203 msg
		.... ..1.		MDCTSTRT	"B'00000010'" START VERIFICATION REQUIRED
		1		MDCTATT8	"B'00000001'" RESERVED FOR FUTURE USE
		Comment			
		MDCTSTAT			
		End of Comment			
		1...		DCTLEASE	"B'10000000'" DEDICATED LINE
		1...		DCTADS	"B'10000000'" ABNORMAL END OF DATA
		.1..		DCTSHARE	"B'01000000'" SHARED LINE
		..1.		DCTETX	"B'00100000'" AN ETX HAS BEEN RECEIVED
		..1.		DCTFLUSH	"B'00100000'" STREAM HAS BEEN TERMINATED
		...1		DCTSOFF	"B'00010000'" SIGNOFF RCVD OR DISCONNECT REQD
		...1		DCTEOF	"B'00010000'" AN EOF HAS BEEN DETECTED
		.... 1...		DCTSINON	"B'00001000'" REMOTE DCT IS ATTACHED TO LNE DCT
		.... .1..		DCTSHMSG	"B'00000100'" Message issued for denied nonshare req (Init only)
		.... .1..		DCTPOST	"B'00000100'" I/O COMPLETE FLAG
		.... ..1.		DCTABORT	"B'00000010'" TRANSMISSION WAS ABORTED
		1		DCTPBUF	"B'00000001'" REMOTE OUTPUT BUFFER INDICATOR
		1		DCTPSUSP	"B'00000001'" REMOTE DEVICE HAS BEEN SUSPENDED
		Comment			
		XDCTSTAT			
		End of Comment			
		1...		XDCTOPEN	"B'10000000'" $EXTP OPEN ISSUED
		.1..		XDCTERR	"B'01000000'" I/O ERROR INDICATOR
		Comment			
		EQU B'00100000' DCTFLUSH EQU B'00010000' DCTEOF			
		End of Comment			
		.... 1...		XDCTMSG	"B'00001000'" FORCE DRAINED MESSAGE
		.... .1..		XDCTSKIP	"B'00000100'" RECEIVER SKIPPING BUFFER
		Comment			
		EQU B'00000010' DCTABORT EQU B'00000001' DCTPBUF MDCTLINE			
		End of Comment			

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
		1...		DCTPTRSP	"B'10000000'" TRANSPARENCY
		.1..		DCTPASCI	"B'01000000'" USASCII CODE
		..1.		DCTPCTC	"B'00100000'" CHANNEL-TO-CHANNEL ADAPTER
		...1		DCTPHASP	"B'00010000'" HASP-TO-HASP
		.... 1...		DCTPCOMP	"B'00001000'" COMPRESS-EXPAND FEATURE
		.... .1..		DCTPNADS	"B'00000100'" NO ABORTIVE DISCONNECT
		.... ..1.		DCTPWIDE	"B'00000010'" WIDE-BAND LINE
		1		DCTPFULL	"B'00000001'" FULL-DUPLEX LINE
				Comment	
		MDCTTYPE			
				End of Comment	
		1...		DCTPSNA	"B'10000000'" SNA LU TYPE TERMINAL
		.1..		DCTPCPU	"B'01000000'" BSC CPU TYPE TERMINAL
		..1.		DCTPHDW	"B'00100000'" BSC HARDWARE TERMINAL
		...1		DCTPTCP	"B'00010000'" TCP/IP LOGICAL DEVICE
		 1111		DCTPSUBC	"B'00001111'" LOW ORDER 4 BITS (X'0F') FOR DEVICE SUB-CLASSIFICATION
796	(31C)	X'81'	0	DCTPLU1	"DCTPSNA+X'01'" SNA LU TYPE 1
796	(31C)	X'41'	0	DCTP20S2	"DCTPCPU+X'01'" 360/20 SUBMODEL 2
796	(31C)	X'42'	0	DCTP20S5	"DCTPCPU+X'02'" 360/20 SUBMODEL 5
796	(31C)	X'43'	0	DCTP20S6	"DCTPCPU+X'03'" 360/20 SUBMODEL 6
796	(31C)	X'44'	0	DCTP360	"DCTPCPU+X'04'" SYSTEM/360
796	(31C)	X'45'	0	DCTP1130	"DCTPCPU+X'05'" 1130
796	(31C)	X'46'	0	DCTPSYS3	"DCTPCPU+X'06'" SYSTEM/3
796	(31C)	X'47'	0	DCTPCRS7	"DCTPCPU+X'07'" RESERVED FOR FUTURE USE
796	(31C)	X'48'	0	DCTPSY36	"DCTPCPU+X'08'" SYSTEM 36 (BSC MODE)
796	(31C)	X'49'	0	DCTP370	"DCTPCPU+X'09'" SYSTEM/370
796	(31C)	X'4A'	0	DCTP20S4	"DCTPCPU+X'0A'" 360/20 SUBMODEL 4
796	(31C)	X'4B'	0	DCTP2922	"DCTPCPU+X'0B'" 2922
796	(31C)	X'21'	0	DCTP2770	"DCTPHDW+X'01'" 2770
796	(31C)	X'22'	0	DCTP3781	"DCTPHDW+X'02'" 3781
796	(31C)	X'23'	0	DCTP3740	"DCTPHDW+X'03'" 3740
796	(31C)	X'24'	0	DCTP3780	"DCTPHDW+X'04'" 3780
796	(31C)	X'25'	0	DCTP2780	"DCTPHDW+X'05'" 2780
				Comment	
		MDCTSEL			
				End of Comment	
		1...		DCTPOUTB	"B'10000000'" OUTBOUND DEVICE SELECTION
				Comment	
		MDCTPMFL			
				End of Comment	
		1...		DCTNPLIM	"B'10000000'" PATH MANAGER BUFFER LIMIT REACHED
				Comment	
		MDCTFMT			
				End of Comment	
		1...		DCTPBLK	"B'10000000'" BLOCKED RECORDS
		.1..		DCTPVAR	"B'01000000'" VARIABLE LENGTH RECORDS
		..1.		DCTPROG	"B'00100000'" MULTI-LEAVING INTERFACE
		.... 1...		DCTPFCB	"B'00001000'" DEVICE FCB HAS BEEN LOADED

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				CTPPRES EQU B'00000100' COMPRESSED DATASTREAM ACTIVE	
				End of Comment	
		.... ..1.		DCTPALTC	"B'00000010'" ALTERNATE CODE SELECTED
		1		DCTPCPCT	"B'00000001'" COMPACTED DATASTREAM ACTIVE
		...1		DCTHOLDS	"B'00010000'" NJE TRANSMISSION HOLD STREAM
				Comment	
				MDCTFEAT CTPTRSP EQU B'10000000' TERMINAL TRANSPARENCY	
				End of Comment	
		.... ..1.		DCTPMRF	"B'00000010'" MULTIPLE-RECORD FEATURE
		.1..		DCTPBEXP	"B'01000000'" BUFFER EXPANSION FEATURE
		..1.		DCTPABEX	"B'00100000'" ADDITIONAL BUFFER EXPANSION
		..1.		DCTPNDST	"B'00100000'" MEDIA NOT BASIC EXCHANGE
		...1		DCTPTAB	"B'00010000'" HORIZONTAL FORMAT CONTROL
		...1		DCTPCCTL	"B'00010000'" CARRIAGE CONTROL
		.... 1...		DCTPSHDR	"B'00001000'" SETUP HEADER FEATURE
		.... .1..		DCTPPRES	"B'00000100'" COMPRESS-EXPAND FEATURE
				Comment	
				CTPALTC EQU B'00000010' ALTERNATE CODE SELECTED CTPCPCT EQU B'00000001' COMPACTION FEATURE DCTRAUTH	
				End of Comment	
		.... 1...		DCTREJRM	"B'00001000'" REMOTE RESTRICTION
		.... .1..		DCTREJJB	"B'00000100'" RESTRICTED FROM JOB COMMANDS
		.... ..1.		DCTREJDV	"B'00000010'" RESTRICTED FROM DEVICE COMMANDS
		1		DCTREJSY	"B'00000001'" RESTRICTED FROM SYSTEM COMMANDS
				Comment	
				MDCTNFL	
				End of Comment	
		1...		MDCTNFLL	"B'10000000'" THIS END LOW NODE
		.1..		MDCTNFLC	"B'01000000'" CONCURRENCE REQUIRED
		..1.		MDCTNFLE	"B'00100000'" RESET REQUIRED
		...1		MDCTNFLQ	"B'00010000'" ON ACTIVE QUEUE
		.... 1...		MDCTNFLS	"B'00001000'" SECONDARY TRUNK
		.... .1..		MDCTNFLI	"B'00000100'" SIGNON INPUT EXPECTED
		.... ..1.		MDCTNFLP	"B'00000010'" Signon is pending MAS validation
		1		MDCTNJEH	"B'00000001'" SEND NJE HDR TO SESSION PARTNR
				Comment	
				MDCTNFL2	
				End of Comment	
		1...		MDCTNF2R	"B'10000000'" THIS LINE REQUIRES RESTART
		.1..		MDCTNF2S	"B'01000000'" RESTART OF THIS LINE IS AS SECONDARY
		..1.		MDCTNF2N	"B'00100000'" Restart line after draining it
		...1		MDCTNF2A	"B'00010000'" Signon of NJE line as primary trunk has completed
		.... 1...		MDCTNF2D	"B'00001000'" The transmitter/receiver DCTs for this line are assigned at init and should not be freed
		.... .1..		MDCTNF2I	"B'00000100'" Received 'I' record, awaiting MAS validation

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... ..1.		MDCTNF2J	"B'00000010'" Received 'J' record, awaiting MAS validation
				Comment	
		MDCTNFL3			
				End of Comment	
		1...		MDCTNF3M	"B'10000000'" Multi-trunk bit set from MAS validation
		.1..		MDCTNF3J	"B'01000000'" Multi-trunk bit set from 'J' record
		..1.		MDCTNF3S	"B'00100000'" Secure NJE signon
		...1		MDCTNF3Q	"B'00010000'" DCT is queued to PCT
		1		MDCTNF3E	"B'00000001'" $EXTP PUT failed for other than buffer shortage while transmitting NMR
				Comment	
		DCTPPFL			
				End of Comment	
		1...		DCTEJECT	"B'10000000'" PRINTER IS AT TOP OF PAGE
		.1..		DCTRPSSE	"B'01000000'" REMOTE PRINTER - SUPPRESS PAGE EJECT ON RMT SIGNON
		.1..		DCTRUSBC	"B'01000000'" REMOTE PUNCH - SUPPRESS BLANK CARD TO FLUSH PUNCH BETWEEN/AFTER DATA SETS
		..1.		DCTALIGN	"B'00100000'" PRINTER WILL ACCEPT ALIGNMENT
		...1		DCTRANS	"B'00010000'" PRINTER TRANSLATION SPECIFIED
		.... 1...		DCTTCEL	"B'00001000'" TRACK-CELL DESPOOLING
		.... .1..		DCTRMFCB	"B'00000100'" REMOTE PRINTER HAS FCB FEATURE
		.... ..1.		DCTSUSPD	"B'00000010'" OUTPUT SUSPEND IS ALLOWED
				Comment	
		CTPAUSE EQU B'00000001' OPERATOR SET PAUSE=YES DCTPPSW			
				End of Comment	
		1...		DCTPPSWC	"B'10000000'" FCB CARRIAGE ALTERED
		..1.		DCTPPSWB	"B'00100000'" FCB NOT STANDARD
		...1		DCTPPSWS	"B'00010000'" SUPRESS SEPARATOR PAGES
		.... 1...		DCTPPSWT	"B'00001000'" UCS TRAIN ALTERED
		.... .1..		DCTPPSWU	"B'00000100'" UCS NOT STANDARD
		.... ..1.		DCTPPSWI	"B'00000010'" DEVICE IDLE MESSAGE ISSUED
		1		DCTPPSWO	"B'00000001'" OPERATOR ACTION ALLOWED
				Comment	
		DCTPPSW2			
				End of Comment	
		1...		DCTNIPRT	"B'10000000'" N/I-PRINTER DCT IDENTIFIER
		.1..		DCTSTFSS	"B'01000000'" Device can only be successfully started if in FSS mode (for example, AFP1 devices)
		..1.		DCTNIMRK	"B'00100000'" N/I-PRT FORMS MARK ALTERED
		...1		DCTCKJAM	"B'00010000'" N/I-CANCEL KEY OR PAPER JAM G38E
		.... 1...		DCTNINIT	"B'00001000'" N/I-PRINTER INITIALIZATION SWITCH
		.... .1..		DCTSEPNL	"B'00000100'" N/I DON'T LOAD DEFAULT FOR SEP
		.... ..1.		DCTSDSSW	"B'00000010'" NOSEPDS/SEPDS SWITCH
		1		DCTBFCKP	"B'00000001'" $B/$F FROM LAST CHECKPOINT

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		DCTPPSW3 THE BIT DEFINITIONS FOR COPYMARKS IN THE DCTPPSW3 BYTE HAVE TO MATCH THE BIT DEFINITIONS FOR COPYMARKS IN THE FSAFLAG4 BYTE FOR HASPCOMM PROCESSING			
		End of Comment			
		1...		DCTDOPN	"B'10000000'" DCB HAS BEEN OPENED
		.1..		DCTS3TFC	"B'01000000'" FCB has been modified via a $T command
		..1.		DCTUCSBL	"B'00100000'" USE 4245 BLDL/LOAD FLAG
		...1		DCT3UCSV	"B'00010000'" PERFORM 424X UCS VERIFY
		.... 1...		DCTS3CNO	"B'00001000'" COPYMARKS NONE
		.... .1..		DCTS3CDS	"B'00000100'" COPYMARKS ON DATASET LEVEL
		.... ..1.		DCTS3CJB	"B'00000010'" COPYMARKS ON JOB LEVEL
		1		DCTS3CON	"B'00000001'" COPYMARKS CONSTANT
796	(31C)	X'F'	0	DCTS3CPY	"DCTS3CNO+DCTS3CDS+DCTS3CJB+DCTS3CON" COPYMARKS reset
		Comment			
		DCTPPSW4			
		End of Comment			
		1...		DCTS4NPS	"B'10000000'" NO DATA SET PRESELECTION
		.1..		DCTSNHLT	"B'01000000'" DO NOT HALT DEV FOR SETUP
		..1.		DCTSNHOR	"B'00100000'" SETUP=NOHALT OVERRIDE
		...1		DCTS4OPI	"B'00010000'" INTERVENTION-REQUIRED CONDITION
		.... 1...		DCTS4TUN	"B'00001000'" Unit has been modified via $T command
		.... .1..		DCTS4AIS	"B'00000100'" Send data ASIS to remote
		.... ..1.		DCT4TRNY	"B'00000010'" TRANS=YES
		1		DCT4TRNN	"B'00000001'" TRANS=NO
		Comment			
		XDCTFLG1			
		End of Comment			
		1...		XDCT1DMP	"B'10000000'" TRANSMIT (DUMP)
		.1..		XDCT1LOD	"B'01000000'" RECEIVE (LOAD)
		..1.		XDCT1SUB	"B'00100000'" SUBTASK OPERATING ON THIS DCT
		...1		XDCT1ALC	"B'00010000'" OFFLOAD DATASET ALLOCATED
		.... 1...		XDCT1CLS	"B'00001000'" CLOSE ISSUED FOR OFFLOAD DCT
		.... .1..		XDCT1VER	"B'00000100'" RECORD VERIFICATION ERROR
		.... ..1.		XDCT1RD	"B'00000010'" READ IN PROGRESS FOR OFFLOAD
		1		XDCT1STR	"B'00000001'" OFFLOAD DEVICE BEING RESTARTED
		Comment			
		XDCTFLG2			
		End of Comment			
		1...		XDCT2ST	"B'10000000'" OFFLOAD XMIT/RECEIVE CAN BEGIN
		.1..		XDCT2PRO	"B'01000000'" SAF PROTECTION IF DISP=NEW
		..1.		XDCT2NDF	"B'00100000'" Node of offload and this node are different
		...1		XDCT2NVR	"B'00010000'" Skip checks of time/date stamp from first record
		.... 1...		XDCT2CRT	"B'00001000'" Set create time for jobs and SYSOUT to original creation time

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MDCTFLG1 SNA REMOTE DCT FLAG BYTE					
End of Comment					
		1...		MDCT1OUT	"B'10000000'" OUTPUT EXISTS FOR THIS DEV
		.1..		MDCT1EOT	"B'01000000'" ACKN END-OF-TRANS (ATC) FLG

$DCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
DCT	0		DCTDEVT2	1D5	
DCT$TFLS	31C	8	DCTDOPN	31C	80
DCT$TNSP	31C	2	DCTDRAIN	C	40
DCTABORT	31C	2	DCTDVTPX	22	40
DCTACB	10		DCTEJECT	31C	80
DCTACPTN	327		DCTEOF	31C	10
DCTADS	31C	80	DCTERMNR	E	40
DCTAGE	2AC		DCTETX	31C	20
DCTALIGN	31C	20	DCTEWF	1C	
DCTARMID	59	5	DCTEXORG	88	
DCTASAPI	2D0		DCTFCB	294	
DCTATTN	C	2	DCTFCKMD	F	40
DCTBFCKP	31C	1	DCTFDFLT	F	20
DCTBKSP	D	8	DCTFEORG	68	
DCTBUFAD	18		DCTFLAGS	D	
DCTBUFCN	20		DCTFLAG2	E	
DCTBUFLM	20	14	DCTFLAG3	23	
DCTCCWTB	334		DCTFLAG4	2C	
DCTCDCTX	50		DCTFLASH	29C	
DCTCHAIN	34		DCTFLGFW	C	
DCTCHAR1	310		DCTFLSHD	2A0	
DCTCHAR2	314		DCTFLUSH	31C	20
DCTCHAR3	318		DCTFORMS	1E4	
DCTCHAR4	31C		DCTFSAID	2FE	
DCTCIP	31C	80	DCTFSET	F	8
DCTCKJAM	31C	10	DCTFSID	2FC	
DCTCKPTL	32A		DCTFSSCH	2F8	
DCTCKPTP	328		DCTFSSFL	F	
DCTCKPTT	32C		DCTFSSID	2FC	
DCTCLASS	1EC		DCTFSSMD	F	1
DCTCLENT	2E0		DCTFSSNM	2F0	
DCTCMODF	F	4	DCTFSSNW	2F8	
DCTCMODJ	F	2	DCTFSYNC	F	10
DCTCNODE	2E8		DCTGTBSM	31C	20
DCTCOMID	59	3	DCTGTDCB	31C	40
DCTCRUID	188		DCTGTW	2CC	
DCTCSW	338		DCTHOLD	C	20
DCTCURJB	180		DCTHOLDJ	D	4
DCTCWS	B8		DCTHOLDS	31C	10
DCTCWSLN	1E4	12C	DCTID	0	
DCTDALEN	23	1C	DCTID2	B8	E6E2D740
DCTDCB	10		DCTINDEX	308	
DCTDCPTN	326		DCTINDIR	191	80
DCTDDFCB	304		DCTINR	22	14
DCTDELET	D	40	DCTINRID	59	0
DCTDEVID	59		DCTINT	22	4
DCTDEVI2	1D6		DCTINUSE	C	80
DCTDEVN	38		DCTIRORG	B7	B8
DCTDEVNC	1C4	1C4	DCTJCFMT	204	80
DCTDEVN2	1C4		DCTJCHRH	1A4	
DCTDEVTP	22		DCTJCHRL	19C	

Name	Hex Offset	Hex Value
DCTJCLAS	206	
DCTJCLA8	AD	
DCTJCLS1	206	
DCTJCLS8	206	
DCTJCOR	214	
DCTJNUMH	198	
DCTJNUML	194	
DCTJOBNM	178	
DCTJREND	B8	B8
DCTJRMC8	24F	
DCTJRMNO	258	
DCTJRMSF	24A	
DCTJRSAF	246	
DCTJTDHD	246	40
DCTJTDKP	246	20
DCTJTDPG	246	80
DCTJTDSP	246	
DCTJTEND	246	247
DCTJWS	B8	
DCTJWSFL	204	
DCTJWSLN	206	18E
DCTLDPID	324	
DCTLEASE	31C	80
DCTLENG	2F0	238
DCTLGNID	59	C0
DCTLIMHI	1E0	
DCTLIMLO	1DC	
DCTLNE	22	2
DCTLNEID	59	D0
DCTLOG	22	6
DCTLOGAL	D	1
DCTLPOS	DB	
DCTLRECL	58	
DCTMAXWS	C0	19
DCTMCLAS	B5	
DCTMLNE	22	E
DCTMODF	320	
DCTMQTR	12	
DCTMQTRD	10	
DCTNACTV	2D4	
DCTNET	22	8
DCTNEWFS	31C	10
DCTNIBRS	2C4	40
DCTNIFCB	300	
DCTNIMRK	31C	20
DCTNINIT	31C	8
DCTNIPRT	31C	80
DCTNJR	22	18
DCTNJRID	59	50
DCTNJT	22	38
DCTNJTID	59	40
DCTNMVOL	BC	
DCTNODE	144	0
DCTNPLIM	31C	80
DCTNPRO	32E	
DCTNRC	190	
DCTNRLEN	144	4
DCTNRR	22	58
DCTNRT	22	78
DCTNSR	22	8
DCTNSRID	59	70
DCTNST	22	28
DCTNSTID	59	60
DCTNUM	59	5A
DCTODPNV	D9	8
DCTOFF	22	84
DCTOFFID	59	FF
DCTOJEND	246	247
DCTOJRLN	258	25A
DCTONODE	DE	
DCTOPEN	E	1
DCTOREND	31C	324
DCTOSEND	2F1	2F4
DCTOUTID	59	E
DCTPABEX	31C	20
DCTPACTV	2D8	
DCTPALTC	31C	2
DCTPASCI	31C	40
DCTPATTN	C	4
DCTPAUSE	C	1
DCTPBEXP	31C	40
DCTPBLK	31C	80
DCTPBUF	31C	1
DCTPCCTL	31C	10
DCTPCE	8	
DCTPCOMP	31C	8
DCTPCPCT	31C	1
DCTPCPU	31C	40
DCTPCRS7	31C	47
DCTPCTC	31C	20
DCTPFCB	31C	8
DCTPFULL	31C	1
DCTPHASP	31C	10
DCTPHDW	31C	20
DCTPJOE	2C8	
DCTPLIMH	2A8	
DCTPLIML	2A4	
DCTPLU1	31C	81
DCTPMRF	31C	2
DCTPNADS	31C	4
DCTPNDST	31C	20
DCTPOSNL	DE	FF
DCTPOST	31C	4
DCTPOUTB	31C	80
DCTPPFL	309	
DCTPPOS	DD	
DCTPPRES	31C	4
DCTPPSW	30A	
DCTPPSWB	31C	20
DCTPPSWC	31C	80
DCTPPSWI	31C	2
DCTPPSWO	31C	1
DCTPPSWS	31C	10
DCTPPSWT	31C	8
DCTPPSWU	31C	4
DCTPPSW2	30B	
DCTPPSW3	30C	
DCTPPSW4	30D	
DCTPPSW5	30E	
DCTPPSW6	30F	
DCTPREND	338	33C
DCTPRGID	59	4
DCTPRINC	B6	
DCTPRINT	90	
DCTPRLIM	B7	
DCTPRMD	2B8	
DCTPRNOD	90	
DCTPROG	31C	20
DCTPRPU	22	20
DCTPRRTE	92	

Name	Hex Offset	Hex Value
DCTPRSER	94	
DCTPRT	22	20
DCTPRTBL	2C0	
DCTPRTID	59	20
DCTPRTRN	330	
DCTPSHDR	31C	8
DCTPSNA	31C	80
DCTPSUBC	31C	F
DCTPSUSP	31C	1
DCTPSYS3	31C	46
DCTPSY36	31C	48
DCTPTAB	31C	10
DCTPTCP	31C	10
DCTPTRSP	31C	80
DCTPUN	22	30
DCTPUNCH	9C	
DCTPUNID	59	30
DCTPUNOD	9C	
DCTPURTE	9E	
DCTPUSER	A0	
DCTPVAR	31C	40
DCTPWIDE	31C	2
DCTP1130	31C	45
DCTP20S2	31C	41
DCTP20S4	31C	4A
DCTP20S5	31C	42
DCTP20S6	31C	43
DCTP2770	31C	21
DCTP2780	31C	25
DCTP2922	31C	4B
DCTP360	31C	44
DCTP370	31C	49
DCTP3740	31C	23
DCTP3780	31C	24
DCTP3781	31C	22
DCTQPOS	DA	
DCTQVAL	D8	80
DCTQWS	D8	20
DCTRACE	E	80
DCTRANS	31C	10
DCTRAUTH	AC	
DCTRBFF	E	20
DCTRC	148	
DCTRCLEN	144	C
DCTRCMAX	144	4
DCTRCON	22	42
DCTRCVPG	31C	1
DCTRDEND	B8	
DCTRDFL1	8A	
DCTRDNOD	8C	
DCTRDONE	59	2
DCTRDR	22	10
DCTRDRID	59	10
DCTRDRT	8C	
DCTRDRTE	8E	
DCTREJDV	31C	2
DCTREJJB	31C	4
DCTREJRM	31C	8
DCTREJSY	31C	1
DCTRJE	22	2
DCTRJI	22	50
DCTRJR	22	12
DCTRMFCB	31C	4
DCTRMTID	59	80
DCTROUTE	144	2
DCTRPOS	DC	
DCTRPP	22	30
DCTRPR	22	22
DCTRPSSE	31C	40
DCTRPT	D	10
DCTRPU	22	32
DCTRRDY	E	10
DCTRSINT	26	
DCTRSTIM	28	
DCTRSTRT	D	20
DCTRTAM	C	8
DCTRTE	E	1
DCTRTEID	59	8
DCTRTEQ	191	
DCTRUSBC	31C	40
DCTRVAL	D8	40
DCTRWS	D8	1
DCTR1IND	8A	80
DCTR190	31C	4
DCTSAF	1E4	
DCTSAFPT	1E8	
DCTSAPID	59	D
DCTSCHE	1F4	
DCTSDSSW	31C	2
DCTSECLB	48	
DCTSEEK	10	
DCTSEEKF	10	
DCTSEPNL	31C	4
DCTSFSID	59	1
DCTSHARE	31C	40
DCTSHMSG	31C	4
DCTSIAFF	A8	
DCTSINON	31C	8
DCTSIZE	4	
DCTSLASH	D8	10
DCTSLLIM	D9	20
DCTSNHLT	31C	40
DCTSNHOR	31C	20
DCTSOFF	31C	10
DCTSOFF2	D	10
DCTSPACE	D	3
DCTSPNID	59	2
DCTSPOF	22	80
DCTSP1	D	1
DCTSP2	D	2
DCTSREND	80	88
DCTSRMCL	2F3	
DCTSRMFC	300	
DCTSRMFL	304	
DCTSRMFO	314	
DCTSRMNO	2F4	
DCTSRMPR	30C	
DCTSRMUC	308	
DCTSRMWI	31C	
DCTSRV	22	C
DCTSRVCL	1EC	
DCTSRVID	59	E0
DCTSTART	F	80
DCTSTAT	C	
DCTSTAT2	24	
DCTSTDHD	2F0	40
DCTSTDKP	2F0	20
DCTSTDPG	2F0	80
DCTSTDSP	2F0	
DCTSTEND	2F1	2F4

Name	Hex Offset	Hex Value
DCTSTFSS	31C	40
DCTSTOP	D	80
DCTSTRT	C	4
DCTSUSPD	31C	2
DCTSWS	B8	
DCTSWSCR	2C8	214
DCTSWSLN	2F0	238
DCTS3CDS	31C	4
DCTS3CJB	31C	2
DCTS3CNO	31C	8
DCTS3CON	31C	1
DCTS3CPY	31C	F
DCTS3TFC	31C	40
DCTS4AIS	31C	4
DCTS4NPS	31C	80
DCTS4OPI	31C	10
DCTS4TUN	31C	8
DCTTCEL	31C	8
DCTTODNE	59	1
DCTTOKA	44	
DCTUCB	40	
DCTUCS	298	
DCTUCSBL	31C	20
DCTUNAL	C	10
DCTUNIT	7C	
DCTUSEID	144	4
DCTUSER0	5C	
DCTUSER1	60	
DCTVOL	C0	
DCTVOLEN	B8	6
DCTVOLFL	D8	8
DCTVOLMX	B8	4
DCTWFORC	254	254
DCTWFORM	254	
DCTWKBUF	2F8	
DCTWORK	88	
DCTWRASI	1BC	
DCTWRNUM	1B8	
DCTWS	E0	D8
DCTWSANY	1B4	1E
DCTWSBEG	D8	
DCTWSBNS	2C4	10
DCTWSBTH	2C4	4
DCTWSCTK	D9	10
DCTWSDAN	2C4	20
DCTWSDSH	2C4	80
DCTWSENL	1B5	80
DCTWSENP	1B5	40
DCTWSENT	C0	4
DCTWSFAP	1B4	2
DCTWSFG1	1B4	
DCTWSFG2	2C4	
DCTWSFG3	2DC	
DCTWSFG4	1B5	
DCTWSFG5	192	
DCTWSFJR	1B4	10
DCTWSFST	1B4	8
DCTWSFTS	1B4	4
DCTWSHLD	1B4	80
DCTWSHNS	1B4	40
DCTWSIP	2C4	8
DCTWSLIM	D9	40
DCTWSLOC	191	80
DCTWSNET	191	20
DCTWSNOT	1B4	20
DCTWSODP	D9	80
DCTWSP	B8	
DCTWSPRI	D8	
DCTWSPRL	C0	8
DCTWSPR2	D9	
DCTWSREQ	E0	
DCTWSRGS	D8	2
DCTWSRMT	191	40
DCTWSRNG	D8	4
DCTWSTB	144	
DCTWSTKN	2C4	2
DCTWSUSE	191	10
DCTWS3CF	2DC	10
DCTWS3QD	2DC	80
DCTWS3QT	2DC	40
DCTWS3QX	2DC	20
DCTWS3XN	2DC	8
DCTWTRID	2B0	
DCTXEQND	88	
DCTXFEND	F4	
DCTXFRID	59	F
DCTXJR	22	90
DCTXJT	22	B0
DCTXSR	22	80
DCTXST	22	A0
DCTXWTID	59	F
DCT1GENC	192	80
DCT1GEN1	192	40
DCT1JHLD	24E	80
DCT1JHNL	24E	40
DCT1JRFL	24E	
DCT1SBNL	2F0	4
DCT1SBUR	2F0	8
DCT1SHLD	2F0	80
DCT1SHNL	2F0	40
DCT1SODA	2C5	F
DCT1SODH	2C5	4
DCT1SODK	2C5	2
DCT1SODL	2C5	1
DCT1SODW	2C5	8
DCT1SRFL	2F0	
DCT1STFL	2C5	
DCT2MODA	2F1	F
DCT2MODH	2F1	4
DCT2MODK	2F1	2
DCT2MODL	2F1	1
DCT2MODW	2F1	8
DCT2POST	E	8
DCT2PTRC	E	4
DCT2RSP	E	2
DCT2SRFL	2F1	
DCT3IOER	23	20
DCT3JWS	23	80
DCT3SODA	2F2	F
DCT3SODH	2F2	4
DCT3SODK	2F2	2
DCT3SODL	2F2	1
DCT3SODW	2F2	8
DCT3SRFL	2F2	
DCT3SWS	23	40
DCT3UCSV	31C	10
DCT4ARST	2C	80
DCT4NSYN	2C	40
DCT4TRNN	31C	1
DCT4TRNY	31C	2

Name	Hex Offset	Hex Value
DCT5$PPN	30E	2
DCT5$SPN	30E	4
DCT5CALL	30E	40
DCT5C1ON	30E	80
DCT5DNRC	30E	8
DCT5FROF	30E	1
DCT5TFSS	30E	10
DCT5TUCS	30E	20
DCT6NOTR	30F	80
MDCTABRT	AC	
MDCTACT	CC	
MDCTADCT	68	
MDCTAFTK	88	
MDCTAPNL	93	
MDCTAPPL	94	
MDCTASID	AC	
MDCTASNM	B0	
MDCTATE	9C	
MDCTATMP	F8	
MDCTATTN	76	
MDCTATT8	31C	1
MDCTATYP	75	
MDCTBFSZ	78	
MDCTBIDR	AC	
MDCTCHLM	7B	
MDCTCMCT	E3	
MDCTCNTS	B4	
MDCTCODE	9C	
MDCTDCK	A8	
MDCTDCNT	CA	
MDCTDCT	70	
MDCTDSC	31C	8
MDCTERCT	6F	
MDCTESTR	128	
MDCTEXCD	C8	
MDCTEXIT	CC	
MDCTEXWK	C8	
MDCTFCS	7A	
MDCTFEAT	6B	
MDCTFLG1	76	
MDCTFMT	6A	
MDCTICE	6C	
MDCTIFEA	104	
MDCTIKEY	118	
MDCTIMER	31C	80
MDCTIMOK	94	
MDCTINTE	31C	4
MDCTINVL	A8	
MDCTISTR	120	
MDCTISWL	130	
MDCTJOB	31C	30
MDCTJOB1	31C	20
MDCTJOB2	31C	10
MDCTJRNM	109	
MDCTJTNM	108	
MDCTKEEP	98	
MDCTLEND	140	
MDCTLGND	D0	
MDCTLINE	74	
MDCTLNCC	DF	
MDCTLNOD	13C	
MDCTLOGN	9C	
MDCTLUST	A8	
MDCTMDID	B0	
MDCTMDNQ	A8	
MDCTMDOM	100	
MDCTMEMB	90	
MDCTMLMQ	25	
MDCTMODE	6E	
MDCTMPER	B0	
MDCTMRRT	110	
MDCTMRT	10C	
MDCTMTIM	AC	
MDCTNA	D0	
MDCTNAK	A4	
MDCTNATP	9C	
MDCTNCES	D8	
MDCTNDCT	A8	
MDCTNEGR	E4	0
MDCTNETA	E3	CC
MDCTNFL	E2	
MDCTNFLC	31C	40
MDCTNFLE	31C	20
MDCTNFLG	AE	
MDCTNFLI	31C	4
MDCTNFLL	31C	80
MDCTNFLP	31C	2
MDCTNFLQ	31C	10
MDCTNFLS	31C	8
MDCTNFL2	DC	
MDCTNFL3	DD	
MDCTNF2A	31C	10
MDCTNF2D	31C	8
MDCTNF2I	31C	4
MDCTNF2J	31C	2
MDCTNF2N	31C	20
MDCTNF2R	31C	80
MDCTNF2S	31C	40
MDCTNF3E	31C	1
MDCTNF3J	31C	40
MDCTNF3M	31C	80
MDCTNF3Q	31C	10
MDCTNF3S	31C	20
MDCTNICE	A0	
MDCTNJEH	31C	1
MDCTNLDV	108	
MDCTNLNE	A4	
MDCTNM	CC	
MDCTNMAP	F0	
MDCTNNR	D6	
MDCTNO	EC	
MDCTNODE	EC	
MDCTNOTS	114	
MDCTNPAS	F8	
MDCTNPCH	A0	
MDCTNQSE	A4	
MDCTNR	D4	
MDCTNTRC	AE	40
MDCTNTRJ	AE	20
MDCTNVRB	AE	80
MDCTOBUF	90	
MDCTOPCT	E0	
MDCTOTAL	A0	
MDCTPAWS	31C	40
MDCTPCL	80	
MDCTPGM	88	
MDCTPMBC	C8	
MDCTPMFL	C9	
MDCTPROC	90	
MDCTPSWD	88	

Name	Hex Offset	Hex Value
MDCTPWDL	7B	
MDCTQTBF	84	
MDCTQUAL	EE	
MDCTRABF	BC	
MDCTRACT	BA	
MDCTRALM	B8	
MDCTRAT	98	
MDCTRAWK	B8	
MDCTRCB	69	
MDCTRECL	68	
MDCTREM	B0	
MDCTRFCN	13B	40
MDCTRFCY	13B	80
MDCTRFXE	80	88
MDCTRNTA	F4	
MDCTRQBF	C4	
MDCTRQCT	C2	
MDCTRQLM	C0	
MDCTRQWK	C0	
MDCTRSEQ	6C	
MDCTRSTF	13B	
MDCTRSTI	138	
MDCTRSTM	134	
MDCTSBSZ	9A	
MDCTSCK	9C	
MDCTSCNT	B4	
MDCTSDCK	BC	
MDCTSDCT	18	
MDCTSEL	69	
MDCTSNAK	B8	
MDCTSNCT	90	
MDCTSOCK	A0	
MDCTSONT	114	
MDCTSREM	C4	
MDCTSRNM	10B	
MDCTSSQD	A8	
MDCTSTAK	B8	
MDCTSTAT	77	
MDCTSTNM	10A	
MDCTSTO	C0	
MDCTSTRT	31C	2
MDCTSUSP	7A	
MDCTSVND	C0	
MDCTSXCP	B4	
MDCTTDRN	DE	80
MDCTTFLG	DE	
MDCTTO	AC	
MDCTTSEQ	6D	
MDCTTTRC	DE	20
MDCTTTRJ	DE	10
MDCTTVRB	DE	40
MDCTTYPE	75	
MDCTVREQ	A0	
MDCTWICE	78	
MDCTXCOD	CB	
MDCTXCP	A0	
MDCTXERR	74	
MDCTXRSP	A4	
MDCT1EOT	31C	40
MDCT1OUT	31C	80
XDCTACTV	C0	
XDCTBUFQ	BC	
XDCTCMPQ	B8	
XDCTDATE	AC	
XDCTDCT	6C	
XDCTDSN	C8	
XDCTDTE	88	
XDCTDVER	B4	
XDCTERCT	C4	
XDCTERR	31C	40
XDCTFLG1	97	
XDCTFLG2	98	
XDCTFREE	A6	
XDCTLABL	9A	
XDCTMAXB	C6	
XDCTMSG	31C	8
XDCTOFSL	A5	
XDCTOPCT	C5	
XDCTOPEN	31C	80
XDCTRCB	69	
XDCTRTPD	9B	
XDCTSEQN	8C	
XDCTSKIP	31C	4
XDCTSTAT	68	
XDCTSUBC	94	
XDCTSUBR	92	
XDCTTIME	A8	
XDCTTVER	B0	
XDCTUNCT	96	
XDCTUNIT	9D	
XDCTVOLS	99	
XDCTXNUM	90	
XDCT1ALC	31C	10
XDCT1CLS	31C	8
XDCT1DMP	31C	80
XDCT1LOD	31C	40
XDCT1RD	31C	2
XDCT1STR	31C	1
XDCT1SUB	31C	20
XDCT1VER	31C	4
XDCT2CRT	31C	8
XDCT2NDF	31C	20
XDCT2NVR	31C	10
XDCT2PRO	31C	40
XDCT2ST	31C	80

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