

Virtual Machine/
Enterprise Systems Architecture™

LX24-5260-01

**CP Diagnosis Summary
for VM/ESA™**

Release 1.1

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NAME	MODULE	TRACE ID	CONTENTS OF REG N	CONTENTS OF REG N + 1	CONTENTS OF REG N + 2	CONTENTS OF REG N + 3	CONTENTS OF REG N + 4
		A	C	10	14	18	1C
External Interrupt	HCPEXT	0100	00 00 00 00	C'EXT'	Interrupt (PFEXTCP)	External Old PSW (PFEXTOP)	
SVC Interrupt	HCPSVC	0200	Abend if Abend C'MM', X'NN'	C'SVC'	SVC Interrupt (PFXSVCIL)	SVC Old PSW (PFXSVCOP)	
Program Interrupt	HCPPRG	0300	VMDBK Address or 00 00 00 00	ILC, Interrupt	Translation Exception Address or 00 00 00 00	Program Old PSW	
Machine Check Interrupt	HCPMCH	0400	Failing Storage Address (FSA)	Machine Check Interruption Code (MCIC)		Machine Check Old PSW	
I/O Interrupt	HCPIFI	0500	RDEVDEV VDEVSUB	Real Device Block Address	PFXRNUSR	I/O Old PSW	
Obtain Free Storage (Free)	HCPFRE HCPFRF	0600	Block's ID' < xxx'	Doublewords Requested (PFXFRERO)	Address of Assigned Block (GPR2)	VMDBK Address (GPR11)	Caller's Return Address (PFXFRERE)
Obtain Pageable Free Storage	HCPPFM	0610	Doublewords Requested (SAVER0)	Assigned Virtual Lock Address (GPR1)	Assigned Real Address (GPR2)	Caller's VMDBK Address (GPR11)	Caller's Return Address (REG14)
Return Free Storage (FRET)	HCPFRE HCPFRF	0700	Block's ID' < xxx'	Doublewords Returned (GRP0)	Returned Block Address (GPR1)	Caller's VMDBK Address (GPR11)	Caller's Return Address (GPR14)
Return Pageable Free Storage	HCPPFM	0710	Doublewords Returned (GRP0)	Returned Virtual Block Address (GPR1)	Returned Real Address (GPR2)	Caller's VMDBK Address (GPR11)	Caller's Return Address (GPR14)
Run User	HCPRUN	0A00	00 00 00 00	00 C'RUN'	VMDBK Address	Guest PSW (VMDPSW)	
Load/Store Vector Facility	HCPVSM	0A10	VMDBK Address of Stored User	Vector Change Status of Stored User	VMDBK Address of Loaded User	Vector Change Status of Loaded User	00 00 00 00
Virtual 370-XA I/O Interrupt	HCPVIS	0C00	User I/O Old PSW (UZPIOOP)		VDEVDEV RDEVDEV	Subchannel ID (SID)	Interrupt Parameter
Virtual Module Subchannel	HCPVOL	0C32	VDEVDEV RDEVDEV	Path Management Control Words (PMCW) 0-3			
Virtual Start Subchannel	HCPVOS	0C33	VDEVDEV RDEVDEV	Operand (VMDICAD1)	Operation Request Block (ORB)		
Virtual Test Subchannel	HCPVOS	0C35	VDEVDEV RDEVDEV	Subchannel Status Word (SCSW) (IORSWSW)			Extended Status Word (ESW)
Virtual Test Pending Interrupt	HCPVOS	0C36	00 00 VMDINST	Operand (VMDICAD1)	VDEVDEV RDEVDEV	Subchannel ID (SID)	Interrupt Parameter
Virtual CSW Stored	HPCSW	0D00	00 00 VMDINST	VDEVDEV RDEVDEV	Limited Channel Logout	Channel Status Word (CSW)	
Virtual Start I/O	HCPVOD HCPVOH	0D90	00 00 VMDINST	VDEVDEV RDEVDEV	Channel Address Word (CAW)	First CCW in Channel Program	
Virtual Start I/O	HCPVOD	0D91	00 00 VMDINST	VDEVDEV RDEVDEV	Channel Address word (CAW)	First CCW in Channel Program	
Clear Subchannel, CC=0	HCPIOS	1000	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Clear Subchannel, CC=3	HCPIOS	1003	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Halt Subchannel, CC=0	HCPIOS	1010	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Halt Subchannel, CC=1	HCPIOS	1011	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Halt Subchannel, CC=3	HCPIOS	1013	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Modify Subchannel, CC=0	HCPIOS	1020	RDEVDEV RDEVSUB	Path Management Control Words (PMCW) 1-3			PMCW Word 6
Modify Subchannel, CC=1	HCPIOS	1021	RDEVDEV RDEVSUB	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Modify Subchannel, CC=3	HCPIOS HCPVOL	1023	RDEVDEV RDEVSUB	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Start Subchannel, CC=0	HCPIOS	1030	RDEVDEV RDEVSUB	Active IORBK Address (RDEVIOR)	Operation Request Block (ORB)		
Start Subchannel, CC=1	HCPIOS	1031	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Subchannel, CC=3	HCPIOS	1033	RDEVDEV RDEVSUB	IORBK Address	Operation Request Block (ORB)		
Start Subchannel, CC=0 Sense	HCPIFI	1038	RDEVDEV RDEVSUB	Active IORBK Address	Operation Request Block (ORB)		

				(RDEVAIOR)			
Start Subchannel, CC=1 Sense	HCPIFI	1039	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Subchannel, CC=3 Sense	HCPIFI	103B	RDEVDEV RDEVSUB	IORBK Address	Operation Request Block (ORB)		
Test Subchannel, CC=0	HCPIFI	1050	RDEVDEV RDEVSUB	Subchannel Status Word (SCSW)			Extended Status Word (ESW)
Test Subchannel, CC=1	HCPIFI	1051	RDEVDEV RDEVSUB	Subchannel Status Word (SCSW)			Extended Status Word (ESW)
Test Subchannel, CC=3	HCPIFI	1053	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Resume Subchannel, CC=0	HCPPAG HCPPAH HCPVOD HCPVOS HCPVIR	1080	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	Previous Suspended PIOBK Address ¹	DDITB Address ¹	CPVOL Address ¹
Resume Subchannel, CC=1	HCPPAG HCPPAH HCPVOD HCPVOS HCPVIR	1081	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	Previous Suspended PIOBK Address ¹	DDITB Address ¹	CPVOL Address ¹
Resume Subchannel, CC=2	HCPPAG HCPPAH HCPVOD HCPVOS HCPVIR	1082	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	Previous Suspended PIOBK Address ¹	DDITB Address ¹	CPVOL Address ¹
Resume Subchannel, CC=3	HCPPAG HCPPAH HCPVOD HCPVOS HCPVIR	1083	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	Previous Suspended PIOBK Address ¹	DDITB Address ¹	CPVOL Address ¹
Channel Information Request/Response	HCPCIO	1090	Request Data		Response Data		
I/O Sense Data Received	HCPIFI	10F0	RDEVDEV IORSNT	Sense Data Bytes 0 - 15			
APPC/VM SENDXXXX	HCPIUA	1404	Address of the IUCVB	Path ID Rtn Code Flags1	State Flags2 What RC SENDOP	Address of MSGBK	Address of Next Instruction
APPC/VM RECEIVE	HCPIUA	1405	Address of the IUCVB	Path ID Rtn Code Flags1	State Flags2 What RC SENDOP	Address of MSGBK	Address of Next Instruction
APPC/VM CONNECT	HCPIUA	140B	Address of the IUCVB	Path ID Rtn Code Flags1	State Flags2 What RC 00	00 00 00 00	Address of Next Instruction
APPC/VM SEVER	HCPIUA	140F	Address of the IUCVB	Path ID Rtn Code Flags1	State Flags2 What RC 00	00 00 00 00	Address of Next Instruction
APPC/VM QRYSTATE	HCPIUA	1412	Address of the IUCVB	Path ID Rtn Code Flags	State FLAGS2 00 00	SIP Code SIP Flag SPC Mod SYNC Level	Address of Next Instruction
APPC/VM SETMODFY	HCPIUA	1413	Address of the IUCVB	Path ID Rtn Code Flags	State 00 00 00	SENDOP2 00 00 00	Address of Next Instruction
APPC/VM SETSTATE	HCPIUA	1414	Address of the IUCVB	Path ID Rtn Code Flags	State 00 00 00	SENDOP2 00 00 00	Address of Next Instruction
APPC/VM CONNECT Resume Suspended Connect	HCPIUR	142B	Address of the IUCVB	Path ID Rtn Code 00	Flags1 Flags2 What RC 00	IPR Code 00 00	Address of Next Instruction
APPC/VM CONNECT Resume Unnecessary	HCPIUR	143B	00 00 00 00	00 00 00 00	00 00 00 00	User ID	
IUCV Query	HCPIUA	1500	Address of the IUCVB	00 00 00 00	CP-SYSCD 00 00 00	Parmsize Max. No. of Connections	Address of Next Instruction
IUCV Test Message	HCPIUA	1501	Address of the IUCVB	CC 00 00 00	00 00 00 00	00 00 00 00	Address of Next Instruction
IUCV Retrieve Buffer	HCPIUA	1502	Address of the IUCVB	00 00 00 00	CP-SYSCD 00 00 00	Address of Buffer	Address of Next Instruction
IUCV Describe	HCPIUA	1503	Address of the IUCVB	Path ID Rtn Code Flags	00 00 00 00	Address of MSGBK	Address of Next Instruction
IUCV Send	HCPIUA	1504	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	Address of MSGBK	Address of Next Instruction
IUCV Receive	HCPIUA	1505	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	Address of MSGBK	Address of Next Instruction
IUCV Reply	HCPIUA	1506	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	Address of MSGBK	Address of Next Instruction
IUCV Test Completion	HCPIUA	1507	Address of the IUCVB	Path ID Rtn Code Flags	00 00 00 00	Address of MSGBK	Address of Next Instruction
IUCV Reject	HCPIUA	1508	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	Address of MSGBK	Address of Next Instruction
IUCV Purge	HCPIUA	1509	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	Address of MSGBK	Address of Next Instruction

IUCV Accept	HCPIUA	150A	Address of the IUCVB	Path ID Rtn Code Flags1	CP-SYSCD ² Flags ² 00 00	00 00 00 00	Address of Next Instruction
IUCV Connect	HCPIUA	150B	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	00 00 00 00	Address of Next Instruction
IUCV Declare Buffer	HCPIUA	150C	Address of the IUCVB	00 00 Rtn Code 00	CP-SYSCD 00 00 00	Address of the Buffer	Address of Next Instruction
IUCV QUIESCE	HCPIUA	150D	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	00 00 00 00	Address of Next Instruction
IUCV Resume	HCPIUA	150E	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	00 00 00 00	Address of Next Instruction
IUCV Sever	HCPIUA	150F	Address of the IUCVB	Path ID Rtn Code Flags	CP-SYSCD 00 00 00	00 00 00 00	Address of Next Instruction
IUCV Set Mask	HCPIUA	1510	Address of the IUCVB	Mask 00 00 00	00 00 00 00	00 00 00 00	Address of Next Instruction
IUCV Set Control Mask	HCPIUA	1511	Address of the IUCVB	Mask 00 00 00	00 00 00 00	00 00 00 00	Address of Next Instruction
IUCV IPOLL	HCPIUA	1515	Address of the IUCVB	00 00 00 00	Buffer Length Data Length	Address of the data buffer	Address of the next instruction
CCS Accept	HCPVCT HCPVCW	1600	00 00 00 00	00 00 00 00	Path ID (CCS) 00 00	Accept Data	
CCS PURGE	HCPVCW	1603	00 00 00 00	00 00 IP-RCODE 00	Path ID (CCS) 00 00	Address of the RDEV	Current VMBDK Address
CCS RECEIVE	HCPVCP	1604	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS REPLY	HCPVCV	1606	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS SEND 1-way	HCPVCV HCPVCX	1608	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS SEND 2-way	HCPVCV HCPVCX	1609	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS SEVER	HCPVCT HCPVCX HCPVCZ	160A	00 00 00 00	00 00 User Data 00	Path ID (CCS) Path ID (VSM)	Luname	
CCS Logic Error in CCS WEBBK	HCPVCP	160B	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS REPLY from VSM	HCPVCQ HCPVCR HCPVCS HCPVCW HCPVCY	160C	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS CONNECT for VSM	HCPVCT	160E	00 00 00 00	00 00 Timer	Path ID (CCS) MSGLIMIT	VSM Userid	
CCS SEVER from VSM	HCPVCT	1610	00 00 00 00	00 00 User Data 00	Path ID (CCS) 00 00	VSM Userid	
CCS Message Complete	HCPVCQ	1611	Address of the SNABK	00 00 00 WEB-MODE	Path ID (CCS) Path ID (VSM)	00 00 IP-AUDIT1 IP-AUDIT2	Address of the IUCV IXBLK
CCS CONNECT for LU	HCPVCT	1612	00 00 00 00	00 00 00 00	Path ID (CCS) 00 00	Luname	
CCS Logic Error in VSM WEBBK	HCPVCX	1613	Address of the SNABK	00 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS Error in User Environment	HCPVCP	1614	00 00 00 00	00 00 WEB-MODE WEB-LAID	Path ID (CCS) 00 00	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS Soft Abend VCX002	HCPVCX	1615	00 00 00 00	00 00 00 00	00 00 00 00	Address of Last Instruction	Current VMBDK Address
CCS ACCEPT Error	HCPVCT HCPVCW	1680	00 00 00 00	IP-RCODE 00 00 00	Path ID (CCS) 00 00	Accept Data	
CCS RECEIVE Error	HCPVCP	1684	Address of the SNABK	IP-RCODE 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS REPLY Error	HCPVCV	1686	Address of the SNABK	IP-RCODE 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS SEND 1-Way Error	HCPVCV HCPVCX	1688	Address of the SNABK	IP-RCODE 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK
CCS SEND 2-Way Error	HCPVCV HCPVCX	1689	Address of the SNABK	IP-RCODE 00 WEB-MODE WEB-LAID	Path ID (CCS) Path ID (VSM)	WEB-FUN WEB-CPFLG WEB-EDIT WEB-CHAR	Address of the IUCV IXBLK

NAME	MODULE	TRACE ID	CONTENTS OF REG N	CONTENTS OF REG N + 1	CONTENTS OF REG N + 2	CONTENTS OF REG N + 3	CONTENTS OF REG N + 4
		A	C	10	14	18	1C
Run User in Virtual SIE Mode	HCPWRU	1A00	00 00 00 00	00 C'WRU'	R/Guest VMDBK Address	V/Guest PSW (VMDPSW)	
Virtual SIE Interception	HCPWRU	1A11	00 00 00 00	VMD-ICODE VMD-ICFLG VMDINST	Operand Address (VMDICAD1)	V Guest PSW (VMDPSW)	
Unit Check	HCPTRE	1C01	RDEVDEV RDEVSUB or 00 00	IO-RECLVL IO-RTYGBL	IOR-FLAG 00 00 00	Failing CCW	
Unit Exception	HCPRDE	1C02	RDEVDEV RDEVSUB or 00 00	IO-RECLVL IO-RTYGBL (GPR1)	IOR-FLAG 00 00 00 (GPR2)	Failing CCW (GPR3 and 4)	
I/O Related Machine Check	HCPRFC	1D01	00 00 00 00	00 00 00 00	Channel Report Word (CRW)	Machine Check Input Parameter or 00 00 00 00	00 00 00 00
Channel Check	HCPRFC	1D02	RDEVDEV RDEVSUB or 00 00	Real Device Block Address or 00 00 00 00	System Log Error Record Address	00 00 00 00	00 00 00 00
Channel Check at Termination	HCPRFC	1D03	00 00 00 00	00 00 00 00	PFXMCHIN or 00 00 00 00	00 00 00 00	Channel Report Word (CRW)
Store CRW (STCRW)	HCPCPR	1D04	00 00 00 00	00 00 00 00	CRW Value	CHPID	Path Initialized = 0 Path Not Initialized = 4
ADD or STACK COMBK	HCPOCN HCPVCQ HCPVCR HCPVCS	2200	COMBK Address	COM-STAT COM-DFLAG COM-BPARM COM-PARM	Originator VMDBK	Destination VMDBK	RDEVBK Address (GPRB)
Execute CP Command	HCPCFM	2301	00 00 00 00	00 00 GSD-TYPE GSD-FLAG	BASE VMDCFCTL VMDCFCTL BASE VMDCWAIT VMDCWAIT	Abbreviated Command	
Guest I/O Untranslation	HCPUNT	2500	00 00 00 00	'UNT'	CCW Address	Guest Translated CCW	
Call-With-Savearea	HCPSVC	2800	PARM REG (GPR2)	Caller Module ID C'XXX'	New SAVBK Address (GPR13)	Caller Real Address (SAVER14)	Callee Virtual Address (SAVER15)
Return-With-Savearea	HCPSVC	2C00	Return (SAVER15)	CC & Return Module Prog ID C'XXX' Mask	Returned SAVBK Address (GPR13)	Caller Real Address (SAVER14)	Callee Real Exit (PFXLNK14)
Stack IORBK/TRQBK	HCPSTK	3000	C'KI '	00 VMD-STATE VMD-SLIST T ³	VMDBK Address	IORBK TRQBK Requesting Stack Address	Calling routine
Unstack IORBK/TRQBK	HCPDSB	3010	C'UI '	00 00 00 T ³	VMDBK Address	IORBK TRQBK Address	IORIRA TRQBIRA (Exit Address)
Add User to Dispatch List	HCPSTK	3200	VMDWSSPR -or- VMDHOTWS	VMD-TYPE VMD-STATE 00 VMD-QSTAT	VMDBK Address	VMDDPRTY (Initial Value)	
Drop User from Dispatch List	HCPSTK	3210	VMDWSSPR -or- VMDHOTWS	VMD-TYPE VMD-STATE 00 VMD-QSTAT	VMDBK Address	VMDDPRTY (Final Value)	
Stack CBEBK	HCPSTK	3300	C'CK '	00 VMD-STATE VMD-SLIST CPEX-SCHC	VMDBK Address	CPEBK Address	Calling Routine Requesting Stack Address
Unstack CBEBK	HCPDSB HCPCFM	3310	C'UC '	00 00 00 CPEX-SCHC	VMDBK Address	CPEBK Address	CPEKR15 (Exit Address)
Interception, Not Instruction	HCPRUN	3500	00 00 00 00	00 00 00 VMD-ICODE	00 00 00 00	Guest PSW (VMDPSW)	
Instruction Interception	HCPPRV	3504	Contents of Guest GPR1	00 VMD-ICFLG VMDINST	Operand Address	Guest PSW (VMDPSW)	
Exit to the Dispatcher	HCPDSP	3600	VMD-STATE VMD-IDLCTL VMD-RSTAT VMD-DWFLG	00 Exiting Module ID C'XXX'	Address of Currently Selected VMDBLK	00 00 00 00	Exiting Module Address
Stack Work Bits	HCPSTK	3700	C'K W00'	00 VMD-STATE VMD-SLIST 00	VMDBK Address	Work Bit Being Stacked	Calling Routine Requesting Stack Address
Processor Controller Diagnose Request Started	HCPPCA	3C00	Command Word (PCRCMDWD)	Base VMDBK (PCRVMBAS) DIAG CC (byte 3)	PC Data Block Address A(HCPWRKPC)	PC Request Block Address PCSPCRQ	PC Status Block Address (SYSPCSBK)
Processor Controller Service Call Request Started	HCPPCB	3C10	Command Word (PCRCMDWD)	Base VMDBK (PCRVMBAS) DIAG CC (byte 3)	PC Data Block Address A(HCPWRKPC)	PC Request Block Address (PCSPCRQ)	PC Status Block Address (SYSPCSBK)
Processor Controller Diagnose Request Returned	HCPPCA	3C55	00 00 PCD-RESPD PCD-RESPS	Base VMDBK Address (PCRVMBAS)	PC Data Block Address (SAVEWRK1)	PC Request Block Address (PCSREQBK)	PC Status Block Address (SYSPCSBK)
Processor Controller Service Request Returned	HCPPCB	3C65	00 00 PCD-RESPD PCD-RESPS	Base VMDBK Address (PCRVMBAS)	PC Data Block Address (PCRRDBKA)	PC Request Block Address (PCSREQBK)	PC Status Block Address (SYSPCSBK)
Unsolicited Processor Controller Interrupt	HCPPCR	3CFF	00 00 00 00 (GPR4)	00 00 00 00 (GPR5)	PC Data Block Address (SAVER1) (GPR6)	00 00 00 00 (GPR7)	PC Status Block Address (SYSPCSBK) (GPR8)

PTR Translation Results	HCPPTR	4000	Virtual Address (GPR1)	Real Address (GPR2)	VMDBK Address Translated for (GPR10)	Dispatched VMDBK Address (GPR11)	Address of Caller (SAVER14)
Demand Scan Pass 1	HCPALD	4001	Count of Frames on Available List	High Threshold	Low Threshold	Number of Outstanding Frame Requests	Number of Steal Writes
Demand Scan Pass 2	HCPALD	4002	Count of Frames on Available List	High Threshold	Low Threshold	Number of Outstanding Frame Requests	Number of Steal Writes
Virtual Machine Storage Locking	HCPVMS	4010	00XA or 0370	Caller's Address	VMDBK Address	Virtual Address to Lock	Real Frame's Address
Virtual Machine Storage Unlocking	HCPVMS	4011	00XA or 0370	Caller's Address	VMDBK Address	Virtual Address to Unlock	Real Frame's Address
Start Interpretive Execution Assist CSCH, CC 0	HCPPTI	5000	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist CSCH, CC 3	HCPPTI	5003	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist HSCH, CC 0	HCPPTI	5010	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist HSCH, CC 1	HCPPTI	5011	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist HSCH, CC 2	HCPPTI	5012	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist HSCH, CC 3	HCPPTI	5013	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist MSCH, CC 0	HCPPTI	5020	RDEVDEV RDEVSUB	Path Management Control Words (PMCW Words 1-3)			PMCW Word 6
Start Interpretive Execution Assist MSCH, CC 1	HCPPTI	5021	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist MSCH, CC 2	HCPPTI	5022	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist MSCH, CC 3	HCPPTI	5023	RDEVDEV RDEVSUB	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist SSCH, CC 0	HCPPTI	5030	RDEVDEV RDEVSUB	IORBK Address	Operation Request Block (ORB)		
Start Interpretive Execution Assist SSCH, CC 1	HCPPTI	5031	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist SSCH, CC 2	HCPPTI	5032	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist SSCH, CC 3	HCPPTI	5033	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist TSCH, CC 0	HCPPTI	5050	RDEVDEV RDEVSUB	Subchannel Status Word (SCSW)			Extended Status Word (ESW)
Start Interpretive Execution Assist TSCH, CC 1	HCPPTI	5051	RDEVDEV RDEVSUB	Subchannel Status Word (SCSW)			Extended Status Word (ESW)
Start Interpretive Execution Assist TSCH, CC 3	HCPPTI	5053	RDEVDEV RDEVSUB	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist TPI, CC 0	HCPPTI	5080	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist TPI, CC 1	HCPPTI	5081	00 00 00 00	Subsystem ID	Interrupt Parameter	Interrupt ID Word	00 00 00 00
Start Interpretive Execution Assist RSCH, CC 0	HCPPTI	5080	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist RSCH, CC 1	HCPPTI	5081	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00

Start Interpretive Execution Assist RSCH, CC 1	HCPPTI	5081	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist RSCH, CC 2	HCPPTI	5082	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist RSCH, CC 3	HCPPTI	5083	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Interpretive Execution Assist Interrupt	HCPIPT	5500	RDEVDEV RDEVSUB	A(RDEV) RDEV Address	PFXRNUSR	I/O Old PSW	
APPC IUCV Path Busy	HCPBUT	7000	CC	PTHBK Address	MDEBK Address		Caller's Return Address
Locate PTHBK by APPC Path	HCPBUT	7002	CC ⁴	PTHBK Address or Path ID	MDEBK Address		Caller's Return Address
Locate PTHBK by Inter-System Communication Facility Session	HCPBUT	7003	CC ⁴	PTHBK Address or Session ID	MDEBK Address		Caller's Return Address
Add a Message to a Work Queue	HCPBUT	7004			MDEBK Address	Queue Anchor	Caller's Return Address
Get a Message to a Work Queue	HCPBUT	7005	CC		MDEBK Address	Queue Anchor	Caller's Return Address
Queue a Message for a Link	HPCCMS	7008	FUN FLG MDEMSGID	PTHBK Address	MDEBK Address	MDECODE TYPIAFL	LNKBK Address
Dequeue Message for a Link	HPCPMR	7009	FUN FLG MDEMSGID	PTHBK Address	MDEBK Address	MDECODE TYPIAFL	LNKBK Address
Clear Logical Subchannel, CC=0	HCPIOS	8000	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Clear Logical Subchannel, CC=3	HCPIOS	8003	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Clear Logical Subchannel, CC=0	HCPIOS	8010	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Halt Logical Subchannel, CC=1	HCPIOS	8011	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Halt Logical Subchannel, CC=3	HCPIOS	8013	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Modify Logical Subchannel, CC=0	HCPIOS	8020	RDEVDEV RDEVSUB	Path Management Control Words (PMCW) 1-3			PMCW Word 6
Modify Logical Subchannel, CC=1	HCPIOS	8021	RDEVDEV RDEVSUB	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Modify Logical Subchannel, CC=3	HCPIOS	8023	RDEVDEV RDEVSUB	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Start Logical Subchannel, CC=0	HCPIOS	8030	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	Operation Request Block (ORB)		
Start Logical Subchannel, CC=1	HCPIOS	8031	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Logical Subchannel, CC=3	HCPIOS	8033	RDEVDEV RDEVSUB	IORBK Address	Operation Request Block (ORB)		
Start Logical Subchannel, CC=0 Sense	HCPIFI	8038	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	Operation Request Block (ORB)		
Start Logical Subchannel, CC=1 Sense	HCPIFI	8039	RDEVDEV RDEVSUB	IORBK Address	00 00 00 00	00 00 00 00	00 00 00 00
Start Logical Subchannel, CC=3 Sense	HCPIFI	803B	RDEVDEV RDEVSUB	IORBK Address	Operation Request Block (ORB)		
Test Logical Subchannel, CC=0	HCPIFI	8050	RDEVDEV RDEVSUB	Subchannel Status Word (SCSW)			Extended Status Word (ESW)
Test Logical Subchannel, CC=1	HCPIFI	8051	RDEVDEV RDEVSUB	Subchannel Status Word (SCSW)			Extended Status Word (ESW)
Test Logical Subchannel, CC=3	HCPIFI	8053	RDEVDEV RDEVSUB	Active IORBK Address (RDEVAIOR)	00 00 00 00	00 00 00 00	00 00 00 00
Logical I/O Sense Data Received	HCPIFI	80F0	RDEVDEV IORSNT	Sense Data Bytes 0-15			
Logical I/O Interrupt	HCPIFI	8500	RDEVDEV RDEVSUB	Real Device Block Address	PFXRNUSR	I/O Old PSW	
SIGP Instruction	HCPSPG	AE00	CPU from Address	CPU to Address	SIGP Order	Program Mask (CC)	SIGP Status Bits
CPU is Check Stopped	HCPMCH	F400	00 00 00 00	MCIC		00 00 00 00	

Check Stop CPU Recovery	HCPMCH	F401	Address of Failed CPU (STAP Format)		Machine Check Interrupt Code (MCIC)	Address of Failed CPU's Prefix Page	00 00 00 00
Trace Page Full During Machine Check Handling	HCPMCH	F40F	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00
Extended Free Storage Page Release	HCPFRE HCPPTE HCPPTF	F700	00 00 00 00	FRMCSWRD	Returned Page Address	Frame Table Address	Number of Extended Pages in Use
Free Storage Extend Replenishment	HCPALF HCPPTE HCPPTF	F701	Virtual Frame Address	Real Frame Address	Owning Virtual System	Number of Pages Extended	Count of Changed Frames Taken
Resume Trace After Soft Abend	HCPABN	FFEE	TOD Clock (Bits 0-31)	TOD Clock (Bits 32-64)	VMDBK Address	C' + SNAP + '	
Suspend Trace During Soft Abend	HCPABN	FFFF	C'xxx'-- Where xxx is MODE ID	C'nnn'-- Where nnn is Abend Number	VMDBK Address	C'aaaaaaa'-- Where aaaaaaa is the Name of Run User at Time of Soft Abend	

- 1 These fields are generated only by HCPPAG and HCPPAH. HCPVOD, HCPVOS, and HCPVIR generate zeros (00 00 00 00).
- 2 CPSYSCD is filled in for non-APPC paths, Flags2 is filled in for APPC paths.
- 3 IOR|TRQSCHED - Bit seven in this field indicates whether this field contains the address of the TRQBK (the bit is on) or the address of the IORBK (the bit is off).
- 4 If CC equals 0, the PTHBK Address is traced. If CC does not equal 0, the PTHBK could not be located and the path ID requested is traced.



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