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CONTROL DATA CORPORATION

BINARY MAINTENANCE LOG (BML) MESSAGE FORMATS

CDC® OPERATING SYSTEMS:
CYBER 180
CYBER 170
CYBER 70
6000

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PREFACE

This manual describes messages issued to the binary maintenance log (BML) which interfaces the Network Operating System Version 2 (NOS 2) and the Hardware Performance Analyzer (HPA). This manual also references all NOS-supported equipment and entities that issue messages to the BML system file.

NOS 2 and HPA operate on the following:

CDC CYBER 70 Computer Systems
Models 71, 72, 73, and 74

CDC CYBER 170 Computer Systems
Models 171, 172, 173, 174, 175,
176A, 176B, 720, 730, 740, 750,
760, 815, 825, 835, 845, 855, 865,
and 875

CDC CYBER 180 Computer Systems
Models 810, 830, 835, 845, and 855

CDC 6000 Computer Systems

Audience

This manual is a reference for customer operations people and Control Data customer engineers who are using the Hardware Performance Analyzer (HPA).

Organization

This manual consists of five sections. Section 1 describes the general BML message format and types. Section 2 summarizes octal message identifier (MSGID) codes; Section 3 summarizes common symptom codes; and Section 4 summarizes common MSGID and symptom code combinations. Section 5 lists the specific structure for each message type in numeric MSGID order.

Related Publications

Control Data Publication	Publication Number
CDC 7155 Disk Storage Subsystem Reference Manual	60455860
CYBER 180 Models 810 and 830 (CYBER 170 State) Hardware Reference Manual	60469420
CYBER 170 Computer Systems Models 171 through 175 (Levels A, B, C) Model 176 (Level A) Hardware Reference Manual	60420000
CYBER 170 Computer Systems Models 720, 730, 740, 750, and 760, Model 176 (Level B/C) Hardware Reference Manual	60456100
CYBER 170 Computer System Model 825 Hardware Reference Manual	60469350
CYBER 170/180 Computer Systems Models 835, 845, and 855 Hardware Reference Manual	60458920
CYBER 170 Computer Systems Models 865 and 875 Hardware Reference Manual	60458920
CYBER 70 Model 71 Computer System Hardware Reference Manual	60453300
CYBER 70 Model 72 Computer System Hardware Reference Manual	60347000
CYBER 70 Model 73 Computer System Hardware Reference Manual	60347200
CYBER 70 Model 74 Computer System Hardware Reference Manual	60347400
CYBER Record Manager BAM Reference Manual	60495700
Direct Extended Memory Access (DEMA) Disk Storage Reference Manual	60459570
834 Intelligent Small Disk (ISD) Subsystem Hardware Reference Manual	60455580
Hardware Performance Analyzer User Reference Manual	60459460
380-170 Network Access Device Hardware Reference Manual	60458500
7155-401 Disk Storage Subsystem Hardware Reference Manual	60459570
65206-2 FSC Hardware Reference Manual	60457940

Conventions

The following conventions apply to user entry formats presented in this manual.

- Bit 0 is the least significant bit in fields shown with bit numbers.
- All numbers are decimal unless otherwise noted.
- Hexadecimal numbers are indicated by the use of parentheses.
- All MSGID and symptom codes are octal numbers, designated with a B. For example, 0012B is the same as 0012_8.
- CYBER Computer Systems are designated by system number or model number. For example, 170 Models refers to all CYBER 170 Models listed in the preface, and Model 825 refers to the CYBER 170 Model 825.

Disclaimer

The descriptions of BML messages are intended for use only with HPA and NOS 2. Control Data cannot be responsible for BML messages produced by other programs or systems.

CONTENTS

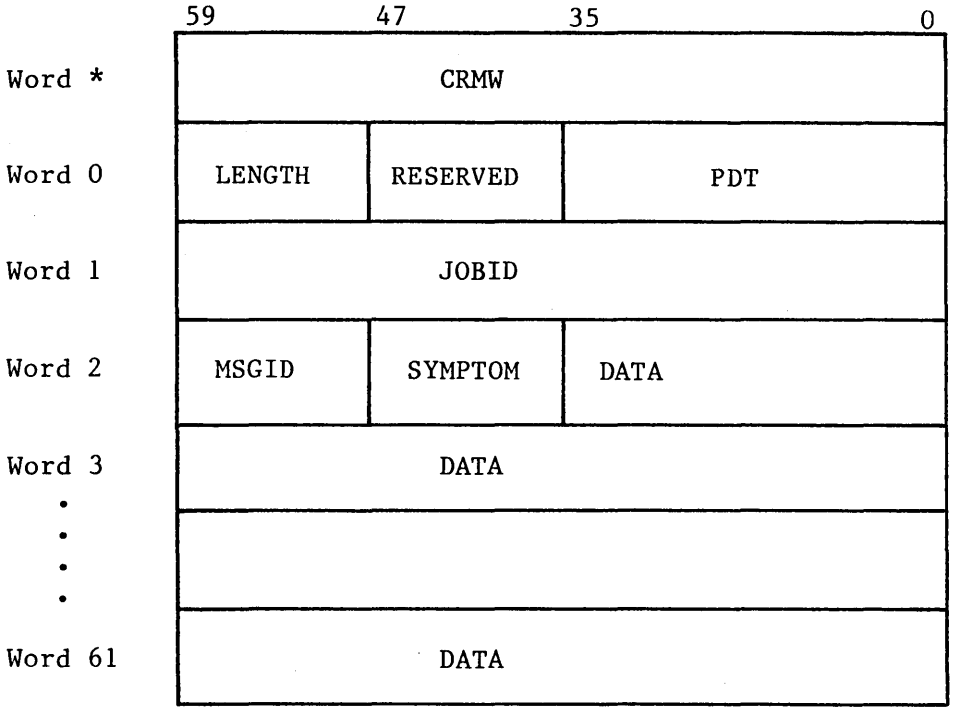
INTRODUCTION 1

The Binary maintenance log (BML) is a system file that stores messages issued by operating system programs. The structure of each message in the file depends upon the type of equipment or entity to which the message applies. Each message contains an octal message identifier (MSGID) and an octal symptom code that specifies the message structure and identifies the error or special condition causing the message to be generated.

This section describes the general BML message structure, the CYBER Record Manager (CRM) W-word, BML message formats for the central processing unit (CPU) and peripheral processing (PP) programs, and the BML disk. This section also describes message types and the format of both hardware error/usage messages and system software messages.

GENERAL BML MESSAGE STRUCTURE

The BML interface is defined as the user-accessible file produced by the MAINLOG utility. The format of a BML message as it appears in this file is shown below.

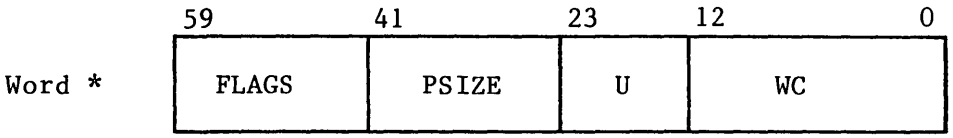


Field	Word	Location	Description
CRMW	*	59-0	CYBER Record Manager (CRM) W-Word.
LENGTH	0	59-48	Binary number specifying total message length in number of 60-bit words, including word 0.
RESERVED	0	47-36	Reserved for future use. This field must be set to zero.
PDT	0	35-0	Packed date and time. Date and time is in the format YYMMDDHHMMSS. The year (YY) is biased by 1970. The date and time are needed to correctly sequence messages. The accuracy of the time is not as critical as the relative accuracy of the elapsed time from event to event.

Field	Word	Location	Description
JOBID	1	59-0	Job identification (job sequence name, JSN) of job that isssued the message; in display code, left-justified, zero-filled.
MSGID	2	59-48	Message identifier. Binary number used to identify the format of the data fields.
SYMPTOM	2	47-36	Binary number indicating the error or special condition causing the entry to be logged. This field is unique for each MSGID.
DATA			The format of these fields varies from message to message, and depends on the value of the MSGID and SYMPTOM fields.

CYBER RECORD MANAGER W-WORD

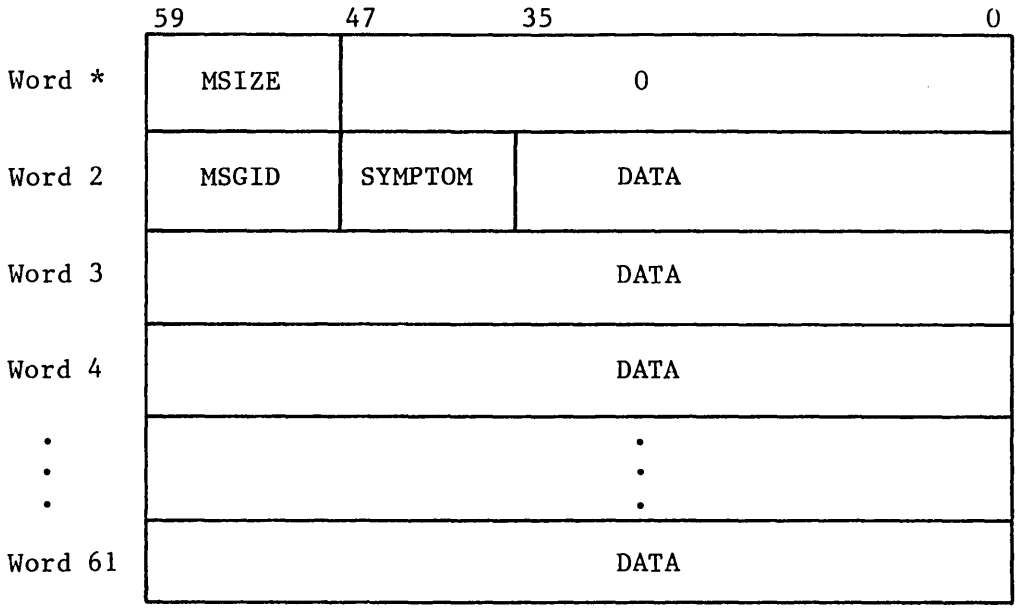
When the MAINLOG utility creates a user-accessible BML file, it places a CYBER Record Manager (CRM) W-word at the beginning of each BML message. This allows use of CRM to analyze the BML file. Refer to the CYBER Record Manager BAM Reference Manual listed in the preface for information on processing the W-word. The format of the CRM W-word is as follows.



Field	Position	Description
FLAGS	59-42	FLAG Field.
	(59)	Parity bit, used to maintain odd parity within the word.
	(58-42)	Set to zero.
PSIZE	41-24	The size of the previous BML message in CM words including the W-word for that message. The field is zero if there are no previous BML messages.
U	23-18	Unused.
WC	17-0	Number of CM words necessary to contain the BML message, not including WORD *.

CPU PROGRAM FORMAT

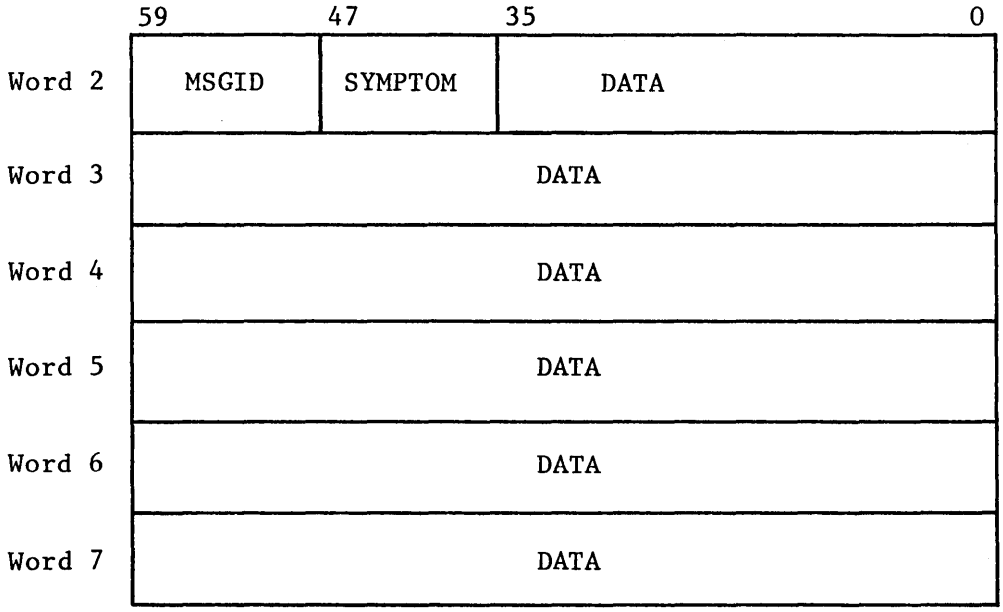
The general format of BML messages issued by a CPU program is below. After the CPU program issues a BML message, NOS strips off word * and adds words 0 and 1. When MAINLOG accesses the BML file, MAINLOG adds the CRM W-word.



Field	Word	Location	Description
MSIZE	*	59-48	Number of 60-bit words in the message, not including word *.
MSGID	2	59-48	Message code identifying message type.
SYMPTOM	2	47-36	Symptom code.
DATA			Data in these fields are dependent on the message type specified by MSGID and SYMPTOM.

PP PROGRAM FORMAT

The general format of BML messages issued by a PP program is below. After the PP program issues a BML message, NOS adds words 0 and 1. When MAINLOG accesses the BML file, MAINLOG adds the CRM W-word.

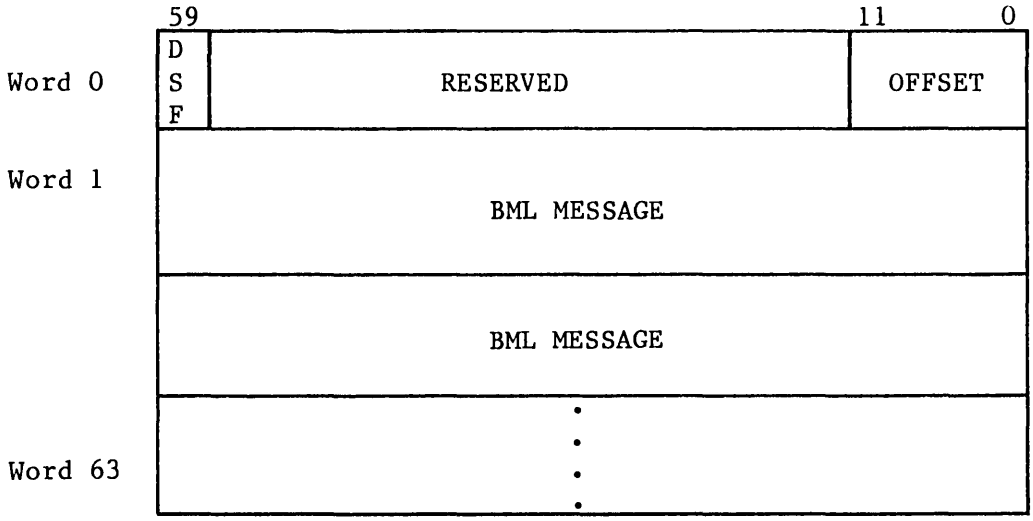


Field	Word	Location	Description
MSGID	2	59-48	Message code identifying message type.
SYMPTOM	2	47-36	Symptom code.
DATA			Data in these fields are dependent on the message type specified by MSGID and SYMPTOM.

BML DISK FORMAT

BML messages are written to disk in 64-word sectors. The first word of each sector is a control word which identifies the beginning of the first message in the sector. NOS uses this control word to recover from situations where a deadstart caused an incomplete BML message to be written in a preceding sector.

Each sector of the BML consists of the following format.



Field	Location	Description
DSF	59	Zero-level deadstart flag. This bit is set if a 0, 1, or 2 recovery level deadstart has occurred since the previous sector was written.
OFFSET	11-0	A 12-bit field containing a binary number for the word offset in the sector of the beginning of the first message.
BML MESSAGE		BML message as previously described in this section. The first and last BML messages in the sector may be incomplete and span sector boundaries.

MESSAGE TYPES

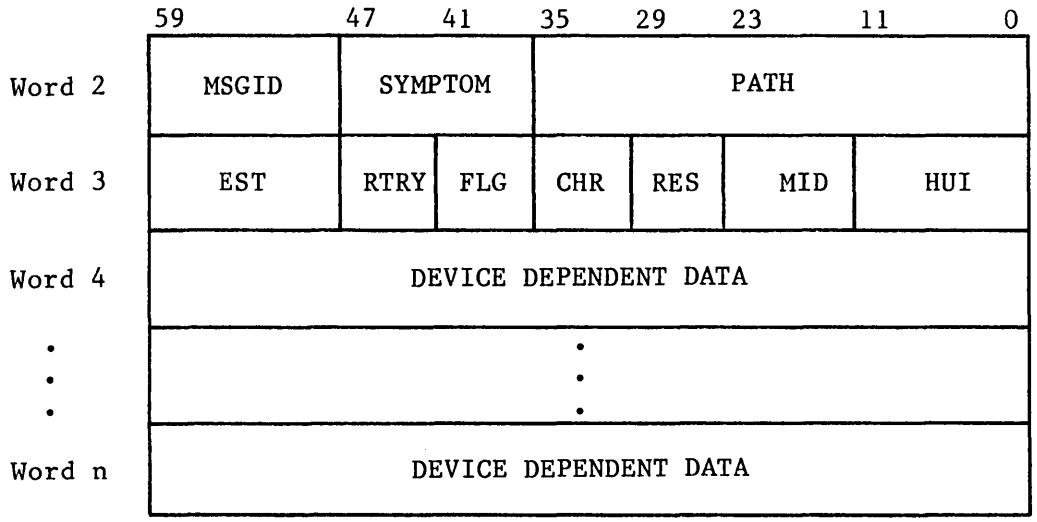
The message identification (MSGID) field contains a binary number that identifies the format of the remaining portion of the message. Message types and corresponding MSGID octal numbers are as follows.

Hardware Error/Usage Message	0001B-0377B
System Software Messages	0400B-0477B
CDC Reserve	0500B-0577B
QSS Software Messages	0600B-0677B
QSE Hardware Messages	0700B-0777B
CDC Reserve	1000B-7777B

Refer to Section 2 for a list of defined message identification numbers.

Hardware Error/Usage Messages

All hardware error/usage messages (octal MSGIDs between 0001B and 0377B) conform to the detailed format given below. Words 0 and 1 are described under General BML Message Structure in this section. Unused fields are zero-filled.

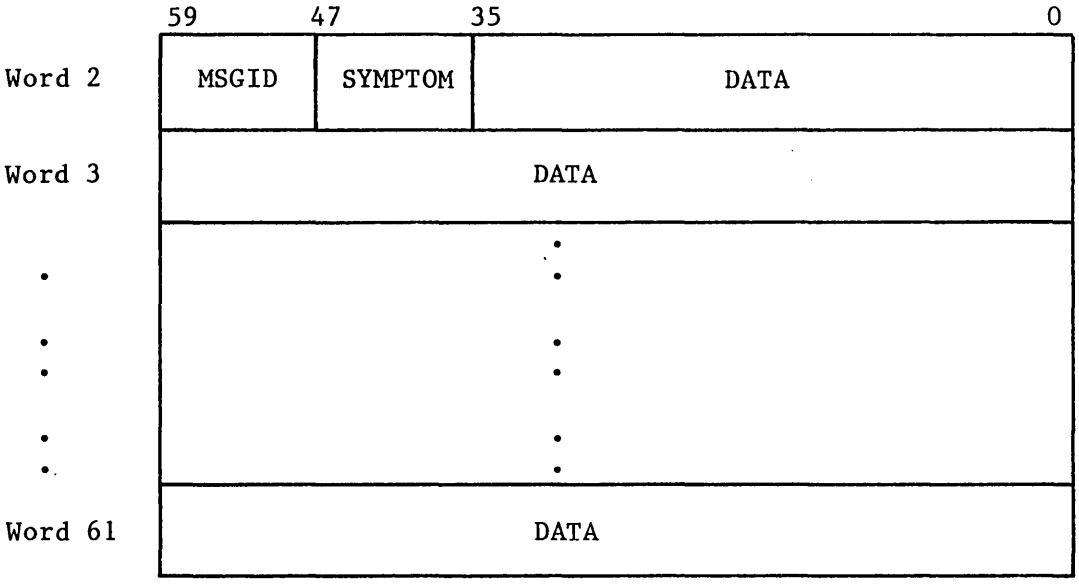


Field	Word	Location	Description
MSGID	2	59-48	Message identification. Octal value is between 0001B and 0377B.
SYMPTOM	2	47-36	Binary value indicating the error or special condition causing the entry to be logged. This field is independent for each MSGID.
PATH	2	35-0	Description of path used to access the equipment. Information in this field may include but is not limited to PP number, channel, equipment and unit number. Additional information to describe this path may be placed in the device dependent data field.
EST	3	59-48	A binary value that contains the EST ordinal number. It is zero when no EST ordinal exists for the equipment. Examples are LCN NADs, FSC adaptors, and status and control registers.
RTRY	3	47-42	Binary number indicating the number of attempts it took to recover, or the number of retries attempted before declaring the problem to be unrecoverable. If more than 63 entries were attempted RTRY is set to 77B.
FLG	3	41-36	Flag field. This field is a general-purpose utility field for indicators and conditions that may be expressed as a binary condition. Bit 36: 0 Recovered error. 1 Unrecovered error. Bit 37: 0 Read operation. 1 Write operation. Bit 38: 0 Final/only message. 1 Another message will follow. Bits 39 through 41: Reserved and zero-filled.

Field	Word	Location	Description
CHR	3	35-30	Channel number used to recover from an error. This may be different from the channel on which the error occurred.
RES	3	29-24	Reserved and zero-filled.
MID	3	23-12	Machine identifier indicating the mainframe that detected the error. The machine identifier is one or two left-justified, zero-filled, alphanumeric display code characters.
HUI	3	11-00	Hardware unique identifier. A binary value which identifies which device of a type is being reported on. This is not a unique identifier on an entire system. The HUI is by device type. The purpose of it is to enable differentiation of devices in a multimainframe environment even if the PATH description to the device is the same on each system. This allows running all BML files through the same HPA. This field should be set to zero if no HUI exists.
DEVICE DEPENDENT DATA			The data in these fields depends on the message type as indicated by MSGID and SYMPTOM.

System Software Messages

All system software messages (octal MSGIDs between 0400B and 0477B) conform to the detailed format given below. Words 0 and 1 are described under General BML Message Structure in this section.



Field	Word	Location	Description
MSGID	2	59-48	Message identifier.
SYMPTOM	2	47-36	Binary number indicating error or specified condition which caused the entry to be logged. This field is independent for each MSGID.
DATA			The data in these fields are dependent on the message type indicated by MSGID and SYMPTOM.

QSS Software Messages

All QSS software messages (octal MSGIDs between 0600B and 0677B) conform to the detailed message format described under System Software Messages in this section.

QSE Messages

All QSE hardware messages (octal MSGIDs between 0700B and 0777B) conform to the detailed message format described under Hardware Error/Usage Messages in this section.

MESSAGE IDENTIFICATION (MSGID) SUMMARY 2

Octal MSGID codes and corresponding devices are as follows. Device mnemonics for mass storage equipment are in parentheses.

MSGID	Device
0001B	Reserved
0002B	7054/844-2x (DI)
0003B	7054/844-4x (DJ)
0004B	7154/844-2x (DK)
0005B	7154/844-4x, 7155/844-4x (DL)
0006B	819 (DV/DW)
0007B	7155/885 (DM)
0010B	3330-1 (DX)
0011B	3330-11 (DY)
0012B	3350 (DZ)
0013B	3502 (DA)
0014B	DEMA/PFMD
0015B	AFMD/PFMD
0016B	Large Sector Serial FMD
0017B	7155/885 (DQ)
0020B	405
0021B	415
0022B	512
0023B	580-12
0024B	580-16
0025B	580-20
0026B	580-12/PFC
0027B	580-16/PFC
0030B	580-20/PFC
0031B-0041B	Reserved
0042B	667
0043B	Reserved
0044B	677
0045B	FSC 7-Track
0046B-0051B	Reserved
0052B	669
0053B	Reserved
0054B	679
0055B	Reserved
0056B	FSC 9-Track
0057B	639
0060B	6671
0061B	6676
0062B	2550-100/6671
0063B	2550-100/6676

MSGID	Device
0064B	2550
0065B	MFI
0066B	Reserved
0067B	6683
0070B	ECS I-DC135 DDP
0071B	ECS I-Coupler
0072B	ECS II-DC135 DDP
0073B	ECS II-Coupler
0074B	ECS I-DC145 DDP
0075B	ECS II-DC145 DDP
0076B	LCME Coupler
0077B	Unified Extended Memory (UEM)
0100B	MST
0101B	CSU
0102B	MSS Subsystem
0103B	MSA
0104B	MSS Coupler
0105B	MAS-FSC Error
0106B	MAS-M860 Error
0107B	MAS-Usage Data
0110B	834
0111B-0112B	Reserved
0113B	7165/895 (Full Track)
0114B	7165/895 (Half Track)
0115B	33800
0116B-0167B	Reserved
0170B	ESM-Coupler (ESM mode)
0171B	ESM-Low Speed Port (ESM mode)
0172B-0177B	Reserved
0200B	SCR-Models 71, 72, 73, and 74
0201B	SCR-Model 170
0202B	SCR-Model 176A
0203B	SCR-Model 176B
0204B	SCR-Model 865
0205B	SCR-Model 875
0206B	Reserved
0207B	ESM-Coupler (ECS mode)
0210B	ESM-Low Speed Port (ECS mode)
0211B	ESM
0212B	IOU-Models 810, 815, 825, and 830
0213B	IOU-Model 835
0214B	IOU-Models 845 and 855
0222B	Memory-Models 810, 815, 825, and 830
0223B	Memory-Model 835
0224B	Memory-Models 845 and 855
0232B	Processor-Models 810, 815, 825, and 830
0233B	Processor-Model 835
0234B	Processor-Models 845 and 855
0250B	Diagnostic CPU
0251B	Diagnostic PP

MSGID	Device
0252B	Diagnostic MALET
0253B	Diagnostic Other
0254B-0277B	Reserved
0300B	Local NAD
0301B	Remote NAD
0310B	Cyberplus
0400B	Software Initialization
0401B	Hardware Initialization
0402B	On-line Software Reconfiguration
0403B	On-line Hardware Reconfiguration
0404B	Operator Action
0405B	Maintenance Action
0406B	Dayfile-Related Message
0407B	Hardware Configuration
0410B	CYBERLOG Message
0411B-0477B	Reserved

COMMON SYMPTOM CODE SUMMARY 3

The following list provides a brief description for common octal symptom codes.

Symptom Code	Description
0001B	Channel active.
0002B	Channel inactive.
0003B	Channel full.
0004B	Channel empty.
0005B	Incomplete data transfer.
0006B	External reject.
0007B	Internal reject.
0010B	Transmission parity.
0011B	Channel stays active after inactivate.
0012B	Cannot connect.
0013B	Channel stays inactive after activate.
0014B	DCN.
0015B	ACN.
0016B	MCN.
0017B	OAN.
0020B	IAN.
0021B	FCN.
0022B	Conversion memory error.
0023B	Channel ill.
0024B	Channel parity.
0025B	Function reject.
0026B	6681 internal/external reject.
0027B-0037B	Reserved.
0040B	Read parity.
0041B	Write parity.
0042B	No EOP on I/O.
0043B	Unit not ready.
0044B	Unit hung busy.
0045B	Memory parity error loading.
0046B	Memory parity error data.
0047B	Firmware load (function timeout).
0050B	Firmware dead (controller stop).
0051B	Cannot autoload.
0052B	Off equipment.
0053B	On equipment.
0054B	Controlware serial number.
0055B	Restart controlware.
0056B	Device reserved.
0057B	Abnormal end operation interrupt.

Symptom Code	Description
0060B	Cumulative status.
0061B	Temperature abnormal.
0062B	Sync error.
0063B	RAM parity error.
0064B	Diagnostic error.
0065B	Memory flag.
0066B	Channel reserved.
0067B-0073B	Reserved.
0074B	General status.
0075B	Examine detail status.
0076B	Undefined error.
0077B	Copyright.

MSGID/SYMPTOM CODE COMBINATIONS 4

The following entries list meanings associated with selected combinations of MSGID and symptom codes. Device mnemonics for mass storage equipment are in parentheses in the MSGID column.

MSGID	Symptom Code	Meaning
844-2x		
0002B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
844-4x		
0003B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
844-2x		
0004B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).

MSGID	Symptom Code	Meaning
844-4X		
0005B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
819		
0006B	1040B	Ready parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1100B	Address error (detected by 6DE).
	3501B	Unrecovered data error (detected by 1HP).
	3502B	Recovered data error (detected by 1HP).
	3503B	Hardware error (detected by 1HP).
	3504B	Software error (detected by 1HP).
885 (DM)		
0007B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
33301		
0010B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).

MSGID	Symptom Code	Meaning
3330-11		
0011B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
3350		
0012B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
33502		
0013B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
DEMA/PFMD		
0014B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).

MSGID	Symptom Code	Meaning
DEMA/PFMD		
0014B	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1100B	Address error (detected by 6DE).
	3001B	Channel active (detected by 1HP).
	3002B	Channel inactive (detected by 1HP).
	3003B	Channel full (detected by 1HP).
	3005B	Incomplete data transfer (detected by 1HP).
	3011B	Channel stays active after channel disconnect (detected by 1HP).
	3013B	Channel stays inactive after channel activate (detected by 1HP).
	3024B	Channel parity error on input (detected by 1HP).
	3050B	Firmware dead (detected by 1HP).
	3051B	Cannot autoload controller (detected by 1HP).
	3063B	RAM parity error (detected by 1HP).
	3074B	General Status (detected by 1HP).
	3075B	Detailed status (detected by 1HP).
AFMD/PFMD		
0015B	3001B	Channel active (detected by 1HP).
	3002B	Channel inactive (detected by 1HP).
	3003B	Channel full (detected by 1HP).
	3005B	Incomplete data transfer (detected by 1HP).
	3011B	Channel stays active after channel disconnect (detected by 1HP).
	3013B	Channel stays inactive after channel activate (detected by 1HP).
	3024B	Channel parity error on input (detected by 1HP).
	3050B	Firmware dead (detected by 1HP).
	3051B	Cannot autoload controller (detected by 1HP).
	3063B	RAM parity error (detected by 1HP).
	3074B	General Status (detected by 1HP).
	3075B	Detailed status (detected by 1HP).
885 (DQ)		
0017B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).

MSGID	Symptom Code	Meaning
885 (DQ)		
0017B	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
MTS 7-Track		
0042B	0100B	Corrected tape errors.
ATS 7-Track		
0044B	0100B	Corrected tape errors.
FSC 7-Track		
0045B	0100B	Corrected tape errors.
MTS 9-Track		
0052B	0100B	Corrected tape errors.
ATS 9-Track		
0054B	0100B	Corrected tape errors.
FSC 9-Track		
0056B	0100B	Corrected tape errors.
ISMT 9-Track		
0057B	0100B	Corrected tape errors.
MFI		
0065B	0051B	Cannot load.
6683 SATELLITE COUPLER		
0067B	0005B	Receive block length failure.
	0011B	Hardware/software failure.
	0076B	Undefined error.
	0101B	Illegal coupler status.
	0102B	Channel left active.
	0103B	Send transmission broken.
	0104B	Receive block in valid.
	0105B	Illegal control/length byte.
	0106B	Coupler/channel test failed.

MSGID	Symptom Code	Meaning
ECS I-DC135 DDP		
0070B	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP.
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS I-COUPLER		
0071B	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS II-DC135 DDP		
0072B	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS II-COUPLER		
0073B	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).

MSGID	Symptom Code	Meaning
ECS II-COUPLER		
0073B	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS I-DC145 DDP		
0074B	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP.
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ECS II-DC145 DDP		
0075B	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP.
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
LCME		
0076B	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).

MSGID	Symptom Code	Meaning
Unified Extended Memory (UEM)		
0077B	1500B	Address error (detected by 6DX).
MSS/MST		
0100B	0100B	Nonexistent device.
	0110B	Block number mismatch.
	0200B	Cannot assign EST.
	0320B	PRU format error.
	0323B	Error on advance.
	0325B	AGC gain check.
	0326B	Write protected.
	0330B	ISD power off.
	0332B	Advance command reject.
	0333B	General command reject.
	0334B	Could not clear device.
	0337B	Device unusable.
	0340B	False equipment check.
	0343B	False intervention required.
	0347B	Contaminated head check.
	0350B	Write current check.
	0351B	Permanent unit check.
	0352B	Cannot load into columns.
	0353B	Cannot unload tape.
	0354B	MST dropped ready.
	0355B	Equipment check (advance).
	0356B	MST equipment check.
	0360B	AGC check on write.
	0361B	Data check on write.
	0362B	AGC check on read.
	0363B	Data check on read.
	0364B	Write error (not write function).
	0365B	2 tracks corrected.
	0366B	Seek reserve reject.
	0367B	Read error (not read function).
	0370B	Cannot seek reserve device.
	0403B	EOS on write recovery.
	0407B	Device siezed on other access.
	0410B	Write reconnect error.
	0412B	MST tachometer error.
	0413B	Busy during poll select.
	0414B	Data not written, no error.
	1200B	Usage information.

MSGID	Symptom Code	Meaning
MSS/CSU		
0101B	0100B	Nonexistent device.
	0200B	Cannot assign EST.
	0320B	PRU format error.
	0327B	Nothing in input driver.
	0331B	Mount command reject.
	0333B	General command reject.
	0334B	Count not clear device.
	0337B	Device unusable.
	0340B	False equipment check.
	0342B	CSU equipment check.
	0343B	False intervention required.
	0351B	Permanent unit check.
	0357B	Pick/put failure.
	0366B	Seek reserve reject.
MSS/CSU		
0101B	0371B	Picker positioning error.
	0372B	Picker positioning may be bad.
	0373B	False pick failure.
	0374B	Move xy pick failure.
	0375B	Cartridge xy empty.
	0376B	Put failure (to MST).
	0377B	Put to full xy.
	0400B	Unknown pick/put failure.
	1200B	Usage information.
MSS/SUBSYSTEM		
0102B	0101B	Request timed out.
	0102B	Read data error.
	0103B	Transfer length error.
	0114B	Channel timeout.
	0201B	Block read check bad.
	0202B	RD deadman timeout.
	0203B	WR deadman timeout.
	0205B	Data header error.
	0206B	CM buffer overrun.
	0207B	CM buffer underrun.
	0401B	Hardware overrun.
	0404B	Busout check.
	0405B	Busout check (load okay).
	0406B	Busout check (mount).
	0415B	Invalid file mark response.
	1200B	Usage Information.

MSGID	Symptom Code	Meaning
MSS/MSA		
0103B	0104B	Cylinder address register failure.
	0105B	HD address reg failure.
	0112B	HOT interface.
	0113B	Bad 3 of 6 return.
	0301B	Busy or select alert 1.
	0302B	Check 2 error.
	0303B	No tag valid (read).
	0304B	Select alert 1 (read).
	0305B	Read (no synchronization in).
	0306B	No busy (start seek).
	0307B	No read normal end.
	0310B	No select alert 1 (write).
	0311B	Select alert 2 (static).
	0312B	Write (no synchronization in).
	0313B	Write (no normal end).
	0314B	Select alert 1 (write).
	0315B	Write (no tag valid).
	0316B	Long busy tag timeout.
	0317B	Busy during select.
	0322B	False unit accept.
	0324B	MST not ready, command reject.
	0335B	Cannot read sense.
	0341B	MSA equipment check.
	0346B	Unknown device equipment check.
	0411B	Busy on CPU selection.
	1200B	Usage Information.
MSS/COUPLER		
0104B	0106B	Coupler overrun.
	0107B	Coupler overrun.
	0111B	Coupler parity error.
	0204B	Other coupler channel busy.
	1200B	Usage Information.
MAS-FSC ERRORS		
0105B	0001B	Illegal function.
	0002B	Data length error.
	0003B	Control word error.
	0004B	Buffer argument error.
	0005B	Header/trailer error.
	0006B	End of volume.
	0007B	Illegal unit number.
	0010B	Buffer timeout error.
	0011B	Tape bottom right.
	0012B	Terminate flag detected.

MSGID	Symptom Code	Meaning
MAS-FSC ERRORS		
0105B	0020B	Status error.
	0021B	Channel hung on input.
	0022B	Channel hung on output.
	0023B	Function timeout.
	0024B	No end of operation.
	0025B	Channel malfunction.
	0026B	Channel parity error.
	0027B	FSC memory parity error.
	0030B	FSC not running.
	0031B	FSC abnormal.
	0032B	FSC diagnostic failure.
	0033B	Checksum error (CM driver).
MAS-M860 ERRORS		
0106B	0036B	Error log overflow.
	0060B	CTF, DTI/DTO errors.
	0100B	DRD,DRC,DIF,DTI/DTO errors device/diagnostic driver.
	0101B	Accessor errors, device/diagnostic driver.
	0103B	Device/path status change.
	0104B	ALT,DRD,DRC,DIF,DTI/DTO errors device/diagnostic driver.
	0107B	Device driver software error.
	0140B	CPU (memory hardware detected errors).
	0141B	Software errors.
MAS-USAGE		
0107B	1200B	Usage type data.
834		
0110B	0024B	Channel parity error (detected by 6DI).
	0040B	Read parity error (detected by 6DI).
	0041B	Write parity error (detected by 6DI).
	0043B	Device not ready (detected by 6DI).
	0050B	Firmware dead (detected by 6DI).
	0051B	Cannot autoload controller (detected by 6DI).
	0056B	Unit reserve error (detected by 6DI).
	0063B	RAM parity error (detected by 6DI).
	0100B	Address error (detected by 6DI).
	0102B	Status error (detected by 6DI).
	0103B	Controller reserve error (detected by 6DI).
	0200B	On-line diagnostic message (detected by 6DI).

MSGID	Symptom Code	Meaning
SCR-170 Models		
0200B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
SCR-Model 700		
0201B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
SCR-Model 176A		
0202B	0100B	Single bit, corrected occurence.
	0101B	Single bit, summary table.
	0104B	LCME single bit, summary table.
SCR-Model 176B		
0203B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
	0104B	LCME single bit, summary table.
SCR-Model 865		
0204B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
SCR-Model 875		
0205B	0100B	Single bit, corrected occurrence.
	0101B	Single bit, summary table.
ESM-COUPLER		
0207B	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).

MSGID	Symptom Code	Meaning
ESM-LOW SPEED PORT		
0210B	0440B	Read parity error (detected by 6DP).
	0441B	Write parity error (detected by 6DP).
	0450B	Firmware dead (detected by 6DP).
	0500B	Address error (detected by 6DP).
	0502B	Status error (detected by 6DP).
	1040B	Read parity error (detected by 6DE).
	1041B	Write parity error (detected by 6DE).
	1043B	Device not ready (detected by 6DE).
	1100B	Address error (detected by 6DE).
	2040B	Read parity error (detected by 1MC).
	2041B	Write parity error (detected by 1MC).
	2440B	Read parity error (detected by ELM).
	2441B	Write parity error (detected by ELM).
ESM		
0211B	0100B	ESM SECDED error.
IOU-Models 810, 815, 825, and 830		
0212B	0100B	IOU error.
	0110B	Virtual state uncorrected IOU.
	0111B	Virtual state uncorrected IOU (system monitor unit).
	0112B	Express deadstart dump.
	0200B	Critical error log.
IOU-Model 835		
0213B	0100B	IOU error.
	0110B	Virtual state uncorrected IOU.
	0111B	Virtual state uncorrected IOU (system monitor unit).
	0112B	Express deadstart dump.
	0200B	Critical error log.
IOU-Models 845 and 855		
0214B	0100B	IOU error.
	0110B	Virtual state uncorrected IOU.
	0111B	Virtual state uncorrected IOU (system monitor unit).
	0112B	Express deadstart dump.
	0200B	Critical error log.

MSGID	Symptom Code	Meaning
MEMORY-Models 810, 815, 825, and 830		
0222B	0100B	Memory corrected.
	0101B	Single bit summary table.
	0104B	Uncorrected error.
	0105B	Express deadstart dump.
	0110B	Virtual state CM error.
	0200B	Critical error log.
MEMORY-Model 835		
0223B	0100B	Memory corrected.
	0101B	Single bit summary table.
	0104B	Uncorrected error.
	0105B	Express deadstart dump.
	0110B	Virtual state CM error.
	0200B	Critical error log.
MEMORY-Models 845 and 855		
0224B	0100B	Memory corrected.
	0101B	Single bit summary table.
	0104B	Uncorrected error.
	0105B	Express deadstart dump.
	0110B	Virtual state CM error.
	0200B	Critical error log.
PROCESSOR-Models 810, 815, 825 and 830		
0232B	0100B	Processor corrected error.
	0113B	Express deadstart dump.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state process detected uncorrected error (DUE) with process damaged.
	0145B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.

MSGID	Symptom Code	Meaning
PROCESSOR-Model 835		
0233B	0100B	Processor corrected error.
	0113B	Express deadstart dump.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state process detected uncorrected error (DUE) with process damaged.
	0145B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.
PROCESSOR-Models 845 and 855		
0234B	0100B	Processor corrected error.
	0113B	Express deadstart dump.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state process detected uncorrected error (DUE) with process damaged.
	0145B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state process detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.
DUAL STATE		
0240B	0110B	CM assigned to NOS/VE.
	0111B	CM returned to NOS.
	0112B	PP assigned to NOS/VE.
	0113B	PP returned to NOS.
	0120B	Deadstart PP error.
	0121B	Idle PP error.

MSGID	Symptom Code	Meaning
LOCAL NAD		
0300B	0100B	NAD error log.
	2100B	Local NAD connection error.
	2101B	NAD off (processor stopped).
	2102B	NAD off (processor stopped with halt code).
	2110B	Function timeout.
	2111B	Channel inactive after activate.
	2112B	Data timeout.
	2113B	Prime timeout.
	2114B	Flag timeout.
	2115B	Transfer error.
	2116B	Abnormal path status.
	2117B	Abnormal response code.
	2120B	Control message length error.
	2121B	Parameter length error.
	2122B	Transfer length error.
	2140B	Local read error (block error).
	2141B	Local read error (host ABN error).
	2142B	Local read error (block too large).
	2143B	Local read error (data length error).
	2144B	Local read error (block fragment without EOR/EOI).
	2145B	Local read error (network ABN error).
	2146B	Local read error (block not 60-bit multiple).
	2150B	Local write error (block error).
	2151B	Local write error (host ABN error).
	2152B	Local write error (block too large).
	2153B	Local write error (data length error).
	2154B	Local write error (block fragment without EOR/EOI).
	2155B	Local write error (network ABN error).
	2156B	Local write error (block not 60-64 multiple).
REMOTE NAD		
0301B	0100B	NAD error log.
	2160B	Header length error.
	2161B	Bad data block length.
	2162B	Bad PRU data block.
	2163B	Abnormal response.
	2164B	Connect in progress timeout.
	2170B	Remote read error (block error).
	2171B	Remote send error (host ABN error).
	2172B	Remote send error (block too large).
	2173B	Remote read error (data length error).
	2174B	Remote read error (block fragment without EOR/EOI.

MSGID	Symptom Code	Meaning
REMOTE NAD		
0301B	2175B	Remote read error (network ABN error).
	2176B	Remote read error (block not 60-bit multiple).
SOFTWARE INITIALIZATION		
0400B	0100B	System title.
	0101B	System version name.
HARDWARE INITIALIZATION		
0401B	0100B	Pack serial number (7X5X controller, ISD adapter, FSC adapter).
	0101B	Controlware revision level (7X5X controller, ISD adapter, FSC adapter).
	0102B	Operator initiated load (7X5X controller, ISD adapter, FSC adapter).
	0103B	System initiated load (7X5X controller, ISD adapter, FSC adapter).
	0104B	COS revision level.
	0105B	Operator initiated load (COS).
	0106B	System initiated load (COS).
	0110B	MFI initialized.
DAYFILE		
0406B	0101B	BML created.
	0102B	BML accessed.
	0103B	BML Terminated.
	0105B	BML Read error.
	0107B	BML Data lost.
	0113B	BML accesssed by HPA.
PROCESSOR INITIALIZATION		
0407B	0100B	Microcode/EI names.
MAINFRAME STATUS		
0410B	0100B	Summary of error counters.

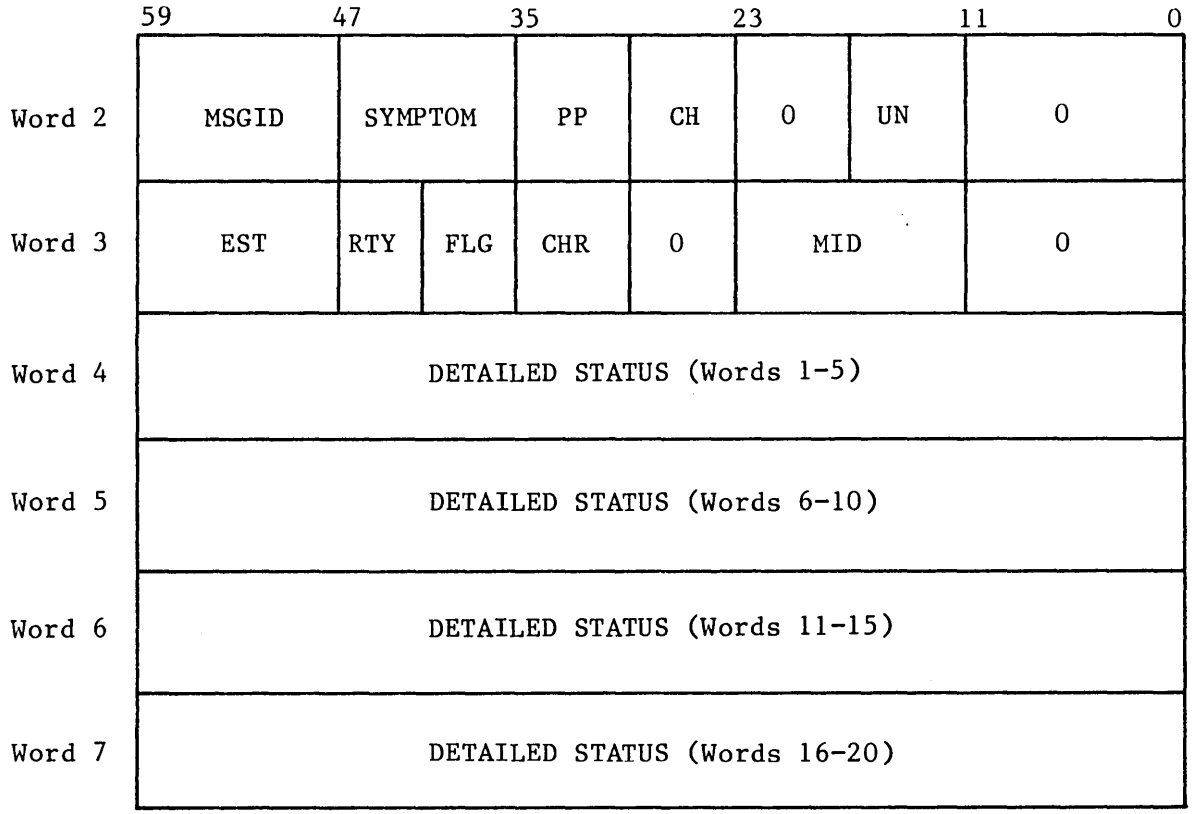
BML MESSAGE FORMATS (IN MSGID ORDER) 5

The following entries describe the format of messages issued to the BML file. MSGID and SYMPTOM codes are listed in octal. Parentheses indicate hexadecimal numbers.

ROTATING MASS STORAGE	MSGID	0002B, 0003B, 0004B, 0005B, 0007B, 0010B, 0011B, 0012B, 0013B, 0014B, 0017B
844-2X, 844-4X, 885, 3330-1, 3330-11, 3350, 33502, DEMA	SYMPTOM	0024B, 0040B, 0041B, 0043B 0050B, 0051B, 0056B, 0063B, 0100B, 00102B, 0103B

6DI will issue the following pair of BML messages once per rotating mass storage error. The pair is issued whether the error is recovered or unrecovered. This insures all errors are reported to the last general and detailed status taken.

The first message has the following form.



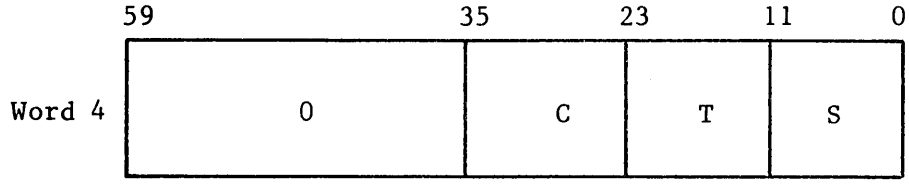
The continuation message has the following form.

	59	47	35	23	11	0
Word 2	MSGID	SYMPTOM	PP	CH	0 UN	0
Word 3	EST	RTY FLG	CHR	0	MID	0
Word 4	FLAGS	0			FUNC	GS

Field	Word	Location	Description
MSGID	2	59-48	Message identifier. 0002B 844-2X (DI). 0003B 844-4X (DJ). 0004B 844-2X (DK). 0005B 844-4X (DL). 0007B 885 (DM). 0010B 3330-1 (DX). 0011B 3330-11 (DY). 0012B 3350 (DZ). 0013B 33502 (DA). 0014B DEMA PFMD (DB). 0017B 885 (DQ).
SYMPTOM	2	47-36	Symptom code. 0024B Channel parity error (detected by 6DI). 0040B Read parity error (detected by 6DI). 0041B Write parity error (detected by 6DI). 0043B Device not ready (detected by 6DI). 0050B Firmware dead (detected by 6DI). 0051B Cannot autoload controller (detected by 6DI). 0056B Unit reserve error (detected by 6DI). 0063B RAM parity error (detected by 6DI).

Field	Word	Location	Description (Continued)
			0100B Address errors (detected by 6DI). 0102B Status errors (detected by 6DI). 0103B Controller reserve error (detected by 6DI).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0100B (address error).
UN	2	17-12	Physical unit number of unit on which error was detected. Not meaningful for symptom code 0100B (address error).
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Retry count.
FLG	3	41-36 (41-39) (38) (37) (36)	Flag field. Reserved (zero). Set if first message of pair, clear if second. Set if write, clear if read. Set if unrecovered error, clear if recovered error.
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom code 0100B (address errors).
MID	3	23-12	Machine identifier in display code.
DETAILED STATUS	4-7	59-0	Detailed status. See the CDC 7155 Disk Storage Subsystem Reference Manual, 7155-401 Disk Storage Subsystem Hardware Reference Manual, and 65206-2 FSC Hardware Reference Manual for more information on the format of detailed status. If all four words are zero, the detailed status is not available.

Field	Word	Location	Description (Continued)
			There is no detailed status in the case of an address error (SYMPTOM 0100B). Instead, word 4 contains the address in error in the format.



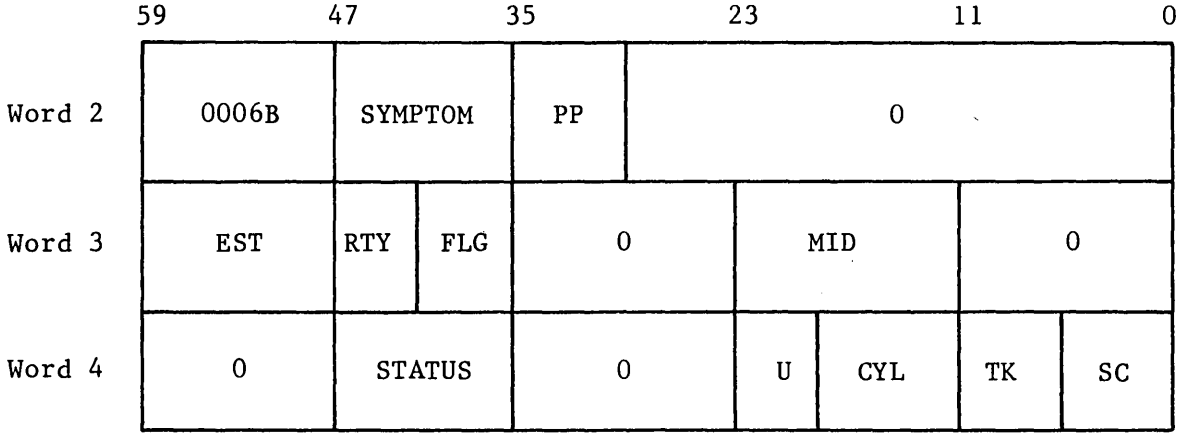
where:

C = Cylinder.
T = Track.
S = Sector.

FLAGS	4	59-48	Flag field.
		(59-50)	Reserved (zero).
		(49)	Set if control module controlware reload occurred.
		(48)	Set if channel controlware reload occurred.
FUNC	4	23-12	Last function issued before a function timeout. Valid only for symptom codes 0024B, 0050B, 0051B and 0063B.
GS	4	11-0	General status. See the CDC 7155 Disk Storage Subsystem Reference Manual, 7155-401 Disk Storage Subsystem Hardware Reference Manual, and 65206-2 FSC Hardware Reference Manual for more information on the format of general status.

ROTATING MASS STORAGE	MSGID 0006B
819	SYMPTOM 1040B, 1041B, 1100B

6DE issues the following message when the PIOM monitor function reports an unrecoverable error on a DB device even though CPUMTR also reports the error to the BML. This message is issued solely to report that a PP attempted to read the sector in error. Since CPUMTR reads data from these disks in large blocks, sectors may be read which no PP will ever need.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error (detected by 6DE). 1041B Write parity error (detected by 6DE). 1100B Address error (detected by 6DE).
PP	2	35-30	Number of the PP which detected the error.
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of attempted retries.
FLG	3	(41-36)	Flags.
		41-38	Reserved (zero).
		37	Set if write operation, clear if read operation.
		36	Set if unrecovered error, clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.

Field	Word	Location	Description (Continued)
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when error occurred. 1: Unrecoverable hardware error (UHES). 4: Unrecoverable parity error (UPES).
U	4	23-22	Unit number.
CYL	4	21-12	Cylinder.
TK	4	11-6	Track.
SC	4	5-0	Sector.

ROTATING MASS STORAGE	MSGID 0006B
819	SYMPTOM 3501B, 3502B, 3503B, 3504B

The first message has the following form.

	59	47	35	23	11	0
Word 2	0006B	SYMPTOM	FP	CH	0	UN	0
Word 3	EST	RTRY	FLG	CHR	0
Word 4	PPID	COUNT	C1	C2	C3
Word 5	C4	C5	C6	C7	C8
Word 6	C9	D1	D2	D3	D4
Word 7	D5	E1	E2	E3	E1

Continuation messages have the following form.

	59	47	35	23	11	0
Word 2	0006B	SYMPTOM	FP	CH	0	UN	0
Word 3	EST	RTRY	FLG	FP	0
Word 4	PPID	0	E2	E3	E1
Word 5	E2	E3	E1	E2	E3
Word 6	E1	E2	E3	E1	E2
Word 7	E3	E1	E2	E3	E4

Field	Location	Description
SYMPTOM	47-36	Symptom code. 3501B Unrecovered data error. 3502B Recovered data error. 3503B Hardware error. 3504B Software error.
FP	35-30	First level PP (FLPP) number.
CM	39-24	FLPP data channel (2 or 6).
UN	17-12	Unit number.
EST	55-48	EST ordinal.
RTRY	47-42	Retry count.
FLG	41-36	Flags. Bit 36: Recovered/unrecovered. Bit 37: Read/write. Bit 38: Last/continuation message.
CHR	35-30	Recovery channel.
PPID	59-48	Input register address.
COUNT	47-36	Error data byte count.
C1	11	Request aborted.
	10	Unrecovered data transfer error.
	9	Operation completed successfully.
	8	Controller dies (no resume on control channel).
	7	No resume to record flag sent to disk.
	6	Slave aborted the request.
	5	Unit never comes on-cylinder.
	4	Unit down.
	3	Channel down.
	2	Request parameter error.
	1	Hardware error.
	0	Partner died.

Field	Location	Description (Continued)
C2	11-6	Function code. 0: Read. 1: Write. 2: Write check.
	5	Write position verify.
	4-0	Physical unit number. Bits 0-1: Physical unit address. Bit 2: 0-Primary controller. 1-Secondary controller.
C3	9-0	Cylinder address.
C4	11-0	0: DV device. 1: DW device.
C5	11-0	Total number of PP error packet words.
C6	9-6	Head group.
	4-0	Starting sector.
C7	6-0	Sector count. Number of sectors to transfer for request.
C8	11-10	Previous request on this unit.
	9-0	Previous cylinder address.
C9	9-6	Previous head group.
	4-0	Previous starting sector.
D1	11	Slave encountered error.
	10	Error during read/write of data. See controller status for type of error.
	9	Not-on-cylinder status occurred without previous position function.
	8	Unused.
	7	Subsystem busy.
	6	Error correction attempted. Fields E1, E2, and E3 are defined by F1, F2 and F3 below. These fields can be repeated.

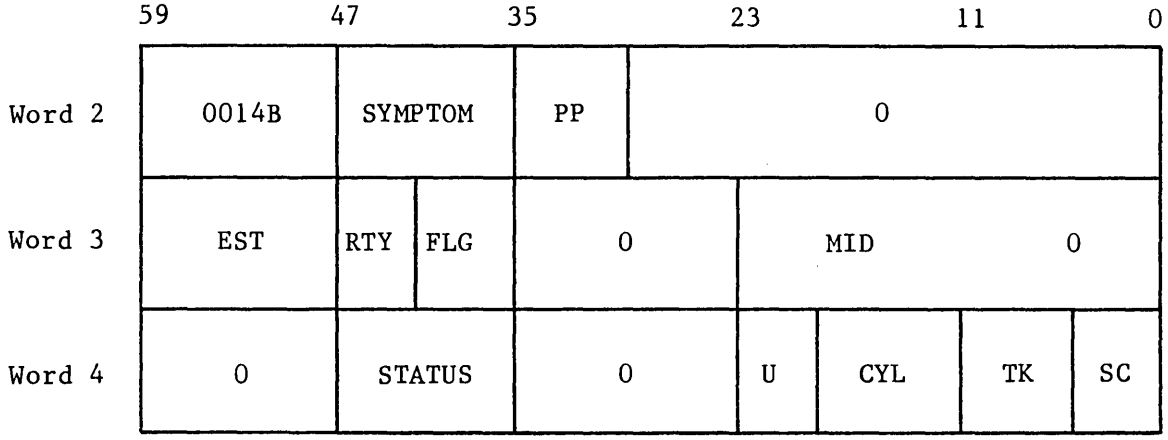
Field	Location	Description (Continued)
	5	Unit not ready (maximum includes words E1 and E2).
	4	Bad header address. Unit, track, head or sector in header not desired position (includes words E1 and E2).
	3	Cylinder address in cylinder status not desired cylinder (includes word E1).
	2	Head address in head status not desired head (includes word E1).
	1	Unit number in controller status not desired unit or controller error during seek.
	0	Seek error.
D2	11-0	Subsystem status.
D3	11-0	Controller status (if controller error).
D4	9-0	Retry count. From this value the succeeding offset position or read strobe position can be computed.
D5	9-6	Head group expected.
	4-0	Expected sector address.

The format of the E1, E2 and E3 fields depends on the data returned in D1. See the description of D1 to determine which definition of E1, E2, E3 applies.

Field	Location	Description
E1	47-36	Cylinder and/or head status if bad. First word of header if bad unit fault status.
E2	35-24	Interlock status, or head and sector in header if bad.
F1		Error code 1 status.
F2		Error code 2 status.
F3		Error code 3 status.

ROTATING MASS STORAGE	MSGID 0014B
DEMA/PFMD	SYMPTOM 1040B, 1041B, 1100B

6DE issues the following message when the PIOM monitor function reports an unrecoverable error on a DB device even though CPUMTR also reports the error to the BML. This message is issued solely to report that a PP attempted to read the sector in error. Since CPUMTR reads data from these disks in large blocks, sectors may be read which no PP will ever need.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error (detected by 6DE). 1041B Write parity error (detected by 6DE). 1100B Address error (detected by 6DE).
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36	Flag field.
		(41-38)	Reserved (zero).
		(37)	Set if write operation, clear if read operation.
		(36)	Set if unrecovered error, clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.

Field	Word	Location	Description (Continued)
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when error occurred. 1 Unrecoverable hardware error (UHES). 4 Unrecoverable parity error (UPES).
U	4	23-22	Unit number.
CYL	4	21-12	Cylinder.
TK	4	11-6	Track.
SC	4	5-0	Sector.

ROTATING MASS STORAGE	MSGID 0014B
DEMA/PFMD	SYMPTOM 3001B, 3002B, 3003B, 3005B 3011B, 3013B, 3024B, 3050B 3051B, 3063B

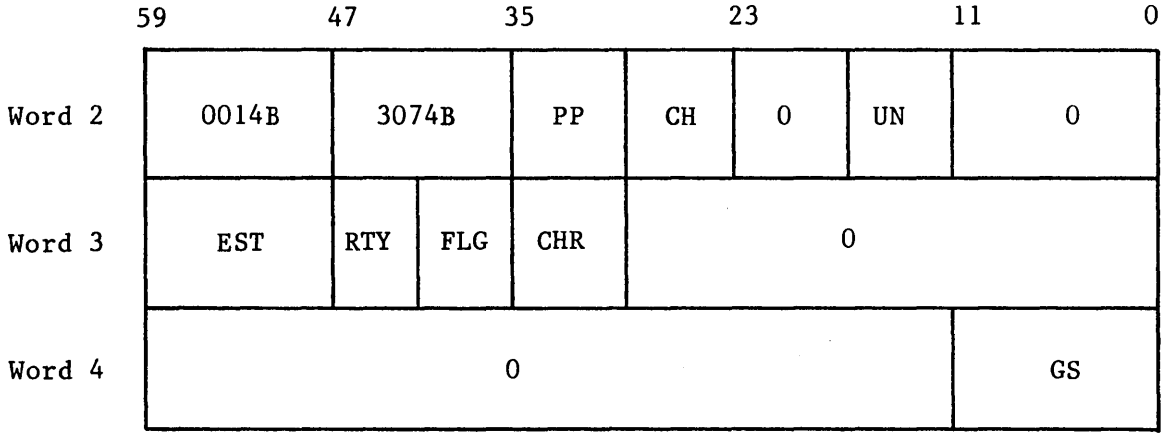
The following message is issued whenever an error is encountered on a DEMA device.

	59	47	35	23	11	0
Word 2	0014B	SYMPTOM	PP	CH	0 UN	0
Word 3	EST	RTY FLG	CHR	0		

Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 3001B Channel active. 3002B Channel inactive. 3003B Channel full. 3005B Incomplete data transfer. 3011B Channel stays active after channel disconnect (DCN). 3013B Channel stays inactive after channel activate (ACN). 3024B Channel parity error on input. 3050B Firmware dead. 3051B Cannot autoload controller. 3063B RAM parity error.
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which error was detected.
UN	2	17-12	Unit on which error was detected.
EST	3	59-48	EST ordinal of equipment.
RTRY	3	47-42	Number of retries attempted.
FLG	3	41-36 (36) (37)	Flag field. Set if unrecovered, clear if recovered. Set if write operation, clear if read operation.
CHR	3	35-30	Channel used for recovery.

ROTATING MASS STORAGE	MSGID 0014B
DEMA/PFMD	SYMPTOM 3074B

This BML message appears immediately in front of the detailed status message (MSGID 0010B, SYMPTOM 3075B). IHP issues this message.



Field	Word	Location	Description
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which error was detected.
UN	2	17-12	Unit on which error was detected.
EST	3	59-48	EST ordinal of equipment.
RTRY	3	47-42	Number of retries attempted.
FLG	3	41-36	Flag field.
		(36)	Set if unrecovered error, clear if recovered error.
		(37)	Set if write operation, clear if read operation.
		(41-38)	Reserved.
CHR	3	35-30	Channel used for recovery.
GS	4	11-0	General status of unit at time of initial error.

ROTATING MASS STORAGE	MSGID 0014B
DEMA/PFMD	SYMPTOM 3075B

This message always follows a general status message (MSGID 0014B, SYMPTOM 3074B). 1HP issues this message.

	59	47	35	23	11	0
Word 2	0014B	3075B	PP	CH	0 UN	0
Word 3	EST	RTY FLG	CHR	0		
Word 4	DETAIL STATUS (Words 1-5)					
Word 5	DETAIL STATUS (Words 6-10)					
Word 6	DETAIL STATUS (Words 11-15)					
Word 7	DETAIL STATUS (Words 16-20)					

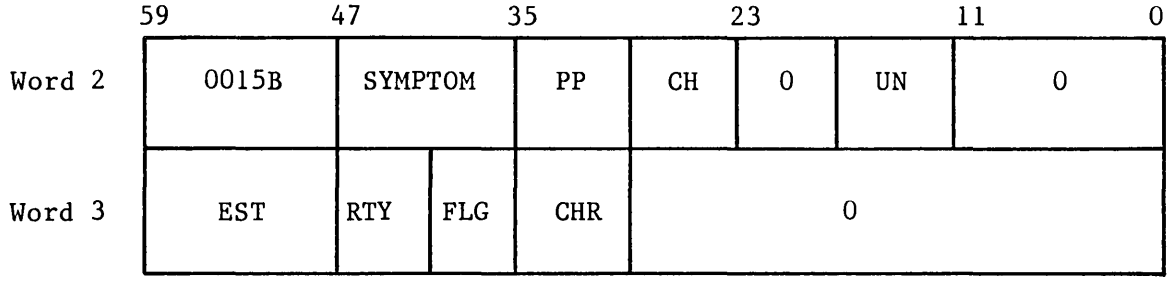
Field	Word	Location	Description
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which error was detected.
UN	2	17-12	Unit on which error was detected.
EST	3	59-48	EST ordinal of equipment.
RTRY	3	47-42	Number of retries attempted.

Field	Word	Location	Description (Continued)
FLAG	3	41-36	Flag field.
		(36)	Set if unrecovered, clear if recovered.
		(37)	Set if write, clear if read.
		(41-38)	Reserved.
CHR	3	35-30	Channel used for recovery.

See the 7155-401 Disk Storage Subsystem Hardware Reference Manual for more information concerning the format of detailed status.

ROTATING MASS STORAGE	MSGID 0015B
AFMD/PFMD	SYMPTOM 3001B, 3002B, 3003B, 3005B 3011B, 3013B, 3024B, 3050B 3051B, 3063B

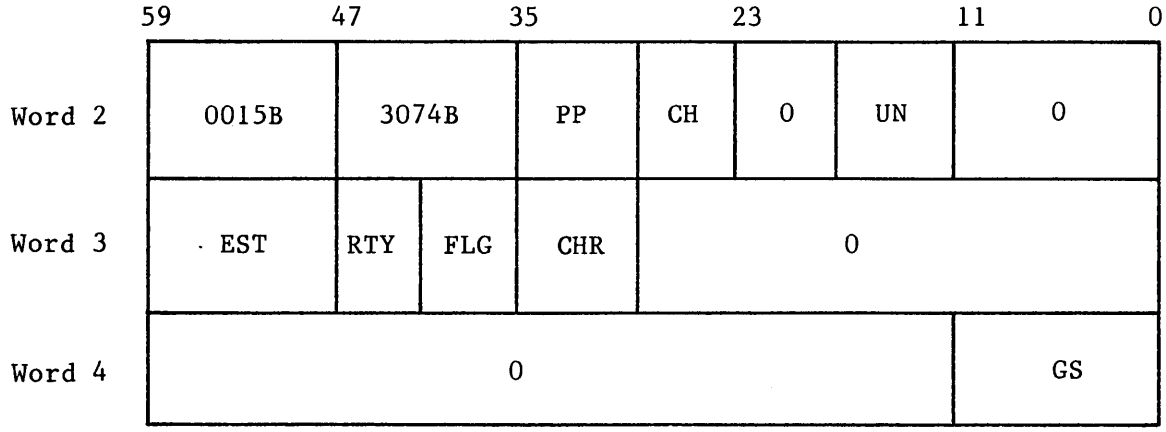
The following message is issued whenever an error is encountered on an AFMD device. This message is not currently supported by NOS.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 3001B Channel active. 3002B Channel inactive. 3003B Channel full. 3005B Incomplete data transfer. 3011B Channel stays active after channel discount (DCN). 3013B Channel stays inactive after channel activate (ACN). 3024B Channel parity error on input. 3050B Firmware dead. 3051B Cannot autoload controller. 3063B RAM parity error.
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which error was detected.
UN	2	17-12	Unit on which error was detected.
EST	3	59-48	EST ordinal of equipment.
RTRY	3	47-42	Number of retries attempted.
FLG	3	41-36 (36) (37) (41-38)	Flag field. Set if unrecovered, clear if recovered. Set if write, clear if read. Reserved.
CHR	3	35-30	Channel used for recovery.

ROTATING MASS STORAGE	MSGID 0015B
AFMD/PFMD	SYMPTOM 3074B

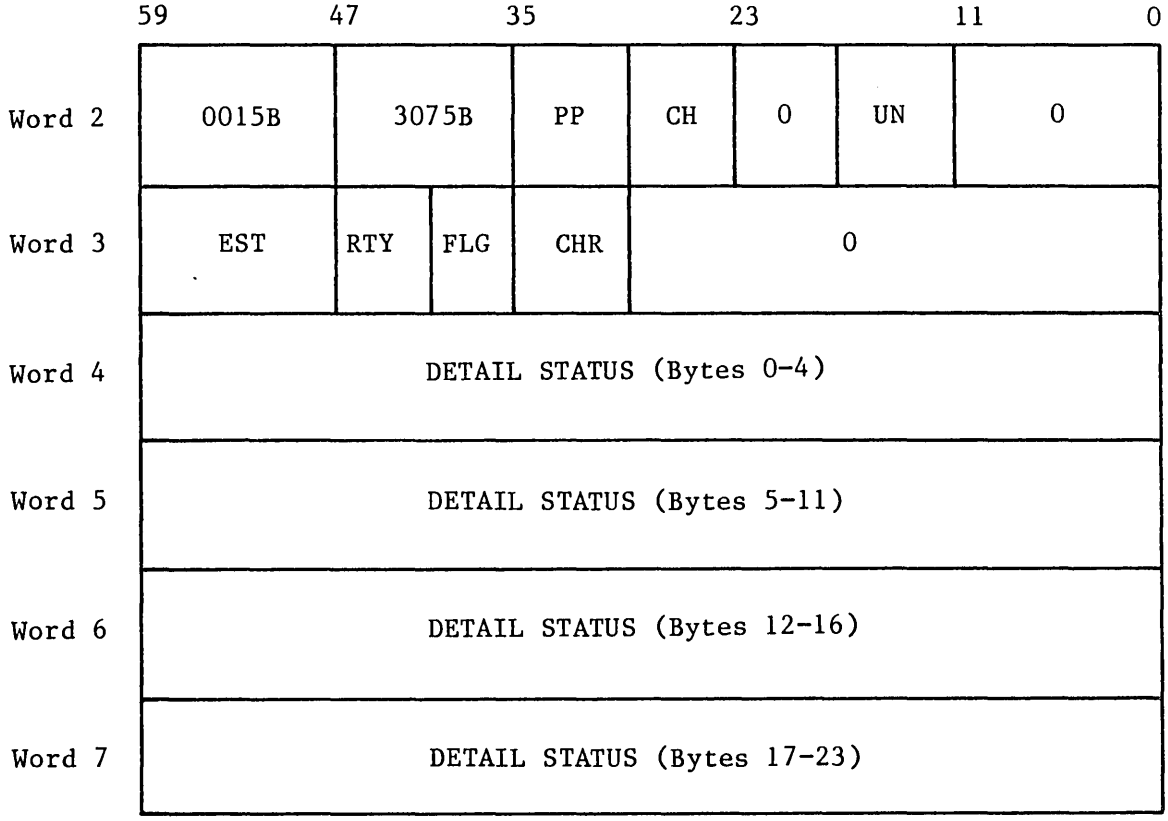
This BML message appears immediately in front of the detailed status message (MSGID 0015B, SYMPTOM 3075B). This message is not currently supported by NOS.



Field	Word	Location	Description
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which error was detected.
UN	2	17-12	Unit on which error was detected.
EST	3	59-48	EST ordinal of equipment.
RTRY	3	47-42	Number of retries attempted.
FLG	3	41-36	Flag field.
		(36)	Set if unrecovered error, clear if recovered error.
		(37)	Set if write, clear if read.
		(41-38)	Reserved.
CHR	3	35-30	Channel used for recovery.
GS	4	11-0	General status of unit at time of initial error.

ROTATING MASS STORAGE	MSGID 0015B
AFMD/PFMD	SYMPTOM 3075B

This message always follows a general status message (MSGID 0015B, SYMPTOM 3074B). This message is not currently supported by NOS.



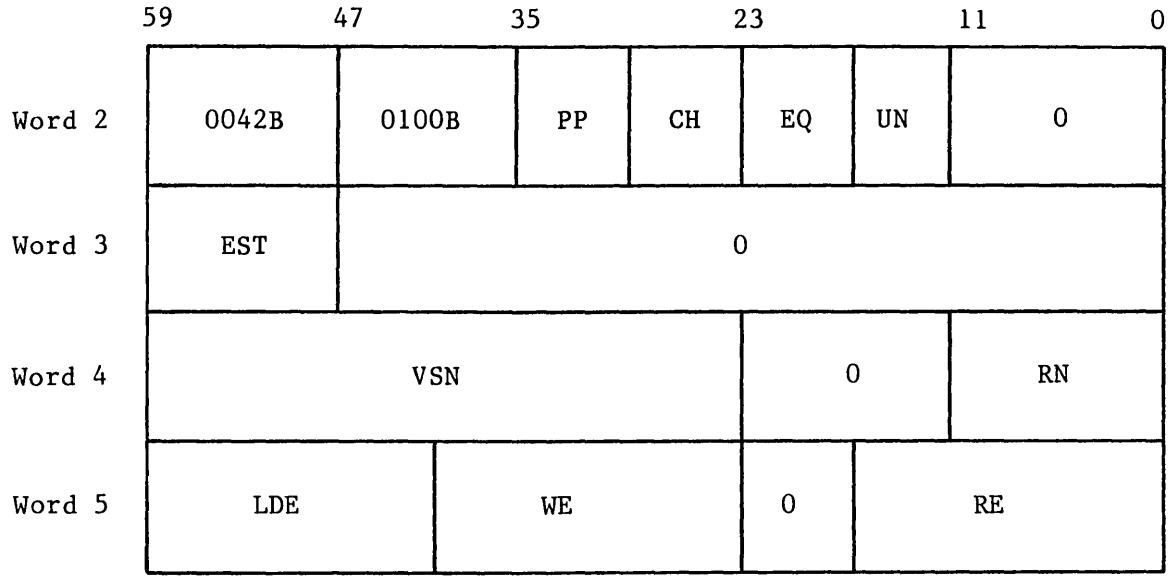
Field	Word	Location	Description
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which error was detected.
UN	2	17-12	Unit on which error was detected.
EST	3	59-48	EST ordinal of equipment.
RTRY	3	47-42	Number of retries attempted.

Field	Word	Location	Description (Continued)
FLG	3	41-36	Flag field.
		(36)	Set if unrecovered, clear if recovered.
		(37)	Set if write, clear if read.
		(41-38)	Reserved.
CHR	3	35-30	Channel used for recovery.

See the DEMA Disk Storage Subsystems Reference Manual for more information concerning the format of detailed status.

MTS (SEVEN-TRACK MTS UNITS)	MSGID 0042B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

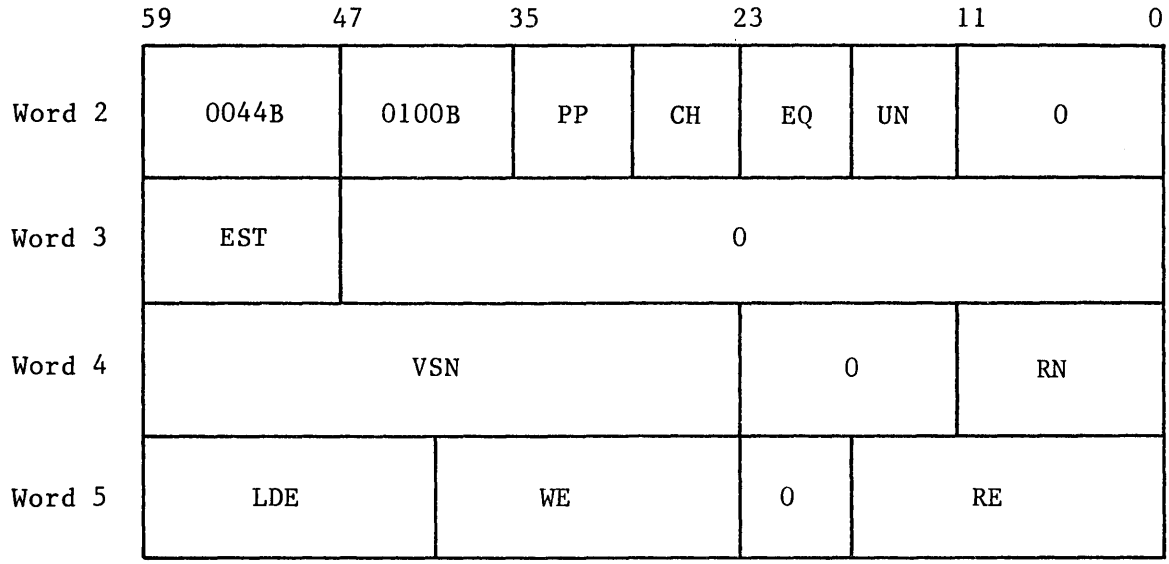
This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.



Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

ATS (SEVEN-TRACK MTS UNITS)	MSGID 0044B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

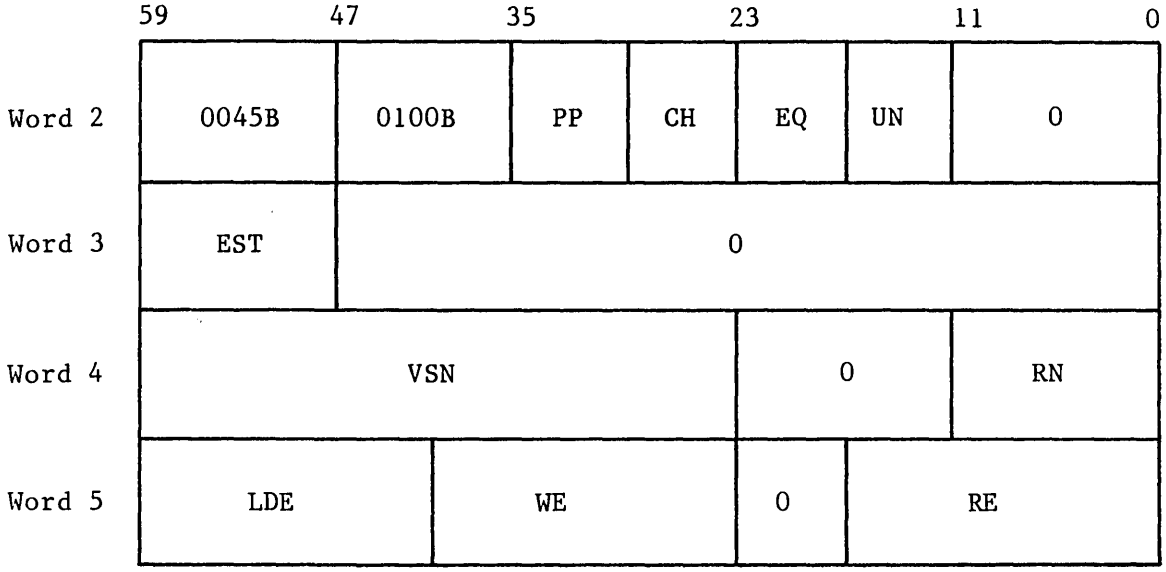
This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.



Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

FSC (SEVEN-TRACK MTS UNITS)	MSGID 0045B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

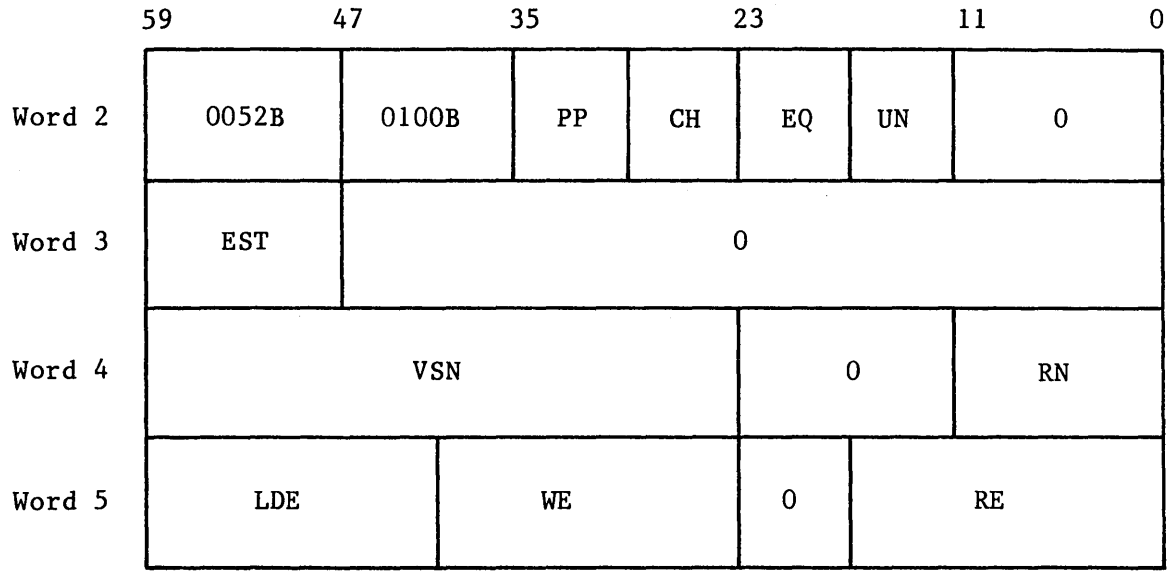
This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.



Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

MTS (NINE-TRACK MTS UNITS)	MSGID 0052B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

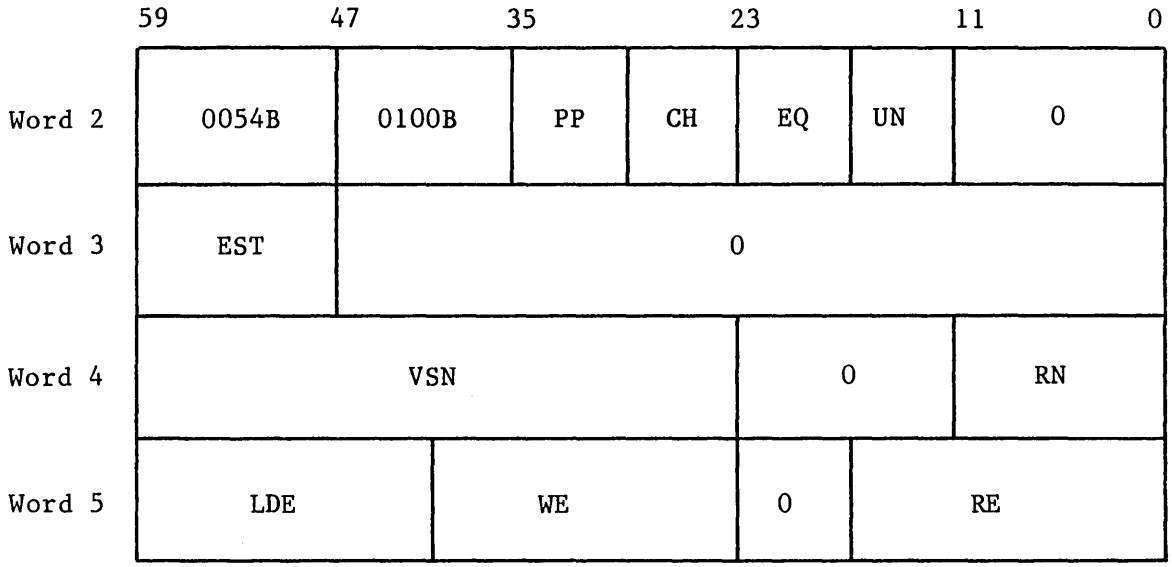
This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.



Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

ATS (NINE-TRACK MTS UNITS)	MSGID 0054B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.



Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

FSC (NINE-TRACK MTS UNITS)	MSGID 0056B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

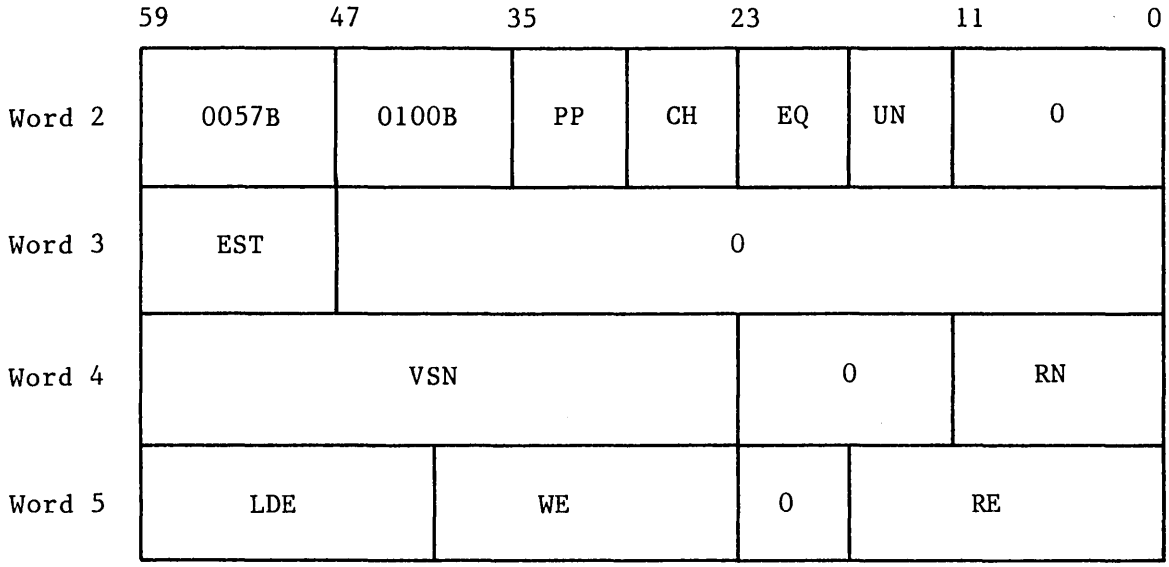
This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.

	59–48	47–36	35–24	23–18	17–12	11–0
Word 2	0056B	0100B	PP	CH	EQ	UN	0
Word 3	EST	0				
Word 4	VSN			0	RN	
Word 5	LDE	WE		0	RE	

Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

ISMT (NINE-TRACK MTS UNITS)	MSGID 0057B
CORRECTED TAPE ERRORS	SYMPTOM 0100B

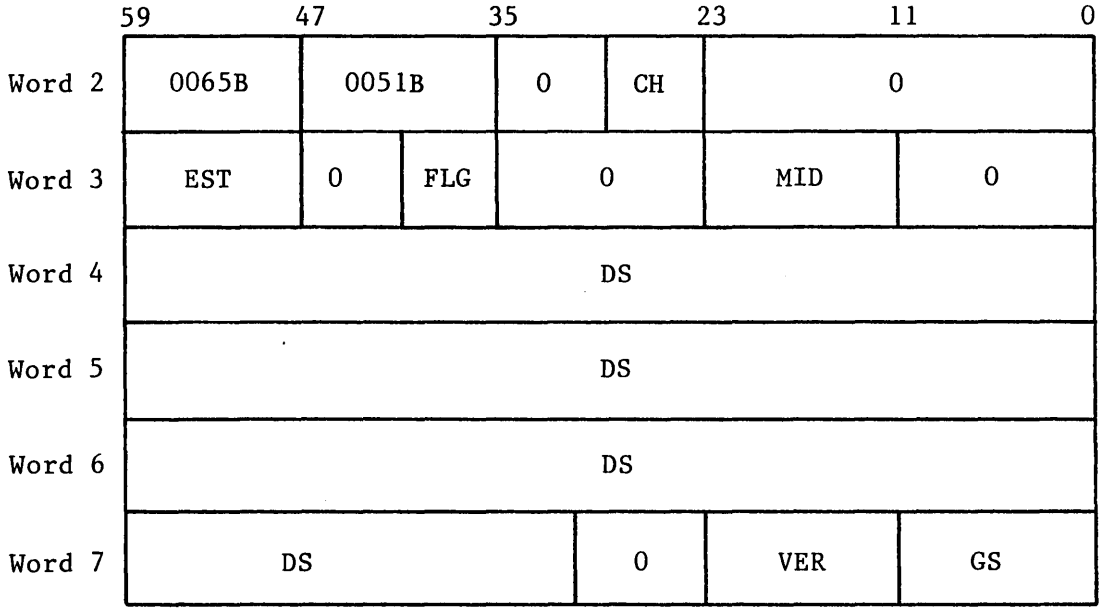
This message is issued by MAGNET/1MT when a tape is returned or unloaded. This message indicates how many errors were encountered on the tape.



Field	Word	Location	Description
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EQ	2	23-18	Equipment number.
UN	2	17-12	Unit number.
EST	3	59-48	EST ordinal.
VSN	4	59-24	Volume serial number.
RN	4	11-0	Reel number.
LDE	5	59-42	Late data errors.
WE	5	41-24	Corrected write errors.
RE	5	17-0	Corrected read errors.

MFI (NINE-TRACK MTS UNITS)	MSGID 0065B
INITIALIZATION ERROR	SYMPTOM 0051B

This BML message is issued if an unrecovered error occurs while initializing an MFI, the CDNA component known as a mainframe interface.



Field	Word	Location	Description
CH	2	29-24	Channel on which error was detected.
EST	3	59-48	EST ordinal of equipment.
LG	3	41-36 (37)	Flag field. Set to indicate unrecovered error.
ID	3	23-12	Machine identifier.
DS	4 5 6 7	59-0 59-0 59-0 59-32	MCI detailed status. MCI detailed status. MCI detailed status. MCI detailed status.
VER	7	27-12	Version number of software to be loaded.
GS	7	11-0	MCI general status.

6683 SATELLITE COUPLER	MSGID 0067B
RECEIVE BLOCK LENGTH ERROR	SYMPTOM 0005B

The following message is issued to report errors with the 6683 Satellite Coupler.

	59–48	47–36	35–24	23–18	17–12	11–0
Word 2	0067B	0005	PP	CH	EQ	0
Word 3	EST	0				
Word 4	0				BN	BE

Field	Word	Location	Description
BN	4	23-12	Octal number of bytes not received.
BE	4	11-0	Octal number of bytes expected.

6683 SATELLITE COUPLER	MSGID 0067B
ERROR CONDITION	SYMPTOM 0011B, 0076B, 0102B, 0103B 0104B, 0105B, 0106B

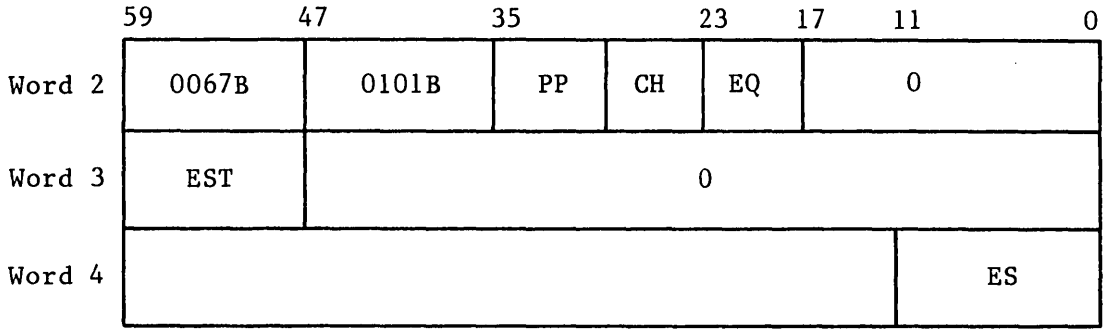
The following message is issued to report errors with the 6683 Satellite Coupler.

	59–48	47–36	35–30	29–24	23–18	17–0
Word 2	0067B	SYMPTOM	PP	CH	EQ	0
Word 3	EST	0				

Field	Word	Location	Description
SYMPTOM	2	47–36	Symptom code. 0011B Hardware/software failure. 0076B Undefined error. 0102B Channel left active. 0103B Send transmission broken. 0104B Receive block invalid. 0105B Illegal control/length byte. 0106B Coupler/channel test failed.
PP	2	35–30	PP number.
CH	2	29–24	Channel number.
EQ	2	23–18	Equipment number of 6683.
EST	3	59–48	EST ordinal of 6683.

6683 SATELLITE COUPLER	MSGID 0067B
ILLEGAL COUPLER STATUS	SYMPTOM 0101B

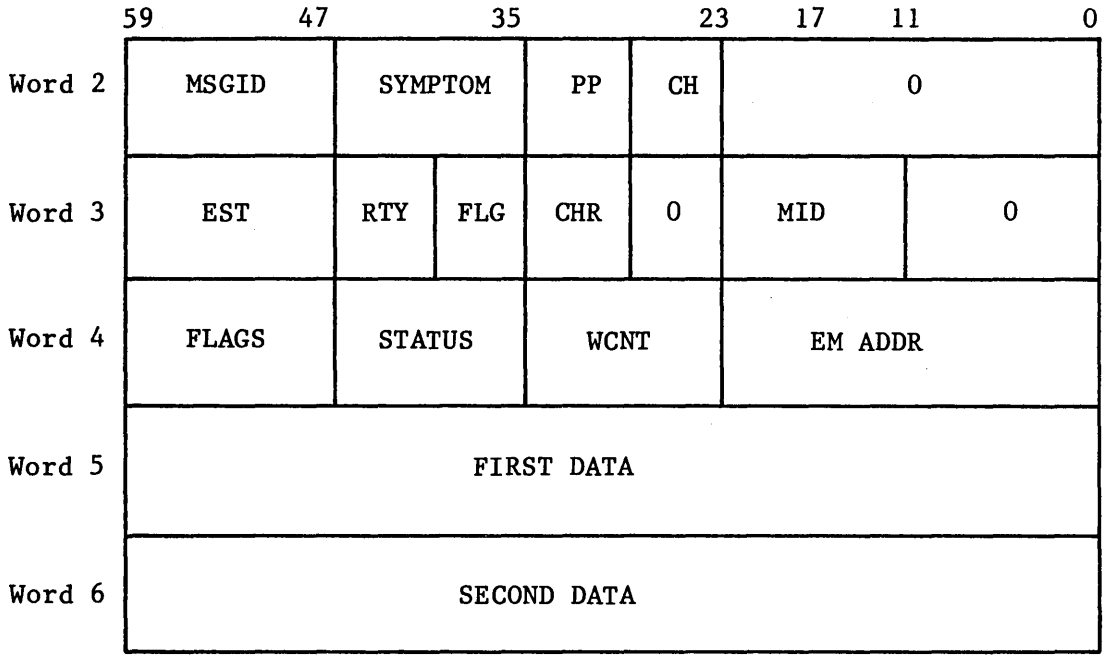
The following message is issued to report errors with the 6683 Satellite Coupler.



Field	Word	Location	Description
ES	4	11-0	Bad status as returned by the coupler.

EXTENDED MEMORY (ECS I, ECS II)	MSGID 0070B, 0072B, 0074B, 0075B
ERROR DETECTED BY 6DP	SYMPTOM 0440B, 0441B, 0450B, 0500B 0502B

6DP issues the following message when a PP detects an error while transfering data to or from extended memory via a DDP.



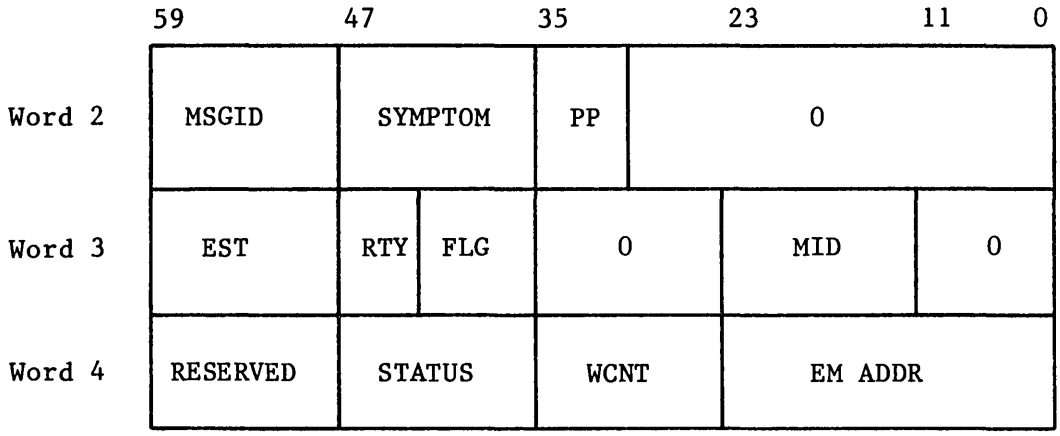
Field	Word	Location	Description
MSGID	2	59-48	Message identifier. (The device code of the device on which an error has occurred.) The error can occur only on the DDP path. 0070B ECS I (DC135 DDP). 0072B ECS II (DC135 DDP). 0074B ECS I (DC145 DDP). 0075B ECS II (DC145 DDP).
SYMPTOM	2	47-36	Symptom code. 0440B Read parity error (detected by 6DP). 0441B Write parity error (detected by 6DP). 0450B Firmware dead (detected by 6DP). 0500B Address error (detected by 6DP). 0502B Status error (detected by 6DP).

Field	Word	Location	Description (Continued)
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0500B (address errors).
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37) (36)	Flag Field. Reserved. Set if write, clear if read. Set if unrecovered error, clear if recovered error.
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom code 0500B.
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48 (59-50) (49) (48)	Flag Field. Reserved. Set if SECOND DATA is present, clear if not. Set if FIRST DATA is present, clear if not.
STATUS	4	47-36	Status received back from a 5004 DDP function. This status is taken immediately after a single word read or write. The status indicates whether or not the operation is successful. If unsuccessful, the status attempts to explain the problem.
WCNT	4	35-24	If WCNT is greater than 1, it is the number of words in the block being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. If WCNT is equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

Field	Word	Location	Description (Continued)
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.

EXTENDED MEMORY	MSGID 0070B, 0071B, 0072B, 0073B, 0074B, 0075B, 0076B
ERRORS DETECTED BY 6DE	SYMPTOM 1040B, 1041B, 1043B, 1100B

6DE issues the following message when the PIOM monitor function has reported an unrecoverable error on a DE or DP device. The PIOM function returns the status in the STATUS field.

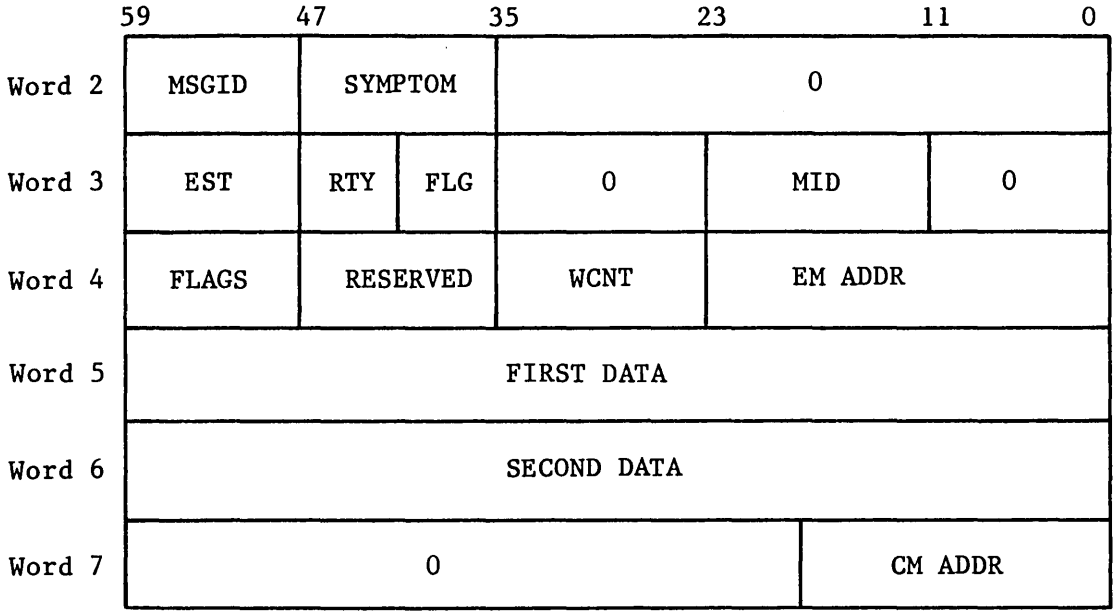


Field	Word	Location	Description
MSGID	2	59-48	Message identifier. (The code of the device on which an error has occurred.) The error occurred on the coupler path to extended memory, even if the device is defined with a DDP. 0070B ECS I (DC135 DDP). 0071B ECS I (Coupler). 0072B ECS II (DC135 DDP). 0073B ECS II (Coupler). 0074B ECS I (DC145 DDP). 0075B ECS II (DC145 DDP). 0076B LCME.
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error (detected by 6DE). 1041B Write parity error (detected by 6DE). 1043B Drive not ready (detected by 6DE). 1100B Address error (detected by 6DE).

Field	Word	Location	Description (Continued)
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37) (36)	Flag field. Reserved. Set if write, clear if read. Set if unrecovered error, clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.
MID	3	23-12	Machine identifier in display code.
STATUS	4	47-36	Status returned from CPUMTR when error occurred. 1 Unrecoverable hardware error (UHES). 4 Unrecoverable parity error (UPES).
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beinnning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

EXTENDED MEMORY ECS I, ECS II, LCME	MSGID 0070B, 0071B, 0072B, 0073B, 0074B, 0075B, 0076B
ERRORS DETECTED BY 1MC AND ELM	SYMPTOM 2040B, 2041B, 2440B, 2441B

Both 1MC and ELM issue the following message when an extended memory parity error occurs. 1MC reports errors detected by CPUMTR, and ELM reports errors detected by user programs while writing to or reading from user extended memory.



Field	Word	Location	Description
MSGID	2	59-48	Message identifier. (The code of the device on which an error has occurred.) The error occurred on the coupler path to extended memory, even if the device is defined with a DDP. 0070B ECS I (DC135 DDP). 0071B ECS I (Coupler). 0072B ECS II (DC135 DDP). 0073B ECS II (Coupler). 0074B ECS I (DC145 DDP). 0075B ECS II (DC145 DDP). 0076B LCME.

Field	Word	Location	Description (Continued)
SYMPTOM	2	47-36	Symptom code. 2040B Read parity error (detected by 1MC). 2041B Write parity error (detected by 1MC). 2440B Read parity error (detected by ELM). 2441B Write parity error (detected by ELM).
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (41-38) (37) (36)	Flag field. Reserved. Set if write operation, clear if read operation. Set if unrecovered error, clear if recovered error.
MID	3	23-12	Machine identifier in display code
FLAGS	4	59-48 (59-50) (49) (48)	Flag field. Reserved. Set if SECOND DATA is present, clear if not. Set if FIRST DATA is present, clear if not.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address of error address in extended memory.

Field	Word	Location	Description (Continued)
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.
CM ADDR	7	17-0	Address in central memory to which or from which the EM transfer was supposed to occur.

EXTENDED MEMORY (UEM)	MSGID 0077B
ERRORS DETECTED BY 6DX	SYMPTOM 1500B

6DX issues the following message when an address error occurs while attempting to read or write UEM.

	59	47		35	23	11	0
Word 2	0077B	1500B		PP	0		
Word 3	EST	RTY	FLG	0	MID	0	
Word 4	0			WCNT	EM ADDR		

Field	Word	Location	Description
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36 (40-38) (37) (36)	Flag field. Reserved. Set if write, clear if read. Set if unrecovered error, clear if recovered error.
MID	3	23-12	Machine identifier in display code.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, the EM ADDR is the actual address where the error occured.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

MSS	MSGID 0100B, 0101B, 0102B, 0103B, 0104B
USAGE	SYMPTOM 1200B

The following message is issued whenever a BML is created or recovered.

	59	47	35	29	23	17	11	5	0
Word 2	MSGID	1200B	PP	CH	CP	MSA	MST	0	
Word 3	EST	0	MID	MSD	ESTC		CSU	CUN	
Word 4	CSN						XY		
Word 5	HEAD	TAPE	PP	BW		BR		BS	
Word 6	0			RE		WE		SM	

Field	Word	Location	Description
MSGID	2	59-48	Message identifier. 0100B MST. 0101B CSU. 0102B MSS subsystem. 0103B MSA. 0104B Coupler.
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
CP	2	23-18	Coupler number.
MSA	2	17-12	MSA unit number.
MST	2	11-6	MST unit number.
EST	3	59-48	EST ordinal of EST.
RES	3	47-36	Reserved for CDC.
MID	3	35-32	MSA MSID.
MSD	3	31-24	MST MSID.
ESTC	3	23-12	Est ordinal of CUS.
CSU	3	11-5	CSU MSID.
CUN	3	4-0	CSU unit number.

Field	Word	Location	Description (Continued)
CSN	4	59-12	Cartridge serial number.
XY	4	11-0	X and Y locations.
HEAD	5	59-48	Number of head changes.
TAPE	5	47-42	Number of tape passes.
PP	5	41-36	Number of picks and puts.
BW	5	35-24	Number of blocks written.
BR	5	23-12	Number of block read.
BS	5	11-0	Block size/100.
RE	6	35-24	Number of read errors.
WE	6	23-12	Number of write errors.
SM	6	11-0	Count of selection moves.

MSS	MSGID 0100B, 0101B, 0102B, 0103B, 0104B
ERROR CONDITIONS	SEE SECTION 4

The following message is issued whenever a BML is created or recovered.

	59	47	35	23	11	0
Word 2	MSGID	SYMPTOM	PP	CH	CP	MSA	DEV	0
Word 3	EST	RTY	FLAG	CHR	0
Word 4	EO	SEC	MID	MSD	C	CHPC	XY
Word 5	CSN	XYL
Word 6	LCT	LCS	CT	CS	LCT
Word 7	LCTM	CWC	PES	OC	IC
Word 8	CBS	BN	SN	MIDS	DRM
Word 9	0	MSDA
Word 10	MSDA
Word 11	MSDA
Word 12	MCSD
Word 13	MCSD
Word 14	MCSD

Field	Word	Location	Description
MSGID	2	59-48	Message identifier. 0100B MST. 0101B CSU. 0102B MSS subsystem. 0103B MSA. 0104B Coupler.
SYMPTOM	2	47-35	Symptom code. See Section 4.
PP	2	35-30	PP number.
CM	2	29-24	Channel number.
CP	2	23-18	Coupler unit number.
MSA	2	17-12	MSA unit number.
DEV	2	11-6	Unit number of MST or CSU reflected by EST entry.
EST	2	59-48	EST ordinal of equipment in error.
RTY	2	47-42	Retry count.
FLAG	2	41-36	Status flag. Bit 37: Set if write. Clear if read. Bit 36: Set if unreasonable error.
CHR	2	35-30	Channel word for recovery operation.
EO	3	59-48	Error type overflow word.
SEC	3	47-36	Secondary error code.
MID	3	35-32	MSA MSID.
MSD	3	31-24	The unit MSID (MST or CSU) reflected by EST ordinal.
CHPC	3	23-12	The channel program element that failed.
XY	3	11-0	X,Y location from which software asked the cartridge to be loaded.
CSN	5	59-12	Cartridge serial number.
XYL	5	11-0	Actual cartridge X,Y coordinates from cartridge label. Set to 7777B if the cartridge was entered via an I/O drawer or has no label.
LCT	6	59-48	Last coupler function issued at time of error.

Field	Word	Location	Description (Continued)
LCS	6	47-36	Last coupler status.
CT	6	35-24	CTL tag status (bug in).
CS	6	23-12	Last CTL tag.
LCT	6	11-0	CTL tag modifier (bug out).
LCTM	7	59-48	Last coupler tag issued at time of error.
CWC	7	47-36	Coupler buffer word counter status.
PES	7	35-24	Coupler buffer parity error status.
OC	7	23-12	Coupler buffer output counter.
IC	7	11-0	Coupler buffer input counter.
CBS	8	59-48	Block size written or read from cartridge divided by 0100B.
BN	8	47-36	Cartridge block number at time of error.
SN	8	35-24	Stream number at time of error.
MIDS	8	23-12	MST ID that wrote the cartridge.
DRM	8	11-0	Recovery method used of MSS driver.
MSDA	9	39-0	MSA sense data.
MSDA	10	59-0	MSA sense data.
MSDA	11	59-0	MSA sense data.
MCSD	12	59-0	MST/CSU sense data.
MCSD	12	59-0	MST/CSU sense data.
MCSD	12	59-0	MST/CSU sense data.

MAS (M860)	MSGID 0105B
FSC ERRORS	SYMPTOM 0001B, 0002B, 0003B, 0004B 0005B, 0006B, 0007B, 0010B 0011B, 0012B, 0020B, 0021B 0022B, 0023B, 0024B, 0025B 0026B, 0027B, 0030B, 0031B 0032B, 0033B

The following message is issued whenever a BML is created or recovered.

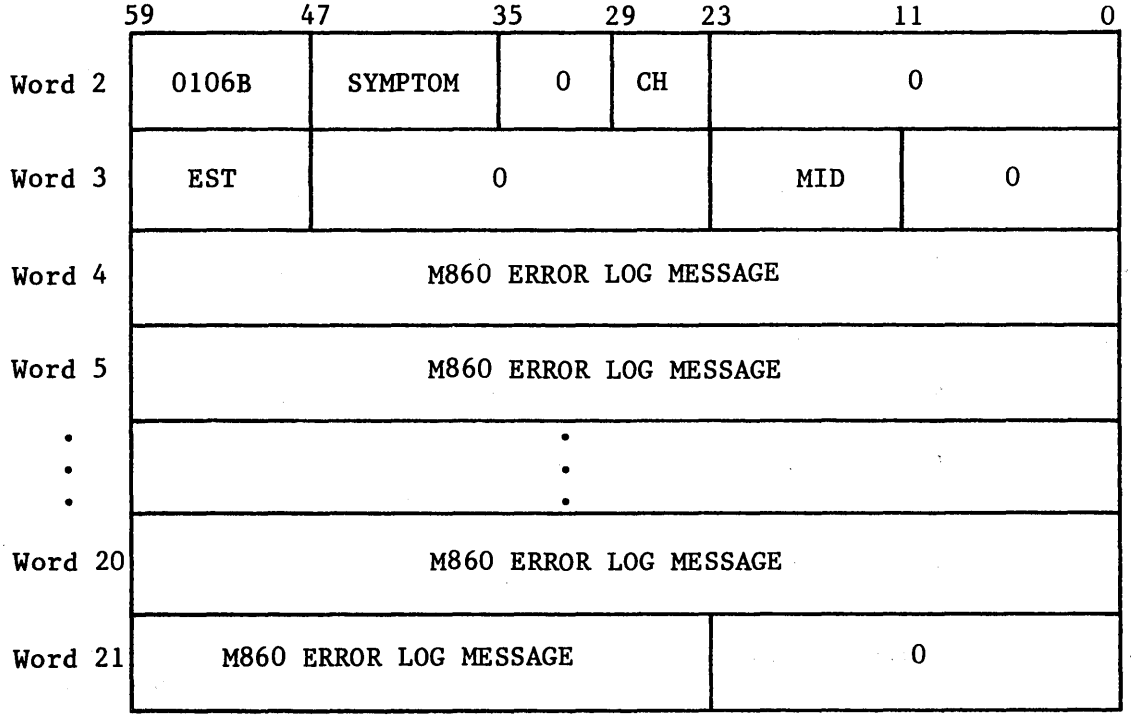
	59–47	35	29	23–11	5	0
Word 2	0105B	SYMPTOM	0	CH	0	UN	DRD
Word 3	EST	0		MID	0	
Word 4	0					
Word 5	0					
Word 6	GS			DS		
Word 8	DS					
Word 9	DS					
Word 10	DS					

Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0001B Illegal function. 0002B Data length error. 0003B Control word error. 0004B Buffer argument error. 0005B Header/trailer error. 0006B End of volume. 0007B Illegal unit number. 0010B Buffer timeout error. 0011B Tape bottom right. 0012B Terminate flag detected.

Field	Word	Location	Description (Continued)
			0020B Status error. 0021B Channel hung on input. 0022B Channel hung on output. 0023B Function timeout. 0024B No end of operation. 0025B Channel malfunction. 0026B Channel parity error. 0027B FSC Memory parity error. 0030B FSC not running. 0031B FSC abnormal. 0032B FSC diagnostic failure. 0033B Checksum error (CM drivers).
CH	2	29-24	Primary channel used.
UN	2	11-6	Unit number of an SM.
DRD	2	5-0	DRD unit number.
EST	3	59-48	EST ordinal of controller.
GS	6	59-24	FSC general status and detailed status origin words.
DS	6	23-0	First two bytes of M860 detail status.
DS	7-10	59-0	Reminder of M860 detailed status. The M860 detailed status consists of 18-8 bit parcels. Each parcel is packed into a 12-bit byte.

MAS (M860)	MSGID 0106B
FSC ERRORS	SYMPTOM 0036B, 0060B, 0100B, 0101B 0103B, 0104B, 0107B, 0140B 0141B

The following message is issued whenever a BML is created or recovered.

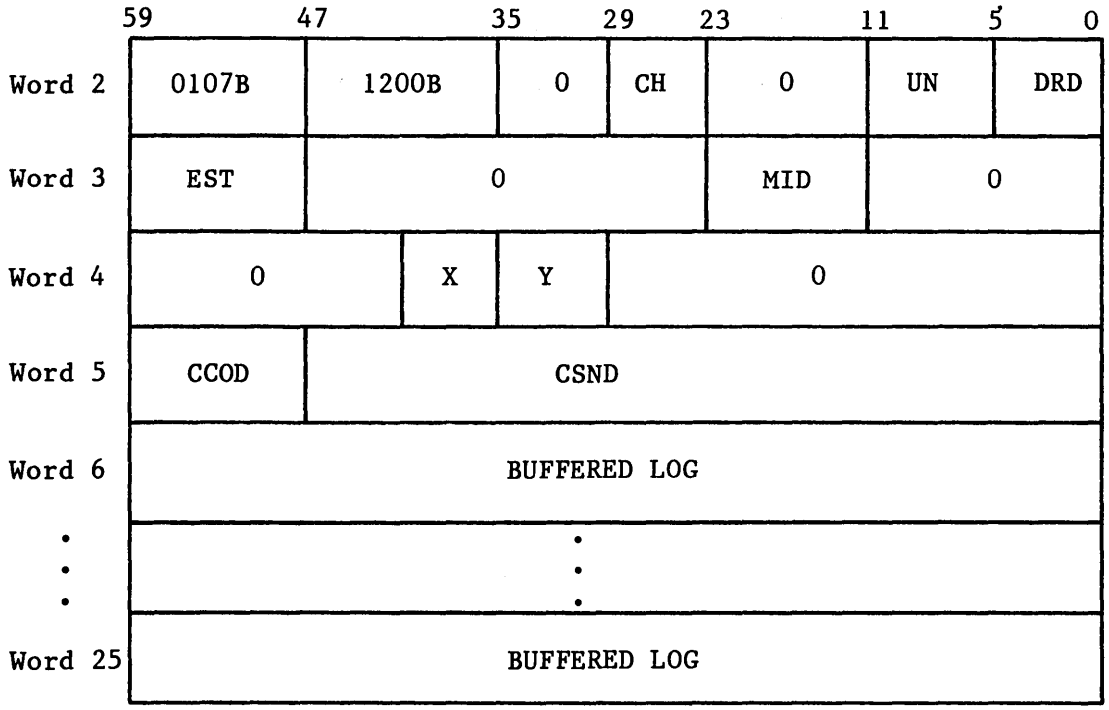


Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0036B Error log overflow. 0060B CIF, DTI/DTO errors. 0100B DRD,DRC,DIF,DTI/DTO errors (device/diagnostic driver). 0101B Accessor errors (drive/diagnostic driver). 0103B Drive/path status change. 0104B ALT DRD, DRC, DIF, DTI/DTO errors (device/diagnostic driver).

Field	Word	Location	Description (Continued)
			0107B Device driver software error. 0140B CPU/memory hardware detected errors. 0141B Software errors.
CH	2	29-24	Primary channel used.
EST	3	59-48	Controller EST ordinal.
MID	3	23-12	Machine identifier.

MAS (M860)	MSGID 0107B
USAGE	SYMPTOM 1200B

The following message is issued whenever a BML is created or recovered.



Field	Word	Location	Description
CH	2	29-24	Primary channel used.
UN	2	11-6	SM unit number.
DRD	2	5-0	DRD unit number.
EST	3	59-48	EST ordinal of the controller.
MID	3	23-12	Machine identifier in display code.
X	4	38-34	Vertical coordinate cartridge location.
Y	4	33-30	Horizontal coordinate cartridge location.
CCOD	5	59-48	Identifier letter of the cartridge maker (I=IBM).
CSND	5	47-0	Cartridge serial number in display code.

ROTATING MASS STORAGE	MSGID 0110B
834	SYMPTOM 0024B, 0040B, 0041B, 0043B 0050B, 0051B, 0056B, 0063B 0100B, 0102B, 0103B

6DI will issue the following pair of BML messages once per rotating mass storage error. The pair is issued when the error is either recovered or goes unrecovered, so that the last general and detailed status taken before recovery or giving up are the ones which get reported.

The first message has the following form.

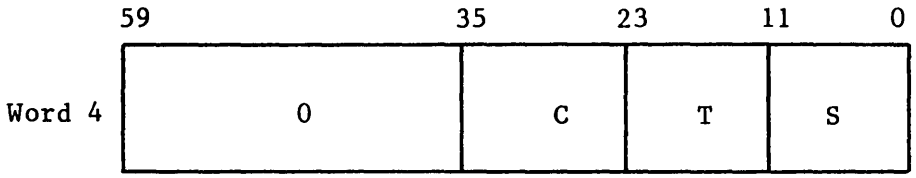
	59	47		35	23		11	0
Word 2	0110B	SYMPTOM		PP	CH	0	UN	0
Word 3	EST	RTY	FLG	CHR	0	MID		0
Word 4	DETAILED STATUS (Words 1-5)							
Word 5	DETAILED STATUS (Words 6-10)							
Word 6	DETAILED STATUS (Words 11-15)							
Word 7	DETAILED STATUS (Words 16-20)							

The continuation message has the following form.

	59	47		35	23		11	0
Word 2	0110B	SYMPTOM		PP	CH	0	UN	0
Word 3	EST	RTY	FLG	CHR	0	MID		0
Word 4	FLAGS	0				FUNC		GS

Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0024B Channel parity error (detected by 6DI). 0040B Read parity error (detected by 6DI). 0041B Write parity error (detected by 6DI). 0043B Device not ready (detected by 6DI). 0050B Firmware dead (detected by 6DI). 0051B Cannot autoload controller (detected by 6DI). 0056B Unit reserve error (detected by 6DI). 0063B RAM parity error (detected by 6DI). 0100B Address error (detected by 6DI). 0102B Status error (detected by 6DI). 0103B Controller reserve error (detected by 6DI).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0100B (address errors).
UN	2	17-12	Physical unit number where the error was detected.
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36	Flag field.
		(41-39)	Reserved.
		(38)	Set if first message of pair, clear if second.
		(37)	Set if write operation, clear if read operation.
		(36)	Set if unrecovered error, clear if recovered error.
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom code 0100B (address errors).

Field	Word	Location	Description (Continued)
MID	3	23-12	Machine identifier in display code.
DETAILED STATUS	4-7	59-0	Detailed status. If all four words are zero, the detailed status is not available. See the 834 Intelligent Small Disk Subsystem Hardware Reference Manual for more information on the format of detailed status. There is no detailed status in the case of symptom 0100B (address error). Instead, word 4 contains the address in error in the format.



where:

C = Cylinder.
T = Track.
S = Sector.

FLAGS	4	59-48	Flag field.
		(59-50)	Reserved (zero).
		(49)	Set if control module controlware reload occurred.
		(48)	Set if channel controlware reload occurred.
FUNC	4	23-12	Last function issued before a function timeout. Valid only for symptom codes 0024B, 0050B, 0051B and 0063B.
GS	4	11-0	General status. See the 834 Intelligent Small Disk Subsystem Hardware Reference Manual for more information on the format of general status.

ROTATING MASS STORAGE (834)	MSGID 0110B
1 DIAGNOSTIC RESULTS	SYMPTOM 0200B

If an unrecoverable error meeting special criteria is detected on an 834 drive, a power up drive function is used to initiate the level 1 diagnostics in the control module. The NOS driver 6DI will issue the following pair of messages to the BML after the power up drive (558) function is completed.

The first message has the following form.

	59	47		35	23		11	0
Word 2	0110B	0200B		PP	CH	0	UN	0
Word 3	EST	RTY	FLG	0		MID		0
Word 4	DETAILED STATUS (Words 1-5)							
Word 5	DETAILED STATUS (Words 6-10)							
Word 6	DETAILED STATUS (Words 11-15)							
Word 7	DETAILED STATUS (Words 16-20)							

The continuation message has the following form.

	59	47		35	23		11	0
Word 2	0110B	0200B		PP	CH	0	UN	0
Word 3	EST	RTY	FLG	0		MID		0
Word 4	0							GS

Field	Word	Location	Description
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected.
UN	2	17-12	Physical unit number of unit on which error was detected.
EST	3	59-48	EST ordinal of device.
FLG	3	41-36 (41-39) (38) (37) (36)	Flag field. Reserved. Set if first message of pair, clear if second. Set if write, clear if read. Set if unrecovered error, should never be clear.
MID	3	23-12	Machine identifier in display code.
DETAILED STATUS	4-7	59-0	Detailed status. See 834 Intelligent Small Disk Subsystem Hardware Reference Manual for more information on the format of detailed status after Level 1 diagnostics have been run.
GS	4	11-0	General status. If zero, then no errors were detected. See the 834 Intelligent Small Disk Subsystem Hardware Reference Manual for more information on the format of general status after Level 1 diagnostics have been run.

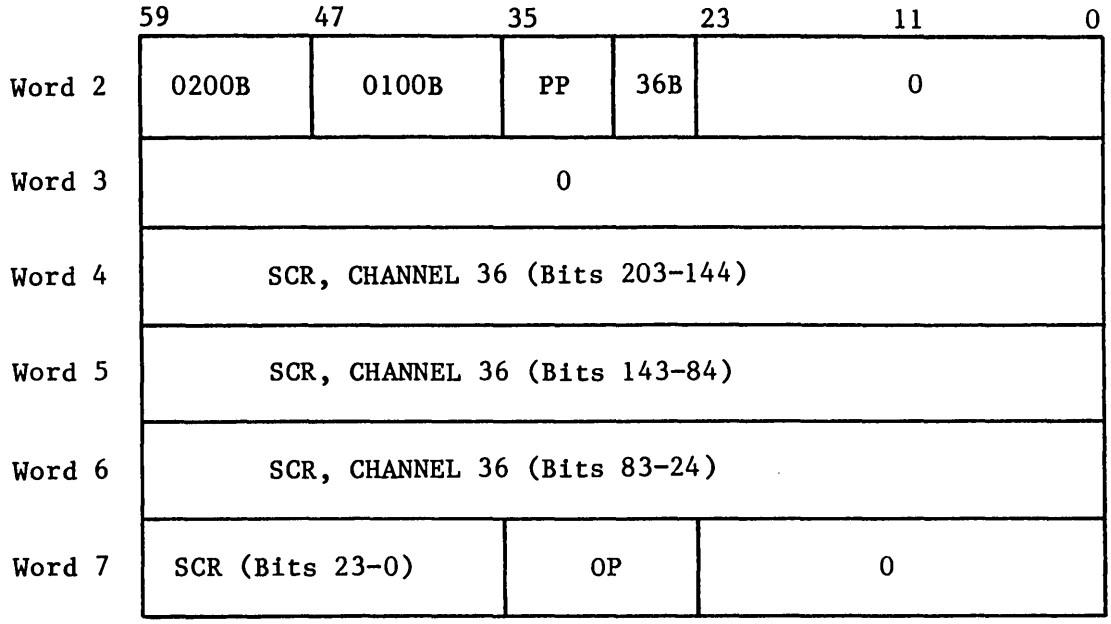
MAINFRAME (170 MODELS)	MSGID 0200B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	35	23	11	0
Word 2	0200B	0100B	PP	16B	0	
Word 3	0	04	0			
Word 4	SCR, CHANNEL 16 (Bits 203-144)					
Word 5	SCR, CHANNEL 16 (Bits 143-84)					
Word 6	SCR, CHANNEL 16 (Bits 83-24)					
Word 7	SCR (Bits 23-0)		OP	0		

The continuation message has the following form.



Field	Location	Description
OP	35-24	Options installed.

MAINFRAME (170 MODELS)	MSGID 0200B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0200B	0101B	PP	16B	0	
Word 3	0	FLAG	0			
Word 4	SID		0		CT	
Word 5	SID		0		CT	
Word 6	SID		0		CT	
Word 7	SID		0		CT	

Field	Location	Description
SID	59-24	SECDED identifier.
	(59-58)	SCR bits 191-190.
	(57-44)	SCR bits 53-40.
	(43-24)	Zero (unused).

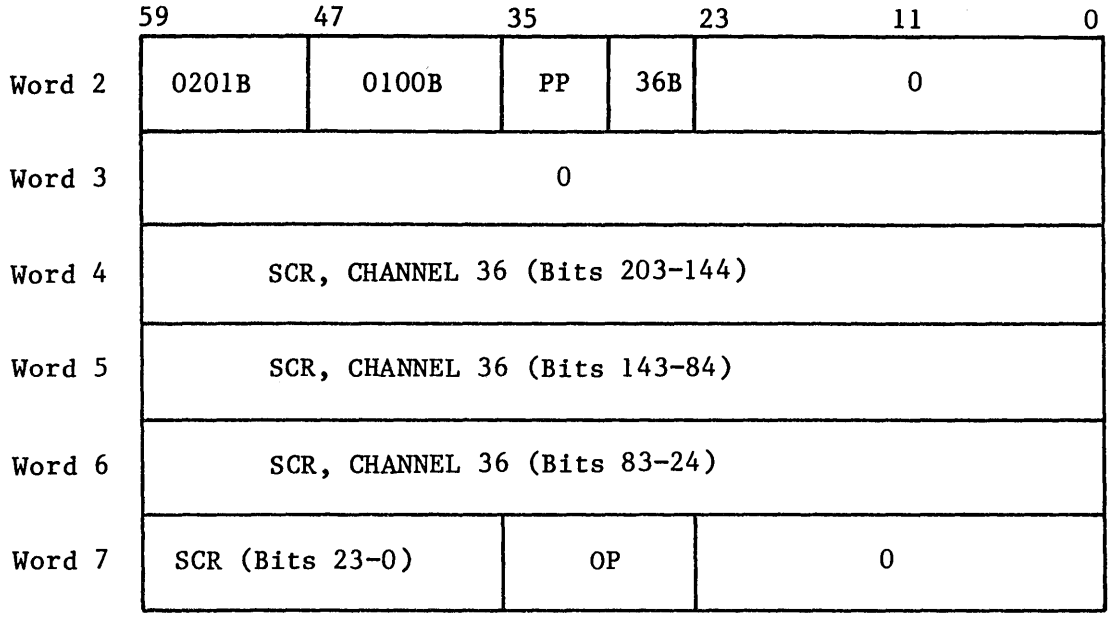
MAINFRAME (MODELS 720, 730, 740, 750, AND 760	MSGID 0201B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	35	23	11	0
Word 2	0201B	0100B	PP	16B	0	
Word 3	0	04	0			
Word 4	SCR, CHANNEL 16 (Bits 203-144)					
Word 5	SCR, CHANNEL 16 (Bits 143-84)					
Word 6	SCR, CHANNEL 16 (Bits 83-24)					
Word 7	SCR (Bits 23-0)		OP	0		

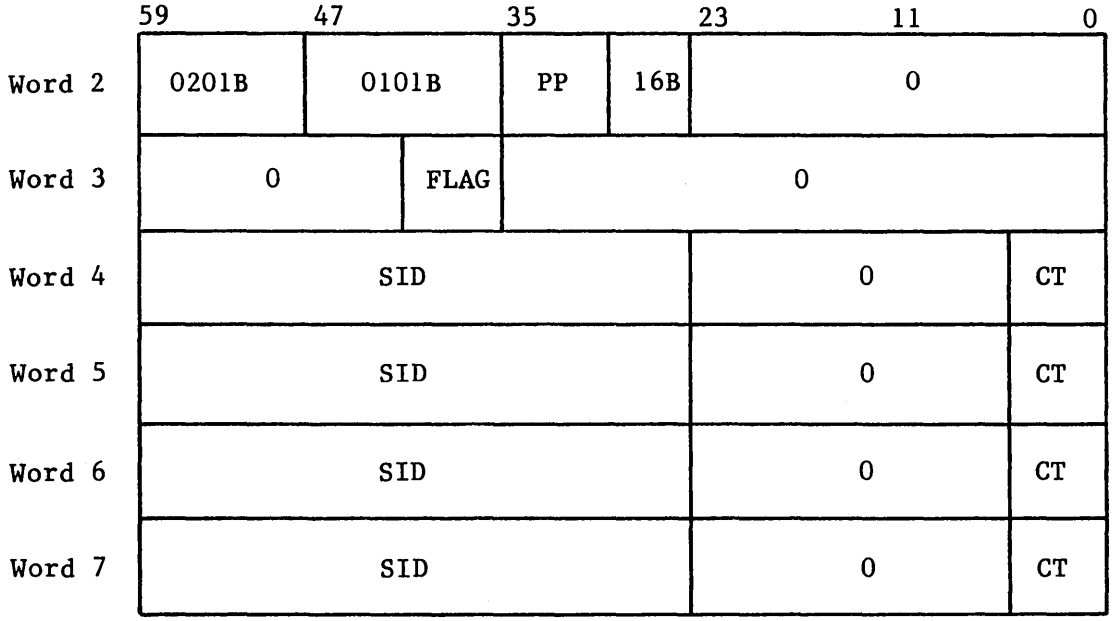
The continuation message has the following form.



Field	Location	Description
OP	35-24	Options installed.

MAINFRAME (MODELS 720, 730, 740, 750, AND 760	MSGID 0201B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.



Field	Location	Description
SID	59-24	SECDED identifier.
	(59-58)	SCR bits 191-190.
	(57-44)	SCR bits 53-40.
	(43-24)	Zero (unused).

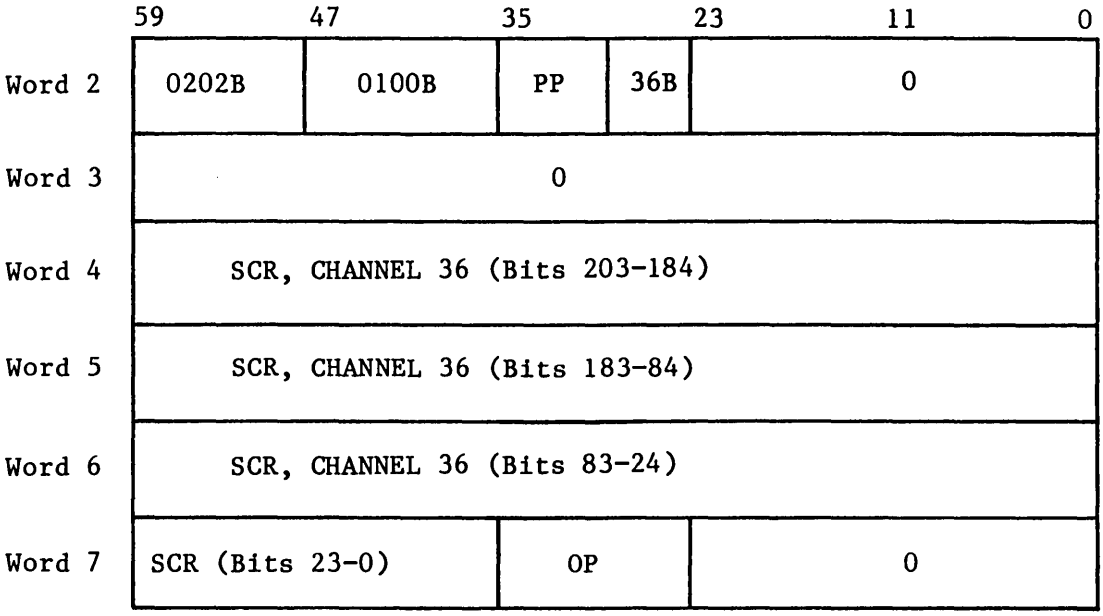
MAINFRAME (MODEL 176A)	MSGID 0202B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	35	23	11	0
Word 2	0202B	0100B	PP	16B	0	
Word 3	0	04	0			
Word 4	SCR, CHANNEL 16 (Bits 203-144)					
Word 5	SCR, CHANNEL 16 (Bits 143-84)					
Word 6	SCR, CHANNEL 16 (Bits 83-24)					
Word 7	SCR (Bits 23-0)		OP	0		

The continuation message has the following form.



Field	Location	Description
OP	35-24	Options installed.

MAINFRAME (MODEL 176A)	MSGID 0202B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0202B	0101B	PP	16B	0	
Word 3	0	FLAG	0			
Word 4	SID			0		CT
Word 5	SID			0		CT
Word 6	SID			0		CT
Word 7	SID			0		CT

Field	Location	Description
SID	59-24	SECDED identifier.
	(59-48)	SCR bits 167-156.
	(47-34)	SCR bits 53-40.
	(33-24)	Zeros (unused).
CT	5-0	Error counter.

MAINFRAME (MODEL 176A)	MSGID 0202B
LCME SINGLE BIT SUMMARY TABLE	SYMPTOM 0104B

The following message is repeated until all LCME errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0202B	0104B	PP	16B	0	
Word 3	0	FLAG	0			
Word 4	SID			0		CT
Word 5	SID			0		CT
Word 6	SID			0		CT
Word 7	SID			0		CT

Field	Location	Description
SID	59-23	LCME ID.
	(59-52)	SCR bits 151-144.
	(51-50)	SCR bits 117-116.
	(49-44)	SCR bits 101-96.
	(43-24)	Zero (unused).
CT	5-0	Error counter.

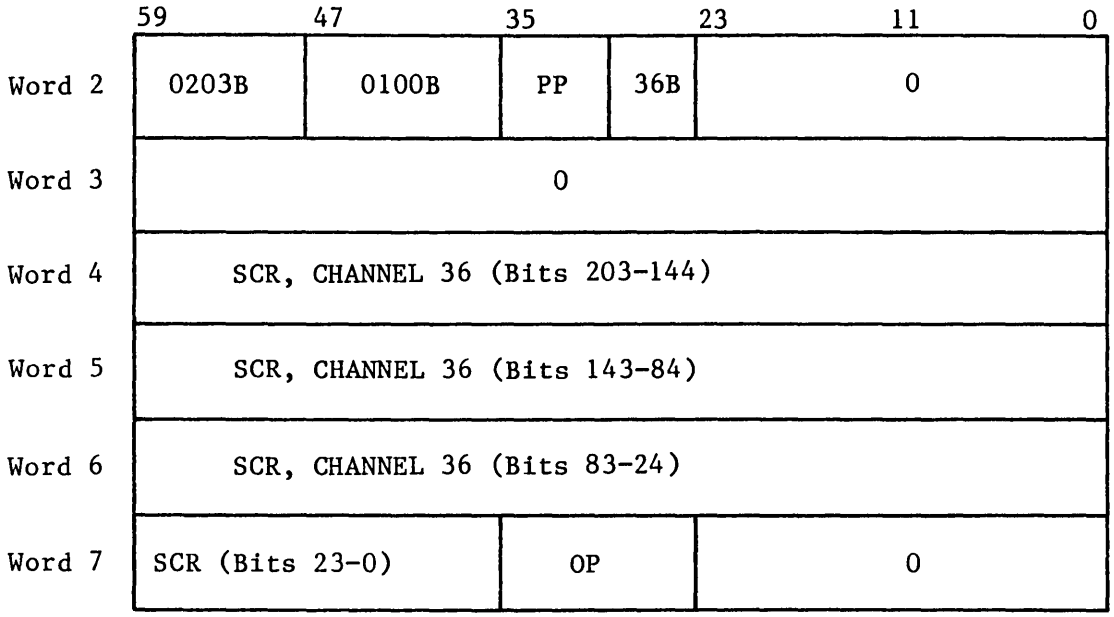
MAINFRAME (MODEL 176B)	MSGID 0203B
LCME SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single list SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	35	23	11	0
Word 2	0203B	0100B	PP	16B	0	
Word 3	0	04	0			
Word 4	SCR, CHANNEL 16 (Bits 203-144)					
Word 5	SCR, CHANNEL 16 (Bits 143-84)					
Word 6	SCR, CHANNEL 16 (Bits 83-24)					
Word 7	SCR (Bits 23-0)		OP	0		

The continuation message has the following form.



Field	Location	Description
OP	35-24	Options installed.

MAINFRAME (MODEL 176B)	MSGID 0203B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all SECDED single bit errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0203B	0101B	PP	16B	0	
Word 3	0	FLAG	0			
Word 4	SID			0		CT
Word 5	SID			0		CT
Word 6	SID			0		CT
Word 7	SID			0		CT

Field	Location	Description
SID	59-24	SECDED identifier.
	(59-48)	SCR bits 167-156.
	(47-34)	SCR bits 53-40.
	(33-24)	Zeros (unused).
CT	5-0	Error counter.

MAINFRAME (MODEL 176B)	MSGID 0203B
LCME SINGLE BIT SUMMARY TABLE	SYMPTOM 0104B

The following message is repeated until all LCME errors that were logged are reported to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0203B	0104B	PP	16B	0	
Word 3	0	FLAG	0			
Word 4	SID			0		CT
Word 5	SID			0		CT
Word 6	SID			0		CT
Word 7	SID			0		CT

Field	Location	Description
SID	59-24	LCME identifier.
	(59-48)	SCR bits 151-144.
	(47-34)	SCR bits 117-116.
	(49-44)	SCR bits 101-96.
	(33-24)	Zeros (unused).
CT	5-0	Error counter.

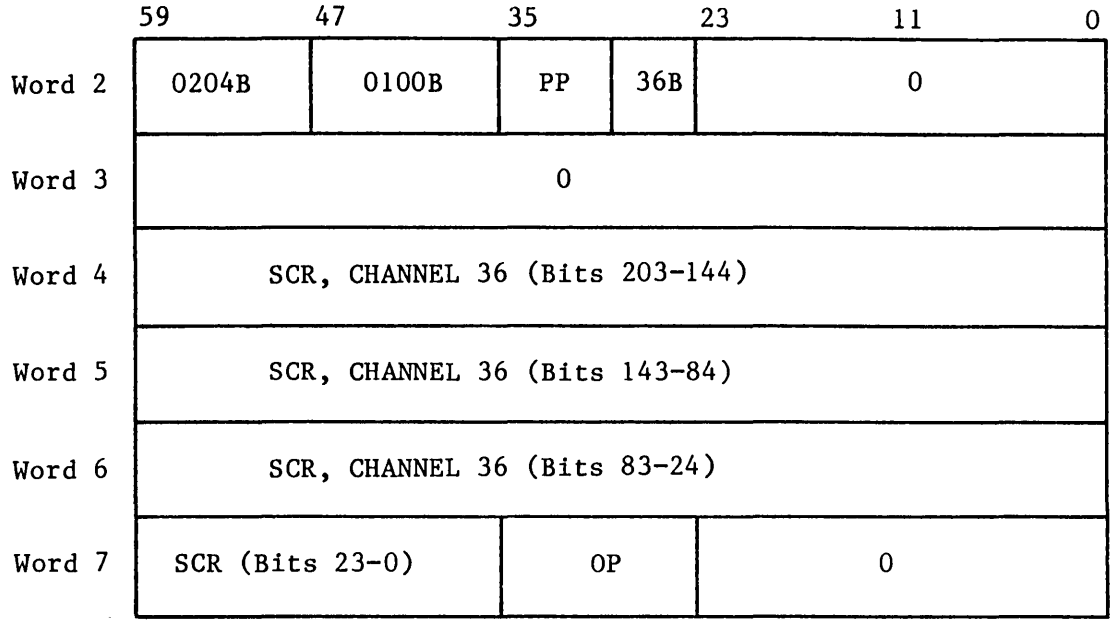
MAINFRAME (MODEL 865)	MSGID 0204B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	35	23	11	0
Word 2	0204B	0100B	PP	16B	0	
Word 3	0	04	0			
Word 4	SCR, CHANNEL 16 (Bits 203-144)					
Word 5	SCR, CHANNEL 16 (Bits 143-84)					
Word 6	SCR, CHANNEL 16 (Bits 83-24)					
Word 7	SCR (Bits 23-0)		OP	0		

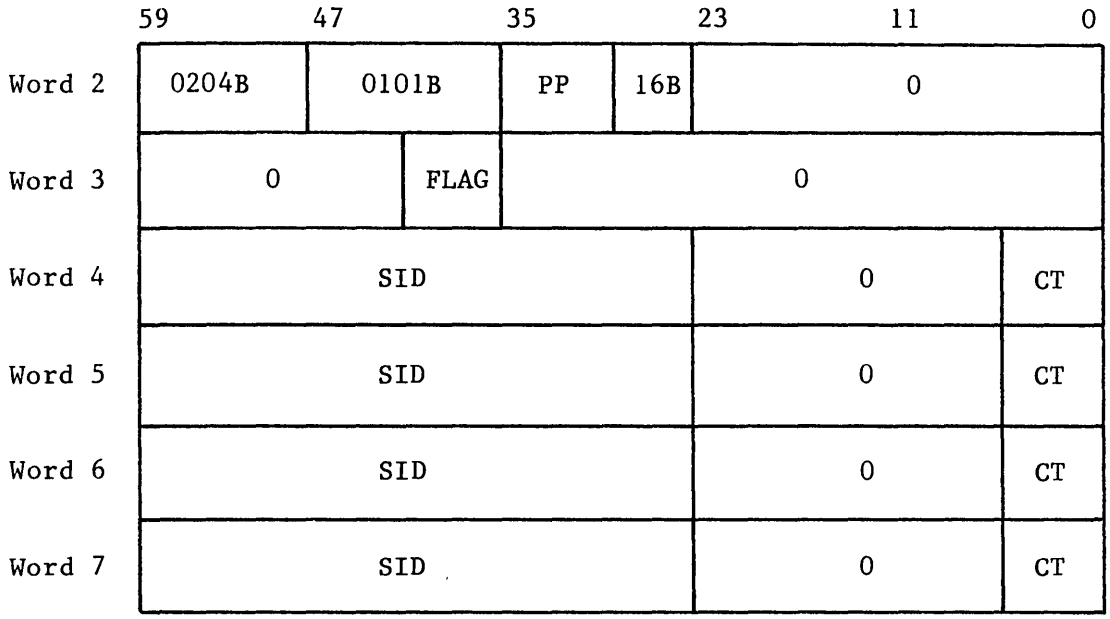
The continuation message has the following form.



Field	Location	Description
OP	35-24	Options installed.

MAINFRAME (MODEL 865)	MSGID 0204B
SECDED SINGLE BIT SUMMARY STATUS	SYMPTOM 0101B

The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.



Field	Location	Description
SID	59-24	SECDED identifier.
	(59-58)	SCR bits 191-190.
	(57-44)	SCR bits 53-40.
	(43-24)	Zero (unused).

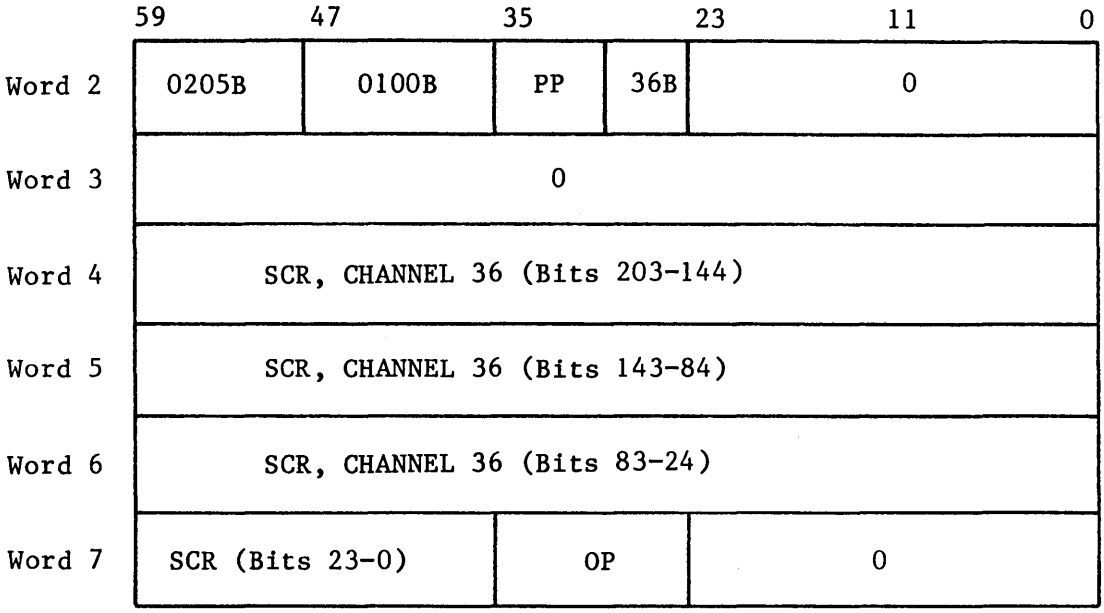
MAINFRAME (MODEL 875)	MSGID 0205B
SECDED SINGLE BIT CORRECTED ERROR	SYMPTOM 0100B

These messages are issued for the first occurrence of each unique single bit SECDED error. If channel 36 is not present, only the first message is issued.

The first message has the following form.

	59	47	35	23	11	0
Word 2	0205B	0100B	PP	16B	0	
Word 3	0	04	0			
Word 4	SCR, CHANNEL 16 (Bits 204-144)					
Word 5	SCR, CHANNEL 16 (Bits 143-84)					
Word 6	SCR, CHANNEL 16 (Bits 83-24)					
Word 7	SCR (Bits 23-0)		OP	0		

The continuation message has the following form.



Field	Location	Description
OP	35-24	Options installed.

MAINFRAME (MODEL 875)	MSGID 0205B
SECDED SINGLE BIT SUMMARY STATUS	SYMPTOM 0101B

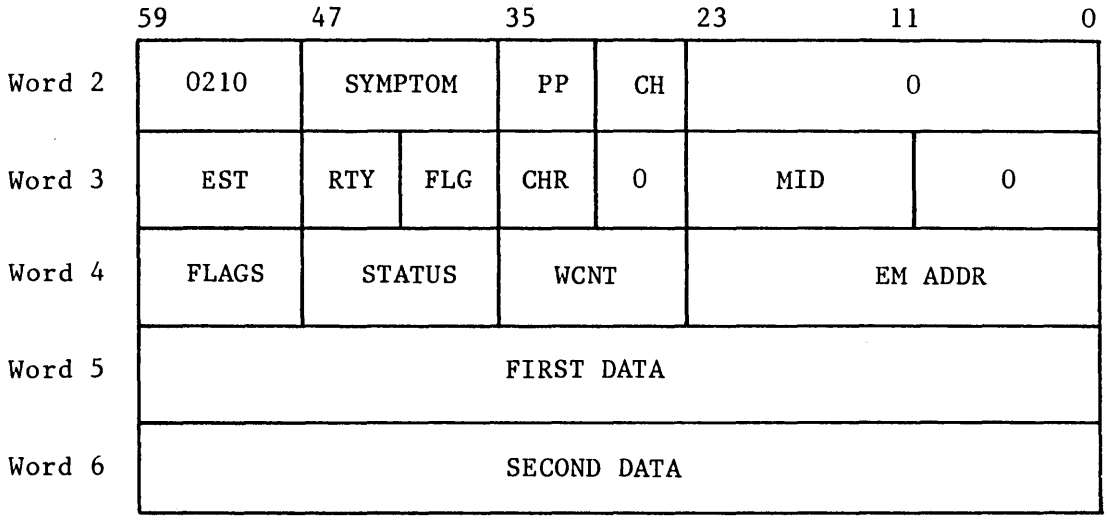
The following message is repeated until all unique SECDED errors that were logged have been issued to the BML. The continuation flag in word 3 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0205B	0101B	PP	16B	0	
Word 3	0	FLAG	0			
Word 4	SID			0		CT
Word 5	SID			0		CT
Word 6	SID			0		CT
Word 7	SID			0		CT

Field	Location	Description
SID	59-24	SECDED identifier.
	(59-58)	SCR bits 191-190.
	(57-44)	SCR bits 53-40.
	(43-24)	Zero (unused).

EXTENDED MEMORY (ESM)	MSGID 0210B
ERRORS DETECTED BY 6DP	SYMPTOM 0440B, 0441B, 0450B, 0500B 0502B

6DP issues the following message when a PP detects an error while transferring data to or from extended memory via a DDP.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0440B Read parity error (detected by 6DP). 0441B Write parity error (detected by 6DP). 0450B Firmware dead (detected by 6DP). 0500B Address error (detected by 6DP). 0502B Status error (detected by 6DP).
PP	2	35-30	PP that detected the error.
CH	2	29-24	Channel on which the error was detected. Not meaningful for symptom code 0500B.
EST	3	59-48	EST ordinal of device.

Field	Word	Location	Description (Continued)
RTY	3	47-42	Number of retries attempted.
FLG	3	41-36	Flag field.
		(41-38)	Reserved.
		(37)	Set if write operation, clear if read operation.
		(36)	Set if unrecovered error, clear if recovered error.
CHR	3	35-30	Channel used for recovery. Not meaningful for symptom codes 500B (address error).
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48	Flag field.
		(59-50)	Reserved.
		(49)	Set if SECOND DATA is present, clear if not.
		(48)	Set if FIRST DATA is present, clear if not.
STATUS	4	47-36	Status received back from a 5004 DDP function. This status is taken immediately after a single word read or write. The status indicates whether or not the operation is successful. If unsuccessful, the status attempts to explain the problem.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

Field	Word	Location	Description (Continued)
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.

EXTENDED MEMORY (ESM)	MSGID 0207B, 0210B
ERRORS DETECTED BY 6DE	SYMPTOM 1040B, 1041B, 1043B, 1100B

6DE issues the following message when the PIOM monitor function has reported an unrecoverable error on a DE or DP device. The status returned by the PIOM monitor function is found in the STATUS field.

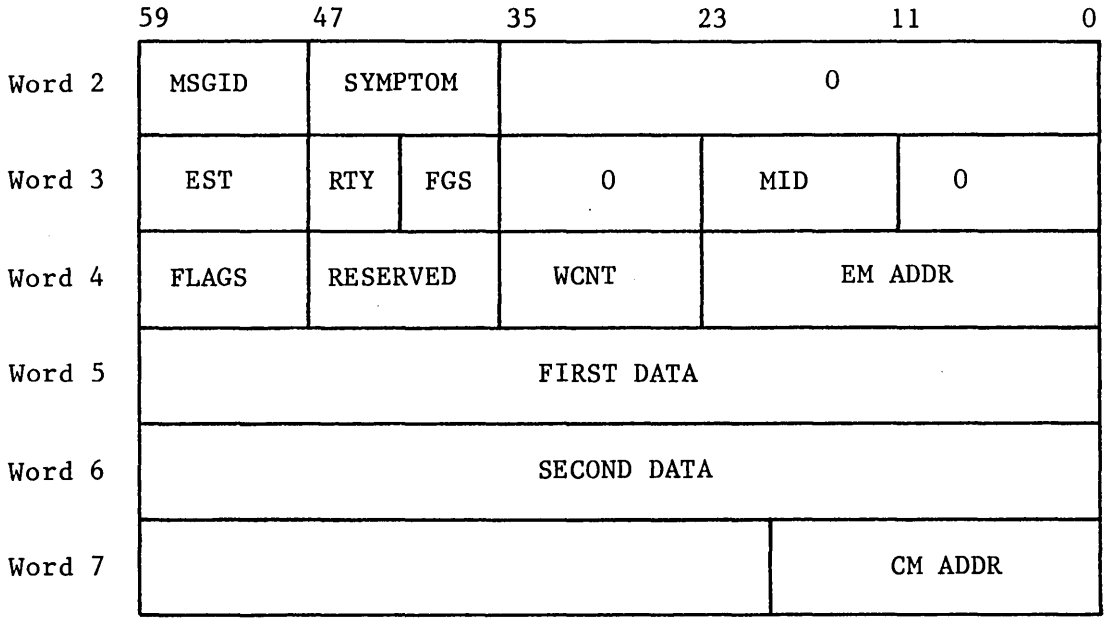
	59	47	35	23	11	0
Word 2	MSGID	SYMPTOM	PP	0		
Word 3	EST	RTY	FGS	0	MID	0
Word 4	0	STATUS		WCNT	EM ADDR	

Field	Word	Location	Description
MSGID	2	59-48	Message identifier. The error occurred on the coupler path to extended memory, even though the device is defined to have a low speed port. 0207B ESM (coupler). 0210B ESM (low speed port).
SYMPTOM	2	47-36	Symptom code. 1040B Read parity error (detected by 6DE). 1041B Write parity error (detected by 6DE). 1043B Device not ready (detected by 6DO). 1100B Address error (detected by 6DE).
PP	2	35-30	PP that detected the error.
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.

Field	Word	Location	Description (Continued)
FLG	3	41-36	Flag field.
		(41-38)	Reserved.
		(37)	Set if write operation, clear if read operation.
		(36)	Set if unrecovered error, clear if recovered error. Currently, this is always set, since all errors reported are unrecovered.
MID	3	23-12	Machine is in display code. Status returned from CPUMTR when error occurred.
STATUS	4	47-36	1 Unrecoverable hardware error (UHES). 4 Unrecoverable parity error (UPES).
WCNT	4	35-24	When greater than 1, WCNT is the number of words in the block transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.

EXTENDED MEMORY (ESM)	MSGID 0207B, 0210B
ERRORS DETECTED BY 1MC AND ELM	SYMPTOM 2040B, 2041B, 2440B, 2441B

1MC and ELM each issue the following message when an extended memory parity error occurs. 1MC reports errors detected by CPUMTR, and ELM reports errors detected by user programs when writing to or reading from user extended memory.



Field	Word	Location	Description
MSGID	2	59-48	Message identifier. (The device code of the device on which an error has occurred.) The error occurred on the coupler path to extended memory, even if the device is defined with a DDP. 0207B ESM Coupler. 0210B ESM Low speed port.
SYMPTOM	2	47-36	Symptom code. 2040B Read parity error (detected by 1MC). 2041B Write parity error (detected by 1MC). 2440B Read parity error (detected by ELM). 2441B Write parity error (detected by ELM).

Field	Word	Location	Description (Continued)
EST	3	59-48	EST ordinal of device.
RTY	3	47-42	Number of retries attempted.
FGS	3	41-36 (41-38) (37) (36)	Flag field. Reserved (zero). Set if write, clear if read. Set if unrecovered, clear if recovered.
MID	3	23-12	Machine identifier in display code.
FLAGS	4	59-48 (59-50) (49) (48)	Flag field. Reserved (zero). Set if SECOND DATA is present, clear if not. Set if FIRST DATA is present, clear if not.
WCNT	4	35-24	When greater than 1, WCNT is the number of words being transferred when the error occurred. EM ADDR is the address of the beginning of that transfer. When equal to 1, EM ADDR is the actual address where the error occurred.
EM ADDR	4	23-0	Transfer address or error address in extended memory.
FIRST DATA	5	59-0	This field shows bad data received on the initial read of recovered read parity errors. Data received on the initial read of unrecovered read parity errors is also shown, but it is not known if the data is bad or good. This field also shows data for write parity errors the driver tried to write to EM.
SECOND DATA	6	59-0	This field shows good data received on the retry of recovered read parity errors, and bad data received on the retry of unrecovered read parity errors. This field is not used for write parity errors.
CM ADDR	7	17-0	Address in central memory to which or from which the EM transfer was supposed to occur.

EXTENDED MEMORY (ESM)	MSGID 0211B
SECDED	SYMPTOM 0100B

The first message is as follows.

	59	47	35	23	11	0
Word 2	0211B	0100B	PP	CH	0	
Word 3	0	04	0			
Word 4	A1			A2	A3	
Word 5	A4	A5	A6	A7	A8	
Word 6	A9	A10	A11	A12	A13	
Word 7	A13	A15	A16	A17	A18	

The continuation message is as follows.

	59	47	35	23	11	0
Word 2	0211B	0100B	PP	CH	0	
Word 3	0	04	0			
Word 4	B1	B2	B3	B4	B5	
Word 5	B6	B7	B8	B9	B10	
Word 6	B11	B12	B13	B14	B15	
Word 7	B16	B17	B18	B19	B20	

The continuation message is as follows.

	59	47	35	23	11	0
Word 2	0211B	0100B	PP	CH	0	
Word 3	0	04	0			
Word 4	C1	C2	C3	C4	C5	
Word 5	C6	C7	C8	C9	C10	
Word 6	C11	C12	C13	C14	C15	
Word 7	C16	C17	C18	C19	C20	

The continuation message is as follows.

	59	47	35	23	11	0
Word 2	0211B	0100B	PP	CH	0	
Word 3	0	04	0			
Word 4	D1	D2	D3	D4	D5	
Word 5	D6	D7	D8	D9	D10	
Word 6	D11	D12	D13	D14	D15	
Word 7	D16	D17	D18	D19	D20	

The continuation message is as follows.

	59	47	35	23	11	0
Word 2	0211B	0100B	PP	CH	0	
Word 3	0					
Word 4	E1	E2	E3		0	

Field	Location	Description
A1	55-24	Programmable single bit error counter.
A2	23-12	Double bit error 1 (valid bit, address bits 23-13).
A3	11-0	Double bit error 1 (address bits 12-4, 2-0).
A4	59-48	Double bit error 2 (valid bit, address bits 23-13).
A5	47-36	Double bit error 2 (address bits 12-4, 2-0).
	•	
	•	
	•	
A18	11-0	Double bit error 11 (valid bit, address bits 23-13).
B1	59-48	Double bit error 11 (address bits 12-4, 2-0).
B2	47-36	Double bit error 12 (valid bit, address bits 23-13).
B3	35-24	Double bit error 12 (address bits 12-4, 2-0).
	•	
	•	
	•	
B15	11-0	Double bit error 16 (valid bit, address bits 23-13).
B16	59-48	Double bit error 16 (address bits 12-4, 2-0).
B17	47-36	Single bit error 1 (syndrome bits, address bit 23).
B18	35-24	Single bit error 1 (address bits 22-17, 2-0).
	•	
	•	
	•	

Field	Location	Description (Continued)
B20	11-0	Single bit error 2 (syndrome bits, address bit 23).
C1	59-48	Single bit error 2 (address bits 22-17, 2-0).
	•	
	•	
	•	
C20	11-0	Single bit error 13 (syndrome bits, address bit 23).
D1	59-48	Single bit error 13 (address bits 22-17, 2-0).
	•	
	•	
	•	
D7	47-36	Single bit error 16 (address bits 22-17, 2-0).
D8	35-24	Single bit error 1 (counter bits).
	•	
	•	
	•	
D20	11-0	Single bit error 13 (counter bits).
E1	55-48	Single bit error 14 (counter bits).
	•	
	•	
	•	
E3	35-24	Single bit error 16 (counter bits).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0212B
UNCORRECTED IOU ERRORS	SYMPTOM 0100B, 0110B, 0111B, 0112B 0200B

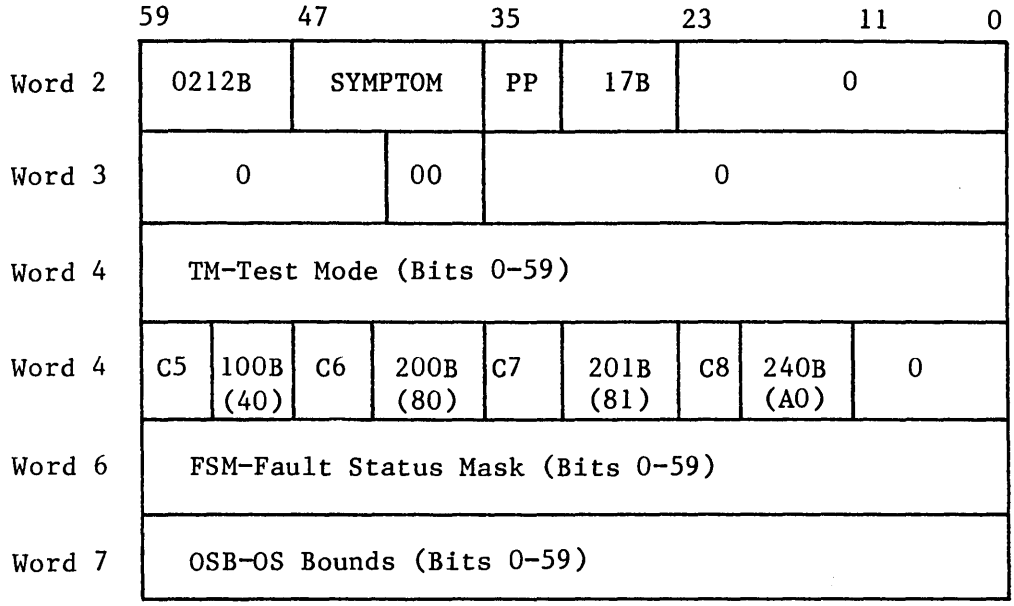
The first message has the following form.

	59	47	35	23	0
Word 2	0212B	SYMPTOM	PP	17B	0
Word 3	0	04	0		
Word 4	EID-Element Identifier (Bits 0-59)				
Word 5	SS-Status Summary (Bits 0-59)				
Word 6	OI-Options Installed (Bits 0-59)				
Word 7	DEC-Dependent Environment Control (Bits 0-59)				

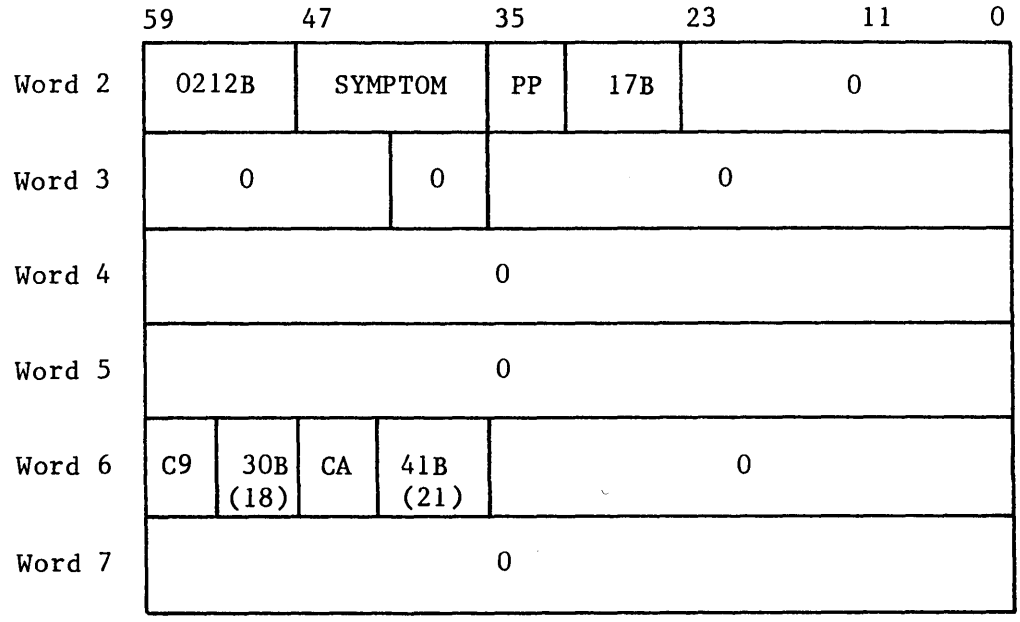
The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0212B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	C1	20B (10)	C2	00 (00)	C3	22B (12)	C4	60B (30)	0
Word 5	SR-Status Register (Bits 0-59)					
Word 6	FS1-Fault Status 1 (Bits 0-59)					
Word 7	FS2-Fault Status 2 (Bits 0-59)					

The continuation message has the following form.



The continuation message has the following form.



Field	Location	Description
SYMPTOM	47-36	Symptom code. 0100B IOU error. 0110B Virtual state uncorrected IOU error. 0111B Virtual state uncorrected IOU error (SMU). 0112B Express deadstart dump. 0200B Critical error log.

Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Status register (bits 60-63).
C6	47-44	Fault status 1 (bits 60-63).
C7	35-31	Fault status 2 (bits 60-63).
C8	23-20	Test mode (bits 60-63).
C9	59-56	Fault status mask (bits 60-63).
CA	47-44	OS bounds (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0213B
UNCORRECTED IOU ERRORS	SYMPTOM 0100B, 0110B, 0111B, 0112B 0200B

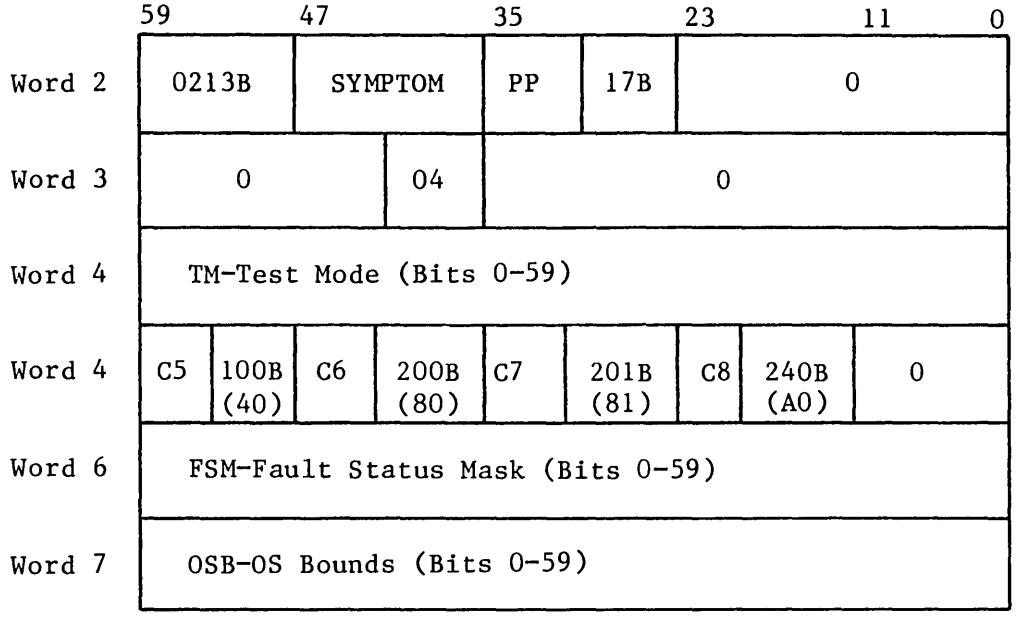
The first message has the following form.

	59	47	35	23	11	0
Word 2	0213B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Operations Installed (Bits 0-59)					
Word 7	DEC-Dependent Environment Control (Bits 0-59)					

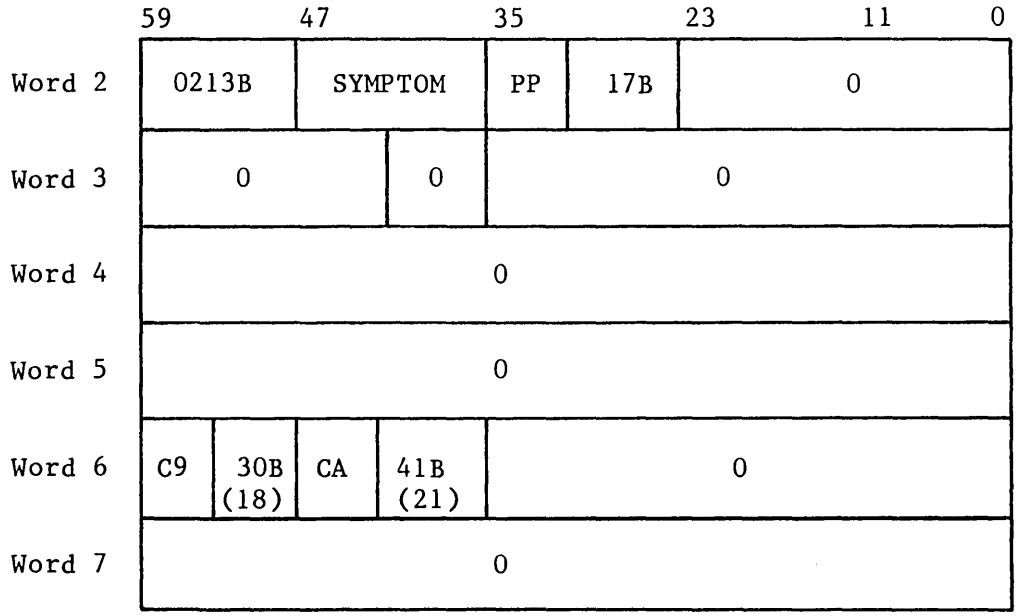
The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0213B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 60B (30) | 0		
Word 5	SR-Status Register (Bits 0-59)					
Word 6	FS1-Fault Status 1 (Bits 0-59)					
Word 7	FS2-Fault Status 2 (Bits 0-59)					

The continuation message has the following form.



The continuation message has the following form.



Field	Location	Description
SYMPTOM	47-36	Symptom code. 0100B IOU error. 0110B Virtual state uncorrected IOU error. 0111B Virtual state uncorrected IOU error (SMU). 0112B Express deadstart dump. 0200B Critical error log.

Field	Location	Description (Continued)
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Status register (bits 60-63).
C6	47-44	Fault status 1 (bits 60-63).
C7	35-31	Fault status 2 (bits 60-63).
C8	23-20	Test mode (bits 60-63).
C9	59-56	Fault status mask (bits 60-63).
CA	23-20	OS bounds (bits 60-63).

MAINFRAME (MODELS 845 AND 855)	MSGID 0214B
UNCORRECTED IOU ERRORS	SYMPTOM 0100B, 0110B, 0111B, 0112B 0200B

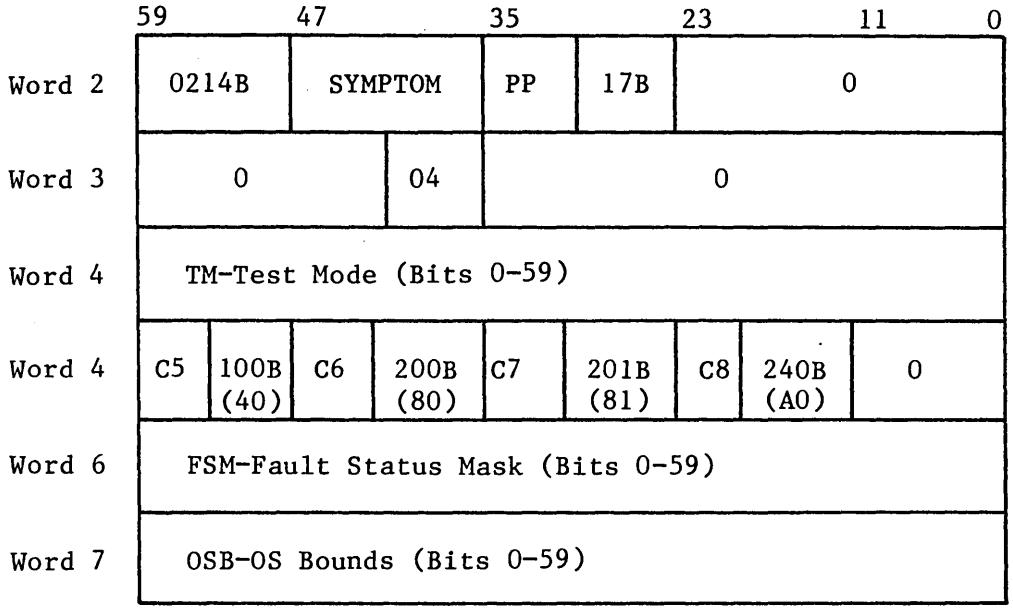
The first message has the following form.

	59	47	35	23	0
Word 2	0214B	SYMPTOM	PP	17B	0
Word 3	0	04	0		
Word 4	EID-Element Identifier (Bits 0-59)				
Word 5	SS-Status Summary (Bits 0-59)				
Word 6	OI-Options Installed (Bits 0-59)				
Word 7	DEC-Dependent Environment Control (Bits 0-59)				

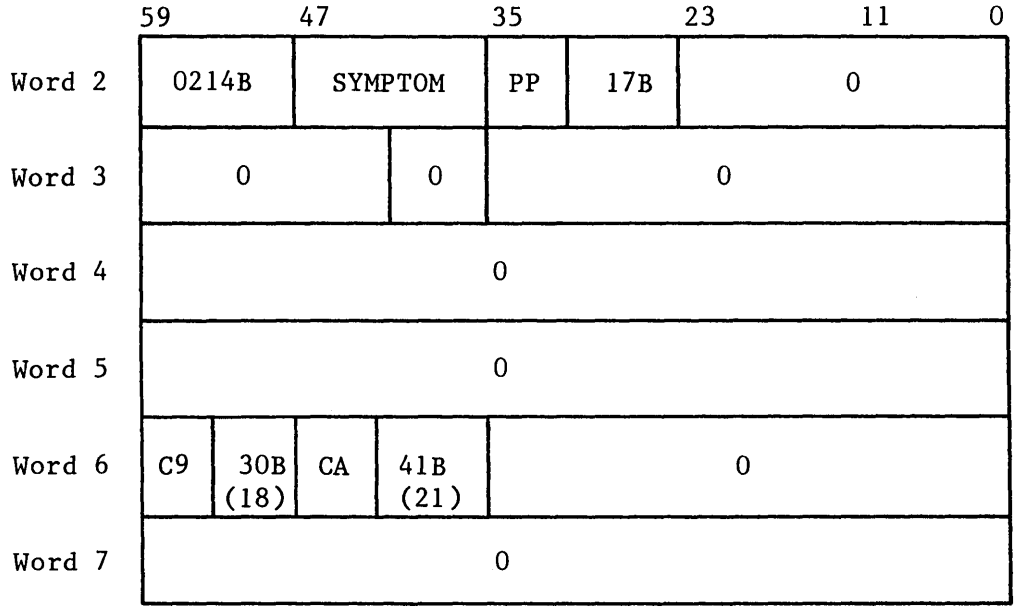
The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0214B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 60B (30)	0	
Word 5	SR-Status Register (Bits 0-59)					
Word 6	FS1-Fault Status 1 (Bits 0-59)					
Word 7	FS2-Fault Status 2 (Bits 0-59)					

The continuation message has the following form.



The continuation message has the following form.

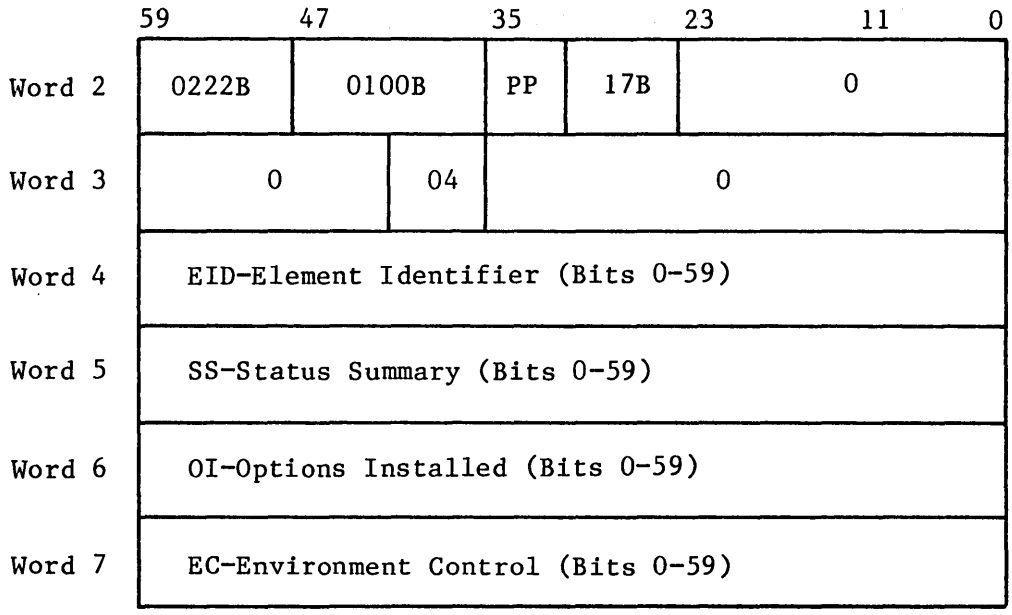


Field	Location	Description
SYMPTOM	47-36	Symptom code. 0100B IOU error. 0110B Virtual state uncorrected IOU error. 0111B Virtual state uncorrected IOU error (SMU). 0112B Express deadstart dump. 0200B Critical error log.

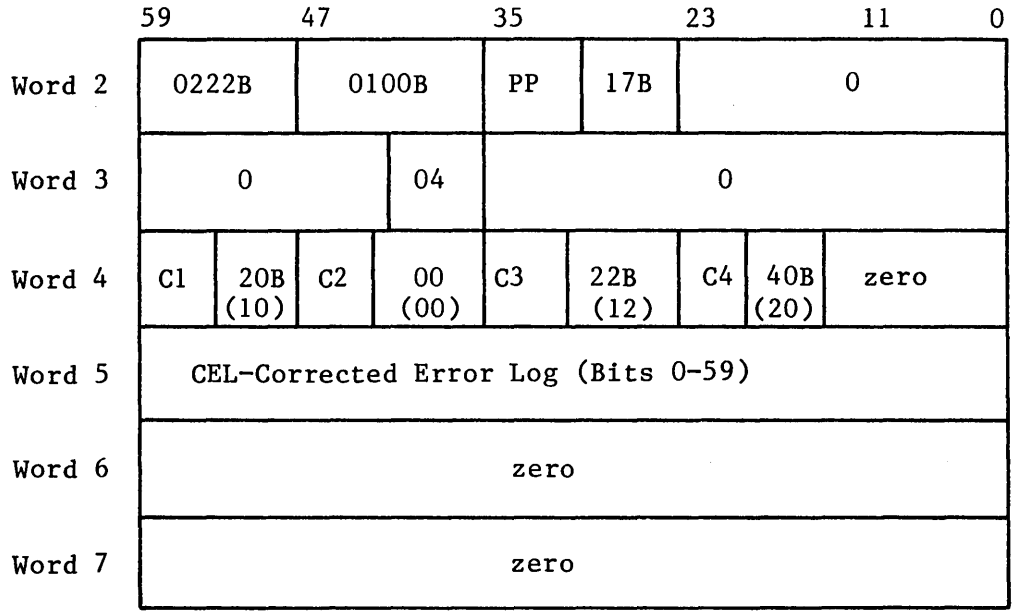
Field	Location	Description (Continued)
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Status register (bits 60-63).
C6	47-44	Fault status 1 (bits 60-63).
C7	35-31	Fault status 2 (bits 60-63).
C8	23-20	Test mode (bits 60-63).
C9	59-56	Fault status mask (bits 60-63).
CA	47-44	OS bounds (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0222B
MEMORY CORRECTED ERROR	SYMPTOM 0100B

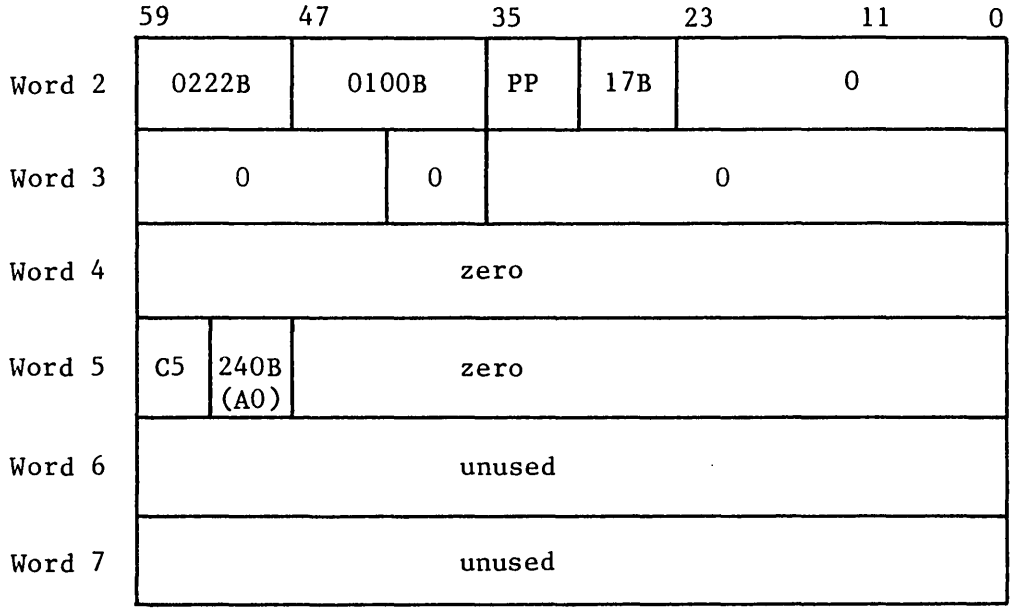
The first message has the following form.



The continuation message has the following form.



The continuation message has the following form.



Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Corrected error log (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0222B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 2 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	222B	101B	PP	17B	0	
Word 3	0	FLAG	0			
Word 4	MRSA			0		CT
Word 5	MRSA			0		CT
Word 6	MRSA			0		CT
Word 7	MRSA			0		CT

Field	Location	Description
MRSA	59-24	Maintenance register SECDED address.
	(59-39)	Memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times error encountered.

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0222B
MEMORY UNCORRECTED ERROR	SYMPTOM 0104B, 0110B, 0200B

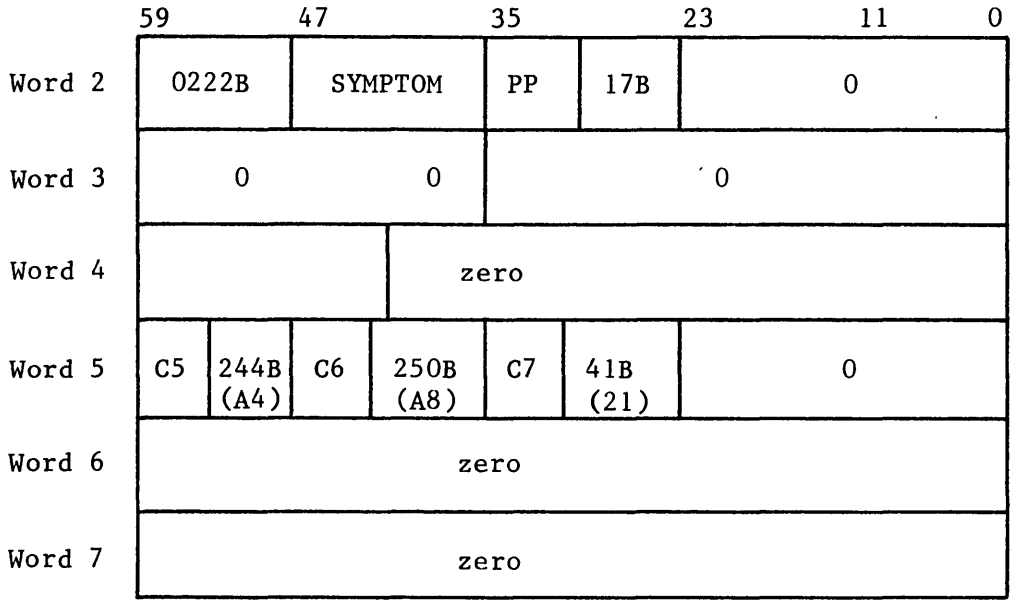
The first message has the following form.

	59	47	35	23	11	0
Word 2	0222B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	EC-Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0222B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 40B (20) | zero		
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)					
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)					
Word 7	BR-Bounds Register (Bits 0-59)					

The continuation message has the following form.



Field	Location	Description
SYMPTOM	47-36	Symptom code. 0104B Uncorrected error. 0110B Virtual state CM error. 0200B Critical error log.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0222B
EXPRESS DEADSTART DUMP	SYMPTOM 0105B

The following message is generated by DSDI from data dumped during an express deadstart dump. The message is written to a local file, not to the BML.

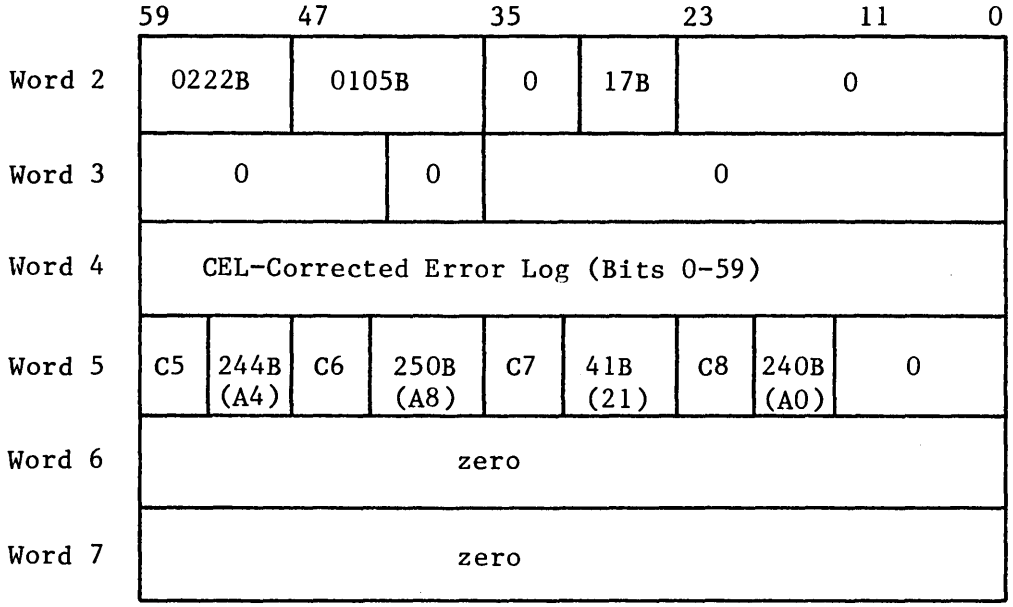
The first message has the following form.

	59	47	35	23	11	0
Word 2	0222B	0105B	0	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	EC-Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0222B	0105B	0	17B	0	
Word 3	0	04	0			
Word 4	C1 20B (10)	C2 00 (00)	C3 22B (12)	C4 40B (20)	zero	
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)					
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)					
Word 7	BR-Bounds Register (Bits 0-59)					

The continuation message has the following form.



Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).
C8	23-20	Corrected error log (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0223B
MEMORY CORRECTED ERROR	SYMPTOM 0100B

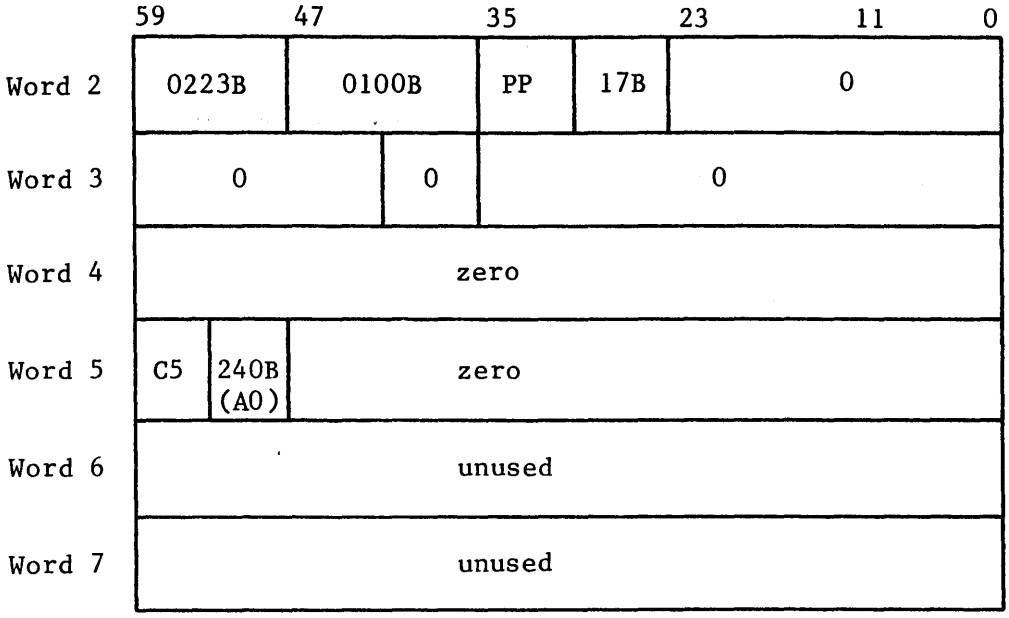
The first message has the following form.

	59	47	35	23	11	0
Word 2	0223B	0100B	PP	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	EC-Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0223B	0100B	PP	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 40B (20)	zero	
Word 5	CEL-Corrected Error Log (Bits 0-59)					
Word 6	zero					
Word 7	zero					

The continuation message has the following form.



Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Corrected error log (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0223B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

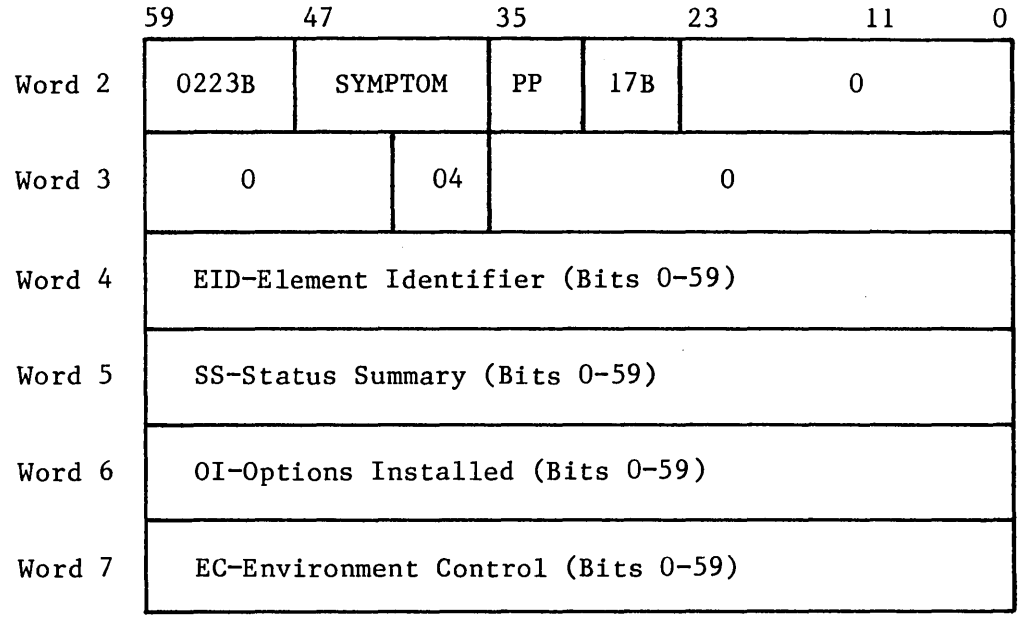
The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 2 is set to zero for the last message in the sequence.

	59	47	35	23	11	0
Word 2	0223B	0101B	PP	17B	0	
Word 3	0	FLAG	0			
Word 4	MRSA		0		CT	
Word 5	MRSA		0		CT	
Word 6	MRSA		0		CT	
Word 7	MRSA		0		CT	

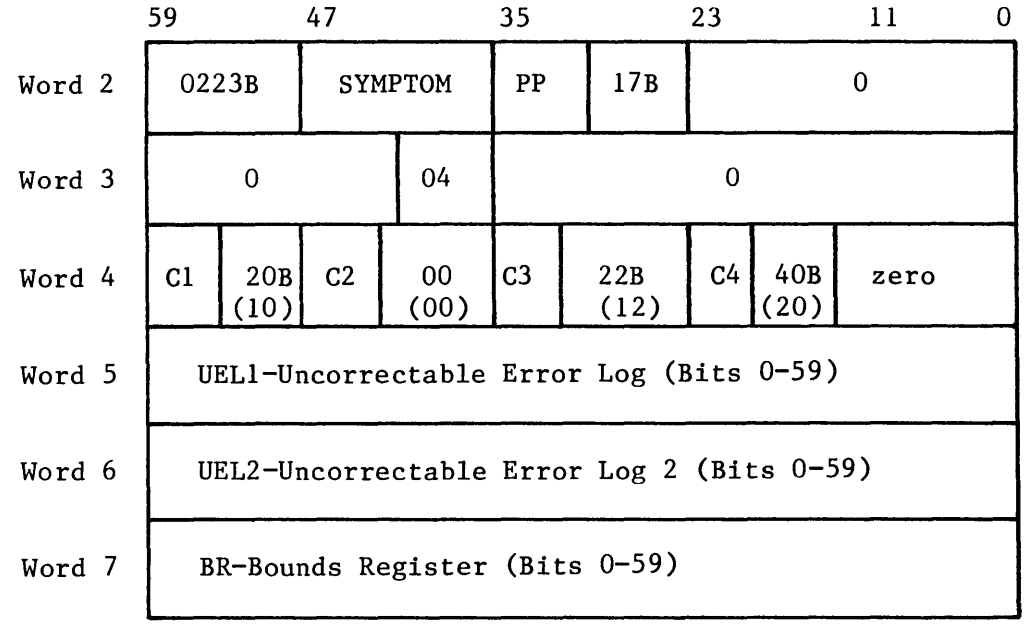
Field	Location	Description
MRSA	59-24	Maintenance register SECDED address.
	(59-39)	Memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times error encountered.

MAINFRAME (MODEL 835)	MSGID 0223B
MEMORY UNCORRECTED ERROR	SYMPTOM 0104, 0110B, 0200B

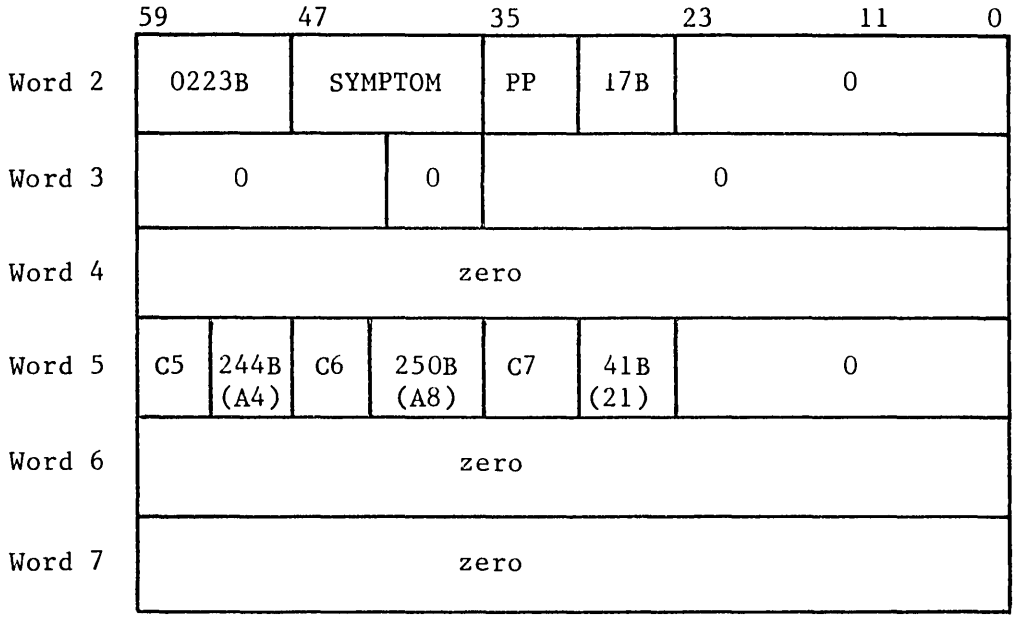
The first message has the following form.



The continuation message has the following form.



The continuation message has the following form.



Field	Location	Description
SYMPTOM	47-36	Symptom code. 0104B Uncorrected error. 0110B Virtual state CM error. 0200B Critical error log.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0223B
EXPRESS DEADSTART DUMP	SYMPTOM 0105B

The following message is generated by DSDI from data dumped during an express deadstart dump. The message is written to a local file, not to the BML.

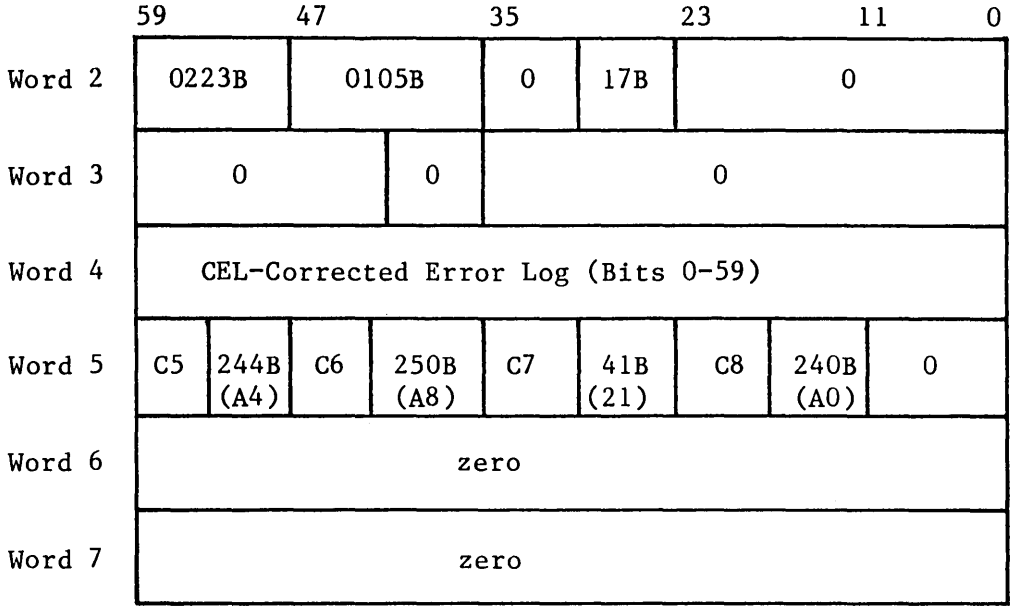
The first message has the following form.

	59	47	35	23	11	0
Word 2	0223B	0105B	0	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	EC-Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0223B	0105B	0	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 40B (20)	zero	
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)					
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)					
Word 7	BR-Bounds Register (Bits 0-59)					

The continuation message has the following form.



Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).
C8	23-20	Corrected error log (bits 60-63).

MAINFRAME (MODELS 845 AND 855)	MSGID 0224B
MEMORY CORRECTED ERROR	SYMPTOM 0100B

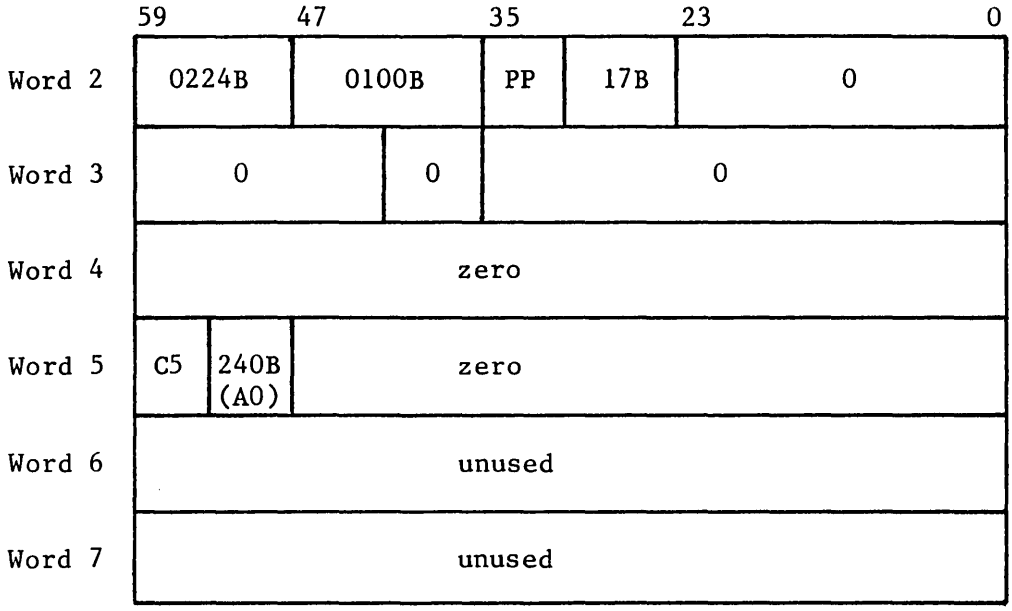
The first message has the following form.

	59	47	35	23	11	0
Word 2	0224B	0100B	PP	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	EC-Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0224B	0100B	PP	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 40B (20)	zero	
Word 5	CEL-Corrected Error Log (Bits 0-59)					
Word 6	zero					
Word 7	zero					

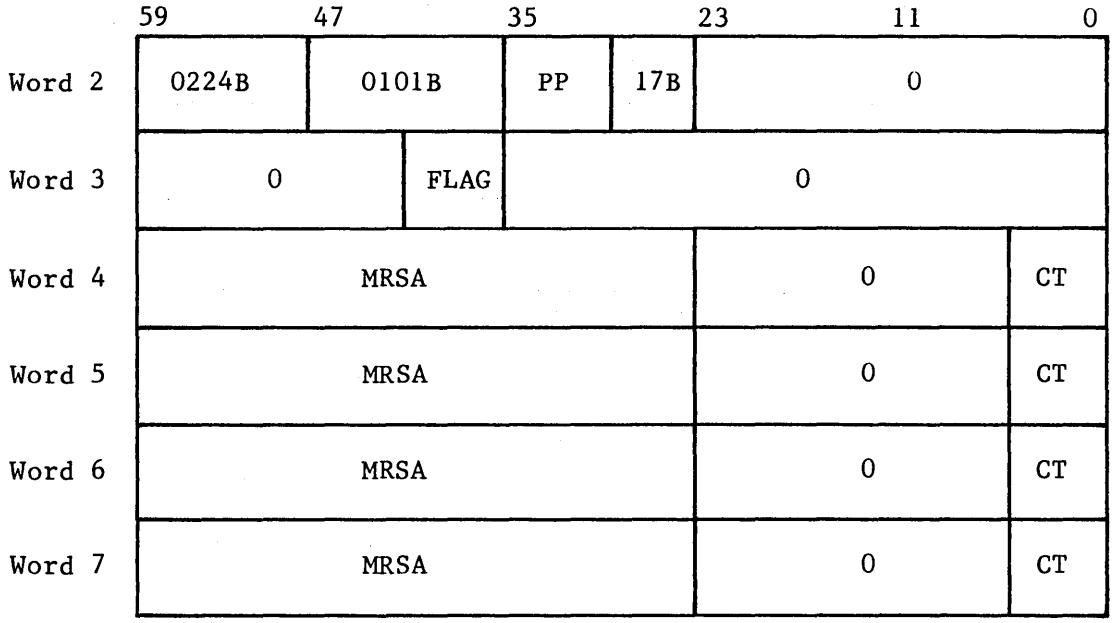
The continuation message has the following form.



Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Corrected error log (bits 60-63).

MAINFRAME (MODELS 845 AND 855)	MSGID 0224B
SECDED SINGLE BIT SUMMARY TABLE	SYMPTOM 0101B

The following message is repeated until all SECDED errors that were logged are reported. The continuation flag in word 2 is set to zero for the last message in the sequence.



Field	Location	Description
MRSA	59-24	Maintenance register SECDED address.
	(59-39)	Memory corrected error log register (MCEL) bits 13-33.
	(39-32)	Memory corrected error log register (MCEL) bits 42-49.
CT	5-0	Number of times error encountered.

MAINFRAME (MODELS 845 AND 855)	MSGID 0224B
MEMORY UNCORRECTED ERROR	SYMPTOM 0104B, 0110B, 0200B

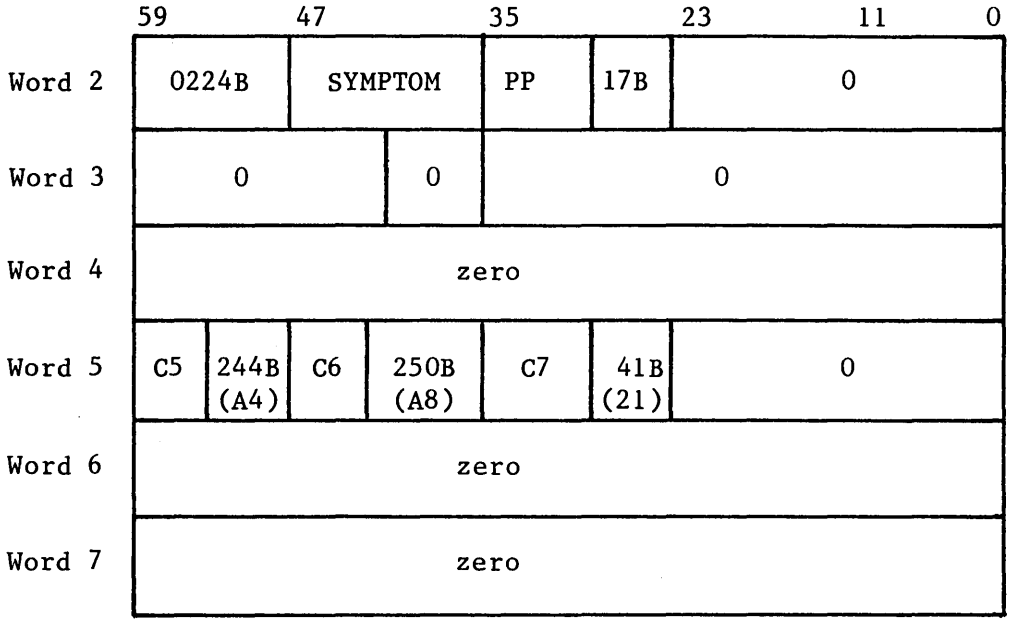
The first message has the following form.

	59	47	35	23	11	0
Word 2	0224B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	EC-Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	0
Word 2	0224B	SYMPTOM	PP	17B	0	
Word 3	0	04	0			
Word 4	C1 | 20B (10)	C2 | 00 (00)	C3 | 22B (12)	C4 | 40B (20)	zero	
Word 5	UEL1-Uncorrectable Error Log (Bits 0-59)					
Word 6	UEL2-Uncorrectable Error Log 2 (Bits 0-59)					
Word 7	BR-Bounds Register (Bits 0-59)					

The continuation message has the following form.

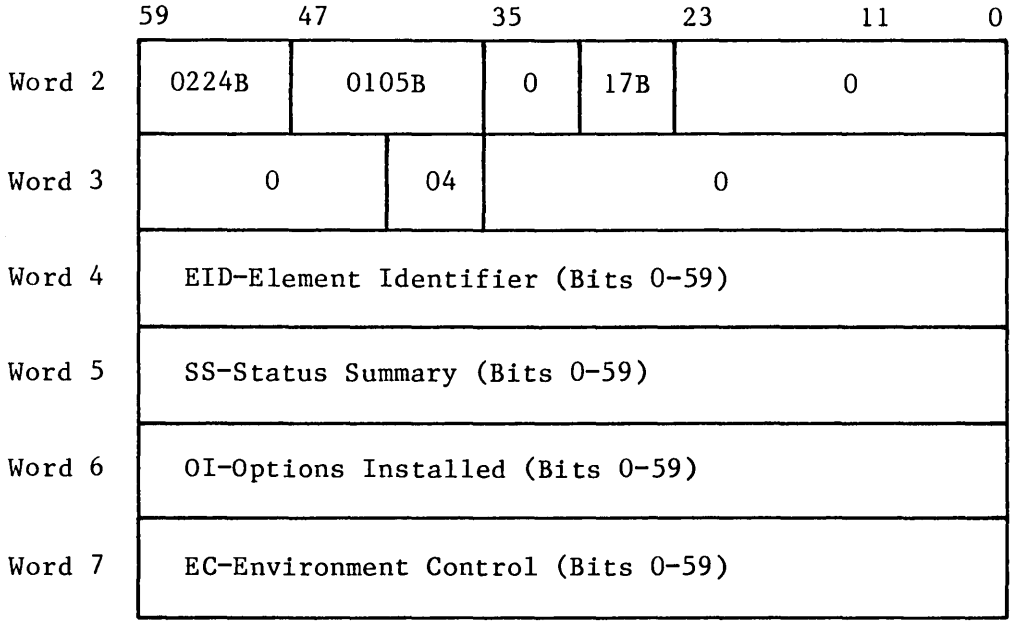


Field	Location	Description
SYMPTOM	47-36	Symptom code. 0104B Uncorrected error. 0110B Virtual state CM error. 0200B Critical error log.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	47-44	Uncorrectable error log 2 (bits 60-63).
C7	35-32	Bounds register (bits 60-63).

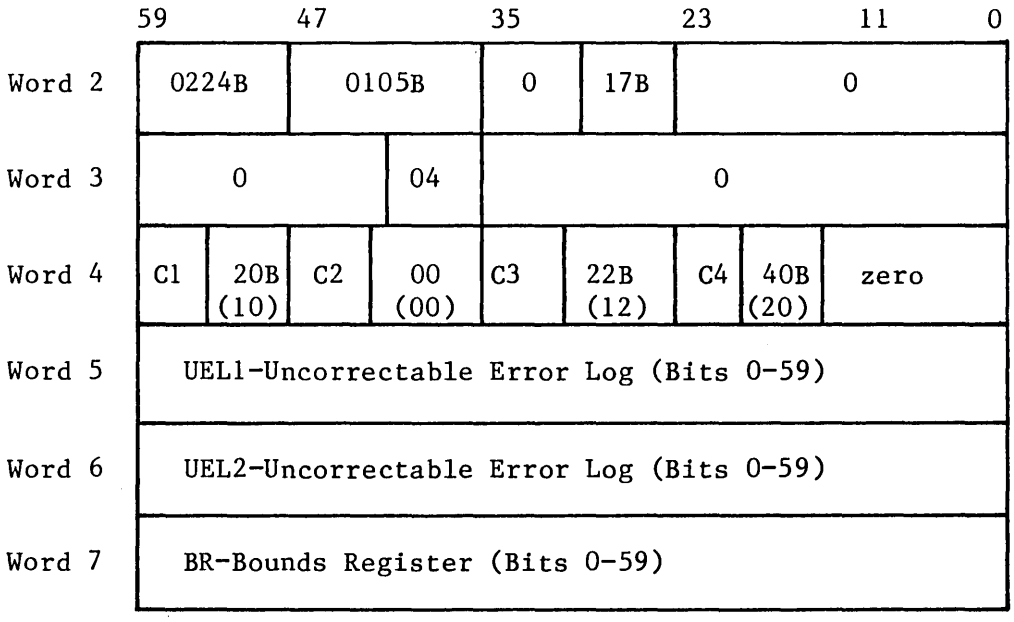
MAINFRAME (MODELS 845 AND 855)	MSGID 0224B
EXPRESS DEADSTART DUMP	SYMPTOM 0105B

The following message is generated by DSDI from data dumped during an express deadstart dump. This message is written to a local file, not to the BML.

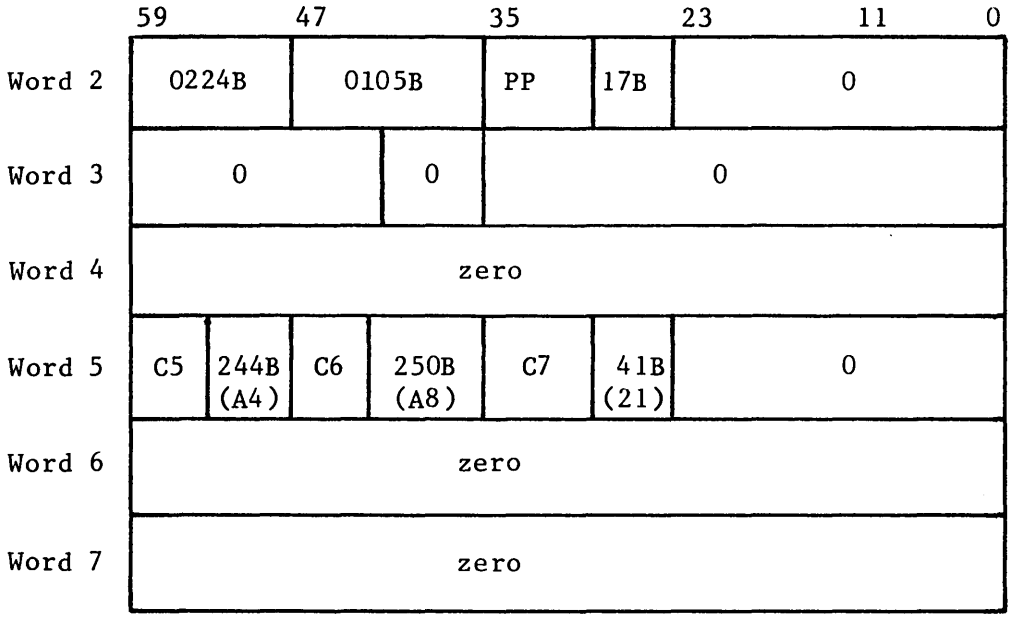
The first message has the following form.



The continuation message has the following form.



The continuation message has the following form.



Field	Location	Description
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Environment control (bits 60-63).
C5	59-56	Uncorrectable error log 1 (bits 60-63).
C6	35-32	Bounds register (bits 60-63).
C7	23-20	Corrected error log (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0232B
PROCESSOR CORRECTED ERROR	SYMPTOM 0100B

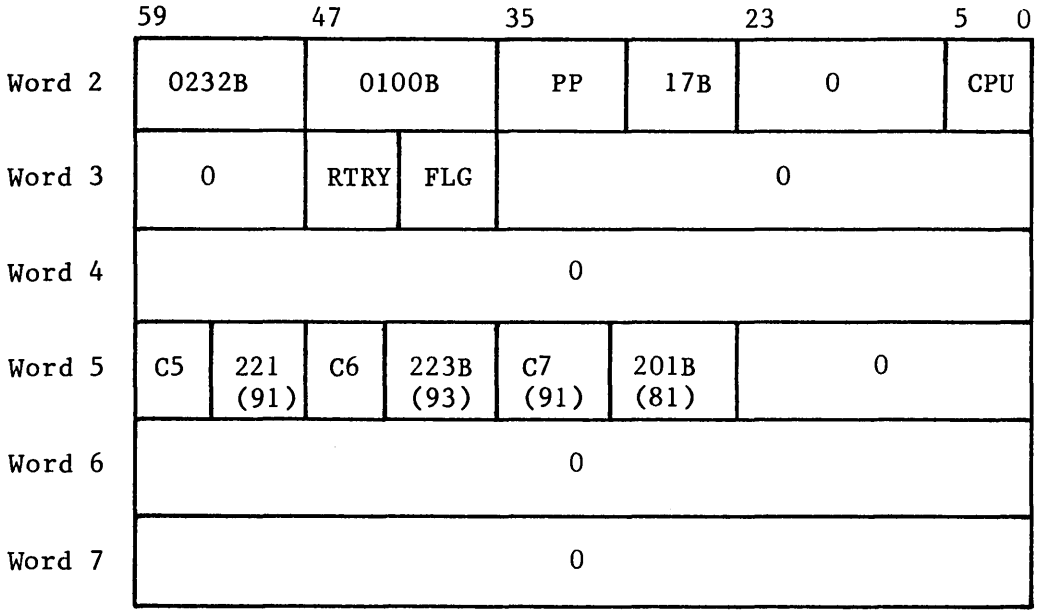
The first message has the following form.

	59	47	35	17	5	0
Word 2	0232B	0100B	PP	17B	0	CPU
Word 3	0	04	0			
Word 4	EID-Element Identifier (Bits 0-55)					
Word 5	SS-Status Summary (Bits 0-55)					
Word 6	OI-Options Installed (Bits 0-55)					
Word 7	DEC-Dependent Environment Control (Bits 0-55)					

The continuation message has the following form.

	59	47	35	23	11	5	0
Word 2	0232B	0100B	PP	17B	0	CPU	
Word 3	0	04	0				
Word 4	C1	20B (10)	C2	00 (00)	C3	22B (12)	C4	60B (30)	0
Word 5	CSEL-Control Store Error Log (Bits 0-59)								
Word 6	MCEL-Map Corrected Error Log (Bits 0-59)								
Word 7	RCEL-Retry Corrected Error Log (Bits 0-59)								

The continuation message has the following form.



Field	Location	Description
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Control store error log (bits 60-63).
C5	47-44	Map corrected error log (bits 60-63).
C6	35-31	Retry corrected error log (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0232B
PROCESSOR UNCORRECTED ERROR	SYMPTOM 0141B, 0142B, 0144B, 0145B 0161B, 0164B, 0200B

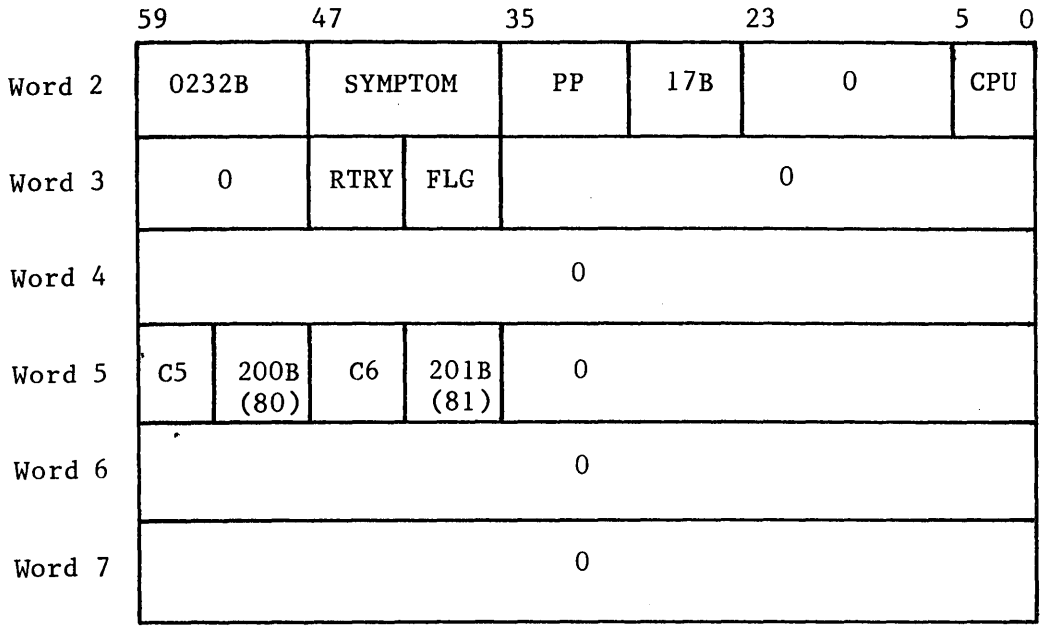
The first message has the following form.

	59	47	35	23	5	0
Word 2	0232B	SYMPTOM	PP	17B	0	CPU
Word 3	0	RTRY FLG	0			
Word 4	EI-Element Identifier (Bits 0-59)					
Word 5	SS-Status Summary (Bits 0-59)					
Word 6	OI-Options Installed (Bits 0-59)					
Word 7	DEC-Dependent Environment Control (Bits 0-59)					

The continuation message has the following form.

	59	47	35	23	11	5	0
Word 2	0232B	SYMPTOM	PP	17B	0	CPU	
Word 3	0	RTRY FLG	0				
Word 4	C1 20B (10)	C2 00 (00)	C3	22B (12)	C4	60B (30)	0
Word 5	PFS-Processor Fault Status (Bits 0-59)						
Word 6	CSEL-Control Store Error Log (Bits 0-59)						
Word 7	0						

The continuation message has the following form.



Field	Location	Description
SYMPTOM	47-36	Symptom code.
	0141B	Real state processor detected uncorrected error (DUE) with process damaged.
	0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0144B	Virtual state processor detected uncorrected error (DUE) with process damaged.
	0145B	Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
	0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0164B	Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
	0200B	Critical error log.

Field	Location	Description (Continued)
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
RTRY	47-42	Number of times software retried failing operation.
FLG	41-36	Flag Field. Bit 36: 0 Recovered. 1 Unrecovered. Bit 37: Reserved. Bit 38: 0 Final/only message. 1 Continuation message.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Processor fault status (bits 60-63).
C6	47-44	Controlstore error log (bits 60-63).

MAINFRAME (MODELS 810, 815, 825, AND 830)	MSGID 0232B
EXPRESS DEADSTART DUMP	SYMPTOM 0113B

The following message is generated by DSDI from data dumped during an express deadstart dump. This message is written to a local file, it is not issued to the BML.

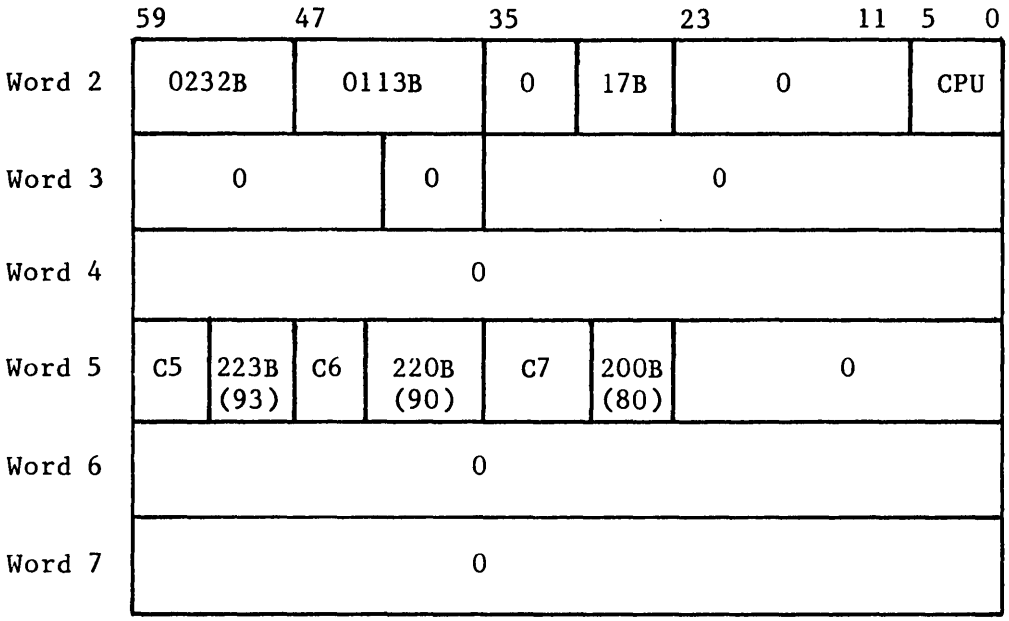
The first message has the following form.

	59 47	35	23	5 0
Word 2	0232B | 0113B	0 | 17B	0	CPU
Word 3	0	04	0	
Word 4	EID-Element Identifier (Bits 0-59)			
Word 5	SS-Status Summary (Bits 0-59)			
Word 6	OI-Options Installed (Bits 0-59)			
Word 7	DEC-Dependent Environment Control (Bits 0-55)			

The continuation message has the following form.

	59 47	35	23	11 5 0
Word 2	0232B | 0113B	0 | 17B	0	CPU
Word 3	0	04	0	
Word 4	C1 | 20B (10) | C2 | 00 (00)	C3 | 22B (12)	C4 | 40B (30)	0
Word 5	MCEL-Map Corrected Error Log (Bits 0-59)			
Word 6	RCEL-Retry Corrected Error Log (Bits 0-59)			
Word 7	PFS-Processor Fault Status (Bits 0-59)			

The continuation message has the following form.



Field	Location	Description
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-31	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Map corrected error log (bits 60-63).
C6	47-44	Retry corrected error log (bits 60-63).
C7	35-31	Processor fault status (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0233B
PROCESSOR CORRECTED ERROR	SYMPTOM 0100B

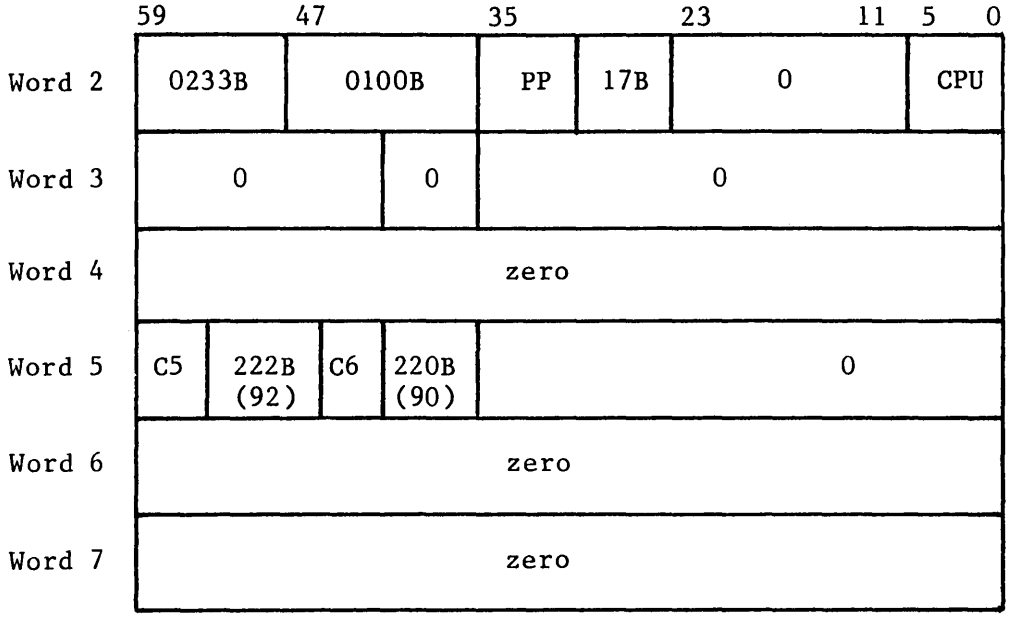
The first message has the following form.

	59 47	35	23	11 5 0
Word 2	0233B | 0100B	PP	17B	0 | CPU
Word 3	0 | 04	0		
Word 4	EID-Element Identifier (Bits 0-59)			
Word 5	SS-Status Summary (Bits 0-59)			
Word 6	OI-Options Installed (Bits 0-59)			
Word 7	DEC-Dependent Environment Control (Bits 0-59)			

The continuation message has the following form.

	59 47	35	23	11 5 0
Word 2	0233B | 0100B	PP	17B	0 | CPU
Word 3	0 | 04	0		
Word 4	C1 | 20B (10) | C2 | 00 (00)	C3 | 22B (12)	C4 | 60B (30)	zero
Word 5	CCEL-Cache Corrected Error Log (Bits 0-59)			
Word 6	RCEL-Retry Corrected Error Log (Bits 0-59)			
Word 7	zero			

The continuation message has the following form.



Field	Location	Description
CPU	5-0	Logical CPU number. 0: Processor 0.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 0-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Cache corrected error log (bits 60-63).
C6	47-44	Retry corrected error log (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0233B
PROCESSOR UNCORRECTED ERROR	SYMPTOM 0141B, 0142B, 0144B, 0145B 0161B, 0164B, 0200B

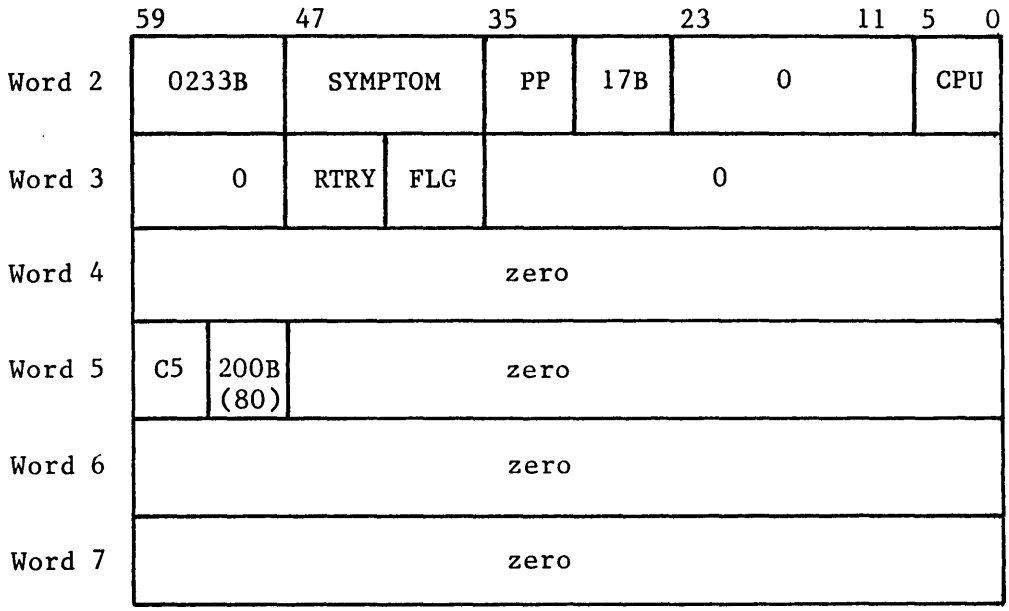
The first message has the following form.

	59	47	35	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0		CPU
Word 3	0	RTRY FLG	0				
Word 4	EID-Element Identifier (Bits 0-59)						
Word 5	SS-Status Summary (Bits 0-59)						
Word 6	OI-Options Installed (Bits 0-59)						
Word 7	DEC-Dependent Environment Control (Bits 0-59)						

The continuation message has the following form.

	59	47	35	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0		CPU
Word 3	0	RTRY FLG	0				
Word 4	C1 20B (10)	C2 00 (00)	C3	22B (12)	C4	60B (30)	zero
Word 5	PFS-Processor Fault Status (Bits 0-59)						
Word 6	0						
Word 7	0						

The continuation message has the following form.



Field	Location		Description
SYMPTOM	47-36	Symptom code.	
		0141B	Real state processor detected uncorrected error (DUE) with process damaged.
		0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
		0144B	Virtual state processor detected uncorrected error (DUE) with process damaged.
		0145B	Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
		0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
		0164B	Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
		0200B	Critical error log.

Field	Location	Description (Continued)
CPU	5-0	Logical CPU number. 0: Processor 0.
RTRY	47-42	Number of times software retried failing operation.
FLG	41-36	Flag field. Bit 36: 0 Recovered. 1 Unrecovered. Bit 37: Reserved. Bit 38: 0 Final/only message. 1 Continuation message.
C6	47-44	Controlstore error log (bits 60-63).
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 0-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	59-56	Processor fault (bits 0-63).

MAINFRAME (MODEL 835)	MSGID 0233B
EXPRESS DEADSTART DUMP	SYMPTOM 0113B

The following message is generated by DSDI from data dumped during an express deadstart dump. This message is written to a local file, not to the BML.

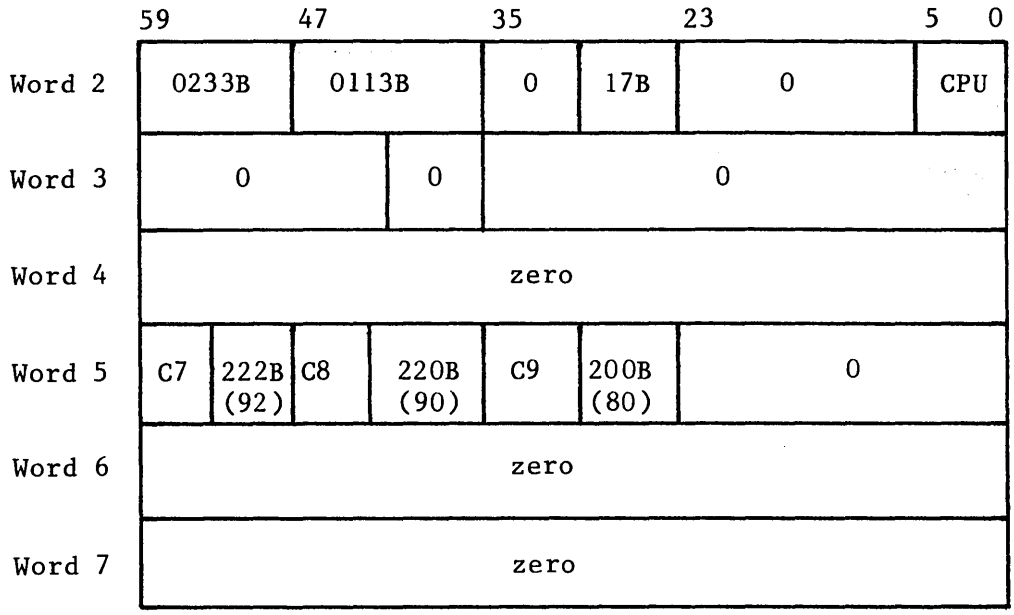
The first message has the following form.

	59	47	35	23	11	5	0
Word 2	0233B	0113B	0	17B	0		CPU
Word 3	0		04	0			
Word 4	EID-Element Identifier (Bits 0-59)						
Word 5	SS-Status Summary (Bits 0-59)						
Word 6	OI-Options Installed (Bits 0-59)						
Word 7	DEC-Dependent Environment Control (Bits 0-59)						

The continuation message has the following form.

	59	47	35	23	11	5	0
Word 2	0233B	0113B	0	17B	0		CPU
Word 3	0		04	0			
Word 4	C1	20B (10)	C2	00 (00)	C3	22B (12)	C4	60B (30)	zero
Word 5	CCEL-Cache Corrected Error Log (Bits 0-59)						
Word 6	RCEL-Retry Corrected Error Log (Bits 0-59)						
Word 7	PFS-Processor Fault Status (Bits 0-59)						

The continuation message has the following form.



Field	Location	Description
CPU	5-0	Logical CPU number. 0: Processor 0.
C1	59-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 0-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C7	59-56	Cache corrected error log (bits 60-63).
C8	47-44	Retry corrected error log (bits 60-63).
C9	35-32	Processor fault status (bits 60-63).

MAINFRAME (MODEL 835)	MSGID 0234B
PROCESSOR ERROR	SYMPTOM 0100B, 0113B, 0141B, 0142B 0144B, 0145B, 0161B, 0164B 0200B

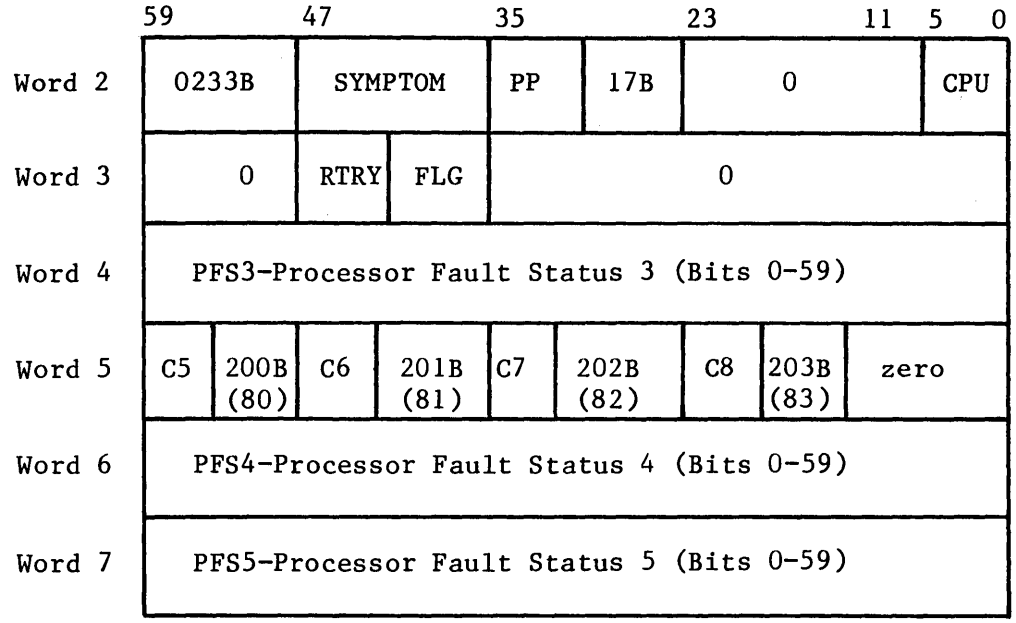
The first message has the following form.

	59	47	35	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0		CPU
Word 3	0	RTRY	FLG	0			
Word 4	EID-Element Identifier (Bits 0-59)						
Word 5	SS-Status Summary (Bits 0-59)						
Word 6	OI-Options Installed (Bits 0-59)						
Word 7	DEC-Dependent Environment Control (Bits 0-59)						

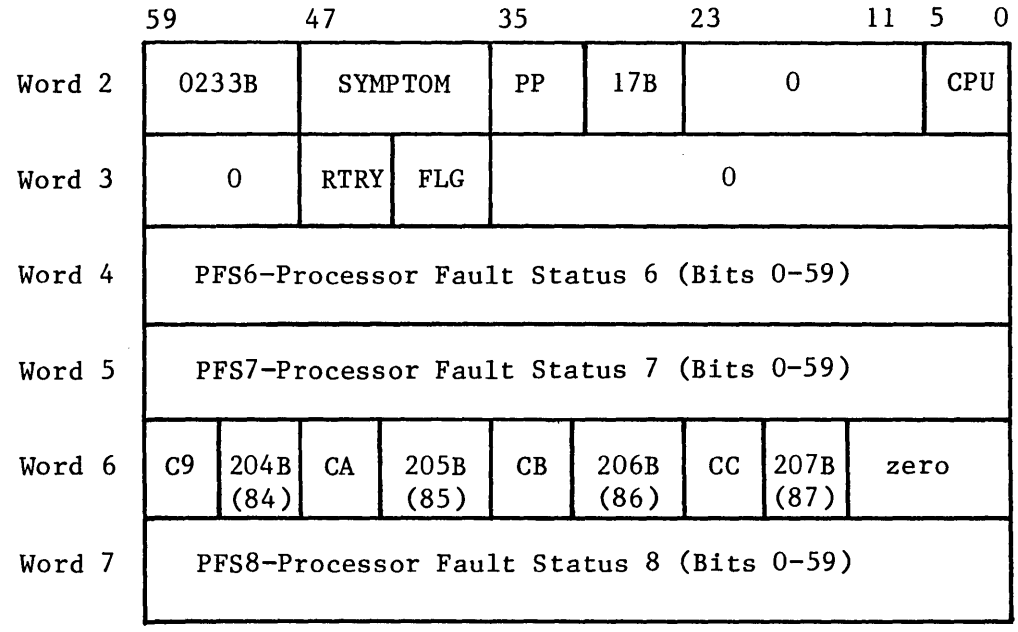
The continuation message has the following form.

	59	47	35	23	11	5	0
Word 2	0233B	SYMPTOM	PP	17B	0		CPU
Word 3	0	RTRY	FLG	0			
Word 4	C1 | 20B (10) | C2 | 00 (00)		C3 | 22B (12)	C4 | 60B (30)	zero		
Word 5	PFS0-Processor Fault Status 0 (Bits 0-59)						
Word 6	PFS1-Processor Fault Status 1 (Bits 0-59)						
Word 7	PFS2-Processor Fault Status 2 (Bits 0-59)						

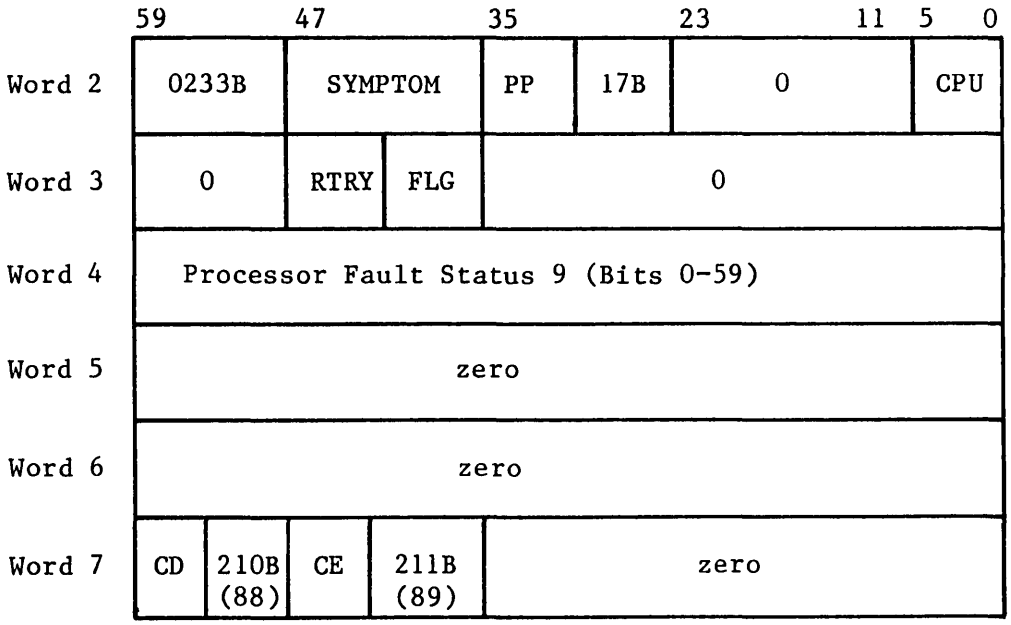
The continuation message has the following form.



The continuation message has the following form.



The continuation message has the following form.

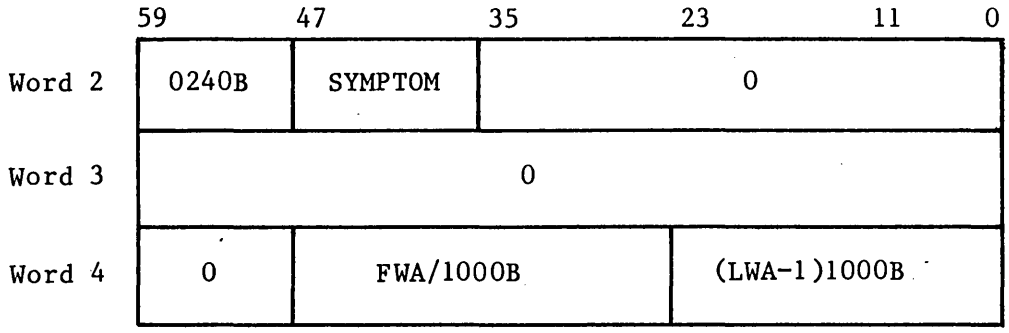


Field	Location		Description
SYMPTOM	47-36	Symptom code.	
		0100B	Corrected error.
		0113B	Express deadstart dump.
		0141B	Real state processor detected uncorrected error (DUE) with process damaged.
		0142B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
		0144B	Virtual state processor detected uncorrected error (DUE) with process damaged.
		0145B	Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry exhausted.
		0161B	Real state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
		0164B	Virtual state processor detected uncorrected error (DUE) with process not damaged and software retry successful.
		0200B	Critical error log.

Field	Location	Description (Continued)
CPU	5-0	Logical CPU number. 0: Processor 0. 1: Processor 1.
RETRY	47-42	Number of times software retried failing operation.
FLG	41-36	Flag field. Bit 36: 0 Recovered. 1 Unrecovered. Bit 37: Reserved. Bit 38: 0 Final/only message. 1 Continuation message.
C1	55-56	Element identifier (bits 60-63).
C2	47-44	Status summary (bits 60-63).
C3	35-32	Options installed (bits 60-63).
C4	23-20	Dependent environment control (bits 60-63).
C5	55-56	Processor fault status 0 (bits 60-63).
C6	47-44	Processor fault status 1 (bits 60-63).
C7	35-32	Processor fault status 2 (bits 60-63).
C8	23-20	Processor fault status 3 (bits 60-63).
C9	59-56	Processor fault status 4 (bits 60-63).
CA	47-44	Processor fault status 5 (bits 60-63).
CB	35-32	Processor fault status 6 (bits 60-63).
CC	23-20	Processor fault status 7 (bits 60-63).
CD	55-56	Processor fault status 8 (bits 60-63).
CE	47-44	Processor fault status 9 (bits 60-63).

DUAL STATE	MSGID 0240B
CM ASSIGNED, CM RETURNED	SYMPTOM 0110B, 0111B

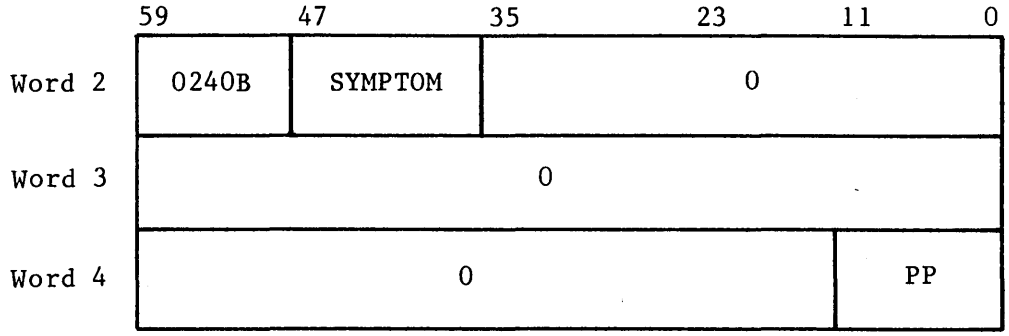
This message is issued wherever central memory (CM) is assigned to NOS/VE or returned to NOS.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0110B CM assigned to NOS/VE. 0111B CM returned to NOS.
FWA	4	47-24	First word address of NOS/VE. CM after operation is complete.
LWA	4	23-0	Last word address of NOS/VE. CM after operation is complete.

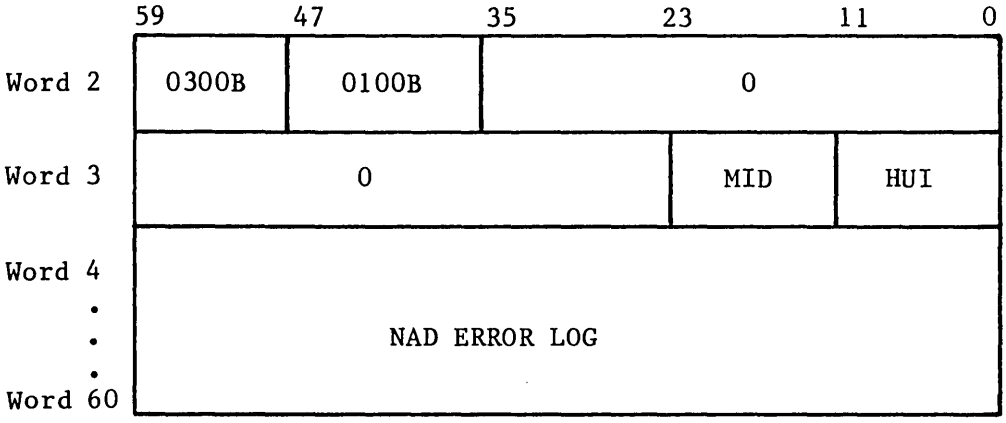
DUAL STATE	MSGID 0240B
PP STATUS	SYMPTOM 0112B, 0113B, 0120B, 0121B

These messages are issued whenever a PP is assigned to NOS/VE or returned to NOS.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0112B PP assigned to NOS/VE. 0113B PP returned to NOS. 0120B Deadstart PP error. 0121B Idle PP error.
PP	4	11-0	Logical PP number to which message applies.

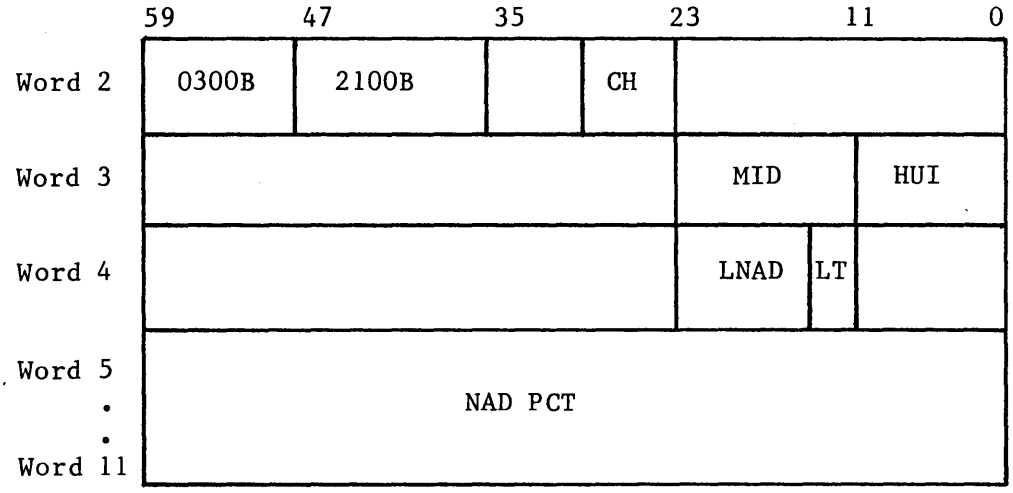
LOOSELY COUPLED NETWORKS	MSGID 0300B
LOCAL NAD ERROR LOG	SYMPTOM 0100B



Field	Word	Location	Description
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier.
NAD ERROR LOG	4-9	59-0	Device status table of local NAD.
	10	59-36	(24 16-bit words).
	10	35-0	21 Local NAD error log entries.
	11-59	59-0	Each entry consists of 9 16-bit
	60	59-12	words.

See the 380-170 Network Access Device Hardware Reference Manual for the format of the NAD error log.

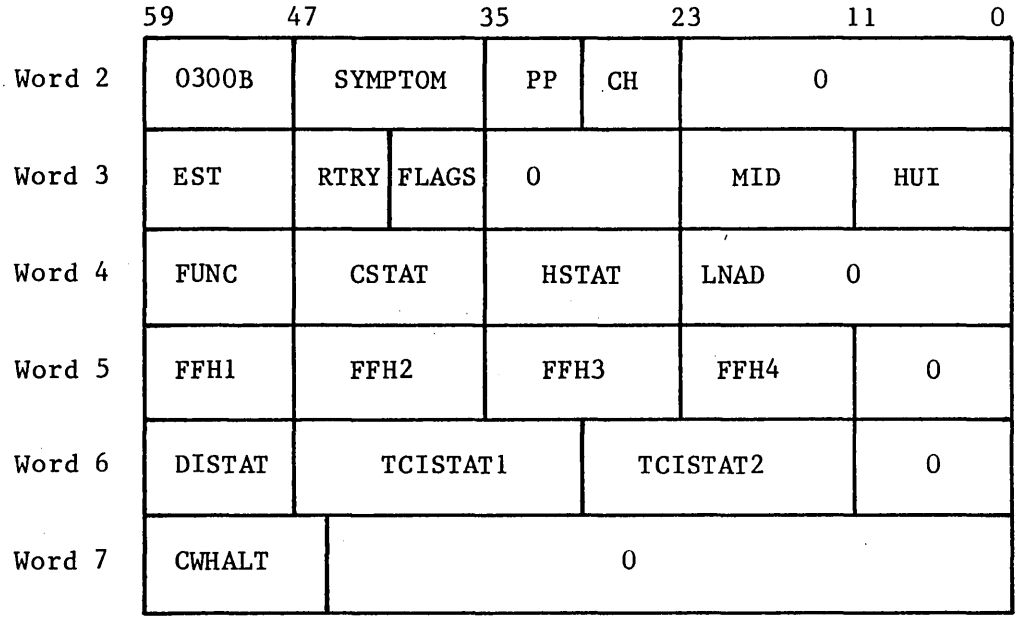
LOOSELY COUPLED NETWORKS	MSGID 0300B
LOCAL NAD ERROR LOG	SYMPTOM 2100B



Field	Word	Location	Description
CH	2	29-24	Channel number.
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier.
LNAD	4	23-16	Local NAD address.
LT	4	15-12	Local trunk enables.
NAD PCT	5-10 11	59-0 59-52	Local NAD path control table. (23 16-bit words).

See the 380-170 Network Access Device Hardware Reference Manual for the format of the NAD path control table.

LOOSELY COUPLED NETWORKS	MSGID 0300B
LOCAL NAD ERROR LOG	SYMPTOM 2101B, 2102B, 2110B-2117B, 2120B-2122B, 2140B-2146B, 2150B-2156B

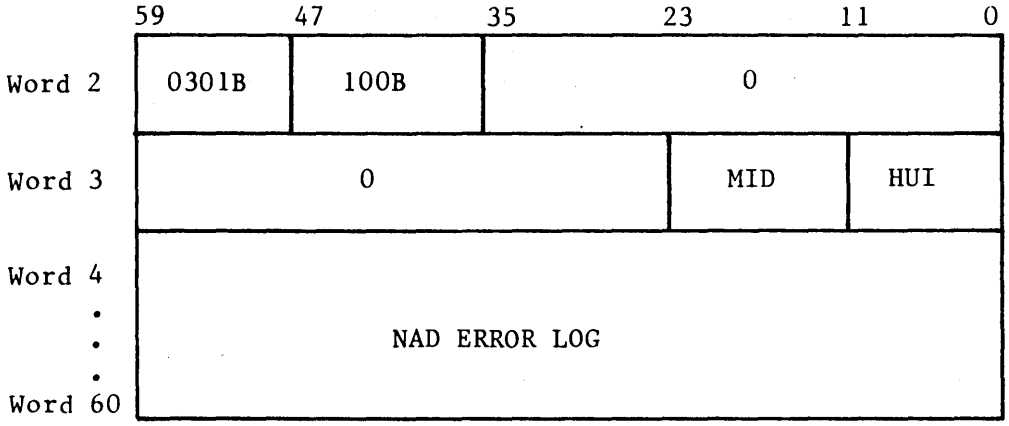


Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 2101B NAD off, processor stopped. 2102B NAD off, processor stopped with halt code (field CWHALT). 2110B Function time out. 2111B Channel inactive after activate. 2112B Date timeout. 2113B Prime timeout. 2114B Flag timeout. 2115B Transfer error. 2116B Abnormal path status. 2117B Abnormal response code. 2120B Control message length error. 2121B Parameter length error. 2122B Transfer length error.

Field	Word	Location	Description (Continued)
			214xB Local read error (convert mode). 215xB Local write error (convert mode). 0 Block error. 1 Host ABN error. 2 Block too large. 3 Data length error. 4 Block fragment with EOR/EOT. 5 Network ABN error. 6 Block not 60-bit multiple.
PP	2	35-30	PP number.
CH	2	29-24	Channel number.
EST	3	59-48	EST ordinal.
RTRY	3	47-42	Retry count.
FLAGS	3	41-36 (36) (37) (37)	Flags. 0 Recovered error. 1 Unrecovered error. 0 DISTAT, TCISTAT1, TCISTAT2, CWHALT invalid. 1 DISTAT, TCISTAT1, TCISTAT2, CWHALT valid.
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier. Set to 7777B if invalid.
FUNC	4	59-48	Initial function.
CSTAT	4	47-36	Initial controlware status.
HSTAT	4	35-24	Initial hardware status.
LNAD	4	23-16	Local NAD address.
FFH1	5	59-48	Flag function history.
FFH2	5	47-36	Flag function history.
FFH3	5	35-24	Flag function history.
FFH4	5	23-12	Flag function history.

Field	Word	Location	Description (Continued)
DISTAT	6	59-44	Device interface status.
TCISTAT1	6	43-28	Trunk control interface status I.
TCISTAT2	6	27-12	Trunk control interface status II.
CWHALT	7	59-44	Controlware halt code.

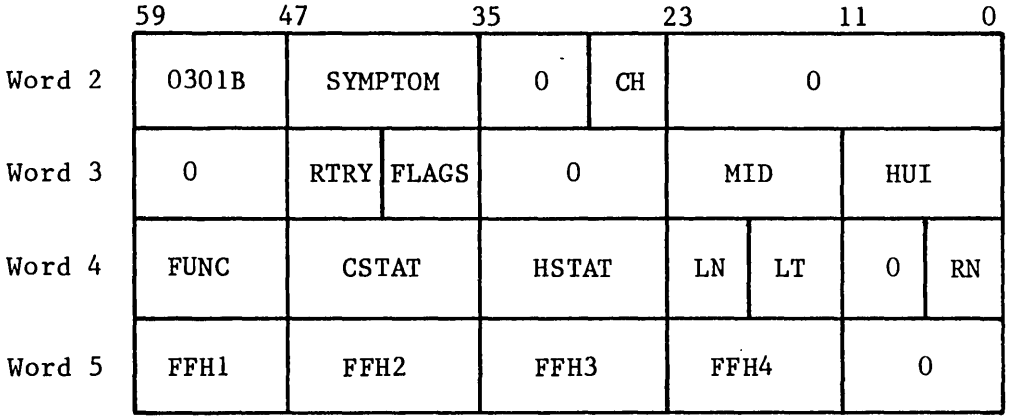
LOOSELY COUPLED NETWORKS	MSGID 0301B
REMOTE NAD ERROR LOG	SYMPTOM 0100B



Field	Word	Location	Description
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier.
NAD ERROR LOG	4-9 10	59-0 59-36	Device status table of remote NAD. (24 16-bit words).
	10 11-59 60	35-0 59-0 59-12	21 remote NAD error log entries. Each entry consists of 9 16-bit words.

See the 380-170 Network Access Device Hardware Reference Manual for the format of the NAD error log .

LOOSELY COUPLED NETWORKS	MSGID 0301B
REMOTE NAD ERRORS	SYMPTOM 2160B-2164B, 2170B-2176B



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 2160B Header length error. 2161B Bad data block length. 2162B Bad PRU data block. 2163B Abnormal response. 2164B Connect in progress timeout. 2170B Block error. 2171B Host ABN error. 2172B Block too large. 2173B Data length error. 2174B Block fragment without EOR/EOT. 2175B Network ABN error. 2176B Block not 60-bit multiple.
CH	2	29-24	Channel number.
RTRY	3	47-42	Retry count.
FLAGS	3	41-36 (36)	Flags. 0 Recovered error. 1 Unrecovered error.
MID	3	23-12	Machine identifier.
HUI	3	11-0	Hardware unique identifier. Set to 7777B if invalid.
FUNC	4	59-48	Initial function code.

Field	Word	Location	Description (Continued)
CSTAT	4	47-36	Initial controlware status.
HSTAT	4	35-24	Initial hardware status.
LN	4	23-16	Local NAD address.
LT	4	15-12	Local trunk enables.
RN	4	7-0	Remote NAD address.
FFH1	5	59-48	Flag function history.
FFH2	5	47-36	Flag function history.
FFH3	5	35-24	Flag function history.
FFH4	5	23-12	Flag function history.

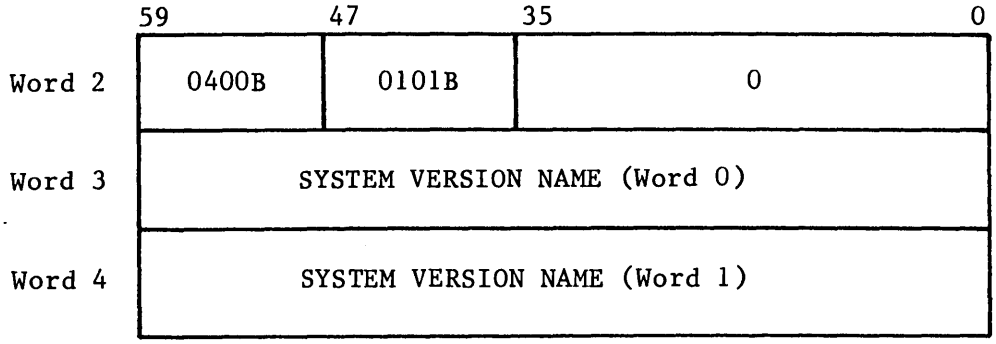
SOFTWARE INITIALIZATION	MSGID 0400B
SYSTEM TITLE	SYMPTOM 0100B

The following message is issued whenever a BML is created or recovered.

	59	47	35	0
Word 2	0400B	0100B	0	
Word 3	SYSTEM TITLE LINE (Word 0)			
Word 4	SYSTEM TITLE LINE (Word 1)			
Word 5	SYSTEM TITLE LINE (Word 2)			
Word 6	SYSTEM TITLE LINE (Word 3)			

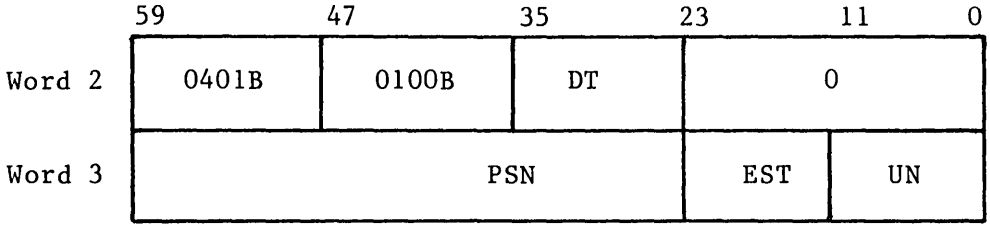
SOFTWARE INITIALIZATION	MSGID 0400B
SYSTEM VERSION	SYMPTOM 0101B

The following message is issued whenever a BML is created or recovered.



HARDWARE INITIALIZATION	MSGID 0401B
PACK SERIAL NUMBER	SYMPTOM 0100B

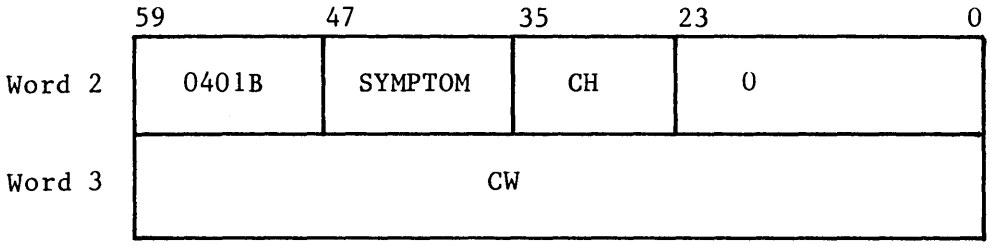
The following message will be issued for each mass storage pack whenever a BML is created or recovered.



Field	Word	Location	Description
DT	2	35-24	Device mnemonic. Two display code characters.
PSN	3	59-24	Pack serial number in display code left justified, blank filled.
EST	3	23-12	EST ordinal in binary format.
UN	3	11-0	Unit number in binary format.

HARDWARE INITIALIZATION	MSGID 0401B
CONTROLWARE REVISION 7X5X CONTROLLERS, 834/FSC ADAPTERS	SYMPTOM 0101B, 0102B, 0103B

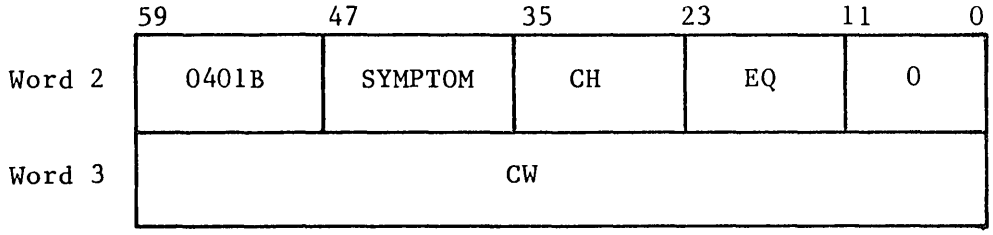
The following message applies to 7X5X controllers, ISD adapters, and FSC adapters.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0101B Controlware level. This message is logged after every deadstart and everytime the errlog or BML is terminated. 0102B Operator initiated load. This message is logged whenever LOADBC is initiated by the operator. 0103B System initiated load. This message is logged whenever LOADBC is initiated by the operating system.
CH	2	35-24	Channel used to access the controller.
CW	3	59-0	Controlware revision level in display code.

HARDWARE INITIALIZATION	MSGID 0401B
COS REVISION LEVEL	SYMPTOM 0104B, 0105B, 0106B

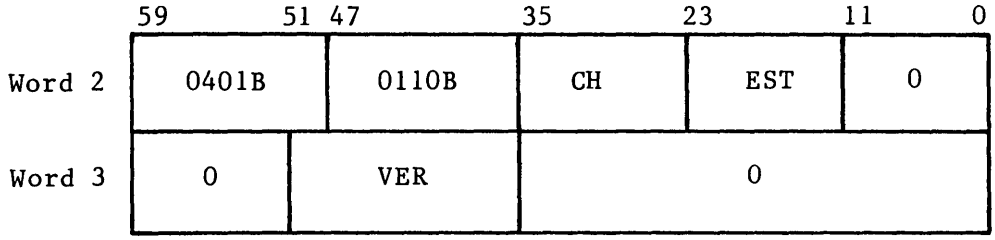
The following message applies to the ISD control module.



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0104B COS level. This message is logged after every deadstart and everytime the errlog or BML is terminated. 0105B Operator initiated load. This message is logged whenever LOADBC is initiated by the operator. 0106B System initiated load. This message is logged whenever LOADBC is initiated by the operating system.
CH	2	35-24	Channel used to access the control module.
EQ	2	23-12	Equipment number of control module.
CW	2	59-0	COS revision level in display code.

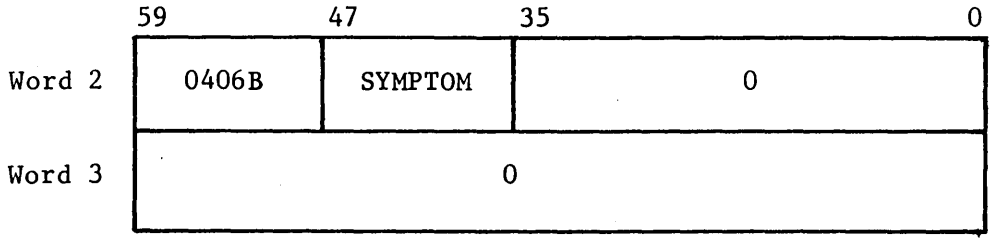
HARDWARE INITIALIZATION	MSGID 0401B
MFI	SYMPTOM 0110B

This BML message is issued when an MFI is successfully initialized. MFI is the CNDA component known as a mainframe interface.



Field	Word	Location	Description
CH	2	35-24	Channel on which MFI was initialized.
EST	2	23-12	EST ordinal of equipment.
VER	3	51-36	Version number of software to be loaded.

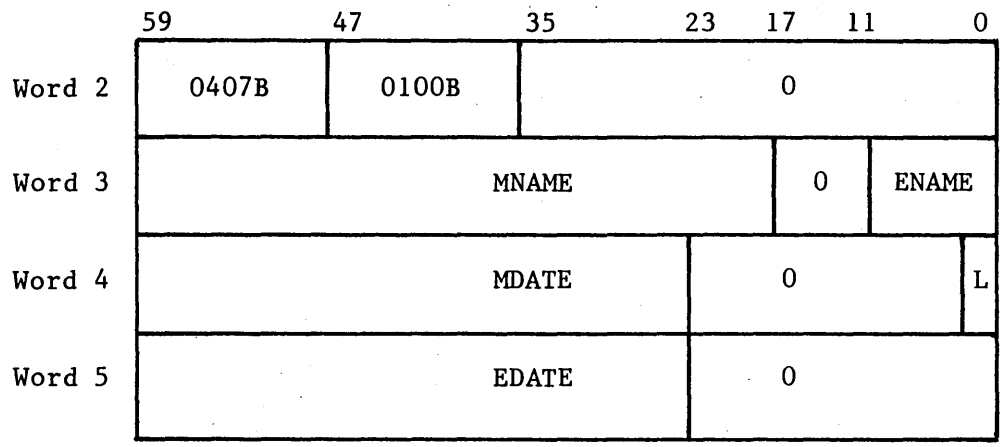
BINARY MAINTENANCE	MSGID 0406B
STATUS	SYMPTOM 0101B, 0102B, 0103B, 0105B 0107B, 0113B



Field	Word	Location	Description
SYMPTOM	2	47-36	Symptom code. 0101B Maintenance log created. 0102B Maintenance log accessed. 0103B Maintenance log terminated. 0105B Maintenance log read error. 0107B Maintenance log data lost. 0113B Maintenance log accessed by HPA.

PROCESSOR INITIALIZATION	MSGID 0407B
MICROCODE, EI	SYMPTOM 0100B

This message is issued during all levels of deadstart to indicate what microcode and EI is being used.



Field	Word	Location	Description
MNAME	3	59-18	Microcode name. Seven display code characters, left justified, zero filled.
ENAME	3	11-0	EI revision level. Two display code characters.
MDATE	4	59-12	Date microcode was generated in display code (YYMMDD).
L	4	0	If set, microcode was not loaded. If clear, microcode was loaded.
EDATE	5	59-12	Date EI was generated in display code (YYMMDD).

MAINFRAME STATUS	MSGID 0410B
SUMMARY OF ERROR COUNTERS	SYMPTOM 0100B

This message is issued at the top of every hour by 1MB. If all counters are zero, no message will be issued. The counters indicate the number of errors encountered during the previous hour.

	59	47	35	23	11	0
Word 2	0410B	0100B	0			
Word 3	UPEC	CPU0	CPU1	CM	LCME	

Field	Word	Location	Description
UPEC	3	59-48	Uncorrected processor error counters.
CPU0	3	47-36	Corrected processor error counter for processor 0.
CPU1	3	35-24	Corrected processor error counter for processor 1.
CM	3	23-12	Corrected memory error counter.
LCME	3	11-0	Corrected LCME error counter.

COMMENT SHEET

MANUAL TITLE: Binary Maintenance Log (BML) Message Formats

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