



LSI IMR event log:

Controller ID: 0	Power state change on	PD = Port 0 - 3:2:21	Previous = On	Current = Powersave
Controller ID: 0	Power state change on	PD = Port 0 - 3:2:23	Previous = On	Current = Powersave
Controller ID: 0	Power state change on	PD = Port 0 - 3:2:20	Previous = On	Current = Powersave
Controller ID: 0	Power state change on	PD = Port 0 - 3:2:22	Previous = On	Current = Powersave
Controller ID: 0	Time established since power on:	Time 2012-04-17, 18:10:09	100	Seconds
Controller ID: 0	Unexpected sense: PD = 28	Invalid field in CDB, CDB = 0x5a 0x00 0x1c 0x00 0x00 0x00 0x00 0x00 0xfc 0x00	, Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00	
Controller ID: 0	Unexpected sense: PD = 28	Invalid field in CDB, CDB = 0x4d 0x00 0x40 0x00 0x00 0x00 0x00 0x00 0xfc 0x00	, Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00	
Controller ID: 0	Host driver is loaded and operational			
Controller ID: 0	Time established since power on:	Time 2012-04-17, 18:09:01	31	Seconds
Controller ID: 0	Device inserted	Device Type: Disk	Device Id: Port 0 - 3:1:21	

LSI (Sense Code) (Unexpected) RAID controller. (decoding).

Intel LSI RAID (layout).

A typical event message in log contains:

```
11/24/10 16:15:29: EVT#01736-11/24/10 16:15:29: 113=Unexpected sense: PD 03(e0,s1)
Path 1f005b10de , CDB: 28 00 00 00 80 00, Sense: 70 00 03 00 00 00 0A 00 00 00 00
11 00 00 00 00 00
```

Decode:

```
11/24/10 16:15:29a : EVT#01736-11/24/10 16:15:29b : 113c=Unexpected sense: PD 03c (e0,s1)d
Path 1f005b10dee , CDB: 28 00 00 00 80 00f , Sense: 70 00 03 00 00 00 0A 00 00 00 00 11 00
00 00 00 00g
```

- a - Date and time
- b - Event # 01736 corresponds to event # in RWC2 log
- c - Physical Device number - PD# is unique for this device on this system.
- d - Enclosure and slot number for the physical device
- e - Path
- f - CDB is the command data block and contains the command given to the device
- g - The sense code returned by the device.

LSI RAID, f:

CDB = 0x5a 0x00 0x1c 0x00 0x00 0x00 0x00 0x00 0xfc 0x00	, Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00
CDB = 0x4d 0x00 0x40 0x00 0x00 0x00 0x00 0x00 0xfc 0x00	, Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00

Unexpected Sense Codes are error messages that are generated when a device attached to a RAID controller encounters an error and responds with a device based error message.

(issue), (exception). LSI IMR controller, ?

1. IMR HBA

2. ?????(target)????good(00h), ?????REQUEST SENSE?????.
3. ???REQUEST SENSE????????????CDB(Command Data Block)?????.
4. CDB????????????????????????????????, ?????255bytes.
5. ??????????????:
 - >>a. ?????
 - >>b. ?????(channel)????
 - >>c. ?????SAS/SATA CDB
 - >>d. ?????(sense code)
6. ??????????:
 - >>a. ???(SENSE key), byte 2
 - >>b. ?????(sense code), byte12
 - >>c. ?????(sense code qualifer), byte 13

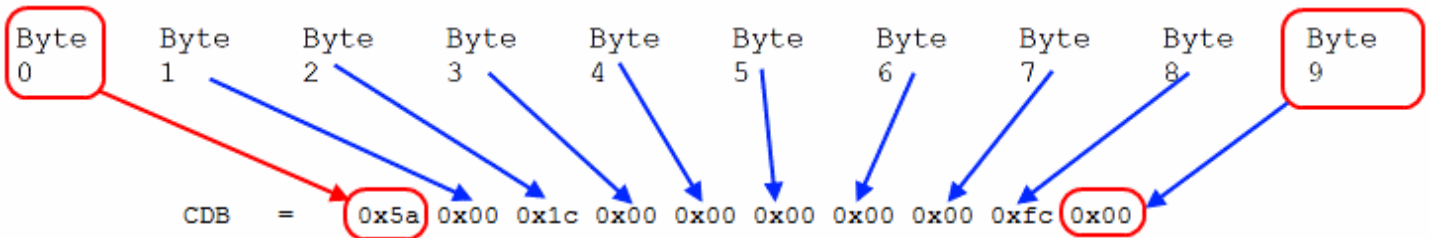
?????????????????:

Date - Controller ID - Error type - Device Number - CDB in Hex - Sense in Hex.

????, ?????CDB in Hex?Sense in Hex?????????. ??????????????:

CDB = 0x4d 0x00 0x40 0x00 0x00 0x00 0x00 0x00 0xfc 0x00 , Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00

??CDB?Sense code??. ????CDB????, ?????:



??10?byte??, ?Hex????, ??????????. ??????????, LSI RAID controller????4????CDB?: 6, 10, 12, 16????CDB??. ?????????10?CDB. LSI??CDB????0??byte??, ??operation code, ??????????.
 ???10bytes??,??stack????????:

bit→	7	6	5	4	3	2	1	0
↓byte								
0	Operation code							
1	LUN			Reserved			BytChk	0
2	Logical Block Address (MSB)							
3	Logical Block Address							
4	Logical Block Address							
5	Logical Block Address (LSB)							
6	Reserved							
7	Transfer Length (MSB)							
8	Transfer Length (LSB)							
9	Control							

?????????Operation Code?????(list):

Operation Code	Command Name	Type	Notes
00	TEST UNIT READY	Mandatory	
01	REZERO UNIT or REWIND	Optional	
03	REQUEST SENSE	Mandatory	
04	FORMAT UNIT	Mandatory	
05	READ BLOCK LIMITS	Manufacturer Specific	Tape drives only
06	Manufacturer Specific	Manufacturer Specific	
07	REASSIGN BLOCKS	Optional	
08	READ (06)	Optional	
09	Manufacturer Specific	Manufacturer Specific	
0A	WRITE (06), PRINT for printers	Optional	Tape drives only
0B	SEEK (06)	Optional	
0F	READ REVERSE	Manufacturer Specific	
10	WRITE FILEMARKS	Optional	Tape drives only
11	SPACE	Optional	
12	INQUIRY	Mandatory	
13	VERIFY (06)	Manufacturer Specific	
14	RECOVER BUFFERED DATA	Manufacturer Specific	
15	MODE SELECT (06)	Optional	
16	RESERVE or RESERVE UNIT	Mandatory	
17	RELEASE or RELEASE UNIT	Mandatory	
18	18 COPY	Optional	
19	ERASE	Optional	Tape drives mandatory
1A	MODE SENSE (06)	Optional	Tape drives mandatory
1B	START/STOP UNIT	Optional	
1C	RECEIVE DIAGNOSTIC RESULTS	Optional	
1D	SEND DIAGNOSTICS	Mandatory	
1E	PREVENT/ALLOW MEDIUM REMOVAL	Optional	

Operation Code	Command Name	Type	Notes
24	SET WINDOW	Manufacturer Specific	Scanners mandatory
25	READ CAPACITY	Mandatory	
28	READ (10)	Mandatory	
29	READ GENERATION	Manufacturer Specific	
2A	WRITE (10)	Mandatory	
2B	SEEK (10)	Optional	
2C	ERASE (10)	Manufacturer Specific	
2D	READ UPDATED BLOCK	Manufacturer Specific	
2E	WRITE AND VERIFY (10)	Optional	
2F	VERIFY (10)	Optional	
30	SEARCH DATA HIGH (10)	Optional	
31	SEARCH DATA EQUAL (10)	Optional	
32	SEARCH DATA LOW (10)	Optional	
33	SET LIMITS (10)	Optional	
34	PRE-FETCH	Optional	
35	SYNCHRONIZE CACHE	Optional	
36	LOCK UNLOCK CACHE	Optional	
37	READ DEFECT DATA (10)	Optional	
39	COMPARE	Optional	
3A	COPY and VERIFY	Optional	
3B	WRITE BUFFER	Optional	
3C	READ BUFFER	Optional	
3E	READ LONG	Optional	
3F	WRITE LONG	Optional	
40	CHANGE DEFINITION	Optional	
41	WRITE SAME	Optional	
42	READ SUB CHANNEL	CD-ROM only, optional	
43	READ TOC	CD-ROM only, optional	
44	READ HEADER	CD-ROM only, optional	
45	PLAY AUDIO	CD-ROM only, optional	
47	PLAY AUDIO MSF	CD-ROM only, optional	
48	PLAY AUDIO TRACK INDEX	CD-ROM only, optional	
49	PLAY TRACK RELATIVE (10)	CD-ROM only, optional	
4B	PAUSE / RESUME	CD-ROM only, optional	
4C	LOG SELECT	Optional	
4D	LOG SENSE	Optional	
55	MODE SELECT (10)	Optional	
5A	MODE SENSE (10)	Optional	
A5	PLAY AUDIO (12)	CD-ROM only, optional	
A8	READ (12)	CD-ROM only, optional	
A9	PLAY TRACK RELATIVE (12)	CD-ROM only, optional	
AF	VERIFY (12)	CD-ROM only, optional	
B0	SEARCH DATA HIGH (12)	CD-ROM only, optional	
B1	SEARCH DATA EQUAL (12)	CD-ROM only, optional	
B2	SEARCH DATA LOW (12)	CD-ROM only, optional	

Operation Code	Command Name	Type	Notes
B3	SET LIMITS (12)	CD-ROM only, optional	

???????:

CDB = 0x4d 0x00 0x40 0x00 0x00 0x00 0x00 0x00 0x00 0xfc 0x00 , Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00 0x00

byte 0x4d, ?list????LOG SENSE?operation code. ??????????????????????????, ???????????Hard Disk Sentinel
 ????, ???????????PD?????, ??????RAID controller???

??LSI??CDB??, ??????byte 0???, ????????????, ??????????????. ???6bytes CDB stack??

bit→								
↓byte	7	6	5	4	3	2	1	0
0	Operation code							
1	LUN			Reserved				
2	Reserved							
3	Reserved							
4	Allocation length							
5	Control							

????????????????????CDB??:

CDB = 0x28 0x00 0x56 0xe9 0x7e 0x00 0x00 0x02 0x00 0x00

?operation code????????list?????. ??28?????????????. ??CDB??????????CC???parity, ?????????????????????, ??
 ?????(read error). ?????????????????sense data????, ??????????????:

CDB = 0x5a 0x00 0x1c 0x00 0x00 0x00 0x00 0xfc 0x00 , Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00 0x00
 CDB = 0x4d 0x00 0x40 0x00 0x00 0x00 0x00 0xfc 0x00 , Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00 0x00

Sense Code????????????255bytes?????. ?????????????????, ??????????????. ???LSI?Sense Code?stack??:

bit→	7	6	5	4	3	2	1	0
byte								
0	Valid	Error Code						
1	Segment Number							
2	Filemark	EOM	ILI	Reserved	Sense Key			
3	(MSB) Information (LSB)							
Through								
6								
7	Additional Sense Length (n-7)							
8	(MSB) Information (LSB)							
Through								
11								

bit→	7	6	5	4	3	2	1	0
byte								
12	Additional Sense Code							
13	Additional Sense Code Qualifier							
14	Field Replaceable Unit Code							
15	SKSV Sense Key Specific							
Through								
17								
18	Additional Sense Bytes							
Through								
254								

????????Sense Code????, ??????, ??????. ??LSI?Sense Code?????????????

	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8	Byte 9	Byte 10	Byte 11	Byte 12	Byte 13	Byte 14	Byte 15	Byte 16	Byte
Sense=	0xf0	0x00	0x0b	0x00	0x02	0xf2	0x2d	0x0a	0x00	0x00	0x00	0x00	0x4b	0x05	0x00	0x00	0x00	0x00

????????4?????????, ????: Error Code, SK, ASC?ASCQ????.

Error Code????????70. Error Code?target device????, ?????????????????????.

The Error Code (Byte 0) for an unexpected sense code is usually 70. Sometimes this byte contains F0 instead because the 7th bit of the Byte 0 is valid, e.g., 0xF0 = 0x70 | 0x80, 0x70 indicates the current error on the target device and 0x80 indicates that the field contains valid information.

Sense Key????????????, ??????????????????. ??????:

>>00: ???

>>01: Soft Error

>>02: Not Ready

>>03: Medium Error

>>04: Hardware Error

>>05: Illegal Request

>>06: Unit Attention

>>07: Write Protect

>>0b: Aborted Command

>>0e|0x: Other

????, SK?03?04????????(critical error), ?????, ??????????????. ???ASC?ASCQ???SK?????????????. ???????
 ???????:

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
No Sense	0	0	0	No error
	0	5D	0	No sense - PFA threshold reached
Soft Error	1	1	0	Recovered Write error - no index
	1	2	0	Recovered no seek completion
	1	3	0	Recovered Write error - write fault
	1	9	0	Track following error
	1	0B	1	Temperature warning
	1	0C	1	Recovered Write error with auto-realloc – reallocated
	1	0C	3	Recovered Write error - recommend reassign
	1	12	1	Recovered data without ECC using prev logical block ID
	1	12	2	Recovered data with ECC using prev logical block ID
	1	14	1	Recovered Record Not Found
	1	16	0	Recovered Write error - Data Sync Mark Error
	1	16	1	Recovered Write error - Data Sync Error - data rewritten
	1	16	2	Recovered Write error - Data Sync Error - recommend rewrite
	1	16	3	Recovered Write error - Data Sync Error - data auto-reallocated
	1	16	4	Recovered Write error - Data Sync Error - recommend reassignment
	1	17	0	Recovered data with no error correction applied
	1	17	1	Recovered Read error - with retries
	1	17	2	Recovered data using positive offset
	1	17	3	Recovered data using negative offset
	1	17	5	Recovered data using previous logical block ID
	1	17	6	Recovered Read error - without ECC, auto reallocated
	1	17	7	Recovered Read error - without ECC, recommend reassign
	1	17	8	Recovered Read error - without ECC, recommend rewrite
	1	17	9	Recovered Read error - without ECC, data rewritten
	1	18	0	Recovered Read error - with ECC
	1	18	1	Recovered data - with ECC and retries
	1	18	2	Recovered Read error - with ECC, auto reallocated
	1	18	5	Recovered Read error - with ECC, recommend reassign
1	18	6	Recovered data using ECC and offsets	

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
Not Ready	1	18	7	Recovered Read error - with ECC, data rewritten
	1	1C	0	Defect list not found
	1	1C	1	Primary defect list not found
	1	1C	2	Grown defect list not found
	1	1F	0	Partial defect list transferred
	1	44	0	Internal target failure
	1	5D	0	PFA threshold reached
	1	5D	FF	PFA test warning
	1	81	0	Internal logic failure
	2	4	0	Not Ready - start motor failed
	2	4	1	Not Ready - becoming ready
	2	4	2	Not Ready - need initialize command (start unit)
	2	4	3	Not Ready - manual intervention required
	2	4	4	Not Ready - format in progress
	2	4	9	Not Ready - self-test in progress
	2	31	0	Not Ready - medium format corrupted
	2	31	1	Not Ready - format command failed
	2	35	2	Not Ready - enclosure services unavailable
	2	40	80	Diagnostic Failure - bring-up fail or degraded mode
	2	40	81	Diagnostic Failure - Hard Disk Controller
	2	40	85	Diagnostic Failure - RAM microcode not loaded
	2	40	90	Diagnostic Failure - RRO Calibration
	2	40	91	Diagnostic Failure - Channel Calibration
	2	40	92	Diagnostic Failure - Head Load
	2	40	93	Diagnostic Failure - Write AE
	2	40	94	Diagnostic Failure - 12V over current
	2	40	95	Diagnostic Failure - Other spindle failure
	2	40	B0	Diagnostic Failure - self-reset
	2	4C	0	Diagnostic Failure - config not loaded
Medium Error	3	3	0	Medium Error - write fault
	3	0C	FF	Medium Error - write recovery time limit exceeded
	3	10	0	Medium Error - ID CRC error
	3	11	0	Medium Error - unrecovered read error
	3	11	1	Medium Error - read retries exhausted
	3	11	2	Medium Error - error too long to correct

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
	3	11	4	Medium Error - unrecovered read error - auto re-alloc failed
	3	11	0B	Medium Error - unrecovered read error - recommend reassign
	3	11	FF	Medium Error - read recovery time limit exceeded
	3	14	1	Medium Error - record not found
	3	16	0	Medium Error - Data Sync Mark error
	3	16	4	Medium Error - Data Sync Error - recommend reassign
	3	19	0	Medium Error - defect list error
	3	19	1	Medium Error - defect list not available
	3	19	2	Medium Error - defect list error in primary list
	3	19	3	Medium Error - defect list error in grown list
	3	19	0E	Medium Error - fewer than 50% defect list copies
	3	31	0	Medium Error - medium format corrupted
	3	31	1	Medium Error - format command failed
	3	80	0	Medium Error - data auto-reallocated
Hardware Error	4	1	0	Hardware Error - no index or sector
	4	2	0	Hardware Error - no seek complete
	4	3	0	Hardware Error - write fault
	4	9	0	Hardware Error - track following error
	4	11	0	Hardware Error - unrecovered read error in reserved area
	4	16	0	Hardware Error - Data Sync Mark error in reserved area
	4	19	0	Hardware Error - defect list error
	4	19	2	Hardware Error - defect list error in Primary List
	4	19	3	Hardware Error - defect list error in Grown List
	4	31	0	Hardware Error - reassign failed
	4	32	0	Hardware Error - no defect spare available
	4	35	1	Hardware Error - unsupported enclosure function
	4	35	2	Hardware Error - enclosure services unavailable
	4	35	3	Hardware Error - enclosure services transfer failure
	4	35	4	Hardware Error - enclosure services refused
	4	3E	3	Hardware Error - self-test failed
	4	3E	4	Hardware Error - unable to update self-test
	4	40	80	Hardware Error - Degrade Mode (Diagnostic Fail)
	4	40	81	Hardware Error - Degrade Mode. H/W Error
	4	40	85	Hardware Error - Degrade Mode. RAM microcode not loaded
4	40	90	Hardware Error - seek test failure	

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
	4	40	A0	Hardware Error - read/write test failure
	4	40	B0	Hardware Error – device self-reset
	4	40	D0	Hardware Error - component mismatch
	4	44	0	Hardware Error - internal target failure
	4	81	0	Hardware Error - internal logic error
	4	82	0	Hardware Error - command timeout
Illegal Request	5	1A	0	Illegal Request - parameter list length error
	5	20	0	Illegal Request - invalid/unsupported command code
	5	21	0	Illegal Request - LBA out of range
	5	24	0	Illegal Request - invalid field in CDB (Command Descriptor Block)
	5	25	0	Illegal Request - invalid LUN
	5	26	0	Illegal Request - invalid fields in parameter list
	5	26	1	Illegal Request - parameter not supported
	5	26	2	Illegal Request - invalid parameter value
	5	26	3	Illegal Request - invalid field parameter - threshold parameter
	5	26	4	Illegal Request - invalid release of persistent reservation
	5	26	97	Illegal Request - invalid field parameter - TMS firmware tag
	5	26	98	Illegal Request - invalid field parameter - check sum
	5	26	99	Illegal Request - invalid field parameter - firmware tag
	5	2C	0	Illegal Request - command sequence error
	5	35	1	Illegal Request - unsupported enclosure function
	5	49	0	Illegal Request - invalid message
	5	53	0	Illegal Request - media load or eject failed
	5	53	1	Illegal Request - unload tape failure
	5	53	2	Illegal Request - medium removal prevented
	5	55	0	Illegal Request - system resource failure
	5	55	1	Illegal Request - system buffer full
	5	55	4	Illegal Request - Insufficient Registration Resources
	Unit Attention	6	28	0
6		29	0	Unit Attention - POR or device reset occurred
6		29	1	Unit Attention - POR occurred
6		29	2	Unit Attention - SCSI bus reset occurred
6		29	3	Unit Attention - TARGET RESET occurred
6		29	4	Unit Attention - self-initiated-reset occurred
6		29	5	Unit Attention - transceiver mode change to SE

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
	6	29	6	Unit Attention - transceiver mode change to LVD
	6	2A	0	Unit Attention - parameters changed
	6	2A	1	Unit Attention - mode parameters changed
	6	2A	2	Unit Attention - log select parameters changed
	6	2A	3	Unit Attention - Reservations pre-empted
	6	2A	4	Unit Attention - Reservations released
	6	2A	5	Unit Attention - Registrations pre-empted
	6	2F	0	Unit Attention - commands cleared by another initiator
	6	3F	0	Unit Attention - target operating conditions have changed
	6	3F	1	Unit Attention - microcode changed
	6	3F	2	Unit Attention - changed operating definition
	6	3F	3	Unit Attention - inquiry parameters changed
	6	3F	5	Unit Attention - device identifier changed
	6	3F	90	Unit Attention - invalid APM parameters
	6	3F	91	Unit Attention - world-wide name mismatch
	6	5D	0	Unit Attention - PFA threshold reached
	6	5D	FF	Unit Attention - PFA threshold exceeded
Write Protect	7	27	0	Write Protect - command not allowed
Aborted Command	B	0	0	Aborted Command - no additional sense code
	B	1B	0	Aborted Command - sync data transfer error (extra ACK)
	B	25	0	Aborted Command - unsupported LUN
	B	3F	0F	Aborted Command - echo buffer overwritten
	B	43	0	Aborted Command - message reject error
	B	44	0	Aborted Command - internal target failure
	B	45	0	Aborted Command - Selection/Reselection failure
	B	47	0	Aborted Command - SCSI parity error
	B	48	0	Aborted Command - initiator-detected error message received
	B	49	0	Aborted Command - inappropriate/illegal message
	B	4B	0	Aborted Command - data phase error
	B	4E	0	Aborted Command - overlapped commands attempted
	B	4F	0	Aborted Command - due to loop initialization
Other	E	1D	0	Miscompare - during verify byte check operation
	x	3	86	Write Fault Data Corruption
	x	5	0	Illegal request
	x	6	0	Unit attention

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
	x	7	0	Data protect
	x	8	0	LUN communication failure
	x	8	1	LUN communication timeout
	x	8	2	LUN communication parity error
	x	9	0	Vendor specific sense key
	x	9	1	Servo fault
	x	9	4	Head select fault
	x	0A	0	Error log overflow
	x	0B	0	Aborted command
	x	0C	0	Write error
	x	0C	2	Write error - auto-reallocation failed
	x	0E	0	Data mismatch
	x	12	0	Address mark not found for ID field
	x	14	0	Logical block not found
	x	15	0	Random positioning error
	x	15	1	Mechanical positioning error
	x	15	2	Positioning error detected by read of medium
	x	27	0	Write protected
	x	29	0	POR or bus reset occurred
	x	31	1	Format failed
	x	31	91	Format corrupted
	x	32	1	Defect list update error
	x	32	2	No spares available
	x	35	1	Unspecified enclosure services failure
	x	37	0	Parameter rounded
	x	3D	0	Invalid bits in identify message
	x	3E	0	LUN not self-configured yet
	x	40	1	DRAM parity error
	x	40	2	DRAM parity error
	x	42	0	Power-on or self-test failure
	x	4C	0	LUN failed self-configuration
	x	5C	0	RPL status change
	x	5C	1	Spindles synchronized
	x	5C	2	Spindles not synchronized

Category	Sense Key	Additional Sense Code	Additional Sense Code Qualifier	Error Condition
	Byte 2	Byte 12	Byte 13	
	x	65	0	Voltage fault
	x	80	0	General firmware error

????????, ???Hex??, ??????????. ??????????SK??, ??????????. ???????????:

Sense = 0xf0 0x00 0x03 0x56 0xe9 0x91 0x54 0x16 0x00 0x00 0x00 0x00 0x11 0x00 0x00 ...

??byte 0?f0????, ?????byte 2?SK?03, ?SK????????????????????, medium error. ??????????, ?????ASC?ASCQ?
?: 11?00. ??SK+ASC+ASCQ=03 11 00. ??????. ??????????:

Medium Error - unrecovered read error

Revision Level	D1B3
Media Error Count	2
Pred Fail Count	0

?????????????????. ???????Media Error Count??, ???????PD????(replace), ??PD????????????????.

??????????, ????:

Sense = 0x70 0x00 0x05 0x00 0x00 0x00 0x00 0x0a 0x00 0x00 0x00 0x00 0x24 0x00 0x00 0x00 0x00 0x00

Error Code?70, ???SK, ???05. Illegal Request, ??????????????, ??05 24 00. ??????????:

Illegal Request - invalid field in CDB (Command Descriptor Block)

??????????, ??????????.

?LSI RAID controller?????, Sense Code??????????, ??????????. ??Code?????????????. ??????????????????. ??????tty log,
?????????. ??????(decode)?Sense Code????????????????, ??????, ?????????????????????.

??Sense Codes??(Multiple Sense Codes)

??????, ??????????, ??????. ?????????????????????>1?????. ???CC??parity???(verify). ??????????failed. ??????????????
?, ???Multiple error reads. ???????????, ???????????sense code???, ?????????????????????LBA. ???????????????, ????:

Controller ID: 0 Command timeout on PD: PD = Port 0 - 3:2:12-No additional sense information, CDB = 0x2f 0x00 0x56 0xe9 0x91 0x55 0x00 0x10 0x00 0x00, Sense = null, Path = 0x50014EE300071AE2
Controller ID: 0 Unexpected sense: PD = Port 0 - 3:2:12-SCSI bus reset occurred, CDB = 0x2f 0x00 0x56 0xe9 0x91 0x55 0x00 0x10 0x00 0x00, Sense = 0x70 0x00 0x06 0x00 0x00 0x00 0x16 0x00 0x00 0x00 0x29 0x02 0x
Controller ID: 0 PD Reset: PD = Port 0 - 3:2:12, Error = 3, Path = 0x50014EE300071AE2
Controller ID: 0 Command timeout on PD: PD = Port 0 - 3:2:12-No additional sense information, CDB = 0x2f 0x00 0x56 0xe9 0x91 0x55 0x00 0x10 0x00 0x00, Sense = null, Path = 0x50014EE300071AE2
Controller ID: 0 Patrol Read corrected medium error: PD Port 0 - 3:2:12 Location 0x56e99154
Controller ID: 0 Corrected medium error during recovery: PD Port 0 - 3:2:12 Location 0x56e99154
Controller ID: 0 Unexpected sense: PD = Port 0 - 3:2:12-Unrecovered read error, CDB = 0x2f 0x00 0x56 0xe9 0x91 0x2d 0x00 0x10 0x00 0x00, Sense = 0xf0 0x00 0x03 0x56 0xe9 0x91 0x54 0x16 0x00 0x00 0x00 0x11 0x00 0x0
Controller ID: 0 Patrol Read corrected medium error: PD Port 0 - 3:2:12 Location 0x56e9912c
Controller ID: 0 Corrected medium error during recovery: PD Port 0 - 3:2:12 Location 0x56e9912c
Controller ID: 0 Unexpected sense: PD = Port 0 - 3:2:12-Unrecovered read error, CDB = 0x2f 0x00 0x56 0xe9 0x90 0x00 0x00 0x10 0x00 0x00, Sense = 0xf0 0x00 0x03 0x56 0xe9 0x91 0x2c 0x16 0x00 0x00 0x00 0x11 0x00 0x0
Successful log on to the server User: administrator, Client: 192.168.1.32, Access Mode: Full, Client Time: 2012-04-14,07:41:18
Controller ID: 0 Unexpected sense: PD = Port 0 - 3:1:12SCSI bus reset occurred, CDB = 0x2f 0x00 0x56 0xe9 0x80 0x00 0x00 0x10 0x00 0x00, Sense = 0x70 0x00 0x06 0x00 0x00 0x00 0x16 0x00 0x00 0x00 0x00 0x

????????SK?03?medium error?????1?. Error Type????????Unrecovered read errorm ??????????: PD=Port 0-3:2:12,
?????wide port 0-3=> enclosure number 02=> slot 12??PD?????. enclosure number???megacli?????:

```

Administrator: Command Prompt
C:\>megacli -encinfo -a0
Number of enclosures on adapter 0 -- 2

```

slot 12??PD?????, ??SK?03?sense code?????????. ????????, ??????????????, ?CDB?sense code?????:

Controller ID: 0 Unexpected sense: PD = Port 0 - 3:2:12-Unrecovered read error, CDB = 0x2f0x000x560xe90x900x000x100x000x00, Sense = 0xf00x000x030x560xe90x910x2c0x160x000x000x000x110x000x

?CDB??, ?byte 2???byte 5?????LBA: 56 e9 90 00. ??????????byte 7?byte 8: 10 00. CDB?byte 0?2f, ??????. ?????
 ?verify???. ??CDB???LBA=56 e9 90 00?, ???1000?????????. ?Sense Code???????, byte 0?f0?Error Code, SK?03, ?
 ?medium error?????, ?byte 3?byte 6?????LBA: 56 e9 91 2c, ??????????LBA?????LBA?????. ???ASC?ASCQ?????
 ?????????.

Medium Error - unrecovered read error

??RAID controller????????????????, ?????????????????:

Controller ID: 0 Patrol Read corrected medium error: PD Port 0 - 3:2:12 Location 0x56e9912c

Controller ID: 0 Corrected medium error during recovery: PD Port 0 - 3:2:12 Location 0x56e9912c

?56 e9 91 2c????????????, ???Patrol Read?media scan?. ??????????, ???56 e9 91 54?LBA?????:

Controller ID: 0 Unexpected sense: PD = Port 0 - 3:2:12-Unrecovered read error, CDB = 0x2f0x000x560xe90x910x2d0x000x100x000x00, Sense = 0xf00x000x030x560xe90x910x540x160x000x000x000x110x000x

RAID controller????????????.

Controller ID: 0 Patrol Read corrected medium error: PD Port 0 - 3:2:12 Location 0x56e99154

Controller ID: 0 Corrected medium error during recovery: PD Port 0 - 3:2:12 Location 0x56e99154

??????????, IMR controller???sense code?????????. ??????????(???sense code), ?????????????????.