To: Membership of X3T10

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Date: November 15, 1994

Subject: Editorial Corrections to SPC for SCC

While processing approved document X3T10/94-024R5, I discovered several areas where the relationship between the SPC and the SCC is not as good as it could be. Acting on the belief that all these problems are editorial in nature, I am correcting them in SPC revision 4. This document catalogs the areas being changed. I will accept comments or corrections to the material described herein. Such comments may not appear in the SPC until revision 5.

First, 94-024R5 incorrectly identified the ASC/ASCQ values in the following two cases:

5Eh 01h LOGICAL UNIT FAILURE
5Eh 02h TIMEOUT ON LOGICAL UNIT

Discussions with George Penokie have shown that the correct ASC in both cases is 3Eh (not 5Eh). This would put both of the approved new ASC/ASCQ values under:

3Eh 00h LOGICAL UNIT HAS NOT SELF-CONFIGURED YET

Second, per the discussion at the November plenary meeting, George Penokie, Doug Hagerman and I have constructed the following list of existing ASC/ASCQs that should have an A in their controller (array) device column:

00h 00h NO ADDITIONAL SENSE INFORMATION
00h 06h I/O PROCESS TERMINATED
04h 00h LOGICAL UNIT NOT READY, CAUSE NOT REPORTABLE
04h 01h LOGICAL UNIT IS IN PROCESS OF BECOMING READY
04h 02h LOGICAL UNIT NOT READY, INITIALIZING COMMAND REQUIRED
04h 03h LOGICAL UNIT NOT READY, MANUAL INTERVENTION REQUIRED
05h 00h LOGICAL UNIT DOES NOT RESPOND TO SELECTION
08h 00h LOGICAL UNIT COMMUNICATION FAILURE
08h 01h LOGICAL UNIT COMMUNICATION TIME-OUT
08h 02h LOGICAL UNIT COMMUNICATION PARITY ERROR
0Ah 00h ERROR LOG OVERFLOW
1Ah 00h PARAMETER LIST LENGTH ERROR
1Bh 00h SYNCHRONOUS DATA TRANSFER ERROR
20h 00h INVALID COMMAND OPERATION CODE
24h 00h INVALID FIELD IN CDB
25h 00h LOGICAL UNIT NOT SUPPORTED
26h 00h INVALID FIELD IN PARAMETER LIST
26h 01h PARAMETER NOT SUPPORTED
26h 02h PARAMETER VALUE INVALID
26h 03h THRESHOLD PARAMETERS NOT SUPPORTED
28h 00h NOT READY TO READY TRANSITION, MEDIUM MAY HAVE CHANGED
29h 00h POWER ON, RESET, OR BUS DEVICE RESET OCCURRED
29h 01h POWER ON OCCURRED

29h	02h	SCSI BUS RESET OCCURRED
29h	03h	BUS DEVICE RESET FUNCTION OCCURRED
2Ah	00h	PARAMETERS CHANGED
2Ah	01h	MODE PARAMETERS CHANGED
2Ah	02h	LOG PARAMETERS CHANGED
2Ch	00h	COMMAND SEQUENCE ERROR
2Fh	00h	COMMANDS CLEARED BY ANOTHER INITIATOR
37h	00h	ROUNDED PARAMETER
39h	00h	SAVING PARAMETERS NOT SUPPORTED
3Dh	00h	INVALID BITS IN IDENTIFY MESSAGE
3Eh	00h	LOGICAL UNIT HAS NOT SELF-CONFIGURED YET
3Fh	00h	TARGET OPERATING CONDITIONS HAVE CHANGED
3Fh	01h	MICROCODE HAS BEEN CHANGED
3Fh	03h	INQUIRY DATA HAS CHANGED
40h	NNh	DIAGNOSTIC FAILURE ON COMPONENT NN (80H-FFH)
43h	00h	MESSAGE ERROR
44h	00h	INTERNAL TARGET FAILURE
45h	00h	SELECT OR RESELECT FAILURE
47h	00h	SCSI PARITY ERROR
48h	00h	INITIATOR DETECTED ERROR MESSAGE RECEIVED
49h	00h	INVALID MESSAGE ERROR
4Ah	00h	COMMAND PHASE ERROR
4Bh	00h	DATA PHASE ERROR
4Ch	00h	LOGICAL UNIT FAILED SELF-CONFIGURATION
4Dh	NNh	TAGGED OVERLAPPED COMMANDS (NN = QUEUE TAG)
4Eh	00h	OVERLAPPED COMMANDS ATTEMPTED
5Dh	00h	FAILURE PREDICTION THRESHOLD EXCEEDED
5Eh	00h	LOW POWER CONDITION ACTIVE
5Eh	01h	IDLE CONDITION ACTIVATED BY TIMER
5Eh	02h	STANDBY CONDITION ACTIVATED BY TIMER
5Eh	03h	IDLE CONDITION ACTIVATED BY COMMAND
5Eh	04h	STANDBY CONDITION ACTIVATED BY COMMAND
65h	00h	VOLTAGE FAULT

This list was constructed by listing all the commands that already apply to the D, T, W, R, and O device types and discarding the small number of ASC/ASCQ values that could not apply to array controllers.

Lastly, I have noticed that Peripheral Device Type table (table 21) does not include the array controller device type. I will be adding it as Peripheral Device Type value 0Ch. The text associated with it will be, "Array Controller (e.g. RAID array controller)".