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GENERAL PROBLEMS WITH SPECIFICATION IMPLEMENTATION

The following is a list of items that are not clear in the SCSI-2 Rev. 5 specification.

GENERAL ITEMS

1.   The Relative Address Bit is never discussed. (We all know what it does but it is not in section 6 where it should be.) I suggest the Rev 17B text be used as is.

2.   Hard and Soft reset options are governed by individual implementation. Most logically a jumper selection on the target device. A host will not be able to tell exactly what conditions are maintained after a reset unless it knows how the target will behave under a reset condition. I propose using Byte 7 bit 0 of the INQUIRY data to signify that this device supports hard or soft reset conditions.

LOCK UNLOCK CACHE

No definition exists to define the status of the Cache after a hard and soft reset. I would guess that after a hard reset (since you would clear out memory) any locked blocks are now free, but, what about a soft reset. Either way text should exist to define what happens to any locked blocks.

No CHECK CONDITION situation is defined when a lock command is given and no more room exists in the cache to satisfy the command.

REQUEST SENSE

The Allocation Length is not defined. In 17B a value of 0 allowed 4 bytes to be transferred. I would hope that this deviation is not included within this spec. as non extended sense data is excluded.

The field pointer needs clearer definition on what to indicate for multiple byte fields. It should be consistant with the Bit Pointer definition. I propose the following changes to the existing text:

The Field Pointer field indicates which byte of the command descriptor block or of the parameter data was in error. Bytes are numbered starting from zero, as shown in the tables describing the commands and parameters. **If a parameter having a length greater than one byte is in error, the Field Pointer will point to the most-significant byte of the parameter.**

REQUEST SENSE (continued)

The Additional Sense Code assignments need to be defined in what they are actually being used to signify (need a code and description format like table 7-49). I realize they were not defined in 17B but it is unclear what a "Changed Operating Definition" or a "Recorded Entity Not Found" error is and how it should be used.

The ILI bit is still not clearly defined, it wasn't for 17B and may never be. Why not just remove it from the spec.

MODE SELECT

In general MODE SELECT/SENSE is hard to read. You must look in four locations to find information for a single parameter. (ex the generic description of MODE SELECT, the description of a general page structure, the device specific description of a page [i.e. direct access caching], and the description of parameter rounding.)

The Page 1 Recovery Time Limit value of 0 is not specified. I propose the spec specifically state that a value of 0 will disable the use of the recovery time limit in a recovery operation.

Page 4 spindle lock definitions are awkward, I propose the following:

[DELETE: In the event that a slave detects the absence of a valid SLAVE SYNC signal, it will operate independently in an un-synchronized mode. (The ESDI interface does not contain a method for determining and absence of a valid SLAVE SYNC, the only indication is that the synchronized spindle bit in the status never comes true.)]

When a target has been configured as a slave, and the target is not yet synchronized, the target will issue a CHECK CONDITION status for any following command that must access the device. The sense key will be set to NOT READY and the additional sense code set to LOGICAL UNIT IS IN PROCESS OF BECOMING READY (02h/04-03h).

When the target changes from a synchronized state to an unsynchronized state, the target will issue a CHECK CONDITION status. The sense key will be set to UNIT ATTENTION and the additional sense code set to LOGICAL UNIT IS IN PROCESS OF BECOMING READY (06h/04-03h) or generate an Asynchronous Event Notification.

No notification is given for the target transition from an unsynchronized state to a synchronized state. [Why would you care. If the host MUST know, it can loop on a TEST UNIT READY command.]

LOG SELECT

PC bits are not defined in the picture of the CDB. It is assumed they are bits 6 & 7 of byte 2. Page code is not shown either.

LOG SENSE

SP bit makes no sense for this command.

Page code 3F should be used to return all pages (like MODE SENSE)