

SSC-2 working group minutes  
(T10/01-036r0)  
January 15, 2000

1) Agenda – Dave Peterson, Cisco

Introductions

Approval of Agenda

Review of old action items

Discussion items

Switch between explicit/implicit address models

SPACE/LOCATE in explicit address model

Explicit address model state diagram

Tagged queuing commands and other command sets (Paul Suhler)

Persistent reservations (Paul Entzel, Quantum)

SSC-2, revision 01 review and status

Unscheduled business

Next meeting requirements

Review new action items

Adjournment

2) Review of action items

SSC-2 is on the floppy. The document is being converted to frame maker.

The remaining action items were completed and the documents are to be discussed in this meeting.

3) Discussion of tagged queuing behaviors

Tagged queuing and ordering are considered in SSC-2. CRNs are interesting, but are more likely to create deadlock environments for things like reservations.

4) Persistent reservations

Table 9 of SSC-2 shows how the persistent reservations work.

Paul Entzel will bring in a proposal to include those functions presently labeled as "not applicable". He will include

a clear indication that this does not provide data integrity protection and that additional communication between initiators is required in order for this to be made.

#### 5) Switch between explicit and implicit address models

This is document T10/01-021r0.pdf

The BAM bit (Block Address Model bit) is proposed as the mode page value in the device configuration page.

A default value was proposed in this document, but mode page defaults are traditionally not specified. The BAM bit is specified as possibly being implicitly transitioned. Ralph Weber suggests that the entire paragraph 2.2 be deleted from the proposal. Implicit switching of modes depending on the first command after load is also considered. After discussion, the implicit switching depending on first command seemed to be favored.

Another view is to set a three-state value. The states would be

- a) new command set
- b) old command set
- c) implicit selection of command set

This progressed to a bit indicating "unlocked" and a second bit would say "explicit mode".

Commands received that are not consistent with the current state are rejected. The text needs to be modified to be consistent with the unlocking.

This was unanimously accepted as modified.

#### 6) Space and locate commands in the explicit address model

This is document T10/01-022r0.pdf

There were some concerns about consistency between SPACE and LOCATE with respect to where the tape is set at the end of the command. After some consideration, the LOCATE to a filemark is expected to be positioned before the first block to be read, logically after the file mark.

The CDB field for LOCATE is acceptable.

The "BOUND" field includes a destination type field. This was accepted. No locate to end of data is required at present.

The destination is now named the logical element address. The word element is overloaded in SSC-2. The term will be changed.

The SPACE command will stay mandatory in the explicit command set.

The CODE field is extended to 4 bits in order to make it accessible for future SPACE functions. The same is required for SPACE(6).

In the SPACE positioning information, there is a two byte boundary for the Logical Block Address, which is a bit awkward sometimes. The parameters were moved for computational convenience.

The CDB's will also be verified against the SPC-2 standard CDB formats.

#### 7) Explicit address state model

This is document T10/01-023r0.pdf

The model defines three states, a "write capable", "read capable", and neutral state. Commands are divided up into being able to operate in some but not all of these states.

The queued commands are timed against their entry into the enabled state as defined by SAM-2, not by their time of receipt.

There are distinctions between "state" and "type" that do not seem to be clearly made in this document. The commands that can be executed in any state may be called generic commands. Two types of generic commands may be distinguished, generic commands that may operate at any time and generic commands that clear the state back to neutral.

Transition a is incompletely described.

This needs to be taken off-line, since the document is incomplete.

#### 8) SSC-2, revision 01

This document replaces 00-318r2.

The document is fully ready for review.

#### 9) Meeting requirements

The meeting should take 3-4 hours. The next meeting should be in the T11 week, where we could pick up some of the key tape folks.

The next T10 meeting will also need 3-4 hours.

#### 10) Action items

Prepare a revised document 022r0.

Prepare a revised document 023r0.

#### 11) Adjournment