

SCSI-2 CAM Changes Proposal

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To: John Lohmeyer X3T9.2 Committee Chairman

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Subject: Proposed Additions and Modifications to CAM interface

Proposal 1 - Variable Selection Timeout

It may not seem quite kosher but we have had requests from customers for a variable SCSI bus Select timeout (currently recommended by SCSI-2 to be 250mS). If such a field were placed in the SCSI I/O Request CCB, it should be capable of up to 1 second timeouts. A 1 byte field would then require a resolution of 4mS. A value of zero would default to 250mS.

9.1.x Selection Timeout

This one byte field specifies the maximum time allowed for a target to respond to a Select during the execution of this SCSI I/O. The value is in 4mS increments with a value of 0 defaulting to 250mS.

Proposal 2 - Addition of "Disconnect Current" bit to SCSI I/O Request CCB

This was the second proposal to address the high priority — kick the hog off the bus — issue. In this implementation, when a CCB is delivered to the SIM with this new bit set, the SIM would, if necessary, disconnect a current I/O in order to send the new I/O as soon as possible. As this is a requested disconnect, it may or may not succeed — in either case, as soon as the bus is free, the new I/O will be started. It may be feasible to allow selection of this function even if SIM Queue Priority is zero (new CCB at tail of queue) although the usefulness of this combination can be debated.

9.1.3.2 Byte 2 Bits

- 0 When Disconnect Current=1 the SIM may, if necessary and worthwhile, attempt to disconnect a current I/O by issuing a Disconnect message to the Target. When bus free is detected, the I/O for this CCB is initiated.