LSI LOGIC ®

Date: 17 September 1999
To: T10 Technical Committee
From: Ralph Weber, LSI Logic Alternate Member of T10
Subj: SAM-2 TASK SET FULL Clarifications

During the May General SCSI Working Group meeting I was asked to investigate the SAM-2 definition of the TASK SET FULL status. The results of this investigation and proposed changes were reviewed and enhanced by the July Working Group meeting.

After reviewing the proposal twice at the September General SCSI Working Group meeting, I believe that the changes shown with strikeouts and underlines below may be acceptable. Please review and comment, if sufficient comments are received before the November meeting, I'll revise the proposal again. Also, discussion of 99-232 has been removed since that proposal has been approved.

The problem is that the definition of the TASK SET FULL status (5.2) does not state whether it can be returned for untagged tasks. The following proposed changes reflect the majority sentiment of the July Working Group.

Old text:

> **TASK SET FULL.** This status shall be implemented if the logical unit supports the creation of tagged tasks (see 4.9). This status shall be returned when the logical unit receives a command and does not have enough resources to enter the associated task in the task set.

New text:

> **TASK SET FULL.** This status shall be implemented if the logical unit supports the creation of tagged tasks (see 4.9). This status shall not be implemented if the logical unit does not support the creation of tagged tasks. ~~This status shall be returned when the logical unit receives a command and does not have enough resources to enter the associated task in the task set.~~ When the logical unit has at least one tagged task in the task set from an initiator and that same initiator sends a task that cannot be entered in the task set due to a lack of task set resources, TASK SET FULL shall be returned, otherwise BUSY shall be returned.
>
> Note: Receipt of a second untagged task from the same initiator is an error case covered in 5.6.2.

New text minus strikeouts:

> **TASK SET FULL.** This status shall be implemented if the logical unit supports the creation of tagged tasks (see 4.9). <u>This status shall not be implemented if the logical unit does not support the creation of tagged tasks. When the logical unit has at least one tagged task in the task set from an initiator and that same initiator sends a task that cannot be entered in the task set due to a lack of task set resources, TASK SET FULL shall be returned, otherwise BUSY shall be returned.</u>
>
> <u>Note: Receipt of a second untagged task from the same initiator is an error case covered in 5.6.2.</u>