

Date: February 5, 2003

To: T10 Committee (SCSI)

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Subject: SAS Target Port Transfer Tag

1 Overview

The target port transfer tag should be clearly labeled as the property of the target. To make sure this occurs the following wording should be added into SAS.

2 9.2.1 SSP frame format

The following paragraph:

The TARGET PORT TRANSFER TAG field allows the target port to quickly establish a write data context when it has multiple outstanding XFER_RDY frames. This field shall be set by the target port in the XFER_RDY frame. Target ports that need this field shall set a value that is unique for the I_T nexus. Target ports that do not need this field shall set it to FFFFh. For each DATA frame that is sent in response to a XFER_RDY frame, the initiator port shall set the TARGET PORT TRANSFER TAG field to the value that was in the corresponding XFER_RDY frame. For each DATA frame that is not sent in response to a XFER_RDY frame (due to a non-zero FIRST BURST SIZE field in the Disconnect-Reconnect mode page), the initiator port shall set the TARGET PORT TRANSFER TAG field to FFFFh. The initiator port shall set this field to FFFFh for all frames other than DATA frames. The target port shall set this field to FFFFh for all frames other than XFER_RDY frames.

Should be replaced with:

The TARGET PORT TRANSFER TAG field provides an additional method for an SSP target port to establish a write data context when receiving DATA frames while it has multiple outstanding XFER_RDY frames. SSP target ports may set the target port transfer tag field to any value when transmitting a frame. SSP target ports that use this field should set the field in every XFER_RDY frame to a value that is unique for the L_Q portion of the I_T_L_Q nexus.

SSP initiator ports shall set the TARGET PORT TRANSFER TAG field as follows:

- a) For each DATA frame that is sent in response to a XFER_RDY frame, the SSP initiator port shall set the target port transfer tag field to the value that was in the corresponding XFER_RDY frame;
- b) For each DATA frame that is sent containing first burst data (see xxx9.2.2.4), the SSP initiator port shall set the TARGET PORT TRANSFER TAG field to FFFFh; and
- c) For frames other than DATA frames, the SSP initiator port shall set the target port transfer tag field to FFFFh.

SSP initiator ports shall ignore the TARGET PORT TRANSFER TAG field in all incoming frames other than XFER_RDY frames. SSP target ports may use this field in incoming DATA frames to establish write data context and may ignore this field in all incoming frames other than DATA frames.