

BREA Technologies, Inc.

14902 Mesita Drive
Houston, TX 77083-3209

P: (281) 530-3063

F: (281) 988-0358

BillG@breatech.com

May 13, 2002

To: T10 Technical Committee
From: Bill Galloway
Subj: SAS Wide Link Rules

Change from:

9.2.2 Information unit sequences

Initiator ports may send COMMAND and TASK IUs unsolicited.

Target ports shall only send XFER_RDY IUs while processing a write or bidirectional command. Initiator ports shall only send DATA IUs in response to an XFER_RDY IU. Target ports shall not send an XFER_RDY IU before receiving all write data for the previous XFER_RDY IU.

Target ports shall only send DATA IUs while processing a read or bidirectional command.

Target ports shall only send RESPONSE IUs in response to a COMMAND or TASK IU after all required data transfers have been performed.

Target ports may send an AEN IU when an asynchronous event occurs (see 9.2.4). Initiator ports shall send an AEN_RESPONSE IU in response to each AEN IU.

Change to:

9.2.2 Information unit sequences

9.2.2.1 COMMAND Information unit sequence

Initiator ports send COMMAND IUs unsolicited.

A wide initiator may send COMMAND IUs on multiple links simultaneously.

9.2.2.2 TASK Information unit sequence

Initiator ports send TASK IUs unsolicited.

The initiator shall not send a TASK IU for a given I_T_L_Q if the initiator is sending any IU for the same I_T_L_Q on another link. The initiator shall not send a TASK IU for a given I_T_L_Q if the initiator is waiting for an IU acknowledgement for that I_T_L_Q on any link.

9.2.2.3 XFER_RDY Information unit sequence

The target shall only send XFER_RDY IUs in response to a COMMAND IU for a write or bidirectional command.

The target shall not send a XFER_RDY IU for a given I_T_L_Q before it has acknowledged all of the previous DATA IUs for that I_T_L_Q. The target shall not send a XFER_RDY IU for a given I_T_L_Q after it has sent a RESPONSE IU that terminates the task for that I_T_L_Q.

9.2.2.4 DATA Information unit sequence

The initiator shall only send DATA IUs in response to a XFER_RDY IU or an implied XFER_RDY IU as a result of the FIRST BURST SIZE field (see xxx).

The target shall only send DATA IUs in response to a COMMAND IU for a read or bidirectional command.

A wide device shall only send DATA IUs for a given I_T_L_Q on one link at a time. The wide device may switch links for DATA IUs once all of the previous DATA IUs have been acknowledged.

The initiator shall not send a DATA IU for a given I_T_L_Q after it has sent a TASK IU that terminates the task for that I_T_L_Q.

The target shall not send a DATA IU for a given I_T_L_Q after it has sent a RESPONSE IU that terminates the task for that I_T_L_Q.

9.2.2.5 RESPONSE Information unit sequence

The target shall only send a RESPONSE IU in response to a COMMAND or TASK IU.

The target shall not send a RESPONSE IU for a given I_T_L_Q if the target is sending any IU for the same I_T_L_Q on another link. The target shall not send a RESPONSE IU for a given I_T_L_Q if the target is waiting for an IU acknowledgement for that I_T_L_Q on any link.

9.2.2.6 AEN Information unit sequence

The target may send an AEN IU when an asynchronous event occurs (see 9.2.4).

9.2.2.7 AEN_RESPONSE Information unit sequence

The initiator ports shall only send an AEN_RESPONSE IU in response to a AEN IU.

???? Why is this IU needed ????