To: T-10/SPI-4 Working Group From: Richard Moore QLogic Corp. Date: March 2, 2001

Subject: Corrections to SPI-4 on Driving and Asserting SCSI signals

1. P1 During Selection

SPI-4r3 states the following requirement in Section 8.2 under the description of P1:

"During the SELECTION phase, ST DATA phase with transfer length set for 8-bit transfers, COMMAND phase, MESSAGE phase, and STATUS phase the P1 signal shall not be driven by any SCSI device."

Including SELECTION in this requirement contradicts the following requirement in Section 10.6.2.2:

"The initiator shall set the DATA BUS to a value that is the OR of its SCSI ID bit, the target's SCSI ID bit, and the appropriate parity bit(s) (i.e., DB(P_CRCA), and/or DB(P1))."

Remedy:

- (1) Delete "the SELECTION phase," from the offending passage in Section 8.2.
- (2) Add another statement to the P1 description which states "During the SELECTION and RESELECTION phases performed by a 16-bit device, P1 is a signal sourced by the device driving the DATA BUS."
- (3) Issue an errata indicating this correction to the corresponding passage in SPI-3.

There is also an oversight under the descriptions of P_CRCA and P1 in Section 8.2:

"When referred to as DB(P_CRCA) it is a signal sourced by the SCSI device driving the DATA BUS during the SELECTION phase..." This passage should also refer to RESELECTION phase.

2. Driving the DATA BUS

SPI-4r3 Section 10.13, item f, states:

"The initiator shall assert the DATA BUS, DB(P_CRCA), and/or DB(P1) no sooner than one system deskew delay after the detection of the negation of the I/O signal."

If true, this would require the initiator to drive logic ones (asserted signal state) onto the data bus. Clearly this is not what is intended.

Remedy: Change "assert" in the above sentence to "drive".