

Date: May 01, 2001

To: T10 Committee (SCSI)

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Subject: SPI L\_Q error handling questions

## **1 Overview**

There are some error conditions that can occur in the SPI L\_Q information unit that SPI-4 does not tell how to handle. They are:

- 1) If, when the initiator sends a L\_Q IU, it sets the data length field to a value outside the legal 14h-90h range what is the target supposed to do.
- 2) If, when the initiator sends a L\_Q IU or the target sends a L\_Q IU with a type of status and the BIDI Direction field is not set to zero what should the receiving device do?

## **2 Proposed changes**

For problem 1 I propose it be handled the same way as if the device received an illegal type code by adding the following wording section 10.8.3.3.4

'If a target receives a SPI L\_Q information unit with an illegal data length (see table 45) target shall transfer all the bytes indicated by the data length and iuCRC interval and shall discard the transmitted information. After transferring all the bytes the target shall change to a DT DATA IN phase and transmit a SPI status information unit with a RSPVALID bit of one and the packetized failure code set to ILLEGAL REQUEST RECEIVED IN SPI L\_Q INFORMATION UNIT.'

For problem 2 I propose that the BIDI Direction field be ignored except for the data and data stream type codes. The following wording should be added into table 45 for the last command, multiple command, and status type code descriptions:

'The BIDI DIRECTION field shall be set to zero and ignored by the receiving SCSI device.'