June 18, 1999

To:   T10 Technical Committee
From: John Lohmeyer, LSI Logic Principal Member of T10
Subj: Proposal to change MSE high-impedance current specification in SPI-3

The May ‘99 SPI-3 working group requested that I develop a written proposal regarding relaxing the High Z input characteristics of MSE devices (i.e., their input characteristics when they are not driving the bus). After posting rev 0, I received some suggestions for improvements from Claude Pattein via email. I’ve included those changes and a couple editorial changes in rev 1 of this proposal. I propose the following changes be made to SPI-3 rev 7:

Add a second sentence to the paragraph immediately above Table 15:

In addition to the device electrical requirements defined in the remaining subclauses of this clause SCSI devices shall meet the requirements specified in table 15 and table 16 at the device connector. The requirements in table 16 shall apply to both powered and unpowered devices.

Modify table 16 as shown:

Table 16 - Input current requirements at the device connector for lines not being driven by the device

<table>
<thead>
<tr>
<th>Value</th>
<th>Maximum</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE current magnitude</td>
<td>See figure &lt;new&gt;</td>
<td>Measured from + or - signal 0 &lt; V_IN &lt; 4.1 V to local ground for each signal pin.</td>
</tr>
<tr>
<td>LVD current magnitude</td>
<td>± 20 μA D.C.</td>
<td>Measured from + or - signal 0 &lt; V_IN &lt; 2.5 V to local ground for each signal pin.</td>
</tr>
</tbody>
</table>

Note: I added the "0 <" to the second row above. It appears that this was inadvertently left out.

Add a new figure under table 16:
After re-reading annex A and table 16, I've come to the conclusion that no changes are needed in annex A because it only applies to LVD mode and LVD mode is not tested above 2.5 V (per row 2 of table 16).