

SCSI cable media performance working group (SCMP)  
October 26, 1999  
Huntington Beach CA

Subject: Approved minutes for the SCSI cable media performance working group CMP held on September 28, 1999 in Lisle, IL.

Zane Daggett of Hitachi led the meeting. Bill Ham of Compaq took these minutes. There was a good attendance from a broad spectrum of the industry. Martin Ogbuokiri of Molex hosted the meeting.

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## 1. Introduction

Zane opened the meeting and conducted the introductions and reviewed the meeting purpose.

## 2. Attendance

The following folks were present:

Martin Ogbuokiri, Molex, mobuokiri@molex.com  
Larry Barnes, LSI Logic, larry.barnes@lsil.com  
Jonathan Fasig, Western Digital, jonthan.L.Fasig@wdc.com  
Tariq Abou-Jeyab, Adaptec, tajayab@corp.adaptec.com  
Paul Aloisi, Unitrode, aloisi@unitrode.com  
Bill Ham, Compaq, bill\_ham@ix.netcom.com  
Andrew Bishop, Quantum, andrew.bishop@quantum.com  
Dave Chapman, Amphenol, dave.chapman@aipc.fabrik.com  
Greg Vaupotic, Amphenol, greg.vaupotic@snet.net  
Jie Fan, Madison Cable, jfan@tycoelectronics.com  
Thom Kreusel, HP, thom.kreusel@hp.com  
Herb VanDeusen, WL Gore, hvandeus@wlgore.com  
David Dunham, Molex, ddunham@molex.com  
Bob Gannon, JPM, rgannon@jpmco.com  
Zane Daggett, Hitachi Cable, zdaggett@hcm.hitachi.com

### 3. Agenda development

The agenda shown was that used.

### 4. Approval of previous minutes

The methodology for minutes using the draft/approved minutes with posting to the t10 web site of the minutes as the vehicle for publication. Postings are to be announced to the SCSI reflector after the posting is verified to be on the web site.

### 5. Review of 99-111r6

The document was reviewed and several changes were recommended:

#### 5.1 Local impedance

The impedance table was slightly rearranged to give both 84 and 78 equal billing.

#### 5.2 Extended distance impedance

The requirements for extended distance impedance testing were agreed to be changed to 50 ohm peak to peak from 10MHz to 600 MHz. This was the best agreement that was possible.

Several companies indicated willingness to coordinate measurements on this measurement. Greg Vaupotic of Amphenol agreed to be the coordinator. Madison and Hitachi will supply samples and test data to Greg for comparison.

#### 5.3 Attenuation

The attenuation table was revised to correct values for 28 AWG wire attenuation. The 0 to 12 and the >12 to 25 meters lengths now use the same dB per meter but with different end to end. This change does increase the total attenuation for 25 meters to 12 dB but was accepted anyway.

#### 5.4 Capacitance

Minimum values were added for both SE and DIFF. The requirements for minimum were added and the frequency range and allowed ranges. The variation of capacitance with frequency was changed to 300kHz to 600 MHz and the allowed variation is increased to 10%.

## 5.5 Other requirements

No other changes were recommended.

## 5.6 Summary

Greg Vaupotic moved and Tariq Abou-Jeyab seconded that the SCSI cable media performance working group recommend that Zane Daggett (chair) and others in the SCSI cable media performance working group submit letter ballot comments against SPI-3 suggesting that the content of 99-111r7 be included in SPI-3 in place of the present material. The motion passed unanimously (one vote per company).

## 6. Annex F review

A line by line review was conducted of rev 05 of Annex F (testing methodologies).

A number of editorial changes were made to the summary table.

The calibration methodology for the local impedance profile tests was extensively discussed. Two methods are commonly use for calibration.

Larry Barnes moved and Bill Ham seconded that the SCSI cable performance working group recommend adoption of the methodology in 98-219r5 for the calibration of local impedance measurement (using resistors). Motion passed 9/1/2. The no vote was based on the existence of reference line methodologies as an alternate and should also be included.

Andrew Bishop moved and Tariq seconded that the local impedance section in 98-219r6 as planned to be modified by Greg Vaupotic be recommended for inclusion in SPI-3.  
Motion passes 10/1/1.

Some rewriting of the capacitance section is needed. The review of this annex was not completed but will be completed at the next meeting at the end of the month. An additional editors meeting will be requested for October 28 (after the modeling meeting). This schedule should allow for making additional comments against SPI-3 if needed.

## 7. Next meetings

October 26, 28 1999 Huntington Beach, CA  
Nov 30, 1999 Rochester, MN  
Future requested dates:  
Feb 01, 2000 San Jose (Adaptec?)  
Feb 29, 2000 Manchester NH (Hitachi)