

Accredited Standards Committee
INCITS, Information Technology

Doc. Number:
Date: 06/09/10
Project:
Reply to: Dean Wallace

TO: MEMBERSHIP of T11.2
FROM: Dean Wallace Chair FC-PI-5 Working Group
Subject: Approved minutes of FC-PI-5 ad hoc 06/09/10

AGENDA

1. Opening remarks and introductions
2. Attendance and membership
3. Approve agenda
4. Document Distribution
5. Review minutes of previous meeting
6. Review old action items
7. Call for patents
8. Liaison Reports
 - 8.1. None
9. Presentations
 - 9.1 Updates to 1600-DF-EA-S channel Adam Healey, LSI, 10-269v0
 - 9.2 High Speed VCSELs for Optical data links, James Lott, VIS, 10-270v0
 - 9.3 VCSEL based 32GFC data links, Jim Tatum, Finisar, 10-268v0
 - 9.4 Response to OIF for 32GFC, Dean Wallace, QLogic, 10-227v0
 - 9.5 Comment resolution, Dean Wallace, QLogic, 10-126v3
- 10 Project review
 - 10.1 None
11. Review action items
12. Next meeting schedule
13. Adjourn

RESULTS OF MEETING

1. Opening remarks and introductions

Dean Wallace, chair, led the meeting. He opened the meeting at 9:00am on Wednesday. He led a round of introductions, thanked our host FCIA.

2. Attendance and Membership

Attendance at plenary meetings does count toward minimum attendance requirements for T11.2 membership. Working group meetings are open to any person or organization directly and materially affected by T11.2's scope of work but do not count toward minimum attendance for T11.2 membership.

The following people attended this meeting:

3. Approval of Agenda

The motion to approve the agenda was made by Michael DeBie (Avago) and approved by acclamation.

Agilent Technologies	Joachim Vobis
AMPHENOL INTERCONNECT	Gregory McSorley
AVAGO TECHNOLOGIES	Michael deBie
BROADCOM	Ali Ghiasi
BROCADE	Scott Kipp
CORNING INC.	Doug Coleman
FCI	Doug Wagner
FINISAR CORPORATION	Richard Johnson
GENNUM CORPORATION	David Brown
IBM	John Ewen
LSI CORP.	Adam Healey
LUXTERA	Tom Palkert
MOLEX	Jay Neer
OPNEXT	Jon Anderson
PANDUIT CORPORATION	Robert Elliot
QLOGIC	Dean Wallace
QLOGIC	Mike Dudek
SYSTIMAX SOLUTIONS	Terry Cobb
TYCO ELECTRONICS	Michael Walmsley
VITESSE	George Noh

4. Document distribution

This section describes the availability of draft documents that are intended to be published as a result of work by the electrical working group.

Document distribution is now being done over the web. Documents relating to the electrical working group work can be found on the T11 website (www.t11.org) by going to “documents” and searching on the key word electrical.

A summary of the presently active policy to document distribution is included for reference.

All presentations are posted electronically at the approved ftp within two weeks after the meeting. Format must be an approved electronic file format.

Presentations are defined as material shown publicly in the plenary or authorized working group meetings.

Submission of documents for T11 document numbers: An online system is now available to provide document numbers and accept the submission of documents. The system is accessed via the T11 web page at <http://www.t11.org>. Follow the “docs” link in the left hand frame, or at the bottom, and fill in a form giving details of the document. In order to complete the form, it will be necessary to enter a password. The password is given out at T11 meetings, or can be obtained from the T11 chair. Instructions will then be given about uploading the file to the ftp site.

We now use all electronic document distribution.

A T11.2 reflector is operational over the T11 site.

The committee forms its agenda by the following:

1. A call (reminder) for presentations by the chair three weeks in advance.
2. Those wanting to be on the agenda submit request including; title, presenter, time required, abstract.
3. Chair creates an agenda and posts two weeks before the meeting.
4. At the meeting it is the chair’s discretion to allow additional presentations.

5 Review minutes of previous meeting and review of minutes from interim meeting

Motion to approve April meeting minutes, Mike Dudek (QLogic) moved to approve minutes, group approved by acclimation.

6 Review old action items

NONE

7 Call for patents

The chair showed the slides for the patent policy in document 08-406v0. The presentation is also on the USB stick that was distributed.

8 Liaison Reports

There were no liaison reports.

9 Presentations

9.1 Updates to 1600-DF-EA-S channel Adam Healey, LSI, 10-269v0

A comment was made to increase the Epsilon point end to end loss from 23dB to 25dB to accommodate the expected loss in systems. This presentation updated fitted insertion loss coefficients to accommodate increased insertion loss allowance. A 1600-DF-EA-S reference model diagram was shown, this will be included in the FC-PI-5 document.

9.2 High Speed VCSELs for Optical data links, James Lott, VIS, 10-270v0

Reviewed Vertical Integrated Systems research into high speed 850nm directly modulated VCSELs. VIS believes that 28Gb VCSELs can be productized now. VIS currently has 40Gb VCSELs in the lab.

9.3 VCSEL based 32GFC data links, Jim Tatum, Finisar, 10-268v0

850nm VCSELs have been demonstrated in the literature and are achievable. Finisar has demonstrated a 30Gb VCSEL in 2008. 30Gb eye diagrams at different distances were shown. Status of 850nm PIN detectors was reviewed. A first attempt was made at a link budget, 50 meters OM3 and 75 meters OM4. Jitter budget will require CDR on transmit and receive.

9.4 Response to OIF for 32GFC, Dean Wallace, QLogic, 10-227v0

Starting from document 10-227v0 we drafted a response to the OIF on 32GFC needs. The response document number is 10-285v1. Some of the main requirements are listed below.

1. Single lane SFP connector.
2. PCB traces up to 10”.
3. Channel loss budget range 15.5dB to 19.5dB.
4. Module will most likely:
 1. Re-timed
 2. Require transmit and receive equalization.
5. Crosstalk targets recommended.
6. Passive direct attach recommendation.

A motion was made to send the drafted response to the OIF and this was improved.

9.5 Comment resolution, Dean Wallace, QLogic, 10-126v3

There are 33 technical comments. All of the technical comments have been resolved. Motion was made to recommend that FC-PI-5 be forwarded to T11 letter ballot. This passed unanimously. The motion is shown below.

Motion Dean Wallace (QLogic), seconded Scott Kipp (Brocade)

The FC-PI-5 ad hoc recommends to T11.2 that document 10-113v0 as modified per accepted comments in comment resolution document 10-126V3 (FC-PI-5 draft 2.0) be released to a T11 letter ballot.

Yes:16 No:0 Abstain:0

10 Project Review

There was no project review.

11 Review action items

No new actions.

12 Next meeting schedule

Next meeting is Wednesday 8/4/10 from 9:00 to 5:30 in Chicago

Request three teleconference.

13. Motion to adjourn

Motion to adjourn: Ali Ghiasi (Broadcom)