

Accredited Standards Committee*
INCITS, Information Technology

Doc. Number:
Date: 4/03/07
Project:
Reply to: Mike Jenkins
Dean Wallace

TO: MEMBERSHIP of T11.2

FROM: Mike Jenkins Chair Electrical Working Group
Dean Wallace Vice-chair Electrical Working Group
Dean Wallace Secretary Electrical Working Group

Subject: Approved minutes of electrical working group 4/03/07

AGENDA

1. Opening remarks and introductions
2. Attendance and membership
3. Approve agenda
4. Document Distribution
5. Review minutes of previous meeting and review of minutes from interim meeting.
6. Review old action items
7. Call for patents
8. New business/presentations
 - 8.1 SFP+Compliance Boards Results,(T11/07-215v0), AliGhiasi, Broadcom.
 - 8.2 Passive CopperSpecification Based on WDP,(T11/07-216v0), AliGhiasi, Broadcom.
 - 8.3 Reference DFE and Non-CompensableJitter,(T11/07-231v0), Mark Marlett, LSI Corp.
9. Project review
 - 9.1 FC-PI-3
 - 9.2 FC-PI-4

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- 10. Old business/presentations
- 11. New business
- 12. Review action items
- 13. Next meeting schedule
- 14. Adjourn

RESULTS OF MEETING

1. Opening remarks and introductions*

Mike Jenkins, chair, led the meeting. He opened the meeting at 2pm on Tuesday. Mike thanked the host Bob Snively of Brocade. He then led a round of introductions.

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:

NAME	COMPANY	TELEPHONE NUMBER
Bob Snively	Brocade	408-833-8135
Tom Lindsay	ClariPhy	425-608-0209
Jinhua Chen	EMC	508-249-4527
Hossein Hashemi	Emulex	714-885-3609
Mike Fitzpatrick	Fujitsu	405-820-5809
Justin Abbott	Gennum	613-270-0458
Dan Colegrove	Hitachi	702-614-6119
David Stauffer	IBM	802-769-6914
Dave Lewis	JDSU	408-546-5448
Adam Healey	LSI Logic	978-691-3067
Mike Jenkins	LSI Logic	408-433-7901
Mark Marlett	LSI Logic	408-954-3760
Mike Dudek	Picolight	303-530-3189
Rick Hernandez	PMC-Sierra	408-553-4187
Dean Wallace	Qlogic	949-389-6480
James Coomes	Seagate	952-402-2665
Robert Kembel	Solution Technology	520-881-0877

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Andrew Nowak	Tyco	508-752-2884
George Noh	Vitesse	805-445-2247
Tom Palkert	Xilinx	952-401-7997
Paul Levin	Xyratex	310-372-7352

3. Approval of Agenda*

The agenda was approved by acclimation.

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:

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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 minutes from previous meeting, Frank Barber (eSilicon), seconded by Mark Marlett (LSI). There was no objection to approving the minutes.

Minutes from interim meeting were reviewed.

6. Review old action items

There were no old action items.

7. Call for patents

The chair noted that the formal call for patents is issues at the T11.2 and T11 plenary meetings. Companies with patents that may bear on the subject of this ad hoc are advised to consider this call for patents. There was no response for this call for patents.

8. New discussions/presentations

8.1 SFP+ Compliance board results, 07-215v0, Ali Ghiasi, Broadcom

Broadcom is designing a module compliance host board. There was discussion if the alpha to delta point host board parameters should be specified in the document. The board being reviewed is the SFF-8431 module compliance test board.

The question was asked if these boards will be available, it was stated that the boards will be available.

When the SFF-8431 annex is complete it will be incorporated into an FC-PI-4 annex with adjustments made for FC. Should this annex be informative or normative, in SFF-8431 it is normative.

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Motion: Mike Dudek, Ali Ghiasi (seconded)

FC-PI-4 annex G shall be based on a modified SFF-8431 annex C. This annex shall be normative with appropriately modified delta point specifications with the existing specifications becoming superseded. Test hardware and all documentation shall be available on a RAND basis prior to the change in specifications.

Yes 8 No 0 Abstain 8

8.2 Passive copper specification based on WDP, 07-216v0, Ali Ghiasi, Broadcom *

Proposing no change to the linear specification and proposing no change to the linear specifications. Also no change to the transmitter output voltage level. The question for this is will a 1,2 reference equalizer go 7 meters with this type of cable.

8.3 Enhanced TWDP and jitter limit , 07-084v0 Mark Marlett, LSI

Discussed TWDP and DFE effects. TWDP equalizer has data only at sample points. Continuous view of DFE shows an open eye. Reviewed how a one tap DFE actually opens the eye. Reviewed non-compensable effects. Recommending a new specification parameter for delta R points, NCJ (non-compensable jitter). The limit for NCJ is 0.5UI. Would like to do this for the limiting output. The reference receiver is a 1 tap DFE. You will measure the waveform and then run it through enhanced TWDP code. This is a reference receiver. Most of the work done previously has used a two tap DFE, that is the current reference receiver for the linear variant.

9. Project Review

FC-PI-3: No action.

FC-PI-4:

Worked on comment resolution. Spreadsheets were updated as comments were accepted or deleted.

10. Old business/presentations

Investigate a working group to look into passive copper cable and to look into what needs to be added into the document. Dean Vermeersch, Tyco. Carry over.

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Dean Wallace generate measured data for Adam using maximum jitter at the delta T point and whatever length of fiber that is needed to meet the vertical eye closure. Carry over.

11. New business*

12. Review action items

Mike Dudek and Ali Ghiasi have agreed to write an annex G based on modified SFF-8431 annex C.

13. Next meeting schedule

The next meeting is Tuesday June 5th from 2pm to 5:00pm.
Request an interim meeting on the afternoon of May 14th and 15th.
Request two telecom.

14. Motion to adjourn

Motion to adjourn: Greg McSorley (Amphenol) seconded by Ali Ghiasi (Broadcom).

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