MMF Ad Hoc meeting minutes

20th June 2013

Unapproved minutes

recorded by Jonathan King

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- **Meeting started** at 9.05 am Pacific, chaired by Jonathan King.
- **Attendee list** was taken from the Webex attendee list, ~18 attendees were noted.
- **Presentations** shared in the MMF ad hoc can be found at the MMF ad hoc web page.
  - *http://www.ieee802.org/3/bm/public/mmfadhoc/meetings/index.html*
- **IEEE patent policy:** Attendees were reminded of the IEEE patent policy
  - *http://www.ieee802.org/3/patent.html*
- **Agenda slides agreed** following addition of request from Mike Dudek to discuss a link budget comment.
- **Meeting minutes for 13th June**: When asked, no objections were made to approving the 13th June meeting minutes, so they are approved by the MMF ad hoc.

- **Presentation 1:**   Propagation delay skew in multimode cabling – Paul Kolesar, *kolesar_01_0613_mmf*. Paul presented Skew and Skew Variation calculations using the kolesar_02_0508 model. Paul noted that wavelength related skew variation had previously been underestimated by a factor of 2, although this is a small part of total Skew Variation. . Paul recommended a value of 400 ps for Skew Variation for the wavelength shift allocation, and a value of 2.4 ns for Cable Skew Variation.
- **Discussion:** Jonathan said he has referenced Paul's presentation in a comment to Draft 1p0. Pete recommended submitting a maintenance request to correct the wavelength shift allocation in clause 86.

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- **Presentation 2:**   100G SR4 Link Model Update, TDP, TxEye Mask & SRS – John Petrilla, *petrilla_01_0613_mmf.* John went through derivation of TDP and SRS test conditions, using his spreadsheet model (*http://www.avagotech.com/docs/AV02-2485EN*). John suggested using an SRS test signal 5×10^{-5} eye mask as an additional check that the test source doesn't overstress the DUT receiver. This would be in addition to specifying VECP, and J2 and J4 jitter.

- **Discussion:** The reference receiver definition in clause 86 was discussed, and the difference between the TDP tests in clauses 86 and 52. It was decided that in calculating the equivalent reference receiver bandwidth for the TDP test, the penalty due to MPN and MNP should not be included in the penalty introduced by the restricted bandwidth reference receiver. John agreed to revise the reference receiver bandwidth taking this into account.

- **Agenda items 3 to 5:** The meeting ran out of time for the last 3 agenda items. Draft text for TDP test for Clause 95 , and draft text for SRS test (working documents prepared by Jonathan King) will be carried over to next weeks meeting.

- **Meeting ended** at 10.39 am

- **Actions and issues requiring resolution:**
  - Contributions addressing the 100m MMF reach objective TBD items
  - Proposals for alternative SRS test and TDP test are invited.

- **Next meeting:** 27th June 2013, 9am to 10.30 Pacific

Attendees

Pete Anslow, Ciena

Dave Brown, Semtech Canada

Piers Dawe, Iptronics

Dan Dove, Applied Micro

Mike Dudek, Qlogic

Galen Fromm, Cray

Jonathan King, Finisar

Paul Kolesar, Commscope

Mike Li, Altera

Marco Mazzini, Cisco

John Petrilla, Avago Technologies

Rick Rabinovich, Alcatel-Lucent

Sam Sambasivan, ATT Labs

Jeff Slavik, Avago Technologies

Alan Ugolini, US Conec

CK Wong, FCI