

MMF Ad Hoc meeting minutes

22nd Aug 2013

Unapproved minutes
recorded by jonathan king

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- **Meeting started** at 9 am Pacific, chaired by Jonathan King.
- **Attendee list** was taken from the Webex attendee list, 17 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 were agreed** after adding a topic for discussion : comment 66, on ER spec for high ISI Tx.
- **Meeting minutes for 1st August:** When asked, no objections were made to approving the 15th August meeting minutes, so they are approved by the MMF ad hoc.
- **Presentation 1: TDP measurement and spec values-3** – a working document compiled by jonathan king, containing draft text for proposed changes to D1p1 to address the need to correct for VECP in the reference sensitivity measurement used to TDP.
- **Discussion:** The group reviewed and edited the slides. The group chose to correct the reference sensitivity measurement (ref_Tx into ref_Rx) by measuring the VECP of the ref_Tx using a 12.6 GHz fourth-order Bessel Thomson filter and subtracting it from the measured reference sensitivity. The resulting agreed text is shown on slide 4.
- **Discussion of comment 66 on ER value:** John outlined his comment 66, which describes how the current definition of ER is affected by a high ISI Tx scenario. John will present his argument for changing ER definition or value or eliminating ER spec completely in a preview of petrilla_01_0913, which will be discussed in the MMF ad hoc next week.

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- **Discussion continued:** Piers spotted a math' error ($-9.1-1.9=-11.2$!) on slide 3 of the presentation 'Clause_95_D1p1_TBDnTBCs-post' which was posted on the MMF ad hoc materials page for the 8th August 2013. Jonathan will use a calculator more often, and post a corrected version 'Clause_95_D1p1_TBDnTBCs-post-r2' in the same location.
- **Meeting ended** at 10.40 am.
- **Topics noted during discussion as worth further consideration:**
 - Reference transmitter RIN specification
 - The difference between TDP and Allocation for penalties
 - The offset for Tx OMA min spec vs the Tx OMA minus TDP spec (currently 0.9dB)
- **Next meetings:** 29th August 2013, 9am to 10.30am

Draft proposed text for 'Option 2' TDP reference sensitivity correction factor

- In section 95.8.5 modify items 'd' and 'g' to become:

“d) The reference transmitter rise/fall times should be less than 12 ps at 20% to 80%. The reference transmitter optical waveform is measured for vertical eye closure penalty (VECP), as defined in Equation 52-4, but evaluated at +/- 0.11 UI from the eye center, using a receiver with a fourth-order Bessel-Thomson filter response with a bandwidth of 12.6 GHz.”

“g) The reference sensitivity S and the measurement P_{DUT} are both measured with the sampling instant displaced from the eye center by ± 0.11 UI. Because the reference sensitivity test is done with a restricted bandwidth receiver, a correction is required to calculate S . S is equal to the measured sensitivity minus the measured reference transmitter VECP from item d).

For each of the two cases (early and late), if $P_{DUT}(i)$ is larger than $S(i)$, the $TDP(i)$ for the transmitter under test is the difference between $P_{DUT}(i)$ and $S(i)$, i.e. $TDP(i) = P_{DUT}(i) - S(i)$. Otherwise, $TDP(i) = 0$. The TDP is the larger of the two $TDP(i)$.”

Attendees

Pete Anslow, Ciena

Dave Brown, Semtech

Jose Castro, Draka

Piers Dawe, Mellanox

Dan Dove, APM

Mike Dudek, Qlogic

Galen Fromm, Cray

Ali Ghiasi, Broadcom

Jonathan King, Finisar

Greg LeCheminant, Agilent

Jeff Maki, Juniper

John Petrilla, Avago Technologies

Rick Rabinovich, Alcatel-Lucent

Mike Ressler, Hitachi Cable

Sam Sambasivan, ATT Labs

Andre Szcapanek, Inphi

Nathan Tracy, TE