## MMF Ad Hoc meeting minutes

29<sup>th</sup> Aug 2013
Approved minutes
recorded by jonathan king

## MMF ad hoc meeting minutes, 29th Aug. 2013 ... 1

- Meeting started late at 9.19 am Pacific, chaired by Jonathan King.
- Attendee list was taken from the Webex attendee list, 16 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
- **Meeting minutes for 22<sup>nd</sup> August**: When asked, no objections were made to approving the 22<sup>nd</sup> August meeting minutes, so they are approved by the MMF ad hoc.
- **Presentation 1:** *petrilla\_01\_0913\_optx* John Petrilla described how the current definition of ER affects set up in a high ISI transmitter scenario and recommended a change to the ER definition (moving to an OMA based definition), a change to ER spec value, or eliminating the ER spec completely.
- Presentation 2: anslow\_01\_0813\_mmf Pete Anslow showed plots of average power vs
   OMA for 3 dB, 2 dB, and no ER spec limit, and the corresponding limiting cases of optical eyes.
   Pete noted that with no ER spec, the ratio of average power to OMA could be ~10dB.
- **Discussion:** The consensus was to keep the ER spec with the current definition but adopt a lower spec value; between 2 dB and 2.5 dB was accepted to be about right, it allows VCSELs with high ISI to still be operated within their 'sweet spot' range but without leaving receivers vulnerable to Tx with high optical pedestals and relatively small OMA. The value will be discussed and finalized in the York meeting.
- Continued.....

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- **Presentation 3**: *OMA\_TDP\_meanPowerMaps* Piers Dawe showed plots of average power vs OMA and made the case for a peak power spec at around 4.4 dBm.
- **Discussion:** There was no agreement to introduce a peak power spec at this time, but the consensus was that this topic should be studied further. It was accepted that with suitable calibration a peak power measurement could be extracted at the same time as Tx eye mask was measurement. Jonathan said he wouldn't oppose a peak power spec value provided it doesn't impinge on the max average power spec and OMA spec map, ie. at the highest average power and OMA values, it should just limit peaking. Measurements of real transmitter eyes will be important in defining the need for and value of a peak power spec.
- **CAUI4 discussion:** The group did not have time to discuss the CAUI-4 comments.
- Meeting ended at 10.50 am.
- Topics noted during discussion as worthy of further study:
  - 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: After York, TBC

## Attendees

Pete Anslow, Ciena
Dave Brown, Semtech
Kevin Burt, Samtec
Wheling Cheng, Juniper
Piers Dawe, Mellanox
Patrick Decker, Oracle
Dan Dove, APM
Mike Dudek, Qlogic
Jonathan King, Finisar

John Petrilla, Avago Technologies Rick Rabinovich, Alcatel-Lucent Mike Ressl, Hitachi Cable Pirooz Tooyserkani, Cisco Nathan Tracy, TE Paul Vanderlaan, Nexans CK Wong, FCI