Unapproved minutes P802.3bs 400 Gb/s Ethernet Electrical Ad Hoc Teleconference 29ᵗʰ August 2016

Minutes taken by Andre Szczepanek, Inphi

The meeting started at 8:04 am Pacific chaired by Andre Szczepanek, the attendee list was taken from the Webex attendee list, plus any e-mail notifications of attendance.

Documentation for the call can be found at the Ad Hoc web page:
http://www.ieee802.org/3/bs/public/adhoc/elect/index.shtml

Andre reminded everyone of the updated IEEE patent policy (http://www.ieee802.org/3/patent.html) and asked if anyone was unfamiliar with it. No one responded.

Andre asked if anyone had any objection or additions to the draft agenda. No one responded, so this agenda was approved by the Ad Hoc.

Andre asked if anyone had any corrections to the draft minutes from the 8ᵗʰ August 2016 call. No one responded, so these minutes are approved by the Ad Hoc.

Presentation #1
Title: Electrical Interface Ad Hoc Opening/Agenda
Presenter: Andre Szczepanek, Inphi
http://www.ieee802.org/3/bs/public/adhoc/elect/29Aug_16/szczepanek_01_082916_elect.pdf

Presentation #2
Title: Revisiting MCB/HCB Crosstalk for C2M
Presenter: Ali Ghiasi, Independent
http://www.ieee802.org/3/bs/public/adhoc/elect/29Aug_16/ghiasi_01_082916_elect.pdf

Ali's presentation points out the disparity between the connector crosstalk assumed in previous chip-to-module simulations and the crosstalk of QSFP connectors (Comment #33). He asked that the contributors of those presentations re-run them with additional crosstalk to assess the effect on margin. A related comment by Adam Healey (#33) was mentioned. Andre displayed the comment from the posted D2.0 Comments file: http://www.ieee802.org/3/bs/comments/P802d3bs_D2p0_comments_rec_Cl.pdf It was also pointed out that the posted HCB/MCB models do not include crosstalk, and that it would be helpful if they did.

Andre proposed using the remaining 90 minutes of the meeting to look through and discussing Annex 102D/E comments – this was agreed to.

Comment #517 : There was agreement that although the suggested remedy might make some compliance boards non-compliant this was worth doing. Suggest AIP.

Comment #132: Discussion of this comment opened up the whole Odd/Even Jitter measurement in the presence of transmit equalization that was addressed in D2.0 by a return to the use of JP03A. There was a general feeling that without the "technical completeness" pressure the use of a PRBS13Q pattern should be re-visited. Piers Dawe asked permission to present some slides on the effect of equalization on a QPRBS7 pattern, which was granted.
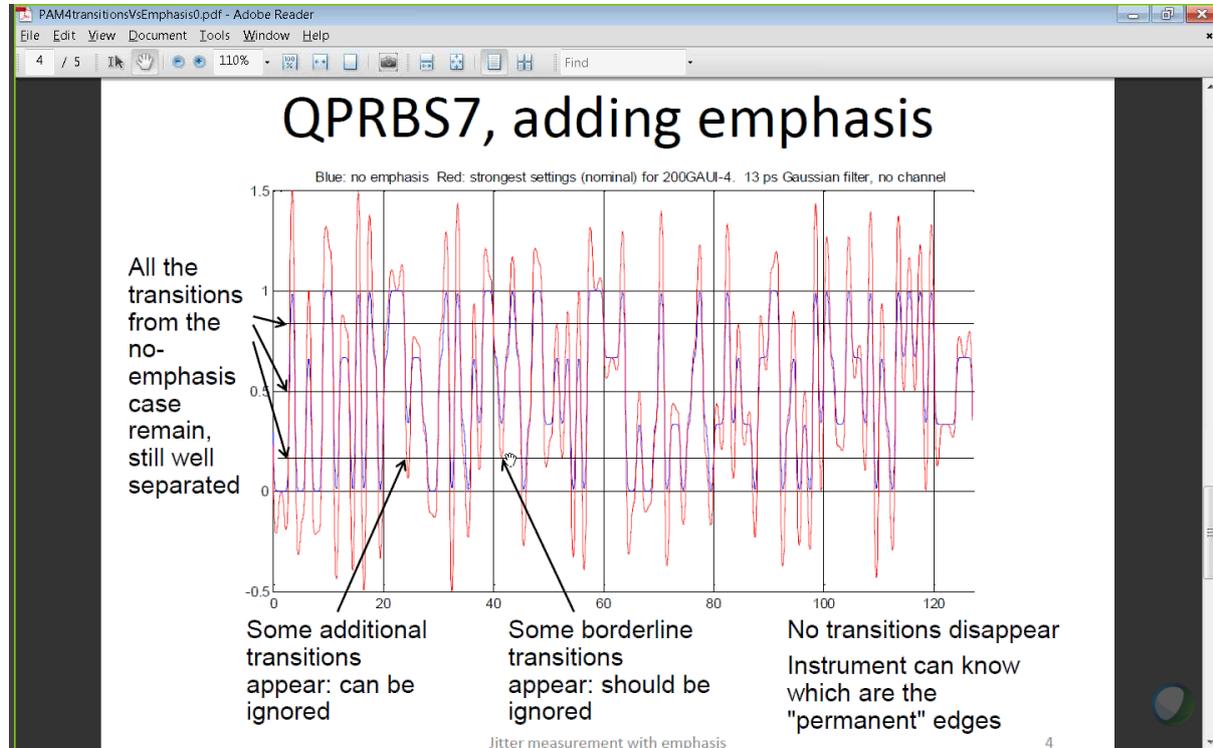
Mike Dudek disputed whether "borderline transitions" could be ignored. It was suggested that the false transitions caused by over-equalization could be addressed by adding loss when making jitter measurements with such higher equalization settings. It was felt this may the solution, but more work needs to be done.

The presentation containing the slides shown by Piers has been placed on the adhoc website here:

http://www.ieee802.org/3/bs/public/adhoc/elect/29Aug_16/dawe_01_082916_elect.pdf

Comment #173 : (Removal of VEC measurement) There is still no consensus on whether this can be done, and the group still feels more info is needed.

 Comment #127 : There was consensus that use of a slew time spec was preferable to a transition time spec.

There was discussion on whether a follow-up meeting on the 5th of September would be required (5th September is the US Labour day holiday).   It was felt that sufficient progress had been made reviewing the comment file, and that the follow-up meeting was **not** necessary.

The meeting adjourned at 10:00 am Pacific.

Attendee list (taken from Webex attendee list)

Andre Szczepanek	inphi
Sam Sambasivan	AT&T Labs
Brandon Chen	TE
Raj Hegde	Broadcom
Allinne Allinson	XLK
Bill Kirkland	Semtech
Scott Summers	Molex
Yasuo Hidaka	Fujitsu
Aanand Kumar	MaxLinear
Ali Ghiasi	Independent
Mike Dudek	Qlogic
Rich Mellitz	Samtec
Piers Dawe	Mellanox
Will Bliss	Broadcom
Rick Rabinovich	Ixia
Vital Balasubramani	Dell
Tom Palkert	VLSI
Rita Horner	Synopsys