Unapproved minutes P802.3bs 400 Gb/s Ethernet Electrical Ad Hoc Teleconference 30th January 2017

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 presented the IEEE participation Foil.
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 objection or additions to the draft minutes from the 23rd January 2017 call. No one responded, so the minutes were 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/30Jan_17/szczepanek_01_013017_elect.pdf

Presentation #2
Title: Jitter Measurement Metrics

Presenter: Greg LeCheminant, Keysight Technologies

http://www.ieee802.org/3/bs/public/adhoc/elect/30Jan_17/lecheminant_01_013017_elect.pdf

The presentation explained the jitter measurement methods used by sampling scopes and the number of samples required by different methods. A request was made that the graph on Slide 10 be re-plotted with a log scale. Greg said he would do this.

Presentation #3
Title: Updated 50G C2M Simulations

Presenter: Ali Ghiasi, Independent

http://www.ieee802.org/3/bs/public/adhoc/elect/30Jan_17/ghiasi_01_013017_elect.pdf

The presentation was an update of the presentation made on the 23rd January with the crosstalk contribution adjusted for the lower average power of PAM4 signals. Even with reduced crosstalk the presentation still indicates failing C2M operation with crosstalk.

Subsequent discussion cantered on whether the kind of trade-offs available through COM could be added to the Annex.

Presentation #4
Title: Annex 120D Receiver Jitter Tolerance Test Pattern
Presenter: Steve Sekel, Keysight Technologies
http://www.ieee802.org/3/bs/public/adhoc/elect/30Jan_17/sekel_01_013017_elect.pdf

The presentation makes the case for use of PRBS31Q as an alternate pattern for the Jitter Tolerance Test, in addition to scrambled Idles, as it is easier to generate in test equipment. PRBS31Q is a more stressful pattern than scrambled Idles and it is difficult to translate PRBS31Q BER to SER without overestimating errors.

There was consensus that PRBS31Q was acceptable as an alternative pattern for passing the test, but not for failing it. It was agreed that suitable wording to encapsulate this would be developed on off-line for a consensus comment.

Andre announced that he would like presentation requests for the next meeting (Feb 6) by Friday to give an early announcement of cancellation if necessary.

The meeting adjourned at 9:50am Pacific.

Attendee list (taken from Webex attendee list)

Andre Szczepanek	Inphi
Kenneth Jackson	SEI
Greg LeCheminant	Keysight
Stephane Dallaire	Inphi
Steve Sekel	Keysight
Ryan Chodora	Keysight
Adam Healey	Broadcom
Marco Mazzini	Cisco
Kumaran Krishnasamy	Broadcom
Yasuo Hidaka	Fujitsu
Stephen Didde	Keysight
Robert Sleigh	Keysight
James Fife	Etopus
Ali Ghiasi	Independent
Rick Rabinovitch	Ixia
Megha Shanbhag	TE
Phil Sun	Credo
Mike Dudek	Cavium

Rita Horner	Synopsys
Rajmohan Hegde	Broadcom
Richard Mellitz	Samtec
Martin white	Cavium
Piers Dawe	Mellanox
Pete Anslow	Ciena