802.3BQ PHY BASELINE PROPOSAL AD HOC MINUTES - unapproved 8 May 2014

Participants are encouraged to review IEEE meeting guidelines available at the following URL - <u>https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf</u>

The proposed agenda for the meeting follows.

11 AM Pacific Time meeting start (one hour meeting planned)

Welcome – Chair George Zimmerman, reminded the group that the meeting is being held under the meeting guidelines of IEEE Standards Association, listed above, and asked if there were any participants unfamiliar with the guidelines or IEEE 802. Noone indicated that either this was his/her's first IEEE 802 meeting or that he/she was unfamiliar with IEEE guidelines

 Roll call : Please send an email indicating your attendance, employer and affiliation to mailto:george@cmeconsulting.onmicrosoft.com?subject=802.3bq PHY ad hoc attendance 8May 2014

Attendance:

Will Bliss, Broadcom Brian Buckmeier – Bel Stewart Connector David Chalupsky, Intel Jerry Chiang – Foxconn Interconnect Technologies Pete Cibula – Intel Chris DiMinico – MC Communications / Panduit German Feyh, Broadcom Manav Garg, Broadcom Mike Good – Berk-Tek **Dave Jeskey - Sentinel Connector Systems** William Lo. Marvell Brett McClellan – Marvell Rich Mellitz – Intel Martin Rossbach – Nexans Dieter Schicketanz – Consultant / Leoni-Kerpen & Reutlingen University Sian She, Broadcom Tom Souvignier, Broadcom **Robert Wagner - Panduit** Paul Wachtel - Panduit Peter Wu, Marvell George Zimmerman, CME Consulting / Aquantia & Commscope (Chair)

2. Reminder of IEEE patent policy

www.ieee802.org/3/patent.html

The Chair reminded the group that the IEEE patent policy obligated and encouraged particpants for early disclosure of essential patents. The Chair asked if anyone on the call was unfamiliar with the IEEE patent policy and/or wished to review the patent policy. Hearing no requests, he reminded participants to review the patent policy on their own.

Housekeeping

Review & approve meeting agenda. :

The Chair reviewed the agenda, and it was approved as posted without change and by voice without objection.

Approve minutes from 24 April 2014 PHY ad hoc meeting <u>http://www.ieee802.org/3/bq/public/phyproposal/minutes_3bq_phyadhoc_apr-24-14.pdf</u>

Minutes were approved without change, and by voice without opposition.

4. Old business from previous ad hoc meetings:

None. (The Channel Modeling ad hoc heard a contribution on Cable Dynamics which was mentioned here in previous minutes)

5. New business at this meeting:

The meeting then proceeded to technical presentations.

Name of presenter: William Lo, Marvell (Lo_3bq_01_0514.pdf) Title of presentation: 40GBASE-T Uncoded Bits Protection Proposal (Brief description of topic: Present a scheme to protect uncoded bits while fitting into existing LDPC, DSQ, and 3200 Mbaud/s

Discussion: there was discussion regarding the proposal to offer a 256/257b transcoding similar to what is used in the RS-FEC sublayer in 802.3bj. This would provide a mixed PCS with 2 64/65b blocks at the end of the frame, but RS code protection for one or 2 adjacent 8 bit symbols. There was some discussion of the purpose of the bits that were deleted, and to be sure that the Mean time to false packet acceptance was still met without this extra distance in the control symbols. Will Bliss of Broadcom offered to bring a contribution with a similar technique to the meeting in Norfolk for further discussion. The Chair urged members to work together towards consensus at the Norfolk meeting.

Name of presenter: Peter Wu, Marvell Title of presentation: Delay Constraints in 40GBASE-T (Wu_3bq_01_0514.pdf) Co author: William Lo, Marvell Brief description of topic: Propose to keep the delay constraints not lower than 25600BT in 40GBASE-T.

Discussion: The presenter discussed the impact of signal processing constraints. There was general agreement not to lower the delay constraint below the 25600 BT because it would put burden on the signal processing parallelization. Several (related) participants desired to have the delay constraint be greater than 25600BT, claiming that DSP clocks would not increase. Others were not ready to increase the delay more than 25600BT, desiring to balance customer needs with design difficulty. More discussion is expected at the Norfolk meeting.

- 6. Next meeting time: TBD (possible at interim), telephonic Thursday May 29, 2014 10AM Pacific Time
- 7. Adjournment: The meeting was adjourned at 12:08 PM Pacific Time.