PHY BASELINE PROPOSAL AD HOC MINUTES - unapproved 27 February 2014

Welcome – Fifth meeting.

From the minutes of the November Task Force Plenary meeting:

The Chair then chartered a PHY proposal ad hoc, chaired by George Zimmerman, with the following charter/objectives:

- Identify elements necessary to form a baseline proposal
 - Signaling bandwidth (bounds)
 - Modulation, EQ, coding, etc.

Participants are encouraged to review IEEE meeting guidelines available at the following URL - https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf
The minutes for the meeting, organized as the agenda follow:

10AM Pacific Time meeting start

George Zimmerman, of CME Consulting, affiliated with Commscope & Aquantia, Chair of the ad hoc, called the meeting to order.

 Roll call: The Chair Requested attendees to please send an email indicating your attendance, employer and affiliation to <u>mailto:george@cmeconsulting.onmicrosoft.com?subject=802.3bq PHY</u> ad hoc attendance 27 Feb 2014

Meeting attendance and affiliation are below: (affiliation & employer are the same unless indicated as employer / affiliation)

Shadi Abughazaleh – Hubbell

Anna An - Foxconn/FIT

Brian Buckmeier – Bel Stewart Connector

David Chalupsky – Intel

Jerry Chiang - Foxconn/FIT

Pete Cibula – Intel

Chris DiMinico – MC Communications / Panduit

Harry Forbes - Nexans

Dave Jeskey - Sentinel

Paul Kish - Belden

Wayne Larsen – Commscope

Rich Mellitz – Intel

Victor Renteria – Bel Stewart Connector

Dieter Schicketanz – Consultant / Leoni-Kerpen & Reutlingen University

Tom Souvignier – Broadcom

Sterling Vaden – Vaden Enterprises / Vaden Enterprises

Paul Vanderlaan – Berk Tek

Bob Wagner – Panduit

Peter Wu – Marvell

George Zimmerman – CME Consulting / Aquantia & Commscope

2. Reminder of IEEE patent policy

www.ieee802.org/3/patent.html

At 10:10 AM the Chair asked if there were any individuals on the call who were unfamiliar with the patent policy, and there were no responses heard. The Chair reminded all to review their obligations under the policy at the link above.

3. Housekeeping

The agenda, emailed to the reflector was modified to correct the start time (10AM) and include a presentation from Pete Cibula of Intel

Review & approve meeting agenda:

M: Wayne Larsen

S: David Chalupsky

Approved by voice vote without opposition

Approve minutes from 13 February 2014 meeting

http://www.ieee802.org/3/bq/public/phyproposal/PHY_BASELINE_PROPOSAL_ADHOC_MINUTES_13Fe b2014_unapproved.pdf

M: Paul Vanderlaan S: Wayne Larsen

Approved by voice vote without opposition

4. Old business from previous ad hoc meeting:

The Chair reviewed the action items discussed at the previous meeting:

The following future contributions were planned at the last meeting:

- Training time/time-to-link User perceptions (Dave C./Pete C.) [ON THIS AGENDA]
- Cable bending End user inputs (Dave C./Pete C.)
- Metrics & Requirements (e.g. power, use model) for a successful PHY proposal (Chris D.)
- Impacts of each of the suggested modifications in zimmerman_3bqah_02_1213.pdf -(George Z) [ON THIS AGENDA]

The Chair mentioned that at this meeting we have contributions on two of these items, and heard a third from the prior meeting. Since this process has served as a good prompt for contributions, he advised members to think about what contributions they might offer going forward. The Chair advised the group that he intended to ask for a refresh of items the ad hoc might receive contributions on when he gave his report at the Beijing meeting, so as to set future agendas and improve progress.

- 5. New business at this meeting:
 - a. Contribution from Peter Cibula, Intel, emailed to reflector as cibula_01_0227_40GBT_PHY_Baseline_proposal_ad_hoc_v0p3.pdf entitled,"User Perception of 10GBASE-T Training time/Time-To-Link".

The presenter presented results and perspectives from WHCL testing of 10GBASE-T PHYs suggesting that the time-to-link of 10GBASE-T, including both Clause 28 autonegotiation and Clause 55 PMA startup, at about 7 seconds, presented some difficulties with WHCL startup. Questions of clarification and discussion followed. The presenter suggested a faster time to link would be helpful, but that it didn't seem like a large improvement was needed. Exactly how much faster he would get back to the group.

b. Contribution from George Zimmerman, CME Consulting/Commscope & Aquantia, emailed to the reflector as zimmerman_3bqah_01_0214.pdf: Potential Improvements to Strawman for PHY Baseline Proposal.

The presenter discussed each of the potential improvements from slide 6 of zimmerman_3bqah_02_1213.pdf, as to further clarification on what was meant, what the benefit might be, and what the cost/risk or power impact might be. The presenter provided a summary with suggested recommendations. Discussion included calls for contributions on FEC coding for all bits, as well as consideration of what might be the driver for a THP backchannel. There was some discussion of a "Direct Attach" mode, the bulk of which would require PHY analysis and OEM feedback on the issue, appropriate for the Task Force meeting in Beijing. Contributions are welcome.

6. The group set its next meeting time as Thursday April 3, **10AM** PST. (2 weeks after March Plenary meeting).

Adjournment:

Motion to Adjourn

M: Dave Chalupsky

S: Pete Cibula

Passed by voice without opposition

At 11:56AM, the meeting was adjourned.