Minutes 25Gb/s Ethernet Architecture ad-hoc meeting – August 28, 2014

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- IEEE patent policy reminder (see http://www.ieee802.org/3/patent.html)
- Approval of draft minutes for August 19
- Objectives and CSD update – Mark Nowell
- CR PHY objective discussion – Mark Nowell
- Architecture consensus presentation discussion – Matt Brown
- If there is enough time…
    - Vineet/Joel presentation update
    - Chris presentation update

Presentations posted at: http://www.ieee802.org/3/25GSG/public/adhoc/architecture/index.html

Meeting begins at 9:04am Pacific.

Matt Brown presented the proposed 25G Architecture ad hoc agenda for August 28, 2014. There were no objections to the agenda.

Matt reminded participants of the IEEE patent policy. (see http://www.ieee802.org/3/patent.html)   No one responded.

Mark Nowell – Objectives and CSD
http://www.ieee802.org/3/25GSG/public/adhoc/architecture/nowell_082814_25GE_adhoc.pdf

- Reviewed current presentation. Will be posted at the end of the ad hoc meeting. Reviewed draft objectives and CSD (i.e 5C) content. Received feedback on Broad Market Potential slide; word choice minimizes impact if optical objective is added. Mark Nowell has asked a few ad-hoc participants to prepare presentations to address deficiencies.

Reviewed meeting minutes for August 19, 2014 ad-hoc meeting. Minutes were posted to the web on Wednesday, August 20th. Piers Dawe requested a correction to the 4th bullet regarding "agenda and opening remarks". With those corrections, there were no objections to the August 19th minutes. Ad-

hoc approves the August 19th meeting minutes with Piers corrections. ==ACTION ITEM:== Matt Brown to post corrected ad-hoc minutes.

Mark Nowell (Twin-ax PHY objectives discussion)
http://www.ieee802.org/3/25GSG/public/adhoc/architecture/nowell_082814_25GE_adhoc.pdf

- Mark resumed reviewing the draft objectives in his presentation. Twin-ax objective options were sent to email reflector for review. Mark received some email feedback that favored options "a" and "c". Discussed option "c" and the impact of channel budget specified in IEEE Std. 802.3bj-2014. There was some concern about setting the channel budget before entering task force – it could preclude the use of FEC, impact latency, etc. Discussed cost implication of FEC in silicon vs. PCB material solution. Discussion on cost implications of switch to server ratios, channel budget allocation, and support 3m and 5m reaches. Discussed a single phy with 2 modes of operation to meet 3m and 5m reaches. There is an issue with the option that references Clause 92 since that channel budget does not consider the FEC operational case. No objection to removing that option. There is concern in the ad-hoc that removing 5m from the objective does not address the broad market potential of the project.
- ==ACTION ITEM:== Mark Nowell will send a straw poll on Twin-Ax PHY objectives from slide 4 via email to the ad-hoc reflector. Straw poll will use Chicago rules.

Reminder that presentation requests for the September interim meeting are due tomorrow (Friday, August 29).

Matt Brown is working on a 25G architecture consensus presentation that summarized ad-hoc status of options that will meet the proposed objectives and technical feasibility. Contact him if interested.

Next meeting is Tuesday, September 2nd. Please request agenda time by email to Matt Brown.

Meeting ends at 10:29 am Pacific.

==List of attendees==

Rita Horner   Synopsys
Mark Lutkowitz Fibereality
Mike Brown   APM
Arthur Marris - Cadence

Paul Mooney   Spirent
Mellitz, Richard Intel
Mike Dudek   QLogic
Chris DiMinico MC Communications,PHY-SI LLC, Panduit
Sambasivan, Sam   AT&T
Vineet Salunke Cisco
Megha Shanbhag   TE
Ran, Adee   Intel
Piers Dawe   Mellanox
Scott Feller   Cortina-systems
Mark Nowell   Cisco
Zhenyu Liu   Marvell
Shankar Harihan Cisco
Scott Kipp   Brocade
Greg LeCheminant   Keysight
Tony Zortea   PMC-Sierra
Scott Kipp   Brocade
Marty Spadaro   Vitesse
Kent Lusted   Intel
Dave Brown   Semtech
David Ofelt   Juniper
Yong Kim   Broadcom
Brian Teipen   Adva Optical
Dale Murray   Lightcounting
Peter Jones   Cisco
Nathan Tracy   TE
David Chalupsky   Intel
martin white   xpliant
john petrilla   AvagoTech
Ron Muir   Jae
john   Vitesse
John D'Ambrosia   Dell