Minutes 25 Gb/s Ethernet ad-hoc meeting – November 19, 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 October 29
- 25GE Study Group Update – Mark Nowell
- 25GE Optical Ad Hoc Update – Jonathan King
- Thoughts on 25G cable/host configurations – Mike Dudek
- Thoughts on Cable Specifications – Rich Mellitz
- Discussion

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

Meeting began at 8:03 a.m. Pacific.

Meeting began with the agenda presentation:
http://www.ieee802.org/3/25GSG/public/adhoc/architecture/agenda_111914_25GE_adhoc.pdf

Matt Brown showed the links to the ad hoc page and the email reflector.

Matt Brown reviewed the Attendance information related to the ad hoc. He reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes.

Matt presented the proposed agenda. There was a last minute presentation request from Rich Mellitz. Matt asked if there were objections to hearing it. No one objected.

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

The October 29 meeting minutes were posted after the meeting. No comments were received. Matt Brown asked if there were objections to approving the minutes as posted. No one responded. The October 29 meeting minutes were approved by the ad hoc.

Presentation #1: Study Group Update -- Mark Nowell
See http://www.ieee802.org/3/25GSG/public/adhoc/architecture/nowell_111914_25GE_adhoc.pdf
- Mark provided a recap. January 2015 will be the first interim meeting, pending Standards Board approval. Ad hocs are available for consensus building on baseline proposals.
- The optical ad hoc meeting dates are not listed explicitly in the presentation but the dates are announced over the email reflector.
- Reviewed the work needed to develop baseline proposals. Volunteers and contributors are working on baseline proposals. Mark strongly encouraged people to get involved.

- Good progress made on the architecture and PCS baselines. Copper baseline has the most work ahead.

25GE Optical Ad Hoc Update – Jonathan King
- Announced via email reflector for a call on December 4th. Another on December 19th. Calls will focus on developing a baseline for the MMF proposal.

David Law noted that the IEEE Standards Board meets on December 10th not December 8th as listed in Mark Nowell's presentation.

Presentation #2:
 "Thoughts on 25G cable/host configurations" -- Mike Dudek
See http://www.ieee802.org/3/25GSG/public/adhoc/architecture/dudek_111914_25GE_adhoc.pdf
- Reviewed the different options of cable length, loss and FEC.
- Pete Anslow recommended the use of FEC Clause numbers (e.g., CL74 and CL91) in the document to avoid ambiguity. For CL91, must also indicate type (e.g., CL91 KR4).
- Reviewed the author's list of interesting configurations. Discussed IL budget assumptions in the table on slide 4. Requested to add another interesting configuration of mid, 3m, mid, with no FEC or CL 74 FEC.
- Much discussion regarding the relevance of configuration 5 on slide 4. Questioned if the configuration is within scope of the project since it was shown as a switch-to-switch implementation in slides. Mark Nowell said that he would consider a high-loss host to high-loss host configuration in scope for project. It cannot be claimed that high-loss host would only be a switch.
- Reviewed assumptions on loss and FEC capabilities. Numerous questions on assumptions.
- Discussed impact of host loss on the optical module compatibility.
- Discussed cable specification implications. Considered a specification for a 3m cable, similar to the 5m cable definition in 802.3bj-2014.

Presentation #3:
Thoughts on Cable Specifications –   Rich Mellitz
See http://www.ieee802.org/3/25GSG/public/adhoc/architecture/mellitz_111914_25GE_adhoc.pdf
- Reviewed two potential compliance tests, based on cable length. Discussed the analysis assumptions for the 3m no-FEC case and the COM item limiting performance (ISI and RL).
- Discussed low loss host budget could be a PCB loss reduction as well as a package size change. COM parameters could be different for 25G project.
- Discussed the number of cable compliance test cases and the COM analysis assumptions for host loss.
- Several requests to explain the significance and interpretation of the COM parameter.

Matt Brown asked Rich Mellitz to provide a COM tutorial.

Meeting ended at 9:32 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	Affiliation
Andre Szczepanek	inphi
Xiaoguang Cheng(Lenovo)	lenovo
Rick Rabinovich	Alcatel-Lucent
Arthur Marris - Cadence	cadence
Eric Baden (Broadcom)	broadcom
Shinkyo Kaku	alliedtelesis
Andy Zambell	fci
Pirooz Tooyserkani	cisco
Ghani Abbas	ericsson
Kent Lusted	intel
Chris DiMinico	MC Communications
Matt Brown	apm
Mike Dudek	qlogic
Don Cober	comira-inc
Ingvar Froroth	marvell
Juan-Carlos Calderon	cortina-systems
Greg McSorley (Amphenol)	amphenol-highspeed
Mark Nowell	cisco
jonathan king	finisar
Jason Pritchard	tilera
Scott Irwin	mosys
Dave Estes - Spirent	spirent
Rakesh Sambaraju	nexans
David Law	HP
Kenneth Jackson	sei-device
Oded Wertheim	mellanox
Adam Healey	avagotech
Rich Mellitz	intel
Daniel Koehler	morethanip
Ken Van Orman	spirent
Tom brown	vitesse
David Malicoat	hp
Gary Nicholl	cisco
Brian Teipen	advaoptical
Peter Anslow	ciena
Venu Balasubramonian	marvell
Paul Kolesar	commscope
Mike Andrewartha	microsoft
George Zimmerman	Aquantia & Commscope

Name	Affiliation
Vineet Salunke	cisco
Dan Cunningham	arista
Megha Shanbhag	te
Jeff Slavick	avagotech
Dan Dove	dovenetworking
Amrik Bains	cisco
John Ewen	us.ibm
Howard Frazier	broadcom
Warren Meggitt	arista
Tom Palkert	visi
Paul Kolesar	commscope
Dave Brown	semtech
Scott Kipp	brocade
Rita Horner	synopsys
Tony Zortea (PMCS)	pmcs
Rashid	synopsys
Mike Peng Li	altera
Paul Mooney	spirent
Adee Ran	intel
David Ofelt	juniper
Derek Cassidy	bt
Omer Sella	mellanox
Rob Stone (Broadcom)	broadcom