

Minutes P802.3by 25 Gb/s Ethernet Task Force ad-hoc meeting – December 17, 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 December 3
- 25GE Task Force Update – Mark Nowell
- 25GE Optical Ad Hoc Update – Jonathan King
- “PCS and FEC baseline proposal” – Eric Baden
- “Auto-Negotiation for 25G-CR Cables” – Venugopal Balasubramonian
- “A Simplifying 25Gb/s Cable Proposal” – Rich Mellitz
- “25G Cable Assembly Models” – Chris Diminico
- Discussion

Presentations posted at: <http://www.ieee802.org/3/by/public/adhoc/architecture/index.html>

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

Meeting began with the agenda presentation:

http://www.ieee802.org/3/by/public/adhoc/architecture/agenda_121714_25GE_adhoc.pdf

Matt Brown showed the links to the ad hoc page and the email reflector. Note that the reflector is the same but the web pages are now on the Task Force home site.

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. No one objected.

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

The December 3 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 December 3 meeting minutes were approved by the ad hoc.

Task Force Update -- Mark Nowell

- Became a Task Force last week. Announced over reflector. Can start making technical decisions.
- Web page updated due to transition from Study Group to Task Force.

- Mark sent out the meeting notice and call for presentations over the email reflector. Deadline for requesting a presentation slot is January 2, 2015. Contributions are due January 6, 2015.
- Meeting in January will be on Monday, Tuesday and Wednesday morning. Please plan travel accordingly.

25GE Optical Ad Hoc Update – Jonathan King

- No update. Presenter was not available.

Presentation #1:

“PCS and FEC baseline proposal” – Eric Baden

See http://www.ieee802.org/3/25GSG/public/adhoc/architecture/marris_120314_25GE_adhoc.pdf

- Eric reviewed the motivation and goals of the presentation.
- Discussed the RS FEC Codeword Marker generation. It is leveraged from the 40G CI 84 MLD. Received several comments on AM structure commonality with 100G and 400G; desire to keep AM0 the same between 25G, 100G, and 400G.
- Discussed code word marker insertion rate. Increasing factor from 5 to 20 makes the markers consistent with 100G but adds time.
- Discussed the partitioning of the code word markers in the PCS vs. the FEC sublayer. Leaves CI 49 intact and consolidates changes to FEC block. Much discussion.
- Eric agreed to add the calculation details for the minimum number of IDLEs with the proposed removal process.
- Received question regarding EEE LPI signaling details in the proposal. Eric will update the content.

Matt Brown asked if there were any objections to extending today’s call by 30 mins, to end at 10:00 a.m. Pacific. No one responded.

Presentation #2:

“Auto-Negotiation for 25G-CR Cables” – Venugopal Balasubramonian

See

http://www.ieee802.org/3/by/public/adhoc/architecture/balasubramonian_121714_25GE_adhoc.pdf

- Proposed 2 PMD types to address the objectives.
- Discussed the usage scenario 2 case where the cable type is known.
- Discussed CR-L and CR-S priority in advertisement. Considered trading lower latency vs. maximum compatibility as the default configuration.

Presentation #3:

“A Simplifying 25Gb/s Cable Proposal” – Rich Mellitz

See http://www.ieee802.org/3/by/public/adhoc/architecture/mellitz_121714_25GE_adhoc.pdf

- Proposed a single host loss to simplify solution space.
- The PCB routing multiplier is tied to the host loss from 802.3bj Clause 92. The “no FEC” case does not pass the COM limit with the 3m cable.
- Proposed a set of DER0 and Bmax(n) values for the 3m cable and the no FEC cable cases.

Presentation #4:

“Considerations for 25Gb/s Cable Assembly Specifications” – Chris Diminico

See http://www.ieee802.org/3/by/public/adhoc/architecture/diminico_121714_25GE_adhoc.pdf

- Prepared an analysis of the 3m channel model used by Rich Mellitz against the 802.3bj specification
- Proposed to include FEXT from 3 disturbers in COM analysis for QSFP connector crosstalk.

Matt Brown thanked all of the presenters for their contributions.

Next ad hoc meeting is scheduled for Wednesday, January 7, 2015. Please request agenda time by email to Matt Brown.

Meeting ended at 10:02 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	company
Adee Ran	intel
Ali Ghiasi	independent
Amir Motamedi	cavium
Amrik Bains	cisco
Andre Szczepanek	inphi
Brad Booth	microsoft
Carlo Tosetti	cisco
Cedrik Begin	cisco
Chris DiMinico	MC Communications
Chris Roth (Molex)	molex
Dan Cunningham	arista
Dan Dove	Dove Networking Solutions & Emulex
Daniel Koehler	morethanip
Dave Brown	semtech
David Law	hp
David Malicoat (HP)	hp
David Ofelt	juniper
Derek Cassidy	BT
Don Cober (CoMira)	comira-inc
Erdem Matoglu	amphenol-tcs
Eric Baden (Broadcom)	broadcom
gary nicholl	cisco
Gary Nicholl	cisco
george Zimmerman	Aquantia & Commscope
Greg D Le Cheminant	keysight

Ingvar Froroth	marvell
Jacky Chang	hp
Jeff H	ranovus
Jeff Slavick	avagotech
John D	vitesse
John Ewen	IBM
jonathan king	finisar
Kapil Shrikhande	dell
Kenneth Jackson	sei-device
Kent Lusted	intel
Mark Nowell	cisco
martin	xpliant
Matt Brown	apm
Megha Shanbhag	te
Mike Andrewartha - Microsoft	microsoft
Mike Dudek	qlogic
Nathan Tracy	te
Oded Wertheim	mellanox
Piers	mellanox
Pirooz Toyserkani	cisco
Randy k Rannow	APIC Corp.
Raymond Nering	cisco
Rich Mellitz (Intel)	intel
Rick Pimpinella	panduit
Rick Rabinovich	alcatel-lucent
Rita Horner	synopsys
Rob Stone (Broadcom)	broadcom
salvatore rotolo	st
Scott Irwin	mosys
Shinkyō Kaku	alliedtelesis
Thomas Brown	vitesse
Tom Palkert	visi
tonmoy	ti
Tony Zortea (PMCS)	pmcs
Venu B (Marvell)	marvell
Vittal	dell
Warren Meggitt	arista
Yong Kim (Broadcom)	broadcom