

## Minutes P802.3by 25 Gb/s Ethernet Task Force ad-hoc meeting – February 4, 2015

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 January 7 2015
- 25GE Task Force Update – Mark Nowell
- 25GE Optical Ad Hoc Update – Jonathan King
- “P802.3by D0.1 editorial update” -- Matt Brown
- “Achieving BER/FLR targets with clause 74 FEC” -- Adee Ran
- “COM measurement data for QSFP28 cable assemblies” -- Megha Shanbhag

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

Meeting began at 8:04 a.m. Pacific.

Meeting began with the agenda presentation:

[http://www.ieee802.org/3/by/public/adhoc/architecture/agenda\\_020415\\_25GE\\_adhoc\\_v2.pdf](http://www.ieee802.org/3/by/public/adhoc/architecture/agenda_020415_25GE_adhoc_v2.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. No one objected.

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

The January 7 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 January 7 meeting minutes were approved by the ad hoc.

### **25GE Task Force update – Mark Nowell**

- Private area setup on the website.
- Next face to face meeting is March Plenary. Limited meeting time available. IEEE 802.3 Opening Plenary is 10am to 12pm.
- 25G will meet Monday morning at 8:00 a.m. before the plenary, then break for the plenary. Resume after plenary thru Tuesday. P802.3bs 400G Task Force may have some overlap but the respective Chairs will attempt to minimize overlap.

- Please plan travel accordingly to arrive for 8:00 a.m. start on Monday, 9 March.
- Goal of the Plenary Task Force meeting is to generate draft 1.0 for Task Force review.

### **25GE optical ad hoc update – Jonathan King**

Presenter was not immediately available.

#### **Presentation #1:**

“P802.3by D0.1 editorial update” -- Matt Brown

See [http://www.ieee802.org/3/by/public/adhoc/architecture/brown\\_020415\\_25GE\\_adhoc\\_v2.pdf](http://www.ieee802.org/3/by/public/adhoc/architecture/brown_020415_25GE_adhoc_v2.pdf)

- Clause numbers start at 105. Clause 105 was originally assigned to P802.3bq for 40GBASE-T and 25GBASE-T but moved to Clause 113 by 802.3 executive staff so that 25GBASE-T follows the 25G introduction, RS + MII, etc.
- Reviewed the Clause number and section titles.
- Comment that the IEEE guideline is that Annexes marked informative should only contain informative, not normative content. Matt noted that Annexes can be restructured or repartitioned as necessary in the future.
- Comment on alien crosstalk is not actually alien. Matt encouraged participants to comment on the draft.
- Reviewed tentative editorial schedule and future consensus work.

#### **Presentation #2:**

“Achieving BER/FLR targets with clause 74 FEC” -- Adee Ran

See [http://www.ieee802.org/3/by/public/adhoc/architecture/ran\\_020415\\_25GE\\_adhoc.pdf](http://www.ieee802.org/3/by/public/adhoc/architecture/ran_020415_25GE_adhoc.pdf)

- Reviewed Frame Loss Ratio and DFE Error propagation calculations.
- Reviewed analysis for DER target for Clause 74 FEC
- Discussed assumptions with one dominant DFE tap.
- Reviewed use of CI 74 codeword errors in place of symbol errors in the RX interference tolerance test case (only when CI 74 FEC is enabled).
- Discussed proposal for COM values for CI 74 BASE-R FEC, and codeword error ratio .

#### **Presentation #3:**

“COM measurement data for QSFP28 cable assemblies” -- Megha Shanbhag

See [http://www.ieee802.org/3/by/public/adhoc/architecture/shanbhag\\_020415\\_25GE\\_adhoc\\_v2.pdf](http://www.ieee802.org/3/by/public/adhoc/architecture/shanbhag_020415_25GE_adhoc_v2.pdf)

- Reviewed COM summary slide.
- Discussed loss assumption of QSFP vs. SFP test boards and the impact of COM.
- Reviewed plots. Megha noted that measurements are from currently shipping 25G rated cables. Data does not represent best or worst case, but typical.
- Discussed no-FEC insertion loss assumptions in P802.3ap and P802.3bj.
- Discussed how to describe the no-FEC cable case in the specification.
- Comment on crosstalk change with SFP-to-SFP assembly. Expect a reduction.
- Request to repeat measurement with crosstalk off or measure SFP assembly. Megha checked the 3m 24AWG DER0=1E-12 case 2 and observed a 0.5dB change in COM.

Next ad hoc meeting is February 11, 2015.

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

### List of attendees (captured from Webex tool)

<b>Name</b>	<b>company</b>
Adee Ran	intel
Ali Ghiasi	independent
Andre Szczepanek	inphi
Arthur Marris (Cadence)	cadence
Brad	microsoft
Brian Schuette	arista
Brian Teipen	advaoptical
Carlo Tosetti	cisco
Cedrik Begin	cisco
Chad Erven	semtech
Chris Roth (Molex)	molex
Dale Murray	lightcounting
Dan Cunningham (Arista)	arista
Dave Brown	semtech
David Law	hp
David Ofelt	juniper
Derek Cassidy	bt
Doug Day (Toshiba)	taec.toshiba
Eric Baden (Broadcom)	broadcom
Flavio Marques	Furukawa
Ghani Abbas	ericsson
Greg D Le Cheminant	keysight
Ingvar Froroth	marvell
Jason Pritchard	tilera
Jason Pritchard	tilera
Jeff H	ranovus
Jeff Slavick	avagotech
Jing Fang	marvell
Ken Van Orman	spirent
Kenneth Jackson	sei-device
Kent Lusted (Intel)	intel
Marc Dupuis	molex
Mark Nowell	cisco

martin white	caviumnetworks
Matt Brown	apm
Megha Shanbhag	te
Michael Stuczynski	dell
Mike Andrewartha	microsoft
Mike Dudek	qlogic
Nathan Tracy	te
Oded Wertheim	mellanox
Peter Anslow	ciena
Piers	mellanox
Pirooz Toyserkani	cisco
Randy k Rannow	n/a
Rich Mellitz (Intel)	intel
Rick Rabinovich	alcatel-lucent
Rita Horner	synopsys
salvatore rotolo	st
sam sambasivan	labs.att
scott Sommers	molex
Sue Bueti	us.ibm
Venu B (Marvell)	marvell
Warren Meggitt	arista
Yasuo Hidaka	us.fujitsu
Yuri Vandyshev	cisco
Zhenyu Liu	marvell
Dan Dove	Emulex