

P802.3by 25 Gb/s Ethernet Task Force and 50G/100G/200G Study Groups Joint Ad Hoc meeting – February 24, 2016

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- IEEE patent policy reminder:
 - 25G TF: <http://www.ieee802.org/3/patent.html>
 - 50G & NGOATH: <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf>
- Approval of draft minutes for February 17, 2016
- 50GNGOATH & 200GSMF Study Groups Ad Hoc – Kent Lusted
 - Study Group Update, Mark Nowell
 - “50 GbE PCS supporting 2 lanes PMA”, Ali Ghiasi
- P802.3by 25G Ad Hoc – Matt Brown
 - Task Force update, Mark Nowell
 - “Closing the Pmax to Vf Ratio budget hole”, Mike Dudek
 - Discussion on Pmax to Vf
 - “Review of CA-N”, Omer Sella

Presentations posted at: <http://www.ieee802.org/3/by/public/adhoc/architecture/index.html> or <http://www.ieee802.org/3/50G/public/adhoc/archive/index.html>

Meeting began at 8:02 a.m. Pacific by Kent Lusted.

Meeting began with the agenda presentation:

http://www.ieee802.org/3/50G/public/adhoc/archive/agenda_022416_25GE_50GE_NGOATH_adhoc.pdf

Kent Lusted reviewed the Attendance information related to the ad hoc. He reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. He reminded participants to mute their lines when not speaking and reviewed the steps to unmute.

Kent Lusted showed the links to the 25G ad hoc page and the email reflector.

Kent Lusted showed the links to the 50G and NGOATH ad hoc page and the email reflector.

Kent presented the proposed agenda and asked if there was objection as written. No one responded. The agenda was approved by the ad hoc.

Kent reminded participants of the IEEE patent policy.

Ad hoc minutes

The February 17 meeting minutes for joint ad hoc were posted on the website. Kent asked if there were any objections to approving the posted minutes. Mark Nowell noted that the first set of minutes on the website were updated a few hours after posting; the changes were editorial and clarifications. No one responded. Minutes approved.

50G/100G/200G Study Groups Agenda Items

Note: The links to the two Study Group ad hoc websites are:

<http://www.ieee802.org/3/50G/index.html> 50Gb/s Ethernet Study Group

<http://www.ieee802.org/3/NGOATH/index.html> Next Generation 100 Gb/s & 200Gb/s Ethernet Study Group

Study Group Update, Mark Nowell:

- The next meeting is in March in Macao. The deadline for presentation requests is March 4. Presentations are due March 8.
- Contributions should focus on supporting the Study Group objectives and project documentation, including the P802.3bs PAR modification.
- The Study Groups will meet Wednesday and Thursday morning. The Study Group may meet on Tuesday, based on the number of contributions.
- Mark noted that the currently adopted objectives related to Copper backplane and Twin-axial cables do not have sufficient detail to pass Working Group scrutiny.
- It was noted that the 200G SMF related objectives intended for the P802.3bs PAR modification could proceed without the copper-related objectives.

50G & NGOATH SG Presentation #1:

“50 GbE PCS supporting 2 lanes PMA”, Ali Ghiasi

See: http://www.ieee802.org/3/50G/public/adhoc/archive/ghiasi_022416_50GE_NGOATH_adhoc.pdf

- Questions were asked about symbol mux vs. bit mux in the implementation.
- Much discussion on a topic of 50GAUI-2 PMD needing 2 different objectives for backward compatibility.
- Chris Cole offered to start a conversation on the topic over the email reflector.
- Due to time constraints in the P802.3by 25G agenda items, Kent Lusted noted that he would allocate time in the next ad hoc meeting to discuss the PCS related topics.

Kent Lusted passed the chair to Matt Brown.

P802.3by 25G TF Agenda Items

Note: The link to the P802.3by 25G Task Force architecture ad hoc website is:

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

Matt Brown reviewed the agenda for the TF portion.

Task Force Update – Mark Nowell:

- The next meeting is in March in Macao. The deadline for presentation requests is March 4. Presentations are due March 8.
- The Task Force will meet on Monday, 14 March.
- The Sponsor Ballot recirculation for Draft 3.1 closes on 25 February.

Matt allocated 20 minutes for the first presentation and up to 30 mins for discussion on the topic afterwards.

P802.3by Presentation #1:

“Further Information towards Closing the Pmaxto Vfratio budget hole”, Mike Dudek

See: http://www.ieee802.org/3/by/public/adhoc/architecture/dudek_022416_25GE_adhoc.pdf

- Discussed the various change options to the specification that would pass COM.
- Discussed that the solutions for backplane and copper cables could be different.
- Matt Brown asked Mike to prepare a summary that outlines the changes to the specification

Matt asked participants to hold questions to the end of the next presentation.

P802.3by Presentation #2:

“Review of CA-N Data”, Oren Sella

See: http://www.ieee802.org/3/by/public/adhoc/architecture/sella_022416_25GE_adhoc.pdf

- It was noted that the same vendor MCB was used on each end of the cable during measurement.
- Discussed the observations from the data collected.
- There was a request for the COM data on the cables used in the analysis.
- Discussed that the MCB variance is accounted for in the specification and that the issue presented is a test challenge, not a specification issue.

The next ad hoc call is scheduled for 4 March 2016.

The ad hoc meeting ended at 10:00 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	company
Adam Healey	broadcom
Adee Ran	intel
Adrian Butter	globalfoundries
Ali Ghiasi	n/a
Andre Szczepanek	inphi
Arvind Srinivasan	oracle
Bipin D. Dama	cisco
Brian	luxtera
Chris Cole	finisar
chris diminico	n/a
Chris Roth (Molex)	molex
Dale Murray - LightCounting	lightcounting
Dan Cunningham	arista
Daniel Koehler	morethanip
David Malicoat	hpe
Ed Ulrichs	sourcephotronics
Eric Baden (Broadcom)	broadcom
Fernando De Bernardinis (Marvell)	marvell
Flavio Marques	furukawa.co
francois beauregard	belden
Gary Nicholl	cisco
Geoffrey Chacon	hpe
Greg LeCheminant	keysight
Hyun Choi	nvidia
Jack Dawson	netronome
Jacky Chang	hpe
Jane Lim	cisco
Jason Ellison	n/a
Jing Fang	marvell
John Castina	netronome
John D'Ambrosia	futurewei
John Dillard	microsemi
John Ewen	globalfoundries
John Nelson	arista
Juan-Carlos Calderon	inphi
Kapil Shrikhande	n/a
Kenneth Jackson	sei-device
kent lusted (intel)	intel

Kumaran Krishnasamy	broadcom
Marco	cisco
Mark Gustlin	xilinx
Mark Nowell	cisco
martin white	caviumnetworks
Matt Brown (APM)	apm
Megha Shanbhag	te
Mike Dudek	qlogic
Mike Li	altera
david ofelt	juniper
Omer Sella	mellanox
Paul Kolesar	commscope
Paul Mooney	spirent
Peter Anslow	ciena
Peter Stassar	huawei
Phil Sun	credosemi
Phong Pham	usconec
Piers	mellanox
Qian Zhang	cisco
Qing Xu	belden
Rajmohan Hegde	broadcom
ramin farjad	aquantia
Randy k Rannow (APIC)	n/a
Rich Mellitz (Intel)	intel
Rick Rabinovich	ixiacom
Rita Horner	synopsys
Rob Stone	broadcom
Ron Muir (JAE)	jae
salvatore rotolo	st
scott sommers	molex
stefano valle	st
Steve Swanson	corning
takeshi.Nish	yeu
Tao Hu	qlogic
Ted Sprague	infinera
Thananya	ixiacom
Tim Webster	cisco
Tom Issenhuth	microsoft
Tom McDermott	us.fujitsu
Tom Palkert	visi

upen	cisco
Vasu	broadcom
Venu B (Marvell)	marvell
Vittal	dell
Wheling Cheng	ericsson
will bliss	broadcom
Xinyuan Wang	huawei
Yasuo Hidaka	us.fujitsu
yizhaoping(h3c)	h3c
Yuri Vandyshev	cisco
Zhenyu Liu	credosemi
Zvi Rechtman	mellanox