

P802.3by 25 Gb/s Ethernet Task Force and 50G/100G/200G Study Groups Joint Ad Hoc meeting – March 3, 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 24, 2016
- P802.3by 25G Ad Hoc – Kent Lusted
 - Task Force update, Mark Nowell
- 50GNGOATH & 200GSMF Study Groups Ad Hoc – Kent Lusted
 - Study Group Update, Mark Nowell
 - Discussion on backward compatible, (15 min)
 - “Feasibility of 30 dB channel at 50 Gb/s”, Ali Ghiasi (15 min)
 - “Copper twin-axial cable”, Chris Diminico (15 min)
 - “200G-PSM4/DR4 Broad Market Potential”, Brian Welch (15 min)
 - “Feasibility of 50GE low-latency schemes”, Phil Sun (15min)

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_030216_25GE_50GE_NGOATH_adhoc-v2.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 24 meeting minutes for joint ad hoc were posted on the website. No one responded. Minutes approved.

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>

Task Force Update – Mark Nowell:

- Draft 3.1 sponsor ballot closed successfully. Met criteria. Received ~35 comments against the draft.
- Proposed responses to the received comments will be posted soon to the Task Force website.
- The Task Force will meet on Monday, 14 March. Task Force will break for the opening plenary.
- The next meeting is in March in Macao. The deadline for presentation requests is March 4. Presentations are due March 8.

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.
- Other objectives are being considered and need supporting contributions. These new objectives may change the PAR and CSD responses.
- 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.
- The Study Groups will meet all day Wednesday and Thursday morning. The Study Group may meet on Tuesday afternoon, based on the number of contributions.
- Mark encouraged participants to review: http://www.ieee802.org/3/50G/public/adhoc/archive/lusted_020316_50GE_NGOATH_adhoc-v2.pdf from February 3 ad hoc meeting to address gaps.

Kent asked if there was interest in discussing backward compatibility. Participants responded in favor. Kent allocated 15 mins for discussion.

Discussion on backward compatibility

- Reviewed the reflector discussion regarding the different scenario options.
- Mark Nowell noted that if the scenarios imply 2 PHY types, then the objectives will need to reflect it and have consensus on the implications to the Study Group.
- Mark Nowell noted that the objectives are owned by the Working Group. New objectives or objective changes that impact the CSD response will need approval by the EC. But, it is possible to add objectives once in Task Force.

Kent Lusted allocated 15 minutes for the presentation and 5 minutes for Q&A.

50G & NGOATH SG Presentation #1:

“Feasibility of 30 dB channel at 50 Gb/s”, Ali Ghiasi

See: http://www.ieee802.org/3/50G/public/adhoc/archive/ghiasi_030216_50GE_NGOATH_adhoc.pdf

- Discussed the changes in bmax in the COM parameter table on page 3.
- Summarized the possibility of changing the COM reference receiver for the more likely PAM4 receiver architecture.
- It was noted that this presentation supports the Technical Feasibility of the proposed copper related objectives.

Kent Lusted allocated 15 minutes for the presentation and 5 minutes for Q&A.

50G & NGOATH SG Presentation #2:

“Copper twin-axial cable”, Chris Diminico

See: http://www.ieee802.org/3/50G/public/adhoc/archive/diminico_030216_50GE_NGOATH_adhoc.pdf

- Clarifying questions were asked about the QSFP ICN assumptions
- Chris noted that he intends to propose a 3m reach at the plenary.
- It was noted that the adopted 200G objective for copper cables does not have “single-lane” as quoted on slide 2.

Kent Lusted allocated 15 minutes for the presentation and 5 minutes for Q&A.

50G & NGOATH SG Presentation #3:

“200G-PSM4/DR4 Broad Market Potential”, Brian Welch

See: http://www.ieee802.org/3/50G/public/adhoc/archive/welch_030216_50GE_NGOATH_adhoc.pdf

- It was noted that the “400G PSM4, FR8” numbers are not yet broken out on slide 5.
- There were questions about the market timing for 200G PSM4.

Kent Lusted allocated 15 minutes for the presentation and 5 minutes for Q&A.

50G & NGOATH SG Presentation #4:

“Feasibility of 50GE low-latency schemes”, Phil Sun

See: http://www.ieee802.org/3/50G/public/adhoc/archive/sun_030216_50GE_NGOATH_adhoc.pdf

- Discussed the usage model of the low-latency solution as the chip-to-chip.

The next ad hoc call is scheduled for 9 March 2016. Kent Lusted noted that the 9 March ad hoc call will not have a 50G/200G agenda.

The ad hoc meeting ended at 9:55 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	company
Adam Healey	broadcom
Adee Ran	intel
Ali Ghiasi	n/a
Andre Szczepanek	inphi
anil	brocade
Arvind Srinivasan	oracle
Bipin Dama	cisco
Brian	luxtera
Chris Cole	finisar
chris diminico	n/a
Chris Roth (Molex)	molex
Dale Murray - LightCounting	lightcounting
Dan Cunningham	arista
Daniel Dillow (Amphenol FCI)	fci
Dave Estes - Spirent	spirent
Dave Lewis	lumentum
Derek Cassidy	n/a
Dominic Lapierre	exfo
Duane Remein	futurewei
Ed Ulrichs	sourcephotonics
Fernando De Bernardinis (Marvell)	marvell
Flavio Marques	furukawa.co
francois beauregard	belden
gary nicholl	cisco
Geoffrey Chacon	hpe
George Zimmerman	cmephyconsulting
Ghani Abbas	ericsson
Gianpiero	cisco
Greg LeCheminant	keysight
Hyun Choi	nvidia
Jane Lim	cisco
Jason Ellison	n/a
Jeff Slavick	broadcom
Jing Fang	marvell
John Castina	netronome
John DAmbrosia	futurewei

John Dillard	microsemi
John Ewen	globalfoundries
John Nelson	arista
Kapil Shrikhande	n/a
Kenneth Jackson	sei-device
kent lusted (intel)	intel
Kumaran Krishnasamy	broadcom
Marco	cisco
Mark Gravel	hp
Mark Gustlin	xilinx
Mark Nowell	cisco
martin white	caviumnetworks
Megha Shanbhag	te
Mike Dudek	qlogic
Nathan Tracy	te
Oded Wertheim	mellanox
david ofelt	junipter
Omer Sella	mellanox
Patrick Casher	loromamerica
Paul	commscope
Paul Mooney	spirent
Peter Stassar	huawei
Phil Sun	credosemi
Piers	mellanox
Qian Zhang	cisco
Qing Xu	belden
ramin farjad	aquantia
Randy k Rannow (APIC)	n/a
Rick Pimpinella	panduit
Rick Rabinovich	ixiacom
Rita Horner	synopsys
Rob Stone	broadcom
sam sambasivan	labs.att
Scott Kipp	brocade
scott sommers	molex
stefano valle	st
Steve	alcatel-lucent
steve sekel (Keysight)	keysight
Tao Hu	qlogic
Ted Sprague	infinera

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
Yasuo Hidaka	us.fujitsu
yizhaoping	h3c
Zhenyu Liu (Credo)	credosemi
Zvi Rechtman	mellanox