# P802.3by 25 Gb/s Ethernet Task Force and 50G/100G/200G Study Groups Joint Ad Hoc meeting – December 16, 2015

Prepared by Kent Lusted

### Proposed Agenda:

- Approval of the Agenda
- IEEE patent policy reminder:
  - o 25G TF: http://www.ieee802.org/3/patent.html
- Approval of draft minutes for December 9
- P802.3by 25G
  - Task Force Update, Mark Nowell
  - o "Re-evaluation of Tx specifications and COM", Mike Dudek
  - o "Error Propagation with DFE's", Mike Dudek
- 50GE & NGOATH Study Groups Ad Hoc
  - Study Group update, Mark Nowell
  - o "Study Group Objectives Discussion", Mark Nowell
- Next joint ad hoc meeting is 6 January 2016

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

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

Meeting began with the agenda presentation:

http://www.ieee802.org/3/50G/public/adhoc/archive/agenda\_121615\_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 P802.3by 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 December 9 meeting minutes for joint ad hoc were posted on the website. A small change was made based on feedback from Peter Stassar. Kent Lusted asked if there were any objections to approving the posted minutes. 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**

- Sponsor Ballot is currently open and closes on December 24. If a participant is not in Sponsor Ballot pool, follow the instructions in the reflector email.
- The tentative January schedule is to meet on Monday and Tuesday.

Matt Brown stated that 25 minutes was allocated for each 25G Task Force ad hoc presentation for schedule purposes.

#### Presentation #1:

"Re-evaluation of Tx specifications and COM", Mike Dudek

See http://www.ieee802.org/3/by/public/adhoc/architecture/dudek 121615 25GE 01 adhoc-v2.pdf

- Discussed the calculation of TXSNR as it relates to the PRBS9 signal from the test procedure.
- Mike Dudek noted a correction on slide 11 and will send an updated presentation.
- Discussed the implications of the proposed change to COM. No change to COM. The proposed changes take budget from the host.
- Mike Dudek noted that the presentation was related to a Sponsor Ballot comment.

Kent Lusted noted that, per Matt Brown, 25 minutes was allocated for the next presentation.

#### Presentation #2:

"Error Propagation with DFE's", Mike Dudek

See http://www.ieee802.org/3/by/public/adhoc/architecture/dudek 121615 25GE 02 adhoc.pdf

- Mike Dudek noted that "C" represents a correct bit
- Discussed the conditions of a zero following a one on the initial bit on slide 4.
- Discussed the analysis when errors have filled the shift register.
- Mike Dudek asked for help with the analysis for the sync header case.

# 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

#### **Update on Study Groups**

Mark Nowell

- Meeting announcement for the January interim meeting was sent to the email reflector.
- The tentative schedule is to meet Wednesday thru Friday.
- John D'Ambrosia expects to announce a joint session with P802.3bs on Friday morning.
- Presentation requests are due Jan 8, 2016. Finished presentations are due Jan 12, 2016. Please send request as soon as possible to facilitate planning. Expect many contributions.
- Mark encouraged offline consensus building on proposals.
- John D'Ambrosia noted that he does not expect strong conflicts with the 25G SMF Study Group or the 25G Task Force.

#### 50G & NGOATH SG Presentation #1:

"Study Group Objectives Discussion", Mark Nowell

See <a href="http://www.ieee802.org/3/50G/public/adhoc/archive/nowell\_121615\_50GE\_NGOATH\_adhoc-v2.pdf">http://www.ieee802.org/3/50G/public/adhoc/archive/nowell\_121615\_50GE\_NGOATH\_adhoc-v2.pdf</a>

- Mark Nowell noted that the purpose of the presentation is to facilitate discussion and will take questions and comments during the presentation.
- Discussed the 50G draft objective of BER as it relates to the P802.3bs BER objective.
- Discussed the meaning of the 50G draft objective of "provide appropriate support for OTN". Steve Trowbridge noted that he is planning a future contribution.
- Discussed the potential 50G objective for backplane. There was agreement on the form that was leveraged from P802.3bj. There was objection to the value. Mark Nowell asked participants for contributions with values.
- Reviewed the draft objectives related to 200G. Discussed the terms "duplex" and "parallel" for the SMF objectives on slide 13. There was a recommendation to use the P802.3ba wording for the optical objectives.
- Reviewed the 100G related draft objectives. There was a question about 500m SMF objectives for 100G and 200G.
- Mark noted that there was a cut and paste error on 100G backplane objective. Mark to provide updated presentation.
- Mark asked participants to bring contributions and proposals to the ad hoc meetings for discussion.
- Mark asked if people were interested in a Survey Monkey poll to get some feedback for the group
  on where objectives might be supported. There was a request for the survey to include an option for
  "need more information".

Kent Lusted noted that the next joint ad hoc meeting will be on 6 January 2016.

The ad hoc meeting ended at 10:01 a.m. Pacific.

# List of attendees (captured from Webex tool)

Name	company
Adam Healey	avagotech
Adee Ran	intel
Adrian Butter	globalfoundries
Ali Ghiasi	n/a
Amrik	cisco
Andre Szczepanek	inphi
anil	brocade
Arthur Marris (Cadence)	cadence
Bharat Tailor	semtech
Chris Roth (Molex)	molex
Dale Murray	lightcounting
Daniel Dillow (FCI)	fci
david chalupsky (intel)	intel
David Law	НРЕ
David Malicoat	hpe
David Ofelt	juniper
deepyue.zhang	n/a
Derek Cassidy	n/a
Ed Ulrichs	sourcephotonics
Eric Baden (Broadcom)	broadcom
Flavio Marques	furukawa.co
gary nicholl	cisco
Geoffrey Chacon	hpe
George Zimmerman	cmephyconsulting
Greg McSorley	amphenol-highspeed
Jacky Chang	hpe
Jeff H	n/a
Jeffery Maki	juniper
Jim+Goell	nanoprecision
Jing Fang	marvell
Joel Goergen	cisco
John DAmbrosia	independent
John Dillard	microsemi
John Ewen	globalfoundries
John Nelson	arista
jonathan	finisar
Juan-Carlos Calderon	inphi

Ken Van Orman	spirent
Kenneth Jackson	sei-device
kent lusted (intel)	intel
Kumaran Krishnasamy	broadcom
Marc Dupuis	molex
Mark	semtech
Mark Gravel	hp
Mark Jones	xtera
Mark Nowell	cisco
martin langhammer	altera
martin white	caviumnetworks
mbrown	apm
Megha Shanbhag	te
Mike Andrewartha	
(Microsoft)	microsoft
Mike Dudek	qlogic
Mike Li	altera
Paul Kolesar	commscope
Peter Anslow	ciena
Peter Jones	cisco
Peter Stassar	huawei
Phil Sun	marvell
Piers	mellanox
Qian Zhang	cisco
rakesh sambaraju	nexans
Randy k Rannow (APIC)	APIC
Ray	cisco
Rich Mellitz (Intel)	intel
Rick Rabinovich	ixiacom
Rob Stone	broadcom
Ron Muir (JAE)	jae
salvatore rotolo	st
Scott Kipp	brocade
Steve Swanson	corning
Steve Trowbridge	alcatel-lucent
takeshi.Nish	yeu
Tom McDermott	us.fujitsu
Tom Palkert	visi
Upendranadh Kareti	cisco
Vipul Bhatt	inphi

Wheling Cheng	ericsson
Winston Way	neophotonics
Xinyuan Wang	huawei
Yasuo Hidaka	us.fujitsu
yizhaoping	h3c
Yong Kim	broadcom
Yuri Vandyshev	cisco
Z.Wang	broadcom
Zvi Rechtman	mellanox