## Joint IEEE P802.3cd and P802.3bs Electrical Track Ad Hoc meeting – June 14, 2017

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- Approval of the June 7 minutes
- IEEE patent policy reminder:
  - http://www.ieee802.org/3/patent.html
- IEEE Participation Requirements reminder
- Joint P802.3cd/P802.3bs TF Ad Hoc -
  - P802.3cd Task Force Update, Mark Nowell (10 min)
  - "Implementing an Extinction Ratio of 3.5 dB in 50GBASE-FR/LR in P802.3cd", Peter Stassar (30 mins)
  - "Resolving COM and RX ITT Concerns", Adee Ran (30 mins)
  - "Tightening Channel Variation by Nominal Impedance Values of COM Package Model", Yasuo Hidaka (20 mins)
  - "Return Loss of Test Channel for Rx ITT", Yasuo Hidaka (20 mins)

Presentations posted at: http://www.ieee802.org/3/cd/public/adhoc/archive/index.html

Meeting began at ~8:05 a.m. Pacific by Kent Lusted.

Meeting began with the agenda presentation: http://www.ieee802.org/3/cd/public/adhoc/archive/agenda\_061417\_3cd\_adhoc-v2.pdf

The ad hoc chair reminded participants that these P802.3cd ad hoc meetings until the July Plenary will be joint with the P802.3bs Electrical Track due to commonality of topics around COM. He 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 lines when not speaking and reviewed the steps to unmute.

Showed the links to the IEEE P802.3cd Task Force ad hoc page and the email reflector.

Presented the proposed agenda and asked if there was objection as written. Yasuo Hidaka-san requested to change the order of his presentations. There was no objection. Yasuo Hidaka-san noted that his presentation on channel variation could be deferred to next week if there is a time constraint. The agenda was approved by the ad hoc.

Asked if there were comments regarding the posted minutes of the last ad hoc meeting. No one responded. Pete Anslow noted an incorrect date in the posted June 7 minutes.

Reminded participants of the IEEE patent policy. He asked if anyone was unfamiliar with the IEEE patent policy. No one responded.

Reminded participants of the IEEE Participation Requirements and showed the slide with the Participation requirements. He asked if anyone was unfamiliar with the IEEE Participation Requirements. No one responded.

## Agenda Items

### P802.3cd Task Force Update, Mark Nowell:

- First Working Group ballot. Draft 2.0 ballot is open. Closes June 25, 2017 (this is a Sunday).
- Next Task Force meeting is the week of July 10, 2017. Task Force will meet on Tuesday, Wednesday, and Thursday of that week. Start no later than 1pm on Tuesday but will start after the 802.3bs TF concludes its work.
- Presentation requests due 30 June, 2017. Presentations due 5 July, 2017 which is later than usual due to July 4<sup>th</sup> holiday in US.

### Presentation #1:

"Implementing an Extinction Ratio of 3.5 dB in 50GBASE-FR/LR in P802.3cd", Peter Stassar See: <u>http://www.ieee802.org/3/cd/public/adhoc/archive/stassar\_061417\_3cd\_adhoc-v2.pdf</u>

- Author indicated an updated version "v2" was provided and posted to the website. It contains a few clarifications based on offline discussions.
- The BER performance shown on slide 5 uses a slightly different method than the IEEE spec. An updated graph with data from the IEEE spec method is expected at the Berlin meeting.
- The device under test used a PIN not an APD.

### Presentation #2:

"Resolving COM and RX ITT Concerns", Adee Ran See: <u>http://www.ieee802.org/3/cd/public/adhoc/archive/ran\_061417\_3cd\_adhoc-v2.pdf</u>

- Author indicated an updated version "v2" with typo fixes.
- Author discussed the background on use of the COM methodology for supporting the writing of specifications
- Discussed and debated the options listed on slide 13.
- Discussed possible paths forward for COM.

### Presentation #3:

"Return Loss of Test Channel for Rx ITT", Yasuo Hidaka See: <u>http://www.ieee802.org/3/cd/public/adhoc/archive/hidaka\_061417\_3cd\_02\_adhoc-v2.pdf</u>

• Discussed the return loss of the test channel at TP5. The test system must meet the requirements of Equation 93-2.

- There was much discussion on the channel requirements and normative testing at TP5.
- \*\* updated v2 version posted after meeting to capture feedback from discussion \*\*

#### Presentation #4:

"Tightening Channel Variation by Nominal Impedance Values of COM Package Model", Yasuo Hidaka See: <u>http://www.ieee802.org/3/cd/public/adhoc/archive/hidaka\_061417\_3cd\_01\_adhoc.pdf</u>

• Discussed the desire to tighten variation of the nominal reference impedance.

\*\*\* A free drink to the first person to let the Task Force Chair know they've read this \*\*\*

The ad hoc meeting ended at ~10 a.m. Pacific.

# List of attendees (captured from Webex tool)

Ed Ulrichs	source photonics
Mark Kimber	semtech
Andy Zambell	amphenol
Torsten Reuschel	tuhh
Phil Sun	credosemi
Vittal Balasubramanian	innovium
Rick Rabinovich	ixiacom
Alexander Rysin	mellanox
rohan gandhi	macom
Jitendra Swarnkar	inphi
Mark Nowell	cisco
Upen Kareti	cisco
Jaclyn Dang	cisco
Rita Horner	synopsys
Jeff Slavick	broadcom
Scott Kipp	brocade
Salvatore Rotolo	st
dave penkler	hpe
Dino Pozzebon	microsemi
Steve Trowbridge	nokia
David Piehler	dell
Isabel de Sousa	IBM
Jeffery Maki	juniper
Modestino Pellecchia	cogecopeer1
Rick Rabinovich	ixiacom
scott sommers	molex
Galen Fromm	cray
martin white	cavium
Piers Dawe	mellanox
Zvi Rechtman	mellanox
Raymond Nering	cisco
Kumaran Krishnasamy	broadcom
Derek Cassidy	bt
John Ewen	globalfoundries
Frank Lambrecht	gmail
kent lusted	intel

Andre Szczepanek	HSZ Consulting
TAO HU	cavium
Tom Palkert	molex
Martin Miller	teledynelecroy
Stephen Didde(Keysight)	keysight
Mike Dudek	cavium
Matt Brown	macom
michael ressl	Hitachi Cable
Yang Zhiwei	zte
Timothy Pak (Luxshare)	luxshare-ict
peter stassar	huawei
Ken Jackson	sei-device
Megha Shanbhag	te
jonathan king	finisar
Marco Mazzini	cisco
Jane Lim	cisco
Adee Ran	intel
Steve Sekel (Keysight)	keysight
aanandakumar	maxlinear
Ted Sprague	infinera
Adrian Young	leviton
Raymond Nering	cisco
David Malicoat	senko
Adam Healey	broadcom
Irina Dillinger	cisco
karen Liu	kaiam
Rick Rabinovich	ixiacom
James Fife	etopus
Ali Ghiasi	ghiasi quantum
Peter Anslow	ciena
Yasuo Hidaka	us.fujitsu
Jason Ellison (Siemon)	siemon
bill kirkland	semtech
Gianpiero Bognanni	source photonics
Slobodan Milijevic	microsemi
Takeshi Nish	yeu
T.SAKAI	socionext
Frank Chang	inphi
RICHARD MELLITZ	samtec

gary nicholl	cisco
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