

## **IEEE 802.3 100G Electrical Lane Study Group Ad Hoc meeting – February 12, 2018**

Prepared by Kent Lusted and Beth Kochuparambil

### **Proposed Agenda:**

- Approval of the Agenda
- Approval of Previous Ad Hoc Minutes – Dec 20, Jan 3, Jan 8
- IEEE Patent Policy reminder:
  - <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf>
- IEEE Participation Requirements reminder
- Study Group Update & Logistics for March Plenary meeting, Beth Kochuparambil
- Loop-Timed Configurations, Ramin Farjadrad
- Cu Cable Channel model, Rich Mellitz

Presentations posted at: <http://www.ieee802.org/3/100GEL/public/adhoc/index.html>

Meeting began at ~8 a.m. Pacific by Beth Kochuparambil, Study Group Chair.

Meeting began with the agenda presentation:

[http://www.ieee802.org/3/100GEL/public/adhoc/feb12\\_18/agenda\\_180212\\_100GEL\\_adhoc.pdf](http://www.ieee802.org/3/100GEL/public/adhoc/feb12_18/agenda_180212_100GEL_adhoc.pdf)

The ad hoc chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Beth reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Showed the links to the IEEE 802.3 100G/s per lane electrical Study Group ad hoc page and the email reflector.

Presented the proposed agenda and asked if there was objection as written. The agenda was approved by the ad hoc.

Chair noted that the minutes from the previous meeting were recently posted to the ad hoc web page.

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

## Agenda Items

### Study Group Update – Beth Kochuparambil

- Noted that the call was reduced to 1 hour in duration.
- Draft project documentation from the January interim was posted to the Study Group website. Documents were pre-submitted for IEEE 802 EC approval.
- Reviewed the adopted objectives. Several have TBD values.
- Reviewed the logistics for the March plenary. Tentatively plan to meet on Wednesday and Thursday of the plenary work.
- Presentations should be focused on completing TBDs in objectives and substantiating the PAR and CSD.
- Request for presentations due Friday, 23 February. Presentations are due Wednesday, February 28.

### Presentation #1:

“Loop-Timed Configurations”, Ramin Farjadrad

See:

[http://www.ieee802.org/3/100GEL/public/adhoc/feb12\\_18/farjadrad\\_100GEL\\_adhoc\\_01\\_021218.pdf](http://www.ieee802.org/3/100GEL/public/adhoc/feb12_18/farjadrad_100GEL_adhoc_01_021218.pdf)

- Discussed a few ways to convert the 100G Dual Duplex to an optical signal inside of the optical module.
- Discussed the impact of jitter on the loop timing.

### Presentation #1:

“Synthesized CR End to End Models”, Rich Mellitz

See: [http://www.ieee802.org/3/100GEL/public/adhoc/feb12\\_18/mellitz\\_100GEL\\_adhoc\\_01\\_021218.pdf](http://www.ieee802.org/3/100GEL/public/adhoc/feb12_18/mellitz_100GEL_adhoc_01_021218.pdf)

- Discussed the changes made to the COM configuration sheet.
- Based on slide 3, there was a request for end-to-end channels with different PCB materials.
- The impedances are all nominal, without variation. Variation will further decrease margin.
- Channel model posted in <http://www.ieee802.org/3/100GEL/public/tools/index.html>

Chair noted that the next ad hoc meeting (February 19, 2018) is cancelled.

The ad hoc meeting ended at ~9:00 a.m. Pacific.

## List of attendees (captured from Webex tool)

<u>Name</u>	<u>Affiliation</u>
Adam Healey	Broadcom
Adrian Butter	Global Foundries
Alex Haser	Molex
Ali Ghiasi	GhiasiQuantum LLC
Andy Zambell	Amphenol
Arthur Marris	Cadence
Beth Kochuparambil	Cisco
Dale Murray	Lightcounting
David Law	HPE
David Malicoat	Senko
David Ofelt	Juniper
David Piehler	Dell EMC
Ed sayre	Samtech
Frank Lambrecht	Gigamon
Gary Nicholl	Cisco
Geoff Thompson	Independent
George Zimmerman	ADI, APL Group, Aquantia, BMW, Cisco Systems, Commscope
Greg LeCheminant	Keysight Technologies
Hormoz Djahanshahi	Microsemi
James Fife	Etopus
Jeffery Maki	Juniper
Jeremy Stephens	Intel
John D'Ambrosia	FutureWei (Subsidiary of Huawei)
John Ewen	Globalfoundries
John Yurtin	Aptiv
Ken Jackson	Sumitomo
Kent Lusted	Intel
Marco Mazzini	Cisco
Mark Gustlin	Xilinx
Mark Nowell	Cisco
Martin White	Cavium
Matt Brown	Macom
Mau-Lin Wu	Mediatek
Megha Shanbhag	TE Connectivity
Mike Dudek	Cavium
Paul Kolesar	CommScope
Phil Sun	Credo
Piers Dawe	Mellanox
Pirooz Toyserkani	Cisco
Ramin Farjadrad	Aquantia
Rich Mellitz	Samtec
Rick Pimpinella	Panduit

Rick Rabinovich	IXIA
Rob Stone	Broadcom
Scott Sommers	Molex
Takeshi Nishimura	Yamaichi Electronics, USA
Tim Pak	Luxshare
Tom Palkert	Molex/Macom
Toshiaki Sakai	Socionext
Vittal Balasubramanian	Innovium
Yasuo Hidaka	Independent
Zvi Rechtman	Mellanox