IEEE P802.3ck Ad Hoc meeting – October 24, 2018

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- Approve 3 October ad hoc minutes
- IEEE Patent Policy reminder:
 - http://www.ieee802.org/3/patent.html
- IEEE Participation Requirements reminder
- Logistics for November Plenary meeting
- .3ck Ad Hoc
 - "Towards Package Baseline Proposal for 100GEL", Liav Ben-Artsi
 - "DFE-based Model vs FFE-based model for Reference Rx of COM", Yasuo Hidaka
 - "Preliminary COM Results for Two Reference Receiver Models", Louis Lu
 - "100G C2C Consideration", Ali Ghiasi

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

Meeting began at ~7:05 a.m. Pacific by Beth Kochuparambil.

Meeting began with the agenda presentation:

http://www.ieee802.org/3/ck/public/adhoc/oct24 18/agenda 181024a 3ck adhoc.pdf

The ad hoc chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. 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. The agenda was approved by the ad hoc.

Asked if there were comments regarding the posted minutes for the October 3 ad hoc meeting. No one responded. The minutes were approved by the ad hoc.

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

Agenda Items

P802.3ck Task Force update, Beth Kochuparambil

- Presentation requests are due Friday, November 2, AoE.
- Presentation submissions are due 5pm Pacific, Wednesday, 7 November.
- Task force meets the week of November 12, 2018 at the IEEE 802.3 Plenary in Bangkok, Thailand.
- Meeting dates will be Tuesday afternoon thru Thursday morning.
- Task Force working towards baseline proposals.
- Next set of ad hocs will be Dec 5, 12, 19 and Jan 2.

Presentation #1:

"Towards Package Baseline Proposal for 100GEL" -- Liav Ben-Artsi

See: http://www.ieee802.org/3/ck/public/adhoc/oct24_18/benartsi_3ck_adhoc_01a_102418.pdf

- Updated version '01a' with graphics and summary slide. Chair asked if there was an update. no objection.
- Discussed keeping the 12mm package models until there is analysis on the copper cable cases.
- The 30mm package loss is ~5 dB. Die contribution (Cd = 110 fF) adds ~2dB.

Presentation #2:

"DFE-based Model vs FFE-based model for Reference Rx of COM" — Yasuo Hidaka See: http://www.ieee802.org/3/ck/public/adhoc/oct24 18/hidaka 3ck adhoc 01 102418.pdf

- Discussed the results shown on slide 9. There is concern of error propagation due to the large DFE tap weights.
- ADC quantization noise is not included in the COM analysis and will likely impact the results.

Presentation #3:

"Preliminary COM Results for Two Reference Receiver Models" — Yunchun Louis Lu See: http://www.ieee802.org/3/ck/public/adhoc/oct24 18/lu 3ck adhoc 01 102418.pdf

• Discussed the results on slide 4 and the impact of noise on the results.

Presentation #4:

"100G C2C Consideration" - Ali Ghiasi

See: http://www.ieee802.org/3/ck/public/adhoc/oct24 18/ghiasi 3ck adhoc 01 102418.pdf

- Discussed the C2C reach assumptions of 200-250mm on slide 5.
- Discussed the BER implications on the C2C interface.

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

List of attendees (captured from Webex tool)

<u>Name</u>	<u>Affiliation</u>	Employed by
Adam Healey	Broadcom	Broadcom
Alexander Rysin	Mellanox	Mellanox
Ali Ghiasi	GhiasiQuantum LLC	GhiasiQuantum LLC
Andy Zambell	Amphenol	Amphenol
Arturo Pachon	TE Connectivity	TE Connectivity
Beth Kochuparambil	Cisco	Cisco
Bill Kirkland	Semtech	Semtech
Biman Chattopadhyay	Synopsys	Synopsys
Brandon Gore	Samtec	Samtec
Brian Holden	Kandou	Kandou
Burrell Best	Samtec	Samtec
Dave Lewis	Lumentum	Lumentum
David Malicoat	Senko & Aquantia	Malicoat Networking Solutions
David Ofelt	Juniper	Juniper

David Rennie Synopsys Synopsys

Derek Cassidy BT BT

Gary Nicholl Cisco Cisco

Geoff Zhang Xilinx Xilinx

Greg LeCheminant Keysight Keysight Technologies

Henry Poelstra Teledyne Teledyne

Howard Heck Intel Intel

Inho Kim Marvell Marvell

Jayen Desai Intel Intel

Jeff Slavick Broadcom Broadcom

Jeff Twombly Credo Credo

Jeffery Maki Juniper Juniper

Jeremy Stephens Intel Intel

John D'Ambrosia FutureWei (Subsidiary of FutureWei (Subsidiary

Huawei) of Huawei)

John Ewen Globalfoundries Globalfoundries

Karen Liu Kaiam Kaiam

Ken Jackson Sumitomo Sumitomo

Kent Lusted Intel Intel

Liav Ben-Artsi Marvell Marvell

Margaret Cadence Cadence

Mark Gustlin Xilinx Xilinx

Mark Nowell Cisco Cisco

Matt Brown Macom Macom

Mau-Lin Wu Mediatek Mediatek

Mike Dudek Cavium Cavium

Nathan Tracy TE Connectivity TE Connectivity

Pete Anslow Ciena Ciena

Phil Sun Credo Credo

Pirooz Tooyserkani Cisco Cisco

Raymond Nering Cisco Cisco

Rich Mellitz Samtec Samtec

Rick Pimpinella Panduit Panduit

Rita Horner Synopsys Synopsys

Sam Kocsis Amphenol Amphenol

Shawn Nicholl Xilinx Xilinx

Shimon Axalume Axalume

Steve Sekel Keysight Keysight

Steve Trowbridge Nokia Nokia

Takeshi Nishimura Yamaichi Electronics, Yamaichi Electronics,

USA USA

Ted Sprague Infinera Infinera

Tom Palkert Molex/Macom Molex/Macom

Toshiaki Sakai Socionext Socionext

Upen Kareti Cisco Cisco

Vittal Balasubramanian Innovium Innovium

Yang Zhiwei ZTE ZTE

Yasuo Hidaka Independent Independent

Yuchun(Louis) Lu Huawei Huawei

Zvi Rechtman Mellanox Mellanox