## IEEE P802.3ck Ad Hoc meeting -

### June 10, 2020

Prepared by Kent Lusted and Beth Kochuparambil

Proposed Agenda:

- Approval of the Agenda
- Participant reminder
  - http://www.ieee802.org/devdocs.shtml
- IEEE Copyright reminder
  - https://standards.ieee.org/ipr/index.html
- IEEE Patent Policy reminder:
  - http://www.ieee802.org/3/patent.html
- Task Force Status
- Overview of D1.2 Telephonic Interim Series
- 3ck Technical Presentations\*
  - "Closer Look at Transfer Function Fix in COM 2.90" Bill Kirkland
  - "ERL Status: Next Decisions" Rich Mellitz
  - "ERL Related Comments in 802.3ck D1p2" Mau-Lin Wu
  - "TP0a measurements: What to do About Fixtures" Rich Mellitz
  - "C2M module output spec at TP4" Yasuo Hidaka
  - "QSFP-DD SMT MCB /HCB Performance vs. 802.3ck D1.2" Alex Haser

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

Meeting began at ~07:00 a.m. Pacific by Beth Kochuparambil.

Meeting began with the agenda presentation:

http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/agenda\_061020\_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.

Presented the proposed agenda. Chair asked if there was opposition to the proposed agenda. No one responded. The agenda was approved by the ad hoc.

Chair reminded participants of the IEEE Participation Requirements and showed the slide with the Participation requirements, the IEEE copyright policy (see:

<u>https://standards.ieee.org/ipr/index.html</u>), and the IEEE patent policy (see: <u>http://www.ieee802.org/3/patent.html</u>). Chair asked if anyone was unfamiliar with any of these IEEE policies. No one responded. There was no response to a "Call for Patents" on the Ad Hoc.

# **Agenda Items**

#### P802.3ck Update, Beth Kochuparambil

See: http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/agenda\_061020\_3ck\_adhoc.pdf

- Draft 1.2 review closes on June 13, 2020 AOE.
- The presentations that complete a comment or suggested remedy have a submission deadline of June 17, 2020 AOE. Updates and consensus presentations are welcome, but no deadline at this time.
- Reviewed the Draft 1.2 telephonic interim series dates listed on slide 9. Wednesday calls will have an open bridge 30 minutes early to enable consensus building prior to the interim meeting. The formal interim meeting would not start until 7am Pacific.

#### Presentation #1:

"Closer Look at Transfer Function Fix in COM 2.90", Bill Kirkland

- See: http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/kirkland\_3ck\_adhoc\_01\_061020.pdf
  - Discussed the change made in COM; it appears that the text in the specification was correct.
  - There was a request for correlation work to ensure that the change for S-parameter processing did not have an unintended consequence.

#### Presentation #2:

"ERL Status: Next Decisions", Rich Mellitz See: <u>http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/mellitz\_3ck\_adhoc\_01\_061020.pdf</u>

- On slide 8, the bottom row should be "Annex 120G module." Presenter will post an updated '01a' version with the correction.
- Discussed the impact of SNR\_ISI

#### Presentation #3:

"ERL Related Comments in 802.3ck D1p2", Mau-Lin Wu See: <u>http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/wu\_3ck\_adhoc\_01\_061020.pdf</u>

• Discussed the proposed parameter table recommended on slide 4.

#### Presentation #4:

"TPOa measurements: What to do About Fixtures", Liav Ben-Artsi See: <u>http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/mellitz\_3ck\_adhoc\_02\_061020.pdf</u>

- Reviewed the details on the proposed TPOv.
- Proposal expands on how to enable the user with the new test point.
- Discussed current industry practices
- Discussed need for test equipment expert involvement in the development of the proposal

Presentation #5:

"C2M module output spec at TP4", Yasuo Hidaka

See: http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/hidaka\_3ck\_adhoc\_01\_061020.pdf

- Discussed the measurement details at "near end" vs "far end".
- Discussed the selection of g\_DC limit of "-3" as it relates to CTLE peaking
- There was a request to look at the impact in the host footprint by using a channel without a host footprint.

#### Presentation #6:

"QSFP-DD SMT MCB /HCB Performance vs. 802.3ck D1.2", Alex Haser See: <u>http://www.ieee802.org/3/ck/public/adhoc/jun10\_20/haser\_3ck\_adhoc\_01b\_061020.pdf</u>

- Updated version '01a'. No objection.
- There was a request for s-parameters to be made available. The author would check.
- Discussed the impact of the RF connectors in the setup.
- There was a request to update the presentation to change a reference to an affiliation's proposal. Presenter would provide an updated '01b' version with this correction.

During presentation #6, Chair noted that the meeting would run a few minutes past the announced stop time.

Chair noted that participants should expect announcements of future meetings via the reflector. She reminded participants of the next ad hoc on 17 June 2020 and Draft 1.2 review closes on 13 June 2020. She also expressed gratitude to presenters and attendees for being succinct as to touch on so many topics in the meeting.

The ad hoc meeting ended at ~9:05 am Pacific.

# List of attendees (captured from Webex tool)

Name	Affiliation	Employed by
Adam Healey	Broadcom	Broadcom
Adee Ran	Intel	Intel
Alan Kinningham	I-PEX	I-PEX
Alex Haser	Molex	Molex
Ali Ghiasi	Ghiasi Quantum/Inphi	Ghiasi Quantum/Inphi
Anand RK	Cadence	Cadence
Arthur Marris	Cadence	Cadence
Beth Kochuparambil	Cisco	Cisco
Bill Kirkland	Semtech	Semtech
Brandon Gore	Samtec	Samtec
Bruce Champion	TE Connectivity	TE Connectivity
Burrell Best	Samtec	Samtec
Champion (Chien Ping) Kao	Intel	Intel
Chan Chih (David) Chen	Applied Optoelectronics	Applied Optoelectronics
Chris DiMinico	PHY-SI	PHY-SI
Clint Walker	Alphawave IP	Alphawave IP
David Law	HPE	НРЕ
David Malicoat	Senko	Independent
David Ofelt	Juniper	Juniper
David Rennie	Synopsys	Synopsys
Derek Cassidy	BT	BT

Ed Frlan	Semtech	Semtech
Enis Akbaba	Maxim Integrated	Maxim Integrated
Frank Chang	Source Photonics	Source Photonics
Gary Nicholl	Cisco	Cisco
Geoff Zhang	Xilinx	Xilinx
George Luk	Credo	Credo
Greg LeCheminant	Keysight	Keysight Technologies
Greg McSorley	Amphenol	Amphenol
Hormoz Djahanshahi	Microchip	Microchip
Howard Heck	Intel	Intel
Inho Kim	Marvell	Marvell
Jacky Chang	НРЕ	НРЕ
James Weaver	Arista	Arista
Jane Lim	Cisco	Cisco
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jeremy Stephens	Microsoft	Microsoft
jim nadolny	Samtec	Samtec
John Calvin	Keysight	Keysight
John Ewen	Marvell	Marvell
Joshua Kim	Hirose	Hirose
Kent Lusted	Intel	Intel
Kumaran Krishnasamy	Broadcom	Broadcom

Leesa Noujeim	Google	Google
Liav Ben-Artsi	Marvell	Marvell
Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Marvell	Marvell
Mike Klempa	UNH-IOL	UNH-IOL
Mike Li	Intel	Intel
Nathan Tracy	TE Connectivity	TE Connectivity
Phil Sun	Credo	Credo
Piers Dawe	Mellanox	Mellanox
Rich Mellitz	Samtec	Samtec
Rick Rabinovich	Keysight	Keysight
Robert Summers	Maxim Integrated	Maxim Integrated
Sam Kocsis	Amphenol	Amphenol
Sameh Elnaggar	Semtech	Semtech
Scott Sommers	Molex	Molex
SJ Yu	Foxconn Interconnect Technology	Foxconn Interconnect Technology
Steve Sekel	Keysight	Keysight
Takeshi Nishimura	Yamaichi Electronics, USA	Yamaichi Electronics, USA
Tao Hu	Marvell	Marvell
Terry Little	Foxconn Interconnect Technology	Foxconn Interconnect Technology
Thananya Baldwin	Ixia	Ixia

Timothy De Keulenaer	nvidia	nvidia
Tom Palkert	Macom/Samtec	Macom/Samtec
Toshiaki Sakai	Socionext	Socionext
Upen Kareti	Cisco	Cisco
Xiang He	Huawei	Huawei
Yasuo Hidaka	Credo	Credo
Zhiwei Yang	ZTE	ZTE