IEEE P802.3ck Ad Hoc meeting -

January 13, 2021

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- Approval of 1/6 Ad Hoc Minutes
- 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 &
- Preliminary Chief Editor's Report & Preliminary Comment Agenda
- 3ck Technical Presentations*
 - "Update COM Analysis with Rectangular Window", Ali Ghiasi
 - "Return-Loss Related TBDs and Ways to Address Them", Adee Ran
 - "TBDs Associated with MTF", Sam Kocsis
 - "Physics based justification on Cp Value Ratification", Karl Bois

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: <u>https://www.ieee802.org/3/ck/public/adhoc/jan13_21/agenda_011321a_3ck_adhoc.pdf</u>

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 agenda. No one responded. The agenda was approved by the ad hoc.

The minutes for the last ad hoc meeting were recently posted to the ad hoc website. Chair asked if there were modifications. No one responded. Chair asked if there was objection to the minutes as posted. No one responded.

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

https://standards.ieee.org/ipr/index.html), 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: <u>https://www.ieee802.org/3/ck/public/adhoc/jan13_21/agenda_011321a_3ck_adhoc.pdf</u>

- Draft 1.4 review period closed. Received 154 comments from 16 commenters.
- Reviewed the comment resolution series details.
- Noted that the Working Group meeting series runs 18-28 January, 2021.
- Received an incoming liaison from OIF. See: https://www.ieee802.org/3/minutes/jan21/incoming/OIF_liaison_IEEE802.3_CEI_Projec ts_07Jan21.pdf and https://www.ieee802.org/3/private/liaison_docs/OIF/0121_OIF_liaison_IEEE_CEI_Proje cts_cover_drafts_07Jan21.pdf
 Chair noted that the Task Force will discuss if a response is necessary during the comment resolution meeting series. Chair noted that the IEEE 802.3 Working Group liaised draft 1.4 to OIF on 17 December 2020.
 Vice-Chair reminded participants of the goal of meeting the technical completeness
- Vice-Chair reminded participants of the goal of meeting the technical completeness criteria by the end of Draft 1.4 comment resolution.

Preliminary Chief Editor's Report, Matt Brown

See: https://www.ieee802.org/3/ck/public/adhoc/jan13_21/brown_3ck_adhoc_01_011321.pdf

- Matt thanked the editors for their effort to prepare and publish the draft. He also thanked Piers Dawe for his pre-release review of the draft.
- Reviewed the big ticket item list on slide 8. Noted that the common-mode noise, return loss and mated test fixture parameters topics would take effort to close during comment resolution.

Preliminary Comment Agenda, Matt Brown

See:

https://www.ieee802.org/3/ck/public/adhoc/jan13_21/brown_3ck_adhoc_02_011321.pdf

• The comment agenda reviewed was a preliminary version.

Presentation #1:

"Update COM Analysis with Rectangular Window ", Ali Ghiasi See: <u>https://www.ieee802.org/3/ck/public/adhoc/jan13_21/ghiasi_3ck_adhoc_01_011321.pdf</u>

- Discussed the results of the VEO and VEC data on slide 10. The results have a different g_dc value of -1 as noted in the COM 3.1.0 sheet on slide 5.
- It was noted that the b_max[2:n] values on slide 5 do not have the draft 1.4 values.

Presentation #2:

"Return-Loss Related TBDs and Ways to Address Them ", Adee Ran See: <u>https://www.ieee802.org/3/ck/public/adhoc/jan13_21/ran_3ck_adhoc_01a_011321.pdf</u>

- Updated version '01a' with changes. No objection.
- Discussed the impact of the RF connector on the ERL analysis of the cable assembly and mated test fixture.
- Discussed the common-to-common return loss values on slide 5.

Presentation #3:

"TBDs Associated with MTF", Sam Kocsis See: <u>https://www.ieee802.org/3/ck/public/adhoc/jan13_21/kocsis_3ck_adhoc_01_011321.pdf</u>

- The analysis on slide 11 uses the long package.
- Discussed the ERL data for QSFP-DD800 on slide 6

Presentation #4:

"Physics based justification on Cp Value Ratification", Karl Bois

See: <u>https://www.ieee802.org/3/ck/public/adhoc/jan13_21/bois_3ck_adhoc_01_011321.pdf</u>

- Discussed the BGA ball height assumptions.
- There was a request for the supporting material that shows the details behind the change recommendation.
- Discussed the BGA ball pitch assumptions in the analysis.

Chair reminded participants of the next ad hoc on 20 January and to watch the email reflector for important announcements.

The ad hoc meeting ended at ~9:00 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
Arthur Marris	Cadence	Cadence
Ayal Shoval	Synopsys	Synopsys
Beth Kochuparambil	Cisco	Cisco
Bill Kirkland	Semtech	Semtech
Brandon Gore	Samtec	Samtec
Bruce Champion	TE Connectivity	TE Connectivity
Champion (Chien Ping) Kao	Cornelis Networks	Cornelis Networks
Chan Chih (David) Chen	Applied Optoelectronics	Applied Optoelectronics
Chris DiMinico	PHY-SI	PHY-SI
Clint Walker	Alphawave IP	Alphawave IP
David Malicoat	Senko	Independent
David Rennie	Synopsys	Synopsys
Enis Akbaba	Maxim Integrated	Maxim Integrated
Frank Chang	Source Photonics	Source Photonics
Gary Nicholl	Cisco	Cisco

Geoff Zhang	Xilinx	Xilinx
Greg LeCheminant	Keysight	Keysight
Howard Heck	Intel	Intel
Istvan BakroNagy	Flex	Flex
James Weaver	Arista	Arista
Jane Lim	Cisco	Cisco
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jennifer Santulli	IEEE SA	IEEE SA
John Calvin	Keysight	Keysight
John Ewen	Marvell	Marvell
John Yurtin	Aptiv	Aptiv
Joshua Kim	Hirose	Hirose
Karl Bois	TE Connectivity	TE Connectivity
Kent Lusted	Intel	Intel
Kumaran Krishnasamy	Broadcom	Broadcom
Liav Ben-Artsi	Marvell	Marvell
Mark Kimber	Semtech	Semtech
Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Marvell	Marvell
Mike Klempa	Amphenol	Amphenol
Mike Li	Intel	Intel

Nathan Tracy	TE Connectivity	TE Connectivity
Patrick Casher	Foxconn Interconnect	Foxconn Interconnect
Paul Brooks	Viavi	Viavi
Phil Sun	Credo	Credo
Piers Dawe	NVIDIA	NVIDIA
Pirooz Tooyserkani	Cisco	Cisco
Rajmohan Hegde	Broadcom	Broadcom
Ray Schmelzer	Wilder Tech	Wilder Tech
Rich Mellitz	Samtec	Samtec
Rick Rabinovich	Keysight	Keysight
Ryan Latchman	Macom	Macom
Sam Kocsis	Amphenol	Amphenol
Scott Sommers	Molex	Molex
SJ Yu	Foxconn Interconnect	Foxconn Interconnect
Stephen Didde	Keysight	Keysight
Steve Sekel	Keysight	Keysight
Steve Trowbridge	Nokia	Nokia
Тао Ни	Marvell	Marvell
Terry Little	Foxconn Interconnect	Foxconn Interconnect
Tom Palkert	Macom/Samtec	Macom/Samtec
Toshiaki Sakai	Socionext	Socionext
Will Miller?	Wilder Tech	Wilder Tech
Xiang He	Huawei	Huawei

Yasuo Hidaka	Credo	Credo
Zvi Rechtman	Mellanox	Mellanox