IEEE P802.3ck Ad Hoc meeting – April 28, 2021

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- Approval of the April 21 minutes
- IEEE Patent Policy reminder (see below for links)
- IEEE Copyright reminder (see below for link)
- IEEE Participation Requirements reminder (see below for link)
- Task Force Status
- Preliminary Chief Editor's Report
- 3ck Technical Presentations
 - "PRBS9Q Pattern and PAM4 Symbols Used for Jitter/EOJ Measurement", Mike Li
 - "Measured C2M jitter at Tp0 (pattern generation) and TP1a", Rich Mellitz
 - "Effect of TP0 to TP0v trace loss on dERL and dRpeak and proposal to tighten the dERL specification", Mike Dudek
 - "Improving the CR loss budget", Piers Dawe

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

Meeting began at ~07:00 a.m. Pacific by Kent Lusted.

Meeting began with the agenda presentation:

https://www.ieee802.org/3/ck/public/adhoc/apr28 21/agenda 042821 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 modification or opposition to the agenda. No one responded. The agenda was approved by the ad hoc.

The minutes for the last ad hoc meeting on 21 April 2021 were posted to the ad hoc website. Kent asked if there were corrections or modifications. No one responded. Minutes were approved.

Chair reviewed the slide with the Participation requirements.

Chair asked if anyone participating had not read the copyright slide set – no one responded. Chair showed the IEEE-SA copyright slides.

Chair asked if anyone participating had not read the patent slide set – no one responded. Chair showed the patent policy slides and did the call for Potentially Essential Patents – no one responded.

Chair reviewed the ground rules.

Chair called for members of the press. No one responded.

Agenda Items

P802.3ck Update, Kent Lusted

See: https://www.ieee802.org/3/ck/public/adhoc/apr28 21/agenda 042821 3ck adhoc.pdf

- Draft 2.0 Working Group ballot closed on Sunday, 18 April 2021. The ballot exceeded the required 75% response rate.
- All other presentations are due 29 April 2021 AOE
- Proposed responses are expected to be posted around 7 May 2021 and will be announced over the email reflector.
- Received liaison from OIF. See
 https://www.ieee802.org/3/ck/private/OIF_liaison_letter_IEEE802.3_08Apr21_CEI_cover_wnotes.pdf
- The next comment resolution series was announced over the email reflector. See: https://www.ieee802.org/3/100GEL/email/msg00694.html

Presentation #1:

"PRBS9Q Pattern and PAM4 Symbols Used for Jitter/EOJ Measurement", Mike Li See: https://www.ieee802.org/3/ck/public/21 05/li_3ck_01_0521.pdf

- Discussed if there was an impact of grey coding on the PRBS9 pattern.
- Discussed the choices of edges in the pattern; the pattern polynomial was the same.
- Chair encouraged offline consensus building on the two different edge proposals prior to the comment resolution meeting series.

Presentation #2:

"Measured C2M jitter at Tp0 (pattern generation) and TP1a", Rich Mellitz

See:

https://www.ieee802.org/3/ck/public/adhoc/apr28 21/mellitz 3ck adhoc 01a 042821.pdf

- The values in the table on slide 5 are mUI.
- Discussed the measurement setup and equipment that could be used to measure the waveforms.
- The scope used was a digital communication analyzer equivalent time device.
- The transmitter equalizer settings were different between TPO and TP1a (FFE, CTLE and DFE).
- There was a request to update the presentation to version 01a with the scope and transmitter equalization setting details.

Presentation #3:

"Effect of TPO to TPOv trace loss on dERL and dRpeak and proposal to tighten the dERL specification", Mike Dudek

See: https://www.ieee802.org/3/ck/public/adhoc/apr28 21/dudek 3ck adhoc 01 042821.pdf

- Reviewed the results on slide 13.
- There was a request to study the effect on more channels.

The Vice Chair noted that the comment resolution meeting series will start on 4 May. See Task Force website for the details (https://www.ieee802.org/3/ck/public/21_05/index.html).

He also noted that the initial proposed responses are estimated to be posted to the website around 7 May. Will be announced over the email reflector.

Presentation #4:

"Improving the CR loss budget", Piers Dawe

See: https://www.ieee802.org/3/ck/public/adhoc/apr28 21/dawe 3ck adhoc 01 042821.pdf

- Discussed the use cases proposed in the presentation.
- Discussed the impact of short host traces on C2M eye compliance.

The Vice Chair reminded participants that the comment resolution meeting series will start on 4 May. See Task Force website for the details.

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	Cisco	Cisco
Alan Kinningham	I-PEX	I-PEX
Alex Haser	Molex	Molex
Ali Ghiasi	Ghiasi Quantum/Inphi	Ghiasi Quantum/Inphi
Ashley Moran- IEEE SA	IEEE SA	IEEE SA
Ayal Shoval	Synopsys	Synopsys
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
David Malicoat	Senko	Independent
Ed Ulrichs	Intel	Intel
Enis Akbaba	Maxim Integrated	Maxim Integrated
Eugene Opsasnick	Broadcom	Broadcom
Frank Chang	Source Photonics	Source Photonics
Gary Nicholl	Cisco	Cisco
Geoff Zhang	Xilinx	Xilinx
Greg LeCheminant	Keysight	Keysight
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Hansel Dsilva	Achronix	Achronix
Hessam Mohajeri	Cadence	Cadence
Howard Heck	Intel	Intel
Hsinho Wu	Intel	Intel
Istvan BakroNagy	EFFECT Photonics	EFFECT Photonics
James Weaver	Arista	Arista
Jane Lim	Cisco	Cisco
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jinhua Chen	Luxshare ICT	Luxshare ICT
John Calvin	Keysight	Keysight
John Ewen	Marvell	Marvell
John Yurtin	Aptiv	Aptiv
Joshua Kim	Hirose	Hirose
Kent Lusted	Intel	Intel
Kumaran Krishnasamy	Broadcom	Broadcom
Luis Boluna	Keysight	Keysight
Manoj Sharma	ST Micro	ST Micro
Masashi Shimanouchi	Intel	Intel
Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Marvell	Marvell
Mike Li	Intel	Intel

Nathan Tracy	TE Connectivity	TE Connectivity
Pavel Zivny	Tektronix	Tektronix
Pavel Zivny	Tektronix	Tektronix
Phil Sun	Credo	Credo
Piers Dawe	NVIDIA	NVIDIA
Pirooz Tooyserkani	Cisco	Cisco
Pranav Devalla	Arista	Arista
Rajmohan Hegde	Broadcom	Broadcom
Rich Mellitz	Samtec	Samtec
Rick Rabinovich	Keysight	Keysight
Sam Kocsis	Amphenol	Amphenol
Scott Sommers	Molex	Molex
Scott Walley	Max Linear	Max Linear
SJ Yu	Foxconn Interconnect	Foxconn Interconnect
Stephen Didde	Keysight	Keysight
Steve Sekel	Wilder Tech	Wilder Tech
Tao Hu	Marvell	Marvell
Terry Little	Foxconn Interconnect	Foxconn Interconnect
Tom Palkert	Macom/Samtec	Macom/Samtec
Toshiaki Sakai	Socionext	Socionext
Upen Kareti	Cisco	Cisco
Varun Garg	Keysight	Keysight
Xiaoguang Cheng	Inspur	Inspur