

IEEE P802.3ck Ad Hoc meeting – January 20, 2021

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- Approval of 1/13 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 & Incoming Liaison
- 3ck Technical Presentations* –
 - “Package to Board Linkage Capacitance - Cp”, Liav BenArtsi
 - “What’s the Reasonable Transition Time?”, Mau-Lin Wu
 - “Annex 120G transition time and XTALK parameter values”, Matt Brown
 - “Annex 120G EH/VEC Values”, Matt Brown

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:

https://www.ieee802.org/3/ck/public/adhoc/jan20_21/agenda_012021_3ck_adhoc.pdf

The ad hoc chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. Chair noted that the attendance for the IEEE 802.3 Working Group interim meeting would be via the IEEE Meeting Attendance Tool. Reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Presented the proposed agenda. Chair noted a late presentation from Matt Brown related to Annex 120G transition times and xtalk parameters. Chair asked if there was opposition to hearing the late contribution. No one responded. 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: <http://www.ieee802.org/3/patent.html>). Chair asked if anyone was unfamiliar with any of these IEEE policies. No one responded. There was no response to a “Call for Patents”.

Agenda Items

P802.3ck Update, Beth Kochuparambil

See: https://www.ieee802.org/3/ck/public/adhoc/jan20_21/agenda_012021_3ck_adhoc.pdf

- Draft 1.4 review period closed. Received 154 comments from 16 commenters.
- Reviewed the comment resolution series details. Deadline for presentations is the Friday before a topic is to be discussed.
- 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_Projects_07Jan21.pdf and https://www.ieee802.org/3/private/liaison_docs/OIF/0121_OIF_liaison_IEEE_CEI_Projects_cover_drafts_07Jan21.pdf Chair asked if there was opposition to deferring the response to March 2021. No one responded.
- Vice-Chair reminded participants of the goal of meeting the technical completeness criteria by the end of Draft 1.4 comment resolution.

Presentation #1:

“Package to Board Linkage Capacitance - Cp”, Liav Ben-Artzi

See:

https://www.ieee802.org/3/ck/public/adhoc/jan20_21/benartsi_3ck_adhoc_01_012021.pdf

- The BGA packages used for the analysis ranged from 0.8 to 1.0 mm pitch.
- Discussed various aspects of the model that resulted in the Cp value of 87 fF.
- Discussed the 13mm case.

Chair reminded participants to declare their affiliation in the webex meeting tool or they would be expelled from the call.

Presentation #2:

“What's the Reasonable Transition Time?”, Mau-Lin Wu

See: https://www.ieee802.org/3/ck/public/adhoc/jan20_21/wu_3ck_adhoc_01a_012021.pdf

- Discussed the minimum transition time spec value at TP1a.
- On slide 9, the transition time is for the cross talk calibration not the output value. The author will clarify in an updated version '01a'.

Presentation #3:

“Annex 120G transition time and XTALK parameter values”, Matt Brown

See:

https://www.ieee802.org/3/ck/public/adhoc/jan20_21/brown_3ck_adhoc_02a_012021.pdf

- Reviewed the values/text proposed on slide 7.
- Discussed several approaches of proposing values for the TBDs.
- Author asked commenters to review the contribution to ensure that their comment was correctly captured.

Presentation #4:

“Annex 120G EH/VEC Values”, Matt Brown

See:

https://www.ieee802.org/3/ck/public/adhoc/jan20_21/brown_3ck_adhoc_01_012021.pdf

- On slide 8, the values proposed by Ali Ghiasi should span the TP1 min and TP1 max columns.
- Discussed EH and VEC proposals.
- Discussed the NE and FE case as well as AUI-S and AUI-L.
- Author asked commenters to review the contribution to ensure that their comment was correctly captured.

Chair reminded participants of the IEEE 802.3 Working Group meeting on 21 January.

Chair reminder participants to sign into IMAT.

Chair noted that Friday, 22 January was the deadline for the contributions on topics scheduled for the 26-27 January meetings (Common Mode, conversion loss and C2M VEC/XTALK, transition times).

Chair reminded participants that the comment resolution series would begin on 26 January.

There were questions regarding the attendance requirements for the January 2021 interim meeting series.

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
Ayla Chang	Huawei	Huawei
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
Christian Orlando	IEEE-SA	IEEE-SA
Dave Estes	Spirent	Spirent
Dave Hess	Cord Data	Cord Data
David Law	HPE	HPE
David Malicoat	Senko	Independent

David Ofelt	Juniper	Juniper
David Rennie	Synopsys	Synopsys
Dawei Fan	Huawei	Huawei
Ed Frlan	Semtech	Semtech
Ed Ulrichs	Intel	Intel
Edward Nakamoto	Spirent	Spirent
Erwin Koeppendoerfer	Leoni Kabel GmbH	Leoni Kabel GmbH
Flavio Marques	Furukawa Electric	Furukawa Electric
Frank Chang	Source Photonics	Source Photonics
Fred Dawson	Chemours Canada Company	Chemours Canada Company
Gary Nicholl	Cisco	Cisco
Geoff Zhang	Xilinx	Xilinx
Greg LeCheminant	Keysight	Keysight
Haifei Wang	Huawei	Huawei
Hansel Dsilva	Achronix	Achronix
Hao Ren	Huawei	Huawei
Howard Heck	Intel	Intel
Ichiro Ogura	Petra JP	Petra JP
Istvan BakroNagy	EFFECT Photonics	EFFECT Photonics
James Weaver	Arista	Arista
James Withey	Fluke	Fluke
James Young	Commscope	Commscope

Jane Lim	Cisco	Cisco
Jeff Hutchins	Ranovus	Ranovus
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jerry Pepper	Keysight	Keysight
Jim Theodoras	HG Genuine	HG Genuine
John Abbott	Corning	Corning
John Calvin	Keysight	Keysight
John Deandrea	II-VI/Finisar	II-VI/Finisar
John Ewen	Marvell	Marvell
John Kamino	OFS Optics	OFS Optics
Joshua Kim	Hirose	Hirose
Kae Dube	UNH-IOL	UNH-IOL
Karl Bois	TE Connectivity	TE Connectivity
Kent Lusted	Intel	Intel
Kishore Kota	Inphi	Inphi
Larry McMillan	Western Digital	Western Digital
Leon Bruckman	Huawei	Huawei
Liav Ben-Artzi	Marvell	Marvell
Luisma Torres	KDPOF	KDPOF
Mabud Choudhury	OFS	OFS
Mark Bordogna	Intel	Intel
Mark Nowell	Cisco	Cisco

Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Marvell	Marvell
Mike Klempa	Amphenol	Amphenol
Mike Li	Intel	Intel
Natalie Wienckowski	General Motors Company	General Motors Company
Nathan Tracy	TE Connectivity	TE Connectivity
Olindo Savi	Hubbell	Hubbell
Paul Brooks	Viavi	Viavi
Peter Stassar	Huawei	Huawei
Phil Sun	Credo	Credo
Piers Dawe	NVIDIA	NVIDIA
Pirooz Toyserkani	Cisco	Cisco
Rich Mellitz	Samtec	Samtec
Rick Pimpinella	Panduit	Panduit
Rick Rabinovich	Keysight	Keysight
Robert Aekins	Legrand	Legrand
Robert Lingle	OFS	OFS
Ruoxu Wang	Huawei	Huawei
Ryan Latchman	Macom	Macom
Sam Kocsis	Amphenol	Amphenol
Scott Sommers	Molex	Molex
Shawn Nicholl	Xilinx	Xilinx

Shimon Muller	Axalume	Axalume
SJ Yu	Foxconn Interconnect	Foxconn Interconnect
Stephen Didde	Keysight	Keysight
Steve Carlson	HSD, Bosch, Ethernovia	High-Speed Design
Steve Trowbridge	Nokia	Nokia
Takehiro Hayashi	Hatlab JP	Hatlab JP
Tao Hu	Marvell	Marvell
Ted Sprague	Infinera	Infinera
Terry Little	Foxconn Interconnect	Foxconn Interconnect
Thananya Baldwin	Keysight	Keysight
Tom Issenhuth	Huawei	Issenhuth Consulting
Tom Palkert	Macom/Samtec	Macom/Samtec
Tong Jiang	Huawei	Huawei
Toshiaki Sakai	Socionext	Socionext
Upen Kareti	Cisco	Cisco
Valerie Maguire	The Siemon Company	The Siemon Company
Viet Tran	Keysight	Keysight
Will Miller?	Wilder Tech	Wilder Tech
Xiang He	Huawei	Huawei
Yan Zhuang	Huawei	Huawei
Yang Zhiwei	ZTE	ZTE
Yasuo Hidaka	Credo	Credo
Yi Sun	OFS Optics	OFS Optics

Yong Kim	Axonne	Axonne
Zhiwei Yang	ZTE	ZTE
Zvi Rechtman	Mellanox	Mellanox