IEEE P802.3ck Ad Hoc meeting -

September 9, 2020

Prepared by Beth Kochuparambil

Proposed Agenda:

- Approval of the Agenda
- Approval of the 6/24 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
- 3ck Technical Presentations*
 - COM 2.95 Update Rich Mellitz
 - AC Common Mode Noise and Common Mode to Differential Conversion Exploration -Mau-lin Wu
 - Examination of SNDR and noise in COM Rich Mellitz
 - (late) RX Interference Tolerance Test Parameters Mike Li

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/sept09_20/agenda_090920_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 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: https://www.ieee802.org/3/ck/public/adhoc/sept09_20/agenda_090920_3ck_adhoc.pdf#page=8

- All Draft 1.2 comments were closed. Great work to everyone!!
- Draft 1.3 Task Force review is currently open, closing Wednesday, Sept 23rd
- Presentations that complete the comment are also due Wednesday, Sept 23rd
- Supporting presentations and consensus presentations deadline is TBD
- Comment resolution will begin in the second half of October

Presentation #1:

"COM 2.95 Update", Rich Mellitz See: <u>https://www.ieee802.org/3/ck/public/adhoc/sept09_20/mellitz_3ck_adhoc_01a_090920.pdf</u>

- COM ver2.95 is available on the Tools & Channels webpage
- Typos found in titles on backup slides, Rich will correct and 01a version to be uploaded
- Clarification that "_120G_tp1a_" COM parameter spreadsheet is for C2M ... 01a version to be uploaded with modified file name
- Clarifying questions of C2M application on TP1a and TP0v.

Presentation #2:

"AC Common Mode Noise and Common Mode to Differential Conversion Exploration", Mau-Lin Wu See: <u>https://www.ieee802.org/3/ck/public/adhoc/sept09_20/wu_3ck_adhoc_01_090920.pdf</u>

- Clarifying questions on analysis done
- Discussions of receiver considerations and false fails, and where restrictions are being applied
- Discission of constraining the TX vs channel

Presentation #3:

"Examination of SNDR and noise in COM", Rich Mellitz See: <u>https://www.ieee802.org/3/ck/public/adhoc/sept09_20/mellitz_3ck_adhoc_02_090920.pdf</u>

- Typo noted on slide 14
- Discussion of TXFFE impacts, impacts of location of this added noise factor, and further work to be done.

Presentation #4:

"Np Proposal for 802.3ck RX ITOL", Mike Li See: <u>https://www.ieee802.org/3/ck/public/adhoc/sept09_20/li_3ck_adhoc_01_090920.pdf</u>

- Discussion of impacts of the Np value
- Discussion of the inclusion of the pre-cursor tap count
- Discussion of C2C Np Value

The chair noted that approving the June 24 minutes was unintentionally skipped on the agenda. She intends to seek this approval at the next Ad hoc instead.

Beth noted that the next ad hoc is 9/16; presentation request deadline is Monday AoE and presentations on Tuesday Noon PDT. Her goal is to initiate ERL discussion and C2M jitter discussion, but is subject to change based on requests/presentations submitted.

She also reminded the task force that Draft 1.3 is currently open for task force review.

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
Alex Haser	Molex	Molex
Ali Ghiasi	Ghiasi Quantum/Inphi	Ghiasi Quantum/Inphi
Arthur Marris	Cadence	Cadence
Beth Kochuparambil	Cisco	Cisco
Bill Kirkland	Semtech	Semtech
Brandon Gore	Samtec	Samtec
Bruce Champion	TE Connectivity	TE Connectivity
Champion (Chien Ping) Kao	Intel	Intel
Chan Chih (David) Chen	Applied Optoelectronics	Applied Optoelectronics
Clint Walker	Alphawave IP	Alphawave IP
David Ofelt	Juniper	Juniper
Derek Cassidy	BT	BT
Enis Akbaba	Maxim Integrated	Maxim Integrated
Fang He	Zhaolong Interconnect	Zhaolong Interconnect
Gary Nicholl	Cisco	Cisco
Geoff Zhang	Xilinx	Xilinx
German Feyh	Broadcom	Broadcom
Greg LeCheminant	Keysight	Keysight
Greg McSorley	Amphenol	Amphenol

Hormoz Djahanshahi	Microchip	Microchip
Howard Heck	Intel	Intel
Inho Kim	Marvell	Marvell
Jamal Riani	Inphi	Inphi
James Weaver	Arista	Arista
Jane Lim	Cisco	Cisco
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jeremy Stephens	Microsoft	Microsoft
John Calvin	Keysight	Keysight
John Ewen	Marvell	Marvell
John Yurtin	Aptiv	Aptiv
Joshua Kim	Hirose	Hirose
Kumaran Krishnasamy	Broadcom	Broadcom
Leesa Noujeim	Google	Google
Liav Ben-Artsi	Marvell	Marvell
Marika Immonen	TTM	TTM
Mark Kimber	Semtech	Semtech
Matt Bolig	Inphi	Inphi
Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Marvell	Marvell
Mike Li	Intel	Intel

Nathan Tracy	TE Connectivity	TE Connectivity
Phil Sun	Credo	Credo
Piers Dawe	NVIDIA	NVIDIA
Pirooz Tooyserkani	Cisco	Cisco
Priyank Shukla	Synopsys	Synopsys
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	Keysight	Keysight
Tedros Tsegaye	Innolight	Innolight
Terry Little	Foxconn Interconnect	Foxconn Interconnect
Tom Palkert	Macom/Samtec	Macom/Samtec
Toshiaki Sakai	Socionext	Socionext
Upen Kareti	Cisco	Cisco
Xiang He	Huawei	Huawei
Yasuo Hidaka	Credo	Credo
Zvi Rechtman	Mellanox	Mellanox