IEEE P802.3ck Ad Hoc meeting –
December 16, 2020

Prepared by Kent Lusted

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
- 3ck Technical Presentations* –
  - "Open Technical Issues and Concerns", Matt Brown
  - "COM r3.1 Update for D1.4", Rich Mellitz
  - "Common Mode (CM) Noise: Next Steps", Rich Mellitz
- AC Common Mode Discussion

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

Meeting began at ~07:05 a.m. Pacific by Kent Lusted.

Meeting began with the agenda presentation:
https://www.ieee802.org/3/ck/public/adhoc/dec16_20/agenda_121620_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: 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" on the Ad Hoc.

Agenda Items

P802.3ck Update, Kent Lusted

See: https://www.ieee802.org/3/ck/public/adhoc/dec16_20/agenda_121620_3ck_adhoc.pdf

- Draft 1.4 Task Force review closes 5 January 2021 AOE
- Presentations for comments due 5 January 2021 AOE
- Reviewed the requirements to go to Working Group ballot
- Vice-Chair encouraged participants to focus Draft 1.4 review on technical completeness
- Encouraged building consensus on comments and the suggested remedy
- It was noted that Chris Diminico's contribution (see: https://www.ieee802.org/3/ck/public/adhoc/dec16_20/diminico_3ck_adhoc_01_121620.pdf) was a supporting reference related to the open technical items on cables and fixtures and would not be shown at the meeting..

Presentation #1:

"D1.4 Open Technical Issues and Concerns ", Matt Brown

See: https://www.ieee802.org/3/ck/public/adhoc/dec16_20/brown_3ck_adhoc_01_121620.pdf

- Vice-Chair asked participants to identify any other open technical issues that need to be listed as this contribution will be referenced during comment resolution.
- Noted that Chris Diminico's contribution (see: https://www.ieee802.org/3/ck/public/adhoc/dec16_20/diminico_3ck_adhoc_01_121620.pdf) was a supporting reference related to the open technical items on cables and fixtures

Presentation #2:

" COM r3.1 Update for d1.4 ", Rich Mellitz

See: https://www.ieee802.org/3/ck/public/adhoc/dec16_20/mellitz_3ck_adhoc_02_121620.pdf

- Participants wanting a pre-release version of COM to review are to contact Rich.
- It was agreed that the new COM version would be posted now instead of waiting until the January ad hoc meeting.
- The parameters on slide 3 should only be used for C2M.
- On slide 3, the parameter "T_0", should be "T_O". There was only one parameter called "T_O".
- The parameter AC_CM_RMS has the units of Volts.

Presentation #3:
" Common Mode (CM) Noise: Next Steps ",   Rich Mellitz
See:
https://www.ieee802.org/3/ck/public/adhoc/dec16_20/mellitz_3ck_adhoc_01_121620.pdf
  ● Several clarifying questions were asked and answered.

Common Mode Discussion:
  ● Discussed whether the quality of the measured channels were good enough to use for
    the analysis.
  ● Discussed the values used in Rich's presentation related to accuracy.
  ● Discussed if the amount of common mode could be reduced below the 30mV specified.

Vice-Chair reminded participants that Draft 1.4 was open for review and that comments were
due on 5 January 2021 AOE. The next ad hoc was scheduled for 6 January 2021; details were on
the website and email reflector.

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
Ayal Shoval	Synopsys	Synopsys
Bill Kirkland	Semtech	Semtech
Champion (Chien Ping) Kao	Cornelis Networks	Cornelis Networks
Chan Chih (David) Chen	Applied Optoelectronics	Applied Optoelectronics
Chris DiMinico	PHY-SI	PHY-SI
Dave Hess	Cord Data	Cord Data
David Malicoat	Senko	Independent
Enis Akbaba	Maxim Integrated	Maxim Integrated
Frank Chang	Source Photonics	Source Photonics
Gary Nicholl	Cisco	Cisco
Geoff Zhang	Xilinx	Xilinx
George Zimmerman	ADI, APL Group, Aquantia, BMW, Cisco Systems, Commscope	CME phy consulting
Greg LeCheminant	Keysight	Keysight

Howard Heck	Intel	Intel
Inho Kim	Max Linear	Max Linear
James Weaver	Arista	Arista
Jane Lim	Cisco	Cisco
Jeffery Maki	Juniper	Juniper
Jeremy Stephens	Microsoft	Microsoft
Jijo Paul	Cadence	Cadence
John Calvin	Keysight	Keysight
John Ewen	Marvell	Marvell
Joshua Kim	Hirose	Hirose
Kent Lusted	Intel	Intel
Kumaran Krishnasamy	Broadcom	Broadcom
Liav Ben-Artsi	Marvell	Marvell
Mark Kimber	Semtech	Semtech
Mark Nowell	Cisco	Cisco
Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Nathan Tracy	TE Connectivity	TE Connectivity
Patricia Roder	IEEE	IEEE
Patrick Casher	Foxconn Interconnect	Foxconn Interconnect
Pavel Zivny	Tektronix	Tektronix
Phil Sun	Credo	Credo

Piers Dawe	NVIDIA	NVIDIA
Rajmohan Hegde	Broadcom	Broadcom
Rich Mellitz	Samtec	Samtec
Rick Rabinovich	Keysight	Keysight
Sam Kocsis	Amphenol	Amphenol
Scott Sommers	Molex	Molex
SJ Yu	Foxconn Interconnect	Foxconn Interconnect
Steve Trowbridge	Nokia	Nokia
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