IEEE P802.3ck Ad Hoc meeting –
October 16, 2019

Prepared by Shawn Nicholl

Proposed Agenda:

- Approval of the Agenda
- Approve 2 October 2019 ad hoc minutes
- IEEE Patent Policy reminder:
  - http://www.ieee802.org/3/patent.html
- IEEE Participation Requirements reminder
- Task Force Update
- .3ck Ad Hoc –
  - "Performance Improvements due to FEC Interleaving", Mark Gustlin
  - "C2M Small Group update", Kent Lusted
  - "C2M Link Performance with Short and Long Channels", Ali Ghiasi
  - "C2M TP1a VEC and VEO vs. Whole Link COM Correlation", Mau-Lin Wu
  - "Host to Module Short Channel Issue – Channels Comparison", Mau-Lin Wu

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:
http://www.ieee802.org/3/ck/public/adhoc/oct16_19/agenda_101619_3ck_adhoc_v2.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. No one responded. The agenda was approved by the ad hoc.

The ad hoc chair noted that the October 2, 2019 minutes were posted. He asked if there were corrections or modifications. No one responded. Minutes were approved by the Task Force.

Reminded participants of the IEEE patent policy. He asked if anyone was unfamiliar with the IEEE patent policy. No one responded.

Reminded participants of the IEEE Participation Requirements and showed the slide with the Participation requirements. He asked if anyone was unfamiliar with the IEEE Participation Requirements. No one responded.

Agenda Items

P802.3ck Update, Kent Lusted
See: http://www.ieee802.org/3/ck/public/adhoc/oct16_19/agenda_101619_3ck_adhoc_v2.pdf
- Chair summarized the most pressing action items and reviewed the project timeline
- Chair indicated that the Task Force will meet week of November 11, 2019 in Waikaloa Village, HI USA. P802.3ck is tentatively meeting Monday through Wednesday.
- Presentation requests are due Friday, November 1, 2019 AOE
- Presentations are due 5:00pm PDT, November 5, 2019
- Chair noted that he would be prioritizing presentations in November focused on the three highlighted areas: FEC, C2M, and CR
- Chair reviewed the adopted baseline summary as of the September meeting
- Reminder that Draft 0.3 was available in the private area
    - Please contact the Chair if you need the password to the private area

Presentation #1:
"Performance Improvements due to FEC Interleaving", Mark Gustlin
See: http://www.ieee802.org/3/ck/public/adhoc/oct16_19/gustlin_3ck_adhoc_101619_v2.pdf
- There was a request for more information on the channel. It was noted that measurement of the channel was challenging in a physical system. Discussed other aspects of the channel.
- It was noted that the FEC statistics were captured inside the end-point device.
- Discussed the fit equations used in the analysis.
- It was noted that the counts were FEC symbol errors, not PAM4 symbol errors.
- It was noted that the tests were run at nominal (room) temperature test conditions.

Presentation #2:
"C2M Small Group Update", Kent Lusted
See: http://www.ieee802.org/3/ck/public/adhoc/oct16_19/lusted_3ck_adhoc_101619.pdf
- There were no questions

Presentation #3:
"C2M Link Performance on Short and Long Channels", Ali Ghiasi
See: http://www.ieee802.org/3/ck/public/adhoc/oct16_19/ghiasi_3ck_adhoc_101619_v2.pdf
- Author noted error on slide #2 and #3 with filenames. corrected in updated "v2"
- It was noted that Case I and Case II align to the package combinations in COM.
- Author agreed to double-check the values in the tables on slides 6 and 9. There might be a transcription error.

Presentation #4:
"C2M TP1a VEC and VEO vs. Whole Link COM Correlation", Mau-Lin Wu
See: http://www.ieee802.org/3/ck/public/adhoc/oct16_19/wu_3ck_adhoc_01_101619.pdf
- Discussed the CTLE settings. There was a suggestion to change to the values. It was not apparent that there was consensus on the values to use.

- Slide 9: It was noted that the left-hand graphs show a dot for each test case (i.e. 19 channels x 30 different packages)

Presentation #5:
"Host to Module Short Channel Issue - Channels Comparison", Mau-Lin Wu
See: http://www.ieee802.org/3/ck/public/adhoc/oct16_19/wu_3ck_adhoc_02_101619.pdf
- On slide 9, the author clarification that the right diagram is the Femi channel.
- It was noted that the channels were simulated, not measured.

The ad hoc meeting ended at ~8:50 am Pacific.

List of attendees (captured from Webex tool)

Name	Company
Adam Healey	Broadcom
Alan Kinningham (I-PEX)	Ipex-Us
Alex Haser (Molex)	Molex
Ali Ghiasi	Ghiasi Quantum / Inphi
Brandon Gore	Samtec
Bruce Champion (TE)	TE
Burrell Best (Samtec)	Samtec
Cathy Huang	Intel
Champion Kao	Intel
Daniel Koehler	Morethanip
david malicoat	Senko
David Rennie	Synopsys
Dominic Lapierre (EXFO)	Exfo
Ed Ulrichs	Source Photonics
Greg LeCheminant	Keysight
Hansel Dsilva	Achronix
Howard Heck	Intel
Hsinho Wu	Intel
Ilya	Inphi

Jane Lim	Cisco
jeff slavick	Broadcom
Jeff Twombly	Credo
Jim Weaver	Arista
John Calvin (Keysight)	Keysight
John Ewen	Averasemi
Kapil Shrikhande	Innovium
Kent Lusted	Intel
Lokesh Kabra (Synopsys)	Synopsys
Mark Gustlin	Cisco
Mark Kimber (Semtech)	Semtech
Masashi	Intel
Matt Brown	Huawei
Mau-Lin Wu	Mediatek
Mike Dudek	Marvell
Nathan Tracy	TE
Phil Sun	Credo
Piers	Mellanox
pirooz tooyserkani	Cisco
Rich	Samtec
Rick Rabinovich	Keysight
Rita Horner	Synopsys

Sam Kocsis (Amphenol)	Amphenol-Tcs
Scott Sommers	Molex
Shawn Nicholl (Xilinx)	Xilinx
Steve Baumgartner	Averasemi
Steve Sekel (Keysight)	Keysight
Steve Trowbridge	Nokia
Tao Hu	Marvell
Thomas Palkert (Guest)	MACOM/Molex
Upen Kareti	Cisco
Will	Wilder-Tech
Xiang	Huawei
Xinyuan(Huawei)	Huawei
Yan Zhuang	Huawei
Yang Xu	Commscope
Yasuo Hidaka	Credosemi
Yuchun Lu	Huawei
Zhiwei Yang	ZTE
Zvi Rechtman	Mellanox