IEEE P802.3ck Ad Hoc meeting –
February 27, 2019

Prepared by Kent Lusted / Beth Kochuparambil

Proposed Agenda:

- Approval of the Agenda
- Approve 13 February 2019 ad hoc minutes
- IEEE Patent Policy reminder:
    - http://www.ieee802.org/3/patent.html
- IEEE Participation Requirements reminder
- Logistics for March Plenary meeting
- .3ck Ad Hoc –
    - Karthik - Is a Lumped Cd Model Accurate? UPDATE
    - Mau-lin - COM Sensitivity Analysis of Key Parameters UPDATE
    - Louis - In-Depth Analysis of System Impacts of Interleaved FEC
    - Nathan - 100G OSFP Cable Assembly Insertion Loss Analysis *(late presentation)*

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

Meeting began at ~7:02 a.m. Pacific by Beth Kochuparambil.

Meeting began with the agenda presentation:
http://www.ieee802.org/3/ck/public/adhoc/feb27_19/agenda_022719_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.

Showed the links to the IEEE P802.3ck Task Force ad hoc page and the email reflector.

Presented the proposed agenda and noted that there was a late presentation by Nathan Tracy and asked if there was any opposition to seeing this late presentation. There was no opposition. She asked if there was objection to the entire agenda as written. There was no objection. The agenda was approved by the ad hoc.

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

Agenda Items

P802.3ck Update, Beth Kochuparambil

See: http://www.ieee802.org/3/ck/public/adhoc/feb27_19/agenda_022719_3ck_adhoc.pdf

- Chair noted that the schedule is on track. Anticipates first view of baseline proposals at the March meeting. Expect to adopt baselines in May.
- TF meets the week of March 11, 2019 in Vancouver, BC, Canada. 3ck meetings on Tuesday thru Thursday.
- Notable dates: Friday, March 1, 2019 (Fri) AOE - Presentation Requests due. March 6, 2019 (Wed) 5pm PST - Presentations due
- Participants gave inputs on what information could be helpful for participants to know ahead of the meeting

Presentation #1:

"Is a Lumped Cd model accurate? UPDATE", Karthik Gopalakrishnan

See: http://www.ieee802.org/3/ck/public/adhoc/feb27_19/gopalakrishnan_3ck_adhoc_01_022719.pdf

- Discussion of modifying rise time as a representation of die effects
- Question of how to close this value; chair intends to have straw poll on this topic at plenary

Presentation #2:

"COM Sensitivity Analysis of Key Parameters UPDATE ", Mau-Lin Wu

See: http://www.ieee802.org/3/ck/public/adhoc/feb27_19/wu_3ck_adhoc_01_022719.pdf

- Discussion was had around burst errors and b1_max recommendation
- Requests were made to see tap values, more details around average/standard deviation on slide 9, and inclusion of loss at nyquist on slide 5

Presentation #3:

"In-Depth Analysis of System Impacts of Interleaved FEC", Louis Lu

See: http://www.ieee802.org/3/ck/public/adhoc/feb27_19/lu_3ck_adhoc_01_022719.pdf

- Strong objection was voiced to using the graphs on slide 9 for this LR case/discussion. Slide 9 images reference a presentation for C2M (VERY constrained tap values).
- Discussion of the inclusion of active copper cable as well as symbol muxing was had.

Presentation #4:

"In-Depth Analysis of System Impacts of Interleaved FEC", Nathan Tracy

See: http://www.ieee802.org/3/ck/public/adhoc/feb27_19/tracy_3ck_adhoc_01_022719.pdf

- Discussion followed around concerns of increasing the loss budget, but also cover manufacturing variation
- Comments suggested the use of COM only instead of pure loss budgets
- Effects of typical data center temperatures were not included in this analysis

Chair reminded the group that this is no ad hoc meeting next week. She once more reminded the group of presentation requests (due this Friday, 3/1) should include a brief summary of conclusions/direction of the presentation to assist in organizing the meeting agenda. Safe travels to those headed to OFC!

The ad hoc meeting ended at ~9 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	Affiliation	Employed by
Adam Healey	Broadcom	Broadcom
Alex Haser	Molex	Molex
Alex Levin	Microsoft	Microsoft
Ali Ghiasi	GhiasiQuantum LLC	GhiasiQuantum LLC
Andy Zambell	Amphenol	Amphenol
Arturo Pachon	TE Connectivity	TE Connectivity
Beth Kochuparambil	Cisco	Cisco
Bo Zhang	Inphi	Inphi
Brian Holden	Kandou	Kandou
Champion Kao	Intel	Intel
David Law	HPE	HPE
David Malicoat	Senko	Malicoat Networking Solutions
David Rennie	Synopsys	Synopsys
Dean Wallace	Marvell	Marvell
Dor Manor	Mellanox	Mellanox
Ed Frlan	Semtech	Semtech
Erdem Matoglu	Amphenol	Amphenol
Fernando DeBerardinis	eSilicon	eSilicon
Geoff Zhang	Xilinx	Xilinx
Greg LeCheminant	Keysight	Keysight Technologies

Greg McSorley	Amphenol	Amphenol
Howard Heck	Intel	Intel
Hsinho Wu	Intel	Intel
Ilya Lyubumirshky	Inphi	Inphi
Inho Kim	Marvell	Marvell
Jacky Chang	HPE	HPE
Jane Lim	Cisco	Cisco
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jia Long (Tony) Shuai	Huawei	Huawei
John Ewen	Globalfoundries	Globalfoundries
Karthik Gopalakrishnan	Inphi	Inphi
Ken Jackson	Sumitomo	Sumitomo
Kumaran Krishnasamy	Broadcom	Broadcom
Linda Shields	TE Connectivity	TE Connectivity
Margaret	Cadence	Cadence
Marika Immonen	TTM	TTM
Masashi Shimanouchi	Intel	Intel
Matt Brown	Macom	Macom
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Cavium	Cavium
Mike Klempa	UNH-IOL	UNH-IOL
Mike Sluyski	Acacia	Acacia

Nathan Tracy	TE Connectivity	TE Connectivity
Pete Anslow	Ciena	Ciena
Phil Sun	Credo	Credo
Phong Pham	US Conec	US Conec
Piers Dawe	Mellanox	Mellanox
Raymond Nering	Cisco	Cisco
Rich Mellitz	Samtec	Samtec
Rick Rabinovich	Keysight	IXIA
Rita Horner	Synopsys	Synopsys
Scott Sommers	Molex	Molex
Shimon Muller	Axalume	Axalume
Stephen Didde	Keysight	Keysight
Steve Sekel	Keysight	Keysight
Takeshi Nishimura	Yamaichi Electronics, USA	Yamaichi Electronics, USA
Tao Hu	Marvell	Marvell
Tom Palkert	Molex/Macom	Molex/Macom
Upen Kareti	Cisco	Cisco
Xiang He	Huawei	Huawei
Yan Zhuang	Huawei	Huawei
Yasuo Hidaka	Credo	Credo
Yuchun(Louis) Lu	Huawei	Huawei
Yue Xu	Infinera	Infinera

Zhiwei Yang	ZTE	ZTE
Zvi Rechtman	Mellanox	Mellanox