IEEE P802.3ck Telephonic Interim meeting –
May 6, 2020

Prepared by Kent Lusted and Beth Kochuparambil

Proposed Agenda:

- Approval of the Agenda
- IEEE Patent Policy reminder:
    - http://www.ieee802.org/3/patent.html
- IEEE Copyright reminder
    - https://standards.ieee.org/ipr/index.html
- IEEE Participation Requirements reminder
- Ground Rules and operations reminder
- Next Steps for 3ck
- Comment Resolution
    - Logic
        - FEC Histograms: #42, gustlin_3ck_01_0320
        - max_wait_timer (TBD): #18
        - mdio: #25, slavick_3ck_02_0320, 7
        - training: #10247
- Liaison Response
    - 162D - Annex contents: #150
    - 162
        - FIR taps: #57, ran_3ck_04_0320
        - Quadrature jitter: #10252
        - CA remove CDRL/DCIL/CMRL: #10079
    - 163
        - TX: #58, ran_3ck_01_0320
        - Channel: #39
    - 120G
        - EO Test Method Extra noise source: #141, 10155
        - Module output far-end ISI: #10144
    - CC - RX jitter tolerance: #33, 36
    - 120F
        - AC-coupling: #34
        - TX SNDR: #151
        - TX vfmin: #70
        - TX EQ control: #59, ran_3ck_02_0320
        - C2C control registers: #82
        - TX c(-3): #144, sun_3ck_01_0320
        - RX RIT: #78, 156
    - CC - RX CM voltage tolerance: #37, 38
    - 120G
        - Module output swing: 60, ran_3ck_03_0320
        - RLCD: #119, 125, 124

- EO Test Method Scope noise: #142
- Host input TP4 CTF: #116, 117
- Module output far-end EH: #100
- Module output far-end ESMW: #99
- Module output near-end ESMW: #97
- Module output near-end EH: #98
- Host input far-end ESMW: :#101
- Host input far-end EW: #102
- Host input far-end: #103
- Module input ESMW: #104
- Module input EH: #105
- Module input EW: #106
  - 162 (LATE): #161, 162, 163, 164

Presentations posted at: http://www.ieee802.org/3/ck/public/20_03/index.html

Meeting began at ~07:00 a.m. Pacific by Beth Kochuparambil.

Meeting began with the agenda presentation:
http://www.ieee802.org/3/ck/public/20_03/agenda_3ck_08a_0320.pdf

The 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Presented the proposed agenda noting that comments #73 and 77 (and associated presentations) were withdrawn and comment #82 was moved to later in the agenda. Chair asked if there were additional modifications to the agenda.

Motion #1:
Move to approve the agenda.
M: Mark Gustlin
S: Howard Heck
Motion passed by voice without opposition

Motion #2:
Move to approve the posted minutes for the
3/18, 3/25, 3/30, 4/1, 4/8, 4/22, & 4/29 Telephonic Interims.
M: Nathan Tracy
S: Rich Mellitz

Procedural (>=50%)
Motion passed by unanimous consent

Chair reminded participants of the IEEE patent policy. She asked if anyone was unfamiliar with the IEEE patent policy. (See: http://www.ieee802.org/3/patent.html) No one responded. Chair made the call for patents. No one responded.

Reminded participants of the IEEE copyright policy. She asked if anyone was unfamiliar with the copyright policy. (See: https://standards.ieee.org/ipr/index.html) No one responded.

Reminded participants of the IEEE Participation Requirements and showed the slide with the Participation requirements. She asked people to leave the call if unwilling to abide by this policy.

Chair reviewed the expectations and ground rules for the telephonic interim meetings.

Agenda Items

P802.3ck Update, Beth Kochuparambil
See: http://www.ieee802.org/3/ck/public/20_03/agenda_3ck_08a_0320.pdf
- Chair reviewed the ad hoc schedule. The dates for the next telephonic interims have not been announced yet.
- There was a request for a longer review period on Draft 1.2.

Comment resolution began.

Chair noted that a presentation related to comment #42 was submitted by the clause editor to expand on the resolution to the comment. (see: http://www.ieee802.org/3/ck/public/20_03/gustlin_3ck_01_0320.pdf) Discussed making the registers mandatory vs. optional.

Straw Poll #1: (direction check for max_wait_timer, comment 18)
I would support a max_wait_timer value as follows (pick one)
A: 6 s
B: 9 s
C: 12 s
D: 15 s
→ A: 5   B: 8   C: 17   D: 5

Straw Poll #2: (max_wait_timer)

Presentation #1:
"Supporting Material for Comment #25", Jeff Slavick
See: http://www.ieee802.org/3/ck/public/20_03/slavick_3ck_02_0320.pdf

Chair noted that a presentation was received, but not yet posted to help facilitate comment #10247 closure. (see: http://www.ieee802.org/3/ck/public/20_03/heck_3ck_02_0320.pdf) She asked if anyone was opposed to seeing it, no one objected.

Task for took break from comment resolution to discuss the OIF Liaison response.

Chair noted that OIF sent a liaison with draft specifications of OIF-112G-VSR and OIF-112G-LR. Files were posted to the private area (see: http://www.ieee802.org/3/minutes/may20/incoming/0520_OIF_liaison_IEEE_CEI-112G-VSR_and_CEI-112G-LR_13Apr2020.pdf and http://www.ieee802.org/3/private/liaison_docs/OIF/0520_OIF_liaison_IEEE_CEI-112G_13Apr2020_with cover.pdf). Chair displayed the proposed response to OIF. (See: http://www.ieee802.org/3/ck/public/20_03/Liaison_toOIF_May2020b.pdf) Changes were made and saved as http://www.ieee802.org/3/ck/public/20_03/Liaison_toOIF_May2020c.pdf

Motion #3:
Move that the IEEE P802.3ck Task Force approve Liaison_toOIF_May2020c.pdf with editorial license granted to the WG Chair (or his appointed agent) as liaison communication from the IEEE 802.3 WG to OIF.
M: Nathan Tracy
S: Tom Palkert
Technical (>=75%)
Motion passes by unanimous consent

Comment resolution resumed.

Presentation #2:
" Adding c(+2) Coefficient in Tx Equalizer ", Adee Ran
See: http://www.ieee802.org/3/ck/public/20_03/ran_3ck_04a_0320.pdf
   ● Adee Ran noted that he had an updated version of 04 with a date change and changes to the backup material. Chair asked if there was opposition to seeing the updated 04a presentation. No one responded.

- Discussed the tradeoffs of the proposal.
- There was a request for more supporting data that shows the benefit.

Straw Poll #3: (CR: C(+2) coefficient)
> *For use of closing comment #57. Details in the comment database.*
> *Yes: 10   No: 17*

Adee Ran withdrew comment #10252.

Presentation #3:
"Enabling DC Coupled Channels", Adee Ran
See: http://www.ieee802.org/3/ck/public/20_03/ran_3ck_01a_0320.pdf
- Adee Ran noted that he had an updated version of 01a with changes to slides 4 and 8. No one responded.
- Discussed some parameters in the proposal, include the maximum DC common-mode voltage

Piers Dawe withdrew comment #10155.

Chair noted that she received a notice regarding a potential error in closed comment #69 related to the value of Av. The editorial team reviewed and agreed. Chair asked if there was objection to opening the comment for the purpose of correcting the value to Av=0.413. No one responded. The response was updated.

Comment resolution ended with 35 comments (including 4 late comments) remaining open.

Motion #4:
Move to:
- Generate Draft 1.2 from Draft 1.1 and closed comments
- Re-submit open comments against Draft 1.1 to Draft 1.2
- Initiate third Task Force review
M: Matt Brown
S: Phil Sun
Technical (>=75%)

During the discussion of motion #4, the chair noted she would again do the mechanics of resubmitting the comments, but will not be directing any ad hoc conversations around them. However, she requested commenters to evaluate if their re-submitted comment is superseded with a new comment or if it is overtaken by events or withdraw if it is no longer relevant.

Motion #5:
Move to amend motion #4 to read "Initiate third Task Force review for 30 days"
M: Adee Ran
S: Rich Mellitz

Chair noted that the meeting would continue past the announced finish time in order to close the motions.

Discussed incorporating the change from motion #5 in motion #4. Adee Ran and Rich Mellitz withdrew motion #5.

Motion #4:
Move to:
- Generate Draft 1.2 from Draft 1.1 and closed comments
- Re-submit open comments against Draft 1.1 to Draft 1.2
- Initiate third Task Force review with a 30 day review

M: Matt Brown
S: Phil Sun
Technical (>=75%)
motion passed by unanimous consent.

Chair noted that there was no meeting next week. The ad hoc schedule is posted on the website. Chair encouraged offline consensus building.

Motion #6:
Move to adjourn.
M: Rich Mellitz
S: Mike Dudek
Procedural (>=50%)
motion passed by unanimous consent

The telephonic interim ended at ~10:05 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
Beth Kochuparambil	Cisco	Cisco
Biman Chattopadhyay	Synopsys	Synopsys
Brandon Gore	Samtec	Samtec
Bruce Champion	TE Connectivity	TE Connectivity
Champion Kao	Intel	Intel
Chris DiMinico	PHY-SI	PHY-SI
Clint Walker	Alphawave IP	Alphawave IP
David Malicoat	Senko	Independent
David Ofelt	Juniper	Juniper
Ed Frlan	Semtech	Semtech
Frank Chang	Source Photonics	Source Photonics
Gary Nicholl	Cisco	Cisco
Geoff Zhang	Xilinx	Xilinx
George Luk	Credo	Credo
Greg LeCheminant	Keysight	Keysight Technologies

Greg McSorley	Amphenol	Amphenol
Hansel Dsilva	Achronix	Achronix
Hormoz Djahanshahi	Microchip	Microchip
Howard Heck	Intel	Intel
Inho Kim	Marvell	Marvell
James Weaver	Arista	Arista
Jane Lim	Cisco	Cisco
Jeff Hutchins	Ranovus	Ranovus
Jeff Slavick	Broadcom	Broadcom
Jeffery Maki	Juniper	Juniper
Jeremy Stephens	Microsoft	Microsoft
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 Gustlin	Cisco	Cisco
Mark Kimber	Semtech	Semtech
Matt Brown	Huawei	Huawei
Mau-Lin Wu	Mediatek	Mediatek
Mike Dudek	Marvell	Marvell
Mike Klempa	UNH-IOL	UNH-IOL

Mike Li	Intel	Intel
Nathan Tracy	TE Connectivity	TE Connectivity
Nelson Murga	Keysight	Keysight
Olindo Savi	?	?
Patrick Casher	Foxconn Interconnect Technology	Foxconn Interconnect Technology
Phil Sun	Credo	Credo
Piers Dawe	Mellanox	Mellanox
Pirooz Tooyserkani	Cisco	Cisco
Priyank Shukla	Synopsys	Synopsys
Qing Xu	Ranovus	Ranovus
Rich Mellitz	Samtec	Samtec
Rick Rabinovich	Keysight	Keysight
Sam Kocsis	Amphenol	Amphenol
Scott Sommers	Molex	Molex
Shawn Nicholl	Xilinx	Xilinx
Stephen Didde	Keysight	Keysight
Steve Sekel	Keysight	Keysight
Steve Trowbridge	Nokia	Nokia
Tao Hu	Marvell	Marvell
Terry Little	Foxconn Interconnect Technology	Foxconn Interconnect Technology
Tom Palkert	Molex/Macom	Molex/Macom
Toshiaki Sakai	Socionext	Socionext

Xiang He	Huawei	Huawei
Xinyuan Wang	Huawei	Huawei
Yasuo Hidaka	Credo	Credo
Zhiwei Yang	ZTE	ZTE
Zvi Rechtman	Mellanox	Mellanox