

Agenda for IEEE P802.3ck
100 Gb/s, 200 Gb/s, and 400 Gb/s
Electrical Interfaces Task Force
ad hoc meeting, Jan. 2nd, 2019

Beth Kochuparambil – Chair

Kent Lusted – Vice Chair

Meeting

- Attendance
 - Attendee names and affiliations for these ad hoc meetings will be taken from the WebEx participants list.
 - Please ensure that your full name and employer/affiliation are indicated correctly.
 - If the WebEx participants list does not correctly indicate your name and employer/affiliation, please send an e-mail to the chair: Beth Kochuparambil ([edonnay at cisco dot com](mailto:edonnay@cisco.com)).
- WebEx
 - Please mute your lines if you are not speaking
 - *6 to mute/unmute or click on mute button in the WebEx window
 - Noisy, unmuted lines will be muted by the WebEx organizer
 - *6 to unmute if this happens to you
- Participants wishing to contact the presenter can contact the Chair for their contact info

.3ck Task Force ad hoc communications

- The TF web page is here:
 - <http://www.ieee802.org/3/ck/index.html>
- All e-mail communications are via the SG reflector
 - archive and subscription links are here:
<http://www.ieee802.org/3/100GEL/reflector.html>

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis

- **Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1)**
- **IEEE 802 Working Group membership is by individual; “Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives”. (subclause 4.2.1 “Establishment”, of the IEEE 802 LMSC Working Group Policies and Procedures)**
- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant’s obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**
- **Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 “Chair”, list item x.**

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: <http://www.ieee802.org/devdocs.shtml>)

Proposed agenda

- Approval of the Agenda
- Approve Dec. 19th Ad Hoc Minutes
- IEEE Patent Policy reminder:
 - <http://www.ieee802.org/3/patent.html>
- IEEE Participation Requirements reminder
- Status from a chair's perspective
- Logistics for January interim meeting
- .3ck Technical Presentations –
 - Exploration on the worst case DFE weight of DFE error propagation effect – Louis, Yan, Liang & Lin (30min)
 - Further study on RS(544,514) - symbol interleaving and bit muxing – Xiang & Alex (20min)

*Slides are posted in Ad Hoc area.

- <http://www.ieee802.org/3/ck/public/adhoc/index.html>

Task Force Status

- Current Goal: Approve baselines by May
- Physical Objectives: 4 interfaces at 3 rates

Chip-to-Module (C2M)

- Consensus to avoid continuous link training
- Attempting to re-use “KP FEC”
 - Understanding equalization arch. impacts
- Discussing 12-16 dB for target IL
- **Expecting baseline-like material in January**

Backplane (28 dB @ 26.56 GHz)

- Working towards targeted channels
- Discussing equalization needs
 - DFE-based or FFE-based Ref. RX
 - Understanding FEC implications
- Discussing reference package
- **Expecting baseline-like material March**

Chip-to-Chip (C2C)

- Understanding use cases
- Considering splitting into 2 use cases, based on FEC
- **Expecting baseline material in May**

Cu Cable (2 m)

- Working on test fixtures
- Considering full budget
- **Expecting baseline-line materials in March**

January Goals:

- Progress several deep technical discussions, including, but not limited to:
 - Package
 - C2M target
 - Reference receiver architecture for backplane and Cu Cable
 - FEC tradeoffs
- Present and discuss baseline-like material (C2M)

Potential Baselines

- COM methodology, including
 - Package model
- 100G/200G/400G CR PMD, including
 - test fixtures (relates to C2M AUI)
 - MDI types
 - cable form factors
- 100G/200G/400G KR PMD
- 100G/200G/400G C2C AUI
- 100G/200G/400G C2M AUI (not CR compatible)
- Auto-negotiation for KR and CR
- FEC/PCS

Logistics for January Interim

- 802.3 Interim meets Jan. 14-18th in Long Beach, CA, USA
 - .3ck is meeting Tuesday 1pm – Thursday 6pm (with obvious breaks)
- **Request for presentations are due Friday, January 4th AOE.**
- **Presentations are due by 5pm PDT Wednesday, Jan. 9th.**
 - Late presentations can/should still be submitted, but will be subject to available time on the agenda and Task Force approval.
- For more information and registration, see:
<http://ieee802.org/3/interims/jan19/index.html>
- If you are new to the IEEE standards and need more detail for submitting requests/presentations, see the webpage or email Beth:
<http://www.ieee802.org/3/ck/public/presentproc.html>

Logistics for January Interim

- NOTE: This is ALL subject to change, topics will shift if we have time... plan is *not* to close early Tuesday or Wednesday
 - We may preview straw polls or have discussions within each topic, however plan is to lump straw polls at the end.

| | Tuesday | Wednesday | Thursday |
|---------|-----------------|------------------------|-------------------------|
| AM | | C2M Backplane? | Cu Cable FEC C2C? |
| Lunch | | | |
| PM | Package C2M? | Backplane Cu Cable? | C2C Straw Polls |
| Evening | | | |