Agenda for IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force ad hoc meeting, Dec. 12th, 2018 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).
- 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:
  - <u>http://www.ieee802.org/3/ck/index.html</u>
- All e-mail communications are via the SG reflector
  - archive and subscription links are here: <u>http://www.ieee802.org/3/100GEL/reflector.html</u>

### 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. (<u>https://standards.ieee.org/develop/policies/bylaws/sb\_bylaws.pdf</u> 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 <u>https://standards.ieee.org/develop/policies/bylaws/sb\_bylaws.pdf</u> 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. 5<sup>th</sup> Ad Hoc Minutes
- IEEE Patent Policy reminder:
  - <u>http://www.ieee802.org/3/patent.html</u>
- IEEE Participation Requirements reminder
- Logistics for January interim meeting
- Status from a chair's perspective
- .3ck Technical Presentations
  - COM Simulation for 100G KR/CR Channels Yasuo & Phil (5min)
  - C2M Update Kent (15min)
  - PKG Model for 802.3ck COM Liav & Rich (30min)
  - Investigation of Baseline Reference Receiver Candidates Louis & Yan & Zhieli (35min)
  - \*Slides are posted in Ad Hoc area.
    - <u>http://www.ieee802.org/3/ck/public/adhoc/index.html</u>

# Logistics for January Interim

- 802.3 Interim meets Jan. 14-18<sup>th</sup> in Long Beach, CA, USA
  - .3ck is meeting Tuesday 1pm Thursday 6pm (with obvious breaks)
- Request for presentations are due Friday, January 4<sup>th</sup> AOE.
- Presentations are due by 5pm PDT Wednesday, Jan. 9<sup>th</sup>.
  - Late presentations can/should still be submitted, but will be subject to available time on the agenda and Task Force approval.
- Early Registration closes Next Tuesday (12/18)
- If you are new to the IEEE standards and need more detail for submitting requests/presentations, see the webpage or email Beth: <u>http://www.ieee802.org/3/ck/public/presentproc.html</u>

## Task Force Status

- Current Goal: Approve baselines by May
- Physical Objectives: 4 interfaces at 3 rates
   Unchanged from Dec 5<sup>th</sup> Ad Hoc
   Chip-to-Module (C2M)
   Chip-to-Chip (C2C)
  - Consensus to avoid continuous link training
  - Attempting to re-use "KP FEC"
    - Understanding equalization arch. impacts
  - Discussing 12-16 dB for target IL

#### 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

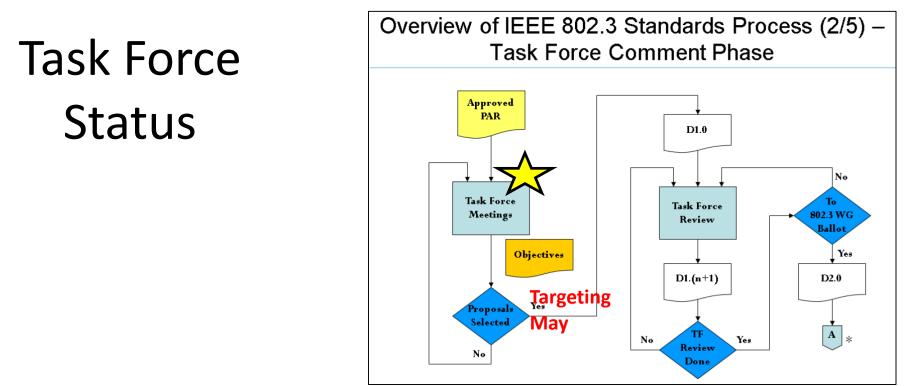
- Understanding use cases
- Considering splitting into 2 use cases, based on FEC

### Cu Cable (2 m)

- Working on test fixtures
- Considering full budget

# **Potential Baselines**

**COM** methodology, including Package model □100G/200G/400G CR PMD, including Lest 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



- January Goals:
  - Progress several deep technical discussion
  - Present and discuss baseline-like material
- This is the Second Ad Hoc before January
  Future Ad Hocs: Dec. 19 & Jan. 2