Agenda and General Information

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force

Robert Lingle, Jr.
OFS

TF Interim Teleconference, 5 November 2020

Meeting

- Webex
  - Please indicate your first name, last name, and affiliation (via Webex name shown or via chat to everyone)
  - 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

Agenda

- Welcome
- Approve agenda
- Attendance
- Approve meeting minutes for October Interim Teleconference
- Reflector and web
- Policies
  - Call for Patents. IEEE Patent Policy reminder: http://www.ieee802.org/3/patent.html
  - IEEE Copyright reminder: https://standards.ieee.org/ipr/index.html
  - IEEE Participant reminder: http://www.ieee802.org/devdocs.shtml
- Contributions
  - "Applications of MM Technology in Alibaba DC Networks" - Chongjin Xie (affiliated with Alibaba Group)
  - "Fiber to machine" - Zuowei Shen (affiliated with Google)
- Chair's discussion & straw polls
- Future meetings
- Adjourn

.3db Motion #1

Move to approve the Agenda for Interim TF Teleconference, Slide 3 of agenda_3db_01_110520.pdf

- M:
- S:
- (Procedural > 50%)

Attendance

- Tutorial Material on attendance tool
  - http://ieee802.org/3/minutes/attendance_procedures.pdf

- Access details
  - Please use http://imat.ieee.org/ to record attendance
  - Session code (provided during meeting):
  - Attendance record based on IMAT only

.3db Motion #2

Move to approve meeting minutes for October 29, 2020 IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force Telephonic Plenary meeting: unapproved_meeting_minutes_3db_01_1020.pdf

- M:
- S:
- (Procedural > 50%)

Reflector and Web

- To subscribe to the IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force reflector, send an email to:

  ListServ@ieee.org

  with the following in the body of the message (do not include “<>”):

  subscribe **stds-802-3-100GSR** ***<yourfirstname> <yourlastname>***

- Send IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force reflector messages to:

  STDS-802-3-100GSR@*listserv.ieee.org*

- Task Force web page URL:

  http://ieee802.org/3/db/index.html

Participants have a duty to inform the IEEE

- Participants shall inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents

- Participants should inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

Early identification of holders of potential Essential Patent Claims is encouraged

Ways to inform IEEE

- **Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or**
- **Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or**
- **Speak up now and respond to this Call for Potentially Essential Patents**

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

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Participants in the IEEE-SA "*individual process*" shall act independently of others, including employers

- The IEEE-SA Standards Board Bylaws require that "*participants in the IEEE standards development individual process shall act based on their qualifications and experience*"
- This means participants:
  - **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
  - **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
  - **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the "*individual process*", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

Contributions

- "Applications of MM Technology in Alibaba DC Networks" - Chongjin Xie (affiliated with Alibaba Group):
  - xie_3db_01_110520.pdf

- "Fiber to machine" - Zuowei Shen (affiliated with Google):
  - shen_3db_01_110520.pdf

Reminder of current reach objectives

8. Define a physical layer specification that supports 100 Gb/s operation over 1 pair of MMF with lengths up to at least 50 m
9. Define a physical layer specification that supports 200 Gb/s operation over 2 pairs of MMF with lengths up to at least 50 m
10. Define a physical layer specification that supports 400 Gb/s operation over 4 pairs of MMF with lengths up to at least 50 m

Chair's discussion of next steps

- Today's input from hyperscale & big cloud market
  - 30m over OM3 & 50m over OM4 are good targets for fiber to the server/machine
  - Having multiple suppliers of practical parts is a key to early success for fiber-to-the-server/machine
  - Do not overburden optics for fiber-to-the-server with *yield hit* or higher relative cost to achieve 100m reach
  - Reach of 80m to 100m is useful to some Big Cloud datacenter architectures
- We know that the traditional users of SR & SR4 have large embedded base of MMF cabling for 100m reach over OM4

Time Horizon	Likely Application	Reach Requirement	Need
Early Adopter	Hyperscale fiber-to-machine, server attachment, TOR elimination	30 to 50m	Tx specs which promote higher yield & low cost in Year One
Second	Big Cloud in China	80 to 100m	Cost effectiveness
Longer-term	Large Enterprise DCs	100m	Meet traditional reach targets used in brownfield cable infrastructures

- Chair has prepared straw polls on reach objectives & linear interface

Future Meetings

- See: http://ieee802.org/3/calendar.html and http://ieee802.org/3/interims/index.html

- P802.3db TF Ad Hoc Teleconferences are currently scheduled:
  - Biweekly on Thursdays at 12 Noon to 2 pm Eastern US (EST/UTC -5): http://www.ieee802.org/3/db/public/adhoc/index.html

- P802.3db TF Plenary Teleconferences:
  - Tuesday, November 10, 12 Noon to 2 pm Eastern US (EST/UTC -5) [next meeting]
    - Available to forge consensus based on results of straw polls
  - Thursday, November 12, 12 Noon to 2 pm Eastern US (EST/UTC -5)
    - Any additions to objectives should be made here

- Please note three 802.3 WG Plenary Meetings in November on web calendar

.3db Motion #3

Move to Adjourn TF Telephonic Interim Meeting

- M:
- S:
- (Procedural > 50%)

Thank You!