

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

Ad Hoc Teleconference, July 9, 2020

Meeting

- Attendance
 - The WebEx tool does not record attendance
 - Please indicate your name and employer/affiliation in an e-mail to the TF recording secretary: Mabud Choudhury (mchoudhury@ofsoptics.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

Proposed Agenda

- Meeting Attendance and Webex
- Approve Agenda
- Reflector and Web
- IEEE
 - 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>
- Discussion of items the TF should address
- Review Draft Liaison Letter IEEE 802.3 to T11.2
- Presentations
 - "MDI Proposals for 100 Gb/s Short Reach 200GBASE SR2 and 400GBASE SR4" - David Malicoat
 - "Very Small Form Factor (VSFF) Fiber Optic Connectors" - Tom Mitcheltree
- Future Meetings

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

IEEE SA COPYRIGHT POLICY

By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

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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

Discussion of items the TF should address

- Discuss whether longer reach than 50m is technically/economically feasible
- Short-reach lower cost PMD plus longer reach PMDs?
- MDI topics
 - Angled MPO? Technical need, market reality, relative cost
 - Smaller form factor duplex connectors?
 - Consider defining optical lane assignments for breakout applications?
- Develop “reference model” for a 100G VCSEL? MATLAB code, analogy with COM?
- See work from Fibre Channel on Tx EQ with training
- Are there options for lower power links?
- Are there options for lower latency links?
- Bidirectional PMDs with two wavelengths? (as in SR4.2)
- Eye safety considerations with 100G VCSEL Tx power?
- Modal noise and mode-partition noise penalties for 100G VCSEL links?
- Can we re-use existing PCS/FEC/PMA? Validation of error statistics
- Consider the length of Reference EQ, esp. for longer reach than 50m

Draft Liaison Letter Review/Update

- Review and update Draft Liaison Letter from IEEE 802.3 to T11.2 “to begin a liaison relationship with T11.2 to foster an exchange of information on 100 Gb/s signaling MMF optical links.”
- [IEEE_802d3db_to_T11d2_draft_liaison_3db_adhoc_070920.pdf](#)
- Motions:
 - TF motion of approve draft liaison letter during July 14 TF virtual interim
 - WG motion to approve draft liaison letter during July 23 virtual closing plenary

Presentations

- July 9 ad hoc:
 - "MDI Proposals for 100 Gb/s Short Reach 200GBASE SR2 and 400GBASE SR4" - David Malicoat (Malicoat Networking Solutions, Senko Advanced Components)
 - [malicoat_3db_adhoc_01_070920.pdf](#)
 - "Very Small Form Factor (VSFF) Fiber Optic Connectors" - Tom Mitcheltree (US Conec)
 - [mitcheltree_3db_adhoc_01_070920.pdf](#)
- July 14 interim or August 6 ad hoc:
 - "C2M Training on 128GFC Links" – Anil Mehta (Broadcom). Based on T11 FC-PI-8, 128 GFC ad hoc presentation

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 (EDT/UTC -4):
<http://www.ieee802.org/3/db/public/adhoc/index.html>
 - Next meeting Thursday, August 6, 12 Noon to 2 pm Eastern US (EDT/UTC -4)
- P802.3db TF Interim Teleconference:
 - Tuesday, July 14, 10 am to 12 noon Eastern US (EDT/UTC -4),
 - During 802.3 WG Plenary Teleconference Weeks (July 13 – July 23)

P802.3db TF Interim Teleconference

- See: <http://ieee802.org/3/calendar.html> and <http://ieee802.org/3/interims/index.html>
- P802.3db TF Interim Teleconference:
 - Tuesday, July 14, 10 am to 12 noon Eastern US (EDT/UTC -4),
 - Please notify the Robert Lingle at rlingle@ofsoptics.com and Mabud Choudhury at mchoudhury@ofsoptics.com addresses if you would like to present at the IEEE P802.3db TF Interim on July 14
 - Please make any presentation **request by 5pm Eastern Thursday, July 9.**
 - Presentations will be **due by 5pm Eastern, Sunday, July 12,** for posting to the web.
 - Please also let Chair, Robert Lingle, know **ASAP** if anyone is considering **straw polls or motions** for the P802.3db TF Interim next week, as these require more planning for a telephonic meeting.
 - Presentations will be scheduled on a 1st come first-serve basis, with schedule-sensitive matters prioritized as needed.

Thank You!