

Agenda and General Information

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

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OFS

Ad Hoc Teleconference, June 25, 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
- Presentations
 - "PCS, FEC and PMA Overview" - Mark Gustlin, Kent Lusted
 - "Angled Multimode Connectors and PAM4 Signaling" - Earl Parsons, James Young
 - "Towards technical feasibility of 100 Gb/s per lane optical PMDs supporting 100 m OM4 MMF" - Jonathan Ingham, Ramana Murty
- 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

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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

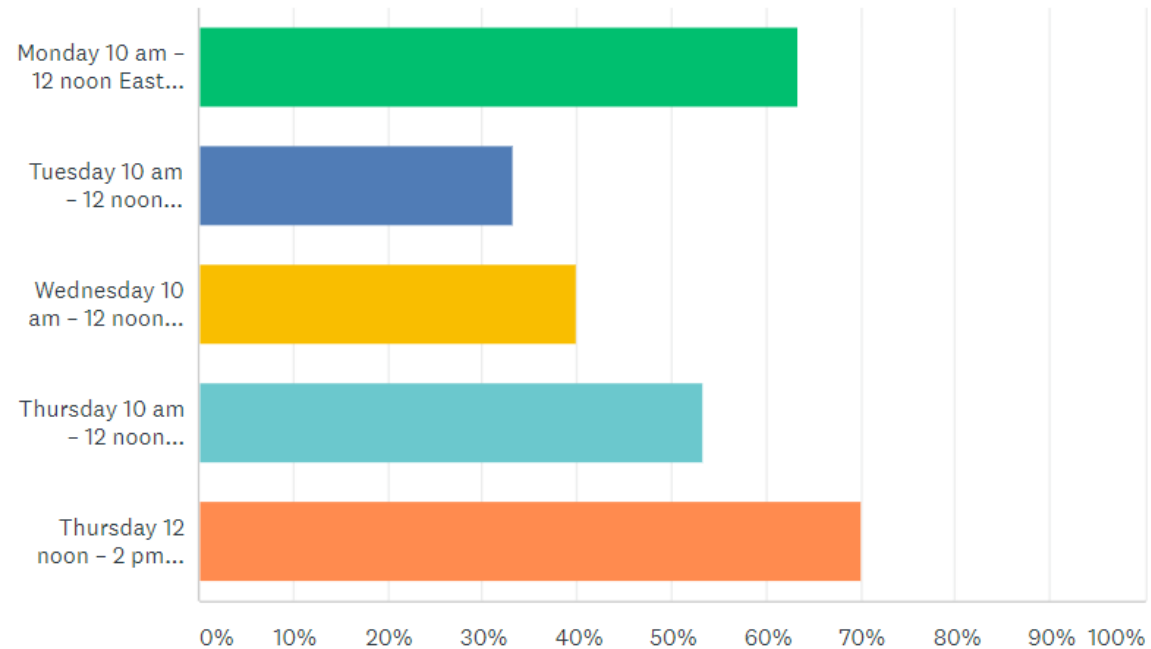
Presentations

- June 25:
 - "PCS, FEC and PMA Overview" Mark Gustlin (Cisco), Kent Lusted (Intel)
 - [gustlin_3db_adhoc_01_062520.pdf](#)
 - "Angled Multimode Connectors and PAM4 Signaling" Earl Parsons (CommScope), James Young (CommScope)
 - [parsons_3db_adhoc_01_062520.pdf](#)
 - "Towards technical feasibility of 100 Gb/s per lane optical PMDs supporting 100 m OM4 MMF" Jonathan Ingham (Broadcom), Ramana Murty (Broadcom)
 - [ingham_3db_adhoc_01_062520.pdf](#)
- July 9:
 - "MDI Proposals for 100 Gb/s Short Reach 200GBASE-SR2 & 400GBASE-SR4" David Malicoat (Malicoat Networking Solutions)

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, July 9, 12 Noon to 2 pm Eastern US (EDT/UTC -4)
- Survey results for alternate meeting times for ad hoc meetings next slide.
- 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)

Poll results – under study



ANSWER CHOICES	RESPONSES
▼ Monday 10 am - 12 noon Eastern Daylight Time (EDT) / 2 pm - 4 pm Universal Time (UTC) time	63.33% 19
▼ Tuesday 10 am - 12 noon Eastern Daylight Time (EDT) / 2 pm - 4 pm Universal Time (UTC) time	33.33% 10
▼ Wednesday 10 am - 12 noon Eastern Daylight Time (EDT) / 2 pm - 4 pm Universal Time (UTC) time	40.00% 12
▼ Thursday 10 am - 12 noon Eastern Daylight Time (EDT) / 2 pm - 4 pm Universal Time (UTC) time	53.33% 16
▼ Thursday 12 noon - 2 pm Eastern Daylight Time (EDT) / 4 pm - 6 pm Universal Time (UTC) time	70.00% 21
Total Respondents: 30	

Thank You!