

Unapproved Minutes
**IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force
Ad Hoc Meeting**

Webex Meeting

June 24, 2021

Prepared by Earl Parsons & Mabud Choudhury

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

Date/Location: Thursday, June 24, 2021. Webex meeting.

Chair: Robert Lingle, Jr (OFS)

Editors: Ramana Murty (Broadcom), Earl Parsons (CommScope)

Recording Secretary: Mabud Choudhury (OFS)

Meeting Participants: Attendance is listed in Appendix A (38 attendees – based on official IMAT attendance list; 41 Webex participants)

Call to order:

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force (TF) Ad Hoc WebEx meeting was convened at 12:02 PM Eastern Daylight Time (EDT/ UTC -4), Thursday, June 24, 2021, by Mabud Choudhury, TF Recording Secretary and Acting Chair for this meeting – as designated by TF Chair Robert Lingle, Jr. via TF reflector message prior to the meeting.

Acting Chair asked attendees to use <http://imat.ieee.org/> to record attendance and provided Session Code for the meeting. Attendance record based on IMAT only.

He instructed attendees to either add their affiliations to their names in the Webex participants list, or else list their name with affiliation in the chat window. [These two instructions were repeated multiple times throughout the meeting].

Acting Chair's Presentation:

Title: "Agenda and General Information"

Presenter: Mabud Choudhury (OFS)

[lingle_3db_adhoc_01_062421.pdf](#)

Mr. Choudhury then proceeded with reviewing the **Agenda** and asked if there any modifications, additions, or deletions? There were none.

12:09 PM: The agenda was approved by the Task Force by unanimous consent. **Approved Agenda:**

- Meeting Attendance and Webex
- Approve Agenda
- Reflector and Web
- Private Area
- 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>
- Editors' Report
- Contributions

- "Minimum SECQ Change to Allow Receiver Sensitivity Margin" - Yi Tang (Cisco), Gary Nicholl (Cisco)
- Future meetings

Reflector and Web: Mr. Choudhury showed the links to the IEEE P802.3db Task Force webpage, ad hoc page, and the email reflector.

TF Private Area: Acting Chair provided Username and Password for TF private area. All draft standards are in private area.

Acting Chair asked if anyone was unfamiliar with any of the IEEE Patent, Copyright and Participation policies, which had been shared via TF reflector prior to the meeting. No one responded.

12:12 PM: Chair reviewed IEEE-SA patent policy slides 6-9 of [linge_3db_adhoc_01_062421.pdf](#) . Acting Chair made a "Call for Essential Patent Claims." There was no response.

IEEE Patent Policy reminder: <http://www.ieee802.org/3/patent.html>

IEEE SA Copyright Policy: Mr. Choudhury provided overview of slide 10 of [linge_3db_adhoc_01_040121.pdf](#) entitled "IEEE SA Copyright Policy"

IEEE Copyright reminder: <https://standards.ieee.org/ipr/index.html>

IEEE SA Participation Policy: Mr. Choudhury showed the participation policy slide 11 of [linge_3db_adhoc_01_040121.pdf](#) .

IEEE Participant reminder: <http://www.ieee802.org/devdocs.shtml>

Editors' Report:

Title: "Editors' Report"

Presenters: Earl Parsons (CommScope) and Ramana Murty (Broadcom Inc.)

[editors_report_3db_adhoc_01_062421.pdf](#)

Editors' Report provided:

- Comment resolution on Draft 1.0 completed
- Draft 1.1 posted and open for comments through Friday June 25th AOE
- Comment review on Draft 1.1 will begin July 1st

Contribution #1:

Title: "Minimum SECQ Change to Allow Receiver Sensitivity Margin"

Presenter: Yi Tang (Cisco) and Gary Nicholl (Cisco)

[tang_3db_adhoc_01a_062421.pdf](#)

(Version 01a posted shortly after meeting corrects slide 4, Proposal, y-axis of top right chart by adding OMA_{outer} (dBm) vs. SECQ (dB) label and minus signs)

Presentation provided:

- Need to improve Rx margin without penalizing Tx
- Proposed raising minimum SECQ to 1.8 dB. Same OMA vs. SECQ curve as in baseline.
- New link budget based on SECQ proposal was illustrated
- Transmit changes: Avg Launch = -4.6 dBm, Min OMA = -2.6 dBm

- Rx changes: min Avg Rx Pow = -6.4 dBm, max SRS = -2 dBm, new Rx sens. Curve

Technical discussion followed including some of these topics:

- Discussion on trade-off between TDECQ and OMA
- Discussion on extinction ratio assumptions and impact on avg launch power.
- Manufacturing distribution and economic feasibility.
- Proposed change on slide 6 for Average launch power, each lane (min) to -4.6 dB (from -5 dB in D1.1) – may not be based on what was presented in contribution.
- OMA_{outer} (dBm) label and minus signs on y axis on slide 4 were accidentally cropped out. Corrected in version 01a after meeting.

Clarifying questions asked and answered.
 Authors welcomed feedback from the group.

Acting Chair presented slide 14 of [linge_3db_adhoc_01_062421.pdf](#) Contributions required to resolve TBDs:

- Complete & technically sound baseline was presented in December by Ramana.
- TBDs in the draft were based on interest in making different trade-offs between relative costs of Tx & Rx.
- Contributions & consensus building are required to resolve the TBDs. TF discussion on 5/27 resulted in planned contributions below.
- The TF can default to the original proposals from December, if needed.

TBD	Owner	Date
Center wavelength	Dave Lewis	24-Jun
TDECQ	Piers Dawe	July
# taps on the reference equalizer	Piers Dawe	July
Stressed receiver sensitivity (OMA outer), each lane (max)	Yi Tang	10-Jun
Over/undershoot	Ramana Murty	July
TDECQ calculation method	Ali, Greg	July
Constraints on tap coefficients	Piers Dawe	July?

Future meetings:

- See: <http://iee802.org/3/calendar.html> and <http://iee802.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.iee802.org/3/db/public/adhoc/index.html>
 - Next Ad Hoc meeting: **Thursday, August 5, 2021, 12 Noon to 2 pm Eastern Daylight US (EDT/UTC -4)**
 - Ad hoc meetings will be converted to TF interims when TF business requires.
- TF Interim and Plenary Meetings:
 - On TF interim & plenary teleconferences, only 802.3 voters may vote on TF motions.
 - Next TF Interim meeting: **Thursday, July 1, 2021, 12 Noon to 3 pm Eastern Daylight US (EDT/UTC -4)**

- Next TF Plenary meeting: **Monday, July 19, 2021, 12 Noon to 3 pm Eastern Daylight US (EDT/UTC -4)**
- July IEEE 802.3 WG Plenary session will be virtual, 12-15 & 19-22 July 2021.
 - **Remember to Register** (\$50 before June 30th, \$75 after)

At 1:02 PM Robert Lingle, Jr. joined the meeting as Chair.

The Task Force Ad Hoc meeting was adjourned at 1:05 PM EDT/ UTC -4, Thursday, June 24, 2021.

Next Meeting:

Scheduled P802.3db TF Interim Webex meeting for Thursday, July 1, 2021, 12 Noon to 3 pm Eastern US (EDT/UTC -4).

Appendix A: Attendance List IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force WebEx Ad Hoc Meeting

38 individuals attended (IMAT based) on Thursday, 24 June 2021, 12:02 PM – 1:05 PM EDT/UTC -4

	Name	Employer	Affiliation
1	Abbott, John	Corning Incorporated	Corning Incorporated
2	Bruckman, Leon	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
3	Calvin, John	Keysight Technologies	Keysight Technologies
4	Chang, Yongmao	Inphi Corporation	Source Photonics
5	Chen, Chan	Applied Optoelectronics, Inc.	Applied Optoelectronics, Inc.
6	Choudhury, Mabud	OFS	OFS
7	Dawe, Piers J G	NVIDIA	Nvidia
8	Didde, Stephen	Keysight Technologies	Keysight Technologies
9	Dudek, Michael	Marvell	Marvell
10	Ferretti, Vincent	Corning Incorporated	Corning Incorporated
11	Ghiasi, Ali	Ghiasi Quantum LLC	Ghiasi Quantum LLC, Marvel
12	Hu, Kangmin	Innogrit	Innogrit
13	Kamino, John	OFS	OFS
14	Kimber, Eric	Semtech Ltd	Semtech Ltd
15	King, Roger	TRUMPF Photonic Components GmbH	TRUMPF Photonic Components GmbH
16	Klempa, Michael	University of New Hampshire InterOperability Laboratory (UNH-IOL)	Amphenol Corporation
17	Le Cheminant, Greg	Keysight Technologies	Keysight Technologies
18	Lewis, David	Lumentum Inc.	Lumentum Inc.
19	Lin, Youxi	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
20	Lingle, Robert	OFS	OFS
21	Liu, Karen	Nubis Communications	Lightwave Logic
22	Malicoat, David	Malicoat Networking Solutions	Malicoat Networking Solutions; SENKO Advanced Components
23	Murty, Ramana	Broadcom Inc.	Broadcom Corporation
24	Nicholl, Gary	Cisco Systems, Inc.	Cisco Systems, Inc.
25	Parsons, Earl	CommScope, Inc.	CommScope, Inc.
26	Pimpinella, Rick	Panduit Corp.	Panduit Corp.
27	Quan, Yu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
28	She, Qingya	Fujitsu Network Communications	Fujitsu Network Communications
29	Shubochkin, Roman	OFS	OFS
30	Son, Yung Sung	Optomind Inc	Optomind Inc
31	Sorbara, Massimo	GLOBALFOUNDRIES	GLOBALFOUNDRIES
32	Sun, Yi	OFS	OFS
33	Tang, Yi	Cisco Systems, Inc.	Cisco Systems, Inc.
34	Thompson, lance	II-VI	Finisar Corporation
35	Toyserkani, Pirooz	Cisco Systems, Inc.	Cisco Systems, Inc.
36	Ulrichs, Ed	Intel Corporation	Intel Corporation
37	Wang, Ruoxu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd
38	Young, James	CommScope, Inc.	CommScope