IEEE 802 July 2022

IEEE 802.3 Ethernet WG Closing Plenary 14 July 2022

IEEE P802.3df 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Force Closing Report



IEEE P802.3df Task Force Project information

Organization

- John D'Ambrosia, Chair, IEEE P802.3df Task Force
- Mark Nowell, Vice-Chair, IEEE P802.3df Task Force, Optics Track Chair
- Matt Brown, Chief Editor
- Mark Gustlin, Architecture & Logic Track Chair
- Kent Lusted, Electrical Track Chair

Task force web and reflector information:

- Home page: https://www.ieee802.org/3/df/index.html
- Reflector Info https://www.ieee802.org/3/df/reflector.html
 - TF Reflector: stds-802-3-b400g@listserv@ieee.org
 - Logic Reflector: stds-802-3-b400g-logic@listserv@ieee.org
 - Optical Reflector: stds-802-3-b400g-optx@listserv@ieee.org
 - Electrical Reflector: stds-802-3-b400g-elec@listserv@ieee.org

Project Documentation –

- PAR: https://www.ieee802.org/3/df/proj_doc/IEEE_P802.3df_PAR_11122021.pdf
- CSD: https://mentor.ieee.org/802-ec/dcn/21/ec-21-0306-00-ACSD-p802-3df.pdf
- Objectives: https://www.ieee802.org/3/df/proj_doc/objectives_P802d3df_220317.pdf

P802.3df TF meeting information may be found on:

- Public page: https://www.ieee802.org/3/df/public/index.html
- 802.3 Calendar: https://www.ieee802.org/3/calendar.html
- Ad hoc Page: https://www.ieee802.org/3/df/public/adhoc/index.html

802.3df July Plenary Activities

- Meetings:
 - Tues 10:30 am to 6:00 pm
 - Wed 10:30 am to 6:00 pm
 - Thur 8:00 am to 12:00 pm
- Heard 26 Technical presentations
- Introduced proposed project documentation packages for P802.3df (modified) and P802.3dj
 - P802.3df 400 GbE and 800 GbE Objectives based on 100 Gbps/lane solutions
 - P802.3dj 200 GbE, 400 GbE, 800 GbE, and 1.6 TbE based on 200 Gbps/lane solutions (plus 16 x 100G AUIs)
- Review of contribution by Editorial Team for IEEE P802.3df D0.1
- Considered proposed response to OIF liaison (Response approved by unanimous consent)
- Technical Discussions
 - Strawpoll #2 No objections
 - I would support the signaling rate ranges for 100 Gbps/lane PMDs and interfaces proposed in healey_3df_01a_2207.pdf slides #8, 9, 11, 13, 15.
 - Strawpoll #3 No objections
 - I support adopting the RS/MII, MII Extender/XS, and Time Sync logic baselines per nicholl_3df_01_2207 for 800GbE using 100Gbps/lane signaling

Technical Discussions - Straw Poll #1

- I would support adopting the following for the 800GbE 100G/lane PCS/FEC/PMA baseline:
 - A) 800GbE (8x100G) PCS/FEC/PMA proposal per wang_3df_logic_220623a.pdf (Sped-up Clause 119)
 - B) 800GbE (8x100G) PCS/FEC/PMA proposal per shrikhande_3df_01b_2207.pdf (Parallel Clause 119)
 - C) Need more information
 - D) Abstain
- Results (all)

Response	In Room	Remote	Total
А	10	17	27
В	39	30	69
С	4	9	13
D	11	9	20

Straw poll Retaken by 802.3 voters only (via DVL)

Response	Results	
А	25	
В	49	
С	8	
D	8	

Technical Discussions - Straw Poll #5

- For the 800GbE 10km objective, I would prefer the following approach:
 - Option A: coherent based
 - Option B: IMDD based
 - Option C: need more information
 - Option D: abstain

Response	In Room	Remote	Total
Option A	11	29	40
Option B	6	14	20
Option C	34	27	61
Option D	10	4	14

Task Force Motions

- Approved by Unanimous consent
 - Proposed draft liaison to OIF
 - Signaling rate ranges for 100 Gbps/lane PMDs and interfaces
 - 8-lane MDI for both 800GBASE-DR8 and 800GBASE-DR8-2 optics
 - RS/MII, MII Extender/XS, and Time Sync logic baselines per nicholl_3df_01_2207, slides 6-10, for 800GbE using 100Gbps/lane signaling

WG Motions

Motion	Move that the IEEE P802.3 Working Group approve: • IEEE_802d3_to_OIF_3df_0714_draft.pdf with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to OIF.
Technical (>= 75%)	
Moved by	John D'Ambrosia
Second by	Mark Nowell
Results 802.3 (y/n/a)	

Next Activities

- Sept 2022 Interim Session
- Editorial Team seeking feedback on contributed Draft 0.1, and working to update for Sept Interim meeting

THANK YOU!

