Motions and Straw Polls

IEEE P802.3cw, IEEE P802.3df and P802.3dj Task Force Joint Meeting

May 2023 Interim

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Foreword

- Straw polls related to resolving comments may be found in the associated comment response files.
- This contribution summarizes motions and straw polls not related to comments.
- This contribution is not the official minutes of the meeting.

If there is any discrepancy between this contribution and the meeting minutes, then the minutes take precedence.

15 May 2023

Straw Poll #1

I would support adopting differential PAM4 signaling as the basis for all of the 200 Gbps/lane passive copper cable and backplane PMDs

Y: 80, N: 0, NMI: 5

Note: Backplane objective is subject to Task Force adoption and WG approval

Straw Poll #2

I would support adopting RS(544,514,10) as the only FEC encoding for all of the 200 Gbps/lane passive copper cable and backplane PMDs

Y: 56 , N: 3 , NMI: 24

Note: Backplane objective is subject to Task Force adoption and WG approval

Straw Poll #3

I support a CRU bandwidth and jitter tolerance corner frequency of 4 MHz for all 802.3dj PMD/AUIs operating at KP4 FEC and 4.27 MHz for all 802.3dj with SFEC per SFEC definition in https://www.ieee802.org/3/dj/public/23_03/patra_3dj_01b_2303.pdf (The calculation for CRU BW is based on the following fBaud/26562.5 equation)

Y: 38 , N: 5 , NMI: 13 , A: 30

Straw Poll #4

I would support using lit_3dj_01a_2305 slide 7 as the direction toward a baseline for C2C.

Y: 52 , N: 1 , NMI: 9 , A: 20

Straw Poll #5

I support a CRU bandwidth and jitter tolerance corner frequency of 4 MHz for all 802.3dj PMD/AUIs operating at RS544 FEC (The calculation for CRU BW is based on the following fBaud/26562.5 equation)

Y: 57 , N: 0 , NMI: 6 , A: 17

Straw Poll #6

I support a CRU bandwidth and jitter tolerance corner frequency of X MHz for all 802.3dj with SFEC (inner code FEC) per SFEC definition in https://www.ieee802.org/3/dj/public/23_03/patra_3dj_01b_2303.pdf

A. X=4 MHz (The calculation for CRU BW is based on the following fBaud/28359.38 equation)

B. X=4.27 MHz (The calculation for CRU BW is based on the following fBaud/26562.5 equation)

C. Need more information

D. Abstain.

Results: A: 14, B: 19, C: 13, D: 30

16 May 2023

Straw Poll #7

I would support adopting the backplane objectives for 200GBASE-KR1, 400BASE-KR2, 800GBASE-KR4, and 1.6TBASE-KR8 in mellitz_3dj_01a_2305, slide 13

Y: 87, N: 0, A: 19

choose one

All in the room

Straw Poll #8

I would support adding a 4-codeword interleaving function in 200 Gb/s per lane PMAs used with 200GBASE-R and 400GBASE-R PCS, as proposed in he_3dj_02_2305.

Y: 51 , N: 5 , NMI: 23 , A: 23

Straw Poll #9

If adopting a 4-codeword interleaving function for 200 Gb/s per lane PMA used with 200GBASE-R and 400GBASE-R PCS, I prefer the following method:

A: option 1 (delay half of the PCS lanes) on slides 6 and 7 in he_3dj_02_2305

B: option 2 (convolutional) on slide 8 in he_3dj_02_2305

C: either option 1 or option 2

D: Need more information

E: Abstain

(pick one)

Results: A: 9 , B: 2 , C: 18 , D: 39 , E: 31

Straw Poll #10

I am supportive of the direction of patra 3dj_ 02a_2305 as the baseline Convolutional Interleaver proposal for Inner Code FEC (128,120) for 200GbE/400GbE/800GbE/1.6TbE PCS.

Y: 36 , N: 12 , NMI: 26 , A: 29

17 May 2023

Motion #1

Move to adopt the proposed responses for 802.3cw D2.1 comment resolution in

https://www.ieee802.org/3/cw/comments/D2p1/8023cw_D2p1_comments_bucket1_by_clause.pdf except # 103, 174, 182, 190, 192, 200

M: Tom Issenhuth

S: Matt Brown

Technical (>=75%)

802.3 voters only

Result: motion passed by unanimous consent 8:22 a.m.

Motion #2

Move to adopt the proposed responses for 802.3df D2.0 comment resolution in

https://www.ieee802.org/3/df/comments/D2p0/8023df_D2p0_comments_bucket1_clause.pdf except # 31, 17, 30, 21, 23, 22, 95, 99, 103, 106, 105, 104, 2, 55.

M: Matt Brown

S: Mike Dudek

Technical (>=75%)

802.3 voters only

Result: passed by unanimous consent 8:24 a.m.

Straw Poll #11

I would support patra_3dj_01b_2303 slides 6 to 8, 13, 14, and 20 to 23 as part of the FEC approach for 800GBASE-LR4 with FEC lane rate and convolutional interleaver details to be determined later

Y: 69, N: 0, A: 19

18 May 2023

Motion #3

Move to adopt the PCS, DTE XS, and PHY XS noted on slide #4 of dambrosia_3dj_01a_2305 for all 200 Gb/s per lane signaling based PHYs for 200 GbE, 400 GbE, and 800 GbE

M: Mike Dudek

S: Gary Nicholl

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent. 8:13 a.m.

Motion #4

Move to adopt gustlin_3dj_01b_230206, slides 6-12, as the baseline for the 1.6TbE PCS/FEC

M: Mark Gustlin

S: Adee Ran

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent 8:22 a.m.

Motion #5

Move to:

- Adopt the following backplane objectives for 200GBASE-KR1, 400BASE-KR2, 800GBASE-KR4, and 1.6TBASE-KR8:
  - Define a physical layer specification that supports 200 Gb/s operation over 1 lane over electrical backplanes supporting a die-to-die insertion loss <= 40 dB at 53.125 GHz
  - Define a physical layer specification that supports 400 Gb/s operation over 2 lanes over electrical backplanes supporting a die-to-die insertion loss <= 40 dB at 53.125 GHz
  - Define a physical layer specification that supports 800 Gb/s operation over 4 lanes over electrical backplanes supporting a die-to-die insertion loss <= 40 dB at 53.125 GHz
  - Define a physical layer specification that supports 1.6 Tb/s operation over 8 lanes over electrical backplanes supporting a die-to-die insertion loss <= 40 dB at 53.125 GHz

M: Rich Mellitz

S: Jim Weaver

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent. 8:26 a.m.

Motion #6

Move to:

- Adopt differential PAM4 signaling as the basis for all of the 200 Gbps/lane passive copper cable and backplane PMDs and adopt RS(544,514,10) as the only FEC encoding for all of the 200 Gbps/lane passive copper cable and backplane PMDs

M: Mike Li

S: Ali Ghiasi

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent. 8:30 a.m.

Straw Poll #12

I would support adopting a DER0 value of 2.67e-5 (equivalent to measured BER of 4e-5 with precoding ON) for higher-loss AUIs within a PHY (BER division between C2C and C2M as well as the measurement method to be determined later)

Results (all): Y: 74 , N: 10 , A: 31

Results (802.3 voters only): Y: 63 , N: 11, A: 25

Motion #7

Move to adopt a CRU bandwidth and jitter tolerance corner frequency of 4 MHz for all 802.3dj PMD/AUIs operating at RS544 FEC (The calculation for CRU BW is based on the following fBaud/26562.5)

M: Ali Ghasi

S: Mike Li

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent 10:21 a.m.

Motion #8

Move to:

- adopt a DER0 value of 2.67e-5 (equivalent to measured BER of 4e-5 with precoding ON) as the total allocation for higher-loss AUIs within a PHY (BER division between C2C and C2M as well as the measurement method to be determined later)

M: Adee Ran

S: Kishore Kota

Technical (>=75%) Procedural (>50%)

802.3 voters only

Results: Y: 75, N: 3, A: 20 passed 10:33 a.m.

Motion #9

Move to:

- Adopt patra_3dj_01b_2303 slides 6 to 8, 13, 14, and 20 to 23 as part of the FEC approach for 800GBASE-LR4 with FEC lane rate and convolutional interleaver details to be determined later

M: Roberto Rodes

S: Ali Ghiasi

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent. 10:37 a.m.

Straw Poll #13

I am interested in working towards enabling an inner code FEC bypass approach for 200 G/lambda IMDD optics

A. all single wavelength
B. multi-wavelength 2km
C. none
D. NMI
E. abstain

(chicago rules)

results: A: 76 , B: 61, C: 19, D: 22, E: 11

Straw Poll #14

I support adopting DP-16QAM modulation on a single wavelength as the basis for the following objectives:

- Define a physical layer specification that supports 800 Gb/s operation:
  - over 1 wavelength over a single SMF in each direction with lengths up to at least 10 km
  - over a single SMF in each direction with lengths up to at least 40 km

Y: 75, N: 4, A: 32

Motion #10

Move to:

- adopt DP-16QAM modulation on a single wavelength as the basis for the following objectives:
  - Define a physical layer specification that supports 800 Gb/s operation:
    - over 1 wavelength over a single SMF in each direction with lengths up to at least 10 km
    - over a single SMF in each direction with lengths up to at least 40 km

M: Mark Nowell

S: Matt Brown

Technical (>=75%)

802.3 voters only

Results: passed by unanimous consent 11:30 a.m.

Straw Poll #15

I support 800GBASE-LR1 and 800GBASE-ER1 sharing common logic (PCS/FEC) and optical wavelengths so they can interoperate under defined conditions.

Y: 35, N: 32, NMI: 7, A: 26

Note: see Clause 151.12 for example of interoperate language

Straw Poll #16

I support 800GBASE-LR1 and 800GBASE-ER1 sharing common logic (PCS/FEC)

Y: 49 , N: 19, NMI: 8,   A: 26

Straw Poll #17

I am supportive of the direction of maniloff_3dj_01a_2305 (slides 4-12) as the baseline FEC proposal for the single wavelength 10 km 800Gb/s optical PMD.

Y: 44, N: 13, NMI: 13, A: 34

Straw Poll #18

I would support adopting baselines for 800GBASE-LR1 and 800GBASE-ER1 based on oFEC as proposed in williams_3dj_01a_2305 and nicholl_3dj_01a_2305

Y: 24, N: 38, NMI: 7, A: 36

Motion #11

Move that the P802.3dj Task Force approve:

- IEEE_802d3_to_ITU_3df_2305_draft_redacted.pdf with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ITU-T SG 15.

M: Tom Huber

S: Peter Stassar

Technical (>=75%)

802.3 voters only

Results: Passed by unanimous consent 3:51 p.m.