

Motions and Straw Polls

IEEE 802.3 400GPL Study Group Meeting

Sept 2026 Interim Meeting

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Foreword

- This contribution summarizes motions and straw polls.
- 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.

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Straw Poll #1: (Slido Trial)

No question

Straw Poll #2: (logic architecture)

I would support the starting assumptions for the logic architecture as summarized in slide 9 of nicholl_400GPL_01_2609?

Yes

No

NMI

Results: Y: 72 N: 0 NMI: 10

Straw Poll #3: (AUI rates)

For the PHY types we are defining in this project, I believe we should include AUIs with these rates:

- A. 400G/lane
- B. 400G/lane, 200G/lane
- C. 400G/lane, 200G/lane and 100G/lane
- D. 400G/lane, 200G/lane, 100G/lane and 50G/lane*

*NOTE: 50G/lane option only applies for 400GbE

Results: A: 4 B: 51 C: 32 D: 4

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Straw Poll #4: (Backplane Objective)

I support the addition of a backplane objective to the P802.3dv project.
Exact wording TBD.

Yes

No

Need more information

Results: Y: 83 N: 2 NMI: 8

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Straw Poll #5: (Optical Modulation)

I support PAM4 optical modulation as the basis to develop baselines for the optical objectives:

Yes

No

Need More Information

Results: Y: 82 N: 1 NMI: 3

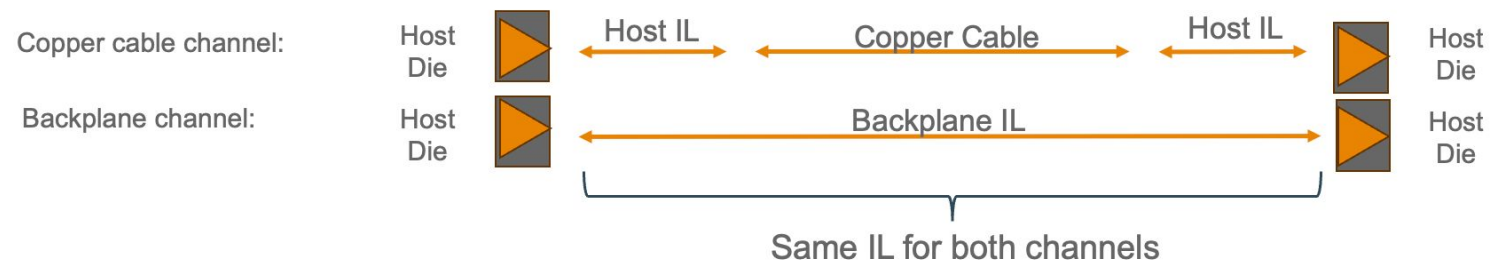
Straw Poll #6: (Backplane Objective Language Form)

I prefer backplane objective language of the form:

- A. Define a single-lane physical layer specification that supports 400 Gb/s operation over electrical backplanes with insertion loss up to at least **X** dB at Nyquist frequency (of **Y** GHz)
- B. Define a single-lane physical layer specification that supports 400 Gb/s operation over electrical backplanes with insertion loss up to at least the insertion loss of a die-to-die channel supporting a 1 meter twin-axial copper cable

NOTE: This straw poll is on the *general direction* of the objective form.

Results: A: 22 B: 72



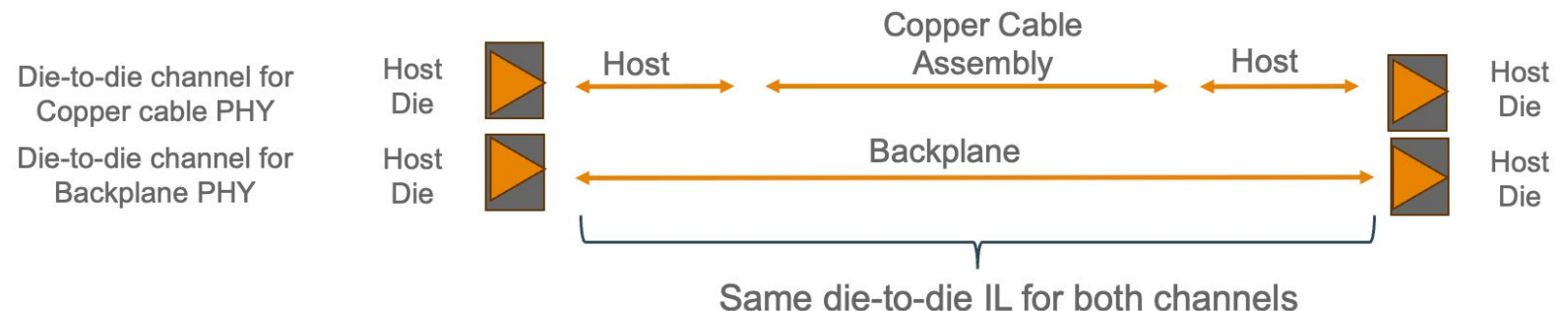
Straw Poll #7: (Backplane Objective Language Form)

I prefer backplane objective language of the form:

- A. Define a single-lane physical layer specification that supports 400 Gb/s operation over electrical backplanes
- B. Define a single-lane physical layer specification that supports 400 Gb/s operation over electrical backplanes with insertion loss up to at least the insertion loss of a die-to-die channel supporting a 1 meter twin-axial copper cable

NOTE: This straw poll is on the *general direction* of the objective form.

Results: A: 32 B: 42



Motion #1: (KR Objective)

Move to adopt the following objectives:

- Define a single-lane physical layer specification that supports 400 Gb/s operation over electrical backplanes
- Define a two-lane physical layer specification that supports 800 Gb/s operation over electrical backplanes
- Define a four-lane physical layer specification that supports 1.6 Tb/s operation over electrical backplanes

M: J. D'Ambrosia

S: N. Swenson

Technical ($\geq 75\%$)

Results: Y: 74 N: 0 A: 6

Motion Passes at 4:29 pm

Straw Polls #8 & 9: Electrical Modulation

I believe PAM6 electrical interface(s) should be standardized in IEEE P802.3dv. Y/N/NMI

I believe PAM4 electrical interface(s) should be standardized in IEEE P802.3dv. Y/N/NMI

Results:

SP8 (PAM6) – Y: 54 N: 17 NMI: 20

SP9 (PAM4) – Y: 85 N: 1 NMI: 6

DISCUSSION

What are your top interests of needed information to help form your opinion on modulation of 400Gbps electrical interfaces (not ordered)

- A. Channel improvements needed for PAM4 vs PAM6
- B. Channel impairments effects on different modulations, including skew
- C. PMA adjustments for PAM6
- D. Spec considerations for PAM6
- E. Comprehensive comparison, including FEC
- F. Power comparison
- G. Parameters of 1m cable assembly & backplane channels
- H. Hard decisions vs soft decisions for PAM6
 - I. Reference Receiver
 - J. Package details
- K. Proposed electrical MDI(s)