

End User PHY Preferences

Hideki Goto, Toyota Olaf Krieger, VW Keld Lang, Porsche

Jim Lawlis, Ford Kirsten Matheus, BMW

Natalie Wienckowski, GM Christoph Wechsler, Audi

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Background

- There were a number of straw polls during the May meeting that had no clear “winner”
- Some of this was due to the fact that participants weren’t sure what was needed
- The purpose of this presentation is to provide feedback from potential end users to help progress the draft

PHY Compatibility

I would prefer the following PHY compatibility for 2.5GBASE-T1:

Meaning I am likely to have applications that would benefit from a PHY that is capable of operation at additional speeds. Please note: We don't give the option of both 1G and 10G compatibility. If possible, the PHY vendors will make devices compatible across all speeds, but they would like to know what compatibility is preferred if this isn't possible.

- a. Selectable operation of 1G and 2.5G – Kirsten , Natalie & Jim
- b. Selectable operation of 2.5G, 5G & 10 G – Olaf, Christoph, Keld & Hideki
- c. 2.5G does not have a need for compatibility with other speeds

Conclusion – Different use cases required different compatibility. It would be best if devices can be compatible both up and down in speed.

Link Segment

It is acceptable to require the use of 24 AWG conductors for link segments longer than 11m:

The current objectives for the project specify operation over a 15m link segment with 4 in-lines. We are also trying to support the usage of 26AWG (0.14mm²) conductors. We collected information on expected usage from VW, Ford and GM in March during the IEEE802 Plenary meeting: [OEM Consolidated Multi-Gig Ethernet Topologies](#). Based on this information, 802.3ch is considering setting the IL limit line to support 26 AWG up to 11 m and supporting 24 AWG (0.20mm²) up to 15 m.

- a. Yes – Hideki, Jim, Olaf, Kirsten, Christoph, Keld & Natalie
- b. No

Conclusion – It is acceptable to select link segment limits that require larger wire gauge for long link segments.

OAM Channel

A Multi-Gig OAM Channel should be included in the PHY:

- a. Always, even if this adds additional bits to the frame – Jim
- b. Only if there are extra bits available based on the modulation scheme / FEC / mapping chosen – Kirsten, Christoph & Natalie
- c. Never, it would not be used – Olaf & Keld