

IEEE P802.3 (IEEE 802.3bx) Revision to IEEE Std 802.3-2012 1st Working Group recirculation ballot comment

Cl 00 SC 0 P1 L1 # 1
Booth, Brad Microsoft

Comment Type ER Comment Status R

Upon reviewing 802.3by, I realized that there is an inconsistency between the definitions in 1.4 and the term used in the standard. For example, 1.4.82 defines CGMII as 100 Gigabit Media Independent Interface and 1.4.79 as 40 Gigabit Media Independent Interface, but in Figure 81-1 the figure shows them as 100 Gb/s Media Independent Interface and 40 Gb/s Media Independent Interface, respectively. The title of Clause 81 also expands on this issue by stating, "Media Independent Interface for 40 Gb/s and 100 Gb/s operation." Definition 1.4.267 defines Media Independent Interface (MII) as being in Clause 22.

The suggested remedy tries to create consistency between the definitions in Clause 1 and the terms used throughout the standard. It also attempts to create consistency with the clause headings.

SuggestedRemedy

Change the title of Clause 81 to read:
Reconciliation Sublayer (RS), 40 Gigabit Media Independent Interface (XLGMII) and 100 Gigabit Media Independent Interface (CGMII)

Search and replace instances of:
100 Gb/s Media with 100 Gigabit Media
100 Gb/s Attachment with 100 Gigabit Attachment
40 Gb/s Media with 40 Gigabit Media
40 Gb/s Attachment with 40 Gigabit Attachment
100 Gb/s Four-Lane Attachment Unit Interface with 100 Gigabit Attachment Unit Interface Over Four-Lanes
100 Gb/s Ten-Lane Attachment Unit Interface with 100 Gigabit Attachment Unit Interface Over Ten-Lanes

Response Response Status C

REJECT.

This comment does not apply to the substantive changes between IEEE P802.3 (IEEE 802.3bx)/D2.1 and IEEE P802.3 (IEEE 802.3bx)/D2.0 or the unsatisfied negative comments from the initial ballot. It is not within the scope of the recirculation ballot.

The current text appears to be inconsistent. It is suggested that this comment be submitted during initial Sponsor ballot.

Cl 80 SC 80.1.2 P79 L45 # 2
Lingle, Robert OFS

Comment Type ER Comment Status R

The stated reach of "up to at least 100 m" fails to acknowledge the 150 m capability of 100GBASE-SR10 on OM4 cabling. Although considered officially an "engineered solution" due to a reduction in allowed connection insertion loss from 1.5 dB to 1.0 dB, this type of special restriction did not impose limiting the stated reach of 40GBASE-ER4 or 100GBASE-ER4 which are rated to 30 km without special engineering, but are stated in this table to support 40 km.

SuggestedRemedy

There are two choices to removing the inequitable handling of stated reaches in this table. The first is preferred.
1. change 100 m to 150 m on line 45.
2. change 40 km to 30 km on lines 27 and 53.

Response Response Status W

REJECT.

This is a restatement of unsatisfied negative comment #45 received during initial Working Group ballot (Draft 2.0). The response to comment #45 follows.

"This topic was discussed in the P802.3ba project after the change was made to increase the reach of 100GBASE-SR10 over OM4 to 150 m. The consensus decision made at that time was to keep the reach in the description of 100GBASE-SR10 at 100 m. Making a change in the description of 100GBASE-SR10 or 100GBASE-ER4 now when there has been no change in the specifications would cause confusion and be counter to the consensus decision of the Task Force and Working Group when the standard was approved."

The response to the Draft 2.0 comment #45 indicates that the topic was discussed by the P802.3ba Task Force and that the consensus of that group is reflected in the content of Table 80-1. No new information has been provided to justify reconsideration of that decision.

The comparison to the treatment of 100GBASE-ER4 may not be appropriate since the model for deployment of inter-office (or similar applications where engineered links are more common) is different from structured cabling within an enterprise or data center.

Cl 80 SC 80.1.2 P 79 L 19 # 3

Lingle, Robert

OFS

Comment Type ER Comment Status R

The stated reach of "up to at least 100 m" fails to acknowledge the 150 m capability of this PHY on OM4 cabling. Although considered officially an "engineered solution" due to a reduction in allowed connection insertion loss from 1.5 dB to 1.0 dB, this type of special restriction did not impose limiting the stated reach of 40GBASE-ER4 or 100GBASE-ER4 which are rated to 30km without special engineering, but are stated in this table to support 40 km.

Suggested Remedy

There are two choices for removing the inequitable handling of stated reaches in this table. The first is preferred.

1. Change 100 m to 150 m on line 19.
2. Change 40 km to 30 km on lines 27 and 53.

Response Response Status W

REJECT.

This is a restatement of unsatisfied negative comment #44 received during initial Working Group ballot (Draft 2.0). The response to comment #44 follows.

"This topic was discussed in the P802.3ba project after the change was made to increase the reach of 40GBASE-SR4 over OM4 to 150 m. The consensus decision made at that time was to keep the reach in the description of 40GBASE-SR4 at 100 m. Making a change in the description of 40GBASE-SR4 or 100GBASE-ER4 now when there has been no change in the specifications would cause confusion and be counter to the consensus decision of the Task Force and Working Group when the standard was approved."

The response to the Draft 2.0 comment #44 indicates that the topic was discussed by the P802.3ba Task Force and that the consensus of that group is reflected in the content of Table 80-1. No new information has been provided to justify reconsideration of that decision.

The comparison to the treatment of 100GBASE-ER4 may not be appropriate since the model for deployment of inter-office (or similar applications where engineered links are more common) is different from structured cabling within an enterprise or data center.