

IEEE 802.3dk D3.0 Bidirectional 100Gb/s Optical Access PHYs Initial Sponsor ballot comments

Cl 135 SC 135.5.7.2 P44 L 24 # I-9

Brown, Matthew

Alphawave Semi

Comment Type TR Comment Status R

The wording on the last sentence is awkward as the exception is on the PMA not the stated requirement.

I would further challenge with this optional (permitted) functionality is worth including in this standard. If it is optional then the receiver cannot count on it and must assume desired performance must be achievable without it. The precoding is conventionally not mandatory on the receiver since the need is dependent on the receiver architecture; and the transmitter precoding state is set based on the need of the receiver. If optional output precoding is retained then some explanation about how it is coordinated between distantly located terminals will be coordinated.

SuggestedRemedy

Change the last sentence to:

"A PMA that is not connected to the service interface of a 100GBASE-BRx PMD shall provide 1/(1+D) mod 4 precoding capability on each output lane. A PMA that is connected to the service interface of a 100GBASE-BRx PMD may provide 1/(1+D) mod 4 precoding capability on each output lane."

Alternately, consider leaving the the base standard text as is.

Response Response Status U

REJECT.

In the base standard text, the optional functionality is for input. The current text in the IEEE P802.3dk draft doesn't change the functionality. The IEEE P802.3dk draft adds an exception for 100GBASE-BRx to the output capability.

For 100GBASE-BRx PHYs, the precoding ability registers are defined in 45.2.1.145a.

The main users are service providers who have control over which PMDs are used, and they can manage this outside of IEEE Std 802.3.

Cl 168 SC 168.11.4.2 P76 L 28 # I-17

Kramer, Glen

Broadcom Corporation

Comment Type TR Comment Status R

PICS F1 and M1 are missing the Value/Comment

SuggestedRemedy

Copy the relevant requirements from specification body

Response Response Status U

REJECT.

IEEE P802.3dk needs to be consistent with existing clauses, such as IEEE Std 802.3 Clause 140, since the 100GBASE-BRx PHY specification references Clause 140.

Cl 168 SC 168.11.4.2 P76 L 42 # I-22

Kramer, Glen

Broadcom Corporation

Comment Type TR Comment Status R

PICS entries F6 and F7 both correspond to a single requirement in text

SuggestedRemedy

Combine both PICS entries into one entry. Make the Value/Comment field read: "Converts the optical signal received from the MDI into a symbol stream for delivery to the PMD service interface using the message PMD:IS_UNITDATA_0.indication"

Response Response Status U

REJECT.

IEEE P802.3dk needs to be consistent with existing clauses, such as IEEE Std 802.3 Clause 140, since the 100GBASE-BRx PHY specification references Clause 140.