

IEEE P802.3cu D3.0 100 Gb/s per wavelength on SMF Initial Sponsor ballot comments

Cl 140 SC 140.6.1 P41 L37 # I-63

Dawe, Piers J G

Mellanox Technologies

Comment Type TR Comment Status R specifications (updated 0929)

100GBASE-DR and 100GBASE-FR1 are expected to be interoperable (whether this standard says so or not). So the 100GBASE-FR1 transmitter must not be weaker than the 100GBASE-DR one. It's not worth making a special case for 0.2 dB that most transmitters can't use anyway, without super-high extinction ratio.

*SuggestedRemedy*

Change 100GBASE-FR1 average launch power (min) from -3.1 to -2.9, same as for 100GBASE-DR. As a consequence, change average receive power (min) from -7.1 to -6.9 dBm.

In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6."

Response Response Status U

REJECT.

A straw poll was taken on the 29th September 2020 IEEE P802.3cu interim meeting:

Straw poll #1:

Do you support changing the average launch power (min) from -3.1 dBm to -2.9 dBm for 100GBASE-FR1.

Y:9, N:9, Abstain: 11

There is no consensus to make the proposed change.

Cl 140 SC 140.6.1 P41 L51 # I-64

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Comment Type TR Comment Status R specifications (updated 0929)

The receiver must be protected from over-emphasised very bad signals as in all other optical PAM4 clauses, 400ZR and 100GBASE-ZR. Over/under-shoot and peak-to-peak power don't exclude all of these (but if you believe they do, the K limit won't hurt you).

*SuggestedRemedy*

Limit TDECQ - 10log10(Ceq) and TECQ - 10log10(Ceq) for 100GBASE-FR1 and 100GBASE-LR1 to 3.4 dB.

As there's now no need to generate such bad signals for Rx stress test or test the receiver against them, in Table 140-7 Conditions of stressed receiver sensitivity test, add limits for SECQ - 10log10(Ceq) (max) of 3.4 dB.

Remove the inserted wording in 140.7.5 and 5th item in list in 140.7.10.

Similarly for 400GBASE-FR4 400GBASE-LR4-6.

Response Response Status U

REJECT.

The comment is proposing values for parameters for that are not currently in Draft D3.0, for 100GBASE-FR1, 100GBASE-LR1, 400GBASE-FR4 and 400GBASE-LR4-6.

The IEEE P802.3cu Task Force reviewed these parameters previously during both task force review and working group ballot, and reached consensus to not include them.

While the comment does not request the addition of these parameters into the draft, that may have been the intention of the commenter.

There is no consensus to make the proposed change.

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Cl 140 SC 140.6.1 P42 L7 # I-65

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Comment Type **TR** Comment Status **R** specifications (updated 0929)

100GBASE-DR and 100GBASE-FR1 are interoperable. So the 100GBASE-FR1 transmitter must not transmit a worse signal than the 100GBASE-DR one.

*SuggestedRemedy*

Limit TECQ -  $10\log_{10}(C_{eq})$  for 100GBASE-FR1 to 3.4 dB.

*Response*

Response Status **U**

REJECT.

The comment is proposing a value for a parameter that is not currently in Draft D3.0, for 100GBASE-FR1.

The IEEE P802.3cu Task Force reviewed this parameter previously during both task force review and working group ballot, and reached consensus to not include it.

While the comment does not request the addition of this parameter into the draft, that may have been the intention of the commenter.

There is no consensus to make the proposed change.