

IEEE P802.3ck D1.1 100/200/400 Gb/s Electrical Interfaces Task Force 2nd Task Force review comments

Cl **120G** SC **120G.4.2** P **232** L **30** # **113**

Ghiasi, Ali

Ghiasi Quantum/Inphi

Comment Type **TR** Comment Status **A** RR DFE taps

DFE tap weights are TBD

SuggestedRemedy

Replace bmax(1)=0.3 and bmax[2-4]=0.1, see ghiasi_3ck_01_0320 supporting presentation

Response Response Status **C**

ACCEPT IN PRINCIPLE.

After taking March 25 Strawpoll #2 and Strawpoll #3, there is consensus to close the comment as follows.

Change bmax(1:4) to {0.4,0.15,0.1,0.1}.

Straw Poll #2

I support setting bmax(1:4) as follows:

A: {0.4,0.15,0.15,0.15}

B: {0.4,0.15,0.1,0.1}

C: leave TBD

Chicago rules.

A: 18, B:17, C:4

Straw Poll #3

I support setting bmax(1:4) as follows:

A: {0.4,0.15,0.15,0.15}

B: {0.4,0.15,0.1,0.1}

Choose one.

A: 12 B: 18

Cl **120G** SC **120G.4.2** P **232** L **32** # **115**

Ghiasi, Ali

Ghiasi Quantum/Inphi

Comment Type **TR** Comment Status **A** RR noise

One sided noise spectral density is TBD

SuggestedRemedy

Replae TBD with $8.2e-9 V^2/GHz$

Response Response Status **C**

ACCEPT IN PRINCIPLE.

Set eta_0 to $4.1e-8$.

Cl **120G** SC **120G.4.2** P **232** L **30** # **140**

Dawe, Piers

Mellanox

Comment Type **TR** Comment Status **A** RR DFE taps

The C2M normalized DFE coefficient magnitude limits need to be chosen carefully so that the reference receiver is not better than, or grossly different to, a range of real receiver implementations. Optical modules probably won't use this classic DFE. This requires separate max and min tap limits. See hidaka_3ck_adhoc_01_021920 for example tap weights found.

SuggestedRemedy

Tap 1 min 0.15 max 0.45

Tap 2 min -0.1 max 0.1

Taps 3, 4 min -0.05 max 0.05

Adjust names of limits and 93A.1 to support separate max and min limits; see another comment, against 162.11.7.

Response Response Status **C**

ACCEPT IN PRINCIPLE.

bmax limits have been approved based on the response to comment #113.

However, there was general agreement that we should consider different values for max and min limit. Further analysis and consensus building is encouraged.

IEEE P802.3ck D1.1 100/200/400 Gb/s Electrical Interfaces Task Force 2nd Task Force review comments

Cl 120F SC 120F.4.1 P 208 L 40 # 157

Li, Mike Intel
 Comment Type TR Comment Status R
 Tr TBD

SuggestedRemedy

Change it to Tr =6.5 ps, which is consistent with CEI-112G-PAM4-MR

Response Response Status C
 REJECT.

This comment was closed on March 18, but reopened on March 25 per March 25 Straw Poll #1.

There is no consensus at this time to implement the suggested remedy. Further analysis and consensus building is underway.

March 25 Straw Poll #1:
 I support reopening comment #157
 yes: 18
 no: 14
 abstain: 13

March 18 Straw poll #4:
 I support closing comment #157 with the suggested remedy.
 Yes: 18
 No: 13
 Abstain: 21

Cl 120G SC 120G.4.2 P 232 L 36 # 10156

Dawe, Piers Mellanox
 Comment Type TR Comment Status R

[Comment resubmitted from Draft 1.0. Subcl. 120G.4.2 - Pg 226 - In 13]

This recipe is a weird combination of the existing C2M measurement method and COM, which is a simulation not a measurement method, for channels not signals, and for backplanes with transmitter training not low power C2M.

SuggestedRemedy

Unless someone can show that it works, change to the CTLE/FFE method as in OIF CEI-112G-VSR.

Response Response Status C
 REJECT.

The methodology specified is consistent with the adopted baseline (DFE not FFE).

The related motion is replicated here:
 November 2019 Motion #6
 Move to adopt slides 5, 7, 8, 12 of sun_3ck_01b_1119 as a C2M baseline, with the following exceptions: ...
 Y:49, N:0, A:5

The comment does not provide evidence to support the proposal in the suggested remedy.

There is no support for the suggested remedy.