

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

Cl **FM** SC **FM** P13 L13 # 3 [REDACTED]
 Marris, Arthur Cadence Design Systems
 Comment Type **E** Comment Status **D** (nc2)
 IEEE Std 802.3cm-2020 and 802.3cq-2002 have now been approved
SuggestedRemedy
 Change 802.3cm-20XX to 802.3cm-2020 and 802.3cq-20XX to 802.3cq-2020 throughout the draft
Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Approval was confirmed in the following announcement.
http://www.ieee802.org/3/email_dialog/msg01004.html
 Implement the suggested remedy.

Cl **120G** SC **120G.1** P217 L20 # 91 [REDACTED]
 Ghiasi, Ali Ghiasi Quantum/Inphi
 Comment Type **TR** Comment Status **D** (nc2)
 Figure 120G-2 covers 100 GbE, then two additional figures 120G-3, and 120G-4 to cover 200 and 400 GbE.
SuggestedRemedy
 The three figures can be combined where the box reads 100GAUI-1, 200GAUIU-2, and 400GAUI-4 then number of connecting line could read 1, 2, or 4.
Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Both the text and figures were purposely kept separate to keep the description clear. However, it is recognized that the same information is repeated three times, once for each rate in the figure and also in the text.
 Merge the figures for the three rates.
 Where appropriate, merge text for the three rates.
 Modify Annex 120F in the same way.
 Implement with editorial license.

Cl **120G** SC **120G.3.1** P221 L20 # 11 [REDACTED]
 Hidaka, Yasuo Credo Semiconductor
 Comment Type **TR** Comment Status **D** VEC/EH/BMAX (nc2)
 As we discussed in ad hoc in hidaka_3ck_adhoc_01_021920, I recommend max 9dB VEC at TP1a with Rx noise of $\eta_0 = 4.1E-8V^2/GHz$.
 In the same presentation, EH (min) and bmax(n) were also provided.
SuggestedRemedy
 Change Table 120G-1 as follows:
 Change the value of vertical eye closure (max) from TBD dB to 9 dB.
 Change the value of eye height, differential (min) from 15 mV to 14mV.
 Change Table 120G-9 as follows:
 Change the value of η_0 from TBD V^2/GHz to $4.1E-8V^2/GHz$.
 Change the value of b_max(1) from TBD to 0.5.
 Change the value of b_max(2) from TBD to 0.15.
 Change the value of b_max(3) from TBD to 0.1.
 Change the value of b_max(4) from TBD to 0.05.
 Alternatively, if a lower value of b_max(1) is preferred, the following is also OK.
 Change Table 120G-1 as follows:
 Change the value of vertical eye closure (max) from TBD dB to 9 dB.
 Change the value of eye height, differential (min) from 15 mV to 13.5mV.
 Change Table 120G-9 as follows:
 Change the value of η_0 from TBD V^2/GHz to $4.1E-8V^2/GHz$.
 Change the value of b_max(1) from TBD to 0.3.
 Change the value of b_max(2) from TBD to 0.2.
 Change the value of b_max(3) from TBD to 0.1.
 Change the value of b_max(4) from TBD to 0.05.
Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 The commenter indicated that no change to EH maximum value is required.
 Resolve using the response to comments #96 for the VEC value, #115 for the η_0 value, and #113 for the bmax values.

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Cl 120G SC 120G.3.1 P 221 L 20 # 154

Dudek, Mike Marvell
 Comment Type T Comment Status D VEC (nc2)

The Vertical Eye Closure has a TBD value, and the appropriate value depends on the parameters in the test methodology table 120G.4.2. I will have a presentation to justify the choices in the proposed change.

SuggestedRemedy

Change the values in table 120G-9 from TBD to
 One sided spectral noise 5e-8
 b1max = 0.4
 b2-bn max=0.15
 Change the VEC in table 120G-1 to 7.5dB.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

[Editor's note: Subclause was changed from 120G to 120G.3.1.]

Resolve using the response to comments #96 for the VEC value, #115 for the eta0 value, and #113 for the bmax values.

Cl 120G SC 120G.4.2 P 232 L 32 # 149

Dawe, Piers Mellanox
 Comment Type TR Comment Status D RR noise (nc2)

For the one-sided noise spectral density, currently TBD V²/GHz, the middle option in hidaka_3ck_adhoc_01_021920 looks promising. However, expressing this as a noise sepctral density may be more clumsy and complicated than necessary.

SuggestedRemedy

Use 4.1e-8 for now.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #115.

Cl 161 SC 161.5.2.6 P 114 L 3 # 23

Slavick, Jeff Broadcom
 Comment Type E Comment Status D (nc2)

In a) and c) the first sentence if is "if" while the second sentence "if" is "If". Seems like the should be the same

SuggestedRemedy

Change them to all be "if"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Since this is a list rather than pseudocode, the first letter of the first word should be capitalized.

Change all to "If".

Cl 162 SC 162.2 P 134 L 10 # 6

Marris, Arthur Cadence Design Systems
 Comment Type E Comment Status D (nc2)

Make Clause 119 a cross reference

SuggestedRemedy

Add cross reference to Clause 119

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Implement the suggested remedy.

Also, change:
 "either Clause 91"
 To
 "either the Clause 91"

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Cl 162 SC 162.9.4 P151 L44 # 8
 Marris, Arthur Cadence Design Systems
 Comment Type E Comment Status D (nc2)
 Make 162A.3 a cross reference
 SuggestedRemedy
 Add cross reference to 162A.3
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Implement the suggested remedy.
 Also, change:
 "The receiver specifications at"
 To:
 "The receiver characteristics at"

Cl 162 SC 162.11.7 P160 L18 # 148
 Dawe, Piers Mellanox
 Comment Type T Comment Status D (nc2)
 This says "DFE floating tap span 40 UI" which is not what was intended. The span of the floating taps in this draft is 40-12 = 28.
 SuggestedRemedy
 Change the name or the number. Adjust 93A.1 if appropriate.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 The name of the variable is somewhat ambiguous. Rather than changing the name or the number, a footnote to explain the variable may be more helpful.
 In Table 93A-1, add a footnote to "DFE floating tap span 40 UI" as follows:
 "N_f is the total span of a DFE with floating taps including both the fixed and floating taps."

Cl 162A SC 162A.5 P241 L13 # 138
 Dawe, Piers Mellanox
 Comment Type T Comment Status D (nc2)
 In Figure 162A-1, TP4 and TP5 are shown aligned with each other, and TP0 and the end of the MCB, while TP1 and the end of the MCB, and TP2 and the end of the HCB, are not aligned. Compare Figure 92A-2.
 SuggestedRemedy
 Show TP5 further right than TP4, and TP0 to the left of the end of the MCB. Align TP1 and the end of the MCB, and TP2 and the end of the HCB.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Show TP5 further right than TP4.
 Show TP0 to the left of the end of the MCB. Align TP1 and the end of the MCB.
 Align TP2 and the end of the HCB.
 Implement with editorial license.

Cl 162B SC 162B.1.3.6 P249 L27 # 43
 Zambell, Andrew Luxshare-ICT
 Comment Type T Comment Status D (nc2)
 Should we still be saying SFP28?
 SuggestedRemedy
 Replace SFP28 with either SFP112 (like it's stated in 162.12 and 162.D) or Single-lane (like tables 162B-3 & 162B-4).
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 SFP112 is introduced in 162.12 and is defined in 162C.2.1. The intent was to replace SFP28 with SFP112.
 Unlike the term "multi-lane connector", the term "single-lane connector" has not been defined. There is some ambiguity between a connector than has only one lane and a multi-lane connector that is used as a single-lane MDI.
 Replace "SFP28" with "SFP112" in four places.

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Cl 162B SC 162B.1.3.6 P249 L27 # 152
 Dudek, Mike Marvell
 Comment Type T Comment Status D (nc2)
 This section is describing the test fixtures for 112G use which are called SFP112 in 162C.2.1 which have different specifications to those for SFP28.
SuggestedRemedy
 Change SFP28 to SFP112 in 4 places in annex 162B.
Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #43.

Cl 162B SC 162B.1.3.6 P249 L32 # 44
 Zambell, Andrew Luxshare-ICT
 Comment Type T Comment Status D (nc2)
 Should we still be saying SFP28?
SuggestedRemedy
 Replace SFP28 with either SFP112 (like it's stated in 162.12 and 162.D) or Single-lane (like tables 162B-3 & 162B-4).
Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #43.

Cl 162B SC 162B.1.3.6 P249 L43 # 45
 Zambell, Andrew Luxshare-ICT
 Comment Type T Comment Status D (nc2)
 Should we still be saying SFP28?
SuggestedRemedy
 Replace SFP28 with either SFP112 (like it's stated in 162.12 and 162.D) or Single-lane (like tables 162B-3 & 162B-4).
Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #43.

Cl 163 SC 163.10 P181 L28 # 67
 Mellitz, Richard Samtec
 Comment Type TR Comment Status D transition time (nc2)
 Tr should be scaled from 50G BaseKR because other timing parameter were scaled.
SuggestedRemedy
 Replace TBD for Tr with 6.01e-3 ns
Proposed Response Response Status W
 PROPOSED REJECT.
 Note that comment #157 for 120F suggested a value of 6.5 ps for C2C. That comment was rejected due to lack of consensus after a series of straw polls.
 There is no consensus to implement the suggested remedy.