Cl **1** *SC* **1.3** *P* **32** *L* **14** # 50

Lusted, Kent — Intel Corporation

Comment Type **E** *Comment Status* **D** *editorial (bucket1)*

The publication date for the SFP-DD MSA v4.2 was August 17, 2020, not August 10, 2020 as shown in the draft. See http://sfp-dd.com/wp-content/uploads/2020/08/SFP-DDrev4.2.pdf

SuggestedRemedy

Change the date to August 17, 2020

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120** *SC* **120.5.7.2** *P* **102** *L* **30** # 55

Slavick, Jeff — Broadcom

Comment Type **TR** *Comment Status* **D** *editorial (bucket1)*

In the change to the first paragph it has removed the requirement of this paragraph for 50G copper PMDs.

SuggestedRemedy

Add 200GBASE-KR4/CR4 to the list in both the first and second sentences.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120** *SC* **120.5.7.2** *P* **102** *L* **45** # 54

Slavick, Jeff — Broadcom

Comment Type **TR** *Comment Status* **D** *editorial (bucket1)*

The cross out of the text "The variables" and "by the PMD control function" in the second sentence of the paragraph seems to be too much since the sentence would read "precoder_tx_out_enable_i and precoder_rx_in_enable_i shall be set as determined in the LINK_READY state of the PMD control state diagram on lane i (see 136.8.11.7.5)"

SuggestedRemedy

Update the second senetence to be ""precoder_tx_out_enable_i and precoder_rx_in_enable_i shall be set as determined by the PMD control function in the LINK_READY state on lane i (see Fig 136-7)"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120** *SC* **120.5.7.2** *P* **103** *L* **44** # 56

Slavick, Jeff — Broadcom

Comment Type **TR** *Comment Status* **D** *editorial (bucket1)*

In the change to the fourth paragph it has removed the requirement of this paragraph for 50G copper PMDs.

SuggestedRemedy

Add 200GBASE-KR4/CR4 to the list in the first sentence.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120F** *SC* **120F.3.1** *P* **212** *L* **50** # 47

Brown, Matt — Huawei

Comment Type **T** *Comment Status* **D** *editorial (bucket1)*

The following sentence is repeated in both 120F.3.1 and 120F.3.1.2. "The state of the transmitter equalizer may be configured via the transmitter control interface described in 120F.3.1.4."

SuggestedRemedy

Delete the sentence in 120G.3.1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** *SC* **120G.1** *P* **229** *L* **2** # 16

Dudek, Mike — Marvell

Comment Type **TR** *Comment Status* **D** *editorial (bucket1)*

135.1.5 does not appear to exist and if it did it is unlikely to include these AUI's

SuggestedRemedy

Change the reference from 135.1.5 to 135.1.4 and make it a hot link and either remove the reference to a tabke or create a table that summarizes the use of the 100GAUI whithin 135.1.4

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
The reference should be to 80.1.5, not 135.1.5.
Change "135.1.5" to "80.1.5" and make it an active cross-reference.

Cl **120G** *SC* **120G.1** *P* **229** *L* **3** # 15

Dudek, Mike Marvell

Comment Type **E** *Comment Status* **D** *editorial (bucket1)*

Clause 116.1.4 is included in the draft and should be a hot link

SuggestedRemedy

Make this a hot link.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** *SC* **120G.1** *P* **229** *L* **5** # 21

Dudek, Mike Marvell

Comment Type **E** *Comment Status* **D** *editorial (bucket1)*

Annex 135A and 120A are part of this draft.

SuggestedRemedy

Make these references hot links.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** *SC* **120G.3.2** *P* **234** *L* **10** # 13

Dudek, Mike Marvell

Comment Type **T** *Comment Status* **D** *editorial (bucket1)*

The references for both near and far eye measurements in table 120G-3 are to the host output. They should be to the module output

SuggestedRemedy

Change the reference from 120G.3.1.5 to 120G.3.2.2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
In Table 120G-3, for rows for NE EH, NE VEC, FE EH, and FE VEC change the reference from "120G.3.1.5" to "120G.3.2.2".

Cl **120G** *SC* **120G.3.3** *P* **237** *L* **37** # 138

Ran, Adee Intel

Comment Type **T** *Comment Status* **D** *TP4a/TPRLCD (bucket1)*

For module output (120G.3.2, table 120G-3), host input (120G.3.3, table 120G-6), and module input (120G.3.4, table 120G-9), the reference subclause for "Common-mode to differential return loss (min)" is incorrect - 120G.3.1.2 discusses ERL.

There is one subclause that discusses RLCD, 120G.3.1.1, but it is currently specific to host output.

SuggestedRemedy

Change reference from 120G.3.1.2 to 120G.3.1.1 in the 3 tables.

Rephrase the text in 120G.3.1.1 to refer to both host and module, output and input.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
The reference to 120G.3.1.2 is incorrect and should be 120G.3.1.1.
By convention, it is common to refer to specifications for different test points without changing the text in the referenced subclause. No changes to the text in 120G.3.1.1 are required.
For RLCD in Table 120G-3, Table 120G-6, and Table 120G-9, change the reference to 120G.3.1.1.

Cl **120G** *SC* **120G.5.2** *P* **246** *L* **23** # 4

Mellitz, Richard Samtec

Comment Type **TR** *Comment Status* **D** *EO method (bucket1)*

Step h and j in 120G.5.2 Eye opening measurement method indicate "over the time interval ts s ± 0.05 UI and not “within 0.025 UI of time TCmid”
Comment 41 was resolved with “Alt. 2” with TBD = 50 mUI from healey_3ck_02_1020 indicating 1 window around Ts for histogram measurements.

SuggestedRemedy

remove "and not within 0.025 UI of time Tcmid from steps h and j in 120G.5.2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
The reference text is intended to point out that the phase “within 0.025 UI of time TCmid” is no longer relevant. However, as written it is somewhat ambiguous.
Change: 'and not "within 0.025 UI of time TCmid”'
To: 'instead of "within 0.025 UI of time TCmid”'

Cl **136** *SC* **136.8.11.7.1** *P* **114** *L* **37** # 48

Lusted, Kent — Intel Corporation

Comment Type **TR** *Comment Status* **D** *training (bucket1)*

Based on the link training change proposed in https://www.ieee802.org/3/ck/public/20_10/lusted_3ck_02_1020.pdf, a new variable "use_quiet_in_training" was defined in Clause 136.8.11.7.1. This variable has an explicit setting of FALSE for 50 Gb/s per lane PHYs. However, no specific mention of the variable value is made for 100 Gb/s per lane PHYs. This could lead to confusion in the industry as some vendors may interpret the "use_quiet_in_training" capability as optional to implement, while it was intended to be mandatory for 100 Gb/s per lane PHYs.

SuggestedRemedy

In Cl 162.8.11, add a new entry to the list as follows:
h) the variable "use_quiet_in_training" (see 136.8.11.7.1) is always set to TRUE for 100 Gb/s per lane PHYs."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #53.

Cl **136** *SC* **136.8.11.7.1** *P* **114** *L* **39** # 53

Slavick, Jeff — Broadcom

Comment Type **TR** *Comment Status* **D** *training (bucket1)*

The intent of the new QUIET state is to make it so all newly developed PHYs will use this features to avoid the deadlock situation. So the QUIET state should mandatory except for 50G PHY types.

SuggestedRemedy

Change the last sentence of the use_quiet_in_training definition to read as "This variable is always set to FALSE for 50 Gb/s per lane PHYs, otherwise it's set to TRUE..

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **136** *SC* **136.8.11.7.1** *P* **114** *L* **39** # 52

Slavick, Jeff — Broadcom

Comment Type **TR** *Comment Status* **D** *training (bucket1)*

The use_quiet_in_training variable controls access to certain states. When TRUE it indicates access to the state is allowed. So the "and is set to FALSE otherwise" is just confusing since a boolean is either TRUE or FALSE and the first sentence is defining what happens when it's TRUE not what makes it TRUE

SuggestedRemedy

Remove "and is set to FALSE otherwise" from the first sentence in the definition of use_quiet_in_training

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.8.11** *P* **150** *L* **34** # 49

Lusted, Kent — Intel Corporation

Comment Type **TR** *Comment Status* **D** *training (bucket1)*

The requirement to "assert local_tf_lock … provided that there is a compliant signal containing training frames at the PMD input" is insufficiently detailed. It is unclear if a receiver should react to a signal that is compliant with respect to amplitude, jitter, etc but does not have a valid training frame format. It is possible that a few of the first training frames during startup are malformed logically yet meet the electrical compliance requirements.

SuggestedRemedy

Change item g) to be "… provided that there is a compliant signal containing valid training frames at the PMD input."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.3.1.4** *P* **155** *L* **46** # 59

Wu, Mau-Lin — MediaTek

Comment Type **T** *Comment Status* **D** *TX EQ (bucket1)*

The step size of TX EQ coefficient had been changed from 2% to 2.5%. The "coefficient step size" shall be modified from 0.02 to 0.025.

SuggestedRemedy

Change <… to a request to "increment" shall be between 0.005 and 0.02, …> to <… to a request to "increment" shall be between 0.005 and 0.025, …>.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.3.1.4** *P* **155** *L* **47** # 60

Wu, Mau-Lin MediaTek

Comment Type **T** *Comment Status* **D** *TX EQ (bucket1)*

The step size of TX EQ coefficient had been changed from 2% to 2.5%. The "coefficient step size" shall be modified from -0.02 to -0.025.

SuggestedRemedy

Change <… to a request to "decrement" shall be between -0.02 and -0.005.> to <… to a request to "decrement" shall be between -0.025 and -0.005.>.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.4.1** *P* **158** *L* **23** # 46

Brown, Matt Huawei

Comment Type **T** *Comment Status* **D** *rate tolerance (bucket1)*

The list of related subclauses should include 162.9.4.2.

SuggestedRemedy

Change "162.9.4.3 and 162.9.4.4" to "162.9.4.2, 162.9.4.3, and 162.9.4.4".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.11.7.2** *P* **171** *L* **1** # 95

Haser, Alex Molex

Comment Type **E** *Comment Status* **D** *COM XTALK (bucket1)*

"The crosstalk paths for each MDI type are given in Table…"; the table specifies the number of crosstalk paths, not the paths themselves

SuggestedRemedy

Change text to "The number of crosstalk paths of each MDI…"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.3.3** *P* **156** *L* **31** # 142

Dawe, Piers Nvidia

Comment Type **T** *Comment Status* **D** *TX SNDR (bucket1)*

The transmitter SNDR measurement uses the method described in

SuggestedRemedy

Transmitter SNDR is defined by the [measurement] method {of | described in}

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change:
"The transmitter SNDR measurement uses the method described in 120D.3.1.6 with the exception that the linear fit procedure in 162.9.3.1.1 is used."
To:
"The transmitter SNDR is defined by the the measurement method described in 120D.3.1.6 with the exception that the linear fit procedure in 162.9.3.1.1 is used."

Cl **162A** *SC* **162A.2** *P* **253** *L* **24** # 57

Wu, Mau-Lin MediaTek

Comment Type **T** *Comment Status* **D** *editorial (bucket1)*

TP0a had been replaced by TP0v in Clause 163.9.2.

SuggestedRemedy

Change "The recommended transmitter characteristics at TP0 as measured at TP0a are described in 163.9.2." shall be changed to "The recommended transmitter characteristics at TP0 as measured at TP0v are described in 163.9.2."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162A** *SC* **162A.3** *P* **253** *L* **29** # 58

Wu, Mau-Lin MediaTek

Comment Type **T** *Comment Status* **D** *editorial (bucket1)*

TP5a had been replaced by TP5v in Clause 163.9.3.

SuggestedRemedy

Change "The recommended receiver characteristics at TP5 as measured at TP5a are described in 163.9.3." shall be changed to "The recommended receiver characteristics at TP5 as measured at TP5v are described in 163.9.3."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162B** *SC* **162B.1** *P* **259** *L* **17** # 6

Dudek, Mike Marvell

Comment Type **TR** *Comment Status* **D** *test fixture (bucket1)*

The measurements at TP1 or TP4 etc. are made with the Cable Assembly Test fixture (162B.1.2) not the mated test fixture (162B.1.3)

SuggestedRemedy

On line 18 change 162B.1.3 to 162B.1.2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162B** *SC* **162B.1** *P* **259** *L* **17** # 22

Dudek, Mike Marvell

Comment Type **TR** *Comment Status* **D** *test fixture (bucket1)*

The measurements at TP2 or TP3 etc. are made with the Test fixture (162B.1.1) not the mated test fixture (162B.1.3)

SuggestedRemedy

On line 17 change 162B.1.3 to 162B.1.1

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162B** *SC* **162B.1.3.6** *P* **265** *L* **36** # 100

Haser, Alex Molex

Comment Type **ER** *Comment Status* **D** *MTF RLDC name (bucket?)*

CMDRL(f) is defined as common-mode return loss; this is incorrect

SuggestedRemedy

Define CMDRL(f) as common-mode to differential mode return loss

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162B** *SC* **162B.1.3.2** *P* **262** *L* **41** # 7

Dudek, Mike Marvell

Comment Type **T** *Comment Status* **D** *MTF ERL reference (bucket1)*

Table 162B-2 is related to crosstalk parameters not ERL

SuggestedRemedy

Change 162B-2 to 162B-1 (two places0

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162C** *SC* **162C.2.2** *P* **275** *L* **12** # 43

Brown, Matt Huawei

Comment Type **T** *Comment Status* **D** *MDI graphic (bucket1)*

The graphics in Figure 162C-3 and Figure 162C-44 are missing.

SuggestedRemedy

Provide graphics.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Insert graphics provided in the following presentation:
diminico_3ck_02_0120.

Cl **162D** *SC* **162D.1.1** *P* **283** *L* **31** # 9

Dudek, Mike Marvell

Comment Type **T** *Comment Status* **D** *editorial (bucket1)*

The 100GBASE-CR2 in the Title of Table 162D-3 should be 200GBASE-CR2.

SuggestedRemedy

Change it

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change Title of Table 162D-3 to "200GBASE-CR2".

Cl **162D** *SC* **162D.1.1** *P* **283** *L* **50** # 10

Dudek, Mike Marvell

Comment Type **E** *Comment Status* **D** *formatting (bucket1)*

There is an unfortunate page break in the middle of Table 162D-3

SuggestedRemedy

Adjust formatting so that this table is all on one page

Proposed Response *Response Status* **W**

PROPOSED REJECT.
There is a trade-off between large tables spanning pages and leaving big holes; leave as is; also the tables are going to be shifting around until the text becomes stable; wait for SA ballot to refine.

Cl **163** *SC* **163.9.2.3** *P* **187** *L* **16** # 66

Healey, Adam Broadcom Inc.

Comment Type **E** *Comment Status* **D** *(bucket1)*

Subclause title is incorrect.

SuggestedRemedy

Change subclause title to "Difference steady-state voltage".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163** *SC* **163.10.1** *P* **190** *L* **26** # 137

Ran, Adee Intel

Comment Type **E** *Comment Status* **D** *editorial (bucket1)*

This subclause is titled "Channel Operating margin" so it should only discuss COM, not recommended IL limits and ERL requirements.

There are additional requirements not listed here (e.g. mode conversion loss, 163.10.4)

SuggestedRemedy

Move the second paragraph (which points to 163.10.2 and 163.10.3) to the parent subclause 163.10.

Consider adding a summary table in 163.10 as in the Tx and Rx characteristics.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Move the second paragraph (which points to 163.10.2 and 163.10.3) to the parent subclause 163.10. Implement with editorial license.
Adding a summary table may be an improvement to the draft, but is not necessary for technical completeness.

Cl **163A** *SC* **163A.4.1.2** *P* **289** *L* **46** # 11

Dudek, Mike Marvell

Comment Type **E** *Comment Status* **D** *editorial (bucket1)*

missing space between "in" and "93A.5"

SuggestedRemedy

fix it

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163B** *SC* **163B.2** *P* **291** *L* **9** # 12

Dudek, Mike Marvell

Comment Type **TR** *Comment Status* **D** *P0v/TP5v example (bucket1)*

With this example test fixture moved to an Annex it is necessary to refer to the relevant clause that provides the package parameters etc.

SuggestedRemedy

Change "For this test fixture, the reference values determined according to the methodology in 163A.3 are listed in Table 163B–1" to "For this test fixture, the reference values determined according to the methodology in 163A.3 using the parameters supplied in Clause 163 are listed in Table 163B–1"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.