Cl **1** *SC* **1.1.3.2** *P* **30** *L* **49** # 1

Marris, Arthur — Cadence Design Systems

Comment Type **E** *Comment Status* **D** *bucket*

"Three" should be underlined

SuggestedRemedy

Underline the word "Three"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **1** *SC* **1.5** *P* **32** *L* **8** # 2

Marris, Arthur — Cadence Design Systems

Comment Type **T** *Comment Status* **D** *bucket*

Should the MDI specifications listed in 162.12 be included in 1.5 (Abbreviations) or 1.3 (Normative references)?

SuggestedRemedy

Add SFP, DSFP, QSFP and OSFP to "1.5 Abbreviations", and the appropriate reference for DSFP and OSFP to "1.3 Normative references"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Abbreviations for connector names have not been defined for clauses currently in IEEE Std 802.3-2018. The normative references define the related abbreviations. So abbreviations for these are not necessary.

Add normative references for the missing specifications.

Cl **69** *SC* **69.1.1** *P* **62** *L* **13** # 4

Marris, Arthur — Cadence Design Systems

Comment Type **E** *Comment Status* **D** *bucket*

"service interface or 200Gb/s or 400Gb/s providing" does not read right

SuggestedRemedy

Change to "service interface or at 200Gb/s or 400Gb/s providing"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **69** *SC* **69.2.3** *P* **65** *L* **31** # 5

Marris, Arthur — Cadence Design Systems

Comment Type **T** *Comment Status* **D** *bucket*

Surely Inverse RS-FEC is optional?

SuggestedRemedy

Change M to O for Clause 152 to align with Table 80-3 which has Inverse RS-FEC as optional. Also make the nomenclature listed in Tables 80-3 and 69-3a match. For example for 161 make both be "100GBASE-P RS-FEC-Int"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **73** *SC* **73.6.4** *P* **68** *L* **26** # 55

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

Editing instruction is overly descriptive given that all information is shown in the table. But it would be helpful to show the previous unchanged row.

SuggestedRemedy

In the editing instruction delete "by adding the following new rows for A16, A17 and A18 and revising the reserved row".
In Table 73-4, add one row with ellipse at the begin and insert unchange row for A15 above the new row A16.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **73** *SC* **73.6.5.a** *P* **69** *L* **27** # 46

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

formatting

SuggestedRemedy

Use proper editing instruction format (bold + italic).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **73** *SC* **73.6.5.a** *P* **69** *L* **29** # 47

Brown, Matt — Huawei Technologies Canada

Comment Type **T** *Comment Status* **D** *bucket*

Title describes the scope incorrectly. This resolution is not for 100G PHYs, rather it is for PHYs using 100 Gb/s per lane. Also, no capitalization in titles except for first letter, acronyms, and proper nouns.

SuggestedRemedy

Change title to "FEC resolution for 100GBASE-P PHYs using RS-FEC-Int

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **73** *SC* **73.7.6** *P* **70** *L* **6** # 49

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

All of the changes described in the editing instruction are obvious from amendment markup and thus are unnecessary. The changes to the priority numbers in all of the rows should be shown.

SuggestedRemedy

Change editing instruction to: "Change Table73-5 (as modified by IEEE Std 802.3cb-2018 and IEEE Std 802.3cd-2018) as follows:"
Include all rows in the table and show the priority numbers changed to the new values.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **80** *SC* **80.1.5** *P* **75** *L* **6** # 20

Trowbridge, Steve — Nokia

Comment Type **ER** *Comment Status* **D** *bucket*

Clause 80.1.4 of IEEE Std 802.3-2018 section 6, page 84 line 6 has two paragraphs that classify 100G Physical Layers as either 100GBASE-R or 100GBASE-P. Table 80-3 doesn't match either as formatted.

SuggestedRemedy

Split Table 80-3 into two parts. The first part (Table 80-3) should retain 100GBASE-KR4/CR4/CR10 PHY types and be re-titled as "Nomenclature and clause correlation (100GBASE-R copper)", since these are the PAM2 PHY types. New Table 80-3a should be created with 100GBASE-KR1/KR2/KP4/CR1/CR2 and should be entitled "Nomenclature and clause correlation (100GBASE-P copper)". This would match the two paragraphs.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Implement with editorial license.

Cl **80** *SC* **80.1.5** *P* **75** *L* **18** # 22

Slavick, Jeff — Broadcom

Comment Type **T** *Comment Status* **D** *bucket*

In Table 80-3 we list CUAI-4 and CAUI-10 as Optional sub-layers for a 100G-KR1/CR1 PHY. If these are utilized, don't they use a Cl83 PMA? So shouldn't Cl83 be also marked as Optional.

SuggestedRemedy

Add O in the column for Cl 83 for 100GBASE-KR1 and 100GBASE-CR1

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93A** *SC* **93A.1.6.1** *P* **197** *L* **33** # 12

Hidaka, Yasuo — Credo Semiconductor

Comment Type **T** *Comment Status* **D** *bucket*

In the definition of sigma_DFE^2 in equation (93A-37a), the range of index of b'(k) is not correct, because this value must be calculated for each potential bank location.

SuggestedRemedy

Change b'(k) to b'(n+k).

In the second sentence of step b on line 15, change "for each potential bank location" to "for each potential bank location n".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120** *SC* **120.5.7.2** *P* **99** *L* **46** # 61

Ran, Adee Intel

Comment Type **T** *Comment Status* **D** *bucket*

Following up on comment #220 against D1.0, which suggested that "136.8.11.7.5 is an incorrect cross-reference"

After the discussion in the January meeting it became clear that it is the correct cross reference, but the text is misleading. Instead of referring to the PMD control function, it should refer to the PMD control state diagram, which is where the cross-reference points to.

SuggestedRemedy

Change from
"precoder_tx_out_enable_i and precoder_rx_in_enable_i shall be set as determined by the PMD control function on lane i (see 136.8.11.7.5)"

to
"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)"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** *SC* **120G** *P* **221** *L* **20** # 153

Dudek, Mike Marvell

Comment Type **T** *Comment Status* **D** *bucket*

The referenced section for the eye measurements is not correct as 120E.4.2 uses the wrong reference equalizer.

SuggestedRemedy

Change 120E.4.2 to 120G.3.1.6.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** *SC* **120G.1** *P* **216** *L* **43** # 84

Heck, Howard Intel

Comment Type **E** *Comment Status* **D** *bucket*

In figure 120G.1, I think "100GBASE-P" should be "100GBASE-R"

SuggestedRemedy

Change to "100GBASE-R"

Proposed Response *Response Status* **W**

PROPOSED REJECT.

100GBASE-P is correct. 100GBASE-P PHY and 100GBASE-R PHY are defined in IEEE Std 802.3-2018 1.4.31 and 1.4.32, reproduced below. 100GAUI-1 requires use of an RS(544,514) FEC, which is specified for use only with 100GBASE-P PHYs.

1.4.31 100GBASE-P: An IEEE 802.3 family of Physical Layer devices using 100GBASE-R encoding and a PMD that employs pulse amplitude modulation with more than 2 levels. (See IEEE Std 802.3, Clause 80.)

1.4.32 100GBASE-R: An IEEE 802.3 family of Physical Layer devices using 100GBASE-R encoding and a PMD that employs 2-level pulse amplitude modulation. (See IEEE Std 802.3, Clause 80.)

Cl **120G** *SC* **120G.1** *P* **217** *L* **29** # 83

Heck, Howard Intel

Comment Type **E** *Comment Status* **D** *bucket*

"25.56 GHz" is incorrect.

SuggestedRemedy

Change to "26.56 GHz"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** *SC* **120G.1** *P* **217** *L* **29** # 81

Healey, Adam Broadcom Inc.

Comment Type **E** *Comment Status* **D** *bucket*

The caption of Figure 120G-2 is cites the wrong frequency.

SuggestedRemedy

Change "100GAUI-1 C2M insertion loss budget at 25.56 GHz" to "100GAUI-1 C2M insertion loss budget at 26.56 GHz".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** SC **120G.2** P **220** L **10** # 93

Ghiasi, Ali — Ghiasi Quantum/Inphi

Comment Type **E** *Comment Status* **D** *bucket*

Component not necessary

SuggestedRemedy

Remove component after host

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The term "host component" refers roughly to the transceiver device on the host. The term "host" is used as a label at the top of the diagram to include the host PCB traces as well as the host component. This is consistent with labelling in Figure 120G-2/3/4.

See comment #94.

Cl **120G** SC **120G.2** P **220** L **32** # 94

Ghiasi, Ali — Ghiasi Quantum/Inphi

Comment Type **ER** *Comment Status* **D** *bucket*

Component not necessary

SuggestedRemedy

Remove component after module

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The term "module component" refers roughly to the transceiver device on the module. Note that "module" is used as a label at the top of the diagram to include the module PCB traces as well as the module component. This is consistent with labelling in Figure 120G-2/3/4.

See comment #93.

Cl **120G** SC **120G.3.4.1.1** P **231** L **11** # 10061

Dudek, Mike — Marvell

Comment Type **T** *Comment Status* **D** *bucket*

[Comment resubmitted from Draft 1.0. Subcl. 120G.3.4.1.1 - Pg 224 - ln 12]

The sections referenced for measuring Eye height and VEC don't have the correct reference receiver and section 4.2 has more details about how to measure these.

SuggestedRemedy

Change "Eye height and VEC are then measured at TP1a based on the measurement methodology given in 120E.4.2 and vertical eye closure is measured according to 120E.4.3." to Eye height and VEC are then measured at TP1a as described in 120G.4.2 "

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **120G** SC **120G.4.2** P **232** L **38** # 13

Hidaka, Yasuo — Credo Semiconductor

Comment Type **T** *Comment Status* **D** *bucket*

It is written as "associated parameters in Table 120G-9" as if the receiver noise filter had plural parameters. However, the receiver noise filter H_r(f) defined by equation (93A-20) has a single parameter f_r. A reference by a singular noun with the parameter symbol f_r is recommended for clarification.

SuggestedRemedy

Change "associated parameters in Table 120G-9" to "associated parameter f_r in Table 120G-9".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **135A** SC **135A.2** P **238** L **12** # 29

Slavick, Jeff — Broadcom

Comment Type **E** *Comment Status* **D** *bucket*

MMD 9 looks like it might be bold while MMD8 and MMD1 are not

SuggestedRemedy

Fix the font for MMD 9

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **152** *SC* **152** *P* **110** *L* **1** # 50

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

Clause 152 was updated in 802.3ct Draft 1.2 such that the Inverse FEC is generic and no amendments are required.

SuggestedRemedy

Delete Clause 152.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Cl **161** *SC* **161.5.2.6** *P* **114** *L* **7** # 24

Slavick, Jeff — Broadcom

Comment Type **E** *Comment Status* **D** *bucket*

Missing coma after the x <= 3

SuggestedRemedy

Add the coma

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **161** *SC* **161.5.2.6** *P* **115** *L* **39** # 88

Nicholl, Shawn — Xilinx

Comment Type **TR** *Comment Status* **D** *bucket*

Figure 161-4 contains the text "am_mapped" while the term "am_txmapped" is used throughout the sub-clause.

SuggestedRemedy

Propose to update Figure 161-4 to change "am_mapped" to "am_txmapped" in two locations.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **161** *SC* **161.5.4.3** *P* **122** *L* **122** # 89

Nicholl, Shawn — Xilinx

Comment Type **TR** *Comment Status* **D** *bucket*

Figure 161-6 incorrectly contains "pcs_enable_skew" in the DESKEW state.

SuggestedRemedy

Propose to update the DESKEW state of Figure 161-6 to change "pcs_enable_skew" to "fec_enable_deskew".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.3.1.5** *P* **150** *L* **33** # 27

Slavick, Jeff — Broadcom

Comment Type **ER** *Comment Status* **D** *bucket*

There are 3 taps being set to zero now, however both refers to just 2.

SuggestedRemedy

Delete the "both" after c(-1)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.3.1.5** *P* **150** *L* **34** # 51

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

There are 3 taps so "both" should be deleted.

SuggestedRemedy

Change "both set to zero" to "set to zero".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Resolve per comment #27.

Cl **162** *SC* **162.9.3.1.5** *P* **150** *L* **43** # 26

Slavick, Jeff — Broadcom

Comment Type **E** *Comment Status* **D** *bucket*

For testing the range of c(1) and c(-1) you lump that both c(0) and the tap are at "their" minimum values, but with c(-3) you use the form used for c(-2) where c(0) is at it's minmum and c(-2) is at it's minimum.

SuggestedRemedy

change "With c(-2), c(-1) and c(1) set to zero, c(0) having received sufficient "decrement" requests so that it is at its minimum value, and c(-3) having received sufficient "decrement" requests so that it is at its minimum value, c(-3) shall be less than or equal to -0.06."
to be
"With c(-2), c(-1) and c(1) set to zero and both c(0) and c(-3) having received sufficient "decrement" requests so that they are at their respective minimum values, c(-3) shall be less than or equal to -0.06."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.3.1.5** *P* **150** *L* **47** # 52

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

Unnecessary comma. Not needed to separate two distinct phrases.

SuggestedRemedy

Change "162.8.11, or by" to "162.8.11 or by".

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **162** *SC* **162.9.4.3** *P* **153** *L* **28** # 53

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

Editor's note has expired.

SuggestedRemedy

Delete editor's note.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162** *SC* **162.9.4.3.3** *P* **154** *L* **1** # 9

Marris, Arthur — Cadence Design Systems

Comment Type **T** *Comment Status* **D** *bucket*

Define the acronyms SCHS, CTSP, HOSP, CASP

SuggestedRemedy

Explain these acronyms here or in 1.5

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The referenced terms are parts of variable names and thus do not require formal definitions in 1.5.

SCHS is defined in item a) on p. 154.
S(HOSP) is defined on p.160, line 48.
S(CASP) is defined on p. 161, line 6.
S(CTSP) is defined on p. 153, line 2.

Cl **162** *SC* **162.11.7** *P* **158** *L* **38** # 54

Brown, Matt — Huawei Technologies Canada

Comment Type **E** *Comment Status* **D** *bucket*

Editor's note is no longer required.

SuggestedRemedy

Delete editor's note.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162C** *SC* **162C.2.6** *P* **262** *L* **15** # 86

Kocsis, Sam — Amphenol

Comment Type **ER** *Comment Status* **D** *bucket*

Figure 162C-11 missing image

SuggestedRemedy

Include "plug" image referenced in kocsis_3ck_adhoc_01_030420

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162C** *SC* **162C.2.6** *P* **262** *L* **29** # 85

Kocsis, Sam — Amphenol

Comment Type **ER** *Comment Status* **D** *bucket*

Figure 162C-12 description says "OSFP"

SuggestedRemedy

Replace "OSFP" with "DSFP"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **162C** *SC* **162C.2.6** *P* **262** *L* **29** # 87

Kocsis, Sam — Amphenol

Comment Type **ER** *Comment Status* **D** *bucket*

Figure 162C-12 missing image

SuggestedRemedy

Include "receptacle" image referenced in kocsis_3ck_adhoc_01_030420

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163** *SC* **163.7** *P* **173** *L* **54** # 10

Marris, Arthur — Cadence Design Systems

Comment Type **E** *Comment Status* **D** *bucket*

Make 162.7 a proper cross reference

SuggestedRemedy

Convert 162.7 to a cross reference

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163** *SC* **163.9.1.2** *P* **176** *L* **53** # 14

Sun, Junqing — Credo Semiconductor

Comment Type **TR** *Comment Status* **D** *bucket*

0.01dB is found to be a typo.

SuggestedRemedy

Change 0.01dB to 0.1dB as in clause 93.8.1.1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163** *SC* **163.9.2.2** *P* **179** *L* **22** # 15

Sun, Junqing — Credo Semiconductor

Comment Type **TR** *Comment Status* **D** *bucket*

0.01dB is found to be a typo.

SuggestedRemedy

Change 0.01dB to 0.1dB as in clause 93.8.2.1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163** *SC* **163.9.2.3** *P* **179** *L* **34** # 79

Healey, Adam — Broadcom Inc.

Comment Type **T** *Comment Status* **D** *bucket*

The receiver interference tolerance procedure defined in 120F.3.2.3 includes guidance on the output return loss of the test setup (item b). This guidance does not appear to be present in this description of a similar test procedure for n00GBASE-KRn.

SuggestedRemedy

Add an item stating "The return loss of the test setup in Figure 93C-4 measured at TP5 replica towards TPt meets the requirements of Equation (163-2)."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **163** *SC* **163.13.4.2** *P* **188** *L* **26** # 28

Slavick, Jeff — Broadcom

Comment Type **TR** *Comment Status* **D** *bucket*

References in 162 go to 136 when possible

SuggestedRemedy

Change:
PC3 to refer to 136.8.11.1.3
PC5 to refer to 136.8.11.3.3
PC6 to refer to 136.8.11.4.1
PC7 to refer to 136.8.11.6
PC8 to refer to 136.8.11.7.5
PC9 to refer to 136.8.11.7.5

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.