IEEE P802.3ck D1.0 100/200/400 Gb/s Electrical Interfaces Task Force 1st Task Force review comments


TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

## Cl 69

SC 69.2.3

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| $C l 69$ | $S C 69.2 .3$ | P62 | L18 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | \# 213 |  |

Comment Status D
bucket
Comment Type T
There is no column for AN in this table. AN is included in table 69.3 (the original 100G backplane table). It seems that 802.3cd omitted this column in the new tables (3a and 3b) it added here, although it is included in the tables that were added in clause 116.

May require maintenance approval but I assume it will be done in this project.

## SuggestedRemedy

Add AN column and populate it - mandatory for all rows.
Also in tables 69-3b and 69-3c
Proposed Response Response Status W
PROPOSED ACCEPT.

| $C l 69$ | $S C$ | 69.2.3 | P63 | $L 10$ |
| :--- | :---: | :---: | :---: | :---: |

Ran, Adee Intel
bucket
The column for clause 78 is not required since EEE is not defined at all for 400GBASE-
KR4 (clause 78 is not mentioned in the new PMD clauses, and EEE is not in scope...) and there is no other PHY in this table.

Clause 116 also leaves this column blank (not even optional) for the new 200G and 400G PMDs.
SuggestedRemedy
Delete this column.
Proposed Response
Response Status W
PROPOSED ACCEPT.

| $C I 73$ | SC 73.2 | P64 | L18 |
| :--- | :--- | :--- | :--- |

\# 215
Ran, Adee
Intel
Comment Type E
Comment Status D
bucket
In the new figure 73-1, The label on the right of the arrow looks like two separate labels.
Also, in the label below "Medium", there is no space after " $50 \mathrm{~Gb} / \mathrm{s}$ ", and there is no bottocm-pointing brace above the list of PHYs (compare to Figure 69-5)

SuggestedRemedy
Add comma after XLGMII, and reduce line spacing (or delete the extra line break).
Add brace and add space after " $50 \mathrm{~Gb} / \mathrm{s}$ ".
Proposed Response Response Status w

## PROPOSED ACCEPT IN PRINCIPLE

For this figure, there is no brace in the base standard or any approved amendments thereof.
Implement the suggested remedy, except do not add the brace.

| CI 73 | SC 73.10.2 | P67 | L25 | \# 216 |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  | bucket |
| Comment Type | E | Comment Status D |  | ber |

Comment Type E Comment Status D bucket
Table 73-7 is shown with all rows, most of which are not changed, and is spread across two pages. Only one new row is inserted.

Using "some unchanged rows are not shown" here and keeping only the
"link_fail_inhibit_timer" rows would make this change easier to understand.
SuggestedRemedy
Change table per comment with editorial license.
Proposed Response Response Status W
PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
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| Cl 80 | SC 80.5 | P73 | L36 |
| :--- | :---: | :---: | :---: |
| Slavick, Jeff | Broadcom |  | \# 107 |

Comment Type TR Comment Status D
bucket
New FEC needs to be referenced
SuggestedRemedy
Add 161.5.2.2 to FEC transmit row and 161.5.3.1 to the FEC receive row into both Table 80-6 and 80-7
Proposed Response Response Status w
PROPOSED ACCEPT IN PRINCIPLE.
Implement the suggested remedy
Also, for both tables in the first column.
Change "At RS-FEC transmit" to "At RS-FEC or RS-FEC-Int transmit" Change "At RS-FEC receive" to "At RS-FEC or RS-FEC-Int receive"

Cl 80 | P73 80.5 | P36 | \# | 112 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

Nicholl, Shawn Xilinx
bucket
Comment Type TR Comment Status D buck
Since 161.5.2.2 says that it's identical to 91.5.2.2, then "Table 80-6 -- Summary of Skew constraints" should contain a reference to 161.5.2.2

## SuggestedRemedy

Propose to update Table 80-6 such that the Notes column for the "At RS-FEC transmit" row contains a reference to Clause 161. Proposed text for the table cell is:
See 91.5.2.2, 161.5.2.2
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment \#107.

| Cl 80 SC 80.5 | P73 | L38 | \# 113 |
| :--- | ---: | :---: | ---: |
| Nicholl, Shawn | Xilinx |  |  |
| Comment Type | TR | Comment Status D |  |

Since 161.5.3.1 specifies the Rx deskew capabilities, then "Table 80-6 -- Summary of Skew constraints" should contain a reference to 161.5.3.1

SuggestedRemedy
Propose to update Table 80-6 such that the Notes column for the "At RS-FEC receive" row contains a reference to Clause 161. Proposed text for the table cell is:
See 91.5.3.1, 161.5.3.1
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment \#107.

| Cl 80 | SC 80.5 | P74 | L32 |
| :--- | :---: | :---: | :---: |
| Nicholl, Shawn | Xilinx | \# 114 |  |

Nicholl, Shawn Xilinx
Comment Type TR Comment Status D bucket
Since 161.5.2.2 says that it's identical to 91.5.2.2, then "Table 80-7 -- Summary of Skew Variation constraints" should contain a reference to 161.5.2.2

SuggestedRemedy
Propose to update Table 80-7 such that the Notes column for the "At RS-FEC transmit" row contains a reference to Clause 161. Proposed text for the table cell is:
See 91.5.2.2, 161.5.2.2
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE
Resolve using the response to comment \#107.

| CI 80 | SC 80.5 | P74 | L34 |
| :--- | :---: | :---: | :---: |
| Nicholl, Shawn | Xilinx | 115 |  |
| Comment Type | TR | Comment Status D |  |
| Corket |  |  |  |

Since 161.5.3.1 specifies the Rx deskew capabilities, then "Table 80-7 -- Summary of Skew Variation constraints" should contain a reference to 161.5.3.1
SuggestedRemedy
Propose to update Table 80-7 such that the Notes column for the "At RS-FEC receive" row contains a reference to Clause 161. Proposed text for the table cell is:
See 91.5.3.1, 161.5.3.1
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment \#107.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general $\quad$ Pl 80 COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

Cl 80
SC 80.5

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| CI 82 | SC 82.2.13 | P152 |
| :--- | :---: | :---: |
| Brown, Matt | Huawei Technologies Canada |  |

Comment Type T Comment Status D
bucket
Table 82-7 "Skew tolerance parameters" has an entry "100GBASE-R with RS-FEC". To be complete this should also include "RS-FEC-Int" per Clause 161.

SuggestedRemedy
Import Table 82-7, and show change of "100GBASE-R with RS-FEC" to "100GBASE-R with RS-FEC or RS-FEC-Int"

Proposed Response Response Status W
PROPOSED ACCEPT

| Cl 93A | SC 93A. | P186 | L36 | \# 47 |
| :--- | :--- | :--- | :--- | :--- |

Dudek, Mike Marvell
Comment Type E Comment Status D
bucket
For style consistency the other parameters that some clauses don't use should be in a footnote.

SuggestedRemedy
Add a footnote c stating "Some clauses that invoke this method do not provide a value for Nbg, Nbf, Nf, bgmax, sigmamax, Nts. See 93A.1.6

Proposed Response Response Status W
PROPOSED ACCEPT

| $C l$ 93a | SC 93a.1.6 | L21 | \# 189 |
| :--- | :--- | :--- | :--- | :--- |

Mellitz, Richard Samtec
bucket
Comment Type TR Comment Status D
If floating taps are not specified, for compatibility with older clauses, Nf should be Nb .
SuggestedRemedy
Change:
..are not specified then no floating taps are used.
..are
..are not specified then no floating taps are used and Nf takes the value of Nb from referring clauses.
Proposed Response Response Status W PROPOSED ACCEPT.
Cl 93A SC 93A.1.6.1 P190 L12
Kasapi, Athos Cadence

Comment Type TR Comment Status D
bucket
Likely typo; existing text refers to number of taps in bank, $N \_\{b f\}$, as $N \_b$
SuggestedRemedy
Change N_f - N_b + 1 to N_f - N_\{bf +1
Proposed Response Response Status W
PROPOSED ACCEPT.

| CI 118 | SC 118.1.3 | PO | \# |
| :--- | ---: | :---: | :---: | :---: |

Slavick, Jeff Broadcom
Comment Type TR Comment Status D
bucket
Clause 118.1.3 lists the AUI that a 200/400GXS may use. The new 100 G serial ones should be included in that list.

SuggestedRemedy
Bring in 118.1.3 and add 120G and 120F to both of the 200G and 400G lists of supported physically instantiated AUls
Proposed Response Response Status W PROPOSED ACCEPT.


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| $C l 120$ | $S C 120.1$ | $P 91$ | $L 6$ |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | \# 218 |  |


| Ran, Adee | Intel |
| :--- | ---: | :---: |
| Comment Type E Comment Status D bucket |  |

Label is "Overvie"
SuggestedRemedy
Change to "Overview".
Proposed Response
Response Status W
PROPOSED ACCEPT.

| CI 120 | SC 120.5.11.2.4 | P95 | L32 |
| :--- | :---: | :---: | :---: |
| Dawe, Piers | Mellanox |  | \# 148 |

Dawe, Piers Mellanox
bucket
This editor's note says "the assumption that the square wave test pattern will continue to be required for 200GAUI-2 and 400GAUI-4 testing". But the square wave is not used for AUI required for 200GAUI-2 and 400GAUI-4 testing". But the square wave is not used
testing at all, nor is it required for anything except measuring the RIN of an optical
transmitter (which is typically done on the optical module alone, not in a complete system, anyway). The text at line 21 says it's optional, not required. This project does not add or alter optical PMDs.

## SuggestedRemedy

Delete this editor's note, and the first part of the editor's note in 135.5.10.2.4.
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
The commenter has clarified that the reason for supporting the square wave in the PMA is not for testing of an AUI transmitter but rather for testing of currently specified PMD transmitters.

Regardless, the editor's notes were intended to be deleted in D1.1, per the included text.
Remove the editor notes on page 95 and page 102.

| CI 120 | SC 120.7.3 | P97 | L3 | \# 222 |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | E | Comment Status D |  | bucket |


| CI 120F SC 120F.1 | P192 | L22 | \# 48 |
| :--- | :---: | :---: | :---: |
| Dudek, Mike | Marvell |  |  |
| Comment Type T | Comment Status D |  |  |
| The 100G Phys using RS544,514 are 100GBASE-P not 100GBASE-R |  | bucket |  |

The 100G Phys using RS544,514 are 100GBASE-P not 100GBASE-R
bucket

SuggestedRemedy
Chage 100GBASE-R to 100GBASE-P in figure 120F-1
Proposed Response Response Status W
PROPOSED ACCEPT.

| Cl 120F | SC 120F.1 | P194 | L38 | \# 177 |
| :--- | :---: | :---: | :---: | :---: |
| Ghiasi, Ali |  | Ghiasi Quantum/Inphi |  |  |
| Comment Type | TR | Comment Status D |  | bucket |

Missing informative channel loss
SuggestedRemedy
Add informative channel loss
Insertion Loss(f)=1.083+1.25V??+0.47?? $0.01=? ?=50$ ??????
Proposed Response Response Status W
PROPOSED REJECT.
The informative channel insertion loss is specified in 120F.4.2.


Font size is inconsistent in this table (existing and new text).
SuggestedRemedy
use consistent font size
Proposed Response
Response Status w
PROPOSED ACCEPT.

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SC 120G. 1

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| Cl 120G SC 120G.1.1 | P212 | L27 | \# 55 |  |
| :---: | :---: | :---: | :---: | :---: |
| Dudek, Mike | Marvell |  | bucket |  |
| Comment Type T | Comment Status D |  |  |  |
| Clause 120 does not apply to 100GAUI-1 |  |  |  |  |
| SuggestedRemedy |  |  |  |  |
| Add "or clause 135 for 100GAUI-1" |  |  |  |  |
| Proposed Response Response Status W |  |  |  |  |
| PROPOSED ACCEPT IN PRINCIPLE. |  |  |  |  |
| Replace the paragraph in 120G.1.1 to the following... <br> "The bit error ratio (BER) when processed according to Clause 135 for 100GAUI-1 C2M or Clause 120 for 200GAUI-2 or 400GAUI-4 C2M for shall be less than $10^{\wedge}-5 . "$ |  |  |  |  |
| Cl 120G SC 120G.4.1 | P224 | L51 | \# 64 |  |
| Dudek, Mike | Marvell |  |  |  |
| Comment Type E | Comment Status D |  |  | bucket |
| This section appears to be a direct copy of 120E.3.1 except that it only applies to the module and host Tx (not calibration of the stressed inputs) |  |  |  |  |
| SuggestedRemedy |  |  |  |  |
| Replace the text in the section with "The signal levels are as defined in 120E.3.1" |  |  |  |  |
| Proposed Response | Response Status W |  |  |  |
| PROPOSED ACCEPT. |  |  |  |  |
| Cl 120G SC 120G.4.2 | P225 | L38 | \# 160 |  |
| Li, Mike | Intel |  |  |  |
| Comment Type E | Comment Status D |  |  | bucket |
| $3 / 4$ is not a normal numerical representation |  |  |  |  |
| SuggestedRemedy change it to 0.75 |  |  |  |  |
| Proposed Response | Response Status W |  |  |  |
| PROPOSED ACCEPT IN PRINCIPLE. |  |  |  |  |
| For consistency with Clause 162 and Clause 163 set the value to " $0.75 \times \mathrm{fb}$ ". |  |  |  |  |


| Cl 120G SC 120G.4.2 | P226 | L23 | \# 163 |  |
| :---: | :---: | :---: | :---: | :---: |
| Li, Mike | Intel |  |  |  |
| Comment Type E <br> "of p2(k)" does not read | Comment Status D <br> right |  |  | bucket |
| SuggestedRemedy delete "of" |  |  |  |  |
| Proposed Response PROPOSED ACCEPT. | Response Status w |  |  |  |


| $C l 135$ | $S C$ 135.1.4 | P98 | L42 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel |  | \#23 |

Comment Type E Comment Status D
bucket
This phrasing " $53 . \mathrm{GBd}$ by one-lane" is unnatural. It should be either by-1 or one-lane.
Preferably the latter.
This phrasing is used existing text, and is also awkward there. It should be changed.
SuggestedRemedy
Remove "by" in items 2-4 (the result would be simply four-lane, two-lane, and one-lane).
Proposed Response Response Status W
PROPOSED REJECT.
Although the referenced text is not perfect, it communicates the intent correctly.
The text of the first 3 bullets is established text in an approved amendment (IEEE Std 802.3-2018). Changes to this text is out of scope for this project.

The new bullet (\#4) was written in the same form as the first three bullets.

| CI 135 SC 135.1.4 | P99 | L15 | \# 224 |  |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | T | Comment Status D |  | bucket |

Comment Type T Comment Status D
In Figure 135-2, with the new variable p, PMAs above and below the 100GAUI-p should be PMA (4:p) and PMA(p:n) respectively.
SuggestedRemedy
Change labels per comment.
Proposed Response Response Status
PROPOSED ACCEPT.

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| CI 135 | SC 135.1.4 | P99 |
| :--- | :---: | :---: |
| Dudek, Mike | Marvell | L15 |

Comment Type T Comment Status D bucket

There are errors in the MMD8 and MMD1 100G PMA's in figure 135-2
SuggestedRemedy
Change the MMD8 100G PMA between 100GAUI-4 and 100GAUI-P from PMA(4:2) to PMA(4:p) and change the PMA (2:n) to PMA (p:n).
Proposed Response
PROPOSED ACCEPT.

| Cl 135 | $S C$ | 135.5.7.2 | P101 |
| :--- | :---: | :---: | :---: |

Ran, Adee Intel
Comment Type E Comment Status D
The bottom brace below the "MEDIUM" and the text "50GBASE-R or 100GBASE-P" don't seem to serve any purpose in this diagram. These are families of PHYs, not specific PMDs or media. Also these are all the families in which this clause is used, so it goes without saying.
SuggestedRemedy
Delete the brace and the label.
Proposed Response Response Status w PROPOSED REJECT.

These braces are consistent with the original diagram in IEEE Std 802.3cd-2018 and thus removing them would be out of scope for this project.

This diagram has been updated only as required regarding addition of the new interfaces in P802.3ck.

| CI 135A SC 135A.2 | PO | LO | \# 111 |  |
| :--- | :---: | :---: | :---: | :---: |
| Slavick, Jeff |  | Broadcom |  |  |
| Comment Type | TR | Comment Status D |  | bucket |


| $C l$ | 161 | SC 161.3 | $P 107$ |
| :--- | :--- | :--- | :--- |

Ran, Adee Intel
Comment Type E Comment Status D
Bucket
Missing period after the sentence
SuggestedRemedy
Add a period.
Proposed Response Response Status W PROPOSED ACCEPT.

| $C l$ | 161 | $S C$ | 161.5.2.4 | P107 228 |
| :--- | :--- | :--- | :--- | :--- |

Ran, Adee
Intel
Comment Type E Comment Status D
Bucket
"EEE is unsupported" is only used here, similar text elsewhere in this draft uses "not supported".

## SuggestedRemedy

Change to "not supported".
Proposed Response Response Status W
PROPOSED ACCEPT.

| CI 161 SC 161.5.2.6 | P109 | L20 | \# 105 |  |
| :--- | :---: | :---: | :---: | :---: |
| Slavick, Jeff |  | Broadcom |  |  |
| Comment Type T | Comment Status D |  | Bucket |  |

Comment Type T Comment Status D
Bucket
The process of creating am_txmapped is not optional

## SuggestedRemedy

Change "may then be" to "is"
Proposed Response Response Status W PROPOSED ACCEPT.

We've added 100GAUI-1 so need to update Figure 135A-8 to indicate that
SuggestedRemedy
Change $\mathrm{n}=2$ or 4 to $\mathrm{n}=1$ or 2 or 4
Proposed Response Response Status w
PROPOSED ACCEPT IN PRINCIPLE.
Change " $\mathrm{n}=2$ or 4 " to $" \mathrm{n}=1,2$, or 4 ".

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SC 161.5.2.6

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| $C l 161$ | $S C$ 161.5.2.6 | P109 | L46 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | \# 229 |  |

Comment Type E Comment Status D Bucket
The phrase "every $20 \times 1638466$-bit blocks" is hard to read with the space in the number 16384 (and possibly misleading, it can be interpreted as the number 1638466).

This space does not appear in the similar text in clause 91. The separator convetion is not helpful here, and it is not mandatory outside of tables.

Also applies in some other similar phrases in this subclause and in 161.5.4.3.
SuggestedRemedy
Change "16 384" to "16384".
Apply for other large numbers within the text in this clause.
Proposed Response
Response Status Z
PROPOSED REJECT.
This comment was WITHDRAWN by the commenter.

| Cl 161 | SC 161.5.2.6 | P109 | L47 | \# 230 |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee | Intel |  |  |  |

Comment Type E Comment Status D Bucket The "x" in "81 $920 \times 257$-bit blocks" is out of place - "257-bit" is not a number. This is also inconsistent with the text in the previous line, which does not have an " $x$ " betore " 66 -bit blocks".

Also in the next sentence and in 161.5.3.5.
SuggestedRemedy
Delete the "x" occurrences listed.
Proposed Response
Response Status Z
PROPOSED REJECT.
This comment was WITHDRAWN by the commenter.

| Cl 161 SC 161.5.2.6 | P110 | L16 | \# 232 |
| :--- | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |
| Comment Type T | Comment Status D |  | Bucket |

Comment Type T Comment Status D
Bucket
In figure 161-3, the labels A and B appear within the amp tx blocks, but these blocks are
not taken _from_ the codewords as the legend states - according to figure 161-5 they are inserted _into_ the stream of symbols that creates the codewords.

Also, the labels do not appear in the tx_scrambled area which contains the real traffic.

## SuggestedRemedy

Change the legend to have "to FEC codeword A" and "to FEC codeword B" .
Continue the labeling into symbol in columns 32 and 33.
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
The current wording is confusing.
Change to "FEC codeword A" and "FEC codeword B"
Also add $A / B$ into the $32 / 33$ column.

| Cl 161 SC 161.5.2.9 | P111 | L16 | \# 234 |  |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | E | Comment Status D |  | Bucket |

Comment Type E Comment Status D
Per style manual, in general text, isolated numbers less than 10 should be spelled out.
Applies here and in several other places in this clause (where numbers are isolated, i.e. with no units following).
SuggestedRemedy
Change "4" to to "four". Apply in other places in this clause.
Proposed Response Response Status w
PROPOSED ACCEPT IN PRINCIPLE.
Style manual is not as specific as the commenter states.
The guideline is as follows:
"In general text, isolated numbers less than 10 should be spelled out. However, in
equations, tables, figures, and other display elements, Arabic numerals should be used. Numbers applicable to the same category should be treated alike throughout a paragraph; numerals should not be used in some cases and spelled out in others."

Update numbers less than 10 to be consistent with the style manual.

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## Cl 161

SC 161.5.2.9

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| $C l$ 161 | SC 161.5.2.10 | P112 | L13 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | \# 235 |  |

Comment Type E Comment Status D Bucket
The number " 256 " appears on the boundary of the block "tx_scrambled",
SuggestedRemedy
Move the number to the interior of the box.
Proposed Response Response Status W
PROPOSED ACCEPT.

| $C l$ 161 | SC 161.5.3.1 | P113 |
| :--- | :---: | :---: |
| Slavick, Jeff | Broadcom | $L 7$ |

Comment Type TR Comment Status D Bucket
FEC synchronization FSM is not Figure 161-6
SuggestedRemedy
Change "161-6" to "91-8"
Proposed Response Response Status w
PROPOSED ACCEPT.

| Cl 161 | SC 161.5.3.3 | P113 | L34 | \# 236 |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | E | Comment Status D |  | Bucket |

A cross-reference to the subclause which defines "bypass error indication" would be helpful.
SuggestedRemedy
Insert "(see 161.5.3.3.1)" between "If bypass error indication" and "is not supported".
Proposed Response Response Status W
PROPOSED ACCEPT.

| $C l$ | 161 | $S C$ | 161.5.3.3 | P113 |
| :--- | :---: | :---: | :---: | :---: |$\quad$ L36 $\quad$ \# 81

Koehler, Daniel MorethanIP

Bucket
Comment Type TR Comment Status D
Does not reflect that there are 2 codewords to perform error indication for.
SuggestedRemedy
replace 'the codeword' with 'the two associated codewords'
Proposed Response Response Status W
PROPOSED ACCEPT.

| Cl 161 SC 161.5.4.1 | P115 | L10 | \# 238 |  |
| :--- | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | E | Comment Status D |  | Bucket |

Comment Type E Comment Status D $\quad$ Buck "Comprised on" is arguable language. 802.3 bs used "composed or , other projects "contains" or omitted this paragraph ald
diagrams take precedence over text).

I suggest "composed of".

## SuggestedRemedy

Change "comprised" to "composed".
Proposed Response Response Status W PROPOSED ACCEPT.

| Cl 161 | SC 161.5.4.2.1 | P115 | L25 | \# 117 |
| :--- | :---: | :---: | :---: | :---: |
| Nicholl, Shawn |  | Xilinx |  |  |
| Comment Type | ER | Comment Status D |  | Bucket |

Need to remove some editorial text related to cw_bad

## SuggestedRemedy

Remove the text:
No cw_bad variable, instead we have:
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Change: "No cw_bad variable, instead we have:"

| Cl 161 | SC 161.7.3 | P122 | L6 | \# 239 |
| :---: | :---: | :---: | :---: | :---: |
| Ran, Adee |  | ntel |  |  |

Comment Type T Comment Status D Bucket Item "*KR1" is marked "optional", but there is no another option (this sublayer is only used for CR1/KR1 PHYs), and no PICS item is defined as conditional on this feature. I don't see the purpose of this item.
SuggestedRemedy
Remove item "*KR1".
Proposed Response Response Status W PROPOSED ACCEPT.

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| $C l 161$ | $S C$ 161.7.4.2 | P124 | L19 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | \# 240 |  |


| Ran, Adee | Intel |
| :--- | :--- | :---: |
| Comment Type $\quad$ T Comment Status D |  |

The method of indicating errors has a "shall ensure" (161.5.3.3) but there is no corresponding PICS item.

Compare to item RF8 in clause 91 which states "Error indication function |91.5.3.3| Corrupts 66-bit block synchronization headers for
uncorrected errored codewords (...)
SuggestedRemedy
Add PICS item based on the quoted RF8.
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Change the feature name of RF4 to "Error indication function"

| Cl 162 | $S C$ | 162.1 | P125 | L35 |
| :--- | :--- | :--- | :--- | :--- |

Ran, Adee Intel
bucket
Table $162-1$ is carried over into the next page, but the continuation is not marked as such, as required by the style manual.

Also in Table 162-3 and perhaps other tables will turn out to be broken in future drafts.
There is also a customary "thin line at bottom" rule. We can perhaps defer applying this one to the last draft or to publication (it is not required in the style manual)
SuggestedRemedy
Add the "continued table" option for all tables.
Proposed Response
Response Status w
PROPOSED ACCEPT.

| Cl 162 |  | P127 | L53 | \# 32 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dudek, |  | Marvell |  |  |  |
| Comme | pe | Comment Status D |  |  | bucket |
| FEC is also used in "FEC symbol error rate" etc. where it also refers to the FEC within the 200 and 400G PCS. |  |  |  |  |  |
| SuggestedRemedy |  |  |  |  |  |
| Add to the sentence "for 100GBASE-CR1 or the RS-FEC within the Clause 119 PCS for 200GBASE-CR2 and 400GBASE-CR4". |  |  |  |  |  |
| Propose | espo | Response Status W |  |  |  |
| PROPOSED ACCEPT. |  |  |  |  |  |
| Cl 162 |  | P136 | L2 | \# 33 |  |
| Dudek, |  | Marvell |  |  |  |
| Comme | pe | Comment Status D |  |  | bucket |
| The cable assembly specifications are in 162.11 not 162.10 |  |  |  |  |  |
| SuggestedRemedy |  |  |  |  |  |
| Change the clause cross-reference from 162.10 to 162.11. Also on line 3 and line 19 |  |  |  |  |  |
| Proposed Response Response Status W |  |  |  |  |  |
| PROPOSED ACCEPT. |  |  |  |  |  |
| Cl 162 |  | P141 | L50 | \# 34 |  |
| Dudek, |  | Marvell |  |  |  |
| Comme | pe | Comment Status D |  |  | bucket |
| There are three pre-cursors. |  |  |  |  |  |
| SuggestedRemedy |  |  |  |  |  |
| Change "-2 to 1" to "-3 to 1" |  |  |  |  |  |
| Proposed Response Response Status W |  |  |  |  |  |
| PROPOSED ACCEPT. |  |  |  |  |  |

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COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

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| CI 162 | $S C$ 162.9.3.1.2 | P142 | L42 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | \# 254 |  |

Comment Type E Comment Status D bucket
Missing space after v_f
SuggestedRemedy
Add space.
Proposed Response Response Status w PROPOSED ACCEPT.

| $C l 162$ | $S C$ | 162.9.3.1.3 | P143 | L5 |
| :--- | :--- | :--- | :--- | :--- |

Ran, Adee
Comment Type T
Comment Status D

The tolerances in Table 162-9 should correspond to the maximum step size of each coefficient in Table 162-8.

Currently all should be $+/-0.02$ except $c(1)$ which is 0.05 (but subject to another comment may also be 0.02).
SuggestedRemedy
Change all values after the $+/-$ signs per comment.
Proposed Response Response Status W PROPOSED ACCEPT.

| Cl 162 | SC 162.9.3.1.5 | P143 | L49 | \# 258 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | T | Comment Status D |  | bucket |

This paragraph specifies the maximum value of $c(-3)$ when it is set to the minimum setting.
But the text says
"and $c(-2)$ having received sufficient "increment" requests so that it is at its maximum value"
which is incorrect.
SuggestedRemedy
Change to
"and $c(-3)$ having received sufficient "decrement" requests so that it is at its minimum value".
Proposed Response
Response Status w
PROPOSED ACCEPT.

| $C I$ | 162 | 162.9.4.3.5 | P147 |
| :--- | :--- | :--- | :--- |

Ran, Adee Intel

Comment Type E Comment Status D
bucket
"per-lane FEC symbol error counters (see 91.6)"
this refers to RS-FEC, but RS-FEC-Int can be used instead.
SuggestedRemedy
Change to "per-lane FEC symbol error counters (see 91.6 or 161.6)".
Proposed Response Response Status W
PROPOSED ACCEPT.

| $C l 162$ | $S C$ | 162.14.4.2 | P159 |
| :--- | :---: | :---: | :---: |
| Ran, Adee | Intel | L23 | \# 263 |

Ran, Adee Intel
Comment Type T Comment Status D bucket
In Item PC4, The reference should be 162.8.11 and the value/comment should include the exceptions listed in 162.8.11 for including $c(-3)$.

Item PC5 has a reference to a subclause in 162 that does not exist 0 it should point to clause 136.
SuggestedRemedy
Per comment.
Proposed Response Response Status W
PROPOSED ACCEPT.

| CI 162 | SC 162.14.4.5 | P160 | L50 | \# 264 |
| :--- | ---: | :---: | :---: | :---: |
| Ran, Adee |  | Intel |  |  |
| Comment Type | E | Comment Status D |  | bucket |

In item CA3, spaces should be inserted between numbers and units.
SuggestedRemedy
Per comment.
Proposed Response Response Status W
PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

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