

## IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

CI **000** SC **0** P L # **66**  
Froroth, Ingvar Marvell

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

The PDF Document Properties are not filled in completely:

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Subject: IEEE P802.3xx amendment

Author: IEEE P802.3xx Task Force

Keywords: P802.3xx,

*SuggestedRemedy*

Fill in the PDF Document Properties with 802.3by and relevant details.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI **031B** SC **31B.3.7** P **197** L **11** # **25**  
Marris, Arthur Cadence Design Syste

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

Delete editor's note as it is no longer needed.

*SuggestedRemedy*

Delete editor's note as it is no longer needed.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI **045** SC **45.2.1.101** P **42** L **30** # **23**  
Anslow, Pete Ciena

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

In Table 45-79, "R0" should be "RO". i.e., what appears to be a zero should be a capital "o"

*SuggestedRemedy*

Change "R0" to "RO"

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI **045** SC **45.2.1.101.a** P **42** L **42** # **9**  
Anslow, Pete Ciena

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

It is not clear exactly what happens when the 25GBASE-R Reed-Solomon FEC is disabled. Is this just the decoding? If the encoding is not performed, what is the signal format?

The answer to these questions can be found in 108.6.3 "25G RS-FEC Enable". Please make this information easier to obtain by adding a cross-reference to 108.6.3

*SuggestedRemedy*

Add: "(see 108.6.3)" to the end of the last sentence.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI **045** SC **45.2.1.102.1** P **43** L **15** # **24**  
Anslow, Pete Ciena

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

In the added text in 45.2.1.102.1, "Clause 91" should be green and "Clause 108" should be a cross-reference.

Same issues in 45.2.1.102.2

*SuggestedRemedy*

In the added text in 45.2.1.102.1, apply character tag "External" to "Clause 91" and make "Clause 108" a cross-reference.  
Make the same changes in 45.2.1.102.2.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI **045** SC **45.2.1.102.1** P **43** L **15** # **28**  
Marris, Arthur Cadence Design Syste

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

Fix cross references in 45.2.1.102.1 and 45.2.1.102.2

*SuggestedRemedy*

Mark Clause 91 and Clause 108 as cross references

Proposed Response Response Status **W**

PROPOSED ACCEPT.

## IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

CI **045** SC **45.2.1.102.1** P **43** L **16** # **1**  
 Anslow, Pete Ciena  
 Comment Type **E** Comment Status **D** bucket  
 "alignment markers lock" should be "alignment marker lock"  
 SuggestedRemedy  
 Change "alignment markers lock" to "alignment marker lock"  
 Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

CI **045** SC **45.2.1.7.4** P **38** L **13** # **22**  
 Anslow, Pete Ciena  
 Comment Type **E** Comment Status **D** bucket  
 Tables 45-9, 45-10, and 45-12 already contain rows with multiple PMD types. For instance:  
 "10GBASE-S, 10GBASE-L, 10GBASE-E 52.4.8"  
 These do not use "or" between the PMD types  
 SuggestedRemedy  
 Use the already established format for multiple PMD types in Tables 45-9, 45-10, and 45-12.  
 Replace " or" with ", " in Table 45-9 (2 instances), Table 45-10 (2 instances), and Table 45-12 (2 instances),  
 Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

CI **045** SC **45.2.3.7.3a** P **45** L **41** # **2**  
 Anslow, Pete Ciena  
 Comment Type **E** Comment Status **D** bucket  
 In the editing instruction, "new subclauses 45.2.3.7.3a" should be "new subclause 45.2.3.7.3a"  
 SuggestedRemedy  
 Change "new subclauses 45.2.3.7.3a" to "new subclause 45.2.3.7.3a"  
 Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

CI **073** SC **73.6.5** P **56** L **10** # **4**  
 Anslow, Pete Ciena  
 Comment Type **E** Comment Status **D** bucket  
 There is no editing instruction associated with 73.6.5  
 SuggestedRemedy  
 Add "Change 73.6.5 as follows:"  
 Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

CI **074** SC **74.1** P **59** L **20** # **10**  
 Anslow, Pete Ciena  
 Comment Type **E** Comment Status **D** bucket  
 The IEEE Editorial style manual contains:  
 "In a series of three or more terms, use a comma immediately before the coordinating conjunction (usually and, or, or nor)."  
 SuggestedRemedy  
 Change:  
 "The 25GBASE-CR, 25GBASE-CR-S, 25GBASE-KR and 25GBASE-KR-S PHYs" to:  
 "The 25GBASE-CR, 25GBASE-CR-S, 25GBASE-KR, and 25GBASE-KR-S PHYs"  
 Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

CI **074** SC **74.8.1** P **68** L **36** # **12**  
 Anslow, Pete Ciena  
 Comment Type **E** Comment Status **D** bucket  
 "Clause 73" should be a cross-reference  
 SuggestedRemedy  
 Make "Clause 73" a cross-reference  
 Proposed Response Response Status **W**  
 PROPOSED ACCEPT.

# IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

**Cl 105**    **SC 105.4.1**    **P 80**    **L 13**    # **56**  
 Baden, Eric    Broadcom  
**Comment Type**    **E**    **Comment Status**    **D**    *bucket*  
 the word 'of' is missing between transfer and a (define the transfer of a stream of data)  
**SuggestedRemedy**  
 Add the work of between the words transfer and a (stream)  
**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 106**    **SC 106.1**    **P 88**    **L 10**    # **13**  
 Anslow, Pete    Ciena  
**Comment Type**    **E**    **Comment Status**    **D**    *bucket*  
 "Clause 46" should be shown in green  
**SuggestedRemedy**  
 Apply the "External" character tag to "Clause 46"  
**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 107**    **SC 107.2**    **P 96**    **L 1**    # **57**  
 Baden, Eric    Broadcom  
**Comment Type**    **E**    **Comment Status**    **D**    *bucket*  
 Change the word codes to encodes for better readability.  
**SuggestedRemedy**  
 Change the word codes to encodes.  
**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 108**    **SC 108.1.1**    **P 101**    **L 10**    # **29**  
 Marris, Arthur    Cadence Design Syste  
**Comment Type**    **E**    **Comment Status**    **D**    *bucket*  
 Clause 108 is a single specification for the 25G RS\_FEC so it should be singular.  
**SuggestedRemedy**  
 Change:  
 "The specifications are closely related to those of the RS-FEC sublayer for 100GBASE-R PHYs"  
 To:  
 "The specification is closely related to that of the RS-FEC sublayer for 100GBASE-R PHYs"  
**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 108**    **SC 108.5.2.2**    **P 103**    **L 34**    # **61**  
 Dove, Daniel    Dove Networking Solut  
**Comment Type**    **ER**    **Comment Status**    **D**    *bucket*  
 Inaccurate phrasing  
**SuggestedRemedy**  
 Replace "periodic" with "periodically occurring"  
**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 108**    **SC 108.5.3.4**    **P 108**    **L 34**    # **177**  
 Wertheim, Oded    Mellanox Technologie  
**Comment Type**    **E**    **Comment Status**    **D**    *bucket*  
 The sunclause defines codeword maerker removal and not alignment marker removal  
**SuggestedRemedy**  
 Change the subclause to: 108.5.3.4 Codeword marker removal  
**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

# IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

**Cl 108**    **SC 108.5.3.4**    **P 108**    **L 34**    # **163**  
 Andrewartha, Mike    Microsoft

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

The heading for 108.5.3.4 should say "Codeword marker removal" instead of "Alignment marker removal"

*SuggestedRemedy*  
 Change heading for 108.5.3.4 to "Codeword marker removal"

**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

[Editor changed subclause from 5.3.4 to 108.5.3.4]

See #177.

**Cl 108**    **SC 108.5.4.2**    **P 110**    **L 31**    # **26**  
 Marris, Arthur    Cadence Design Syste

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

Delete editor's note as it is no longer needed.

*SuggestedRemedy*  
 Delete editor's note as it is no longer needed.

**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 108**    **SC 108.6.3**    **P 116**    **L 2**    # **45**  
 Ran, Adee    Intel

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

The editor's note about RS-FEC enable/disable capability is not needed in the next draft.

*SuggestedRemedy*  
 Delete editor's note.

**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 109**    **SC 109.3**    **P 126**    **L 23**    # **41**  
 Ran, Adee    Intel

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

The final part of the sentence, "(e.g., another PMA, FEC, or PMD)", repeats an identical itemization in the previous sentence.

*SuggestedRemedy*  
 Delete the parthesized text

**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 109**    **SC 109.4.5.1**    **P 128**    **L 31**    # **27**  
 Marris, Arthur    Cadence Design Syste

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

Delete editor's note as it is no longer needed.

*SuggestedRemedy*  
 Delete editor's note as it is no longer needed.

Also on page 129 line 21  
 Also on page 130 line 5

**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

**Cl 109**    **SC 3**    **P 126**    **L 33**    # **160**  
 Andrewartha, Mike    Microsoft

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

Typo: "The service interface below the PMA has and input and output" should be "The service interface below the PMA has an input and output"

*SuggestedRemedy*  
 Replace the word 'and' with 'an' between 'has' and 'input'

**Proposed Response**    **Response Status**    **W**  
 PROPOSED ACCEPT.

# IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

**Cl 109B** **SC 109B.1** **P 207** **L 40** # **121**  
Dawe, Piers Mellanox  
**Comment Type E** **Comment Status D** *bucket*  
Entries in key should be in alphabetical order.  
**SuggestedRemedy**  
Move FEC entry to its place in alphabetical order.  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

**Cl 109B** **SC 109B.3.4.1** **P 210** **L 17** # **18**  
Anslow, Pete Ciena  
**Comment Type E** **Comment Status D** *bucket*  
In Table 109B-1, "Table 88-13" should be green.  
Same issue for "83E.4.2" in 109B.4.1  
**SuggestedRemedy**  
In Table 109B-1, apply character tag "External" to "Table 88-13"  
Do the same for "83E.4.2" in 109B.4.1  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

**Cl 109B** **SC 109B.5.2.2** **P 212** **L 37** # **184**  
Dawe, Piers Mellanox  
**Comment Type E** **Comment Status D** *bucket*  
Clause 109B  
**SuggestedRemedy**  
Annex 109B  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

**Cl 109B** **SC 109B.5.2.2** **P 212** **L 50** # **185**  
Dawe, Piers Mellanox  
**Comment Type E** **Comment Status D** *bucket*  
Orphan heading  
**SuggestedRemedy**  
Keep with table on next page.  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

**Cl 109B** **SC 109B.5.3** **P 213** **L 11** # **191**  
Dawe, Piers Mellanox  
**Comment Type ER** **Comment Status D** *bucket*  
MM1 and MM2 are not major options because knowledge of their states does not allow for any different action to knowledge of the major option above, RSFEC.  
**SuggestedRemedy**  
Move these two PICS to 109B.5.4.2 Module output.  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

**Cl 109B** **SC 109B.5.3** **P 213** **L 9** # **181**  
Dawe, Piers Mellanox  
**Comment Type E** **Comment Status D** *bucket*  
Wrong subclause. The two choices are first laid out in 109B.1.1.  
**SuggestedRemedy**  
Change "109B.3.2.1" to "109B.1.1".  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

**Cl 109B** **SC 109B.5.4.2** **P 214** **L 19** # **182**  
Dawe, Piers Mellanox  
**Comment Type E** **Comment Status D** *bucket*  
Signal rate  
**SuggestedRemedy**  
Signaling rate  
**Proposed Response** **Response Status W**  
PROPOSED ACCEPT.

# IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

**Cl 109B**    **SC 109B.5.4.4**    **P 215**    **L 18**    # **154**  
Maki, Jeffery    Juniper Networks, Inc.

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

Draft 1.0 was not updated properly to reflect the final response made for Comment #110 against Draft 0.1.

**SuggestedRemedy**  
Value/Comment for Item RM2 should refer to 83E.3.4.1.1, not 83E.4.1.1. There is no subclause 83E.4.1.1.

**Proposed Response**    **Response Status**    **W**  
PROPOSED ACCEPT.

**Cl 110**    **SC 110.1**    **P 137**    **L 2**    # **15**  
Anslow, Pete    Ciena

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

The base standard is almost consistent in using "interpacket" rather than "inter-packet"  
Same issue in 111.1 and 112.1.1 (2 instances)

**SuggestedRemedy**  
Change "inter-packet" to "interpacket"  
Make the same change in 111.1 (page 163 line 54) and 112.1.1 (page 181 lines 42 and 43)

**Proposed Response**    **Response Status**    **W**  
PROPOSED ACCEPT IN PRINCIPLE.

Implement the suggested remedy, also including:  
page 76, line 16, clause 105

Affects clauses: 105, 110, 111, 112

**Cl 110**    **SC 110.10.7.1.2**    **P 152**    **L 17**    # **49**  
Ran, Adee    Intel

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

The editor's note about implementation of comment #103 against D0.1 (scattering parameters) is not needed in the next draft.

**SuggestedRemedy**  
Delete editor's note.

**Proposed Response**    **Response Status**    **W**  
PROPOSED ACCEPT.

**Cl 110**    **SC 110.6**    **P 140**    **L 1**    # **16**  
Anslow, Pete    Ciena

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

The IEEE Editorial style manual contains:  
"In a series of three or more terms, use a comma immediately before the coordinating conjunction (usually and, or, or nor)."

**SuggestedRemedy**  
Change:  
"in RS-FEC, BASE-R FEC or no-FEC mode." to:  
"in RS-FEC, BASE-R FEC, or no-FEC mode."

**Proposed Response**    **Response Status**    **W**  
PROPOSED ACCEPT.

**Cl 110**    **SC 110.8.4.2**    **P 144**    **L 47**    # **46**  
Ran, Adee    Intel

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

The editor's note about required block error ratio in BASE-R FEC mode is not needed in the next draft.

**SuggestedRemedy**  
Delete editor's note.

**Proposed Response**    **Response Status**    **W**  
PROPOSED ACCEPT.

See also comment #146.

**Cl 110**    **SC 110.8.4.2.3**    **P 147**    **L 46**    # **134**  
Dudek, Mike    QLogic

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

This is a good solution to the Comment #52.

**SuggestedRemedy**  
Delete the editor's note.

**Proposed Response**    **Response Status**    **W**  
PROPOSED ACCEPT.

See comment #47.

## IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

CI 110 SC 110.8.4.2.3 P 147 L 46 # 47  
 Ran, Adee Intel  
 Comment Type E Comment Status D bucket  
 The editor's note about implementation of comment #52 against D0.1 (modified COM parameters) is not needed in the next draft.  
 SuggestedRemedy  
 Delete editor's note.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 110 SC 110.8.4.3 P 148 L 26 # 17  
 Anslow, Pete Ciena  
 Comment Type E Comment Status D bucket  
 "test 2 as specified of Table 110-5" should be "test 2 as specified in Table 110-5"  
 SuggestedRemedy  
 Change "test 2 as specified of Table 110-5" to "test 2 as specified in Table 110-5"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 110 SC 110.8.4.3 P 148 L 36 # 48  
 Ran, Adee Intel  
 Comment Type E Comment Status D bucket  
 The editor's note about implementation of comment #53 against D0.1 (jitter tolerance tables) is not needed in the next draft.  
 SuggestedRemedy  
 Delete editor's note.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 110B SC 110B.1 P 222 L 14 # 101  
 Lusted, Kent Intel  
 Comment Type ER Comment Status D bucket  
 Type "QFP28"  
 SuggestedRemedy  
 Change "QFP28" to "QSFP28"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 110B SC 110B.1 P 222 L 18 # 102  
 Lusted, Kent Intel  
 Comment Type ER Comment Status D bucket  
 Type "QFP28"  
 SuggestedRemedy  
 Change "QFP28" to "QSFP28"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 110B SC 110B.1 P 222 L 18 # 44  
 Ran, Adee Intel  
 Comment Type E Comment Status D bucket  
 Cable assembly form factor is a new concept. Form factors mentioned here should have references to the definitions.  
 SuggestedRemedy  
 Insert "(See 110C.3.1)" after "SFP28-SFP28 form factor".  
 Insert "(See 110C.3.2)" after "QSFP28-QSFP28 form factor".  
 Insert "(See 110C.3.3)" after "QSFP28-4xSFP28 form factor".  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

## IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

CI 111 SC 111.8.3 P 170 L 6 # 50  
Ran, Adee Intel

Comment Type E Comment Status D bucket

The editor's note about implementation of comment #59 against D0.1 (receiver characteristics in no-FEC and BASE-R FEC modes) is not needed in the next draft.

## SuggestedRemedy

Delete editor's note.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 111 SC 111.9 P 172 L 30 # 51  
Ran, Adee Intel

Comment Type E Comment Status D bucket

The editor's note about implementation of comment #59 against D0.1 (channel characteristics for 25GBASE-KR-S) is not needed in the next draft.

## SuggestedRemedy

Delete editor's note.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 112 SC 112.3 P 182 L 25 # 43  
Ran, Adee Intel

Comment Type E Comment Status D bucket

The delay constraint values are in magenta.

## SuggestedRemedy

Change to normal black font.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 999 SC P 10 L 11 # 19  
Anslow, Pete Ciena

Comment Type E Comment Status D bucket

As the P802.3bw project is entering Sponsor ballot, it is reasonable to assume that the 802.3bw amendment will be published before the 802.3by amendment.

## SuggestedRemedy

Add the summary for IEEE Std 802.3bw to the frontmatter above that for IEEE Std 802.3by:

IEEE Std 802.3bwTM-201x

This amendment includes changes to IEEE Std 802.3-201x and adds Clause 96. This amendment adds 100 Mb/s Physical Layer (PHY) specifications and management parameters for operation on a single balanced twisted-pair copper cable.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 999 SC P 12 L 9 # 81  
Nowell, Mark Cisco

Comment Type E Comment Status D bucket

Table of contents entry for 45.2.1.94 & 45.2.1.95 both state "Single-lane PHY 10GBASE-R..."

The intention of the changes in 45.2.1.94 & 95 is to replace "10GBASER-R" with "Single-lane PHY BASE-R"

Additional comments to follow on the use of "Single-lane"...

## SuggestedRemedy

Correct table of contents entry for both 45.2.1.94 & 45.2.1.95 to state "Single-lane PHY BASE-R..."

Proposed Response Response Status W

PROPOSED ACCEPT.

# IEEE 802.3by D1.0 25 Gb/s Ethernet 2nd Task Force review comments

<i>Cl</i> <b>999</b>	<i>SC</i>	<i>P</i> <b>18</b>	<i>L</i> <b>46</b>	<i>#</i> <span style="border: 1px solid black; padding: 0 5px;">83</span>
Nowell, Mark		Cisco		

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

Table of contents entry for 110.11.1 needs a space after clause number or else it looks like 110.11.125

## *SuggestedRemedy*

Add space to Table of contents entry for 110.11.1

*Proposed Response*                      *Response Status*    **W**

PROPOSED ACCEPT IN PRINCIPLE.

The space is missing for all level-3 headings in the TOC. Fix the formatting appropriately.

<i>Cl</i> <b>999</b>	<i>SC</i> <b>99</b>	<i>P</i> <b>15</b>	<i>L</i> <b>14</b>	<i>#</i> <span style="border: 1px solid black; padding: 0 5px;">187</span>
Dawe, Piers		Mellanox		

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

Formatting /alignment problem?

## *SuggestedRemedy*

Fix

*Proposed Response*                      *Response Status*    **W**

PROPOSED ACCEPT IN PRINCIPLE.