

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

Cl 44 SC 44.1.4.4 P28 L46 # R1-3

Ran, Adee Cisco Systems, Inc.

Comment Type E Comment Status A EZ

"The term 10GBASE-AU, specified in Clause 166, refers to a specific Physical Layer implementation based upon 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission on glass optical fiber in the automotive environment."

This paragraph is unnecessarily different from the preceding paragraphs - "encapsulated" is an obscure word and "Reed-Solomon frames" is not used in this draft other than in the introduction clauses (RS-FEC codeword is the prevalent term in this draft).

The base text in the preceding paragraph (not included in the amendment) is "The term 10GBASE-T1, specified in Clause 149, refers to a specific Physical Layer implementation based upon 64B/65B data coding method placed in an RS-FEC frame that is Gray-code mapped to PAM4 for transmission over a single balanced pair of conductors."

Similar language should be used, with the necessary changes.

SuggestedRemedy

Change the quoted sentence to "The term 10GBASE-AU, specified in Clause 166, refers to a specific Physical Layer implementation based upon 64B/65B data coding method placed in RS-FEC codewords that are transmitted using NRZ modulation on glass optical fiber in the automotive environment."

Response Response Status C

ACCEPT IN PRINCIPLE.
Comment is out of scope for this recirculation ballot.

Change
"The term 10GBASE-AU, specified in Clause 166, refers to a specific Physical Layer implementation based upon 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission over glass optical fiber in the automotive environment."
to
"The term 10GBASE-AU, specified in Clause 166, refers to a specific Physical Layer implementation based upon 64B/65B data coding method placed in RS-FEC codewords that are transmitted using NRZ modulation on glass optical fiber in the automotive environment."

Cl 44 SC 44.1.4.4 P28 L48 # R1-57

Torres, Luis Knowledge Development for Plastic Optical Fiber

Comment Type E Comment Status A EZ

Grammar and consistency with other subclauses

SuggestedRemedy

Change "for transmission on glass optical fiber" to "for transmission over glass optical fiber"

Response Response Status C

ACCEPT.

Cl 105 SC 105.1.3 P49 L39 # R1-4

Ran, Adee Cisco Systems, Inc.

Comment Type E Comment Status A EZ

"25GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission on optical fiber."

As stated in another comment - "encapsulated" is an obscure word and "Reed-Solomon frames" is not used in this draft other than in the introduction clauses (RS-FEC codeword is the prevalent term in this draft).

Also, the fact that an optical fiber is used is already included in the preceding statement - there is no need to repeat it.

The base text in the preceding paragraph (not included in the amendment) is "The term 10GBASE-T1, specified in Clause 149, refers to a specific Physical Layer implementation based upon 64B/65B data coding method placed in an RS-FEC frame that is Gray-code mapped to PAM4 for transmission over a single balanced pair of conductors."

Similar language should be used, with the necessary changes.

SuggestedRemedy

Change the quoted sentence to

"25GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using NRZ modulation".

Response Response Status C

ACCEPT IN PRINCIPLE.
Comment is out of scope for this recirculation ballot.

Change
"25GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission on optical fiber."
to
"25GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using NRZ modulation"

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

<i>Cl</i> 105	<i>SC</i> 105.2	<i>P</i> 51	<i>L</i> 18	# R1-58
Torres, Luis		Knowledge Development for Plastic Optical Fiber		
<i>Comment Type</i>	E	<i>Comment Status</i>	A	<i>EZ</i>
Typo				
<i>SuggestedRemedy</i>				
Change "25BASE-AU" to "25GBASE-AU"				
<i>Response</i>			<i>Response Status</i>	C
ACCEPT.				

<i>Cl</i> 125	<i>SC</i> 125.1.3	<i>P</i> 54	<i>L</i> 26	# R1-5
Ran, Adeo		Cisco Systems, Inc.		
<i>Comment Type</i>	E	<i>Comment Status</i>	A	<i>EZ</i>
"2.5GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission on optical fiber."				
As stated in another comment - "encapsulated" is an obscure word and "Reed-Solomon frames" is not used in this draft other than in the introduction clauses (RS-FEC codeword is the prevalent term in this draft).				
Also, the fact that an optical fiber is used is already included in the preceding statement - there is no need to repeat it.				
Similarly for 5G in the next paragraph.				
<i>SuggestedRemedy</i>				
Change the quoted sentence to				
"2.5GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using NRZ modulation."				
Change the last sentence in the second paragraph to				
"5GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using NRZ modulation."				
<i>Response</i>			<i>Response Status</i>	C
ACCEPT IN PRINCIPLE.				
Comment is out of scope for this recirculation ballot.				
Change				
"2.5GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission on optical fiber."				
to				
"2.5GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using NRZ modulation."				
Change				
"5GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to NRZ modulation for transmission on optical fiber."				
to				
"5GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using NRZ modulation."				

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

Cl 125 SC 125.1.4 P56 L22 # R1-59
 Torres, Luis Knowledge Development for Plastic Optical Fiber
 Comment Type E Comment Status A EZ
 Typo
 SuggestedRemedy
 Change "2.5BASE-AU" to "2.5GBASE-AU" and "5BASE-AU" to "5GBASE-AU".
 Response Response Status C
 ACCEPT.

Cl 131 SC 131.1.3 P59 L7 # R1-6
 Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ
 "50GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to PAM4 modulation for transmission on optical fiber"
 As stated in another comment - "encapsulated" is an obscure word and "Reed-Solomon frames" is not used in this draft other than in the introduction clauses (RS-FEC codeword is the prevalent term in this draft).
 Also, the fact that an optical fiber is used is already included in the preceding statement - there is no need to repeat it.
 SuggestedRemedy
 Change the quoted sentence to
 "50GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using PAM4 modulation."
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Comment is out of scope for this recirculation ballot.
 Change
 "50GBASE-AU uses 64B/65B coding encapsulated into Reed-Solomon frames that are mapped to PAM4 modulation for transmission on optical fiber"
 to
 "50GBASE-AU uses 64B/65B coding placed into RS-FEC codewords that are transmitted using PAM4 modulation."

Cl 131 SC 131.4 P60 L43 # R1-60
 Torres, Luis Knowledge Development for Plastic Optical Fiber
 Comment Type E Comment Status A EZ
 Typo. Extra 2 digit in the Maximum (pause_quanta) column.
 SuggestedRemedy
 Change "229" to "29"
 Response Response Status C
 ACCEPT.

Cl 166 SC 166.1.4 P64 L19 # R1-61
 Torres, Luis Knowledge Development for Plastic Optical Fiber
 Comment Type T Comment Status A EZ
 PHD information is used also by the PMA sublayer
 SuggestedRemedy
 Change "it is used by the PCS sublayer" to "it is used by the PCS and PMA sublayers"
 Response Response Status C
 ACCEPT.

Cl 166 SC 166.1.4 P64 L21 # R1-8
 Ran, Adeo Cisco Systems, Inc.
 Comment Type T Comment Status A EZ
 This page contains four cross-references to Table 166-2. The first one is in a description of the PHD; the last three are about the content of the PHD, and are not really helpful for the reader.
 SuggestedRemedy
 On L21, delete "(see Table 166-2)"
 On L24 and on L32, change "as described in Table 166-2" to "using the PHD".
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Comment is out of scope for this recirculation ballot.
 However, the suggested remedy is accepted.

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

Cl 166 SC 166.1.5 P110 L17 # R1-62

Torres, Luis Knowledge Development for Plastic Optical Fiber
 Comment Type E Comment Status A EZ

Different font sizes in NOTE.

SuggestedRemedy

Use the font size defined for NOTE paragraph in the document template.

Response Response Status C

ACCEPT.

Cl 166 SC 166.2.1 P66 L40 # R1-11

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

"as specified in Table 166-2 (see 166.2.2.1.1)."

no need for double reference. Table 166-2 is part of 166.2.2.1.1.

SuggestedRemedy

change to "as specified in 166.2.2.1.1."

Response Response Status C

ACCEPT IN PRINCIPLE.
 Comment is out of scope for this recirculation ballot.
 However, the suggested remedy is accepted.

Cl 166 SC 166.2.1 P67 L5 # R1-12

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

"The 36 CW that are needed"

Using the acronym saves very little typing here, makes it less readable and makes the grammar questionable.

There are a few other instances of the acronym in subclause text where it interferes with reading : 166.2.2.5, 166.3.4.6.1 (twice), 166.3.4.6.2.

In other places, CW is used as a variable name or as a label of a specific block of data; in these cases CW is preferable.

SuggestedRemedy

Change to "The 36 codewords that are needed"

Change "CW" to "codeword" and adjust grammar if necessary where it is just an acronym and not a variable name (as listed in the comment, and elsewhere if necessary).

Response Response Status C

ACCEPT IN PRINCIPLE.
 Comment is out of scope for this recirculation ballot.
 However, the suggested remedy is accepted.
 Change "CW"
 to
 "codeword"
 in the text.

Some occurrences in the Figures, e.g. Figure 166-31 and 166-32,
 add explanation "CW = codeword".

Cl 166 SC 166.2.2.1.1 P67 L33 # R1-14

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

Table 166-2 spans more than one page; the subsequent parts should have "(continued)".

SuggestedRemedy

Set the table continuation variable in this table (and others if necessary) to make the "(continued)" appear.

Response Response Status C

ACCEPT IN PRINCIPLE.
 Set the Frame Maker table continuation variable in all the tables.

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

CI 166 SC 166.2.2.1.2 P70 L3 # R1-17

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status A EZ

The term "three repetition code" appears uncapitalized in its definition in 166.2.2.1.5. It should not be capitalized here.

SuggestedRemedy

Remove capitalization from "Three Repetition Code".

Response Response Status C

ACCEPT IN PRINCIPLE.
Comment is out of scope for this recirculation ballot.
However, the suggested remedy is accepted.

CI 166 SC 166.2.2.3 P71 L28 # R1-19

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status A EZ

Text is stretched. It seems that it is formatted as justified, and a paragraph break is missing.

SuggestedRemedy

Format as necessary to prevent the text stretching.

Response Response Status C

ACCEPT.

CI 166 SC 166.2.2.4 P72 L5 # R1-20

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status A EZ

"Polynomial operations will be used"

"will" is deprecated in standards text. And in this case, the operations are used at the present time.

SuggestedRemedy

Change to "Polynomial operations are used".

Response Response Status C

ACCEPT.

CI 166 SC 166.2.2.7.2 P78 L29 # R1-25

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status A EZ

"as specified in the PCS 64B/65B transmit state diagram (see 166.2.2.9, and Figure 166-16)"

No need for double reference. Figure 166-16 is part of 166.2.2.9 (and its main content).

SuggestedRemedy

Change to "as specified in the PCS 64B/65B transmit state diagram (Figure 166-16)"

Response Response Status C

ACCEPT IN PRINCIPLE.
Comment is out of scope for this recirculation ballot.
However, the suggested remedy is accepted.

CI 166 SC 166.2.2.7.4 P80 L33 # R1-27

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status A EZ

"are specified in Table 166-4 for <...>, and Table 166-5 for" Missing "in" before "Table 166-5".

SuggestedRemedy

Change "and Table 166-5" to "and in Table 166-5".

Response Response Status C

ACCEPT.

CI 166 SC 166.2.2.7.9 P83 L6 # R1-29

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status A EZ

"block.The" missing space.

SuggestedRemedy

Insert a space

Response Response Status C

ACCEPT.

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

Cl 166 SC 166.2.2.8.1 P83 L32 # R1-31

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

The first sentence in the definition of LBLOCK_T is badly stretched as a result of justification (apparently it ends with a line break). If it is not a separate paragraph, the text should continue.

Similarly for LBLOCK_R in 166.2.3.7.1.

SuggestedRemedy

Delete the line break.

Response Response Status C
 ACCEPT.

Cl 166 SC 166.2.2.8.2 P84 L5 # R1-32

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

The "Values" paragraph is badly justified.

Similarly in the definition of T_BLOCK_TYPE in 166.2.2.8.3, and several in 166.3.4.1.

SuggestedRemedy

Fix the paragraph formats to create the appropriate justification as in similar paragraphs in the base standard.

Response Response Status C
 ACCEPT.

Cl 166 SC 166.2.3.2 P87 L11 # R1-34

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

a RS-FEC

(this appears 9 times in the draft)

SuggestedRemedy

Find and replace all instances to "an RS-FEC"

Response Response Status C
 ACCEPT.

Cl 166 SC 166.2.3.6 P87 L38 # R1-35

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

The commas preceding "shall" should not be there.

SuggestedRemedy

Delete the commas (L38 and L40).

Response Response Status C
 ACCEPT.

Cl 166 SC 166.3.4.6.4 P104 L17 # R1-40

Ran, Adeo Cisco Systems, Inc.
 Comment Type E Comment Status A EZ

Missing comma before "shall" ("which ..." is a parenthetical expression).

SuggestedRemedy

insert a comma after "166.3.4.6.1".

Response Response Status C
 ACCEPT.

Cl 166 SC 166.6.4.8.3 P126 L13 # R1-63

Torres, Luis Knowledge Development for Plastic Optical Fiber
 Comment Type T Comment Status A EZ

Wrong sign in B(z) polynomial (Figure 166-41)

SuggestedRemedy

Change "B(z)" to "-B(z)".

Response Response Status C
 ACCEPT.

IEEE P802.3cz D3.1 Multi-Gigabit Optical Automotive Ethernet 1st Sponsor recirculation ballot comments

CI 166 SC 166.10.1 P139 L6 # R1-66

Wienckowski, Natalie General Motors Company

Comment Type ER Comment Status A EZ

The table was changed to call out temperature classes per i-102, but the names in the table were not changed to match.

SuggestedRemedy

- Change "Grade 1" to "Class 1".
- Change "Grade 2" to "Class 2".
- Change "Grade 3" to "Class 3".

Response Response Status C

ACCEPT.