

IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review commentsF Review - D1.0 Comments

Cl 1 SC 1.4 P 23 L 43 # 14  
 Lo, William Marvell Semiconducto  
 Comment Type **TR** Comment Status **X**  
 Annex 128A describes the 2.5GSEI and not just Clause 128A.2  
 SuggestedRemedy  
 Change Clause 128A.2 to Annex 128A  
 Proposed Response Response Status **O**

Cl 1 SC 1.4 P 23 L 52 # 15  
 Lo, William Marvell Semiconducto  
 Comment Type **TR** Comment Status **X**  
 Annex 130A describes the 5GSEI and not just Clause 130A.2  
 SuggestedRemedy  
 Change Clause 130A.2 to Annex 130A  
 Proposed Response Response Status **O**

Cl 1 SC 1.4 P 24 L 11 # 16  
 Lo, William Marvell Semiconducto  
 Comment Type **TR** Comment Status **X**  
 Need to add 2.5GSEI and 5GSEI  
 SuggestedRemedy  
 Add  
 2.5GSEI 2.5Gb/s Storage Enclosure Interface  
 5GSEI 5Gb/s Storage Enclosure Interface  
 Proposed Response Response Status **O**

Cl 30 SC 30.5.1.1.2 P 26 L 8 # 30  
 Lo, William Marvell Semiconducto  
 Comment Type **TR** Comment Status **X**  
 Multiple issues with 30.5.1.1.2  
 1) Need to add 2.5GBASE-X and 5GBASE-R since they are enumerated in lines 23 and 24.  
 2) Current definitions on 2.5GBASE-KX and 5GBASE-KR should be PMD not PCS/PMA  
 SuggestedRemedy  
 Add  
 2.5GBASE-X X PCS/PMA as specified in Clause 127 over undefined PMD  
 5GBASE-R R PCS/PMA as specified in Clause 129 over undefined PMD  
 Change current definitions to  
 2.5GBASE-KX X PCS/PMA over an electrical backplane PMD as specified in Clause 128  
 5GBASE-KX R PCS/PMA over an electrical backplane PMD as specified in Clause 130  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.7.1 P 27 L 45 # 31  
 Lo, William Marvell Semiconducto  
 Comment Type **ER** Comment Status **X**  
 Heading 45.2.1.7.1 is incorrect  
 SuggestedRemedy  
 Change to 45.2.1.7.4  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.8 P 28 L 21 # 32  
 Lo, William Marvell Semiconducto  
 Comment Type **ER** Comment Status **X**  
 Table 45-11 should be 45-12  
 SuggestedRemedy  
 Table 45-11 should be 45-12  
 Proposed Response Response Status **O**

IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review comments F Review - D1.0 Comments

Cl 45 SC 45.2.1.14c P 28 L 40 # 33  
 Lo, William Marvell Semiconducto

Comment Type ER Comment Status X  
 Table 45-17g by inserting a row for the bit 1.21.3  
 should be  
 Table 45-17c by inserting a row for the bit 1.21.2

SuggestedRemedy  
 Fix per comment

Proposed Response Response Status O

Cl 45 SC 45.2.1.88 P 29 L 40 # 34  
 Lo, William Marvell Semiconducto

Comment Type T Comment Status X  
 Delete PA comment.  
 Same registers controls both 1000BASE-KX and 2.5GBASE-KX

SuggestedRemedy  
 Delete PA comment.

Proposed Response Response Status O

Cl 45 SC 45.2.1.88 P 30 L 7 # 35  
 Lo, William Marvell Semiconducto

Comment Type T Comment Status X  
 Delete PA comment - but need to accept the comment.  
 See below for remedy.

SuggestedRemedy  
 Delete PA comment.  
 add:  
 "The assignment of bits in the 1000BASE-KX/2.5GBASE-KX control register shown in  
 Table 45-69"

(i.e. add the /2.5GBASE-KX to the sentence

Proposed Response Response Status O

Cl 45 SC 45.2.3 P 30 L 22 # 36  
 Lo, William Marvell Semiconducto

Comment Type TR Comment Status X  
 Delete PA comment - but need to accept the comment.  
 See below for remedy.

SuggestedRemedy  
 Delete PA comment.

In table 45-119 from 802.3by change to  
 (i.e. add the 5G speed)

3.34 through 3.37  
 5/10/25GBASE-R PCS test pattern seed A  
 45.2.3.15

3.38 through 3.41  
 5/10/25GBASE-R PCS test pattern seed B  
 45.2.3.16

Proposed Response Response Status O

Cl 45 SC 45.2.3 P 30 L 24 # 37  
 Lo, William Marvell Semiconducto

Comment Type TR Comment Status X  
 Missed a register change needed for loopback.

SuggestedRemedy  
 Add the following:

45.2.3.1 PCS control 1 register (Register 3.0)  
 45.2.3.1.2 Loopback (3.0.14)  
 Copy the text from 802.3bz and make the following change:  
 Change all instances of 10GBASE-R to 5/10GBASE-R

Proposed Response Response Status O

IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review comments F Review - D1.0 Comments

**Cl 45**    **SC 45.2.3.13.1**                      **P 32**            **L 34**                      # **38**  
 Lo, William                                      Marvell Semiconducto  
**Comment Type**    **E**                      **Comment Status**    **X**  
     Missing space  
  
*SuggestedRemedy*  
     Add space to the following:  
  
     in 126.3.7.1  
**Proposed Response**                      **Response Status**    **O**

**Cl 45**    **SC 45.2.7.14ab**                      **P 35**            **L 30**                      # **41**  
 Lo, William                                      Marvell Semiconducto  
**Comment Type**    **E**                      **Comment Status**    **X**  
     5GBASE-R should be 5GBASE-KR  
  
*SuggestedRemedy*  
     See comment  
**Proposed Response**                      **Response Status**    **O**

**Cl 45**    **SC 45.2.3.13.5**                      **P 32**            **L 50**                      # **39**  
 Lo, William                                      Marvell Semiconducto  
**Comment Type**    **E**                      **Comment Status**    **X**  
     Missing underline  
  
*SuggestedRemedy*  
     Underline 5/ in 5/10/25GBASE-R  
**Proposed Response**                      **Response Status**    **O**

**Cl 73**    **SC 73.7.4.1**                                      **P 49**            **L 3**                      # **42**  
 Lo, William                                      Marvell Semiconducto  
**Comment Type**    **E**                      **Comment Status**    **X**  
     Missing space  
  
*SuggestedRemedy*  
     Add space between  
     in 73.7.4.1  
**Proposed Response**                      **Response Status**    **O**

**Cl 45**    **SC 45.2.3.16**                                      **P 34**            **L 9**                      # **40**  
 Lo, William                                      Marvell Semiconducto  
**Comment Type**    **TR**                      **Comment Status**    **X**  
     Wrong seed  
  
*SuggestedRemedy*  
     Change seed A  
     to  
     seed B  
**Proposed Response**                      **Response Status**    **O**

**Cl 78**    **SC 78.1.1**                                      **P 53**            **L 18**                      # **43**  
 Lo, William                                      Marvell Semiconducto  
**Comment Type**    **TR**                      **Comment Status**    **X**  
     Not all PCS types support FEC.  
     Clause 129 PCS does not support BASE-R FEC.  
  
*SuggestedRemedy*  
     Change  
     these PCS types  
     to  
     the Clause 49 PCS and Clause 82 PCS  
**Proposed Response**                      **Response Status**    **O**

IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review commentsF Review - D1.0 Comments

Cl 78 SC 78.1.3.3 P 53 L 25 # 44  
 Lo, William Marvell Semiconducto

Comment Type **TR** Comment Status **X**

Clause 78.1.3.3.1 got dropped.  
 Put back

SuggestedRemedy

78.1.3.3.1 PHY LPI transmit operation

Change the fourth paragraph of 78.1.3.3.1 as shown.

The EEE capability in most PHYs (for example, 100BASE-TX, 10GBASE-T, 1000BASE-KX, 2.5GBASEKX, 5GBASE-KR, 10GBASE-KR, and 10GBASE-KX4) requires the local PHY transmitter to go quiet after sleep is signalled.

Proposed Response Response Status **O**

Cl 78 SC 78.1.4 P 53 L 30 # 45  
 Lo, William Marvell Semiconducto

Comment Type **E** Comment Status **X**

Delete extra colon at end of sentence

SuggestedRemedy

See comment

Proposed Response Response Status **O**

Cl 125 SC 125 P 55 L 1 # 17  
 Lo, William Marvell Semiconducto

Comment Type **TR** Comment Status **X**

Strip down Clause 125 to bare minimum highlighting the differences only.

SuggestedRemedy

See comment. Editor has discretion.

Proposed Response Response Status **O**

Cl 125 SC 125.1.2 P 55 L 40 # 18  
 Lo, William Marvell Semiconducto

Comment Type **ER** Comment Status **X**

Item d is new - need to underline it.

SuggestedRemedy

See comment.

Proposed Response Response Status **O**

Cl 125 SC 125.1.4 P 58 L 13 # 1  
 Lo, William Marvell Semiconducto

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

2.5GBASE-KX and 5GBASE-KR are new - need to underline it.

SuggestedRemedy

See comment.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl 125 SC 125.1.4 P 58 L 19 # 2  
 Lo, William Marvell Semiconducto

Comment Type **ER** Comment Status **X**

missing space

SuggestedRemedy

Add space between

reference columns

Proposed Response Response Status **O**

IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review commentsF Review - D1.0 Comments

Cl 125 SC 125.2.2 P 59 L 52 # 3  
 Lo, William Marvell Semiconducto  
 Comment Type ER Comment Status X  
 Sentence is new - need to underline it.  
 SuggestedRemedy  
 See comment.  
 Proposed Response Response Status O

Cl 127 SC 127.2.4.5 P 70 L 54 # 6  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 Delete (( ))  
 SuggestedRemedy  
 Delete the parenthesis  
 Proposed Response Response Status O

Cl 125 SC 125.2.4.2 P 60 L 32 # 4  
 Lo, William Marvell Semiconducto  
 Comment Type ER Comment Status X  
 Clause 125.2.4.2 is new - need to underline entire clause.  
 SuggestedRemedy  
 See comment.  
 Proposed Response Response Status O

Cl 127 SC 127.2.5 P 71 L 49 # 7  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 Delete extra period at end of paragraph  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

Cl 125 SC 125.3 P 61 L 22 # 5  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 Delete PA comment in both cells  
 Clause 70.4 1000BASE-KX PCS+PMA+PMD delay is 328 bits  
 This is not an integer pause\_quanta. i.e 328/512 = 0.640625  
 For 2.5GBASE-KX we are making the entire PCS+PMA+PMD to be 1024 which is an  
 integer pause\_quanta. We are giving PCS more budget where it is needed instead of  
 doing 512 bits for PCS+PMA and 512 bits for PMD.  
 SuggestedRemedy  
 Delete PA comment in both cells  
 Proposed Response Response Status O

Cl 127 SC 127.2.6.1.3 P 77 L 26 # 8  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 Delete extra period at end of paragraph  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

Cl 127 SC 127.2.6.1.3 P 77 L 31 # 9  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 Add period at end of paragraph  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review comments F Review - D1.0 Comments

Cl 127 SC 127.2.6.1.4 P 80 L 50 # 10  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 should be table 36-1a-e  
 SuggestedRemedy  
 Change 36a-e  
 to  
 36-1a-e  
 Proposed Response Response Status O

Cl 127 SC 127.2.6.2.7 P 95 L 4 # 13  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 Wrong reference  
 (See Clause 36.2.5.2.9)  
 SuggestedRemedy  
 Figure 127-10 should be Table 36-10  
 Proposed Response Response Status O

Cl 127 SC 127.2.6.1.4 P 81 L 4 # 11  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 should be table 36-1a-e  
 SuggestedRemedy  
 Change 36a-e  
 to  
 36-1a-e  
 Two instances of this.  
 Proposed Response Response Status O

Cl 128 SC 128.4 P 108 L 25 # 19  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 Delete extra comma  
 SuggestedRemedy  
 Delete extra comma after Clasue 31  
 Proposed Response Response Status O

Cl 127 SC 127.2.6.2.6 P 94 L 16 # 12  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 ) at the wrong place.  
 Put it at the end.  
 SuggestedRemedy  
 ) at the wrong place.  
 Put it at the end just like the other 4 states below it.  
 Proposed Response Response Status O

Cl 128 SC 128.6.5 P 110 L 35 # 20  
 Lo, William Marvell Semiconducto  
 Comment Type ER Comment Status X  
 Remove editor's note  
 TBDs are resolved.  
 SuggestedRemedy  
 Remove editor's note  
 Proposed Response Response Status O



CI 128D SC 128D.2.2 P 204 L 32 # 59  
 Smith, Daniel Seagate Technology  
 Comment Type TR Comment Status X  
 Equation 128D-4 is incorrect  
 SuggestedRemedy  
 Change equation 128D-4 to:  
 $y(f) = 17-f \quad 0.01 \leq f < 4$   
 $y(f) = 15-0.5f \quad 4 \leq f < 5.15625$   
 Proposed Response Response Status O

CI 128D SC Figure 128D-2 P 202 L 27 # 56  
 Smith, Daniel Seagate Technology  
 Comment Type TR Comment Status X  
 reformat graph to match equation  
 SuggestedRemedy  
 replace Figure with new plot from Dan Smith  
 Proposed Response Response Status O

CI 128D SC Figure 128D-4 P 204 L 22 # 57  
 Smith, Daniel Seagate Technology  
 Comment Type TR Comment Status X  
 reformat graph to match equation and use logarithmic x-axis  
 SuggestedRemedy  
 replace Figure with new plot from Dan Smith  
 Proposed Response Response Status O

CI 128D SC Figure 128D-5 P 205 L 19 # 58  
 Smith, Daniel Seagate Technology  
 Comment Type TR Comment Status X  
 reformat graph to match equation and use logarithmic x-axis  
 SuggestedRemedy  
 replace Figure with new plot from Dan Smith  
 Proposed Response Response Status O

CI 129 SC 129.1.1 P 125 L 12 # 23  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 Need both PCS and PMA  
 SuggestedRemedy  
 "the PMA"  
 should be  
 "the PCS and PMA"  
 Proposed Response Response Status O

CI 129 SC 129.1.3 P 126 L 33 # 24  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 Need both PCS and PMA  
 SuggestedRemedy  
 "PMA"  
 should be  
 "PCS and PMA"  
 Proposed Response Response Status O



IEEE 802.3cb D1.0 TF Re IEEE 802.3cb D1.0 TF Review 2.5 Gb/s and 5 Gb/s Backplane Ethernet 1st Task Force review commentsF Review - D1.0 Comments

CI 129 SC 129.2.1 P 127 L 46 # 25  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 Add missing period at end of paragraph.  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

CI 129 SC 129.2.4 P 130 L 8 # 28  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 It would be good if table 129-1 and 129-2 appear right after clause 129.2.4 since text is describing the tables.  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

CI 129 SC 129.2.2 P 129 L 30 # 26  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 Incorrect variable label.  
 SuggestedRemedy  
 rx\_data\_unit  
 should be  
 rx\_data-group  
 2 instances  
 Proposed Response Response Status O

CI 130 SC 130.6.8 P 145 L 17 # 29  
 Lo, William Marvell Semiconducto  
 Comment Type TR Comment Status X  
 Wrong reference  
 SuggestedRemedy  
 45.2.1.7.1 should be  
 45.2.1.7.4  
 Proposed Response Response Status O

CI 129 SC 129.2.3 P 129 L 34 # 27  
 Lo, William Marvell Semiconducto  
 Comment Type E Comment Status X  
 It would be good if Clause 129.2.3 heading and text appear before Figure 129-2 since text is describing the figures.  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

CI 130 SC 130.7.1 P 146 L 35 # 51  
 Wu, Peter Marvell Semiconducto  
 Comment Type TR Comment Status X  
 The total jitter is 0.30 UI instaed of 0.28 UI at table 130-4  
 SuggestedRemedy  
 Change 0.28 to 0.30  
 Proposed Response Response Status O

Cl 130 SC 130.7.1.2 P 147 L 30 # 52  
 Wu, Peter Marvell Semiconducto  
 Comment Type E Comment Status X  
 At Equation 130-1, Return\_loss min is not necessary  
 SuggestedRemedy  
 removed, it reads:  
 Return\_loss(f) >= 20  
 Proposed Response Response Status O

Cl 130 SC 130.7.1.6 P 149 L 34 # 48  
 Wu, Peter Marvell Semiconducto  
 Comment Type E Comment Status X  
 Same problem as we have at Equation 130-2.  
 SuggestedRemedy  
 remove "x" and pull "10" to "log", and remove "Returnloss min", add "MHZ" in Equation.  
 Return\_loss(f) >= 7 - 13.275log10(f/1250MHz)  
 Proposed Response Response Status O

Cl 130 SC 130.7.1.2 P 147 L 35 # 46  
 Wu, Peter Marvell Semiconducto  
 Comment Type E Comment Status X  
 At Equation 130-2, the X operator should be removed and base 10 should be pulled closer to log, and the "returnloss min" is not necessary, missing "MHZ" ( refer to format used in Equation 72-3 )  
 SuggestedRemedy  
 remove "x" and pull "10" to "log", and remove "Returnloss min", add "MHZ" in Equation.  
 Return\_loss(f) >= 10 - 13.275log10(f/1289MHz)  
 Proposed Response Response Status O

Cl 130 SC 130.7.1.11 P 152 L 3 # 49  
 Wu, Peter Marvell Semiconducto  
 Comment Type E Comment Status X  
 missing description for v4  
 SuggestedRemedy  
 add:  
 v4 = minimum voltage measured in the interval t3-T and t3  
 Proposed Response Response Status O

Cl 130 SC 130.7.1.6 P 149 L 29 # 47  
 Wu, Peter Marvell Semiconducto  
 Comment Type E Comment Status X  
 "Return\_lossmin" at 130-5 is not necessary  
 SuggestedRemedy  
 Remove Returnloss min =  
 Proposed Response Response Status O

Cl 130 SC 130.7.2.1 P 153 L 3 # 50  
 Wu, Peter Marvell Semiconducto  
 Comment Type ER Comment Status X  
 Table 130-6 has two tests defined, but at the description, only one is mentioned.  
 SuggestedRemedy  
 Changed the text to:  
 The receiver interference tolerance shall consist of two separate tests as described in Annex 130B with the Parameters specified in Table 130-6. The data pattern for the interference tolerance test shall be the test Patterns 2 or 3 as defined in 52.9.1.1. The receiver shall satisfy the requirements for interference tolerance specified in Annex 130B for both tests  
 Proposed Response Response Status O

---

CI 130A SC 130A.1 P 210 L 51 # 61  
Smith, Daniel Seagate Technology  
Comment Type **TR** Comment Status **X**  
Incorrect coefficient in equation 130A-1  
SuggestedRemedy  
Replace 0.3608 with 3.608 in first equation  
Proposed Response Response Status

---

CI 130A SC Figure 130A-3 P 211 L 28 # 62  
Smith, Daniel Seagate Technology  
Comment Type **TR** Comment Status **X**  
reformat graph to match equation  
SuggestedRemedy  
replace Figure with new plot from Dan Smith  
Proposed Response Response Status

---

CI 130A SC Figure 130A-7 P 216 L 20 # 63  
Smith, Daniel Seagate Technology  
Comment Type **TR** Comment Status **X**  
reformat graph to match equation and use logarithmic x-axis  
SuggestedRemedy  
replace Figure with new plot from Dan Smith  
Proposed Response Response Status