Please configure project comments

Cl **127**   *SC* **127.2.6.1.4**   *P* **81**   *L* **19**   # 1
Maguire, Valerie   Siemon

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

It appears that the link to 36.2.4.4 at the end of line 19 is formatted incorrectly and may be broken. (My apologies if this comment is out of scope. If so, kindly advise and I will resubmit against the Sponsor ballot if the link is indeed a problem.)

SuggestedRemedy

Verify that the link to 36.2.4.4 at the end of line 19 is formatted and working correctly.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **130A**   *SC* **130A.3.1**   *P* **210**   *L* **33**   # 2
Dudek, Mike   Cavium

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

An SNDR ratio of 16dB appears marginal to provide a BER of 1e-12 when the additional degradations created by jitter, receiver non ideality and reflections between the host and the receiver are considered.

SuggestedRemedy

Consider whether a higher value should be used.

Proposed Response   *Response Status* **W**

[Editor: this will require extensive research by Anthony & Rich Mellitz. - Dan]

Cl **128A**   *SC* **128A.3.2.2**   *P* **176**   *L* **15**   # 3
Dudek, Mike   Cavium

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

Tables 128A-3, 128A-8, 130A-3 and 130A-8 contain a parameter SDNR that is not defined.   From context this should be SNDR

SuggestedRemedy

Change to SNDR in 4 places.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

[Editor note: fix the typo: "SDNR" s/b "SNDR"; check all instances. - Dan.

Update: still need to fix:
Table 130A-3
Table 130A-8
]

Cl **125**   *SC* **125.2.2**   *P* **61**   *L* **53**   # 4
Dudek, Mike   Cavium

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

Missing Clause #

SuggestedRemedy

Add "127" as the missing clause #
Also on page 62 line 5

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

[Editor note: Jim, make this change. I checked it against D2.1, it is not missing there. - Dan Update: need change notation?]

Cl **127**   *SC* **127.2.2**   *P* **65**   *L* **45**   # 5
Dudek, Mike   Cavium

Comment Type **T**   *Comment Status* **X**

I don't see a scrambler in the PCS transmit.   Having unscrambled data input to 8B10B encoding has in other standards created EMI and adaptive equalizer convergence problems.

SuggestedRemedy

If a scrambler isn't included consider adding one.

Proposed Response   *Response Status* **W**

[Editor: this will require extensive research by the protocol contributors. A major comment this late in the cycle.
- Dan]

Cl **128**   *SC* **128.7.1.5**   *P* **112**   *L* **44**   # 6
Dudek, Mike   Cavium

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

Figure 128-4 does not match the specications in equations 128-3 and 128-4. (The figure is the same as Figure 128-5)

SuggestedRemedy

Correct the figure.

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 U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **6**

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Cl **128A**   *SC* **128A.3.1.7**   *P* **172**   *L* **33**   # 7

Dudek, Mike   Cavium

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

It seems unlikely that an SNDR value of only 5.6dB will provide a 1e-12 error rate. (SNDR is expected to be be un-equalizable noise and a 5.6dB SNR will not provide 1e-12 error rate). The effect of jitter and reflections from a worst case Rx (versus the good test load) will futher degrade the signal beyond this value.

SuggestedRemedy

Determine a reasonable value. Clause 92 uses 26dB which may be higher than necessary.

Make the change on page 175 line 8 as well, and change the SDNR for the drive interference in table 128A-8.

Proposed Response   *Response Status*   **W**

[Editor: this will require extensive research by Anthony & Rich Mellitz. A real show stopper. - Dan]

Cl **31B**   *SC* **31B.4.6**   *P* **160**   *L* **21**   # 8

Anslow, Pete   Ciena

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

In "Insert a new row for *TIM4aa before the row for *TIM4a …" there should not be a "*" before TIM4aa or TIM4a

SuggestedRemedy

Change "for *TIM4aa before the row for *TIM4a" to "for TIM4aa before the row for TIM4a"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **69A**   *SC* **69A.2**   *P* **161**   *L* **30**   # 9

Anslow, Pete   Ciena

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

There is no need to show an external reference as green in an editing instruction.

SuggestedRemedy

Change "Figure 69A-1." to black

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **69A**   *SC* **69A.2**   *P* **161**   *L* **30**   # 10

Anslow, Pete   Ciena

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

As Figure 69A-1 is the last figure in Annex 69A, a figure inserted after it should be Figure 69A-2

SuggestedRemedy

Change "Figure 59A-1a" to "Figure 69A-2" in the editing instruction and the figure number.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **69A**   *SC* **69A.2.1**   *P* **162**   *L* **1**   # 11

Anslow, Pete   Ciena

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

In the editing instruction, change "the 69A.2.1" to "69A.2.1"

SuggestedRemedy

In the editing instruction, change "the 69A.2.1" to "69A.2.1"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

[Editor note: remove the word "the" ahead of "69A.2.1". - Dan]

Cl **69A**   *SC* **69A.2.1**   *P* **162**   *L* **36**   # 12

Anslow, Pete   Ciena

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

Space missing in editing instruction

SuggestedRemedy

Change "69A.2.1as" to "69A.2.1 as"

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 U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **12**

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Cl **69A**   *SC* **69A.2.1**   *P* **162**   *L* **40**   # 13
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
    "requirements or 130.7.1.1" should be "requirements of 130.7.1.1" and "130.7.1.1" should
    be a cross-reference

SuggestedRemedy
    Change "requirements or 130.7.1.1" to "requirements of 130.7.1.1" and make "130.7.1.1" a
    cross-reference

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

Cl **69A**   *SC* **69A.3**   *P* **163**   *L* **18**   # 14
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
    "130.6.2" should be a cross-reference

SuggestedRemedy
    make "130.6.2" a cross-reference

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

Cl **128A**   *SC* **128A.1**   *P* **167**   *L* **14**   # 15
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
    "Annex 128C" should be a cross-reference (3 instances)

SuggestedRemedy
    Make "Annex 128C" a cross-reference (3 instances)

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

Cl **128C**   *SC* **128C.3**   *P* **202**   *L* **2**   # 16
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
    The PICS should reflect the exact title of the Annex.

SuggestedRemedy
    On line 2, line 37, line 36, and line 48:
    Change "Annex 128C, Test fixtures" to "Annex 128C, Test Fixtures for 2.5 Gb/s and 5 Gb/s
    Storage Enclosure Interfaces"

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

Cl **FM**   *SC* **FM**   *P* **13**   *L* **49**   # 17
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
    In "adds Clause through Clause 130, Annex 127A, Annex 127B, Annex 128A, Annex 128B,
    Annex 128C, and Annex 130A."
    The first "Clause" should be "Clause 127" and "Annex 127B, " should be deleted.

SuggestedRemedy
    Change the first "Clause" to "Clause 127" and delete "Annex 127B, "

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

    [Editor note: same as comment #4]

Cl **45**   *SC* **45.2.1.89.6**   *P* **36**   *L* **15**   # 18
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
    The text changes in 45.2.1.89.6 are not shown as changes with respect to the base
    standard.

SuggestedRemedy
    Change the editing instruction to: "Change the title and text of 45.2.1.89.6 as follows:"
    Change the text to show changes with respect to the text of the base standard which is:
    "The PMD signal detect function is optional see 70.6.4. The 1000BASE-X PCS requires
    signal detect to be one before synchronization can occur. If the signal detect function is not
    implemented this bit is set to one."

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

    [Editor note: his wording is much better. We struggle with this several times. - Dan]

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **18**   Page 3 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   2/23/2017 5:54:33 PM
SORT ORDER: Comment ID

Cl **45**   *SC* **45.2.3.14.3**   *P* **40**   *L* **6**   # 19

Anslow, Pete   Ciena

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

The editing instruction refers to only the first sentence of 45.2.3.14.3, but the complete text is shown.
The first sentence of 45.2.3.14.3 has been modified by IEEE Std 802.3bz-2016
"113.3.6.2.2" should be in Forest green

SuggestedRemedy

Remove the text after the first sentence.
Change the editing instruction to include IEEE Std 802.3bz-2016
Change:
"… and defined by the counter lfer_count in 55.3.6.2 for 10GBASE-T and in 113.3.6.2.2 for 25GBASE-T and 40GBASE-T." to:
"... and defined by counter lfer_count in 126.3.6.2 in 2.5GBASE-T and 5GBASE-T, 55.3.6.2 for 10GBASE-T, and in 113.3.6.2.2 for 25GBASE-T and 40GBASE-T."
Note, the base text shown in the published version of IEEE Std 802.3bz-2016 does not correctly reflect the standard as modified by IEEE Std 802.3bq-2016. The text above is the correct version.
Apply character tag External to "113.3.6.2.2"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.
Remove the text after the first sentence.

Change the editing instruction to include IEEE Std 802.3bz-2016

Change:
"… and defined by the counter lfer_count in 55.3.6.2 for 10GBASE-T and in 113.3.6.2.2 for 25GBASE-T and 40GBASE-T." to:
"... and defined by counter lfer_count in 126.3.6.2 in 2.5GBASE-T and 5GBASE-T, 55.3.6.2 for 10GBASE-T, and in 113.3.6.2.2 for 25GBASE-T and 40GBASE-T."

Note, the base text shown in the published version of IEEE Std 802.3bz-2016 does not correctly reflect the standard as modified by IEEE Std 802.3bq-2016. The text above is the correct version.

Apply character tag External to "113.3.6.2.2"

Cl **45**   *SC* **45.2.3.14.4**   *P* **40**   *L* **22**   # 20

Anslow, Pete   Ciena

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

The first sentence of 45.2.3.14.4 has been modified by IEEE Std 802.3bz-2016
"113.3.6.2" should be in Forest green

SuggestedRemedy

Change the editing instruction to include IEEE Std 802.3bz-2016
Change:
"… and defined by the counter errored_block_count in 55.3.6.2 for 10GBASE-T and in 113.3.6.2 for 25GBASE-T and 40GBASE-T." to:
"... and defined by counter errored_block_count in 126.3.6.2 in 2.5GBASE-T and 5GBASE-T, 55.3.6.2 for 10GBASE-T and in 113.3.6.2 for 25GBASE-T and 40GBASE-T."
Apply character tag External to "113.3.6.2"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

[Editor note: this comment has not been done yet. - Dan]

Cl **73**   *SC* **73.1**   *P* **51**   *L* **27**   # 21

Anslow, Pete   Ciena

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

In the added text in Figure 73-1, "2.5 G/b" should be "2.5 Gb/s"

SuggestedRemedy

Change "2.5 G/b" to "2.5 Gb/s"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **73**   *SC* **73.2**   *P* **51**   *L* **39**   # 22

Anslow, Pete   Ciena

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

The heading shown as "73.2" should be "73.3"

SuggestedRemedy

Change the heading number to 73.3

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editor note: Is the editing instruction in the right place if the subheader is changed to 73.3? Should the editing instruction be placed above the "73.2 Functional specifications" header? - Dan]

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 U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **22**

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Cl **125**   *SC* **125.2.3**   *P* **62**   *L* **5**   # 23
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
"in Clause and" should be "in Clause 127 and"

SuggestedRemedy
Change "in Clause and" to "in Clause 127 and"

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

[Editor note: same as comment #4. Shouldn't the change show as forest green? - Dan]

Cl **125**   *SC* **125.3**   *P* **62**   *L* **26**   # 24
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
Spurious "/" at the end of the editing instruction.
The inserted rows in Table 125-3 should be shown in underline font.
As there are numbers above 10 000 in the Maximum (bit time) column, 1024 and 3540
should have a space as a thousands separator as per the style manual.

SuggestedRemedy
Delete the "/" at the end of the editing instruction.
Show the inserted rows in Table 125-3 in underline font.
Change "1024" to 1 024" and change "3540" to "3 540"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.
[editors note: which lines are inserted?]

Cl **128**   *SC* **128.7.1**   *P* **110**   *L* **26**   # 25
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
1.2.6 in the base standard says that "trailing zeros having no significance"

SuggestedRemedy
Remove any trailing zeros from the draft.
In Table 128-4 change "0.20" to "0.2"
In Table 130-6 change "1.0" to "1"
In Table 128A-1 change "0.20" to "0.2"

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

[Editor note: scan entire draft for other instances. - Dan]

Cl **130**   *SC* **130.7.2.1**   *P* **151**   *L* **14**   # 26
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**
In Table 130-6 footnote a, "Equation 69A-5" should be Forest green

SuggestedRemedy
Apply character tag External to "Equation 69A-5"

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **26**   Page 5 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   2/23/2017 5:54:33 PM
SORT ORDER: Comment ID

Cl **127**　　　*SC* **127.2.6.2.1**　　　　*P* **85**　　　*L* **19**　　　# 27

Law, David　　　　　　　　　　HPE

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

In respect to my comment #362 submitted against D2.0, I note that a TX_XGMII_HI state along with states TX_2.5GPII_4 through TX_2.5GPII_7 have been added. I also note that in the TX_XGMII state the assignments 'xgmii_txc<3:0> <= xgmii_txc_lo<3:0>' and 'xgmii_txd<3:0> <= xgmii_txd_lo<3:0>' have been added. The definition of the xgmii_txc<3:0> and xgmii_txd<31:0> variables however still state that they are latched on the rising or falling edge of TX_CLK and there is no definition of the xgmii_txc_lo and xgmii_txd_lo variables.

Assuming that xgmii_txc_lo and xgmii_txd_lo are TXC and TXC latched on the falling edge of TX_CLK, that xgmii_txc and xgmii_txd are TXC and TXC latched on the rising edge of TX_CLK, and that the TX_XGMII state is entered on the rising edge of TX_CLK, the assignments 'xgmii_txc<3:0> <= xgmii_txc_lo<3:0>' and 'xgmii_txd<3:0> <= xgmii_txd_lo<3:0>' would appear to overwrite the TXC and TXC values just latched on the rising edge. As an aside I would note that the XGMII data bus is 32 bits hence I think the assignment 'xgmii_txd<3:0> <= xgmii_txd_lo<3:0>' should read 'xgmii_txd<31:0> <= xgmii_txd_lo<31:0>'.

It would seem clearer to define xgmii_txc_lo and xgmii_txd_lo as TXC and TXC latched on the falling edge of TX_CLK, and xgmii_txc_hi and xgmii_txd_hi as TXC and TXC latched on the rising edge of TX_CLK, remove the use of xgmii_txc and xgmii_txd, and process xgmii_txc_lo and xgmii_txd_lo as well as xgmii_txc_hi and xgmii_txd_hi directly in the WENCODE function. As suggest that the state TX_XGMII be renamed TX_XGMII_HI to complement the new TX_XGMII_LO state.

SuggestedRemedy

Suggest that:

[1] The definition for xgmii_txc<3:0> and xgmii_txd<31:0> be deleted.
[2] A new definition for xgmii_txc_lo<3:0> be added that reads 'The value of TXC<3:0> latched by the falling edge of TX_CLK.'
[3] A new definition for xgmii_txc_hi<3:0> be added that reads 'The value of TXC<3:0> latched by the rising edge of TX_CLK.'
[4] A new definition for xgmii_txd_lo<31:0> be added that reads 'The value of TXD<31:0> latched by the falling edge of TX_CLK.
[5] A new definition for xgmii_txd_hi<31:0> be added that reads 'The value of TXD<31:0> latched by the rising edge of TX_CLK.

[6] The assignments 'xgmii_txc<3:0> <= xgmii_txc_lo<3:0>' and 'xgmii_txd<3:0> <= xgmii_txd_lo<3:0>' in the TX_XGMII state be deleted.

[7] The variable assignment to the WENCODE function in the TX_XGMII state be change to WENCODE(xgmii_txc_lo<3:0>,xgmii_txd_lo<31:0>,wencode_state).
[8] The variable assignment to the WENCODE function in the TX_XGMII_HI state be change to WENCODE(xgmii_txc_hi<3:0>,xgmii_txd_hi<31:0>,wencode_state).

[9] In the WENCODE function definition the text '... is the xgmii_txc<3:0>, xgmii_txd<31:0>, and ...' be changed to read '... is xgmii_txc_lo<3:0> or xgmii_txc_lo<3:0>, xgmii_txd_lo<31:0> or xgmii_txd_hi<31:0>, and ...'.

[10] Rename the state TX_XGMII to be TX_XGMII_HI

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Prior comment that was "accepted in principal" that did NOT get completely implemented.

[Editor note: this came in late Jim, please implement. - Dan]

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　*Comment ID* **27**　　　Page 6 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected　　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　2/23/2017 5:54:33 PM
SORT ORDER: Comment ID