Cl **128** *SC* **7.1.6** *P* **109** *L* **41** # 1

McDermott, Thomas Fujitsu

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

The cluase deals with common mode output return loss, but references differential output retun loss in line 41, and the titel of figure 128-5 on page 110.

SuggestedRemedy

On page 109 line 41 - change 'differential mode' to 'common mode'.
Page 110 line 23 - change 'differenital mode' to 'common mode' in the figure title.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128** *SC* **128.2** *P* **99** *L* **46** # 114

Bains, Amrik Cisco Systems

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

2.5GBASE-X uses 8B/10B 10 bit interface between PMA/PMD and not
"The PMD Service Interface supports the exchange of encoded and scrambled 64B/66B blocks between the
PMA and PMD entities."

SuggestedRemedy

The PMD Service Interface supports the exchange of encoded 8B/10B blocks between the PMA and PMD entities.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **00** *SC* *P* **101** *L* **42** # 115

Bains, Amrik Cisco Systems

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

1000BASE-KX shpuld be changes to 2.5GBAS-KXE

"The 1000BASE-KX PHY receiver should put unused functional blocks into a low power state to save energy."

SuggestedRemedy

1000BASE-KX shpuld be changes to 2.5GBAS-KXE

"The 1000BASE-KX PHY receiver should put unused functional blocks into a low power state to save energy."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **127A** *SC* **127A** *P* **157** *L* **6** # 116

D'Ambrosia, John Futurewei, Subsidiary

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

Annex127A consists of two sentences with a pointer to Annex36A. This does not help with ease of reading for the reader.

SuggestedRemedy

Delete Annex127A. Replace the last sentnece in second paragraph of 127.3.4. with - The patterns described in Annex 36A may be used
for 2.5GBASE-X except the nominal bit rate is 2.5 times faster and any references to the GMII applies to the XGMII."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **125** *SC* **125.1.4** *P* **57** *L* **23** # 117

D'Ambrosia, John Futurewei, Subsidiary

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

Table 125-2 notes that autonegotiation is optional for 2.5GBASE-KX, however, in 73.3 it is stated that AN shall interact with PHYs. No note was found indicating that AN is optional to implement, but shall be implemented per Clause 73 if implemented.

SuggestedRemedy

Change entry in table for Row 2.5GBASE-KX to indicate that Clause 73 FEC is M

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128B** *SC* **128B** *P* **179** *L* **5** # 118
D'Ambrosia, John Futurewei, Subsidiary

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

Annex 128B is primarily a duplication of Annex 69B. Such duplication should be avoided.

SuggestedRemedy

There are two options
1.delete annex 128B - modify annex 69B to add in specific requirements related to 2.5GBASE-KR
2. Delete redundant text in annex 128b, and replace in each instance with pointer to the original text in Annex 69B

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Use solution #2.
Delete redundant text in annex 128B, and replace in each instance with pointer to the original text in Annex 69A.

[Editor's note: Annex 69B should actually be 69A,]

Cl **130B** *SC* **130B** *P* **221** *L* **5** # 119
D'Ambrosia, John Futurewei, Subsidiary

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

Annex 130B is primarily a duplication of Annex 69B. Such duplication should be avoided.

SuggestedRemedy

There are two options
1.delete annex 130B - modify annex 69B to add in specific requirements related to 5GBASE-KR
2. Delete redundant text in annex 12830b, and replace in each instance with pointer to the original text in Annex 69B

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
[Editor's note: an email thread indicates that option 2 was the one actually accepted.]

Cl **00** *SC* **0** *P* **0** *L* **0** # 124
Slavick, Jeff Broadcom Limited

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

802.3by is an offiical standard

SuggestedRemedy

Change all the 802.3by-201x to 8023by-2016

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **78** *SC* **78.1.1** *P* **53** *L* **18** # 125
Slavick, Jeff Broadcom Limited

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

The change from "these" to a list of Clauses didn't keep the entire list.

SuggestedRemedy

Add Clause 107 to the list of Clauses can generate RX_LPI_ACTIVE

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128** *SC* **128.7.1.2** *P* **107** *L* **34, 3** # 127
Smith, Daniel Seagate

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

ReturnLoss is not consistant with other usage.

SuggestedRemedy

change to: Return_Loss

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128** *SC* **128.7.1.5** *P* **108** *L* **31, 3** # 128
Smith, Daniel Seagate

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

ReturnLoss is not consistant with other usage.

SuggestedRemedy

change to: Return_Loss

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128C** SC **128C.4.4** P **188** L **41** # 129
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
Missing parenthesis on the term: Af)

SuggestedRemedy
s/b: A(f)

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

Cl **130A** SC **130A.3.1.1** P **206** L **37** # 130
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
Overbar on the decimal 193.93

SuggestedRemedy
remove the overbar

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

Cl **FM** SC P **4** L **10** # 132
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
spelling of the word arabic

SuggestedRemedy
Arabic not arabic

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

Cl **127** SC **127.2.6.2.3** P **85** L **2** # 135
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
effecting hysteresis

SuggestedRemedy
s/b: affecting hysteresis (affect is a verb)

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

Cl **127** SC **127.2.6.1.3** P **74** L **14** # 136
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
capitalization in name

SuggestedRemedy
should read: PMD_SIGNAL.indication(SIGNAL_DETECT).

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

Cl **127** SC **127.2.6.1.6** P **78** L **47** # 137
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
capitalization in name

SuggestedRemedy
should read: PMD_SIGNAL.indication(SIGNAL_DETECT).

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

Cl **128** SC **128.7.2.1** P **112** L **3** # 151
Smith, Daniel Seagate

Comment Type **ER** *Comment Status* **D**
plural missing

SuggestedRemedy
should read:
The receiver interference tolerance consists...

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.
[Editor's note: I also removed the extra space before 'consist'.]

Cl **45** *SC* **45.2.3.7a** *P* **35** *L* **21** # 202
Lusted, Kent Intel

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

table 45-125a entries for bits 3.21.8 and 3.21.7 are not underlined (per IEEE style guide) to indicate insertions per editing instructions

SuggestedRemedy

Underline as necessary

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128** *SC* **128.7.1.4** *P* **107** *L* **54** # 203
Lusted, Kent Intel

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

The minimum peak-to-peak transmitter amplitude is not specified in the specification. It is inferred to be >720mV in the "EEE capability" paragraph on page 108, linke 19. However, it is this reader's interpretation of that EEE paragraph that the >720 requirement only applies to PHYs that support the optional EEE.

SuggestedRemedy

Sufficiently define the minimum peak-to-peak amplitude for the transmitter.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Specify amplitude as a range from 800 mV to 1200 mV.

Cl **130** *SC* **130.7.1.11** *P* **146** *L* **8** # 207
Lusted, Kent Intel

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

value for Rpre is not defined in specification.
the min and max value of Rpre is not defined in the specification.

SuggestedRemedy

Set a value for Rpre.
Define the min and max value of Rpre

Add relevant PICS entry.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment #317 for first part

second part: add new entry FS19 in
130.10.4.2 PMD functional specifications
to cover the transmitter waveform definitions (Dan Smith to provide content)

Cl **130** *SC* **130.7.1.11** *P* **145** *L* **52** # 208
Lusted, Kent Intel

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

For v1 and v3, the average voltage in the interval t1 to t2-T includes the shoulder rise time of the waveform. this artificially reduces the measured voltage from the true amplitude of the waveform at the midpoint.

SuggestedRemedy

consider defining a window in the flat portion of the waveform, away from the rise and falling edges, as the steady state voltage. see figure 72-12 for inspiration.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comments #192 and #193

Cl **130** *SC* **130.7.1.7** *P* **144** *L* **30** # 209
Lusted, Kent Intel

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

The rising and falling transition times requirement references v1 and v4. v4 is the pre-emphasis point. v3 is the negative waveform level.

SuggestedRemedy

change "v4" to "v3"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **1** *SC* **1.4** *P* **26** *L* **40** # 211
Lusted, Kent Intel

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

the definition for 5GBASE-R incorrectly references 10GBASE-R.

SuggestedRemedy

Consider changing "10GBASE-R" to "5GBASE-R" in 1.4.74a4

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **1** *SC* **1.4** *P* **26** *L* **50** # 212
Lusted, Kent Intel

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

The P802.3bs project is modifying the definition of BASE-R also.

The P802.3by-20xx project is P802.3-2016.

SuggestedRemedy

Add to editor note the dependency on P802.3bs changes to the definition of BASE-R.

Update reference to 802.3by with the published year.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
[Editor's note: please supply dependency text.]

Cl **45** *SC* **45.2.3.7a** *P* **35** *L* **21** # 213
Lusted, Kent Intel

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

table 45-124a entries for bits 3.9.2 and 3.9.3 are not underlined (per IEEE style guide) to indicate insertions per editing instructions

SuggestedRemedy

Underline as necessary

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **1** *SC* **1.5** *P* **27** *L* **6** # 243
Baden, Eric Broadcom Limited

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

2.5GSEI line is missing period (".") at the end of sentence. Also 5GSEI

SuggestedRemedy

Fix them

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128** *SC* **128.7.1.10** *P* **111** *L* **4** # 249
Healey, Adam Broadcom Ltd.

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

A procedure for the measurement for v1 and v2 is provided but no requirements on the values of v1 and v2 are given.

SuggestedRemedy

Include requirements for v1 and v2 or, if there are no requirements, remove the subclause.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

OBE, see comment #297, subclause 128.7.1.10 has been deleted.

Cl **128** *SC* **128.8** *P* **113** *L* **10** # 250
Healey, Adam Broadcom Ltd.

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

The interconnect requirements are defined in Annex 128C.

SuggestedRemedy

Correct the reference.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **128A** *SC* **128A.1** *P* **160** *L* **8** # 256
Healey, Adam Broadcom Ltd.

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

In Figure 128A-1, the test point adjacent to the PMD transmit function is TP0 but here it appears to be TP1. Which is correct?

SuggestedRemedy

Include the TX PCB before TP1 or change the test point to TP0.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Fix figure 128A-2 to show the 2nd reference to TP1 as TP0 and elongate the path to make it look differrent.

Cl **128A** *SC* **128A.1** *P* **160** *L* **27** # 257
Healey, Adam Broadcom Ltd.

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

Why is the loss from TP1D-H to the connector 0.9 dB in one part of the figure and 1.375 dB in another part of the figure. What has changed? Similarly for the TP1 to TP5 insertion loss.

SuggestedRemedy

Clarify the difference between the diagrams in Figure 128A-2.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Fix figure 128A-2 to show the 2nd reference to TP1 as TP0 and elongate the path to make it look differrent.

Refer to:
Calbone_3cb_02_0916.pdf posted on Public page for Sept Interim.

Cl **128C** *SC* **128C.4.3** *P* **188** *L* **2** # 272
Healey, Adam Broadcom Ltd.

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

Using Equation (128C-7), it appears the maximum insertion loss for 5GBASE-KR is allowed to be about 33.6 dB at 2.578125 GHz. This does not agree with a fitted attenuation limit of 13.4 dB at 2.578125 GHz and an insertion loss deviation limit of +/-2.8 dB at 2.578125 GHz. This implies the insertion loss should not exceed 16.2 dB at that frequency.

SuggestedRemedy

Revisit the insertion loss equation for 5GBASE-KR.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Corrected equation 128C-7 was incorrect and was changed, and Figure 128C-3 was replotted.

Cl **128C** *SC* **128C.4.3** *P* **188** *L* **13** # 273
Healey, Adam Broadcom Ltd.

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

Equation (128C-7) states the range of the limit to be fmax, and in Table 128C-1, fmax is assigned a value of 7 GHz. However, Figure 128C-3 only plots the limit to about 2.25 GHz and it is unclear how the curve applies to 2.5GBASE-KX and 5GBASE-KR (compare to Figure 128C-2).

SuggestedRemedy

Replace the plot with one that illustrates the limit over the specified frequency range and annotate the plot so show how it applies to 2.5GBASE-KX and 5GBASE-KR respectively (including the "high confidence" regions").

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Changed, and Figure 128C-3 was replotted.