Cl **45** *SC* **45.2.1.136.2** *P* **36** *L* **45** # 147

Geoff Thompson GraCaSI S.A.

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

Missing article

SuggestedRemedy

Change the following text: "...when both the local device and link partner..."
to read: "...when both the local device and its link partner..."

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.136.3** *P* **36** *L* **52** # 148

Geoff Thompson GraCaSI S.A.

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

Missing article

SuggestedRemedy

Change the following text: "...when both the local device and link partner are advertising..."
to read: "...when both the local device and its link partner are advertising..."

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.3.6.3** *P* **91** *L* **50** # 129

Klaus, Andrew Marvell

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

"receive" should be changed to "receiver".

SuggestedRemedy

"receive" should be changed to "receiver".

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.3.8.2.1** *P* **97** *L* **5** # 130

Klaus, Andrew Marvell

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

"Pariy" should be changed to "Parity"

SuggestedRemedy

"Pariy" should be changed to "Parity"

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.5.3.2** *P* **133** *L* **44** # 131

Klaus, Andrew Marvell

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

"Canceler" should be changed to "Canceller".

SuggestedRemedy

"Canceler" should be changed to "Canceller".

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.5.4.1** *P* **136** *L* **30** # 137

Estes, Dave Spirent Communicatio

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

This comment is out of scope however I hope you can include in this comment round anyways.

The calculation for frame error ratio is overly strict. Due to the fact that the RS blocks contain 450 octets of data, a single uncorrected RS block will corrupt three or four 125-octet frames at line rate, making the observed frame error ratio 3 or 4 times higher than the limit. Also, to make it similar to 10GBASE-T, the frame error ratio specification should use frames that are twice the size of the RS block.

The math should be 10^-10 * 7200 bits per frame * 1.47 = 1.06 * 10^-6.

The 1.47 factor is because there is a 47% chance at minimum IPG that an uncorrectable RS block will corrupt 2 frames.

When separated by a larger IPG, there is no chance that a single uncorrectable RS block will corrupt more than one frame. However, each frame requires that 3 RS blocks are correct (because there needs to be preamble before each frame meaning that 908 bytes needs to be correct). So the math is 10^-10 * 10800 bits per frame = 1.08 * 10^-6.

1.06 * 10^-6 is stricter so that should be the value used.

SuggestedRemedy

Change the frame error ratio specification to be similar to that in 10GBASE-T by using data frames that are twice the size of the RS block and account for the different scenarios of line rate traffic and large IPG.

Change:

"This specification shall be satisfied by a frame error ratio less than 10^-7 for 125-octet frames."

to:

"This specification shall be satisfied by a frame error ratio less than 1.06 × 10^–6 for 900 octet frames with minimum IPG or greater than 500 octet IPG."

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.5.5.1.1** *P* **138** *L* **26** # 132

Klaus, Andrew Marvell

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

Figures 97-36 and 97-37 and 97-38 and 97-39 have been updated. Thanks for these corrections.
In Figure 97-36, the "y" in the "Frequency (MHz)" is cut off by the text below it. Please edit to may the "y" readable.
Same issue with Figures 97-37 and 97-38 and 97-39.

SuggestedRemedy

Please edit to may the "y" readable.

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.5.5.1.3** *P* **138** *L* **44** # 133

Klaus, Andrew Marvell

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

In equation 97-17, "ReturnLoss" should be changed to "Return Loss".

SuggestedRemedy

In equation 97-17, "ReturnLoss" should be changed to "Return Loss".
Same issue in Page 142, Line 4, and Page 147, Line 22.

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.5.5.3.4** *P* **145** *L* **29** # 144

Gardner, Andrew Linear Technology

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

y-axis is mislabeled in Figure 97-42

SuggestedRemedy

Change y-axis label from "Return loss (dB)" to "PSAACRF (dB)"

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.6.2.1** *P* **147** *L* **22** # 146

Gardner, Andrew Linear Technology

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

The MDI return loss specification is limiting for PoDL applications due to the constraint it places on open-circuit inductance (OCL).

SuggestedRemedy

Relax the low frequency corner from 10MHz to a higher frequency. For example, relaxing the corner frequency from 10MHz to 50MHz reduces PHY SNR by 0.4dB while decreasing PoDL OCL by a factor of 5.

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.6.2.1** *P* **147** *L* **51** # 142

Dinh, Thuyen Pulse Electronics

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

Return Loss figure is incorrectly referenced as PSANEXT.

SuggestedRemedy

Change caption to read "Figure 97-43- MDI Return Loss calculated using equation (97-29)

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.6.2.1** *P* **147** *L* **51** # 143

Gardner, Andrew Linear Technology

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

Figure 97-43 caption is incorrect

SuggestedRemedy

Change Figure 97-43 caption to read "return loss as calculated in equation 97-29"

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.10.6** *P* **154** *L* **31** # 134

Klaus, Andrew Marvell

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

"synchonization" should be changed to "synchronization".

SuggestedRemedy

"synchonization" should be changed to "synchronization".

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.10.8** *P* **157** *L* **24** # 135

Klaus, Andrew Marvell

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

"sufficently" should be changed to "sufficiently".

SuggestedRemedy

"sufficently" should be changed to "sufficiently".

Proposed Response *Response Status* **O**

Cl **97** *SC* **97.10.11** *P* **162** *L* **38** # 136

Klaus, Andrew Marvell

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

"Synchonize" should be changed to "Synchronize".

SuggestedRemedy

"Synchonize" should be changed to "Synchronize".

Proposed Response *Response Status* **O**

Cl **97A** *SC* **97A.2** *P* **201** *L* **22** # 145

Gardner, Andrew Linear Technology

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

30cm should be 30mm

SuggestedRemedy

See comment

Proposed Response *Response Status* **O**

Cl **97.5.** *SC* **97.5.5.3.4** *P* **145** *L* **29** # 138

moffitt, bryan commscope

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

Need correct axis label

SuggestedRemedy

Return Loss should be PSAACRF

Proposed Response *Response Status* **O**

Cl **97.6.** *SC* **97.6.2.1** *P* **147** *L* **51** # 139

moffitt, bryan commscope

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

Need correct figure label

SuggestedRemedy

PSANEXT should be MDI RL

Proposed Response *Response Status* **O**

Cl **97A.2** *SC* **97A.2** *P* **201** *L* **22** # 140

moffitt, bryan commscope

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

The figures are correct but this is a typo.

SuggestedRemedy

30 cm should be 30 mm

Proposed Response *Response Status* **O**

Cl **97B.1** *SC* **97B.1.1** *P* **205** *L* **22** # 141

moffitt, bryan commscope

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

missing fig 97B–4

SuggestedRemedy

change:
in Figure 97B–2, Figure 97B–3, and Figure 97B–5.
to:
in Figure 97B–2, Figure 97B–3, Figure 97B–4, and Figure 97B–5.

Proposed Response *Response Status* **O**