

Approved Responses

IEEE P802.3bp D2.1 1000BASE-T1 PHY 2nd Working Group recirculation ballot comments

Cl 45 **SC 45.2.1.136.2** **P 36** **L 45** # **147**
 Geoff Thompson GraCaSI S.A.
Comment Type E **Comment Status A** OOS
 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..."
Response **Response Status C**
 ACCEPT.

Cl 45 **SC 45.2.1.136.3** **P 36** **L 52** # **148**
 Geoff Thompson GraCaSI S.A.
Comment Type E **Comment Status A** OOS
 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..."
Response **Response Status C**
 ACCEPT.

Cl 97 **SC 97.3.6.3** **P 91** **L 50** # **129**
 Klaus, Andrew Marvell
Comment Type E **Comment Status A**
 "receive" should be changed to "receiver".
SuggestedRemedy
 "receive" should be changed to "receiver".
Response **Response Status C**
 ACCEPT.

Cl 97 **SC 97.3.8.2.1** **P 97** **L 5** # **130**
 Klaus, Andrew Marvell
Comment Type E **Comment Status A** OOS
 "Pariy" should be changed to "Parity"
SuggestedRemedy
 "Pariy" should be changed to "Parity"
Response **Response Status C**
 ACCEPT.

Cl 97 **SC 97.5.3.2** **P 133** **L 44** # **131**
 Klaus, Andrew Marvell
Comment Type E **Comment Status A**
 "Canceler" should be changed to "Cancellor".
SuggestedRemedy
 "Canceler" should be changed to "Cancellor".
Response **Response Status C**
 ACCEPT.

CI 97 SC 97.5.4.1 P 136 L 30 # 137
 Estes, Dave Spirent Communicatio

Comment Type T Comment Status D OOS

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 $10^{-10} * 7200 \text{ bits per frame} * 1.47 = 1.06 * 10^{-6}$.

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 $10^{-10} * 10800 \text{ bits per frame} = 1.08 * 10^{-6}$.

$1.06 * 10^{-6}$ 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 Z

REJECT.

This comment was WITHDRAWN by the commenter.

CI 97 SC 97.5.5.1.1 P 138 L 26 # 132
 Klaus, Andrew Marvell

Comment Type E Comment Status A OOS

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.

Response Response Status C

ACCEPT.

CI 97 SC 97.5.5.1.3 P 138 L 44 # 133
 Klaus, Andrew Marvell

Comment Type E Comment Status A OOS

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.

Response Response Status C

ACCEPT.

CI 97 SC 97.5.5.3.4 P 145 L 29 # 144
 Gardner, Andrew Linear Technology

Comment Type T Comment Status D OOS

y-axis is mislabeled in Figure 97-42

SuggestedRemedy

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

Proposed Response Response Status Z

REJECT.

This comment was WITHDRAWN by the commenter.

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Cl 97 SC 97.6.2.1 P 147 L 22 # 146
 Gardner, Andrew Linear Technology

Comment Type T Comment Status D OOS

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 Z

REJECT.

This comment was WITHDRAWN by the commenter.

Cl 97 SC 97.6.2.1 P 147 L 51 # 142
 Dinh, Thuyen Pulse Electronics

Comment Type E Comment Status R OOS

Return Loss figure is incorrectly referenced as PSANEXT.

SuggestedRemedy

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

Response Response Status C

REJECT.

This text is out of scope for the current recirculation. The commenter is invited to resubmit this comment during sponsor ballot.

Cl 97 SC 97.6.2.1 P 147 L 51 # 143
 Gardner, Andrew Linear Technology

Comment Type T Comment Status D OOS

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 Z

REJECT.

This comment was WITHDRAWN by the commenter.

Cl 97 SC 97.10.6 P 154 L 31 # 134
 Klaus, Andrew Marvell

Comment Type E Comment Status A OOS

"synchronization" should be changed to "synchronization".

SuggestedRemedy

"synchronization" should be changed to "synchronization".

Response Response Status C

ACCEPT.

Cl 97 SC 97.10.8 P 157 L 24 # 135
 Klaus, Andrew Marvell

Comment Type E Comment Status A OOS

"sufficiently" should be changed to "sufficiently".

SuggestedRemedy

"sufficiently" should be changed to "sufficiently".

Response Response Status C

ACCEPT.

Cl 97 SC 97.10.11 P 162 L 38 # 136
 Klaus, Andrew Marvell

Comment Type E Comment Status A OOS

"Synchronize" should be changed to "Synchronize".

SuggestedRemedy

"Synchronize" should be changed to "Synchronize".

Response Response Status C

ACCEPT.

Approved Responses

IEEE P802.3bp D2.1 1000BASE-T1 PHY 2nd Working Group recirculation ballot comments

Cl 97A **SC 97A.2** **P 201** **L 22** # **145**
 Gardner, Andrew Linear Technology
Comment Type **T** **Comment Status** **D** **OOS**
 30cm should be 30mm
SuggestedRemedy
 See comment
Proposed Response **Response Status** **Z**
 REJECT.
 This comment was WITHDRAWN by the commenter.

Cl 97.5. **SC 97.5.5.3.4** **P 145** **L 29** # **138**
 moffitt, bryan commscope
Comment Type **E** **Comment Status** **D** **OOS**
 Need correct axis label
SuggestedRemedy
 Return Loss should be PSAACRF
Proposed Response **Response Status** **Z**
 REJECT.
 This comment was WITHDRAWN by the commenter.

Cl 97.6. **SC 97.6.2.1** **P 147** **L 51** # **139**
 moffitt, bryan commscope
Comment Type **E** **Comment Status** **R** **OOS**
 Need correct figure label
SuggestedRemedy
 PSANEXT should be MDI RL
Response **Response Status** **C**
 REJECT.
 This comment was WITHDRAWN by the commenter.

Cl 97A.2 **SC 97A.2** **P 201** **L 22** # **140**
 moffitt, bryan commscope
Comment Type **E** **Comment Status** **R** **OOS**
 The figures are correct but this is a typo.
SuggestedRemedy
 30 cm should be 30 mm
Response **Response Status** **C**
 REJECT.
 This comment was WITHDRAWN by the commenter.

Cl 97B.1 **SC 97B.1.1** **P 205** **L 22** # **141**
 moffitt, bryan commscope
Comment Type **E** **Comment Status** **R** **OOS**
 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.
Response **Response Status** **C**
 REJECT.
 This comment was WITHDRAWN by the commenter.