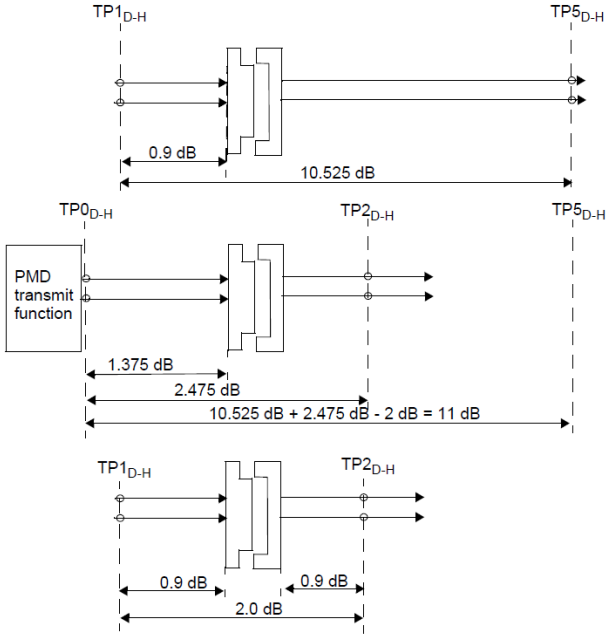
802.3cb Comment Resolutions

SEAGATE

Anthony Calbone 9/16/2016

Comments 194, 256, 257

- Figure 128A-2 is incorrect in a couple areas.
- Solution is to modify the figure to match the figure below



NOTE-- The connector insertion loss is 0.2 dB for the mated test fixture.

Cl **128A** *SC* **128A.1** *P* **160** *L* **8** # 194

Hidaka, Yasuo — Fujitsu Lab of America

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

The definitions of the compliance points, the host compliance board, and the drive compliance board are not clearly shown in the figures. For instance, the output of PMD transmit function is labeled as TP0_D-H in Figure 128A-1, but labeled as TP1_D-H in Figure 128A-2. In Figure 128A-2, the loss from TP1_D-H to the connector input is 0.9dB in the top figure but 1.375dB in the middle figure.

SuggestedRemedy

Define the compliance points clear.

Proposed Response *Response Status* O

Cl **128A** *SC* **128A.1** *P* **160** *L* **8** # 256

Healey, Adam — Broadcom Ltd.

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

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* O

Cl **128A** *SC* **128A.1** *P* **160** *L* **27** # 257

Healey, Adam — Broadcom Ltd.

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

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.

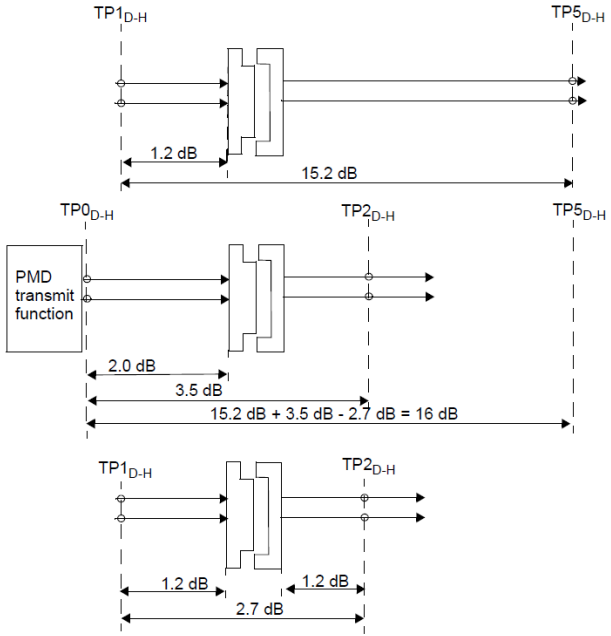
SuggestedRemedy

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

Proposed Response *Response Status* O

Comments 262, 263

- Figure 130A-2 is incorrect in a couple areas.
- Solution is to modify the figure to match the figure below



NOTE-- The connector insertion loss is 0.3 dB for the mated test fixture.

Cl **130A** *SC* **130A.1** *P* **202** *L* **7** # 262

Healey, Adam — Broadcom Ltd.

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

In Figure 130A-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 TP0 or change the test point to TP1.

Proposed Response *Response Status* O

Cl **130A** *SC* **130A.1** *P* **202** *L* **14** # 263

Healey, Adam — Broadcom Ltd.

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

Why is the loss from TP1D-H to the connector 1.2 dB in one part of the figure and 2 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 130A-2.

Proposed Response *Response Status* O

Comments 264

- Figure 128A-5 is incorrect in a couple areas.
- Solution is to modify the figure to match the figure below to address the comments

Cl **128A** *SC* **128A.2** *P* **163** *L* **17** # 264

Healey, Adam — Broadcom Ltd.

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

In the second part of the figure, it seems the test point at the PMD receiver function should be TP5H-D. the test point at the connection interface should be TP4H-D, the "Tx PCB" should be "Rx PCB", and the AC coupling capacitors shown between the TP4 and TP5.

SuggestedRemedy

Modify the figure per the comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

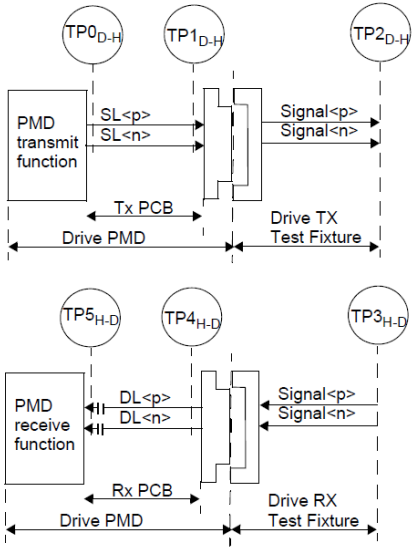


Figure 128A–5—Drive compliance board

Comments 265

- Figure 130A-5 is incorrect in a couple areas.
- Solution is to modify the figure to match the figure below to address the comments

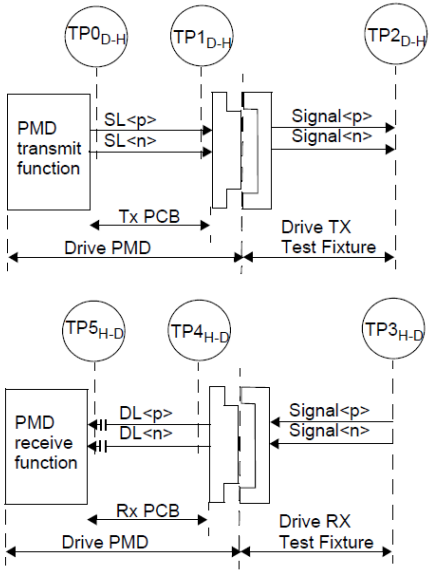


Figure 130A–5—Drive compliance board

Cl **130A** *SC* **130A.2** *P* **205** *L* **20** # 265

Healey, Adam — Broadcom Ltd.

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

In the second part of the figure, it seems the test point at the PMD receiver function should be TP5H-D. the test point at the connection interface should be TP4H-D, the "Tx PCB" should be "Rx PCB", and the AC coupling capacitors shown between the TP4 and TP5.

SuggestedRemedy

Modify the figure per the comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Comments 235, 237

- Np=100 is correct
- Refer to contribution: http://www.ieee802.org/3/cb/public/may16/mellitz_cb_01_0516.pdf

Cl **128A** *SC* **128A.3.1.4.1** *P* **166** *L* **33** # **235**
Ewen, John GlobalFoundries

Comment Type **T** *Comment Status* **X**
Is Np=100 correct? This seems an order of magnitude larger than other clauses.

SuggestedRemedy
Change to Np=3 to be consistent with SNDR definition in 128A.3.1.7

Proposed Response *Response Status* O

Cl **128A** *SC* **128A.3.3.1** *P* **171** *L* **38** # **237**
Ewen, John GlobalFoundries

Comment Type **T** *Comment Status* **X**
Is Np=100 correct? This seems an order of magnitude larger than other clauses.

SuggestedRemedy
Change to Np=3 to be consistent with SNDR definition in 128A.3.3.3

Proposed Response *Response Status* O

Comments 199

- Remove the Tx that was present during calibration
- Move noise injection to after the ISI channel
- Text and figures need to change
- Change 128A.3.2.2, 128A.3.4.2, 130A.3.2.2, 130A.3.4.2 text according to the documents Calbone_3cb_02_0916.pdf and Calbone_3cb_03_0916.pdf
- Note changes to figures 128A-8, 128A-9, 128A-8, and 128A-9,

Cl **128A** *SC* **128A.3.2.2** *P* **167** *L* **38** # 199

Hidaka, Yasuo — Fujitsu Lab of America

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

It is not clear how the crosstalik is applied in the receiver interference tolerance test. In Figure 128A-9, the crosstalk is applied only during the calibration. Also, Figure 128A-8 and 128A-9 seem identical.

SuggestedRemedy

Apply crosstalk during test.

Proposed Response *Response Status* O

Comments 306,307

- Change annex 128D according to the document: Calbone_3cb_04_0916.pdf

Cl 128D SC 128D.2.3.1 P 196 L 39 # 306

Donahue, Curtis UNH-IOL

Comment Type E *Comment Status* D

Title is identical to 128D.2.3.2 and not correct. Should be "Mated test fixture multiple disturber near-end crosstalk (MDNEXT) loss". Also, MDNEXT has been defined and used in other Clauses as "Multiple Disturber Near End Crosstalk" but here its spelt out as "single disturber near-end crosstalk".

SuggestedRemedy

1) Change the subclause title to "Mated test fixture multiple disturber near-end crosstalk (MDNEXT) loss".

2) Change "Single Disturber Near-End Crosstalk" to "Multiple Disturber Near-End Crosstalk".

Proposed Response *Response Status* W

PROPOSED ACCEPT.

Cl 128D SC 128D.2.3.2 P 197 L 19 # 307

Donahue, Curtis UNH-IOL

Comment Type TR *Comment Status* X

This subclause is either missing parameters (mostly far-end) or has some additional unnecessary parameters defined. For example Equations 128D-6 and 218D-7 are nearly identical, the difference is the use of Ant vs Aft but both equations are labelled as Wnt. Since Aft is not defined my guess is that there shouldn't be any far-end parameters in this section.

SuggestedRemedy

Either

a) Remove Equation 128D-7 and any references to that equation.

or

b) Add in far-end parameters to these definitions and rename Wnt in Eq. 128D-7 to Wft.

Proposed Response *Response Status* O