Р # 513 SC L C/ 00 802.3ak Task Force PG 21/43 Line 34 delete the words "by setting...1.0.0," Comment Type E Comment Status A ACCEPT Comment Type: TR Clause: 54 SubClause: 54.6 PG 21/43 Line 36 change "device is" to "device must be". Page #: 28 I ine #: 8 **ACCEPT** Comment: Time values reported in Table 54-5 are not specified in pS but in UI. Proposed Remedy: Either report times in pS (therefore being consitent with Figure 54-6) or change PG 21/43 Line 53 Change "ONE otherwise" to "ONE. Otherwise" columns 1,3,5,7 headers from "Time (pS)" to "Time (UI)". ACCEPT, put comma in. Resolution: Accept, using UI nomenclature. PG 22/43 Line 4 Change "ONE otherwise" to "ONE. Otherwise" From Dan Dove: ACCEPT, put comma in. PG 7/43 Line 40 Change "Clause 48, 53 and 54, refers" to "Clauses 48, 53 and 54, refer". PG 22/43 Line 9 Change "ONE otherwise" to "ONE. Otherwise" **ACCEPT** ACCEPT, put comma in. PG 8/43 Line 36 the word "manufacturer" is underlined... I don't think it PG 22/43 Line 48 Change "low swing" to "low-swing" was supposed to be. **ACCEPT ACCEPT** PG 23/43 Line 6 Change "operate up to..54.8." to "operate on twinaxial PG 13/43 Line 41 "19GBASE-CX4" becomes "10GBASE-CX4". cables up to 15m in length, as described in 54.8." **ACCEPT** ACCEPT PG 23/43 Line 14 Do a global search for "transmiter" and change to PG 14/43 Line 30 add a comma after "Clause 53" "transmitter". Be sure to keep caps on those words that require them. Withdraw **ACCEPT** PG 15/43 Line 19 add a comma and space after "Clause 53". PG 24/43 Line 20 Figure 54-3 the capacitor is bunged up and signal shield is partially dashed, partially solid. Accept, added space **ACCEPT** PG 19/43 Figure 54-2 There is a black line under TP4 that I can't figure has any meaning. A thick black line. PG 25/43 Lines 3,23 "Transmiter" again. **ACCEPT ACCEPT**

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SC

ELEFEXT(f)>= $17 - 21.85^* \log(f/2000)$ (2000 in the denominator of the log rather than 50).

I've taken 4 points off figure 54-10 and they seem to fit well the above equation

f	ELFEXT	(figure)	17-21.85*log(f/2000)	
10		5 39	45.4	
39	U	39		
10	00	23.5		23.6
20	00	17		
17				

B. Regarding MDELFEXT in order for the equation to fit the figure we should have:

MDELEFEXT(f)>= 21 -21.85* log(f/2000) (2000 in the denominator of the log rather than 50 & 21 instead of 15).

f	MDELFEXT (figure)	21-21.85*log(f/2000)
100	49.5	49.4
200	43	
42.9		
1000) 28	27.6
2000) 21	
21		

Equation 54.11 as is makes little sense: for f=50 they yield positive results while for f=500 they yield negative results. For instance

MDELFEXT (100) = 8.4225

MDELFEXT (200) = 1.8450

MDELFEXT(1000) =-13.4275

MDELFEXT(2000) =-20.0050

Implying that @2GHz you have 20 dB gain.

Proposed Remedy: Replace equation 54.10 by: ELEFEXT(f)>= 21 -21.85* log(f/2000)

Replace equation 54.11 by: MDELEFEXT(f)>= 17 -21.85* log(f/2000)

Regards, Ze'ev

PG 27/43 Line4-6 Change "Figure 54--6--" and "Figure 54--6--" to "Figure 54-6 and Figure 54-5" $\,$

ACCEPT

PG 27/43 Line 7 Change ". All transmitters... SHALL be disabled" to "while all other transmitters are disabled" to remove the shall statement.

ACCEPT

PG 27/43 Line39 Figure 54-6 the lower limit should have a slope at time zero. The lower axis should be in UI. Change the title from "..at MDI.." to "..at TP2.." Add the Transition time lines to the figure.

ACCEPT

PG 28/43 Table 54-5 Change "Time(ps)" to "Time(UI)" on four columns.

ACCEPT

PG 29/43 Line 49 "transmiter" again.

ACCEPT

PG 30/43 Line 8 Change "between ports" to "between network ports"

ACCEPT

From Ze'ev.

Comment Type: (TR) Clause: 54

SubClause: 8.5 Page #: 34 Line #: Comment:

There seems to be a discrepancy between equations 54.10, 54.11 and figure 54-10.

In the figure itself I think the label of ELFEXT and MDELFEXT are crossed (MDELFEXT should be larger than ELFEXT hence the loss should be smaller therefore it should appear higher in the figure).

A. Regarding ELEFEXT In order for the equation to fit the figure we should have:

ACCEPT in Principle: f/50 changed to f/2000 SC 0 P 3 L 1 C/ 00 Booth, Brad Intel From Peter Bradshaw Comment Type Ε Comment Status A Table 54-4, line 26 change minimum to maximum Line numbering is always on the left side of the page. Are you using right and left pages, or did you just place the number always on the left side? **ACCEPT** SuggestedRemedy SuggestedRemedy This is only an issue if you're not using right and left paging throughout the document which See comment is preferred by the IEEE editors. Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT IN PRINCIPLE. No opposition to resolution. We are using right and left paging throughout the document, therfore no change is made C/ 00 SC 0 Р L # 342 per suggested remedy. Grow. Robert Intel C/ 00 P **7** SC 0 L33 Comment Type E Comment Status A F342 Nortel Thompson, Geoff IEEE Std 802.3ae uses ""interoperability"" and P802.3ak uses ""inter operability"" in Comment Type E Comment Status A multiple places. thru line 35 ""f)"" should not be in underscored and ""h)"" should be in underscore. SuggestedRemedy SuggestedRemedy Search and replace to be consistent. Remove underscore from ""f)"" Add underscore to ""h)"" Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT IN PRINCIPLE. C/ 00 SC 0 P 2 L 8 # 320 Will delete all unchanged list items and mark as recommended. Grow. Robert Intel C/ 00 SC 1.4 Р Comment Type E Comment Status A F320 Marris. Arthur Cadence Though used in published standards, somewhere this EDITORIAL NOTE is inconsistent. There are four instructions described and used, not three. Comment Type Ε Comment Status A SuggestedRemedy Need to add definitions for ""FR4"" and ""Twinaxial"" Change ""Three"" to ""Four"". SuggestedRemedy Proposed Response Response Status C Add definitions for ""FR4"" and ""Twinaxial"" ACCEPT.

> The occurance of "FR4" has been deleted, see comment #386 See comment #82 for usage of twinaxial.

Response Status C

Proposed Response

ACCEPT IN PRINCIPLE.

SC 1.4

56

380

14

F056

F380

TR386

P802.3ak Draft 4.0 Comments P 1 # 319 SC 1.1 P **7** # 15 C/ 00 SC Cover L 21 CI 44 L11 Intel World Wide Packets Grow. Robert Daines. Kevin Comment Type E Comment Status A F319 Comment Type Ε Comment Status A F015 The entire document isn't changes, there are two parts: the changes to the published Need comma. standard, and a new clause. SuggestedRemedy SuggestedRemedy Add comma so line reads ""...10GBASE-CX4. 10GBASE-LX4..."" Cut the two lines beginning ""Changes to ..."" and replace the heading on page two with the Proposed Response Response Status C cut lines. ACCEPT. Proposed Response Response Status C ACCEPT. CI 44 SC 1.1 P **7** / 11 # 72 Plunkett. Timothy **NSWCDD** P 2 L 3 C/ 00 SC Front matter # 379 E072 Comment Type Ε Comment Status A Thompson, Geoff Nortel comma needed after ""10GBASE-CX4"" E379 Comment Type E Comment Status A SuggestedRemedy The text: ""This amendment is based on the current edition of IEEE Std 802.3-2002 plus changes incorporated by IEEE 802.3ae-2002."" ..doesn't (or shouldn't) descibe the add comma in specified location document being changed. Proposed Response Response Status C SuggestedRemedy ACCEPT. Perhaps: ""This amendment is based on the current revision of IEEE Std 802.3-2002 plus changes incorporated by all subsequently approved projects. These are IEEE 802.3ae-P **7** CI 44 SC 1.1 / 11 # 322 2002. P802.3af and P802.3ai (both expected to be approved in 2003). Changes dues to Grow. Robert Intel P802.3ah are expected to follow rather than lead this project. (also on page 46) Comment Type Ε Comment Status A E322 Proposed Response Response Status C ACCEPT IN PRINCIPLE. Typos SuggestedRemedy Change first sentence of first paragraph to: "This amendment is based on the current Missing comma after ""10GBASE-CX4"". The change marks are strange, ""10GBASErevision of IEEE Std 802.3-2002 plus changes incorporated by all subsequently approved CX4,"" should be underlined and nothing else. projects. These are IEEE 802.3ae-2002, P802.3af and P802.3aj (both expected to be approved in 2003). Changes dues to P802.3ah are expected to follow rather than lead this Proposed Response Response Status C project." ACCEPT. For page 14 modification see comment #333. CI 44 SC 1.1 P **7** 18 # 321 CI 44 SC 1.1 P **7** / 11 # 2 Grow. Robert Intel Marris. Arthur Cadence F321 Comment Type E Comment Status A Comment Type E Comment Status A F002 Only paragraph 1 is changed. Missing comma SuggestedRemedy SuggestedRemedy Delete ""& 2"" from the instruction, delete the second paragraph of text. Add comma 10GBASE-CX4, 10GBASE-LR, Proposed Response Response Status C Proposed Response Response Status C ACCEPT.

ACCEPT.

CI 44 SC 1.2 P **7** # 323 CI 44 SC 1.3 P **7** # 59 L 21 L 41 Grow. Robert Intel Booth, Brad Intel Comment Type E Comment Status A F323 Comment Type Ε Comment Status R Missing space. (I assume you have replacated the Heading3 style instead of applying that Bullet point on its own is confusing. style.) SuggestedRemedy SuggestedRemedy Include referring text for clarity. Insert space following section number. Proposed Response Response Status C Proposed Response Response Status C REJECT. ACCEPT. Instructions say to change just this one item. CI 44 SC 1.2 P **7** / 21 # 92 CI 44 SC 1.3 P **7** L 41 # 325 Dove. Daniel hp ProCurve Networki Grow, Robert Intel E092 Comment Type E Comment Status A Comment Type Ε Comment Status A The word Objectives is mashed against the section number The change marking is not correct SuggestedRemedy SuggestedRemedy add a space between them. The additions start with the comma, not LX4, therefore no strikeout/insertion is required for Proposed Response Response Status C ACCEPT. Proposed Response Response Status C ACCEPT. CI 44 SC 1.2 P 7 L 21 # 57 Booth, Brad Intel CI 44 SC 1.4.4 P 7 / 46 # 326 E057 Comment Type E Comment Status A Grow. Robert Intel Missing space between heading number and heading title. Comment Type Е Comment Status A SuggestedRemedy The change marking though technically correct is unconventional. Re-apply "heading3"" to the text. SuggestedRemedy Proposed Response Response Status C Add an underlined "". 53"" after ""Clause 48"", strike through ""53"", and add an underlined ""54"". Alternatively, change to read ""The term 10GBASE-X in Clause 48, refers to ..."" by ACCEPT. striking out the ""s"" in Clauses up through ""Clause 53"". CI 44 SC 1.2 P **7** / 33 # 93 Proposed Response Response Status C Dove. Daniel hp ProCurve Networki ACCEPT IN PRINCIPLE. TR058 Comment Type E Comment Status A See comment #300 suggested wording change SuggestedRemedy change ""operation over 15m"" to ""operation over distances up to 15m"" Proposed Response Response Status C ACCEPT IN PRINCIPLE.

See comment #58

F059

E325

F326

P **7** SC 1.4.4 # 300 CI 44 SC 1.4.4 P 8 CI 44 L 48 L10 Dawe, Piers Brown, Benjamin Independent Aailent Comment Type Ε Comment Status A F326 Comment Type Ε Comment Status A extra word ""Cu"" is an implementation choice. Silver plated steel wires could be compliant too. SuggestedRemedy SuggestedRemedy Replace ""Clauses 48, 53 and Clause 54"" with ""Clauses 48, 53 and 54"" Replace ""Cu"" with ""electrical"". Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. CI 44 SC 1.4.4 P **7** / 48 CI 44 SC 3 P 9 # 60 / 26 Booth, Brad Intel Dawe, Piers Agilent Comment Status A F060 Comment Type E Comment Type Ε Comment Status R Inserted reference for Clauses 53 and 54 are not required. 10GBASE-X is only specified in A reader might assume that ""bit time"" referred to the signalling period (320 ps). We Clause 48, and not in Clauses 53 and 54. should make it clear that it doesn't. SuggestedRemedy SuggestedRemedy Remove change and return the text to original form. Add to 44.3: NOTE - ""Bit time"" refers to the duration of one bit as transferred to and from the MAC (approximately 100ps in this case). Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. REJECT. The strikethru and underscore were incorrect. A reference to Clasue 54 and 10GBASE-See comment #290. CX4 is added to keep consistancy. CI 44 SC 3 P9# 16 1 27 CI 44 SC 1.4.4 P 7 / 48 Booth, Brad Intel Daines. Kevin World Wide Packets Comment Type Ε Comment Status A Comment Type Ε Comment Status A F326 Information was provided in Clause 44 to determine the cable delay. There is no Extra word. equivalent equation (44-1) or table (Table 44-3) to reference. SuggestedRemedy SuggestedRemedy Change to read ""...Clauses 48, 53 and 54..."" Provide information to determine cable delay. Proposed Response Response Status C Proposed Response Response Status C

Paragraph #2 of Clause 44.3 will be modified to:

ACCEPT.

"Equation (44-1) specifies the calculation of bit time per meter of fiber or electrical cable based upon the parameter n, which represents the ratio of the speed of light in the fiber or electrical cable to the speed of light in a vacuum. The value of n should be available from the fiber or electrical cable manufacturer, but if no value is known then a conservative dela estimate can be calculated using a default value of n = 0.66. The speed of light in a vacuum is c = 3 x 10⁸ m/s. Table 44-3 can be used to convert fiber or electrical cable delay values specified relative to the speed of light or in nanoseconds per meter."

ACCEPT.

See comment #300

F447

TR290

F061

391

61

C/ 44 P 8 L 5 # 301 C/ 45 SC 2.1.6.1 P 10 # 330 **SC Table 44-1** L13 Grow, Robert Brown, Benjamin Independent Intel Comment Type E Comment Status R F301 Comment Type Ε Comment Status A TR001 Lines/boundaries missing from table The second line of the paragraph needs to be edited for the new status bit (1.8.9). SuggestedRemedy SuggestedRemedy This applies to numerous tables throughout the draft. If a full list of the tables are Change to read ""are advertised in bits 9 and 7 through 0"", marked with appropriate necessary, I'll provide it in a comment against D4.1 underscore of ""9 and "". Proposed Response Response Status C Response Status C Proposed Response REJECT. ACCEPT IN PRINCIPLE. Do not see any missing lines, perhaps this is a screen resolution issue. Printed copies See comment #1 appear fine. C/ 45 P 10 # 125 SC 2.1.6.1 L17 CI 44 P 9 SC Table 44-2 L 21 # 327 Martin, David Nortel Networks Grow. Robert Intel Comment Type Ε Comment Status A E125 Comment Status A F327 Comment Type E Typo? Inconsistent ordering of PMDs SuggestedRemedy SuggestedRemedy The term ""MMD"" is used twice in this line. Should it say ""PMD"", or is it simply an Move CX4 PMD row below LX4 PMD row for consistency with all other table to which a acronym I'm not familiar with? CX4 row has been added. Response Status C Proposed Response Proposed Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Acronym you're not familiar with. (MMD = MDIO Manageable Device see 44.1.4.3) SC 0 P 10 L 4 C/ 45 # 328 CI 45 SC 2.1.6.1 P 10 # 115 1 29 Grow, Robert Intel Jonathan Thatcher **WWP** Comment Type E Comment Status A E328 Ε Comment Status A TR329 Comment Type Font problem. There is no insufficient reason to skip PHY types 1000 to 1011 in order to have this be SuggestedRemedy 1100. Incorrect font for Clause title. SuggestedRemedy Proposed Response Response Status C Just go in order and have this be 1000. ACCEPT. Proposed Response Response Status C ACCEPT IN PRINCIPLE. See comment #329

C/ 45 P 11 L 21 # 392 C/ 45 SC 2.1.7.6 P 11 L 22 # 76 SC 2.1.7.6 Dawe, Piers Aailent Mindspeed Cravens, George TR001 Comment Type Ε Comment Status A Comment Type E Comment Status A TR001 Wrong bit PMD type bit is described in text as bit 1.8.4. but in the subclause header and in Table 45-8. it is shown as bit 1.8.9 SuggestedRemedy SuggestedRemedy 1.8.9 (twice) Fix text to call out bit 1.8.9 not 1.8.4 Proposed Response Response Status C Response Status C Proposed Response ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. See comment #1 See comment #1 C/ 45 SC 2.1.7.6 P 11 L 21 # 393 C/ 45 SC 2.1.7.6 P 11 L 22-24 # 489 Dawe, Piers Agilent Steve Dreyer Intel E393 Comment Type E Comment Status R Comment Type E Comment Status A TR001 This doesn't make much sense: ""PMA/PMD is able to support a 10GBASE-CX4 This section has two references to bit 1.8.4 that should have been references to bit 1.8.9. PMA/PMD type."" It doesn't support, it must be - or comply - or perform as. SuggestedRemedy SuggestedRemedy Change to something like ""... able to act as a 10GBASE-CX4 PMA/PMD."" or ""... able to In section 45.2.1.7.6, change the two references to bit 1.8.4 to bit 1.8.9. comply to the 10GBASE-CX4 PMA/PMD type."" (twice). Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. REJECT. See comment #1 Will keep description the same as existing. C/ 45 SC 2.1.7.6 P 11 L 22-24 # 501 C/ 45 / 21 SC 2.1.7.6 P 11 # 126 Steve Dreyer Intel Martin, David Nortel Networks Comment Type E Comment Status A TR001 Comment Status A TR001 Comment Type Ε This section has two references to bit 1.8.4 that should have been references to bit 1.8.9. Typo? SuggestedRemedy SuggestedRemedy In section 45.2.1.7.6, change the two references to bit 1.8.4 to bit 1.8.9. ""bit 1.8.4"" is mentioned twice in lines 21-22. Shouldn't it say ""bit 1.8.9""? Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE.

See comment #1

See comment #1

C/ 45 P 174 # 512 C/ 48 SC 1.2 P 12 SC 2.1.8.5 L38 Peter Bradshaw Cadence Marris. Arthur Comment Type E Comment Status A F512 Comment Type Ε Comment Status A T286 3rd paragraph only specifies multiple wavelength PMDs. Also 45.2.1.9 as well. Figure 48-1 could be improved SuggestedRemedy SuggestedRemedy Change to ".. wavelength or lane PMDs ..." Delete text ""To 10GBASE-X PHY"" Delete dashed line surrounding 10GBASE-CX4 Narrow the two boxes containing ""10GBASE-X PCS"" and ""10GBASE-X PMA"" Move 10GBASE-Proposed Response Response Status C LX4 PMD box so that it aligns with the left hand sides of these boxes ACCEPT. Proposed Response Response Status C ACCEPT IN PRINCIPLE. Editor to do global search and replace in Clause 45.2.1 SC 1 P 12 / 14 C/ 48 # 3 See comment #286 Marris, Arthur Cadence C/ 48 P 13 SC 1.3.3 *L* 1 # 109 Comment Status A E003 Comment Type E Dallesasse, John Molex Incorporated The text ""PMD"" is missing Comment Type Е Comment Status A F109 SuggestedRemedy Line 1 text ""10GBASE-X supports the PMD sublayer and MDI specified in Clause 53."" Change ""10GBASE-CX4 described"" to ""10GBASE-CX4 PMD described"" should be changed to ""10GBASE-X supports the PMD sublayer and MDI specified in Clauses 53 and 54."" Proposed Response Response Status C SuggestedRemedy ACCEPT. See above. C/ 48 SC 1 P 12 / 15 # 94 Proposed Response Response Status C Dove. Daniel hp ProCurve Networki ACCEPT. F094 Comment Type E Comment Status A SC 1.3.3 C/ 48 P 13 # 394 / 1 missing word Dawe, Piers Aailent SuggestedRemedy Comment Type E Comment Status A E109 change ""CX4 described"" to ""CX4 PMD described"" Can higher layers support lower ones? Missing reference to 54. Proposed Response Response Status C SuggestedRemedy ACCEPT. Get rid of the sentence. Consider copying language from e.g. 34.1.2. C/ 48 SC 1.2 P 12 / 35 # 65 Proposed Response Response Status C Booth, Brad Intel ACCEPT IN PRINCIPLE. Comment Status A T286 Comment Type E See comment #109 In Figure 48-1, remove the CX4 portion of the diagram as it is not required. SuggestedRemedy Change the ""10GBASE-LX4"" to read ""10GBASE-LX4 or 10GBASE-CX4"". Proposed Response Response Status C ACCEPT IN PRINCIPLE.

See comment #286

P 13 L 1 # 66 P 13 L3 # 363 C/ 48 SC 1.3.3 C/ 48 SC 2.6.1.3 Booth, Brad Intel UNH-IOI Lynskey, Eric Comment Type E Comment Status A F109 Comment Type Ε Comment Status A F363 Missing reference to Clause 54. This is against 48.2.6.1.3, on page 301 of 802.3ae-2002. The variable rx_lane<3:0> contains a reference to Clause 53. SuggestedRemedy SuggestedRemedy Change to read ""... specified in Clause 53 and Clause 54."" Add text to reference Clause 54. Change end of sentence to read ""...as specified in Proposed Response Response Status C Clause 53 or 54."" ACCEPT. Proposed Response Response Status C ACCEPT. See comment #109 P 13 L 3 C/ 48 SC 2.6.1.3 P 13 L3 C/ 48 SC 2.6.1.3 # 366 # 367 Lynskey, Eric UNH-IOI UNH-IOI Lynskey, Eric E366 E367 Comment Type E Comment Status A Comment Type Ε Comment Status A This is against 48.2.6.1.3, on page 302 of 802.3ae-2002. The variable tx_lane<3:0> This is against 48.2.6.1.3, on page 301 of 802.3ae-2002. The variable rx_lane<3:0> contains a reference to Clause 53. contains a reference to Clause 53. SuggestedRemedy SugaestedRemedy Add text to reference Clause 54. Change end of sentence to read ""...as specified in Add text to reference Clause 54. Change end of sentence to read ""...as specified in Clause 53 or 54."" Clause 53 or 54."" Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. P 13 C/ 48 SC 2.6.1.3 P 13 13 C/ 48 SC 2.6.1.6 L3 # 368 # 362 **UNH-IOL** Lynskey, Eric UNH-IOI Lynskey, Eric Comment Type E Comment Status A F362 Comment Type E Comment Status A F368 This comment is against 48.2.6.1.6 on page 304 of 802.3ae-2002. The This is against 48.2.6.1.3, on page 302 of 802.3ae-2002. The variable tx_lane<3:0> PMD_SIGNAL.indicate(signal_detect<3:0>) variable only references Clause 53. contains a reference to Clause 53. SuggestedRemedy SuggestedRemedy Add text to reference Clause 54. Change end of sentence to read ""...as specified in Add text to reference Clause 54. Change end of sentence to read ""...as specified in Clause 53 or 54."" Clause 53 or 54." Proposed Response Response Status C Proposed Response Response Status C

ACCEPT.

ACCEPT.

P 13 L 3 # 364 # 332 C/ 48 SC 2.6.1.6 C/ 48 SC Figure 48-1 P 12 L 20 UNH-IOI Lynskey, Eric Grow. Robert Intel Comment Type E Comment Status A F364 Comment Type Ε Comment Status A T286 This comment is against 48.2.6.1.6 on page 304 of 802.3ae-2002. The There are a number of minor problems with this figure. This instruction should be PMD_SIGNAL.indicate(signal_detect<3:0>) variable only references Clause 53. ""Replace Figure 48-1 with:"" or alternative leave as ""Change"" and add what has changed below the instruction (see IEEE Std 802.3ae-2002, p. 16). The architectural Figure is not SuggestedRemedy consistent for PCS clauses, but we don't need to invent a new one. (Clause 36 has a Add text to reference Clause 54. Change end of sentence to read ""...as specified in PCS--PMD stack for each PMD type. Clause 52 only has WAN and LAN stacks.) I Clause 53 or 54."" recommend consistency within a speed of operation (e.g., more like Clause 52). Proposed Response Response Status C SuggestedRemedy ACCEPT. 1. The background of the PCS and PMA boxes should be diagonal lines, not shading (probably a platform translation problem of FrameMaker). 2. Use the model of clause 52 P 13 L 3 C/ 48 SC 3.1 # 365 and only have one stack, delete ""To 10GBASE-X PHY"", name at bottom becomes ""10GBASE-X"". (If the TF chooses two stacks, do it like clause 36.) UNH-IOI Lynskey, Eric Proposed Response Response Status C Comment Type E Comment Status A E365 ACCEPT IN PRINCIPLE. This comment is against 48.3.1 on page 310 of 802.3ae-2002. The note here mentions Clause 47 and 53. See comment #286 SugaestedRemedy C/ 54 SC 0 P 14 L3 # 333 Change text to ""jitter specifications of Clauses 47, 53, and 54."" Grow. Robert Intel Proposed Response Response Status C E333 Comment Type E Comment Status A ACCEPT. The EDITORIAL NOTE is not necessary since clause 54 is an addition. Cl 48 SC 3.1 P 13 L 3 # 369 SuggestedRemedy Lvnskev. Eric UNH-IOI Delete EDITORIAL NOTE (both paragraphs). Comment Type E Comment Status A F369 Proposed Response Response Status C This comment is against 48.3.1 on page 310 of 802.3ae-2002. The note here mentions ACCEPT. Clause 47 and 53. SuggestedRemedy Cl 54 SC₁ P 16 L1 # 397 Change text to ""itter specifications of Clauses 47, 53, and 54,"" Dawe, Piers Aailent Proposed Response Response Status C Comment Type E Comment Status A F397 ACCEPT. Not IEEE reference model. This is a typo in 53.1: I think 52.1 has it right. SuggestedRemedy Change to ""ISO/IEC Open System Interconnection (OSI) reference model."". Response Status C Proposed Response ACCEPT.

SC₁

C/ 54 SC₁ P 16 L 24 # 5 C/ 54 SC 1.1 P 16 # 127 L34 Cadence Martin, David Nortel Networks Marris. Arthur Comment Type E Comment Status R TR287 Comment Type Ε Comment Status A F127 Figure 54-1 tidy up Typo. SuggestedRemedy SuggestedRemedy Replace ""and do not imply"" with ""and does not imply"" Move ""PMA = PHYSICAL MEDIUM ATTACHMENT"" so that it is above ""PMD = PHYSICAL MEDIUM DEPENDENT"" Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. REJECT. See comment #335 See comment #335 C/ 54 SC 1.1 P 16 L34 # 398 C/ 54 SC₁ P 16 L 26 # 67 Dawe, Piers Agilent Booth, Brad Intel Comment Type Ε Comment Status A E398 Comment Type E Comment Status R TR287 Grammar: ""The service interface ... do not imply"" Minor editorial, but the columns listing the acronyms in Figure 54-1 should have 3 SuggestedRemedy definitions each. Change to ""The service interface for this PMD is described in an abstract manner which SuggestedRemedy does not imply ..."". Fix as per comment. Proposed Response Response Status C Proposed Response Response Status C ACCEPT. REJECT. See comment #335 See comment #335 C/ 54 SC 1.1 P 16 / 34 # 375 C/ 54 SC 1.1 P 16 L 31 # 335 Ewen, John JDS Uniphase Grow. Robert Intel Comment Type E E375 Comment Status A TR287 Comment Type E Comment Status A Subject / verb mismatch With the exception of the ""-CX4"" instead of ""-LX4"" this subclause is identical to 53.1.1. SuggestedRemedy It is neither necessary nor prudent to include this duplicate information. Replace: ... and do not imply ... with ... and does not imply ... SuggestedRemedy Proposed Response Response Status C Rewrite 54.1.1 to reference clause 53.1.1. ""The 10GBASE-CX4 PMD uses the same PMD interface as 10GBASE-LX4. The following PMD service primitives are defined in 53.1.1: ACCEPT IN PRINCIPLE. PMD_UNITDATA.request PMD_UNITDATA.indicate PMD_SIGNAL.indicate" Delete the 54.1.2 through 54.1.4.3. See comment #335 Proposed Response Response Status C

ACCEPT.

C/ 54 SC 1.1 P 16 L 35 # 6 C/ 54 SC 1.2.3 P 17 L 12 # 336 Marris. Arthur Cadence Grow, Robert Intel Comment Type Ε Comment Status A E006 Comment Type Ε Comment Status R TR287 grammar Grammar problem. SuggestedRemedy SuggestedRemedy Replace ""do"" with ""does"" Change ""stream"" to ""streams"". Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. REJECT. See comment #335 See comment #335 C/ 54 SC 1.1 P 16 L 35 # 77 C/ 54 SC 1.3.2 P 17 L30 Cravens, George Marris, Arthur Mindspeed Cadence Comment Type E Comment Status R TR287 Comment Type E Comment Status A E077 Minor grammatical change: Current sentence: The service interface for this PMD is ""stream"" should be plural described in an abstract manner and do not imply any particular implementation. Change SuggestedRemedy ""and do not"" to ""and does not"" ""The PMD continuously sends four parallel streams of bits to the PMA corresponding to SuggestedRemedy the signals received from the MDI."" Change second sentence to: The service interface for this PMD is described in an abstract Proposed Response Response Status C manner and does not imply any particular implementation. REJECT. Proposed Response Response Status C ACCEPT IN PRINCIPLE. See comment #335 See comment #335 C/ 54 SC 1.3.2 P 17 L30 # 337 Grow. Robert Intel C/ 54 SC 1.2 P 16 L 52 # 407 Comment Type E Comment Status R TR287 Dawe, Piers Agilent Grammar problem. Comment Type Ε Comment Status A F407 SuggestedRemedy Syntax Change ""stream"" to ""streams"". SuggestedRemedy Proposed Response Response Status C Remove the space before ""("" here, in 54.1.3.1 and in 54.1.4.1. REJECT. Proposed Response Response Status C ACCEPT. See comment #335

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

See comment #335

Page 13 of 37

C/ 54 SC 1.3.2

C/ 54 SC 1.3.3 P 17 L 35 # 400 C/ 54 SC 11 P 40 L10 # 444 Dawe, Piers Dawe, Piers Agilent Agilent Comment Type E Comment Status R TR287 Comment Type Ε Comment Status R F444 This subclause has no value: it says as much itself. There is no need for such unhelpful Subclause title doesn't tell the whole story. material. SuggestedRemedy SuggestedRemedy Please change to ""Environmental and safety"". Delete it, and 54.1.4.3. Proposed Response Response Status C Proposed Response Response Status C REJECT. REJECT. Clauses 51.9, 52.10, 53.10, etc. all label this Clause title as "Environment Specifications". See comment #335 C/ 54 SC 11 P 40 L13 C/ 54 SC 10.1.2 P 40 L 5 # 318 Cobb, Terry Avaya Brown, Benjamin Independent Ε Comment Status A E087 Comment Type Comment Type E Comment Status A E318 Is ISO/IEC 11801:1995 the correct reference for environmental requirements? wrong tense SuggestedRemedy SuggestedRemedy Add correct reference. Replace ""define"" with ""defined"" Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Will change 54.11 to: "All equipment subject to this clause shall conform to the applicable See comment #374 requirements of 14.7.". C/ 54 SC 10.1.2 P 40 L 5 # 134 Cl 54 SC 11 P 40 / 15 # 445 Martin, David Nortel Networks Dawe, Piers Agilent Ε Comment Status A E134 Comment Type Comment Type Ε Comment Status R F445 Туро Do you want to recommend anything about labelling? SuggestedRemedy SuggestedRemedy Replace ""as define in 54.7.3.6"" with ""as defined in 54.7.3.6"" ? Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. REJECT. See comment #374 No recommendation.

SC 12 P 40 # 38 SC 12.4 P 42 L 22 # 45 C/ 54 L 16 C/ 54 Booth, Brad Intel Booth, Brad Intel Comment Type E Comment Status A F038 Comment Type Ε Comment Status A F045 PICS should start on their own page. Remove value/comment for TP1 and TP4 as information is redundant. SuggestedRemedy SuggestedRemedy Insert page break before 54-12. Fix as per comment. Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. Cl 54 SC 12.1 P 40 1 22 # 460 Cl 54 SC 12.4 P 42 17 # 12 Thaler, Pat Agilent Technologies Marris. Arthur Cadence Comment Type E E460 Ε Comment Status A E012 Comment Status A Comment Type Dan, I think you are being rather pessimistic here. I expect you can say IEEE Std 802.3ak-Comment/value field empty 200x as we will probably get this approved before the end of 2009. :^) SuggestedRemedy SuggestedRemedy Put something in the comment/value field or delete this PICS item There should be an editor's note that the appropriate year should be entered before Proposed Response Response Status C publication. Otherwise, it might slip through and get published with this still saying 20xx. ACCEPT. Response Status C Proposed Response ACCEPT IN PRINCIPLE. Item to be deleted Editor's note exists on first page of Clause 54, page 14 C/ 54 SC 12.4 P 42 L9 # 446 Dawe, Piers Aailent C/ 54 SC 12.2.2 P 41 / 25 # 39 Comment Type E Comment Status R T041 Booth, Brad Intel Asking if a PMD integrates Clause 46 XGMII seems a bit odd: it can never be directly Comment Type E Comment Status R E039 attached (in terms of signal path) to one. Unnecessary period after ""Clause 54"". SuggestedRemedy SuggestedRemedy Delete MC1, tweak main text if necessary. Remove. Proposed Response Response Status C Proposed Response Response Status C REJECT. REJECT. See comment #41 Period is a remanent of framemaker cross-reference. C/ 54 SC 12.4 P 43 L 41 # 46 Booth, Brad Intel Comment Type E Comment Status A E046 No[] not required for a mandatory PICS. SuggestedRemedy Remove No[].

Proposed Response

ACCEPT.

Response Status C

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

Page 15 of 37

C/ 54 SC 12.4

P 43 L 43 # 358 C/ 54 SC 12.4.2 P 44 # 361 C/ 54 SC 12.4.1 L19 Grow. Robert Intel Grow, Robert Intel Comment Type E Comment Status A F358 Comment Type Ε Comment Status A F361 PF16 through PF18 are management functions. Though basically copied from clause 53, these PICs items are not internally consistent or consistent with the style of other clauses. All management functions are dependent on SuggestedRemedy MDIO. I found nothing in the text that indicates that any of the capabilities (e.g. lane by Move to MF, relable and renumber MF PICS items. lane transmit disable) are optional. Proposed Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. Delete MF1, it is covered by *MD. Change all Status entries in MF PICS to MD:M Change all Support entries to Yes[], NA[]. PF16 is a mandatory function this PMD must have. PF16 status will be changed from Proposed Response Response Status C "MD:M" to "M". ACCEPT. See comment #412 for PF17 resolution Cl 54 SC 12.4.2 P 44 1 22 # 49 PF18 is a mandatory function this PMD must have and therefore has to stay. Booth, Brad Intel Comment Type E Comment Status A F049 C/ 54 SC 12.4.1 P 43 L 50 # 359 Remove NAII from MF6. Grow. Robert Intel SuggestedRemedy Comment Type E Comment Status R E359 As per above. The loopback function described in 54.6.9 is per an MDIO bit, therefore should be MD:M. Proposed Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. Change Status to MD:M. Proposed Response Response Status C See comment #361 REJECT. P 44 C/ 54 SC 12.4.2 1 25 # 50 The loopback function is mandatory, its control is optionally done through an MDIO register Booth, Brad Intel bit. Comment Type E Comment Status A E050 P 44 C/ 54 SC 12.4.2 / 19 # 48 Remove No[] and NA[] from mandatory MF7. Intel Booth, Brad SuggestedRemedy Comment Type E Comment Status A E048 As per above. Remove Noll from MF5. Proposed Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. As above. See comment #361 Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #361

			. 002.002				
CI 54 SC 12.4.2 Booth, Brad	P 44 Intel	L 28	# 51	CI 54 SC 12.4.5 Booth, Brad	P 46 Intel	L 29	# 54
Comment Type E Add N/A[] to MF8, M	Comment Status A F9 and MF10.		E051	•	Comment Status A efore, it requires a No[].		E054
SuggestedRemedy As per above.				SuggestedRemedy Add a No[].			
Proposed Response ACCEPT IN PRINCIPL	Response Status C .E.			Proposed Response ACCEPT.	Response Status C		
See comment #361				CI 54 SC 2	P18	L 7.5	# 69
C/ 54 SC 12.4.2 Booth, Brad	P 44 Intel	L 6	# 47	Booth, Brad Comment Type E	Intel Comment Status R		TR287
Comment Type E	Comment Status A		E047	Capitalize the C for c	lause.		
Insert No[] value.				SuggestedRemedy Fix as per comment.			
SuggestedRemedy As per comment.				Proposed Response	Response Status C		
Proposed Response ACCEPT IN PRINCIPL	Response Status C			REJECT.			
	L.			See comment #335			
See comment #361				CI 54 SC 3 Dawe, Piers	P 18 Agilent	L11	# 408
C/ 54 SC 12.4.3	P 45	L 28	# 52	Comment Type E	Comment Status A		TR401
Booth, Brad	Intel Comment Status A		F052	This subclause seem			11140
	ve an extra carriage return in t	he Value/Comm	E052 /alue/Comment field.	SuggestedRemedy Should it come in or j			
SuggestedRemedy Delete so row forma	at matches others.			Proposed Response	Response Status C		
Proposed Response	Response Status C			ACCEPT IN PRINCIPLE	Е.		
ACCEPT.				See comment #401			
C/ 54 SC 12.4.4 Booth, Brad	P 46 Intel	L 20	# 53				
Comment Type E RS8 appears to have	Comment Status A e an extra carriage return in th	e Value/Comme	E053 nt field.				
SuggestedRemedy	-						

Delete so row format matches others.

Proposed Response ACCEPT.

Response Status C

P 18 # 289 C/ 54 SC 3 L 13 SW Frazier, Howard Comment Type E Comment Status A TR401 Missing word: ""PMD"". SuggestedRemedy Insert ""PMD"" after 10GBASE-CX4 in the sentence starting at line 13 in the current draft. Proposed Response Response Status C ACCEPT IN PRINCIPLE. See comment #401 SC 4 P 18 C/ 54 / 46 # 403 Dawe, Piers Agilent TR290 Comment Type E Comment Status R A reader might assume that ""bit time"" referred to the signalling period (320 ps). We should make it clear that it doesn't. This is a repeat of a comment against 44.3. SugaestedRemedy Add: NOTE - ""Bit time"" refers to the duration of one bit as transferred to and from the MAC (100ps in this case). Proposed Response Response Status C REJECT. See comment #290. Bit time is defined in Clause 1.4.50 CI 54 SC 5 P 19 L 31 # 404 Dawe, Piers Agilent E338 Comment Type E Comment Status R Might as well complete the table. SuggestedRemedy Include bit 1.8.9 in the table. Proposed Response Response Status C

REJECT.

See comment #338

C/ 54 SC 5 P19 L5 # 338

Grow, Robert Intel

Comment Type E Comment Status A E338

With the exception of the table references in the text, this subclause is identical to 53.3. It is neither necessary nor prudent to include this duplicate information.

SuggestedRemedy

Change all references to ""Table 54-3"" to ""Table 53-2"" and references to ""Table 54-4"" to ""Table 53-3"". Delete Tables 54-3 and 54-4. Search for references to 54.5 and replace as appropriate with 53.3.

Proposed Response Response Status C
ACCEPT IN PRINCIPLE.

This subclause changed to:

"The 10GBASE-CX4 PMD uses the same MDIO function mapping as 10GBASE-LX4 as defined in Clause 53.3"

Comment Type E Comment Status A

The "+" and "-" notations used here to designate the two signals comprising a differential pair differ from the notation used in Table 54-2 which uses "" and "<n>". This or a similar inconsistency occurs in a number of places and needs to be uniformly addressed.

SuggestedRemedy

Select and use consistent notation. I suggest the "+" and "-" notation.

Proposed Response Response Status C ACCEPT.

"" and "<n>" will be used to match the style in Clause 47.

CI **54** SC **6.2** P **20** L **44** # **356**Grow, Robert Intel

Glow, Robert Inter

Ε

Though ""electrical"" is the most likely implementation approach for bit streams, it is implementers choice as to how the logic is implemented.

Comment Status A

SuggestedRemedy

Comment Type

Line 44 -- delete ""electronic"" Line 52 -- delete ""electronic"" Page 43, PF5 -- delete ""electrical"" from the second line of Value

Proposed Response Response Status C

ACCEPT IN PRINCIPI F.

....

See comment #292

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

Page 18 of 37

C/ **54** SC **6.2**

F466

T292

P 21 L 4 # 340 C/ 54 SC 6.4 # 411 C/ 54 SC 6.3 P 21 L 42 Grow. Robert Intel Dawe, Piers Aailent Comment Type E Comment Status A T409 Comment Type Ε Comment Status A F411 The paragraph basically describes what happens on loopback. You want very rapid signal detect yet less rapid de-assert. Opposite to what I would expe SuggestedRemedy SuggestedRemedy Either move it of 54.6.9 or rewrite in terms of remote TX signals to local RX signals. Please explain. Proposed Response Response Status C Proposed Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Explanation: We want to know if there is a signal present as soon as possible so the link See comment #409 can be brought up as soon as possible. We do not want to drop the link for any random C/ 54 SC 6.4 P **21** L 32 # 468 noise event. Bill Quackenbush Cisco Systems, Inc. C/ 54 SC 6.7 P 22 L 12 # 128 Comment Type E Comment Status A E468 Martin. David Nortel Networks The unit "mVppd" appears to be used in Table 54-5 without definition. I infer that it means Comment Type Ε Comment Status A F128 "milliVolts peak-peak differential". Font. SuggestedRemedy SuggestedRemedy Define the term or change the table so that "mVpp" can be used as is the case in Table 54-Correct font size for ""absolute output voltage limits"" Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. Also change mVppd to mVpp differential in paragraphs above table. C/ 54 SC 6.8 P 22 1 24 # 129 Martin. David Nortel Networks C/ 54 SC 6.4 L 42 P 21 # 412 Dawe, Piers Agilent Comment Status A E129 Comment Type Ε Font. Comment Type E Comment Status R E412 There should be something in here about a compliant signal (both electrically and in SuggestedRemedy coding), and a get out: behaviour unspecified in all other conditions. Correct font size for ""absolute output voltage limits"" SuggestedRemedy Proposed Response Response Status C Per comment. ACCEPT.

Proposed Response

compliant, coded signal.

REJECT.

Response Status C

Signal detect is only meant to detect the presence of a signal, not whether there is a CX4,

71 C/ 54 SC 6.8 P 22 L 29 Booth, Brad Intel Comment Type E Comment Status R F071 Missing the word ""optional"" in front of PMD_transmit_disable_n. SuggestedRemedy Fix as per comment. Proposed Response Response Status C REJECT. PMD_transmit_disable_n is not optional. L 34 C/ 54 SC 6.9 P 22 # 20 Booth, Brad Intel E020 Comment Type E Comment Status A Wording is redundant. SuggestedRemedy Remove ""as specified in this subclause"". Proposed Response Response Status C ACCEPT. C/ 54 SC 6.9 P 22 / 35 # 89 Joergensen, Thomas Vitesse Semiconducto

Loopback mode might be selected through either MDIO management or other means, so there should not be any reference to how loopback mode is selected in the subclause.

SuggestedRemedy

Comment Type E

Remove the words ""by setting the loopback control bit of 1.0.0""

Comment Status A

Proposed Response Response Status C ACCEPT.

435 C/ 54 SC 7 P 26 L 24 Dawe, Piers Aailent

Comment Type Ε Comment Status R

Too many graphs. Other editorial.

SuggestedRemedy

Combine the three ""return loss"" graphs. Remove gratuitous trailing zeroes in y axes. Remove ""E+0"" in v axes. Remove grey borders. Start f axis below, not at, 100 MHz. Commas are forbidden in numbers. It would be nice to have shading to show which side o each mask is compliant. Figures are orphans; each needs a mention in the text.

Proposed Response Response Status C REJECT.

Graphs stay and will be labeled informative and will be black & white, see comment #297

C/ 54 SC 7.1 P 23 L16 # 309 Brown, Benjamin Independent Comment Type E Comment Status A E309

In ""inter operability"" 2 words?

SuggestedRemedy

F089

Replace ""inter operability"" with ""interoperability"". This results in a hyphen at the end of this line. This comment also applies to 54.7.4.3, page 29, line 43

Proposed Response Response Status C ACCEPT.

P 23 C/ 54 SC 7.1 / 16 # 454 Thaler, Pat **Agilent Technologies**

Comment Type E Comment Status A

When you have a two word adjective, it should be hyphenated. For instance, ""low swing AC coupled differential interface" should be ""low-swing AC-coupled differential interface"" Another example is ""peak to peak"" in 54.7.3.4 which should be ""peak-topeak"". By the way, it is not clear why the first sentence of this subclause says ""differenti output amplitude"" when describing the maximum while the next sentence describing the minimum for the same signal characteristic calls it ""differental peak to peak output voltage"". Both are obviously peak-to-peak voltages as the units are mVp-p. I suggest you use the same name for the characteristic in both sentences.

SuggestedRemedy

Check for unhypenated adjectives and correct. Also, make the wording of 54,7,3,4 more consistant.

Proposed Response Response Status C ACCEPT.

TR297

E454

CI 54 SC 7.2 Brown, Benjamin	P 23 Independent	L 23	# 305		Cl 54 SC 7.2 Alan Flatman	P 23 LAN Technol	L 25 ogies	# 74	
Comment Type E Wrong word usage	Comment Status A			E305	Comment Type E cannot say "up to app	Comment Status A roximately 15m"			T082
SuggestedRemedy Replace ""is comprise	ed of"" with ""comprises""				SuggestedRemedy delete "approximately	,			
Proposed Response ACCEPT.	Response Status C				Proposed Response ACCEPT IN PRINCIPLE	Response Status C			
C/ 54 SC 7.2	P 23	L 25	# 21		See comment #82				
Booth, Brad Comment Type E	Intel Comment Status A			T082	Cl 54 SC 7.3 Dawe, Piers	P 24 Agilent	L11	# <u>415</u>	
Bad wording. SuggestedRemedy					Comment Type E Standard terminology	Comment Status A			E415
Remove ""approximat	tely"". Scan specification for o	ther occurren	ces.		SuggestedRemedy				
Proposed Response ACCEPT IN PRINCIPLE	Response Status C					olerance"" with ""Signaling spind period"" there with ""unit in			
See comment #82					Proposed Response ACCEPT.	Response Status C			
C/ 54 SC 7.2 Thaler, Pat	P 23 Agilent Techno	L 25 logies	# 455		C/ 54 SC 7.3.1	P 24	L37	# 344	
Comment Type E	Comment Status A			T082	Grow, Robert	Intel			=
for the cables called o of 54.8, then it should	cky comment re: ""standard tw out in 54.8. If there is a cable st at least be called out in a note. ase delete ""standard"" as it is	andard that sa If there is not	atisfies the require and you simply m	ements lean	Comment Type E Awkward language. SuggestedRemedy	Comment Status A			E344
the word in a standard		ŭ			Ğ	ad: ""The test fixture of Figur	e 54-3, or its fund	ctional equivalent,	.,""
SuggestedRemedy See comment					Proposed Response ACCEPT.	Response Status C			
Proposed Response ACCEPT IN PRINCIPLE	Response Status C				C/ 54 SC 7.3.1 Booth, Brad	P 24 Intel	L 38	# 22	
See comment #82					Comment Type E Use caps for abbrevia	Comment Status A			E022
					SuggestedRemedy Change ""pcb"" to ""Po	CB"".			
					Proposed Response ACCEPT.	Response Status C			
					See comment #386				

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

Page 21 of 37

C/ 54 SC 7.3.1

75 SC 7.3.4 P 25 L 33 C/ 54 Alan Flatman LAN Technologies Comment Type E Comment Status A F075 Title "Amplitude and Swing" duplicates same meaning SuggestedRemedy rename "Output Amplitude" Proposed Response Response Status C ACCEPT. Cl 54 SC 7.3.4 P 25 / 39 # 296 Frazier, Howard SW Comment Status A E296 Comment Type E D.C. vs DC. Both appear in the same sentence. SuggestedRemedy Use DC. not D.C. Proposed Response Response Status C ACCEPT. Will also search entire text and make all consistant CI 54 SC 7.3.4 P 25 L Figure 54-# 470 Bill Quackenbush Cisco Systems, Inc. F470 Comment Type E Comment Status A The designations "<N>" and "<P>" for the two signals comprising a differential pair are inconsistent with the designations used elsewhere in the Clause 54. SuggestedRemedy Select and use consistent notation. I suggest the "+" and "-" notation. Proposed Response Response Status C ACCEPT IN PRINCIPLE.

and <n> adopted

C/ 54 SC 7.3.5 P 26 L 10 # 86
Cobb. Terry Avava

Comment Type **E** Comment Status **A** TR297 In the past this is usually a table.

SuggestedRemedy

Move the return loss to a table. This would need to be changed throughout the document. In addition the picture should not be included. It is best not to show a requirement with both a picture and equation or table. As in a previous comment, the table is generally used for specifing the requirement. It also makes the PIC easier.

Proposed Response Response Status C
ACCEPT IN PRINCIPLE.

All graphic pictures will be labeled informative, see comment #297

CI 54 SC 7.3.5 P 26 L 24 # 24

Booth, Brad Intel

Comment Type E Comment Status R

Figure 54-5, -6, -7, -9, -10, -11, and -12 appear to be imported graphics. These graphics need to be in editable FrameMaker format.

SuggestedRemedy

Eliminate imported graphics.

Proposed Response Response Status C REJECT.

IEEE Standards Style Manual Section 16 allows for imported graphics. Files for each graphic will be maintained per Section 16. See comment #297

Comment Type E Comment Status A

It is not the output impedance of the driver, but the output impedance of the total circuit including PCB and connector.

SuggestedRemedy

Change the word ""driver"" to ""output"" in line 3

Proposed Response Status C
ACCEPT.

"driver" canged to "transmitter" throught document

TR297

E088

SC 7.3.5 P 26 L 4 # 83 C/ 54 SC 7.3.5 # 118 C/ 54 P 28 L38 Cobb. Terry **WWP** Avava Jonathan Thatcher Comment Type Ε Comment Status A F083 Comment Type E Comment Status A F118 Correct text. Remove the note to the editors note box below. IEEE has no permanent means to ensure availability of this file. SuggestedRemedy SuggestedRemedy Use ""shall be greater than or equal to"" (note: this needs to be changed throughtout the Put note in editors box, which will be removed "prior to publication." Or, fix the IEEE document) and on the following line change output impedance to return loss. process and rules so that we have permanent, managed repository for such files. Proposed Response Response Status C Response Status C Proposed Response ACCEPT. ACCEPT IN PRINCIPLE. Cl 54 SC 7.3.5 P 26 L 6 # 502 Removed note. Steve Dreyer Intel C/ 54 SC 7.3.6 P 26 L 53 # 25 E502 Comment Type E Comment Status A Booth, Brad Intel Looks like missing period at end of line 6. Comment Type E Comment Status A F025 SuggestedRemedy Leading in text for list should be on the same page as the list. Add period to end of line 6. SuggestedRemedy Proposed Response Response Status C Fix as per comment. ACCEPT. Proposed Response Response Status C Cl 54 SC 7.3.5 P 26 L 6 # 490 ACCEPT. Steve Dreyer Intel C/ 54 SC 7.3.6 P 27 / 1 # 26 F490 Comment Type E Comment Status A Booth, Brad Intel Looks like missing period at end of line 6. Comment Type Ε Comment Status A E026 SuggestedRemedy Numbered list does not appear to be an IEEE numbered list. Add period to end of line 6. SuggestedRemedy Proposed Response Response Status C Apply IEEE format to the numbered list. ACCEPT. Proposed Response Response Status C Cl 54 SC 7.3.5 P 26 / 9 # 23 ACCEPT. Booth, Brad Intel Comment Status A E023 Comment Type E Equation format is incorrect. SuggestedRemedy Apply the ""Equation" format to each equation. Numbering should be ""(54-1)" and

should have no ""Eq."" and no ""a"" or ""b"". Apply to all equations in the specification.

Response Status C

Proposed Response

ACCEPT.

P 27 # 377 SC 7.3.6 C/ 54 SC 7.3.6 L 13 C/ 54 JDS Uniphase Dawe, Piers Ewen. John Comment Type Ε Comment Status R F377 Comment Type Ε Definition of Vnorm and Normalized Waveform include factors of 2 and 0.5 that cancel. This seems redundant. SuggestedRemedy SuggestedRemedy Define Vnorm and Normalized Waveform as: Vnorm = (Vlowp - Vlowm) Normalized Proposed Response Waveform = (Original Waveform - Voff) / Vnorm ACCEPT. Proposed Response Response Status C REJECT. Cl 54 SC 7.3.6 Dawe, Piers The factor of 0.5 represents the nominal pre-emphasis value chosen by the study group. This number can change from other comments to this draft and might therefore change Ε Comment Type here. range. C/ 54 P 27 / 19 SC 7.3.6 # 421 Dawe. Piers Aailent SuggestedRemedy Comment Type Е Comment Status A TR418 time axis. Don't use figures for normative specs. Proposed Response SuggestedRemedy REJECT. Replace ""defined in Figure 54-6 and the piece-wise linear interpolation between the points in Table 54-7." with ""defined in piece-wise linear format by Table 54-7 and illustrated by See comment #418 Figure 54-6."" Cl 54 SC 7.3.6 Proposed Response Response Status C Bill Quackenbush ACCEPT IN PRINCIPLE. Comment Type Ε See comment #418 not seen to be needed. C/ 54 P 27 SC 7.3.6 L 3 # 420 Dawe, Piers Aailent

Comment Type E

SuggestedRemedy

Proposed Response

ACCEPT.

""continuous baud""?

successive unit intervals?

Comment Status A

Response Status C

P 27 # 419 L3 Aailent Comment Status A F419 The two levels are not called +1 and -1 1 and 0. or one and zero. Response Status C P 27 / 45 # 422 Agilent TR418 Comment Status R The pattern is 10 UI or 3200 ps long. The table and figure should extend over the same Delete last row of table, truncate figure at 3200 ps or continue template to chosen end of Response Status C P 28 L Table 54-7 # 471 Cisco Systems, Inc. Comment Status A F471 The table contains 4 sets of duplicated number pairs whose purpose is unclear and that do SuggestedRemedy Remove the duplicate upper limit number pairs for 283 and 709 ps and the duplicate lower limit number pairs for 1883 and 2309 ps. Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Will pare down duplicated numbers to pairs to indicate a straight line.

E420

CI 54 Brown, Ben	SC 7.3.7	P 28 Independent	L 47	# 307	C/ 54 Grow, Rob	SC 7.3.8	P 29 Intel	L 4	# 348
Comment 7 Wrong Suggested	Type E tense Remedy	Comment Status A		E307	Suggested	ete Editor's Note.	Comment Status A		TR298
Proposed F	Response T IN PRINCIPLE.	Response Status C			Proposed ACCEI	Response PT.	Response Status C		
Last se	entence deleted.				See co	omment #298			
C/ 54 Martin, Davi	SC 7.3.8	P 28 Nortel Networ	L 47 ks	# <u>130</u>	CI 54 Plunkett, T	SC 7.3.8 imothy	P 29 NSWCDD	L 4	# 73
Comment T Typo	Type E	Comment Status A		E130	Comment Editor	Type E s note is not out	Comment Status A		TR298
SuggestedF Replace	•	EMI"" with ""and increased E	≣MI""		Suggested Editor	•	updated or removed.		
Proposed F	Response T IN PRINCIPLE.	Response Status C			Proposed ACCEI	Response PT.	Response Status C		
Last se	entence deleted.				See co	omment #298			
CI 54 Healey, Ada	SC 7.3.8 am	P 28 Agere System	<i>L</i> 51	# 371	CI 54 Daines, Ke	SC 7.3.8 evin	P 29 World Wide	L 4 Packets	# 17
Comment 7 Should	,,	Comment Status A se the test methodology, 54.1	10.1.	E371	Comment This e	,,	Comment Status A uld have been removed, sho	ouldn't it?	TR298
SuggestedF Add sei	•	nit jitter test requirements ar	e specified in s	section 54.10.1.""	Suggested Remo	•	f transmit jitter allocation wa	as resolved in Dalla	s.
Proposed F ACCEP	•	Response Status C			Proposed ACCEI	Response PT.	Response Status C		
					See co	omment #298			

C/ 54 SC 7.3.8 Say-Otun, Sabit	P 29 Next Level Co	L 4	# 114	C/ 54 SC 7.3.8 Martin, David	P 29 Nortel Network	L 4	# 131
Comment Type E Editor's note still re	Comment Status A eferences March 2003 meeting		TR298	Comment Type E Editor's Note	Comment Status A		TR298
SuggestedRemedy delete edirot's note	e			SuggestedRemedy The March 2003 pler	nary has come and gone. Shoul	dn't this note b	pe removed by now?
Proposed Response ACCEPT.	Response Status C			Proposed Response ACCEPT.	Response Status C		
See comment #29	8			See comment #298			
C/ 54 SC 7.3.8 Booth, Brad	P 29 Intel	L 4	# 27	C/ 54 SC 7.4 Cobb, Terry	P 29 Avaya	L12	# 85
Comment Type E Editor's note shou	Comment Status A		TR298	Comment Type E Tables are generally found this throughou	Comment Status R used for requirements and the	text that follow	E085 s points to the table. I
SuggestedRemedy Remove editor's n	ote.			SuggestedRemedy	e document to the practice that	we have used	in the past.
Proposed Response ACCEPT.	Response Status C			Proposed Response REJECT.	Response Status C		we pass
See comment #29	8			Will add wording to in	ndicate this table is informative.		
Cl 54 SC 7.3.8 Dove, Daniel	3 P 29 hp ProCurve	L 4 Networki	# 98	C/ 54 SC 7.4 Bill Quackenbush	P 29 Cisco Systems	L 25 (Tab	le # <u>472</u>
Comment Type E Editorial note appe	Comment Status A ears obsolete.		TR298	Comment Type E	Comment Status A m differential return loss in the t		E472
SuggestedRemedy Remove editorial r	note				d in 54.7.4.5 and is therefore m		reneet the frequency
Proposed Response ACCEPT.	Response Status C			,	uency dependence in the table	or removed the	e parameter from the
See comment #29	8			Proposed Response ACCEPT IN PRINCIPLI	Response Status C E.		
				Will make it the same	e format as the transmitter return	loss in table 5	54-6.

SC 7.4.1 P 29 L 33-34 # 473 C/ 54 SC 7.4.3 P 29 # 99 C/ 54 / 43 Bill Quackenbush Cisco Systems, Inc. Dove. Daniel hp ProCurve Networki Comment Type E Comment Status A F473 Comment Type Ε Comment Status A F099 The wording less than precise. typo SuggestedRemedy SuggestedRemedy add a hyphen between ""inter"" and ""operability"". Change the sentence to "The receiver shall operate with a BER of better than 10^-12 when receiving a compliant transmit signal, as defined in 54.7.3, through a compliant channel as Proposed Response Response Status C defined in 54.8." ACCEPT IN PRINCIPLE. Proposed Response Response Status C ACCEPT. Will use "interoperability" throughout the document. C/ 54 P 29 Cl 54 SC 7.4.1 P 29 L 35 # 28 SC 7.4.3 L 43 # 132 Martin, David Nortel Networks Booth, Brad Intel Ε Comment Status A Comment Type E Comment Status A F028 Comment Type E099 Extra space between ""in"" and ""54.8."" Typo SuggestedRemedy SuggestedRemedy Replace ""for maximum inter operability"" with ""for maximum interoperability"" Remove extra space. Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. See Comment #99 C/ 54 SC 7.4.2 P 29 L 38 # 474 Bill Quackenbush Cisco Systems, Inc. C/ 54 SC 7.4.3 P 29 L 43 # 30 Comment Type E Comment Status A E474 Booth, Brad Intel The requirement is poorly stated. Comment Type E Comment Status A E099 SuggestedRemedy Extra space between ""inter"" and ""operability"". Change the sentence to "A 10GBASE-CX4 receiver shall comply with the requirements of SuggestedRemedy 54.7.4.1 for any Baud rate in the range 3.125 GBd +/- 100 ppm." Change to be ""interoperability"". Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. SC 7.4.2 P 29 C/ 54 L 39 # 29 See comment #99 Booth, Brad Intel Comment Type E Comment Status A F029 Different font type for +/-100 ppm. SuggestedRemedy Change font to match previous text. Proposed Response Response Status C

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

ACCEPT.

Page 27 of 37

C/ 54 SC 7.4.3

P 29 # 31 P 30 # 91 C/ 54 SC 7.4.3 L 48 C/ 54 SC 7.4.5 L16 Booth, Brad Intel Vitesse Semiconducto Joergensen, Thomas Comment Type E Comment Status A F031 Comment Type E Comment Status A F091 Note is not in IEEE Note format. The word ""driver"" should be replaced with ""receiver"". In the next sentence the text still refers to the output impedance and not the input impedance. SuggestedRemedy SuggestedRemedy Change to be in IEEE Note format. Replace line 16 and 17 with: ""...and any off-chip components related to the receiver. This Proposed Response Response Status C input impedance requirement applies to all valid input levels..."" ACCEPT. Proposed Response Response Status C ACCEPT IN PRINCIPLE. Cl 54 SC 7.4.4 P 30 / 4-5 # 475 Bill Quackenbush Cisco Systems, Inc. See comment #349 E475 Comment Type E Comment Status A Cl 54 SC 7.4.5 P 30 L17 # 503 The second sentence could be clearer. Steve Drever Intel SuggestedRemedy Comment Status A Comment Type Ε E503 Change the second sentence to "Note that these may be greater than the 1600 mVpp Looks like missing period at end of line 17. maximum differential amplitude specified in 54.7.3.3 due to the actual transmitter output and receiver input impedances." SuggestedRemedy Proposed Response Response Status C Add period to end of line 17. ACCEPT. Proposed Response Response Status C ACCEPT. SC 7.4.4 P 30 L 7-8 Cl 54 # 476 Bill Quackenbush Cisco Systems, Inc. See comment #349 Comment Type E Comment Status A F476 C/ 54 P 30 SC 7.4.5 / 17 # 491 The sentence makes little sense as stated and the use of the word "height" seems Steve Dreyer Intel inappropriate. I infer that the intent was to say that input impedance of a receiver can cause the minimum signal into a receiver to differ from that measured when the receiver is Comment Status A Comment Type Ε E491 replaced with a 100 Ohm test load. Looks like missing period at end of line 17. SuggestedRemedy SuggestedRemedy

Change the sentence beginning in line 7 to "The input impedance of a receiver can cause the minimum signal into a receiver to differ from that measured when the receiver is replaced with a 100 Ohm test load."

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

The 4th sentence will be changed to "... the minimum specified value due to ..."

See comment #349

Proposed Response

ACCEPT.

Add period to end of line 17.

Response Status C

CI 54 SC 7.4.5 P 30 L 46 # 349

Grow, Robert Intel

Comment Type E Comment Status A TR427

This postion is uppressessibly redundent with the transmit section. For maintaneous of the

This section is unnecessarily redundant with the transmit section. For maintenance of the document it is better to specify in one location and reference. It isn't clear that the impedance specifications of the transmitter and reciever are identical after teing transmitted through a conformant channel (including the cabling).

SuggestedRemedy

Replace section and Figure 54-7 with: ""The reciever shall accept a signal generated by a transmitter meeting the output impedance requirements of 54.7.3.5 over a compliant channel (including cable assembly).""

Proposed Response Response Status C
ACCEPT IN PRINCIPLE.

See comment #427

C/ 54 SC 7.4.6 P 31 L 32 # 311

Brown, Benjamin Independent

Comment Type E Comment Status A E311

wrong comma placement

SuggestedRemedy

Replace ""54.7.3.8 with any compliant transmit signal, as defined in 54.7.3 through" with ""54.7.3.8, with any compliant transmit signal as defined in 54.7.3, through"

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #374

CI 54 SC 7.4.6 P 31-32 L 1 # 504

Steve Dreyer Intel

Comment Type E Comment Status A E504

Graphic for Figure 54-8 is on one page, title for that figure is on the next page, that is confusing.

SuggestedRemedy

Put title and graphic for Figure 54-8 on same page.

Proposed Response Response Status C
ACCEPT.

See comment #374

CI 54 SC 7.4.6 P31-32 L1 # 492

Steve Dreyer Intel

Comment Type E Comment Status A E492

Graphic for Figure 54-8 is on one page, title for that figure is on the next page, that is confusing.

SuggestedRemedy

Put title and graphic for Figure 54-8 on same page.

Proposed Response Status C

ACCEPT.

See comment #374

CI 54 SC 8 P 32 L16 (Table # 478

Bill Quackenbush Cisco Systems, Inc.

Comment Type E Comment Status A TR386

"PCBs" is rather non description of this item.

SuggestedRemedy

Change "CBs" to "printed circuit board traces" or "PCB traces".

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #386

CI 54 SC 8 P 32 L 17 # 429

Dawe, Piers Agilent

Comment Type E Comment Status A

Table 54-9 needs an indication of how much random jitter is added by the cable assembly. Surely it's not zero?

SuggestedRemedy

Per comment.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #386

TR386

CI 54 SC 8	P 32	L 25	# 479		C/ 54 SC 8	P 32	L 46	# 133
Bill Quackenbush	Cisco System	s, Inc.		•	Martin, David	Nortel Netwo	rks	·
Comment Type E The meaning of "eye he	Comment Status A eight" in note "d" is unclear.			TR386	Comment Type E Capital letter	Comment Status A		E133
SuggestedRemedy Clarify the note or remo	ove the phrase "eye height" f	rom the note.			SuggestedRemedy Replace ""of the Jum	per cable"" with ""of the jumpe	er cable""	
Proposed Response ACCEPT IN PRINCIPLE.	Response Status C				Proposed Response ACCEPT IN PRINCIPLE	Response Status C		
See comment #386					Jumper cable will be	replaced with cable assembly		
CI 54 SC 8 Booth, Brad	<i>P</i> 32 Intel	L 30	# 33		CI 54 SC 8 Marris, Arthur	P 32 Cadence	L 5	# 8
Comment Type E Table 54-10 has improp	Comment Status A per line weighting.			E033	Comment Type E Delete the redundant	Comment Status A word ""approximately""		E008
SuggestedRemedy Fix line weights.					SuggestedRemedy Delete the redundant	word ""approximately""		
Proposed Response ACCEPT.	Response Status C				Proposed Response ACCEPT.	Response Status C		
C/ 54 SC 8 Dawe, Piers	P 32 Agilent	L 37	# 434		CI 54 SC 8 Booth, Brad	<i>P</i> 32 Intel	L 5	# 32
Comment Type E The crosstalk material r	Comment Status R needs a diagram.			E434	Comment Type E Remove the word ""a	Comment Status A		E032
SuggestedRemedy Add a diagram illustrati	ing the different forms of cro	sstalk and reflecti	on.		SuggestedRemedy Fix as per comment.			
Proposed Response REJECT.	Response Status C				Proposed Response ACCEPT.	Response Status C		
					C/ 54 SC 8	P 32	L 7	# 428
This is tutorial and is no	ot consistent with other IEEE				Dawe, Piers	Agilent		
						Comment Status A -to-point interface of up to app u use PCB to connect ICs. Tw		
					SuggestedRemedy ""between ports"".			
					Proposed Response ACCEPT IN PRINCIPLE	Response Status C		
					Will use "between ne	etwork ports".		

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

Page 30 of 37

CI 54 SC 8 Steve Dreyer	P 32 Intel	L na	# 505	C/ 54
Comment Type E Table 54-10 has inco SuggestedRemedy Make Table 54-10 lir			E505	Comment Type E Comment Status A E482 It appears that "connector" at the end of the sentence should be plural. SuggestedRemedy Change "connector" to "connectors".
Proposed Response ACCEPT.	Response Status C			Proposed Response Response Status C ACCEPT.
CI 54 SC 8 Steve Dreyer	<i>P</i> 32 Intel	<i>L</i> na	# 493	C/ 54 SC 8.3 P 34 L 42 # 122 Jonathan Thatcher WWP
Comment Type E Table 54-10 has inco	Comment Status A		E493	Comment Type E Comment Status A E122 Figure 54-10 is informative.
SuggestedRemedy Make Table 54-10 lir	ne widths consistent.			SuggestedRemedy Add "(Informative)" to the title of the figure.
Proposed Response ACCEPT.	Response Status C			Proposed Response Response Status C ACCEPT.
CI 54 SC 8.2 Bill Quackenbush	P 33 Cisco System	<i>L</i> 11 s, Inc.	# 480	CI 54 SC 8.3 P 34 L 6 # 313 Brown, Benjamin Independent
Comment Type E It appears that "conn	Comment Status A nector" at the end of the senter	ce should be pl	<i>E480</i> ural.	Comment Type E Comment Status A E313 For commonality with ""2.0 GHz""
SuggestedRemedy Change "connector"	to "connectors".			SuggestedRemedy Replace ""1000 MHz"" with ""1.0 GHz"" both here and on line 14.
Proposed Response ACCEPT.	Response Status C			Proposed Response Response Status C ACCEPT IN PRINCIPLE.
C/ 54 SC 8.2	P 33	L 38	# 121	Will change all "GHz" to their equivalent "MHz".
Jonathan Thatcher Comment Type E Figure 549 is inform	WWP Comment Status A native.		E121	C/ 54 SC 8.4 P 36 L 26 # 123 Jonathan Thatcher WWP Comment Type E Comment Status A E123
SuggestedRemedy	o the title of the figure.			Figure 5411 is informative.
Proposed Response	Response Status C			SuggestedRemedy Add "(Informative)" to the title of the figure.
ACCEPT.				Proposed Response Response Status C ACCEPT.

Cl 54 SC 8.4.1 Marris, Arthur	P 34 Cadence	L 49	# 11	CI 54 SC 8.4.1 Steve Dreyer	<i>P</i> 34 Intel	L 51	# 495
	Comment Status A e any of the four transmit cha	nnels"" to ""be	E011 tween any of the four	Comment Type E Missing colon after "at SuggestedRemedy Add colon.	Comment Status A least".		E495
transmit channels"" Proposed Response ACCEPT.	Response Status C			Proposed Response ACCEPT.	Response Status C		
CI 54 SC 8.4.1 Bill Quackenbush	P 34 Cisco Systems	<i>L</i> 49 s, Inc.	# 483	CI 54 SC 8.4.1 Brown, Benjamin	P 35 Independent	L 6	# 312
Comment Type E Extra "the". SuggestedRemedy Delete "the" from the	Comment Status A phrase "loss between the any	of the four trai	E483 nsmit channels".	Comment Type E no comma needed SuggestedRemedy Remove the comma at line 1	Comment Status A the end of this line. This com	nment also applie	E312 s ti 54.8.5.1, page 37,
Proposed Response ACCEPT.	Response Status C			Proposed Response ACCEPT.	Response Status C		
CI 54 SC 8.4.1 Brown, Benjamin	P 34 Independent	L 50	# 314	C/ 54 SC 8.4.2 Cobb, Terry	<i>P</i> 35 Avaya	L 28	# <u>81</u>
Comment Type E wrong word	Comment Status A		E314	Comment Type E MDNEXT is not a sum	Comment Status A of the magnitudes.		E081
SuggestedRemedy ""bit error rate"" shoul 54.8.5.1 Proposed Response ACCEPT.	ld be ""bit error ratio"" but repla	acing it with ""E	BER"" would match	SuggestedRemedy Change to a power su Proposed Response ACCEPT.	m. Response Status C		
C/ 54 SC 8.4.1 Steve Dreyer	<i>P</i> 34 Intel	L 51	# 507	CI 54 SC 8.4.2 Steve Dreyer	P 35 Intel	L 37-38	# 494
Comment Type E Missing colon after "a	Comment Status A tleast".		E507	Comment Type E Lines 37-38 seem con section 54.8.5.2.1.	Comment Status A fusing, maybe there is some f	formatting probler	E494 m. Same issue in
SuggestedRemedy Add colon.				SuggestedRemedy Fix formatting problem.			
Proposed Response ACCEPT.	Response Status C			Proposed Response ACCEPT.	Response Status C		

P 35 # 506 C/ 54 SC 8.5.1 P 36 # 497 C/ 54 SC 8.4.2 L 37-38 L36 Steve Dreyer Intel Steve Dreyer Intel Comment Type E Comment Status A F506 Comment Type Ε Comment Status A F497 Lines 37-38 seem confusing, maybe there is some formatting problem. Same issue in Missing colon after "defined as". section 54.8.5.2.1. SuggestedRemedy SuggestedRemedy Add colon Fix formatting problem. Proposed Response Response Status C Response Status C Proposed Response ACCEPT. ACCEPT. Cl 54 SC 8.5.1 P 36 / 48 # 19 Cl 54 SC 8.4.2 P 35 L 51 # 508 Daines. Kevin World Wide Packets Steve Dreyer Intel Ε Comment Status A E019 Comment Type E508 Comment Type E Comment Status A This line, introducing an equation, ends with a colon. Most of the preceding lines Missing colon after "at least". introducing equations did not. SuggestedRemedy SuggestedRemedy Add colon. Choose one punctuation and harmonize clause. Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT. Will end with ":" C/ 54 SC 8.4.2 P 35 L 51 # 496 Steve Dreyer Intel C/ 54 SC 8.5.2 P 37 16 # 439 E496 Comment Type E Comment Status A Dawe, Piers Aailent Missing colon after "at least". Comment Type E Comment Status A E439 SuggestedRemedy If I've understood this right, this paragraph can be cleaned up. Add colon. SuggestedRemedy Proposed Response Response Status C Replace first two sentences with: ""Since four duplex channels are used to transfer data between PMDs, the FEXT that is coupled into a data carrying channel will be from the three ACCEPT. other channels in the same direction. Cl 54 SC 8.5.1 P 36 / 36 # 509 Proposed Response Response Status C Steve Dreyer Intel ACCEPT IN PRINCIPLE. Comment Status A E509 Comment Type E Will use Missing colon after "defined as". "Since four channels are used to transfer data between PMDs, the FEXT that is coupled into a data carrying channel will be from the three other channels in the same direction" SuggestedRemedy Add colon

Proposed Response

ACCEPT.

Response Status C

E370

E370

440 C/ 54 SC 8.5.2.1 P 37 L 21 Dawe, Piers Aailent Comment Type Ε Comment Status A F370

Editorials SuggestedRemedy

> Delete the subclause heading: there is no 54.8.5.2.1 to keep it company. In equation. change PSELFEXT to MDELFEXT.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #370

P 37 # 370 C/ 54 SC 8.5.2.1 L 21 Healey, Adam Agere Systems

Comment Type E Comment Status R

PSELFEXT is not cited as a cable performance requirement. The intent of this section appears to be to show how MDELFEXT is to be computed. Also the note below equation 54.10 states that NL(f)i is the FEXT loss for pair combination i. but this should read ELFEXT loss (or the attenuation term needs to be factored into Equation 54.10).

SuggestedRemedy

Move contents of 54.8.5.2.1 to 54.8.5.2 and remove subsection. Change PSELFEXT to MDELFEXT and NL(f)i to EL(f)i in equation 54.10 and modify note to read that ""EL(f)i is the ELFEXT loss at frequency f for pair combination i""

Proposed Response Response Status C

REJECT.

Will make consistant with other 802.3 standards (e.g. 1000BASE-T).

C/ 54 P 37 SC 8.5.2.1 L 21 # 315 Brown, Benjamin Independent

Comment Type E Comment Status A

According to the second paragraph in Clause 11 of the IEEE style manual: ""Clauses and subclauses shall be divided into further subclauses only when there is to be more than one subclause. In other words, clauses and subclauses should not be broken down into further subclauses if another subclause of the same level does not exist. For example, Clause 1 shall not have a subclause 1.1 unless there is also a subclause 1.2.

SuggestedRemedy

Remove the header for this subclause and combine with 54.8.5.2 Same comment applies to 54.9.1.1 & 54.10.1

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #370

316 Cl 54 SC 8.5.2.1 P 37 L33 Brown, Benjamin Independent

Comment Type Ε Comment Status A F316

While I hardly can even follow this discussion, it seems to me that the definition of NL(f)i is wrong...

SuggestedRemedy

Replace ""FEXT"" with ""ELFEXT""

Proposed Response Response Status C ACCEPT.

Cl 54 SC 8.6 P 38 / 30 # 35 Booth, Brad Intel

Comment Type Ε Comment Status A E035

I believe that the ""class"" should be ""Class"".

SuggestedRemedy

Fix as per comment.

Proposed Response Response Status C ACCEPT.

Cl 54 SC 8.6 P 38 L30 # 441 Dawe, Piers Aailent

Comment Type E Comment Status R

What does this mean: "The cable assembly shall provide class 2 or better shielding in

accordance with IEC 61196-1.""?

SuggestedRemedy

Please give the reader a one-sentence summary so that he can decide if he needs to buy IEC 61196-1. Add IEC 61196-1 to list of references and give its title.

Proposed Response Response Status C REJECT.

This is specified in the exact same manner as 1000BASE-CX is in Clause 39.4.2. IEC 61196-1 is already referenced in Clause 1.3

F441

485 SC all $P\mathbf{0}$ C/ 54 SC 9.1.1 P 39 L6 (Figure Cl 54 L 0 # 96 hp ProCurve Networki Bill Quackenbush Cisco Systems, Inc. Dove. Daniel Comment Type E Comment Status R F485 Comment Type Ε Comment Status A F096 I think the title of the figure should be "plug" not "connector". The term ""driver"" is used throughout the document to describe the term ""transmitter"". I believe this is not the correct term. SuggestedRemedy SuggestedRemedy Change "connector" to "plug" in the title of the figure. Do a document check and replace ""driver"" with ""transmitter"". Proposed Response Response Status C Proposed Response Response Status C REJECT. ACCEPT. Cl 54 SC 9.2 P 39 L 27-35 (Fig # 486 C/ 54 SC Figure 54-1 P 16 L18 # 334 Bill Quackenbush Cisco Systems, Inc. Grow, Robert Intel E486 Comment Type E Comment Status A E334 Comment Type Ε Comment Status A Inconsistent designators "+". "-". "<P>" and "<N>" are used to designate the two signals Fill problem (probably a FrameMaker platform independence problem). that comprise a differential pair. SuggestedRemedy SuggestedRemedy Make the designations consistent and consistent with the rest of the text. Change the background in the PMD and MDI box to diagonal lines (prints as shaded). Proposed Response Response Status C Proposed Response Response Status C ACCEPT. ACCEPT IN PRINCIPLE. & <n> notation used throughout. Is correct in framemaker files, printing / pdf translation problem. Cl 54 SC 9.2 P 39 L 33 # 389 C/ 54 SC Figure 54-10—Cable a P 34 / 18 # 106 Beck. Michael Alcatel Bell nv Carlson, Steve **HSD** Comment Type E Comment Status A F389 Comment Type E Comment Status A F106 Figure 54-15: The signal names in the explanatory note are different from the signal names Figure 54-10—Cable assembly return loss contains color. shown in the figure. SuggestedRemedy SuggestedRemedy See previous comments on this subject. Make figure conform with notation in Table 54-2: Replace SLn+, SLn-, DLn+, DLn- with Proposed Response Response Status C SLi<P>, SLi<N>, DLi<P> and DLi<N>, respectively. Explain meaning of DLi<P> and DLi<N>. ACCEPT. Proposed Response Response Status C C/ 54 **SC Figure 54-11** P 36 L 26 # 383 ACCEPT IN PRINCIPLE. Thompson, Geoff Nortel & <n> notation used throughout. E383 Comment Type E Comment Status A Remove color information. (also 54-12) Final publication will be in black and white.

> Proposed Response Response Status C ACCEPT.

SuggestedRemedy

L 2 # 107 C/ 54 SC Figure 54-11—Cable a P36 **HSD** Carlson, Steve Comment Type E Comment Status A F107 Figure 54-11—Cable assembly NEXT / MDNEXT loss contains color SuggestedRemedy See previous comments on this subject. Proposed Response Response Status C ACCEPT. Cl 54 12 SC Figure 54-12—Cable a P38 # 108 Carlson, Steve **HSD** Comment Type E Comment Status A E108 Figure 54–12—Cable assembly ELFEXT / MDELFEXT loss contains color. SuggestedRemedy Convert to grey-scale. Proposed Response Response Status C ACCEPT. # 317 C/ 54 **SC Figure 54-13** P 39 / 1 Independent Brown, Benjamin Comment Type E Comment Status R TR037 This figure is not referenced in the text SuggestedRemedy Either add a reference to this figure or remove it. Same comment applies to Figure 54-14. Proposed Response Response Status C REJECT. See comment #37. Figures will be labeld as informative. P 20 / 31 C/ 54 SC Figure 54-2 # 339 Grow. Robert Intel Comment Status A E339 Comment Type E SIGNAL_DETECT arrow should connect to the box above it. SuggestedRemedy

Response Status C

Move the arrow Proposed Response

ACCEPT.

P 26 # 306 C/ 54 SC Figure 54-5 L 24 Brown, Benjamin Independent Comment Type Ε Comment Status R F306 Why does this figure have all the dashed lines in it? They don't appear to add anything to the figure. SuggestedRemedy Remove all the dashed lines from the figure. Same comment applies to Figure 54-7. Proposed Response Response Status C REJECT. Gradicule lines make graphs easier to read. # 102 C/ 54 SC Figure 54-5 P 26 L 24 Carlson, Steve HSD Comment Type Ε Comment Status A TR297 Table 54-5 Transmit differential output return loss contains color (dark blue) in the graph. IEEE 802 standards are printed in black-and-white only. SuggestedRemedy Change dark blue color in graph to black. Proposed Response Response Status C ACCEPT IN PRINCIPLE. all graphs will be labeled informative and be black & white, see comment #297 C/ 54 SC Figure 54-6—Normaliz P 27 # 103 Carlson, Steve **HSD** Comment Status A TR297 Comment Type Ε Figure 54–6—Normalized transmit template as measured at MDI using Figure 54–3 contains color. IEEE 802 standards are in black and white. SuggestedRemedy Change colors to gray scale. Proposed Response Response Status C ACCEPT.

all graphical figures will be in black & white, see comment #297

F104

C/ 54 SC Figure 54-7—Receiver P 31 L 2 # 104

Carlson, Steve HSD

Comment Type E Comment Status A

Figure 54–7—Receiver differential input return loss is in color. IEEE 802 standards are black-and-white.

SuggestedRemedy

Replace dark blue coloor with black in the graph.

Proposed Response Response Status C

ACCEPT.

all graphic figures will be black & white

CI 54 SC Figure 54-8 P32 L1 # 310

Brown, Benjamin Independent

Comment Type E Comment Status A E310

Figure title needs to stay with its figure

SuggestedRemedy

Move the figure title to the bottom of page 31 (or the figure to the top of page 32) so the figure and the title are together.

Proposed Response Response Status C ACCEPT.

C/ 54 SC Figure 54-9—Cable as P 33 L 15 # 105

Carlson, Steve HSD

Comment Type E Comment Status A E105

Figure 54–9—Cable assembly insertion loss contains color.

SuggestedRemedy

See previous comments on this subject.

Proposed Response Status C

ACCEPT.

All figures and tables will be B&W

C/ 54 SC Table 54-10 P 32 L 28 # 18

Daines, Kevin World Wide Packets

Comment Type E Comment Status A

Table borders for column #2 are messed up.

SuggestedRemedy

Fix borders.

Proposed Response Response Status C

ACCEPT.

Cl 54 SC Table 54-10 P 32 L 31 # 350

Grow, Robert Intel

Comment Type **E** Comment Status **A** E350 Bad formatting.

SuggestedRemedy

Correct the borders on the Table so that outside border and bottom border of Table header is the bold line and others are the fine line.

Proposed Response Response Status C ACCEPT.

C/ 54 SC Table 54-8 P 24 L 11 # 343

Grow, Robert Intel

Comment Type E Comment Status A E415

Inconsistent table format with Table 54-8.

SuggestedRemedy

Either change both to Baud Rate and tolerance on a single line per Table 54-6 or change 54-6 to the two line format of Table 54-8.

Proposed Response Status C
ACCEPT.

See comment #415 and will use multi-line format in both

F018