C/ 00 SC 0 P 58 # 1 C/ 00 SC 0 P 60 # 4 L 39 L 7 Linear Technology Cor Gardner, Andrew Gardner, Andrew Linear Technology Cor Comment Type TR Comment Status X Comment Type TR Comment Status X The 100 ohm termination resistor shown in Test Fixture 1 of Figure 200-17 may be The droop observed with Test Fixture 1 of Figure 200-17 will underestimate the droop for a damaged by a PoDL PSE. PoDL PSE/PD application by approximately a factor of two. SuggestedRemedy SuggestedRemedy Add a low-loss AC coupling capacitor or capacitors in series with the 100 ohm resistor in Add a note to 200.5.4.1 stating that the droop observed with Test Fixture 1 needs to be Test Fixure 1 in order to prevent a PoDL PSE from potentially damaging the differential multiplied by 2 for PoDL transmitters. probe and/or termination resistor. Proposed Response Response Status O Proposed Response Response Status O SC 0 P 58 C/ 00 L 39 SC 0 C/ 00 P 59 L 24 Gardner, Andrew Linear Technology Cor Gardner, Andrew Linear Technology Cor Comment Status X Comment Type TR Comment Type TR Comment Status X Test fixture 1 in Figure 200-17 does not support PoDL PDs. Other test fixtures and PHY The 50 ohm termination resistors and voltage source shown in Fixture 2 of Figure 200-18 circuits may need to be addressed as well. maybe damaged by a PoDL PSE. SuggestedRemedy SuggestedRemedy Modify test fixture 1 or add a new test fixture that supports PoDL PDs. Show an auxiliary Add low-loss AC coupling capacitors in series with the 50 ohm resistors in Test Fixture 2 in power connection or PSE/coupling network and reference clause 96. order to prevent a PoDL PSE from potentially damaging the differential probe and/or Proposed Response Response Status O termination resistors. Proposed Response Response Status O C/ 00 SC 0 P 59 # 3 L 38 Gardner, Andrew Linear Technology Cor Comment Type TR Comment Status X

The balun shown in Test Fixture 3 of Figure 200-19 may be damaged by a PoDL PSE.

to prevent a PoDL PSE from potentially damaging the balun.

Response Status O

Add a low-loss AC coupling capacitor or capacitors in series with the balun inputs in order

SuggestedRemedy

Proposed Response

Cl 00 SC 0 P 60 L 9 # 6
Gardner, Andrew Linear Technology Cor

Comment Type T Comment Status X

The transmitter output droop time of 500ns appears to be overly conservative.

SuggestedRemedy

Reduce the droop time to 100ns.

The transmitter droop requirement calls for less than 45% of droop magnitude 500ns after the initial peak subsequent to a zero crossing. Referring this droop to 15ns yields approximately 1.7% of droop of 0.15dB.

The amount of inductance required in the PoDL coupling network inductors for compliance with this specification is greater than 55uH. It may not be technically feasible and/or economically feasible for these inductors to be compatible with 1000BASE-T1 PHYs. The physical bulk of these inductors may also be significant for higher current PoDL applications. Finally, the energy stored in these inductors may be discharged into the PHYs during fault conditions, and this may make EOS protection for the PHYs problematic.

Is it possible to relax the droop specification to less than 45% droop magnitude 100ns after the initial peak? This would increase the droop magnitude within a symbol period to approximately 8.2% or 0.74dB. This change would reduce the PoDL inductance from 55uH to 11uH, and may make a single inductor value feasible for both 100BASE-T1 and 1000BASE-T1 PoDL.

Proposed Response Status O

 CI 00
 SC 0
 P 58
 L 25
 # 7

 Gardner, Andrew
 Linear Technology Cor

Comment Type T Comment Status X

Test mode support for PoDL PSE transmitter testing may be required.

SuggestedRemedy

Add an informative note stating that a PoDL PSE may need to be enabled during test modes. Reference clause 96 as needed.

Proposed Response Status O

C/ 01 SC 1.4.x P18 L25 # 8

Estes, Dave Spirent Communicatio

Comment Type E Comment Status X

Auto-Negotiation should be capitalized. Also the last sentence is not clear.

SuggestedRemedy

Change "auto-negotiation" to "Auto-Negotiation". Change "The start-up procedure, from link_control=ENABLE to valid data, shall be completed within 100 ms for 100BASE-T1 channel compliant 1-pair 15m UTP link segments." to "The PHY-Initialization procedure, from link_control=ENABLE to tx_mode=SEND_N, shall be completed within 100 ms for 2 100BASE-T1 PHYs operating over a 100BASE-T1 compliant channel."

Proposed Response Response Status O

C/ 01 SC 1.4.x P18 L31 # 9

Estes, Dave Spirent Communicatio

Comment Type E Comment Status X

Side-Stream scrambling is defined in 1.4.359. It does not need a separate definition, unless the definition is removed from 1.4.359.

SuggestedRemedy

Remove this definition

Proposed Response Response Status O

C/ 01 SC 1.4.142 P16 L19 # 10

Estes, Dave Spirent Communicatio

Comment Type E Comment Status X

A code-group is defined to convey 3 bits of data, which means a code-group is two ternary symbols so it should be described as a pair or ternary symbols instead of a set of ternary symbols. Also the "A" should not be capitalized.

SuggestedRemedy

Change "For 100BASE-T1, A set of ternary PAM3 ..." to "For 100BASE-T1, a pair of ternary PAM3 ..."

Proposed Response Status O

C/ 01 SC 1.4.163 P 16 L 40 C/ 01 P 17 L 52 # 14 # 11 SC 1.4.381 Spirent Communicatio Spirent Communicatio Estes, Dave Estes, Dave Comment Type Ε Comment Status X Comment Type Ε Comment Status X SSD is three code-groups A code-group is two ternary pairs, or 30 ns. The definition should be changed to special this it is 15 ns for a ternary symbol or 30ns for a code-group. SuggestedRemedy SuggestedRemedy Change "This mode begins with the transmission of two Start-of-Stream delimiter code-Change "In 100BASE-T1, this is equivalent to fifteen nanoseconds." to "In 100BASE-T1, groups ..." to "This mode begins with the transmission of three Start-of-Stream delimiter code-groups ..." this is equivalent to 30 ns." Proposed Response Proposed Response Response Status O Response Status 0 SC 1.4.x P 18 C/ 01 L 14 # 15 C/ 01 SC 1.4.183 P 16 L 50 # 12 Estes, Dave Spirent Communicatio Estes, Dave Spirent Communicatio Comment Type Comment Status X Comment Type E Comment Status X If Automotive Cabling is tied specifically to 100BASE-T1, what will the cabling for ESD can also include ERR ESD3. 1000BASE-T1 be called? SuggestedRemedy SuggestedRemedy Change "ESD consists of the code-group of 3 consecutive ternary pairs named as ESD1-3 Consider a more descriptive name such as "100BASE-T1 Automotive Cable" as defined in 200.3.2.3," to "ESD consists of three code-groups named ESD1, ESD2, and ESD3 or ERR ESD3 as defined in 200.3.2.3," Proposed Response Response Status O Proposed Response Response Status O C/ 01 SC 1.4.x P 18 L 14 # 16 C/ 01 SC 1.4.377 P 17 L 40 # 13 Estes. Dave Spirent Communicatio Estes, Dave Spirent Communicatio Comment Type E Comment Status X Comment Status X Comment Type Ε Clariying the sentence code-group should be plural SuggestedRemedy SuggestedRemedy Change "Balanced 100 ohm one pair cable and associated hardware having specified transmission characteristics are provided in 200.7.1." to "Balanced 100 ohm one pair cable Change "SSD consists of the code-group of 3 consecutive" to "SSD consists of three and associated hardware whose transmission characteristics are specified in 200.7.1. consecutive code-groups named SSD1-3 as defined in 200.3. Proposed Response Proposed Response Response Status O Response Status 0

Cl 200 SC 200.1.2 P 24 L 27 # 17 C/ 200 P 25 L 10 # 20 SC 200.1.2.2 Spirent Communicatio Spirent Communicatio Estes, Dave Estes, Dave Comment Type Ε Comment Status X Comment Type Е Comment Status X The subclause name should be "Relationship of 100BASE-T1 to other standards" and They PMA usually defines the Baud rate on the line not the bit rate at the MAC. should include a figure of the OSI model. The text in this subclause is more suited for an SuggestedRemedy "Operation of 100BASE-T1" subclause. The sentence "The 100BASE-T1 PHY provides Change "The PMA provides full duplex communication at 100Mb/s." to "The PMA provides features that are comparable to the standard Ethernet product specified in IEEE 802.3" full dumplex communication at 66 2/3 MBd." should be removed. Proposed Response Response Status O SuggestedRemedy Change the subclause name to "Relationship of 100BASE-T1 to other standards", add a figure of the OSI model, remove the sentence "The 100BASE-T1 PHY provides features that are comparable to the standard Ethernet product specified in IEEE 802.3", and move C/ 200 SC 200.1.2.3 P 25 L 16 the remaining text to a subclause titled "Operation of 100BASE-T1" Spirent Communicatio Estes, Dave Proposed Response Response Status O Comment Type E Comment Status X The signaling objectives should be re-written here instead of a list of differences SuggestedRemedy C/ 200 SC 200.1.2.1 P 25 L 4 # 18 Write the signaling objectives here Estes, Dave Spirent Communicatio Proposed Response Comment Status X Response Status O Comment Type Missing text SuggestedRemedy C/200SC 200.1.3 P 25 1 23 Change the beginning of the sentence from "PCS" to "The 100BASE-T1 PCS" Estes. Dave Spirent Communicatio Proposed Response Response Status 0 Comment Type E Comment Status X Why aren't the definitions from 21.5 used? SuggestedRemedy C/ 200 SC 200.1.2.2 P 25 L 9 # 19 Estes, Dave Spirent Communicatio If applicable, change 1.2.1 to 21.5. Proposed Response Comment Type Ε Comment Status X Response Status O Missing text SuggestedRemedy Change the beginning of the sentence from "PMA" to "The 100BASE-T1 PMA"

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Proposed Response

Response Status O

Cl 200 SC 200.1 P 26 # 23 C/ 200 P 36 L 17 # 26 L 1 SC 200.3.2.2.2 Spirent Communicatio Spirent Communicatio Estes, Dave Estes, Dave Comment Type Ε Comment Status X Comment Type E Comment Status X Figure 200-1 is referenced two pages earlier and should be moved closer to the reference. Missing reference The text immediately after Figure 200-1 does not belong in subclause 200.1.5 Timer SuggestedRemedy Specification. Change "As shown in ," to "As shown in Figure 200-5," SuggestedRemedy Proposed Response Response Status O Move the Figure and text Proposed Response Response Status O C/ 200 SC 200.3.2.3 P 36 L 38 Estes. Dave Spirent Communicatio C/ 200 SC 200.2.2 P 28 L 23 Comment Type E Comment Status X Estes, Dave Spirent Communicatio Missing reference Comment Type E Comment Status X SuggestedRemedy List the service primitives that are used, instead of the service primitives that are not used. Change "As shown in ," to "As shown in Figure 200-5," SuggestedRemedy Proposed Response Response Status O List the service primitives that are used, instead of the service primitives that are not used. Proposed Response Response Status O C/ 200 SC 200.3.2.3 P 36 L 43 Estes. Dave Spirent Communicatio C/ 200 SC 200.2.3 P 29 L 35 # 25 Comment Type E Comment Status X Estes, Dave Spirent Communicatio The sentences on lines 43-46 are not needed. The definitions for STD and PUDR are Comment Type Ε Comment Status X already included. The transmitter also sends zeros during training SuggestedRemedy SuggestedRemedy Remove the sentences "When implementing the PCS Transmit State Diagrams shown in Change "The 100BASE-T1 transmitter sends code-groups that represent an MII data Figure 200-6, it should be interpreted similarly to Clause 40. For example, STD is an alias stream, control information or idles." to "The 100BASE-T1 transmitter sends code-groups for symb timer done, and PUDR stands for PMA UNITDATA request(tx symb vector), a that represent an MII data stream, control information, idles, or zeros." signal to PMA Transmit indicating tx symb vector is available." Proposed Response Response Status O Proposed Response Response Status O

Cl 200 SC 200.3.2.3 P 37 L 8 # 29 C/ 200 SC 200.3.2.3.1 P 40 L 8 # 32 Spirent Communicatio Spirent Communicatio Estes, Dave Estes, Dave Comment Type Ε Comment Status X Comment Type Ε Comment Status X Figure 200-5 should not be split across two pages Add the reference for the definition SuggestedRemedy SuggestedRemedy Move the figure so that it is contained on one page Change "as specified in Section Generation of ternary pair (TAn, TBn)." to "as specified in 200.3.2.4.5" Proposed Response Response Status 0 Proposed Response Response Status O SC 200.3.2.3.1 P 38 L 48 # 30 C/ 200 C/ 200 SC 200.3.2.3.1 P 40 L 12 # 33 Estes, Dave Spirent Communicatio Spirent Communicatio Estes, Dave Comment Type Ε Comment Status X Comment Type Ε Comment Status X The colons after ERR_ESD3, ESD2, ESD3, SSD3, and tx_data[2:0] are not necessary 100BASE-T1 does not have a Carrier Sense function SuggestedRemedy SuggestedRemedy Remove the colons after ERR_ESD3, ESD2, ESD3, SSD3, and tx_data[2:0] Remove the sentence "Also used by the Carrier Sense process." Proposed Response Response Status 0 Proposed Response Response Status O C/ 200 SC 200.3.2.3.1 P 39 L 9 # 31 C/ 200 P 40 SC 200.3.2.3.1 / 19 # 34 Spirent Communicatio Estes. Dave Estes. Dave Spirent Communicatio Comment Status X Comment Type Ε Comment Type E Comment Status X The values for some ESD and SSD vectors are listed and others are not. All values should Wrong reference be listed. SuggestedRemedy SuggestedRemedy Add the value (0,0) to ESD1, SSD1, and SSD2. Change 200-6 to 200-5 Proposed Response Proposed Response Response Status O Response Status O P 40 C/ 200 SC 200.3.2.3.1 L 40 # 35 Estes. Dave Spirent Communicatio Comment Type E Comment Status X xmt_err is not used by 100BASE-T1 SuggestedRemedy Remove the definition for xmt_err Proposed Response Response Status O

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID 35

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Cl 200 P 40 L 23 # 36 C/ 200 SC 200.3.2.4.4 P 42 L 27 # 39 SC 200.3.2.3.1 Spirent Communicatio Spirent Communicatio Estes, Dave Estes, Dave Comment Type Ε Comment Status X Comment Type Ε Comment Status X The tx error definition is in the wrong place and has the wrong reference The first two sentences are not necessary because the bits are defined here SuggestedRemedy SuggestedRemedy Remove "The bits Sdn[2:0] performs analogous function to 40.3.1.3.4, but uses local Correct the location of tx error and change the reference to figure 200-5. definition of tx_data[2:0] specific to this document. The tx_data[2:0] is a three bit vector Proposed Response Response Status 0 after 4B3B conversion, and it not analogous to TXD[7:0] used in 40.3.1.4." Proposed Response Response Status O P 41 # 37 C/ 200 SC 200.3.2.3.3 L 3 Estes. Dave Spirent Communicatio C/ 200 SC 200.3.2.4.5 P 42 L 47 # 40 Comment Type T Comment Status X Estes, Dave Spirent Communicatio symb_timer controls the timing of the PCS State Diagrams and should be the time for one Comment Type E Comment Status X code-group not the time for one ternary symbol. This sentence is not necessary SuggestedRemedy SuggestedRemedy Change "Duration: 15 ns nominal" to "Duration: 30 ns nominal" Remove "The bits Sdn[2:0] perform analogous function to 40.3.1.3.5, but specific ternary Proposed Response Response Status 0 pair is used in this document." Proposed Response Response Status O C/ 200 SC 200.3.2.4.3 P 42 / 14 # 38 Estes. Dave Spirent Communicatio P 44 C/ 200 SC 200.3.2.4.10 L 39 # 41 Comment Type E Comment Status X Estes. Dave Spirent Communicatio The definition can be simplified if all bits are defined here instead of reference Clause 40 Comment Type Ε Comment Status X SuggestedRemedy typo Change the definition to Scn[2:0] = [0 0 0] if (tx_mode = SEND_Z) or Syn[2:0] else SuggestedRemedy Proposed Response Response Status O Change "illustrated in the Figure 200-8" to "illustrated in Figure 200-8" Proposed Response Response Status 0

Cl 200 P 45 L 22 # 42 C/ 01 SC 1.4.142 P 16 L 19 # 90 SC 200.3.4.2.10 Spirent Communicatio Yokogawa Electric Cor Estes, Dave Mitsuru, Iwaoka Comment Type Т Comment Status X Comment Type Ε Comment Status X The ternary ordering should be a fixed ordering. Allowing either TA then TB or TB then TA A capital "A" after a comma. will require more processing and make the link-up process slower. Non-fixed ordering will SuggestedRemedy create four possibilities (TA then TB with the correct polarity, TA then TB with flipped Uncapitalize the "A". polarity, TB then TA with correct polarity, and TB then TA with flipped polarity) that the slave PHY must examine and two possibilities (TA then TB and TB then TA) that the Proposed Response Response Status O master PHY must examine before a link can be established. The Figure illustrates that the ordering is fixed as TA then TB. SuggestedRemedy C/ 01 SC 1.4.313 P 17 L 6 Remove the text "or (TBn, TAn) with TBn followed by TAn" to require that the ternary Mitsuru, Iwaoka Yokogawa Electric Cor ordering is TA then TB. Comment Type E Comment Status X Proposed Response Response Status O A duplicated "and". SuggestedRemedy C/ 200 SC 200.3.3.1 P 47 L 28 # 43 Remove the redundant "and". Spirent Communicatio Estes, Dave Proposed Response Response Status O Comment Status X Comment Type Remove "totally" C/ 45 SC P 23 L 1 SuggestedRemedy Mitsuru, Iwaoka Yokogawa Electric Cor Remove "totally" Comment Type E Comment Status X Proposed Response Response Status 0 Table 00-1 in age 23 is not the part of this amendment. SuggestedRemedy L 40 C/ 200 SC 200.3.3.1.2 P 48 # 44 Remove Table 00-1 and the first paragraph of page 23. Estes, Dave Spirent Communicatio Proposed Response Response Status O Comment Type Ε Comment Status X typo C/ 200 SC 200.3.2.4.5 P 42 L 50 # 93 SuggestedRemedy Mitsuru, Iwaoka Yokogawa Electric Cor Change "four consecutive vectors" to "six consecutive vectors" Comment Type Comment Status X Proposed Response Response Status O "ternary symbol (0,0)" shall be "tarnary symbol pair (0.0)". SugaestedRemedy As in comment. Proposed Response Response Status O

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID 93

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C/ 200 SC 200.2 P 27 L 1 # 94 C/ 200 SC 200.1.2.3 P 25 L 17 # 97 Yokogawa Electric Cor Yokogawa Electric Cor Mitsuru, Iwaoka Mitsuru, Iwaoka Comment Type Ε Comment Status X Comment Type Т Comment Status X Missing "-", i.e., "100BASET1" should be "100BASE-T1". 100BASE-T1 signaling shall share an objective m) of 40.1.4. SuggestedRemedy SuggestedRemedy As in comment. Replace "and i)" by "i), and m)". Proposed Response Proposed Response Response Status 0 Response Status O C/ 01 SC 1.3 P 16 # 95 C/ 00 SC 0 P 57 L 27 L 7 Mitsuru, Iwaoka Yokogawa Electric Cor Wienckowski. Natalie General Motors Comment Type Ε Comment Status X Comment Type ER Comment Status X IEC62132-4 and IEC61967-4 are refered in this Amendment. It is ncessary to add these Usually the clock tolerance is specified as 100 ppm; however, in section 200.5.2 it is specified as 0.01%. While both are the same tolerance it can be confusing to see this two documents to 1.3. differnt ways. SuggestedRemedy As in comment. ppm used in 200.5.1.3, 200.5.4.5, 200.5.5.2 Proposed Response Response Status O 0.01% used in 200.5.2 SuggestedRemedy Be consistent and use only 100ppm or 0.01% throughout the entire document. C/ 200 SC 200.2 P 27 / 10 # 96 Mitsuru, Iwaoka Yokogawa Electric Cor Proposed Response Response Status O Comment Type T Comment Status X I could not find any reason for not supporting LPI. C/ 00 SC 0 P 64 L 50 # 99 SuggestedRemedy Wienckowski, Natalie General Motors Add optional support of LPI. Comment Type T Comment Status X If LPI is not supported, it is necessary to add "with the exceptions that the optional timers associated with LPI" to the 200.1.5 (Page 25, Line 32). 1-pair UTP cable is not the correct name to use. Proposed Response Response Status O 200.7 also uses one-pair balanced cabling and balanaced copper cabling. Need to look for UTP throughout the document and replace it with the correct term. SuggestedRemedy Should use the cable name defined in the 1TPCE Objectives, "single balanced twisted pair".

Proposed Response

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID 99

Response Status O

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C/ 00 SC 0 Ρ # 100 C/ 200.3 SC P 50 L 5 # 102 L Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type TR Comment Status X Comment Type ER Comment Status X In many cases "should" has been used when "shall" is the proper term. Incorrect subject - verb agreement. Should is a prefered behavior, shall is a required behavior. conversion is the subject, which is singular SuggestedRemedy SuggestedRemedy Replace should with shall in the following locations: change are to is The conversion from pcs rxclk domain signals to MII signals is shown in Figure 200-11. section - page - line 200.3.2.3 - 36 - 42 Proposed Response Response Status O 200.3.3.4 - 49 - 33 200.3.3.5 - 50 - 6 200.5.2 - 57 - 22 C/ 200.3 SC P 47 L 28 200.5.4.2 - 60 - 34 # 103 200.5.5.3 - 65 - 17 Wienckowski, Natalie **General Motors** 200.7.1.1 - 67 - 7 Comment Type E Comment Status X Probably don't want to use "totally" Proposed Response Response Status O Note that, in Figure 200-9, there are totally 4 states after SSD3... SuggestedRemedy C/ 200.3 SC P 48 L 41 # 101 Note that, in Figure 200-9, there are a total of 4 states after SSD3... Wienckowski. Natalie **General Motors** Proposed Response Response Status O Comment Type E Comment Status X final line in definition is not indented C/ 200.4 SC P 50 # 104 L 44 SuggestedRemedy Wienckowski, Natalie General Motors indent all lines of the definition Comment Type ER Comment Status X Proposed Response Response Status O It is not necessary to say how this is almost the same as something else, commentary, not technical. SuggestedRemedy Delete the sentence: This functionality is analogous to 40.4 for 1000BASE-T but for a single channel only (versus four channels in 1000BASE-T). Proposed Response Response Status O

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID 104

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C/ 200.4 SC P 50 L 48 C/ 200.4 SC P 52 L 27 # 108 # 105 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type ER Comment Status X Comment Type ER Comment Status X It is not necessary to say how this is almost the same as something else, commentary, not It is not necessary to say how this is almost the same as something else, commentary, not technical. Also, the markings in the figure which show the difference will not exist in the technical. final document. SuggestedRemedy SuggestedRemedy Delete the sentence: The PMA sublayer functions are analogous to Clause 40, and apply Delete the sentence: The PMA Receive function is similar to 40.4.2. to the use of a single channel operation only, and the supports for optional LPI function is not included. Proposed Response Response Status O Proposed Response Response Status O SC C/ 200.4 P 53 L 5 # 109 SC P 50 C/ 200.4 L 52 # 106 Wienckowski. Natalie General Motors Wienckowski. Natalie **General Motors** Comment Type ER Comment Status X Comment Type ER Comment Status X It is not necessary to say how this is almost the same as something else, commentary, not It is not necessary to say how this is almost the same as something else, commentary, not technical. technical. Also, the markings in the figure which show the difference will not exist in the SuggestedRemedy final document. Delete the sentence: The 100BASE-T1 PHY Control function is analogous to 40.4.2.4 but SuggestedRemedy as stated, no auto-negotiation is used. Delete the phrase: notes differences from the PMA diagram in Figure 40-14 in Clause Proposed Response Response Status O Proposed Response Response Status O C/ 200.4 SC P 53 L 12 # 110 Wienckowski. Natalie **General Motors** SC P 51 # 107 C/ 200.4 L 52 Comment Type ER Comment Status X Wienckowski, Natalie General Motors It is not necessary to say how this is almost the same as something else, commentary, not Comment Type ER Comment Status X technical. It is not necessary to say how this is almost the same as something else, commentary, not SuggestedRemedy technical. Also, the markings in the figure which show the difference will not exist in the final document. Delete the sentence: Figure 200-15 illustrates the differences between the 100BASE-T1 PHY Control and Figure 40-16a. SuggestedRemedy

Delete the sentence: The PMA Transmit function is analogous to 40.4.2.2.

Proposed Response Response Status O

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID 110

Or replace with the sentence: Figure 200-15 illustrates the

Response Status O

100BASE-T1 PHY Control.

Proposed Response

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C/ 200.4 SC P 54 # 111 SC L 4 C/ 200.4 Wienckowski, Natalie General Motors Wienckowski, Natalie Comment Type ER Comment Status X Comment Type E It is not necessary to say how this is almost the same as something else, commentary, not technical. code group SuggestedRemedy SuggestedRemedy Delete the sentence: This function adopts 40.4.2.5 and the associated Figure 40-17 with the exception that Auto-Negotiation is not supported. Proposed Response Response Status O **PCS** Proposed Response SC P 54 C/ 200.4 L 41 # 112

Comment Status X Comment Type E

It is not necessary to say how this is almost the same as something else, commentary, not technical.

General Motors

SuggestedRemedy

Wienckowski, Natalie

Delete the sentence: This function shall comply with Figure 40-17 Link Monitor state diagram, with the exceptions that in NOTE 1, the maxwait_ timer reference is to Figure 200-15, and NOTE 2 does not apply.

Add: NOTE 1—maxwait_timer is started in PHY Control state diagram (see Figure 200-15).

Proposed Response Response Status O

SC C/ 200.4 P 55 L 16 # 113 General Motors

Wienckowski, Natalie

Comment Type E Comment Status X

missing CR between end of link status and start of loc rcvr status

SuggestedRemedy

Add missing carriage return

Proposed Response Response Status 0 P 55 L 50 # 114

General Motors

Comment Status X

Incorrect grammar. Not sure if it is referring to multiple PCS code groups or a single PCS

Either: when transmission of sequences of code-groups representing PCS code groups in

OR: when transmission of sequences of code-groups representing a PCS code group in

Response Status 0

SC C/ 200.4 P 56 L 8 # 115

Wienckowski, Natalie General Motors

Comment Status X Comment Type ER

3rd line in definition is not indented

SuggestedRemedy

indent all lines of definition

Proposed Response Response Status 0

C/ 200.5 SC P 56 L 53 # 116

Wienckowski. Natalie General Motors

Comment Type ER Comment Status X

It is not necessary to say how this is almost the same as something else, commentary, not technical.

SuggestedRemedy

Delete the sentence: These test modes are analogous to 40.6.1.1.2, and reflect test modes for The 100BASE-T1 PHY.

Modify the next sentence to read: The test modes for The 100BASE-T1 PHY described below in Table 200-4 ...

Proposed Response Response Status 0

C/ 200.5 SC P 58 L 23 # 117 C/ 200.5 SC P 60 L 33 # 120 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type TR Comment Status X Comment Type TR Comment Status X The complete test is defined in this section, but it refers to 40.6 for the resistor tolerance Improve wording of: The peak distortion values measured at minimum 10 different equallyspaced phases of a single symbol period should be less than 15 mV. 40.6 does not include a tolerance specification for the 100 Ohm or 50 Ohm resistors. If this is a requirement, "shall" is the proper term, not "should". What is the required tolerance to ensure no false fails of the tests? SuggestedRemedy SuggestedRemedy The peak distortion values, measured at a minimum of 10 different, equally-spaced phases of a single symbol period, shall be less than 15 mV. Replace: The tolerance of resistors should comply with 40.6. Proposed Response Response Status 0 With: The maximum tolerance of the resistors shall be (1%, 0.1%, etc.) Proposed Response Response Status O SC C/ 200.5 P 62 L 26 # 121 Wienckowski, Natalie General Motors SC C/ 200.5 P 59 L 54 # 118 Comment Type Comment Status X ER Wienckowski, Natalie **General Motors** It is not necessary to say how this is almost the same as something else, commentary, not Comment Status X Comment Type ER technical. It is not necessary to say how this is almost the same as something else, commentary, not SuggestedRemedy technical. Delete the phrase: , similar to 1000BASE-T, SuggestedRemedy Proposed Response Response Status O Delete the sentence: This specification is analogous to 40.6.1.2. Proposed Response Response Status O C/ 200.5 SC P 64 L 42 # 122 Wienckowski, Natalie General Motors C/ 200.5 SC P 60 L 31 # 119 Comment Status X Comment Type ER Wienckowski, Natalie General Motors It is not necessary to say how this is almost the same as something else, commentary, not Comment Type ER Comment Status X technical. It is not necessary to say how this is almost the same as something else, commentary, not SuggestedRemedy technical. Delete the phrase: This specification is analogous to 40.6.1.3.

Proposed Response

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

SuggestedRemedy

Proposed Response

Delete the sentence: This specification is analogous to 40.6.1.2.4.

Response Status O

Response Status 0

C/ 200.5 SC P 65 L 14 # 123 Wienckowski, Natalie General Motors

Comment Type Comment Status X

poor wording

You have tolerance to something, not of something.

SuggestedRemedy

This specification is provided to verify the DUT's tolerance to alien crosstalk noise.

Proposed Response Response Status O

SC Figure 200-23 P 65 L 32 # 124 C/ 200.5

Wienckowski, Natalie General Motors

Comment Type T Comment Status X

Resistor tolerance is always provided in %, not parts per x.

SuggestedRemedy

1 Resistor matching to 0.1%

NOTE: This requires 0.05% resistors, is this what is intended, or is it expected that 0.1% resistors are used?

Proposed Response Response Status O

C/ 200.6 SC P 66 L 4 # 125

Wienckowski. Natalie General Motors

Comment Type ER Comment Status X

It is not necessary to explain why this link cannot do something done in another.

SuggestedRemedy

Delete: In 1000BASE-T. MASTER-SLAVE resolution is attained during the Auto-Negotiation process (see Clause 28). However, the latency for this process is not acceptable

for some applications.

Proposed Response Response Status O C/ 200.7 SC P 66 L 25 # 126 General Motors

Wienckowski, Natalie

Comment Type TR Comment Status X

The spec states: two inline connectors

The 1TPCE Objectives states: up to four inline connectors

SuggestedRemedy

Change the text to say: four inline connectors

Change Figure 200-24 to show four inline connectors and change the text in the figure to do the same.

Proposed Response Response Status O

C/ 200.7 SC P 67 L 32 # 127

Wienckowski, Natalie General Motors

Comment Type TR Comment Status X

Who decides this?

The insertion loss for the path from PHY to MDI connector, including choke or any extra low-pass filters, might be separately specified from cabling system.

SuggestedRemedy

Either say:

will be separately specified

OR: make it clear this is included in the requirement.

Proposed Response Response Status O

C/ 200.7 SC P 68 L 5 # 128 C/ 200.8 SC P 68 L 45 # 131 General Motors Wienckowski, Natalie General Motors Wienckowski, Natalie Comment Status X Comment Type Ε Comment Status X Comment Type E There is a comma separating the subject and verb. Where can the Cabling system characterists be found? SuggestedRemedy SuggestedRemedy Add a reference to 200.7.1 Remove the, after pair Proposed Response Response Status O Alternatively, add a comma before on if it is desired to separate the clause "on the same cable pair". Proposed Response Response Status 0 SC C/ 200.8 P 69 L 4 # 132 Wienckowski, Natalie General Motors Cl 200.7 SC P 68 L 18 # 129 Comment Type ER Comment Status X Wienckowski, Natalie **General Motors** Missing ")" after dB. Comment Type Comment Status X SuggestedRemedy TR The spec states: two inline connectors Add missing ")" Proposed Response Response Status O The 1TPCE Objectives states: up to four inline connectors SuggestedRemedy Change the text to say: four inline connectors, equally spaced at 3 meter C/ 200.9 SC P 69 L 13 # 133 Wienckowski. Natalie General Motors Proposed Response Response Status 0 Comment Type E Comment Status X It is not needed to say what other requirement this is similar to. C/ 200.8 SC P 68 L 40 # 130 SuggestedRemedy Wienckowski, Natalie General Motors Remove: This delay constraint specification is analogous to 40.11. Comment Status X Comment Type TR Proposed Response Response Status O This statement: These connectors shall not degrade the signals, in terms of the insertion loss or return loss, worse than a 15 meter 1-pair UTP cable. C/ 200b. SC Figure 200B-1 P 75 # 134 Implies that the connectors can have the same insertion loss and return loss as a 15 meter Wienckowski. Natalie General Motors cable. Comment Type E Comment Status X SuggestedRemedy The figure is not labeled and includes selection box around 100BASE-T1 PCS Transmit. Should include specific return loss and insertion loss allowances for the connector. SugaestedRemedy Proposed Response Response Status 0 Label the figure and remove selection box. Proposed Response Response Status O

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID 134

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Cl 200b. SC Figure 200B-2

P **76**

135

136

Wienckowski, Natalie

General Motors

Comment Type E

Comment Status X

The figure is not labeled and there are green squigglies.

SuggestedRemedy

Label the figure and remove the green squigglies.

Proposed Response

Response Status 0

C/ Annex SC

P 75

L **9**

L

. . . .

Wienckowski, Natalie

General Motors

Comment Type E

Comment Status X

Improve wording of: ...functionality without having the need to have link partner.

SuggestedRemedy

Change wording to: ... functionality without the

need for a link partner.

Proposed Response

Response Status 0