Cl 44 SC 44.1.3 P23 L23 # 17
Wienckowski, Natalie General Motors

Comment Type E Comment Status D EZ

Renumber figures and change editor instruction

SuggestedRemedy

Change editor instruction to: Replace Figure 44-1 with Figure 44-1a and Figure 44-1b as shown below.

Renumber Figure 44-1 to 44-1a. Renumber Figure 44-1a to 44-1b.

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change editor instruction to: Replace Figure 44-1 with Figure 44-1 shown below.

Combine current figures into a single figure with two separate drawings in it.

Grant editorial license to modify figures and/or keep as two figures to fit on a single page.

 CI 44
 SC 44.1.3
 P24
 L15
 # 19

 Wienckowski, Natalie
 General Motors

Comment Type E Comment Status D PCS

10GBASE-T1 does not hav a LDPC PCS.

SuggestedRemedy

In 10GBASE-T1 stack, change "LDPC PCS" to "64B/65B PCS".

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Change "LDPC PCS" to "64B/65B RS-FEC PCS".

Cl 78 SC 78.1 P30 L11 # 4

Wienckowski, Natalie General Motors

Comment Type T Comment Status D
Add Section 78.1.4, Table 78-1 with 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1, all

referenced to Clause 149.

SuggestedRemedy
Insert a row for 2.5GBASE-T1 after 2.5GBASE-T, insert a row for 5GBASE-T1 after 5GBASE-T, and insert a row for 10GBASE-T1 after 10GBASE-T.

Proposed Response Response Status W
PROPOSED ACCEPT.

Cl 125 SC 125.1.2 P33 L8 # 18
Wienckowski, Natalie General Motors

Comment Type E Comment Status D

Renumber figures and change editor instruction

SuggestedRemedy

Change editor instruction to: Replace Figure 125-1 (as modified by IEEE Std 802.3cb-2018) with Figure 125-1a and Figure 125-1b as shown below. Insert the following text at the end of the list after d) of 125.1.2 (as modified by IEEE Std 802.3cb-2018) as follows: Renumber Figure 125-1 to 125-1a.

Renumber Figure 125-1 to 125-1a. Renumber Figure 125-1a to 125-1b.

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change editor instruction to: Replace Figure 125-1 (as modified by IEEE Std 802.3cb-2018) with Figure 125-1 shown below.

Combine current figures into a single figure with two separate drawings in it.

Grant editorial license to modify figures and/or keep as two figures to fit on a single page.

Cl 125 SC 125.1.4 P35 L17 # 5
Wienckowski, Natalie General Motors

Comment Type E Comment Status D EZ
missing space

SuggestedRemedy

Change "64B/65Bencoding" to "64B/65B encoding".

Proposed Response Response Status W
PROPOSED ACCEPT.

Cl 149 SC 149.1 P38
Wienckowski, Natalie General Motors

Comment Type E Comment Status D EZ

L14

SuggestedRemedy

missing comma

FFF

Change "The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"

Proposed Response Status W
PROPOSED ACCEPT.

EΖ

C/ 149 SC 149.1 P38 L17 # C/ 149 SC 149.1.3 P40 L7 # 31 Wienckowski, Natalie General Motors Tu, Mike Broadcom Comment Type E Comment Status D EΖ Comment Type TR Comment Status D EΖ missing comma When Auto-Negotiation is not used, MASTER and SLAVE must be synchronized by the PHY Link Synchronization function as defined in 149.4.2.6. SugaestedRemedy SuggestedRemedy Change "The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-Change "The MASTER and SLAVE are synchronized by a PHY Link Synchronization T1, 5GBASE-T1, and 10GBASE-T1 PHYs" function ..." to "The MASTER and SLAVE shall be synchronized by the PHY Link Proposed Response Response Status W Synchronization PROPOSED ACCEPT. function ... Proposed Response Response Status W C/ 149 SC 149.1 P38 L19 PROPOSED ACCEPT Wienckowski. Natalie General Motors Comment Type E Comment Status D F7 C/ 149 SC 149.1.3 P40 L26 Wienckowski, Natalie missing comma General Motors SuggestedRemedy Comment Type E Comment Status D EΖ Change "The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASEmissing space T1, 5GBASE-T1, and 10GBASE-T1 PHYs" SuggestedRemedy Proposed Response Response Status W Change "10GBASE-T1over" to "10GBASE-T1 over" PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT. SC 149.1.3 P39 L14 # C/ 149 Tu, Mike Broadcom C/ 149 SC 149.1.3.1 P40 L41 Comment Type TR Comment Status D EΖ Wienckowski. Natalie General Motors Change "TBD encoding" to "64B/65B encoding" Comment Status D EΖ Comment Type E SuggestedRemedy Change awkward wording: A 10-bit OAM field is next appended Change "TBD encoding" to "64B/65B encoding" SuggestedRemedy Proposed Response Response Status W Change "A 10-bit OAM field is next appended" to "Next, a 10-bit OAM field is appended". PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT. C/ 149 SC 149.1.3 P39 L16 # Tu. Mike Broadcom Comment Status D PCS Comment Type TR Need to specify the meaning of "50 blocks" SuggestedRemedy Change "each group of 50 blocks" to "each group of 50 64B/65B blocks"

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 Z/withdrawn

Response Status W

Pa **40** 

Page 2 of 7 11/5/2018 4:35:18 PM

PROPOSED ACCEPT.

Proposed Response

# 22 C/ 149 SC 149.1.3.3 P**41** L31 C/ 149 SC 149.1.3.4 P41 L51 # 25 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type T Comment Status D EΖ Comment Type T Comment Status D Synchronization These PHYs use XGMII Change 1 us to 1.25 us per send s timer SugaestedRemedy SugaestedRemedy Change "GMII" to "XGMII". Also on line 34. Change "it responds with a synchronization sequence for 1 µs" to "it responds with a synchronization sequence for 1.25 µs". Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. # 23 C/ 149 SC 149.1.3.4 P41 L49 C/ 149 SC 149.1.3.4 P41 L52 Wienckowski. Natalie General Motors Wienckowski. Natalie General Motors Comment Status D Comment Type T Synchronization Comment Type T Comment Status D Synchronization Change 1 us to 1.25 us per send s timer Change to 5 us per sigdet wait timer. SuggestedRemedy SuggestedRemedy Change "the MASTER PHY sends a synchronization sequence for 1 µs." to "the MASTER Change "after the SLAVE response for 4 µs" to "after the SLAVE response for 5 µs". PHY sends a synchronization sequence for 1.25 µs." Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT SC 149.1.4 # C/ 149 C/ 149 SC 149.1.3.4 P41 L50 P42 L11 Wienckowski, Natalie General Motors McClellan, Brett Marvell Comment Type T Comment Status D Synchronization Comment Type E Comment Status D ΕZ Change to 6.25 us, sum of send s timer and sigdet wait timer. this is a single pair PHY SuggestedRemedy SuggestedRemedy Change "MASTER repeats by sending a synchronization sequence every 5 µs." to delete "on any pair combination." "MASTER repeats by sending a synchronization sequence every 6.25 µs." Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 149 SC 149.1.4 P**42** L22 Tu. Mike Broadcom F7 Comment Type TR Comment Status D PAM4 has four transmit voltage levels SugaestedRemedy Change "one of ??? Power levels" to "one of four voltage levels" Proposed Response Response Status W PROPOSED ACCEPT

# 27 C/ 149 SC 149.2.1.1.1 P43 L29 C/ 149 Wienckowski, Natalie General Motors McClellan, Brett Comment Type E Comment Status D EΖ Comment Type E Make DISABLE and ENABLE statements parallel. SugaestedRemedy SuggestedRemedy Change "Used by the Auto-Negotiation to enable the PHY." to "Used by the Auto-Negotiation function to enable the PHY." Proposed Response Proposed Response Response Status W PROPOSED ACCEPT. C/ 149 # 10 SC 149.2.2.4.2 P47 L17 C/ 149 Wienckowski. Natalie General Motors McClellan, Brett F7 Comment Type E Comment Status D Comment Type T missing comma SuggestedRemedy SuggestedRemedy Change "for 5GBASE-T1 and 5625 MHz for" to "for 5GBASE-T1, and 5625 MHz for" Change "x S" to "/ S" Proposed Response Response Status W Proposed Response PROPOSED ACCEPT # 28 C/ 149 SC 149.2.2.8.1 P49 L3 C/ 149 Wienckowski, Natalie **General Motors** Wienckowski. Natalie Comment Type E Comment Status D ΕZ Comment Type T Missing periods SuggestedRemedy SuggestedRemedy Add periods at the end of the OK and NOT OK statements. Proposed Response Response Status W PROPOSED ACCEPT. Proposed Response

SC 149.3.2.2 P53 L3 # 39 Marvell Comment Status D **PCS** figure references should be clause 149 instead of 136 change "136" to "149" in multiple locations Response Status W PROPOSED ACCEPT IN PRINCIPLE. Update the references, which are currently highlighted in yellow, to the appropriate references when the Figures are provided and added to the document. SC 149.3.2.2 P53 L24 # 43 Marvell Comment Status D **PCS** symbol period scales with 1/S not with S Response Status W PROPOSED ACCEPT. P53 / 32 SC 149.3.2.2 General Motors Comment Status D PAM2 levels accept highlighted text for PAM 2 levels Remove yellow highlighting on "2/3, 2/3} to keep the transmit power in the training mode close to the transmit power in normal mode." Response Status W PROPOSED ACCEPT

C/ 149 SC 149.3.2.2 P**53** L32 # 35 C/ 149 SC 149.3.2.2.4 P55 L31 # 42 Tu, Mike McClellan, Brett Broadcom Marvell Comment Type TR Comment Status D PAM2 levels Comment Type E Comment Status D **PCS** The PAM2 transmit levels have not yet been determined. indexes usually start at zero SuggestedRemedy SuggestedRemedy change indexes from 1 through 1800 to 0 through 1799 An agreement by the task force is reugired. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT IN PRINCIPLE. That is why there are currently highlighted in yellow. See Comment #29. Should Page 56, Line 33 also be changed? # C/ 149 SC 149.3.2.2 P**54 L1** C/ 149 SC 149.1.3.4 P56 L40 Tu. Mike Broadcom Tu. Mike Broadcom Comment Status D Comment Status D **PCS** Comment Type TR Interleaving Comment Type TR There should be 1800 rx PAM4 symbols per RS FEC frame. The figure is showing 1801 The interleaving depths have not yet been determined. rx PAM4 symbols. SuggestedRemedy SuggestedRemedy An agreement by the task force is reugired. Option 1: Change "rx PAM4n (PMA)" to "rx PAM4n+1 (PMA)" Proposed Response Response Status W Option 2: Change "rx PAM4n+1800 (PMA)" to "rx PAM4n+1799 (PMA)" PROPOSED ACCEPT IN PRINCIPLE. Proposed Response Response Status W That is why there are currently highlighted in yellow. PROPOSED ACCEPT IN PRINCIPLE See Comment #41 # 11 C/ 149 SC 149.3.2.2.3 P54 L33 Wienckowski, Natalie General Motors C/ 149 SC 149.3.2.2.4 P56 L40 Comment Type Comment Status D ΕZ Ε McClellan, Brett Marvell missing comma Comment Type E Comment Status D PCS SuggestedRemedy a block has 1800 symbols Change "/O/, /S/ and /T/" to "/O/, /S/, and /T/". SuggestedRemedy Proposed Response Response Status W change "n+1800" to "n+1799" PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT.

# 12 C/ 149 SC 149.3.2.2.6 P57 L46 C/ 149 SC 149.3.3 P66 L39 # 13 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type E Comment Status D EΖ Comment Type E Comment Status D EΖ missing comma missing comma SuggestedRemedy SuggestedRemedy Change "2.5, 5 and 10" to "2.5, 5, and 10". Change "the local transmitter, the channel and remote receiver." to "the local transmitter, the channel, and remote receiver.". Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 149 SC 149.3.2.2.13 P59 L46 # 40 P**91** C/ 149 SC 149.5.5.1 **L1** McClellan, Brett Marvell **General Motors** Wienckowski, Natalie Comment Status D PCS Comment Type E Comment Type E Comment Status D F7 figure references should be clause 149 instead of 136 Carryover of comment #24 from D0p5. SuggestedRemedy SuggestedRemedy change "136" to "149" in multiple locations Redraw Figure 149-20 in FM. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT Update the references, which are currently highlighted in yellow, to the appropriate references when the Figures are provided and added to the document. SC 149.7 C/ 149 P93 L 52 # 32 C/ 149 SC 149.3.2.2.16 P62 / 14 Wienckowski, Natalie **General Motors** Tu. Mike Broadcom Comment Type E Comment Status D EΖ Comment Type TR Comment Status D EΖ missing comma Input should be m325, m324, . SuggestedRemedy SuggestedRemedy Change "2.5 Gb/s, 5 Gb/s and 10 Gb/s" to "2.5 Gb/s, 5 Gb/s, and 10 Gb/s". Change "m355" to "m325". Use subscript for "325". Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT.

for the limitation of electromagnetic interference.

limitation of electromagnetic interference.

C/ 149 SC 149.9.1 P97 L21 # C/ 149 SC 149.9.2.2 P98 **L6** # Jones, Chad Jones, Chad Cisco Cisco Comment Type ER Comment Status D Conformance Comment Type ER Comment Status D Conformance "All equipment subject to this clause may be additionally required to conform to any "Exact test setup and test limit values may be adapted to each specific application, subject to agreement between the customer and the supplier." the customer and supplier have no applicable local, state, or national standards or as agreed to between the customer and supplier." the customer and supplier have no business in an interoperability spec. Delete business in an interoperability spec. Delete this text. this text. SuggestedRemedy SuggestedRemedy change to: "Exact test setup and test limit values may be adapted to each specific change to: "All equipment subject to this clause may be additionally required to conform to application." any applicable local, state, or national standards." Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT IN PRINCIPLE Change: All equipment subject to this clause may be additionally required to conform to SC 149A.1 C/ 149A P102 L12 any applicable local, state, or national standards or as agreed to between the customer and Wienckowski, Natalie General Motors supplier. ΕZ Comment Type E Comment Status D To: All equipment subject to this clause shall conform to all applicable local, state. missing comma national, and application-specific standards. SuggestedRemedy C/ 149 SC 149.9.2.2 P97 # L51 Change "2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1" to "2.5GBASE-T1, 5GBASE-T1, Jones. Chad Cisco and 10GBASF-T1" Proposed Response Response Status W Comment Type ER Comment Status D Conformance "In addition, the system may need to comply with more stringent requirements as agreed PROPOSED ACCEPT. upon between customer and supplier, for the limitation of electromagnetic interference." the customer and supplier have no business in an interoperability spec. Delete this text. SC 149A.1 P102 L32 C/ 149A Wienckowski. Natalie General Motors SuggestedRemedy change to: "In addition, the system may need to comply with more stringent requirements Comment Type E Comment Status D F7 for the limitation of electromagnetic interference." missing comma Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT IN PRINCIPLE. Change: In addition, the system may need to Change "cable, PCB connectors and inline connectors" to "cable, PCB connectors, and comply with more stringent requirements as agreed upon between customer and supplier, inline connectors".

Proposed Response

PROPOSED ACCEPT.

To: In addition, the system may need to comply with more stringent requirements for the

Response Status W