

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

Cl 149 SC 149.9.2.2 P97 L51 # 1 [REDACTED]  
 Jones, Chad Cisco

Comment Type ER Comment Status D

"In addition, the system may need to comply with more stringent requirements as agreed 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.

SuggestedRemedy

change to: "In addition, the system may need to comply with more stringent requirements for the limitation of electromagnetic interference."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Change: In addition, the system may need to comply with more stringent requirements as agreed upon between customer and supplier, for the limitation of electromagnetic interference.

To: In addition, the system may need to comply with more stringent requirements for the limitation of electromagnetic interference.

Cl 149 SC 149.9.2.2 P98 L6 # 2 [REDACTED]  
 Jones, Chad Cisco

Comment Type ER Comment Status D

"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 business in an interoperability spec. Delete this text.

SuggestedRemedy

change to: "Exact test setup and test limit values may be adapted to each specific application."

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 149 SC 149.9.1 P97 L21 # 3 [REDACTED]  
 Jones, Chad Cisco

Comment Type ER Comment Status D

"All equipment subject to this clause may be additionally required to conform to any 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 this text.

SuggestedRemedy

change to: "All equipment subject to this clause may be additionally required to conform to any applicable local, state, or national standards."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: All equipment subject to this clause may be additionally required to conform to any applicable local, state, or national standards or as agreed to between the customer and supplier.

To: All equipment subject to this clause shall conform to all applicable local, state, national, and application-specific standards.

Cl 78 SC 78.1 P30 L11 # 4 [REDACTED]  
 Wienckowski, Natalie General Motors

Comment Type T Comment Status X

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 O

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

Comment Type E Comment Status X

missing space

SuggestedRemedy

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

Proposed Response Response Status O

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

Cl 149 SC 149.1 P38 L14 # 6  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change " The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"  
 Proposed Response Response Status O

Cl 149 SC 149.1.3 P40 L26 # 9  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing space  
 SuggestedRemedy  
 Change "10GBASE-T1over" to "10GBASE-T1 over"  
 Proposed Response Response Status O

Cl 149 SC 149.1 P38 L17 # 7  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change " The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"  
 Proposed Response Response Status O

Cl 149 SC 149.2.2.4.2 P47 L17 # 10  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change "for 5GBASE-T1 and 5625 MHz for" to "for 5GBASE-T1, and 5625 MHz for"  
 Proposed Response Response Status O

Cl 149 SC 149.1 P38 L19 # 8  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change " The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"  
 Proposed Response Response Status O

Cl 149 SC 149.3.2.2.3 P54 L33 # 11  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change "/OI/, /SI/ and /TI/" to "/OI/, /SI/, and /TI/".  
 Proposed Response Response Status O

Cl 149 SC 149.3.2.2.6 P57 L46 # 12  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change "2.5, 5 and 10" to "2.5, 5, and 10".  
 Proposed Response Response Status O

Local Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

CI 149 SC 149.3.3 P66 L39 # 13  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change "the local transmitter, the channel and remote receiver." to "the local transmitter, the channel, and remote receiver."  
 Proposed Response Response Status O

CI 149A SC 149A.1 P102 L32 # 16  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change "cable, PCB connectors and inline connectors" to "cable, PCB connectors, and inline connectors".  
 Proposed Response Response Status O

CI 149 SC 149.7 P93 L52 # 14  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 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".  
 Proposed Response Response Status O

CI 44 SC 44.1.3 P23 L23 # 17  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 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 Response Status O

CI 149A SC 149A.1 P102 L12 # 15  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 missing comma  
 SuggestedRemedy  
 Change " 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1" to "2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1"  
 Proposed Response Response Status O

CI 125 SC 125.1.2 P33 L8 # 18  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 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 125-1a to 125-1b.  
 Proposed Response Response Status O

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

Cl 44 SC 44.1.3 P24 L15 # 19  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 10GBASE-T1 does not have a LDPC PCS.  
 SuggestedRemedy  
 In 10GBASE-T1 stack, change "LDPC PCS" to "64B/65B PCS".  
 Proposed Response Response Status O

Cl 149 SC 149.1.3.4 P41 L49 # 23  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Change 1 us to 1.25 us per send\_s\_timer  
 SuggestedRemedy  
 Change "the MASTER PHY sends a synchronization sequence for 1 μs." to "the MASTER PHY sends a synchronization sequence for 1.25 μs."  
 Proposed Response Response Status O

Cl 149 SC 149.5.5.1 P91 L1 # 20  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Carryover of comment #24 from D0p5.  
 SuggestedRemedy  
 Redraw Figure 149-20 in FM.  
 Proposed Response Response Status O

Cl 149 SC 149.1.3.4 P41 L50 # 24  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Change to 6.25 us, sum of send\_s\_timer and sigdet\_wait\_timer.  
 SuggestedRemedy  
 Change "MASTER repeats by sending a synchronization sequence every 5 μs." to "MASTER repeats by sending a synchronization sequence every 6.25 μs."  
 Proposed Response Response Status O

Cl 149 SC 149.1.3.1 P40 L41 # 21  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Change awkward wording: A 10-bit OAM field is next appended  
 SuggestedRemedy  
 Change "A 10-bit OAM field is next appended" to "Next, a 10-bit OAM field is appended".  
 Proposed Response Response Status O

Cl 149 SC 149.1.3.4 P41 L51 # 25  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Change 1 us to 1.25 us per send\_s\_timer  
 SuggestedRemedy  
 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 O

Cl 149 SC 149.1.3.3 P41 L31 # 22  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 These PHYs use XGMII  
 SuggestedRemedy  
 Change "GMII" to "XGMII". Also on line 34.  
 Proposed Response Response Status O

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

CI 149 SC 149.1.3.4 P41 L52 # 26  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Change to 5 us per sigdet\_wait\_timer.  
 SuggestedRemedy  
 Change "after the SLAVE response for 4 μs" to "after the SLAVE response for 5 μs".  
 Proposed Response Response Status O

CI 149 SC 149.3.2.2 P53 L32 # 29  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 accept highlighted text for PAM 2 levels  
 SuggestedRemedy  
 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."  
 Proposed Response Response Status O

CI 149 SC 149.2.1.1.1 P43 L29 # 27  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Make DISABLE and ENABLE statements parallel.  
 SuggestedRemedy  
 Change "Used by the Auto-Negotiation to enable the PHY." to "Used by the Auto-Negotiation function to enable the PHY."  
 Proposed Response Response Status O

CI 149 SC 149.1.3 P39 L14 # 30  
 Tu, Mike Broadcom  
 Comment Type TR Comment Status X  
 Change "TBD encoding" to "64B/65B encoding"  
 SuggestedRemedy  
 Change "TBD encoding" to "64B/65B encoding"  
 Proposed Response Response Status O

CI 149 SC 149.2.2.8.1 P49 L3 # 28  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Missing periods  
 SuggestedRemedy  
 Add periods at the end of the OK and NOT\_OK statements.  
 Proposed Response Response Status O

CI 149 SC 149.1.3 P40 L7 # 31  
 Tu, Mike Broadcom  
 Comment Type TR Comment Status X  
 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.  
 SuggestedRemedy  
 Change "The MASTER and SLAVE are synchronized by a PHY Link Synchronization function ..." to "The MASTER and SLAVE shall be synchronized by the PHY Link Synchronization function ..."  
 Proposed Response Response Status O

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

Cl 149 SC Figure 149-8 P62 L14 # 32  
 Tu, Mike Broadcom  
 Comment Type **TR** Comment Status **X**  
 Input should be m325, m324, ...  
 SuggestedRemedy  
 Change "m355" to "m325". Use subscript for "325".  
 Proposed Response Response Status **O**

Cl 149 SC 149.3.2.2 P54 L1 # 36  
 Tu, Mike Broadcom  
 Comment Type **TR** Comment Status **X**  
 The interleaving depths have not yet been determined.  
 SuggestedRemedy  
 An agreement by the task force is required.  
 Proposed Response Response Status **O**

Cl 149 SC 149.1.3 P39 L16 # 33  
 Tu, Mike Broadcom  
 Comment Type **TR** Comment Status **X**  
 Need to specify the meaning of "50 blocks"  
 SuggestedRemedy  
 Change "each group of 50 blocks" to "each group of 50 64B/65B blocks"  
 Proposed Response Response Status **O**

Cl 149 SC Figure 149-5 P56 L40 # 37  
 Tu, Mike Broadcom  
 Comment Type **TR** Comment Status **X**  
 There should be 1800 rx\_PAM4 symbols per RS FEC frame. The figure is showing 1801 rx\_PAM4 symbols.  
 SuggestedRemedy  
 Option 1: Change "rx\_PAM4n (PMA)" to "rx\_PAM4n+1 (PMA)"  
 Option 2: Change "rx\_PAM4n+1800 (PMA)" to "rx\_PAM4n+1799 (PMA)"  
 Proposed Response Response Status **O**

Cl 149 SC 149.1.4 P42 L22 # 34  
 Tu, Mike Broadcom  
 Comment Type **TR** Comment Status **X**  
 PAM4 has four transmit voltage levels  
 SuggestedRemedy  
 Change "one of ??? Power levels" to "one of four voltage levels"  
 Proposed Response Response Status **O**

Cl 149 SC 149.1.4 P42 L11 # 38  
 McClellan, Brett Marvell  
 Comment Type **E** Comment Status **X**  
 this is a single pair PHY  
 SuggestedRemedy  
 delete "on any pair combination."  
 Proposed Response Response Status **O**

Cl 149 SC 149.3.2.2 P53 L32 # 35  
 Tu, Mike Broadcom  
 Comment Type **TR** Comment Status **X**  
 The PAM2 transmit levels have not yet been determined.  
 SuggestedRemedy  
 An agreement by the task force is required.  
 Proposed Response Response Status **O**

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 2nd 1

Cl 149 SC 149.3.2.2 P53 L3 # 39  
 McClellan, Brett Marvell  
 Comment Type E Comment Status X  
 figure references should be clause 149 instead of 136  
 SuggestedRemedy  
 change "136" to "149" in multiple locations  
 Proposed Response Response Status O

Cl 149 SC 149.3.2.2 P53 L24 # 43  
 McClellan, Brett Marvell  
 Comment Type T Comment Status X  
 symbol period scales with 1/S not with S  
 SuggestedRemedy  
 Change "x S" to "/ S"  
 Proposed Response Response Status O

Cl 149 SC 149.3.2.2.13 P59 L46 # 40  
 McClellan, Brett Marvell  
 Comment Type E Comment Status X  
 figure references should be clause 149 instead of 136  
 SuggestedRemedy  
 change "136" to "149" in multiple locations  
 Proposed Response Response Status O

Cl 149 SC 149.3.2.2.4 P56 L40 # 41  
 McClellan, Brett Marvell  
 Comment Type E Comment Status X  
 a block has 1800 symbols  
 SuggestedRemedy  
 change "n+1800" to "n+1799"  
 Proposed Response Response Status O

Cl 149 SC 149.3.2.2.4 P55 L31 # 42  
 McClellan, Brett Marvell  
 Comment Type E Comment Status X  
 indexes usually start at zero  
 SuggestedRemedy  
 change indexes from 1 through 1800 to 0 through 1799  
 Proposed Response Response Status O