

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 1st T

**CI 45**    **SC 45.2.1.185.2**    **P34**    **L 28**    # **1**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **E**    **Comment Status** **D**  
 Modify Editor Instruction based on 802.3cg change  
**SuggestedRemedy**  
 Change Editor Instruction to: Insert the following text after the fifth sentence of 45.2.1.185.2 (as modified by 802.3cg) as follows:  
**Proposed Response**    **Response Status** **O**

**CI Intro**    **SC Intro**    **P9**    **L 4**    # **5**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **E**    **Comment Status** **D**  
 Duplicate of Amendment:  
**SuggestedRemedy**  
 Remove second Amendment:  
**Proposed Response**    **Response Status** **O**

**CI Intro**    **SC Intro**    **P12**    **L**    # **2**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **E**    **Comment Status** **D**  
**SuggestedRemedy**  
 Remove all empty pages throughout document  
**Proposed Response**    **Response Status** **O**

**CI 45**    **SC 45.2.1.185**    **P34**    **L 17**    # **6**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **E**    **Comment Status** **D**  
 Missing space  
**SuggestedRemedy**  
 Change: 0 1 00  
 To: 0 1 0 0  
**Proposed Response**    **Response Status** **O**

**CI 149**    **SC 149.1.2**    **P50**    **L 20**    # **3**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **T**    **Comment Status** **X**  
 The MDI is not part of the PHY and should not be shaded in Figure 149-1.  
**SuggestedRemedy**  
 Remove shading on MDI "box" in Figure 149-1.  
**Proposed Response**    **Response Status** **O**

**CI 125**    **SC 125.1.3**    **P44**    **L 48**    # **7**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **E**    **Comment Status** **D**  
 Missing space  
**SuggestedRemedy**  
 Change: PAM4for  
 To: PAM4 for  
**Proposed Response**    **Response Status** **O**

**CI 150**    **SC 150.1.2**    **P98**    **L 25**    # **4**  
 Wienckowski, Natalie    General Motors  
**Comment Type** **T**    **Comment Status** **X**  
 The MDI is not part of the PHY and should not be shaded in Figure 150-1.  
**SuggestedRemedy**  
 Remove shading on MDI "box" in Figure 150-1.  
**Proposed Response**    **Response Status** **O**

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**CI 78**    **SC 78**                      **P37**    **L**                      # **8**  
 Wienckowski, Natalie                      General Motors  
**Comment Type**    **E**                      **Comment Status**    **D**  
 Page forced to 21  
**SuggestedRemedy**  
 Change to use next available page number.  
**Proposed Response**                      **Response Status**    **O**

**CI 150**    **SC 150.1.3**                      **P99**                      **L14**                      # **11**  
 Wienckowski, Natalie                      General Motors  
**Comment Type**    **E**                      **Comment Status**    **D**  
 broken link  
**SuggestedRemedy**  
 Change: text 150.1  
 To: Link to 150.4  
**Proposed Response**                      **Response Status**    **O**

**CI 149**    **SC 149.1.2**                      **P50**    **L2**                      # **9**  
 Wienckowski, Natalie                      General Motors  
**Comment Type**    **E**                      **Comment Status**    **D**  
 Missing period at end of sentence.  
**SuggestedRemedy**  
 Add missing period.  
**Proposed Response**                      **Response Status**    **O**

**CI 150**    **SC 150.2**                                      **P100**                      **L2**                      # **12**  
 Wienckowski, Natalie                      General Motors  
**Comment Type**    **E**                      **Comment Status**    **D**  
 broken link  
**SuggestedRemedy**  
 Change: text 150.1  
 To: Link to 150.2.2  
**Proposed Response**                      **Response Status**    **O**

**CI 150**    **SC 150.1.3**                      **P98**    **L1**                      # **10**  
 Wienckowski, Natalie                      General Motors  
**Comment Type**    **E**                      **Comment Status**    **D**  
 noun/verb agreement  
**SuggestedRemedy**  
 Change: The 5GBASE-T1 and 10GBASE-T1 PHYs utilizes four level  
 To: The 5GBASE-T1 and 10GBASE-T1 PHYs utilize four level  
**Proposed Response**                      **Response Status**    **O**

**CI 149**    **SC 149.2.2.1**                      **P58**                      **L25**                      # **13**  
 Wienckowski, Natalie                      General Motors  
**Comment Type**    **E**                      **Comment Status**    **D**  
 missing periods  
**SuggestedRemedy**  
 Add periods at end of OK and NOT\_OK statements  
**Proposed Response**                      **Response Status**    **O**

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CI 150 SC 150.2.2.1 P106 L25 # 14  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 missing periods  
 SuggestedRemedy  
 Add periods at end of OK and NOT\_OK statements  
 Proposed Response Response Status O

CI 149 SC 149.4.2.2 P70 L15 # 18  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 broken link  
 SuggestedRemedy  
 Change: text 149.1  
 To: Link to 149.5  
 Proposed Response Response Status O

CI 150 SC 150.4.1 P116 L27 # 15  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 broken link  
 SuggestedRemedy  
 Change: text 150.1  
 To: Link to 150.2.2  
 Proposed Response Response Status O

CI 150 SC 150.4.2.2 P118 L15 # 19  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 broken link  
 SuggestedRemedy  
 Change: text 150.1  
 To: Link to 150.5  
 Proposed Response Response Status O

CI 149 SC 149.4.2.1 P70 L1 # 16  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 typo  
 SuggestedRemedy  
 Change: stat). To state.  
 Proposed Response Response Status O

CI 149 SC 149.4.4.1 P81 L25 # 20  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 missing periods  
 SuggestedRemedy  
 Add periods at end of SEND\_N, SEND\_I, SEND\_T, SEND\_Z statements  
 Proposed Response Response Status O

CI 150 SC 150.4.2.1 P118 L1 # 17  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 typo  
 SuggestedRemedy  
 Change: stat). To state.  
 Proposed Response Response Status O

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CI 150 SC 150.4.4.1 P129 L 25 # 21  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 missing periods  
 SuggestedRemedy  
 Add periods at end of SEND\_N, SEND\_I, SEND\_T, SEND\_Z statements  
 Proposed Response Response Status O

CI 149 SC 149.5.2.2 P87 L 15 # 24  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 Figure 149-13 was not drawn in Frame  
 SuggestedRemedy  
 Redraw Figure 149-13 in Frame.  
 Proposed Response Response Status O

CI 149 SC 149.5.1 P84 L 37 # 22  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified.  
 SuggestedRemedy  
 Accept the text in clause 149.5.1 and its subclauses, e.g. remove yellow highlighting.  
 Proposed Response Response Status O

CI 150 SC 150.5.2.2 P135 L 15 # 25  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 Figure 150-13 was not drawn in Frame  
 SuggestedRemedy  
 Redraw Figure 150-13 in Frame.  
 Proposed Response Response Status O

CI 150 SC 150.5.1 P132 L 37 # 23  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified.  
 SuggestedRemedy  
 Accept the text in clause 150.5.1 and its subclauses, e.g. remove yellow highlighting.  
 Proposed Response Response Status O

CI 149 SC 149.5.3.5 P88 L 21 # 26  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set peak differential output tolerance to 30%.  
 SuggestedRemedy  
 Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak  
 To: transmit differential signal at MDI shall be less than 1.3 V peak-to-peak  
 Proposed Response Response Status O

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 1st Test

CI 150 SC 150.5.4.5 P136 L21 # 27  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set peak differential output tolerance to 30%.  
 SuggestedRemedy  
 Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak  
 To: transmit differential signal at MDI shall be less than 1.3 V peak-to-peak  
 Proposed Response Response Status O

CI 149 SC 149.5.3.6 P88 L30 # 31  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set the short-term rate of frequency variation to 0.1 ppm/second.  
 SuggestedRemedy  
 Remove yellow highlighting on 0.1 ppm/second.  
 Proposed Response Response Status O

CI 150 SC 150.5.3 P135 L51 # 28  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 Duplicate clause heading: Test Modes  
 SuggestedRemedy  
 Remove duplicate clause heading 150.5.3 Test Modes  
 Proposed Response Response Status O

CI 150 SC 150.5.4.6 P136 L30 # 32  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set the short-term rate of frequency variation to 0.1 ppm/second.  
 SuggestedRemedy  
 Remove yellow highlighting on 0.1 ppm/second.  
 Proposed Response Response Status O

CI 149 SC 149.5.3.6 P88 L27 # 29  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set the symbol transmission rate tolerance to 50 ppm.  
 SuggestedRemedy  
 Remove yellow highlighting on 50 ppm.  
 Proposed Response Response Status O

CI 149 SC 149.7.1.1 P90 L34 # 33  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 IL frequency axis should start at 0  
 SuggestedRemedy  
 Change Frequency axis to be 0 to 3000.  
 Proposed Response Response Status O

CI 150 SC 150.5.4.6 P136 L27 # 30  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set the short-term rate of frequency variation to 0.1 ppm/second.  
 SuggestedRemedy  
 Remove yellow highlighting on 50 ppm.  
 Proposed Response Response Status O

CI 150 SC 150.7.1.1 P138 L33 # 34  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 IL frequency axis should start at 0  
 SuggestedRemedy  
 Change Frequency axis to be 0 to 3000.  
 Proposed Response Response Status O

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Cl 149 SC 149.7.1.5 P92 L31 # 35  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set maximum link segment propagation delay to 94 ns as the maximum segment length is the same as bp. This is a propagation delay of 6.27 ns/m. Most cable used for this purpose is about 5.5 ns/m.  
 SuggestedRemedy  
 Remove yellow highlighting on 94 ns.  
 Proposed Response Response Status O

Cl 150 SC 150.7.1.5 P140 L28 # 38  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set maximum frequency for link segment propagation delay to 3000 MHz.  
 SuggestedRemedy  
 Remove yellow highlighting on 3000 MHz.  
 Proposed Response Response Status O

Cl 150 SC 150.7.1.5 P140 L27 # 36  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set maximum link segment propagation delay to 94 ns as the maximum segment length is the same as bp. This is a propagation delay of 6.27 ns/m. Most cable used for this purpose is about 5.5 ns/m.  
 SuggestedRemedy  
 Remove yellow highlighting on 94 ns.  
 Proposed Response Response Status O

Cl 149 SC 149.8.1 P92 L39 # 39  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 This spec should not define a specific MDI connector.  
 SuggestedRemedy  
 Remove yellow highlighting on: Further specification of the mechanical interface is beyond the scope of this standard.  
 Proposed Response Response Status O

Cl 149 SC 149.7.1.5 P92 L32 # 37  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Set maximum frequency for link segment propagation delay to 3000 MHz.  
 SuggestedRemedy  
 Remove yellow highlighting on 3000 MHz.  
 Proposed Response Response Status O

Cl 150 SC 150.8.1 P140 L35 # 40  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 This spec should not define a specific MDI connector.  
 SuggestedRemedy  
 Remove yellow highlighting on: Further specification of the mechanical interface is beyond the scope of this standard.  
 Proposed Response Response Status O

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CI 149 SC 149.8.3 P92 L 53 # 41  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 The automotive fault tolerance is the same for all communication speeds..  
 SuggestedRemedy  
 Remove yellow highlighting on: See 96.8.3.  
 Proposed Response Response Status O

CI 150 SC 150.8.3 P140 L 49 # 42  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 The automotive fault tolerance is the same for all communication speeds..  
 SuggestedRemedy  
 Remove yellow highlighting on: See 96.8.3.  
 Proposed Response Response Status O

CI 44 SC 44.3 P32 L 8 # 43  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status D  
 broken link  
 SuggestedRemedy  
 Change: text 150.1  
 To: Link to 150.10  
 Proposed Response Response Status O

CI 98B SC 98B P145 L 16 # 44  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status X  
 Change bit assignments in ch and cg to remove interleaved reserved bits and plan for future PHYs.  
 SuggestedRemedy  
 Change 2.5GBASE-T1 ability to A3 from A7  
 Change 5GBASE-T1 ability to A4 from A8  
 Change 10GBASE-T1 ability to A5 from A9  
 Proposed Response Response Status O

CI 125 SC 1.4 P45 L 15 # 45  
 Wu, Mau-Lin MediaTek  
 Comment Type T Comment Status D  
 In Table 125-1, the ""Description"" of 2.5GBASE-T1 is ""TBD modulation"". It's not correct!  
 SuggestedRemedy  
 The team had adopted PAM4 as the modulation of 2.5GBASE-T1 and 5GBASE-T1. Shall modify ""TBD modulation"" into ""PAM4 modulation"".  
 Proposed Response Response Status O

CI 125 SC 1.4 P45 L 22 # 46  
 Wu, Mau-Lin MediaTek  
 Comment Type T Comment Status D  
 In Table 125-1, the ""Description"" of 5GBASE-T1 is ""TBD modulation"". It's not correct!  
 SuggestedRemedy  
 The team had adopted PAM4 as the modulation of 2.5GBASE-T1 and 5GBASE-T1. Shall modify ""TBD modulation"" into ""PAM4 modulation"".  
 Proposed Response Response Status O

Physical Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 1st Test

CI 125 SC 125.1.4 P45 L48 # 47  
 WU, Peter Marvell  
 Comment Type T Comment Status D  
 EEE is optimal for 2.5GBASE-T1  
 SuggestedRemedy  
 Marked as "O"  
 Proposed Response Response Status O

CI 149 SC 149.4.2.6.2 P77 L40 # 51  
 WU, Peter Marvell  
 Comment Type T Comment Status X  
 send\_s\_timer expiration changed to "1.25us±0.05us"  
 SuggestedRemedy  
 see attached contribution "Wu\_3ch\_01\_0918.pdf"  
 Proposed Response Response Status O

CI 125 SC 125.1.4 P45 L53 # 48  
 WU, Peter Marvell  
 Comment Type T Comment Status D  
 EEE is optimal for 5GBASE-T1  
 SuggestedRemedy  
 Marked as "O"  
 Proposed Response Response Status O

CI 149 SC 149.4.2.6.2 P77 L44 # 52  
 WU, Peter Marvell  
 Comment Type T Comment Status X  
 sigdet\_wait\_timerexpiration changed to "5.0us±0.15us"  
 SuggestedRemedy  
 see attached contribution "Wu\_3ch\_01\_0918.pdf"  
 Proposed Response Response Status O

CI 149 SC 149.4.2.6 P76 L2 # 49  
 WU, Peter Marvell  
 Comment Type T Comment Status X  
 SEN\_S signaling modification  
 SuggestedRemedy  
 see attached contribution "Wu\_3ch\_01\_0918.pdf"  
 Proposed Response Response Status O

CI 150 SC 150.4.2.6.2 P125 L40 # 53  
 WU, Peter Marvell  
 Comment Type T Comment Status X  
 send\_s\_timer expiration changed to "1.25us±0.05us"  
 SuggestedRemedy  
 see attached contribution "Wu\_3ch\_01\_0918.pdf"  
 Proposed Response Response Status O

CI 150 SC 150.4.2.6 P124 L2 # 50  
 WU, Peter Marvell  
 Comment Type T Comment Status X  
 SEN\_S signaling modification  
 SuggestedRemedy  
 see attached contribution "Wu\_3ch\_01\_0918.pdf"  
 Proposed Response Response Status O

CI 150 SC 150.4.2.6.2 P125 L44 # 54  
 WU, Peter Marvell  
 Comment Type T Comment Status X  
 sigdet\_wait\_timerexpiration changed to "5.0us±0.15us"  
 SuggestedRemedy  
 see attached contribution "Wu\_3ch\_01\_0918.pdf"  
 Proposed Response Response Status O

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CI 149 SC 149.4.2.6 P75 L27 # 55  
WU, Peter Marvell  
Comment Type T Comment Status X  
SEND\_S signaling modification - 703.125MHz  
SuggestedRemedy  
see attached contribution "Wu\_3ch\_01a\_0918.pdf"  
Proposed Response Response Status O

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CI 150 SC 150.4.2.6 P123 L27 # 56  
WU, Peter Marvell  
Comment Type T Comment Status X  
SEND\_S signaling modification- - 703.125MHz  
SuggestedRemedy  
see attached contribution "Wu\_3ch\_01a\_0918.pdf"  
Proposed Response Response Status O