C/ 44 SC 44.3 Wienckowski, Natalie	P 32 General Motors	L 8	# 43		Cl 78 SC 78 P37 L # 8 Wienckowski, Natalie General Motors
Comment Type E broken link	Comment Status D			EZ	Comment Type E Comment Status D EZ Page forced to 21
SuggestedRemedy Change: text 150.1 To: Link to 150.10 Proposed Response PROPOSED ACCEPT.	Response Status W				SuggestedRemedy Change to use next available page number. Proposed Response Response Status W PROPOSED ACCEPT.
Cl 45 SC 45.2.1.18 Wienckowski, Natalie	5 P34 General Motors	L17	# 6		CI 98B SC 98B P145 L16 # 44 Wienckowski, Natalie General Motors
Comment Type E Missing space	Comment Status D			EZ	Comment Type T Comment Status D Registers Change bit assignments in ch and cg to remove interleaved reserved bits and plan for future PHYs.
SuggestedRemedy Change: 0 1 00 To: 0 1 0 0 Proposed Response				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 ACCEPT.	Response Status W				Proposed Response Response Status W PROPOSED ACCEPT.
Cl 45 SC 45.2.1.18 Wienckowski, Natalie	5.2 P34 General Motors	L 28	# 1		See wienckowski_3ch_02_0918.pdf for rationale.
Comment Type E Modify Editor Instructio	Comment Status D n based on 802.3cg change			EZ	Cl 125 SC 1.4 P45 L15 # 45 Wu, Mau-Lin MediaTek
	on to: Insert the following text a ed by 802.3cg) as follows: Response Status W IN PRINCIPLE.	fter the fifth sent	tence of		Comment Type T Comment Status D EZ 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"".
	Instruction based on P802.3cg l	D2p1.			Proposed Response Response Status W PROPOSED ACCEPT.

CI 125 SC 1.4 P 45 Wu, Mau-Lin Media		# 46	C/ 125 SC 125.1.4 WU, Peter	P 45 Marvell	L 48	# 47
Comment Type T Comment Status In Table 125-1, the ""Description"" of 5GBAS		EZ on"". It's not correct!	Comment Type T EEE is optinal for 2.5Gl	Comment Status D BASE-T1		EZ
SuggestedRemedy The team had adopted PAM4 as the modula modify ""TBD modulation"" into ""PAM4 mod		nd 5GBASE-T1. Shall	SuggestedRemedy Marked as "O" Proposed Response	Desperae Status W		
Proposed Response Response Status PROPOSED ACCEPT.	w		PROPOSED ACCEPT			
Cl 125 SC 125.1.3 P44 Wienckowski, Natalie Gener	L 48 al Motors	# [7	CI 149 SC 149.1.2	g in cell (EEE, 2.5GBASE-T1) P 50	L 2	# 9
,		EZ	Wienckowski, Natalie	General Motors		
Comment Type E Comment Status Missing space	ט	EZ	Comment Type E Missing period at end o	Comment Status D		EZ
SuggestedRemedy Change: PAM4for To: PAM4 for			SuggestedRemedy Add missing period.	r semence.		
Proposed Response Response Status PROPOSED ACCEPT.	W		Proposed Response PROPOSED ACCEPT.	Response Status W		
CI 125 SC 125.1.4 P45 WU, Peter Marve	-	# 48	Cl 149 SC 149.1.2 Wienckowski, Natalie	P 50 General Motors	L 20	# [3
Comment Type T Comment Status EEE is optinal for 5GBASE-T1	D	EZ	Comment Type T The MDI is not part of the Type Type Type Type Type Type Type Typ	Comment Status D he PHY and should not be shad	ded in Figure	<i>EZ</i> 149-1.
SuggestedRemedy Marked as "O"			SuggestedRemedy Remove shading on MI	DI "box" in Figure 149-1.		
Proposed Response Response Status PROPOSED ACCEPT IN PRINCIPLE.	W		Proposed Response PROPOSED ACCEPT.	Response Status W		

Add "O" with underlining in cell (EEE, 5GBASE-T1)

Cl 149 SC 149.2.2.1 Wienckowski, Natalie	P 58 General Motors	L 25	# [13		CI 149 SC 149.4.2.6 P75 L27 # 55 WU, Peter Marvell				
Comment Type E missing periods	Comment Status D			EZ	Comment Type T Comment Status D Link Sync SEND_S signaling modification - 703.125MHz				
SuggestedRemedy Add periods at end of O	K and NOT_OK statements				SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf"				
Proposed Response PROPOSED ACCEPT.	Response Status W				Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.				
C/ 149 SC 149.4.2.1 Wienckowski, Natalie	P 70 General Motors	L 1	# [16		In section 149.4.2.6, insert a paragraph between the 2nd and 3rd paragraphs with the text: The frequency of the SEND_S signal shall be 703.125MHz.				
Comment Type E typo	Comment Status D			EZ	C/ 149 SC 149.4.2.6 P76 L2 # 49 WU, Peter Marvell				
SuggestedRemedy Change: stat). To state.					Comment Type T Comment Status D Link Sync SEND_S signaling modification				
Proposed Response PROPOSED ACCEPT.	Response Status W				SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf"				
Cl 149 SC 149.4.2.2 Wienckowski, Natalie	P 70 General Motors	L 15	# [18		Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.				
Comment Type E	E Comment Status D EZ			EZ	Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 2.				
broken link SuggestedRemedy					Cl 149 SC 149.4.2.6.2 P77 L40 # 51 WU, Peter Marvell				
Change: text 149.1 To: Link to 149.5					Comment Type T Comment Status D Link Sync				
Proposed Response PROPOSED ACCEPT.	Response Status W				send_s_timer expiration changed to "1.25us±0.05us" SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf"				
					Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.				
					Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 4, subbullet 1.				

C/ 149 SC 149.4.2.6.2 P77 L 44 # 52 C/ 149 SC 149.5.2.2 P87 L 15 # 24 WU. Peter Marvell Wienckowski. Natalie General Motors Comment Type Т Comment Status D Link Sync Comment Type E Comment Status D Editorial sigdet wait timerexpiration changed to 5.0us±0.15us Figure 149-13 was not drawn in Frame SuggestedRemedy SuggestedRemedy see attached contrtibution "Wu 3ch 01a 0918.pdf" Redraw Figure 149-13 in Frame. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT IN PRINCIPLE PROPOSED ACCEPT IN PRINCIPLE Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 4, subbullet 2. TX TCLK is In yellow highlight. In Clause 97 this was TX TCLK125. Should the clock speed be included or should it be more generic? C/ 149 SC 149.4.4.1 P81 1 25 C/ 149 SC 149.5.3.5 # 26 P88 L 21 Wienckowski, Natalie General Motors Wienckowski. Natalie General Motors Comment Status D EΖ Comment Type E Comment Type T Comment Status D PMA missing periods Set peak differential output tolerance to 30%. SuggestedRemedy SuggestedRemedy Add periods at end of SEND N, SEND I, SEND T, SEND Z statements Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak Proposed Response Response Status W To: transmit differential signal at MDI shall be less than 1.3 V peak-to-peak PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. C/ 149 SC 149.5.1 P84 L 37 # 22 Wienckowski. Natalie General Motors Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak. Comment Type T Comment Status D PMATo: transmit differential signal at MDI shall be less than 1.1 V peak-to-peak. The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified. C/ 149 SC 149.5.3.6 P88 L 27 # 29 SuggestedRemedy Wienckowski. Natalie General Motors Accept the text in clause 149.5.1 and its subclauses, e.g. remove yellow highlighting. Comment Status D PMA Comment Type T Proposed Response Response Status W Set the symbol transmission rate tolerance to 50 ppm. PROPOSED ACCEPT. SuggestedRemedy Remove yellow highlighting on 50 ppm. IEC specs only go to 1 GHZ. We are checking to see if there is any standard we can refer to that goes to a higher frequency. NOTE: The CISPR 25 test referred to in 149.9.2.2 Proposed Response Response Status W does include RE for GPS and GLONASS bands.

PROPOSED ACCEPT.

C/ 149 SC 149.5.3.6 P88 L 30 # 31 C/ 149 SC 149.7.1.5 P92 L 32 # 37 Wienckowski. Natalie General Motors Wienckowski. Natalie General Motors Comment Type T Comment Status D PMAComment Type T Comment Status D Link Segment Set the short-term rate of frequency variation to 0.1 ppm/second. Set maximum frequency for link segment propagation delay to 3000 MHz. SuggestedRemedy SuggestedRemedy Remove yellow highlighting on 0.1 ppm/second. Remove yellow highlighting on 3000 MHz. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT PROPOSED ACCEPT C/ 149 SC 149.7.1.1 P90 # 33 C/ 149 SC 149.8.1 P92 L 34 L 39 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type T Comment Status D ΕZ Comment Type T Comment Status D MDI IL frequency axis should start at 0 This spec should not define a specific MDI connector. SuggestedRemedy SuggestedRemedy Remove yellow highlighting on: Further Change Fequency axis to be 0 to 3000. specification of the mechanical interface is beyond the scope of this standard. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 149 SC 149.7.1.5 P92 L31 # 35 C/ 149 SC 149.8.3 P92 L 53 # 41 Wienckowski. Natalie General Motors Wienckowski, Natalie General Motors Comment Status D Comment Type T Link Seament Comment Type T Comment Status D Fault Tolerance Set maximum link segment propagation delay to 94 ns as the maximum segment length is The automotive fault tolerance is the same for all communication speeds... 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 SuggestedRemedy Remove yellow highlighting on: See 96.8.3. Remove yellow highlighting on 94 ns. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 150 SC 150.1.2 P98 L 25 Wienckowski, Natalie General Motors Comment Status D Comment Type T EΖ 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 W PROPOSED ACCEPT.

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 SORT ORDER: Clause, Subclause, page, line

C/ **150** SC **150.1.2** Page 5 of 10 9/6/2018 5:12:39 PM

Cl 150 SC 150.1.3 Wienckowski, Natalie	P 98 General Motors	L 1	# 10		Cl 150 SC 150.2.2.1 Wienckowski, Natalie	P 106 General Motors	L 25	# 14		
Comment Type E noun/verb agreement	Comment Status D			EZ	Comment Type E missing periods	Comment Status D			EZ	
SuggestedRemedy Change: The 5GBASE-T1 and 10GBASE-T1 PHYs utilizes four level To: The 5GBASE-T1 and 10GBASE-T1 PHYs utilize four level					SuggestedRemedy Add periods at end of OK and NOT_OK statements					
Proposed Response PROPOSED ACCEPT.	Response Status W	our level			Proposed Response PROPOSED ACCEPT.	Response Status W				
Cl 150 SC 150.1.3 Wienckowski. Natalie	P 99 General Motors	L 14	# 11	EZ	Cl 150 SC 150.4.1 Wienckowski, Natalie	P116 General Motors	L 27	# 15		
Comment Type E broken link	Comment Status D				Comment Type E broken link	Comment Status D			EZ	
SuggestedRemedy Change: text 150.1					SuggestedRemedy Change: text 150.1 To: Link to 150.2.2					
To: Link to 150.4 Proposed Response PROPOSED ACCEPT.	Response Status W				Proposed Response PROPOSED ACCEPT.	Response Status W				
C/ 150 SC 150.2	P100 General Motors	L 2	# 12		Cl 150 SC 150.4.2.1 Wienckowski, Natalie	P 118 General Motors	L1	# 17		
Wienckowski, Natalie Comment Type E	Comment Status D	s		EZ	Comment Type E typo	Comment Status D			EZ	
broken link SuggestedRemedy					SuggestedRemedy Change: stat). To state.					
Change: text 150.1 To: Link to 150.2.2 Proposed Response	Response Status W				Proposed Response PROPOSED ACCEPT.	Response Status W				
PROPOSED ACCEPT.	,									

C/ 150 SC 150.4.2.2 P118 L 15 # 19 C/ 150 SC 150.4.2.6.2 P125 L 40 # 53 Wienckowski. Natalie General Motors WU. Peter Marvell Comment Status D Comment Type EΖ Comment Type T Comment Status D Link Sync broken link send s timer expiration changed to "1.25us±0.05us" SuggestedRemedy SuggestedRemedy Change: text 150.1 see attached contrtibution "Wu 3ch 01a 0918.pdf" To: Link to 150.5 Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT. C/ 150 SC 150.4.2.6 P123 L 27 # 56 Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 4, subbullet 1. WU. Peter Marvell C/ 150 SC 150.4.2.6.2 P125 L 44 # 54 Comment Type T Comment Status D Link Sync WU, Peter Marvell SEND S signaling modification - - 703.125MHz Comment Type T Comment Status D Link Sync SuggestedRemedy sigdet wait timerexpiration changed to 5.0us±0.15us see attached contribution "Wu 3ch 01a 0918.pdf" SuggestedRemedy Proposed Response Response Status W see attached contrtibution "Wu 3ch 01a 0918.pdf" PROPOSED ACCEPT IN PRINCIPLE. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. In section 150.4.2.6, insert a paragraph between the 2nd and 3rd paragraphs with the text: The frequency of the SEND S signal shall be 703.125MHz. # 50 C/ 150 SC 150.4.2.6 P124 L2 Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 4, subbullet 2. WU, Peter Marvell C/ 150 P129 SC 150.4.4.1 L 25 Comment Type T Comment Status D Link Sync Wienckowski, Natalie General Motors SEND S signaling modification Comment Type E Comment Status D EΖ SuggestedRemedy missing periods see attached contribution "Wu 3ch 01a 0918.pdf" SuggestedRemedy Proposed Response Response Status W Add periods at end of SEND N, SEND I, SEND T, SEND Z statements PROPOSED ACCEPT IN PRINCIPLE. Proposed Response Response Status W PROPOSED ACCEPT. Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 3.

SC 150.5.1 C/ 150 P132 L 37 # 23 C/ 150 SC 150.5.4.5 P136 L 21 # 27 Wienckowski. Natalie General Motors Wienckowski. Natalie General Motors Comment Type T Comment Status D PMAComment Type T Comment Status D PMAThe PMA electrical specification tests for Multi-Gig are the same as they are for slower Set peak differential output tolerance to 30%. speeds as specific frequencies are not specified. SuggestedRemedy SuggestedRemedy Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak Accept the text in clause 150.5.1 and its subclauses, e.g. remove yellow highlighting. To: transmit differential signal at MDI shall be less than 1.3 V peak-to-peak Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT IN PRINCIPLE. IEC specs only go to 1 GHZ. We are checking to see if there is any standard we can refer Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak to that goes to a higher frequency. NOTE: The CISPR 25 test referred to in 149.9.2.2 does include RE for GPS and GLONASS bands. To: transmit differential signal at MDI shall be less than 1.1 V peak-to-peak. C/ 150 SC 150.5.2.2 P135 L 15 # 25 C/ 150 SC 150.5.4.6 P136 L 27 # 30 Wienckowski. Natalie General Motors Wienckowski. Natalie General Motors Comment Type E Comment Status D Editorial Comment Type T Comment Status D PMAFigure 150-13 was not drawn in Frame Set the short-term rate of frequency variation to 0.1 ppm/second. SuggestedRemedy SuggestedRemedy Redraw Figure 150-13 in Frame. Remove yellow highlighting on 50 ppm. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT IN PRINCIPLE. TX_TCLK is In yellow highlight. In Clause 97 this was TX_TCLK125. Should the clock speed be included or should it be more generic? This is actually the symbol transmission rate tolerance. C/ 150 SC 150.5.3 P135 L 51 # 28 Remove yellow highlighting on 50 ppm in lines 28 and 31. Wienckowski. Natalie General Motors C/ 150 L 30 SC 150.5.4.6 P136 Comment Type E Comment Status D EΖ Wienckowski. Natalie General Motors Duplicate clause heading: Test Modes Comment Type T Comment Status D PMASuggestedRemedy Set the short-term rate of frequency variation to 0.1 ppm/second. Remove duplicate clause heading 150.5.3 Test Modes SuggestedRemedy Proposed Response Response Status W Remove yellow highlighting on 0.1 ppm/second. PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. This actually Line 34.

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 SORT ORDER: Clause, Subclause, page, line

C/ **150** SC **150.5.4.6** Page 8 of 10 9/6/2018 5:12:40 PM

C/ 150 SC 150.7.1.1 P138 L 33 # 34 C/ 150 SC 150.8.1 P140 L 35 # 40 Wienckowski. Natalie General Motors Wienckowski. Natalie **General Motors** Comment Type T Comment Status D EΖ Comment Type T Comment Status D MDI IL frequency axis should start at 0 This spec should not define a specific MDI connector. SuggestedRemedy SuggestedRemedy Change Fequency axis to be 0 to 3000. Remove yellow highlighting on: Further specification of the mechanical interface is beyond the scope of this standard. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT. C/ 150 SC 150.7.1.5 P140 L 27 # 36 C/ 150 SC 150.8.3 P140 L 49 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type T Comment Status D Link Segment Comment Type T Comment Status D Fault Tolerance 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 The automotive fault tolerance is the same for all communication speeds... purpose is about 5.5 ns/m. SuggestedRemedy SuggestedRemedy Remove yellow highlighting on: See 96.8.3. Remove yellow highlighting on 94 ns. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ Intro SC Intro P9 L4 C/ 150 SC 150.7.1.5 P 140 L 28 # 38 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type E Comment Status D F7 Comment Type T Comment Status D Link Segment **Duplicate of Amendment:** Set maximum frequency for link segment propagation delay to 3000 MHz. SuggestedRemedy SuggestedRemedy Remove second Amendment: Remove yellow highlighting on 3000 MHz. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT. Change: Amendment: Amendment: Physical Layer Specifications To: Amendment: Physical Layer Specifications

C/ Intro SC Intro P12 L # 2
Wienckowski, Natalie General Motors

Comment Type E Comment Status D EZ

SuggestedRemedy

Remove all empy pages throughout document

Proposed Response Status W
PROPOSED ACCEPT.

Cl Intro

Page 10 of 10 9/6/2018 5:12:40 PM