C/ Intro SC Intro Wienckowski, Natalie	P 9 General Motors	L 4	# <u>5</u>		C/ 44SC 44.3P 32L 8# 43Wienckowski, NatalieGeneral Motors	
Comment Type E Duplicate of Amendmer	Comment Status D			EZ	Comment Type E Comment Status D broken link	EZ
SuggestedRemedy Remove second Amend					SuggestedRemedy Change: text 150.1 To: Link to 150.10	
Proposed Response PROPOSED ACCEPT	Response Status W IN PRINCIPLE.				Proposed Response Response Status W PROPOSED ACCEPT.	
Change: Amendment: <i>I</i> To: Amendment: Physi	Amendment: Physical Layer Sp ical Layer Specifications	ecifications			C/ 45 SC 45.2.1.185 P 34 L 17 # 6 Wienckowski, Natalie General Motors Gene	
C/ Intro SC Intro Wienckowski, Natalie	P 12 General Motors	L	# 2		Comment Type E Comment Status D Missing space	EZ
Comment Type E SuggestedRemedy	Comment Status D			EZ	SuggestedRemedy Change: 0 1 00 To: 0 1 0 0	
Remove all empy pages Proposed Response	s throughout document <i>Response Status</i> W				Proposed Response Response Status W PROPOSED ACCEPT.	
PROPOSED ACCEPT.					C/ 45 SC 45.2.1.185.2 P 34 L 28 # 1 Wienckowski. Natalie General Motors Ge	
Cl 125 SC 125.1.4 WU, Peter	P 45 Marvell	L 53	# 48		Comment Type E Comment Status D Modify Editor Instruction based on 802.3cg change	ΕZ
Comment Type T EEE is optinal for 5GBA SuggestedRemedy	Comment Status D ASE-T1			EZ	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:	
Marked as "O" Proposed Response	Response Status W				Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	
PROPOSED ACCEPT	IN PRINCIPLE. g in cell (EEE, 5GBASE-T1)				Editor to update Editor Instruction based on P802.3cg D2p1.	

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Cl 78 SC 78 Wienckowski, Natalie	P 37 General Motors	L	# 8		C/ 125 SC 1.4 Wu, Mau-Lin	Р 45 MediaTek	L 22	# <u>4</u> 6
Comment Type E Page forced to 21	Comment Status D			EZ	Comment Type T In Table 125-1, the ""D	Comment Status D Description"" of 5GBASE-T1 is "	"TBD modula	ation"". It's not correct!
SuggestedRemedy Change to use next ava Proposed Response PROPOSED ACCEPT.	ilable page number. <i>Response Status</i> W				•	d PAM4 as the modulation of 2. ion"" into ""PAM4 modulation"". <i>Response Status</i> W		and 5GBASE-T1. Shal
Cl 125 SC 125.1.3 Wienckowski, Natalie	P 44 General Motors	L 48	# 7		C/ 125 SC 125.1.4	P 45 Marvell	L 48	# 47
Comment Type E Missing space SuggestedRemedy Change: PAM4for	Comment Status D			EZ	Comment Type T EEE is optinal for 2.50 SuggestedRemedy	Comment Status D GBASE-T1		
To: PAM4 for Proposed Response PROPOSED ACCEPT.	Response Status W				Marked as "O" <i>Proposed Response</i> PROPOSED ACCEPT	Response Status W		
C/ 125 SC 1.4 Wu, Mau-Lin	Р 45 MediaTek	L15	# 45			ng in cell (EEE, 2.5GBASE-T1)		11
Comment Type T	Comment Status D scription"" of 2.5GBASE-T1 is 1	"TPD modu	lation"" It's not oor	EZ	<i>Cl</i> 149 <i>SC</i> 149.1.2 Wienckowski, Natalie	P 50 General Motors	L 2	# 9
SuggestedRemedy The team had adopted f modify ""TBD modulatio	PAM4 as the modulation of 2.50 n"" into ""PAM4 modulation"".				Comment Type E Missing period at end SuggestedRemedy Add missing period.	Comment Status D of sentence.		
Proposed Response PROPOSED ACCEPT.	Response Status W				Proposed Response PROPOSED ACCEPT	Response Status W		

Pa **50** Li **2**

C/ 149 SC 149.1.2 Wienckowski, Natalie	P 50 General Motors	L 20	# <u>3</u>		C/ 149 SC 149.4.2.6 P 75 L 27 # 55 WU, Peter Marvell
Comment Type T The MDI is not part of th	<i>Comment Status</i> D e PHY and should not be shad	ed in Figure	149-1.	EZ	Comment Type T Comment Status D Link Syn SEND_S signaling modification - 703.125MHz Link Syn Link Syn
SuggestedRemedy Remove shading on MD	l "box" in Figure 149-1.				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 149.2.2.1 Wienckowski, Natalie	P 58 General Motors	L 25	# 13		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 missing periods	Comment Status D			EZ	C/ 149 SC 149.4.2.6 P76 L2 # 49 WU, Peter Marvell
SuggestedRemedy Add periods at end of Ol	K and NOT_OK statements				Comment Type T Comment Status D Link System SEND_S signaling modification
Proposed Response PROPOSED ACCEPT.	Response Status W				SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf"
C/ 149 SC 149.4.2.1 Wienckowski, Natalie	Р 70 General Motors	L1	# 16		Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.
Comment Type E	Comment Status D			ΕZ	Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 2.
typo SuggestedRemedy Change: stat). To state					C/ 149 SC 149.4.2.6.2 P77 L 40 # 51 WU, Peter Marvell
Change: stat). To state. Proposed Response PROPOSED ACCEPT.	Response Status W				Comment Type T Comment Status D Link Syn send_s_timer expiration changed to "1.25us±0.05us"
C/ 149 SC 149.4.2.2	P70	L15	# 18		SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf" Proposed Response Response Status W
Wienckowski, Natalie Comment Type E broken link	General Motors Comment Status D			EZ	PROPOSED ACCEPT IN PRINCIPLE.
SuggestedRemedy					Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 4, subbullet 1.
Change: text 149.1 To: Link to 149.5					
Proposed Response PROPOSED ACCEPT.	Response Status W				

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: Page, Line

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Li **40**

C/ 149 SC 149.4.2.6.2 P 77 L 44 # 52 WU, Peter Marvell	C/ 149 SC 149.5.2.2 P 87 L 15 # 24 Wienckowski, Natalie General Motors # 24 14 </th
Comment Type T Comment Status D Link sigdet_wait_timerexpiration changed to" 5.0us±0.15us"	ync Comment Type E Comment Status D Editoria. Figure 149-13 was not drawn in Frame
SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf"	SuggestedRemedy Redraw Figure 149-13 in Frame.
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	Proposed Response Response Status W 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 149.4.1 P 81 L 25 # 20 Wienckowski, Natalie General Motors Gener	C/ 149 SC 149.5.3.5 P 88 L 21 # 26 Wienckowski, Natalie General Motors General Motors # 26
Comment Type E Comment Status D missing periods	<i>EZ</i> <i>Comment Type</i> T <i>Comment Status</i> D <i>PMA</i> Set peak differential output tolerance to 30%.
SuggestedRemedy Add periods at end of SEND_N, SEND_I, SEND_T, SEND_Z statements Proposed Response Response Status W PROPOSED ACCEPT.	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 W
C/ 149 SC 149.5.1 P 84 L 37 # 22 Wienckowski, Natalie General Motors General Motors # 22 Comment Type T Comment Status D The PMA electrical specification tests for Multi-Gig are the same as they are for slower	 PROPOSED ACCEPT IN PRINCIPLE. 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 1.1 V peak-to-peak.
speeds as specific frequencies are not specified. <i>SuggestedRemedy</i> Accept the text in clause 149.5.1 and its subclauses, e.g. remove yellow highlighting.	C/ 149 SC 149.5.3.6 P 88 L 27 # 29 Wienckowski, Natalie General Motors General Motors General Motors General Motors
Proposed Response Response Status W PROPOSED ACCEPT.	Comment Type T Comment Status D PMA Set the symbol transmission rate tolerance to 50 ppm.
IEC specs only go to 1 GHZ. We are checking to see if there is any standard we can re 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.	SuggestedRemedy er Remove yellow highlighting on 50 ppm. Proposed Response Response Status W PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general	Pa 88	Page 4 of 9
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Cl 149 SC 149.5.3.6 Wienckowski, Natalie	P 88 General Motors	L 30	# 31	C/ 149 SC 149.7.1.5 P 92 L 32 # 37 Wienckowski, Natalie General Motors General Motors B
Comment Type T Set the short-term rate	Comment Status D of frequency variation to 0.1 pp	m/second.	PI	Comment Type T Comment Status D Link Segment Set maximum frequency for link segment propagation delay to 3000 MHz. Example 1 Example 2 Example 2
SuggestedRemedy Remove yellow highligh	ting on 0.1 ppm/second.			SuggestedRemedy Remove yellow highlighting on 3000 MHz.
Proposed Response PROPOSED ACCEPT.	Response Status W			Proposed Response Response Status W PROPOSED ACCEPT.
<i>Cl</i> 149 <i>SC</i> 149.7.1.1 Wienckowski, Natalie	Р 90 General Motors	L 34	# <u>33</u>	C/ 149 SC 149.8.1 P 92 L 39 # 39 Wienckowski, Natalie General Motors
Comment Type T IL frequency axis should	<i>Comment Status</i> D d start at 0			Comment Type T Comment Status D MDI This spec should not define a specific MDI connector. MDI MDI
SuggestedRemedy Change Fequency axis	to be 0 to 3000.			SuggestedRemedy Remove yellow highlighting on: Further
Proposed Response PROPOSED ACCEPT.	Response Status W			specification of the mechanical interface is beyond the scope of this standard. <i>Proposed Response Response Status</i> W PROPOSED ACCEPT.
Cl 149 SC 149.7.1.5 Wienckowski, Natalie Vatalie Vatalie	P 92 General Motors	L 31	# <u>3</u> 5	C/149SC149.8.3P 92L 53#41Wienckowski, NatalieGeneral Motors
	Comment Status D nent propagation delay to 94 ns s a propagation delay of 6.27 ns /m.			Comment Type T Comment Status D Fault Tolerance The automotive fault tolerance is the same for all communication speeds SuggestedRemedy Remove yellow highlighting on: See 96.8.3.
Remove yellow highligh	ting on 94 ns.			Proposed Response Response Status W
Proposed Response PROPOSED ACCEPT.	Response Status W			PROPOSED ACCEPT.
FROFUSED ACCEFT.				C/ 150 SC 150.1.3 P 98 L 1 # 10 Wienckowski, Natalie General Motors General Motors To an and the second s
				Comment Type E 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
				Proposed Response Response Status W PROPOSED ACCEPT.
•	d ER/editorial required GR/ger patched A/accepted R/rejecte	•		G/general Pa 98 Page 5 of 9 /written C/closed Z/withdrawn Li 1 9/6/2018 5:14:18 F

Cl 150 SC 150.1.2 Wienckowski, Natalie	P 98 General Motors	L 25	# 4		C/ 150 SC 150.4.1 Wienckowski, Natalie	P 116 General Motors	L 27	# 15
Comment Type T The MDI is not part of th	Comment Status D le PHY and should not be shade	ed in Figure	150-1.	EZ	<i>Comment Type</i> E broken link	Comment Status D		EZ
SuggestedRemedy Remove shading on MD	0				<i>SuggestedRemedy</i> Change: text 150.1 To: Link to 150.2.2			
Proposed Response PROPOSED ACCEPT.	Response Status W				Proposed Response PROPOSED ACCEPT.	Response Status W		
C/ 150 SC 150.1.3 Wienckowski, Natalie	P 99 General Motors	L 14	# 11		C/ 150 SC 150.4.2.1 Wienckowski, Natalie	P 118 General Motors	L1	# 17
Comment Type E broken link SuggestedRemedy	Comment Status D			EZ	Comment Type E typo	Comment Status D		EZ
Change: text 150.1 To: Link to 150.4					SuggestedRemedy Change: stat). To state.			
Proposed Response PROPOSED ACCEPT.	Response Status W				Proposed Response PROPOSED ACCEPT.	Response Status W		
C/ 150 SC 150.2 Vienckowski, Natalie	P 100 General Motors	L 2	# 12		C/ 150 SC 150.4.2.2 Wienckowski, Natalie	P 118 General Motors	L 15	# 19
Comment Type E broken link	Comment Status D			EZ	Comment Type E broken link	Comment Status D		EZ
SuggestedRemedy Change: text 150.1 To: Link to 150.2.2					<i>SuggestedRemedy</i> Change: text 150.1 To: Link to 150.5			
Proposed Response PROPOSED ACCEPT.	Response Status W				Proposed Response PROPOSED ACCEPT.	Response Status W		
C/ 150 SC 150.2.2.1 Vienckowski, Natalie	P 106 General Motors	L 25	# 14					
Comment Type E missing periods	Comment Status D			EZ				
SuggestedRemedy Add periods at end of O	K and NOT_OK statements							
Proposed Response PROPOSED ACCEPT.	Response Status W							
	ER/editorial required GR/gen batched A/accepted R/rejected					Pa 118 Li 15		Page 6 of 9 9/6/2018 5:14:18

C/ 150 SC 150.4.2.6 P 123 L 27 # 56 WU, Peter Marvell	C/ 150 SC 150.4.2.6.2 P 125 L 44 # 54 WU, Peter Marvell
Comment Type T Comment Status D Link S SEND_S signaling modification 703.125MHz Link S	Sync Comment Type T Comment Status D Link Sync sigdet_wait_timerexpiration changed to" 5.0us±0.15us" Link Sync Li
SuggestedRemedy see attached contribution "Wu_3ch_01a_0918.pdf"	SuggestedRemedy see attached contrtibution "Wu_3ch_01a_0918.pdf"
Proposed Response Response Status W 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 te The frequency of the SEND_S signal shall be 703.125MHz.	xt: Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 4, subbullet 2.
C/ 150 SC 150.4.2.6 P 124 L 2 # 50 WU, Peter Marvell <	C/ 150 SC 150.4.4.1 P 129 L 25 # 21 Wienckowski, Natalie General Motors # 21 1
Comment Type T Comment Status D Link S SEND_S signaling modification	Sync Comment Type E Comment Status D EZ missing periods
SuggestedRemedy see attached contribution "Wu_3ch_01a_0918.pdf"	SuggestedRemedy Add periods at end of SEND_N, SEND_I, SEND_T, SEND_Z statements
Proposed Response Response Status W 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.	C/ 150 SC 150.5.1 P 132 L 37 # 23 Wienckowski, Natalie General Motors
C/ 150 SC 150.4.2.6.2 P 125 L 40 # 53 WU, Peter Marvell	Comment Type T Comment Status D PMA
Comment Type T Comment Status D Links	Sync The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified.
send_s_timer expiration changed to "1.25us±0.05us"	SuggestedRemedy
SuggestedRemedy see attached contrtibution "Wu 3ch 01a 0918.pdf"	Accept the text in clause 150.5.1 and its subclauses, e.g. remove yellow highlighting.
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	Proposed Response Response Status W PROPOSED ACCEPT.
Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 4, subbullet 1.	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 does include RE for GPS and GLONASS bands.

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Cl 150 SC 150.5.2.2 P 135 Wienckowski, Natalie General M	L 15 lotors	# 25	C/ 150 SC 150.5.4.6 P 136 L 27 # Wienckowski, Natalie General Motors	30
Comment Type E Comment Status D Figure 150-13 was not drawn in Frame		Editorial	Comment Type T Comment Status D Set the short-term rate of frequency variation to 0.1 ppm/second.	PMA
SuggestedRemedy Redraw Figure 150-13 in Frame.			SuggestedRemedy Remove yellow highlighting on 50 ppm.	
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. TX TCLK is In yellow highlight. In Clause 97 thi	is was TX TCLK12	5. Should the clock	Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	
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 M Comment Type E Comment Status D	lotors	EZ	C/ 150 SC 150.5.4.6 P 136 L 30 # Wienckowski, Natalie General Motors General Motors #	32
Duplicate clause heading: Test Modes SuggestedRemedy Remove duplicate clause heading 150.5.3 Test Proposed Response Response Status W PROPOSED ACCEPT.	Modes		Comment Type T Comment Status D 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 W	РМА
CI 150 SC 150.5.4.5 P 136 Wienckowski, Natalie General M	L 21 lotors	# 27	PROPOSED ACCEPT IN PRINCIPLE. This actually Line 34.	
Comment Type T Comment Status D Set peak differential output tolerance to 30%.		PMA	C/ 150 SC 150.7.1.1 P138 L33 # Wienckowski, Natalie General Motors	34
SuggestedRemedy Change: transmit differential signal at MDI shall To: transmit differential signal at MDI shall be le			Comment Type T Comment Status D IL frequency axis should start at 0	EZ
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.			SuggestedRemedy Change Fequency axis to be 0 to 3000.	
Change: transmit differential signal at MDI shall To: transmit differential signal at MDI shall be le			Proposed Response Response Status W PROPOSED ACCEPT.	

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Cl 150 SC 150.7.1.5 Wienckowski, Natalie	P 140 General Motors	L 27	# 36	C/ 150 SC 150.8.3 Wienckowski, Natalie	P 140 General Motors	L 49	# 42
				The automotive fault tolerance is the SuggestedRemedy Remove yellow highlighting on: Se		nunication sp	Fault Tolerance eeds
PROPOSED ACCEPT.	P 140	L 28	# 38	C/ 98B SC 98B Wienckowski, Natalie	P 145 General Motors	L 16	# 44
Wienckowski, Natalie Comment Type T Set maximum frequenc SuggestedRemedy Remove yellow highligh Proposed Response PROPOSED ACCEPT.	General Motors Comment Status D y for link segment propagation ting on 3000 MHz. Response Status W	delay to 3000 N	Link Segment	Change bit assignments in ch and future PHYs. SuggestedRemedy Change 2.5GBASE-T1 ability to A3 Change 5GBASE-T1 ability to A4 f Change 10GBASE-T1 ability to A5	3 from A7 from A8	aved reserve	<i>Registers</i> d bits and plan for
C/ 150 SC 150.8.1 Wienckowski, Natalie	P 140 General Motors	L 35	# 40	See wienckowski_3ch_02_0918.pd	df for rationale.		
SuggestedRemedy Remove yellow highligh	Comment Status D efine a specific MDI connector. ting on: Further chanical interface is beyond the Response Status W	scope of this s	<i>MDI</i> tandard.				

Pa **145** Li **16**