Cl 45 SC 45.2. Wienckowski, Natalie	1.185.2 <i>P</i> 34 General M	L28	# [1	C/ 150 SC 150.1.2 Wienckowski, Natalie	P 98 General Motors	L 25	# 4		
Comment Type E Modify Editor Instru	Comment Status A action based on 802.3cg chan	ge	E		Comment Status A f the PHY and should not be shad	ded in Figure	150-1.	EZ	
	ruction to: Insert the following odified by 802.3cg) as follows **Response Status C CIPLE.		sentence of	SuggestedRemedy Remove shading on Response ACCEPT.	MDI "box" in Figure 150-1. Response Status C				
	litor Instruction based on P80	2.3cg D2p1.		C/ Intro SC Intro Wienckowski, Natalie	P 9 General Motors	L 4	# 5		
Cl Intro SC Intro Wienckowski, Natalie	P 12 General M	L lotors	# 2	Comment Type E Duplicate of Amendn	Comment Status A			EZ	
Comment Type E	Comment Status A		E	Z SuggestedRemedy Remove second Amo	endment:				
SuggestedRemedy Remove all empy p	pages throughout document			Response ACCEPT.	Response Status C				
Response ACCEPT.	Response Status C			G	it: Amendment: Physical Layer Sp	ecifications			
C/ 149 SC 149.1	.2 P50	L 20	# 3	To: Amendment: Ph	ysical Layer Specifications				
Wienckowski, Natalie Comment Type T	General M Comment Status A	otors	E	Cl 45 SC 45.2.1. Wienckowski, Natalie	185 P34 General Motors	L17	# 6		
The MDI is not part	of the PHY and should not b	e shaded in Figure		Comment Type E Missing space	Comment Status A			EZ	
SuggestedRemedy Remove shading of	n MDI "box" in Figure 149-1.			SuggestedRemedy	÷ .				
Response	Response Status C			Change: 0 1 00 To: 0 1 0 0					
ACCEPT.				Response ACCEPT.	Response Status C				

Cl 125 SC 125.1.3 Wienckowski, Natalie	P 44 General Motors	L 48	# 7		Cl 150 SC 150.1.3 Wienckowski, Natalie	P 98 General Motors	L1	# 10	
Comment Type E Missing space	Comment Status A			EZ	Comment Type E noun/verb agreement	Comment Status A			EZ
SuggestedRemedy Change: PAM4for To: PAM4 for						E-T1 and 10GBASE-T1 PHYs utiliz and 10GBASE-T1 PHYs utilize fou			
Response ACCEPT.	Response Status C				Response ACCEPT.	Response Status C			
Cl 78 SC 78 Wienckowski, Natalie	P37 General Motors	L	# 8		C/ 150 SC 150.1.3 Wienckowski, Natalie	P 99 General Motors	L14	# 11	
Comment Type E Page forced to 21	Comment Status A			EZ	Comment Type E broken link	Comment Status A			EZ
SuggestedRemedy Change to use next av Response ACCEPT.	railable page number. Response Status C				SuggestedRemedy Change: text 150.1 To: Link to 150.4 Response	Response Status C			
CI 149 SC 149.1.2 Wienckowski, Natalie Comment Type E Missing period at end SuggestedRemedy Add missing period. Response	P50 General Motors Comment Status A of sentence. Response Status C	L2	# <u>9</u>	EZ	ACCEPT. CI 150 SC 150.2 Wienckowski, Natalie Comment Type E broken link SuggestedRemedy Change: text 150.1 To: Link to 150.2.2	P100 General Motors Comment Status A	L2	# 12	EZ
ACCEPT.					Response ACCEPT.	Response Status C			

CI 149 SC 149.2.2.1 Wienckowski, Natalie	P 58 General Motors	L 25	# 13		Cl 150 SC 150.4.2.1 Wienckowski, Natalie	P118 General Motors	L1	# <u>1</u> 7
Comment Type E missing periods	Comment Status A			EZ	Comment Type E typo	Comment Status A		EZ
SuggestedRemedy Add periods at end of O	K and NOT_OK statements				SuggestedRemedy Change: stat). To state.			
Response ACCEPT.	Response Status C				Response ACCEPT.	Response Status C		
Cl 150 SC 150.2.2.1 Wienckowski, Natalie	P106 General Motors	L 25	# 14		CI 149 SC 149.4.2.2 Wienckowski, Natalie	P 70 General Motors	L15	# [18
Comment Type E missing periods	Comment Status A			EZ	Comment Type E broken link	Comment Status A		EZ
SuggestedRemedy Add periods at end of O	K and NOT_OK statements				SuggestedRemedy Change: text 149.1 To: Link to 149.5			
Response ACCEPT.	Response Status C				Response ACCEPT.	Response Status C		
Cl 150 SC 150.4.1 Wienckowski, Natalie	P116 General Motors	L 27	# 15		Cl 150 SC 150.4.2.2 Wienckowski, Natalie	P118 General Motors	L15	# [19
Comment Type E broken link	Comment Status A			EZ	Comment Type E	Comment Status A		EZ
SuggestedRemedy Change: text 150.1 To: Link to 150.2.2				SuggestedRemedy Change: text 150.1				
Response ACCEPT.	Response Status C				To: Link to 150.5 Response	Response Status C		
C/ 149 SC 149.4.2.1 Wienckowski, Natalie	P 70 General Motors	L1	# <u>1</u> 6		ACCEPT.			
Comment Type E	Comment Status A			EZ				
SuggestedRemedy Change: stat). To state.								

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: Comment ID

Response Status C

Response ACCEPT.

Comment ID 19

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C/ 149 SC 149.4.4.1 P81 L25 # 20 C/ 150 SC 150.5.1 P132 L37 # 23 Wienckowski, Natalie **General Motors** Wienckowski, Natalie General Motors Comment Type E Comment Status A EΖ Comment Type T Comment Status A missing periods The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified. SuggestedRemedy SuggestedRemedy Add periods at end of SEND_N, SEND_I, SEND_T, SEND_Z statements Accept the text in clause 150.5.1 and its subclauses, e.g. remove yellow highlighting. Response Response Status C Response Status C ACCEPT. ACCEPT IN PRINCIPLE. SC 150.4.4.1 P129 L25 C/ 150 # 21 Remove section 150.5.1. Wienckowski. Natalie **General Motors** C/ 149 SC 149.5.2.2 P87 L15 Comment Type E Comment Status A F7 Wienckowski, Natalie General Motors missing periods Comment Type E Comment Status A Editorial SuggestedRemedy Figure 149-13 was not drawn in Frame Add periods at end of SEND_N, SEND_I, SEND_T, SEND_Z statements SuggestedRemedy Response Response Status C Redraw Figure 149-13 in Frame. ACCEPT. Response Response Status C C/ 149 SC 149.5.1 P84 L37 # 22 ACCEPT IN PRINCIPLE. Wienckowski. Natalie **General Motors** TX TCLK is In yellow highlight. Comment Status A PMAComment Type T The PMA electrical specification tests for Multi-Gig are the same as they are for slower Replace TX TCLK with TX TCLK DIV. speeds as specific frequencies are not specified. Add editor's note, by the Test Mode 1 text that we need to define TX TCLK DIV. SuggestedRemedy Accept the text in clause 149.5.1 and its subclauses, e.g. remove yellow highlighting. Page 85 line 27 - change TX TCLK125 to TX TCLK DIV with no yellow highlighting. Response Response Status C ACCEPT IN PRINCIPLE.

Remove Section 149.5.1.

PMA

C/ 150 SC 150.5.2.2 P135 L15 # 25 C/ 150 SC 150.5.3 P135 L51 # 28 Wienckowski, Natalie **General Motors** Wienckowski, Natalie General Motors Comment Type E Comment Status A Editorial Comment Type E Comment Status A Figure 150-13 was not drawn in Frame Duplicate clause heading: Test Modes SuggestedRemedy SuggestedRemedy Redraw Figure 150-13 in Frame. Remove duplicate clause heading 150.5.3 Test Modes Response Response Response Status C Response Status C ACCEPT IN PRINCIPLE. ACCEPT. TX TCLK is In yellow highlight. C/ 149 SC 149.5.3.6 P88 L27 Replace TX TCLK with TX TCLK DIV. Wienckowski. Natalie General Motors Add editor's note, by the Test Mode 1 text that we need to define TX TCLK DIV. Comment Type T Comment Status A Set the symbol transmission rate tolerance to 50 ppm. Page 133 line 27 - change TX TCLK125 to TX TCLK DIV with no yellow highlighting. SuggestedRemedy C/ 149 SC 149.5.3.5 P88 L21 # 26 Remove yellow highlighting on 50 ppm. Wienckowski, Natalie General Motors Response Response Status C Comment Type T Comment Status R **PMA** ACCEPT. Set peak differential output tolerance to 30%. C/ 150 SC 150.5.4.6 P136 L27 # 30 SuggestedRemedy Wienckowski. Natalie General Motors 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 Comment Status A Comment Type T Response Response Status C Set the short-term rate of frequency variation to 0.1 ppm/second. REJECT. SuggestedRemedy Remove yellow highlighting on 50 ppm. C/ 150 SC 150.5.4.5 P136 / 21 # 27 Response Response Status C Wienckowski. Natalie General Motors ACCEPT IN PRINCIPLE. Comment Type T Comment Status R **PMA** Set peak differential output tolerance to 30%. This is actually the symbol transmission rate tolerance. SuggestedRemedy Remove yellow highlighting on 50 ppm in lines 28 and 31.

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: Comment ID

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

Response Status C

Response

REJECT.

Comment ID 30

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EΖ

РМА

PMA

Cl 149 SC 149.5.3.6 Wienckowski, Natalie	P88 General Motors	L 30	# 31	CI 150 SC 150.7.1.1 P138 L33 # 34 Wienckowski, Natalie General Motors
Comment Type T Set the short-term rate	Comment Status A e of frequency variation to 0.1 pp	om/second.	PMA	Comment Type T Comment Status A EZ IL frequency axis should start at 0
SuggestedRemedy Remove yellow highlig	hting on 0.1 ppm/second.			SuggestedRemedy Change Fequency axis to be 0 to 3000.
Response ACCEPT.	Response Status C			Response Response Status C ACCEPT.
Cl 150 SC 150.5.4.6 Wienckowski, Natalie	P136 General Motors	L30	# 32	CI 149 SC 149.7.1.5 P92 L 31 # 35 Wienckowski, Natalie General Motors
SuggestedRemedy	Comment Status A e of frequency variation to 0.1 pp hting on 0.1 ppm/second. Response Status C .E.	om/second.	PMA	Comment Type T Comment Status A Link Segment 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. Response Response Status C ACCEPT.
Cl 149 SC 149.7.1.1 Wienckowski, Natalie	P 90 General Motors	L 34	# 33	C/ 150
Comment Type T IL frequency axis shou SuggestedRemedy Change Fequency axis Response ACCEPT.			EZ	Comment Type T Comment Status A Link Segment 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. Response Response Status C ACCEPT.

C/ 149 SC 149.7.1.5 P92 L32 # 37 C/ 150 SC 150.8.1 P140 L35 # 40 Wienckowski, Natalie Wienckowski, Natalie General Motors General Motors Comment Type T Comment Status A Link Segment Comment Type T Comment Status A MDI Set maximum frequency for link segment propagation delay to 3000 MHz. This spec should not define a specific MDI connector. SuggestedRemedy SugaestedRemedy Remove yellow highlighting on 3000 MHz. Remove yellow highlighting on: Further specification of the mechanical interface is beyond the scope of this standard. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Keep yellow highlighting and make the value TBD. C/ 149 SC 149.8.3 P**92** L 53 Add Editor's note at start of 149.7 that we need to come to align the maximum frequencies Wienckowski, Natalie General Motors for all link segment parameters. Comment Type T Comment Status A Fault Tolerance # 38 C/ 150 SC 150.7.1.5 P140 L28 The automotive fault tolerance is the same for all communication speeds... General Motors Wienckowski. Natalie SuggestedRemedy Comment Type T Comment Status A Link Segment Remove yellow highlighting on: See 96.8.3. Set maximum frequency for link segment propagation delay to 3000 MHz. Response Response Status C SuggestedRemedy ACCEPT. Remove yellow highlighting on 3000 MHz. C/ 150 SC 150 8 3 P140 L49 Response Response Status C Wienckowski. Natalie General Motors ACCEPT IN PRINCIPLE. Comment Type T Comment Status A Fault Tolerance Keep yellow highlighting and make the value TBD. The automotive fault tolerance is the same for all communication speeds... Add Editor's note at start of 150.7 that we need to come to align the maximum frequencies SuggestedRemedy for all link segment parameters. Remove yellow highlighting on: See 96.8.3. C/ 149 Response SC 149.8.1 P92 L39 # 39 Response Status C Wienckowski, Natalie General Motors ACCEPT. Comment Type T Comment Status A MDI This spec should not define a specific MDI connector. SuggestedRemedy

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: Comment ID

Remove yellow highlighting on: Further

Response

ACCEPT.

specification of the mechanical interface is beyond the scope of this standard.

Response Status C

Comment ID 42

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Cl 44 SC 44.3 P32 L8 # 43 C/ 125 SC 1.4 P45 L22 # 46 Wienckowski, Natalie General Motors Wu, Mau-Lin MediaTek Comment Type Comment Status A EΖ Comment Type T Comment Status A EΖ broken link In Table 125-1, the ""Description"" of 5GBASE-T1 is ""TBD modulation"". It's not correct! SuggestedRemedy SugaestedRemedy Change: text 150.1 The team had adopted PAM4 as the modulation of 2.5GBASE-T1 and 5GBASE-T1. Shall modify ""TBD modulation"" into ""PAM4 modulation"". To: Link to 150.10 Response Response Status C Response Response Status C ACCEPT. ACCEPT. C/ 98B SC 98B P145 L16 # 44 C/ 125 SC 125.1.4 P45 L48 Wienckowski, Natalie General Motors WU. Peter Marvell Comment Type T Comment Status A Registers Comment Type T Comment Status A EΖ Change bit assignments in ch and cg to remove interleaved reserved bits and plan for EEE is optinal for 2.5GBASE-T1 future PHYs SuggestedRemedy SuggestedRemedy Marked as "O" Change 2.5GBASE-T1 ability to A3 from A7 Response Response Status C Change 5GBASE-T1 ability to A4 from A8 Change 10GBASE-T1 ability to A5 from A9 ACCEPT IN PRINCIPLE. Response Response Status C Add "O" with underlining in cell (EEE, 2.5GBASE-T1) ACCEPT IN PRINCIPLE. C/ 125 SC 125.1.4 P45 L 53 # 48 Perform Suggested Remedy with editorial license to change bit assignments depending WU. Peter Marvell upon the outcome of cg's comment resolution to avoid conflicts. Comment Type T Comment Status A EΖ C/ 125 SC 1.4 P45 / 15 # 45 EEE is optinal for 5GBASE-T1 Wu. Mau-Lin MediaTek SuggestedRemedy EΖ Comment Type T Comment Status A Marked as "O" In Table 125-1, the ""Description"" of 2.5GBASE-T1 is ""TBD modulation"". It's not correct! Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE The team had adopted PAM4 as the modulation of 2.5GBASE-T1 and 5GBASE-T1. Shall modify ""TBD modulation"" into ""PAM4 modulation"". Add "O" with underlining in cell (EEE, 5GBASE-T1) Response Status C Response

ACCEPT

C/ 149 SC 149.4.2.6 P76 L2 # 49 C/ 149 SC 149.4.2.6.2 P77 L44 # 52 WU, Peter WU, Peter Marvell Marvell Comment Type T Comment Status A Link Sync Comment Type T Comment Status A Link Sync SEND S signaling modification sigdet wait timerexpiration changed to 5.0us±0.15us SuggestedRemedy SuggestedRemedy see attached contrtibution "Wu 3ch 01a 0918.pdf" see attached contrtibution "Wu 3ch 01a 0918.pdf" Response Response Response Status C Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 2. Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 4, subbullet 2. C/ 150 SC 150.4.2.6 P124 L2 # 50 C/ 150 SC 150.4.2.6.2 P125 L40 WU. Peter WU. Peter Marvell Marvell Comment Type T Comment Status A Link Sync Comment Type T Comment Status A Link Sync SEND S signaling modification send s timer expiration changed to "1.25us±0.05us" SuggestedRemedy SuggestedRemedy see attached contribution "Wu 3ch 01a 0918.pdf" see attached contrtibution "Wu 3ch 01a 0918.pdf" Response Status C Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 3. 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 L40 # 51 C/ 150 SC 150.4.2.6.2 P125 L44 # 54 WU, Peter Marvell WU. Peter Marvell Comment Type T Comment Status A Link Sync Comment Type T Comment Status A Link Sync send s timer expiration changed to "1.25us±0.05us" sigdet wait timerexpiration changed to 5.0us±0.15us SuggestedRemedy SuggestedRemedy see attached contrtibution "Wu 3ch 01a 0918.pdf" see attached contrtibution "Wu 3ch_01a_0918.pdf" Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 4, subbullet 1. Make change as defined in Wu 3ch 01a 0918.pdf, Slide 4, bullet 4, subbullet 2.

Comment ID 54

CI 149 SC 149.4.2.6 P75 L27 # 55
WU, Peter Marvell

Comment Type T Comment Status A
SEND S signaling modification - 703.125MHz

SuggestedRemedy

see attached contrtibution "Wu_3ch_01a_0918.pdf"

Response Status C

ACCEPT IN PRINCIPLE.

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.

C/ 150 SC 150.4.2.6 P123 L27 # 56
WU, Peter Marvell

Comment Type T Comment Status A Link Sync

SEND S signaling modification - - 703.125MHz

SuggestedRemedy

see attached contribution "Wu_3ch_01a_0918.pdf"

Response Status C

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.

Cl 149 SC 149.4.2.1 P54 L10 # 57
Feyh, German Broadcom

Comment Type E Comment Status A Late

PAM4 has four levels

SuggestedRemedy

change "three level" to "four level"

Response Response Status C

ACCEPT IN PRINCIPLE.

Change "three level" to "four-level".

Cl 150 SC 150.4.2.2 P102 L10 # 58

Feyh, German Broadcom

Comment Type E Comment Status A Late

PAM4 has four levels

SuggestedRemedy

change "three level" to "four level"

Response Status C

ACCEPT IN PRINCIPLE.

Change "three level" to "four-level".