P802.3ch D3.0	D3.0 Physical L	ayer Specifica	ations and Ma	anageme	nt Parame	ters for	r 2.5 G	b/s, 5 Gb/s, and 10 Gb/s	Auto		
C/FM SC FM	P 22	L 16	# <u>i-3</u>		C/ 0	SC	0	P1	L 28	# <u>i-18</u>	
Wienckowski, Natalie	General Moto	rs Company			Wiencko	wski, Na	talie	General Motors	s Company		
Comment Type E According to the SA I	Comment Status D Editors, the "IMPORTANT NOT	ICE" is not neede	ed and can be de	<i>EZ</i> eleted.	Commen Upda		E ation da	Comment Status D te for 802.3cn			EZ
SuggestedRemedy Delete lines 16 throug	gh 27.				Suggeste Char			() to 2019, also on P10 L49			
Proposed Response PROPOSED ACCEP	Response Status W T.				Proposed PRO	d Respon POSED		Response Status <b>W</b> T.			
CIO SCO	Р	L	# i-1		C/ 0	SC	0	P 79	L <b>44</b>	# i-4	
Berger, Catherine					Wiencko	wski, Na	talie	General Motors	s Company		
<i>Comment Type</i> <b>G</b> This draft meets all e	Comment Status <b>D</b> ditorial requirements.			EZ	Commen Repla	, <b>,</b> , , , ,	E er case 'x	<i>Comment Status</i> <b>D</b> with a multiplication symbol.			EZ
SuggestedRemedy					Suggeste Make			P79 L44 & P79 L 45.			
Proposed Response PROPOSED ACCEP	Response Status W T.				Proposed PRO	d Respon		Response Status <b>W</b> T.			
CIO SCO	P1	L 28	# i-17		C/ 1	SC	1.4	P 23	L <b>45</b>	# <u>i-72</u>	
Wienckowski, Natalie	General Moto	rs Company			Mcclellar	n, Brett		Marvell Semico	onductor, Inc.		
Comment Type E Update publication da	Comment Status D ate for 802.3cg			EZ	Commen "IEE		<b>E</b> 2.3cg-20	Comment Status D	Std 802.3cg-2019	n	EZ
SuggestedRemedy					Suggeste	edRemea	ły				
L30, P35 L3, P53 L12	x) to 2019, also on P11 L1, P23 2, P53 L35, P53 L44, P53 L50, 7, P68 L5, P68 L38, P69 L23, P	P55 L8, P58 L1,	P66 L9, P66 L17		chan Proposed	0		2.3cg-201x" to "IEEE Std 802.3c Response Status W	cg-2019" in multip	le locations	
Proposed Response	Response Status W	. ,			PRO	POSED	ACCEP	Т.			

PROPOSED ACCEPT.

C/ 1 SC 1.4

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ 1	SC 1.4.494b	P 23	L <b>46</b>	# i-54	
Zimmerm	nan, George	ADI, APL Gro	up, Aquantia, BN	/W, Cisco, Comm	Scop
Comment IEEE	51	Comment Status <b>D</b> has been approved as IEEE	Std 802.3cg-20	19	EZ
chan		o 802.3cg-2019 on P23 L45, 8, 66, 67,68, 69, 195 - some⊧			ages
•	l Response POSED REJECT.	Response Status Z			
This	comment was WIT	HDRAWN by the commente	r.		
This . Cl <b>45</b>	comment was WIT	HDRAWN by the commente	L 32	# <u>i-83</u>	
	SC 45.2.1			# [ <u>i-83</u>	
Cl <b>45</b> Jonsson, Comment	SC <b>45.2.1</b> Ragnar t <i>Type</i> <b>ER</b>	P 32	L 32		EZ
Cl <b>45</b> Jonsson, Comment In Ta Suggeste	SC <b>45.2.1</b> Ragnar <i>t Type</i> <b>ER</b> ble 45-3 the Subcl edRemedy	P <b>32</b> Aquantia Comment Status D	L <b>32</b> uld be 45.2.1.200	)	EZ

C/ 45 SC	45.2.1.194	P 3	8	L 19	# i-56	
Zimmerman, Geo	orge	ADI, J	APL Group,	Aquantia, BM	IW, Cisco, CommScor	p
Comment Type	TR	Comment Status	D		Interleav	ve

Table 45-155c, bits 1.2311.12:11 description indicates that values L=2 is Reserved for 2.5GBASE-T1, and L=4 is reserved for 2.5GBASE-T1 and 5GBASE-T1, but the specification does not appear to say what happens if the control register is set to those values - what will L be in those cases - will those values be requested, or will something be substituted? The same issue exists in Table 45-155d and 45.2.1.195.1 Further -the term "reserved" is not correct. what we mean is that those values are not defined.

### SuggestedRemedy

Suggest: (1) changing "Reserved" to "undefined" in the description of bits 1.2311.12:11 in Table 45-155c, and (2) to add a new paragraph to 45.2.1.194.1 stating, "The values of L = 2 and L=4 are not defined for 2.5GBASE-T1 PHYs, and the value of L=4 is not defined for 5GBASE-T1 PHYs. If bits 1.2311.12:11 are set to these values, the PHY will communicate these values to the link partner, but the requested interleaver depth is out of scope of this standard and may not be supported by the link partner." Add a new paragraph to 45.2.1.195.1 stating, "The values of L = 2 and L=4 are not defined for 2.5GBASE-T1 PHYs, and the value of L=4 is not defined for 5GBASE-T1 PHYs. If bits 1.2311.12:11 are set to these values, the PHY will communicate these values to the link partner, but the requested interleaver depth is out of scope of this standard and may not be supported by the link partner." Add a new paragraph to 45.2.1.195.1 stating, "The values of L = 2 and L=4 are not defined for 2.5GBASE-T1 PHYs, and the value of L=4 is not defined for 5GBASE-T1 PHYs. Bits 1.2312.12:11 will indicate whatever value is received from the link partner, but if the undefined values are received, the requested interleaver depth is out of scope of this standard and may not be supported by the local PHY."

# Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Not all instances of "Reserved" should be changed to "undefined" in the identified cell, also the spacing around the "=" is not consistent in the suggestion.

Change "Reserved" to "undefined" for the values 01 and 10 in the description of bits 1.2311.12:11 in Table 45-155c, and (2) to add a new paragraph to 45.2.1.194.1 stating, "The values of L = 2 and L = 4 are not defined for 2.5GBASE-T1 PHYs, and the value of L = 4 is not defined for 5GBASE-T1 PHYs. If bits 1.2311.12:11 are set to these undefined values, the PHY will communicate these values to the link partner, but the requested interleaver depth is out of scope of this standard and may not be supported by the link partner." Add a new paragraph to 45.2.1.195.1 stating, "The values of L = 2 and L = 4 are not defined for 2.5GBASE-T1 PHYs. Bits 1.2312.12:11 will indicate whatever value is received from the link partner, but if the undefined values are received, the requested interleaver depth is out of scope of this standard and may not be supported by the link partner, but if the undefined values are received, the requested interleaver depth is out of scope of this standard and may not be supported by the link partner, but if the undefined values are received, the requested interleaver depth is out of scope of this standard and may not be supported by the local PHY."

C/ 45 SC 45.2.1.194 Page 2 of 20 1/6/2020 2:55:36 PM

# D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ <b>45</b>	SC	45.2.1.194	l.1 P:	38	L 51	# i-55
Zimmerma	an, Geo	rge	ADI,	APL G	roup, Aquantia, BM	W, Cisco, CommScop
Comment	Туре	Е	Comment Status	D		EZ
Scram		he correct	scribe Reed Solomore reference is 149.3.			s the PCS xists in 45.2.1.195.1
Suggested	dRemed	ly				
			from 149.3.2.2.18 2.1.194.1 and 45.2			riate link if
Proposed	Respor	ise	Response Status	w		
PROF	POSED	ACCEPT.				
CI 45	SC	45.2.1.195	5.4 P	10	L 36	# i-46
Rannow, I	RK		IEEE	E/SELF		
Comment	Туре	GR	Comment Status	D		Editoria
using	the tern	n "both" ap	pears verbose in n	early 20	instances.	
Suggested	dRemed	ly				
Bomo	ve the v	• work "both'	,			
Remo		ise	Response Status	147		

does not contain sufficient detail so that the CRG can understand the specific changes that satisfy the commenter. The commenter does not specify which "nearly 20" instances should be deleted. This is used in the front matter 3 times and 21 times in the "new text". A search of 802.3-2018 shows that the word "both" is found 938 times. This is a word commonly used in this specification to indicate that there are two conditions or two actions.

Regarding the specific instance cited in the comment at page 40 line 36, the CRG disagrees with the commenter. The use of 'both' in this instance is not extraneous and clarifies that MultiGBASE-T1 OAM capability requires support by both the local PHY and its link partner.

Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C         Comment Type       TR       Comment Status       D         "When the transmitter is in test mode 2, bits 1.2313.1:0 control the pattern of the ji signal." - what these bits do when the transmitter is not in test mode 2 is not speci         SuggestedRemedy         Suggest to add a new second sentence immediately following the quoted one, to r follows: "When the transmitter is not in test mode 2, the setting of bits 1.2313.1:0 t effect."         Proposed Response       Response Status       W         PROPOSED ACCEPT IN PRINCIPLE.       fix subject/verb agreeement in proposal: Add the sentence "When the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect."         Cl       45       SC 45.2.3.75       P 48       L 1       # i-72         Mcclellan, Brett       Marvell Semiconductor, Inc.         Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"       SuggestedRemedy         suggested Response       Response Status       W         PROPOSED ACCEPT.       Cl       45       SC 45.2.9.3       P 53       L 44       # i-52         Cl       45       SC 45.2.9.3       P 53       L 44       # i-52         Cl       45       SC 45.2.9.3       P 53       L	amme
"When the transmitter is in test mode 2, bits 1.2313.1:0 control the pattern of the ji signal." - what these bits do when the transmitter is not in test mode 2 is not speci         Suggest dRemedy         Suggest to add a new second sentence immediately following the quoted one, to r follows: "When the transmitter is not in test mode 2, the setting of bits 1.2313.1:0 Feffect."         Proposed Response       Response Status       W         PROPOSED ACCEPT IN PRINCIPLE.       fix subject/verb agreeement in proposal: Add the sentence "When the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect."         Cl 45       SC 45.2.3.75       P 48       L 1       # i-7         Mcclellan, Brett       Marvell Semiconductor, Inc.         Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"       SuggestedRemedy         move table as indicated       Proposed Response       Response Status       W         PROPOSED ACCEPT.       Cl 45       SC 45.2.9.3       P 53       L 44       # i-52         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C       Comment Status       D       E         Ling instruction has been separated from the table that it is editing.       D       E       E	5111130
signal." - what these bits do when the transmitter is not in test mode 2 is not specif SuggestedRemedy Suggest to add a new second sentence immediately following the quoted one, to r follows: "When the transmitter is not in test mode 2, the setting of bits 1.2313.1:0 h effect." Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. fix subject/verb agreeement in proposal: Add the sentence "When the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect." CI 45 SC 45.2.3.75 P 48 L 1 # -77 Mcclellan, Brett Marvell Semiconductor, Inc. Comment Type E Comment Status D Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:" SuggestedRemedy move table as indicated Proposed Response Response Status W PROPOSED ACCEPT. CI 45 SC 45.2.9.3 P 53 L 44 # -57 Zimmerman, George ADI, APL Group, Aquantia, BMW, Cisco, C Comment Type E Comment Status D Editing instruction has been separated from the table that it is editing.	
Suggest to add a new second sentence immediately following the quoted one, to r         Suggest to add a new second sentence immediately following the quoted one, to r         follows: "When the transmitter is not in test mode 2, the setting of bits 1.2313.1:0 F         effect."         Proposed Response       Response Status       W         PROPOSED ACCEPT IN PRINCIPLE.         fix subject/verb agreeement in proposal: Add the sentence "When the transmitter         test mode 2, the setting of bits 1.2313.1:0 has no effect."         Cl       45       SC 45.2.3.75       P 48       L 1       # [-7]         Mcclellan, Brett       Marvell Semiconductor, Inc.         Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"       SuggestedRemedy         move table as indicated       Proposed Response       Response Status       W         PROPOSED ACCEPT.       Cl       45       SC 45.2.9.3       P 53       L 44       [-58]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C       Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.       Editing.       D       Editing.	
follows: "When the transmitter is not in test mode 2, the setting of bits 1.2313.1:01 effect."         Proposed Response       Response Status       W         PROPOSED ACCEPT IN PRINCIPLE.       fix subject/verb agreeement in proposal: Add the sentence "When the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect."       Image: Classical Content of the sentence is the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect."         Cl       45       SC 45.2.3.75       P 48       L 1       Image: Figure 2         Mcclellan, Brett       Marvell Semiconductor, Inc.       Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"       SuggestedRemedy       move table as indicated         Proposed Response       Response Status       W         PROPOSED ACCEPT.       Cl       45       SC 45.2.9.3       P 53       L 44       Image: Figure 2         Cl       45       SC 45.2.9.3       P 53       L 44       Image: Figure 3         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C       C         Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.       Editing.	
PROPOSED ACCEPT IN PRINCIPLE.         fix subject/verb agreeement in proposal: Add the sentence "When the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect."         Cl 45       SC 45.2.3.75       P 48       L 1       # [-7]         Mcclellan, Brett       Marvell Semiconductor, Inc.         Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"       SuggestedRemedy         SuggestedRemedy       move table as indicated         Proposed Response       Response Status       W         PROPOSED ACCEPT.       Cl 45       SC 45.2.9.3       P 53       L 44       # [-55]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C       C         Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.	
fix subject/verb agreeement in proposal: Add the sentence "When the transmitter test mode 2, the setting of bits 1.2313.1:0 has no effect."         Cl       45       SC 45.2.3.75       P 48       L 1       # [-7]         Mcclellan, Brett       Marvell Semiconductor, Inc.         Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"       SuggestedRemedy         SuggestedRemedy       move table as indicated         Proposed Response       Response Status       W         PROPOSED ACCEPT.       Cl       45       SC 45.2.9.3       P 53       L 44       # [-55]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C       Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.       D       Editing.       Editing.	
test mode 2, the setting of bits 1.2313.1:0 has no effect."         CI 45 SC 45.2.3.75 P 48 L 1 # [-73]         Mcclellan, Brett       Marvell Semiconductor, Inc.         Comment Type E Comment Status D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"         SuggestedRemedy         move table as indicated         Proposed Response       Response Status W         PROPOSED ACCEPT.         Cl 45       SC 45.2.9.3       P 53       L 44       # [-55]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C         Comment Type E       Comment Status D       Editing instruction has been separated from the table that it is editing.	
Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"         SuggestedRemedy         move table as indicated         Proposed Response       Response Status       W         PROPOSED ACCEPT.         Cl 45       SC 45.2.9.3       P 53       L 44       # [-56]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C         Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.	}
Comment Type       E       Comment Status       D         Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"         SuggestedRemedy         move table as indicated         Proposed Response       Response Status       W         PROPOSED ACCEPT.         Cl 45       SC 45.2.9.3       P 53       L 44       # [-56]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C         Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.	
Table 45-244 should appear on page 47 following this text: "Change Table 45-244 follows:"         SuggestedRemedy         move table as indicated         Proposed Response       Response Status         W       PROPOSED ACCEPT.         Cl       45       SC 45.2.9.3       P 53       L 44       # [-58]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C         Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.	
move table as indicated Proposed Response Response Status W PROPOSED ACCEPT. CI 45 SC 45.2.9.3 P 53 L 44 # [-52] Zimmerman, George ADI, APL Group, Aquantia, BMW, Cisco, C Comment Type E Comment Status D Editing instruction has been separated from the table that it is editing.	as
Proposed Response       Response Status       W         PROPOSED ACCEPT.	
PROPOSED ACCEPT.         Cl 45       SC 45.2.9.3       P 53       L 44       # [-58]         Zimmerman, George       ADI, APL Group, Aquantia, BMW, Cisco, C         Comment Type       E       Comment Status       D         Editing instruction has been separated from the table that it is editing.	
Zimmerman, George     ADI, APL Group, Aquantia, BMW, Cisco, C       Comment Type     E       Comment Status     D       Editing instruction has been separated from the table that it is editing.	
Comment Type E Comment Status D Editing instruction has been separated from the table that it is editing.	
Editing instruction has been separated from the table that it is editing.	
Suggested Demodu	
SuggestedRemedy	
Make editing instruction stay with Table 45-341	
Proposed Response Response Status W	

PROPOSED ACCEPT.

C/ **45** SC **45.2.9.3** 

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

CI <b>78</b>	SC 78.5	P 61	L <b>44</b>	# i-84	C/ 104	SC 10	04.9.4.3	P 70	L 35	# i-86
Jonsson,	Ragnar	Aquantia			Jonsson, R	agnar		Aquantia		
Comment	21	Comment Status D		EEE	Comment T	уре	TR	Comment Status D		PoDL
should impler	d be changed to 1	BASE-T1 Case-4 row and T_ 28. See comment 22 on the graba_3ch_01a_0719.pdf in	initial working gr	oup ballot said to	Type F.	. The fea	ature cov	use 97" should be: "Clause 9 /ers both Type B and Type F addition to Clause 97.		
					SuggestedF	Remedy				
Suggested For the	•	Case-4 row and T {phy shrin	ık tx} column ch	ange the value "120"	For the 149"	PD20 ro	ow and \	/alue/Comment colum chang	je "Caluse 97" t	o "Clause 97 or Clause
to "12			_ /	0	Proposed R	Response	e	Response Status W		
	Response POSED ACCEPT.	Response Status W			1			IN PRINCIPLE.		
PROP	OSED ACCEPT.				Accomo	odated b	ov respoi	nse to comment #71 with the	e relevant portio	n copied here.
C/ 104	SC 104.5.6.4	P 68	L <b>48</b>	# i-59						
Zimmerma	an, George	ADI, APL Gro	up, Aquantia, B	AW, Cisco, CommScop Change PD20 row to read: "PD20a   Type F PD ripple and transients   104.5 accordance with specifications shown in Table 104-7 for all operating voltages in						
Comment	Type E	Comment Status D		EZ				a dc bias coupling network		
Claus	e 97 is in the draf	t, but is shown as an external	l cross reference	e. It should be an	Clause 149, and over the range of PPD.   *PDTF:M   Yes []"					
active	cross reference				C/ 104	SC 10	04.9.4.3	P 70	L 35	# i-85
Suggested	dRemedy				Jonsson, R	agnar		Aguantia		
Chang	ge external "Claus	e 97" reference to an active	cross reference		Comment T	0	TR	Comment Status D		PoDI
•	Response POSED ACCEPT.	Response Status W			Status	filed for I	PD20 sh	nould be: *PDTB:M *PDTF:M Bbu spec has it correct)	I. The item (PD2	
					SuggestedF	Remedy				
							ow and S "*PDTF:	Status column, change "*PSE :M".	TB:M" to "*PD1	FB:M" and change
					Proposed R	Response	е	Response Status W		
					PROPO		CCEPT	, IN PRINCIPLE.		

Accomodated by response to comment #71 with the relevant portion copied here.

Change PD20 row to read: "PD20a | Type F PD ripple and transients | 104.5.6.4 | In accordance with specifications shown in Table 104-7 for all operating voltages in the range of VPD sourced through a dc bias coupling network with MDI return loss as specified by Clause 149, and over the range of PPD. | \*PDTF:M | Yes []"

C/ 104 SC 104.9.4.3

C/ 104	SC 104.9.4.3	P 70	L 35	# i-71	C/ 14
Zimmerman,	George	ADI, APL Gr	oup, Aquantia, BM	IW, Cisco, CommSc	op Zimn
Comment Typ	e TR	Comment Status D		Pa	DL Com

Type B and Type F have separate 'shalls' and Type F should not be added to PICS PD20 and PD22. Additionally this creates confusion as to which return loss needs to be used for which type... Also, the option code should be PDTF in both cases, not PSETF on the first row...

## SuggestedRemedy

Change editing instruction from "Change item PD20 and item PD22 in the table in 104.9.4.3 as follows (unchanged rows not shown):" to "Insert new PICS item PD20a after item PD20, and new PICS item PD22a after item PD22 in the table in 104.9.4.3 as follows (unchanged rows not shown):" - change PICS items in rows to read: "PD20a | Type F PD ripple and transients | 104.5.6.4 | In accordance with specifications shown in Table 104-7 for all operating voltages in the range of VPD sourced through a dc bias coupling network with MDI return loss as specified by Clause 149, and over the range of PPD. | \*PDTF:M | Yes []" and "PD22a | Type F PD measured ripple voltage post-processing | 104.5.6.4 | With transfer function H2(f) specified in Equation (104-3) where f2 = 10 MHz +/- 1% | \*PDTF:M | Yes []"

## Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

An additional change is needed.

Before 104.9.4.3 add "104.9.4 PICS proforma tables for Clause 104, Power over Data Lines (PoDL) of Single Balanced Twisted-Pair Ethernet" title for the subclause above this Clause.

Also, make the change requestesd by the commenter: Change editing instruction from "Change item PD20 and item PD22 in the table in 104.9.4.3 as follows (unchanged rows not shown):" to "Insert new PICS item PD20a after item PD20, and new PICS item PD22a after item PD22 in the table in 104.9.4.3 as follows (unchanged rows not shown):" - change PICS items in rows to read: "PD20a | Type F PD ripple and transients | 104.5.6.4 | In accordance with specifications shown in Table 104-7 for all operating voltages in the range of VPD sourced through a dc bias coupling network with MDI return loss as specified by Clause 149, and over the range of PPD. | \*PDTF:M | Yes []" and "PD22a | Type F PD measured ripple voltage post-processing | 104.5.6.4 | With transfer function H2(f) specified in Equation (104-3) where f2 = 10 MHz +/- 1% | \*PDTF:M | Yes []"

C/ 149	SC 149.1	P77	L 17	# i-94
Zimmerma	n, George	ADI, APL Gr	oup, Aquantia, BN	MW, Cisco, CommScop
Comment T	ype <b>T</b>	Comment Status D		late

The overview and the draft indicate that clause 149 operates over a single balanced pair of conductors. As in other standards, this may include either cabling or a backplane link segment. However, in several portions of the link segment specification, the requirements are written so that ONLY a separate cabling link segment can be used. this is in conflict with the overview and purpose. A slight adjustment to the wording, and a conditional on the PICS will make it clear that requirements such as coupling attenuation and shielding attenuation are only intended to apply to cabling link segments.

## SuggestedRemedy

page 167 line 10 : At 149.7, change the last sentence of the first paragraph from "The term link segment used in this clause refers to a single shielded balanced pair of conductors operating in full duplex." to "The term link segment used in this clause refers to a single balanced pair of conductors (cable or backplane) operating in full duplex. "Page 171 line 31: at 149.7.1.4. change the first sentence from "when tested using the IEC 62153-4-7 triaxial tube in tube method as specified in Annex 149A, the MultiGBASE-T1 link segment shall meet the coupling attenuation values " to "when tested using the IEC 62153-4-7 triaxial tube in tube method as specified in Annex 149A, where shielded balanced pair cabling is used, the MultiGBASE-T1 link segment shall meet the coupling attenuation values" : Page 172 line 27: Change the first sentence of 149.7.1.5 for "The minimum screening attenuation..." to read "Where shielded balanced pair cabling is used, the minimum screening attenuation..."; Page 174 line 36: Change the first sentence of 149.8.1 from "The mechanical interface to the shielded balanced cabling " to "Where shielded balanced pair cabling is used, the mechanical interface to the shielded balanced cabling": Page 179 line 10, 149.11.3, insert row for \*INS after row for \*EEE, reading "\*INS | Installation / cabling | 149.7 | Items marked with INS include installation practices and cabling specifications applicable when the link segment is balanced pair cabling, and not applicable to backplane link segments | O | Yes []<cr> No []" ; on page 193 line 12. Change status of row for LSC5 to "M:INS"

# Proposed Response Response Status W

PROPOSED ACCEPT.

# D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ 149	SC 149.1.3	P 79	L 18	# i-61
Zimmerma	an, George	ADI, APL Gro	up, Aquantia, BN	/W, Cisco, CommScop
T1, or freque	MultiGBASE-T1 O 10GBASE-T1 PH ency domain or do	Comment Status <b>D</b> AM information is exchange Ys out-of-band." - the conce es not consume the bit rate me improved wording here r	pt of whether this for the ethernet p	s is out-of-band in the
Suggested	Remedy			
	est change "out-of- Ethernet data strea	band." to "out-of-band, that am."	is, outside of the	specified 2.5, 5, or 10
•	Response	Response Status W		
PROP	OSED ACCEPT.			
C/ 149	SC 149.1.3.1	P 79	L 41	# i-51
Lo, Willian	n			
Comment	Туре Т	Comment Status D		Nomenclature
		in several places but it loos etation of the bit ordering.	ely defined and ı	never formally defined.
Suggested	Remedy			
needs the ca propos as: <c< td=""><td>to be subscripted rriage return will s sed Change&gt; In lir r&gt; tx_group50x65 _coded*i*&lt;64:0&gt; i</td><td>show subscripts in the spre with **. For example A*n* i how up in the file so a <cr> he 47 insert the following: <c B&lt;65 * i + j&gt; = tx_coded*i*<j s the ith 64B/65B block whe</j </c </cr></td><td>s An with n subs means carriage r&gt; tx_group50x6 &gt; <cr> where i =</cr></td><td>cripted. I'm not sure if return.) <begin 5B&lt;3249:0&gt; is defined 0 to 49 and j = 0 to 64</begin </td></c<>	to be subscripted rriage return will s sed Change> In lir r> tx_group50x65 _coded*i*<64:0> i	show subscripts in the spre with **. For example A*n* i how up in the file so a <cr> he 47 insert the following: <c B&lt;65 * i + j&gt; = tx_coded*i*<j s the ith 64B/65B block whe</j </c </cr>	s An with n subs means carriage r> tx_group50x6 > <cr> where i =</cr>	cripted. I'm not sure if return.) <begin 5B&lt;3249:0&gt; is defined 0 to 49 and j = 0 to 64</begin 
Proposed	Response	Response Status 🛛 🛛 🛛 🛛 🛛 🖉		
PROP	OSED ACCEPT I	N PRINCIPLE.		
		hat to do is hard to understa tiplication is confusing.	and and the usag	e of "*" to indicate
Impler	ment the changes	show in wienckowski_3ch_[	03p0_comment5	1.pdf.

	SC 149.1.3.1	P 79	L <b>42</b>	# i-87
Jonsson, F	Ragnar	Aquantia	a	
Comment	Туре Е	Comment Status D		E
Param	eter L is introduc	ed, without reference to	the definition of L	
Suggested	Remedy			
Chang	e "L" to "A numb	er, L,"		
Proposed	Response	Response Status 🛛 🛚	1	
PROP	OSED ACCEPT.			
C/ 149	SC 149.1.3.1	P 79	L <b>44</b>	# i-62
Zimmerma	an, George	ADI, AP	L Group, Aquantia	, BMW, Cisco, CommScop
Comment	Туре Е	Comment Status D		EZ
	•	es around "The duratior	of the superframe	e is L x 320 / S ns."
•	Response OSED ACCEPT.	Response Status 🛛 🛛	1	
PROP	•		L 17	# <u>i-63</u>
PROP C/ 149	OSED ACCEPT.	P 80	L 17	# <u>i-63</u> , BMW, Cisco, CommScop
PROP	OSED ACCEPT. SC 149.1.3.2	P 80	L 17	
Cl 149 Zimmerma Comment "The n specifi there a	OSED ACCEPT. SC 149.1.3.2 an, George Type T ninimum link segued in 149.5." - the are no EMC requiscribing the PMA,	P 80 ADI, AP <i>Comment Status</i> D ment characteristics, EN e link segment characte	L <b>17</b> L Group, Aquantia //C requirements, ristics are specifie	, BMW, Cisco, CommScop

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 149 SC 149.1.3.2

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto



Comment Type Comment Status D E

Inconsistency in document. Sometimes "true" and sometimes "TRUE".

### SuggestedRemedy

Change "true" to "TRUE", also on P112 L33, P112 L35, P112 L37, P112 L44, P112 L46, P112 L48, P114 L18, P114 L24, P114 L30, P114 L37, P114 L52, P115 L33, P115 L37, P115 L43. P115 L48. P115 L52. P116 L2. P116 L7. P116 L10. P116 L25. P116 L30. P116 L35. P116 L41. P119 L24. P119 L25. P119 L39. P119 L45. P123 L9. P123 L27. P123 L36. P138 L20, P138 L41, P138 L47, P139 L48, P139 L54, P144 L12, P144 L43, P156 L29, P157 L13, P157 L50, P186 L40, P204 L49, P205 L2, P205 L8, P205 L14

#### Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Should be "TRUE" only when this represents a variable value.

Change "true" to "TRUE" on P112 L33, P112 L35, P112 L37, P112 L44, P112 L46, P112 L48, P114 L18, P114 L24, P114 L27, P114 L30, P114 L37, P114 L52, P115 L33, P115 L37. P115 L43. P115 L48. P115 L52. P116 L2. P116 L7. P116 L10. P116 L25. P116 L30. P116 L35, P116 L41, P119 L24 (2x), P119 L25, P119 L39, P119 L45, P121 L39, P123 L9, P125 L 8, P125 L16, P126 L17, P126 L27, P126 L36, P138 L20, P138 L41, P138 L47, P139 L48, P139 L54, P144 L43, P156 L29, P157 L13, P157 L50, P158 L49, P186 L40, P204 L49, P205 L2, P205 L8, P205 L14, P206 L18.

C/ 149 SC	149.3.2.2.1	1 P99	9	L 39	# <u>i-66</u>	
Zimmerman, Geo	orge	ADI, A	APL Grou	p, Aquantia, BN	1W, Cisco, Comm	nScop
Comment Type ordered set ir		Comment Status use header should	_	ized		EZ
SuggestedRemed Change "149	•	dered set" to "149.3	3.2.2.11 O	rdered set"		
Proposed Respor		Response Status	w			

Comment Status D Comment Type т

The following text is confusing as it is not clear what constitute the leftmost/LSB element: "For both x and c (see 149.3.2.2.17) the encoder shall follow the notation described in 149.3.2.2.3 where the LSB (leftmost element of the vectors x and c) is the first bit into the RS-FEC encoder and the first transmitted bit." x infers a position and there is no concept of MSB or LSB. c is a vector with MSB and LSB, but which bit of c is considered the MSB/LSB? For example page 102 line 6 m is the bit vector <m9, m8, m7, m6, ..., m0> is m0 the LSB, or the leftmost element m9 the LSB? This text is not really necessary since 149.3.2.2.17 describes things in adequate detail.

### SugaestedRemedv

My preference is to delete "For both x and c (see 149.3.2.2.17) the encoder shall follow the notation described in 149.3.2.2.3 where the LSB (leftmost element of the vectors x and c) is the first bit into the RS-FEC encoder and the first transmitted bit." since 149.3.2.2.17 adequately describes this. But if we want to leave the text alone I'm ok.

#### Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Delete "For both x and c (see 149.3.2.2.17) the encoder shall follow the notation described in 149.3.2.2.3 where the LSB (leftmost element of the vectors x and c) is the first bit into the RS-FEC encoder and the first transmitted bit."

P204 L49, P205 L2, P205 L8, P205 L14, P206 L18.	C/ 149 SC 149.3.2.2.17 P101 L 47 # i-22
Also, change "True" to "TRUE" on P136 L19.	Wienckowski, Natalie General Motors Company
C/         149         SC         149.3.2.2.11         P 99         L 39         # [i-66           Zimmerman, George         ADI, APL Group, Aquantia, BMW, Cisco, CommScop	Comment Type         E         Comment Status         D         EZ           number on top of "pi" symbol is cut off         EZ         EZ
Comment Type       E       Comment Status       D       EZ         ordered set in the subclause header should be capitalized       EZ       EZ	SuggestedRemedy Resize equation to ensure complete equation is visible.
SuggestedRemedy Change "149.3.2.2.11 ordered set" to "149.3.2.2.11 Ordered set"	Proposed Response Response Status W PROPOSED ACCEPT.
Proposed Response Response Status W PROPOSED ACCEPT.	C/     149     SC     149.3.2.2.17     P 101     L 47     # [i-23]       Wienckowski, Natalie     General Motors Company
	Wienckowski, Natalie     General Motors Company       Comment Type     E     Comment Status     D     EZ       superscript of 4 in x^4 is higher than the other supercripts
	SuggestedRemedy Adjust height of "4" in "x^4" to match height of other x superscripts.
	Proposed Response Response Status W PROPOSED ACCEPT.
TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/g	

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SC 149.3.2.2.17 1/6/2020 2:55:36 PM SORT ORDER: Clause, Subclause, page, line

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

102 line 6 m*i,0* can b adds to the confusion t to the leftmost element. ine 7 after the end of "f to make things complet replace "message" with <b>W</b> <b>15</b> <i>L</i> <b>16</b> PL Group, Aquantia, B <b>D</b> r 10GBASE-T1 EEE ca of operation when link irection, link utilization	"finite field." add: "m*i,0* ete. Copy first sentence with "parity" and "m", with # [i-69 BMW, Cisco, CommScop EZ apability allows cutilization is low." isn't is not. therefore, the	Zimmerman, Geo Comment Type "PHYs with th successfully of requirements 46.3.1.5. It ap for at least on SuggestedRemed Change cross Proposed Respon PROPOSED C/ 149 SC Wienckowski, Nat Comment Type Consider rewo	T Cor e EEE capability completed trainin of 46.3.1.5." The pears this is mea- e second before ly s reference to 46 ise Resp ACCEPT. 149.3.6 talie E Cor ording to remove ly s used to ensure	mment Status D y support transition to ig and pcs_data_moderer are no timing requ ant to reference 46.1. transitioning to LPI. .3.1.5 to 46.1.7 ponse Status W P110	the LPI mode whe e is TRUE and su uirements for the I 7 which requires t <i>L</i> <b>30</b> ors Company unnecessary expla	ibject to the timing PHY transitioning in the link be operational # <u>i-20</u> <i>EZ</i> anatory language.
o       can be made more e         102 line 6 m*i,0* can b         adds to the confusion t         adds to the confusion t         g the leftmost element.         ine 7 after the end of "f         to make things complet         to make things complet         replace "message" wit         W         5       L 16         .PL Group, Aquantia, B         D         r 10GBASE-T1 EEE ca         of operation when link         irection, link utilization	explicit. Page 102 line be inferred as bit 0 but that states the leftmost "finite field." add: "m*i,0* ete. Copy first sentence ith "parity" and "m", with # [i-69 BMW, Cisco, CommScop EZ apability allows cutilization is low." isn't is not. therefore, the	Comment Type "PHYs with th successfully of requirements 46.3.1.5. It ap for at least on SuggestedRemed Change cross Proposed Respon PROPOSED Cl 149 SC Wienckowski, Nat Comment Type Consider rewo SuggestedRemed Delete: that is	T Cor e EEE capability completed trainin of 46.3.1.5." The pears this is mea- e second before ly s reference to 46 ise Resp ACCEPT. 149.3.6 talie E Cor ording to remove ly s used to ensure	mment Status D y support transition to g and pcs_data_mode ere are no timing requ ant to reference 46.1. transitioning to LPI. .3.1.5 to 46.1.7 ponse Status W P110 General Mote mment Status D e "ensure". Remove u	the LPI mode whe e is TRUE and su uirements for the I 7 which requires t <i>L</i> <b>30</b> ors Company unnecessary expla	EZ en the PHY has ibject to the timing PHY transitioning in the link be operational # <u>i-20</u> EZ anatory language.
o       can be made more e         102 line 6 m*i,0* can b         adds to the confusion t         adds to the confusion t         g the leftmost element.         ine 7 after the end of "f         to make things complet         to make things complet         replace "message" wit         W         5       L 16         .PL Group, Aquantia, B         D         r 10GBASE-T1 EEE ca         of operation when link         irection, link utilization	explicit. Page 102 line be inferred as bit 0 but that states the leftmost "finite field." add: "m*i,0* ete. Copy first sentence ith "parity" and "m", with # [i-69 BMW, Cisco, CommScop EZ apability allows cutilization is low." isn't is not. therefore, the	"PHYs with the successfully of requirements 46.3.1.5. It ap for at least on SuggestedRemed Change cross Proposed Respon PROPOSED Cl 149 SC Wienckowski, Nai Comment Type Consider rewe SuggestedRemed Delete: that is	e EEE capability completed trainin of 46.3.1.5." The pears this is mea- e second before ly s reference to 46 ose Resp ACCEPT. 149.3.6 talie E Cor ording to remove ly s used to ensure	v support transition to ig and pcs_data_mode ere are no timing requ ant to reference 46.1. transitioning to LPI. .3.1.5 to 46.1.7 ponse Status W P 110 General Mote mment Status D e "ensure". Remove u	e is TRUE and su uirements for the I 7 which requires t <i>L</i> <b>30</b> ors Company unnecessary expla	en the PHY has ibject to the timing PHY transitioning in the link be operational # [ <u>i-20</u> <i>EZ</i> anatory language.
102 line 6 m*i,0* can b adds to the confusion t to the leftmost element. ine 7 after the end of "f to make things complet replace "message" with <b>W</b> <b>15</b> <i>L</i> <b>16</b> PL Group, Aquantia, B <b>D</b> r 10GBASE-T1 EEE ca of operation when link irection, link utilization	be inferred as bit 0 but that states the leftmost "finite field." add: "m*i,0* ete. Copy first sentence ith "parity" and "m", with # [i-69 BMW, Cisco, CommScop EZ apability allows cutilization is low." isn't is not. therefore, the	successfully or requirements 46.3.1.5. It ap for at least on <i>SuggestedRemed</i> Change cross <i>Proposed Respon</i> PROPOSED C/ 149 SC Wienckowski, Nai <i>Comment Type</i> Consider rewo <i>SuggestedRemed</i> Delete: that is	completed trainin of 46.3.1.5." The pears this is mea- e second before ly s reference to 46 ose Resp ACCEPT. 149.3.6 talle E Cor ording to remove ly s used to ensure	and pcs_data_mode ere are no timing requ ant to reference 46.1. transitioning to LPI. .3.1.5 to 46.1.7 ponse Status W P 110 General Mote mment Status D e "ensure". Remove u	e is TRUE and su uirements for the I 7 which requires t <i>L</i> <b>30</b> ors Company unnecessary expla	ibject to the timing PHY transitioning in the link be operational # <u>i-20</u> <i>EZ</i> anatory language.
to make things complet treplace "message" with <b>W</b> <b>5</b> <i>L</i> <b>16</b> PL Group, Aquantia, B <b>D</b> r 10GBASE-T1 EEE ca of operation when link irection, link utilization	# [-69 BMW, Cisco, CommScop EZ apability allows cutilization is low." isn't is not. therefore, the	Change cross Proposed Respon PROPOSED Cl 149 SC Wienckowski, Na Comment Type Consider rew SuggestedRemed Delete: that is	s reference to 46 se Res ACCEPT. 149.3.6 talie E Cor ording to remove ly s used to ensure	P 110 P 110 General Moto mment Status D e "ensure". Remove u	ors Company	EZ anatory language.
to make things complet treplace "message" with <b>W</b> <b>5</b> <i>L</i> <b>16</b> PL Group, Aquantia, B <b>D</b> r 10GBASE-T1 EEE ca of operation when link irection, link utilization	# [-69 BMW, Cisco, CommScop EZ apability allows cutilization is low." isn't is not. therefore, the	Proposed Respon PROPOSED Cl 149 SC Wienckowski, Na Comment Type Consider rew SuggestedRemed Delete: that is	ACCEPT. 149.3.6 talie E Cor ording to remove ly used to ensure	P 110 P 110 General Moto mment Status D e "ensure". Remove u	ors Company	EZ anatory language.
W 5 <i>L</i> 16 PL Group, Aquantia, B D 10GBASE-T1 EEE ca of operation when link irection, link utilization	# [i-69 BMW, Cisco, CommScop <i>EZ</i> apability allows cutilization is low." isn't n is not. therefore, the	PROPOSED Cl 149 SC Wienckowski, Nat Comment Type Consider rew SuggestedRemed Delete: that is	ACCEPT. <b>149.3.6</b> talie <b>E</b> Cor ording to remove ly s used to ensure	P 110 General Moto mment Status D e "ensure". Remove u	ors Company	EZ anatory language.
5 <i>L</i> 16 PL Group, Aquantia, B D 10GBASE-T1 EEE ca of operation when link irection, link utilization	BMW, Cisco, CommScop EZ apability allows ( utilization is low." isn't n is not. therefore, the	Cl 149 SC Wienckowski, Na Comment Type Consider rew SuggestedRemed Delete: that is	149.3.6 talie E Cor ording to remove	General Moto mment Status D e "ensure". Remove u	ors Company	EZ anatory language.
PL Group, Aquantia, B <b>D</b> <sup>-</sup> 10GBASE-T1 EEE ca of operation when link irection, link utilization	BMW, Cisco, CommScop EZ apability allows ( utilization is low." isn't n is not. therefore, the	Wienckowski, Na Comment Type Consider rew SuggestedRemed Delete: that is	talie E Cor ording to remove ly s used to ensure	General Moto mment Status D e "ensure". Remove u	ors Company	EZ anatory language.
PL Group, Aquantia, B <b>D</b> <sup>-</sup> 10GBASE-T1 EEE ca of operation when link irection, link utilization	BMW, Cisco, CommScop EZ apability allows ( utilization is low." isn't n is not. therefore, the	Comment Type Consider rew SuggestedRemed Delete: that is	E Cor ording to remove ly used to ensure	mment Status <b>D</b> e "ensure". Remove u	innecessary expla	anatory language.
PL Group, Aquantia, B <b>D</b> <sup>-</sup> 10GBASE-T1 EEE ca of operation when link irection, link utilization	BMW, Cisco, CommScop EZ apability allows ( utilization is low." isn't n is not. therefore, the	Consider rew SuggestedRemed Delete: that is	ording to remove <i>ly</i> s used to ensure	e "ensure". Remove u		anatory language.
D 10GBASE-T1 EEE ca of operation when link irection, link utilization	EZ apability allows cutilization is low." isn't n is not. therefore, the	SuggestedRemed Delete: that is	ly used to ensure			
<sup>–</sup> 10GBASE-T1 EEE ca of operation when link irection, link utilization	apability allows < utilization is low." isn't n is not. therefore, the	SuggestedRemed Delete: that is	used to ensure	refresh signals and al	lert start times are	appropriately offset
y because the expecte	ed applications are often	Proposed Respon PROPOSED	ise Resp	ponse Status W		
link utilization in low in	in aither direction of		440.0.0.4	DAAD	1.0	# 0
					-	# <u>i-6</u>
w		,			ors Company	EZ
			_		ditorial Coordinati	
				avings, maintain link i	ntegrity, and ensu	ure interoperability,
			,	ponse Status W		
		n link utilization is low in either direction of	W Wienckowski, Na Comment Type Consider repl SuggestedRemed Delete: To m Proposed Respon	W Wienckowski, Natalie Comment Type E Con Consider replacing "ensure" p SuggestedRemedy Delete: To maximize power s	Wienckowski, Natalie       General Mote         Wienckowski, Natalie       General Mote         Comment Type       E       Comment Status       D         Consider replacing "ensure" per IEEE Mandatory E       SuggestedRemedy       Delete: To maximize power savings, maintain link i         Proposed Response       Response Status       W	Wienckowski, Natalie       General Motors Company         W       Comment Type       E       Comment Status       D         Consider replacing "ensure" per IEEE Mandatory Editorial Coordination       SuggestedRemedy       Delete: To maximize power savings, maintain link integrity, and ensure         Proposed Response       Response Status       W

C/ 149 SC 149.3.6.1 Page 8 of 20 1/6/2020 2:55:37 PM

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ 149	SC 149.3.	6.1	P 112	L <b>3</b>	# i-5	C/ 149	SC 149.3.7		P 123	L 18	# i-64
Wienckows	ski, Natalie		General Motor	rs Company		Zimmerma	an, George		ADI, APL Gr	oup, Aquantia, B	MW, Cisco, CommScop
Comment T	Гуре Е	Comme	nt Status D		E	Z Comment	Type <b>TR</b>	Comment	Status D		State Diagrams
This is	part of the "c 5.1, etc. The r	ommon" wordi	ing used throughou	ut 802.3. See 97	ation comment. Note: 7.3.5.1, 113.3.5.1, required for the spec.	tx_lpi_ tx_ale Othen	active is false b rt_start_next. S vise, if tx_alert_	efore exiting, a state diagrams start_next were	nd continuous only evaluate t e false on entry	ly re-evaluate the he condition on e v, TX_WN would	
Delete:	To maximiz	e power saving	gs, maintain link in	ntegrity, and ensu	ure interoperability,	being	exited due to a	low SNR mess	age). Accordir	ng to Figure 149-	20, tx lpi active is set
Proposed R	Response DSED ACCE	,	e Status W				E in TX_NORM/ req going to fal		n SEND_SLEE	P, which can on	ly be exited by
	JOLD NOOL	1.				Suggested	lRemedy				
C/ <b>149</b> Wienckows	,		P 112 General Motor	L <b>12</b> rs Company	# i-19	existin condit		d add an additio		d an " * (tx_lpi_re _WN, re-entering	eq = FALSE)" to the tx_WN with the
Comment T			nt Status D		E	Z Proposed	Response	Response	Status <b>W</b>		
Consid	er rewording	to remove "en	sures".			PROP	OSED ACCEP		E.		
00	,	ensures that tl	he MASTER and S	SLAVE ALERT w	indows are offset from	Need	to use standard	state diagram	conventions of	!tx_lpi_req in the	e added conditions.
Change each ot and SL	e: This offset ther and that	the refresh per	riods are close to h	half cycle offset.	rindows are offset from To: The MASTER sh periods are close	Chang	je the exit condi	ition to exit "C"	to add an " * !t		existing condition, and
Change each ot and SL to half o	e: This offset ther and that AVE ALERT cycle offset.	the refresh per windows are c	riods are close to h	half cycle offset.	To: The MASTER	Chang	je the exit condi	ition to exit "C" to TX_WN, re-	to add an " * !t	x_lpi_req" to the	existing condition, and
Change each ot and SL to half o Proposed R	e: This offset ther and that AVE ALERT cycle offset.	the refresh per windows are o <i>Respons</i>	riods are close to h offset from each otl	half cycle offset.	To: The MASTER	Chang add ar C/ 149	ge the exit condi n additional exit	ition to exit "C" to TX_WN, re-	to add an " * !t entering TX_W <i>P</i> <b>113</b>	x_lpi_req" to the /N with the condi	existing condition, and tion !tx_lpi_req
Change each ot and SL to half o Proposed R PROPO	e: This offset ther and that AVE ALERT cycle offset. Response DSED ACCE SC 149.3.	the refresh per windows are o <i>Respons</i> PT.	riods are close to h offset from each oth se <i>Status</i> <b>W</b> P 113	half cycle offset. her and the refre	To: The MASTER	Chang add ar C/ 149 Wienckow Comment	ge the exit condi n additional exit SC <b>149.3.7.</b> rski, Natalie <i>Type</i> <b>T</b>	ition to exit "C" to TX_WN, re- 1 Comment	to add an " * !t: entering TX_W <i>P</i> <b>113</b> General Mot <i>Status</i> <b>D</b>	x_lpi_req" to the /N with the condi <i>L</i> 21 ors Company	existing condition, and tion !tx_lpi_req # [i-32
Change each ot and SL to half of Proposed R PROPO C/ 149 Wienckows	e: This offset ther and that AVE ALERT cycle offset. Response DSED ACCE SC <b>149.3.</b> ski, Natalie	the refresh per windows are o <i>Respons</i> PT. <b>6.3</b>	riods are close to h offset from each oth se <i>Status</i> <b>W</b> <i>P</i> <b>113</b> General Motor	half cycle offset. her and the refre	To: The MASTER sh periods are close # [-7	Chang add ar Cl 149 Wienckow Comment Delete	ge the exit condi a additional exit SC 149.3.7. rski, Natalie Type T the reference t	ition to exit "C" to TX_WN, re- 1 Comment	to add an " * !t: entering TX_W <i>P</i> <b>113</b> General Mot <i>Status</i> <b>D</b>	x_lpi_req" to the /N with the condi <i>L</i> 21 ors Company	existing condition, and tion !tx_lpi_req # [ <u>i-32</u> State Diagrams
each ot and SL to half of Proposed R PROPO Cl 149 Wienckows Comment 7 Conside	e: This offset ther and that AVE ALERT cycle offset. Response OSED ACCE SC 149.3. ski, Natalie Fype E er replacing '	the refresh per windows are o <i>Respons</i> PT. <b>6.3</b> <i>Comme</i> maximize" per	riods are close to h offset from each oth se Status W P 113 General Motor of Status D r IEEE Mandatory	half cycle offset. her and the refre <i>L</i> 8 rs Company Editorial Coordin	To: The MASTER sh periods are close # [i-7 Eation comment.	Chang add ar Cl 149 Wienckow Comment Delete Z Suggested Delete	the exit condin additional exit SC 149.3.7. ski, Natalie Type T the reference t IRemedy	ition to exit "C" to TX_WN, re- 1 <i>Comment</i> o state diagram	to add an " * It: entering TX_W P 113 General Mot Status D n notation as t	x_lpi_req" to the /N with the condi <i>L</i> 21 ors Company his is done in 149	existing condition, and tion !tx_lpi_req # [i-32 State Diagrams
Change each ot and SL to half of Proposed R PROPO CI 149 Wienckows Comment 7 Conside Note: T	e: This offset ther and that AVE ALERT cycle offset. Response DSED ACCE SC 149.3. ski, Natalie Type E er replacing ' This is part of 5.3, 126.3.5.3	the refresh per windows are c <i>Respons</i> PT. 6.3 <i>Comme</i> maximize" per the "common"	riods are close to h offset from each oth se Status W P 113 General Motor ont Status D r IEEE Mandatory wording used thro	half cycle offset. her and the refre <i>L</i> 8 rs Company Editorial Coordin bughout 802.3. S	To: The MASTER sh periods are close # [i-7 Eation comment.	Chang add ar Cl 149 Wienckow Comment Delete Suggested Delete as des Proposed	the exit condinaditional exit SC 149.3.7. Ski, Natalie Type T the reference to Remedy The notation useribed in 21.5."	ition to exit "C" to TX_WN, re- 1 <i>Comment</i> to state diagram used in the stat <i>Response</i>	to add an " * It entering TX_W <i>P</i> 113 General Mot <i>Status</i> <b>D</b> n notation as t e diagrams foll	x_lpi_req" to the /N with the condi <i>L</i> 21 ors Company his is done in 149	existing condition, and tion !tx_lpi_req # [ <u>i-32</u> State Diagrams 9.1.6 for the Clause.
Cl 149 Wienckows Comment 7 Cl 13.5 Comment 7 Conside Note: T 113.3.5 the spe	e: This offset ther and that AVE ALERT cycle offset. Response DSED ACCE SC 149.3. ski, Natalie Fype E er replacing ' this is part of 5.3, 126.3.5.3 ec.	the refresh per windows are c <i>Respons</i> PT. 6.3 <i>Comme</i> maximize" per the "common"	riods are close to h offset from each oth se Status W P 113 General Motor ont Status D r IEEE Mandatory wording used thro	half cycle offset. her and the refre <i>L</i> 8 rs Company Editorial Coordin bughout 802.3. S	To: The MASTER sh periods are close # [-7 Enation comment. See 97.3.5.3,	Chang add ar Cl 149 Wienckow Comment Delete Suggested Delete as des Proposed	the exit condinaditional exit SC 149.3.7. Ski, Natalie Type T the reference to Remedy "The notation of scribed in 21.5." Response	ition to exit "C" to TX_WN, re- 1 <i>Comment</i> to state diagram used in the stat <i>Response</i>	to add an " * It entering TX_W <i>P</i> 113 General Mot <i>Status</i> <b>D</b> n notation as t e diagrams foll	x_lpi_req" to the /N with the condi <i>L</i> 21 ors Company his is done in 149	existing condition, and tion !tx_lpi_req # [i-32 State Diagrams 9.1.6 for the Clause.
Cl 149 Wienckows Comment 7 Cl 149 Wienckows Comment 7 Conside Note: T 113.3.5 the spe	e: This offset ther and that AVE ALERT cycle offset. Response DSED ACCE SC 149.3. ski, Natalie Fype E er replacing ' 'his is part of 5.3, 126.3.5.3 ec. Remedy	the refresh per windows are o <i>Respons</i> PT. <b>6.3</b> <i>Comme</i> maximize" per the "common" , etc. The re	riods are close to h offset from each oth se Status W P 113 General Motor ont Status D r IEEE Mandatory wording used thro	half cycle offset. her and the refre <i>L</i> <b>8</b> rs Company Editorial Coordir oughout 802.3. S ing refresh signa	To: The MASTER sh periods are close # [ <u>i-7</u> Enation comment. See 97.3.5.3, Ils is not required for	Chang add ar Cl 149 Wienckow Comment Delete Suggested Delete as des Proposed	the exit condinaditional exit SC 149.3.7. Ski, Natalie Type T the reference to Remedy "The notation of scribed in 21.5." Response	ition to exit "C" to TX_WN, re- 1 <i>Comment</i> to state diagram used in the stat <i>Response</i>	to add an " * It entering TX_W <i>P</i> 113 General Mot <i>Status</i> <b>D</b> n notation as t e diagrams foll	x_lpi_req" to the /N with the condi <i>L</i> 21 ors Company his is done in 149	existing condition, and tion !tx_lpi_req # [i-32 State Diagrams 9.1.6 for the Clause.

C/ 149 SC 149.3.7.1

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

	C/ 149 SC 149.3.7.2.2 P 114 L 18 # 1-35
Wienckowski, Natalie General Motors Company	Wienckowski, Natalie General Motors Company
Comment Type E Comment Status D EZ	Comment Type E Comment Status D EZ
LP_BLOCK_R is not consistent with other comment names.	Inconsistency in document. Sometimes "false" and sometimes "FALSE".
SuggestedRemedy	SuggestedRemedy
Change "LP_BLOCK_R" to "LPBLOCK_R" to be consistent with other comment names. Also make the same change on P125 L7. Proposed Response Response Status W PROPOSED ACCEPT.	Change "false" to "FALSE", also on P114 L31, P115 L19, P115 L34, P115 L38, P115 L40, P115 L44, P115 L45, P115 L49, P115 L54, P116 L4, P116 L11, P119 L25, P123 L20, P126 L6, P126 L7, P126 L8, P126 L35, P126 L44, P138 L19, P138 L44, P138 L46, P139 L51, P139 L53, P149 L12, P152 L22, P156 L28, P157 L12, P190 L3, P204 L48, P205 L1, P205 L7, P205 L13
	Proposed Response Response Status W
Wienckowski, Natalie       General Motors Company         Comment Type       E         Comment Type       E         Comment Status       D         EZ       I_BLOCK_R is not consistent with other comment names.         SuggestedRemedy       Change "I_BLOCK_R" to "IBLOCK_R" to be consistent with other comment names. Also make the same change on P125 L14.         Proposed Response       Response Status       W         PROPOSED ACCEPT.	<ul> <li>PROPOSED ACCEPT IN PRINCIPLE. Should be "FALSE" only when this represents a variable value.</li> <li>Change "false" to "FALSE" on P114 L18, P114 L31, P115 L19, P115 L34, P115 L38, P115 L40, P115 L44, P115 L45, P115 L49, P115 L54, P116 L4, P116 L11, P119 L25, P121 L7, P121 L39, P123 L19, P124 L17, P125 L 15, P125 L23, P126 L6, P126 L7, P126 L8, P126 L35, P126 L43, P138 L19, P138 L44, P138 L46, P139 L51, P139 L53, P149 L12, P152 L22, P156 L28, P157 L12, P158 L9, P190 L3, P204 L48, P205 L1, P205 L7, P205 L13, P206 L6, P206 L30, P206 L41.</li> <li>Also, change "False" to "FALSE" on P136 L20.</li> </ul>
	C/ 149 SC 149.3.7.2.4 P116 L 46 # [i-65
	Zimmerman, George ADI, APL Group, Aquantia, BMW, Cisco, CommScop
	Comment Type       T       Comment Status       D       EZ         DECODE (rx_symb<64:0>) - the text says that the argument is rx_coded<64:0>. rx_symb is what is passed by the PMA_UNITDATA indication, before the descrambler, blocking and RS-FEC decoder (see 149.3.2.3). rx_coded is what seems to be needed by this function according to the description.       EZ         SuggestedRemedy       Change DECODE (rx_symb<64:0>) to DECODE(rx_coded<64:0>)       EZ
	Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 149 SC 149.3.7.2.4

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C/ 149 SC 149.3.9.2.1	P 128	L 37	# i-67	C/ 149 SC 149.3.9.2.	12 <i>P</i> 131	L 14	# i-68
Zimmerman, George	ADI, APL Grou	ıp, Aquantia, Bl	WW, Cisco, CommScop	Zimmerman, George	ADI, APL Gro	oup, Aquantia, BN	/W, Cisco, CommScop
Comment Type E Co	omment Status D		EZ	Comment Type E	Comment Status D		EZ
"super frame" - in most place SuggestedRemedy replace "super frame" with "s OAM2 description (P185 L11	uperframe" at P128 L37			receiver (link partner)."	by the PHY to convey its stat - why is (link partner) in par- urse it's conveyed to a receiv rould it go?	entheses? I think	what is meant is "to
Proposed Response Res PROPOSED ACCEPT.	sponse Status 🛛 🛛 🛛 🛛 🛛 🖤				(link partner)" to "to the link Response Status W	partner."	
C/ 149 SC 149.3.9.2.1	P 129	L <b>4</b>	# i-26	PROPOSED ACCEPT.			
Wienckowski, Natalie Comment Type E Co The use of "0s" is not consist	General Motor	. ,	EZ	C/ 149 SC 149.3.9.2. Wienckowski, Natalie	13 P 132 General Moto	L 38 ors Company	# [i-30
SuggestedRemedy Change "0s" to "0's". Also m			d P185 L20.	Comment Type E typo, unnecessary "the" SuggestedRemedy Change "when the EEE Proposed Response	Comment Status D is implemented" To "when I Response Status W	EEE is implement	EZ ted".
C/ 149 SC 149.3.9.2.7	P 130	L 19	# i-8	PROPOSED ACCEPT.			
Wienckowski, Natalie Comment Type E Co Consider replacing "ensure" This is the same wording as		. ,	EZ ion comment. Note:	Cl <b>149</b> SC <b>149.3.9.2.</b> Jonsson, Ragnar Comment Type E	16 P 133 Aquantia Comment Status D	L 13	# [ <u>i-88</u>
SuggestedRemedy Change: The toggle bit is us the PHY and the link partner. which OAM message is being	ed to ensure proper OAI To: The toggle bit			Simple typo "toggling" n SuggestedRemedy Change "togging" to "tog Proposed Response PROPOSED ACCEPT.			

C/ 149 SC 149.3.9.2.16 ΕZ

ΕZ

ΕZ

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ 149 SC 149.3.9.2.17	P 133	L 31	# i-31	C/ 149 SC 14	49.3.9.4.1	P <b>136</b>	L 9	# i-33	
Wienckowski, Natalie	General Moto	ors Company		Wienckowski, Nata	lie	General Moto	ors Company		
Comment Type E Com	ment Status D		EZ	Comment Type	T Con	nment Status D		State Dia	iagrams
type, missing space after period				Delete the refer	ence to state d	iagram notation as tl	his is done in 149.	1.6 for the Claus	se.
SuggestedRemedy				SuggestedRemedy					
Add space after "is occurring co	ncurrently and bi-dire	ectionally."				e state diagrams foll	ows the conventio	ons of state diagr	rams
	onse Status W			as described in					
PROPOSED ACCEPT.				Proposed Response PROPOSED A		onse Status W			
C/ 149 SC 149.3.9.3	P 135	L 27	# i-93	C/ 149 SC 14	19.4.2.3	P 144	L 49	# i-37	r
Tu, Mike				Wienckowski. Nata	lie	General Mot	ors Company		
	ment Status D	ore inconsistent	late	Comment Type	E Con	nment Status D			ΕZ
The register bit mappings for O/ given in Figure 149-25 (line 30 a				missing article					
SuggestedRemedy				SuggestedRemedy					
In Table 149-9, the last column:	1. On line 27, chan	ge from "mr_tx_m	essage[95:88]" to	<b>00</b> ,		o "over the receive pa	air".		
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or	line 29, change from	m "mr_tx_message	e[87:80]" to	<b>00</b> ,	eceive pair" To	o "over the receive pa onse Status <b>W</b>	air".		
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4	line 29, change from line 36, change from	n "mr_tx_message n "mr_rx_message	e[87:80]" to e[95:88]" to	Change "over r	eceive pair" To e <i>Resp</i>		air".		
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]".	l line 29, change from line 36, change from . On line 39, change	n "mr_tx_message n "mr_rx_message	e[87:80]" to e[95:88]" to	Change "over r Proposed Response PROPOSED A	eceive pair" To e Resp CCEPT.	onse Status W		# 1-38	
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Respo	line 29, change from line 36, change from	n "mr_tx_message n "mr_rx_message	e[87:80]" to e[95:88]" to	Change "over r Proposed Response PROPOSED A Cl 149 SC 14	eceive pair" To e Resp CCEPT. <b>19.4.2.4</b>	onse Status W	L 21	# [i-38	
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]".	l line 29, change from line 36, change from . On line 39, change	n "mr_tx_message n "mr_rx_message	e[87:80]" to e[95:88]" to	Change "over r Proposed Response PROPOSED A Cl 149 SC 14 Wienckowski, Nata	eceive pair" To e Resp CCEPT. <b>19.4.2.4</b> lie	onse Status W P 145 General Mote		# [i-38	EZ
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Response PROPOSED ACCEPT.	l line 29, change from line 36, change from . On line 39, change	n "mr_tx_message n "mr_rx_message	e[87:80]" to e[95:88]" to	Change "over r Proposed Response PROPOSED A Cl 149 SC 14 Wienckowski, Nata Comment Type	eceive pair" To e Resp CCEPT. 19.4.2.4 lie E Con	onse Status W	L <b>21</b> ors Company	# [ <u>i-38</u>	EZ
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Response PROPOSED ACCEPT.	a line 29, change from a line 36, change from . On line 39, change onse Status W	m "mr_tx_messag n "mr_rx_messag from "mr_rx_mes	e[87:80]" to e[95:88]" to sage[87:80]" to	Change "over r Proposed Response PROPOSED AG CI 149 SC 14 Wienckowski, Nata Comment Type The Figure is th	eceive pair" To e Resp CCEPT. <b>19.4.2.4</b> lie E Con lie state diagran	onse Status W P 145 General Mote	L <b>21</b> ors Company	# [i-38	EZ
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Response PROPOSED ACCEPT. C/ 149 SC 149.3.9.3 Tu, Mike	a line 29, change from a line 36, change from . On line 39, change onse Status W	m "mr_tx_messag n "mr_rx_messag from "mr_rx_mes	e[87:80]" to e[95:88]" to sage[87:80]" to	Change "over r Proposed Response PROPOSED A Cl 149 SC 14 Wienckowski, Nata Comment Type The Figure is th SuggestedRemedy	eceive pair" To e Resp CCEPT. <b>19.4.2.4</b> lie E Con te state diagran	onse Status W P 145 General Mote	L <b>21</b> ors Company f a state diagram.		
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Response PROPOSED ACCEPT. Cl 149 SC 149.3.9.3 Tu, Mike	n line 29, change from n line 36, change from . On line 39, change onse Status W P 135 ment Status D	n "mr_tx_messag n "mr_rx_messag from "mr_rx_mes	e[87:80]" to e[95:88]" to sage[87:80]" to # [i-92 /ate	Change "over r Proposed Response PROPOSED AG CI 149 SC 14 Wienckowski, Nata Comment Type The Figure is th SuggestedRemedy Change "PHY C	eceive pair" To e Resp CCEPT. <b>19.4.2.4</b> lie E Con he state diagran	P 145 P 145 General Mote ament Status D n, not a description of	L <b>21</b> ors Company f a state diagram. agram description	given in Figure	
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Response PROPOSED ACCEPT. C/ 149 SC 149.3.9.3 Tu, Mike Comment Type T Comment	n line 29, change from n line 36, change from . On line 39, change onse Status W P 135 ment Status D	n "mr_tx_messag n "mr_rx_messag from "mr_rx_mes	e[87:80]" to e[95:88]" to sage[87:80]" to # [i-92 /ate	Change "over r Proposed Response PROPOSED AG CI 149 SC 14 Wienckowski, Nata Comment Type The Figure is th SuggestedRemedy Change "PHY C	eceive pair" To e Resp CCEPT. <b>19.4.2.4</b> lie <b>E Con</b> le state diagran Control shall con	P 145 General Mote ment Status D n, not a description of mply with the state di	L <b>21</b> ors Company f a state diagram. agram description	given in Figure	
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[85:88]". Proposed Response Response PROPOSED ACCEPT. C/ 149 SC 149.3.9.3 Tu, Mike Comment Type T Comment The variable "mr_rx_message"	a line 29, change from a line 36, change from . On line 39, change onse Status W P 135 ment Status D does not exist. Its na	m "mr_tx_messag n "mr_rx_messag from "mr_rx_mes <i>L</i> 32	e[87:80]" to e[95:88]" to sage[87:80]" to # [i-92 ////////////////////////////////////	Change "over r Proposed Response PROPOSED A CI 149 SC 14 Wienckowski, Nata Comment Type The Figure is th SuggestedRemedy Change "PHY ( 32." To "PHY (	eceive pair" To e Resp CCEPT. 49.4.2.4 lie E Con le state diagran Control shall con control shall con e Resp	P 145 P 145 General Mote ament Status D n, not a description of mply with the state di mply with the state di	L <b>21</b> ors Company f a state diagram. agram description	given in Figure	
In Table 149-9, the last column: "mr_tx_message[87:80]". 2. Or "mr_tx_message[95:88]". 3. Or "mr_rx_lp_message[87:80]". 4 "mr_rx_lp_message[95:88]". Proposed Response Response PROPOSED ACCEPT. C/ 149 SC 149.3.9.3 Tu, Mike Comment Type T Comment The variable "mr_rx_message" SuggestedRemedy Within Table 149-9, on line 32, 5 "mr_rx_lp_message".	a line 29, change from a line 36, change from . On line 39, change onse Status W P 135 ment Status D does not exist. Its na	m "mr_tx_messag n "mr_rx_messag from "mr_rx_mes <i>L</i> 32	e[87:80]" to e[95:88]" to sage[87:80]" to # [i-92 ////////////////////////////////////	Change "over r Proposed Response PROPOSED AU CI 149 SC 14 Wienckowski, Nata Comment Type The Figure is th SuggestedRemedy Change "PHY C 32." To "PHY C Proposed Response	eceive pair" To e Resp CCEPT. 49.4.2.4 lie E Con le state diagran Control shall con control shall con e Resp	P 145 P 145 General Mote ament Status D n, not a description of mply with the state di mply with the state di	L <b>21</b> ors Company f a state diagram. agram description	given in Figure	EZ 149-

C/ 149 SC 149.4.2.4

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

		,	, ,	<b>.</b>							
C/ <b>149</b>	SC 149.4.2.4	P 145	L 26	# i-39	C/ 149	SC	149.4.2.6.	1 F	151	L <b>43</b>	# i-81
Wienckows	ski, Natalie	General Motor	s Company		Mcclellan	, Brett		Ма	rvell Sem	niconductor, Inc.	
Comment 1	Туре Е	Comment Status D		EZ	Comment	Туре	Е	Comment Statu	s D		State Diagi
Redund	dant text										.6.2, 149.4.2.6.3 an
Suggestedl	Remedy							iption of the state ons are stated in 1			owever the text stat
		IY frame (bits 6750 to 6845) o	of the PHY frame	e." To "16th partial				y only to those sub			
	ame (bits 6750 to	,			Suggeste	dRemed	dy				
Proposed F	•	Response Status W								bclauses as neede	əd.
PROPO	OSED ACCEPT.							nctions and state or ram conventions	diagrams	i	
C/ 149	SC 149.4.2.4	P 145	L 32	# i-13					f state di	iagrams, including	the associated
Wienckows	ski, Natalie	General Motor	s Company							ers, and messages	s. Should there be a
Comment 1	Tvpe E	Comment Status D	. ,	EZ				state diagram and te diagram prevails			
Consid	er replacing "ens	ure" per IEEE recommendati	on. It is not re	quired to explain why						e conventions of 21	1.5. "
this rec	quirement exists.				Proposed	Respor	nse	Response Statu	s W		
Suggestedl	Remedy				PROF	POSED	REJECT.				
		be transmitted at least 256 tir			<b>T</b> 1.1.4			Alata ta alama ta A	40 4 0 5		
	ure detection at lir the change to octo	nk partner. To: Infofield sh ets 7-10	all be transmitte	d at least 256 times						or the Clause. The 149.3.9.4.1 (Comm	
Proposed F	8	Response Status W			C/ 149	50	149.4.2.6.	2 5	152	L 45	# i-40
,	OSED ACCEPT.							-			# 1-40
					Wienckov	,				tors Company	
C/ <b>149</b>	SC 149.4.2.4.0	6 <i>P</i> 148	L <b>3</b>	# i-9	Comment		E	Comment Statu	S D		
Wienckows	ski, Natalie	General Motor	s Company			ng spac					
Comment 1	51	Comment Status D		EZ	Suggester		•				
Consid	er replacing "gua	rantees" per IEEE Mandatory	/ Editorial Coord	ination comment.			0.	es around +/- sym	-	on P152 L49.	
	-	e same as 97.4.2.4.6			Proposed	Respor	nse	Response Statu	s W		
Suggested	-				PROF	POSED	ACCEPT.				
		DataSwPFC24 guarantees the boundary. To: When the v									
		2 to PAM4 occurs on a PHY									
Proposed F		Response Status W									
,	OSED ACCEPT.										

C/ 149 SC 149.4.2.6.2

# D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

		- ·	1	11 1 0 0	<u> </u>		<b>-</b>	1	11 1 10		
C/ 149 SC 149.4		P 155	L 43	# i-82	C/ 149	SC 149.5.1	P 161	L 12	# i-42		
Vicclellan, Brett	Ma	arvell Semic	conductor, Inc.		Wienckowsk	i, Natalie	General Moto	rs Company			
Comment Type E	Comment Stat	us <b>D</b>		State Diagrams	Comment Ty	rpe E	Comment Status D			EZ	
	n section including subo		.4.4.1, 149.4.4.2,	and 149.4.5 lacks	missing	article					
description of the s	state diagram conventions	are stated in 149.3.7.1 and 149.3.9.4.1, however the text states									
those conventions	apply only to those sul	bclauses.	ia 140.0.0.4.1, iic		Change	C," To "Instead	of encoding recei	ived			
SuggestedRemedy					data from the MAC,"						
,	uses and renumber rem	naining subo	clauses as neede	d.	Proposed Re	esponse	Response Status W				
"149.4.4 Detailed f	4.4 Detailed functions and state diagrams 4.4.1 State diagram conventions				PROPOSED ACCEPT IN PRINCIPLE.						
		of state dia	arama includina t	the associated	Change	"Instead of on	coding received data from MA	C " To "Instead	of encoding data		
						from the MAC		ic, to instead	of encounty data	1	
discrepancy betwe	The body of this subclause is comprised of state diagrams, including the associated lefinitions of constants, variables, functions, counters, and messages. Should there be liscrepancy between a state diagram and lescriptive text, the state diagram prevails.					SC 149.5.1	P 161	L 12	# i-43		
	criptive text, the state diagram and				C/ 149				# 1-43		
	-	ation used in the state diagrams follows the conventions of 21.5. "				i, Natalie	General Moto				
	-					_					
Proposed Response	,	us W			Comment Ty		Comment Status D			ΕZ	
Proposed Response PROPOSED REJE	,	us <b>W</b>			Comment Ty poor wor		Comment Status D			EZ	
PROPOSED REJE	ECT. eded as this is done in	149.1.6 for 1			poor wor SuggestedRe	, ding e <i>medy</i>				EZ	
PROPOSED REJE	ECT.	149.1.6 for 1			poor wor SuggestedRe	, ding e <i>medy</i>	Comment Status D	<b>3</b> ".		EZ	
PROPOSED REJE	ECT. eded as this is done in m 149.3.7.1 (Commen	149.1.6 for 1			poor wor SuggestedRe	, rding e <i>medy</i> "In the receive		9".		EZ	
PROPOSED REJE This text is not nee being removed fro	ECT. eded as this is done in im 149.3.7.1 (Comment 5.1	149.1.6 for t t 32) and 14 P <b>160</b>	9.3.9.4.1 (Comm	ent 33).	poor wor SuggestedRe Change Proposed Re	, rding e <i>medy</i> "In the receive	e side" To "On the receive side Response Status W	9".		EZ	
PROPOSED REJE This text is not nee being removed fro C/ 149 SC 149.	ECT. eded as this is done in im 149.3.7.1 (Comment 5.1	149.1.6 for 1 t 32) and 14 P <b>160</b> eneral Motor	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33).	poor wor SuggestedRe Change Proposed Re	, emedy "In the receive esponse	e side" To "On the receive side Response Status W	2". L 14	# i-44	EZ	
PROPOSED REJE This text is not nee being removed fro C/ 149 SC 149.8 Wienckowski, Natalie	ECT. eded as this is done in m 149.3.7.1 (Comment 5.1	149.1.6 for 1 t 32) and 14 P <b>160</b> eneral Motor	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPO	, ding emedy "In the receive esponse SED ACCEPT SC 149.5.1	e side" To "On the receive side Response Status W P 161	L 14	# [i-44	EZ	
PROPOSED REJE This text is not nee being removed fro C/ 149 SC 149. Wienckowski, Natalie Comment Type E	ECT. eded as this is done in m 149.3.7.1 (Comment 5.1	149.1.6 for 1 t 32) and 14 P <b>160</b> eneral Motor	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPO Cl 149 Wienckowsk	, ding emedy "In the receive sponse SED ACCEPT SC <b>149.5.1</b> i, Natalie	e side" To "On the receive side Response Status W P <b>161</b> General Moto	L 14	# [ <u>i-44</u>		
PROPOSED REJE This text is not nee being removed fro Cl <b>149</b> SC <b>149.</b> Wienckowski, Natalie Comment Type <b>E</b> Redundant word	ECT. eded as this is done in m 149.3.7.1 (Commeni 5.1 Ge Comment Stat	149.1.6 for 1 t 32) and 14 P <b>160</b> eneral Motor	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPOS CI 149 Wienckowsk Comment Ty	, rding emedy "In the receive esponse SED ACCEPT SC <b>149.5.1</b> i, Natalie rpe <b>E</b>	e side" To "On the receive side Response Status W P 161	L 14	# [i-44	EZ	
PROPOSED REJE This text is not nee being removed fro Cl 149 SC 149.4 Wienckowski, Natalie Comment Type E Redundant word SuggestedRemedy Change "BER test	ECT. eded as this is done in m 149.3.7.1 (Comment 5.1 Ge Comment Stat	149.1.6 for f t 32) and 14 P <b>160</b> eneral Motor <i>us</i> <b>D</b>	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPOS Cl 149 Wienckowsk Comment Ty missing	rding emedy "In the receive esponse SED ACCEPT SC 149.5.1 i, Natalie pe E article	e side" To "On the receive side Response Status W P <b>161</b> General Moto	L 14	# [i-44		
PROPOSED REJE This text is not nee being removed fro 2/ 149 SC 149.8 Nienckowski, Natalie Comment Type E Redundant word SuggestedRemedy Change "BER test Proposed Response	ECT. eded as this is done in im 149.3.7.1 (Comment 5.1 Ge Comment Stat ting" to "BER". <i>Response Statu</i>	149.1.6 for f t 32) and 14 P <b>160</b> eneral Motor <i>us</i> <b>D</b>	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPOS CI 149 Wienckowsk Comment Ty missing SuggestedRe	, ding emedy "In the receive sponse SED ACCEPT SC 149.5.1 SC 149.5.1 i, Natalie pe E article emedy	e side" To "On the receive side Response Status W P 161 General Moto Comment Status D	L 14 rs Company	<u>.</u>	EZ	
PROPOSED REJE This text is not nee being removed fro Cl <b>149</b> SC <b>149.</b> Wienckowski, Natalie Comment Type <b>E</b> Redundant word SuggestedRemedy Change "BER test	ECT. eded as this is done in im 149.3.7.1 (Comment 5.1 Ge Comment Stat ting" to "BER". <i>Response Statu</i>	149.1.6 for f t 32) and 14 P <b>160</b> eneral Motor <i>us</i> <b>D</b>	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPOS CI 149 Wienckowsk Comment Ty missing SuggestedRe	, ding emedy "In the receive sponse SED ACCEPT SC 149.5.1 SC 149.5.1 i, Natalie pe E article emedy	e side" To "On the receive side Response Status W P <b>161</b> General Moto	L 14 rs Company	<u>.</u>	EZ	
PROPOSED REJE This text is not nee being removed fro Cl <b>149</b> SC <b>149.</b> Wienckowski, Natalie Comment Type <b>E</b> Redundant word SuggestedRemedy Change "BER test Proposed Response	ECT. eded as this is done in im 149.3.7.1 (Comment 5.1 Ge Comment Stat ting" to "BER". <i>Response Statu</i>	149.1.6 for f t 32) and 14 P <b>160</b> eneral Motor <i>us</i> <b>D</b>	19.3.9.4.1 (Comm <i>L</i> <b>8</b>	ent 33). # i-41	poor wor SuggestedRe Change Proposed Re PROPOS Cl 149 Wienckowsk Comment Ty missing SuggestedRe Change	, ding emedy "In the receive seponse SED ACCEPT SC 149.5.1 i, Natalie type E article emedy "calculated in	e side" To "On the receive side Response Status W P 161 General Moto Comment Status D	L 14 rs Company	<u>.</u>	EZ	

C/ 149 SC 149.5.1 Page 14 of 20 1/6/2020 2:55:37 PM P802 3ch D3 0

D3.0 Physical Laver Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

1 002		DO.01 Hysical L	ayer opecine	ations and manage			1 2.5 00/	3, 5 Ob/3, and 10	J OD/3 Au	110	
C/ 149	SC 149.5.2.2	P 162	L 50	# i-45	C/ 1	<b>49</b> SC	149.7.2.1	P 17	/2	L <b>52</b>	# i-49
Wienckow	vski, Natalie	General Moto	rs Company		Kum	ada, Taketo	)				
<i>Comment</i> missir	<i>Type</i> <b>E</b> ng Oxford comma	Comment Status D		EZ		•		•	ed on the m		<i>Link Segme</i> t results when all the
36 dB	ge "10GBASE-T1,	36 dB in 5GBASE-T1 and 3 nd 35 dB in 2.5G mode"	5 dB in 2.5G mo	de" To "10GBASE-T1,	- 1 1	Therefore, I	think it is ne figured arou s requireme	ind are STP cables. T Int when the surround	comment th This is beca	nat clearly st use it is assu	ates that all the cables ates that all the cables umed that it is difficult ed of cables such as J-
•	POSED ACCEPT.	Response Status W			Sugg	gestedReme	edy				
C/ 149	SC 149.7.2	P 172	L <b>40</b>	# i-10				please add as follows are composed of STF		this equation	n is for the case where
Wienckow	vski, Natalie	General Moto	rs Company		Prop	osed Respo	onse	Response Status	w		
Comment	Туре Е	Comment Status D		EZ	<u> </u>	PROPOSED	REJECT.				
	der replacing "ens .6.3, 113.7.3, 126.	ure" per IEEE recommendat 7.3, etc.	ion. Note: This	wording is the same				h the commenter. Th ly. This applies to all			
segm	ge: To ensure the ents is limited, pov	total alien NEXT loss and al ver sum alien near-end cross	talk (PSANEXT	) loss and power sum	:	shielded cab	les would h	et this requirement, s have the unintended s ielded cables were us	side effect o		rement only applies to violation of this
alien ı ratio f	near-end crosstalk ar-end (PSAACR-	stalk ratio far-end (PSAACR (PSANEXT) loss and power F) are specified to limit the to	sum alien atter	uation to crosstalk	C/ <b>1</b> Wier	<b>49</b> SC nckowski, Na	<b>149.7.2.2</b> atalie	P 17 Gener	<b>73</b> ral Motors C	L <b>42</b> company	# <u>i-12</u>
couple	ed between link se	egments.			Com	ment Type	Е	Comment Status	D		E

Proposed Response Respo	onse Status W
-------------------------	---------------

PROPOSED ACCEPT.

C/ 149	SC 149.7.2.1	P 17:	<b>2</b> L	48	#	i-11
Wienckowski,	Natalie	Genera	al Motors Com	pany		
Comment Typ	e E	Comment Status	D			EZ

Consider replacing "ensure" per IEEE Mandatory Editorial Coordination comment.

### SuggestedRemedy

Change: In order to limit the alien crosstalk at the near end of a link segment, the differential pair-to-pair near-end crosstalk (NEXT) loss between the disturbed link segment and the disturbing link segment is specified to meet the bit error ratio objective. To: The differential pair-to-pair near-end crosstalk (NEXT) loss between the disturbed link segment and the disturbing link segment is specified to meet the bit error ratio objective by limiting the alien crosstalk at the near end of a link segment.

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 149	SC	149.7.2.2	P 1	73	L <b>42</b>	#	i-12	
Wienckows	ki, Nat	alie	Gene	ral	Motors Company			
Comment T	уре	Е	Comment Status	D				ΕZ
0								

Consider replacing "ensure" per IEEE recommendation.

### SuggestedRemedy

Change: To ensure the total alien FEXT coupled into a link segment, multiple disturber attenuation to crosstalk ratio far-end ACRF is specified as the power sum of the individual alien ACRF disturbers. To: Multiple disturber attenuation to crosstalk ratio far-end ACRF is specified as the power sum of the individual alien ACRF disturbers to limit the total alien FEXT coupled into a link segment.

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 U/unsatisfied Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 149 SC 149.7.2.2 Page 15 of 20 1/6/2020 2:55:37 PM

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

	C 149.7.2.2	P 173	L 47	# i-50	C/ 149 S	SC 149.8.2.2	P 175	L 45	# i-2
Kumada, Taket	to				Mueller, Thom	as			
Comment Type	т	Comment Status D		Link Segment	Comment Type	e T	Comment Status D		EZ
cables conf Therefore, I that are cor	figured aroun I think it is ne nfigured aroui	his required line based on th d are composed of STP cab cessary to include a comme nd are STP cables. This is b nt when the surrounding cab	les in the 4 aroun int that clearly stat recause it is assur	d 1 measurement. es that all the cables ned that it is difficult	requireme there is no	nts for a prop ot enough exp	se 149.8.2.2 was to provide er shield termination of the l erience / data for a solid de n to the implementer for now	inksegment to the scription of this te	e MDI. As for today,
	and UTP cab		les ale composed		SuggestedRer	-			
SuggestedRem	edv				Suggest to	o remove sub	clause 149.8.2.2 from the st	andard due to a la	ack of information.
00	-	lease add as follows. Howe	ver, this equation	is for the case where	Proposed Res	ponse	Response Status W		
		re composed of STP cables			PROPOSE	ED ACCEPT.			
Proposed Resp		Response Status W			C/ 149 S	SC 149.9.1	P 176	L <b>5</b>	# i-27
PROPOSE	D REJECT.				Wienckowski.	Natalie	General Mot	ors Company	
The CRG d	lisagrees with	the commenter. This equa	tion defines what	is required for the	Comment Type	e T	Comment Status D		Environment
PHYs to op	erate properl	y. This applies to all link see	gments. While it i	s likely that only	, i i i i i i i i i i i i i i i i i i i	n untestable s	shall.		
		et this requirement, specifyin ave the unintended side effe			SuggestedRer	nedv			
		elded cables were used.	ot of allowing a vi				ubject to this clause shall co	onform to IEC 623	368-1 (or IEC 60950-1)
C/ 149 S	C 149.8.2.2	P 175	L <b>45</b>	# i-21	(for IT and	motor vehicle	e applications) and to ISO 2 iven application). Also dele	6262 (for motor v	
Wienckowski, N	Vatalie	General Moto	rs Company		Proposed Res		Response Status W		
Comment Type Empty Sub		Comment Status D		EZ	•	ED ACCEPT.			
					C/ 149 S	SC 149.9.1	P 176	L7	# i-28
	edv								
SuggestedRem					Wienckowski,	Natalie	General Mot	ors Company	
SuggestedRem Delete subo	clause	Poppono Statuo W			Wienckowski, <i>Comment Typ</i> e		General Mote Comment Status D	ors Company	Environment
SuggestedRem Delete subo Proposed Resp	clause oonse	Response Status W			Comment Type		Comment Status D	ors Company	Environment
SuggestedRem Delete subo Proposed Resp PROPOSE	clause oonse D ACCEPT.				Comment Type	e <b>T</b> n untestable s	Comment Status D	ors Company	Environment
SuggestedRem Delete subo Proposed Resp PROPOSE	clause oonse	Response Status W	L 45	# [ <del>i-79</del>	Comment Type There is a SuggestedRer Change "A	e <b>T</b> n untestable s <i>nedy</i> All equipment	Comment Status D hall. subject to this clause shall o	conform to all app	licable local, state,
SuggestedRem Delete subo Proposed Resp PROPOSE Cl 149 So Mcclellan, Brett	clause ionse D ACCEPT. C <b>149.8.2.2</b> t	Р 175	L 45 conductor, Inc.	# [i-79	Comment Type There is a SuggestedRer Change "A national, a	e <b>T</b> n untestable s <i>nedy</i> All equipment nd applicatior	Comment Status D shall. subject to this clause shall o n-specific standards." To "A	conform to all app	licable local, state, ect to this clause is
SuggestedRem Delete subo Proposed Resp PROPOSE Cl 149 So Mcclellan, Brett Comment Type	clause onse D ACCEPT. C 149.8.2.2 t TR	P <b>175</b> Marvell Semic Comment Status <b>D</b>	conductor, Inc.	EZ	Comment Type There is a SuggestedRer Change "A national, a expected t	e <b>T</b> n untestable s <i>nedy</i> All equipment nd applicatior	Comment Status D shall. subject to this clause shall o n-specific standards." To "A all applicable local, state, na	conform to all app	licable local, state, ect to this clause is
SuggestedRem Delete subo Proposed Resp PROPOSE Cl 149 So Mcclellan, Brett Comment Type The subclat	clause onse D ACCEPT. C 149.8.2.2 t TR use '149.8.2.2	, P <b>175</b> Marvell Semic	conductor, Inc.	EZ	Comment Type There is a SuggestedRer Change "A national, a expected t standards Proposed Res	e <b>T</b> n untestable s nedy All equipment nd application to conform to " Also delete ponse	Comment Status D shall. subject to this clause shall o n-specific standards." To "A all applicable local, state, na	conform to all app	licable local, state, ect to this clause is
SuggestedRem Delete subo Proposed Resp PROPOSE Cl 149 St Mcclellan, Brett Comment Type The subclar proposal fo	clause onse D ACCEPT. C 149.8.2.2 t TR use '149.8.2.2 r content. It s	P 175 Marvell Semic Comment Status D 2 MDI coupling attenuation' I	conductor, Inc.	EZ	Comment Type There is a SuggestedRer Change "A national, a expected t standards Proposed Res	e <b>T</b> n untestable s nedy All equipment nd application to conform to ." Also delete	Comment Status D shall. subject to this clause shall on-specific standards." To "A all applicable local, state, na e PICS ES2.	conform to all app	licable local, state, ect to this clause is
SuggestedRem Delete subo Proposed Resp PROPOSE Cl 149 St Mcclellan, Brett Comment Type The subclat proposal fo SuggestedRem	clause onse D ACCEPT. C 149.8.2.2 t TR use '149.8.2.2 r content. It s	P 175 Marvell Semic Comment Status D 2 MDI coupling attenuation' I hould be removed.	conductor, Inc.	EZ	Comment Type There is a SuggestedRer Change "A national, a expected t standards Proposed Res	e <b>T</b> n untestable s nedy All equipment nd application to conform to " Also delete ponse	Comment Status D shall. subject to this clause shall on-specific standards." To "A all applicable local, state, na e PICS ES2.	conform to all app	licable local, state, ect to this clause is
SuggestedRem Delete subo Proposed Resp PROPOSE Cl 149 St Mcclellan, Brett Comment Type The subclar proposal fo SuggestedRem	clause onse D ACCEPT. C 149.8.2.2 t TR use '149.8.2.2 r content. It s redy clause 149.8.2	P 175 Marvell Semic Comment Status D 2 MDI coupling attenuation' I hould be removed.	conductor, Inc.	EZ	Comment Type There is a SuggestedRer Change "A national, a expected t standards Proposed Res	e <b>T</b> n untestable s nedy All equipment nd application to conform to " Also delete ponse	Comment Status D shall. subject to this clause shall on-specific standards." To "A all applicable local, state, na e PICS ES2.	conform to all app	licable local, state, ect to this clause is

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 U/unsatisfied Z/withdrawn SORT ORDER: Clause, Subclause, page, line

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SC 149.9.1	1/6/2020 2:55:38 PM

D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ 149	SC 149.9.2	P 176	L 18	# i-29	C/ 149 SC 149.11.4.3.4	P 187	L 26	# i-14	
Wienckowski,	Natalie	General Motor	s Company		Wienckowski, Natalie	General Moto	rs Company		
Comment Typ There is a this draft.		<i>Comment Status</i> <b>D</b> all which applies to the final	instalation, not	<i>Environment</i> the PHY defined by	Comment Type E Update PICS to match requ	Comment Status D uirement text.			ΕZ
SuggestedRei Delete: Ir maximum	n automotive app protection by th	blications, all cabling shall b e motor vehicle sheet meta nd ISO 15764. Also deleta	l and structural		SuggestedRemedy Delete: to ensure detection Proposed Response R PROPOSED ACCEPT.	n at link partner Response Status W			
Proposed Res PROPOS	sponse ED ACCEPT.	Response Status W			C/ <b>149A</b> SC <b>149A.3</b> Wienckowski, Natalie	P <b>196</b> General Moto	L 32	# <u>i</u> -15	
C/ 149	SC 149.9.2.1	P 176	L 33	# i-80		Comment Status D	ie company		ΕZ
Mcclellan, Bre	ett	Marvell Semic	onductor, Inc.		Consider replacing "ensure	es" per IEEE Mandatory E	ditorial Coordina	ation comment.	
SuggestedRei Change "I Proposed Res	40-5 is a typo cc <i>medy</i> ISO 167540-5" to	Comment Status D pied from Clause 96, ISO 7 o "ISO 16750-5" Response Status W	6750-5 is the co	EZ prrect reference	SuggestedRemedy Change: This also ensures and shielding, in order to re attenuation. To: In orde screening attenuation, the and shielding. Proposed Response	each sufficient accuracy to er to reach sufficient accur	o measure coupl racy to measure	ing and screening coupling and	
C/ 149	SC 149.11.4.2.2	P 182	L1	# i-89	PROPOSED ACCEPT.				
Jonsson, Rag	Inar	Aquantia			C/ 149A SC 149A.4	P 197	L 27	# i-47	
Comment Typ	e ER	Comment Status D		EZ	Boyer, Rich	Aptiv - Signal	and Power Solu	tions	
SuggestedRei	medy	CS Receive" not "PCS Tran	smit"		Comment Type T ( *** Comment submitted wit attached ***	Comment Status <b>D</b> th the file 103045400003-I	Figure149A-2_C		1494
Proposed Res	sponse	Response Status W			To make Figure 149A-2 mo	ore descriptive.			
PROPOS	ED ACCEPT.				SuggestedRemedy				
					As per attached PDF; Prop Port 1 both these lines are match the width of coax lin Port 1 of "Coax"; Add lines connects to the shield of co tube is connected to cable	to be coax. Therefore; The from as from Port 2; Add that show that each of the ponnector on the test fixture	he lines are mad d that the text to e Coax shields fi e; Show an explo	e to be thicker to each line from Diff. rom Diff. Port 1 oded view that inner	
					view.				

 TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
 C/
 149A
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 COMMENT STATUS: D/dispatched A/accepted R/rejected
 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 SC
 149A
 1/6/2020 2:55:38 PM

 SORT ORDER: Clause, Subclause, page, line
 SC
 149A
 1/6/2020 2:55:38 PM

# D3.0 Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Auto

C/ 149A	SC	149A.4	P	198	L 10	#	i-48		C/ <b>149A</b>	S
Boyer, Ric	h		Apti	v - Signal	and Power Sol	utions			Wienckow	/ski, N
Comment	Туре	т	Comment Status	s D			1-	49A	Comment	Туре
			e to the shield conr ing of implementing			oth ends to	assist user		missir Suggested	0.
Suggested	Remed	dy							Add ".	
both ei technio implen implen	nds of ques su nenting nentatio	the cable uitable for cable as:	ntences at the end of shield should be dir RF applications in t semblies into vehicle the coupling and	ectly con he freque es. This i	nected to the sig ency range of int is necessary so	gnal groun terest whe that the ve	d using n ehicle		Proposed PROF Cl <b>149B</b>	Res
Annex	-								Mcclellan,	Bre
Proposed I	Respor	nse	Response Status	W					Comment	Τνρε
PROP	OSED	ACCEPT	IN PRINCIPLE.						"PHY	• •
It is no	t neces	ssarv to e	plain why the requi	rement e	xists.				warnir	ng"
ADD t	the follo	owing sen	tence at the end of	paragrapl	n that starts on				Suggested chang	
			he cable shield sho ble for RF applicatio						Proposed	
			semblies into vehicle						PROF	
	50	149A.4	Р	400						
C/ 149A	30	145A.4	P	198	L 24	#	i-91		C/ 149B	S
Cl 149A Thompson					L <b>24</b> Consultant	#	i-91		C/ <b>149B</b> Mcclellan,	
	i, Geof			ependent		#		49A	Mcclellan,	Bre
Thompson Comment Text do conditi the shi	n, Geoff <i>Type</i> oes no ions for ield gro	frey TR t adequate r link segn bunding pr	Inde	ependent s <b>D</b> ing a unif ive enviro	Consultant orm test conditionment. Text sh	on for qua	14 lifying the te	st	Mcclellan, Comment OAM and a definit	Bre <i>Type</i> Sym com ion(f
Thompson Comment Text de conditi the shi Suggested	n, Geoff <i>Type</i> oes no ons for ield gro <i>Remed</i>	frey TR t adequate r link segn bunding pr	Inde <i>Comment Status</i> ely deal with specify tents in an automoti actice used in that e	ependent s <b>D</b> ing a unif ive envirc	Consultant orm test conditi nment. Text sh ent.	on for qua nould be ad	1. lifying the te lded to refle	st	Mcclellan, Comment OAM and a definit indica	Bre <i>Type</i> Sym com ion(I ted t
Thompson Comment Text di conditi the shi Suggested Insert cable s	n, Geoff <i>Type</i> oes no ons for ield gro <i>Remeo</i> the foll shall ha	frey TR t adequate r link segn bunding pr dy owing text	Inde Comment Status ely deal with specify tents in an automoti actice used in that e before the existing ground connection	ependent s <b>D</b> ing a unif ive enviro environme text on P	Consultant form test conditi nment. Text sh ent. age 198, Line 2	on for qua nould be ac 4: The shi	1 <sup>,</sup> lifying the te dded to refle eld of the	st ect	Mcclellan, Comment OAM and a definit indica compl Makin organ	Bre Type Sym com ion(I ted t iant g the izatio
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Thompson Comment Text de conditi the shi Suggested Insert cable s referer Proposed I PROP	n, Geoff Type oes no ons for ield gro <i>Remed</i> the foll- shall ha nce cat <i>Respor</i> OSED	frey TR t adequate r link segn bunding pr dy owing text ave a harc ble assem nse ACCEPT	Inde Comment Status ely deal with specify nents in an automoti actice used in that e before the existing ground connection bly. Response Status	ependent s <b>D</b> ing a unif ive enviro environme text on P to the co	Consultant form test conditionment. Text shent. age 198, Line 2 nnected equipn	on for qua nould be ac 4: The shi	1 <sup>,</sup> lifying the te dded to refle eld of the	st ect	Mcclellan, Comment OAM and a definit indica compl Makin organ free to Suggested page2 specif page 5	Bre Type Symi com com ion(h ted t iant ig the izatio defi defi defi 202 li ic fie 203 l
Thompson Comment Text de conditi the shi Suggested Insert i cable s referer Proposed I PROP It is no Add th	n, Geoff <i>Type</i> oes no oons for ield gro <i>Remed</i> the folli shall ha nce cat <i>Respor</i> OSED ot clear e text a	frey TR t adequate r link segn ounding pr dy owing text ave a harc ble assem nse ACCEPT what a "h as defined	Inde Comment Status ely deal with specify nents in an automoti actice used in that e before the existing ground connection bly. <i>Response Status</i> IN PRINCIPLE. ard ground" connec in comment #48.	ependent s <b>D</b> ing a unif ive enviro environme text on P to the co s <b>W</b> tion mean	Consultant form test conditionment. Text shent. age 198, Line 2 nnected equipn	on for qua lould be ad 4: The shi hent at ead	1. Ifying the te Ided to refle	st .ct	Mcclellan, Comment OAM and a definit indica compl Makin organ free to Suggested page2 specif page 3 "149B Vendo	Bre <i>Type</i> Sym com ion(I ted t iant g the ization dRer 202 li ic fie 203 l .3.7 pr-sp
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	30	149A.4	P1	98	L 27	# <u>i-16</u>	
Wienckow	ski, Na	Italie	Gene	eral Motor	s Company		
Comment missin		E od	Comment Status	D			EZ
Suggested Add ".'		<i>dy</i> d of paragi	raph.				
Proposed I PROP	•	nse ACCEPT.	Response Status	w			
C/ 149B	SC	149B.2	P2	202	L <b>29</b>	# i-77	
Mcclellan,	Brett		Marv	ell Semico	onductor, Inc.		
Comment <sup>-</sup> PHY <sup>-</sup> warnin	TempV	<b>ER</b> Varning" fo	Comment Status or D5 doesn't match	-	ne in 149B.3.3,	"Internal temperat	<i>EZ</i> ure
Suggested							
change	e "PHY	' TempWa	arning" to "Internal te	mperature	e warning"		
Proposed I PROP	•	nse ACCEPT.	Response Status	w			
C/ 149B	SC	149B.2	P2	202	L <b>32</b>	# i-75	
C/ <b>149B</b> Mcclellan,		149B.2			L <b>32</b> onductor, Inc.	# [i-75	
Mcclellan, Comment	Brett <i>Type</i>	TR	Marv Comment Status	vell Semico D	onductor, Inc.		OAM
Mcclellan, Comment OAM S and a definiti indicat compli Making organiz	Brett Type Symbol compli- on(http ed that ant to g these zations	TR 111 bits 7: ant device b://www.ier this symbol this inform e vendor d s. Leaving	Marv	vell Semico D ich means to zero. Ti c/nov18/w ture use, h em to be d	onductor, Inc. they cannot be he proposal for vienckowski_3ch nowever it cannot lefined by OEM	used for any purp this n_01b_1118.pdf) ot be used by a dev s or other	ose vice
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Mcclellan, Comment OAM S and a definiti indicat compli Making organi: free to Suggested page22 specifi page 2 "149B. Vendo	Brett Type Symbol complia on(http ed that ant to g these zations define Remed 02 line c field 03 line 3.7 Ve r-specie	TR 111 bits 7: ant device b://www.ieg this inform e vendor d b. Leaving a new sta dy 32 chang <7:0>" 49 insert indor-speci ific field <7 ed data fie	Marv Comment Status 0 are 'Reserved' whi e must set these bits ee802.org/3/ch/publi bol is reserved for fut ative annex. efined bits allows the these bits as zero for atus structure. e Symbol 11 bits D7 new subclause 1490 cific field 7:0> is indicated in C	vell Semica <b>D</b> ich means to zero. The c/nov18/w ture use, h erm to be d or later use to D0 fror B.3.7 and DAM<11><	nductor, Inc. they cannot be he proposal for vienckowski_3ch owever it canno lefined by OEM isn't necessary n individual reso renumber rema	used for any purp this n_01b_1118.pdf) of be used by a dev s or other y as any later proje erved bits to "Vend ining subclauses:	ose vice ct is lor-
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TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general required T/technical E/editorial F/editorial F/editorial F/editorial F/editorial F/editorial F/editorial F/editorial F/editorial F/edito

C/ 149B SC 149B.3	P 203	L 5	# i-76	C/ 149B	SC 149B.4.1
Mcclellan, Brett	Marvell Semic	conductor, Inc.		Mcclellan	, Brett
Comment Type <b>TR</b> Comment Type <b>TR</b> Comment Type <b>TR</b> Conditions and duration implementor to decide, but management entity at the line these bits are not placed in updated in registers 1.2318 For these bits: PowerSuppl DegradedLinkSegment we PolarityInversion is a static	how long should the indic nk partner has an opportu- nto latched indicators at the and 1.2319 as they arriv yWarning, PHY TempWa should recommend a mir	eator bits be set a unity to detect th ne link partner, b e. rning, No MACM imum indication	=1 to ensure the ese status bits? ut are continuously lessagesWarning, time.	missir Suggested page2 its val Proposed	ng definition for ++ opera
SuggestedRemedy page 203 on lines 9, 18, 26 this status is set for a minir management entity." Proposed Response				C/ <b>149B</b> Mcclellan, Comment rf_vali	, ,
PROPOSED ACCEPT.	·			Suggestee	dRemedy 205 line 16 insert new va
C/ 149B SC 149B.4.1	P 204	L 33	# i-34	rf_va	
Wienckowski, Natalie	General Moto	rs Company			ed in 149.3.7.2.2"
Comment Type T	Comment Status D		State Diagrar		205 line 23 insert new st 8.4.2.2 Counters
Need to add reference to s	tate diagram notation exte	ensions as done	in 149.1.6.	RX_F	RAME ed in 149.3.7.2.6 "
SuggestedRemedy Change "The notation used as described in 21.5." To conventions of state diagra	"The notation used in the	state diagrams f	ollows the	PROF	Response Res
145.2.5.2."	,	5			ubclause 149B.4.2.2 alre

#### Proposed Response Response Status W

PROPOSED ACCEPT.

Should be "FALSE" only when this represents a variable value.

Change "false" to "FALSE" on P114 L18, P114 L31, P115 L19, P115 L34, P115 L38, P115 L40, P115 L44, P115 L45, P115 L49, P115 L54, P116 L4, P116 L11, P119 L25, P121 L7, P121 L39, P123 L19, P124 L17, P125 L 15, P125 L23, P126 L6, P126 L7, P126 L8, P126 L35, P126 L43, P138 L19, P138 L44, P138 L46, P139 L51, P139 L53, P149 L12, P152 L22, P156 L28, P157 L12, P158 L9, P190 L3, P204 L48, P205 L1, P205 L7, P205 L13, P206 L6, P206 L30, P206 L41.

Also, change "False" to "FALSE" on P136 L20.

C/ 149B	SC	149B.4.1	P 2	04	L 33	# i-74	
Mcclellan,	Brett		Marve	ell S	emiconductor, Inc.		
Comment 7	Туре	Е	Comment Status	D			EZ
missing	g defin	ition for ++	operator				

he notation ++ after a counter or integer variable indicates that d."

sponse Status W

C/ 149B	SC	149B.4.2.1	P 20	)6	L 12	# i-78	
Mcclellan, B	rett		Marve	ell S	emiconductor, Inc.		
Comment Ty	рe	т	Comment Status	D			OAM
a							

used without definition in Figure 149B-2

variable definition subclause

sponse Status W RINCIPI F

The subclause 149B.4.2.2 already exists. RX FRAME is not a Counter but a message.

P205 L16 insert new variable definition, with appropriate formatting, " rf valid -> Defined in 149.3.7.2.2"

P205 L 23 insert new subclause, with appropriate formatting, "149B.4.2.3 Messages -> RX FRAME -> Defined in 149.3.7.2.6 "

C/ 149B SC 149B.4.2.1

C/ 149C SC 149C.3	P 208	L <b>46</b>	# <u>i-90</u>		C/ 149C	SC 149C.5	P 2	12	L <b>6</b>	# i-60
Jonsson, Ragnar	Aquantia				Zimmermar	n, George	ADI,	APL Group	o, Aquantia, BM∖	W, Cisco, CommScop
Comment Type E	Comment Status D			MDI	Comment T	<i>уре</i> <b>т</b>	Comment Status	D		MD
The equation reference SuggestedRemedy Remove footnotes a, b,	es b, c, and d, in footnotes to ⊺ , c, and d,	Гable 149С-1 ar	e incorrect		the boa in the m	nd are goverer nain clause. T	here is confusion as to nd by the "coupling be hey are not. MDI to M hey should be less that	tween link s IDI coupling	segments" (alier g or trace to trac	n crosstalk) specified e coupling are in
Proposed Response	Response Status W				SuggestedF	Remedy				
PROPOSED ACCEPT Remove the references the footnotes below the	s to the footnotes in the headi	ng row of Table	149C-1 and remov	e	text: "W should a multip the san specifie line 42, connec	/hen multiple M be taken to avo port MDI conne ne level, but no ed in Equation to read "For in tor assembly, o	49C.4.3, entitled: Cou MultiGBASE-T1 PHYs oid coupling between ector or between adjac o greater, than that spo 149-25." Additionally nplementations with n coupling between port and PSAFEXT specif	are implem ports. The cent traces ecified for p , add a sec nultiple Mul s on the Mi	nented on the sa coupling betwee is recommended ower sum alien cond paragraph tiGBASE-T1 por DI connector is r	ame board, care en adjacent ports on d to be approximately near end crosstalk to 149.7.2, page 172 rts on the same MDI not considered to be
					Proposed R	Response	Response Status	w		
					PROPOSED ACCEPT IN PRINCIPLE.					
							osal "specification" sh replace with alien cro		pecifications" an	d remove specific
					Insert 1	49 C 5 after 14	49C 4 3 entitled <sup>.</sup> Cou	olina hetwe	en ports on mul	tiport designs with

Insert 149.C.5 after 149C.4.3, entitled: Coupling between ports on multiport designs, with text: "When multiple MultiGBASE-T1 PHYs are implemented on the same board, care should be taken to avoid coupling between ports. The coupling between adjacent ports on a multiport MDI connector or between adjacent traces is recommended to be approximately the same level, but no greater, than that specified for power sum alien near end crosstalk specified in Equation 149-25." Additionally, add a second paragraph to 149.7.2, page 172 line 42, to read "For implementations with multiple MultiGBASE-T1 ports on the same MDI connector assembly, coupling between ports on the MDI connector is not considered to be part of the alien crosstalk specifications. For further information, see 149.C.5."

C/ 149C SC 149C.5