

comments

**CI FM**    **SC FM**                    **P8**            **L13**            # **309**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
     missing "Task"  
**SuggestedRemedy**  
     Change: Electrical Auto Force Chair  
     To: Electrical Auto Task Force Chair  
**Response**                    **Response Status**    **C**  
     ACCEPT.

**CI FM**    **SC FM**                    **P8**            **L14**            # **308**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
     Add TF Vice Chair  
**SuggestedRemedy**  
     Add: Natalie Wienckowski, IEEE P802.3cy 10G+ Electrical Auto Task Force Vice Chair  
**Response**                    **Response Status**    **C**  
     ACCEPT.

**CI FM**    **SC FM**                    **P10**           **L3**            # **303**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
     Change title in box to new title  
**SuggestedRemedy**  
     Change: Physical Layer Specifications and Management Parameters for greater than 10 Gb/s Electrical Automotive Ethernet.  
     To: Physical Layer Specifications and Management Parameters for 25 Gb/s Electrical Automotive Ethernet  
**Response**                    **Response Status**    **C**  
     ACCEPT.

**CI FM**    **SC FM**                    **P12**            **L35**            # **313**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
     update amendment order  
**SuggestedRemedy**  
     Change Amendment 7 to Amendment 8 for cw and reorder list  
**Response**                    **Response Status**    **C**  
     ACCEPT.

**CI FM**    **SC FM**                    **P12**            **L41**            # **314**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
**SuggestedRemedy**  
     Change Amendment 8 to Amendment 7 for cz and reorder list  
**Response**                    **Response Status**    **C**  
     ACCEPT.

**CI FM**    **SC FM**                    **P12**            **L45**            # **315**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
**SuggestedRemedy**  
     Delete 802.3da from list  
**Response**                    **Response Status**    **C**  
     ACCEPT.

**CI FM**    **SC FM**                    **P12**            **L51**            # **316**  
 Wienckowski, Natalie                    General Motors  
**Comment Type**    **E**            **Comment Status**    **A**                    *bucket*  
**SuggestedRemedy**  
     Change Amendment 10 to Amendment 9 for cy and reorder list  
**Response**                    **Response Status**    **C**  
     ACCEPT.

comments

Cl 1 SC 1.4 P23 L5 # 319  
 Tu, Mike Broadcom  
 Comment Type T Comment Status A 50GBASE-T2/100GBASE-T4  
 100GBASE-T4 has been removed from Clause 165  
 SuggestedRemedy  
 Delete line 5 to 9  
 Response Response Status C  
 ACCEPT.

Cl 1 SC 1.4 P23 L15 # 320  
 Tu, Mike Broadcom  
 Comment Type T Comment Status A 50GBASE-T2/100GBASE-T4  
 50GBASE-T2 has been removed from Clause 165  
 SuggestedRemedy  
 Delete line 15 to 19  
 Response Response Status C  
 ACCEPT.

Cl 1 SC 1.4.41a P23 L6 # 292  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A 50GBASE-T2/100GBASE-T4  
 Delete the text for 100GBASE-T4.  
 SuggestedRemedy  
 Delete 1.4.41a and the Editor's instructions before it.  
 Response Response Status C  
 ACCEPT.

Cl 1 SC 1.4.175a P23 L16 # 291  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A 50GBASE-T2/100GBASE-T4  
 Delete the text for 50GBASE-T2.  
 SuggestedRemedy  
 Delete 1.4.175a and the Editor's instructions before it.  
 Response Response Status C  
 ACCEPT.

Cl 16 SC 16.5.3 P117 L25 # 321  
 Tu, Mike Broadcom  
 Comment Type E Comment Status A  
 Combine paragraphs at line 25-28 and at line 43-47.  
 SuggestedRemedy  
 1. Replace line 25-28 by the following two paragraphs:  
 The PMA provides the Transmit function specified in 165.4.2.2 in accordance with the electrical specifications of this clause. The electrical input shall be AC-coupled, i.e., it shall present a high DC common-mode impedance at the MDI. There may be various methods for AC-coupling in actual implementations.  
 Unless specified otherwise, all transmitter measurements and tests defined in 165.5.3 are made at TP2 utilizing a test fixture that meets the specifications 165.5.5.  
 2. Delete line 43-47  
 Response Response Status C  
 ACCEPT.

Cl 45 SC 45.2.3 P30 L1 # 294  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A bucket  
 SuggestedRemedy  
 Delete 45.2.3 as this is copied from ch without changes.  
 Response Response Status C  
 ACCEPT.

Cl 105 SC 105.2 P43 L25 # 299  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A bucket  
 SuggestedRemedy  
 Delete Note regarding table width  
 Response Response Status C  
 ACCEPT.

comments

Cl 105 SC 105.6 P44 L45 # 301  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A bucket  
 This subclause is empty  
 SuggestedRemedy  
 Delete  
 Response Response Status C  
 ACCEPT.

Cl 105 SC 105.7 P44 L50 # 302  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A  
 Need to add Clause 165 to the list.  
 SuggestedRemedy  
 Add Editorial Note: Change 105.7 as shown below.  
 \_x\_ means underline "x"  
 Add: The supplier of a protocol implementation that is claimed to conform to any part of IEEE Std 802.3, Clause 45, Clause 73, Clause 74, Clause 106 through Clause 112, Clause 114, \_Clause 165, \_and related annexes demonstrates compliance by completing a protocol implementation conformance statement (PICS) proforma.  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.1.1 P45 L26 # 304  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A 165.1.1  
 Since this is a single PHY, we don't need this subclause. This was used in P802.3ch to define the relationship of the 3 PHYs.  
 SuggestedRemedy  
 Delete Subclause  
 Response Response Status C  
 ACCEPT IN PRINCIPLE.  
 See comment #327

Cl 165 SC 165.1.1 P45 L27 # 327  
 Zimmerman, George CME Consulting/various  
 Comment Type T Comment Status A 165.1.1  
 The paragraph under Nomenclature was borrowed from Clause 149 which defines three PHYs - here there is only one. This paragraph can be repurposed to define the relationship of 25GBASE-T1 to the MultiGBASE-T1 PHY set.  
 SuggestedRemedy  
 Replace paragraph in 165.1.1 (P45 L27 to 31) with "The 25GBASE-T1 PHYs in this clause are members of the MultiGBASE-T1 PHY set, defined in 1.4.407. The PHYs in this set share control registers and characteristics. The nomenclature "MultiGBASE-T1" is used to refer to registers and features common to the PHYs in the set."

Response Response Status C  
 ACCEPT IN PRINCIPLE.  
 Replace paragraph in 165.1.1 (P45 L27 to 31) with "The 25GBASE-T1 PHY defined in this Clause is a member of the MultiGBASE-T1 PHY set, as defined in 1.4.407. The PHYs in this set share control registers and characteristics. The term MultiGBASE-T1" when used in this Clause refers to registers and features common to the PHYs in this set."

Cl 165 SC 165.1.3 P46 L34 # 305  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A bucket  
 SuggestedRemedy  
 Change: The 25GBASE-T1 PHYs utilize  
 To: The 25GBASE-T1 PHY utilizes  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.1.3 P47 L3 # 293  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A bucket  
 Add reference to Annex K  
 SuggestedRemedy  
 Between 3rd and 4th paragraph add "NOTE—Annex K defines optional alternative terminology for "master" and "slave".  
 Response Response Status C  
 ACCEPT.

comments

Cl 165 SC 165.1.3 P47 L8 # 324

Zimmerman, George CME Consulting/various  
 Comment Type E Comment Status A MultiGBASE-T1

Nomenclature for 'MultiGBASE-T1' - the 25GBASE-T1 OAM channel is a little different than the 'MultiGBASE-T1' OAM channel, as defined. Nomenclature needs to refer to it specifically.

SuggestedRemedy

Changes:  
 P47 L8: change "the MultiGBASE-T1 PCS-based operations" to "the PCS-based operations"  
 P47 L9: change "The MultiGBASE-T1 OAM" to "This"  
 P47 L10, 12, 13: Replace "the MultiGBASE-T1 OAM" with "OAM for 25GBASE-T1" (3 instances)  
 P47 L47: Change "EEE and MultiGBASE-T1 OAM" to "EEE and OAM"

Response Response Status C

ACCEPT.

Cl 165 SC 165.1.3.1 P47 L22 # 325

Zimmerman, George CME Consulting/various  
 Comment Type E Comment Status A MultiGBASE-T1

Nomenclature for "MultiGBASE-T1" is used for 25GBASE-T1 specific sublayers incorrectly, for example, it is the 25GBASE-T1 PCS, not the MultiGBASE-T1 PCS... (or other PHY-specific characteristic) Since Clause 165 is 25GBASE-T1, it is clear it is the 25GBASE-T1 PCS (or whatever), and MultiGBASE-T1 may simply be deleted or replaced with 25GBASE-T1 as appropriate for readability.

SuggestedRemedy

Delete "MultiGBASE-T1" at the following places:  
 P47 L 22, 37; and P49 L 9,  
 Replace "MultiGBASE-T1" with "25GBASE-T1" at P49 L 22, 23; P49 L51; P50 L44; and P51 L3

Response Response Status C

ACCEPT.

Cl 165 SC 165.3 P59 L18 # 332

Zimmerman, George CME Consulting/various  
 Comment Type E Comment Status R

Looking through the text of 165.3 we have cleaned out the general 'step-by-step' descriptions of the state diagrams, and it appears the text aligns. No changes to text

SuggestedRemedy

No changes to text - feel free to reject, or use this comment to insert changes needed that someone else sees

Response Response Status C

REJECT.

Cl 165 SC 165.3.2.2.5 P66 L8 # 328

Zimmerman, George CME Consulting/various  
 Comment Type T Comment Status A

"The control characters and their mappings to 25GBASE-T1 control codes and 25GMII control codes are specified in Table 165-1. All 25GMII control code..." These control codes are identical to those in Clause 149, and can be considered common to 25GBASE-T1. The text as is makes it look like they are somehow different. They should be included by reference.

SuggestedRemedy

Change "The control characters and their mappings to 25GBASE-T1 control codes and 25GMII control codes are specified in Table 165-1." to "The control characters and their mappings to MultiGBASE-T1 control codes and control codes at the xMII are common across the MultiGBASE-T family, except for 25GBASE-T the xMII is the 25GMII. These are specified in Table 149-1."  
 Delete Table 165-1.  
 Change Cross references at P63 L11 (figure 165-6), P64 L11 (figure 165-7), P67 L2, P75 L28, P75 L29, P84 L32, P84 L33, P85 L18, P85 L20, and P139 L42 from Table 165-1 to (external) Table 149-1

Response Response Status C

ACCEPT.

comments

Cl 165 SC 165.3.2.2.6 P66 L53 # 306  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A 50GBASE-T2/100GBASE-T4  
 Remnant of 50G and 100G.  
 SuggestedRemedy  
 Change: 25, 50, and 100 Gigabit Ethernet use  
 To: 25 Gigabit Ethernet uses  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.3.9.2 P94 L21 # 329  
 Zimmerman, George CME Consulting/various  
 Comment Type E Comment Status A  
 "The 25GBASE-T1 OAM functions are defined in 149.3.9.2 except for..." is incorrect -  
 149.3.9.2 defines the MultiGBASE-T1 OAM functions, not the 25GBASE-T1 specific ones.  
 These are the same with a few exceptions.  
 SuggestedRemedy  
 Change from ""The 25GBASE-T1 OAM functions are defined in 149.3.9.2 except for..." to  
 "25GBASE-T1 OAM functions are the same as those defined for other MultiGBASE-T1  
 PHYs in 149.3.9.2 with the exception that...  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.4 P96 L3 # 295  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A bucket  
 This should have been deleted when most OAM content was referred to 149.  
 SuggestedRemedy  
 Delete Figure 165-21  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.4.2.4.10 P103 L5 # 317  
 Razavi Majomard, seid alireza Marvell  
 Comment Type T Comment Status R  
 maximum time is 40-0.384  
 SuggestedRemedy  
 maximum time is 30-0.384 as described in  
 majomard\_tahir\_jonsson\_3cy\_01\_06\_19\_22.pdf, slide 2  
 Response Response Status C  
 REJECT.

No consensus to make this change at this time.

Cl 165 SC 165.4.2.4.10 P103 L18 # 318  
 Razavi Majomard, seid alireza Marvell  
 Comment Type T Comment Status R  
 maximum time is 40  
 SuggestedRemedy  
 maximum time is 30 as described in majomard\_tahir\_jonsson\_3cy\_01\_06\_19\_22.pdf,slide  
 2  
 Response Response Status C  
 REJECT.

No consensus to make this change at this time.

comments

Cl 165 SC 165.4.2.6.1 P105 L9 # 330

Zimmerman, George CME Consulting/various

Comment Type T Comment Status A

10G-T1, 5G-T1, and 2.5G-T1 are not described in this clause and are beyond the scope of it. These should not be in our state diagram.

Additionally, as far as listing the values, either ALL the values for force\_phy\_type (including 100-T1, 1000-T1) should be added or only 25G-T1. Better to leave them to their own clauses...

SuggestedRemedy

Delete variable values for 10G-T1, 5G-T1, and 2.5G-T1 on P105 Lines 9-11.

On P105 L13, Change "beyond the scope of this clause." to "beyond the scope of this clause (For examples of other values see Clause 97 and Clause 149)." (with clause 97 & clause 149 external cross references)

On P107 L38-40 (Figure 165-27), change OR'd condition into SYNC\_DISABLE "(force\_phy\_type ≠ 2.5G-T1 \*force\_phy\_type ≠ 5G-T1 \*force\_phy\_type ≠ 10G-T1 \*force\_phy\_type ≠ 25G-T1)" so that it reads "force\_phy\_type ≠ 25G-T1"

Response Response Status C

ACCEPT IN PRINCIPLE.

Delete variable values for 10G-T1, 5G-T1, and 2.5G-T1 on P105 Lines 9-11.

>><< marks the change from the original comment

On P105 L13, Change "beyond the scope of this clause." to "beyond the scope of this clause (>>f<<or examples of other values see Clause 97 and Clause 149)." (with clause 97 & clause 149 external cross references)

On P107 L38-40 (Figure 165-27), change OR'd condition into SYNC\_DISABLE "(force\_phy\_type ≠ 2.5G-T1 \*force\_phy\_type ≠ 5G-T1 \*force\_phy\_type ≠ 10G-T1 \*force\_phy\_type ≠ 25G-T1)" so that it reads "force\_phy\_type ≠ 25G-T1"

Cl 165 SC 165.4.3.1 P108 L35 # 333

Jonsson, Ragnar Marvell

Comment Type E Comment Status R

A note was dropped during comment resolution for draft 1.2. This note is probably unnecessary, but a possible text for the note is suggested.

SuggestedRemedy

If the note is needed, the suggested text for the note is: NOTE – the receiver can be expected to ignore the first 150 ns following a transition to quiet refresh signaling.

Response Response Status C

REJECT.

Consensus NOT to add this note at this time.

Cl 165 SC 165.5.3 P117 L30 # 310

Wienckowski, Natalie General Motors

Comment Type E Comment Status A bucket

SuggestedRemedy

Delete Editor's Note

Response Response Status C

ACCEPT.

Cl 165 SC 165.5.3 P117 L34 # 311

Wienckowski, Natalie General Motors

Comment Type E Comment Status A bucket

SuggestedRemedy

Delete Editor's Note

Response Response Status C

ACCEPT.

Cl 165 SC 165.5.3 P117 L42 # 312

Wienckowski, Natalie General Motors

Comment Type E Comment Status A bucket

SuggestedRemedy

Delete Editor's Note

Response Response Status C

ACCEPT.

Cl 165 SC 165.5.4 P120 L45 # 307

Wienckowski, Natalie General Motors

Comment Type E Comment Status A bucket

SuggestedRemedy

Delete Editorial Note in yellow highlight.

Response Response Status C

ACCEPT.

comments

Cl 165 SC 165.6 P124 L 52 # 331  
 Zimmerman, George CME Consulting/various  
 Comment Type E Comment Status A bucket  
 "25GBASE-T1 make extensive use of the management" usage error - should be "makes extensive use"  
 SuggestedRemedy  
 change "make extensive" to "makes extensive"  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.7 P125 L 14 # 300  
 Wienckowski, Natalie General Motors  
 Comment Type T Comment Status A 50GBASE-T2/100GBASE-T4  
 Remove 50G and 100G  
 SuggestedRemedy  
 Change:25GBASE-T1 are designed to operate over a single shielded balanced pair of conductors that meet the requirements specified in this subclause. The one, two, and four pair of shielded, balanced conductors supports an effective data rate of 25 Gb/s, 50 Gb/s, and 100 Gb/s in each direction simultaneously.  
 To: 25GBASE-T1 is designed to operate over a single shielded balanced pair of conductors that meet the requirements specified in this subclause. The single pair of shielded, balanced conductors supports an effective data rate of 25 Gb/s in each direction simultaneously.  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.7.1.1 P125 L 37 # 296  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A bucket  
 Delete Editor's Note  
 SuggestedRemedy  
 Delete Editor's Note  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.11.4.3.6 P148 L 27 # 326  
 Zimmerman, George CME Consulting/various  
 Comment Type E Comment Status A bucket  
 "prior to MultiGBASE-T1 link training" - the link training is specific to the PHY  
 SuggestedRemedy  
 delete "MultiGBASE-T1" in the description of PICS PLS7  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.11.4.4.2 P151 L 11 # 322  
 Tu, Mike Broadcom  
 Comment Type T Comment Status A  
 The jitter measuring interval should be 0.4 ms  
 SuggestedRemedy  
 Change TES10 column 4 (Value/Comment) to:  
 Measured over an interval of 0.4 ms +- 10%  
 Response Response Status C  
 ACCEPT.

Cl 165 SC 165.11.4.4.2 P151 L 26 # 323  
 Tu, Mike Broadcom  
 Comment Type T Comment Status A  
 EOJpk-pk jitter shall be less than 1.6 ps  
 SuggestedRemedy  
 Change TES17 column 4 (Value/Comment) to:  
 Less than 1.6 ps  
 Response Response Status C  
 ACCEPT.

comments

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CI 165A SC 165A.2 P157 L 14 # 297  
Wienckowski, Natalie General Motors  
Comment Type E Comment Status A bucket

*SuggestedRemedy*

Delete Editor's Note

Response Response Status C  
ACCEPT.

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CI 165A SC 165A.4 P158 L 40 # 298  
Wienckowski, Natalie General Motors  
Comment Type E Comment Status A bucket

*SuggestedRemedy*

Delete Editor's Note

Response Response Status C  
ACCEPT.