Layer Specifications and Management Parameters for Greater Than 1 Gb/s Automotive Ethernet 1st Tc

**Comment Type** E  **Comment Status** D  **EZ**

**Suggested Remedy**

Duplicate of Amendment:

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT IN PRINCIPLE.**

**Change:** Amendment: Amendment: Physical Layer Specifications

To:** Amendment: Physical Layer Specifications

**Comment Type** E  **Comment Status** D  **EZ**

**Suggested Remedy**

Remove second Amendment:

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT IN PRINCIPLE.**

**Comment Type** E  **Comment Status** D  **EZ**

**Suggested Remedy**

Remove all empty pages throughout document

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT.**

**Comment Type** E  **Comment Status** D  **EZ**

**Suggested Remedy**

EEE is optional for 5GBASE-T1

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT IN PRINCIPLE.**

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

**Comment Type** E  **Comment Status** D

**Suggested Remedy**

Broken link

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT.**

**Comment Type** E  **Comment Status** D  **EZ**

**Suggested Remedy**

Change: 0 1 00

To: 0 1 0 0

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT.**

**Comment Type** E  **Comment Status** D  **EZ**

**Suggested Remedy**

Modify Editor Instruction based on 802.3cg change

**Proposed Response**  **Response Status** W

**PROPOSED ACCEPT IN PRINCIPLE.**

Editor to update Editor Instruction based on P802.3cg D2p1.
Comment Type: E  Comment Status: D  EZ
Page forced to 21

Wienckowski, Natalie  General Motors

Suggested Remedy

Change to use next available page number.

Proposed Response  Response Status: W
PROPOSED ACCEPT.

---

Comment Type: E  Comment Status: D  EZ
Missing space

Wienckowski, Natalie  General Motors

Suggested Remedy

Change: PAM4 for
To: PAM4 for

Proposed Response  Response Status: W
PROPOSED ACCEPT.

---

Comment Type: T  Comment Status: D  EZ

Wu, Mau-Lin  MediaTek

Suggested Remedy

In Table 125-1, the "Description" of 2.5GBASE-T1 is "TBD modulation". It's not correct!

Proposed Response  Response Status: W
PROPOSED ACCEPT IN PRINCIPLE.

---

Comment Type: T  Comment Status: D  EZ

Wu, Peter  Marvell

Suggested Remedy

EEE is optional for 2.5GBASE-T1

Proposed Response  Response Status: W
PROPOSED ACCEPT IN PRINCIPLE.

---

Comment Type: T  Comment Status: D  EZ

Wienckowski, Natalie  General Motors

Suggested Remedy

The team had adopted PAM4 as the modulation of 2.5GBASE-T1 and 5GBASE-T1. Shall modify "TBD modulation" into "PAM4 modulation".

Proposed Response  Response Status: W
PROPOSED ACCEPT.
Comment Type: T  Comment Status: D  EZ
The MDI is not part of the PHY and should not be shaded in Figure 149-1.

Suggested Remedy:
Remove shading on MDI "box" in Figure 149-1.

Proposed Response: Response Status: W
PROPOSED ACCEPT.

Comment Type: E  Comment Status: D  EZ
missing periods

Suggested Remedy:
Add periods at end of OK and NOT_OK statements

Proposed Response: Response Status: W
PROPOSED ACCEPT.

Comment Type: E  Comment Status: D  EZ
typo

Suggested Remedy:
Change: stat). To state.

Proposed Response: Response Status: W
PROPOSED ACCEPT.

Comment Type: E  Comment Status: D  EZ
broken link

Suggested Remedy:
Change: text 149.1
To: Link to 149.5

Proposed Response: Response Status: W
PROPOSED ACCEPT.
Comment Type: T  Comment Status: D  Link Sync
sigdet_wait_timerExpiration changed to * 5.0us±0.15us*

Suggested Remedy:
see attached contribution "Wu_3ch_01a_0918.pdf"

Proposed Response: Response Status: W
PROPOSED ACCEPT IN PRINCIPLE.

Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 4, subbullet 2.

Comment Type: E  Comment Status: D  EZ
missing periods

Suggested Remedy:
Add periods at end of SEND_N, SEND_I, SEND_T, SEND_Z statements

Proposed Response: Response Status: W
PROPOSED ACCEPT.

Comment Type: T  Comment Status: D  PMA
The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified.

Suggested Remedy:
Accept the text in clause 149.5.1 and its subclauses, e.g. remove yellow highlighting.

Proposed Response: Response Status: W
PROPOSED ACCEPT.

IEC specs only go to 1 GHZ. We are checking to see if there is any standard we can refer to that goes to a higher frequency. NOTE: The CISPR 25 test referred to in 149.9.2.2 does include RE for GPS and GLONASS bands.
Set the short-term rate of frequency variation to 0.1 ppm/second.

Suggested Remedy
Remove yellow highlighting on 0.1 ppm/second.

Proposed Response Response Status W
PROPOSED ACCEPT.

Set maximum link segment propagation delay to 94 ns as the maximum segment length is the same as bp. This is a propagation delay of 6.27 ns/m. Most cable used for this purpose is about 5.5 ns/m.

Suggested Remedy
Remove yellow highlighting on 94 ns.

Proposed Response Response Status W
PROPOSED ACCEPT.

Set maximum frequency for link segment propagation delay to 3000 MHz.

Suggested Remedy
Remove yellow highlighting on 3000 MHz.

Proposed Response Response Status W
PROPOSED ACCEPT.

This spec should not define a specific MDI connector.

Suggested Remedy
Remove yellow highlighting on: Further specification of the mechanical interface is beyond the scope of this standard.

Proposed Response Response Status W
PROPOSED ACCEPT.

The automotive fault tolerance is the same for all communication speeds.

Suggested Remedy
Remove yellow highlighting on: See 96.8.3.

Proposed Response Response Status W
PROPOSED ACCEPT.

Change: The 5GBASE-T1 and 10GBASE-T1 PHYs utilizes four level To: The 5GBASE-T1 and 10GBASE-T1 PHYs utilize four level

Proposed Response Response Status W
PROPOSED ACCEPT.
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<td>D/</td>
<td>The MDI is not part of the PHY and should not be shaded in Figure 150-1.</td>
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</table>

**Suggested Remedy**
- Remove shading on MDI "box" in Figure 150-1.
- Change: text 150.1
  - To: Link to 150.2.2
- Change: stat). To state.
- Change: text 150.1
  - To: Link to 150.5

**Proposed Response**
- Response Status: W
- Response Status: W
- Response Status: W
- Response Status: W
- Response Status: W
- Response Status: W
- Response Status: W
- Response Status: W
In section 150.4.2.6, insert a paragraph between the 2nd and 3rd paragraphs with the text:

The frequency of the SEND_S signal shall be 703.125MHz.

In section 150.4.2.6.2, in bullet 3, change "1.25us±0.05us" to "5.0us±0.15us".

Make change as defined in Wu_3ch_01a_0918.pdf, Slide 4, bullet 4, subbullet 2.

The PMA electrical specification tests for Multi-Gig are the same as they are for slower speeds as specific frequencies are not specified.

Accept the text in clause 150.5.1 and its subclauses, e.g. remove yellow highlighting.

IEC specs only go to 1 GHZ. We are checking to see if there is any standard we can refer to that goes to a higher frequency. NOTE: The CISPR 25 test referred to in 149.9.2.2 does include RE for GPS and GLONASS bands.
<table>
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<td>Redraw Figure 150-13 in Frame.</td>
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<td>Duplicate clause heading: Test Modes</td>
<td>Remove duplicate clause heading 150.5.3 Test Modes</td>
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<td>D</td>
<td>PMA</td>
<td>Set peak differential output tolerance to 30%.</td>
<td>Change: transmit differential signal at MDI shall be less than 1 +TBD V peak-to-peak To: transmit differential signal at MDI shall be less than 1.3 V peak-to-peak</td>
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<td>PMA</td>
<td>Set the short-term rate of frequency variation to 0.1 ppm/second.</td>
<td>Remove yellow highlighting on 0.1 ppm/second.</td>
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<td>Set the short-term rate of frequency variation to 0.1 ppm/second.</td>
<td>Change frequency axis should start at 0</td>
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<td>Change frequency axis should be to 0 to 3000.</td>
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</tbody>
</table>
Set maximum link segment propagation delay to 94 ns as the maximum segment length is the same as bp. This is a propagation delay of 6.27 ns/m. Most cable used for this purpose is about 5.5 ns/m.

**Suggested Remedy**
- Remove yellow highlighting on 94 ns.

**Proposed Response**
- **Response Status**: W

---

Set maximum frequency for link segment propagation delay to 3000 MHz.

**Suggested Remedy**
- Remove yellow highlighting on 3000 MHz.

**Proposed Response**
- **Response Status**: W

---

This spec should not define a specific MDI connector.

**Suggested Remedy**
- Remove yellow highlighting on: Further specification of the mechanical interface is beyond the scope of this standard.

**Proposed Response**
- **Response Status**: W

---

The automotive fault tolerance is the same for all communication speeds.

**Suggested Remedy**
- Remove yellow highlighting on: See 96.8.3.

**Proposed Response**
- **Response Status**: W

---

See wienckowski_3ch_02_0918.pdf for rationale.