Cl **149**   *SC* **149.9.2.2**   *P* **97**   *L* **51**   # 1

Jones, Chad   Cisco

Comment Type **ER**   *Comment Status* **D**   *Conformance*

"In addition, the system may need to comply with more stringent requirements as agreed upon between customer and supplier, for the limitation of electromagnetic interference." the customer and supplier have no business in an interoperability spec. Delete this text.

SuggestedRemedy

change to: "In addition, the system may need to comply with more stringent requirements for the limitation of electromagnetic interference."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Change: In addition, the system may need to comply with more stringent requirements as agreed upon between customer and supplier, for the limitation of electromagnetic interference.

To: In addition, the system may need to comply with more stringent requirements for the limitation of electromagnetic interference.

Cl **149**   *SC* **149.9.2.2**   *P* **98**   *L* **6**   # 2

Jones, Chad   Cisco

Comment Type **ER**   *Comment Status* **D**   *Conformance*

"Exact test setup and test limit values may be adapted to each specific application, subject to agreement between the customer and the supplier." the customer and supplier have no business in an interoperability spec. Delete this text.

SuggestedRemedy

change to: "Exact test setup and test limit values may be adapted to each specific application."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**   *SC* **149.9.1**   *P* **97**   *L* **21**   # 3

Jones, Chad   Cisco

Comment Type **ER**   *Comment Status* **D**   *Conformance*

"All equipment subject to this clause may be additionally required to conform to any applicable local, state, or national standards or as agreed to between the customer and supplier." the customer and supplier have no business in an interoperability spec. Delete this text.

SuggestedRemedy

change to: "All equipment subject to this clause may be additionally required to conform to any applicable local, state, or national standards."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change: All equipment subject to this clause may be additionally required to conform to any applicable local, state, or national standards or as agreed to between the customer and supplier.

To: All equipment subject to this clause shall conform to all applicable local, state, national, and application-specific standards.

Cl **78**   *SC* **78.1**   *P* **30**   *L* **11**   # 4

Wienckowski, Natalie   General Motors

Comment Type **T**   *Comment Status* **D**   *EEE*

Add Section 78.1.4, Table 78-1 with 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1, all referenced to Clause 149.

SuggestedRemedy

Insert a row for 2.5GBASE-T1 after 2.5GBASE-T, insert a row for 5GBASE-T1 after 5GBASE-T, and insert a row for 10GBASE-T1 after 10GBASE-T.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **125**   *SC* **125.1.4**   *P* **35**   *L* **17**   # 5

Wienckowski, Natalie   General Motors

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

missing space

SuggestedRemedy

Change "64B/65Bencoding" to "64B/65B encoding".

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **5**

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Cl **149**	*SC* **149.1**	*P* **38**	*L* **14**	# 6

Wienckowski, Natalie   General Motors

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

missing comma

SuggestedRemedy

Change " The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**	*SC* **149.1**	*P* **38**	*L* **17**	# 7

Wienckowski, Natalie   General Motors

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

missing comma

SuggestedRemedy

Change " The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**	*SC* **149.1**	*P* **38**	*L* **19**	# 8

Wienckowski, Natalie   General Motors

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

missing comma

SuggestedRemedy

Change " The 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1 PHYs" to "The 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1 PHYs"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**	*SC* **149.1.3**	*P* **40**	*L* **26**	# 9

Wienckowski, Natalie   General Motors

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

missing space

SuggestedRemedy

Change "10GBASE-T1over" to "10GBASE-T1 over"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**	*SC* **149.2.2.4.2**	*P* **47**	*L* **17**	# 10

Wienckowski, Natalie   General Motors

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

missing comma

SuggestedRemedy

Change "for 5GBASE-T1 and 5625 MHz for" to "for 5GBASE-T1, and 5625 MHz for"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**	*SC* **149.3.2.2.3**	*P* **54**	*L* **33**	# 11

Wienckowski, Natalie   General Motors

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

missing comma

SuggestedRemedy

Change "/O/, /S/ and /T/" to "/O/, /S/, and /T/".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **149**	*SC* **149.3.2.2.6**	*P* **57**	*L* **46**	# 12

Wienckowski, Natalie   General Motors

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

missing comma

SuggestedRemedy

Change "2.5, 5 and 10" to "2.5, 5, and 10".

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **12**

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11/5/2018 4:31:30 PM

Cl **149**   *SC* **149.3.3**   *P* **66**   *L* **39**   # 13

Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
missing comma

SuggestedRemedy
Change "the local transmitter, the channel and remote receiver." to "the local transmitter, the channel, and remote receiver.".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.7**   *P* **93**   *L* **52**   # 14

Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
missing comma

SuggestedRemedy
Change "2.5 Gb/s, 5 Gb/s and 10 Gb/s" to "2.5 Gb/s, 5 Gb/s, and 10 Gb/s".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149A**   *SC* **149A.1**   *P* **102**   *L* **12**   # 15

Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
missing comma

SuggestedRemedy
Change " 2.5GBASE-T1, 5GBASE-T1 and 10GBASE-T1" to "2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149A**   *SC* **149A.1**   *P* **102**   *L* **32**   # 16

Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
missing comma

SuggestedRemedy
Change "cable, PCB connectors and inline connectors" to "cable, PCB connectors, and inline connectors".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **44**   *SC* **44.1.3**   *P* **23**   *L* **23**   # 17

Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
Renumber figures and change editor instruction

SuggestedRemedy
Change editor instruction to: Replace Figure 44-1 with Figure 44-1a and Figure 44-1b as shown below.
Renumber Figure 44-1 to 44-1a.
Renumber Figure 44-1a to 44-1b.

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

Change editor instruction to: Replace Figure 44-1 with Figure 44-1 shown below.

Combine current figures into a single figure with two separate drawings in it.

Grant editorial license to modify figures and/or keep as two figures to fit on a single page.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Comment ID

Comment ID **17**   Page 3 of 8
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Cl **125**   *SC* **125.1.2**   *P* **33**   *L* **8**   # 18
Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
Renumber figures and change editor instruction

SuggestedRemedy
Change editor instruction to: Replace Figure 125-1 (as modified by IEEE Std 802.3cb-2018) with Figure 125-1a and Figure 125-1b as shown below. Insert the following text at the end of the list after d) of 125.1.2 (as modified by IEEE Std 802.3cb-2018) as follows:
Renumber Figure 125-1 to 125-1a.
Renumber Figure 125-1a to 125-1b.

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

Change editor instruction to: Replace Figure 125-1 (as modified by IEEE Std 802.3cb-2018) with Figure 125-1 shown below.

Combine current figures into a single figure with two separate drawings in it.

Grant editorial license to modify figures and/or keep as two figures to fit on a single page.

Cl **44**   *SC* **44.1.3**   *P* **24**   *L* **15**   # 19
Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *PCS*
10GBASE-T1 does not hav a LDPC PCS.

SuggestedRemedy
In 10GBASE-T1 stack, change "LDPC PCS" to "64B/65B PCS".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Change "LDPC PCS" to "64B/65B RS-FEC PCS".

Cl **149**   *SC* **149.5.5.1**   *P* **91**   *L* **1**   # 20
Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
Carryover of comment #24 from D0p5.

SuggestedRemedy
Redraw Figure 149-20 in FM.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.1.3.1**   *P* **40**   *L* **41**   # 21
Wienckowski, Natalie   General Motors

Comment Type **E**   *Comment Status* **D**   *EZ*
Change awkward wording: A 10-bit OAM field is next appended

SuggestedRemedy
Change "A 10-bit OAM field is next appended" to "Next, a 10-bit OAM field is appended".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.1.3.3**   *P* **41**   *L* **31**   # 22
Wienckowski, Natalie   General Motors

Comment Type **T**   *Comment Status* **D**   *EZ*
These PHYs use XGMII

SuggestedRemedy
Change "GMII" to "XGMII". Also on line 34.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.1.3.4**   *P* **41**   *L* **49**   # 23
Wienckowski, Natalie   General Motors

Comment Type **T**   *Comment Status* **D**   *Synchronization*
Change 1 us to 1.25 us per send_s_timer

SuggestedRemedy
Change "the MASTER PHY sends a synchronization sequence for 1 µs." to "the MASTER PHY sends a synchronization sequence for 1.25 µs."

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **23**   Page 4 of 8
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Cl **149**   *SC* **149.1.3.4**   *P* **41**   *L* **50**   # 24
Wienckowski, Natalie   General Motors

Comment Type   **T**   *Comment Status* **D**   *Synchronization*
Change to 6.25 us, sum of send_s_timer and sigdet_wait_timer.

SuggestedRemedy
Change "MASTER repeats by sending a synchronization sequence every 5 µs." to "MASTER repeats by sending a synchronization sequence every 6.25 µs."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.1.3.4**   *P* **41**   *L* **51**   # 25
Wienckowski, Natalie   General Motors

Comment Type   **T**   *Comment Status* **D**   *Synchronization*
Change 1 us to 1.25 us per send_s_timer

SuggestedRemedy
Change "it responds with a synchronization sequence for 1 µs" to "it responds with a synchronization sequence for 1.25 µs".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.1.3.4**   *P* **41**   *L* **52**   # 26
Wienckowski, Natalie   General Motors

Comment Type   **T**   *Comment Status* **D**   *Synchronization*
Change to 5 us per sigdet_wait_timer.

SuggestedRemedy
Change "after the SLAVE response for 4 µs" to "after the SLAVE response for 5 µs".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.2.1.1.1**   *P* **43**   *L* **29**   # 27
Wienckowski, Natalie   General Motors

Comment Type   **E**   *Comment Status* **D**   *EZ*
Make DISABLE and ENABLE statements parallel.

SuggestedRemedy
Change "Used by the Auto-Negotiation to enable the PHY." to "Used by the Auto-Negotiation function to enable the PHY."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.2.2.8.1**   *P* **49**   *L* **3**   # 28
Wienckowski, Natalie   General Motors

Comment Type   **E**   *Comment Status* **D**   *EZ*
Missing periods

SuggestedRemedy
Add periods at the end of the OK and NOT_OK statements.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **149**   *SC* **149.3.2.2**   *P* **53**   *L* **32**   # 29
Wienckowski, Natalie   General Motors

Comment Type   **T**   *Comment Status* **D**   *PAM2 levels*
accept highlighted text for PAM 2 levels

SuggestedRemedy
Remove yellow highlighting on "2/3, 2/3} to keep the transmit power in the training mode close to the transmit power in normal mode."

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **29**   Page 5 of 8
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Cl **149** *SC* **149.1.3** *P* **39** *L* **14** # 30
Tu, Mike Broadcom

Comment Type **TR** *Comment Status* **D** *EZ*
Change "TBD encoding" to "64B/65B encoding"

SuggestedRemedy
Change "TBD encoding" to "64B/65B encoding"

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **149** *SC* **149.1.3** *P* **40** *L* **7** # 31
Tu, Mike Broadcom

Comment Type **TR** *Comment Status* **D** *EZ*
When Auto-Negotiation is not used, MASTER and SLAVE must be synchronized by the
PHY Link Synchronization function as defined in 149.4.2.6.

SuggestedRemedy
Change "The MASTER and SLAVE are synchronized by a PHY Link Synchronization
function ..." to "The MASTER and SLAVE shall be synchronized by the PHY Link
Synchronization
function ...

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **149** *SC* **149.3.2.2.16** *P* **62** *L* **14** # 32
Tu, Mike Broadcom

Comment Type **TR** *Comment Status* **D** *EZ*
Input should be m325, m324, .

SuggestedRemedy
Change "m355" to "m325". Use subscript for "325".

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **149** *SC* **149.1.3** *P* **39** *L* **16** # 33
Tu, Mike Broadcom

Comment Type **TR** *Comment Status* **D** *PCS*
Need to specify the meaning of "50 blocks"

SuggestedRemedy
Change "each group of 50 blocks" to "each group of 50 64B/65B blocks"

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **149** *SC* **149.1.4** *P* **42** *L* **22** # 34
Tu, Mike Broadcom

Comment Type **TR** *Comment Status* **D** *EZ*
PAM4 has four transmit voltage levels

SuggestedRemedy
Change "one of ??? Power levels" to "one of four voltage levels"

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **149** *SC* **149.3.2.2** *P* **53** *L* **32** # 35
Tu, Mike Broadcom

Comment Type **TR** *Comment Status* **D** *PAM2 levels*
The PAM2 transmit levels have not yet been determined.

SuggestedRemedy
An agreement by the task force is reuqired.

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
That is why there are currently highlighted in yellow. See Comment #29.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Comment ID

Comment ID **35**

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Cl **149**   *SC* **149.3.2.2**   *P* **54**   *L* **1**   # 36
Tu, Mike   Broadcom

Comment Type **TR**   *Comment Status* **D**   *Interleaving*
    The interleaving depths have not yet been determined.

SuggestedRemedy
    An agreement by the task force is reuqired.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE.
    That is why there are currently highlighted in yellow.

Cl **149**   *SC* **149.1.3.4**   *P* **56**   *L* **40**   # 37
Tu, Mike   Broadcom

Comment Type **TR**   *Comment Status* **D**   *PCS*
    There should be 1800 rx_PAM4 symbols per RS FEC frame. The figure is showing 1801
    rx_PAM4 symbols.

SuggestedRemedy
    Option 1: Change "rx_PAM4n (PMA)" to "rx_PAM4n+1 (PMA)"
    Option 2: Change "rx_PAM4n+1800 (PMA)" to "rx_PAM4n+1799 (PMA)"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE.
    See Comment #41

Cl **149**   *SC* **149.1.4**   *P* **42**   *L* **11**   # 38
McClellan, Brett   Marvell

Comment Type **E**   *Comment Status* **D**   *EZ*
    this is a single pair PHY

SuggestedRemedy
    delete "on any pair combination."

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT.

Cl **149**   *SC* **149.3.2.2**   *P* **53**   *L* **3**   # 39
McClellan, Brett   Marvell

Comment Type **E**   *Comment Status* **D**   *PCS*
    figure references should be clause 149 instead of 136

SuggestedRemedy
    change "136" to "149" in multiple locations

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE.
    Update the references, which are currently highlighted in yellow, to the appropriate
    references when the Figures are provided and added to the document.

Cl **149**   *SC* **149.3.2.2.13**   *P* **59**   *L* **46**   # 40
McClellan, Brett   Marvell

Comment Type **E**   *Comment Status* **D**   *PCS*
    figure references should be clause 149 instead of 136

SuggestedRemedy
    change "136" to "149" in multiple locations

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE.
    Update the references, which are currently highlighted in yellow, to the appropriate
    references when the Figures are provided and added to the document.

Cl **149**   *SC* **149.3.2.2.4**   *P* **56**   *L* **40**   # 41
McClellan, Brett   Marvell

Comment Type **E**   *Comment Status* **D**   *PCS*
    a block has 1800 symbols

SuggestedRemedy
    change "n+1800" to "n+1799"

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **41**   Page 7 of 8
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   11/5/2018 4:31:31 PM
SORT ORDER: Comment ID

Cl **149**   *SC* **149.3.2.2.4**   *P* **55**   *L* **31**   # 42

McClellan, Brett   Marvell

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

indexes usually start at zero

SuggestedRemedy

change indexes from 1 through 1800 to 0 through 1799

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT IN PRINCIPLE.
Should Page 56, Line 33 also be changed?

Cl **149**   *SC* **149.3.2.2**   *P* **53**   *L* **24**   # 43

McClellan, Brett   Marvell

Comment Type   **T**   *Comment Status*   **D**   *PCS*

symbol period scales with 1/S not with S

SuggestedRemedy

Change "x S" to "/ S"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **43**   Page 8 of 8
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   11/5/2018 4:31:31 PM
SORT ORDER: Comment ID