Cl 44 SC 44.1.3 P27 L3 # 23

Maguire, Valere The Siemon Company

Comment Type E Comment Status D

Editorial

Fditorial

Correct grammatical of the word "which"

SuggestedRemedy

Insert a comma after the last word coming before "which" in these locations: page 27 - line 3, page 35 - line 31, page 61 - line 8, page 69 - line 37, page 70 - line 2, page 80 - line 5, and page 90 - line 51.

Proposed Response Response Status W PROPOSED ACCEPT.

Cl 45 SC 45.2.3.72.5 P42 L15 # 8

Anslow, Pete Ciena

Comment Type E Comment Status D

In the second line of text "8 octet" has been changed to "8-octet".

However, the text in the base standard is "8 octet".

If it is intended that this amendment changes "8 octet" to "8-octet" then this has to be shown with strikethrough and underline font, preferably with "8 octet" in strikethrough and "8-octet" in underline for clarity.

SuggestedRemedy

If it is intended that this amendment changes "8 octet" to "8-octet" then this has to be shown with strikethrough and underline font, preferably with "8 octet" in strikethrough and "8-octet" in underline for clarity.

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

Cl 45 SC 45.2.3.75 P44 L3 # 10

Anslow, Pete Ciena

Comment Type E Comment Status D Editorial

While the addition of the hyphen in "8-octet" is shown with underline, the removal of the space is not shown with strikethrough.

SuggestedRemedy

Show "8 octet" in strikethrough and "8-octet" in underline for clarity.

Proposed Response Response Status W

PROPOSED ACCEPT

Cl 45 SC 45.2.3.80.5 P49 L13 # 139

Wienckowski, Natalie General Motors

Comment Type E Comment Status D Editorial

There is a carriage return that shouldn't be there. This section should be a single paragraph.

SuggestedRemedy

Remove the carriage return after "behavior." to bring the following line into the same paragraph.

Proposed Response Response Status W
PROPOSED REJECT

In the BASE-T1 bits which are copies, the statement that the bit is a copy is set off by being its own paragraph for readability. See 45.2.3.69.1 and 45.2.3.69.2

Cl 149 SC 149.1.3.3 P69 L15 # 12

Chen, Steven Broadcom

Comment Type TR Comment Status D Editorial

The transmit transition to the LPI transmit mode is based on the TXD[31:0] of the XGMII,

not in the last 64B/64B block of a RS frame.

SuggestedRemedy

Change "... an LPI control character in the last 64B/65B block of a Reed-Solomon frame." to "... an LPI control character in all four lanes of two consecutive transfers of TXD[31:0] that will be mapped into a single 64B/65B block."

Proposed Response Response Status W PROPOSED ACCEPT.

C/ 149 SC 149.1.3.3 P69 L20 # 148 Wienckowski. Natalie General Motors Comment Type E Comment Status D Editorial

missing comma

SuggestedRemedy

Change: Periodically the transmit To: Periodically, the transmit

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(rewrite, removing need for the comma and improving clarity)

Change: Periodically the transmit function of the local PHY transmits refresh frames that are used by the link partner to update adaptive filters and timing circuits in order to maintain link integrity.

To: The transmit function of the local PHY periodically transmits refresh frames. These are used by the link partner to update adaptive filters and timing circuits in order to maintain link integrity.

C/ 149 SC 149.2.2.1.1 P**74** L48 # 154 Wienckowski. Natalie General Motors

Comment Type T Comment Status D Editorial

We removed SEND I, but didn't change the number of values to "three" from "four" in the text.

SuggestedRemedy

Change: four To: three

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: can take on one of the following four values of the form:

To: can take on one of the following values:

C/ 149 SC 149.2.2.3 P**76** L34 # 114

Chen. Steven Broadcom

Comment Type ER Comment Status D Editorial

Using XGMII instead.

SuggestedRemedy

Change "to represent GMII data and ..." to "to represent XGMII data and ..."

Suggest to search and replace it globally.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Make the suggested change and also make this change on P148 L34.

C/ 149 SC 149.3.2.2 P83 L37 # 232

Zimmerman, George CME:ADI, Aquantia, AP

Comment Type T Comment Status D Editorial

aggregation into a superframe is not an option - it is written as if it were.

SuggestedRemedy

Change "In order to improve error correction capability, the PHY may aggregate L RS-FEC input frames into an interleaved RS-FEC input superframe."

"The PHY aggregates L RS-FEC input frames into an L-interleaved (L=1, 2, or 4) RS-FEC input superframe."

Proposed Response Response Status W

PROPOSED ACCEPT

C/ 149 SC 149.3.2.2.15 P91 / 15 # 233

Zimmerman, George CME:ADI, Aquantia, AP

Comment Type E Comment Status D

Editorial

"This may be computed". "may" is a special word for "is permitted to". In this case, it is describing an implementation.

SuggestedRemedy

Change "may" to "can"

Proposed Response Response Status W

PROPOSED ACCEPT

C/ 149 SC 149.3.2.2.16 P94 L19 # 96 C/ 149 SC 149.3.2.3 P97 L28 # 188 Tu. Mike Broadcom Wienckowski. Natalie General Motors Comment Type TR Comment Status D Editorial Comment Type E Comment Status D Editorial Wrong indices. "m L" should be "m 0" at both the input and the output of the Lth encoder. Add comma for readability. SuggestedRemedy SuggestedRemedy Change "m_L" to "m_0" at bot the input and the output of the Lth RS Encoder. Change: monitors the signal quality asserting hi rfer if excessive To: monitors the signal quality, asserting hi rfer if excessive Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT IN PRINCIPLE. C/ 149 SC 149.3.2.2.16 P94 L19 # 117 Change: monitors the signal quality asserting hi rfer if excessive RS-FEC frame errors are Chen. Steven Broadcom detected. Comment Type TR Comment Status D Editorial To: monitors the signal quality and asserts hi rfer to indicate excessive RS-FEC frame The last message symbol of the input message symbols should be m0, not mL. errors SuggestedRemedy C/ 149 P97 SC 149.3.2.3 L38 # 86 In the input message symbols, change "mL" to "m0". Tu, Mike Broadcom Proposed Response Response Status W Comment Status D Comment Type TR Editorial PROPOSED ACCEPT. There are 450 PAM2 symbols per partial frame. SC 149.3.2.2.16 P94 C/ 149 L19 # 266 SuggestedRemedy Wei, Dong Futurewei Technologie Within the highlighted text, change "180" to "450". Then remove the highlights. Comment Type ER Comment Status D Editorial Proposed Response Response Status W Typo PROPOSED ACCEPT. SuggestedRemedy C/ 149 SC 149.3.2.3 P97 L38 # 277 Change "mL" to "m0"; Figure 149-10, at the RS Encoder #L, the input and output mL McClellan, Brett Marvell should be m0. Proposed Response Response Status W Comment Type T Comment Status D Editorial PROPOSED ACCEPT. according to 149.3.4.1. alignment bits are placed every 450 symbols. SuggestedRemedy C/ 149 SC 149.3.2.2.20 P**96** L3 # 98 Change 80 to 450. Tu. Mike Broadcom Proposed Response Response Status W Comment Type TR Comment Status D Editorial PROPOSED ACCEPT IN PRINCIPLE. "P(r,t)" probably should be "P(u)" Change: 180 SuggestedRemedy Replace "P(r,t)" on line 3 and line 6 by "P(u)" To: 450 Proposed Response Response Status W Changing 80 to 450 would yield 1450 which is not what is desired here. 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: Clause, Subclause, page, line

C/ 149 SC 149.3.2.3 Page 3 of 10 3/1/2019 5:42:41 PM C/ 149 SC 149.3.4 P98 L47 # 237 Zimmerman. George CME:ADI.Aguantia.AP

Comment Type T Comment Status D

Editorial

C/ 149

Benvamin, Saied

Comment Type E Comment Status D

SC 149.3.5

Editorial

32

"PMA training side-stream scrambler polynomials" - these are also used in data mode. They're not just for breakfast anymore.

SuggestedRemedy

C/ 149

Delete "PMA Training" so that the header for 149.3.4 reads "Side-stream scrambler polynomials"

Proposed Response Response Status W

SC 149.3.4.1

PROPOSED ACCEPT. P99 L37 # 305

den Besten, Gerrit **NXP Semiconductors**

Comment Type T Comment Status D Editorial

"alignment to the RS-FEC block and the 16 partial PHY frames that comprise the block" "block" is confusing here as block is used in the context of 64B/65B block encoding. What is meant here is PAM2 training sequence with the length of 4 RS frames. I think this is called super-frame.

SuggestedRemedy

Replace by: "alignment to the RS-FEC super-frame comprising 16 partial PHY frames"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: alignment to the RS-FEC block and the 16 partial PHY frames that comprise the block

To: alignment to the RS-FEC super-frame comprised of 16 partial PHY frames

We space alerts so they do not overlap by forcing their start times. It is more clear to refer to alert start time as opposed to alert signal. Also in the same sentence we refert to the link partner. See following text and changes in bold on the right

P100

Aquantia

L34

lpi offset is a fixed value equal to lpi gr time / 2 + 4 (52 RS-FEC frame periods) that is used to ensure refresh signals and alert signals are appropriately offset by the link partner's.

SuggestedRemedy

lpi offset is a fixed value equal to lpi gr time / 2 + 4 (52 RS-FEC frame periods) that is used to ensure refresh signals and alert start times are appropriately offset from the link partner's.

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Change "alert signals" to "alert start times" on P100 L34.

24 C/ 149 SC 149.3.6.2.2 P102 L49

Maguire, Valere The Siemon Company

Comment Status D Comment Type Editorial

Consistency with other text in clause

SuggestedRemedy

Replace "which" with "that"

Proposed Response Response Status W

PROPOSED ACCEPT.

Change "TBD" to "65B RS-FEC"

C/ 149 SC 149.3.6.2.4 P105 L25 # 199 C/ 149 SC 149.3.7.3 P112 L50 # 224 Wienckowski. Natalie General Motors Zimmerman, George CME:ADI,Aquantia,AP Comment Type E Comment Status D Editorial Comment Type E Comment Status D Editorial awkward wording "a continuous stream of TBD encoded PAM 4 symbols" - the missing word is "RS-FEC" SuggestedRemedy SuggestedRemedy Change: belonging to the eight types Replace "TBD" with "RS-FEC" To: belonging to one of the eight types Proposed Response Response Status W Also on page 106, line 11 PROPOSED ACCEPT IN PRINCIPLE Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. Change "TBD" to "65B RS-FEC" Change: belonging to the eight types C/ 149 SC 149.3.8 P113 L14 # 121 Chen. Steven Broadcom To: belonging to one or more of the eight types Comment Type E Comment Status D Editorial Also on page 106, line 11 The OAM10 is not defined. C/ 149 SC 149.3.7.3 P112 L50 # 93 SuggestedRemedy Tu. Mike Change "the OAM10 field" to "the OAM 10-bit field" Broadcom Also replace the same issue in page 113 line 30. Comment Type TR Comment Status D Editorial Proposed Response Response Status W Change "TBD" to "65B RS-FEC" PROPOSED ACCEPT. SuggestedRemedy Change "TBD" to "65B RS-FEC" C/ 149 P114 SC 149.3.8.2.1 L38 # 308 den Besten, Gerrit **NXP Semiconductors** Proposed Response Response Status W PROPOSED ACCEPT. Comment Type E Comment Status D **Fditorial** "full OAM frame can packed into 8 super frames in the 2x interleave mode, and into 4 super C/ 149 SC 149.3.7.3 P112 L50 # 306 frames in the 4x interleave mode" den Besten, Gerrit **NXP Semiconductors** SuggestedRemedy Comment Type T Comment Status D Editorial "full OAM frame can be packed into 8 super frames in the 2x interleaved mode, and into 4 super frames in the 4x interleaved mode" **TBD** Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Replace "TBD encoded" with "encoded transmit data" Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Proposed Response

PROPOSED ACCEPT.

C/ 149 SC 149.3.8.2.1 P114 L41 # 235 Zimmerman. George CME:ADI.Aguantia.AP Comment Type E Comment Status D Editorial "it may be possible". "may" means "it is permitted to" - "it is permitted to be possible" doesn't really make sense. If it is, indeed possible, "it is possible", if we are unsure, let's figure it out! (in 2 places, also on line 44) SuggestedRemedy Change "it may be possible" to "it is possible" on lines 41 and 44 Proposed Response Response Status W PROPOSED ACCEPT. P117 # 122 C/ 149 SC 149.3.8.2.12 L31 Chen. Steven Broadcom Comment Type TR Comment Status D **Fditorial** The definition of "not receiving transmit messaged from the MAC" needs to be clarified. SuggestedRemedy Change "... not receiving transmit messaged from the MAC" to "... not receiving valid transmit message from the MAC" Proposed Response Response Status W PROPOSED ACCEPT. C/ 149 SC 149.3.8.2.13 P118 L14 # 202 Wienckowski. Natalie General Motors Comment Type E Comment Status D Editorial subject/verb agreement SuggestedRemedy Change: The RS(16, 14) parity symbols is indicated To: The RS(16, 14) parity symbols are indicated

Response Status W

C/ 149 SC 149.3.8.2.14 P118 L41 # 205 Wienckowski. Natalie General Motors Comment Type E Comment Status D Editorial missing periods SuggestedRemedy Add periods at the end of the a) and b) statements. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE (change is on page 119, and a) and b) are not sentences. Change: a) RS(16, 14) uncorrectable error b) Uncorrectable PHY frame on any of the 16 symbols To: a) RS(16, 14) contains an uncorrectable error, or b) there is an uncorrectable PHY frame on any of the 16 symbols. C/ 149 SC 149.3.8.2.14 P119 L39 Lo. William Axonne Inc Editorial Comment Type ER Comment Status D Title heading incorrect SuggestedRemedy Delete 1000BASE-T1 Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. Change: 1000BASE-T1 To: BASE-T1 SC 149.3.8.2.15 P119 C/ 149 / 48 # 236 Zimmerman, George CME:ADI, Aquantia, AP Comment Type E Comment Status D **Fditorial** "that may cause the PHY" - it appears "can cause the PHY" would be more appropriate. This is neither permission nor option. Occurs 2 times, also on line 51. SugaestedRemedy Change "may" to "can" on lines 48 & 51 Proposed Response Response Status W PROPOSED ACCEPT

C/ 149

SC 149.3.8.2.15

Editorial

CI 149 SC 149.3.8.4.3 P126 L47 # 214
Wienckowski, Natalie General Motors

Comment Type E Comment Status D Editorial missing periods

SuggestedRemedy

Add period at the end of the 0 and 1 sentences.

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE

Change: "0: BASE-T1 OAM message not received and read by the link partner

1: BASE-T1 OAM message received by the link partner"

to: "0: BASE-T1 OAM message was not received and read by the link partner.

1: BASE-T1 OAM message was received by the link partner."

Cl 149 SC 149.3.8.4.3 P127 L11 # 215
Wienckowski, Natalie General Motors

Comment Type **E** Comment Status **D** improve wording to match other statements

SuggestedRemedy

Change: Don't send request to link partner...

To: Don't request link partner...

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE

Change: false: Don't send request to link partner to clear their REC counter.

To: false: Don't request link partner to clear its REC counter.

C/ 149 SC 149.3.8.4.3 P127 L12 # 216

Wienckowski, Natalie General Motors

Comment Type E Comment Status D Editorial

improve wording to match other statements

SuggestedRemedy

Change: Send request to link partner...

To: Request link partner...

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: true: Send request to link partner to clear their REC counter.

To: true: Request link partner to clear its REC counter.

C/ 149 SC 149.3.8.4.3 P127 L43 # 163

Wienckowski, Natalie General Motors

Comment Type **E** Comment Status **D** Editorial missing periods

SuggestedRemedy

Add periods at the end of both "Values" sentences.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Add periods at the end of both values, and editorial license to add periods at the end of other Values in 149.3.8.4.3 which may be lacking and are complete sentences (e.g., P127 L21 & 22)

Comment Type E Comment Status D Editorial

missing period

SuggestedRemedy

Add period at end of "Good" sentence.

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

This is not a sentence

Remove period at the end of the "BAD" statement as it is not a sentence.

Proposed Response

C/ 149 SC 149.3.8.4.3 P128 L19 # 165 C/ 149 SC 149.3.8.4.4 Wienckowski. Natalie General Motors Lo. William Comment Type E Comment Status D Editorial Comment Type ER missing periods rx cnt incorrectly defined SuggestedRemedy SuggestedRemedy Add periods at the end of both "Values" sentences. Change: Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE Proposed Response Change: false: transmit stream not at a boundary end true: transmit stream at a boundary end To: false: transmit stream is not at a boundary end. Change: true: transmit stream is at a boundary end. C/ 149 SC 149.3.8.4.3 P129 L20 # 166 Wienckowski. Natalie General Motors C/ 149 SC 149.4.2.2.1 Comment Status D Comment Type E Editorial Wienckowski. Natalie missing periods Comment Type E SuggestedRemedy Add periods at the end of all 4 "Values" sentences. SuggestedRemedy Proposed Response Response Status W PROPOSED ACCEPT. than -53 dBm. C/ 149 SC 149.3.8.4.3 P129 L33 # 167 Wienckowski, Natalie General Motors Proposed Response Editorial Comment Type E Comment Status D PROPOSED ACCEPT. missing periods SuggestedRemedy Add periods at the end of both "Values" sentences.

P130 L17 # 51 Axonne Inc Comment Status D Editorial A count of received OAM frames A count of received OAM frame symbols Response Status W PROPOSED ACCEPT IN PRINCIPLE. A count of received OAM frames. A count of received OAM frame symbols. P135 L26 # 172 General Motors Comment Status D **Fditorial** improve wording by removing an extra "transmitter". Change: When the PMA transmit disable variable is set to true, this function shall turn off

the transmitter so that the transmitter Average Launch Power of the Transmitter is less

To: When the PMA transmit disable variable is set to true, this function shall turn off the transmitter so that the Average Launch Power of the Transmitter is less than -53 dBm.

Response Status W

To: false: transmit stream is not at a boundary end. true: transmit stream is at a boundary end.

Change: false: transmit stream not at a boundary end

PROPOSED ACCEPT IN PRINCIPLE

true: transmit stream at a boundary end

Response Status W

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: Clause, Subclause, page, line

C/ 149 SC 149.4.2.2.1 Page 8 of 10 3/1/2019 5:42:41 PM Cl 149 SC 149.4.2.4.2 P137 L3 # 175
Wienckowski, Natalie General Motors

Comment Type T Comment Status D Editorial
The SOF is 3 octets, not 4. Also, fix subject/verb agreement.

SuggestedRemedy

Change: The start of Frame Delimiter consist of 4 octets [Octet 1<7:0>, Octet 2<7:0>, Octet 3<7:0>]

To: The start of Frame Delimiter consists of 3 octets [Octet 1<7:0>, Octet 2<7:0>, Octet 3<7:0>]

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: The start of Frame Delimiter consist of 4 octets [Octet 1<7:0>, Octet 2<7:0>, Octet 3<7:0>]

To: The start of Frame Delimiter consists of three octets [Octet 1<7:0>, Octet 2<7:0>, Octet 3<7:0>]

Cl 149 SC 149.4.2.4.4 P137 L15 # 176
Wienckowski, Natalie General Motors

Comment Type E Comment Status D Editorial

Not a sentence

SuggestedRemedy

Change: Message Field (1 octet). To: The Message Field is 1 octet.

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: Message Field (1 octet).
To: The Message Field is one octet.

Cl 149 SC 149.4.2.4.5 P138 L42 # 238

Zimmerman, George CME:ADI,Aquantia,AP

Comment Type T Comment Status D Editorial

"data mode precoder" - it's used in training as well. It is not just for data mode.

SuggestedRemedy

Change "data mode precoder" to "requested precoder"

Proposed Response Status W

PROPOSED ACCEPT.

Comment Type ER Comment Status D Editorial

Use the Link Synchronization when AN is disabled.

SuggestedRemedy

Change the "synchronization ..." to "Link Synchronization ...".

Proposed Response Response Status W
PROPOSED ACCEPT

Cl 149 SC 149.5.1 P152 L7 # 243

Zimmerman, George CME:ADI,Aquantia,AP

Comment Type E Comment Status D Editorial

Table 149-12 - the highlighted text is correct,

SuggestedRemedy

Remove highlighting on Test mode descriptions for modes 1, 5 and 7 in Table 149-12

Proposed Response Response Status **W**

PROPOSED ACCEPT.

C/ 149 SC 149.7.1.1 P158 L27 # 249

Wei, Dong Futurewei Technologie

Comment Type ER Comment Status D Editorial

Typo

SuggestedRemedy

Delete the unit of "MHz", Fmax is just the number.

Proposed Response Response Status W

PROPOSED ACCEPT.

Editorial

C/ 149 SC 149.7.1.3 P160 L38 # 255

Wei, Dong Futurewei Technologie

Comment Status D Comment Type ER Editorial typo

SuggestedRemedy

Change "N=1" to "N=1" in the equation (149-23)

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change "N = 1" to "N = 1 curve which is equivalent to equation (149-19)."

C/ 149A SC 149A.2 P169 L26 # 260

Futurewei Technologie Wei, Dong

Comment Status D Comment Type ER Editorial

Туро

SuggestedRemedy

Change "23°C ± 5°C" to "23 ± 5°C"

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ various SC various P**0** L0 # 42

Benyamin, Saied Aquantia

Comment Type G Comment Status D

There are a zillion places where 1000Base-T1 is mentioned; on some, we have crossed out

the "1000"

SuggestedRemedy

They all need to change to MGBase-T1

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

OAM registers used for both 1000BASE-T1 and MultiGBASE-T1 are named BASE-T1.

The following are the places where "1000" does not have strikethrough but it should.

P119 L38. P127 L35