

IEEE P802.3bq D3.1 25G/40GBASE-T Ethernet 1st Sponsor recirculation ballot comments

Cl 113 SC 113.1.3 P 78 L 43 # r01-9
 Zimmerman, George Aquantia, and CommS
 Comment Type E Comment Status A Editorial
 Editorial staff instructions are to use Baud, and its abbreviation Bd for signalling rate.
 SuggestedRemedy
 Change Msymbol/s in all instances to MBd. (P78 L43, 44; P79 L2, 3; and P83 L5)
 Response Response Status C
 ACCEPT.

Cl 113 SC 113.11 P 192 L 27 # r01-8
 Zimmerman, George Aquantia, and CommS
 Comment Type T Comment Status A Cabling
 Equation 80-1 does not specify the delay in bit times per meter of cabling, but rather in terms of ns/m of cabling.
 SuggestedRemedy
 Change "Equation (105-1) and Equation (80-1) respectively specify the calculation of bit time per meter of electrical cable." to read: "Equation (105-1) specifies the calculation of bit time per meter of electrical cable for 25GBASE-T. Equation (80-1) specifies the delay per meter of electrical cable in nanoseconds, and may be used for 40GBASE-T, given the bit time for 40 Gb/s Ethernet of 25 ps (see notes to Table 80-5)."
 Response Response Status C
 ACCEPT.

Cl 113 SC 113.3.2.2.14 P 105 L 44 # r01-12
 McClellan, Brett Marvell Semiconducto
 Comment Type T Comment Status A PCS
 invalid blocks only appear at the receiver, not the transmitter
 SuggestedRemedy
 delete "It is also sent when invalid blocks are received."
 Response Response Status C
 ACCEPT.

Cl 113 SC 113.3.2.2.8 P 104 L 31 # r01-11
 McClellan, Brett Marvell Semiconducto
 Comment Type T Comment Status A PCS
 this section defines invalid blocks that may be seen at the receiver, not the transmitter
 SuggestedRemedy
 move this section to 113.3.2.3.3
 add text "Invalid blocks are replaced with Error."
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Move this section to 113.3.2.3.3, and retile "Invalid blocks" (there are no valid blocks in the section)
 add text "Invalid blocks are replaced by error." as the first sentence of the section.
 After item (e) add the following (based on 55.3.2.3.3 CRC8 receive function text, which we deleted and inadvertently deleted the 'invalid PHY frame' detection):
 "The PCS Receive function shall check the integrity of the LDPC and RS-FEC parity bits defined in 113.3.2.2.19 and 113.2.2.20, respectively. If either check fails the PHY frame is invalid."

Cl 113 SC 113.5.3.5 P 167 L 45 # r01-14
 Zimmerman, George Aquantia, and CommS
 Comment Type T Comment Status A Unsatisfied Comments
 Does the frequency requirement also apply to SLAVE PHYs? (related to unsatisfied comment i-93)
 SuggestedRemedy
 Change "When the transmitter is" to
 "For a MASTER PHY, when the transmitter is"
 A specification for the SLAVE is not required during either during normal operation, MASTER in LPI, or SLAVE in LPI.
 During normal operation and SLAVE in LPI the SLAVE has no trouble tracking since the MASTER is always transmitting. (aligns with similar text adopted by IEEE P802.3bp in comment resolution)
 Response Response Status C
 ACCEPT.

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Cl 113 SC 113.7.1 P 175 L 25 # r01-15
Hess, David CORD DATA

Comment Type E Comment Status A Cabling

ISO/IEC TR 11801-9905 is included in the Bibliography

Add informative reference to it for "operation on other classes of cabling", after:

113.7.1 Cabling system characteristics
The cabling system used to support 25G/40GBASE-T requires 4-pair balanced cabling with a nominal impedance of 100ohm listed in Table 113-21. Operation on other classes of cabling may be supported if the link segment meets the requirements of 113.7.

SuggestedRemedy

Add third sentence to 113.7.1:
It is recommended that the guidelines in ISO/IEC TR 11801-9905, be considered before the installation of 25GBASE-T equipment for operation on other classes of cabling.

Response Response Status C

ACCEPT IN PRINCIPLE.
Add the following at the end of 113.7.1 (P175 L36):

NOTE - ISO/IEC JTC1 SC25/WG3 is in the process of developing technical report ISO/IEC TR 11801-9905 "Guidelines for the use of installed cabling to support 25GBASE-T application", to provide guidance on the use of other cabling classes with this standard at the 25 Gb/s rate. When complete, it is expected to provide specifications for cabling, certification, and mitigation procedures suitable for use with this standard.

Delete Editor's note in Annex A (P217 L13-16)

Cl 113 SC 113.8.2.1 P 189 L 12 # r01-13
McClellan, Brett Marvell Semiconducto

Comment Type E Comment Status A EZ

typo

SuggestedRemedy

change "efrom" to "from"

Response Response Status C

ACCEPT.

Cl 113 SC 113.8.2.1 P 189 L 12 # r01-6
Anslow, Peter Ciena Corporation

Comment Type E Comment Status A EZ

Typo "efrom"

SuggestedRemedy

Change to "from"

Response Response Status C

ACCEPT. (duplicate of r01-13, same definition, only needs implementing once)

Cl 45 SC 45.2.1.62.1 P 36 L 38 # r01-1
Anslow, Peter Ciena Corporation

Comment Type E Comment Status A EZ

Typo in "25G/45GBASE-T"

SuggestedRemedy

Change to "25G/40GBASE-T"

Response Response Status C

ACCEPT.

Cl 45 SC 45.2.1.64.2 P 37 L 37 # r01-2
Anslow, Peter Ciena Corporation

Comment Type E Comment Status A EZ

"55.5.4.5" should be in forest green

SuggestedRemedy

Apply character tag External

Response Response Status C

ACCEPT.

Cl 45 SC 45.2.3.7 P 43 L 3 # r01-10
Zimmerman, George Aquantia, and CommS

Comment Type E Comment Status A EZ

Editorial staff instruction that references to other amendments be parenthesized

SuggestedRemedy

Parenthesize "(as modified by IEEE Std 802.3by-201X)" (P43, L3 and L7)

Response Response Status C

ACCEPT.

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CI 45 SC 45.2.3.9a P 44 L 21 # r01-4
 Anslow, Peter Ciena Corporation

Comment Type E Comment Status A EZ

45.2.3.9a and 45.2.3.9a.1 are not clauses.
 Also, the instruction to Insert 45.2.3.9a.1 appears twice

SuggestedRemedy

Change the first editing instruction to:
 Insert 45.2.3.9a, Table 45-125a, and 45.2.3.9a.1 after 45.2.3.9 as follows:
 Remove the second editing instruction "Insert 45.2.3.9a.1 after 45.2.3.9a as follows:"

Response Response Status C

ACCEPT.

CI 45 SC 45.2.3.9a P 44 L 21 # r01-3
 Anslow, Peter Ciena Corporation

Comment Type E Comment Status A EZ

The name of the register is "EEE control and capability 2", so "EEE control and capability register 2" should be "EEE control and capability 2 register" in the editing instruction and title of Table 45-125a

SuggestedRemedy

In the editing instruction and title of Table 45-125a change "EEE control and capability register 2" to "EEE control and capability 2 register"

Response Response Status C

ACCEPT.
 (note this is correct in 802.3bz D2.0)

CI 45 SC 45.2.7.14a P 48 L 16 # r01-5
 Anslow, Peter Ciena Corporation

Comment Type T Comment Status R Registers

When the 802.3bq and 802.3bz amendments have been applied the registers will be:

- 7.60 EEE advertisement 1
- 7.61 EEE link partner ability 1
- 7.62 EEE advertisement 2
- 7.63 EEE link partner ability 2
- 7.64 MultiGBASE-T AN control 2
- 7.65 MultiGBASE-T AN status 2

It seems likely that at some time there may be a need to expand the EEE registers to add EEE advertisement 3 and EEE link partner ability 3. This would naturally be 7.64 and 7.65.

As the block of 14 registers below:

- 7.32 MultiGBASE-T AN control 1
 - 7.33 MultiGBASE-T AN status 1
- is unallocated, it seems better to move to:
- 7.34 MultiGBASE-T AN control 2
 - 7.35 MultiGBASE-T AN status 2

SuggestedRemedy

- Move
- 7.64 MultiGBASE-T AN control 2
 - 7.65 MultiGBASE-T AN status 2
- to:
- 7.34 MultiGBASE-T AN control 2
 - 7.35 MultiGBASE-T AN status 2

Response Response Status C

REJECT.
 The comment is out of scope for the recirculation and refers to unchanged text.

Register addresses have been stable for some time.
 Additionally, it does not fix a problem now or in the near future, as there are 14 extra bits to be filled before a new set of EEE registers are needed.

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Cl **TBD** *SC* **TBD** *P* **42** *L* **1** # **r01-7**
Rannow, R K APIC Corp

Comment Type **GR** *Comment Status* **R** *Editorial - Required*

A couple uses of the "neither ... nor" can be extremely confusing to ESL individuals, leading to missed opportunities.

SuggestedRemedy

Response *Response Status* **W**

REJECT.

The proposed change in the comment does not contain sufficient detail so that the CRC can understand the specific changes that satisfy the commenter

Comment is out of scope - no changed text at the referenced page

Draft 3.1 of 802.3bq has 3 instances of "neither... Nor combinations" which are in unchanged text, and a fourth (P52 L8), in response to a comment on draft 3.1. IEEE Std 802.3-2015 uses "neither ... nor" language between 30 and 50 times.