

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

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

Comment Type E Comment Status D 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.

Proposed Response Response Status W

PROPOSED REJECT.

Task Force needs a liaised draft of the TR to understand its contents and properly reference it.

Task Force to discuss, particularly, alignment and progress of the ISO/IEC TR 11801-9905 Draft coming out of the current ISO/IEC SC25 WG3 meeting with the link segment specifications and consistency of the referenced TR with the preceding statement "Operation on other classes of cabling may be supported if the link segment meets the requirements of 113.7."

CI 113 SC 113.11 P 192 L 27 # r01-8
Zimmerman, George Aquantia, and CommS

Comment Type T Comment Status D 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)."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 113 SC 113.1.3 P 78 L 43 # r01-9
Zimmerman, George Aquantia, and CommS

Comment Type E Comment Status D 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)

Proposed Response Response Status W

PROPOSED ACCEPT.

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

Comment Type GR Comment Status D Editorial - Required

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

SuggestedRemedy

Proposed Response Response Status W

PROPOSED 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.

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

Comment Type E Comment Status D EZ

typo

SuggestedRemedy

change "efrom" to "from"

Proposed Response Response Status W

PROPOSED ACCEPT.

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CI 45 SC 45.2.3.7 P 43 L 3 # r01-10
 Zimmerman, George Aquantia, and CommS
 Comment Type E Comment Status D 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)
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 113 SC 113.8.2.1 P 189 L 12 # r01-6
 Anslow, Peter Ciena Corporation
 Comment Type E Comment Status D EZ
 Typo "efrom"
 SuggestedRemedy
 Change to "from"
 Proposed Response Response Status W
 PROPOSED ACCEPT. (duplicate of r01-13, same definition, only needs implementing once)

CI 45 SC 45.2.3.9a P 44 L 21 # r01-4
 Anslow, Peter Ciena Corporation
 Comment Type E Comment Status D 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:"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.3.9a P 44 L 21 # r01-3
 Anslow, Peter Ciena Corporation
 Comment Type E Comment Status D 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"

Proposed Response Response Status W
 PROPOSED ACCEPT.
 (note this is correct in 802.3bz D2.0)

CI 45 SC 45.2.1.64.2 P 37 L 37 # r01-2
 Anslow, Peter Ciena Corporation
 Comment Type E Comment Status D EZ
 "55.5.4.5" should be in forest green
 SuggestedRemedy
 Apply character tag External

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.62.1 P 36 L 38 # r01-1
 Anslow, Peter Ciena Corporation
 Comment Type E Comment Status D EZ
 Typo in "25G/45GBASE-T"
 SuggestedRemedy
 Change to "25G/40GBASE-T"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

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

Cl 113 SC 113.3.2.2.8 P 104 L 31 # r01-11
 McClellan, Brett Marvell Semiconducto
 Comment Type T Comment Status D 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."
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Move this section to 113.3.2.3.3, and retitle "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 45 SC 45.2.7.14a P 48 L 16 # r01-5
 Anslow, Peter Ciena Corporation
 Comment Type T Comment Status D 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
 Proposed Response Response Status W
 PROPOSED REJECT.
 The comment is out of scope for the recirculation.
 Task Force to discuss.
 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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CI 126 SC 126.5.3.5 P 167 L 45 # r01-14
Zimmerman, George Aquantia, and CommS

Comment Type T Comment Status D 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)

Proposed Response Response Status W

PROPOSED ACCEPT.