

IEEE P802.3bq D3.0 25G/40GBASE-T Ethernet Initial Sponsor ballot comments

CI 113 SC 113.7.1 P 178 L 23 # i-10
 Maguire, Valerie The Siemon Company

Comment Type TR Comment Status R Cabling

Recognize that up to 30m, 2-connector category 7A channels, meeting the additional specifications described in ISO/IEC TR 11801-9905, will support 25GBASE-T.

SuggestedRemedy

Refer to page 3 of http://www.ieee802.org/3/bq/public/nov15/maguire_3bq_01a_1115.pdf to see proposed changes with revision marks.

Response Response Status U

REJECT.
 No consensus to change the draft.

Straw Poll:
 I support the commenter's proposed resolution (including both pages 3 & 4 of the referenced file) with editorial license to align with more recent parallel changes to the draft (e.g., 'star topology' language).
 Y:8
 N:10
 A: 9

Straw Poll:
 I support rejecting this comment
 Y: 14
 N: 9
 A: 3

The editor asked whether there were any additional proposals to resolve the comment - there were none. The editor then asked whether there were any who believed there would be proposals after the lunch break or at this meeting - there were none.

CI 113 SC 113.7.2 P 178 L 44 # i-11
 Maguire, Valerie The Siemon Company

Comment Type TR Comment Status R Cabling

Recognize that up to 30m, 2-connector category 7A channels, meeting the additional specifications described in ISO/IEC TR 11801-9905, will support 25GBASE-T.

SuggestedRemedy

Refer to page 4 of http://www.ieee802.org/3/bq/public/nov15/maguire_3bq_01a_1115.pdf to see proposed changes with revision marks.

Response Response Status U

REJECT.
 No consensus to make this change to the draft

Straw Poll:
 I support the commenter's proposed resolution (including both pages 3 & 4 of the referenced file) with editorial license to align with more recent parallel changes to the draft (e.g., 'star topology' language).
 Y:7
 N:8
 A:9

Straw Poll:
 I support rejecting this comment
 Y: 10
 N: 7
 A: 7

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CI 113 SC 113.5.3.5 P 170 L 45 # i-93
 RAN, ADEE Intel Corporation

Comment Type TR Comment Status R EEE

Does the frequency variation requirement also apply to SLAVE PHYs?

Specifically, since asymmetric LPI operation is possible, the SLAVE clock recovery function has no clock to track for extended periods when the MASTER is in LPI. The SLAVE TX has to use loop-timing clock during that time. What are the frequency/phase requirements when the MASTER is in LPI? Holding the open-loop frequency within 0.1 ppm/second of the closed-loop frequency seems challenging. I don't see another value specified for the slave.

Also, there is no test mode that enables measurement of the SLAVE frequency when MASTER is going in and out of LPI.

SuggestedRemedy

If SLAVE is subject to the specifications in the second paragraph, state it explicitly.

If not, state that it only holds for MASTER, and specify separately what is required from SLAVE, especially with MASTER in LPI.

If anything is required from SLAVE, please address how it can be validated.

Response Response Status U

REJECT.
 Commenter does not provide specific sufficient remedy.

This is the exact text in clause 55 and was not misunderstood. A slave which does not keep timing would fail BER and other requirements of the clause. Experts in the BRC understood the requirement to apply to both master and slave and was correct as written.

CI 113 SC 113.5.4.3 P 171 L 22 # i-94
 RAN, ADEE Intel Corporation

Comment Type TR Comment Status A EMI test

What does "remain over the ground reference plane" mean? does it mean component enclosures are grounded to the same connection? or should they all float to be isolated from ground connection?

SuggestedRemedy

Please reword to clarify.

Response Response Status U

ACCEPT IN PRINCIPLE.
 Implemented in comment i-139

[Editor's note added after comment resolution was complete:
 the resolution to comment i-139 was:

Change to "All components that are exposed to the induced fields should remain over the ground reference plane."

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CI 113 SC 113.7.1 P 178 L 25 # i-109
Rossbach, Martin Nexans Canada Inc.

Comment Type TR Comment Status R Cabling
Add Class FA for 25GBASE-T Cabling Types

SuggestedRemedy

use the following text for 113.7.1 "The cabling system used to support 40GBASE-T requires 4-pair balanced cabling with a nominal impedance of 100 Ohm listed in Table 113-21. The cabling system used to support 25GBASE-T requires 4-pair balanced cabling with a nominal impedance of 100 Ohm listed in Table 113-22. Operation on other classes of cabling may be supported if the link segment meets the requirements of 113.7.

Additionally:

- a) 40GBASE-T uses balanced cabling listed in Table 113-21-- in a star topology to connect PHY entities.
- b) 40GBASE-T is an application of the balanced cabling listed in Table 113-21-- with the additional transmission requirements specified in this subclause.
- c) 25GBASE-T uses balanced cabling listed in Table 113-22-- in a star topology to connect PHY entities.
- d) 25GBASE-T is an application of the balanced cabling listed in Table 113-21-- with the additional transmission requirements specified in this subclause. "

Response Response Status U

REJECT.

No consensus to make this change to the draft. (see comments i-10 and i-11)

[Editor's note added after comment resolution was complete:
the resolution to comment i-10 was:
No consensus to change the draft.

Straw Poll:

I support the commenter's proposed resolution (including both pages 3 & 4 of the referenced file) with editorial license to align with more recent parallel changes to the draft (e.g., 'star topology' language).

Y:8
N:10
A: 9

Straw Poll:

I support rejecting this comment

Y: 14
N: 9
A: 3

The editor asked whether there were any additional proposals to resolve the comment - there were none. The editor then asked whether there were any who believed there would be proposals after the lunch break or at this meeting - there were none.

the resolution to comment i-11 was:

No consensus to make this change to the draft

Straw Poll:

I support the commenter's proposed resolution (including both pages 3 & 4 of the referenced file) with editorial license to align with more recent parallel changes to the draft (e.g., 'star topology' language).

Y:7
N:8
A:9

Straw Poll:

I support rejecting this comment

Y: 10
N: 7
A: 7
]

IEEE P802.3bq D3.0 25G/40GBASE-T Ethernet Initial Sponsor ballot comments

CI 113 SC 113.7.2 P 178 L 39 # i-110
Rossbach, Martin Nexans Canada Inc.

Comment Type **TR** Comment Status **R** Cabling

Add Table 113-22 for 25GBASE-T Cabling Types including Class FA

SuggestedRemedy

Link segment transmission parameters
A link segment consisting of up to 30 m of cabling that meets the transmission parameters of this subclause provides a reliable medium. The transmission parameters of the link segment include insertion loss, delay parameters, nominal impedance, NEXT loss, ACRF, and return loss. In addition, the requirements for the alien crosstalk coupled "between" link segments is specified.

Table 113-21 lists the supported cabling types and distances for 40GBASE-T and Table 113-22 lists the supported cabling types and distances for 25GBASE-T.

Table 113-21 40GBASE-T Cabling types and distances

Cabling Supported link segment distances Cabling references

ISO/IEC Class I / Class II 30 m ISO/IEC 11801-1 Edition 3

Category 8 30 m ANSI/TIA-568-C.2-1

Table 113-22 25GBASE-T Cabling types and distances

Cabling Supported link segment distances Cabling references

ISO/IEC Class I / Class II 30 m ISO/IEC 11801-1 Edition 3

Category 8 30 m ANSI/TIA-568-C.2-1

CLASS FA 30 m ISO/IEC 11801-1 Edition 3 up to 30m / ISO/IEC TR 11801-9905

Response Response Status **U**

REJECT.

No consensus to make this change to the draft. See comment i-10 and i-11

[Editor's note added after comment resolution was complete:

the resolution to comment i-10 was:

No consensus to change the draft.

Straw Poll:

I support the commenter's proposed resolution (including both pages 3 & 4 of the referenced file) with editorial license to align with more recent parallel changes to the draft (e.g., 'star topology' language).

Y:8

N:10

A: 9

Straw Poll:

I support rejecting this comment

Y: 14

N: 9

A: 3

The editor asked whether there were any additional proposals to resolve the comment - there were none. The editor then asked whether there were any who believed there would

be proposals after the lunch break or at this meeting - there were none.

the resolution to comment i-11 was:

No consensus to make this change to the draft

Straw Poll:

I support the commenter's proposed resolution (including both pages 3 & 4 of the referenced file) with editorial license to align with more recent parallel changes to the draft (e.g., 'star topology' language).

Y:7

N:8

A:9

Straw Poll:

I support rejecting this comment

Y: 10

N: 7

A: 7

]

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Cl 113 SC 113.8.1 P 192 L 8 # i-132
Schicketanz, Dieter Reutlingen University

Comment Type TR Comment Status R Cabling

in Kanata 2014 when deciding on the MDI connector the motion for an "RJ45" failed. It passed later by saying it would not preclude other options. This wording was not implemented just old wording used. In the Berlin meeting this was discussed but it was said it would be a technical change. To my knowledge implementing a motion is editorial and not a technical change. I personally was very disappointed about the treatment in Berlin.

Suggested Remedy

Change the sentence to reflect the outcome of the motion that the one mentioned connector is not the only one possible. e.g.: Start at line 8: One option is an..... After 7-81 replace "shall" with "to" My English is not sufficient to propose a good wording that would satisfy all.

Response Response Status U

REJECT.
No consensus to change the draft for this comment.

Commenter clarifies suggested remedy as:
Change P192 Line 8 to read:
"One option is using eight-pin connectors meeting the requirements of IEC 60603-7-51 with the improved characteristics and frequency extensions specified in IEC 60603-7-81 as the mechanical interface to the balanced cabling."

Straw poll:
I support the clarified suggested remedy for this comment i-132.
Y:9
N:12
A:6

Straw poll:
I support rejecting this comment:
Y:12
N: 8
A: 7

From the September 2014 Task Force meeting, Ottawa, ON, Canada meeting minutes (http://www.ieee802.org/3/bq/public/sep14/unconfirmed_minutes_3bq_0914.pdf)

The secretary & Editor noted that they understood the language of the motion not to preclude additional MDI's should they be offered in the future.

Commenter clarifies that he is requesting that the draft to be modified to include an alternative MDI.