Physical Layer and Management Parameters for 40Gb/s Operation, Type 40GBASE-T Initial Working Gru

C/ **01** SC **1.3** P **20** L **8** # 228

Booth, Brad Microsoft

Comment Type TR Comment Status R

Cablingrefs

Reference to ANSI specification is incorrect. This draft specification must reference an existing specification or draft specification, not a pending specification.

SuggestedRemedy

Provide the correct reference.

Response Status U

REJECT.

Referenced document is a draft specification.

C/ 113 SC 113.8.1 P183 L3 # 466

Lackner, Hans QoSCom GmbH

Comment Type TR Comment Status R

MDI

IEC 60603-7-51/81 is not suitable for all applications. It should be possible to use as alternative connector IEC 61076-3-110 or 60603-7-82.

SuggestedRemedy

If backward compatibility offered with IEC 60603-7-81 is not required, the interface specified in IEC 61076-3-110 or 60603-7-82 may be used.

Response Status U

REJECT.

Motion: To implement suggest remedy "If backward compatibility offered with IEC 60603-7-81 is not required, the interface specified in IEC 61076-3-110 or 60603-7-82 may be used."

M: Val Maguire

S: Yakov Belopolsky

Y:6 N:16

A:2

IEC 60603-7-51/81 shall be used. 113.8.1 MDI connectors

Eight-pin connectors meeting the requirements of IEC 60603-7-51 (published) with the improved characteristics and frequency extensions specified in IEC 60603-7-81 shall be used as the mechanical interface to the balanced cabling. The plug connector shall be used on the balanced cabling and the jack on the PHY.

IEEE P802.3bq D2.3 25G/40GBASE-T Ethernet 3rd Working Group recirculation ballot comments

Cabling

C/ 1 SC 1.3 P 24 L 12 # 34 Maquire, Valerie Siemon

Comment Type TR Comment Status R

Insert a reference to the ISO/IEC Technical Report under development to address installed cabling support of 25GBASE-T.

SuggestedRemedy

Add to Normative references:

ISO/IEC TR 11801-9905 (draft), Guidelines for the use of installed cabling to support 25GBASE-T

Add ISO/IEC TR 11801-9905 to the Editor's Note on line 14 as follows:

References to published versions of ANSI/TIA-568-C.2-1-201x, ISO/IEC 11801-1, and ISO/IEC TR 11801-9905 will be substituted when available.

Response Status W

REJECT.

Task group needs to review ISO/IEC TR 11801-9905 (draft), "Guidelines for the use of installed cabling to support 25GBASE-T" to ensure specifications meet the 802.3bq link segment specifications.

Commenter provides alternate resolution:

MOTION 7:

MOVE TO ACCEPT IN PRINCIPLE:

Add Bibliography to the draft, inserting:

ISO/IEC TR 11801-9905 (draft), Guidelines for the use of installed cabling to support 25GBASE-T

Add an Editor's Note following the entry as follows:

Reference to published version of ISO/IEC TR 11801-9905 will be substituted when available.

M: Valerie Maguire

S: Paul Vanderlaan

Y:9

N:11

A:7

MOTION FAILS

NO CONSENSUS TO CHANGE DRAFT

C/ 113 SC 113.7.1

TR

P 181

L 20

36

Maguire, Valerie

Comment Type

Siemon

Comment Status R

Cabling

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

SuggestedRemedy

See page 3 of "maguire_3bq_01_1115.pptx" to view these changes with revision marks.

Replace entire of clause 113.7.1 (except Editor's Note) with:

The cabling system used to support 40GBASE-T requires 4-pair balanced cabling with a nominal impedance of 100 W listed in Table 113-21. The cabling system used to support 25GBASE-T requires 4-pair balanced cabling with a nominal impedance of 100 W 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. The ISO/IEC 11801-1 cabling limit calculation minimums apply to the link segment specifications.
- 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. The ISO/IEC 11801-1 cabling limit calculation minimums apply to the link segment specifications.

Response Status U

REJECT.

MASTER COMMENT ON CAT7A IN 113.7

See resolution to comment#34. Resolve with comments 37.38

(Motion 4)

Move to ACCEPT text as corrected in maguire_01a_1115.pdf

M: Valerie Maguire

S: Paul Vanderlaan

Y: 13

N: 13

A: 8

MOTION FAILS

(Motion 5)

Move to ACCEPT IN PRINCIPLE adding a note to Table 113-21 under "Cabling", as follows: "(1) Additionally, 25GBASE-T support over up to 30m of installed Category 7A cabling is possible when qualified per ISO/IEC TR 11801-9905"

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 U/unsatisfied Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 113 SC 113.7.1 Page 1 of 2

11/10/2015 11:11:11 PM

IEEE P802.3bq D2.3 25G/40GBASE-T Ethernet 3rd Working Group recirculation ballot comments

M: Shadi Abughazaleh

S: Valerie Maquire

Motion 6:

Move to Amend Motion 5. deleting "Category 7A" from the text, to read: ""(1) Additionally. 25GBASE-T support over up to 30m of installed cabling is possible when qualified per ISO/IEC TR 11801-9905"

M: Alan Flatman

S: Masood Shariff

Y: 19

N: 6 A:6

MOTION PASSES

Motion 5 AS AMENDED:

Move to ACCEPT IN PRINCIPLE adding a note to Table 113-21 under "Cabling", as follows: "(1) Additionally, 25GBASE-T support over up to 30m of installed cabling is possible when qualified per ISO/IEC TR 11801-9905"

Y: 8

N: 20 A: 6

MOTION FAILS

(Working Group and Sponsor).

NO CONSENSUS TO CHANGE THE DRAFT

Commenters are encouraged to provide additional information on the content and status of ISO/IEC TR 11801-9905, and work to achieve consensus during subsequent ballot cycles C/ 113 SC 113.7.2 P 18

L 43

37

Maguire, Valerie Siemon

Comment Type TR

Comment Status R

Cabling

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

SuggestedRemedy

See page 4 of "maguire_3bq_01_1115.pptx" to see proposed table changes and to view these changes with revision marks.

Replace clause 113.7.2, starting at line 44, with:

Category 7A30 mISO/IEC TR 11801-9905

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 II30 mISO/IEC 11801-1 Edition 3 Category 830 mANSI/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 II30 mISO/IEC 11801-1 Edition 3 Category 830 mANSI/TIA-568-C.2-1

Response

Response Status U

REJECT.

See comment 36.

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 U/unsatisfied Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 113 SC 113.7.2

Page 2 of 2 11/10/2015 11:11:11 PM