

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

Cl 00 SC 0 P L # 116  
 Anslow, Pete Ciena

Comment Type TR Comment Status A 25G

The objectives of the P802.3bq project were changed by motion #32 of the Berlin plenary to include:

"Support a data rate of 25 Gb/s at the MAC/PLS Service Interface  
 Define a single 25 Gb/s PHY supporting operation on the link segment"

This draft does not include a PHY to satisfy these objectives

SuggestedRemedy

Either:  
 remove the objectives  
 or:  
 modify the project PAR and CSD responses to reflect the additional objectives and revise the draft to include a suitable PHY

Response Response Status U

ACCEPT IN PRINCIPLE.  
 Objectives are removed AND  
 PAR modifications were accidentally omitted from motions at Berlin plenary - project CSD modifications were approved.  
 Move project PAR for WG approval and progress project documentation at earliest opportunity.

Cl 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 Response Status U

REJECT.  
 Referenced document is a draft specification.

Cl 113 SC 113.7.1 P 174 L 3 # 480  
 Thompson, Geoff GraCaSI S.A.

Comment Type TR Comment Status A Cabling

It says in this line that 40GBASE-T uses "star topology". That is untrue. It uses point-to-point topology as do ALL 802.3 devices which utilize "Link Segments".

SuggestedRemedy

Replace "star" with "point-to-point"

Response Response Status U

ACCEPT IN PRINCIPLE.

Change: a) 40GBASE-T uses a star topology with balanced cabling listed in Table 113-22 used to connect PHY entities.

To: a) 40GBASE-T uses balanced cabling listed in Table 113-22 in a star topology to connect PHY entities.

Cl 113 SC 113.8.1 P 183 L 3 # 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 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.

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CI 113 SC 3 P 99 L # 403  
Wang, Zhongfeng Broadcom Corp.

Comment Type TR Comment Status R PCS

Table 113-2  
title: Truncated blocks including control blocks (without leading 0).

Given the truncating operation shown in Table 113-2, we always move control blocks to the top and data blocks to the bottom. Since data blocks in original 512B block can be in any row, this operation will involve muxing logic for all 64 bits for every data and control block, which causes extra hardware. In addition, at the receiver side, we need wait until entire 512B data is received before finishing reverse truncating.

*Suggested Remedy*

- 1) We only need swap location of first byte for each data or control block.  
This leads to much reduced muxing logic.
- 2) We transmit the first bytes of each data and control block immediately after leading 0. Then we transmit the rest 7 bytes for each data and control block. This will save significant processing latency at receiver side.

The above changes fully maintain data mapping of original truncating operation for each data byte. Only data reordering is involved. So there is no performance hurt.

Please see wang's contributions for detailed description.

Response Response Status U

REJECT.  
Attempt at accept-in-principle:

Make changes documented in Text-comments-40G-T-transcoding.pdf, with the following changes:  
give Editor license to connect text edit (3) in "comments..." correctly to referenced 'above case with pure data blocks'.

Straw Poll: Y: 8 N: 11

No consensus to make change