

IEEE P802.3 (IEEE 802.3bx) Revision to IEEE Std 802.3-2012 1st Sponsor recirculation ballot comments

Cl 01 SC 1.3 P 65 L 1 # r01-9  
Thompson, Geoffrey

Comment Type E Comment Status X

\*\*\* Comment submitted with the file 86274200003-BX Comments.txt attached \*\*\*

Please consider the items in the file as APPROVE/EDITORIAL comments for this cycle.

SuggestedRemedy

Per comment.

Proposed Response Response Status O

Cl 22 SC 22.1.5 P 47 L 30 # r01-5  
Thaler, Patricia Broadcom Corporation

Comment Type T Comment Status X

To be consistent with the new changes (e.g. 22.1 a)) "or Clause 45" should be added after 22.2.4. A GMII can use either Clause 22.2.4 or Clause 45.

SuggestedRemedy

The Gigabit Media Independent Interface (GMII) is similar to the MII. The GMII uses the MII management interface and register set specified in 22.2.4 or Clause 45.

Proposed Response Response Status O

Cl 22 SC 22.8.2.3 P 90 L 5 # r01-7  
Thaler, Patricia Broadcom Corporation

Comment Type TR Comment Status X

Implementation of the GMIII (item GM) is used to condition PICS items on the extended register set, but these should all depend on whether the Clause 22.2.4 registers are used - they don't apply to PHYs using a GMII and Clause 45 registers.

SuggestedRemedy

Either make a replacement for item GM that covers when a GMII is used with the MII Management Interface (and possibly also when the 22.2.4 registers are mapped on the MDIO) or condition the items that currently are conditioned on GM on GM and item indicating that support.

Proposed Response Response Status O

Cl 22 SC 22.8.2.3 P 90 L 5 # r01-6  
Thaler, Patricia Broadcom Corporation

Comment Type TR Comment Status X

Since now the MII is defined to include a management interface based on either 22.2.4 or Clause 45, the PICS needs to be updated to reflect that. Mandatory functional and electrical requirements of the Clause 22.2.4 should only apply when the Clause 22.2.4 MII Management interface is implemented. Also, a capability should be added to indicate whether the Clause 22 registers are supported. This should be Mandatory if MII Management Interface is supported and Optional if MDIO is supported.

SuggestedRemedy

Add to Major capabilities/options entries for MII Management Interface and MDIO Interface with the PICS notation O/<n> indicating that one of the two must be implemented. Make PICS entries that apply to the MII Management Interface conditional on whether the capability is supported. Register requirements should be conditional on whether the 22.2.4 register set is supported.

Proposed Response Response Status O

Cl 34 SC 34.1 P 16 L 43 # r01-8  
Thaler, Patricia Broadcom Corporation

Comment Type E Comment Status X

The wording of the new paragraph seems awkward and much of it is unnecessary. None of the speeds other than 10 Mb/s are in a contiguous set of Clauses. Also, nitpicking, no Gigabit PHY Clause is contiguous to Clause 34 since the Clause after 34 is RS and GMII which isn't a PHY.

SuggestedRemedy

Suggest deleting all but the first sentence.

Proposed Response Response Status O

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**Cl 55**      **SC 55.1**                      **P 91**              **L 19**              # **r01-1**  
Marris, Arthur                      Cadence Design Syst

**Comment Type**    **T**              **Comment Status**    **X**  
Inappropriate to mention Clause 30 here

**SuggestedRemedy**  
Replace  
"Management is specified in Clause 30."  
With  
"Management functions are optionally accessible through the management interface defined in Clause 45, or equivalent."

**Proposed Response**              **Response Status**    **O**

**Cl 83E**      **SC 83E.3.3.1**                      **P 631**              **L 21**              # **r01-4**  
Dawe, Piers J G                      Mellanox Technologie

**Comment Type**    **E**              **Comment Status**    **X**  
In 83E.3.1.3, RLdc is common to differential output conversion return loss (following the convention for S-parameters where the response comes first then the stimulus). In 83E.3.3.1, differential to common mode input return loss was shown in P802.3bm D2.0 as RLcd, which is consistent with 3E.3.1.3. In P802.3bm D2.1, an error crept into Eq. 83E-6: RLdc in the equation. although still "where" RLcd below it. The published 802.3bm made the "where" follow the equation, which was the wrong choice - but I didn't notice it had changed. Now this draft is making the same error.

**SuggestedRemedy**  
In Eq. 83E-6, change RLdc(f) to RLcd(f). At line 29, revert RLdc to RLcd as it was in P802.3bm and D3.0 of this project.

**Proposed Response**              **Response Status**    **O**

**Cl 85**      **SC 85.8.3**                      **P 224**              **L 28**              # **r01-3**  
Dawe, Piers J G                      Mellanox Technologie

**Comment Type**    **E**              **Comment Status**    **X**  
More importantly than consistent hyphenation (because Acrobat Reader will find a hyphen or a space, but won't find words in a different order), we should make the two "Common-mode AC" consistent with the 59 (in section 6) "\*C common-mode" or "\*C common mode". There are no "common mode AC or "common mode DC" (with or without with hyphens), and one "DC common-mode", in section 5.

**SuggestedRemedy**  
Here and at 85A.2 p642 line 36, change  
Common-mode AC output voltage  
to  
AC common-mode output voltage

**Proposed Response**              **Response Status**    **O**

**Cl 94**      **SC 94.3.12.4**                      **P 517**              **L 19**              # **r01-2**  
Dawe, Piers J G                      Mellanox Technologie

**Comment Type**    **E**              **Comment Status**    **X**  
While we are making the hyphenation of AC coupled / AC-coupled and so on consistent, we could apply this to common mode / common-mode, when used in a compound adjective. Section 6 uses common-mode 229 times and common mode 17 times (some may be legit). Section 5 seems OK.

**SuggestedRemedy**  
In 94.3.12.4 p517 line 19, consider changing  
Transmitter common mode return loss limit  
to  
Transmitter common-mode return loss limit  
or  
Deprecate the clause and don't bother.

In 83D.3.3 p612 line 42, consider changing  
common mode input return loss  
to  
common-mode input return loss  
Also 83E.3.3 p630 line 42; 83E.3.3.1 p631 lines 16, 29; p632 line 22; 83E.3.4 p634 line 32.

**Proposed Response**              **Response Status**    **O**