IEEE P802.3bf D3.1 comments

C/ 00 SC 0 $P\mathbf{0}$ L 0 # 10 Thompson, Geoffrey Independent

Comment Type TR Comment Status D

I am going to have to add my weight to Mr Frazier's unsatisfied comment #35

Your response and the lack of of any specified tolerance leads one to inevitable conclusion there there is no accuracy requirement whatsoever for this reported measurement. That being the case, there is no way for a developer manufacturer of higher layer equipment to put a conformance burden on their supplier that lies within the standard. Further, there is no way for a design verification function within a suppliers operation to tell whether this function works as opposed to supplying a random number not at all associated with the event.

SuggestedRemedy

Put some numeric tolerance on this measurement so that functionality can be verified. If it requires that the vendor supply a fixed delay number to center the tolerance variance then that is acceptable.

Proposed Response

Response Status Z

REJECT.

This comment was WITHDRAWN by the commenter.

C/ 01 SC 1.4 P 14 L7 # 2 Marris, Arthur Cadence Design Syst

Comment Status A

Changes to 1.4

ER Clause 90 is not in 802.3-2008

SuggestedRemedy

Comment Type

Change reference to be just to IEEE std 802.3 Clause 90.

Response Response Status C

ACCEPT IN PRINCIPLE.

OBE, see comment #8.

C/ 01 SC 1.4 P14 L 7

Marris. Arthur Cadence Design Syst

Comment Type Comment Status A Changes to 1.4

This is a pile on to comment 28 against draft 3.0. TSSI should be properly defined here. Also the reference to 802.3-2008 is incorrect.

SuggestedRemedy

Change to:

Time Synchronization Service Interface (TSSI). The interface between the TimeSync client and the generic Reconciliation Sublayer to provide SFD indication. (See IEEE 802.3. Clause 90.)

Response Response Status C

ACCEPT IN PRINCIPLE.

Modify definition in 1.4 to read:

1.4.XXX TSSI: Time Synchronization Service Interface between the generic Reconciliation Sublayer and a TimeSync client. (See IEEE 802.3, Clause 90.)

C/ 30 SC 30.13.1.1 P 20 L 23 Marris, Arthur Cadence Design Syst

Comment Status A Comment Type Ε

Make 1.1800.1, 2.1800.1, 3.1800.1, 4.1800.1, 5.1800.1, and 6.1800.1 link to Clause 45

SuggestedRemedy

Add links (cross references) from the registers referenced in Clause 30 to Clause 45.

Response Response Status C ACCEPT.

Cl 30 SC 30.13.1.3 P 20 L 46 # 1

Marris, Arthur Cadence Design Syst

Comment Type ER Comment Status A

The following does not make sense:

If a Clause 45 MDIO Interface to PMA/PMD, WIS, PCS, PHY XS, DTE XS and/or TC is present, then the value stored in this attribute accounts for maximum transmit path data delay values, accounts for the sum of the values of the registers in the instantiated sublayers (for each MMD, in case of multiple instances):

SuggestedRemedy

Reword to:

If a Clause 45 MDIO Interface to PMA/PMD, WIS, PCS, PHY XS, DTE XS and/or TC is present, then the value stored in this attribute is the sum of the values of the following registers in the instantiated sublayer:

- -- for PMA/PMD: registers 1.1801 and 1.1802,
- -- for WIS: registers 2.1801 and 2.1802,
- -- for PCS: registers 3.1801 and 3.1802.
- -- for PHY XS: registers 4.1801 and 4.1802,
- -- for DTE XS: registers 5.1801 and 5.1802,
- -- for TC: registers 6.1801 and 6.1802.

and make similar change in 30.13.1.4, 30.13.1.5 and 30.13.1.6

Response

Response Status C

ACCEPT IN PRINCIPLE.

Change

"then the value stored in this attribute accounts for maximum transmit path data delay values, accounts for the sum of the values of the registers in the instantiated sublayers (for each MMD "

to

"then the value stored in this attribute represents the maximum transmit path data delay values, consisting of the sum of the values of the registers in the instantiated sublayers (for each MMD "

for attributes aTimeSyncDelayTXmax, aTimeSyncDelayTXmin

Change attributes aTimeSyncDelayRXmax and aTimeSyncDelayRXmin to read: "then the value stored in this attribute represents the maximum receive path data delay values, consisting of the sum of the values of the registers in the instantiated sublayers (for each MMD "

Accept response as written:

Y: 7

N:0

Cl 30 SC 30.13.1.3 P20 L46 # 7

Marris, Arthur Cadence Design Syst

Comment Type TR Comment Status R

This is a pile on to comment 29 against draft 3.0. The most significant thing that 802.3bf is doing from the PHY implementers point of view and the system implementers point of view is defining how to report the transmit and receive latency through the PHY. This definition must be clear and unambigous.

SuggestedRemedy

See my other comment on this.

My view is that the value of the attribute is simply the sum of the delay through the PCS and the delay through the PMA/PMD. Any latency in the TSSI indication and extra delay between sublayers is irrelevant as all the 802.1AS system implementer cares about is the asymmetry between the transmit and receive latency.

Mentioning XAUI without including SFI and XFI confuses matters as XAUI is a legacy MAC/PHY interconnect. The easiest way to get around this confusion is to focus on PCS and PMA latency. XAUI is really just a PCS/PMA combination.

Response Status C

REJECT.

The consensus on the introduction of XAUI is long standing and it is believed there is no need to make any modifications to it.

Motion to accept response.

Y: 6

N: 0

A: 0

Cl 45 SC 45.2.3.40 P27 L17

Marris, Arthur Cadence Design Syst

Comment Type E Comment Status A

Cahnge Table 45-115cc to Table 45-115c

SuggestedRemedy Remove a 'c'

Response Response Status C

ACCEPT.

Cl 45 SC 45.2.4 P 113 # 5 Marris. Arthur Cadence Design Syst Comment Type TR Comment Status A Title of Table 45-108 is incorrect SuggestedRemedy Change title to: Table 45-108--PHY XS registers Response Response Status C ACCEPT. SC 90.1 P 35 C/ 90 L 6 Thompson, Geoffrey Independent Comment Type E Comment Status A (Not classified DISAPPROVE because it is not new text) I would expect the following text to be easily proved false: "The TSSI can be used to support any protocol that requires knowledge of packet egress and ingress time." SuggestedRemedy I would suggest text that is not so presumptious, perhaps: "The TSSI can be used to support protocols that require knowledge of packet egress and ingress time." Response Status C Response ACCEPT. C/ 90 SC 90.5 P 38 L 14 # 6 Marris, Arthur Cadence Design Syst Comment Status A Comment Type Ε "used to interface MAC with any type of PHYs supporting" SuggestedRemedy change to: "used to interface a MAC with a PHY supporting" Response Response Status C ACCEPT IN PRINCIPLE. Change to paragraph to read: "Within the scope of this clause, the term generic Reconciliation Sublayer (gRS) is used to

denote any IEEE 802.3 Reconciliation Sublayer (RS) used to interface a MAC with any

PHY supporting the TimeSync capability through the xMII."