Cl 45 SC 45.2.7.6 P 42 L 26 # 3

Dawe, Piers Avago Technologies

Comment Type T Comment Status A

.3ap text contradicts and/or repeats .3an text; also sentences need re-ordering to make the whole read properly

SuggestedRemedy

Wordsmith it. Also the following three subclauses.

Response Status C

ACCEPT IN PRINCIPLE.

The base text will be updated per IEEE 802.3an-2006 and IEEE P802.3aq/D4.0. Text that is not being changed by IEEE P802.3ap will be removed.

The TF and WG chairs rule that it is not a substantive change, to update the base text only.

The commenter did not provide specific changes for wordsmithing. If the base text update does not address the commenters concerns then the commenter is encouraged to submit the comment during sponsor ballot with detailed changes.

Cl **45** SC **45.2.7.6** P **42** L **43** # 5

McClellan, Brett Solarflare

Comment Type E Comment Status R

It is unclear which parts of this subclause apply only to backplane and which apply to non-backplane devices. For example, does the text on lines 32 to 35 apply to all devices? Do lines 45 to 49 apply to backplane devices? Page 45 line 43 and page 46 lines 6-7 separately describe the use of bit 7.16.12.

SuggestedRemedy

Break 45.2.7.6 into two subclauses, one describing the use of registers 7.16 to 7.18 for backplane and one for non-backplane devices.

Response Status C

REJECT.

This comment was WITHDRAWN by the commenter.

Comment Type E Comment Status A

This is out of scope but could be fixed now.

CF28 Value/Comment does not match text in 72.6.10.2.6

SuggestedRemedy

Change CF28 Value/Comment field to match 72.6.10.2.6

Response Status C

ACCEPT IN PRINCIPLE.

This comment is out of scope.

However the TF and WG chair rules that this is a non substantive change.

Change CF28 value/comment as follows:

Feature: Training pattern seed

Subclause: 72.6.10.2.6

Value/Comment: The pseudo-random generator shall have a random seed at the start of

the training pattern.

CI 72 SC 6.10 P 111 L 31 # 2

Spagna, Fulvio INTEL

Comment Type E Comment Status A

Typo from draft 2.4 to 2.5

SuggestedRemedy

left barnch exiting VALID MARKER state should read

good_markers < 2 * frame_offset

Response Status C

ACCEPT.

This was an accidental deletion of the digit "2" when implementing a D2.4 comment change by the editor.

The TF and WG chairs rule that this not a substantive change and will be implemeted as suggested.

Cl 74 SC 74.10.3 P 192 L 31 # 4 Dawe, Piers Avago Technologies

Comment Type TR Comment Status R

Four problems with this state machine: 1. It throws away lock unnecessarily in transient error conditions e.g. lighting strikes (or plugging a neighbouring card in?) hence taking MUCH longer than needed to recover a good link. What it should do is keep lock and deassert FEC_SIGNAL.indication while BER >10^-4 but lock is OK. 2. At a BER 10^-4, the machine could gain and lose ""lock"" repeatedly - I understand that network management systems really hate anything that can cause unnecessary multiple alarms. Compare Clause 49 64B/66B PCS sync which uses hi_ber to shield the system from this (does it provide hysteresis?). 3. Text says ""Evaluate parity for the potential block i) If the parity does not match (i.e., the received parity does not match the computed parity), shift candidate start by one bit position and try again."" While this state machine tests every hopeless bit position m=8 times before trying the next one. As the probability of a false match is very low, slipping as soon as a parity mismatch is found (like the text says) is the right thing to do. But state diagram takes precedence, therefore a change is needed. 4. All this reminds us why over-prescriptive viewgraph engineering is not so clever. Do we really need a state diagram for this, or can we do the job with words?

SuggestedRemedy

Try to define the lock requirements in words. If we can't, give reason in response, and change state machine so that when seeking lock, a single imperfect block causes a slip, and when in lock, m consecutive correctable or uncorrectable blocks cause FEC_SIGNAL.indication to be false yet not necessarily cause a slip; recovery by n perfect blocks as for initial block lock; m consecutive uncorrectable blocks cause slip as at present.

Response Status C

REJECT.

1 & 2:

This comment is out of scope for this recirculation. It is not related to the change text.

The WG chair rules that this comment is out of scope not requiring recirculation.

However even if it was in scope, this will not be an appropriate change. The 10GBASE-KR FEC is not intended to recover links of BER 1E-3 or 1E-4 . The KR link with or without FEC has comparable probability of losing lock at low BER.

3 & 4: The commenter's interpretation of the state machine is incorrect. The state machine and the text are consistent.