

IEEE 802.3dk D3.2 Bidirectional 100Gb/s Optical Access PHYs 3rd Sponsor recirculation ballot comments

Cl	FM	SC	FM	P1	L28	#	R3-2
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Dawe, Piers J G NVIDIA

Comment Type E Comment Status D

Standard Association ballot

SuggestedRemedy

Standards Association ballot

But if this is the last draft - this text will disappear on publication

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Delete the sentence "Draft D3.3 is prepared for Standard Association ballot."

Cl	FM	SC	FM	P12	L3	#	R3-3
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Dawe, Piers J G NVIDIA

Comment Type E Comment Status D

This is called Amendment 11. Amendments 1 to 9 and one corrigendum are listed above, but no amendment 10. The IEEE SA Standards Board Operations Manual implies that corrigendum and amendment are mutually exclusive

SuggestedRemedy

If there is a missing amendment, include it. If not, renumber this to Amendment 10 (4 places).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Add Amendment 10 in the documents list as follows:

IEEE Std 802.3da(tm)-20xx

Amendment 10-This amendment includes changes to IEEE Std 802.3-2022 and adds Clause 188 through Clause 189. This amendment adds Physical Layer specifications and management parameters for enhancement of multidrop 10 Mb/s operation based on the 10BASE-T1S PHY specified in Clause 147 of IEEE Std 802.3-2022, and specifies optional provision of power over single balanced pair mixing segments. Additionally, this amendment includes additions and changes to Clause 148 to automatically allocate node IDs (Dynamic PLCA).

Cl	135	SC	135.5.7.2	P52	L22	#	R3-1
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Ran, Adee Cisco Systems, Inc.

Comment Type E Comment Status D

"The PMA shall provide  $1/(1+D) \bmod 4$  precoding capability on each output lane and may optionally provide  $1/(1+D) \bmod 4$  decoding capability on each input lane."

The resolution of comment R1-26 was not implemented correctly. The quoted sentence (which existed in D2.1) was supposed to be deleted (the response reads "Change the text of the second paragraph as follows" and the quoted sentence is not included).

The result of the implementation is duplicate text, since the quoted sentence is essentially repeated by the text following it (which was supposed to replace it).

Unfortunately I did not notice this issue in the previous review.

SuggestedRemedy

Delete the quoted sentence.

(Since this comment is editorial and pertains to the implementation of resolved comment R1-26 I assume this can be done by the publication editor without a recirculation).

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl	161	SC	161.6	P60	L30	#	R3-4
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Dawe, Piers J G NVIDIA

Comment Type E Comment Status D

Table cells should not be left empty

SuggestedRemedy

Insert an em dash, as recommended by the style guide.

Also, the thickness of the right border should be tidied up.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 168	SC 168.7.5	P73	L42	# R3-5
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Dawe, Piers J G NVIDIA

Comment Type ER Comment Status D

Comment R1-37 against D3.1: "ACCEPT IN PRINCIPLE. Add a bullet after line 50 in page 71:

The tap coefficient limits: the coefficients of the tap before (pre-cursor) and after (post-cursor) the tap with the largest magnitude tap (cursor) coefficient are less than 0.1. The coefficient of post-cursor minus pre-cursor is less than 0.15.

See contribution 3dk\_dawe\_2511\_1.

[https://www.ieee802.org/3/dk/public/2511/3dk\\_dawe\\_2511\\_1.pdf](https://www.ieee802.org/3/dk/public/2511/3dk_dawe_2511_1.pdf)

Implement with editorial license."

In D3.2 the comment was not implemented correctly. We corrected the un-100G-like normalization: comment R2-21 "Change the quoted text to:

The cursor is the tap with the largest magnitude coefficient.

The magnitude of the pre-cursor (the tap before the cursor) coefficient is less than 0.1.

The magnitude of the post-cursor (the tap after the cursor) coefficient is less than 0.1.

The post-cursor coefficient minus the pre-cursor coefficient is less than 0.15."

ACCEPT.

but we did not pay enough attention to the two extra additions of "magnitude".

In mathematics, "magnitude" frequently means the unsigned size, or absolute value, of a number or vector. But here, we mean the signed value, as is clear from the figure in 3dk\_dawe\_2511\_1.pdf (black boundary, blue dots), although there is a similar error in the legend. For determining which tap is the cursor, we don't expect that the difference would have any effect in practice, but for the pre-cursor and post-cursor, applying an unsigned amplitude rule would exclude too much of the middle of the figure in 3dk\_dawe\_2511\_1 where typical transmitters could reasonably be.

c(1) and c(-1) (which would be better called w(1) and w(-1) ) cannot be extremely negative if the signal complies to the maximum transition time limit, so there is no need to add explicit specs for -ve c(1) and c(-1). Also, signals with very negative c(1) and c(-1) would have very high Ceq and therefore very high T(D)ECQ, and there is a maximum T(D)ECQ limit.

My apologies for not catching this before.

#### SuggestedRemedy

Change the first three sentences of the last listed item in 168.7.5 from:

The cursor is the tap with the largest \*magnitude\* coefficient. The \*magnitude of the\* pre-cursor (the tap before the cursor) coefficient is less than 0.1. The \*magnitude of the\* post-cursor (the tap after the cursor) coefficient is less than 0.1.

to:

The cursor is the tap with the largest coefficient. The pre-cursor (the tap before the cursor) coefficient is less than 0.1. The post-cursor (the tap after the cursor) coefficient is less than 0.1.

Proposed Response Response Status W

PROPOSED ACCEPT.

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

Cl 168  
SC 168.7.5

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