

# 802.3dk D2.1 Bidirectional 100Gb/s Optical Access PHYs 1st Working Group recirculation ballot comme

CI 168 SC 168.7.5 P37 L20 # 23

Mi, Guangcan

Huawei Technologies Co., Ltd

Comment Type ER Comment Status A D2.0 unresolved

looking back at CL 140.7 and other IMDD clauses in 100Gbps, the description of TDECQ and its measurement setup has been referencing as much as possible the existing content in CL 121.8.5 and writing only the changes and differences. An example in CL140 is: "TDECQ, and for 100GBASE-DR only, TDECQ – 10log10(Ceq) shall be within the limits given in Table 140–6 if measured using the test setup specified in 121.8.5.1, with an optical channel specified in 140.7.5.2, using the measurement method specified in 121.8.5.3, and using a reference equalizer as described in 140.7.5.1, with the following exceptions: ....."

also double checking the content of 168.7.5.1, there seems no technical difference than what was defined in CL 140.7.5 or CL 124.8.5, except need of updates to the table references. For the sake of clarity and consistence, also avoiding misleading message of new test setp, it is recommended to update the section with references to existing clauses while only listing out the exceptions.

## SuggestedRemedy

delet sections 168.7.5.1, 168.7.5.3,168.7.5.4. make appropriate references to existing clauses, so that the overall standard of 802.3 is coherent. implement with editorial licenses.

some possible languages:

The TDECQ shall be within the limits given in

Table 168–6 if measured using the test setup specified in 121.8.5.1, with an optical channel specified in 168.7.5.2, using the measurement method specified in 121.8.5.3, and using a reference equalizer as described in 168.7.5.1, with the following exceptions:

The signaling rate of the test pattern generator is as given in Table 168–6 and uses a test pattern

specified for TDECQ in Table 168–10.

— The combination of the O/E converter and the oscilloscope has a 3 dB bandwidth of approximately 26.5625 GHz with a fourth-order Bessel-Thomson response to at least 1.3 × 53.125 GHz and at frequencies above 1.3 × 53.125 GHz the response should not exceed – 20 dB. Compensation may be made for any deviation from an ideal fourth-order Bessel-Thomson response.

— The normalized noise power density spectrum, N(f) in Equation (121–9), is equivalent to white noise filtered by a fourth-order Bessel-Thomson response filter with a 3 dB bandwidth of 26.5625 GHz."

or

"The TDECQ shall be within the limits given in Table 168–6 if measured using the test setup specified in 121.8.5.1, with an optical channel specified in 168.7.5.2, using the measurement method specified in 140.7.5, and using a reference equalizer as described in 140.7.5.1."

or other format that fits.

Response Response Status W

ACCEPT IN PRINCIPLE.

Resolve using response to comment #15.

CI 168 SC 168.7.7 P39 L31 # 24

Mi, Guangcan

Huawei Technologies Co., Ltd

Comment Type ER Comment Status A unresolved (over/under shoot)

There seems to be no change from the method defined in CL 140. reference to CL 140 regarding the calculation.

## SuggestedRemedy

possible language from CL 151, and update the reference tables should serve the purpose :

"The over/under-shoot of each lane shall be within the limits given in Table 151–7 if measured using a test

pattern specified for over/under-shoot in Table 151–11.

Overshoot and undershoot are measured using the waveform captured for the TDECQ test (see 151.8.5) and the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied in each case.

Overshoot and undershoot are calculated using the methods in 140.7.7."

Response Response Status W

ACCEPT IN PRINCIPLE.

Resolve using response to comment #16.

CI 168 SC 168.7.11 P40 L51 # 25

Mi, Guangcan

Huawei Technologies Co., Ltd

Comment Type TR Comment Status R D2.0 unresolved

802.3 dj has extensively discussed the definition of RINxOMA. Consensus were made to update the definition of RINxOMA which better describes the actual behaviour and aligns with what is being used in the field. Related contribution from Ahmad and JJ, [https://www.ieee802.org/3/dj/public/24\\_09/chayeb\\_3dj\\_01\\_2409.pdf](https://www.ieee802.org/3/dj/public/24_09/chayeb_3dj_01_2409.pdf)

## SuggestedRemedy

align to what is defined in dj.

Response Response Status W

REJECT.

The group made consensus to keep consistent with CL140.

802.3dk D2.1 Bidirectional 100Gb/s Optical Access PHYs 1st Working Group recirculation ballot comment

CI 168 SC 168.3.2 P29 L2 # 27

Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse

Comment Type TR Comment Status R D2.0 unresolved

"is" is for statements of fact. The limitation on the skew seems to be a requirement. Further, the requirements in 83.5.3.4 go further and specify skew variation. Is that to be specified? While 83.5.3.4 was mentioned earlier defining skew, it isn't clear that those requirements apply. Here is where that should be stated.

SuggestedRemedy

Change "Skew at SP2 is limited to 43 ns as defined by 83.5.3.4" to "Skew and skew variation at SP2 shall comply with the requirements of 83.5.3.4"

Response Response Status W

REJECT.  
The signal at SP2 is not under control of PMD, so "shall" is inappropriate.  
Keep consistent with Clause 140.

CI 00 SC 0 P11 L54 # 65

Wienckowski, Natalie IVN Solutions LLC

Comment Type ER Comment Status A contents

Missing table of contents  
This was submitted as comment #258 on D2.0. The comment resolution was "ACCEPT", but the table has not been added.

SuggestedRemedy

Create table of contents and insert after the introductory material and before Clause 30.

Response Response Status W

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 45 SC 45.2.1.8 P17 L22 # 66

Wienckowski, Natalie IVN Solutions LLC

Comment Type ER Comment Status R cross-ref

Subclause 45.2.1.8.1 should not have been removed as Table 45-12 is in this subclause.

SuggestedRemedy

Restore subclause 45.2.1.8.1

Response Response Status W

REJECT.  
Table 45-12 is part of 45.2.1.8, not 45.2.1.8.1.  
See D2.0 comment #142.

CI 157 SC 157.6 P34 L14 # 67

Wienckowski, Natalie IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated. Clause 160 is not in this document.

SuggestedRemedy

Apply a character tag of "External" to "Clause 160".

Response Response Status W

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 168 SC 168.1 P45 L29 # 69

Wienckowski, Natalie IVN Solutions LLC

Comment Type ER Comment Status A external

References to external points not properly indicated. In Table 168-1, there are links to the following which are not in the document: 81, 82, 83, 83A, 83B, 83D, 83E, 135, 135D, 135E, 135F, 135G, 120F, 120G, and 78.

SuggestedRemedy

Apply a character tag of "External" to "Clause 160".

Response Response Status W

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 80 SC 80.2.5 P21 L51 # 71

Wienckowski, Natalie IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated.

SuggestedRemedy

Apply a character tag of "External" to: Clause 84, Clause 89, Clause 92, Clause 95, Clause 136, Clause 138, Clause 140, Clause 154, and Clause 163.

Response Response Status W

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

802.3dk D2.1 Bidirectional 100Gb/s Optical Access PHYs 1st Working Group recirculation ballot comme

**CI 80**      **SC 80.4**      **P22**      **L12**      # **74**

Wienckowski, Natalie      IVN Solutions LLC

**Comment Type ER**      **Comment Status A**      *external*

As comment #235 on D2.0 stated: References to external points not properly indicated.

**SuggestedRemedy**

Apply a character tag of "External" to: 140.3 and 88.3.1.

**Response**      **Response Status W**

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

**CI 80**      **SC 80.7**      **P23**      **L38**      # **76**

Wienckowski, Natalie      IVN Solutions LLC

**Comment Type ER**      **Comment Status A**      *external*

As comment #235 on D2.0 stated: References to external points not properly indicated.

**SuggestedRemedy**

Apply a character tag of "External" to: Clause 73, Clause 74, Clause 71, Clause 91, Clause 95, Clause 135, Clause 138, Clause 140, Clause 152, Clause 154, Clause 161, and Clause 163.

**Response**      **Response Status W**

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

**CI 91**      **SC 91.5.3.3**      **P24**      **L35**      # **77**

Wienckowski, Natalie      IVN Solutions LLC

**Comment Type ER**      **Comment Status A**      *external*

As comment #235 on D2.0 stated: References to external points not properly indicated.

**SuggestedRemedy**

Apply a character tag of "External" to "91.6.8".

**Response**      **Response Status W**

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

**CI 91**      **SC 91.5.3.3**      **P24**      **L36**      # **78**

Wienckowski, Natalie      IVN Solutions LLC

**Comment Type ER**      **Comment Status A**      *external*

As comment #235 on D2.0 stated: References to external points not properly indicated.

**SuggestedRemedy**

Apply a character tag of "External" to "91.6.1".

**Response**      **Response Status W**

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

**CI 91**      **SC 91.6.3**      **P25**      **L19**      # **79**

Wienckowski, Natalie      IVN Solutions LLC

**Comment Type ER**      **Comment Status A**      *external*

As comment #235 on D2.0 stated: References to external points not properly indicated.

**SuggestedRemedy**

Apply a character tag of "External" to "91.5.2.6".

**Response**      **Response Status W**

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

**CI 91**      **SC 91.6.3**      **P25**      **L25**      # **80**

Wienckowski, Natalie      IVN Solutions LLC

**Comment Type ER**      **Comment Status A**      *external*

As comment #235 on D2.0 stated: References to external points not properly indicated.

**SuggestedRemedy**

Apply a character tag of "External" to "45.2.1.116".

**Response**      **Response Status W**

ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

802.3dk D2.1 Bidirectional 100Gb/s Optical Access PHYs 1st Working Group recirculation ballot comme

CI 157 SC 157.1.4 P31 L28 # 87  
Wienckowski, Natalie IVN Solutions LLC  
Comment Type **ER** Comment Status **A** external  
As comment #235 on D2.0 stated: References to external points not properly indicated.  
SuggestedRemedy  
Apply a character tag of "External" to: Table 157-3, Table 157-4, and Table 157-5.  
Response Response Status **W**  
ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 157 SC 157.2.1 P31 L46 # 88  
Wienckowski, Natalie IVN Solutions LLC  
Comment Type **ER** Comment Status **A** external  
As comment #235 on D2.0 stated: References to external points not properly indicated.  
SuggestedRemedy  
Apply a character tag of "External" to: Table 157-3, Table 157-4, and Table 157-5.  
Response Response Status **W**  
ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 157 SC 157.2.2 P31 L54 # 89  
Wienckowski, Natalie IVN Solutions LLC  
Comment Type **ER** Comment Status **A** external  
As comment #235 on D2.0 stated: References to external points not properly indicated.  
SuggestedRemedy  
Apply a character tag of "External" to: Table 157-3, Table 157-4, and Table 157-5.  
Response Response Status **W**  
ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 157 SC 157.2.2 P32 L8 # 90  
Wienckowski, Natalie IVN Solutions LLC  
Comment Type **ER** Comment Status **A** external  
As comment #235 on D2.0 stated: References to external points not properly indicated.  
SuggestedRemedy  
Apply a character tag of "External" to: 120F and 120G.  
Response Response Status **W**  
ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 157 SC 157.2.3 P32 L36 # 92  
Wienckowski, Natalie IVN Solutions LLC  
Comment Type **ER** Comment Status **A** external  
As comment #235 on D2.0 stated: References to external points not properly indicated.  
SuggestedRemedy  
Apply a character tag of "External" to: Table 157-3, Table 157-4, and Table 157-5.  
Response Response Status **W**  
ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

CI 157 SC 157.2.4 P32 L50 # 94  
Wienckowski, Natalie IVN Solutions LLC  
Comment Type **ER** Comment Status **A** external  
As comment #235 on D2.0 stated: References to external points not properly indicated.  
SuggestedRemedy  
Apply a character tag of "External" to: Table 157-3, Table 157-4, and Table 157-5.  
Response Response Status **W**  
ACCEPT IN PRINCIPLE.  
Implement suggested remedy with editorial license.

802.3dk D2.1 Bidirectional 100Gb/s Optical Access PHYs 1st Working Group recirculation ballot comme

CI 157 SC 157.2.5 P33 L5 # 96

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated.

SuggestedRemedy

Apply a character tag of "External" to: Table 157-3, Table 157-4, and Table 157-5.

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

CI 157 SC 157.3 P33 L21 # 98

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated.

SuggestedRemedy

Apply a character tag of "External" to "80.3".

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

CI 157 SC 157.4.2 P33 L48 # 100

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated.

SuggestedRemedy

Apply a character tag of "External" to "116.5".

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

CI 168 SC 168.5.10 P41 L28 # 102

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated.

SuggestedRemedy

Remove the hyperlink, which goes no where, and apply a character tag of "External" to "157.5".

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

CI 168 SC 168.8.1 P53 L18 # 103

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status A external

As comment #235 on D2.0 stated: References to external points not properly indicated.

SuggestedRemedy

Apply a character tag of "External" to "J.2".

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.