EEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comment

Cl 116  SC 116  P92  L40  # 445
Simms, William  NVIDIA
Comment Type E  Comment Status D  (editorial)
spacing of text on line 40 is different than spacing of the same text in lin 38
SuggestedRemedy
make spacing the same

Cl 119  SC 119.2.5.8  P112  L27  # 470
Slavick, Jeff  Broadcom
Comment Type E  Comment Status D  (editorial)
Extraneous "either"
SuggestedRemedy
remove the word "either"

Cl 176  SC 176.2  P196  L46  # 471
Slavick, Jeff  Broadcom
Comment Type E  Comment Status D  (editorial)
Is respectively necessary here? X is just a list of different rates.
SuggestedRemedy
remove the ", respectfully"

Cl 176  SC 176.2  P196  L53  # 472
Slavick, Jeff  Broadcom
Comment Type E  Comment Status D  (editorial)
Is respectively necessary here? X is just a list of different rates.
SuggestedRemedy
remove the ", respectfully"

Cl 176  SC 176.5.1.1  P200  L35  # 479
Slavick, Jeff  Broadcom
Comment Type E  Comment Status D  (editorial)
test pattern generate is overlapping with the IS_SIGNAL.request line in Figure 176-2
SuggestedRemedy
Move "test pattern generate" to not overlap with the inst.IS_SIGNAL.request/indication line
Same in Figure 176-9,10,13,14,15,19,20,24,25,26

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COMMENT STATUS: D/dispatched  A/accepted  R/rejected  RESPONSE STATUS: O/open  W/written  C/closed  Z/withdrawn
SORT ORDER: Clause, Subclause, page, line
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

Cl 176 SC 176.5.1.1 P200 L35 # 478
Slavick, Jeff Broadcom
Comment Type E Comment Status D (editorial)
test pattern generate is overlapping with the IS_SIGNAL_request line in Figure 176-2
SuggestedRemedy
Move "test pattern generate" to not overlap with the inst.IS_SIGNAL.request line
Same in Figure 176-9,10,13,14,15,19,24,25,26
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.5.1.3.5 P203 L25 # 476
Slavick, Jeff Broadcom
Comment Type E Comment Status D (editorial)
It's a multiplexor or a multiplexing function
SuggestedRemedy
add the word function after multiplexing
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.5.1.5 P205 L20 # 484
Slavick, Jeff Broadcom
Comment Type E Comment Status D (editorial)
Detailed functions and state diagrams has no content
SuggestedRemedy
Change 176.5.1.6 to be a sub-heading of 176.5.1.5 (4th tier I think).
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.5.1.6.5 P208 L9 # 483
Slavick, Jeff Broadcom
Comment Type E Comment Status D (editorial)
I think it's best if the Start of the counter is the last thing in the Box
SuggestedRemedy
Move "Start symbol_pair_lock_counter_demux" to be the last thing in LOSS_OF_SYMBOL_PAIR_LOCK box
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.5.2 P208 L40 # 501
de Koos, Andras Microchip Technology
Comment Type E Comment Status D (editorial)
Is specifying the 1:8 SM-PMA really necessary? Apart from the layers it attaches to and the labels on the interfaces, it is identical to the 8:1 PMA. Same thing for 16:2 vs 2:16 for 400G, 32:4 vs 4:32 for 800G, and 16:8 vs 8:16 for 1.6T. Alternately, could SM-PMAs be specified unidirectionally, rather than specifying transmit and receive? So 8:1 would only specify the PCS-PMD direction, and 1:8 would specify the PMD-PCS direction. Having so many sub-clauses that just point to other sub-clauses is an easy way to cause confusion.
SuggestedRemedy
Consider specifying the 1:8 and 8:1 (and equivalent SM-PMAs for other rates) together.
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.6 P213 L1 # 500
de Koos, Andras Microchip Technology
Comment Type E Comment Status D (editorial)
Would it not be possible to merge Clause 176.5 and 176.6? They are 95% similar, so repeating everything is hardly necessary. Even the figures for 200GBASE-R SM-PMA (Figure 17603, Figure 17604, Figure 17605) have a general form with a variable number of PCSLs that are suitable for 400GBASE-R
SuggestedRemedy
Consider merging subclauses 176.5 and 176.6
Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

**Comment Type:** E  **Comment Status:** D  (editorial)

Clauses 176.6, 176.7 and 176.8 are missing the 'overview' sub-clauses (with tables) that exist in Clause 176.5 (e.g. 176.5.1.1). The equivalent content is there but is placed directly in each PMA sub-clause (e.g. 176.6.1)

**Suggested Remedy:**
Structure the subclauses consistently between 200GBASE-R and 400GBASE-R, 800GBASE-R, 1.6TBASE-R.

**Proposed Response**  **Response Status:** W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Comment Type:** E  **Comment Status:** D  (editorial)

Table 176-7 includes two references to 400GBASE-R, these should be replaced with 800GBASE-R

**Suggested Remedy:**
Replace the text "400GBASE-R" with "800GBASE-R" in Table 176-7.

**Proposed Response**  **Response Status:** W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Comment Type:** E  **Comment Status:** D  (editorial)

tx_symbol and rx_symbol variables do not appear in this annex. They are in fact parameters of the service interface primitives of the sublayer that implements the control function.

**Suggested Remedy:**
Tie the text defining the symbols to the service interface of the sublayer.

**Proposed Response**  **Response Status:** W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Comment Type:** E  **Comment Status:** D  (editorial)

Should the status field name be uniquified? The field name in the text of the table and text sections below the table do not clearly identify text as a field.

**Suggested Remedy:**
Change Receiver ready to RECEIVER_READY or at maybe receiver_ready and use the same in the text below the table 176A-3- Status field structure. Pertains to all field names.

**Proposed Response**  **Response Status:** W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

---

**Comment Type** E  **Comment Status** D (editorial)

*176A.6.4* says that 'The variables coef_req, coef_sts, and k are defined in 176A.10.3.1.'; however, 176A.10.3.1 'Variables' uses all lowercase for the coef_sts values (e.g., updated, coefficient at limit and equalization limit) and coef_req (e.g., decrement, increment) whereas 176A.10.3.1 uses all uppercase for the coef_sts values (e.g., UPDATED, COEFFICIENT AT LIMIT AND EQUALIZATION LIMIT) and coef_req (e.g., DECREMENT, INCREMENT).

**Suggested Remedy**

The formatting of the variable values defined in 176A.10.3.1 'Variables' and used in 176A.6.4 should match.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.

Implement with editorial license and discretion.

---

**Comment Type** E  **Comment Status** D (editorial)

It took me longer than usual to realize the algorithm continues on page 559.

**Suggested Remedy**

Maybe put a '—continued—' at the last line of page 558. Disregard if this is inconsistent with IEEE style.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.

Implement with editorial license and discretion.

---

**Comment Type** ER  **Comment Status** D (editorial)

Subclause 176A.10.1 'State diagram conventions' says that 'The notation used in the state diagrams follows the conventions of 21.5.' Subclause 21.5.3 'State transitions' says 'The following terms are valid transition qualifiers:' and item d) says 'An unconditional transition: UCT'. As a result, it is not necessary to expand UCT on its first use in Annex 176A.

**Suggested Remedy**

Change the text 'UCT (unconditional transition)' to read 'UCT'.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.

Implement with editorial license and discretion.

---

**Comment Type** ER  **Comment Status** D (editorial)

The "Segment by segment training" seems to be an introductory subclause that explains the purpose of the whole thing.

It would help readers if this introduction is placed at the beginning of the annex. The current introduction in 176A.1 seems too brief.

**Suggested Remedy**

Move 176A.9 and its subclauses into 176A.1 (with some hierarchy) or after it.

Rephrase the text as necessary to make it a good introduction to the control function (e.g., explain what "RTS" stands for).

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.

Implement with editorial license and discretion.

---

**Comment Type** ER  **Comment Status** D (editorial)

Figure 176A-6 has an extraneous < in the name 'local_tf_lock<'.

**Suggested Remedy**

change to 'local_tf_lock'

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.

Implement with editorial license and discretion.

---
### IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

<table>
<thead>
<tr>
<th>CI</th>
<th>SC</th>
<th>P</th>
<th>L</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Proposed Response</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Proposed Response</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Proposed Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>176D</td>
<td>176D.3.3</td>
<td>598</td>
<td>16</td>
<td>E</td>
<td>D</td>
<td>(editorial) Where does the value for SNDR of 32.5dB come from?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>174</td>
<td>177.4.6.1</td>
<td>255</td>
<td>25</td>
<td>E</td>
<td>D</td>
<td>(editorial) &quot;Pad frame sequence&quot; naming does not convey purpose in alignment. Suggest to call this field &quot;Frame Alignment Sequence&quot; instead.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>177</td>
<td>177.6.3</td>
<td>262</td>
<td>8</td>
<td>E</td>
<td>D</td>
<td>(editorial) In Figure 177-8 the wrong character is showing up for the &lt;= symbol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>179A</td>
<td>179A.7</td>
<td>668</td>
<td>9</td>
<td>E</td>
<td>D</td>
<td>(editorial) &quot;TP0 and TP5&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Simms, William NVIDIA**

**Liu, Cathy Broadcom**

**Ramesh, Sridhar Maxlinear Inc**

**Slavick, Jeff Broadcom**

**Kocsis, Sam Amphenol**
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

<table>
<thead>
<tr>
<th>Cl</th>
<th>SC</th>
<th>Page</th>
<th>Line</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Suggested Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>179B</td>
<td>179B</td>
<td>670</td>
<td>L</td>
<td>E</td>
<td>D</td>
<td>Figure 179B-1 figure is not showing completely in my PDF file</td>
</tr>
<tr>
<td>179B</td>
<td>179B</td>
<td>672</td>
<td>L</td>
<td>E</td>
<td>D</td>
<td>Figure 179B-2 figure is not showing completely in my PDF file</td>
</tr>
<tr>
<td>179C.1</td>
<td>179C.1</td>
<td>682</td>
<td>L</td>
<td>E</td>
<td>D</td>
<td>&quot;QSFP-DD800&quot;</td>
</tr>
</tbody>
</table>

Liu, Cathy
Broadcom

Comment Type: E
Comment Status: D (editorial)

Suggested Remedy:

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Law, David
HPE

Comment Type: E
Comment Status: D (editorial)

The variable 'alignnment_status' used in the LOSS_OF_ALIGNMENT and ALIGNMENT_ACQUIRED states is misspelt.

Suggested Remedy:
Suggest that 'alignnment_status' should read 'alignment_status'.

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.