C/ 00 SC Р # C/ 160 SC 160.6 Р L # 185 Finisar/ /II-VI Stassar, Peter DeAndrea, John Huawei Comment Type Ε Comment Status A Comment Type TR Comment Status R Table 159-4 The Table shows a value of -20 dBm for 25GBASE-BR10 and -26 dBm for Specification methodology and parameters for PAM4 optical signals have recently been 25GBASE-BR-10. I believe there is a typo, because the PMD has (4) types, -BR10. modified in P802.3cu. Parameters have been deleted, added or modified. Often to simplify BR20, -BR40, and -BR40+ the specification. Align with P802.3cu D2.2. Especially TDECQ - 10loq10(Ceq)c (max) has been removed as Tx parameter and SECQ - 10loq10(Ceq)f (max) as Rx parameter. TECQ SuggestedRemedy has been added, as well as TDECQ - TECQ. Transmitter over/under-shoot (max). Suggest change: add other (2) PMD types and comment for power levels Transmitter peak-to-peak power (max). "OMA minus TDECQ = value" has been modified to "OMA = value + TDECQ". In a similar way receiver sensitivity specification has been Response Response Status C modified. Etcetera ACCEPT IN PRINCIPLE. SuggestedRemedy See#1, change text to show -20 dBm is for BR10, -26 dBm is for BR20/40 Align PAM4 specification methodology with P802.3cu D2.2. C/ 158 SC 158.6 Р # 188 Response Response Status U Stassar, Peter Huawei REJECT. Comment Status A Comment Type ER No consensus reached on addressing the remedy PAM4 spec in Clause 160. For several parameters in Table 158-6, 158-7 and 158-8 there is a "zero" after the decimal C/ 00 SC 0 $P\mathbf{0}$ L0 # 165 point. Remove the decimal point and "zero" after it. Dawe. Piers Nvidia SuggestedRemedy Comment Type Comment Status R Remove the decimal point and "zero" after it for those parameters with integer values Editorial comments Response Response Status C ACCEPT. SuggestedRemedy To follow SC 158 P C/ 158 # 181 Response Response Status C Stassar, Peter Huawei REJECT. Comment Type TR Comment Status A No specific changes are proposed Requirements for interoperability between the various PMDs are missing. See latest C/ 00 SC 0 P0**LO** # 164 version of P802.3cu D2.2. Also for 159 and 160. Dawe. Piers Nvidia SuggestedRemedy Comment Type Comment Status R Add requirements for interoperability for various PMDs in 158, 159 and 160 Tecehnical comments Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. Implement the suggested remedy with editorial license to follow P802.3cu D2.2 To follow Response Response Status C REJECT. No changes are proposed.

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: Topic

C/ FM SC FM P1 L13 # 11 C/ FM SC FM P7 L19 # 90 Charter Grow, Robert RMG Consulting Hajduczenia, Marek Comment Type E Comment Status A Comment Type E Comment Status A Suggest to break title before "and 50" The WG ballot group list is now known. SuggestedRemedy SuggestedRemedy Insert line break before "and 50" to make title look a bit better Fill in WG list. Response Response Response Status C Response Status C ACCEPT. ACCEPT IN PRINCIPLE. Add WG ballot group member list when D2.0 was announced on Page 7 # 89 C/ FM SC FM P7 L4 C/ 00 # 232 SC 0 P9 L15 Grow, Robert RMG Consulting Thompson, Geoff GraCaSI S.A./Independent Comment Status A Comment Type Ε Comment Type E Comment Status R This number of this standard is known. The word "Ethernet" in this line is incorrect SuggestedRemedy SuggestedRemedy 802.3cp See maintenance request 1350 Response Response Status C Response Response Status C ACCEPT. REJECT. This is from the template FM document. Maintenance request 1350 is in Received status. It C/ FM SC FM P**7** L9 # will therefore be discussed in the Maintenance Task Force Dell EMC Lewis, Jon C/ FM SC FM P10 **L1** Comment Type ER Comment Status A Charter Hajduczenia, Marek Pete Anslow is no longer the 802.3 WG secretary Comment Type ER Comment Status A SuggestedRemedy Front Matter is not up to date Change "Pete Anslow" to "Jon Lewis" SuggestedRemedy Response Response Status C Update FM text and content to match the latest amendments published. Yes, it is a ACCEPT. constant process. SC FM P**7** C/ FM / 15 # 14 Response Response Status C Hajduczenia, Marek Charter ACCEPT Comment Type E Comment Status A When editor is change, it is usual to designate them separately as Phase 1 and Phase 2 editors SuggestedRemedy Per comment

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: Topic

Response Status C

Response

ACCEPT IN PRINCIPLE.

Follow example in 802.3cb, See #231

Topic

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C/ 00 SC 0 L1 # 53 C/ 1 SC 1.4 P12 Dell EMC D'Ambrosia, John Lewis, Jon Comment Type Ε Comment Status A Comment Type TR blank page SuggestedRemedy Remove the blank page. Also page 16, 20, 38 is blank. Please remove all blank pages in the document. The latest template has instructions for removing blank pages throughout the draft if necessary. Response Response Status C ACCEPT. SuggestedRemedy SC FM P13 # 92 C/ FM L49 Grow. Robert RMG Consulting Response Comment Status A Comment Type Ε REJECT. For some reason, a 43 is added to the end of the clause title. Same thing with clause 159 and clause 160. Each ends with "-BR40+", and each has a different number tacked onto the title. termed "asymmetric". SuggestedRemedy C/ 1 SC 1.4.52a If this is a FrameMaker "feature" perhaps appending spaces or something to the end of the title may help eliinate the TOC problem. It is a mystery to me though what to do if this is a Nicholl, Shawn FrameMaker problem with a title ending in "+". Comment Type ER Response Response Status C ACCEPT IN PRINCIPLE. the amendment is approved. Fix these places SuggestedRemedy C/ 1 SC 1.3 P18 **L1** # 16 Charter Hajduczenia, Marek Response Comment Type ER Comment Status A ACCEPT. No normative references, no need for 1.3 SC 1.4 SuggestedRemedy C/ 1 Strike 1.3 Hajduczenia, Marek Response Response Status C Comment Type ER ACCEPT.

P18 **L8** # 228 Futurewei, U.S. Subsidiary of Huawei Comment Status R Definition of all PHYs in 1.4, indicate that each PHY includes two different specifications for -D and U. However, the scope of the approved PAR for 802.3cp states -The scope of the project defines physical layer specifications and management parameters for symmetric bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s operation over single strand of single mode fiber of at least 10 km. It does not appear that specifications for symmetric bidirectional links were defined, as there are different specifications for upstream and downstream. Therefore, this specification is not per the scope of the approved PAR. It is assumed that different specifications are necessary for upstream / downstream. Therefore, the scope of the PAR needs to be updated. Response Status W The term "symmetric" in the PAR refers to the same rate in the upstream and the downstream. In access it is common for the two rates not to be the same, and this is # 69 P18 L12 Xilinx Comment Status A Definitions contain a reference to IEEE Std 802.3cp which should be IEEE Std 802.3 once Propose to replace "See IEEE Std 802.3cp" with "See IEEE Std 802.3" in this sub-clause and other sub-clauses found in sub-clause 1.4 Response Status C P18 / 13 Charter Comment Status A Units need to be separated from numeric value/ SuggestedRemedy Insert a space (non-breaking) before "km" Scrub the draft Response Response Status C 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: Topic

Topic

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C/ 1 SC 1.4 L14 # 17 C/ 30 SC 30.5.1.1.2 P21 L16 # 20 P18 Charter Hajduczenia, Marek Charter Hajduczenia, Marek Comment Type ER Comment Status A Comment Type E Comment Status A We do not reference amendments, but baseline standard Seems like "..." should be in a separate line above? SuggestedRemedy SuggestedRemedy Change "IEEE Std 802.3cp" to "IEEE Std 802.3", all definitions in 1.4 Fix the location of "..." Response Response Response Status C Response Status C ACCEPT. ACCEPT. SC 1.4 C/ 30 C/ 1 P18 L20 # 229 SC 30.5.1.1.2 P22 **L1** # 166 D'Ambrosia. John Futurewei, U.S. Subsidiary of Huawei Dudek. Mike Marvell Comment Type TR Comment Status A Comment Type Comment Status A Т All the other -D Phys are OLT Distinct Identiv concerns. Each of the speeds has two PHYs that address at least 40km (BR40 and BR40+) which are noted as differing by -40+ having a larger loss budget, which SuggestedRemedy means that there are two different solutions that can address the lower loss budget. Change ONU to OLT SuggestedRemedy Response Response Status C Choose 1 solution for 40km for each rate. ACCEPT. Response Response Status W ACCEPT IN PRINCIPLE. C/ 30 SC 30.5.1.1.2 P22 L14 See#187, Remove BR40+ from .3cp draft, BR40 is the single solution to 40 km reach Hajduczenia, Marek Charter C/ 1 SC 1.4.128 P18 / 45 93 Comment Type E Comment Status A Grow, Robert RMG Consulting Comment Type E Comment Status A SuggestedRemedy Insert point is wrong. Fix line spacing in 30.5.1.1.2 SuggestedRemedy Response Response Status C The insert should be after 1.4.128aac which was inserted by IEEE Std 802.3ca-20xx. 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: Topic

Inserts are then numbered 1.4.128aad through 1.4.128aag.

Response Status C

Response

ACCEPT IN PRINCIPLE.

Align insert point to .3ca, .3cr, and .3cu

Cl 45 SC 45.2.1 P23 # Cl 45 L18 L8 40 SC 45.2.1.7 P25 # 42 Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe ADI, Cisco, CommScope, Marvell, SenTekSe Zimmerman, George Comment Type E Comment Status A Comment Type E Comment Status A Editing instruction lists modifying amendments to Table 45-3, and includes "802.3xx" which 130.6.8, 71.6.10, 113.4.2.2, and 137.8.9 should be marked as external references in Table does not exist. Additionally, omits at least 802.3cq-2019 and 802.3ch-2020, which 45-9. Similarly for 130.6.9. 71.6.11. 89.5.9. and 137.8.10 in Table 45-10. and 130.6.5. modified this table. Since most amendments modify this table, the 'modified by' list is 71.6.6, 113.4.2.3, and 137.8.10 in Table 45-12 generally left out. SuggestedRemedy SuggestedRemedy Change references not in the draft to externals Delete "(as modified by ... 802.3xx)" from editing instruction Response Response Status C Response Response Status C ACCEPT. ACCEPT. CI 45 SC 45.2.1.7.1 P25 L20 C/ 45 SC 45.2.1.16 P24 L4 # 153 Anslow. Pete Self Marris, Arthur Cadence Design Systems Comment Type Ε Comment Status A Comment Type E Comment Status A Table 45-9 and Table 45-10 do not include "and" in any of the existing rows (although Table I thought 802.3ct was amending 802.3cp 45-12 does). SuggestedRemedy SuggestedRemedy Delete reference to 802.3ct and review the changes indicated in the bit description in Table Delete all instances of "and" from Table 45-9 and Table 45-10 45-7. Deleting both 11xxxxx and 1111001 does not seem right. Response Response Status C Response Response Status C ACCEPT. ACCEPT IN PRINCIPLE. Check out .3ca. .3cr. .3cu. remove all BR40+ allocations from Table 45-7 C/ 45 SC 45.2.1.27a.4 P29 L25 # 168 Dudek, Mike Marvell C/ 45 # SC 45.2.1.7 P25 L7 41 Comment Type TR Comment Status A Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe 25GBASE-BR20-U should not be described in a section titles 25GBASE-BR40-D and it Comment Type E Comment Status A needs its own bit. Tables 45-9 and 45-10 are commonly modified, modifying amendments are generally left SuggestedRemedy out. However, if they are to be included, at least 802.3cg and 802.3ch which modified these tables should be included Make this paragraph a different section with its own bit and title and renumber the rest of the sub-clauses. SuggestedRemedy Response Response Status W Delete "(as modified by ...)" from editing instructions for Tables 45-9 and 45-10 ACCEPT.

Response

ACCEPT.

Response Status C

Topic

Make "25GBASE-BR20-U ability (1.34.11)" a subclause title

Cl 45 SC 45.2.1.27b P31 L7 # 22 Cl 56 SC 56.1.1.1 P34 L18 # 24 Hajduczenia, Marek Charter Hajduczenia, Marek Charter Comment Type TR Comment Status A Comment Type ER Comment Status A Title says "25G" and all entries show "50GBASE External references (not live) are to be marked in Forest Green - "as defined in >>66.1<<" SuggestedRemedy SuggestedRemedy Fix the table title to say "50G PMA/PMD" Multiple locations in the draft - please scrub accordingly. Response Response Response Status C Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. Use suggested remedy to fix Table 45-31b title. Also fix Table 45-31a title as "10G and Other locations are Line 18 "66.1". line 20 "66.2" C/ 56 P34 SC 56.1.2.1 L40 Table 45-31a, line 1.34.6. missing RO Hajduczenia, Marek Charter Cl 56 SC 56.1.1 P34 / 1 Comment Type E Comment Status A Charter Hajduczenia, Marek Seems like subclause number is doubled? Comment Status A Comment Type E SuggestedRemedy What does text in {} mean? remove one instance of 56 1 2 1 SuggestedRemedy Response Response Status C Use known designation for text and editorial instructions ACCEPT. Response Response Status C ACCEPT IN PRINCIPLE. SC 56.1.2.1 Cl 56 P34 L40 # 61 Delete "{from IEEE Std 802.3-2018}." Kramer, Glen Broadcom C/ 56 SC 56.1.1.1 P34 L18 # Comment Type E Comment Status A Subclause number repeated twice Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Status A Comment Type E SuggestedRemedy 66.1 and 66.2 (line 20) should be external cross references delete an extra "56.1.2.1" SuggestedRemedy Response Response Status C Change references not in the draft to externals ACCEPT. Response Response Status C Cl 56 SC 56.1.3 P35 L9 ACCEPT. Hajduczenia, Marek Charter Comment Type E Comment Status A None of the lists added in 56.1.3 need to be lettered, we do not reference them. SuggestedRemedy Convert lettered lists into bulleted ones Other locations include page / line: 39/31, Response Response Status C 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: Topic

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Cl 56 SC 56.1.3 P37 # 203 C/ 157 SC 157 P38 L1 # 28 L21 Law, David Charter **Hewlett Packard Enterprise** Hajduczenia, Marek Comment Type Т Comment Status A Comment Type E Comment Status A The title for Clause 49 is 'Physical Coding Sublayer (PCS) for 64B/66B, type 10GBASE-R' Title missing "and' when listing speeds therefore the text in the Clause 49 heading in Table 56-2 should read '10GBASE-R PCS'. SuggestedRemedy This matches the existing Clause 66 column wich is labelled '1000BASE-X PCS, PMA' Change to "Introduction to 10 Gbps, 25 Gbps, and 50 Gbps BiDi PHYs" even though the PCS is used to from the 1000BASE-LX10 and 1000BASE-BX10 PHYs. A similar changed needs to be made to the Clause 107 and 133 column headings. Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. Change '10GBASE-BRx PCS to read '10GBASE-R PCS' for the Clause 49 column Change to "Introduction to 10 Gb/s. 25 Gb/s, and 50 Gb/s BiDi PHYs" heading, '25GBASE-BRx PCS' to read '25GBASE-R PCS' for the Clause 107 heading, and C/ 157 SC 157.1.1 P38 '50GBASE-BRx PCS' to read '50GBASE-R PCS' for the Clause 133 heading. L11 Hajduczenia, Marek Response Response Status C Charter ACCEPT. Comment Type Comment Status A ER Group comments #244, 203, 204 Extra "-" in Net-work # 204 P37 CI 56 SC 56.1.3 L21 SuggestedRemedy Scrub the draft, there are multiple instances where likely import from Word resulted in Law. David **Hewlett Packard Enterprise** spurious "-" characters Comment Type T Comment Status A Response Response Status C The title for Clause 51 is 'Physical Medium Attachment (PMA) sublayer, type Serial' therefore the text in the Clause 51 heading in Table 56-2 should read '10GBASE-R PMA'. ACCEPT. This matches the existing Clause 66 column wich is labelled '1000BASE-X PCS. PMA' even though the PCS is used to from the 1000BASE-LX10 and 1000BASE-BX10 PHYs. A C/ 157 SC 157.1.2 P38 L31 # 30 similar changed needs to be made to the Clause 109 and 153 column headings. Haiduczenia. Marek Charter SuggestedRemedy Comment Type Comment Status A Change '10GBASE-BRx PMA' to read '10GBASE-R PMA' for the Clause 51 column Seems like "see Clause XXX" should be in (), or at least preceded with a comma heading, '25GBASE-BRx PMA' to read '25GBASE-R PMA' for the Clause 109 heading, and ' 50GBASE-BRx PMA' to read '50GBASE-R PMA' for the Clause 133 heading. SuggestedRemedy Add comma before "see" in lines 31, 33, and 35 Response Response Status C

Response

ACCEPT.
Page number is 39

C/ 56

arek

Group comments #244, 203, 204

SC 56.1.4

P37 Charter L**50**

Hajduczenia, Marek

ACCEPT.

Charter

Comment Type E Comment Status A

56.1.4 is empty

SuggestedRemedy

Remove it please

Response Response Status C

ACCEPT.

Response Status C

C/ 157 SC L1 # C/ 157 SC 157.1.1 P39 L11 # 71 P39 Nicholl, Shawn Xilinx Baggett, Tim Microchip Comment Type Е Comment Status A Comment Type ER Comment Status A The term BiDi is used extensively throughout the document, but it there isn't a clear Typo "Net-work" definition, nor is it found anywhere else in the existing standard. SuggestedRemedy SuggestedRemedy Replace "Net-work" with "Network" Consider if BiDi definition should be added to clause 1.4 Response Response Status C Response Response Status C ACCEPT. ACCEPT IN PRINCIPLE. Add "BiDi" as an abbreviation for "Bidirectional" in Clause 1.5 C/ 157 SC 157.1.1 P39 L23 # 197 Law, David Hewlett Packard Enterprise C/ 157 SC 157 / 1 P39 Comment Status A Comment Type Self Anslow, Pete The PMA sublayer is listed twice, yet the PMD sublayer is missing. In addition the list ends Comment Type Ε Comment Status A with '... Coding Sublayer (PCS) sublayers and ...'. 802.3 uses Gb/s rather than Gbps. See: SuggestedRemedy http://www.ieee802.org/3/WG tools/editorial/requirements/words.html#bps which states: "only Mb/s and Gb/s should be used" Suggest the text '... Physical Medium Attachment (PMA), Physical Medium Attachment (PMA), forward error correction (FEC), and Physical Coding Sublayer (PCS) sublayers ...' SuggestedRemedy be changed to read '... Physical Coding Sublayer (PCS), forward error correction (FEC). Change the title of Clause 157 to "Introduction to 10 Gb/s. 25 Gb/s. 50 Gb/s BiDi PHYs" physical medium attachment (PMA), physical medium dependent (PMD) sublayers ...'. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Change to "Introduction to 10 Gb/s, 25 Gb/s, and 50 Gb/s BiDi PHYs" C/ 157 SC 157.1.3 P39 L39 C/ 157 SC 157.1.1 P39 / 10 # 144 Baggett, Tim Microchip Lusted, Kent Intel Corporation Comment Type Ε Comment Status A Comment Type TR Comment Status A There are six occurances of "Bidi" when I suspect the intention is "BiDi". the term "BiDi" is used repeatedly throughout the document as an abbreviation for P39 L39 Bidirectional. However, it is not defined as an abbreviation in the base standard. P44 I 11 P44 L17 SuggestedRemedy P44 L27 Add "BiDi" as an abbreviation for "Bidirectional" in Clause 1.5 P44 L38 P44 L45 Response Response Status W ACCEPT. SuggestedRemedy Search for "Bidi" and replace with "BiDi" Response Response Status C 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: Topic

Topic

C/ 157 SC 157.1.3 L47 # 221 C/ 157 SC 157.1.3 P40 **L**5 # 44 P39 Trowbridge, Steve Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Nokia Comment Type E Comment Status A Comment Type E Comment Status A The "x" should go as the next element of the list other than BR. The text describing x All phy names in Tables 157-1, 157-2, 157-3, and 157-4 have an extra hyphen (e.g., 10Gshould retain the hanging indent instead of wrapping back to the next line. BASE-BR10-D should be 10GBASE-BR10-D as it is elsewhere). SuggestedRemedy SuggestedRemedy See comment Change names in Table 157-1 to remove hyphen after speed Response Response Response Status C Response Status C ACCEPT IN PRINCIPLE. ACCEPT. See#31, use a table similar to Table 141-6 for .3cp nomenclature C/ 157 SC 157.1.3 P40 L5 # 10 C/ 157 1 47 # 75 SC 157.1.3 P39 Anslow. Pete Self Self Laubach, Mark Comment Type Comment Status A Comment Type Е Comment Status A The draft contains 52 instances of "xxG-BASE", which should all be "xxGBASE" For readability, suggest a tab The first example is in Table 157-1 where "10G-BASE-BR10-D" should be "10GBASE-BR10-D" SuggestedRemedy SuggestedRemedy add tabs to align "(40 km)..." under "Bidirectional" Change all 52 instances of "xxG-BASE" to "xxGBASE" Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. See #31, use a table as Table 141–6 for .cp nomenclature ACCEPT. C/ 157 SC 157.1.3 # 170 P39 L 53 C/ 157 SC 157.1.3 P41 L37 # 202 Dudek. Mike Marvell Law, David Hewlett Packard Enterprise Comment Type Т Comment Status A Comment Type T Comment Status A GMII is for 1G which isn't part of this project. The PCS used for all three PHY speeds in a 'BASE-R PCS', not a 'BASE-X PCS'. SuggestedRemedy SuggestedRemedy Change GMII to XGMII Suggest that the text '10GBASE-X PCS' be changed to read '10GBASE-R PCS', '25GBASE-X PCS' be changed to read '25GBASE-R PCS' and '50GBASE-X PCS' be Response Response Status C changed to read '50GBASE-R PCS'. ACCEPT. Response Response Status C ACCEPT

C/ 157 SC 157.1.3 L37 # 156 C/ 157 SC 157.1.3 L47 # 32 P41 P41 Marris, Arthur Cadence Design Systems Hajduczenia, Marek Charter Comment Type TR Comment Status A Comment Type ER Comment Status A These are BASE-R PCSes GMII is defined in Figure 157-1, but not used in the figure. XGMII, 25GMII, and 50GMII are used and not defined SuggestedRemedy SuggestedRemedy Change BASE-X to BASE-R in Figure 157-1 Fix the xMII definition issues Response Response Status W Response Response Status C ACCEPT. ACCEPT IN PRINCIPLE. In Figure 157-1, remove "GMII = GIGABIT MEDIA INDEPENDENT INTERFACE", add C/ 157 SC 157.1.3 P41 L37 # 145 "XGMII = 10 GIGABIT MEDIA INDEPENDENT INTERFACE", "25GMII = 25 GIGABIT Lusted. Kent Intel Corporation MEDIA INDEPENDENT INTERFACE", and "50GMII = 50 GIGABIT MEDIA INDEPENDENT INTERFACE" Comment Type Comment Status A TR Apply same changes to other figures using XGMII, 25GMII, and 50GMII Figure 157-1 uses "10GBASE-X PCS". "25GBASE-X PCS". and "50GBASE-X PCS" in the architectural diagrams, which are not the correct names for these PCS layers. However, C/ 157 # 33 SC 157.1.4 P42 L5 the PCS sections referenced in Table 157-2, 157-3, and 157-4 have them correct. Haiduczenia. Marek Charter SuggestedRemedy Comment Status A Comment Type ER Change "10GBASE-X PCS" to "10GBASE-R PCS", "25GBASE-X PCS" to "25GBASE-R PCS", and "50GBASE-X PCS" to "50GBASE-R PCS" In IEEE 802.3 standard, we do not use "must" except for specific cases outlined in Style Manual Response Response Status W SuggestedRemedy ACCEPT. "PHY types must meet the requirements" - change to "shall"? C/ 157 SC 157.1.3 P41 L40 # 211 Response Response Status C Law, David **Hewlett Packard Enterprise** ACCEPT. Comment Type T Comment Status A C/ 157 SC 157.1.4 P42 L13 # 34 The MDI is part of the Physical Layer of the OSI reference model, see IEEE Std 802.3-2018 figure 1-1. Hajduczenia, Marek Charter SuggestedRemedy Comment Type Comment Status A Move the dotted line from the bottom of the Physical Layer to the bottom of the PMD box to Clause 158 should not be marked in gree, but linked live be from the bottom of the Physical Layer to the bottom of the MDI box. SuggestedRemedy Response Response Status C Same applies to Tables 157-3, and 157-4 for Clauses 159, and 160, respectively ACCEPT. Response Response Status C

ACCEPT.

C/ 157 SC 157.1.4 P42 L13 # 76 C/ 157 SC 157.1.4 P42 L36 # 235 Self Thompson, Geoff GraCaSI S.A./Independent Laubach, Mark Comment Type Е Comment Status A Comment Type ER Comment Status A "158" is indicated forest green, yet it is included in this addendum. Same respective issue The way Table 157-3 is split across the page break is, at a minimum, confusing. It needs on line 41 with "159". to be controlled appropriately. SuggestedRemedy SuggestedRemedy change clause numbers included in this addendum to active cross references. Keep the table on a single page or pro-actively control the row split at a logical point with new column headings on the new page. Change the title on the 2nd piece to Table 157-3 Response Response Status C (continued). ACCEPT IN PRINCIPLE. Response Response Status W See#34, same change applies to Tables 157-3, and 157-4 for Clauses 159, and 160, ACCEPT IN PRINCIPLE. respectively Remove all BR40+ items, try to keep table on a single page C/ 157 SC 157.1.4 P42 L 20 # 201 C/ 157 # SC 157.2.1 P44 L11 45 Law. David **Hewlett Packard Enterprise** Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Status A Comment Type T Comment Type E Comment Status A As the title for Clause 49 is 'Physical Coding Sublayer (PCS) for 64B/66B, type 10GBASE-R', and since the 'PCS' column for Table 157-3 and 157-4 are labelled '25GBASE-R PCS' Is it BiDi or Bidi...? and '50GABSE-R PCS' respectively, please change the Table 157-2 'PCS' column to SuggestedRemedy '10GBASE-R PCS'. Change Bidi to BiDi on P44, Lines 11, 17, 24, 38, 45, and page 39 line 39 SuggestedRemedy Response Response Status C Suggest that the text '64B/66B PCS' be changed to read '10GBASE-R PCS'. ACCEPT. Response Response Status C ACCEPT. C/ 157 SC 157.2.2 P44 L15 # 214 Law, David **Hewlett Packard Enterprise** C/ 157 SC 157.1.4 L 20 # 205 P42 Comment Status A Comment Type T Hewlett Packard Enterprise Law. David Suggest that '... the MII ...' should be changed to read '... the xMII ...' hear and on line 17. Comment Type T Comment Status A SuggestedRemedy Clause 46 specifies the XGMII, not the GMII. See comment. SuggestedRemedy Response Response Status C Change the text 'GMII' to read 'XGMII' in the right hand Clause 46 column. ACCEPT. Response Response Status C

ACCEPT.

CI 157 SC 157.2.2 P44 L16 # 65

Kramer, Glen Broadcom

Comment Type E Comment Status A

The draft uses "sublayer" everywhere except in three places on page 44, where it uses "sub-layer"

SuggestedRemedy

Remove hyphens in "sub-layer" on lines 16 (two ninstances) and line

Response Status C

ACCEPT.

CI 157 SC 157.2.4 P44 L35 # 237

Thompson, Geoff GraCaSI S.A./Independent

Comment Type TR Comment Status R

The statement "The PMA also may provide an observable electrical interface for the 25GAUI or 50GAUI chip-to-chip 35 (C2C) or chip-to-module (C2M)." has no meaning within the scope of the standard. Anything that is not forbidden in the standard may be provided.

SuggestedRemedy

If optional standardized test points are specified or called out then say so. If that is not the case then delete the text.

Response Status W

REJECT.

This follows last sentence in 105.3.4

C/ 157 SC 157.4 P45 L18 # 238

Thompson, Geoff GraCaSI S.A./Independent

Comment Type TR Comment Status R

I believe that PAUSE operation is not the only reason that demands that there be an upper bound on the propagation delays through the network. I am given to understand that both maximum and minimum transit time need to be specified to support TSN.

SuggestedRemedy

Generalize the reasons for specifying delay and include specification of minimum delay as well.

Response Status W

REJECT.

Remedy is not specific enough.

Can you please provide an 802.3 reference clause for the minimum delay constraint spec?

C/ 157 SC 157.4

L25

72

66

Nicholl, Shawn

Comment Type ER Comment Status A

Currently, the sentence reads "The maximum delay \dots are specified". This is improper grammar.

P45

Xilinx

SuggestedRemedy

Proposed to replace "The maximum delay for" with "The maximum delay values for". Another alternative is "The maximum delay constraints for".

Response Status C

ACCEPT.

Replace it with "The maximum delay constraints for" in 3 places

CI 157 SC 157.6 P45 L43

Kramer, Glen Broadcom

Comment Type T Comment Status A

"All members of the Multi-Gigabit Ethernet BiDi PHY family are required to include PCS registers or variable equivalents that:

- 1) indicate the receive status of the PCS (see 49.2.14.1 and 45.2.3.15.1), and
- 2) disable the PHYs transmitter(see 45.2.1.8)."

As described, both OLT and ONU will disable the transmitter. This is not what should happen.

SuggestedRemedy

The setting to use silent mode must be pre-configured before a device is connected to a network. Using PCS registers or variables is an implementation choice irrelevant here. It is better to introduce Active/Passive Mode for all BRx PHY. If BRx is pre-configured to be in Active Mode, it does not disable the TX. In Passive Mode, the TX disabled until a valid Rx is confirmed. (see 57.2.9 for a similar issue resolved for OAM peers)

Response Status C

ACCEPT IN PRINCIPLE.

Add "ONU" to subclause 157.6 title.

At the end of 157.6, add a note "Note silent start does not apply to the OLT PHY types."

C/ 157 SC 157.6 L45 # 213 C/ 157 SC 157.6 P46 L1 P45 # 36 Charter Law, David **Hewlett Packard Enterprise** Hajduczenia, Marek Comment Type ER Comment Status A Comment Type E Comment Status A I'm not sure if it is the case that 'The access network ... by nature, are less well controlled Missing space in "transmitter(see" than other telecommunications networks.'. but I don't see a need to provide this text. SuggestedRemedy SuggestedRemedy Add missing space Replace the entire first paragraph of subclause 157.6 with the text 'Silent Start is provided Response Response Status C by Multi-Gigabit Ethernet BiDi ONU PHYs to reduce the likelihood of disruption to established services if a Multi-Gigabit Ethernet BiDi ONU PHY is inadvertently attached to ACCEPT. a Point-to-Multipoint network.'. C/ 157 SC 157.6 P46 L10 # 67 Response Status W Response Kramer, Glen Broadcom ACCEPT Comment Type Comment Status A # C/ 157 SC 157.6 P45 / 46 212 "Once transmission is enable it should not be disabled until the receive signal is lost." Law. David Hewlett Packard Enterprise SuggestedRemedy Comment Type E Comment Status A This sentence is not intended as an optional requirement and no corresponding PICS If my comment to replace this paragrpah is not accepted, suggest that '... are, by nature, exists. Also, a typo in "is enable". less well ...' should be changed to read '... are, by their nature, less well ...'. Rephrase as "Once transmission is enabled, it is not be disabled until the receive signal is SuggestedRemedy lost." A better explanation would be this: Response Response Status C "Once transmission is enabled, it remains enabled until the optical receive power is lost, ACCEPT IN PRINCIPLE. even if the PCS detects the received signal fault." See #213 resolution Response Response Status C C/ 157 SC 157.6 P45 1 52 # 35 ACCEPT IN PRINCIPLE. Remove this sentence, See #37 Hajduczenia, Marek Charter Comment Type ER Comment Status A C/ 157 P46 SC 157.6 / 10 A hidden "shall" in "All members of the Multi-Gigabit Ethernet BiDi PHY family are required Hajduczenia, Marek Charter to include PCS registers" Comment Type ER Comment Status A SuggestedRemedy Is this intended to be an optional requirement: "Once transmission is enable it should not convert this text into "shall" statement if this is intended as a requirement. Otherwise. be disabled until the receive signal is lost." soften the language. SuggestedRemedy Response Response Status C Add to PICS if intended, or change the language to avoid "should" ACCEPT IN PRINCIPLE. Change "are required to" to "shall". Response Response Status C Add Clause 49 to the first sentence of 157.7 ACCEPT IN PRINCIPLE

Remove this sentence

See #67

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: Topic

Topic

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CI 158 SC 158.1 P47 L7 # 186

Stassar, Peter Huawei

Comment Type ER Comment Status A

Despite the fact that in the past for 10G PHYs reference was made to "baseband medium" in more recent optical PMDs this term has not been used, as in new clauses 159 and 160. Also no reference is made to "serial" in 159.1 and 160.1, so it shouldn't be needed in 158.1. Thus comments also applies to 159.1 and 160.1

SuggestedRemedy

Make wording consistent with 159.1 and 160.1

Response Status C

ACCEPT IN PRINCIPLE.

Change first sentence in 158.1 to "This clause specifies the 10GBASE-BR10, 10GBASE-BR20, and 10GBASE-BR40 PMDs together with the single-mode fiber medium."

CI 158 SC 158.1 P47 L17 # 46

Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe

Comment Type E Comment Status A

"defined in 45" - the cross reference should read "Clause 45" (same thing in 159.1 and 160.1)

SuggestedRemedy

Change cross reference to read "Clause 45"

Response Status C

ACCEPT.

Cl 158 SC 158.1 P47 L32 # 210

Law, David Hewlett Packard Enterprise

Comment Type TR Comment Status A

According to Table 158–1, Clause 108 RS—FEC is optional for both a 10GBASE-BR10 and 10GBASE-BR40 PHY. It is not clear that a 10GBASE-BR10 PHY that implements the optional RS-FEC sublayer can interoperate with a 10GBASE-BR10 PHY that does not implement the optional RS-FEC sublayer. Since the IEEE P802.3cp nomenclature doesn't provide a way to indicate if a 10GBASE-BR10 or a 10GBASE-BR40 PHY does or does not implement optional FEC, it appears that user has no way to know if a 10GBASE-BR10 or a 10GBASE-BR40 PHY implements RS-FEC or not. This seems to mean that a user won't know if one particular 10GBASE-BR10 PHY will interoperate with another 10GBASE-BR10 PHY, similarly for any two 10GBASE-BR40 PHYs.

SuggestedRemedy

If a 10GBASE-BR10 (or 10GBASE-BR40) PHY that implements the optional RS-FEC sublayer can't interoperate with a 10GBASE-BR10 (or 10GBASE-BR40) PHY that does not implement the optional RS-FEC sublayer, add a way to indicate if the optional RS-FEC sublayer is implemented to the IEEE P802.3cp nomenclature.

Response Status W

ACCEPT IN PRINCIPLE.

BR10 and BR40 do not need RS-FEC. Change the cell in Table 158-1 from "optional" to "not applicable".

When updating Table 56-2, leave cells for 10GBASE-BR10 and BR40 FEC blank

C/ 158 SC 158.1 P47 L34 # 77

Laubach, Mark Self

Comment Type E Comment Status A

Cross reference not colored in table footnote.

SuggestedRemedy

Change "Clause 108" for forest green.

Response Status C

ACCEPT.

C/ 158 SC 158.1.1 P47 L45 # 47

Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe

Comment Type TR Comment Status A

The BER is specified to be at the "PHY service interface" - I can't find any other reference to a "PHY service interface" in this draft. Clauses 58, 59, and 75 use the term as well, but it is undefined. Clause 113 (25GBASE-T) defines its PHY service interface as the 25GMII (see 113.1.2). However, this clause is only specifying a PMD sublayer, and references a PMD service interface elsewhere - as just a PMD, Clause 158 cannot specify a BER at the xMII. Is the PMD service interface meant? (otherwise this requirement needs to go in the PMA, and something needs to be partitioned to the PMD)

SugaestedRemedy

Change "PHY service interface" to "PMD service interface"

Response Response Status W

ACCEPT IN PRINCIPLE.

Change this setence to "The bit error ratio (BER) shall be less than 10-12 at the PMD service interface "

64 C/ 158 SC 158.5.1 P49 L37

Comment Status A

Kramer, Glen Broadcom

Ε

Per IEE style manual, the word "will" is deprecated.

SuggestedRemedy

Comment Type

Change the sentences containing "will" to use present tense at the following locations:

P49-L37

P56-L20

P56-L21

P68-L2 P86-L37

Response Response Status C

ACCEPT.

C/ 158 SC 158.5.2 P49

L40

78

Laubach, Mark

Comment Type Т

Comment Status A

PMD UNITDATA.request is neither defined or referenced in this draft. Same for PMD UNITDATA indication on line 49.

Self

SuggestedRemedy

Either provide the definitions of these functions in this draft or a cross reference to where they are defined.

Response Response Status C

ACCEPT IN PRINCIPLE.

52.1.1.1 defines PMD UNITDATA.request, 52.1.1.2 defines PMD UNITDATA.indication. Use them as cross references in Lines 40 and 49 and use forest green color.

C/ 158 SC 158.5.2 P49 L44

Laubach, Mark Self

Comment Status D Comment Type Т

and line 50. The constant "ONE" is not defined in this draft. There are only these two occurences.

SuggestedRemedy

Definitions should be fixed when implementing the proposed change for PMD UNITDATA.request and PMD UNITDATA.indication.

Proposed Response Response Status Z

REJECT.

This comment was WITHDRAWN by the commenter.

802.3 convention ONE is a well-known constant

C/ 158 SC 158.5.6 L11 P51

Topic

Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe

Comment Type E Comment Status A It seems the font size in 158.5.6 has gotten smaller.

SuggestedRemedy

Correct font size in 158.5.6 to be consistent with the rest of the draft

Response Response Status C

ACCEPT.

C/ 158 SC 158.5.6 L11 # 73 P51 Xilinx Nicholl, Shawn Comment Type ER Comment Status A Small font in paragraphs in this sub-clause. It looks different than surrounding sub-clauses. SuggestedRemedy Check the font and paragraph spacing in this sub-clause. Response Response Status C ACCEPT. C/ 158 SC 158.6.1 P52 L29 # 218 Law. David **Hewlett Packard Enterprise**

Doesn't the -D PHY Tx centre wavelength range have to match the -U PHY Rx centre wavelength range, and vice versa? As an example, the 10GBASE-BRx-D PHY Tx centre wavelength (range) is 1320 to 1340 nm in Table 158–6 (page 52, line 29) which is the same as the 10GBASE-BRx-D PHY Rx centre wavelength (range) of 1320 to 1340 nm in Table 158–7 (page 53, line 24), while the 10GBASE-BRx-U PHY Rx centre wavelength (range) is 1260 to 1280 nm in Table 158–7 (page 53, line 26). This doesn't seem correct.

Comment Status A

SuggestedRemedy

Comment Type

Correct here, and for other PHYs, if necessary.

Response Status W

TR

ACCEPT IN PRINCIPLE.

In Rx table, switch values in row "10GBASE-BRx-D center wavelength (range)" and "10GBASE-BRx-U center wavelength (range)"

Do same changes to Rx tables in Clauses 159, 160

C/ 158 SC 158.6.1 P52 L48 # 80

Laubach, Mark Self

Comment Type T Comment Status A

and line 50. The unit cells are blanks for eye mask. Same for Table 159–6 on page 71, Table 159–7 on page 72.

SuggestedRemedy

Insert "UI" for the Unit value in the table for these two rows (or other appropriate unit value).

Response Response Status C

ACCEPT IN PRINCIPLE.

Use a long dash to the two unit cells

C/ 158 SC 158.6.2

TR

TR

P**53** Huawei L40

182

Stassar, Peter

Comment Type

'

In latest optical PMD specifications no longer "Receive electrical 3 dB upper cutoff frequency (max)" is included because it cannot be measured at TP3 and is part of the implementation

SuggestedRemedy

Remove row for "Receive electrical 3 dB upper cutoff frequency (max)"

Comment Status A

Response Status C

ACCEPT.

Comment Type

C/ 158 SC 158.6.3

P**54** Huawei L14

L14

192

191

Stassar, Peter

Comment Status A

It doesn't make sense to have 15 dB for 20km and 18 dB for 40km. 15 dB would rather be a channel loss for a 30km channel as in clause 114 for 25GBASE-ER. Also applies to 159 and 160

SuggestedRemedy

Define an appropriate channel insertion loss for 20km, e.g. 11 or 12 dB, and optimize power values in Table 158-6 and Table 158-7. Also in 159 and 160

Response

Response Status U

ACCEPT IN PRINCIPLE.

Editorial license: To justify 15 dB add text to describe 0.5 dB/km fiber loss and 5 dB connection loss in Clauses 158-160

Cl 158 SC 158.6.3 P54
Stassar. Peter Huawei

Comment Type TR Comment Status R

Channel insertion loss numbers do not add up using the attenuation coefficient and the allocation for connector and splice loss of 2 dB. This comment is related to another comment requesting a change in attenuation coefficient. Compare with other recent optical PMDs and make numbers consistent between Clauses 158, 159 and 160.

SuggestedRemedy

Make numbers consistent for channel insertion loss in Clauses 158, 159 and 160

Response Status U

REJECT

No consensus reached from the group to make changes to the draft.

C/ 158 SC 158.6.3 L21 # 81 C/ 158 SC 158.8 P54 L47 # 178 P54 Self Stassar, Peter Laubach, Mark Huawei Comment Type Ε Comment Status A Comment Type TR Comment Status A Suggest a cross reference for table footnote c. The dispersion equation provides too high values for current latest G.652 fibers. Value of 0.2325 should be 0.23. Applies also to 160.7 SuggestedRemedy SuggestedRemedy Add a cross reference to CL158.11.1 Change 0.2325 to 0.23. In Clauses 158 and 160 Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Remove the second sentence beginning with "Attenuation" from footnote c. See#194 C/ 158 SC 158.8 P54 L49 # 179 C/ 158 SC 158.6.3 P54 L22 # 190 Stassar, Peter Huawei Stassar, Peter Huawei Comment Type TR Comment Status A Comment Type TR Comment Status R The dispersion equation provides too high values for current latest G.652 fibers. Value of An attenuation of 0.4 dB/km is used, 0.43 dB/km in Table 159-8 and 0.5 dB/km in Table 0.465 should be 0.46. Applies also to 160.7 160-6. Use a single value for all 3 clauses, preferably 0.5 dB/km to make the specifications SuggestedRemedy consistent. Now they are all different. Applies similarly to 159 and 160 Change 0.465 to 0.46. In Clauses 158 and 160 SuggestedRemedy Response Response Status C Change loss to 0.5 dB/km consistent with other recent PMDs like P802.3cu in 158 and 159 and with clause 160 ACCEPT. Response Response Status U SC 158.8 P54 C/ 158 L 51 180 REJECT. Stassar, Peter Huawei No consensus reached from the group to make changes to the draft. Comment Type TR Comment Status A # 189 SC 158.6.3 P54 C/ 158 L22 The dispersion equation provides too high values for current latest G.652 fibers. Value of Stassar, Peter Huawei 0.93 should be 0.92. Plus the negative dispersion is not zero but similar equation as for minimum dispersion for 20km but with 0.92 as a coefficient. Applies also to 160.7 Comment Type TR Comment Status A Reference is made to Table 52-11 and cross reference is missing. Change to Table 158-5 SuggestedRemedy with cross reference

Change 0.93 to 0.92, plus add equation for minimum dispersion. In Clauses 158 and 160

Response Response Status C

ACCEPT IN PRINCIPLE.

Revise values in Comments #178-180 and apply changes to dispersion values

SuggestedRemedy

ACCEPT.

Response

Change to Table 158-5 with cross reference

Response Status C

Comment Type TR Comment Status A

An indirect reference like this should not be used because of the difficulty of properly maintaining the document. Because the subclauses of 52.10 specifically reference port types, it could be argued that the requirements do not apply because clause 52 does not reference 10BASE-BRx port types.

SuggestedRemedy

A general safety subclause should copy P802.3cr 52.10.1, and the other clauses can copy the relevant subclauses of the latest revision or amendment that changes the text of the relevant subclause.

If indirection is still desired, the port type lists in Clause 52 need to be deleted (preferred) or expanded to include 10GBASE-BRx.

Response Status U

ACCEPT IN PRINCIPLE.

See #184, editorial license to add safety requirements as .3cu, .3ct

C/ 158 SC 158.9 P55 L6 # 184

Stassar, Peter Huawei

Comment Type TR Comment Status A

Safety requirements have recently been changed. Please refer to P802.3cu requirements. Also applies to 159 and 160

SuggestedRemedy

Implement safety requirements as in P802.3cu D2.2 151.9. Also in 159.8 and 160.8

Response Response Status C

ACCEPT IN PRINCIPLE.

Follow .3cu D3.0 to refer to J.2. apply same statement to Clauses 159 and 160.

Cl 158 SC 158.10 P56 L4 # 216

Law, David Hewlett Packard Enterprise

Comment Type T Comment Status A

The vertical bar separating the top two rows of Table 158–10 'Fiber optic cabling (channel) characteristics' seem to exclude the fibre type and wavelength rows for 40+ which doesn't seem to be correct.

SuggestedRemedy

Delete the vertical bar separating the top two rows of Table 158–10.

Response Response Status C

ACCEPT IN PRINCIPLE.

See #187 to remove all 40+ columns

C/ 158 SC 158.10

P**56** Huawei L12

193

Stassar, Peter

Comment Type TR

Comment Status A

Reference is made to Table 158-9 so that the reader will need to calculate maximum dispersion numbers themselves. Chromatic dispersion values at nominal wavelengths are likely to provide too optimistic estimates for worst case TDP (or TDECQ in 160). The applicable values at extreme wavelengths need to be in this Table as in other recent optical PMDs. Also applies to 159 and 160

SuggestedRemedy

Add chromatic dispersion numbers at extreme wavelengths for each PMD, e.g. as in Clause 114, Table 114-11 for 25GBASE-LR/ER and use similar Table formatting as for Clause 114.

Response Status C

ACCEPT IN PRINCIPLE.

Editorial license to calculate "Positive dispersion (max)" and "Negtive dispersion (min)", fill into Table 158-10, update Note d.

Cl 158 SC 158.11.1 P56 L33 # 194

Stassar, Peter Huawei

Comment Type TR Comment Status A

For recent optical PMDs, reference is made to ITU-T G.652 or G.657 fibers as in P802.3cu. Also applies to 159.10 and 160.10

SuggestedRemedy

Change to fiber types in P802.3cu, D2.2, Subclause 151.11.1 "The optical fiber cable requirements are satisfied by cables containing ITU-T G.652.B (dispersion unshifted), type G.652.D (low water peak, dispersion unshifted), or type G.657.A1, or type G.657.A2 (bend insensitive) fibers...." or similar. In 158, 159 and 160

Response Status C

ACCEPT IN PRINCIPLE.

Editorial license to change reference to ITU-T G.652 or G.657 fibers as in P802.3cu.

Cl 158 SC 158.12.2.2 P58 L40 # 54

Lewis, Jon Dell EMC

Comment Type E Comment Status A

Date is shown specifically and should be 202x as the draft isn't published

SuggestedRemedy

Change "IEEE Std 802.3cp-2020" to "IEEE Std 802.3cp-202x"

Response Status C

ACCEPT.

Global update of this item

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: Topic

Topic

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C/ 158 SC 158.12.4.3 P61 L19 # 82 C/ 158 SC 158.12.4.5 P62 L3 # 56 Laubach, Mark Self Dell EMC Lewis, Jon Comment Type Ε Comment Status A Comment Type Ε Comment Status A This subclause looks empty. Same for 158.12.4.5 on the next page. And same for Headings are listed with the tables out of order. Table with BR401 should be before 158.12.4.8. 158.1.4.6 SuggestedRemedy SuggestedRemedy Adjust framemaker to have the tables flow properly with the headings. Move Table with BR401 above the heading line for 158.12.4.6 Response Response Status C Response Response Status C ACCEPT. ACCEPT. C/ 158 SC 158.12.4.3 P61 L19 C/ 158 SC 158.12.4.7 P62 L32 Haiduczenia. Marek Haiduczenia. Marek Charter Charter Comment Type E Comment Type ER Comment Status A Comment Status A Empty subclause or table anchor was moved? Text format in 158.12.4.7 table is incosistent with the rest of PICS tables SuggestedRemedy SuggestedRemedy Fix the table placement Align the formatting The same applies for 158.12.4.5, 158.12.4.8 Response Response Status C Response Response Status C ACCEPT. ACCEPT. SC 158.12.4.8 C/ 158 P63 **L3** SC 158.12.4.3 P61 L21 # 55 C/ 158 Dell EMC Lewis, Jon Lewis, Jon Dell EMC Comment Status A Comment Type Ε Comment Type Ε Comment Status A Headings are listed with the tables out of order. Table with ES1 should be before Headings are listed with the tables out of order. Table with BR101 should be before 158.12.4.9 158.12.4.4 SuggestedRemedy SuggestedRemedy Move Table with ES1 above the heading line for 158.12.4.9 Move Table with BR101 above the heading line for 158.12.4.4 Response Response Status C Response Response Status C ACCEPT. ACCEPT.

C/ 158 # 96 C/ 159 SC 159.1 **L8** # 74 SC 158.12.4.9 P63 **L8** P65 **RMG Consulting** Xilinx Grow, Robert Nicholl, Shawn Comment Type TR Comment Status A Comment Type ER Comment Status A E1 is not properly written. P802.3cr is eliminating references to IEC 60950-1. PMDS should have a lowercase "S". SuggestedRemedy SuggestedRemedy Replace "PMDS together" with "PMDs together" The PICs should point to J.2 which is being inserted by P802.3cr. If indirection is retained, the PICs could be written more like E1 in Clause 159 to eliminate a contradiction to Response Response Status C P8023cr. ACCEPT. Response Response Status U ACCEPT IN PRINCIPLE. C/ 159 SC 5.4 P69 **L9** See #184, follow .3cu D3.0 to refer to J.2, apply same statement to Clauses 159 and 160. DeAndrea, John Finisar/ /II-VI C/ 158 P63 **L8** # 95 SC 158.12.4.9 Comment Type Comment Status A Table 159-4 The Table shows a value of -20 dBm for 25GBASE-BR10 and -26 dBm for Grow. Robert RMG Consulting 25GBASE-BR-10. I believe there is a typo, because the PMD has (4) types, -BR10, -Comment Type TR Comment Status A BR20, -BR40, and -BR40+ In E1 through E4, the subclause should not be pointing to something in clause 52. SuggestedRemedy SuggestedRemedy Suggest modifying, from "-26 dBm for 25GBASE-BR-10" to "-26 dBm for 25GBASE-BR-20" Point to whatever the result is in clause 158 based on changes from other comments. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. See #1, change text to show -20 dBm is for BR10, -26 dBm is for BR20/40 Point to 158.9 C/ 159 SC 5.4 P69 L9 C/ 158 SC 158.12.4.8 P63 **L8** # 58 DeAndrea, John Finisar/ /II-VI Dell EMC Lewis, Jon Comment Type E Comment Status A Comment Type TR Comment Status A Table 159-4, SIGNAL DETECT value, FAIL, outlines (2) average powers for the PMD Clause 52 is currently part of P802.3cr. The referenced text needs to align with P802.3cr. options, of (4) types, -10, -20, -40, and -40+ SuggestedRemedy SuggestedRemedy Change the Value/Comment field to "Conforms with J.2" where J.2 is green for external Suggested change: add other (2) PMD types and comment for power levels cross reference. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Change text to show -20 dBm is for BR10, -26 dBm is for BR20/40

C/ 159 SC 159.5.4 L13 # 172 C/ 159 SC 159.6.1 P71 L21 # 136 P69 ZTE TX Inc Dudek, Mike Marvell Wey, Jun Shan Comment Type TR Comment Status A Comment Type TR Comment Status A It is inappropriate in a standard to say "and poor 25GBASE-BR20 is left to the wind". Propose to revise Optical Modulation Amplitude (min) for BR40+ in Table 159-6 in order to align with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy This problem needs to be fixed to create an inter-operable standard. Table 159-6 Response Response Status W Revise the Optical Modulation Amplitude (min) spec from +5.0 dBm to +3.5 dBm ACCEPT IN PRINCIPLE. Response Response Status C See #1, change text to show -20 dBm is for BR10, -26 dBm is for BR20/40 ACCEPT IN PRINCIPLE. # 134 See #187. BR40+ PHYs are removed from this document C/ 159 SC 159.6.1 P71 L15 Wey, Jun Shan 7TF TX Inc. C/ 159 SC 159.6.1 P71 L21 # 135 Comment Type Comment Status A TR Wey, Jun Shan 7TF TX Inc. Propose to revise Average launch power (min) for BR40+ in Table 159-6 in order to align Comment Type Comment Status A TR with the ITU-T G.9806 Propose to revise Optical Modulation Amplitude (min) for BR20 in Table 159-6 in order to SuggestedRemedy align with the ITU-T G.9806 Table 159-6 SuggestedRemedy Revise the average launch power (min) spec from +2 dBm to +0.5 dBm Table 159-6 Response Response Status C Revise the Optical Modulation Amplitude (min) spec from -3.0 dBm to -4.5 dBm ACCEPT IN PRINCIPLE Response Response Status C See #187, BR40+ PHYs are removed from this document ACCEPT. # 133 C/ 159 SC 159.6.1 P71 L15 C/ 159 SC 159.6.1 P71 L22 # 137 7TF TX Inc. Wey, Jun Shan Wey, Jun Shan ZTE TX Inc Comment Type TR Comment Status A Comment Type Comment Status A

Propose to revise Average launch power (min) for BR20 in Table 159-6 in order to align with the ITU-T G.9806

SuggestedRemedy

Table 159-6

Revise the average launch power (min) spec from -6 dBm to -7.5 dBm

Response

ACCEPT.

Response Status C

Response ACCEPT.

TR

align with the ITU-T G.9806

Response Status C

SuggestedRemedy

Table 159-6

Propose to revise Launch power OMA minus TDP (min) for BR20 in Table 159-6 in order to

Revise the Launch power OMA minus TDP (min) spec from -4.0 dBm to -5.5 dBm

C/ 159 SC 159.6.1 P71 L22 # 138 C/ 159 SC 159.6.2 P72 L23 # 142 Wey, Jun Shan ZTE TX Inc ZTE TX Inc Wey, Jun Shan Comment Type TR Comment Status A Comment Type TR Comment Status A Propose to revise Launch power OMA minus TDP (min) for BR40+ in Table 159-6 in order Propose to revise Rx sensitivity (max) in OMA for BR 40+ in Table 159-7 in order to align with the ITU-T G.9806 to align with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy Table 159-6 Table 159-7 Revise the Launch power OMA minus TDP (min) spec from +4.0 dBm to +2.5 dBm Revise the Rx sensitivity (max) in OMA spec from -19.0 dBm to -20.5 dBm Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. See #187. BR40+ PHYs are removed from this document See #187. BR40+ PHYs are removed from this document C/ 159 SC 159.6.2 P72 L17 # 140 C/ 159 SC 159.6.2 P72 L23 # 141 Wey, Jun Shan 7TF TX Inc. Wey, Jun Shan 7TF TX Inc. Comment Status A Comment Type Comment Status A Comment Type TR TR Propose to revise Average receive power (min) for BR 40+ in Table 159-7 in order to align Propose to revise Rx sensitivity (max) in OMA for BR 20 in Table 159-7 in order to align with the ITU-T G.9806 with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy Table 159-7 Table 159-7 Revise the Average receive power (min) spec from -21.0 dBm to -22.5 dBm Revise the Rx sensitivity (max) in OMA spec from -19.0 dBm to -20.5 dBm Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. See #187. BR40+ PHYs are removed from this document C/ 159 SC 159.6 P73 L19 C/ 159 SC 159.6.2 P72 L17 # 139 Laubach, Mark Self ZTE TX Inc Wev. Jun Shan Comment Type E Comment Status A Comment Type TR Comment Status A 88.11.2.1 needs to be an indicated cross reference. Propose to revise Average receive power (min) for BR 20 in Table 159-7 in order to align SuggestedRemedy with the ITU-T G.9806 Change text color to forest green SuggestedRemedy

Response

ACCEPT.

Response Status C

Topic

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: Topic

Table 159-7

ACCEPT.

Response

Revise the Average receive power (min) spec from -21.0 dBm to -22.5 dBm

Response Status C

Cl 159 SC 159.7 P73 L20 # 183

Stassar, Peter Huawei

Comment Type TR Comment Status A

By referring to 114.7 automatically all the requirements of 114 are followed, introducing a lot of differences with the values in 159.6. Add full details as in other reject optical PMDs and apply all changes appropriate for 159. Especially the channel requirement in 114.7 refer to 88.8.5.2. Missing are requirements for 20km. Also applies to 158.8 referring to 52.9 and 160.7 referring to 139.7

SuggestedRemedy

Add full details as in other reject optical PMDs and apply all changes appropriate for 159, and also 158 and 160. Including table for Transmitter compliance channel specifications

Response Status C

ACCEPT IN PRINCIPLE. Line number should be 26.

Editorial license to make inline changes to 114.7 (25G), 52.9 (10G),139.7/CU/140/151

C/ 159 SC 159.8 P73 L33 # 97

Grow, Robert RMG Consulting

Comment Type ER Comment Status A

The indirection is getting a bit absurd. This points to 114.8, and 114.8 points to 112.8. Then you have the same problem of 112.8 specifications being specific to 25GBASE-SR.

SuggestedRemedy

If still using indirection, remove the two levels of indirection and poiint to 112.8. Fix corresponding PICS items in 159.11.4.8.

Response Response Status U

ACCEPT IN PRINCIPLE.

Editorial license to use content in 802.3cu D2.2 Clause 151.9 for .3cp 159.8

C/ 159 SC 159.11.2.2 P76 L42 # 59

Lewis, Jon Dell EMC

Comment Type E Comment Status A

Date is shown specifically and should be 202x as the draft isn't published

SuggestedRemedy

Change "IEEE Std 802.3cp-2020" to "IEEE Std 802.3cp-202x"

Response Status C

ACCEPT.

C/ 160 SC 160.3

Stassar, Peter Huawei

Comment Type TR Comment Status A

Skew constraints as in 139.3.2 as missing

SuggestedRemedy

Add skew constraints consistent with 139.3.2

Response Status C

ACCEPT IN PRINCIPLE.

Add "and Skew" to the title. Editorial license to add skew constraints consistent with 139.3.2 to Clause 160.

P85

L

195

C/ 160 SC 160.5.4 P87 L42 # 174

Dudek, Mike Marvell

Comment Type TR Comment Status A

The average receive power min fo BR20 etc. is -17.6dB. So a power of -17dB should have signal detect =OK, but the other line says <-16dB is Fail. It can't meet both lines

SuggestedRemedy

Change the signal detect FAIL level from <-16dBm to <-20dBm for BR20 etc.

Response Status **U**

ACCEPT IN PRINCIPLE.

Apply suggested remedy, change BR20 Average launch power of OFF transmitter (max) in Table 160-6 to -20 dBm to support the remedy

CI 160 SC 160.6 P88 L52 # 220

Law. David Hewlett Packard Enterprise

Comment Type T Comment Status A

The text 'A PMD that exceeds the operating range requirement ...' is followed by the example 'e.g., a 50GBASE-BR10 PMD operating at 2.5 km ...'. This however isn't an example of a PMD that exceeds the operating range requirement as 2.5 km is within the operating range requirement of 2 m to 10 km.

SuggestedRemedy

Suggest that the text '... at 2.5 km ...' be changed to read '... at 12.5 km ...'.

Response Status C

ACCEPT.

C/ 160 SC 160.6 # 226 C/ 160 SC 160.6.1 L51 # 175 P88 L 53 P89 Maki, Jeffery Juniper Networks Dudek, Mike Marvell Comment Type TR Comment Status A Comment Type TR Comment Status A The provide example (e.g., a 50GBASE-BR10 PMD operating at 2.5 km meets the The Average launch power of OFF transmitter must be less than the Fail level of the Signal detect for the signal detect to work properly. operating range requirement of 2 m to 10 km) has a typo. SuggestedRemedy SuggestedRemedy Change the value for BR20 etc. to -20dBm (see other comment for why -20 not -16) Replace 2.5km with 12.5km. Response Response Status W Response Response Status W ACCEPT IN PRINCIPLE. ACCEPT. See resolution to #174 C/ 160 P90 1 42 SC 160.6 # SC 160.6.2 # 176 C/ 160 P88 L 54 227 Dudek, Mike Marvell Maki. Jefferv Juniper Networks Comment Type TR Comment Status A Comment Status A Comment Type TR The receive power (OMAouter) max values are wrong for BR20 and BR40+. (or the Tx "The 50GBASE-BR40 PMD interoperates with the 50GBASE-BR10...". The 50GBASE-OMA outer max values are wrong) The min attenuation for 20km is 0dB, for 40km 10dB. BR40 transmit and receive wavelength is not compatible with 50GBASE-BR10. 50GBASE-BR10-D center wavelengths (range): 1320nm to 1340 mm SuggestedRemedy 50GBASE-BR10-U center wavelengths (range): 1260nm to 1280 nm Change BR20 to 4.4dBm, and BR40+ to 2.4dBm. 50GBASE-BR40-D center wavelengths (range): 1306nm to 1322nm 50GBASE-BR40-U center wavelengths (range): 1281nm to 1297nm Response Response Status W SuggestedRemedy ACCEPT IN PRINCIPLE BR20's MAX OMA should be 4.4 dBm, BR40 remains at -2.6 dBm, BR40+ should be Remove 50GBASE-BR10 PMD as an example of interoperability with the 50GBASE-BR40 removed PMD leaving one example, the 50GBASE-BR20 PMD. Response Response Status W C/ 160 SC 160.7 P91 / 35 # 177 ACCEPT IN PRINCIPLE. Dudek, Mike Marvell See#181 to add interop content Comment Status A Comment Type C/ 160 SC 160.6.1 P89 / 14 # 84 The sentence is wrong. Measurements don't meet the specifications and there are exceptions. Laubach, Mark Self SuggestedRemedy Comment Type Ε Comment Status A Change to "Optical measurement methods are defined in 139.7 with the following 121.8.5.3 needs to be an indicated cross reference. Same in footnote of next table. exceptions. SuggestedRemedy 1 The transmitter is tested using an optical channel that meets the requirements listed in Table 160-9. Change text color to forest green 2 The stressed receiver conformance test shall be conducted under the additional condition Response Response Status C that the transmitted optical signal and the reflectance of the optical link should be at their maximum levels." ACCEPT. Response Response Status C ACCEPT IN PRINCIPLE.

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: Topic

Topic

inline changes to 114.7 (25G), 52.9 (10G), 139.7/CU/140/151 (50G)

See#183, add full details and apply all changes appropriate for 159, and also 158 and 160. Including table for Transmitter compliance channel specifications. Editorial license to make

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C/ 160 SC 160.8 # 98 C/ 158 SC 158.6 Р L P92 **L6** RMG Consulting Stassar, Peter Grow, Robert Huawei Comment Type TR Comment Status A Comment Type TR Comment Status A Another example of indirection problems. Laser safety descriptions include port types in It is very confusing why 2 PMDs 40km and 40+km are specified to satisfy a single 40km the description. General safety is changed by P802.3cr. etc. objective, also considering that in Table 158-5 only one 40km distance is given. It is also not clear what "+" refers to. If the 40+km spec is technically and economically feasible, SuggestedRemedy delete the 40km spec. This comment also applies to 159 and 160. Change (or not) consistent with changes made to 158 and 159. SuggestedRemedy Response Response Status W Remove one of 40km/40+km and create a single 40km specification optimized for lowest ACCEPT IN PRINCIPLE. cost. This can be done via a single power budget with 2 distance options as in Clause 114 See#184, follow .3cu D3.0 to refer to J.2, apply same statement to Clauses 159 and 160. for 25GBASE-ER. Applies to 158, 159 and 160 Response Response Status C C/ 160 SC 160.11.2.2 P94 / 40 # 60 ACCEPT IN PRINCIPLE. Dell EMC Lewis, Jon The project has three distance reach objectives, we should have three pairs of PHYs. Comment Type E Comment Status A Remove -BR40+ PHYs for all speeds from .3cp draft D2.0 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Date is shown specifically and should be 202x as the draft isn't published SuggestedRemedy C/ 1 SC 1.4.91d P18 L23 Change "IEEE Std 802.3cp-2020" to "IEEE Std 802.3cp-202x" Thompson, Geoff GraCaSI S.A./Independent Response Response Status C Comment Type Comment Status A ACCEPT. I believe that introducing a new symbol other than dash (and dash has been bad enough) will be problematical over the long haul in the popular press editorial sense. C/ 160 SC 160.11.3.1 P96 *L*1 # 85 SuggestedRemedy Laubach, Mark Self Change from "25GBASE-BR40+" to "25GBASE-BR40plus" here and throughout the draft. Comment Type Ε Comment Status A Response Response Status C The heading text is broken across two pages. ACCEPT IN PRINCIPLE. See#187 to remove BR40+ from .3cp SuggestedRemedy Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217

Keep the entire heading text on the same page.

Response Response Status C

ACCEPT.

187

233

40+

C/ 1 SC 1.4.52d # 219 C/ 1 SC 1.4.128d P19 L5 # 234 P18 L24 Law, David Thompson, Geoff GraCaSI S.A./Independent **Hewlett Packard Enterprise** Comment Status A Comment Type TR Comment Status A Comment Type Ε Please do not use '+' as part of the PHY name, due to its position it is resulting in the string I believe that introducing a new symbol other than dash (and dash has been bad enough) '+-' in PHY names. will be problematical over the long haul in the popular press editorial sense. SuggestedRemedy SuggestedRemedy Change from "50GBASE-BR40+" to "50GBASE-BR40plus" here and throughout the draft. Please clarify the difference between the 40 and 40+ PHYs and based on the difference choose an additional letter to add after the '40' separated with a dash. This would be of the Response Response Status C format 10GBASE-BR40-X, with a 10GBASE-BR40-X-D and 10GBASE-BR40-X-U where 'X' ACCEPT IN PRINCIPLE. is the chosen letter. See#187 to remove BR40+ from .3cp Response Response Status W Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 ACCEPT IN PRINCIPLE See #187, remove all BR40+ PHYs from .3cp C/ 157 SC 157.1.3 P38 # L40 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Haiduczenia. Marek Charter C/ 1 SC 1.4.52d P18 1 25 # 70 Comment Type Comment Status A 40+ use the formatting for naming nomenclature defined in 802.3ca - it is way more readable Nicholl, Shawn Xilinx that way TR Comment Status A Comment Type SuggestedRemedy Concerns about readability of "+-" in 10GBASE-BR40+-D and 10GBASE-B40+-U PMD See 141.2.6 PMD naming for reference names. SuggestedRemedy Response Response Status C Propose to replace "10GBASE-BR40+" with something else. Perhaps "10GBASE-BR40X", ACCEPT IN PRINCIPLE. where X is a letter A-Z (perhaps "L" for "Legacy" or "Long"). Perhaps "10GBASE-BR40-X", Follow style in Table 141–6 where X is a number (i.e. in the format of 400GBASE-LR4-6 found in P802.3cu). Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Response Response Status C C/ 157 SC 157.1.3 # 155 P39 L41 ACCEPT IN PRINCIPLE. Marris. Arthur Cadence Design Systems See#187, remove all BR40+ PHYs from .3cp Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Comment Type E Comment Status A 40+ "rr" is hard to decipher in the nomenclature C/ 1 SC 1.4 P18 # 19 L26 SuggestedRemedy Hajduczenia, Marek Charter Consider changing "rr" to "r" Comment Type ER Comment Status A 40+ Response Response Status C "10GBASE-BR40+-D" looks and reads terrible. ACCEPT IN PRINCIPLE. SuggestedRemedy See#31, use a table for .3cp nomenclature Change the PMD name to "10GBASE-BR50-D" or any other combination that avoids the Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 use of + followed by - sign Scrub the draft

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: Topic

Response Status C

Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217

See#187, remove all BR40+ PHYs from .3cp draft

Response

ACCEPT IN PRINCIPLE.

Topic **40+**

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C/ 157 L47 # 63 C/ 158 SC 158 L2 SC 157.1.3 P39 P46 Kramer, Glen Broadcom Dawe, Piers Nvidia Comment Type Т Comment Status A Comment Type ER Comment Status A In Sentence "Bidirectional 64B/66B encoding.x refers to the PHY reach; 10 (10 km), 20 (20 10GBASE-BR40+ is a bad name and 10GBASE-BR40+-U is even worse km), 40 (40 km), or 40+ (legacy 40 km)" it is not clear what "legacy 40 km" means. Is SuggestedRemedy legacy 40 km different than a "new 40 km"? Choose something else e.g. 10GBASE-BR40p, 10GBASE-BR50 SuggestedRemedy Response Response Status W Either strike the "(legacy 40 km)" or add an explanation of what that means. ACCEPT IN PRINCIPLE. Response Response Status C See#187, remove all BR40+ PHYs from .3cp draft ACCEPT IN PRINCIPLE. Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 See#187, remove all BR40+ PHYs from .3cp draft Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 C/ 158 SC 158 P47 **L1** Kramer, Glen Broadcom C/ 157 SC 157.1.3 P39 L48 215 Comment Type Ε Comment Status A Law, David **Hewlett Packard Enterprise** PMD name 50GBASE-BR40+-D is confusing as it reads like BR40 "plus/minus" D. Comment Type TR Comment Status A SuggestedRemedy It is not clear what is mean by '40+ (legacy 40 km)', perhaps it is in reference to the optical budaet. Consider the following PMD names instead: 50GBASE-BR41 - "BR41" PMD class slightly better than class "BR40". SuggestedRemedy 50GBASE-BR40XB - "XB" for "eXtended Budget" Please provide a description of the technical difference is between '40' and '40+'. Response Response Status C Response Response Status W ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. See#187, remove all BR40+ PHYs from .3cp See#187, remove all BR40+ PHYs from .3cp Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 C/ 157 SC 157.1.3 P40 L12 # 199 Law. David **Hewlett Packard Enterprise** Comment Type TR Comment Status A The description of the 10G-BASE-BR40-D and 10G-BASE-BR40+-D both read '10 Gb/s OLT PHY using 10GBASE-R encoding over one single-mode fiber, with reach up to at least

SuggestedRemedy

Provide a distinct description for BR40 and BR40+ PHYs.

Response Response Status W

ACCEPT IN PRINCIPLE.

these two PHYs to select.

See#187, remove all BR40+ PHYs from .3cp draft

Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217

40 km (see Clause 158).'. This is also the case for the other five BR40 and BR40+ PHYs. As their descriptions are identical it makes it very difficult for a user to decide which of

163

#

40+

40+

4to10

Cl 158 SC 158.10 P56 L7 # 217

Law, David Hewlett Packard Enterprise

Comment Type TR Comment Status A

The operating distance (max) specified in Table 158–10 'Fiber optic cabling (channel) characteristics' is really a 'minimum operating distance (max)', for example a 10GBASE-BR20 PHY that can operate at 25 km is a conformant 10GBASE-BR20 PHY even though it exceeds the 20 km operating distance (max) specified in Table 158–10 for that PHY type. For the same reason a 10GBASE-BR40 PHY that can operate in excess of 40 km is a conformant 10GBASE-BR40 PHY. It is therefore not clear what the difference is between a 10GBASE-BR40 PHY and a 10GBASE-BR40+ PHY as it is conformant for both to operate in excess of 40 km.

SuggestedRemedy

Please clarify what the reach difference is between a 10GBASE-BR40 PHY and a 10GBASE-BR40+ PHY, as well as for the 25GBASE-BR40 PHY and a 25GBASE-BR40+ PHY and the 40GBASE-BR40 PHY and a 40GBASE-BR40+ PHY.

Response Status W

ACCEPT IN PRINCIPLE.

See#187, remove all BR40+ PHYs from .3cp

Group comments #19, 219, 70, 234, 31, 155, 63, 214, 199, 163, 62, 187, 217

C/ FM SC FM P10 L47 # 149

Marris, Arthur Cadence Design Systems

Comment Type ER Comment Status A

This list is missing amaendments 4 to 10

SuggestedRemedy

Add descriptions of amendments 4 to 10

Response Status W

ACCEPT IN PRINCIPLE.

See #7. include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

C/ FM SC FM P10 L48 # 103
Wienckowski, Natalie General Motors

Comment Type E Comment Status A

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3cn™-2019

Amendment 4—This amendment includes changes to IEEE Std 802.3-2018 and adds 50 Gb/s, 200 Gb/s, and 400 Gb/s Physical Layer specifications and management parameters for operation over single-mode fiber with reaches of at least 40 km.

Response Status C

ACCEPT IN PRINCIPLE.

See #7, include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

C/ FM SC FM P10 L48 # 107

Wienckowski, Natalie General Motors

Comment Type E Comment Status A 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3ch™-2020

Amendment 8—This amendment includes changes to IEEE Std 802.3-2018 and adds Clause 149, Annex 149A, Annex 149B, and Annex 149C. This amendment adds physical layer specifications and management parameters for operation at 2.5 Gb/s, 5 Gb/s, and 10 Gb/s over a single balanced pair of conductors.

Response Status C

ACCEPT IN PRINCIPLE.

See #7, include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

4to10

C/ FM SC FM P10 L48 # 106 General Motors Wienckowski, Natalie Comment Type E Comment Status A 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3cm™-2020

Amendment 7—This amendment includes changes to IEEE Std 802.3-2018 and adds Clause 150. This amendment adds Physical Layer (PHY) specifications and management parameters for 400 Gb/s operation on four pairs (400GBASE-SR4.2) and eight pairs (400GBASE-SR8) of multimode fiber, over reaches of at least 100 m.

Response Response Status C

ACCEPT IN PRINCIPLE.

See #7, include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

C/ FM # 108 SC FM P10 L48

Wienckowski. Natalie **General Motors**

Comment Type E Comment Status A 4to10

Missing ammendment descriptions

SuggestedRemedy

IEEE Std 802.3ca™-2020

Amendment 9—This amendment to IEEE Std 802.3-2018 extends the operation of Ethernet Passive Optical Networks (EPONs) to multiple channels of 25 Gb/s providing both symmetric and asymmetric operation for the following data rates (downstream/upstream): 25/10 Gb/s. 25/25 Gb/s. 50/10 Gb/s. 50/25 Gb/s. and 50/50 Gb/s. This amendment specifies the 25 Gb/s EPON Multi-Channel Reconciliation Sublayer (MCRS), 25GBASE-Nx25G-EPON PHYsical Coding Sublayers (PCSs), Physical Media Attachments (PMAs), and Physical Medium Dependent sublayers (PMDs) that support both symmetric and asymmetric data rates while maintaining backward compatibility with already deployed 10 Gb/s EPON equipment. The EPON operation is defined for distances of at least 20 km, and for a split ratio of at least 1:32.

Response Response Status C

ACCEPT IN PRINCIPLE.

See #7, include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

C/ FM SC FM P10 L48 # 104 General Motors Wienckowski, Natalie Comment Type E Comment Status A 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3cg™-2019

Amendment 5—This amendment includes changes to IEEE Std 802.3-2018 and its amendments and adds Clause 146 through Clause 148 and Annex 146A and Annex 146B. This amendment adds 10 Mb/s Physical Layer specifications and management parameters for operation on a single balanced pair of conductors.

Response

ACCEPT IN PRINCIPLE.

See #7, include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

Response Status C

C/ FM SC FM P10 L48

Wienckowski. Natalie **General Motors**

Comment Type E Comment Status A 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3cg™-2020

Amendment 6—This amendment includes editorial and technical corrections, refinements. and clarifications to Clause 33 and related portions of the standard.

Response Response Status C

ACCEPT IN PRINCIPLE.

See #7. include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

C/ FM SC FM P10 L49 # 91 C/ FM SC FM P10 L49 **RMG Consulting** Dell EMC Grow, Robert Lewis, Jon Comment Type TR Comment Status A 4to10 Comment Type Ε Comment Status A Incomplete list of amendment descriptions, including a self description for IEEE Std Template is still in the draft for additional ammendments. 802.3cp-20xx which others can copy into their front matter. SuggestedRemedy SuggestedRemedy Update from line 49 to include prior amendments to the base standard. Add amendments 4 through 9 at a minimum, copying from the published or approved Response Response Status C drafts. If properly written, this draft should also be dependent on P802.3cu. Recommend ACCEPT IN PRINCIPLE. using Mr. Laws list of 24 June that has this project as Amendment 12. See #7. include a list of amendments and summaries Write a descripption of this amendment. Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158 Response Response Status C C/ 00 SC 0 P10 L49 ACCEPT IN PRINCIPLE. Maguire, Valerie The Siemon Company See #7, include a list of amendments and summaries Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104 Comment Type E Comment Status A Missing the descriptive content for amendments 4 through 11 C/ FM SC FM # 109 P10 L49 SuggestedRemedy Wienckowski. Natalie General Motors Replace content on lines 49 through 52 with descriptive content for amendments 4 through Comment Type E Comment Status A 4to10 11 in draft 2.0 of IEEE 802.3cv (lines 49 - 54 on page 10 and lines 1 -50 on page 11) Missing description of this ammendment. Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. Change: IEEE Std 802.3xx[™]-20xx See #7, include a list of amendments and summaries This amendment includes [complete] Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs. Response Response Status C

ACCEPT IN PRINCIPLE.

To: IEEE Std 802.3cp™-20xx

See #7, include a list of amendments and summaries

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

This amendment includes includes changes to IEEE Std 802.3-2018 and adds Clause 157, Clause 158, Clause 159, and Clause 160. This ammendment adds bidirectional 10

SugaestedRemedy

Comment Type ER

C/ FM

Marris. Arthur

Replace "[complete]" with suitable text

Response Response Status W

ACCEPT IN PRINCIPLE

SC FM

See #7, include a list of amendments and summaries

Missing description for "IEEE Std 802.3cp™-20xx"

Group comments #7, 109, 108, 103, 106, 105, 107, 52, 158, 150, 149, 91, 104

Comment Status A

P10

Cadence Design Systems

L 50

52

158

150

4to10

4to10

4to10

4to10

Comment Status A

The amendment summary is not populated

SuggestedRemedy

Comment Type

Add appropriate summary text

ER

Response Status C

ACCEPT IN PRINCIPLE.

P10L51, populate Amendments 4-11 and 802.3cp summary as: IEEE Std 802.3cn™-2019

Amendment 4—This amendment includes changes to IEEE Std 802.3-2018 and adds 50 Gb/s, 200 Gb/s, and 400 Gb/s Physical Layer specifications and management parameters for operation over single-mode fiber with reaches of at least 40 km.

IEEE Std 802.3ca™-2019

Amendment 5—This amendment includes changes to IEEE Std 802.3-2018 and its amendments and adds Clause 146 through Clause 148 and Annex 146A and Annex 146B. This amendment adds 10 Mb/s Physical Layer specifications and management parameters for operation on a single balanced pair of conductors.

IEEE Std 802.3cg™-2020

Amendment 6—This amendment includes editorial and technical corrections, refinements, and clarifications to Clause 33 and related portions of the standard.

IEEE Std 802.3cm™-2020

Amendment 7—This amendment includes changes to IEEE Std 802.3-2018 and adds Clause 150. This amendment adds Physical Layer (PHY) specifications and management parameters for 400 Gb/s operation on four pairs (400GBASE-SR4.2) and eight pairs (400GBASE-SR8) of multimode fiber, over reaches of at least 100 m.

IEEE Std 802.3ch™-2020

Amendment 8—This amendment includes changes to IEEE Std 802.3-2018 and adds Clause 149, Annex 149A, Annex 149B, and Annex 149C. This amendment adds physical layer specifications and management parameters for operation at 2.5 Gb/s, 5 Gb/s, and 10 Gb/s over a single balanced pair of conductors.

IEEE Std 802.3ca™-2020

Amendment 9—This amendment to IEEE Std 802.3-2018 extends the operation of Ethernet passive optical networks (EPONs) to multiple channels of 25 Gb/s providing both symmetric and asymmetric operation for the following data rates (downstream/upstream): 25/10 Gb/s, 25/25 Gb/s, 50/10 Gb/s, 50/25 Gb/s, and 50/50 Gb/s. This amendment specifies the 25 Gb/s EPON Multi-Channel Reconciliation Sublayer (MCRS), Nx25G-EPON Physical Coding Sublayers (PCSs), Physical Media Attachment (PMA) sublayers, and Physical Medium Dependent (PMD) sublayers that support both symmetric and asymmetric data rates while maintaining backward compatibility with already deployed 10 Gb/s EPON

equipment. The EPON operation is defined for distances of at least 20 km, and for a split ratio of at least 1:32.

IEEE Std 802.3cr-20xx

Amendment 10— This amendment includes changes to IEEE Std 802.3-2018 and adds Annex J. This amendment replaces references to the IEC 60950 series of standards (including IEC 60950-1 "Information technology equipment—Safety—Part 1: General requirements") with appropriate references to the IEC 62368 "Audio/video, information and communication technology equipment" series and makes appropriate changes to the standard corresponding to the new references.

IEEE Std 802.3cu-20xx

Amendment 11— This amendment includes changes to IEEE Std 802.3-2018 and its amendments, and adds Clause 151. This amendment adds Physical Layer (PHY) specifications and management parameters for 100 Gb/s and 400 Gb/s operation over single-mode fiber, based on 100 Gb/s per wavelength optical signaling.

IEEE Std 802.3cp™-20xx

This amendment includes changes to IEEE Std 802.3-2018 and adds Clause 157, Clause 158, Clause 159, and Clause 160. This amendment adds Physical Layer specifications and management parameters for 10 Gb/s, 25 Gb/s, and 50 Gb/s Ethernet optical interfaces for bidirectional operation over a single strand of single-mode fiber.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P2 L1 # 87
Grow, Robert RMG Consulting

Comment Type E Comment Status A

Front matter is incomplete.

SuggestedRemedy

Add Abstract.

Response Status C

ACCEPT IN PRINCIPLE.

See#6, change abstract to text as #6 resolution Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 Abs

C/ FM SC FM P2 **L1** # C/ FM SC FM P2 L1 # 13 Self Charter Anslow, Pete Hajduczenia, Marek Comment Type ER Comment Status A Abs Comment Type ER Comment Status A Abs The abstract and keywords are not populated Abstract and keywords should be filled in at this time SuggestedRemedy SuggestedRemedy Please fill in abstract and keywords Add appropriate abstract text and suitable keywords Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. See#6, change abstract and keywords as #6 resolution Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 Add Abstract (P2L1) as "This amendment to IEEE Std 802.3-2018 adds Physical Layer specifications and management parameters for 10 Gb/s, 25 Gb/s, and 50 Gb/s Ethernet C/ FM SC FM P2 **L1** # 148 optical interfaces for bidirectional operation over a single strand of single-mode fiber with reaches of at least 10 km, 20 km, and 40 km," Marris. Arthur Cadence Design Systems Comment Type ER Comment Status A Abs Add Keywords (P2L3) as "bidirectional (BiDi), multi-gigabit Ethernet bidirectional Physical Lavers, 10GBASE-BR10, 10GBASE-BR20, 10GBASE-BR40, 25GBASE-BR10, 25GBASE-Missing abstract text BR20, 25GBASE-BR40, 50GBASE-BR10, 50GBASE-BR20, 50GBASE-BR40, forward SuggestedRemedy error correction (FEC), Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA), Physical Medium Dependent (PMD)" Add abstract text Response Response Status W Comment group #6, 13, 87, 88, 99, 100, 148 ACCEPT IN PRINCIPLE. C/ FM SC FM P2 **L1** See#6, change abstract to text as #6 resolution Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 Wienckowski. Natalie **General Motors** Comment Type E Comment Status A Abs C/ FM SC FM P2 L2 # 100 Abstract needs to be completed. Wienckowski. Natalie General Motors SuggestedRemedy Comment Type E Comment Status A Abs Change: Abstract: This amendment to IEEE Std 802.3-2018 [abstract text]. Keywords need to be completed. To: Abstract: This amendment to IEEE Std 802.3-2018 adds bidirectional 10 Gb/s, 25 SuggestedRemedy Gb/s. and 50 Gb/s Optical Access PHYs. Change: Keywords: Ethernet; [keywords list]. Response Response Status C To: Keywords: Ethernet, rrGBASE-BRx-d, 10GBASE-BR10, 10GBASE-BR20, 10GBASE-ACCEPT IN PRINCIPLE. BR40, and 10GBASE-BR40+, 25GBASE-BR10, 25GBASE-BR20, 25GBASE-BR40, and See#6, change abstract to text as #6 resolution 25GBASE-BR40+, 50GBASE-BR10, 50GBASE-BR20, 50GBASE-BR40, and 50GBASE-Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 BR40+, IEEE 802.3cp™

Response

ACCEPT IN PRINCIPLE.

See#6, change keywords as #6 resolution

Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88

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: Topic

Topic Abs

Response Status C

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C/ FM SC FM P2 L3 # 88 **RMG Consulting** Grow, Robert Comment Type Ε Comment Status A Abs Front matter is incomplete. SuggestedRemedy Add Keywords. Response Response Status C ACCEPT IN PRINCIPLE. See#6, change keywords as #6 resolution Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 C/ FM SC FM P1 **L10** # 147 Marris. Arthur Cadence Design Systems Comment Type ER Comment Status A Amd State this is amendment 11 and list the prior amendments SuggestedRemedy

"Amendment: 11" - "This draft is an amendment of IEEE Std 802.3-2018 as amended by IEEE Std 802.3cb-2018. IEEE Std 802.3bt-2018. IEEE Std 802.3cd-2018. IEEE Std 802.3cn-2019, IEEE Std 802.3cg-2019, IEEE Std 802.3cg-2020, IEEE Std 802.3cm-2020, IEEE Std 802.3ch-2020, IEEE Std 802.3ca-2020, and IEEE Std 802.3cr-20xx"

Response Response Status W

ACCEPT IN PRINCIPLE.

Replace paragraph at line 23 with: "This draft is an amendment of IEEE Std 802.3-2018 as amended by IEEE Std 802.3cb-2018, IEEE Std 802.3bt-2018, IEEE Std 802.3cd-2018, IEEE Std 802.3cn-2019, IEEE Std 802.3cq-2019, IEEE Std 802.3cq-2020, IEEE Std 802.3cm-2020, IEEE Std 802.3ch-2020, IEEE Std 802.3ca-2020, IEEE Std 802.3cr-20xx, and IEEE Std 802.3cu-20xx."

Do not list the amendment number of .3cp yet.

Group comments #147, 86, 50, 68, 281

C/ FM SC FM P1 L23 # 50 Dell EMC Lewis, Jon Comment Status A Comment Type ER Amd The list of "as amended by" is not up to date.

SuggestedRemedy

Please align with the latest FM template available on the website. This should at a minimum include "IEEE Std 802.3cb-2018, IEEE Std 802.3bt-2018, IEEE Std 802.3cd-2018, IEEE Std 802.3cn-2019, IEEE Std 802.3cq-2019, IEEE Std 802.3cq-2020, and IEEE Std 802.3cm-2020"

Response Response Status C

ACCEPT.

See #147, use the amendment list in #147 resolution Group comments #147, 86, 50, 68, 281

C/ FM P1 # 86 SC FM L24 RMG Consulting Grow. Robert

Comment Type T Comment Status A The paragraph is dated. On the date of this comment, we now have 9 approved

amendments, 6 of which are published, and at least 2 amendments likely to receive amendment numbers 10 and 11 that are ahead of the 3 projects in initial WG ballot.

SuggestedRemedy

Add IEEE Std 802.3cr-20xx to the list as the 10th amendment (before IEEE Std 802.3cu-20xx).

Response Response Status C

ACCEPT IN PRINCIPLE.

See #147, use the amendment list to #147 resolution Group comments #147, 86, 50, 68, 281

Amd

C/ FM SC FM P1 L24 # 68 C/ 00 SC 0 P1 L15 # 159 Xilinx The Siemon Company Nicholl, Shawn Maguire, Valerie Comment Type ER Comment Status A Amd Comment Type Ε Comment Status A EΖ Missing some existing amendments in the frontmatter. "50" and "Gb/s" should be on the same line SuggestedRemedy SuggestedRemedy Propose to replace ", and IEEE Std 802.3cd-2018" with ",IEEE Std 802.3cd-2018, IEEE Std Insert non-breaking space between "50" and "Gb/s" in the title of the amendment 802.3cn-2019, IEEE Std 802.3cg-2019, IEEE Std 802.3cg-2020, IEEE Std 802.3cm-2020" Response Response Status C as well as any other relevant in-progress amendments. ACCEPT. Response Response Status C ACCEPT IN PRINCIPLE. C/ FM SC FM P7 **L9** # 146 Lusted. Kent Intel Corporation See #147, use the amendment list to #147 resolution Group comments #147, 86, 50, 68, 281 ΕZ Comment Type Comment Status A ER The IEEE 802.3 WG Recording Secretary is now "Jon Lewis". not "Pete Anslow" C/ FM SC FM P1 L24 SuggestedRemedy Lewis. Jon Dell FMC Change to "Jon Lewis" Comment Type E Comment Status A D2p1 Response Response Status W This draft is for Initial Working Group ballot ACCEPT. SugaestedRemedy Change "Draft D1.3 is prepared for Task Force review [review/balloting stage]" to "Draft C/ 00 SC 0 **P7 L9** # 230 D2.1 is prepared for the the first Working Group recirculation ballot" Thompson, Geoff GraCaSI S.A./Independent Response Response Status C Comment Type ER Comment Status A ΕZ ACCEPT. Pete Anslow is no longer 802.3 WG Secretary Group comments #51, 12, 283, 284 SuggestedRemedy P1 C/ FM SC FM L24 # 12 Replace "Pete Anslow" with "Jon Lewis" Charter Haiduczenia. Marek Response Response Status W D2p1 Comment Type ER Comment Status A ACCEPT. This is not draft D1.3 SC 0 P7 CI 00 / 15 SuggestedRemedy FM summary must be filled in as well Thompson, Geoff GraCaSI S.A./Independent Comment Type ER Comment Status A EΖ Response Response Status C Duane Remein is no longer an editor or this project. ACCEPT IN PRINCIPLE. See #51, change to "Draft D2.1 is prepared for the the first Working Group recirculation SuggestedRemedy ballot" Remove his name or revise the text. Group comments #51, 12, 283, 284 Response Response Status W ACCEPT IN PRINCIPLE. See #14, follow style in 802.3cb to list Duane Remein as Phase I editor and Yuangiu Luo as Phase II editor

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: Topic

Topic **EZ**

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C/ FM SC FM P9 L4 # 101 C/ 1 SC 1.3 P18 **L1** # 111 **General Motors** Wienckowski, Natalie **General Motors** Wienckowski, Natalie Comment Type E Comment Status A EΖ Comment Type E Comment Status A EΖ Amendment title is not added in box. SuggestedRemedy SuggestedRemedy Change: Amendment: Amendment title (copy from PAR). Delete empty section. To: Amendment: Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs Response Response Status C Response Response Status C ACCEPT. ACCEPT. C/ 30 SC 30.5.1.1.2 P21 L16 # 151 P9 # C/ FM SC FM L29 102 Marris. Arthur Cadence Design Systems Wienckowski. Natalie General Motors ΕZ Comment Type Comment Status A Comment Type E Comment Status A EΖ Missina line feed Ammendment identifier not added. SuggestedRemedy SuggestedRemedy Change "...10GBASE-BR10-D" to "... Change: IEEE Std 802.3xx-20xx 10GBASE-BR10-D" To: IEEE Std 802.3cp-20xx Response Response Status C Response Response Status C ACCEPT. ACCEPT. C/ 45 SC 45.2.1 P23 **L8** # 112 C/ FM SC FM P12 L1 # 110 Wienckowski. Natalie General Motors Wienckowski, Natalie **General Motors** Comment Status A ΕZ Comment Type Ε Comment Type E Comment Status A ΕZ Incorrect editor instructions. Cb and cd didn't make any changes that impact the changed There should not be blank pages in the document. rows in cp. SuggestedRemedy SuggestedRemedy Delete blank page (Instruction on how to do this are in the 802.3 template on page 15 of Make editor instruction: Change Table 45-3 as shown (unchanged rows not shown): version 4p2 Response Response Status C Also delete blank page 16, 20, 38, 64, and 82. ACCEPT. Response Status C Response

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: Topic

ACCEPT.

Topic **EZ**

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Cl 45 SC 45.2.1 P23 **L8** # 152 C/ 45 SC 45.2.1.27a P28 L33 # 167 Cadence Design Systems Dudek, Mike Marvell Marris, Arthur Comment Type Ε Comment Status A EΖ Comment Type т Comment Status A EΖ What is IEEE Std 802.3xx? All the other bits are RO this one is blank. SuggestedRemedy SuggestedRemedy Delete 802.3xx or correct it to the right amendment Make it RO Response Response Status C Response Response Status C ACCEPT. ACCEPT. Delete "(as modified by ... 802.3xx)" C/ 56 SC 56.1 P33 **L**5 # 116 # 113 C/ 45 SC 45.2.1 P23 L15 Wienckowski. Natalie General Motors Wienckowski. Natalie General Motors Comment Status A F7 Comment Type E Comment Status A Comment Type E ΕZ The editorial instruction includes (as changed by P802.3ca) which is not the correct way to missing rows above and below changed rows to show there are rows above and below that write this. aren't changed. SuggestedRemedy SuggestedRemedy Change: (as changed by P802.3ca) Add row above and below the contented rows. "straddle" each row then add an "..." - See To: (as modified by IEEE Std 802.3ca-2020) 45.2.1 in the 802.3 FM template for example. Response Response Status C Response Response Status C ACCEPT. ACCEPT. CI 56 SC 56.1 P33 L 5 154 CI 45 SC 45.2.1.6 P24 L12 # 115 Marris, Arthur Cadence Design Systems Wienckowski. Natalie **General Motors** Comment Type Ε Comment Status A ΕZ Comment Type E Comment Status A ΕZ Change P802.3ca to IEEE Std 802.3ca-2020 missing rows above and below changed rows to show there are rows above and below that SuggestedRemedy aren't changed. Change P802.3ca to IEEE Std 802.3ca-2020 SuggestedRemedy Response Add row above and below the contented rows. "straddle" each row then add an "..." - See Response Status C 45.2.1 in the 802.3 FM template for example. ACCEPT.

Response

ACCEPT.

Response Status C

C/ 56 SC 56.1	P33	L14	# 117		C/ 157	SC 157.1.2	P39	L 26	# 223	
Wienckowski, Natalie	General Motor	rs			Trowbridge	e, Steve	Nokia			
Comment Type E This should show the	Comment Status A e changes made by ca.			EZ	Comment Refere		Comment Status A 77-1 should be reference to F	igure 157-1.		EZ
To: Figure 56–5 for	56–5 for EPoC topologies EPoC topologies, and 25G-EPON topologies.				Suggested See co Response	<i>Remedy</i> omment	Response Status C			
Response	Response Status C				ACCE	PT.				
ACCEPT.	Response states •				C/ 157	SC 157.1.1	P39	L26	# 198	
C/ 56 SC 56.1.2.	2 P34	L 44	# 118		Law, David	i	Hewlett Pack	ard Enterprise		
Wienckowski, Natalie	General Motor	rs	_		Comment	Type E	Comment Status A			ΕZ
Comment Type E ca was approved in 2 SuggestedRemedy	Comment Status A 2020			EZ	Suggested		Table 157–1.' should read '	model are shov	vn in Figure 157–1	.'.
Change: 802.3ca-Y To 802.3ca-2020 Also P36L1	YYY				Response ACCE	PT.	Response Status C			
Response ACCEPT.	Response Status C				C/ 157 Dudek, Mik		P39 Marvell	L 28	# 169	EZ
C/ 157 SC 157.1.1	P39	<i>L</i> 11	# 196		Comment Senter	• •	Comment Status A (has two verbs)			EZ
Law, David Comment Type E Net-work' shoul SuggestedRemedy See comment.	Hewlett Packa Comment Status A d read ' Network'.	ard Enterprise		EZ	Suggested	Remedy "apply" on the	end of the sentence. Response Status C			
Response	Response Status C				C/ 157	SC 157.1.3	P 39	L47	# 143	
ACCEPT.	Nesponse Status C				Lusted, Ke Comment	Type E	Intel Corpora Comment Status A associated text is on the sar		riable "BR"	ΕZ
					Suggested	Remedy	and its associated text a sepa			
					Response ACCE	PT IN PRINCIP	Response Status C			

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: Topic

Topic **EZ**

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C/ 157 SC 1	57.1.3	P 40	L 5	# 119		C/ 157	SC 157.1.4	P 42	L13	# 120	
Wienckowski, Nata	lie	General Moto	rs	·		Wienckows	ski, Natalie	General Motor	s		
• •		mment Status A er 10G/25G/50G here	that aren't in the	rest of the docum	<i>EZ</i> ent.	Comment Clause	<i>Type</i> E e 158 is in this d	Comment Status A raft.			EZ
SuggestedRemedy Remove the "-"		n each of the names.				Suggested Make t		eading a crosslink.			
Response ACCEPT.	Res	ponse Status C				Response ACCE	PT.	Response Status C			
C/ 157 SC 1	57.1.3	P 41	L 22	# 200		C/ 157	SC 157.1.4	P 42	L36	# 207	
Law, David		Hewlett Packa	ard Enterprise	·		Law, David	l	Hewlett Packa	rd Enterprise		<u>.</u>
Comment Type	E Co.	mment Status A			ΕZ	Comment	Type E	Comment Status A			EZ
		the right hand side of as they do on the left		n so that the lowes	t	25G-B Suggested		ld read '25GBASE-BRx'.			
SuggestedRemedy	•						omment.				
See comment.						Response		Response Status C			
Response ACCEPT.	Res	ponse Status C				ACCE	PT.	·			
C/ 157 SC 1	57.1.2	P41	L34	# 222		C/ 157	SC 157.1.4	P 42	L41	# 121	
Trowbridge, Steve		Nokia				Wienckows	,	General Motor	S		
	E Co.	mment Status A			ΕZ	Comment	,,	Comment Status A			EZ
The wide recta	ngle at the top	of the XGMII should b on Sublayer, as are tho				Suggested	e 159 is in this d Remedy	гат.			
SuggestedRemedy	,					Make t	the 159 in the h	eading a crosslink.			
See comment						Response		Response Status C			
Response	Res	ponse Status C				ACCE	PT.				
ACCEPT.		-				C/ 157	SC 157.1.4	P 43	L1	# 209	
C/ 157 SC 1	57.1.4	P 42	L 9	# 206		Law, David	l	Hewlett Packa	rd Enterprise		
Law, David		Hewlett Packa	ard Enterprise			Comment '	Type E	Comment Status A			EZ
Comment Type	E Co.	mment Status A	·		ΕZ	25G-B	ASE-BRx' shou	ld read '25GBASE-BRx'.			
		'10GBASE-BRx'.				Suggested	Remedy				
SuggestedRemedy	,					See co	mment.				
See comment.						Response		Response Status C			
Response ACCEPT.	Res	ponse Status C				ACCE	PT.				

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: Topic

Topic **EZ**

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C/ 157 SC 157.1.4 P43 **L1** # 122 C/ 157 SC 157.3 P45 L25 # 124 Wienckowski, Natalie General Motors Wienckowski, Natalie General Motors Comment Type E Comment Status A EΖ Comment Type E Comment Status A EΖ The table title needs (continued) in it. Either PHYs should be possessive or the s should be removed. SuggestedRemedy SuggestedRemedy Change: PHYs sublayers See instructions in 200.1.1.1.1 in the 802.3 FM template. To: PHY's sublayers Response Response Status C Or To: PHY sublayers ACCEPT IN PRINCIPLE. Also on L27 and L29 Remove all BR40+ items, use instructions in 200.1.1.1.1 of the 802.3 FM template to keep Response Response Status C table on a single page ACCEPT. # 208 C/ 157 SC 157.1.4 P43 L18 Change to "PHY sublayers" in three places Law. David **Hewlett Packard Enterprise** C/ 158 SC 158.1 P47 L8 # 114 Comment Type E Comment Status A EΖ Wienckowski, Natalie General Motors 50G-BASE-BRx' should read '50GBASE-BRx'. ΕZ Comment Type E Comment Status A SuggestedRemedy typo See comment. SuggestedRemedy Response Response Status C Change: 10BASE-BR10 To: 10GBASE-BR10 ACCEPT. Response Response Status C SC 157.1.4 P43 C/ 157 / 21 # 123 ACCEPT. Wienckowski, Natalie General Motors C/ 158 SC 158.1 P47 # 126 Comment Type E Comment Status A ΕZ L25 Clause 160 is in this draft. Wienckowski. Natalie General Motors Comment Type E Comment Status A F7 SuggestedRemedy All the "Associated clause"s in the table are not included in the draft and should be external. Make the 160 in the heading a crosslink. SuggestedRemedy Response Response Status C Change the character tag on "46" (2x), "47", "49", "51", "108" to External which will turn ACCEPT. them green. C/ 157 SC 157.2 P44 **L1** # 236 Response Response Status C Thompson, Geoff GraCaSI S.A./Independent ACCEPT. Comment Type ER Comment Status A ΕZ The definition of "syblayers" is unknown to me. SuggestedRemedy Change "syblayers" to "sublayers."

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: Topic

Response Status W

Response

ACCEPT.

Topic **EZ**

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C/ 158 SC 15	58.1	P 47	L34	# <u>1</u> 25		C/ 158	SC 158.12.4	1.9	P 64	L1	# <u>1</u> 60	
Wienckowski, Natal	ılie	General Moto	ors			Maguire, \	/alerie	Т	he Siemon (Company		
,,	_	nent Status A s an external link as	s it isn't in this dr	raft.	EZ	Comment Extra	<i>Type</i> E blank page	Comment Sta	atus A			EZ
SuggestedRemedy Change the cha		lause 108" to Exterr	nal which will tur	n it green.		Suggested Delete	dRemedy e blank page					
Response ACCEPT.	Respo	nse Status C				Response ACCE		Response Sta	ntus C			
C/ 158 SC 15	58.1	P48	L13	# 224		C/ 159	SC 159.3		P 67	L 5	# <u>1</u> 61	
Trowbridge, Steve		Nokia				Maguire, \	/alerie	Т	he Siemon (Company		
Comment Type	E Comr	nent Status A			ΕZ	Comment	Type E	Comment Sta	atus A			ΕZ
Sloppy aligmen	nt of rectangles fo	or XGMII, PCS, RS-I	FEC in Figure 1	58-1		"1" an	d "pause_quant	um" should be on	the same lir	ne		
SuggestedRemedy Fix it	,					Suggested Insert	•	pace between "1"	and "pause_	_quantum"		
Response ACCEPT.	Respo	nse Status C				Response ACCE		Response Sta	ntus C			
C/ 158 SC 15	58.5.6	P 51	L11	# 127		C/ 159	SC 159.5.9		P 70	L 9	# 128	
Wienckowski, Natal	ılie	General Moto	ors			Wienckow	ski, Natalie	G	eneral Moto	rs		
Comment Type	E Comr	nent Status A			EZ	Comment	Type E	Comment Sta	atus A			ΕZ
This sentence i	isn't clear. What	s optional, the funct	tion? Th PMD?	Γhe optical transm	itter?	typo						
SuggestedRemedy	,					Suggested	dRemedy					
function which a	allows the optical	this clause shall incl transmitter to be di	isabled is option		sable		ge: 25BASE-BR 5GBASE-BRx-U					
		with this clause shal unction which allows		smitter to be disal	alad	Response	!	Response Sta	tus C			
Response	_	nse Status C	s trie optical tran	Similier to be disar	Jieu.	ACCE	PT.					
ACCEPT.	Nespo	nse status C				C/ 159	SC 159.6.3		P 73	L 20	# 129	
						Wienckow	ski, Natalie	G	eneral Moto	rs		
						Comment	Type E	Comment Sta	atus A			ΕZ
						88.11	.2.1 should be m	narked as an exte	rnal link as it	isn't in this draf	t.	
						Suggested	dRemedy					
							•	tag on "88.11.2.1	" to External	which will turn i	t green.	
						Response	-	Response Sta	tuo C		-	

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: Topic

Topic **EZ**

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C/ 159 SC 159.9 L48 # 173 C/ 160 SC 160.6.1 P90 L14 P73 Wienckowski, Natalie **General Motors** Dudek, Mike Marvell Comment Type Ε Comment Status A EΖ Comment Type Ε Comment Status A Table 159-9 is split across a page break which makes it hard to read. 121.8.5.3 should be marked as an external link as it isn't in this draft. SuggestedRemedy SuggestedRemedy Change the character tag on "121.8.5.3" to External which will turn it green. Put it all on one page. Also on P91L8 Response Response Status C Response Response Status C ACCEPT. ACCEPT. # 130 C/ 159 SC 159.9 P74 **L1** C/ 158 SC 158.1 P47 L34 Wienckowski. Natalie **General Motors** Marris. Arthur Cadence Design Systems F7 Comment Type E Comment Status A Comment Type TR Comment Status A The table title needs (continued) in it. Is it really adequate to just say "Clause 108 describes an FEC for 25 Gb/s PHY, but the SuggestedRemedy same scheme can be applied to 10 Gb/s PHYs"? See instructions in 200.1.1.1.1 in the 802.3 FM template. SuggestedRemedy Response Response Status C Consider opening up clause 108 to explain how it works with 10G PMDs ACCEPT. Response Response Status W ACCEPT IN PRINCIPLE. C/ 160 SC 160.1 P83 L16 # 131 See#248, In Cl. 108, add a new paragrph to the end of 108.1.1 "This RS-FEC sublayer also Wienckowski, Natalie General Motors applies to 10GBASE-BR20 PHY, specified in Clause 158. When applying it to 10GBASE-BR20 PHY. "25GBASE-R" and "25.78125 GBd" in this clause are replaced by "10GBASE-Comment Type E Comment Status A EΖ BR20" and "10.3125 GBd", respectively." When refering to the "top" of a Clause, you need to include "Clause" in the reference. Group comments #248, 157, 171, 225 SuggestedRemedy Change: 45 To: Clause 45 Response Response Status C ACCEPT. SC 160.3 P85 C/ 160 / 36 162 Maquire. Valerie The Siemon Company F7 Comment Type E Comment Status A "2" and "pause quantum" should be on the same line SuggestedRemedy

Insert non-breaking space between "2" and "pause quantum"

Response Status C

Response

ACCEPT

132

157

EΖ

FFC

FEC

The footnote says the 108 RS-FEC is described for 25Gb/s. It should not be left to the reader to work out how to apply it to 10Gb/s

SuggestedRemedy

Bring appropriate edits to Clause 108 into the document. E.g. The delays in ns are probably wrong. The introduction would need work etc. Whether this RS FEC meets the delay constraints for 10G networks in Clause 44 should also be investigated if this has not already been done.

Response Response Status W

ACCEPT IN PRINCIPLE.

See#248, In Cl. 108, add a new paragrph to the end of 108.1.1 "This RS-FEC sublayer also applies to 10GBASE-BR20 PHY, specified in Clause 158. When applying it to 10GBASE-BR20 PHY, "25GBASE-R" and "25.78125 GBd" in this clause are replaced by "10GBASE-BR20" and "10.3125 GBd", respectively."

Group comments #248, 157, 171, 225

C/ 158 SC 158.1 P48 L14 # 225

Trowbridge, Steve Nokia

Comment Type T Comment Status A

I'm not aware there is an RS-FEC for 10GBASE-R PHYs

SuggestedRemedy

I suspect you may have intended Clause 74 Firewire FEC. Provide an appropriate reference to the correct FEC type and clause reference

Response Response Status C

ACCEPT IN PRINCIPLE

It is RS-FEC in Cl. 108. see #248

In Cl. 108, add a new paragrph to the end of 108.1.1 "This RS-FEC sublayer also applies to 10GBASE-BR20 PHY, specified in Clause 158. When applying it to 10GBASE-BR20 PHY, "25GBASE-R" and "25.78125 GBd" in this clause are replaced by "10GBASE-BR20" and "10.3125 GBd", respectively."

Group comments #248, 157, 171, 225

CI 108 SC 108 P L # 248

Dawe, Piers Nvidia

Comment Type T Comment Status A

Clause 108, Reed-Solomon Forward Error Correction (RS-FEC) sublayer for 25GBASE-R PHYs, will need some modifications for its new use as a 10G FEC.

SuggestedRemedy

Response Status C

ACCEPT IN PRINCIPLE.

See#248, In Cl. 108, add a new paragrph to the end of 108.1.1 "This RS-FEC sublayer also applies to 10GBASE-BR20 PHY, specified in Clause 158. When applying it to 10GBASE-BR20 PHY, "25GBASE-R" and "25.78125 GBd" in this clause are replaced by "10GBASE-BR20" and "10.3125 GBd", respectively."

CI 78 SC 78.1.4 P L # 247

Dawe, Piers Nvidia

Comment Type T Comment Status A LATE

Need to modify the EEE clause

SuggestedRemedy

Modify Table 78-1 to show which PHYs may optionally support EEE. For each, footnote b applies: The deep sleep mode of EEE is not supported for this PHY.

Response Status C

ACCEPT IN PRINCIPLE.

Modify Table 78-1 to show 25GBASE-BRx and 50GBASE-BRx BiDi PHYs may optionally support EEE, follow the rate, reach, number of lanes, alphabetical order. Footnode b applies to the aformentioned PHYs.

CI FM SC FM P1 L24 # 282

Dawe, Piers Nvidia

Comment Type E Comment Status A LATE

[complete]

SuggestedRemedy

Complete it

Response Status C

ACCEPT IN PRINCIPLE.

Propose to complete this setence as "This amendment adds Physical Layer (PHY) specifications and management parameters for 10 Gb/s, 25 Gb/s, and 50 Gb/s Ethernet optical interfaces for bidirectional operation over a single strand of single-mode fiber."

LATE

C/ FM SC FM P2 **L1** # 285 C/ 1 SC 1.4.52d P18 L24 # 239 Nvidia Dawe, Piers Dawe, Piers Nvidia Comment Type Ε Comment Status A LATE Comment Type Е Comment Status A LATE Abstract with a larger loss budget: larger than what? SuggestedRemedv SuggestedRemedy Write it with a larger loss budget than 10GBASE-BR40. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. See#187, remove BR40+ definition as BR40+ PHYs are removed from .3cp See#6, include abstract text in #6 resolution Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 C/ 56 SC 56.1 P33 L38 C/ FM SC FM P2 L2 # 286 Dawe. Piers Nvidia Dawe. Piers Nvidia Comment Type Comment Status A LATE Comment Type Ε Comment Status A LATE Wrong PCS; wrong font. As the lower sublayers are rate-specific too, I don't know that we Keywords need to give that detail in the figure. SugaestedRemedy SuggestedRemedy Either change to 10GBASE-R PCS 25GBASE-R PCS 50GBASE-R PCS, in the usual font. List them and make the stacks of boxes wider. Response Response Status C or change to PCS PCS, in the usual font. Also Fig 157-1. ACCEPT IN PRINCIPLE. See#6. include keywords in #6 resolution Response Response Status C Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88 ACCEPT IN PRINCIPLE. Change PCS blocks in Figures 56-1a and 157-1 into 10GBASE-R PCS, 25GBASE-R PCS. C/ 1 SC 1.4 P18 L12 288 and 50GBASE-R PCS. Remove all BR40+ elements. Use same font as in other boxes and Dawe. Piers Nvidia make boxes wider. I ATF Comment Type T Comment Status R Cl 56 SC 56.1.1.1 P34 # 242 L21 "The link includes two different specifications": I know this is copied from before but it disagrees with the definition of "link" and anyway a link is a thing not a document; it does Dawe, Piers Nvidia not contain specifications. LATE Comment Type Ε Comment Status R SuggestedRemedy Too much "support" Change to "There are different specifications for 10GBASE-BR10-D and 10GBASE-BR10-SuggestedRemedy U; a link connects one to the other."? Change Response Response Status C sublavers are used to support a bit rate REJECT. This for example follows definitions of 100BASE-BX10. sublayers are used for a bit rate four times Response Response Status C REJECT. This type of wording is used throughout 56.1.1 to describe all EFM P2P links.

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: Topic

Topic LATE

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Cl 56 SC 56.1.1.1 L24 # 243 C/ 56 SC 56.1.3 L # 246 P34 P37 Dawe, Piers Dawe, Piers Nvidia Nvidia Comment Type Ε Comment Status A LATE Comment Type Т Comment Status A LATE Should mention the FEC sublayers too where they are required for all variants. RS-FEC is missing. Maybe EEE is missing. SuggestedRemedy SuggestedRemedy 25GBASE-R PCS, RS-FEC, and PMA sublayers OAM 50GBASE-R PCS, RS-FEC, and PMA sublayers EEE 100BASE-LX10 PMD Response Status C Response ACCEPT IN PRINCIPLE. 10GBASE-R PCS Change text from Line 22 to 25GBASE-R RS-FEC 108 "The 10GBASE-R PCS, RS-FEC, and PMA sublayers ..." 10GBASE-R PMA "The 25GBASE-R PCS, RS-FEC, and PMA sublayers ... ' 10GBASE-BRx PMD "The 50GBASE-R PCS, RS-FEC, and PMA sublayers ..." 25GBASE-R PCS 10GBASE-R RS-FEC 108 # 245 C/ 56 SC 56.1.3 P37 L 25GBASE-R PMA 25GBASE-BRx PMD Dawe. Piers Nvidia 50GBASE-R PCS Comment Type E Comment Status A LATE 50GBASE-R RS-FEC 134 Order: should go down the layers. Compare Table 44-1, Table 105-2, Table 131-3 and 50GBASE-R PMA ... several others Response Response Status C SuggestedRemedy ACCEPT IN PRINCIPLE. 10GBASE-R PCS Change column order and titles to: 10GBASE-R PMA OAM 10GBASE-BRx PMD FFF 25GBASE-R PCS 100BASE-LX10 PMD 25GBASE-R PMA 25GBASE-BRx PMD 10GBASE-R PCS 50GBASE-R PCS 25GBASE-R RS-FEC 108 (add a note to say it is 25G FEC running on 10GBASE-BR20, 50GBASE-R PMA See comment resolution on Table 158-1 footnote) 50GBASE-BRx PMD 10GBASE-R PMA 10GBASE-BRx PMD Response Response Status C 25GBASE-R PCS ACCEPT IN PRINCIPLE. 25GBASE-R RS-FEC 108 Change the order and column titles to be: 25GBASE-R PMA 10GBASE-R PCS 25GBASE-BRx PMD 10GBASE-R PMA 50GBASE-R PCS 10GBASE-BRx PMD 50GBASE-R RS-FEC 134 25GBASE-R PCS 50GBASE-R PMA ... 25GBASE-R PMA 25GBASE-BRx PMD 50GBASE-R PCS 50GBASE-R PMA

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: Topic

50GBASE-BRx PMD

Topic LATE

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Cl 56 SC 56.1.3 P37 L18 # 244 C/ 157 SC 157.1.3 L39 # 253 P39 Dawe, Piers Dawe, Piers Nvidia Nvidia Comment Type Е Comment Status A LATE Comment Type Ε Comment Status A LATE Sublayer names Within this clause the Multi-Gigabit Ethernet Bidi PHY device use the following nomenclature. SuggestedRemedy SuggestedRemedy Change: For Multi-Gigabit Ethernet Bidi PHYs, the following nomenclature is used. 10GBASE-BRx PMA to 10GBASE-R PMA 10GBASE-BRx PCS to 10GBASE-R PCS Response Response Status C 25GBASE-BRx PMA to 25GBASE-R PMA ACCEPT. 25GBASE-BRx PCS to 25GBASE-R PCS 50GBASE-BRx PMA to 50GBASE-R PMA C/ 157 SC 157.1.3 P40 L5 # 257 50GBASE-BRx PCS to 50GBASE-R PCS Dawe. Piers Nvidia Response Response Status C ACCEPT. Comment Type Comment Status A I ATF Group #244, 203, 204 This table is too long (spills over onto the next page) and too repetitive. C/ 158 SC 158.8 P37 L 50 # 277 SuggestedRemedy Add a sentence of introduction including the common information (over one single-mode Dawe, Piers Nvidia fiber), and instead of one Description column with a sentence in each cell, use columns for Comment Type T Comment Status A I ATF rate, position (OLT or ONU), coding, reach, and clause reference. The minimum dispersion for a 40 km PMD was set at zero in 52.9.10.2 because the 1550 Response Response Status C nm signal was always at a longer wavelength than the dispersion zero. Here, we don't know that. All we know is that the 10GBASE-BRx-U signal is always at a shorter ACCEPT IN PRINCIPLE. Update table 157-1 to remove all BR40+ rows, this will fit the table into a single page wavelength than the dispersion zero. SuggestedRemedy C/ 157 SC 157.1.4 P42 L19 260 The table could be split for U and D. If not, the simple solution is: Dawe, Piers Nvidia PMD Min Max Comment Status A LATE Comment Type BR10 min(f1(lambda), 0) max(f2(lambda), 0) BR0 min(f3(lambda), 0) max(f4(lambda), 0) As it's Fast Wake only, EEE is above PCS the PCS at least; I believe it's above the RS. BR40 min(f5(lambda), 0) max(f6(lambda), 0) SuggestedRemedy where f1 2 3 4 6 are as now, f5 is 0.93.lambda.[1- (1324 / lambda)^4] Move the EEE column to between "Nomenclature" and RS. Response Response Status C Response ACCEPT IN PRINCIPLE. Response Status C See resolution to Comments #178-180 ACCEPT.

C/ 157 SC 157.2.3 L22 # 262 C/ 158 SC 158.6 P51 L45 # 270 P44 Dawe, Piers Dawe, Piers Nvidia Nvidia Comment Type Т Comment Status A LATE Comment Type Т Comment Status A LATE Now that FEC is required for some PMDs, "An FEC sublayer is available for all Multi-There should be something about the possibilities (or not) for interoperation between the Gigabit BiDi PHYs" is too weak. different grades of PMD. Also for Clause 159. The text in 160 needs attention: a minimum insertion loss would be needed, I think. SuggestedRemedy SuggestedRemedy An FEC sublayer is optional for 10G-BASE-BR10 and 10G-BASE-BR40, and required for all other Multi-Gigabit BiDi PHYs. See P802.3cu for examples of how to do this. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. Change to "An FEC sublaver is required for all Multi-Gigabit BiDi PHYs except 10GBASE-See#181 to add introp of .3cp links BR10 and 10GBASE-BR40, where the FEC sublaver is not applicable." See#210 to make FEC not applicable for 0GBASE-BR10 and 10GBASE-BR40 C/ 158 SC 158.6.1 P52 L49 # 272 Dawe. Piers Nvidia C/ 157 SC 157.4 P45 L25 265 LATE Comment Type T Comment Status A Dawe. Piers Nvidia Definition B is preferable Comment Type T Comment Status A LATE SuggestedRemedy 44.3 will need modification to include FEC delay Suggest remove the obsolete transmitter eye mask definition A SuggestedRemedy Response Response Status C Modify Table 44-2. ACCEPT IN PRINCIPLE. Response Response Status C Remove the note on definitions A and B, remove row of definition A. ACCEPT IN PRINCIPLE. Add a new line "10GBASE-BRx RS-FEC" to Table 44-2, reuse values in Table 105-3, line C/ 158 SC 158.6.2 P53 L49 "25GBASE-R RS-FEC" for 10GBASE-BRx, make values 2.5 times longer for 10GBASE-Dawe, Piers Nvidia BRx Comment Type Comment Status A LATE SC 158.1 # 267 C/ 158 P47 L32 Extinction ratio: 3.5 dB is OK for 10GBASE-L, 3 dB for 10GBASE-E, 3 for 25GBASE-LR, 4 for 25GBASE-ER, why would 10GBASE-BR40 need 5.5 dB? Is this a typo? Dawe, Piers Nvidia Comment Status A SuggestedRemedy Comment Type Ε LATE Order of sublayers should be top to bottom. Reduce to lower than 10GBASE-BR20 and 10GBASE-BR40+, e.g. 4.5 or 4 dB. SuggestedRemedy Response Response Status C ACCEPT IN PRINCIPLE. Move the row "108 RS-FEC Optional Required" to between PCS and PMA (as it is in 159 P52 I 42 and 160). See #187 to remove BR40+ PHYs. ER 5.5 copies from 10GBASE-ER spec. Response Response Status C

ACCEPT.

C/ 158 SC 158.8 L33 # 274 C/ 158 SC 158.8 P54 L38 # 276 P54 Dawe, Piers Dawe, Piers Nvidia Nvidia Comment Type Т Comment Status A LATE Comment Type Т Comment Status A "Optical measurement requirements" this was copied from Clause 38 to 52 then 58-60 but What does "condition that the transmitted optical signal and ... should be at their maximum later it was decided that this was incorrect: 802.3 is not a test spec, the measurements are levels" mean? not required, only the compliance is. So Clause 68 and later optical PMD clauses use SuggestedRemedy different wording. Should this say that the transmitter reflectance should be at maximum? SuggestedRemedy Response Response Status C Change to: ACCEPT IN PRINCIPLE. Definition of optical parameters and measurement methods See#183, add full details of optical measurement requirements and apply all changes

Response Status C

ACCEPT IN PRINCIPLE

See#183, add full details of optical measurement requirements and apply all changes appropriate for 158, and also 159 and 160. Editorial license to make inline changes to 114.7 (25G), 52.9 (10G),139.7/CU/140/151 (50G)

275 C/ 158 SC 158.8 P54 L37 Dawe. Piers Nvidia

Comment Type T Comment Status A LATE "shall be conducted" isn't suitable wording, as there is no requirement to conduct the test.

Here is example wording based on what has been used in 802.3ba and later projects:

SuggestedRemedy

Stressed receiver sensitivity shall be within the limits given in Table 158-7 if measured using the method defined by 52.9.9, with the additional condition that the transmitted optical signal and the reflectance of the optical link are at their maximum levels.

Response Response Status C

ACCEPT IN PRINCIPLE.

See#183, add full details of optical measurement requirements and apply all changes appropriate for 158, and also 159 and 160. Editorial license to make inline changes to 114.7 (25G), 52.9 (10G), 139.7/CU/140/151 (50G)

114.7 (25G), 52.9 (10G), 139.7/CU/140/151 (50G) C/ 158 SC 158.11.1 P56 L37 # 279 Dawe, Piers Nvidia

appropriate for 158, and also 159 and 160. Editorial license to make inline changes to

LATE Comment Type Comment Status A

This NOTE was written for a 1550 nm PMD.

SuggestedRemedy

Needs review because different wavelength here

Response Status C

ACCEPT IN PRINCIPLE.

Delete the note as it is not relevant

C/ 158 SC 158.12 P58 **L1** # 280

Dawe. Piers Nvidia

Comment Type E Comment Status A

Subclause title is shorter than past clauses, which is an improvement. However, "for 158"

is too abrupt.

SuggestedRemedy

Change the format of the cross-reference to 158 so that the title becomes:

Protocol implementation conformance statement (PICS) proforma for Clause 158

Protocol implementation conformance statement (PICS) proforma for Clause 158. Physical Medium Dependent (PMD) sublayer and medium, types 10GBASE-BR10, 10GBASE-

BR20, 10GBASE-BR40, and 10GBASE-BR?? Similarly for 159.11 and 160.11.

Response Response Status C

ACCEPT IN PRINCIPLE.

Use the lastest template to include clause number and title. Line 5, add clause title. Line 33. add "Clause" before 158. Do same thing for clauses 159. 160.

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: Topic

Topic LATE

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LATE

IATE

C/ FM SC FM P1 L24 # 281 C/ FM SC FM P13 L28 # 287 Dawe, Piers Dawe, Piers Nvidia Nvidia Comment Type Е Comment Status R LATE. Comment Type Ε Comment Status A LATE, EZ [list to be populated during publication process] Formatting problem with the contents list for the new clauses. Missing tab in the template? SuggestedRemedy SuggestedRemedy Populate it now, consistent with lines 23-24. If necessary, say that the list may be Fix amended during the publication process. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. REJECT. Use the Content list from FM template We assume this comment is to line 2. This is inline with 802.3 framemaker template, will be # 289 populated during the publication process. C/ 1 SC 1.4.52a P18 L12 See #147 to populate the amendment list in line 24. Dawe. Piers Nvidia SC FM P1 L24 # LATE. EZ C/ FM 283 Comment Type Comment Status A Ε 10km Nvidia Dawe, Piers LATE. EZ Comment Type Ε Comment Status A SuggestedRemedy D1.3 10 space km Several places SuggestedRemedy Response Response Status C Would be D2.1 next time ACCEPT. Response Response Status C Cl 45 SC 45.2.1.7.1 P25 L20 # 240 ACCEPT IN PRINCIPLE. Dawe, Piers Nvidia See #51, change to "Draft D2.1 is prepared for the the first Working Group recirculation Comment Status A Comment Type E LATE, EZ Group comments #51, 12, 283, 284 This very long table can be laid out better # 284 C/ FM SC FM P1 L25 SuggestedRemedy Make the left column wider, at least wide enough to fit the contents, as done for Table 45-Dawe, Piers Nvidia 12. The right column could be narrower. LATE, EZ Comment Type E Comment Status A Also Table 45-10. [review/balloting stage] Response Response Status C SuggestedRemedy ACCEPT Delete Response Response Status C

ACCEPT.

C/ 157	SC 157	P 39	L1	# 249	C/ 157 SC 157.1.3	P 39	L 47	# 254
Dawe, Pie	rs	Nvidia			Dawe, Piers	Nvidia		
Comment 802.3	Type E doesn't use Gbp:	Comment Status A		LATE, EZ	Comment Type E encoding.x refers	Comment Status A		LATE, EZ
Suggested Chang	dRemedy ge to Gb/s (3 time	es)			SuggestedRemedy encoding.			
Response ACCE		Response Status C			x refers Response ACCEPT IN PRINCIE	Response Status C		
C/ 157	SC 157.1.1	P39	L11	# 250	See #31 to list nomer			
Dawe, Pie	rs	Nvidia			C/ 157 SC 157.1.3	P39	L 53	# 255
Comment	Type E	Comment Status A		LATE, EZ	Dawe, Piers	Nvidia		
Net-we Suggested					Comment Type E GMII	Comment Status A		LATE, EZ
Netwo	rk				SuggestedRemedy			
Response		Response Status C			XGMII			
ACCE	PT.				Response	Response Status C		
C/ 157	SC 157.1.2	P39	L 27	# 251	ACCEPT.			
Dawe, Pie	rs	Nvidia			C/ 157 SC 157.1.3	P 40	L 5	# 256
Comment	Type E	Comment Status A		LATE, EZ	Dawe, Piers	Nvidia		
apply	- not grammatica	(for 10 Gb/s), 105.1.2 (for 25 I.	Gb/s), and 131	.1.2 (for 50 Gb/s)	Comment Type E	Comment Status A		LATE, EZ
Suggested	•				ber			
Delete	e "are" or "apply"?	?			SuggestedRemedy			
Response		Response Status C			Make the right hand o	olumn wider, set the hyphena	tion fragment le	ngth to at least 3.
ACCE Delete	PT. e "apply"				Response ACCEPT.	Response Status C		
C/ 157	SC 157.1.3	P39	L37	# 252				
Dawe, Pie	rs	Nvidia						
Comment Space	Type E before "Nomeno	Comment Status A		LATE, EZ				
Suggested	dRemedy							

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: Topic

Response Status C

Remove Response

ACCEPT.

Topic LATE, EZ

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C/ 157	SC 157.1.3	P 41	L1	# 258	C/ 157 SC 157.2.3	P 44	L 10	# 263
Dawe, Pier	rs	Nvidia			Dawe, Piers	Nvidia		
Comment	Type E	Comment Status A		LATE, EZ	Comment Type E	Comment Status A		LATE, EZ
		onto a second page, the conf	tinuation header	should say (continued)	specific RS and xMII	specified		
in italio					SuggestedRemedy			
Suggested	•	1. 412			particular RS and xM			
There's	s a correct way t				or, delete the second	l "specified" 2.3, 157.2.4 and 157.2.5.		
Response		Response Status C			Response	•		
	PT IN PRINCIPL	.E. age for this table			ACCEPT.	Response Status C		
						pecified" in all places		
C/ 157	SC 157.1.4	P 42	L9	# 259	C/ 157 SC 157.2. 3		L11	# 264
Dawe, Pier		Nvidia			Dawe, Piers	Nvidia	211	π <u>204</u>
Comment	.,	Comment Status A		LATE, EZ	Comment Type E	Comment Status A		LATE. EZ
10G-B	ASE				for a given is given			LATE, EZ
Suggested	Remedy					'		
					SuggestedRemedy Change "for a given"	to "for each"		
Response		Response Status C				2.3, 157.2.4 and 157.2.5.		
ACCEI Delete					Response	Response Status C		
Delete	-				ACCEPT.	,		
C/ 157	SC 157.2	P 44	<i>L</i> 1	# 261	C/ 158 SC 158.1	P47	L 17	# 266
Dawe, Pier	'S	Nvidia					L11	# 266
Comment	,,	Comment Status A		LATE, EZ	Dawe, Piers	Nvidia		/ ATC
syblay	ers				Comment Type T	Comment Status A		LATE, EZ
Suggested	Remedy				Not the usual wordin	9		
sublay	ers				SuggestedRemedy	IFILE II define dia Oleman 45 co		
Response		Response Status C			G	l5" to "defined in Clause 45, or	equivalent"	
ACCE	PT.				Response	Response Status C		
					ACCEPT. Change "defined in 4	5" to "defined in Clause 45"		
					•			

C/ 158	SC 158.1.1	P48	<i>L</i> 1	# 268
Dawe, Piers	;	Nvidia		
Comment T		Comment Status A		LATE, EZ
Suggested Remove	-			
Response ACCEP	т.	Response Status C		
C/ 158	SC 158.1.1	P48	L30	# 269
Dawe, Piers	;	Nvidia		
Comment T	•	Comment Status A		LATE, EZ
Suggested R Remove	-			
Response ACCEP	Т.	Response Status C		
C/ 158	SC 158.6.1	P 52	∠19	# 271
Dawe, Piers	i	Nvidia		
Comment T		Comment Status A		LATE, EZ
Suggested Remove	-			
Response ACCEP	т.	Response Status C		
C/ 158	SC 158.10	P56	L 25	# 278
Dawe, Piers	i	Nvidia		
Comment T	•	Comment Status A		LATE, EZ
Suggested Remove				
Response ACCEP	т.	Response Status C		

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: Topic