

P802.3ak Draft 4.1 Comments

CI 00 SC 46.1.2 P L 0 # 65

Bradshaw, Peter BitBlitz Communicatio

Comment Type T Comment Status A T65

802.3ae says in 46.1.2 about XGMII ""This interface is used to provide media independence so that an identical media access controller may be used with all 10GBASE PHY types using either serial or wavelength division multiplexed optics."" There is no technical reason that XGMII cannot be used with CX4 (in fact I expect most implementations will have XGMII explicitly or implicitly embedded within them).

SuggestedRemedy

Direct the editor to consider adding this to the 'modify' sections, with proposed new wordin such as replacing 'serial or wavelength division multiplexed optics' with 'serial or multiple lane optical or electrical channels', which would aslo cover the 10GBASE-T proposal.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Eliivated from "E" to "T"

In 46.1.2 change "This interface is used to provide media independence so that an identical media access controller may be used with all 10GBASE PHY types using either serial or wavelength division multiplexed optics." to "This interface is used to provide media independence so that an identical media access controller may be used with all 10GBASE PHY types."

CI 01 SC 3 P 3 L 6 # 23

Frazier, Howard SWI

Comment Type TR Comment Status A TR23

Incomplete reference to IEC 61076-3-113. I have been told that all references must be complete prior to the start of the WG ballot

SuggestedRemedy

Provide the complete reference to IEC 61076-3-113 , including the date and title.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Added in "Connectors for electronic equipment - Part 3-113: Screened, serial multi-conductor cable to board connectors suitable for 10 Gbit/sec data rates." This is a similar title to IEC 61076-3-103.

CI 01 SC 3 P 3 L 6 # 50

Dawe, Piers Agilent

Comment Type E Comment Status A TR23

The connector reference IEC 61076-3-113 has now showed up on the IEC website. Here's its title: Connectors for electronic equipment - Part 3-113: Screened, serial multi-conductor cable to board connectors suitable for 10 Gbit/sec data rates Target dates: CDV 2004-02 FDIS 2004-12

SuggestedRemedy

Add title to reference. Note the target dates: are they timely enough or do you want to refer additionally to the SFF document in the interim, maybe as an informative reference?

Proposed Response Response Status C

ACCEPT.

See comment #23

CI 01 SC 3 P 5 L 6 # 5

Booth, Brad Intel

Comment Type T Comment Status A TR23

Normative reference missing document title.

SuggestedRemedy

Insert corresponding document title.

Proposed Response Response Status C

ACCEPT.

See comment #23

CI 01 SC 4.276 P L # 1

Marris, Arthur Cadence

Comment Type T Comment Status A T1

Add definition for 'twinaxial cable'

SuggestedRemedy

twinaxial cable: A pair of insulated conductors surrounded by a conductive sheath

Proposed Response Response Status C

ACCEPT.

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CI 44 SC 3 P13 L 35 # 6
Booth, Brad Intel

Comment Type T Comment Status A T6

It appears that the CX4 Task Force has created a new form of electrical cable, one that is capable of carrying light.

SuggestedRemedy

Return paragraph to its original form. Insert new subheading "44.3.1 Fiber delay constraints" following 44.3. Add new subheading after equation 44-1, "44.3.2 Copper delay constraints". Add new text point to a reference for the CX4 delay parameters, or a reference to contact the electrical cable manufacturer.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Change "... ratio of the speed of light in the fiber or electrical cable to ..." to "... ratio of the speed of electromagnetic propagation in the fiber or electrical cable to ..."

CI 45 SC 2 P194 L # 66
Bradshaw, Peter BitBlitz Communicatio

Comment Type T Comment Status X T66

Section 44A7 (including Figure 44A-7) implies a possible loopback ability at all of the PMA, WIS and PCS sublayers (explicitly omitting WIS if not present). Other parts of 802.3ae specify:- PMA loopback (45.2.1.1.4) is mandatory or optional, depending on PMA type, the ability being advertised in bit 1.8.0, loopback is mandatory for a WIS device (if present), and for a 10G-BASE-R PCS, but is forbidden for all other PCS types (45.2.3.1.2)*, and loopback is optional for a PHY XS device (45.2.4.1.2) (advertised in bit 4.24.10), and mandatory for a DTE XS device (45.2.5.1.2), where the 5.24.10 bit must be 0*. These awkward inconsistencies (a PHY XGXS and a DTE XGXS are otherwise identical) are enhanced by the addition of the CX4 PMA/PMD, since the functional differences between a CX4 PMA/PMD/PCS device and a DTE XGXS device are mainly some changes to the output and input levels and the SIGNAL_DETECT function, the required register Device Address value changes, and the loopback function and advertising scrambling.
*Comments on the comment: a small side bet says that any plausible compliant devices will actually have this loopback/bit, and will have had to hide it somewhere in a vendor-specific register or in some other way.

SuggestedRemedy

Add a section after page 11 with following:- 1. In 45.2.3.1.2: Remove the prohibition against loopback in a 10GBASE-X PCS device, making it optional. If present, the 3.24.10 bit could be used to advertise its presence, since this register is required in a 10GBASE-X PCS. Current compliant devices are still in compliance, since they do not have the loopback* and the advertising bit would say so. 2. In 45.2.5.1.2: Allow the 5.24.10 bit to optionally be a 1, so that a device that can implement both PHY XGXS and DTE XGXS need not change this status bit when changing device address*. Present conforming devices would be allowed to keep this bit a 0, but it would be recommended that it be a 1.

Proposed Response Response Status Z

Withdrawn, commentor will consider submitting a maintenance request.

CI 45 SC 2.1.10 P17 L 17 # 8
Booth, Brad Intel

Comment Type E Comment Status A E8

Remove capitalization.

SuggestedRemedy

Change all references to "10G PMA/PMD extended ability register". Also, remove change "(Register 1.11)" to "(1.11)" in heading.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Capitalization removed, "(Register 1.11)" kept to remain consistent with the rest of Clause 45.

CI 45 SC 2.1.6.1 P10 L 5 # 67
Bradshaw, Peter BitBlitz Communicatio

Comment Type TR Comment Status D TR67

I believe the register 1.7 structure proposed in D4.0 is preferable to that proposed in D4.1. The original 802.3ae pattern had some reasonable logical consistency (hobgoblins being ignored), where all 10GBASE-X devices had '00' as the last two bits, and the optical devices all came in the order 'E-L-S' in numerical ascending order. The related ability bits 1.8.0--7 would all encode into the control bits. The D4.0 proposal retained and expanded this, leaving '0000' for a possible EX4 addition, and '1000' for SX4. Furthermore, the extended 'ability' bits, now ordered 1.8.0...7 and 1.11.0...14, would continue to encode from the control bits. Efficiency in the use of register 1.7 values hardly seems necessary (there are still over 65,000 codes available, and no previous 802.3 speed family has used more than 6 variants: even if we give up to 32 variants to each data rate, and go up by a data rate factor of

SuggestedRemedy

3.2 each time, a.c.w the prior factor of 10, and devote a full bit of 1.7 to each step (rather than a decoded value), the wavelength of the data pattern gets below 100 nm, well into the UV, before 1.7 runs out!) Register 1.8 is to be extended to 1.11, and (leaving bit 1.11.15 for further extension bits to 1.12 with 1.12.15 & 1.13), we have a total of 46 more bits, of which one is needed now for CX4, possibly one for SX4, and probably one or two for 10GBASE-T, maybe one for an XFI-type electrical interface. These can fill up 1.11.0-4, leaving 5-14 for expansion. Two nominally independent changes, but preferably done together. 1. Retain the changes proposed for 45.2.1.6.1 in D4.0 2. Modify Table 45-11 on Page 12 of D4.2 to use 1.11.1 for CX4 ability, reserving the other bits.

Proposed Response Response Status Z

Withdrawn by commentor.

Note: This is a non-binding comment because the commentor was not a voting member at the time of the comment.

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CI 45 SC 2.1.6.1 P 15 L 27 # 9
 Booth, Brad Intel
 Comment Type T Comment Status A T9
 Wrong bit range.
 SuggestedRemedy
 Change bit range to be 1.7.15:3, then 1.7.2:0.
 Proposed Response Response Status C
 ACCEPT.

CI 45 SC 2.1.8 P 16 L 40 # 7
 Booth, Brad Intel
 Comment Type E Comment Status A E7
 What is a multi-lane PMD?
 SuggestedRemedy
 Change to read ""multiple lane PMDs"".
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 0 P L # 48
 Dawe, Piers Agilent
 Comment Type E Comment Status A E48
 Some of my TRs against d4.0 have been closed: 399, 401, 413, 416, 417, 427, 433, 432, 442.
 SuggestedRemedy
 No action needed! Thank you.
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 0 P L # 47
 Baumer, Howard Broadcom Corp.
 Comment Type T Comment Status A T47
 It is the commentor's opinion that the current link budget as specified in Clauses: 54.7.3.8 Transmitter jitter, 54.8.2 Cable assembly insertion loss, 54.8.3 Cable assembly return loss, 54.8.4.1 Differentialk near end crosstalk, 54.8.4.2 Multiple disturber near end crosstalk, 54.8.5.1 Equal Level Far-End Crosstalk (ELFEXT) loss, 54.8.5.2 Multiple Disturber Equal Level Far-End Crosstalk (MDELFE XT) loss do not produce an error free system with a BER of 10^-12 or better. This is based on simulations run with these limits.

SuggestedRemedy
 Further simulations with adjusted limits should need to be run and the appropriate limits that create a error free system (to a BER of better than 10^-12) found. This is in support of comment #388 against draft 4.0.
 Proposed Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #388 against D4.0.

CI 54 SC 1 P 18 L 9 # 49
 Dawe, Piers Agilent
 Comment Type T Comment Status R T49
 Management is always optional, as well as the MDIO being optional. See e.g. 28.5.3.
 SuggestedRemedy
 Change to ""... shall be integrated with the appropriate physical sublayers (see Table 54-1) and may be integrated with the management ...
 Proposed Response Response Status C
 REJECT.
 Not all management functions are optional (e.g. transmit disable). The access of the management functions through the Clause 45 MDIO interface is optional as stated.

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CI 54 SC 10.1 P 38 L 47 # 62
 Dawe, Piers Agilent

Comment Type TR Comment Status A TR62

This subclause needs wordmithing to avoid another ""shall be performed"". The suggested remedy moves the last sentence to the beginning to improve readability, and modifies it. I've also suggested an editorial change to one other sentence. There is no loss of rigour without the ""shall"": there's one in 54.7.3.8 and a normative reference to this subclause. ""54.10.1 Transmit Jitter test requirements For the purpose of jitter measurement, the effect of a single-pole high pass filter with a 3 dB point at 1.875 MHz is applied to the jitter. The data pattern for jitter measurements is the CJPAT pattern defined in Annex 48A. All four lanes of the 10GBASE-CX4 transceiver are active in both directions, and opposite ends of the link use asynchronous clocks. Jitter is measured with AC-coupling and at 0 volts differential. Jitter measurement for the transmitter shall be performed with a test procedure resulting in a BER bathtub curve such as that described in Annex 48B.""

SuggestedRemedy

""54.10.1 Transmit Jitter test requirements Transmit jitter is defined with respect to a test procedure resulting in a BER bathtub curve such as that described in Annex 48B. For the purpose of jitter measurement, the effect of a single-pole high pass filter with a 3 dB point at 1.875 MHz is applied to the jitter. The data pattern for jitter measurements is the CJPAT pattern defined in Annex 48A. All four lanes of the 10GBASE-CX4 transceiver are active in both directions, and opposite ends of the link use asynchronous clocks. Crossing times are defined with respect to the mid-point (0 V) of the AC-coupled differential signal.""

Proposed Response Response Status C

ACCEPT.

CI 54 SC 10.5.1 P 51 L 1 # 21
 Booth, Brad Intel

Comment Type E Comment Status R E21

Paragraph starts at top of page when should be on previous page.

SuggestedRemedy

Check that the ""keep with next"" is only on for the appropriate portions of the paragraph or remove the page break.

Proposed Response Response Status C

REJECT.

This is fine in D4.1 but looks different in the D4.0 to D4.1 compare document.

CI 54 SC 11 P 53 L 27 # 22
 Booth, Brad Intel

Comment Type E Comment Status A E22

Shorten paragraph to a more usable form.

SuggestedRemedy

Change to read:
 The 10GBASE-CX4 PMD, as per 54.9, is coupled to the cable assembly, as per 54.10, by the MDI.

MDI has already been defined.

Proposed Response Response Status C

ACCEPT.

CI 54 SC 12.4.2 P 42 L 19 # 33
 Dove, Daniel HP ProCurve Networki

Comment Type TR Comment Status A TR33

MF5 appears to be un-necessary. In section 54.5.7 it states...""If a PMD_fault is detected, then the PMD may turn off the electrical transmitter in all lanes.""

SuggestedRemedy

Either make 54.5.7 a ""shall"" requirement, or remove the PIC entry.

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Will make PICS entry MD:O

CI 54 SC 12.4.5 P 44 L 30 # 37
 Baumer, Howard Broadcom Corp.

Comment Type E Comment Status A E37

MDNear End Cross Talk is used, whereas every where else MDNEXT is used

SuggestedRemedy

Change ""MDNear End Cross Talk"" to MDNEXT""

Proposed Response Response Status C

ACCEPT.

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CI 54 SC 12.4.5 P 44 L 32 # 38
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A E38
 ELFar-End cross talk is used whereas every where else ELFEXT is used
 SuggestedRemedy
 Change ""ELFar-End cross talk"" to ""ELFEXT""
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 12.4.5 P 44 L 34 # 39
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A E39
 MDELFar-End cross talk is used whereas every where else MDELFEXT is used.
 SuggestedRemedy
 Change ""MDELFar-End cross talk"" to ""MDELFEXT"".
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 5.1 P 20 L 20 # 2
 Marris, Arthur Cadence
 Comment Type T Comment Status A T2
 In Figure 54-2, is it the intention that the link and signal shields should be grounded at both ends of the link?
 SuggestedRemedy
 Modify Figure 54-2 to show the electrical connections of the link and signal shields going through the connectors and being grounded at both the transmit and receive sides. Alternatively add some text saying where the link and signal shields should be grounded.
 Proposed Response Response Status C
 ACCEPT IN PRINCIPLE.
 Signal Shield and Link Shield lines will be extended through the connectors into the CX4 transmit network and the CX4 receive network. The exact implementation is left up to the implementor.
 "CX4 transmit network" will be changed to "CX4 transmit connection" and "CX4 receive network" will be change to "CX4 receive connection".

CI 54 SC 5.6 P 22 L 9 # 25
 Dove, Daniel HP ProCurve Networki
 Comment Type T Comment Status A T25
 Zero volts out is not a logic level, but should be valid in the case of an AC coupled transmitter.
 SuggestedRemedy
 Remove the word ""logic"" from this sentence. ie: ""...constant logic level..."" becomes ""...constant level...""
 Proposed Response Response Status C
 ACCEPT.

And also line 17.

CI 54 SC 7.1 P 23 L 16 # 11
 Booth, Brad Intel
 Comment Type E Comment Status A E11
 Remove ""Clause"" from reference to a subclause.
 SuggestedRemedy
 Scan document for ""Clause"" and ensure that reference is not a subclause. If reference is a subclause, strike the word ""Clause"".
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 7.1 P 24 L 1 # 10
 Booth, Brad Intel
 Comment Type E Comment Status R E10
 Decrease font size in Figure 54-2 to 10pt.
 SuggestedRemedy
 As per comment.
 Proposed Response Response Status C
 REJECT.
 All text is either 9 or 10pt.

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CI 54 SC 7.3 P 24 L 39 # 3
 Adam Healey Agere Systems
 Comment Type T Comment Status A T3
 Peak-peak jitter should be expressed as magnitude (positive value).
 SuggestedRemedy
 Remove "+/-" for all Output Jitter entries in Table 54-4.
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 7.3.1 P 24 L 7 # 26
 Dove, Daniel HP ProCurve Networki
 Comment Type T Comment Status A T26
 This figure leaves some confusion regarding where the test fixture starts in my opinion.
 SuggestedRemedy
 I think that a dashed line around the area that involves the test fixture... to clearly indicate that TP2 exists to the left of that fixture... and a vertical line at the TP2 interface will help a lot. Also, the graphic for the lower common-mode measurement resistor has a few mis-aligned connections.
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 7.3.2 P 25 L 34 # 52
 Dawe, Piers Agilent
 Comment Type E Comment Status A E14
 Need a space between number and unit.
 SuggestedRemedy
 Add the spaces: several occasions throughout the clause.
 Proposed Response Response Status C
 ACCEPT.
 See comment #14 & #27

CI 54 SC 7.3.2 P 25 L 34 # 51
 Dawe, Piers Agilent
 Comment Type E Comment Status A E51
 extraneous dash after 3
 SuggestedRemedy
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 7.3.2 P 25 L 35 # 27
 Dove, Daniel HP ProCurve Networki
 Comment Type E Comment Status A E27
 For consistency, we should change all instances of ""2.0GHz"" to ""2000 MHz"". Right now the document uses both indiscriminately.
 SuggestedRemedy
 Other instances I found... P27-L3,L20; P31-L3,L20-28; P32-L4
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 7.3.4 P 26 L 1 # 68
 802.3ak Task Force
 Comment Type T Comment Status A T68
 Output amplitude specification does not specify what pattern should be used while performing the tests. The amplitude for a continuous "010101..." will be different for a "00000111110000011111..."
 SuggestedRemedy
 Specify to use the test pattern in 48A.2.
 Proposed Response Response Status C
 ACCEPT.

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CI 54 SC 7.3.4 P 26 L 8 # 53

Dawe, Piers Agilent

Comment Type E Comment Status A E53

This made me stop and re-read it: ""The Signal<p> / Signal<n> DC-common mode voltage"".

SuggestedRemedy

Might be better to say ""The DC-common mode voltage (Signal<p>-Signal<n>)/2"".

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Will change "The Signal<p> / Signal<n> DC-common mode voltage shall be between ..." to "The common mode voltage of SLi<p> and SLi<n> shall be between ...".

CI 54 SC 7.3.5 P 27 L 23 # 28

Dove, Daniel HP ProCurve Networki

Comment Type E Comment Status A E28

No need for two decimal points on Y axis of table.

SuggestedRemedy

Set number to zero decimal points on all tables. Also, don't use exponentials where not necessary on table axes. Figures this applies to: Figure 54-5: Y axis Figure 54-6: Y axis and X axis Figure 54-7: Unnecessary E+0 on Y axis Figure 54-8: Unnecessary E+0 on Y axis Figure 54-9: Unnecessary E+0 on Y axis Figure 54-10: Unnecessary E+0 on Y axis

Proposed Response Response Status C

ACCEPT.

CI 54 SC 7.3.5 P 27 L 4 # 55

Dawe, Piers Agilent

Comment Type E Comment Status A E55

shall be meet

SuggestedRemedy

shall meet

Proposed Response Response Status C

ACCEPT.

CI 54 SC 7.3.6 P 28 L 4 # 29

Dove, Daniel HP ProCurve Networki

Comment Type E Comment Status R E29

We use the term pre-emphasis everywhere but here for the transmitter. Inconsistent use of the term equalization.

SuggestedRemedy

Change ""equalization"" to ""pre-emphasis""

Proposed Response Response Status C

REJECT.

Pre-emphasis is not used anywhere in D4.1.

CI 54 SC 7.3.6 P 28 L 5 # 56

Dawe, Piers Agilent

Comment Type E Comment Status R E56

Not all points are inflection points.

SuggestedRemedy

""vertices"" or just ""points"".

Proposed Response Response Status C

REJECT.

All of the points are inflection points except the end points, which delimit the line.

CI 54 SC 7.3.6 P 28 L 6 # 63

Bradshaw, Peter BitBlitz Communicatio

Comment Type E Comment Status A E63

""Voltage and time coordinates for inflection points on Figure 54-6 are given in Figure 54-5. "" Coordinates are given in Table 54-5, not Figure 54-5.

SuggestedRemedy

Replace word 'Figure' by 'Table'

Proposed Response Response Status C

ACCEPT.

P802.3ak Draft 4.1 Comments

CI 54 SC 7.3.6 P 28 L 6 # 57
 Dawe, Piers Agilent

Comment Type TR Comment Status A TR57

This continues my comment 418 against D4.0. Rationale is this: we want the ""shall""s and the PICS to certify what the compliant product does, all the time, not that 100% testing is required. We leave implementers room to use margin, ""right by design"" and test reduction strategies to build cost-effective product. We have struggled with similar wordsmithing issues in EFM. I think the remedy below gives you what need.

SuggestedRemedy

Instead of saying: ""These measurements are to be made for each pair while observing the differential signal output at TP2 using the transmitter test fixture shown in Figure 54-3 and with all other transmitters disabled."" please change to: ""The template {is met|shall be met} for each differential signal output at TP2 using the transmitter test fixture shown in Figure 54-3, when the three other transmitters are disabled.""

Proposed Response Response Status C

ACCEPT IN PRINCIPLE.

Will remove the sentence: "These measurements are to be made for each pair while observing the differential signal output at TP2 using the transmitter test fixture shown in Figure 54-3 and with all other transmitters disabled." Will modify "... test pattern specified in 48A.2." to "... test pattern specified in 48A.2, with all other transmitters disabled."

CI 54 SC 7.3.7 P 29 L 28 # 30
 Dove, Daniel HP ProCurve Networki

Comment Type E Comment Status A E30

Missing space

SuggestedRemedy

Change ""0.66normalized levels"" to ""0.66 normalized levels""

Proposed Response Response Status C

ACCEPT.

CI 54 SC 7.3.8 P 29 L 33 # 4
 Adam Healey Agere Systems

Comment Type T Comment Status A T3

Peak-peak jitter should be expressed as magnitude (positive value).

SuggestedRemedy

Remove "+/-" in all references to peak-peak jitter values. Also apply changes to corresponding PICS items in section 54.12.4.3 (DS15, 16, and 17).

Proposed Response Response Status C

ACCEPT.

CI 54 SC 7.4.1 P 30 L 26 # 58
 Dawe, Piers Agilent

Comment Type E Comment Status A E58

10^12

SuggestedRemedy

Use superscript, delete the ^

Proposed Response Response Status C

ACCEPT.

CI 54 SC 7.7 P 26 L 5 # 13
 Booth, Brad Intel

Comment Type E Comment Status A E13

Logic values should be in lowercase.

SuggestedRemedy

Change ""ONE"" to ""one"" and ""ZERO"" to ""zero"". Scan document for all other occurrences and change.

Proposed Response Response Status C

ACCEPT.

These are not logic values but rather variable values. This same section in Clause 53 uses all capitals for "ONE".

CI 54 SC 7.8 P 26 L 29 # 12
 Booth, Brad Intel

Comment Type E Comment Status R E12

Notes in 54.7.8 and 54.7.9 about ""disruptive to a network"" do not seem to add any value to specification. Although the information is correct, the management entity controlling these bits doesn't care about disrupting the network. There is a high probability that the controlling of these bits is due to diagnostics being performed on the network and therefore, disruption of the network is desired. This is a specification, not a user's manual.

SuggestedRemedy

Remove notes.

Proposed Response Response Status C

REJECT.

This was the resolution to Technical comment #381 against D4.0

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CI 54 SC 8 P 27 L 16 # 15

Booth, Brad Intel

Comment Type E Comment Status A E15

Heading should use lowercase.

SuggestedRemedy

Change to read ""Connector pin assignments"". Apply similar change to 54.9.3.2.

Proposed Response Response Status C

ACCEPT.

CI 54 SC 8 P 31 L 18 # 60

Dawe, Piers Agilent

Comment Type T Comment Status A TR31

Line 10 says TP1 and TP4 while this table says TP2/TP3.

SuggestedRemedy

Reconcile.

Proposed Response Response Status C

ACCEPT.

Table item is being removed from the response to comment #484 against D4.0.

CI 54 SC 8 P 31 L 31 # 31

Dove, Daniel HP ProCurve Networki

Comment Type TR Comment Status R TR31

Erroneous reference (TP2 and TP3)

SuggestedRemedy

Change ""(TP2 and TP3)"" to ""(TP1 and TP4)""

Proposed Response Response Status C

REJECT.

Table item is being removed from the response to comment #484 against D4.0.

CI 54 SC 8 P 31 L 31 # 61

Dawe, Piers Agilent

Comment Type TR Comment Status R TR61

""The impedance for the cable assembly, shall be recorded at half the length of the cable but not to exceed 1ns away from the MDI."" Problem 1: you can't put a ""shall"" under an informative table. Problem 2: ""shall be recorded"": like, keep records of every cable? For how many years? Problem 3: a cable more than a very few feet long will have its mid-point more than 1ns from either end. Which do you mean, mid-point or 1 ns from an end?

SuggestedRemedy

1. Move the impedance requirement to the normative section 54.8.1. 2. Something like ""cable impedance is defined at <position>"" or better, see below 3. 1 ns from each MDI or at the mid-point if cable is shorter than 2 ns? or better I think, don't take a TDR approach: just define the impedance looking into TP1 with TP4 terminated by the test fixture (and looking into TP4 with TP1 terminated ...).

Proposed Response Response Status C

REJECT.

Table item is being removed from the response to comment #484 against D4.0.

CI 54 SC 8.1 P 32 L 4 # 44

Baumer, Howard Broadcom Corp.

Comment Type E Comment Status A E27

Inconsistent units, 2GHz used whereas 2000MHz is more commonly used through out the document

SuggestedRemedy

Change 2GHz to 2000MHz. Check throughout the whole document and use 2000MHz.

Proposed Response Response Status C

ACCEPT.

See comment #27

CI 54 SC 8.3 P 33 L 18 # 32

Dove, Daniel HP ProCurve Networki

Comment Type T Comment Status A T32

Last sentence appears to have been cut-n-pasted into the wrong locations.

SuggestedRemedy

Remove sentence ""This includes..."" Other locations; P34-L6, P34-L25, P36-L8, P36-L27

Proposed Response Response Status C

ACCEPT.

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CI 54 SC 8.3 P 33 L 18 # 40
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A T32
 The last sentence in this line incorrectly states attenuation. This Sentence is not needed.
 SuggestedRemedy
 Delete sentence starting with ""This includes ...""
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.5.1 P 36 L 8 # 45
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A T32
 The last sentence in this line incorrectly states attenuation. This Sentence is not needed.
 SuggestedRemedy
 Delete sentence starting with ""This includes ...""
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.4.1 P 34 L 6 # 42
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A T32
 The last sentence in this line incorrectly states attenuation. This Sentence is not needed.
 SuggestedRemedy
 Delete sentence starting with ""This includes ...""
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.5.2 P 36 L 27 # 46
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A T32
 The last sentence in this line incorrectly states attenuation. This Sentence is not needed
 SuggestedRemedy
 Delete sentence starting with ""This includes ...""
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.4.2 P 34 L 25 # 43
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A T32
 The last sentence in this line incorrectly states attenuation. This Sentence is not needed.
 SuggestedRemedy
 Delete sentence starting with ""This includes ...""
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.5.2 P 36 L 39 # 35
 Baumer, Howard Broadcom Corp.
 Comment Type T Comment Status A T35
 NL(f)i units are not defined
 SuggestedRemedy
 modify NL(f)i definition as follows: (.. combination i, in dB)
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.4.2 P 34 L 37 # 34
 Baumer, Howard Broadcom Corp.
 Comment Type T Comment Status A T34
 Units for NL(f)i are not defined
 SuggestedRemedy
 modify NL(f)i definition as follows: (.. combination i, in dB)
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC 8.5.2 P 36 L 39 # 36
 Baumer, Howard Broadcom Corp.
 Comment Type T Comment Status A T36
 NL(f)i is stated as the magnitude of the ELFEXT loss, it should be power
 SuggestedRemedy
 Change ""magnitude"" to ""power""
 Proposed Response Response Status C
 ACCEPT.

P802.3ak Draft 4.1 Comments

CI 54 SC 8.6 P 37 L 31 # 24
 Frazier, Howard SWI

Comment Type TR Comment Status R TR24

It appears that the text makes a normative reference to IEC 61196-1. This publication does not appear in the list of references in 1.3

SuggestedRemedy

If this document is not already referenced in the base standard, add IEC 61196-1 to the list of reference in 1.3, including the date and full title.

Proposed Response Response Status C

REJECT.

IEC 61196-1 is listed in 1.3, Page 8, third paragraph from the bottom of IEEE Std 802.3-2002.

CI 54 SC 9.3.10 P 39 L 32 # 18
 Booth, Brad Intel

Comment Type E Comment Status A E30

Need to insert a space between 0.66 and normalized.

SuggestedRemedy

As per comment.

Proposed Response Response Status C

ACCEPT.

CI 54 SC 9.3.6 P 32 L 6 # 14
 Booth, Brad Intel

Comment Type E Comment Status A E14

Require a space between value and unit of measurement.

SuggestedRemedy

Insert space between ""150"" and ""mVpp"". Scan document for other occurrences and fix

Proposed Response Response Status C

ACCEPT.

CI 54 SC 9.3.8 P 33 L 10 # 16
 Booth, Brad Intel

Comment Type E Comment Status A E16

Equation format needs to be fixed.

SuggestedRemedy

It appears that the font is too large (12 pt instead of 10 pt), that the equation needs to be shrink-wrapped, and the equation numbering format should include a long dash (/=) instead of a period. Also apply to other equations.

Proposed Response Response Status C

ACCEPT.

CI 54 SC 9.3.9 P 35 L 8 # 17
 Booth, Brad Intel

Comment Type E Comment Status A E17

The word ""Annex"" is not required.

SuggestedRemedy

Delete.

Proposed Response Response Status C

ACCEPT.

CI 54 SC 9.4 P 40 L 3 # 19
 Booth, Brad Intel

Comment Type E Comment Status A E19

Need a space between Table and 54-12.

SuggestedRemedy

As per comment.

Proposed Response Response Status C

ACCEPT.

CI 54 SC 9.4.6 P 41 L 35 # 20
 Booth, Brad Intel

Comment Type E Comment Status A E20

Missing period at end of paragraph.

SuggestedRemedy

As per comment.

Proposed Response Response Status C

ACCEPT.

P802.3ak Draft 4.1 Comments

CI 54 SC Figure 54-4 P 26 L 16 # 54
 Dawe, Piers Agilent
 Comment Type E Comment Status A E54
 Inconsistent capitalisation of p and n here and in caption to Fig. 54-11.
 SuggestedRemedy
 Proposed Response Response Status C
 ACCEPT.

CI 54 SC Figure 54-6 P 28 L 25 # 59
 Dawe, Piers Agilent
 Comment Type E Comment Status A E28
 Numbers on axes are hard to read.
 SuggestedRemedy
 Make them bigger, removing the second and third decimal places.
 Proposed Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #28

CI 54 SC Figures 54-5 to 54-10 P L # 64
 Bradshaw, Peter BitBlitz Communicatio
 Comment Type E Comment Status R E64
 Many Figures still have Howard's nice 'grey box' surrounding them. In particular, this is true of Figures 54-5, 54-6, 54-7, 54-8, 54-9 & 54-10 This is inconsistent with similar figures in other 802.3 documents e.g. Figures 47-4, 47-5, 47-6, 52-4, 52-8 & 52-15. Although consistency may be the hobgoblin of small minds, that may be all that are available...
 SuggestedRemedy
 Remove the grey boxes (perhaps easier than expanding our minds!).
 Proposed Response Response Status C
 REJECT.

CI 54 SC Table 54-7 P 31 L 18 # 41
 Baumer, Howard Broadcom Corp.
 Comment Type E Comment Status A TR23
 Test points TP2/TP3 should be TP1/TP4.
 SuggestedRemedy
 Change TP2/TP3 to TP1/TP4.
 Proposed Response Response Status C
 ACCEPT IN PRINCIPLE.

Table item is being removed from the response to comment #484 against D4.0.