Cl **01** *SC* **1.4** *P* **16** *L* **13** # 14

Zimmerman, George — CME Consulting

Comment Type **TR** *Comment Status* **D** *Definitions*

Definition of pair-set is missing.

SuggestedRemedy

Insert definition of pair-set agreed in task force

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

… "pair-set" and its definition as referring to either of the two valid 4-wire connections as listed in 33.2.3.

EZ

Cl **33** *SC* **33.1** *P* **17** *L* **11** # 22

Rimboim, Pavlick — Microsemi

Comment Type **E** *Comment Status* **D** *Text Improvements*

missing "," after 25

"and the PHYs defined in Clause 25 Clause 40 and Clause 55. These entities allow devices to draw"

SuggestedRemedy

and the PHYs defined in Clause 25, Clause 40 and Clause 55. These entities allow

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.1** *P* **17** *L* **52** # 92

Dwelley, David — Linear Technology

Comment Type **E** *Comment Status* **D** *Type 4*

Type 4 should be referenced here - also 33.1.4.1 on page 20 line 42

SuggestedRemedy

Add an editor's note: "Type 4 operation requires cabling TBD"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **1.1** *P* **17** *L* **52** # 44

Schindler, Fred — Seen Simply

Comment Type **TR** *Comment Status* **D** *Type 4*

Type 4 is missing from c) Compatability.

SuggestedRemedy

See related comment for page 20 for a potential solution. i.e. reuse the suggested text.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment # 92 for suggested remedy.

EZ

Cl **33** *SC* **33.1.1** *P* **17** *L* **53** # 122

Beia, Christian — STMicroelectronics

Comment Type **T** *Comment Status* **D** *Type 4*

Type 4 operation is not listed.

SuggestedRemedy

Add this sentence at the end of the paragraph:
Type 4 operation requires TBD or better cabling and a TBD derating of the cabling maximum ambient operating temperature.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See Comment # 92 for suggest remedy.

EZ

Cl **33** *SC* **3.1.4** *P* **20** *L* **19** # 5

Zimmerman, George — CME Consulting

Comment Type **ER** *Comment Status* **D** *Definitions*

Term "per 2-pair" should be "per pair-set" as defined elsewhere, in note 1

SuggestedRemedy

Replace "2-pair" with "pair-set" in note 1

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.1.4** *P* **20** *L* **26** # 24

Rimboim, Pavlick — Microsemi

Comment Type **TR** *Comment Status* **D** *Channel*

"All four twisted pairs, connected from PSE PI to PD PI are required for Type 3 operation."

this ststaement is not true, for instance, you can have type 3 2P only, type 3 that uses the new MPS but uses only 30W 2P, with all the charecteristics meeting the 2P and type 3 requirements.

SuggestedRemedy

Type 3 system can use two twisted pair or 4 twisted pair

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

This text needs to be changed, but it should be stated that operation above class 4 power levels requires 4 twisted pairs. See comment #132 for suggested remedy.

EZ

Cl **33** *SC* **1.4** *P* **20** *L* **26** # 55

Schindler, Fred — Seen Simply

Comment Type **TR** *Comment Status* **D** *Channel*

Explanitory text missing on +Icable and -Icable.

SuggestedRemedy

replace "... operation." with "... operation--two pair-sets each having one carrying (+Icable) and one carrying (-Icable), from the perspective of the PI.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Suggested text is not clear.

Suggested Fix:
replace "… operation." with "… operation--two pair-sets each having one twisted pair carrying (+Icable) and one twisted pair carrying (-Icable), from the perspective of the PI.

EZ

Cl **33** *SC* **33.1.4** *P* **20** *L* **26** # 94

Dwelley, David — Linear Technology

Comment Type **T** *Comment Status* **D** *Type 4*

Type 4 is missing

SuggestedRemedy

"...Type 3 and Type 4 operation."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.1.4** *P* **20** *L* **26** # 132

Balasubramanian, Koussalya — Cisco Systems Inc,

Comment Type **TR** *Comment Status* **D** *Channel*

The draft says "All Four twisted pairs, connected from PSE PI to PD PI are required for Type 3 operation". Given Type 3 can operate in 15.4W and 30W levles, this implies 4-pairs is a MUST even for 15.4 and 30W operations.

SuggestedRemedy

Suggest to reword the statement to say "All four twisted pairs, connected from the PSE PI to PD PI are required to source greater than 30W of power at PSE PI".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

We should use class levels for power where appropriate.

Suggested fix:
"All four twisted pairs, connected from the PSE PI to PD PI are required to source greater than class 4 power at PSE PI".
EZ

Cl **33** *SC* **33.1.4** *P* **20** *L* **26** # 123

Beia, Christian STMicroelectronics

Comment Type **T** *Comment Status* **D** *Type 4*

The new sentence is also valid for Type 4 systems

SuggestedRemedy

Add Type 4 in the sentence to read:
All four twisted pairs, connected from PSE PI to PD PI are required for Type 3 and Type 4 operation.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Power level should be noted, see comment #132 for suggested remedy.

EZ

Cl **33** *SC* **33.1.4.1** *P* **20** *L* **35** # 15

Zimmerman, George CME Consulting

Comment Type **TR** *Comment Status* **D** *Channel*

Title change makes section generic, yet the text doesn't apply to types 1 & 4

SuggestedRemedy

Change section title to read "Type 2 and Type 3 Cabling requirements"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Type 4 needs to be added to this section.

Change title to read "Type 2, Type 3, and Type 4 Cabling requirements".

EZ

Cl **33** *SC* **33.1.4.1** *P* **20** *L* **46** # 6

Zimmerman, George CME Consulting

Comment Type **ER** *Comment Status* **D** *Channel*

TIA TR42.7 is updating TSB-184 to TSB-184A. Reference is or will be obsolete. (likely something similar has to happen for ISO)

SuggestedRemedy

Update reference to TSB-184A in anticipation or, add editors note to remind about updating.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.1.4.3** *P* **21** *L* **24** # 7

Zimmerman, George CME Consulting

Comment Type **ER** *Comment Status* **D** *Text Improvements*

NOTE is more properly an "Editors Note" - the text is not suitable for the final standard.

SuggestedRemedy

Make "NOTE" "Editor's note" (to be removed prior to publication).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See Comment # 64 for suggested remedy.

EZ

Cl **33** *SC* **33.1.4.3** *P* **21** *L* **24** # 64

Darshan, Yair Microsemi

Comment Type **ER** *Comment Status* **D** *Unbalance*

The following text is not accurate:
"NOTE - The pair-to-pair resistance unbalance values are preliminary working numbers used for.."

We need the channel pair to pair resistance unbalance.
The channel is the cabling and connectors per TIA definition for a Channel or alternatively the P2P resistance unbalance from the face of the first equipment to the face of the end equipment or equivalent term but it cannot be cable+cordage only.

SuggestedRemedy

Change to:
NOTE - The channel pair-to-pair resistance unbalance values are preliminary working numbers used for characterizing cabling while awaiting input from ISO/IEC SC25 (developing the second edition of ISO/IEC TR 29125) and TIA TR42 (developing a revision of TIA TSB-184). These groups have works in progress
that are expected to include channel pair-to-pair resistance unbalance specifications suitable for reference.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EDITIOR'S NOTE - The channel pair-to-pair resistance unbalance values are preliminary working numbers used for characterizing cabling while awaiting input from ISO/IEC SC25 (developing the second edition of ISO/IEC TR 29125) and TIA TR42 (developing a revision of TIA TSB-184). These groups have works in progress
that are expected to include channel pair-to-pair resistance unbalance specifications suitable for reference.

EZ

Cl **33** *SC* **33.1.4.2** *P* **21** *L* **5** # 95

Dwelley, David Linear Technology

Comment Type **E** *Comment Status* **D** *Text Improvements*

Long list of Types is awkward.

SuggestedRemedy

"Operation for all Types requires...". This text may move to an informative annex but the remedy should still work.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.2.2** *P* **22** *L* **19** # 81

Darshan, Yair Microsemi

Comment Type **TR** *Comment Status* **D** *10G*

In 33.2.2 Midspan PSE types, the text for 10G need to be included.

SuggestedRemedy

Add the following text after line 19:
10GBASE-T Midspan PSE:
A Midspan PSE that results in a link that can support 10BASE-T, 100BASE-TX, 1000BASET and 10GBaseT operation (see Figure TBD).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #17 for suggested remedy.
EZ

Cl **33** *SC* **33.2.2** *P* **22** *L* **9** # 17

Zimmerman, George CME Consulting

Comment Type **TR** *Comment Status* **D** *10G*

There are now several types of midpan PSE (the exact number depends on how you want to classify types, and isn't important - additionally the word "type" is defined and overused, so best to avoid)
We have added a 10GBASE-T midspan, which topologically, a 10GBASE-T Midspan PSE looks just like a 1000BASE-T midspan.
We have also added 4-pair powering (Type 3 and type 4?) midspans - whether these are Type 3 & Type 4 is

SuggestedRemedy

Change "two types" to "several variations", insert the following after 1000BASE-T Midspan PSE description:
"10GBASE-T Midspan PSE:
A Midspan PSE that results in a link that can support 10BASE-T, 100BASE-TX, 1000BASE-T and 10GBASE-T operation (see Figure 33-4)."
Modify title of Figure 33-4 to read "1000BASE-T or 10GBASE-T Midspan PSE location overview"

Then add the following Sentence:"Additionally, 1000BASE-T and 10GBASE-T Midspan PSEs" may be capable of 4-pair power (see Figure 33-5).

See contribution for figure 33-5 showing 4-pair PSE similar to Figure 33-4.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.2** *P* **24** *L* **46** # 58

Feldman, Shahar Microsemi

Comment Type **TR** *Comment Status* **D** *10G*

"Figure 33-2 - 1000BASE-T Endpoint PSE location Overview" Missing 10GBASE-T reference

SuggestedRemedy

after the text "...1000BASE-T" add "/10GBASE-T"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.2** *P* **26** *L* **53** # 82

Darshan, Yair Microsemi

Comment Type **TR** *Comment Status* **D** *10G*

Missing drawing for:
- 10/BASE-T/100BASE-TX Alternative A and Alternative B Midspan PSE

- 1000BASE-T/10GBaseT Alternative A and Alternative B Midspan PSE

SuggestedRemedy

Add Missing drawing for:
- 10/BASE-T/100BASE-TX Alternative A and Alternative B Midspan PSE
- 1000BASE-T/10GBaseT Alternative A and Alternative B Midspan PSE

See attached "darshan_D0.2_Midspan drawings" file.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.4.1** *P* **28** *L* **21** # 83

Darshan, Yair Microsemi

Comment Type **TR** *Comment Status* **D** *4-Pair Power*

The Backoff time Tdbo algorithm is not required for 4P systems.

SuggestedRemedy

Add the following text after line 25:
A Type 3 or Type 4 PSE that is delivering power over Altenative A and Alternative B pairs is not required to meet backoff algorithm.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Suggested fix:

"A Type 3 or Type 4 PSE that is delivering power over Altenative A and Alternative B is not required to meet backoff algorithm."
EZ

Cl **33** *SC* **33.2.4.4** *P* **31** *L* **29** # 9

Zimmerman, George CME Consulting

Comment Type **ER** *Comment Status* **D** *PSE State Diagram*

pse_dll_capable interacts with allowable variations in Table 33-3 - needs a reference here and more description.

SuggestedRemedy

Insert after See 33.6, "for a description of Data Link Layer functionality and Table 33-3 for the allowed permutations of this variable with PSE Type and class_num_events."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.2.4.4** *P* **34** *L* **28** # 1

Zimmerman, George — CME Consulting

Comment Type **E** *Comment Status* **D** *PSE State Diagram*

tinrush_timer, per table 33-11 is the timer to monitor the "per pair-set" inrush event. Although I can't find another tinrush, because it is mentioned prominently that it is a per pair-set inrush, it shoudl be mentioned here.

SuggestedRemedy

add "per pair-set" before "inrush event".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change definition to "A timer used to monitor the duration of the inrush event on a single pair-set".

EZ

Cl **33** *SC* **33.2.4.5** *P* **34** *L* **34** # 100

Dwelley, David — Linear Technology

Comment Type **T** *Comment Status* **D** *PSE State Diagram*

tme1_timer should apply to all Mark events except the last one (whichever that is)

SuggestedRemedy

change text to "A timer used to limit mark event times for all but the last mark event during Multiple Event classification..."

Also fix Table 33-10 on page 48: row 6 Parameter: "Mark event timing (except last Mark event)"; row 8 Parameter: "Last Mark event timing"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **2.4.5** *P* **34** *L* **8** # 38

Schindler, Fred — Seen Simply

Comment Type **TR** *Comment Status* **D** *PSE State Diagram*

The name TLCF_TIMER is not correct in some locations. One version needs to be selected.

SuggestedRemedy

Scan for TCLF_TIMER and replace with TLCF_TIMER. ex. see line 13.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.4.7** *P* **38** *L* **1** # 104

Dwelley, David — Linear Technology

Comment Type **E** *Comment Status* **D** *PSE State Diagram*

Typo in exit logic from state CLASS_EV1: should be pse_skips_multiclass per page 32 line 3

SuggestedRemedy

change "pse_skips_multievent" to "pse_skips_multiclass" (or change page 32 line 3)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **2.6** *P* **43** *L* **32** # 40

Schindler, Fred — Seen Simply

Comment Type **TR** *Comment Status* **D** *PSE Detection*

Most requirements are specified on a pair-set bases. This text covers both a pair-set and two pair-sets in parallel. The text is not clear.

SuggestedRemedy

Replace "... and RChan = RCh max or RChan = RCh max/2 for two-pair, four-pair systems respectively and ..." with
"... and RChan = RCh max when powering using two-pairs, or RChan = RCh max/2 when powering using four-pair systems ..."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

EZ

Cl **33** *SC* **33.2.6** *P* **43** *L* **33** # 2

Zimmerman, George — CME Consulting

Comment Type **E** *Comment Status* **D** *PSE Detection*

comma in place of "or" (precedent language is linked by an or

SuggestedRemedy

change "for two-pair, four-pair systems respectively" to read, "for two-pair or four-pair systems respectively".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #40 for suggested remedy.
EZ

Cl **33** *SC* **33.2.6** *P* **44** *L* **15** # 32

Lukacs, Miklos — Silicon Labs

Comment Type **E** *Comment Status* **D** *PSE Classification*

This comment address Table 33-7.

The number is the brackets at Classes 5,6 and 7 should be described

SuggestedRemedy

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

We can remove the class signatures in the brackets, that was added to the working document, but is no longer needed.

Suggested Fix:

Remove brackets and numbers inside of them.
EZ

Cl **33** *SC* **33.2.6** *P* **44** *L* **19** # 61

Darshan, Yair — Microsemi

Comment Type **TR** *Comment Status* **D** *PSE Classification*

The 90W supposed to be TBD.
We didn't agree yet of Type 4 maximum power.

SuggestedRemedy

Change the 90W or Ptype to TBD.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #54 on same topic.

EZ

Cl **33** *SC* **2.6** *P* **44** *L* **19** # 54

Schindler, Fred — Seen Simply

Comment Type **T** *Comment Status* **D** *PSE Classification*

The value 90W and probably 60W have not been established yet.

SuggestedRemedy

Replace at least 90W value with TBD.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add (TBD) after 90W in class 7 minimum power output, so that we have some idea what the number will be.

EZ

Cl **33** *SC* **33.2.6** *P* **45** *L* **28** # 108

Dwelley, David — Linear Technology

Comment Type **T** *Comment Status* **D** *PSE Classification*

Any Type PSE that opts to power-limit a port to 13W or less (due to power management or any other reason) should be allowed to use 1-event classification.

SuggestedRemedy

Change Note 1 to read: "Any Type PSE that is limited..." (or "is operating...")
Modify Table 33-8 col 4 row 4: change "No ^1" to "Note 1"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Suggested text: Any PSE that is limited to 15.4W shall be limited to 1-Event Physical Layer classification and does not require DLL capability.
EZ

Cl **33** *SC* **33.2.6** *P* **45** *L* **29** # 133

Balasubramanian, Koussalya Cisco Systems Inc,

Comment Type **T** *Comment Status* **D** *PSE Classification*

Table 33-8 - The note below the table says "A Type 3 PSE that is limited to Type 1 power levels ....." - It will be more clear to call out the power level than associate it with a Type.

SuggestedRemedy

Suggest note to be changed to "A Type 3 PSE that is limited to 15.4W or less ....."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #108 for suggested remedy.
EZ

Cl **33** *SC* **33.2.6** *P* **45** *L* **34** # 33

Lukacs, Miklos Silicon Labs

Comment Type **E** *Comment Status* **D** *PSE Classification*

The new classes also should be mentioned

SuggestedRemedy

change the text:
"Valid classification results are Classes 0, 1, 2, 3, and 4, as..."
to
"Valid classification results are Classes from 0 to 7, as..."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.6.2** *P* **46** *L* **20** # 31

Lukacs, Miklos Silicon Labs

Comment Type **E** *Comment Status* **D** *Text Improvements*

The tile is about 2-event classification

SuggestedRemedy

change the text:
"PSE 2-Event Physical Layer classification"
to:
"PSE Multiple-Event Physical Layer classification"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #30 for suggested remedy.
EZ

Cl **33** *SC* **33.2.6.2** *P* **46** *L* **20** # 30

Rimboim, Pavlick Microsemi

Comment Type **ER** *Comment Status* **D** *Text Improvements*

"33.2.6.2 PSE 2-Event Physical Layer classification"
title is misleading, it is discussing multi event but the title is only 2 event

SuggestedRemedy

"33.2.6.2 PSE Multiple-Event Physical Layer classification"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.6.2** *P* **46** *L* **24** # 109

Dwelley, David Linear Technology

Comment Type **T** *Comment Status* **D** *PSE Classification*

1-EVENT_CLASS and CLASS_EV1_LCF are missing from the list of states

SuggestedRemedy

Add 1-EVENT_CLASS and CLASS_EV1_LCF to the list of states, and add a descriptive paragraph (copied from CLASS_EV1) for 1-EVENT_CLASS

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add CLASS_EV1_LCF to the list of states. 1-EVENT_CLASS does not belong in the Multiple-Event section.
EZ

Cl **33** *SC* **33.2.6.2** *P* **46** *L* **34** # 27

Rimboim, Pavlick Microsemi

Comment Type **E** *Comment Status* **D** *Text Improvements*

"based on the observed current according to Table 33–9a."
cant find table 33-9a, is the "a" a typo? or am i missing some table?

SuggestedRemedy

"based on the observed current according to Table 33–9."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The reference should be to Table 33-TBDA1.

Suggested Fix:

"based on the observed current according to Table 33–TBDA1."
EZ

Cl **33** *SC* **33.2.6.2** *P* **46** *L* **38** # 110

Dwelley, David Linear Technology

Comment Type **E** *Comment Status* **D** *Text Improvements*

This section is unnecessarily verbose

SuggestedRemedy

Combine the MARK_EV1-4 and CLASS_EV3-5 sections:
"When a PSE is in the state MARK_EV1, MARK_EV2, MARK_EV3, or MARK_EV4, the PSE shall..."
"When a PSE is in the state CLASS_EV3, CLASS_EV4, or CLASS_EV5, the PSE shall..."
If Tcle3 remains the same as Tcle2, CLASS_EV2 can also be in the combined sentence.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.2.6.2** *P* **46** *L* **53** # 28

Rimboim, Pavlick Microsemi

Comment Type **E** *Comment Status* **D** *Text Improvements*

"the observed current according to Table 33–9a."
same comment, cant find table 33-9a, is the "a" a typo?

SuggestedRemedy

"the observed current according to Table 33–9."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The reference should be to Table 33-TBDA1.

Suggested Fix:

"the observed current according to Table 33–TBDA1."
EZ

Cl **33** *SC* **33.2.7.1** *P* **49** *L* **16** # 26

Rimboim, Pavlick Microsemi

Comment Type **E** *Comment Status* **D** *PSE Classification*

table 33-10
1st class event timing in this line is defined only for type 1 or 2

SuggestedRemedy

need to add in the additional information
"only applies to type 1 or type 2 PSE"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Suggested Fix:

"only applies to Type 1 or Type 2 PSEs"
EZ

Cl **33** *SC* **2.7** *P* **51** *L* **18** # 41

Schindler, Fred — Seen Simply

Comment Type **TR** *Comment Status* **D** *Table 33-11*

Type-4 PSE will support the new DC MPS.

SuggestedRemedy

Add 4 to item 17, PSE Type column.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add Type 4 to the Type 3 line in Item 17.

Type 4 must also be added to the Type 3 line item 18 and 19.
EZ

Cl **33** *SC* **33.2.7.7** *P* **55** *L* **27** # 63

Darshan, Yair — Microsemi

Comment Type **ER** *Comment Status* **D** *Text Improvements*

In drawing 33-14, at the 8.2msec point, there are vertical thick black marks on the numbers etc.

SuggestedRemedy

Remove these marks.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Remove any marks in the drawing, I didn't see any.
EZ

Cl **33** *SC* **33.3** *P* **59** *L* **48** # 131

Beia, Christian — STMicroelectronics

Comment Type **TR** *Comment Status* **D** *Text Improvements*

As specified in clause 33.1.4 a PoE system is defined from a single PSE o a single PD. In Clause 33.2 the PSE is explicitly defined as an equipment that provides the power to a single PD.
Allowing 4-pair power it is now also needed to specify the PD as a device requesting power from a single PSE.

SuggestedRemedy

Add the words: "from a single PSE" to the first sencence in clause 33.3, to read:
A PD is the portion of a device that is either drawing power or requesting power from a single PSE by participating in the PD detection algorithm.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **3.1** *P* **60** *L* **11** # 47

Schindler, Fred — Seen Simply

Comment Type **ER** *Comment Status* **D** *Text Improvements*

Remove extra .

SuggestedRemedy

Remove extra .

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **3.2** *P* **60** *L* **47** # 48

Schindler, Fred — Seen Simply

Comment Type **ER** *Comment Status* **D** *Text Improvements*

Replace "... Type 1 Type 2, ..."

SuggestedRemedy

with "... Type 1, Type 2, ..."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **3.2** *P* **61** *L* **1** # 49

Schindler, Fred — Seen Simply

Comment Type **ER** *Comment Status* **D** *Text Improvements*

Improve text by,
replacing "Type 3 PDs operating with a max power draw corresponding to Class 3 or less implement ..."

SuggestedRemedy

with "Type 3 PDs operating up to a max power draw corresponding to Class 3 implement ..."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.3.3.5** *P* **65** *L* **5** # 112

Dwelley, David — Linear Technology

Comment Type **E** *Comment Status* **D** *PD State Diagram*

Typo in exit arc from IDLE

SuggestedRemedy

Change mid_power_received to mdi_power_received

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.3.3.5** *P* **66** *L* **8** # 114

Dwelley, David — Linear Technology

Comment Type **T** *Comment Status* **D** *PD State Diagram*

Variable present_class_sig in state MDI_POWER_1 doesn't exist anymore

SuggestedRemedy

Change to present_class_sig_A <= FALSE. Add variable present_class_sig_B <= FALSE.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.3.5.2** *P* **69** *L* **46** # 115

Dwelley, David — Linear Technology

Comment Type **T** *Comment Status* **D** *PD Classification*

State names are incorrect for PD

SuggestedRemedy

Change CLASS_EVx to DO_CLASS_EVENTx

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **3.5.2** *P* **70** *L* **26** # 53

Schindler, Fred — Seen Simply

Comment Type **ER** *Comment Status* **D** *Text Improvements*

Improve the text, "... for the level defined in its pse_power_level state variable." be replcing it with

SuggestedRemedy

"... for the level defined in the pse_power_level state variable."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.3.5** *P* **71** *L* **5** # 66

Darshan, Yair — Microsemi

Comment Type **T** *Comment Status* **D** *PD Classification*

The DO_CLASS_EVENT_6 is missing from line 5 per the current state diagram that is required to have a defined state after maximum class events per PSE type was used.: VMark_th is the PI voltage threshold at which the PD implementing 2Multiple-Event class signature transitions into and out of the DO_CLASS_EVENT1, or DO_CLASS_EVENT2, DO_CLASS_EVENT3, DO_CLASS_EVENT4 or DO_CLASS_EVENT5 states as shown in Figure 33–16.

SuggestedRemedy

Change to:
VMark_th is the PI voltage threshold at which the PD implementing 2Multiple-Event class signature transitions into and out of the DO_CLASS_EVENT1, or DO_CLASS_EVENT2, DO_CLASS_EVENT3, DO_CLASS_EVENT4,or DO_CLASS_EVENT5 or DO_CLASS_EVENT6 states as shown in Figure 33–16.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.3.5.2.1** *P* **71** *L* **5** # 117

Dwelley, David — Linear Technology

Comment Type **T** *Comment Status* **D** *PD Classification*

State DO_CLASS_EVENT_6 is missing from the list

SuggestedRemedy

Add state DO_CLASS_EVENT_6 to the list, or refer to all as the "DO_CLASS_EVENT states" or the "DO_CLASS_EVENT_x states".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Accepted adding class event 6 as per comment from Yair. See comment #66.
EZ

Cl **33** *SC* **33.3.7.6** *P* **76** *L* **54** # 127

Beia, Christian — STMicroelectronics

Comment Type **T** *Comment Status* **D** *PD Power*

Type 3 and Type 4 PDs behavior during transient at PSE PI has to be described

SuggestedRemedy

Modify the sentence:
"A Type 2 PD shall meet both of the following:
a) The PD input current spike shall not exceed 2.5 A and shall settle below the PD upperbound template (see Figure 33–18) within 4 ms. During this test, the PD PI voltage is driven from 50 V to 52.5 V at greater than 3.5 V/µs, a source impedance of 1.5 ?, and a source that supports a current greater than 2.5 A."

To read:
"Type 2,3 and 4 PDs shall meet both of the following:
a) The PD input current spike shall not exceed 2.5 A per pair-set and shall settle below the PD upperbound template (see Figure 33–18) within 4 ms. During this test, the PD PI voltage is driven from 50 V to 52.5 V at greater than 3.5 V/µs, a source impedance of 1.5 ?, and a source that supports a current greater than 2.5 A."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.3.7.6** *P* **77** *L* **10** # 128

Beia, Christian — STMicroelectronics

Comment Type **T** *Comment Status* **D** *PD Power*

Type 3 and Type 4 PDs behavior during transient at PSE PI has to be described

SuggestedRemedy

Modify the sentence:
The current limit at the MDI (MDI ILIM) is defined by Equation (33–14)

To read:
the current limit per pair-set at the MDI (MDI ILIM-2p) is defined by Equation (33–14)

Then modify the Equation 33-14 using the definition MDI ILIM_2p

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ

Cl **33** *SC* **33.4** *P* **78** *L* **49** # 62

Darshan, Yair — Microsemi

Comment Type **TR** *Comment Status* **D** *10G*

Missing 10GBaseT.
Change the text:
The requirements of 33.4 are consistent with the requirements of the 10BASE-T MAU and the 100BASETX and 1000BASE-T PHYs.

SuggestedRemedy

Change the text to:
The requirements of 33.4 are consistent with the requirements of the 10BASE-T MAU and the 100BASETX, and 1000BASE-T and 10GBaseT PHYs.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
EZ