				-				
C/ 1 SC 1.4.254 Van den Eeckhout, Koenra	P 20 ad ON Semicono	L 20 ductor	# 1	<i>Cl</i> 1 Van den Ee	SC 1.4.426 eckhout, Koenra	P 21 ad ON Semicor	L 7 nductor	# 4
Comment Type E 'link section' definition s	Comment Status D still has underline		Editorial	Comment ⁻ 'V_PSI	<i>Type</i> E E' definition still I	Comment Status D		Editorial
SuggestedRemedy remove underline				Suggested remove	<i>Remedy</i> e underline/strike	ethrough		
Proposed Response PROPOSED REJECT.	Response Status W			Proposed I PROP	Response OSED REJECT.	Response Status W		
Only clause 33 has ma	rkups removed. Other claus	es still are diffs	to original clauses.	Only c	lause 33 has ma	rkups removed. Other clau	ises still are diffs	to original clauses.
C/ 1 SC 14.415 Van den Eeckhout, Koenra	P 20 ad ON Semicond	L 31 ductor	# 2	C/ 25 Van den Ee	SC 25.4.5 eckhout, Koenra	P 24 ad ON Semicor	L 1 nductor	# 5
Comment Type E 'Type 1 PD' definition s	Comment Status D till has underline/strikethroug	Jh	Editorial	Comment ⁻ Worst	<i>Type</i> E case droop of tr	Comment Status D ansformer' paragraph still h	as underline	Editoria
SuggestedRemedy remove underline/strike	ethrough			Suggested remove	<i>Remedy</i> e underline			
Proposed Response PROPOSED REJECT.	Response Status W			Proposed I PROP	Response OSED REJECT.	Response Status W		
Only clause 33 has ma	rkups removed. Other claus	es still are diffs	to original clauses.	Only c	lause 33 has ma	rkups removed. Other clau	ises still are diffs	to original clauses.
C/ 1 SC 1.4.425 Van den Eeckhout, Koenra	P 21 ad ON Semicond	L 3 ductor	# 3	<i>Cl</i> 25 Van den Ee	SC 25.4.7 eckhout, Koenra	P 25 ad ON Semicor	L 44 nductor	# 6
Comment Type E 'V_PD' definition still ha	Comment Status D as underline/strikethrough		Editorial	Comment [*] Receiv	<i>Type</i> E ver' paragraph st	Comment Status D		Editorial
SuggestedRemedy remove underline/strike	ethrough			Suggested remove	<i>Remedy</i> e underline			
Proposed Response PROPOSED REJECT.	Response Status W			Proposed I PROP	Response OSED REJECT.	Response Status W		
Only clause 33 has ma	rkups removed. Other claus	es still are diffs	to original clauses.	Only cl	lause 33 has ma	rkups removed. Other clau	ises still are diffs	to original clauses.

C/ 30 Van den Ee	SC 30.9.1.1.4 ckhout, Koenraad	P 29 ON Semicond	L 10 uctor	# 7	C/ 30 SC 30.12.2.1.18b P 37 L 43 # 10 Van den Eeckhout, Koenraad ON Semiconductor	
Comment T	ype E owerPairs' parag	Comment Status D		Editorial	Comment Type E Comment Status D Edu Bad reference to table 79-6c	litorial
SuggestedF remove	<i>Remedy</i> underline				SuggestedRemedy Change reference to table 79-6f	
Proposed R PROPC	esponse DSED REJECT.	Response Status W			Proposed Response Response Status W PROPOSED ACCEPT.	
Only cla	ause 33 has mark	ups removed. Other clause	es still are diffs	to original clauses.	Cl 30 SC 30.12.2.1.18c P 38 L 2 # 11 Van den Feckhout, Koenraad ON Semiconductor	
C/ 30 Van den Ee Comment T	SC 30.9.1.1.6 ckhout, Koenraac ype E	P 30 ON Semicond Comment Status D	L 9 uctor	# <u>8</u> Editorial	Comment Type E Comment Status D Ed. Bad reference to table 79-6c	litorial
'aPSEP	owerClassificatio	n' paragraph still has under	line		SuggestedRemedy Change reference to table 79-6f	
SuggestedF remove Proposed R	Remedy underline Response	Pasnonsa Status W			Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	
PROPC	SED REJECT.				This is actually a bad reference to table 79-6d and should be table 79-6g	
Only cla	ause 33 has mark	ups removed. Other clause	es still are diffs	to original clauses.	Replace "79-6d" with "79-6g"	
C/ 30 Van den Ee	SC 30.12.2.1.1 ckhout, Koenraad	8a P 37 D ON Semicond	L 31 uctor	# 9	C/ 30 SC 30.12.2.1.18d P 38 L 14 # 12 Van den Eeckhout, Koenraad ON Semiconductor	
Comment T Bad refe	ype E erence to table 79	Comment Status D 9-6c		Editorial	Comment Type E Comment Status D Edu Bad reference to table 79-6c	litorial
SuggestedF Change	Remedy reference to tabl	e 79-6f			SuggestedRemedy Change reference to table 79-6f	
Proposed R PROPC	esponse DSED ACCEPT.	Response Status W			Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	
					This is actually a bad reference to table 79-6d and should be table 79-6g	
					Replace "79-6d" with "79-6g"	

C/ 30 SC 30.12.3.1.14 P 40 L 2 # 13 Van den Eeckhout, Koenraad ON Semiconductor Image: Compare the second s	C/ 33SC 33.2.8.10P 113L 23Van den Eeckhout, KoenraadON Semiconductor	# 15
Comment Type T Comment Status X Management 'aLldpXdot3RemPowerType' only distinguishes between Type 1 and 2 PSE/PD. Management Management	Comment Type E Comment Status D Bad reference to equation 33-3	Editorial
SuggestedRemedy Bits should be added for Type 3/4	SuggestedRemedy Change reference to equation 33-2	
Proposed Response Response Status W TFTD	Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.	
I believe as this was an existing field we can't update it. Correct?	OBE by 177	
C/ 33SC 33.2.6.4P 92L 1# 14Van den Eeckhout, KoenraadON Semiconductor	C/ 33SC 33.2.8.10P 113L 26Van den Eeckhout, KoenraadON Semiconductor	# 16
Comment TypeTComment StatusXPSE DetectionIn Table 33-9 'Valid PD detection signature electrical characteristics', the word 'tolerance' was removed from 'signature voltage offset tolerance' and 'signature offset current tolerance'. This however slightly changes the meaning of the parameter, as 'offset tolerance' implies it can deviate up or down from the expected value by the given value, while 'offset' means the sign of the min/max values must be respected. If voltage offset is positive, the current offset will be negative and vice versa. This was changed from D1.1 to D1.2, possibly related to comments #3 and #179 on D1.1, but these comments only deal with the accompaning text of this table.	Comment TypeEComment StatusDBad reference to equation 33-4SuggestedRemedy Change reference to equation 33-3Proposed ResponseResponse StatusWPROPOSED ACCEPT.	Editorial
SuggestedRemedy Either: * Return the word 'tolerance' * Allow for negative voltage and current offset values * Remove the minimum current offset and minimum voltage offset from the table		

* Add absolute value signs: |I_os|, |V_os|

Proposed Response Response Status W

TFTD

Cl 33 SC 33.2.9 P117 L4 # 17	Cl 33 SC 33.3.5.2 P 128 L 47 # 19
Van den Eeckhout, Koenraad ON Semiconductor	Van den Eeckhout, Koenraad ON Semiconductor
Comment Type T Comment Status D PSE MPS Paragraphs have been added to this section saying "A Type 1 and Type 2 PSE shall not remove power from the port PI when IPort is greater than or equal to IHold max continuously for at least TMPS every TMPS + TMPDO, as defined in Table 33–17." and "A Type 3 or Type 4 PSE, when connected to a single-signature PD, shall not remove power from the PI when DC MPS has been present within the TMPS + TMPDO window.". There have been added according in D1 6 to betowart 01, 0116, baceling, v6 pdf	Comment Type T Comment Status D PD Class "Until successful Multiple-Event Physical Layer classification or Data Link Layer classification has completed, a Type 2, Type 3 and Type 4 PD's pse_power_level state variable is set to '1'. Type 2, Type 3 and Type 4 PDs shall conform to the electrical requirements as defined by Table 33–28 for the level defined in the pse_power_level state variable."
There are many situations where the PSE shall need to remove power when Iport is above Ihold (including when Iport is WAY above Ihold). These sentence do not add anything to the standard.	Multiple-Event Physical Layer classification has not yet been completed. SuggestedRemedy Remove this paragraph, the state diagram explains sufficiently when pse_power_level has to be set.
SuggestedRemedy Remove these sentences. Proposed Response Response Status W	Proposed Response Response Status W PROPOSED ACCEPT.
PROPOSED REJECT. TFTD. This idea is from the existing standard. It is meant to point out that you should not remove power if the PD is meeting its duty cycle requirement. While the shall does seem to conflict with the TLIM shall (for example), it has never been interpreted that way before.	Cl 33 SC 33.3.7.3 P 134 L 11 # 20 Van den Eeckhout, Koenraad ON Semiconductor Comment Type T Comment Status D PD Inrus "Inrush current is drawn during the startup period beginning with the application of input vittage at the PL compliant with Vacut PD 2P requirements as defined in Table 22, 29, and
C/ 33 SC 33.3.3.6 P 123 L 1 # 18 Van den Eeckhout, Koenraad ON Semiconductor Image: Constraint of the second secon	ending when CPort has reached a steady state and is charged to 99% of its final value."
Comment Type T Comment Status X Pres: Yseboodt4 When the PD experiences a pd_reset that lasts a time t < T_MPDO_PD, the PSE will not remove power, and the PD state diagram will continue from OFFLINE -> DO_DETECTION -> DO_CLASS_EVENT1 -> MDI_POWER1 and will end up with pse_power_level = 1 Suggested Barnedy	The word 'value' here is ambiguous: it can refer either to capacitor charge (voltage) or energy (voltage^2). SuggestedRemedy replace 'value' by 'charge'
Add a requirement 'V < V_mark_th' to the transition OFFLINE -> DO_DETECTION Proposed Response Response Status WED	Proposed Response Response Status W PROPOSED REJECT.
TFTD	

PD Class

PD Inrush

C/ 33 SC 33.3.8 Van den Eeckhout, Koenra	P 141 ad ON Semicond	L 10 luctor	# 21	C/ 33 SC 33.4.9.1.1 P 152 L 34 # 24 Van den Eeckhout, Koenraad ON Semiconductor
Comment Type E Period at the end of the	Comment Status D e line still has underline		Editorial	Comment Type E Comment Status D Editori 'in dB' still has underline
SuggestedRemedy remove underline				SuggestedRemedy Remove underline
Proposed Response PROPOSED ACCEPT	Response Status W			Proposed Response Response Status W PROPOSED ACCEPT.
Cl 33 SC 33.3.8 Van den Eeckhout, Koenra	P 142 aad ON Semicond	L 9 luctor	# 22	C/ 33 SC 33.4.9.1.2 P 153 L 12 # 25 Van den Eeckhout, Koenraad ON Semiconductor
Comment Type E Conditions in this table avoid confusion with th depending on the PSE SuggestedRemedy Change 'P_class_PD - Change 'P_class_PD -	Comment Status X e refer to P_class_PD, which he requested class, and bette type, it would be better imple <= PD Class 4 power limit' to 'p > PD Class 4 power limit' to 'p	is derived from r demonstrate t ement the sugge 'pse_power_leve bse_power_leve	PD MPS the pse_power_level. To hat I_PORT_MPS is ested remedy. rel <= 2'. I > 2'.	Comment Type E Comment Status D Editoria 'in dB' still has underline SuggestedRemedy Image: Common Status Image:
Proposed Response TFTD	Response Status W			Cl 33 SC 33.5.1.1 P 156 L 39 # 26 Van den Eeckhout, Koenraad ON Semiconductor
C/ 33 SC 33.4.1.1. Van den Eeckhout, Koenra	2 P144 ad ON Semicond	L 2 Juctor	# 23	Comment TypeEComment StatusDEditoriTable 33-34: 'Reserved' still has strikeout
Comment Type E 'IEC 62368-1' paragrap	Comment Status D oh still has underline		Editorial	SuggestedRemedy remove strikeout
SuggestedRemedy remove underline				Proposed Response Response Status W PROPOSED ACCEPT.
Proposed Response PROPOSED ACCEPT	Response Status W			

C/ 79SC 79.3P 194L 16Van den Eeckhout, KoenraadON Semiconductor	# 27	Cl 79 SC 79.4.2 P 208 Van den Eeckhout, Koenraad ON Semiconder	L 33 # 30
Comment Type E Comment Status D In table 79-1 'Power Via MDI Measurement' still has underline	Editorial	Comment Type E Comment Status D Table 79-8 still has underlines	Editorial
SuggestedRemedy remove underline		SuggestedRemedy remove underlines	
Proposed Response Response Status W PROPOSED REJECT.		Proposed Response Response Status W PROPOSED REJECT.	
Only markups in clause 33 should be removed.		Only markups in clause 33 should be removed.	
C/ 79 SC 79.3.2.4.1 P 197 L 32 Van den Eeckhout, Koenraad ON Semiconductor	# 28	C/ 79 SC 79.4.2 P 210 Van den Eeckhout, Koenraad ON Semiconder	L 30 # 31
Comment Type E Comment Status D Paragraph 'Power Type' still has underline	Editorial	Comment Type E Comment Status D Table 79-9 still has underlines	Editorial
SuggestedRemedy remove underline		SuggestedRemedy remove underlines	
Proposed Response Response Status W PROPOSED REJECT.		Proposed Response Response Status W PROPOSED REJECT.	
Only markups in clause 33 should be removed.		Only markups in clause 33 should be removed.	
C/ 79 SC 79.3.2.6a.2 P 199 L 37 Van den Eeckhout, Koenraad ON Semiconductor	# 29	CI 33 SC 33.3.3.3 P 120 Van den Eeckhout, Koenraad ON Semiconder	L 18 # 32
Comment Type E Comment Status D paragraph 'PSE power classes' still has strikethrough	Editorial	Comment Type T Comment Status X The PD state diagram does not track if short MPS is	Pres: Yseboodt4 allowed.
SuggestedRemedy		SuggestedRemedy	
remove strikethrough Proposed Response Response Status W PROPOSED REJECT.		Add to 33.3.3.3: pse_short_mps_allowed: A control variable that indic short MPS. Values: FALSE: The PSE does not support short MPS. The I	ates to the PD if the PSE supports
Only markups in clause 33 should be removed.		Add to Figure 33-31:	
		 - in state DO_DETECTION: pse_short_mps_allowed - in state DO_CLASS_EVENT_AUTO: pse_short_mp 	<= FALSE ps_allowed <= TRUE
		Proposed Response Response Status W WFP	
		TFTD	
TYPE: TR/technical required ER/editorial required GR/general required T	/technical E/editorial G/g	eneral Comme	nt ID 32 Page 6 of 83

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Cl 33 Bennett K	SC 33.3.5.3	P 130 Sifos Techno	L 5 Iogies In	# 33	C/ 33 Bennett	SC 33.3.5. 1	l F Sife	9 127 Dis Techno	L 10	# 35
Comment Pautoo	Type E Comi class is defined as a mea	ment Status D sured value at the F	PSE. There is cu	Editoria rrently no variable in the	I Commen The t	t Type ER ext states:	Comment Statu	is D	ologioo,	Editorial
The re	medy suggests PAutocla	ss_PD, which is cor	nsistent with PC	ass/PClass_PD	"Sinc 3, an highe	e Single-Event o d Type 4 PDs op r, respond to Sir	classification is a sub perating with a maxir ngle-Event classifica	oset of Mu num powe tion with a	ultiple-Event clas er draw correspo a Class 4 signati	sification, Type 2, Type nding to Class 4 or ure."
Suggested Add th After p PAutod	<i>Remedy</i> e underlined text to the s ower up, a PD implemen class_PD, subject to the	tatement below: ting Autoclass shall requirements on PC	draw its highest lass_PD in 33.3	required power, .7.2,	The c class <i>Suggeste</i> Rem	underlined phras ification with" ne ed <i>Remedy</i> ove the underline	e is confusing and u eds a minor fix. ed text and Change i	nnecessa t to:	ary. Also, "respo	nd to single event
Proposed PROP	Response Response Response	onse Status W			"Type Class 	e 2, Type 3, and s 4 or higher, res <i>I Response</i>	Type 4 PDs operating spond to a Single-Eve Response Statu	ng with a r ent classi s W	maximum power ification with a Cl	draw corresponding to ass 4 signature"
Cl 33	SC 33.2.5.4	P 56	L 15	# 34	PRO	POSED ACCEP	ΥТ.			
Comment The fo Event "Class "Class ambigu Suggested Chang Pg 56 30/33/ Table Table pg 114 Proposed I PROP	Type ER Common Network lowing two terms are used counts: Event(s)" (approx. 90 insidication Event(s)" (approximation Event(s)" (approximation Events" should be used yous and/or incorrect bear and/or	ment Status D ed inconsistently who stances) x. 30 instances) when addressing Cl ause it encompasse of "Classification Ev In 40, pg 67 ln 9, pg In 27, pg 93 ln 23, g column 2, I Column 2, 21 ln 25, pg 122 ln onse Status W	en referencing C ass Events. "Cl es both Class Ev vents" to "Class 72 ln 34/37/40/ 38, pg 133 ln 19	Editoria Class-Events and Class- assification Events" is vents and Mark Events. Events": 43/46/50, pg 73 ln	C/ 33 Bennett, Commen This PAut The v powe Suggeste Char PAut Proposed PRO	SC 33.2.7.3 Ken t Type T section states: oclass is the pow word "Connected r value at the PS odRemedy ge to the followi oclass is the pow <i>I Response</i> POSED ACCEP	B F Sife Comment Statu wer consumption of a d" is ambiguous. It s SE end. ng: wer provided by the F Response Statu T.	2 99 ps Techno (s D a connect hould be PSE meas s W	<i>L</i> 42 blogies, In red PD measured clear that the PA sured throughour	# <u>36</u> <i>Autoclass</i> d throughout the period Autoclass value is the

C/ 33 SC 33.2.1 P 47 L 18 # 37 Bennett Ken Sifes Technologies In	C/ 33	SC on Peter	33.2.7	P 93 Sifes Tech	L 29	# 39
Commont Tuno TD Commont Status D			F	Commont Status	009163	
Table 33-2 shows "Single-Event" for Type 3 with a footnote to Table 33-15 Row 11,	, 12. T	ne phrase;	E			Editorial
This hasn't been updated to be consistent with the editor's note on page 118, line 4 Editor's Note: Classification section to be updated to move all Type 3 and Type 4 P multiple-event (Mark is considered an event).	I3: P P PSEs to (s	hysical Lay hysical Lay ee 33.2.7.2	er classific er classific 2).	cation encompasses two mo cation (see 33.2.7.1) and M	ethods, known as ultiple-Event Phy	s Single-Event vsical Layer classification
SuggestedRemedy	S	ems out of	r place as	It has nothing to do with PC	lass computation	1.
Change the entry for Type-3 to "Multiple Event".	Sugge	estedReme	dy		- 40 is D4 0	that a sub-sub-that sub-sub-
Either delete the footnote, or change it to: "Multiple event in this instance refers to one Class Event and one Mark Event. <i>Proposed Response Response Status</i> W PROPOSED ACCEPT IN PRINCIPLE.	T ([S cl	nere are two DLL) classifi ingle-Event assification	to forms of ication. Pl Physical (see 33.2	classification: Physical Lay hysical Layer classification Layer classification (see 33 7.2).	ver classification encompasses tw 5.2.7.1) and Multi	and Data Link Layer vo methods, known as ple-Event Physical Layer
Change the entry for Type-3 to "Multiple Event".	Propo P	sed Respo ROPOSED	nse ACCEPT	Response Status W		
Delete footnote 2.						
C/ 33 SC 33.3.7.4 P 135 L 9 # 38 Bennett, Ken Sifos Technologies, In	C/ 33 Johns	SC on,Peter	33.2.7	P 93 Sifos Techr	L 26 nologies	# 40
Comment Type TR Comment Status D F The text: "These equations may be used to calculate peak operating power for PPeak_PD or PPeak_PD-2P values obtained via Data Link Layer classification or Autoclass." does not describe how to use the equations. PClass_PD must be replaced with the Autoclass power. SuggestedRemedy Change the sentence as follows: These equations may be used to calculate Ppeak_PD or Ppeak_PD-2P for Data Linc Classification and for Autoclass by substituting PClass_PD with PDMaxPowerValue PAutoclass_PD respectively.	Comm PD Power B th th th th th th th th th th th th th	nent Type ased on the e PSE is P e PI. Base r a pairset i truth, as p sponse of a estedReme ased on the upports at th inimum por nown in Equ sed Respo	T e response Class as s d on the re at the outp revious pa a PD". Pcl dy e assigned PSE is PC he PI. Bas wer level s uation (33- nse	Comment Status D e of a single-signature PD, t shown in Equation (33–2). F esponse of a dual signature but of the PSE is PClass-2F tragraph before this one poi ass_PD is an assigned value I class to a single-signature Class as shown in Equation ted on the assigned class to supported for a pairset at th -3). Response Status W	the minimum pov PClass is the pow PD, the minimur as shown in Eq ints out, PClass i ue. To be fully co PD, the minimum (33–2). PClass o a dual signature e output of the P	PSE Class ver level at the output of ver the PSE supports at m power level supported uation (33–3). s not just based on "the unsistent, we should say: m power level at the is the power the PSE e PD pairset, the SE is PClass-2P as
Proposed Response Response Status W PROPOSED ACCEPT. Aha, the place we use Pautoclass_PD.	Ρ	ROPOSED	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 Z/withdrawn SORT ORDER: Comment ID

C/ 33 Johnson,F	SC : eter	33.2.8		P 101 Sifos Techno	L 18 logies	# 41	C/ 33 Johnson,F	SC Peter	33.2.7	Р 93 Sifos Te	L 36 chnologies	# 42
Comment	Туре	т	Commer	nt Status X	0	PSE Power	Comment	Туре	т	Comment Status)	PSE Class
Table	33-17 lt	em 5 is le	con specifie	d as minimum=	Pclass/Vport_PS	SE-2P.	We ha bit cle	ave an arer. C	opportunit	ty to make the relationsł kt savs:	nip between DLL	classification and Pclass a
Table that is PD's. Parag power Vport_ Dual S	33-17 si the con raph 33. ing of si PSE-2F	hould als nparable .2.7 stipu ngle sign P) in Tabl	o include lo power supp lates that Po lature PD's. le 33-17 app	on_2P with refer ly requirement fo class (EQ 33-2) Therefore, Icon lies to both of th	ence to paragrap or furnishing pow applies to 2-Pair (with minimum nose cases but r	oh 33.2.8.4 because er to Dual Signature powering and 4-Pair value Pclass / iot to 4-Pair powering of	"The r signat Altern RCh v pairse	minimu ure PD atively, vhen po ts to ar	im power o), or suppl , PSE imp owering us rrive at ove	butput by the PSE for a ying power in 2-pair more lementations may use V sing a single pairset, or er-margined values as s	particular PD Cla de, is defined by /PSE = VPort_PS RChan = RCh/2 v hown in Table 33	ss, when powering a single- Equation (33–2). 3E-2P min and RChan = when powering using two 3–11."
Duare	Jighatan	0100.					Suggested	dReme	edy			
This c sugge	hange w st in and	vould also other com	o enable a ra nment.	adical simplificat	ion of paragraph	33.2.8.4 that I will	Add to "Pclas <i>Proposed</i> PROF	s this p s may <i>Respo</i>	aragraph: subseque onse ACCEPT	ently be adjusted using I Response Status V	Data Link Layer c V	lassification."
Suggested	Remed	У								•		
Add n	ew item	Icon_2P	to Table 33	-17.			CI 33	SC	33.2.7	P 93	L 53	# 43
Specif	y Minim	um Powe	er = Pclass_	2P / Vport_PSE	-2P.		Johnson,F	Peter		Sifos Te	chnologies	
Proposed	Respon	se	Response	e Status W			Comment	Туре	т	Comment Status)	PSE Class
TFTD							We ha Pclass	ave an s_2P a	opportunit	ty to make the relationsh r. Current text says:	nip between DLL	classification and
This d	efinition	would co	onflict with e	quation 33-7.			"The r power impler margi	ninimu to a du nentati ned val	im output j ual-signati ions may i lues as sh	power on a pairset for T ure PD is defined by Eq use VPSE = VPort_PSE own in Table 33–12."	ype 3 and Type 4 uation (33–3). Al -2P min and RCl	PSEs that apply 4-pair ternatively, PSE han = RCh to arrive at over-
							Suggested	dReme	dy			
							Add to	o this p	aragraph:			
							"Pclas	s_2P r	may subse	equently be adjusted usi	ng Data Link Lay	er classification."
							Proposed PROF	Respo POSED	onse ACCEPT	Response Status V	V	

C/ 33	SC 33.2.8.4	P 105	L 20	# 44
Johnson,Pe	ter	Sifos Technol	ogies	

Comment Type T Comment Status X Unbalance Paragraph 33.2.8.4 is a bit challenging to comprehend and consumes over 2 pages in order to communicate the concept that, given pair-to-pair unbalance, total current must add up to Icon while maximum per-pairset current is Icon-2P-unb. To do this, it introduces

variables Iport-2P and Iport-2P-other that do not relate to state diagram very well.

In addition, Icon-2P as presently defined in 33.2.8.4 is not consistent with Pclass and Pclass_2P as defined in 33.2.7 where there is clear separation of 2-pair/4-pair Single Signature from 4-Pair Dual Signature powering requirements.

Recommendation is to simplify and better tie to state diagrams and to 33.2.7. This comment addresses the lcon / lcon_2P portion of 33.2.8.4.

SuggestedRemedy

Replace all text (p. 105 line 20 to p. 106 line 4) related to lport, Icon, and Icon-2P with:

"PSE's providing power on one pairset shall be able to source lcon, as specified in Table 33-11, on that pairset. Type 3 and Type 4 PSE's providing power on two pairsets to a single-signature PD shall be able to source lcon as the total of currents on both pairsets. Type 3 and Type 4 PSE's providing power on two pairsets to a dual-signature PD shall be able to source lcon_2P on each pairset.

When Type 3 or Type 4 PSE provides power on two pairsets to a single signature PD, pairto-pair unbalance effects necessitate that one of the two powered pairsets shall source Icon-2P-unb as specified in Table 33-11. The pairset sourcing Icon-2P-unb could be either the Primary Alternative or the Secondary Alternative. Assuming that Iport-2P-pri is the current on the Primary Alternative and Iport-2P-sec is the current on the Secondary Alternative, the following equation shall be met regardless of how current is split between the two pairsets:

Icon = Iport-2P-pri + Iport-2P-sec

provided that;

lport-2P-pri < lcon_2P-unb and lport-2P-sec < lcon_2P-unb.

Proposed Response Response Status W

TFTD.

While I like the idea here, the 2nd paragraph of the proposed remedy completely loses the idea the the PSE must be able to source current rather than the PSE must source current.

Would OBE 196

CI 33	SC 33.2.8.4	P 106	L 6	# 45
Johnson,Pete	er	Sifos Techno	ologies	
Comment Ty	pe T	Comment Status X		Unbalance

Similar to my other comment regarding Icon/Icon_2P in 33.2.8.4, there is an opportunity to improve consistency in the description of Ipeak, Ipeak-2P_unb, and Ipeak-2P with paragraph 33.2.7 and the state diagrams.

In the following remedy, equations 33-8, 33-9, and 33-10 are unchanged from draft 1.6. Equation 33-11 is simplified to cover 4-Pair powering of Dual Signature PD's only.

SuggestedRemedy

Replace all text (p. 106 line 6 to p. 107 line 20) related to Iport, Icon, and Icon-2P with:

In addition to continuous current Icon, PSE's providing power on one pairset shall be able to support the transient current Ipeak, as specified in Equation 33-4, on that pairset. Type 3 and Type 4 PSE's providing power on two pairsets to a single-signature PD shall be able to support the transient current Ipeak as the total of simultaneous transient currents on both pairsets.

*** Ipeak (EQ 33-8) here ***

PSE's shall source Ipeak for a minimum duration of Tcut-2P as specified in Table 33-11 and also support a minimum duty cycle of 5% on each powered pairset.

When Type 3 or Type 4 PSE provides power on two pairsets to a single signature PD, pairto-pair unbalance effects necessitate that one of the two powered pairsets shall source Ipeak-2P-unb as specified in Equation 33-4a.

*** Ipeak-2P-unb (EQ 33-9 and EQ 33-10) here ***

The pairset sourcing Ipeak-2P-unb could be either the Primary Alternative or the Secondary Alternative. Assuming that Ipeak-2P-pri is the transient current on the Primary Alternative and Ipeak-2P-sec is the transient current on the Secondary Alternative, the following equation shall be met regardless of how current is split between the two pairsets:

Ipeak = Ipeak-2P-pri + Ipeak-2P-sec

provided that;

Ipeak-2P-pri < Ipeak-2P-unb and Ipeak-2P-sec < Ipeak-2P-unb.

Type 3 and Type 4 PSE's providing power on 4 pairs to a dual-signature PD shall be able to support the transient current lpeak_2P on each pairset independently.

Ipeak_2P = (Quadratic using Rchan and Ppeak_PD-2P) (Revised EQ 33-11)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Comment ID 45

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See 44. Co Cl 33 SC 33.3.7 P 131 L 28 # 46 Johnson,Peter Sifos Technologies Unbalance Comment Type T Comment Status D Unbalance Table 33-28, item 4, infers that all PD's can operate up to Pclass_PD continuous power draw. There is, however, one case where this is not true. Su Su A Dual Signature PD with a single electrical load is subject to DC pair-to-pair unbalance that occurs outside of the PD and is fully independent of the PD's intrinsic pair-to-pair unbalance. Yet this PD, in accordance with teh normative testing of paragraph 33.3.7.10, must meet loon_2P on both pairsets under conditions of PSE and channel unbalance. Unless the PD deploys some method of active pairset load balancing, the only way it can pass the testing of 33.3.7.10 is to operate at some level below Pclass_PD. Pro	mment Type Since PDs ha to withstand t pair PSEs, th damage is no between pair- upper-bound	TR ave always l he PD max e maximum o longer clea -sets, it is p	Comment Status D been powered by 2-pair PS imum rated power over ea power that a PD should w ar. Since there is no mech	SEs, all PDs have ch pair-set. With vithstand on a pair	PD Pow always been required the introduction of 4-
Cl 33 SC 33.3.7 P 131 L 28 # 46 Johnson,Peter Sifos Technologies Comment Type T Comment Status D Unbalance Table 33-28, item 4, infers that all PD's can operate up to Pclass_PD continuous power draw. There is, however, one case where this is not true. Su A Dual Signature PD with a single electrical load is subject to DC pair-to-pair unbalance that occurs outside of the PD and is fully independent of the PD's intrinsic pair-to-pair unbalance. Yet this PD, in accordance with teh normative testing of paragraph 33.3.7.10, must meet Icon_2P on both pairsets under conditions of PSE and channel unbalance. Unless the PD deploys some method of active pairset load balancing, the only way it can pass the testing of 33.3.7.10 is to operate at some level below Pclass_PD. Pro	Since PDs ha to withstand t pair PSEs, th damage is no between pair- upper-bound	ave always l he PD max e maximum o longer clea -sets, it is p	been powered by 2-pair PS imum rated power over ea power that a PD should w ar. Since there is no mech	SEs, all PDs have ch pair-set. With <i>v</i> ithstand on a pail	always been required the introduction of 4-
Add a seond footnote (2) to Pclass_PD on Item 4.	ggestedRemed Add the follow "PDs shall im maximum rat whichever is pposed Respon PROPOSED	template fo dy wing text to plement ea ed power o lower. nse ACCEPT.	ossilbe that a PD could be or an indefinite period of time section 33.3.1 ach Mode to withstand, with r a Type-4 PSE uppoer-book Response Status W	anism to enforce exposed to powe e. hout permanent da und template, I(ps	-set without incurring current balance r levels up to the PSE amage, either the PDs seut-Type-4-2p),
In this footnote: CI 2) The maximum Pport_PD may be limited to less than Pclass_PD for a dual signature PD with a single electrical load in order to meet the requirements of 33.3.7.10. Proposed Response Response Status W PROPOSED ACCEPT. Su	1 SC ve, Daniel mment Type The text is ina be Type 3 or ggestedRemed	1.4.186a TR accurate as Type 4. <i>dy</i> D that" with	P 20 Dove Networ <i>Comment Status</i> X it does not communicate t n "A Type 3 or Type 4 PD t	L 15 rking Solut the fact that a "dua hat"	# 48 Definition al-signature PD" must
Pro	Replace "A P	200	Response Status W		

I'm not sure I agree as I can build a dual-sig Type 1 PD that is totally compliant to the Type 1 Definition. The true distinction is that we left them out of scope for Type 1 and 2, but have put them in scope for Type 3 and 4.

Definitions

PD Power

C/ 1 SC 1.4.418t	<i>P</i> 20	L 41	# 49	C/ 1	SC 1.4.418	b P 20	L 40	# 52
Dove, Daniel	Dove Networ	king Solut		Yseboodt, L	ennart	Philips		
Comment Type TR	Comment Status D		Definitions	Comment Ty	ype T	Comment Status X		Definitions
The text leaves out the	at a Type 3 PSE may suppor	power on all 4 p	pairs.	"1.4.418	Ba Type 3 PSE	E: A PSE that supports PD T	ypes 1-3 and sup	ports Low MPS (see
SuggestedRemedy				IEEE 80	2.3, Clause 3	3)."		
Replace "A PSE that s supports PD Types 1- power"	supports PD Types 1–3 and s -3, supports Low MPS and de	supports Low MF epending upon c	'S" with "A PSE that ass, may support 4-pair	definitio	IEEE Style gu Also, Low MP ns ?)	ide disallows "Types 1-3". S should not be capitalized ((why do we even n	nention this in the
Proposed Response	Response Status W				Also, all PSEs	s support all PD Types, but n	ot at all power lev	els.
TFTD				SuggestedR	Remedy			
The "depending on cla	ass" part is confusing as it is	actually required	depending on class,	"1.4.418 power (s	Ba A PSE that see IEEE 802	t supports PDs up to Type 3 .3, Clause 33)."	power levels and	may support 4-pair
not optional. See 52.				Proposed Re TFTD	esponse	Response Status W		
"A PSE that supports	PD Types 1 to 3, supports lo	w MPS and may	support 4-pair power"	l believe	e that low MPS	S was in there because it is t	he one parameter	that distinguishes
C/ 1 SC 1	P1	<i>L</i> 1	# 50	See 49.				
	Fillips			<u></u>				" ==
Do you want me to res	Comment Status X set the change bars in Clause	e 33 for D1.7 ?	Editorial	C/ 1 Yseboodt, L	SC 1.4.4180 ennart	d P 20 Philips	L 47	# 53
SuggestedRemedy Indicate YES/NO.				Comment Ty 1.4.418"	<i>ype</i> T 3d Type 4 PSE	Comment Status X E: A PSE that supports PD T	ypes 1-4 and sup	Definitions ports 4-pair power and
Proposed Response	Response Status W			Low MP	'S (see IEEE 8	302.3, Clause 33)."		
IFID					IEEE Style gu Also, Low MP	ide disallows " I ypes 1-4". S should not be capitalized (why do we even n	nention this in the
C/1 SC1	P1 Philips	L 1	# 51	definitio	ns ?) Also, all PSEs	s support al PD Types, but no	ot at all power leve	els.
Commont Turno ED	Commont Statup D		Editorial	SuggestedR	Remedy			
The IEEE SA Style gu	ide prohibits the use of a hyp	hen or dash to d	lenote a range.	"1.4.418 (see IEE	8d A PSE that EE 802.3, Cla	supports PDs up to Type 4 use 33)."	power levels and s	supports 4-pair power
We have qu	lite a few of these in our draft	are not anowed.		Proposed R	esponse	Response Status W		
SuggestedRemedv				TFTD				
Bulk replace all of the Idem for Cla	se by the construct "x to y", s ass.	o Type 1-4 beco	mes Type 1 to 4.	See 49,	52			
Proposed Response PROPOSED ACCEPT	Response Status W							

IEEE P802.3bt D1.6 4-Pair Power-over-Ethernet 9th Task Force review comments C/ 33 SC 33.1.2 P 45 L 19 # 54 C/ 33 SC 33.1.3 P 46 L7 # 56 Yseboodt, Lennart Yseboodt, Lennart Philips Philips Comment Type E Comment Status D **F**ditorial Comment Type **TR** Comment Status D Cabling "Editor's Note: Editor to consult with staff on duplication of definitions. Waiting for response Section 33.2 and 33.3 make extensive use of the parameter "Rchan" which is nowhere from staff - note will be removed once response is received." defined. The first mention of Rchan is in the classification section. This note is ancient. Should we not simply refer to the latest .bx revision ? Rchan is the actual DC resistance between a PSE and a PD. This is influenced by SuggestedRemedy channel length and resistance, but also Remove note. whether the PSE is operating 2P or 4P AND whether the PD is a single or dual Change references to .bx revision. signature device. Proposed Response Response Status W A definition is needed, 33.1.3 which talks about Rch seems like a good place. PROPOSED ACCEPT IN PRINCIPLE. SuggestedRemedy OBE by 300 - Insert at the end of 33.1.3: C/ 33 SC 33.1.3 P 45 L 30 # 55 "R Chan is the actual DC loop resistance between the PI of the PSE and the PI of the PD. Yseboodt, Lennart Philips R_Chan-2P is the actual DC loop resistance of a pairset from the viewpoint of the Comment Type T Comment Status D Cablina PSE and PD PI." Table 33-1 System parameters shows the nominal highest current per pair. What this Table does not show is the (maximum) number of powered pairs, which - Editor to scan the document for all mention of Rchan and change to Rchan-2P seems essential information. where used in the context of dual-signature. Proposed Response SuggestedRemedy Response Status W Insert a column after the 'Icable' column title "Number of powered pairs" PROPOSED ACCEPT. Values: Type 1 => 2 SC 33.2.1 CI 33 P 47 13 # 57 Type 2 => 2Yseboodt, Lennart Philips Type 3 => 2 or 4Type 4 => 2 or 4Comment Type E Comment Status D Editorial Table 33-2a does not exist anymore. Also check the thickness of the internal lines in the Table, near the bottom two lines seem a bit thicker. Carried over from 802.3-2012. SuggestedRemedy Change to Table 33-2 Proposed Response Response Status W PROPOSED ACCEPT. Proposed Response Response Status W

PROPOSED ACCEPT.

CI 33 S	SC 33.2.1	P 47 Philips	L 9	# 58	C/ 33 Yseboodt	SC 33.2	.1	P 47 Philips	L 26	# 60
Comment Type Table 33-2	e E 2 Permissble Column lists The new MP Also the stat <i>nedy</i> ow MPS" to	Comment Status D PSE Types. "Low MPS support". S is actually shorter rather the e machine variable is called "Short MPS"	han lower. "short_mps".	Editorial	Comment Table Suggeste Remo	Type E 33-2 Permis Has a fo None of dRemedy	Comme soble PSE Type potnote pointing the other terms	ent Status D s. the reader to see thas a footnote	ction "33.3.8 for do with section refere	Editorial etails". ence.
Ed Proposed Res	litor to chang	e Low MPS to short MPS ex Response Status W	verywhere.		Proposed PROF	Response POSED ACC	Respons EPT.	se Status W		
PROPOSE MPS stand connectior	ED REJECT. ds for mainta n that is lowe	in power signature. It is the r (not shorter).	power required	o maintain the	CI 33 Yseboodt Comment	SC 33.2 Lennart <i>Type</i> E	.1 Comme	P 47 Philips ent Status D	L 36	# 61 Editorial
CI 33 S Yseboodt, Len	SC 33.2.1	Р 47 Philips	L 18	# 59	" ar 33-9,	e illustrated i Figure 33-10	n Figure 33-4, F), and Figure 33	igure 33-5, Figu -11."	re 33-6, Figure 33	-7, Figure 33-8, Figure
Comment Type Table 33-2	e T 2 lists "Single Type 3, Clas	Comment Status X E-Event" for Type 3 which is s 3, Optional, Yes, Single-E	no longer true. vent^2, Optional	PSE Types Optional.	Suggeste " ar	Why? d <i>Remedy</i> e illustrated i	n Figure 33-4 th	rough Figure 33	-11."	
column.	Also the Tab Class is a co	le would be more logical if the nore logical if the nore logical if the nore of 4-pair.	ne "Supports 4-p	air" is the second	Proposed PROF	Response POSED ACC	Respons EPT.	se Status W		
SuggestedRen - Remove Proposed Res TFTD	nedy this line (4th - Swap colur ponse	line) along with footnote 2. nn 3 and 2 <i>Response Status</i> W			C/ 33 Yseboodt Comment	SC 33.2 , Lennart <i>Type</i> E the state dia	.5 Comme	P 56 Philips ent Status D	L 9	# 62 Editorial
A general	question abo	out Table 33-2:			Refer	ence to "Figu	ure 33-13 contin	ued" is not need	ed	
Does this t lines exact remove thi otherwise. Type 1 PS	table seem to tly? For insta is line? I thir Maybe we SE that only s	o imply that you cannot built ance, would I not be able to hk the answer is "I still can", should include some text to supports class 1 or 2.	a PSE that does built a class 3 m but this table see point this out. Th	n't match one of the ax Type 3 PSE if we ems to indicate he same applies for a	Suggeste " of Proposed PROF	dRemedy the state dia Response POSED ACC	igrams shown in <i>Respons</i> EPT.	n Figure 33-13 ar se Status W	nd Figure 33-14."	

Cl 33 SC 33 2 5 1	D P73	/ 39	# 63	CI 33	SC	33 2 5 10	P73	/ 49	# 66	
Yseboodt, Lennart	Philips	- 00		Yseboodt,	, Lennar	t	Philips			
Comment Type T tme1_timer: "A timer used to	Comment Status D to limit mark event times for a	ll but the last the	<i>Editorial</i> first mark event time	Comment tme2_	<i>Type</i> _timer: "A tim	T er used to	Comment Status D	event time in Mu	ultiple-Event	Editorial
in during Multiple-Ever	nt classification; see T ME1 in	Table 33-15."		classi	fication;	see T ME	2 in Table 33-15."			
SuggestedRemedy "A timer used to limit r classification; see T M	nark event times for all but th IE1 in Table 33-15."	e last mark even	t during Multiple-Event	Suggestee Strike	dRemea secono	<i>ly</i> d"	5 0 <i>. (</i>			
Proposed Response PROPOSED ACCEPT	Response Status W			Proposed PROF	POSED	ACCEPT.	Response Status W			
C/ 33 SC 33.2.5.10	0 P73	L 42	# 64	C/ 33 Yseboodt,	SC : Lennar	33.2.5.10 t	P 73 Philips	L 52	# 67	
Comment Type T tme1_timer_pri: "A timer used to in during Multiple-Even 15." SuggestedRemedy "A timer used to limit r classification on the P	Comment Status D to limit mark event times for a nt classification on the Primar mark event times for all but th rimary Alternative; see T ME1	Il but the last the y Alternative; see e last mark even in Table 33-15."	<i>Editorial</i> first mark event time e T ME1 in Table 33- t during Multiple-Event	Comment tme2_ classi Suggestee Strike Proposed PROF	Type _timer_p "A tim fication dRemed s "second Respon POSED	T er used to on the Prin dy d" sse ACCEPT.	Comment Status D limit the second final mark enary Alternative; see T ME2 Response Status W	event time in Mu in Table 33-15.	ultiple-Event ."	Editorial
Proposed Response PROPOSED ACCEPT	Response Status W			C/ 33 Yseboodt,	SC : Lennar	33.2.5.10 t	P 74 Philips	L 52	# 68	
Cl 33 SC 33.2.5.10 Yseboodt, Lennart Comment Type T	D P 73 Philips Comment Status D	L 46	# 65 Editorial	<i>Comment</i> tme2_ classi	<i>Type</i> _timer_s "A tim	T ec: er used to on the Sec	Comment Status D limit the second final mark e condary Alternative: see T M	event time in Mu E2 in Table 33-	ultiple-Event 15."	Editorial
tme1_timer_sec: "A timer used t in during Multiple-Ever	to limit mark event times for a nt classification on the Secon	ll but the last the dary Alternative;	first mark event time see T ME1 in Table 33-	Suggestee Strike	dRemea secono	dy d"	• •			
SuggestedRemedy "A timer used to limit r classification on the S Proposed Response PROPOSED ACCEPT	nark event times for all but th econdary Alternative; see T M <i>Response Status</i> W	e last mark even IE1 in Table 33-1	t during Multiple-Event 5."	Proposed PROF	Respon	nse ACCEPT.	Response Status W			

					-					
C/ 33	SC 33.2.5.11	P 75	L 17	# 69	C/ 33	SC	33.2.5.11	P 77	L 31	# 72
Yseboodt	t, Lennart	Philips			Yseboodt	, Lenna	rt	Philips		
Comment	t Туре Т	Comment Status D		PSE SD	Comment	t Type	т	Comment Status D		PSE SD
In the '8' wh	e function do_class hich doesn`t exist.	sification, variable mr_pd_ Only 0 through 4 is valid.	class_detected, lis	ts up to class signature	"A va requi	riable u rement	sed by a PS	SE to pick between Type 1 values defined in Table 33	, Type 2, Type 3 -17. Values 1 thro	and Type 4 PI electrical ough 4."
Suggeste	edRemedy					Ть	ic ic the SM	for Type 2 and Type 4 PS	Ec	
Remo	ove all values grea Change the des n: class signat	ter than 4. cription to the format: ure n			backy	Ty wards c	pe 3 and Ty ompatible w	vith Type 1 and Type 2 PD	es are chosen su s.	ch that they are
	Remove the edi	tor's note on line 27.			Suggeste	dReme	dy			
Proposed PROI	l Response POSED ACCEPT.	Response Status W			This : to kee	should i Since ep the r	not be a var e it is used i name uncha	iable, but a constant. n the state machine as we inged.	II as the LLDP sta	ate machine, it is best
CI 33 Yseboodt	SC 33.2.5.11	P 75 Philips	L 28	# 70		- Rer - Ado	nove the se	t_parameter_type function _type to 33.2.5.8 Constant	s section:	
Comment	t Type E	Comment Status D		PSE SD		A co	onstant indi	cating the Type of the PSE	. This is used to	pick the Type 3 and
Edito no lor	rs notes telling us nger needed.	that we need to take dual	-signature classifica	ation into account are	Туре	4 PI ele Valu 3 [.]	ectrical requ ues: Type 3 para	irement parameter values	defined in Table	33-17.
Suggeste	edRemedy					4:	Type 4 para	ameter values		
Remo	ove notes on: - page 75, line :	28				- Rer	nove the sta	ate SET_PARAMETERS i	n Figure 33-17 ar	nd 33-18
	- page 76, line	4 25			Proposed	l Respo	nse	Response Status W		
Proposed PROI	Response POSED ACCEPT.	Response Status W			TFTC)				
CI 33 Yseboodt	SC 33.2.5.11	P 77 Philips	L 31	# 71						
<i>Comment</i> paran set_p	<i>t Type</i> E meter_type is incor parameter_type.	Comment Status D rectly indented. It should	be a variable returr	<i>Editorial</i> ned by						
Suggeste	edRemedy									
Inden	t parameter_type.									
Proposed PROI	l Response POSED ACCEPT.	Response Status W								

<i>CI</i> 33 Yseboodt, L	SC 33.2.5.12 .ennart	Р 78 Philips	L 17	# 73	C/ 33 Yseboodt	SC 33.2.5.12 , Lennart	2 P 85 Philips	L 8	# 75
Comment T	igure T igure 33-15, IDL "IF (mr_pse_a alt_pri <= m ELSE alt_pri <= U END" UserDefined	Comment Status D E state. Iternative != both) THEN Ir_pse_alternative serDefined doesn`t exist.		PSE SE	Comment The A Suggeste Adop Proposed WFP	t Type T Autoclass part in t edRemedy t yseboodt_07_03 d Response	Comment Status X the State Diagram can be fur 316_Autoclass3.pdf Response Status W	rther improved fo	<i>Pres:</i> Yseboodt7 r clarity.
SuggestedF	Remedy							1.45	# [70]
Change	"IF (mr_pse_a	Iternative != both) THEN			C/ 33 Wendt, M	SC 33.2.5.12 latthias	2 P 88 Philips	L 45	# 76
Proposed R see 269 TFTD Cl 33 Yseboodt, L Comment T	END" Append the follo "A variable that is esponse b. SC 33.2.5.12 Lennart Type T	wing sentence to the descript s set in an implementation de <i>Response Status</i> W <i>P</i> 80 Philips <i>Comment Status</i> D	ion of 'alt_pri': pendent manner." <i>L</i> 24	# [<u>74</u> PSE SE	Comment "Edite 4PID and 1 to key - Dua - Figu Suggeste "Edite requi Proposed	t Type E br's Note: The Sta requirements tha Type 4 does not a ep complexity ma al signature work h ure reference is w edRemedy br's Note: The Sta rements that are a d Response POSED ACCEPT	Comment Status D ate diagram shown in figure 3 it are also covered in section ddress dual-signature. Prefe nageable." has been done. rong. ate diagram shown in Figure also covered in section 33.2. <i>Response Status</i> W	33-9(TBD) needs 33.2.5.6. The st arably this goes in 33-15 needs to i 5.6."	Editorial to incorporate the ate diagram for Type 3 nto a separate diagram
FOE ON		2011 Says IF ((FD_4pail_cai	iu = 1) +		OBE	by 314			
SuggestedF Replace Proposed R PROPC	Remedy e by "IF (PD_4pa Response DSED ACCEPT.	ir_cand +" <i>Response Status</i> W			CI 33 Yseboodt Comment Spac Suggeste Add s Proposed PRO	SC 33.2.6.1 a, Lennart <i>t Type</i> E e missing in head <i>edRemedy</i> space between 33 <i>d Response</i> POSED ACCEPT	P 89 Philips Comment Status D der 3.2.6.1 and Connection. Response Status W	L 14	# 77 Editorial

-					-				
CI 33 Yseboodt,	SC 33.2.6.1 Lennart	P 89 Philips	L 20	# 78	C/ 33 Yseboodt	SC 33.2.7 , Lennart	P 93 Philips	L 23	# 81
Comment	Туре Е	Comment Status D		Editorial	Comment	t Type E	Comment Status D		Editorial
"The e	xact method of th Redundant. T What it is sup	ne connection check is not s The standard never specifies oposed to do is very clearly s	pecified." s specific implem stated in the first	nentations. t paragraph.	"The numb 33-12	assigned Class is per of classificatio 2."	s the Class that results from n events produced by the P	the PDs requeste SE as shown in T	ed Class and the able 33-11 and Table
Suggested	Remedy				Reph	rase.			
Remov	ve sentence.				Suggeste	dRemedy			
Proposed	Response	Response Status W			"The class	assigned Class is ification events p	s the result of the PDs reque roduced by the PSE as show	ested Class and th vn in Table 33-11	ne number of and Table 33-12."
FROF	USED ACCEPT.				Proposed	l Response	Response Status W		
CI 33	SC 33.2.6.1	P 90	L 5	# 79	PRO	POSED ACCEPT	-		
Wendt, Ma	tthias	Philips			C/ 33	SC 33.2.7	P 93	L 52	# 82
Comment	Туре Е	Comment Status X		Connection Check	Yseboodt	, Lennart	Philips		
origina	I text: "Editor?s N	Note: An informative annex s	should be consid	lered. Test	Comment	tType T	Comment Status D		PSE Class
Suggested Either: - Creat	<i>Remedy</i> te the Annex as e	empty with title "Connection	Check"		"The powe	minimum output r to a dual-signat This seems	power on a pairset for Type ure PD is defined by Equation a remnant from D1.5. It doe	3 and Type 4 PSI on (33-3)." s not matter if 4P	Es that apply 4-pair power is applied or not.
- or, de	elete Editor`s Not	te.			Suggeste	dRemedy			
Proposed TFTD	Response	Response Status W			"The signa	minimum output ture PD is define	power on a pairset for Type d by Equation (33-3)."	3 and Type 4 PSI	Es connected to a dual-
C/ 33 Yseboodt,	SC 33.2.6.7 Lennart	P 92 Philips	L 50	# 80	Proposed PROI	l Response POSED ACCEPT	Response Status W		
Comment 4PID r	<i>Type</i> E equirements	Comment Status X		Pres: Yseboodt1	C/ 33 Yseboodt	SC 33.2.7 , Lennart	P 93 Philips	L 53	# 83
state c identifi	4PID shall be of both pairsets, the cation, and the re	he result of connection chec esults of other system inform	as a logical funct k as described i nation. It shall be	n 33.2.6.1, mutual e stored in the variable	Comment "V_P	t <i>Type</i> E ort_PSE-2P" is s _l	Comment Status D plit over 2 lines.		Editorial
PD_4p	pair_cand, define Doesn`t say	d in 33.2.5.4. what the actual requirements	s are.		Suggeste Inser	<i>dRemedy</i> t non-breaking hy	phen.		
Suggested	Remedy				Proposed	l Response	Response Status W		
Adopt	yseboodt_01_03	16_4pid.pdf			PRO	POSED ACCEPT	-		
Proposed WFP	Response	Response Status W							
TFTD									

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

CI 33 Ysebood	SC 33.2.7 dt, Lennart	P 94 Philips	L 2	# 84	C/ 33 SC 33.2.7 Yseboodt, Lennart	7.2 <i>P</i> 96 Philips	L 35	# 86
Commei Equ	<i>nt Type</i> E ation 33-3 is not pro	Comment Status D		Editorial	Comment Type T "Type 3 PSEs shall	Comment Status D	events and 4 mar	PSE Class k events for single-
Suggest Fix. Propose	edRemedy d Response	Response Status W			signature PDs and PDs. Type 4 PSEs signature PDs and PDs."	a maximum of 3 class events ar shall provide a maximum of 5 cl a maximum of 4 class events ar	nd 3 mark events lass events and 5 nd 4 mark events	for dual-signature mark events for single- for dual-signature
PRC	POSED ACCEPT.				Not correct	for dual-signature PDs (they cla	ss each pairset in	dependently).
CI 33 Ysebood	SC 33.2.7.2 dt, Lennart	P 96 Philips	L 35	# 85	SuggestedRemedy "Type 3 PSEs shall signature PDs and	l provide a maximum of 4 class a maximum of 3 class events ar	events and 4 mar	k events for single- on each pairset for
Comme		Comment Status D		Editorial	dual-signature PDs	. Type 4 PSEs shall provide a m	naximum of 5 clas	s events and 5 mark

Fditorial

"Type 2 PSEs shall provide a maximum of 2 class events and 2 mark events. Type 3 PSEs shall provide a maximum of 4 class events and 4 mark events for single-signature PDs and a maximum of 3 class events and 3 mark events for dual-signature PDs. Type 4 PSEs shall provide a maximum of 5 class events and 5 mark events for single-signature PDs and a maximum of 4 class events and 4 mark events for dual-signature PDs."

IEEE Style Guide says that numbers less than 10 should be spelled out in general text.

SuggestedRemedy

Comment Type E

Change "2 class events" to "two class events" and so on for the entire paragraph.

Comment Status D

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Combine with result of comment 86.

Proposed Response Response Status W

each pairset for dual-signature PDs."

PROPOSED ACCEPT.

C/ 33	SC 33.2.7.2	P 96	L 40	# 87
Yseboodt,	Lennart	Philips		
Comment	Type F	Comment Status D		Editorial

events for single-signature PDs and a maximum of 4 class events and 4 mark events on

Comment Type E Comment Status D

"A Type 1 or Type 2 PSE in the state CLASS_EV1 or a Type 3 or Type 4 PSE in the state CLASS_EV1_LCE shall provide to the PI V Class as defined in Table 33-15. The timing specification for Type 1 and Type 2 PSEs shall be as defined by Table 33-15 value T CLE1 , and by T LCE for Type 3 or Type 4 PSEs. The PSE shall measure I Class and classify the PD based on the observed current according to Table 33-14 within T pdc as defined in Table 33-15. Type 3 and Type 4 PSEs may continue to monitor the current past T pdc . If the Type 3 or Type 4 PSE does not measure I Class in the range of Class 0 before T ACS min and the PSE measures I Class in the range of Class 0 after T ACS max this indicates the PD will perform Autoclass. (see 33.3.5.3)."

We mix "Type 3 or Type 4 PSEs ..." and "Type 3 and Type 4 PSEs...". Which is it again ? Or?

SuggestedRemedy

Make consistent.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

It is "and" if it is plural (Type 3 and Type 4 PSEs...)

It is "or" if it is singular (A Type 3 or Type 4 PSE...)

CI 33	SC 33.2.7.2	P 96	L 40	# 88
Yseboodt	, Lennart	Philips		
Comment	t Tvpe T	Comment Status D		PSE Class

"A Type 1 or Type 2 PSE in the state CLASS_EV1 or a Type 3 or Type 4 PSE in the state CLASS_EV1_LCE shall provide to the PI V Class as defined in Table 33-15. The timing specification for Type 1 and Type 2 PSEs shall be as defined by Table 33-15 value T CLE1 , and by T LCE for Type 3 or Type 4 PSEs. The PSE shall measure I Class and classify the PD based on the observed current according to Table 33-14 within T pdc as defined in Table 33-15. Type 3 and Type 4 PSEs may continue to monitor the current past T pdc . If the Type 3 or Type 4 PSE does not measure I Class in the range of Class 0 before T ACS min and the PSE measures I Class in the range of Class 0 after T ACS max this indicates the PD will perform Autoclass. (see 33.3.5.3)."

Many improvements:

- some akwardly worded
- replace Class 0 by class signature 0
- Class not determined by Table 33-14 alone, also involve Pclass tables
 to the PI => pairset

SuggestedRemedy

A Type 1 or Type 2 PSE in the state CLASS_EV1 or a Type 3 or Type 4 PSE in the state CLASS_EV1_LCE shall provide to the PI **or pairset** V Class as defined in Table 33-15. The timing specification for Type 1 and Type 2 PSEs shall be as defined by Table 33-15 value T CLE1, and by T LCE for Type 3 or Type 4 PSEs. The PSE shall measure I Class and classify the PD based on the observed current according to **Table 33-11, Table 33-12, and **Table 33-14 within T pdc as defined in Table 33-15. Type 3 or Type 4 PSEs may continue to monitor the current past T pdc . If the Type 3 or Type 4 PSE does not measure I Class in the range of **class signature 0** after T ACS max this indicates the PD will perform Autoclass. (see 33.3.5.3).

- Note: merge these changes with other comments!

Proposed Response Response Status	Proposed Response	Response Status	W
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PROPOSED ACCEPT.

CI 33	SC 33.2.7.2	P 97	L 22	#	89
Yseboodt, Ler	nnart	Philips			
Comment Typ	e T	Comment Status D			PSE Class

Multiple Event classification section:

"All measurements of I Class shall be taken after the minimum relevant class event timing of Table 33-15. This measurement is referenced from the application of V Class min to ignore initial transients."

The minimum time for the duration of a class event doubles as the minimum time at which a class current measurement may be taken.

This works, except for T_LCE which has a minimum of 88ms (at this time an Autoclass PD already has dropped it`s current).

SuggestedRemedy

- Rename the existing T_class (which is used in the PD section), to T_class_PD

Introduce a new T_class in Table 33-15:
Parameter: "Class event Iclass measurement timing" Symbol: T_class Units: ms
Min: 6.00
Max:
Single or Multiple-Event: Multiple
Additional information:
Change the comment text to:

"All measurements of I Class shall be taken after T_class, as defined in Table 33-15. This measurement is referenced from the application of V Class min to ignore initial transients."

Proposed Response Response Status W PROPOSED ACCEPT.

CI 33	SC 33.2.7.2	P 97	L 26	# 90
Yseboodt, Le	ennart	Philips		
Comment Ty	rpe E	Comment Status D		Editorial

"The PSE shall complete 2Multiple-Event Physical Layer classification..."

Lingering strikeout "2" and underlined "Multiple".

SuggestedRemedy

Change to: "The PSE shall complete Multiple-Event Physical Layer classification..." without underline.

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 33	SC 33.2.7.2	P 97	L 38	# 91	C/ 33	SC	33.2.7.2	P 97	L 46	# 93
Yseboodt,	, Lennart	Philips			Yseboodt	, Lenna	art	Philips		
Comment	Туре Т	Comment Status D		PSE Class	Comment	t Type	Е	Comment Status D		Editorial
"If the PD as PD ac	e result of the first s a Type 1 PD and ccording to the res	class event is any of Classe d may omit the subsequent r sult of the first class event."	s 0, 1, 2, or 3, a nark and class e	Type 2 PSE treats the vents and classify the	"Edito unma	or's Note atched c	e (Remove classes for	prior to D2.0): We need to ac mixed Type PDs."	ddress behavior f	or matched and
	Classes -> cla	ss signature				No	o we don't.	All dual-signature PDs will ope	erate under the s	ame rules.
Suggasta	dPomodu	ss signature			Suggeste	dReme	dy			
Suggester	urenieuy	along avant is any of along a	ignoturo 0 1 2		Remo	ove note	е.			
treats	the PD as a Type fy the PD accordi	e 1 PD and may omit the sub ing to the result of the first cla	ignature 0, 1, 2, osequent mark a ass event."	nd class events and	Proposed PRO	<i>l Respo</i> POSED	nse ACCEPT.	Response Status W		
Proposed	Response	Response Status W			CI 33	SC	33 2 7 2	Pas	/ 12	# 04
PROF	POSED ACCEPT				Yseboodt	Lenna	55.2.7.2	Philips	L 72	# 94
CI 22	SC 22 2 7 2	D 07	/ 40	# 02	Common	+ Tuno		Commont Status		Editorial
Ur 33 Veeboodt	30 33.2.7.2	P 91	L 40	# 92	Comment	. 1ype 	on Class ti	ming has a column "Single- or	r Multiple-Event"	Eulional
					Table	lte	m 1 and 2	apply to both, and list "Single,	, Multiple". This fi	its badly in the table.
Comment	Type I	Comment Status D	4 0 0 . T	PSE Class	Suaaeste	dReme	dv		•	
treats	a single-signatur	re PD as a Type 1 PD and sh	all omit the subs	pe 3 or Type 4 PSE	Repla	ace "Sin	ale. Multip	le" bv "Both".		
transi	tion directly to MA	ARK_EV_LAST,"		in all of the states,	Proposed	l Resno	inse	Response Status W		
		aignoturo			PRO	POSED				
Currente		Signature				OOLD	NOOLI I.			
Suggester	aremeay	along avant is any of along a	ignoturo 0 1 2		C/ 33	SC	33.2.7.2	P 99	L 24	# 95
4 PSE	E treats a single-s	signature PD as a Type 1 PD	and shall omit th	ne subsequent class	Yseboodt	, Lenna	art	Philips		
event	s, transition direc	tly to MARK_EV_LAST,"			Comment	t Type	Е	Comment Status D		Editorial
Proposed	Response	Response Status W			Table	933-15,	Item 12 ar	nd 13 do not use consistent ar	mount of digits.	
PROF	POSED ACCEPT				Suggeste	dReme	dy			
					Chan	ge:				
						88	=> 88.0			
						6 = 20	=> 6.00 => 20.0			
					Proposed	 I Respo	nse	Response Status W		
						POSED	ACCEPT			
					PRO	POSED	ACCEPT.			

C/ 33 SC 33.2.7.3 P 99 L 43 # 96 C/ 33 SC 33.2.8 P 102 L1 # 98 Yseboodt, Lennart Yseboodt, Lennart Philips Philips Comment Type E Comment Status D **F**ditorial Comment Type E Comment Status D **F**ditorial "P Autoclass is the power consumption of a connected PD measured throughout the period Table 33-17 uses mostly seconds as the unit for time parameters, with the exception of bounded by T AUTO PSE1 and T AUTO PSE2 . defined in Table 33-16a." Trise which is in microseconds. The IEEE Styleguide forbids this, it needs to be all the same. Bad Table reference. Since most values are in the millisecond range, propose to change all units in 33-17 from SuggestedRemedy seconds to milliseconds. Change to Table 33-16. SuggestedRemedv Proposed Response Response Status W Convert 33-17 to milliseconds. PROPOSED ACCEPT IN PRINCIPLE. Proposed Response Response Status W OBE by 194 PROPOSED ACCEPT. C/ 33 P 99 L 47 # 97 SC 33.2.7.3 C/ 33 SC 33.2.8 P 102 L 22 # 99 Yseboodt, Lennart Philips Yseboodt, Lennart Philips Comment Type E Comment Status D **F**ditorial Comment Type E Comment Status D PSE Power "Average power is calculated using any sliding window with a width in the range of T In Table 33-17 we have item 10 for Icut-2P. AUTO Window as defined in Table 33-16a." The minimum value for Type 1 and 2 is "PClass / VPSE". The minimum value for Type 3 and 4 is "ICon-2P" Bad Table reference. This distinction is a relic from 802.3at and no longer needed. SuggestedRemedy For Type 1 & 2, Icon-2P = PClass / Vpse Change to Table 33-16. SuggestedRemedy Proposed Response Response Status W Replace "PClass / Vpse" by "Icon-2P" and merge with the Type 3/4 line below. PROPOSED ACCEPT IN PRINCIPLE. Proposed Response Response Status W OBE by 194 PROPOSED ACCEPT IN PRINCIPLE. Also a "," has been inserted in the parameter column for item 10 making it confusing. The 2012 standard said "overload current detection range" which is quite different from "overload current per pairset, detection range"

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Remove "," referenced above.

Cl 33	SC 33.2.8	P 102	L 5 1	# 100	C/ 33	SC 33.2.8.1	P 104	L 41	# 102
Commont		Commont Status		DSE Dowor	Commont				DSE Dowor
Ptype does r	This allows for the difference in This means not	4. two different Type 4 PSEs, on is only 15W, which is negligibl t every Type 4 PD will work wi	e that supports e from a hardw th a Type 4 PS	Class 8 and one that are viewpoint. E.	"A Typ the PC includi actual	be 3 or Type 4 P DWER_ON state ng after the exp We have plent ly state when a	SE that has assigned Class a may transition between 2-p iration of T pon ." y of requirements when NO PSE SHALL provide 4-pair p	1-4 to a single-s pair and 4-pair po T to apply 4-pair power. PSE that a	ignature PD and is in wer at any time, power, but we never assign Class 5 through 8
Chang	e Ptype(min) = 9	00W for Type 4.			must p	brovide 4P powe This seems lik	r. e a good section to state thi	s.	
Proposed A TFTD Also, r	Response eference to 33.2	Response Status W .8.12a needs the a removed (a	additional inforr	nation column).	a Type excee revisit/	Note: Dependi a 3 or Type 4 PS ds the "PSE upp freword this stat	ng on the outcome of the "W E should (TBD) remove pow perbound template" on eithe ement, hence the TBD.	Vhen connected t wer from both pai r pairset." issue v	to a single-signature PD, irsets before the current ve may need to
Cl 33 Yseboodt, Comment There Suggestee Delete	SC 33.2.8 Lennart Type E is a large 4 point IRemedy the items which Keep 2 rem	P 104 Philips Comment Status D Editor's Note after Table 33-1 are already addressed.	L 23	# 101 <i>Editorial</i> moved for a while.	Suggested "(TBD) shall a Proposed TFTD. The or had a	IRemedy) A Type 3 or Ty ipply power to b Response ne issue I see w fault…	pe 4 PSE that has assigned oth pairsets while in the POV <i>Response Status</i> W ith this is if a PSE tries to ke	l Class 5 to 8 to a WER_ON state." eep a PSE power	a single-signature PD ed when one pairset has
Proposed PROP	Response OSED ACCEPT.	Response Status W			C/ 33 Yseboodt.	SC 33.2.8.1 Lennart	P 104 Philips	L 42	# 103
					<i>Comment</i> "The s Port_F	<i>Type</i> T pecification for PSE-2P min) to	Comment Status X V Port_PSE-2P in Table 33- P Type min load step at a ra	17 shall be met v te of change of a	<i>PSE Power</i> with a (I Hold max x V it least 15 mA/ms."
						This broke of We need so	due to the new definition of F mething that says "The high	PType. nest supported po	ower for a given Type"
					Suggested	Remedy			
					"The s Port_F where	pecification for PSE-2P min) to P_Class is the	V Port_PSE-2P in Table 33- P_Class load step at a curre power of the highest Class t	17 shall be met v ent rate of change he PSE supports	with a (I Hold max x V e of at least 15 mA/ms, "
					Proposed TFTD.	Response	Response Status W		
					The hi to som	ghest class a Patternet class	SE supports? What if it sup f in that case it is only opera	ports class 8, but ting over 2 pairs	t only assigned class 1 ?

CI 33 Yseboodt,	SC 33.2.8.3 Lennart	P 105 Philips	L 14	# 104	C/ 33 Yseboodt,	SC 33.2.8.4 Lennart	4 P 106 Philips	L 26	# 105			
Comment	Туре Т	Comment Status X		PSE Power	Comment	Туре Т	Comment Status X		Unbalance			
"The s comm Port_F	specification for p on-mode and/or PSE-2P min) to P This broke di	ower feeding ripple and nois pair-to-pair noise values for p Type min for PSEs at static ue to the new definition of P	e in Table 33-17 power outputs fr operating V_Pc	′ shall be met for om (I Hold max x V ırt_PSE-2P."	lpeak∹ a Clas listed v	2P_unb is calc s dependent c Icon-2P_ur with numbers in	ulated using the Klpeak paran urve fit. nb which serves exactly the sa n Table 33-17.	neter. Which in t ame function as l	urn is calculated using Peak-2P_unb is simply			
	We need sor	nething that says "The highe	est supported po	wer for a given Type"		For simplic	tity`s sake we should adopt the	e same approacl	h for both.			
Suggested	dRemedy				define	In addition, d for Class 5 th	, while Icon-2P_unb is defined	I for all Classes,	Ipeak-2P_unb is only			
"The s comm Port_F P_Cla	specification for p on-mode and/or PSE-2P min) to P ss is the power o	ower feeding ripple and nois pair-to-pair noise values for r _Class for PSEs at static op f the highest Class the PSE	e in Table 33-17 power outputs fr erating V_Port_ supports."	′ shall be met for om (I Hold max x V PSE-2P, where	SuggestedRemedy - Add new item to Table 33-17 called Ipeak-2P_unb with min values (values derived from Equation 33-8, 33-9 and 33-10 with worst-case values)							
Proposed	Response	Response Status W				Class 0 to	0 4 => lpeak					
TFTD. The hi	ghest class a PS	E supports? What if it supp	orts class 8, but	only assigned class 1		Class 5 Class 6 Class 7 Class 8	=> 0.634 => 0.828 => 0.975 => 1.160					
10 501	retning? what in	in that case it is only operati	ng over 2 pairs?		Table	- Change tl 33-17. - Remove l	he reference to Equation 33-9 Equation 33-9 and 33-10	on page 106, lir	e 24 to a reference to			
					Proposed TFTD.	Response	Response Status W					
					This cl	hange would re	equire PSEs to support the wo	orst case Rchan	(Rch) for all links			

CI 33	SC 33.2.8.4.1	P 107	L 30	# 106	C/ 33	SC 33.2.8.5	P 108	L 35	# 109		
Yseboodt,	Lennart	Philips			Yseboodt,	Lennart	Philips				
Comment	Type ER	Comment Status D		Editorial	Comment	Type E	Comment Status D		Editorial		
"The contract the whole the provident the second se	ontribution of PSE ole effective syste	E PI pair-to-pair effective resisem end to end resistance unt	stance unbalai palance (E2EP	nce (PSE_P2PRunb) to 2PRunb), is specified	"For T ms to	ype 1 PSE, meas allow startup trar	surement of minimum I Inr nsients."	ush-2P requirement t	o be taken after 1		
by PSE resista	= maximum (R P: nce in the power	SE_max) and minimum (R P ed pairs of same polarity."	SE_min) com	mon mode effective	Suggested	lRemedy					
	The abbreviat	tion PSE_P2PRunb is used to	wice in the who	ble doc. Both times in	"For T ms to	ype 1 PSEs, mea allow for startup	asurement of minimum I Ir transients."	rush-2P requirement	is to be taken after 1		
33.2.8.	4.1. Tongtwister E	2EP2PRunb is used once (a	nd a few times	in Annex 33B).	Proposed Response Response Status W PROPOSED ACCEPT.						
Suggested	Remedy										
Replac	e PSE_P2PRunk Replace E2EI	b by "PSE PI pair-to-pair effect P2PRunb by "effective syster	ctive resistance n end to end re	e unbalance". esistance unbalance"	C/ 33 Yseboodt,	SC 33.2.8.5 Lennart	P 109 Philips	L 8	# 110		
Proposed I PROP	Response OSED ACCEPT.	Response Status W			<i>Comment</i> In Figu	<i>Type</i> E ure 33-26 it says:	Comment Status X "I Inrush-2P and I Inrush a	at V PSE-2P > 30 V"	PSE Inrush		
C/ 33 Yseboodt,	SC 33.2.8.4.1 Lennart	P 108 Philips	L 9	# 107	Vpse-2P is not defined in the definitions section. Vpse is (see definition below) and the way it is defined allows us to use Vpse in both a single-signature and dual-signature context as well as in 2P contexts.						
Comment Type E Comment Status D Editorial "Editor's Note: Numbers to be updated for DS PDs." Editorial					Use of Vpse-2P is not widespread in the text. Propose to use V_PSE everywhere. The same applies to V_PD.						
	Has this been	done ?				The definition o	f Vpd is: "The voltage at th	e PD PI measured b	etween any positive		
Suggested	Remedy				condu	ctor of a powered	d pair and any negative co	nductor of the corresp	oonding powered		
If yes =	=> Remove note.				power	The definition of	f Vpse is: "The voltage at t	the PSE PI measured	between any		
Proposed I	Response	Response Status W			positiv power	e conductor of a ed power pair"	powered pair and any neg	ative conductor of the	e corresponding		
FROF	USED ACCEPT.				Suggested	lRemedy					
C/ 33	SC 33.2.8.5	P 108	L 11	# 108	Chang	je V_PSE-2P into	o V_PSE.				
Yseboodt,	Lennart	Philips			Proposed	Response	Response Status W				
Comment PSE in	<i>Type</i> TR rush needs a goo	Comment Status X		Pres: Yseboodt8	TFTD						
Suggested Adopt	Remedy yseboodt_08_031	16_pseinrush.pdf									
Proposed I WFP	Response	Response Status W									
TFTD											

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Yseboodt Lennart	Philips	L 20	# 111	C/ 33 Yseboodt I	SC 33.2.8.5.1	P 109 Philips	L 30	# 113
Comment Type E	Comment Status D		Editorial	Comment 1		Comment Status X		DSE Inrush
"33.2.8.5.1 I Inrush-2P mini Reword. SuggestedRemedy "33.2.8.5.1 Type 4 minimur	n inrush current requirem	um requirements" ents"	Lakoha	"When 8 and u succes per pai oscillat resistar	a Type 4 PSE is uses a lower I Inr sfully power up a rset as defined in ions during the F nce of 0.1 ohm to	connected to a single-sign ush-2P and I Inrush than th a single-signature PD comp of 33.3.7.3 and a Class 2 loa POWER_UP period, when c to 12.5 ohm per pairset."	ature PD with a ose defined in T rised of a paralle Id within T Inrus onnected to the	ssigned Class 7 or Class Fable 33-17, it shall el combination of C Port h-2p min without startup PD through channel
Proposed Response Re PROPOSED ACCEPT. C/ 33 SC 33.2.8.5.1 Yseboodt, Lennart	esponse Status W P 109 Philips	L 28	# 112	automa max fo Suggested	This requiren atically met by PS Also, why mu r inrush. Remedy	nent applies to all PSEs in t SEs that use the values in T st this be met in Tinrush-2F	his situation. Ob able 33-17. 9 min ? PSEs m	oviously it is ay use up to Tinrush-2P
Comment Type T C "A Type 4 PSE, when conn 8, may optionally implemen Table 33-17, but not less th	Comment Status D ected to a single signatur a minimum I Inrush-2P aan 0.15A and 0.4A respe	e PD with assigne and I Inrush lower ctively."	PSE Inrush ed Class 7 or Class r than defined in	"A Type succes and a (during the ran	e 4 PSE connect sfully power up a Class 2 load with the POWER_UF ge of Rch."	ed to a single-signature PD a parallel combination of C F in T Inrush-2P. The power u period, when connected to	e assigned to Cla Port per pairset up shall be with the PD through	ass 7 or Class 8 shall as defined in 33.3.7.3 out startup oscillations o channel resistance in
Reword + get rid	of "may optionally".			Proposed F	Response	Response Status W		
SuggestedRemedy				TFTD				
"A Type 4 PSE, when conn may implement a minimum 17, but not less than 0.15A	ected to a single signatur I Inrush-2P and I Inrush and 0.4A respectively."	e PD assigned to lower than those o	Class 7 or Class 8, defined in Table 33-	<i>CI</i> 33 Yseboodt, I	SC 33.2.8.7 Lennart	P 110 Philips	L 2	# 114
Proposed Response Re PROPOSED ACCEPT IN F "A Type 4 PSE, when conn may implement a minimum 17, but not less than 0.15A	esponse Status W PRINCIPLE. eccted to a single signatur I Inrush-2P and I Inrush and 0.4A respectively."	e PD assigned Cl lower than those o	ass 7 or Class 8, defined in Table 33-	Comment T "When power either p We sho Suggested See ys Proposed F WFP TFTD	Type TR connected to a s from both pairse pairset." buld settle this. <i>Remedy</i> eboodt_09_0316 <i>Response</i>	Comment Status X single-signature PD, a Type is before the current exceed 6_4pbehaviour.pdf Response Status W	3 or Type 4 PS Is the 'PSE upp	Pres: Yseboodt9 E should (TBD) remove erbound template' on

C/ 33 SC 33.2.10.1.2 P115 L 50 # 115 C/ 33 SC 33.3.2 P 118 L 43 # 117 Yseboodt, Lennart Yseboodt, Lennart Philips Philips Comment Type **T** Comment Status X Pres: Yseboodt2 Comment Type E Comment Status D **F**ditorial The DC MPS text can be further improved by introducing I Hold-2P for pairset currents "Editor's Note: Classification section to be updated to move all Type 3 and Type 4 PSEs to and I Hold for 4P currents. multiple-event (Mark is considered an event)." SuggestedRemedy - next few comments will address this Adopt vseboodt 02 0316 mps.pdf SuggestedRemedy Proposed Response Response Status W Remove editors note. WFP Proposed Response Response Status W TFTD PROPOSED ACCEPT. C/ 33 SC 33.3.1 P 118 L 28 # 116 C/ 33 SC 33.3.2 P 119 L 4 # 118 Yseboodt, Lennart Philips Yseboodt, Lennart Philips Comment Type T Comment Status X PD Power PD Types Comment Type E Comment Status D "The PD shall be implemented to be insensitive to the polarity of the power supply and In Table 33-20, the new MPS scheme is called "Low MPS", when this would more shall be able to operate per the PD Mode A column and the PD Mode B column in Table accurately be called "Short MPS". 33-19." The state machine variable is called short mps. SuggestedRemedv The 'operate' part of that requirement does not hold for >= Class 5 PDs or dualsignature PDs. - Change "Low MPS support" to "Short MPS support" they need 4-pair in order to operate. Proposed Response Response Status W SuggestedRemedy PROPOSED REJECT. "The PD shall be implemented to be insensitive to the polarity of the power supply. Single-signature PDs with a power demand lower or equal to Class 4 power shall MPS stands for maintain power signature. It is the power required to maintain the be able to operate per the PD Mode A column and the PD Mode B column in Table 33-19. connection that is lower (not shorter). All other PDs may require being supplied over Mode A and Mode B simultaneously to operate at their nominal power level."

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TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Proposed Response

TFTD.

Response Status W

I guess the definition of "operate" is what matters. If operate is "actively indicate that the PD is underpowered" then the PD has to be able to do that over Alt-A or Alt-B individually...

CI 33	SC 33.3.2	P 119	L 4	# 119	C/ 33	SC	33.3.2	P 11	9 L 22	2	# 121
Yseboodt, I	Lennart	Philips			Ysebo	odt, Lenna	irt	Philips	;		
Comment 7	Гуре Е	Comment Status D		PD Type	es Comn	ent Type	Е	Comment Status	D		Editorial
In Table higher backwa	e 33-20 we have ^1 "See 33.3.8 fo standby MPS pow ^2 "Need to supp ard compatibility." ^3 "Type 3/SS C	3 footnotes. or details. "Low" means ver." oort High MPS when co lass 1-3 PDs are not re	s lower standby MPS onnected to Type 1 or	power, "high" means Type 2 PSEs for	"T C ac	ype 3 sing ass 3 or le vertise a S Refe	le-signatur ss implem Single-Ever rence to Si	e PDs operating up to ent a minimum of Mul nt class signature of 1 ingle-Event is wrong.	a maximum pov tiple-Event Phys , 2, or 3."	wer draw corres ical Layer Clas	sponding to sification and
Suggestedl	Remedy		dan og to impromorie		Sugge	stedReme	dy La siana atum				an an dùn a ta
All of th	his information is ted with the table	covered in the text. Nor	r is it such critical info	ormation that it must be	C ac	ass 3 or le	ss implem ss 1, 2, or	ent a minimum of Mul 3."	tiple-Event Phys	ical Layer Clas	sponding to sification and
Brananad F		Desperance Status			Propo	sed Respo	nse	Response Status	w		
PROP	OSED ACCEPT.	Response Status w			P	ROPOSED	ACCEPT				
This tal	ble is NOT norma	itive.			C/ 33 Ysebo	SC odt, Lenna	33.3.2 Irt	P 11 Philips	9 L 3	5 ;	# 122
CI 33	SC 33.3.2	P 119	L 5	# 120	Comn	ent Type	Е	Comment Status	D		Editorial
Yseboodt, I	Lennart	Philips			 T"	ype 4 sing	le-signatur	e PDs only advertise	Class 7 and 8. T	ype 4 dual-sigr	ature PDs
Comment 7	Type E	Comment Status D		Editoria	al ac	vertise Cla	ass 5 on at	least one pairset."			
Misspe					_	Noth	ing is said	here that the two prev	vious paragraph o	don`t also state).
Suggestedl Change	Remedy e to Capabilities.				Sugge R	s <i>tedReme</i> emove this	<i>dy</i> line.				
Proposed F PROPO	Response DSED ACCEPT.	Response Status W			Propo Pl	sed Respo ROPOSED	nse ACCEPT	Response Status	w		
					C/ 33	SC	33.3.2	P 11	9 L 38	8	# 123
					Ysebo	odt, Lenna	irt	Philips	;		
					Comn "A Pi po m	ent Type Type 2, T hysical Lay wer restric ethod of ac	E ype 3 or Ty er classific tions and ctive indica	Comment Status ype 4 PD that does no cation or Data Link Lay shall provide the user tition is left to the imple	D ot successfully ob yer classification with an active in- ementer."	oserve a Multip shall conform dication if unde	<i>Editorial</i> le-Event to Type 1 PD prpowered. The
						This	section is a	about PD Type descri	ptions and we sh	nould not have	shalls here.
					Sugge	stedReme	dy				
					М	ove this pa	ragraph to	33.3.5 "PD Classifica	itions", page 126	5, line 52.	
					<i>Propo</i> Pl	sed Respo ROPOSED	nse ACCEPT	Response Status	w		
TYPE: TR/t COMMENT SORT ORE	technical required STATUS: D/disp DER: Comment IE	ER/editorial required batched A/accepted R	GR/general required /rejected RESPON	T/technical E/editoria ISE STATUS: O/open	al G/general W/written C/cl	osed Z/wi	thdrawn		Comment ID 12	3	Page 28 of 83 3/2/2016 11:16:41 AM

CI 33	SC 33.3.2	2 P 119	L 43	# 124	CI 33	SC 33.3.3	P 120	L 1	# 126
Yseboodt,	, Lennart	Philips			Yseboodt, Le	ennart	Philips		
Comment	Туре Е	Comment Status D		Editorial	Comment Ty	pe E	Comment Status X		Pres: Yseboodt4
"Type the re	e 2, Type 3 and equirements of	d Type 4 PDs implementing 100l 25.4.5 in the presence of (I unb	BASE-TX (Claus / 2)."	se 25) PHYs shall meet	"Editor's and dual requirem	Note: To re -signature F ents for ead	view state machine that clearl PDs regarding the detection , o h pairset/mode."	ly specify behavio classification, pov	or of single-signature verup and power on
contai	This sectior On page 14 ins:	n is about PD Type descriptions a 8 we have a section "33.4.8 100	and we should r BASE-TX transt	ot have shalls here. former droop" which	T adopted,	he SM doe: we can ren	s not handle dual-signature at nove this editors note.	all. If the comme	ent to split the SM is
requir	"100BASE-" rements of Cla	TX Type 2 Endpoint PSEs and 1 ause 25 in the presence of (I unb	00BASE-TX Ty /2)."	pe 2 PDs shall meet the	SuggestedRe Remove	e <i>medy</i> Editors note	9 .		
	This seems	to cover what is in 33.3.2 (except	ot for Type).		Proposed Re	sponse	Response Status W		
Suggester	dRemedy				WFP				
- Rem	nove the sente	ence in 33.3.2 as well as the Note	e (and format th	e Note properly, needs	TETD				
Type : of (I u	- Change th "100BAS 2, Type 3, and inb /2)."	e sentence in 33.4.8 as follows: SE-TX Type 2, Type 3, and Type d Type 4 PDs shall meet the requ	4 Endpoint PSE uirements of Cla	Es and 100BASE-TX ause 25 in the presence					
Proposed PROF	Response POSED ACCE	Response Status W							
C/ 33 Yseboodt,	SC 33.3.2 , Lennart	2 P 119 Philips	L 49	# 125					
<i>Comment</i> "Edito	<i>Type</i> E or's Note: Nee Comments	Comment Status D d to move two normative required have been filed to move both rec	ments from sec quirements.	Editorial tion 33.3.2."					
Suggestee Remo	<i>dRemedy</i> ove note.								
Proposed PROF	Response POSED ACCE	Response Status W							

C/ 33 Yseboodt,	SC 33.3.3.2 Lennart	P 120 Philips	L 19	# 127	CI 33 Yseboodt	SC t, Lennai	33.3.4 rt	P 123 Philips	L 12	# 129
Comment	Tvpe T	Comment Status D		Pres: Yseboodt4	Commen	t Tvpe	т	Comment Status D		PD SD
The Pl cases addres	D state machine poorly. See presentation Fixing these with Also the current ss dual-signature	contains a few historic short on yseboodt_04_0316_pdsm thout changing legacy behav t SM is written for single-sign o.	comings that ma issues.pdf for sp iour is not possi nature behaviour	ake it handle edge becifics. ble. and does not properly	PD S towa Suggeste	itate ma The I rds MDI It curr	chine in Fig DO_CLASS _POWER1 rently can o dy	gure 33-31. S_EVENT_AUTO state is a in case the power gets turr only go through DO_MARK_	'class' state and ned on. _EVENT1.	should have a path
Suggested	Remedy				"pow	er_recei	LASS_EVE ived".	INT_AUTO add an arc to Mi	DI_POWERT WI	
1. Reir 802.3t approp	ntroduce the orig ox (latest draft) a oriate.	inal PD state machine and condition of the state machine and condition of the state	onstant/variable, nd Type 2 PD s	/timers/functions from tate machine" as	Proposed PRO	l Respoi POSED	nse ACCEPT.	Response Status W		
Type 4	2. Rename the 4 constant/variab	le/timers/functions". These w	vill serve both fo	r single-signature and	CI 33	SC	33.3.3.6	P 124	L 20	# 130
dual-s	ignature.	D1 6 state diagram (Figure 2	2221) to "Turno "	2 and Turna 4 aingla	Ysebood	t, Lenna	rt	Philips		
 3. Rename the D1.6 state diagram (Figure 33-31) to "Type 3 and Type 4 single-signature PD state diagram" 4. Duplicate the D1.6 state diagram (Figure 33-31) and call this "Type 3 and Type 4 single-signature PD state diagram" 5. Add Editors Note to this last Figure reminding readers this needs to be turned into a proper dual-signature SD. 6. Editor to apply all changes against the PD SD from the D1.6 comment cycle against the Type 3 / Type 4 single-signature PD, with the possible exception of the MR comment. Proposed Response Response Status W WFP TFTD					Comment Type TR Comment Status D PD State diagram in Figure 33-31 cont`d. State DLL_ENABLE does "pse_power_level = pse_dll_power_level" pse_dll_power_level is output by the DLL state diagram, but has a default va 1. This has the effect of restricting every PD to Class 3 power, regardless of Ph Layer classification. The original SD does not have this assignment. SuggestedRemedy Remove "pse_power_level <- pse_dll_power_level" from the DLL_ENABLE state.					
Cl 33	SC 33.3.3.3	P 120	L 39	# 128						
Y Seboodt,	Lennart			F olitovial						
PD sta subtra	Type ER ate machine varia Variable is calle cting is highly dis dRemedy	comment Status D able list. ed "pd_multi-event". Per the s scouraged.	style guide, use	Editorial						
Renan	ne to pd_multi_e	vent throughout the documer	nt.							
Proposed PROP	Response OSED ACCEPT	Response Status W								

C/ 33 Yseboodt	SC 33.3.4	P 124 Philips	L 26	# 131	C/ 33 SC 33.3.4		P 124 Philips	L 50	# 133		
Comment	t Type E	Comment Status D		Editorial	Comment	Type T	Comment Status X		Pres: vseboodt1		
"Edito class	or's Note: PD state events."	e diagram needs to be update	ed for Autoclass	and detecting long first	"Any PD may indicate the ability to accept power on both pairsets using TLV variable PD 4P-ID in Table 79-6b or other (TBD) means." As per yseboodt_01_0316_4pid.pdf there is only one option that fitts the bill for the						
do_cl	ass_timing.	been completed, see DO_CL	ASS_EVENT_A		IDD.	Domodu					
Suggeste	dRemedy				Suggested	D may indicate	the ability to accept power of	n hoth nairsets us	sing TI V variable PD		
Remo	ove Editors note.				4P-ID	in Table 79-6b	or or by presenting a valid de	tection signature	on the unpowered		
Proposed	l Response	Response Status W			pairse	t, when it is pow	vered over only one pairset."	-			
PRO	POSED ACCEPT				Proposed	Response	Response Status W				
					WFP						
CI 33 Yseboodt	SC 33.3.3.6 , Lennart	P 124 Philips	L 33	# 132	TFTD						
Comment	t Type E	Comment Status D		Editorial	CI 33	SC 33.3.4	P 125	L 1	# 134		
"NOT	E 2In general, th	here is no requirement for a F	D to respond w	ith a valid classification	Yseboodt,	Lennart	Philips				
signa	ture for any DO_0	CLASS_EVENT duration less	than T class ."		Comment	Туре Е	Comment Status D		Editorial		
	Refer to where	Tclass is defined.			"Edito 4PID	r's Note: The ab work."	ove sentence requires furthe	r study based on	the outcome of the		
	Note: in anothe	r comment/baseline, we rena	ame Tclass to To	class_PD.		Comment sub	mitted to address this				
Suggeste	dRemedy				Suggester	Domody					
"NOT signa	E 2In general, th ture for any DO_0	here is no requirement for a F CLASS_EVENT duration less	PD to respond with than T class as	ith a valid classification defined in Table 33-	Remo	ve Editors note.					
28.".					Proposed	Response	Response Status W				
Proposed	l Response	Response Status W			PROF	OSED ACCEPT	Г.				
PRO	POSED ACCEPT				<u> </u>	SC 22 2 4	DAOS	1.24	# 405		
					U 33 Vaabaadt	SC 33.3.4	P 123	L 34	# 135		
					r Sebooul,						
					Comment "See l	<i>Type</i> E Figure 33-32" in	Table 33-21 is not a condition	n but is in the cor	Editorial ndition column.		
					Suggestee Add la	dRemedy ast column "Addi	itional information" and put th	e "See Figure 33	-32" into this column.		
					Proposed PROF	Response POSED ACCEPT	Response Status W				

C/ 33 Yseboodi	SC 33.3.4 t. Lennart	P 125 Philips	L 47	# 136	C/ 33 Yseboodt	SC Lenna	33.3.5	P 126 Philips	L 44	# 138
Commen Table	<i>t Type</i> E e 33-22 contains V	<i>Comment Status</i> D /_PD with underlines (2x).		Editorial	Comment "All P PDs o	<i>Type</i> Ds shal	E I provide p	Comment Status D hysical layer classification.	Type 1 PDs and	Editorial Class 1 to 3 Type 3 Ds. Class 4 to 6 Type 3
Suggeste Rem	edRemedy ove underline				PDs,	and Typ	be 4 PDs s	shall provide DLL classification	on.	
Proposed	d Response	Response Status W				А Тур —	be 1 PD ma	ay implement any of the clas	ss signatures in	33.3.5 and 33.6.
C/ 33 Ysebood	SC 33.3.5 t, Lennart	P 126 Philips	L 31	# 137	both 33.6)	Type Multiple There	Event clase	duplication in these 3 parad	and Data Link La	ayer classification (see
Commen "The PD d Phys shall wants the s reme	t Type T Physical Layer cla raws across all inp ical Layer classific draw across all in This is quite ug Is there any rea A Type 2 PD w s Class 4 power. If it only gets 1 econd sentence.	Comment Status X assification of the PD is the m out voltages and operational cation of the PD is the maxim put voltages and operational ly. ason by the second sentence ill return class_sig 4 on the fil event, it is allowed to LLDP u are adding a requirement to	naximum power modes. The adv um power that a modes." doesn't apply to rst class event, t up to Class 4 lay Type 1 and Type	PD Power that a Type 1 or Type 2 ertised Class during Type 3 or Type 4 PD Type 1 and Type 2 ? hereby indicating it er, this is allowed by	Suggeste Repla of the 2, Typ classi signa Proposeo PROI	dRemen ice by: "PDs class s be 3, an Type fication ture PD Respon POSED	dy shall provi ignatures d Type 4 F 1 PDs and (see 33.6) s shall pro nse ACCEPT.	ide Physical Layer classifica defined for Single-Event cla PDs shall implement Multiple d Class 1 to 3 Type 3 PDs o) while Type 2 PDs, Class 4 vide DLL classification." <i>Response Status</i> W	tion. A Type 1 P ssification as de e-Event classific ptionally provide to 6 Type 3 PDs	PD may implement any fined in 33.3.5.1. Type ation (see 33.3.5.2). Data Link Layer s, Type 4 PDs, and dual-
Suggeste Repla maxi	ace by: "The advertised mum power that a	d Class during Physical Layer PD shall draw across all inp	classification of ut voltages and o	the PD is the operational modes."						
Proposed TFTE	d Response)	Response Status W								
This	is a legacy text iss	sue								

CI 33	SC 33.3.5	P 126	L 48	# 139	C/ 33	SC 33.3.5.1	P 127	L 13	# 141		
Yseboodt,	Lennart	Philips			Yseboodt,	Lennart	Philips				
Comment	Type E	Comment Status D		PD Class	Comment	Туре Т	Comment Status D		PD Class		
"А Тур	be 1 PD may impler	ment any of the class signa	tures in 33.3.5 a	and 33.6."	33.3.5	5.1 PD Single-Ev The Type 2"	ent class signature: 2, Type 3 and Type 4 PD's cla	ssification beha	vior shall conform to the		
	Type 1 PDs typics Do not rely on see	ally do Single-Event classifi ction number for requireme	cation => refer t nts, spell them o	to 33.3.5.1. Dut.	electrical specifications defined by Table 33-26."						
noted	Note: Type 1 PD in 33.3.5.1 so char the referred section	are allowed to do Multiple-E nging on does not change a legad	event classificati y requirement.	ion, this allowance is	"The PD's classification behavior shall conform to the electrical specifications defined by Table 33-26."						
Suggestee	dRemedy					What is that	requirement in 33.3.5.1 doin	g there ?	are already required to		
"A Tyj classi	be 1 PD may impler	ment any of the class signa	tures defined fo	r Single-Event	confin	m to 33-26.		iveni, and are in	ere alleady required to		
Proposed		Response Status W	ayor olacomoan		Suggested Strike	dRemedy the line in 33.3.	5.1.				
OBE I	by 138.	N PRINCIPLE.			Proposed PROF	Response POSED ACCEPT	Response Status W				
CI 33 Yseboodt,	SC 33.3.5.1 Lennart	P 127 Philips	L 6	# 140	l notic behav	e that there is no vior shall conform	o sentence in the Single-Ever n to Table 33-26.	nt section that st	ates Type 1 PDs		
Comment " P (<i>Type</i> T Class_PD , as spec	Comment Status D sified in Table 33-24a and th	e responses	Editorial	Chanç define	ge to: "The PD's ed by Table 33-20	classification behavior shall 6."	conform to the e	electrical specifications		
Suggosto		rence (twice).			C/ 33	SC 33.3.5.1	P 127	L 22	# 142		
Chan	ne to Table 33-24				Yseboodt,	Lennart	Philips				
Proposed	Response	Paananaa Statua M			Comment	Туре Т	Comment Status D		Editorial		
PROF	POSED ACCEPT IN	PRINCIPLE.			Table	33-23 lists the c For class sig	lassification signatures. g. 0 we have a different curre	nt range for Type	e 3 than for the other		
OBE b	by 209				Types	s. - This also a - The Type i	applies to Type 4 (Autoclass un needs its own column	ises class signa	ture 0)		
					Suggestee	dRemedy					
					Add a	new column title For all rows	ed "PD Type" to become the s the content is "All", except th	second column. e 2nd row, wher	re it is "3, 4".		
					Proposed PROF	Response POSED ACCEP1	Response Status W				

CI 33	SC 33.3.5.2	P 127	L 40	# 143	C/ 33 SC 33.3.5.1		33.3.5.1	P 129	L 4	# 145	
Yseboodt, Lennart		Philips			Yseboodt, Lennart		rt	Philips			
Comment Type T Comment Status D PD		PD Class	Commen	t Type	Е	Comment Status D		Editorial			
"PDs i during	implementing Mu DO_CLASS_EV We also need	Itiple-Event Physical Layer cl ENT1 and DO_CLASS_EVE d a 'shall' for Autoclass.	assification sha NT2 and"	ll present class_sig_A	"Type MPS FALS class event	e 3 and 1 by meas SE. If it c event is t is longe	Type 4 PD suring the hooses to longer th er than T L	s may determine if the PSE t length of the first class event implement low MPS, a PD m an T LCE_PD min and shall s _CE PD max."	hey are connec The default va nay set short_m set short_mps t	ted to supports low alue for short_mps is ps to TRUE if the first o TRUE if the first class	
Suggester	dRemedy										
Add tr	ne following line o PDs implem"	n page 128, line 3. enting Autoclass shall prese	nt class sig 0 c	lurina	Change "low MPS" to "short MPS" SuggestedRemedy						
DO_C	LASS_EVENT_A	UTO as defined in 33.3.5.3.		lanng							
Proposed Response Response Status W PROPOSED ACCEPT.				"Type 3 and Type 4 PDs may determine if the PSE they are connected to supports short MPS by measuring the length of the first class event. The default value for short_mps is FALSE. If it chooses to implement short MPS, a PD may set short_mps to TRUE if the first class event is longer than T LCE_PD min and shall set short_mps to TRUE if the first class event is longer than T LCE_PD min and shall set short_mps to TRUE if the first class							
Vsehoodt Lennart Philins		Pronosed Response Response Status W									
Commont	Commont Tuno ED Commont Status D		PRO	POSED	REJECT						
"It is r	ecommended tha signature."	t dual-signature PDs with a s	ingle electrical l	oad use the same	Agair	n, the po	ower is low	er not shorter.			
This recommendation does not really help readers. We do not define what a 'single electrical load' is and we shouldn't as this is implementation dependent and invisble from the PI. Since the 'rules' for dual-signature are now uniform and clear, this recommendation is no longer needed.						SC , Lennar	33.3.5.2 rt	P 129 Philips	L 27	# 146	
						Comment Type E Comment Status D Ed					
Suggestee	dRemedy				NOT	L966			10163 1-4.		
Strike	sentence.					Note	serves no	purpose.			
Proposed PROF	Response POSED ACCEPT.	Response Status W			S <i>uggeste</i> Delet	edRemed e note.	dy				
					Proposed PRO	l Respor POSED	nse ACCEPT.	Response Status W			

Cl 33 SC 33.3.5.2 Yseboodt, Lennart	2.1 P 129 Philips	L 42	# 147	C/ 33 Yseboodt,	SC 33.3.5.3 Lennart	P 130 Philips	L 8	# 149
Comment Type T "The PD shall draw I IDLE state." This requirem	Comment Status D Mark until the PD transitions ent would prevent a PD from	from a DO_MAR	PD Class <_EVENT state to the but a Mark current as	Comment Type E Comment Status D Reference to Table 33-27a SuggestedRemedy Change to Table 33-27				
soon as it went throug The intent is t capacitor and force a	gh a Mark state. o make sure the PD keeps di clean reset.	awing IMark to d	scharge its front	Proposed Response PROPOSED ACCEPT		Response Status W		
It doesn't see Note: applies	to Type 2 as well - verify we	e PD can also go do not change leo	o to a CLASS state.	C/ 33 Yseboodt,	SC 33.3.5.3 Lennart	P 130 Philips	L 12	# 150
SuggestedRemedy Replace by: "The PD shall to the IDLE state or to Proposed Response TFTD.	draw I Mark until the PD trar o a DO_CLASS_EVENT state <i>Response Status</i> W	isitions from a DC	D_MARK_EVENT state	Comment Table Suggestee Chang Proposed PROF	Type E 33-27 uses both dRemedy ge all to millisect Response POSED ACCEPT	Comment Status D milliseconds and seconds, w onds (results in least required Response Status W	vhich is not allow digits).	Editorial ed by the Style Guide.
Cl 33 SC 33.3.5.3	P 130	L 3	# 148	C/ 33 Yseboodt,	SC 33.3.5.3 Lennart	<i>P</i> 130 Philips	L 19	# 151
Yseboodt, Lennart	Philips			Comment	Type E	Comment Status D		Editorial
Comment Type E Comment Status D Editorial Reference to Table 33-27a SuggestedRemedy Change to Table 33-27			Table Item 1 Suggested Repla	33-27 on Autocl State does not dRemedy ce by "DO_CLA	exist.	ers to state "DO_	CLASS_EVENT_1" in	
Proposed Response PROPOSED ACCEP	Response Status W			Proposed PROF	Response	Response Status W		

· · · · · · · · · · · · · · · · · · ·													
C/ 33 SC 33.3.5.3 Yseboodt, Lennart	P 130 Philips	L 19	# 152	<i>Cl</i> 33 <i>SC</i> 33.3.7 . Yseboodt, Lennart	1 P 133 Philips	L 4	# 155						
Comment Type E Table 33-27 on Autocla "Measured fron	Comment Status D ass timing requirements, items n when V Port_PD rises above	us D Editorial nents, items 2 and 3:) rises above V Port_PD min".		Comment Type E Comment Status X Ed "Note, V PD-2P = V PSE-2P - (R Chan x I Port-2P)"									
SuggestedRemedy Replace in Item 2 and "Measured from	3 by: n when V_PD rises above V_F	Port_PD-2P mir	ın	Vpd-2P is not defined in the definitions section. Vpd is (see definition below) and the way it is defined allows us to use Vpd in both a single-signature and dual-signature context as well as in 2P contexts.									
Proposed Response Response Status W PROPOSED ACCEPT.				Use of Vpd-2P is not widespread in the text (only twice). Propose to use V_PD everywhere. The same applies to V_PSE.									
Cl 33 SC 33.3.7 Yseboodt, Lennart Comment Type E Table 33-28 contains ti	P 131 Philips <i>Comment Status</i> D ime in seconds, but all values	L 1 are << 1000 ms	# 153 <i>Editorial</i> s. Change to ms.	The definition of Vpd is: "The voltage at the PD PI measured between any positive conductor of a powered pair and any negative conductor of the corresponding powered power pair" The definition of Vpse is: "The voltage at the PSE PI measured between any positive conductor of a powered pair and any negative conductor of the corresponding powered power pair"									
SuggestedRemedy Change seconds to mil Proposed Response PROPOSED ACCEPT	iseconds in Table 33-28. Response Status W			SuggestedRemedy "Note, V_PD = V_PS Proposed Response	SE - (R Chan x I Port-2P)" Response Status W								
C/ 33 SC 33.3.7 Yseboodt, Lennart	P 131 Philips	L 48	# 154	TFTD									
<i>Comment Type</i> E linrush_PD-2P value is Looks like a division.	Comment Status D s "0.300 / TBD"		Editorial										
SuggestedRemedy If we don`t have a valu	e yet, make it "0.300 (TBD)".												
Proposed Response PROPOSED ACCEPT	Response Status W												
CI 33	SC	33.3.7.3	P 134	L 17	# 156	CI 33	SC	33.3.7.3	P 134	L 25	# 158		
----------------------------------	---	---	---	---	---	---	---------------------	---	--	---	--	--	--
Yseboodt	, Lenna	rt	Philips			Yseboodt	Lenna	rt	Philips				
Comment	Type	Е	Comment Status X		Editorial	Comment	Туре	ER	Comment Status D		PD Inrush		
"T de voltaç a sinç	lay-2P f ge" Vpd-2 Vpd is gle-signa	or each pa 2P is not d s (see defi ature and o	airset starts when V PD-2P of efined in the definitions sect nition below) and the way it dual-signature context as we	rosses the PD p ion. is defined allow all as in 2P conte	bower supply turn on s us to use Vpd in both exts.	C Port per pairset is less than 180 mF for: - single-signature PDs, assigned to Class 0 to 6 - dual-signature PDs assigned to Class 1 to 5 and if C Port per pairset is less than 360 mF for single-signature PDs assig Class 7 to 8, as specified in Table 33-17."							
	Use o The s	of Vpd-2P i ame appli	is not widespread in the text es to V_PSE.	. Propose to use	e V_PD everywhere.	Guardanta	There	e is no reas	on to use a itemized list her	e.			
			-			Suggeste	areme	ay					
condu powe positi powe	The c uctor of r pair" The c ve cond red pow	lefinition of a powered lefinition of luctor of a ver pair"	f Vpd is: "The voltage at the I pair and any negative conc f Vpse is: "The voltage at th powered pair and any negat	PD PI measure luctor of the cor e PSE PI measure ive conductor o	d between any positive responding powered ured between any f the corresponding	PSE i to 6, a than 3	f C Port and dua	ne list into t t inrush cur t per pairse il-signature for single-si	he sentence. rents at startup, I Inrush_PE t is less than 180 uF for sing PDs assigned to Class 1 to gnature PDs assigned to Cl Response Status	D and I Inrush_P gle-signature PE o 5, and if C Por lass 7 to 8, as sp	D-2P are limited by the ls, assigned to Class 0 per pairset is less pecified in Table 33-17."		
Suggosto	dPomo	du.				Fioposeu		ACCEDT	Response Status w				
Chan		uy D 20 into V				PROF	-05ED	ACCEPT.					
Chan	ye v_ri		v_FD.			Would	d OBE 2	216 if accep	oted.				
Proposed	Respo	nse	Response Status W						h				
IFIC)					Incorp	orate ti "Inpu"	ne list into t t inrush cur	ne sentence. rents at startup. I Inrush PI	D and I Inrush P	D-2P are limited by the		
CI 33	SC	33.3.7.3	P 134	L 19	# 157	PSE,	as spec	cified in Tab	ble 33-17, if C Port per pairs	set is less than 1	80 uF for single-		
Yseboodt	, Lenna	rt	Philips			and if	C Port	per pairset	is less than 360 uF for sing	le-signature PD:	s assigned to Class 7		
Comment	t Type	т	Comment Status D		PD Inrush	to 8."							
"This powe Inrusl while	delay is r state b h-2P to The c the PSI	e required s before the I LIM-2P." delay is rec E is still in	so that the Type 2, Type 3 a PSE has had time to switch quired such that a PD doesn inrush.	nd Type 4 PD d current limits or 't start consumin	oes not enter a high n each pairset from I ng it's Class current								
might	The r try to d	eal issue is raw that.	s that PSEs don`t provide Ic	on-2P yet (durir	ng inrush) and the PD								
Suggeste	dReme	dy											
"This powe from	delay is r state b I_Inrush	required s before the 1-2P to I_C	so that the Type 2, Type 3 a PSE has had time to change con-2P."	nd Type 4 PD d e the available c	oes not enter a high current on each pairset								

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Response Status W

Proposed Response

PROPOSED ACCEPT.

CI 33	SC 33.3.7.4	P 13	34 L 34	# 159	C/ 33	SC 33.3.7.6	6 P 138	L 42	# 160
Yseboodt,	Lennart	Philips	3		Yseboodt,	Lennart	Philips		
Comment [·]	Type ER	Comment Status	х	Pres: Yseboodt6	Comment	Туре Т	Comment Status D		PD Power
Comment The cu values POWE connec Port va PD C F Suggested Adopt Proposed I WFP TFTD	Type ER Irrent definition of for single and "C Port in Tab R_ON states th cted to a single-salue Port interpretation <i>Remedy</i> yseboodt_06_03 <i>Response</i>	Comment Status of "Cport per pairset" i dual signature. This w le 33-28 is the total P at a PSE encounters signature PD. When a s are specified in 33.3 n model." B16_cport.pdf <i>Response Status</i>	X s highly confusing a will trip up readers. D input capacitanc when operating one D PSE is connected 3.7.6. See Figure 3:	Pres: Yseboodt6 as it produces different e during POWER_UP and e or both pairsets, when to a dual-signature PD, C 3-33 for a simplified PSE-	Comment "A Typ the fol under 2P mi Suggested Either 2P as Proposed PROF Chang TFTD	Type T be 2 or Type 3 F llowing:" "b) The PD sh worst-case curr T_LIM-2P has A Type 1 (Cla n=10ms. A Type 3 PSE The PD only F The same iss dRemedy : - Change T - or, specify it is the shortes Response POSED ACCEP ge Tlim-2p to cla	Comment Status D PD that demands less than Cl hall not exceed the PD upperb rent draw under the following is a different value depending of s a different value depending of s a different value depending of the st	ass 5 power level ound template b conditions." on PSE Type. W as, whereas Type as a Type 4 PSI the PSE Type. and line 20. Class rather tha ere. That should ge text.	PD Power els shall meet both of eyond T LIM-2P min hich one ? e 3 (Class 0-6) has Tlim- E has T_LIM-2P=6ms. an PSE Type be the Type 4 T_LIM- # 161
					Yseboodt,	Lennart	Philips		
					<i>Comment</i> "4ms"	<i>Type</i> E is missing space	Comment Status D		Editorial
					Suggested Chang	<i>dRemedy</i> ge to "4 ms".			
					Proposed PROF	Response	Response Status W		

SC 33.3.7.10 SC 33.6.3.5 P 140 L 3 C/ 33 P 167 L 1 # 162 # 165 Yseboodt, Lennart Yseboodt, Lennart Philips Philips Comment Type **TR** Comment Status D PD Power Comment Type E Comment Status D "Dual-signature PDs shall not exceed Icon-2P as defined in Equation 33-3c for longer than The PSE power control SD in Figure 33-45 makes use of pd_dll_power_type and TCUT-2P min as defined in Table 33-11." parameter type. These variables are 'shared' with the PSE state diagrams. This requirement is already captured in 33.3.7.2. The new PSE SD uses different variables. I don't know how to fix this. SuggestedRemedy Remove sentence. A similar situation exists for the PD power control SD in Figure 33-46. Proposed Response Response Status W SuggestedRemedy PROPOSED REJECT. Add Editor's note: "LLDP power control state diagrams must be changed such that they also work with the new Type 3/4 PSE and PD state diagrams." Where? I don't see it anywhere in 33.3.7.2. Proposed Response Response Status W TFTD PROPOSED ACCEPT. An editor's note from Lennart. Yes, please! SC 33.6.3.2 P 162 L 17 # 163 Yseboodt, Lennart Philips C/ 33 SC 33.6.3.5 P 168 L 17 # 166 Comment Type **T** Comment Status X Pres: Yseboodt10 Yseboodt, Lennart Philips Changes to the DLL section to D1.5 broke the combination of DLL and extended power. Comment Type E Comment Status D Specifically the corner case of a PSE that reclaims power and a PD that uses PD LLDP state machine in Figure 33-46. extended power no longer works. State "PD POWER REALLOCATION 2" is too narrow, text does not fit. SuggestedRemedy SuggestedRemedv Adopt vseboodt 10 0316 lldpextended.pdf Resize state box. Proposed Response Response Status W

C/ 33

WFP

C/ 33

C/ 33

TFTD

CI 33	SC 33.6.3.4	P 1	66	L 10	# 164
Ysebood	, Lennart	Philip	S		
Commen Table	<i>t Type</i> E e 33-36 got garbled	Comment Status I in Draft 1.3.	D		Editorial
Suggeste Reste	dRemedy ore version of the 1	able from D1.2.			
Proposed PRO	l Response POSED ACCEPT.	Response Status	w		

IEEE P802.3bt D1.6 4-Pair Power-over-Ethernet 9th Task Force review comments

Proposed Response Response Status W PROPOSED ACCEPT. SC Annex33A P 217 L 33 # 167 Yseboodt, Lennart Philips Comment Type E Comment Status D Editorial "Four pair operation requires the specification of resistance unbalance between each two pairs of the channel, ...". We never use "four pair", always "4-pair". SuggestedRemedv "Operation using 4-pair requires the specification of resistance unbalance between each two pairs of the channel, ...' Proposed Response Response Status W PROPOSED ACCEPT. Comment ID 167 Page 39 of 83

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

3/2/2016 11:16:41 AM

Fditorial

Editorial

Cl 33 Vseboodt	SC Annex33A	A P 218 Philips	L 21	# 168	C/ 79 Vseboodt	SC 79.3.7	P 202 Philips	L 4	# 171
Comment		Comment Status D		Anneves	Comment		Comment Status D		
"The e throug	effective resistance	e R n is the measured voltage cribed below and as shown i	e V eff_pd_n , n the example i	divided by the current in Figure 33A-4."	In Fig	ure 79-3a, the T 3+1+12+12+2	LV string length says 26, bu = 30.	it should be 30.	
'n' is n	not defined.				Suggeste	dRemedy			
Suggested	dRemedy				Chan	ge 26 to 30.	5		
"The e throug n is th	effective resistance gh the path as des ne pair number."	e R n is the measured voltag cribed below and as shown i	e V eff_pd_n , n the example i	divided by the current in Figure 33A-4, where	Proposed PROF	POSED ACCEP	Response Status W		
Proposed	Response	Response Status W			CI 33	SC 33.2.5.1	1 P 75	L 22	# 172
PROF	POSED ACCEPT.	,			Picard, Je	ean	Texas Instr	ruments	
<i>Cl</i> 79 Yseboodt,	SC 79.3.2 Lennart	P 195 Philips	L 28	# [169	Comment mr_po event 5-8 d	<i>Type</i> TR d_class_detecte Valid signature	Comment Status D d is The PD classification si s are 0 through 4.	gnature seen durir	F ng a classification
Comment "Claus Equip	<i>Type</i> ER se 33 defines two o ment (PSE)."	Comment Status D option power entities: a Pow	ered Device (Pl	<i>Editorial</i> D) and Power Sourcing	Suggeste Elimir	<i>dRemedy</i> nate items 5 to 8	and remove the Editor's no	te.	e unig.
Suggester	I guess that sho	uld be 'optional' ?			Proposed PROF	Response POSED ACCEP	Response Status W T IN PRINCIPLE.		
"Claus Sourc	se 33 defines two (ing Equipment (PS	optional power entities: a Po SE)."	wered Device (PD) and Power	Partia	al OBE by 69.			
Proposed	Response	Response Status W			Remo	ove editor's note			
PROF	POSED ACCEPT.								
C/ 79 Yseboodt,	SC 79.3.7 Lennart	P 201 Philips	L 47	# 170					
Comment	Type ER	Comment Status D		Editorial					
"Claus Equip	se 33 defines two o ment (PSE)."	option power entities: a Pow	ered Device (Pl	D) and Power Sourcing					
	I guess that sho	uld be 'optional' ?							
Suggested	dRemedy								
"Claus Sourc	se 33 defines two o ing Equipment (PS	optional power entities: a Po SE)."	wered Device (PD) and Power					
Proposed PROP	Response POSED ACCEPT.	Response Status W							

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

TLV

PSE SD

CI 33	SC 33.2.6.1	P 89	L 30	# 173	CI 33	SC 33.2.5.8	P 65	L 29	# 176
Picard, Jea	n	Texas Instrum	ents		Picard, Jea	an	Texas Instrum	ents	
Comment 1 "The sp of deter first pai signatu This is detection	ype TR becification of Td ction on the rset to the begin re PD". incomplete, tdet on is initially perf	Comment Status D et2det, defined in Table 33–7 ning of detection on the othe 2det should also apply when ormed prior to connection.	7, applies to the r pairset when o connected to d	Connection Check time between the end connected to a single- ual signature PD if	Comment The m Suggested See S Proposed	<i>Type</i> ER leaning of CC_DB <i>IRemedy</i> D presentation (J <i>Response</i>	Comment Status X ET_SEQ needs to be updated P) Response Status W	L	PSE SD
Suggestedl Add thi " When to conn the beg	Remedy s sentence: connected to a ection check, To inning of next de	dual-signature PD and if a de let2det also applies to the tim stection following connection	etection is perfo ne between the check"	rmed on a pairset prior end of this detection to	CI 33 Picard, Jea	SC 33.2.8.10 an	P 113 Texas Instrum	L 23 ents	# [177
Proposed F PROPC OBE by	Response DSED ACCEPT / 291.	Response Status W			Comment Pclass Suggested	Type ER is referredd to th Remedy	Comment Status D ne wrong equation (33-3)		Editorial
C/ 33 Picard, Jea Comment 7 Autocla	SC 33.2.7.3 n <i>Type</i> TR iss margin equat	P 100 Texas Instrum Comment Status D ion for Type 4 over 2P is defi	L 20 ents ined. Type 4 sh	# 174 Autoclass ould be 4P only.	Proposed PROP Also, r	Response POSED ACCEPT needs to be made	Response Status W IN PRINCIPLE. e a hyperlink.		
Suggestedl Delete Proposed F	Remedy the equation app Response	licable to "for Type 4 over 2- Response Status W	pair"		C/ 33 Picard, Jea Comment	SC 33.2.8.10 an <i>Type</i> FR	P 113 Texas Instrum Comment Status D	L 26 ents	# 178
PROPO Cl 33 Picard, Jea	SED ACCEPT. SC 33.2.5.12	P 78 Texas Instrum	L 4 ents	# [175	Pclass Suggested Chang	s-2P is referred to Remedy ged equation 33-4	the wrong equation (33-4)		
Comment 7 Needs	<i>ype</i> TR an Updated PSE	Comment Status X state diagram (Type 3 and 4	4) for SS and D	PSE SD S PD.	Proposed PROP	Response POSED ACCEPT	Response Status W IN PRINCIPLE.		
Suggestedl See SE	Remedy Presentation (J	P)			OBE b	by 16			
Proposed F WFP	Response	Response Status W							
TFTD									

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Cl 33 Darshan, Yai	SC 33.3.7.3 r	P 134 Microsemi	L 42	# 179	C/ 33 Darshan, `	SC 3: Yair	3.3.5.2	P 128 Microsemi	L 52	# 180		
Comment Ty	pe TR	Comment Status X		PD Inrush	Comment	Туре	TR	Comment Status D		PD		
Does the controllin requirem during th concern. about on It is OK a it is feasi	requirement to g linrus i.e. Cp ent for the PD2 e 802.3af proje If this is correct ly the case who also if we require ble and clear fu	o finish lirush within Tinrus-2F d<=180uF and if PD is limitin ? This interpretation makes so ect, my intent was to support of than it is not clear from clau en PSE is limiting the current re to meet the 50msec even if rom the spec that this is what	P min is only if I ag linrush than t ense to me sind Cport>>180uF use 33.3.7.3 firs f Cport>Cpd bu s we want.	PSE is in charge of there is no Tinrush_max when I worked on it so time is not a t paragraph that talks t we need to verify that	The following text in page 128 lines 52-53 and page 129 lines 1-2: "Dual-signature PDs shall advertise a class signature corresponding with Class or 5 on each pairset as defined in Table 33–25. The Class advertised on each the power requested by the PD on that pairset. Dual-signature PDs may adver class signatures on each pairset. It is recommended that dual-signature PDs v electrical load use the same class signature." It is not complete for describing the requirements for dual signature PD in the sone pairset of the dual-signature PD is powered, the 2nd pairset should preserved.							
SuggestedRe Option 1: If we don it explicit Option 2: verify tha Group to	emedy 't care about T ly since it is no lf we want to l t it is possible discuss.	inrsh_max=50msec in teh PI t addressed at all in the curre keep the PD max Tinrush=50 and express the requirement	uF etc. we should say apacitance, we need to	one pa classif clause Suggested	airset of the fication si a 33.3.4 p	he dual-s gnature t age 124	ignature PD is powered, the oo in addition to valid detecti lines 47-48.	2nd pairset sh on signature a	ould present a valid s done for detection in			
Proposed Re TFTD as	sponse requested.	Response Status W			Add th "A Typ a valio	ne followir be 3 or Ty t classific	ng text at /pe 4 dua ation sig	page 129 after line 2: al-signature PD that is powere pature on the uppowered pair	ed over only or set "	ne pairset shall present		
The requ put on it	irement is simple based on its as	bly that by Tinrush_min (50m ssigned class.	s) the PD must	meet the requirements	Proposed PROP	Respons POSED R	e EJECT.	Response Status W				
					This re	equireme	nt is alrea	ady on page 124, line 47.				

CI 33	SC 33.3.7.2	Ps	97	L 30	# 181	CI 33	SC	33.2.7	P 9:	3	L 48	# 182
Darshan, Ya	air	Micro	osemi			Darshan, Y	/air		Micros	semi		
Comment T	ype TR	Comment Status	X		PSE Class	Comment	Туре	TR	Comment Status	Х		PSE Class
To add without (There I saw th the SS	text that we can doing CC and d is a separate co hat for DS PDs i PD it is not cov	n do class and reset detection again. omment to address i t is covered by Figu ered.	at any time b t also in the s re 33-20 at the	etween detectio tate machine.) e CLASS_RESE	n and power_up	In the "The n signati Alterna RCh w pairset	followir ninimur ure PD atively, /hen po ts to ar	ng text: m power o , or supply PSE impl owering us rive at ove	output by the PSE for ving power in 2-pair m ementations may use ving a single pairset, o er-margined values as	a particu ode, is d VPSE = or RChan shown i	ar PD Class, efined by Equ VPort_PSE-2 = RCh/2 whe n Table 33-11	when powering a single- lation (33-2). 2P min and RChan = in powering using two ."
Suggested	Remedy					It is no -It add	t clear ressed	for the firs	st sentence in this pa	agraph ti in 4-nairs	nat:	
Add the "PSE is	e following text to allowed to rese	o classification secti et the PD classificati	on page 97 lii on during clas	ne 30: ss event sequen	ce and redo its	-Equat -Vpse	tion 33- and Ro	-2 is the go	eneral case eneral case	nge for 2	/ -pairs and 4-p	bairs
classific duration	cation sequence (Tpon) withou	e at any time betwee t redoing connection	n the end of o check and de	detection and Po	OWER_UP time	Suggestea	IRemed	dy				
or equiv	valent wording.					Chang "In the "The n	e the fi followi	irst senten ing text:	nce of the paragraph a	above fro	m: ar PD Class	when powering a single-
Proposed H	esponse	Response Status	W			signati	ure PD	, or supply	ving power in 2-pair m	ode, is d	efined by Equ	ation (33-2)."
						"The n signatu repres <i>Proposed i</i> TFTD I'm not	ninimur ure PD enting <i>Respor</i> t sure v	m power o over 4-pa the genera nse what clarity	utput by the PSE for irs, or supplying pow al case for Vpse and <i>Response Status</i> y your suggested sen	a particul er in 2-pa Rchan." W tence brit	ar PD Class, ir mode, is de ngs.	when powering a single- fined by Equation (33-2)
						C/ 33 Darshan, Y	SC ⁄air	33.2.10	P 1 Micros	1 5 semi	L 8	# 183
						Comment See da Short I guideli issue.	<i>Type</i> arshan <u></u> MPS (th nes in	TR _03_0316 he 7msec the PSE, i	Comment Status .pdf for details. PD pulse) subject ne in the PD and during	X ed to be testing fo	addressed in r compliance	Pres: Darshan3 terms of recommended regarding potential
						Suggestea See da	IRemeo arshan_	dy _03_0316	.pdf for suggested rei	nedy.		
						Proposed WFP	Respor	nse	Response Status	w		
						TFTD						

C/ 33 SC 33.2.8.4 Darshan, Yair	P 106 Microsemi	L 18	# 184	CI 33 S Darshan, Yair	SC 33.2.8.4	P 106 Microsemi	L 47	# 185		
Comment Type TR	Comment Status X		Pres: Darshan2	Comment Type	TR	Comment Status X		Pres: Darshan2		
See darshan_02_0316.p as well. In the definition of Rchar "RChan is the channel lo Equation 33-10 was deve be clearlry defined so Ro <i>SuggestedRemedy</i> Change the definition for "RChan is the channel lo To: "RChan is the channel D	df for details. The complete n for Equation 33-10 we see pop resistance" elpoed based on Ipeak-2P_ than can accept only 2-pairs Rchan for Equation 33-8 fr pop resistance"	comment and r the following te unb/Ipeak_2P ra Rchan values. om: meter has a	remedy are shown here ext: atio so Rchan need to	See darshan_02_0316.pdf for details. The complete comment and remedy are show as well. In the definition of Rchan for Equation 33-8 we see the following text: "RChan is the channel loop resistance; this parameter has a worst-case value of RC is defined in Table 33-1." Equation 33-8 is for Ipeak (total current on both pairsets) and and it is using Ppeak- (total PD peak power) but it is only using Rchan defined for 2-pairs while this equation used for 4-pairs and 2-pairs. SuggestedRemedy Change the definition for Rchan for Equation 33-8 from: "RChan is the channel loop resistance; this parameter has a worst-case value of RC						
worst-case value of RCh	. RCh is defined in Table 33	8-1."		To						
Proposed Response WFP	Response Status W			"RChan is the channel loop resistance; this parameter has a worst-case value of when 2-pairs mode is used and Rch/2 when 4-pairs is used."						
TFTD				Proposed Res WFP	oonse	Response Status W				
				TFTD						

CI 33	SC	33.1.3		P 45	L 54	# 186		CI 33	SC	33.2.9	P 114	L 32	# 187
Darshan, `	Yair		Μ	icrosemi				Darshan,	Yair		Microsem	ıi	
Comment	Туре	TR	Comment Sta	tus X		Ca	abling	Comment	Туре	TR	Comment Status D		PSE Power
Comment The te "All for source pair ca PI." Is not We ca Suggested Chang "All for source ICable Proposed TFTD This is	Type ext: ur twiste e greate arrying (accurat an use u dRemeo ge to: ur twiste e greate 4 system e) and o Respon	TR ed pairs, c r than Cla + ICable) e. p to class y ed pairs, c r than Cla ns at the F ne twisted se aching on	Comment Sta connected from F ass 4 power at th and one twisted as 5 to source pow connected from F ass 4 power with PSE PI—two pai d pair carrying (– <i>Response Sta</i> the decision that	tus X PSE PI to F e PSE PI- pair carryi ver from PS PSE PI to F Type 3 sys rsets each ICable), fr tus W	PD PI are required -two pairsets eac ing (– ICable), fro SE for Type 4 cor PD PI are required stems and greate having one twist om the perspectiv ot support a 2-pair	Ca d in order for the PS ch having one twister m the perspective of nnected to DS PD. d in order for the PS er than class 5 power ed pair carrying (+ ve of the PI."	abling E to d f the	Comment In the "A PS able to produ provis The p 1.The numb 2.The the firm not to Suggestee Option Option "A PS power Proposed PROF TFTD While	<i>Type</i> followir E shall o ascer ced by roblems PSE ca er of cla massa st sente work at <i>dRemed</i> n 1: Del n 2: Moi E shall r and th <i>Respoi</i> POSED , see 32 I agree	TR ng text: not initiation tain the average the PSE. wer to the s with this s with this s with this annot kno assification age of the ence tries t the PSE dy lete this ter dify the ter not provis the PD has nse REJECT. 22 first!	Comment Status D e power provision to a linivailable power based on t For example, a PSE that link or pairset for a PD re text are: wif the PD is not able to n events. example shown in the tex to convey and again, how available power budget? ext and the Editor Note. ext and the Editor Note. ext to: sion power to a link or pai requested a Class the PS <i>Response Status</i> W sentence is hard to under	k or a pairset if th he number of cla has less than Cla questing a Class ascertain the ava t is clear but it ha v the PSE can kn irset if the PSE c SE cannot suppo	PSE Power the connected PD is not assification events as 3 power would not as 3 or higher power level." ailable power based on the the as nothing to do with what how that the PD is able or eannot supply Class 3 ort."
								1.The numb Respo	PSE ca er of cla onse: F	annot kno assification PDs are re	w if the PD is not able to n events. equired to ascertain the av	ascertain the ava vailable power ba	ailable power based on the ased on the number of
								2.The the fir not to Respo respo	massa st sente work a onse: T not tha nsibility	age of the ence tries t the PSE The require at the PSE t to either	example shown in the tex to convey and again, how available power budget? ement says the PSE mus must know the PD can v work or alert the user it is	tt is clear but it ha v the PSE can kn it know the PD ca work at that powe underpowered.	has nothing to do with what how that the PD is able or an ascertain the available er level. It is the PDs

Cl 33 S Darshan, Yair	SC 33.2.10.1.2	2 P Mic	116 rosemi	L 49	# 188	C/ 33 Darshan, `	SC Yair	33.3.3.4	P 122 Microsemi	L 31	# 189
Comment Type In the text: "A Type 1 is greater t	e TR and Type 2 P than or equal t	Comment Statu SE shall consider to the applicable I	s D the DC MF Hold max c	PS component t continuously for	PSE MPS o be present if IPort-2P a minimum of TMPS"	Comment The te "tpowe A time during	<i>Type</i> ext: erdly_tin er used to the PS	TR ner to prevent E's inrush	Comment Status D the Type 2, 3, or 4 PD from period; see Tdelay-2P in Ta	drawing more t ble 33-28."	PD SD
-It doesn't -In addition confusing	clear what it n n to use the w or contradictir	neans? ord "continuously" or both.	and right a	after it "for a mi	nimum of TMPS" is	This T more t	imer is than cla	used to pr iss 2 powe	event Type 2-3 PDs from dra r for Type 4 PDs.	awing more tha	n Type 1 power and
SuggestedRen Delete the Page 116 Page 117 Page 117 Page 117 Proposed Res	nedy word "continu line 49. line 5. line 10. line 26. ponse	ously" from the fo Response Status	ollowing loc	ations:		Chang "tpowe A time during To: "tpowe A time Type 2	ge from: erdly_tin er used t the PS erdly_tin er used t 2 and 3	ner to prevent E's inrush ner to prevent PDs and (the Type 2, 3, or 4 PD from period; see Tdelay-2P in Ta the Type 2, 3, or 4 PD from Class 2 power for Type 4 PD	drawing more t ble 33-28." drawing more t s, during the P	han inrush current han Type 1 power for SE's inrush period; see
FROFOS	DACCEPT.					Proposed TFTD. Better	/-2P in Respon langua	Table 33-2 ise ge:	vs." Response Status W		
						To: "tpowe A time 4 PDs 2P in	erdly_tin er used t from di Table 33	ner to prevent rawing mo 3-28."	Type 2 and 3 PDs from drav re than Class 2 power during	ving more than g the PSE's inru	Type 1 power and Type Ish period; see Tdelay-

C/ 33	SC	33.3.3	P 119)	L 53	# 190	C/ 33	SC 33.	3.7.5	<i>P</i> 136	L 23	# 191
Darshan	i, Yair		Microse	emi			Darshan, Y	Yair		Microsemi		
Comme	nt Type	TR	Comment Status	x		Pres: Yseboodt4	Comment	Туре Т	R	Comment Status X		PD Power
The with The sign a) D b) T	PD state the sam following ature PD ual signa he PSE	e diagram t le state ma g facts help Ds as well: ature PDs r can poweru	ext and drawing can c chine. • us to determine that equired to consume u up each pairset in diffe	over singl the curren p to Pclas rrent timin	e-signature ar It state machir Iss-PD per pairs gs. This is true	nd dual-signature PD ne can support dual- set. e for single-signature	We ne Ppeak still ne or alte PSSU same	eed to clarif _PD>Pclased to meet rnatively to T(T)is <pc concept ap</pc 	ty that e ss_PD t equati update lass_PI oplies to	even if drawings 33-34 and 3 for t <tcut_2p and="" for="" min="" th<br="">on 33-24 by using a bit sma e drawings 33-34 and 33-35 D and not Pclass_Pd and ac o drawings 33-34 and 33-35</tcut_2p>	3-35 shows that e rest of the cy ller Pclass_PD to show that fo cordingly upda and Equations	at if the PD was using vcle it uses Pclass_PD it for the rest of the cycle or t>=Tcut-2P_min te the equations. The 33-27, 33-28 and 33-29.
PDs	and dua	al-signature	e PDs. Therefore the p	ower_rec	ived variable i	s true if there is power	Suggested	dRemedy				
c) T As a beha Suggest	he detect a result, v avior of a redReme	etis for sing tion signati we can defi a PD over e	are signature and one ore is presented is see ne that the state mack each pairset and the st	en pair pai nine descr ate machi	rset. The sam ibes the exter ine definitions	-signature PD. e is for dual_signature. nally observable applies per pairset.	Option Add th "Note: Equati after T	n 1: ne following In additior ions 33-29 Cut-2P mir	text af , Figure need to nimum i	ter line 23. es 33-34, Figure 33-35, Equ o meet equation 33-24 as we in the above figures and equ	uations 33-27, I ∋II by using low uations."	Equations 33-28 and er power than shown
Cha "The prov To: "The pairs sing Propose	nge the PD stat ide the t PD stat set. The le-signat	folowing tex te diagram behavior of te diagram PD shall pr ture PDs ar onse	xt from: specifies the externall the state diagram sho specifies the externall ovide the behavior of nd dual-signature PDs Response Status	y observa wn in Figu y observa the state o over each	ble behavior c ure 33–31." ble behavior c diagram show n pairset indep	of a PD. The PD shall of a PD over each n in Figure 33–31 for bendently."	Optior a)Upd upperl b) Upc Pclass c) Acc Equati Equati	ate drawing bound temp date drawin s_PD-2P. cordingly up ion 33-28 to ion 33-29 to	gs 33-3 olate ar igs 33-3 odate E o <pcla o <pcla< td=""><td>4 to show that after Tcut-2P re below PSE Pclass and Pc 35 to show that after Tcut-2P quation 33-27 to <pclass_p ass instead of Pclass. ass_PD-2P instead of Pclass</pclass_p </td><td>PD extended to lass_PD respe PD PD uppert D instead of <f s_PD-2P.</f </td><td>emplate and PD ctively. bound template is below Pclass_PD.</td></pcla<></pcla 	4 to show that after Tcut-2P re below PSE Pclass and Pc 35 to show that after Tcut-2P quation 33-27 to <pclass_p ass instead of Pclass. ass_PD-2P instead of Pclass</pclass_p 	PD extended to lass_PD respe PD PD uppert D instead of <f s_PD-2P.</f 	emplate and PD ctively. bound template is below Pclass_PD.
WFI												
TFT	D						Proposed TFTD	Response		Response Status W		

C/ 33 S Darshan, Yair	SC 33.2.8.2	P 105 Microsem	L 8	# 192	CI 33 Darshan, `	SC Yair	33.2.7.3	P 99 Microsemi	L 43	# 194
Comment Type	e TR	Comment Status X		PSE Power	Comment	Туре	ER	Comment Status D		Editorial
Missing Ty "Transient	ype 3 and 4 in ts less than 30	the following text:) us in duration may cau	se the voltage at th	e PI to fall more than	Typo i Same	in Table in line	e name. It i 47.	s Table 33-16 and not 33-16	Sa.	
KTran_lo. any input v shall meet	The minimum voltage transie t the VPort_Ps	ι PD input capacitance a ent lasting less than 30 ι SE-2P specification."	llows a Type 1 or 1 s. Transients lastir	Fype 2 PD to operate for ng more than 250 us	Suggested Chang	d <i>Reme</i> d ge to "T	<i>dy</i> able 33-16	" in two locations.		
SuggestedRer	medy				Proposed	Respor	nse	Response Status W		
Change to):				PROF	POSED	ACCEPT.			
"Transient KTran_lo. voltage tra the VPort_	ts less than 30 The minimum ansient lasting _PSE-2P spec	us in duration may cause PD input capacitance a less than 30 us. Transie ification."	se the voltage at th llows all PD types ents lasting more th	e PI to fall more than to operate for any input nan 250 us shall meet	C/ 33 Darshan, `	SC Yair	33.2.8.4	P 107 Microsemi	L 23	# 195
Proposed Res TFTD.	sponse	Response Status W			Comment Delete	<i>Type</i> e Editor	E Note since	Comment Status D e the request was addressed	d in 33.3.7.10.	Editorial
Is this true Why is this	e? I thought w is even here.	e changed the wording i It is PD related and is co	n the PD section. pied in the PD sec	tion.	"Edito requir make condit	r's Note ements sure th ions."	e: Text nee to make s at dual-sig	ds to be inserted in 33.3.7.1 ure they work with PSEs that nature PDs correctly police I	0 to address du at exhibit unbala PClass PD-2P a	ual-signature PD test ance. This is required to also under unbalance
C/ 33 S Darshan, Yair	SC 33.3.7.6	P 138 Microsem	L 11	# 193	Suggested Delete	dRemed e Editor	dy Note.			
Comment Type Clause 33 include du	be TR 8.3.7.6 "PD bel ual_signature F	Comment Status X navior during transients a PDs.	at the PSE PI" nee	Pres: Darshan6 ds to be updated to	Proposed PROF	<i>Respoi</i> POSED	nse ACCEPT.	Response Status W		
SuggestedRer	medy				C/ 33	SC	33.2.8.4	P 105	L 21	# 196
See propo	osed update in	darshan_06_0316.pdf.			Darshan, `	Yair		Microsemi		
Proposed Res	sponse	Response Status W			Comment	Туре	Е	Comment Status D		Editorial
WFP					Missir "IPort-	ng "in" ii -2P and	n the follov I IPort-2P-	ving text: other are the currents on the tatint's Equation (22, 5) in or	pairs with the	same polarity of the two
TFTD					pairse			a iii Equation (55–5) iii ai	iu Equation (33	<i>—</i> о).
					Suggested Chang IPort-2 pairse To: "IPort- pairse	dRemed ge: 2P and ets and -2P and ets and	dy IPort-2P-o are defined I IPort-2P-o are defined	ther are the currents on the d Equation (33-5) in and Equ other are the currents on the d in Equation (33-5) in and E	pairs with the s lation (33-6). pairs with the s quation (33-6).	ame polarity of the two same polarity of the two
					Proposed	Respor	nse	Response Status W		
					PROF	POSED	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 Z/withdrawn SORT ORDER: Comment ID

C/ 33 SC Darshan, Yair	33.2.8	P 10 Micros)4 semi	L 20	# 197	<i>Cl</i> 33 Darshan, Y	SC 33.2 air	2.5.12	P 86 Microsemi	L 6	# 199	
Comment Type Notes 3 and all MPS opt "3ltem 17 a	E d 4 need to b ions. pplies to PS	Comment Status e updated due to the Es that measure curr	D e fact that It rents per pa	em 17 and 17a	Editorial a is now item 20 for the MPS.	al Comment Type TR Comment Status D There are redundant parentheses in the 2nd exit from CLASS_EV1_LCE_PRI to ' following text: tlce_timer_pri_done *[!class_4PID_mult_events_pri * [(mr_pd_class_detected_pri (class_num_events_pri = 1)] + (mr_pd_class_detected_pri = 0)]						
 SuggestedRemedy Change to: "3Applies to PSEs that measure currents per pairset to check the MPS. 4Applies to PSEs that measure the sum of the pair currents of the same polarity to check the MPS." 						SuggestedRemedy Change to: tlce_timer_pri_done * !class_4PID_mult_events_pri * [(mr_pd_class_detected_pri < (class_num_events_pri = 1) + (mr_pd_class_detected_pri = 0)] Proposed Response Response Status W PROPOSED REJECT.						
Proposed Response Response Status W PROPOSED ACCEPT.					TFTD These two statements are not the same (the effect of (mr. pd. class, detected, $pri = 0$							
Cl 33 SC Darshan, Yair	33.2.7.2	P 97 Micros	semi	L 46	# 198	not dep	pendent on	class	_4PID_mult_events_pri ir	the original text	, it is in your version.	
Comment Type We can rem "Editor's No unmatched	E nove the Edi ite (Remove classes for r	Comment Status tor Note: prior to D2.0): We n mixed Type PDs."	D eed to addr	ess behavior fo	<i>Editorial</i> or matched and							
SuggestedRemo Delete Edito	<i>edy</i> or Note.											
Proposed Resp PROPOSEI	onse D ACCEPT I	Response Status N PRINCIPLE.	W									
OBE by 93												

SC 33.3.7

<u> </u>	SC 9	2 2 5 4 2	Dos	1.00	# [200		SC 22 2		
Darshan,	Yair	53.2.5.12	P 85 Microsemi	L 22	# 200	Darshan	, Yair		
Commen	t Type	TR	Comment Status X		PSE SD	Commer	nt Type TR		
Wher that t Type Type need apply	n PSE Ty his PD is 3 PD, ca 1, therefo to be allo ring Vrese	pe 3 is con 4-pairs ca pable of w ore need t owed to do et for Tres	nnected to single-signature pable due to the fact that it rorking at 4-pairs, at class 5 o issue only one class even o 3 class events, evaluate th et and then issue one class	PD with class 5 has new class c power" but has t. To enable this he class code, re ification event.	and wishes to know code that says "I am a power budget of only scenario, the PSE set classification by	See We we c class and	darshan_09_0 need to do som lid in D1.6 to de s over each pai inconsistency t		
class	ification s	Suggest See	SuggestedRemedy See darshan_09_0						
In ad witho	In addition, to allow generate 1 class event if PSE knows that the power avalable is Type 1 without the need to know what is the PD requested power.						Proposed Response WFP		
The a	above was	s meant to	increase PSE design flexil	oility.		TFT	П		
Suggeste	dRemedy	/							
To ac	dd the foll	owing Edi	tor Notes:			C/ 33	SC 33.2.		
"Edito	or Note: T	o add in F	igure 33-19 the ability to re	set classification	after at least 3	Darshan	, Yair		
class single	e class ev	Commer	Comment Type TR						
"Edito the p	or Note: T ower avai	To add in F ilable is Ty	Figure 33-19 the ability gene pe 1 without the need to kr	erate 1 class evenow what is the F	ent if PSE knows that PD requested power."	In th optic The	onal and not ma current text is:		
Proposed	Respons	se	Response Status W			shor	t_det_pri + sho		
TFTC	D.					IT WE	erriove: + ov e machine (in 3		

I don't understand the request as all single-signature PDs are 4P capable (as we have defined it).

	class ov and inc	ver each pa onsistency	irset" for th to the defini	e dual-signa tions in Table	ture descri e 33-28.	ption that caus	ses some ar	mbiguity			
	SuggestedF See dat	R <i>emedy</i> rshan_09_0)316.pdf for	detailed corr	iment and	remedy.					
1	Proposed R WFP	Response	Resp	onse Status	w						
	TFTD										
	CI 33	SC 33.2.	5.12	Pt	30	L 34	# 2	202			
	Darshan, Ya	air		Micro	osemi						
	Comment T	ype TR	Con	nment Status	x			PSE SD			
	In the e optiona The cur	exit from PC I and not m rrent text is:	WER_ON to andatory. A	o ERROR_D ccording to tl	ELAY Turi ne state m	ning off the pov achine it is ma	wer due to o indatory.	overload is			
	short_d If we re state m overloa So if sta features	let_pri + sho move: + ov achine (in 3 d" ate machino s.	ort_det_sec /ld_det_pri + 33.2.8.6 Ove e have the p	+ ovld_det_r + ovld_det_ser erload curren riority to set	ori + ovld_c ec it will fix t) allows sl the require	det_sec + option the problem. 	on_vport_lin The text out oower in cas t will clarify	n side the se of the optional			
	Suggested	Remedy									
	Option 1: Change the text exit to: short_det_pri + short_det_sec + ovld_det_pri + ovld_det_sec + option_vport_lim										
	Option in 33.2. optiona	Option 2 (preferred to simplify state machine and to cover for similar cases): To add a text in 33.2.5 after line 12: A state machine requirement or a state machine behavior may be optional if it is allowed specifically by other parts of clause 33.									
	Proposed R TFTD.	Response	Resp	onse Status	W						
	As of rig those c	ght now, we ases?	e have multij	ole optional t	ehaviors i	n the SD, how	do we want	t to handle			
al G/gei W/writt	neral en C/closed	Z/withdraw	'n		Commer	nt ID 202	Pa 3/2	age 50 of 83 2/2016 11:16:41 AN			

P 131

Microsemi

We need to do some adjustments to Table 33-28 item 6 and Item 7 after the last changes we did in D1.6 to delete the "with the same class over each pairset" and "with different"

Comment Status X

See darshan_09_0316.pdf for detailed comment and remedy.

L 38

201

Pres: Darshan9

C/ 33	SC 33.3.7.3	P 134	L 12	# 203
Darshan, Ya	ir	Microsemi		
Comment Ty	vpe TR	Comment Status X		Pres: Darshan1

Comment Type **TR** Comment Status X

See darshan 10 0316.pdf for marked document. The full remedy is shown here as well. 1.In the text below. Tinrush need to be addressed and not only Tinrush-2P.

2.Adding link to Table 33-28 where we can find the relevant data and requirements. 3. Not "all PDs shall consume maximum of Type 1 power for at least Tdelay-2P min per Table 33-28." This requirement applies only for Type 2,3 and 4 PDs. So striking "All" will fixed it while the rest of the relevant data regarding single and dual signature PDs and PD types are in Table 33-28.

SuggestedRemedy

Change the text from:

"Inrush current is drawn during the startup period beginning with the application of input voltage at the PI

compliant with Vport_PD-2P requirements as defined in Table 33-28, and ending when CPort has reached a steady state and is charged to 99% of its final value. This period shall be less than TInrush-2P min per Table

33-17, with the PSE minimum inrush behavior defined in 33.2.8.5. All PDs shall consume a maximum of Type 1 power for at least Tdelay-2P min. This allows the PSE to properly complete inrush."

To:

"33.3.7.3 Input inrush current

Inrush current is drawn during the startup period beginning with the application of input voltage at the PI compliant with Vport_PD-2P requirements as defined in Table 33-28, and ending when CPort has reached a steady state and is charged to 99% of its final value. This period shall be less than TInrush-2P min per Table 33-17. PDs shall consume maximum of Type 1 power for at least Tdelay and Tdelay-2P min per Table 33-28. This allows the PSE to properly complete inrush."

Proposed Response	Response Status	W
i ioposeu nesponse	Response Status	

WFP

TFTD

Why did you take out the reference to the PSE inrush section?

-						
CI 33	SC 33.2.8.	7 P1	09 L	. 54	# 204	
Darshan,	Yair	Micros	semi			
Comment	Туре Е	Comment Status	D			Editorial
In the "A PS lowerl	text: E may remove cound template	power from the PI if the " in Figure 33–14, Figur	e PI current me re 33–28, and	eets or exceeds Figure 33–29."	the "PSE	
It is F	igure 33-27 and	d not Figure 33-14.				
Suggeste	dRemedy					
Chang	ge to "Figure 3	3-27"				
Proposed PROF	<i>Response</i> POSED ACCEF	Response Status PT.	W			
CI 33	SC 33.2.8.	7 P1 [.]	10 L	. 1	# 205	
Darshan,	Yair	Micros	semi			
Comment	Туре Е	Comment Status	D			Editorial
In the "pai and F	text: rset current exe igure 33–29." i	ceeds the "PSE upperbo n Figure 33–14, Figure 3	ound template [*] 33–28, and Fig	' in Figure 33–14 jure 33–29."	I, Figure 3	33–28,
It is F	igure 33-27 and	d not Figure 33-14.				
Suggeste	dRemedy					
Chang	ge to "Figure 33	3-27"				
D	D	-				

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 33 SC 33.2.8.7 P110 L 51 # 206		C/ 33	SC	33.3.3.6	P 124	L 27	# 208		
Darshan, Yair Microsemi		Darshan,	Yair		Microsemi				
Comment Type E Comment Status D	Editorial	Comment	Туре	Е	Comment Status D		Editorial		
The text: "The maximum value of ILIM-2P is the PSE upperbound template described by Eq **(33–14), Equation (33–15), **Equation (33–15), Equation (33–16), **Figure 33–17 33–28, Figure 33–29, and Figure 33–27. ILIM-2P minimum value in Table 33–17 it	uation 4, Figure tem 9 for	The text: "Editor's Note: PD state diagram needs to be updated for Autoclass and detecting long first class events."							
Class 5 and above includes E2EP2PRund effect."		iveed to add to it that the state machine need to be updated to include dual-signature PDs.							
Contains erros in Figure # and duplications.		SuggestedRemedy							
SuggestedRemedy Change the text to:		Updat "Edito class	te the Eo or's Note events a	ditor Note: PD state and dual-si	diagram needs to be updat ignature PDs."	ed for Autoclass	s, detecting long first		
"The maximum value of ILIM-2P is the PSE upperbound template described by Eq	quation	Proposed	Respor	ise	Response Status W				
(33–14), Equation (33–15), Equation (33–16), Figure 33–27, Figure 33–28 and Fig 33–29. ILIM-2P minimum value in Table 33–17 item 9 for Class 5 and above includ E2EP2PRunb effect."	lure des	PROPOSED ACCEPT IN PRINCIPLE.							
Proposed Response Response Status W		OBE by 127 and 131							
PROPOSED ACCEPT IN PRINCIPLE.		C/ 33	SC	33.3.5.1	P 127	L 3	# 209		
		Darshan,	Yair		Microsemi				
Change the text to: "The maximum value of ILIM-2P is the PSE upperbound template described by Eq (33–14) through (33–16) and Figures 33–27 through 33–29. ILIM-2P minimum valu Table 33–17 item 9 for Class 5 and above includes E2EP2PRunb effect."	quations ue in	<i>Comment</i> The T Also i	<i>Type</i> able is 3 n line 8.	E 33-24 and	Comment Status D not 33-24a in two locations.		Editorial		
C/ 33 SC 33 2 8 7 P 111 / 21 # 207		Suggeste	dRemec	ły					
Darshan, Yair Microsemi		1. Lin 2. Lin	e 3: Cha e 8: Cha	ange from ange from	"Table 33-24a" to "Table 33 "Table 33-24a" to "Table 33	-24" in two loac -24".	tions.		
Comment Type E Comment Status D The title of Figure 33-29: missing space in "Type 4PSEs"	Editorial	Proposed PROF	Respor	ise ACCEPT.	Response Status W				
SuggestedRemedy Change to: "Type 4 PSEs"									
Proposed Response Response Status W PROPOSED ACCEPT.									

Cl 33 SC 33.3.7.3 P 134 L 35 # 210 Darshan, Yair Microsemi	C/ 33 SC 33.2.5.12 P 85 L 31 # 212 Darshan, Yair Microsemi						
Comment Type E Comment Status D Editorial	Comment Type E Comment Status D Editoria						
In the text: "CPort in Table 33–28 is the total PD input capacitance during POWER_UP and POWER_ON states that a PSE encounters when operating one or"	Typo in the left exit from CLASS_EV4, it should be "mr_pd_class_detected" and not "md_pd_class_detected":						
	"tcle3_timer_done * (md_pd_class_detected = temp_var) *						
Replace "encounters" with "sees"	$[(mr_pd_class_detected<2) + (class_num_events = 4) + [(mr_pd_class_detected = 2) * (pro_plusic_s = 2)]]"$						
SuggestedRemedy	[(III_pd_class_detected = 5) (pse_avaii_pwi < 6)]]						
Replace "encounters" with "sees"	SuggestedRemedy						
Proposed Response Response Status W TFTD	Change to: "tcle3_timer_done * (mr_pd_class_detected = temp_var) * [(mr_pd_class_detected<2) + (class_num_events = 4) + [(mr_pd_class_detected = 3) * (nse_avail_pwr < 8)]]"						
Didn't we change it from sees to encounters a few meetings ago? Let's make a final decision.	Proposed Response Response Status W PROPOSED ACCEPT.						
Cl 33 SC 33.3.8 P 142 L 36 # 211							
Darshan, Yair Microsemi	C/ 33 SC 33.2.5.10 P72 L 32 # 213						
Comment Type E Comment Status D Editorial	Darshan, Yair Microsemi						
In the text:	Comment Type E Comment Status D Editoria						
"NOTE—PDs may not be able to meet the IPort_MPS specification in Table 33–30a during the maximum allowed"	It will be easier to read the spec if all the classification timers on page 72 and 73 will be located in the same place and will not be interrupted by other times like detection timers, inrush timers etc.						
It is Table 33-30 and not 33-30a.	Suggested Bernedy						
SuggestedRemedy	Locate all classification timers in one place in the order it appears in Table 33-15						
Change to:							
"NOTE—PDs may not be able to meet the IPort_MPS specification in Table 33–30 during the maximum allowed"	Proposed Response Response Status W PROPOSED REJECT.						
Proposed Response Response Status W	This list is in alphabatical order so someone reading the state diagram can swickly find the						
PROPOSED ACCEPT.	appropriate timer definition.						

Comment Type E Comment Status D PSE SD Type in the left out from CLASS_CVA PIO4_PRI, it should be 'mr_pd_class_detected and not 'mr_pd_class_detected and 'many pd_class_detected and 'many pd_class_detected_pri.''' Comment Type E Response Status W Comment Type Type Status PDs and Imrush_PD-2P are limited by the PSE 'many pd_class detected_pri.'''' TFTD. The ink for Table 33-17'' if CPort per pairse is less than 300 iF for single-signature PDs assigned to Class 1 to 5 and if CPort per pairse is less than 300 iF for single-signature PDs assigned to Class 7 to 8.''' acted to transke it hard to understand that the link to Table 33-17'' if CPort per pairse is less than 300 iF for single-signature PDs assigned to Class 7 to 8.'''' acted to Table 33-17'' if CPort per pairse is less than 100 iF for :many pd_class 0 to 6 Carsen Type E Comment Status D Editorial Remove Editor Note #4. Many endower to PD Vdiff.'' Proposed Response Status W PROPOSED ACCEPT. Class by 101 OBE by 101 Status PD S	Cl 33 Darshan,	SC 33.2.5.12 Yair	P 86 Microsemi	L 43	# 214	C/ 33 Darshan, Yair	SC 33.3.7.3	P 134 Microsemi	L 22	# 216
Typo in the left exit from CLASS. EV4 or APID4_PRI, it should be 'mr_pd_class_detected' and nd 'md_pd_class_detected_pri'. "tcla3_imre_pri_clone * (md_pd_class_detected = 3) * SuggestedRemedy Change to: "tcla3_imre_pri_done * (mr_pd_class_detected = 3) * PROPOSED REJECT. TFTD	Comment	t Type E	Comment Status D		PSE SD	Comment Typ	e ER	Comment Status D		PD Inrush
Proposed Response Response Status W PROPOSED REJECT. TFTD. This is the primary alternative SD, it needs to be mr_pd_class_detected_pri. C1 33 SC 33.2.8 P 104 L 39 # 215 Darshan, Yair Microsemi Editorial Comment Type Comment Status D Editorial Remove Editor Note #4. We have done with this item. * as generified by Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place so it makes it hard to understand that the link to Table 33-17 is in the wrong place to class 0 to 6 OBE by 101 Comment Type E Comment Status D E Comment	Typo and n "tcle3 <i>Suggeste</i> Chan "tcle3	in the left exit from not "md_pd_class 3_timer_pri_done ed <i>Remedy</i> nge to: 3_timer_pri_done	<pre>m CLASS_EV4 to 4PID4_PRI, _detected_pri": * (md_pd_class_detected = 3) * (mr_pd_class_detected = 3)</pre>	it should be "r "	nr_pd_class_detected"	In the text "Input inru CPort per — single- — dual-si and if CPu 8, as spec	:: Ish currents a pairset is les signature PD gnature PDs ort per pairse cified in Table	at startup, IInrush_PD and IIn as than 180 ìF for: s, assigned to Class 0 to 6 assigned to Class 1 to 5 t is less than 360 ìF for single a 33–17."	rush_PD-2P ar e-signature PDs	re limited by the PSE if s assigned to Class 7 to
TFD. This is the primary alternative SD, it needs to be mr_pd_class_detected_pri. Cl 33 SC 33.2.8 P104 L 39 # 215 Darshan, Yair Microsemi Comment Type E Comment Status D Remove Editor Note #4. We have done with this item. ************************************	Proposed PROF	l Response POSED REJECT.	Response Status W			The link for to Table 3	or Table 33-1 33-17 is for lir	7 is in the wrong place so it n nrush and Inrush-2P.	nakes it hard to	o understand that the link
Cl 33 SC 33.2.8 P 104 L 39 # [215] Darshan, Yair Microsemi D Editorial Comment Type E Comment Status D Editorial Remove Editor Note #4. We have done with this item. **. Editorial **. SuggestedRemedy Remove Editor Note #4. **. **. **. *.	TFTD This i). is the primary alte	rnative SD, it needs to be mr_j	od_class_dete	cted_pri.	SuggestedRe Change th "Input inru **as spec	medy ne text to: ush currents a ified by Table	at startup, Ilnrush_PD and Iln 33-17** if CPort per pairset i	rush_PD-2P ar is less than 180	re limited by the PSE 0 ìF for:
Comment Type E Comment Status D Remove Editor Note #4. We have done with this item. *4. Item 4a still under investigation with respect to PD Vdiff." SuggestedRemedy Remove Editor Note #4. *4. Item 4a still under investigation with respect to PD Vdiff." Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. OBE by 101 Cl as specified in Fable 33-17.3" in the additional information column of item 9. SuggestedRemedy Change from: *Dual-signature PDs only" To: "See 33.3.7.3 Single-signature PDs only" To: *See 33.3.7.3 Single-signature PDs only" Or merge the additional information column of item 8 and 9 and use the text of item 8: *See 33.3.7.3 Single-signature PDs only" Proposed Response Response Status W PROPOSED ACCEPT. The additional information column of item 8 and 9 and use the text of item 8: *See 33.3.7.3 Single-signature PDs only" To: *See 33.3.7.3 Single-signature PDs only Proposed Response Response Response Response Response Status W PROPOSED REJECT. TFD. I thought this item was for DS PDs.	Cl 33 Darshan,	SC 33.2.8 Yair	P 104 Microsemi	L 39	# 215		signature PD gnature PDs ort per pairse	s, assigned to Class 0 to 6 assigned to Class 1 to 5 t is less than 360 ìF for single fied in Table 22, 17 l"	e-signature PD:	s assigned to Class 7 to
SuggestedRemedy Remove Editor Note #4. ''.4. Item 4a still under investigation with respect to PD Vdiff." Proposed Response Response Status W Darshan, Yair Microsemi PROPOSED ACCEPT IN PRINCIPLE. OBE by 101 C/ 33 SC 33.23.7 P 132 L 9 # [217] OBE by 101 Comment Type ER Comment Status D Editorial Missing "See 33.3.7.3" in the additional information column of item 9. SuggestedRemedy Change from: "Dual-signature PDs only" OBE by 101 O'' merge the additional information column of item 8 and 9 and use the text of item 8: "See 33.3.7.3 Single-signature PDs only" O'' merge the additional information column of item 8 and 9 and use the text of item 8: "See 33.3.7.3 Single-signature PDs only" Proposed Response Response Status W Proposed Response Response Status W PROPOSED REJECT. TFTD. I thought this item was for DS PDs.	Comment Remo "4. Ite	<i>t Type</i> E ove Editor Note #4 em 4a still under in	Comment Status D 4. We have done with this item nvestigation with respect to PD	Vdiff."	Editorial	Proposed Res	sponse ED ACCEPT	Response Status W		
Proposed Response Response Status W Editorial PROPOSED ACCEPT IN PRINCIPLE. OBE by 101 Missing "See 33.3.7.3" in the additional information column of item 9. SuggestedRemedy Change from: "Dual-signature PDs only" To: "See 33.3.7.3 Single-signature PDs only" Or merge the additional information column of item 8 and 9 and use the text of item 8: "See 33.3.7.3 Single-signature PDs only" Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. OBE by 101 To: "See 33.3.7.3 Single-signature PDs only"	Suggeste Remo "4. Ite	edRemedy ove Editor Note #4 em 4a still under i	4. nvestigation with respect to PD	Vdiff."		<i>Cl</i> 33 Darshan, Yair	SC 33.23.7	P 132 Microsemi	L 9	# 217
OBE by 101 SuggestedRemedy Change from: "Dual-signature PDs only" "Do: "See 33.3.7.3 Single-signature PDs only" Or merge the additional information column of item 8 and 9 and use the text of item 8: "See 33.3.7.3 Single-signature PDs only" Proposed Response Response Status W PROPOSED REJECT. TFTD. I thought this item was for DS PDs.	Proposed PROF	l Response POSED ACCEPT	Response Status W IN PRINCIPLE.			Comment Typ Missing "	e ER See 33.3.7.3"	Comment Status D in the additional information	column of item	Editorial 9.
Or merge the additional information column of item 8 and 9 and use the text of item 8: "See 33.3.7.3 Single-signature PDs only" Proposed Response Response Status W PROPOSED REJECT. TFTD. I thought this item was for DS PDs.	OBE	by 101				SuggestedRe Change fi "Dual-sigi To: "See 33.3	medy om: nature PDs of .7.3 Single-s	nly" ignature PDs only"		
Proposed Response Response Status W PROPOSED REJECT. TFTD. I thought this item was for DS PDs.						Or merge "See 33.3	the additiona .7.3 Single-s	al information column of item ignature PDs only"	8 and 9 and us	e the text of item 8:
TFTD. I thought this item was for DS PDs.						Proposed Res PROPOS	sponse ED REJECT	Response Status W		
						TFTD. I t	hought this it	em was for DS PDs.		

Cl 33	SC 33. 2 Yair	2.5.12	P 87 Microsemi	L 53	# 218	Cl 33	SC : /air	33.2.8.5	P 108 Microsemi	L 23	# 220
Comment The ti "Figur Prima Suggester Chang diagra	<i>Type</i> E itle: re 33–21––T ary Alternativ <i>dRemedy</i> ge to: "Figur am on the S	R ⊽pe 3 a ve" has o re 33–2 ² econdai	Comment Status D nd Type 4 PSE dual-signati error. It is "Secondary Altern 1—Type 3 and Type 4 PSE ry Alternative"	ure classificatio native" dual-signature	<i>Editorial</i> n state diagram on the classification state	Comment In the and Ec only af Tinrus "The F Table	<i>Type</i> followin quation fter sign _min tin PSE sha 33-17. 1	ER g text, it is (33-13) du ificant tim- ne duration all limit IInr The maxim	Comment Status D not clear when the PSE is file to the fact that some PD in e (10-30msec) after the appl n. ush-2P and Ilnrush during P num inrush current sourced b	ollowing the ter mplementation ication of Vpd I OWER_UP pe oy the PSE per	PSE Inrush mplate in Figure 33-26 s start to show linrush but still within r the requirements of pairset shall not exceed
Proposed PROF Cl 33 Darshan, Comment	POSED ACC SC 33.2 Yair Type E	CEPT. 2.5.10 R	Response Status W P 72 Microsemi Comment Status D	L 27	# 219 Editorial	The pe Suggested Chang "The F Table the pe	r pairse IRemed ge the te PSE sha 33-17. T r pairse	ly ext to: Ill limit IInr The maxim t inrush te	ush-2P and IInrush during P num inrush current sourced to mplate in Figure 33-26 and F	OWER_UP pe by the PSE per Equation (33-13	 r the requirements of pairset shall not exceed whenever Iport-2P or
Missir "tcc_t A time Suggester Chan "tcc_t A time	ng link to Ta timer er used to n <i>dRemedy</i> ge from: timer er used to n	ible 33-7 nonitor tl nonitor tl	' in the following text: he duration of Connection C he duration of Connection (Check." Check."		Iport c Proposed I PROP I agree a delay TFTD.	rosses Respon OSED o e that th y. How	linrush-2P Ise ACCEPT I le PSE car ever, I am	or linrush respectively." <i>Response Status</i> W N PRINCIPLE. h't respond instataneously if not sure the suggested text	the PD shows is the way to m	the inrush current after nake that point.
To: "tcc_t A time Proposed PROF	imer er used to m <i>Response</i> POSED ACC	nonitor ti CEPT IN	he duration of Connection C <i>Response Status</i> W N PRINCIPLE.	Check. See Tab	le 33–7."						

OBE by 240

Cl 33 SC 33.3.7.10 P 140 L 3 # 221 Darshan, Yair Microsemi	C/ 33 SC 33.3. Darshan, Yair	7.3 <i>P</i> 134 <i>L</i> 38 Microsemi	# 223
Comment Type T Comment Status X Pres: Darshan1	Comment Type T	Comment Status D	PD Inrush
The proposed updates is additional improvements for this text and is addressing the following discussion on D1.6 and previous comments on D1.3-D1.5: David Abramson: Clarifying that the requirements need to be met at Rsorce_min/max and not below it	The current spec a result we need to a this situation regard	Ilows PSEs to power up both pairset with subst add informative note to the PD section that a PD ding the availability of the power he requires du	antial time delay. As a D needs to be aware of ring this time delay.
Yair Darshan: Addressing Type 4 that worst case unbalance happen at short cable but worst case lcon-2P_unb happens at long channels by specifying a range for Rsource_min/max values. Using ONLY the lower range of Rsource_min/max is still possible if the tested parameter is E2EP2PRunb and not lcon-2P_unb but lcon-2P_unb is more practical to use so it is better to check the two use cases of Rsource_min/max. Lennart Yseboodt: To quantify the common source voltage. Yair Darshan: To use table with the conditions and link the text to it, it may simplify the text. David Abramson: To use the proposed minimum channel resistance range and for the	SuggestedRemedy Add the following r "Note: PD impleme to power up their p after Tdelay when powered yet." Proposed Response	note after line 38: enter needs to take in account Type 3 and Type airsets within Tinrush time delay which may aff PD is consuming above class 4 power levels w <i>Response Status</i> W	e 4 PSEs that are allowed ect the PD performance hen both pairset are not
maximum use 1.16*Minimum range. Yair: It looks that explicite value is clearer.	IFID.		
SuggestedRemedy Change the text per darshan_01_0116.pdf.	I don't understand Tdelay). For DS P	how it can affect performance after Tdelay (Tin Ds, I think a note might be needed as they can its to both paire the page this note avist some	rush is shorter than take an uspecified time
Proposed Response Response Status W		neu to both pansets. Does this hote exist some	
WFP	CI 33 SC 33.2.	6.7 P93 L1	# 224
TFTD	Darsnan, Yair	Microsemi	
C/ 33 SC 33.2.8.4.1 P 108 L 6 # 222 Darshan, Yair Microsemi	Comment Type T The TBD in the tex "4PID shall be initia is not required.	t: ally (TBD) determined as a logical function"	Pres: Yseboodt1
Comment Type T Comment Status X Pres: Darshan4 To update 33.2.8.4.1 and Annex B per the guidelines and proposed remedy in darshan_04_0316.pdf." Pres: Darshan4	SuggestedRemedy Delete "(TBD)"		
SuggestedRemedy	Proposed Response	Response Status W	
See darshan_04_0316.pdf.	WFP		
Proposed Response Response Status W WFP	TFTD		
TFTD			

CI 22	SC 22 2 5 44	D 76	/ 20	# 005	CI 22	SC 4	22 2 2 4 4	D 407	/ 27	# 007
Darshan,	Yair	Microsemi	L 99	# 220	Darshan, Y	′air	55.2.0.4.1	Microsemi	L 31	# 221
Comment	t Type T	Comment Status D		PSE SD	Comment	Туре	т	Comment Status D		Unbalance
In the "pd_re reque or 6, v	e text: eq_pwr_pri: This v ests a higher class whichever is the h	rariable indicates the power c than a PSE can support, the ighest that it can support. See	ass requested PSE shall ass 33.2.7."	by the PD. When a PD gn the PD Class 3, 4,	The te "ICon- than IC	xt; 2P-unb Con/2." P. unb i	is the pairs	set current in the case of ma	aximum unbala	nce and will be higher
How t Same	the PSE can assig	n class 6 for pd_req_pwr_pri	?		Suggested	Remed	s the pairs ly			
Suggester Group "pd_rrd reque or 5, v Same "pd_rd PD re 4, or 5 Proposed PROF Since	dRemedy p to explain or cha eq_pwr_pri: This v ests a higher class whichever is the h e in page 76 line 1 eq_pwr_sec: This squests a higher cl 5, whichever is the <i>I Response</i> POSED ACCEPT e class 5 is the hig	nge to: variable indicates the power c than a PSE can support, the ighest that it can support. Sec 4: variable indicates the power ass than a PSE can support, highest that it can support. S <i>Response Status</i> W IN PRINCIPLE. hest possible, we do not need	ass requested PSE shall ass 33.2.7." class requested the PSE shall See 33.2.7."	by the PD. When a PD gn the PD Class 3, 4, d by the PD. When a assign the PD Class 3,	SuggestedRemedy Change from: "ICon-2P-unb is the pairset current in the case of maximum unbalance and will than ICon/2." To: "ICon-2P-unb is the pairset with maximum current in the case of maximum unb will be higher than ICon/2." Proposed Response Response Status PROPOSED ACCEPT IN PRINCIPLE. Change from: "ICon-2P-unb is the pairset current in the case of maximum unbalance and will than ICon/2."					
Repla	ace "3, 4, or 5" with	n "3 or 4" in suggested remed	у.		unbala	ince and	d will be hig	gher than Icon/2."		
<i>CI 33</i> Darshan,	SC 33.2.6.1 Yair	P 89 Microsemi	L 44	# 226						
Comment Table 1. Thi 2. Co (Tcc2	t Type T 33-7 item 3, conr is item is not linke nnection check tin 2det and Tdet2det)	Comment Status D nection check timing, Tcc: d to the text. ning is not defined here as the	e other parame	Connection Check ters in Table 33-7						
Suggester Add ti "The Checl	<i>dRemedy</i> he following text a specification of Tc k."	fter line 31: c, defined in Table 33–7, app	lies to the time	duration of Connection						
Proposed	l Response	Response Status W								

PROPOSED ACCEPT.

C/ 33 SC 33.2.8.10 Darshan, Yair	P 113 Microsemi	L 34	# 228	Cl 33 Darshan, `	SC 33.2.5.12 Yair	P Micr	88 osemi	L 25	# 229
Comment Type T Comment The text and Editor Note: "A PSE may remove power from a Editor's Note: Effects of single and We can change to the following to A PSE may remove power from a st than PClass. A PSE may remove power from a st	nt Status D PD that causes th dual-signature PD address the Editor single signature PD	e PSE to sourc s to be conside Note: D that causes the pature PD that c	PSE Power e more than PClass. ered." ne PSE to source more	Comment See d Figure where simult	<i>Type</i> T arshan_08_0316 9 33-23-Type 3 ar POWER_UP for aneously.	Comment Status pdf for new Figure nd Type 4 inrush mo r ALT A and ALT B r	X 33-23. onitor state may be do	e diagram does ne in different t	Pres: Darshan8 not reflect the case ime and not
source more than PClass-2P on th	at pairset.			Suggested Repla	<i>Remedy</i> ce Figure 33-23 a	as proposed in dars	han_08_0	316.pdf	
Change from: "A PSE may remove power from a Editor's Note: Effects of single and	PD that causes th dual-signature PD	e PSE to sourc s to be conside	e more than PClass. ered."	Proposed WFP TFTD	Response	Response Status	W		
To: 1. "A PSE may remove power from more than PClass. A PSE may remove power from a l	a single signature	PD that cause	s the PSE to source	Cl 33 Darshan, `	SC 33.2.5.12 Yair	2 P Micr	78 osemi	L 1	# 230
source more than PClass-2P on th 2. Remove the Editor Note.	at pairset."			<i>Comment</i> This c	<i>Type</i> T omment is marke	Comment Status ed as AL1.	5 X		PSE SD
Proposed Response Response PROPOSED ACCEPT IN PRINCIP	e S <i>tatus</i> W PLE.			List of See d	proposed chang etails in darshan	es in PSE state ma _07_0316.pdf.	chine.		
1. Change to: "A PSE may remove	e power from the F	l when connec	ted to a single	Suggested See de	<i>lRemedy</i> etails in darshan <u></u>	_07_0316.pdf.			
A PSE may remove power from a process the PSE causes the PSE to source more the	an PClass-2P on t	ected to a dual- hat pairset."	signature PD that	<i>Proposed</i> Wait fe	<i>Response</i> or Presentation (Response Status WFP)	W		
2. Remove the Editor Note.				TFTD					

Cl 33 Darshan,	SC Yair	33.2.5.12		P 86 Microsemi	L 10	# 231		Cl 33 Darshan,	SC Yair	33.2.8.7	P 110 Microser	L 2 ni	# 232	
Comment Type T Comment Status D PSE SD In the following text of the exit from CLASS_EV1_LCE_PRI to MARK_EV1_PRI: tice_timer_pri_done * [[class_4PID_mult_events_pri + ((mr_pd_class_detected_pri = 4) * (class_num_events_pri > 1))] * (mr_pd_class_detected_pri = 4) * (class_num_events_pri > 1))] * (mr_pd_class_detected_pri = 4) * (class_num_events_pri > 1))] * (mr_pd_class_detected_pri = 4) * (class_num_events_pri > 1))] 2. Redundant round parantesis in the part: ((mr_pd_class_detected_pri = 4) * (class_num_events_pri > 1))) 2. Redundant rectangular parantesis. 3. The part "(mr_pd_class_detected_pri > 0)" is not required if (mr_pd_class_detected_pri = 4) is already there. SuggestedRemedy Change to: tice_timer_pri_done*[class_4PID_mult_events_pri + (mr_pd_class_detected_pri = 4)*(class_num_events_pri > 1)] 1							PSE SD	 Referring to the text (see darshan_05_0316.pdf for details): "[**Part-1**] Power shall be removed from a pairset PI of a PSE before the pairset PI current exceeds the "PSE upperbound template" in Figure 33-14, Figure 33-14b. [**Part-2**] When connected to a single signature PD, a Type 3 or Type 4 PSE should (TBD) remove power from both pairsets before the current exceeds the "PSE upperbot template" on either pairset." Due to the fact that for single-signature PD: a)Each pairset is already protected by [**part-1**]. b)Shutting off both pairset doesn't add extra protection to the PD. c)Forcing the PSE to shut off both pairset in case of fault, kills PD applications that we designed to work at lower power in case of fault when 4-pairs is required for full power We don't need [**Part-2**] due to the fact that in single-signature PD if current over a pairset approaches the upper bound template, this pairset will be powered off, if the P 						
(mr_ Proposed PRO	pd_class d Resport POSED	_detected_ ase REJECT.	_pri = 4)*(class Response St	atus W	s_pri > 1)]			pairset approaches the upper bound template, this pairset will be powered off, if the was not designed to handle lower power mode, the whole current will flow through t remaining pairset and it will be disconnected as well, so there is no need for the rec text in [**Part-2**].						
TFTI 1. Re ((mr_ Resp 2. Re Resp and t	D edundant pd_class ponse: N edundant ponse: N he secor	round para s_detected ot true. Th rectangula ot true. Th nd set of []	antesis in the I_pri = 4) * (cla ne result of this ar parantesis. nese are not re groups an out	oart: ss_num_ever AND statem edundant as th er term which	nts_pri > 1)) ent is ORed with ne first set of [] g is then ANDed y	n timer_done. roups an inne with timer_dor	r term ne.	Suggester Delete "Whe power Proposed WFP TFTD	dRemed e: n conne from b Respoi	dy ected to a s ooth pairset nse	single signature PD, a T is before the current exc <i>Response Status</i> W	ype 3 or Type 4 F æeds the "PSE u	SE should (TBD) remove pperbound template"	
3. Th = 4) i Resp is no	e part "(r s already oonse: N t true all	mr_pd_clas y there. ot true. Th the time.	ss_detected_p ne (mr_pd_cla	ri > 0)" is not ss_detected_	required if (mr_p pri = 4) is part of	od_class_dete an OR staten	cted_pri nent so it							

CI 33	SC 3:	3.3.7.6	P 138	L	14	# 233	CI 33	SC	33.2.10.1.2	2 P1	17	L 8	# 235
Darshan,	Yair		Microsem	i			Lukacs, M	iklos		Silico	n Labs		
Comment	Туре	TR	Comment Status X			PD Power	Comment	Туре	Е	Comment Status	D		Editorial
In the "A PD	e text:) shall cor	ntinue to	operate without interrup	tion in the p	presence of tra	insients at the	The te signat	ext in th ure PD	iis paragrap)" multiple tii	h call out "A Type mes, making the te	or Type xt hard t	e 4 PSE, when o follow.	connected to a single-
PSE I	PI as defir	ned in 33	5.2.7.2."				Suggested	dReme	dy				
33.2.7 contin	7.2 defines	s the trai erate.	nsients at the PSE PI so	when conr	nected to the F	PD, the PD need to	Simpli conne A Typ	ify the t cted to e 3 or 7	text (from lir a single-sig Type 4 PSE	ne 8 to 21) by pullin gnature PD" like thi , when connected t	្វ out "A រ: o a sing!	Type 3 or Type	e 4 PSE, when
The p when It is ol cable	oroblem is this trans bvious tha which is o	that it is ient beha at the tra one of th	not clear what should w avior is applied directly to nsients in the PSE PI are e operating scenarios.	e expect fro o the PD P e identical t	om the PD wh I? to PD PI trans	en it is tested ents at short	- shall highes or equ - shall	consid st curre al to th consid	der the DC Ment or the sume applicable der the DC Menter the DC Menter the DC Menter the State and the state of the state	MPS component to im of IPort-2P of bc e IHold max continu MPS component to im of IPort 2P of bc	be prese th pairse lously fo be abse	ent if IPort-2P o ets of the same or a minimum of nt if IPort-2P of	f the pairset with the polarity is greater than f TMPS. the pairset with the
Suggeste	dRemedy						polarit	st curre v are le	ent or the su ess than or (equal to the application	ble IHol	d min.	
Chang "A PD PSE F To: "A PD the PS	ge from:) shall cor PI as defir) shall cor SE PI as o	ntinue to ned in 33 ntinue to defined in	operate without interrup .2.7.2." operate without interrup n 33.2.7.2 or applied at t	tion in the p tion in the p he PD PI th	presence of tra presence of tra hrough TBD re	insients at the insients applied at isistance"	- may pairse is with - shall than T - shall TMPD	consident t with the r remov MPDO not rer	er the DC M he highest of range of the re power from the power how This all	APS component to current or the sum of applicable IHold. Im the PI when DC r from the PI when lows a PD to minim	De either of IPort-2 MPS has DC MPS	present or abs P of both pairs s been absent f has been pres	sent if IPort-2P of the sets of the same polarity for a duration greater sent within the TMPS +
Proposea	Respons	е	Response Status W				Proposed	Respo	nse	Response Status	w		
IFID)						PROF	POSED	ACCEPT.	Response Glalas	••		
CI 33 Lukacs, N	SC 3 3 1iklos	3.2.10.1.	2 P 115 Silicon La	L bs	50	# 234	TFTD						
Comment	Type	E	Comment Status D			Editorial	l agre	e that tl	his is easier	r to read. Is there a	ny prece	edent of writing	specs this way?
The A	AC MPS re	equireme	ents in table 33-18 are sh	nown in the	middle of the	DC MPS text.	Sac 2	26					
Suggeste Move	<i>dRemedy</i> Table 33-	–18 befo	re paragraph "33.2.10.1	.2 PSE DC	MPS compon	ent requirements"	566.5	30.					
Proposed PROF	Respons	e CCEPT I	Response Status W N PRINCIPLE.										
Editor	r to confor	m to IEE	E style guide.										

CI 33	SC 33.2.10.1	.2 <i>P</i> 117	L 23	# 236
Lukacs, N	liklos	Silicon Labs		
Commen	Type E	Comment Status D		PSE MPS
The t signa	ext in this paragra ture PD" multiple	aph call out "A Type 3 or Type times, making the text hard to	4 PSE, when a follow.	connected to a dual-
Suggeste	dRemedy			
A Tyr - sha from - sha is gre - sha equa - may 2P is - sha durat - sha every - may TMPS	ected to a dual-si be 3 or Type 4 PS I consider the DC the other pairset. I consider the DC ater than or equa I consider the DC to the applicable or consider the DC within the range I remove power f ion greater than T I not remove power S + TMPDO. This I Response	grature PD" like this: DE, when connected to a dual- CMPS component to be presected MPS component to be presected MPS component to be abserted MPS component on a pairse of the applicable IHold. MPS component on a pairse of the applicable IHold. Torom a pairset when DC MPS I TMPDO. T	signature PD, nt or absent or nt on a pairset continuously fo nt on a pairset i to be either pr has been abser PS has been pr een present on ower consump	in a pairset independently if IPort-2P r a minimum of TMPS. If IPort-2P is less than or resent or absent if IPort- int on that pairset for a resent on both pairsets that pairset every tion
PRO				
	. 366 233.			
C/ 33	SC 33.3.2	P 119 Silicon Labs	L 22	# 237
Common				
Commen	<i>Type</i> E	Comment Status D		PD Types
confu	sing. Hard to und	lerstand if one doesn't read no	ote3 of table 33	-20.
Suaaeste	dRemedv			
Chan	ge the paragraph	to:		
Type	3 single-signatur 3 or less has to	e PDs operating up to a maxin implement Multiple-Event Phy	num power dra sical Layer cla	w corresponding to ssification and advertise
a Sin	gle-Event class s	ignature of 1, 2, or 3. DLL clas	ssification is op	tional for these PDs.
Proposed	Response	Response Status W		
PRO	POSED REJECT			
Tho	uaaested remed	v uses "has to" which is a poo	r substitute for	"shall". All of this text is

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

Lukacs, Miklos		Silico	n Labs			
Comment Type	Е	Comment Status	D			Editorial
The word "m	inimum" is ı	not needed.				
SuggestedReme	dy					
Change the Dual-signatu classification	sentence as re Type 3 a and Data L	i follows: nd Type 4 PDs impl .ink Layer Classifica	ement M tion (see	ultiple-Event Ph 33.6).	ysical Layer	
Proposed Respo	nse	Response Status	w			
PROPOSED	ACCEPT.					
CI 33 SC	33.2.5.9	P 6	7	L 30	# 239	
Schindler, Fred		Seen	Simply			
Comment Type	ER	Comment Status	х			PSE SD
Existing text,						
A temporary	variable that	t indicates whether	a 4-pair l	PSE has comple	eted detection of	on a
first alternati	ve but not o	n a second alternati	ve.			
Values:		ad data at an an hat	h 14 - m - 4			
1: The PSE	has complet	ed detection on only	y one alte	ernative."	allemalives.	
should be ch	anged to m	aka stata diagrams	easier to	read		
	,	ake state diagrams	easier to	Teau.		
SuggestedReme	dy					
Change valu	es as follow	'S:				

P 119

L 31

"Values:

SC 33.3.2

both_neither: The PSE has completed detection on both alternatives or neither alternatives. one : The PSE has completed detection on only one alternative."

Make the matching changes to locations where the variables are used. For example, page 78, "det_temp <= 0" is replaced by "det_temp <= both_neither".

Proposed Response Response Status W

TFTD.

Why create these long value names?

Would "0_or_2" and "1" be better? Or "0/2" and "1"?

Comment ID 239

238

CI 33	SC 33.2.5.10	P 72	L 26	# 240	CI 33	SC	33.2.5.12	P 78	L 31	# 242
Schindler, F	Fred	Seen Simply			Schindler,	Fred		Seen Simply		
Comment T	Type ER	Comment Status D		Editorial	Comment	Туре	ER	Comment Status D		PSE SD
Timer t	cc_timer is not atta	ached to a PSE parameter.			State	CXN_C	HK_EVAL	exit condition,		
Suggested	Remedy				"(sig_ (CC_I	type = s DET_SE	single) *(((C EQ = 1) *(si	C_DET_SEQ = 0) + (CC_DE g_pri = valid) *!tdet2det_time	T_SEQ = 3)) r_done)"	*!tcc2det_timer_done +
Replace "tcc_tin A timer	e existing text, ner ' used to monitor th	ne duration of Connection Ch	neck."		may b reduc	oe simpli es text c	ified. The on the state	condition that applies to all ch	ecks may be	checked globally. This
with					Suggeste	dRemea	ły			
"tcc_tin A timer	ner used to monitor th	ne duration of Connection Ch	neck, see Tcc	in Table 33-7."	Repla "!tdet2 + (CC	ice the e 2det_tim _DET_\$	exit conditioner_done*(SEQ = 1) *(n with, sig_type = single) *(((CC_DE sig_pri = valid))"	T_SEQ = 0) +	- (CC_DET_SEQ = 3))
		Response Status W			Proposed	Respon	ise	Response Status W		
PROPU	JSED ACCEPT.				PROF	POSED	REJECT.			
Cl 33 Schindler F	SC 33.2.5.12 Fred	P 78 Seen Simply	L 36	# 241	These	e actuall	y aren't the	same timersone is tcc2de	t and one is to	let2det
Comment 7		Comment Status D		PSE SD	C/ 33	SC	33.2.5.12	P 78	L 31	# 243
State C	XN CHK EVAL	xit condition		10200	Schindler,	Fred		Seen Simply	-	
"(sig_ty	vpe = dual) *(((CC_	_DET_SEQ = 0) +(CC_DET_	SEQ = 3)) *!te	cc2det_timer_done	Comment	Type	FR	Comment Status X		PSF SD
+(CC_[$DET_SEQ = 1) *!tc$	let2det_timer_done)"			State	CXN C	HK EVAL	exit condition.		
may be reduces	simplified. The cost state	ondition that applies to all ch diagram.	ecks may be	checked globally. This	"(sig_ tcc2de	type = 0 et_timer	pen_circ) - _done + td	- (sig_type = single) * (CC_DI et2det_timer_done"	ET_SEQ = 1)	* (sig_pri = invalid) +
Suggested	Remedy				mav b	be simpli	ified. This	reduces text on the state diad	aram. This ha	s a repeated term.
Replace	e the exit conditior	ı with,			Suggester	dRemeo	łv			
"!tdet2c	det_timer_done*((s	ig_type = dual) *(((CC_DET	_SEQ = 0) +(0	CC_DET_SEQ = 3))	Repla	ice the e	xit conditic	n with.		
Proposed F	Response	Response Status W			"(sig_ tcc2d	type = o et_timer	pen_circ) - _done"	<pre>- (sig_type = single) * (CC_DI</pre>	ET_SEQ = 1)	* (sig_pri = invalid) +
PROPO	OSED REJECT.				Proposed	Respon	ise	Response Status W		
These a	actually aren't the	same timersone is tcc2det	t and one is to	let2det	PROF	POSED	REJECT.			
					These	e actuall	y aren't the	same timersone is tcc2de	t and one is to	let2det

Cl 33 Schindler,	SC 33.2 Fred	2.5.12	P 78 Seen Simply	L 5	# 244	C/ 33 Schindler	SC 33.2.5. Fred	1 2 Se	P 78 en Simply	L 39	# 246
Comment Variab Suggested On pa "ovid_ Th condit Values FAL	Type EF oles ovld_de dRemedy ge 69 above det_pri nis variable i ion exists or s: SE: The PS	R Co et_pri and c e variable is used by in the prima E primary	omment Status D ovld_det_sec are not de pd_4pair_cand add the the PSE to indicate the ary Alternative.	fined but are us following defini status of an ov ve an overload	PSE sed in the state diagran tions, rerload, see 33.2.8.6, condition.	SD Comment m. The e "do_c I coul Note do_n soluti timer_	Type ER xit condition fro etect_pri_done d not find IEEE that detection d chk has tcc_t on provide for c tcc-done may b	Comment Stat m START_CXN_CH, and do_detect_sec requirements for fur oes not have a time imer and, therefore, omments marked, C be used.	us X IK_DETECT c_done", whi nctions in sta r that indicat does not red COMMENT-1	Γ uses "do_cxn ich is understa ate diagrams. tes detection is quire do_cxn_c 1, either do_cx	PSE SD n_chk_done", ndable but not defined. s done. However, chk_done. In the n_chk_done or
ovld_c Th condit Values FAL TRU <i>Proposed</i> PROP	JE: The PSE det_sec nis variable i ion exists or s: SE: The PSE JE: The PSE <i>Response</i> POSED ACC	E primary A is used by in the seco E seconda E seconda Re CEPT.	Alternative has an overlo the PSE to indicate the ndary Alternative. ary Alternative does not ry Alternative has an over sponse Status W	ad condition. status of an ov have an overlo erload conditior	rerload, see 33.2.8.6, ad condition. n."	Add a "Func variat <i>Proposed</i> TFTD we us in the	definition to the tions appended les." <i>Response</i> e "do_detection Type 1/2 State	e start of 33.2.5.11, I with _done indicate <i>Response State</i> n_done" to move be Diagram	e that the fur <i>us</i> W tween STAR	nction has com	ppleted and returned its
Cl 33 Schindler, Comment	SC 33.2 Fred <i>Type</i> EF	2.5.12 R C	P 78 Seen Simply omment Status D	L 25	# 245 Edite	prial					
State Suggested Use th Proposed PROP	Response POSED ACC	/mbol. Re <i>Re</i> CEPT.	place <- with <=.	gnment symbo	л.						

Cl 33 Schindler,	SC 33.3 Fred	P 117 Seen Simply	L 44	# 247	Cl 33 Schindler,	SC Fred	33.2.7.2	Р 97 Seen Simply	L 49	# 249
Comment	Type ER	Comment Status D		Editorial	Comment	Туре	ER	Comment Status X		PSE Class
Comn borrov "A de	nents were mad wed from Claus vice that is capa	te during the IEEE 802.3bu Dra e 33, should also be consider by able of becoming a PD may or n	ft 2.0 and D2.1 y this Task For nay not have th	cycle to improve text ce. Existing legacy text, ne ability to draw power	Existi "Whe assigi	ng text, n a PD i ns the P	requests a D Class 3	higher Class than a Type 3 (, 4, or 6, whichever is the hig	or Type 4 PSE hest that it can	can support, the PSE support."
from a	an alternate pov	ver source and, if doing so, may	or may not re	quire power from the PI."	cover not, w	s class (hich lea	demotion v ads to ques	without indicating this. The T stions like "why is class 5 not	ask Force knov assigned?"	ws this the reader does
is not some	clear. The exis	sting text has unnecessary word a PD in the same sentence that	s and also app t is trving to de	ears to cover fine a PD. For	Suggeste	dRemed	dy			
exam altern discor is and Suggester	ple, a device ca ate power source nnect because t does not chan dRemedy	pable of being a PD and is capa ce may not require from power t the device is no longer a PD. Th ge the requirements (Task Forc	able of drawing he PI. Which he proposed te e to confirm).	power from an will result in a xt focus on what a PD	Add ti "A PS repres and 7 class	he follow E stops sented to may be events	ving text at at class e by classes provided 3 and 4 wh	ter the called sentence, wents 1, 2, or 3, when it is no greater or equal to 4, 5, or 7, when the PSE supports these then the PSE supports at lease	ot able to provid respectively. e power levels. t class power le	le power levels Class power levels of 5 A PSE only provides evels of 5 and 7,
Repla	ice the called or	ut text with,			Proposed	Respor	160	Posponso Status M		
"A de altern from a	vice that is capa ate power sourc an alternate pow	able of becoming a PD may hav ce. A PD requiring power from t ver source."	e the ability to he PI may sim	draw power from an ultaneously draw power	TFTD		130	Nesponse Status W		
Proposed PROF	Response	Response Status W			l like t difficu	the inter Ilt to und	nt of spellir derstand (a	ng out demotion directly (as it and I created this system).	t is in the SD),	but this text is very
TFTD	as this is legad	cy text.			See 3	18				
CI 33	SC 22 2 5 4	D 95	1 22	# 248	C/ 33	SC	33.2.8.6	<i>P</i> 109	L 54	# 250
Schindler,	Fred	Seen Simply	L Z 3	# 240	Schindler,	⊢red		Seen Simply		
Comment	Type FR	Comment Status X		PSF SD	Comment	Type	ER	Comment Status D		Editorial
State guida	diagrams use s nce, characters o an	symbols [], which Section 21.5.1	Actions inside	state blocks, provide	"A PS lower	E may bound te	remove po emplate" ir	wer from the PI if the PI current Figure 33-14, Figure 33-28,	ent meets or e: "	ceeds the "PSE
THE			te any special	meaning.	Figure	e 33-14	is not a co	rrect reference.		
No for	rmal guidance i	s provided for the use of [].			Suggeste	dRemed	dy			
Suggeste	dRemedy				Repla	ice Figu	re 33-14 w	ith Figure 33-27.		
IFID	use of [] in stat	e diagrams.			Do th	is same	correction	for the same error on page	110 Line 1.	
The p endin	referred solutio g in "21.5."	n is to add the following text on	page 56 after t	he existing sentence	Proposed PROF	Respor	nse ACCEPT	Response Status W		
"State	e diagrams use	both () and [] to indicate precede	ence."			0011				
Proposed	Response	Response Status W			OBE	by 204 a	and 205.			
TFTD	as requested.									

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

CI 33	SC 3	33.2.8.6	<i>P</i> 110	L 52	# 251	C/ 33	SC	33.2.8	P 102	L 29	# 254
Schindler,	Fred		Seen Simply			Schindler,	Fred		Seen Simply		
Comment	Туре	ER	Comment Status D		Editorial	Comment	Туре	ER	Comment Status X		PSE Power
Existin "The m (33-14 Repea	g text, naximun), Equat ts Equa	n value of tion (33-1 tion (33-1	ILIM-2P is the PSE upperbou 5), Equation (33-15), Equation 5).	nd template ((33-16),"	described by Equation	The le so tha in two shoulc PSE d	gacy sp t all cla ILIM cu l be ma lesigne	becification sses 0 - 4 irrent valu de more v rs.	n permits Type-2 PSE to use have the same short-circuit v les for classes 0 - 3 (Type 1 a <i>v</i> isible to the reader and can b	a higher ILIM ralue. There is nd Type 2/3/4 be made more	values in classes 0 - 3 s a grey area that results values ILIMs). This accommodating for
Suggested	Remedy	y				This c	ommen	t is related	d to other comments marked	COMMENT-3	
Remov	/e the re	epeated in	formation.			Suggested	Remed	ly			
	Respon:	SE NCCERTI	Response Status W			Inform	ation is	shown in	column order with extra text t	to help make t	he intent clear.
OBE b	y 206	NOOLF I I				Modify All Class	/ Table isses,	33-17, the 0.4 A, Typ	e first row of item 12 from, be 1 to		
CI 33	SC 3	33.2.8.6	P 112	L 7	# 252	Classe		, 0.4 A, Ty			
Schindler,	Fred		Seen Simply			Add a "Type	foot no 2. 3. ar	te to this r nd 4 PSEs	row 0.400 Min value that indic s may use class 4 ILIM-2P cur	ates, rrent values fo	r classes 0 - 4."
Comment	Туре	ER	Comment Status D		Editorial		_, _, _,		·		
To be	consiste	ent, refere	nce ILPS in the entries below	"where".		All Cla	isses, C	xt row of r .684A, Ty	rem 12 from		
Suggested ILPS is	Remedy s the cu	V rrent defir	ned in 33.2.8.12.			Class	4, 0.68	4A, Type 2	2, 3, 4		
Proposed I	Respon	se	Response Status W			Modify	the ne	xt row of i	tem 12 (third row) from		
PROP	OSED A	ACCEPT.				Class Add a	0-4, 0.6 foot no	84, Type te to this r	2,3,4 row 0.684 Min value that refer	ences the san	ne footnote just added.
CI 33	SC 3	33.2.8.6	P 112	L 51	# 253	This c	hanae i	s provider	d in a presentation schindler '	3 0316	
Schindler,	Fred		Seen Simply			Proposed	Respor	se	Response Status W	0_0010.	
Comment	Туре	ER	Comment Status D		Editorial	TFTD.	/				
lo be langua	consiste ge as th	ent, refere ne prior re	nce variables in the entries be ference that is on line 17.	low "where"	using the same	l bayo	to cov		confused Vour colution and	a up with multi	nlo minimum valuos for
Suggested	- IRemedy	y .				a Type	€ 2, 3, c	or 4 PSE fo	or Class 0-3. Shouldn't we ju	st be able to li	st the lower one
Replac "VPSE	e with t is the v	he referer /oltage at	nce definition with, the PSE PI as defined in 1.4.4	123"		(400m	A)?				
Proposed I PROP	Respon OSED A	se ACCEPT.	Response Status W								

C/ 33 SC 33.2.5 Schindler, Fred	.11 P 77 Seen Simply	L 31	# 255	Cl 33 Schindler,	SC 3 Fred	33.2.5.8	P 65 Seen Simply	L 28	# 257
Comment Type ER	Comment Status X		Editorial	Comment	Туре	ER	Comment Status D		Editorial
The Task Force sho example, on p61, pa same name is used recommend or an a functions are reused	uld discuss, reusing the same n arameter_type is used for Type 1 for Type 3 & 4 state diagrams. llowed IEEE practice? Note that d.	ame for multiple & 2 state diag This is understa names for stat	e state diagrams. For rams, on page 77 the andable but is this te, timers, variables, and	During sente sente "The	g the dra nces in a nce, PSE stat	ft 1.5 clea a section fo e diagram	nup, I remember the Task Fo or a specific Type. If this is co ns use the following constants:	rce adding Ty prrect practice :", could be in	rpe information to a, then the existing nproved.
SuggestedRemedy				Renla	ice the se	y entence w	vith		
Requested that the	.3bt Editor check this with the IE	EE Editor and p	provide a	"The	Type 3 a	nd Type 4	PSE state diagrams use the	following con	stants:"
recommendation ba	ck to the Task Force.			Proposed	Respon	se	Response Status W		
At the minimum we	should add sentence to 33.2.5 tl	nat indicates,		PROF	POSED A	ACCEPT.			
"Editor's Note: Nam If is not correct, ther correct and potentia Draft 2.0 so that the	es used for state diagrams apply n we will have to find a new mec I change names. Transfer this in reader is aware of the solution of	to the section hanism for keep ntent to the app used."	where they are defined. ping names used propriate section before	Cl 33 Schindler,	SC 3	33.2.5.9	P 65 Seen Simply	L 46	# 258
Proposed Response TFTD as requested	Response Status W			Comment The te lines	<i>Type</i> erm "glob 1, and 3.	ER bal" is use This may	Comment Status D ed to cover IDLE on page 65, L y confuse readers.	ines 46, and	PSE SD 48, and on page 66
C/ 33 SC 33.2.5 Schindler, Fred	.7 P 65 Seen Simply	L 23	# 256	Suggester Delete	dRemedy e the wor	/ [.] d "global"	in the referenced sentences.		
Comment Type ER Figure 33-14 is for 1	Comment Status D	is not clear fron	<i>Editorial</i> n the Figure title.	Proposed PROF	Respons POSED A	se ACCEPT.	Response Status W		
SuggestedRemedy Replace the existing "Figure 33-14-PSE	title, monitor inrush and monitor MPS	state diagrams	s", with						
"Figure 33-14-Type	1 and Type 2 PSE monitor inrus	h and monitor I	MPS state diagrams"						
Proposed Response	Response Status W		-						
PROPOSED ACCE	PT.								

CI 33 SC 33.2.5.9 P 66 L 26 # 259 Schindler, Fred Seen Simply	CI 33 SC 33.2.5.9 P 66 L 31 # 260 Schindler, Fred Seen Simply
Comment Type ER Comment Status X PSE SD	Comment Type ER Comment Status D PSE SD
 Existing text, "autoclass_enabled A control variable indicating that the PSE is enabled to check if the PD is requesting Autoclass via Physical Layer classification. Autoclass is an optional extension of Physical Layer classification PSEs may support; see 33.2.7.3 and 33.3.5.3." Provides unnecessary information already provided on page 99, which is referenced by the above text. 	Existing text, "class_4PID_mult_events_pri A variable indicating if the PSE uses the method consisting in generating 3 class events to determine if the dual signature PD is a candidate for 4-pair power. Values: FALSE: the PSE does not need to generate 3 class events to determine if the PD is a candidate for 4-pair power. TRUE: the PSE generates at least 3 class events to determine if the PD is a candidate for 4-pair power."
SuggestedRemedy	can be improved.
Strike, "Autoclass is an optional extension of Physical Layer classification PSEs may support;" Move the "see …" to the end of the remaining sentence.	Suggesteakemeay Replace "A variable indicating if the PSE uses the method consisting in generating 3 class events to determine if the dual signature PD is a candidate for 4-pair power." with,
Proposed Response Response Status W TFTD	"A variable indicating if the PSE generates 3 class events to determine if a dual signature PD is a candidate for 4-pair power."
As this is an optional feature, pointing it out in the SD (which is normative) is a good idea.	Proposed Response Response Status W PROPOSED ACCEPT.
	CI 33 SC 33.2.6.1 P 89 L 44 # 261 Schindler, Fred Seen Simply
	Comment Type ER Comment Status X Connection Check Add a note to the bottom of Table 33-7 to clarify the intent of tcc without forcing implementation requirements.
	SuggestedRemedy Add the following note below Table 33-77, "Note: When an Ethernet cable is connected to an MDI, not all contacts are made simultaneously. Therefore, a minimum time is required for Tcc so that a full mated MDI exist when the connection check is performed."
	Proposed Response Response Status W TFTD

Cl 33 Schindler	SC , Fred	33.2.5.9	P 68 Seen Simply	L 5	# 262	CI 33 Schindler	SC , Fred	33.2.5.9	<i>P</i> 6 Seen	9 Simply	L 10	# 263
Comment Legad Contr use th	t Type cy and i ol regis he nam	ER new text ref ter detailed e and regist	Comment Status X erence specific control bits usi on page 156. Because specific ter references only.	ing names and b fics may change	PSE SD it position of PSE , it may be better to	Commen Fix ty Suggeste Repla	<i>t Type</i> vpos, "V ed <i>Reme</i> ace with	ER PSE" dy "VPSE".	Comment Status	D		Edito
Note bits (1	that ref 11.7:6).	erences are	also incorrect they were exter	nded from a sing	le bit (11.6) to two	Proposed PRO	l Respo POSED	nse ACCEPT.	Response Status	W		
It is a section	lso que on-see l	ine 49.	hether indicating what values	go into a register	r belongs in this	Cl 33	SC Fred	33.2.5.9	P7	1 Simply	L 43	# 264
SuggestedRemedy Delete register bit references on lines page 68. For example, on line 5 text, "mapped to the PSE Control register Pair Control bit (11.6) or other equivalent function."					text, uivalent function."	Commen The v	, Freu <i>t Type</i> words "s	ER state machi	Comment Status	D e where the l	EEE would	<i>Edito</i> use "state diagram."
"map Selec	ped to t	the PSE Co other equiv	ntrol register Pair Control bits alent function."	Force Power Te	st Mode Pairset	Suggeste Repla some	ed <i>Reme</i> ace occ e Editor	<i>dy</i> urrences of notes as we	"state machine" with ell, but a global repla	h "state diagra	am". This o o work.	change will affect
"map Selec	ped to t	the PSE Co other equiv	ntrol register (11) Pair Control alent function."	bits Force Powe	er Test Mode Pairset	Proposed PRO	l Respo POSED	nse ACCEPT.	Response Status	w		
Gene choic	rically, es also	the references	ce (reg.bit(s)) has been replace the register the bits appear in.	ed by the registe	r name. The second	C/ 33 Schindler	SC , Fred	33.2.5.9	P 7 : Seen	3 Simply	L 26	# 265
Repla "This enabl force are no de with	ace star value c le: Norn _power: etected	ting on line corresponds nal PSE op : Test mode error condit	48, s to MDIO register bits 11.1:0 = eration. This value correspond e selected that causes the PSE ions. This value corresponds to	: '00'. s to MDIO regist E to apply power o MDIO register	er bits 11.1:0 = '01'. to the PI when there bits 11.1:0 = '10'."	Commen Fix ty Suggeste Repla Proposed	t Type ypo "time edReme ace with d Respo	ER e r". dy ı "timer". nse	Comment Status	D		Edito
"This Disab enabl Enabl force are no de Enabl	value o ble. le: Norn le with t _power: etected le with t	corresponds nal PSE op the bit patte : Test mode error condit the bit patte	to MDIO register (11) bits PS eration. This value correspond for PSE Enable. e selected that causes the PSE ions. This value corresponds t or for Force Power Test Mode."	E Enable with th s to MDIO regist E to apply power o MDIO register	e bit patter for PSE er (11) bits PSE to the PI when there (11) bits PSE	PRO	POSED	ACCEPT.				
Proposed TFTD	l Respo)	nse	Response Status W									
TYPE: TR COMMEN SORT OF	R/techni NT STA RDER: (cal required TUS: D/disp Comment II	d ER/editorial required GR/ge batched A/accepted R/rejecte D	neral required T ed RESPONS	7/technical E/editorial G/g E STATUS: O/open W/wi	general ritten C/close	ed Z/wit	thdrawn		Comment ID	9 265	Page 68 of 8 3/2/2016 11

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Editorial

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Editorial

CI 33 SC 33.2.5.9 P 74 L 45 Schindler, Fred Seen Simply	# 266 C/ 33 Schindle	SC 33.2.5.9 r, Fred	P 74 Seen Simply	L 45	# 267
Comment Type ER Comment Status X The function variables generically do_class_xxx use text, "pd_classindicates that 4PID has been established. Values: FALSE: PD is not a candidate for 4-pair power. TRUE: PD is a candidate for 4-pair power."	PSE SD Commen s_4PID_xxx: This variable This The sec PSE sect sepa	t Type ER Co comment is related to o variable "pd_cls_4PID_) , or _pri. The value for r state diagrams (see p8 on 33.2.5.8 and not in th rate comment.	omment Status X other comments marked C xxx" is not initialized. Not these variables is establis 6 line 45). Therefore, this he 33.2.5.1 function section	COMMENT-4. e that _xxx is eithe shed within the Typ s variable belongs on, which has been	PSE SD er not present, be 3 and Type 4 in the variable in done in a
requires clarification and correction. Note that _xxx is either not The value for these variables is established within the Type 3 an diagrams (see p86 line 45). Therefore, this variable belongs in t 33.2.5.8 and not in the 33.2.5.1 function section. Note that although pd_cls_4PID is defined I do not see it used ir This comment is related to other comments marked COMMENT	r present, _sec, or _pri. Suggest ad Type 4 PSE state the variable section h the SD. TFT -4 Propose TFT	edRemedy) where to initialize the t cls_4PID_pri <= False" cls_4PID_sec <= False"): If pd_cls_4PID is will d Response Re) as requested	three variables. Suggest within state task list CLA within state task list CLA within state task list CLA not be used this definition sponse Status W	ions are made belo SS_EV1_LCE_PR \SS_EV1_LCE_SI n may be removed	ow, I. EC.
SuggestedRemedy Generically (_xxx) replace this text with, "pd_cls_4PID: This variable indicates that 4PID has been estable both pairsets have a valid detection signature and that a device Type 4 PD. Values: FALSE: PD is not a candidate for 4-pair power. TRUE: PD is a candidate for 4-pair power." Move the correct text to the variable section 33.2.5.8. TFTD: If pd_cls_4PID is will not be used this definition may be r Proposed Response Response Status W	emoved.	SC 33.2.5.9 SC 33.2.5.9 Fred t Type ER Co variables pd_req_pwr is practice is allowed and t edRemedy uested that the .3bt Editumendation back to the d Response Re D on requipated	P74 Seen Simply comment Status X is used by multiple functio to take corrected action if or check this with the IEE Task Force. sponse Status W	L 45 ns (standard, pri, s necessary. E Editor and provi	# 268 PSE SD sec). TFTF whether de a

Cl 33 Schindle	SC 33.2.5.12 er, Fred	P 78 Seen Simply	L 17	# 269	Cl 33 Schindler, I	SC 33.2.5.12 Fred	2 P 78 Seen Simply	L 25	# 270		
Comme	nt Type TR	Comment Status D		PSE SD	Comment 7	Type TR	Comment Status X		PSE SD		
The "IF(alt_ ELS	IDLE pseudo code (mr_pse_alternative pri <= mr_pse_alte	, != both) THEN rnative			The ex unders diagrar	it condition from tandable but no ns.	a START_CXN_CHK, uses "o t defined. I could not find IEf	lo_cxn_chk_dor EE requirements	ne", which is s for functions in state		
alt_ FNF	pri <= UserDefined				The ex	t condition also	checks tcc_timer_done, whi	ch seems redur	ndant.		
					Comm	ents that chang	e Figure 33-15 are provided of	on schindler_1_	0316.		
The add	term "UserDefined ed or removed from	" does not seem to exist in s i use.	tate diagram de	finitions and should be	Suggested	Remedy					
Suaaest	tedRemedv				Replac	e the existing e	xit condition for START_CXN	_CHK,			
On "Wh	page 65 after 33.2.8 ien a variable is ass	5.9 header add, signed value UserDefined it is	s provided in an	implementation way."	"tcc_tin	ner_done"	cc_umer_done with,				
This	comment is related	d to other comments marked	COMMENT-2.		Amend the existing function text, on page 74, "do_cxn_chk This function initiates the Connection Check as specified in 33.2.6.1. This function returns the following variable:"						
Propose	ed Response	Response Status W									
PRO	DPOSED ACCEPT	IN PRINCIPLE.									
See	73.				with, "do cxn chk						
Variable "UserDefined" on page 78 should be changed to "pri_init" and should be returned by a function do_set_alt.						This function initiates the Connection Check as specified in 33.2.6.1. This function returns the following variable after a delay of Tcc, which is in Table 33-7:"					
In 3	3.2.5.11 add a new	function definition,			This is	related to other	comments marked COMME	NT-1.			
This	_set_ait	e following variable:			Proposed F	Response	Response Status W				
pri_ The	init: which is initiali: n pri_init toggles be	zed to Value "a" when mr_ps etween the two possible Valu	e_enable is ma es each time do	ade equal to enable. o_set_alt is called.	TFTD						
Values: a: Alternative A is assigned Primary, and Alternative B is assigned Secondary.						we use "do_detection_done" to move between START_DETECTION and DETECT_EVAL in the Type 1/2 State Diagram					
On page 78, in state IDLE, on the line after "sism <= FALSE" add,	Secondary.	CI 33 Schindler, I	SC 33.2.6.1 ⁻ red	P 89 Seen Simply	L 44	# 271					
	"do_set_alt"			Comment 7	Type TR	Comment Status D		Connection Check			
					The Tc	c parameter is a	assigned a value but no conte	ext is provided.			
					SuggestedRemedy						
					In Table 33-7, additional information column for Tcc add, "From start to completion, see 33.2.5.10."						
					Proposed F	Response	Response Status W				
					PROP	OSED 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 Z/withdrawn SORT ORDER: Comment ID

Cl 33	SC Fred	33.4.2		P 144	oply	L 14	# 272		C/ 33 Schindler	SC .	33.2.5.11	P 75 Seen Simply	L 14	# 273
	, Tieu	TD	O a m m a m		прту			450	Commont	Turne	TD			
The F like c	ault tole	erance se r shorts.	ction covers This section	cases where should cont	e a PSE ain simil	is subjected to lar requiremen	o uncommon fau ts for new PDs.	AES Ilts	Basec do_cla	<i>Type</i> d on hov assificat	v results are ion, appear	e used, variable mr_pd_cla rs to record the last class dis	ss_detected of f scovered which	FSE SD function is not what is indicated
Suggeste A Tv	dReme pe-3 an	<i>dy</i> d Type-4	PD PI shall v	withstand on	e or moi	re conductor fa	ailures without		Suggested	dRemea	ly			
dama Proposed PRO	ige." <i>Respo</i> POSED	nse REJECT.	Response	∍ Status W					Repla "mr_p see Table	ce exist d_class 33-11 a	ing text, _detected: and 33.2.7.'	The PD classification signa	ture seen during	g a classification event;
l am side) Bullo	not sure ? These ck's con	what you don't rea nment wo	I mean. The ally affect the uld take care	y should witl PD execpt i i of that).	hstand fa in terms	ailures in the li of the unbalar	nk (the PD input nce factor (and C	Chris	with, "mr_p event; Table	d_class ; see 33-11 a	_detected: and 33.2.7.'	The PD classification signa	ture seen durin(g the last classification
									Perfor mr_pc	rm the s d_class_	ame correc _detected_s	ction for the mr_pd_class_de	etected_pri and	
									Proposed PROF	Respon POSED	nse ACCEPT II	Response Status W N PRINCIPLE.		
									I think event.	adding	"the last" a	actually adds confusion as it	seems to indica	ate the the final class
									How a	about "m	nost recent	?		
									Repla "mr_p classit	ce text v d_class fication	with: _detected: event; see	The PD classification signa Table 33-11 and 33.2.7."	ture seen during	g the most recent
									Perfor mr_po	rm the s d_class_	ame correc _detected_s	ction for the mr_pd_class_desec.	etected_pri and	

C/ 33 SC 33.2.5.12 P 85 L 6 # 274 Schindler, Fred Seen Simply	C/ 33 SC 33.2.5.12 P 85 L 6 # 275 Schindler, Fred Seen Simply										
Comment Type TR Comment Status D PSE S It is not clear what PSE Alternative is used to perform function do_classification. PSE S	Comment Type TR Comment Status X Pres: Yseboodt7 The exit condition for CLASS_EV1_LCE checks TACS max, which is a PD parameter in what may be a ponstandard way										
Comments that change Figure 33-19 are provided on schindler_2_0316. SuggestedRemedy Add a the following pseudo code to CLASS_EV1_LCE state below the existing tasks, IF (mr_pse_alternative != both) THEN alt_pri <= mr_pse_alternative ELSE alt_pri <= UserDefined END Note this is related to a comment marked COMMENT-2, which defines UserDefined.	The exit condition for CLASS_EV1_LCE checks TACS max, which is a PD parameter. The PD may transition to class-0 as soon as TACS min. The PSE is required to delaying the transition to CLASS_EV1_AUTO greater than TACSmax which could lead to an incorrect class reading in the prior state that would prevent a transition to CLASS_EV1_AUTO. The PSE should capture class in state CLASS_EV1_LCE before the PD transitions to class-0. <i>SuggestedRemedy</i> On page 100, Table 33-16 add a new row above item 1, which provides TACS_PSE with TBD min and max values. In the additional information column add "Measured from state CLASS_EV1_LCE."										
Proposed Response Response Status Z PROPOSED REJECT. This comment was WITHDRAWN by the commenter.	On page 73 add a new time, "tacs_pse_timer A timer used to determine when class currents should be record when checking parameter TACS_PSE in Table 33-16." On page 85 replace exit condition, "(tlce_timer > TACS max) * autoclass_enabled * mr_pd_class_detected != 0" with, "tacs_pse_timer_done * autoclass_enabled * mr_pd_class_detected != 0" In block CLASS_EV1_LCE add a new task, "start tacs_pse_timer" Proposed Response Response Status W TFTD This will be OBE Lennart's new work uses a TACS timer										
-											
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C/ 33	SC 33.2.	.12	P 85	L 6	# 276	CI 33	SC	33.2.5.11	P 77	L 31	# 278
Schindler,	Fred		Seen Simply			Schindler	, Fred		Seen Simply		
Comment	Type TR	Comn	nent Status X		Pres: Yseboodt7	Comment	Туре	TR	Comment Status X		PSE SD
State taken the sy	MARK_EV1 i , mr_pd_class /stem expects	s entered from _detected is	m state CLASS_EV1_ 0 rather than the first	_AUTOEVAL. class event v	When this path is alue, which is not what	On pa "Whe requir Type	age 62 e n a Typ rements 2 PSE f	existing text e 2 PSE pc of a Type for ICon, II	covers parameter_type, wers a Type 1 PD, the PSE 1 PSE, but may choose to m M_TIM_and PType (see T	shall meet the l neet the electrica	PI electrical al requirements of a
Suggeste	dRemedy					турс	21001				
Have CLAS	paths from st S_EVAL, rath	ates CLASS_ er than to sta	_EV1_LCE and CLAS ate MARK_EV1. Trar	S_EV1_AUTO Insfer from CLA	D go to a new state, ASS_EVAL to	This s is rela	same co ated to c	oncept is lao other comm	cking from p77, which covers ents marked COMMENT-3.	s Type 2 and 3 I See presentati	PSEs. This comment on schindler_3_0316.
IVIAN		•				Suggeste	dReme	dy			
Withir "temp	n state CLAS _var <= mr_	S_EVAL perfo od_class_det	orm these tasks, ected"			Add t "Whe requir	he follow n a Typ rements	wing text be e 3 or Type of a Type	elow the Value 4 sentence. 4 PSE powers a Type 1 PD 1 PSE, but may choose to m	, the PSE shall neet the electric	meet the PI electrical al requirements of a
From "tomp	state MARK_	EV1 remove	task, octod"			Туре	3 or Typ	be 4 PSE fo	or ICon, ILIM, TLIM, and PTy	/pe (see Table 3	33-17)."
Dronoood	_var <= mi_					Proposed	Respor	nse	Response Status W		
TFTD		Respo	nse Status W			lcon a Ptype	and Ilim e is now	are now ba used differ	ased on class so this sentend ently (right Lennart?) so it is	ce is no longer r no longer need	needed for them. ed as well.
This v	vill be OBE		ation for autoclass so	that it doos no	at uco	The c	only para	ameter here	e that we may need to update	e (to be based o	on class ranges) is
do_cla	assification.	t will use do_	autoclassification and	d mr_pd_autoo	class_detected.	TFTD).				
Cl 33 Schindler,	SC 33.2.9 Fred	.12	P 85 Seen Simply	L 5	# 277	<i>Cl</i> 33 Walker, D	SC Iylan	33.1	P 43 Cisco	L 10	# 279
<i>Comment</i> State	<i>Type</i> TR CLASS_EV1	<i>Comn</i> LCE should_	nent Status D initialize variable pd_	autoclass.	PSE SD	Comment Need	t <i>Type</i> s a seria	ER al comma te	Comment Status D o align with our agreed upon	convention.	Editorial
S <i>uggeste</i> State	dRemedy CLASS_EV1	LCE should	initialize variable pd_	autoclass.		Suggeste Chan	dRemed ge "Pl	<i>dy</i> HYs define	d in Clause 25, Clause 40 ar	nd Clause 55."	
Proposed	Response	Respo	nse Status W			То "	PHVs o	lefined in C	lause 25. Clause 40, and Cl	auso 55 "	
PROF	POSED ACCE	PT.				Proposed PROF	<i>Respor</i> POSED	nse ACCEPT.	Response Status W	ause 55.	
						Dylan	wins th	ie "Dave's f	Favorite Comment Award" fo	or D1.6.	

C/ 33 SC 33.1.3.1 P 46 L 10 # 280 Walker, Dylan Cisco Cisco	C/ 33 SC 33.2.5.4 P 60 L 1 # 282 Walker, Dylan Cisco
Comment Type ER Comment Status X Cabling	Comment Type ER Comment Status D Editoria
Sentence reads a little awkwardly with a seemingly redundant use of the word "specified."	Table reference needs to be updated.
SuggestedRemedy	SuggestedRemedy
Change "Type 1 power levels may be transmitted over all specified premises cabling that meets the requirements specified in Table 33–1."	Change "PSEs shall meet at least one of the allowable variable definition permutations described in Table 33–6."
To "Type 1 power levels may be transmitted over all premises cabling that meets the requirements specified in Table 33–1."	To "PSEs shall meet at least one of the allowable variable definition permutations described in Table 33–5."
Proposed Response Response Status W	Proposed Response Response Status W
TFTD	PROPOSED ACCEPT IN PRINCIPLE.
Question: does the term "specified premises cabling" refer to a subset of "premises cabling"?	OBE by 308
	C/ 33 SC 33.2.5.8 P 65 L 30 # 283
C/33 SC 33.2.1 P 47 L 3 # 281	Walker, Dylan Cisco
Walker, Dylan Cisco	Comment Type ER Comment Status D PSE SI
Comment Type ER Comment Status D Editorial The table reference needs to be updated. Editorial Editorial Editorial	In conjunction with a fix to the logic in the START_DETECT block in the Type 3/Type 4 PSE SD, would like to clarify that CC_DET_SEQ is only applicable to 4-pair operation.
SuggestedRemedy	SuggestedRemedy
Change "Table 33–2a summarizes the permissible PSE Types along with supported parameters."	Change "A constant indicating the sequence in which the PSE performs connection check and detection."
To "Table 33–2 summarizes the permissible PSE Types along with supported parameters."	To "A constant indicating the sequence in which a PSE operating over both pairsets
Proposed Response Response Status W	performs connection check and detection. Pathways in Figure 33-15 that require an assigned value for this constant cannot be taken by a PSE operating over a single pairset."
PROPOSED ACCEPT IN PRINCIPLE.	Pronosed Response Response Status W
OBE by 57	PROPOSED ACCEPT.
, -	

C/ 33 Walker, D	SC 33.2.5.9 ylan	P 66 Cisco	L 43	# 284	<i>C</i> / 33 Walker, D	SC 33.2.5.9 Dylan	P 70 Cisco	L 2	# 287
<i>Comment</i> Variat	<i>Type</i> TR ble class_num_ev	Comment Status D vents cannot be 0 for Type 3/	Type 4 per Tabl	PSE SD e 33-6.	<i>Comment</i> Defin	t <i>Type</i> ER ition of FALSE val	Comment Status D ue for variable power_not_av	ailable_sec is a	PSE SD awkward.
Suggested Remo	<i>dRemedy</i> ve value of 0 fror	n class_num_events.			<i>Suggeste</i> Chan	<i>dRemedy</i> ge "FALSE: PSE	s capable to continue to sour	rce power to a	PD."
Proposed PROP Impler	Response POSED ACCEPT ment suggested i	Response Status W IN PRINCIPLE. remedy as well as:			To "F <i>Proposed</i> PROI	ALSE: PSE is cap <i>Response</i> POSED ACCEPT.	able of continuing to source Response Status W	power to a PD.	ı
Remo (there	ve "Single-Event	Physical Layer classificatin of as single-event for Types 3 a	or" from the defir	nition of value "1".	<i>Cl</i> 33 Walker, D	SC 33.2.5.10 Oylan	P 72 Cisco	L 29	# 288
Cl 33	SC 33.2.5.9	P 69	L 41	# 285	Comment Time	t <i>Type</i> TR r tcc2det_timer als	Comment Status D to applies to CC_DET_SEQ =	= 3.	PSE SD
Comment Definit can fix	<i>Type</i> ER tion of FALSE for t it now that it's in	Comment Status D variable power_not_availabl the Type 3/Type 4 PSE SD	e is awkward. It section.	PSE SD was legacy text, but we	Suggeste Chan CC_I	dRemedy ge "A timer used f DET_SEQ = 0."	o limit the time between Con	nection Check	and Detection when
Suggested	dRemedy				To "A	timer used to lim	t the time between Connection	on Check and E	Detection when
Chang	ge "FALSE: PSE	is capable to continue to sou	rce power to a F	PD."	Proposed	I Response	$R_{\text{Denonse}} \text{ Status } \mathbf{W}$		
To "FA	ALSE: PSE is car	bable of continuing to source	power to a PD."		PRO	POSED ACCEPT.			
Proposed PROP	Response POSED ACCEPT	Response Status W							
C/ 33 Walker, Dy	SC 33.2.5.9 ylan	P 69 Cisco	L 48	# 286					
Comment Definit	<i>Type</i> ER tion of FALSE va	Comment Status D lue for variable power_not_a	vailable_pri is av	PSE SD vkward.					
Suggested Chang	d <i>Remedy</i> ge "FALSE: PSE	is capable to continue to sou	rce power to a F	PD."					
To "F#	ALSE: PSE is ca	bable of continuing to source	power to a PD."						
Proposed PROP	Response POSED ACCEPT	Response Status W							

<i>Cl</i> 33 Walker, Dyla	SC 33.2.5.12 n	P 78 Cisco	L 33	# 289	C/ 33 Walker, Dy	SC 33.2.6.1 /lan	<i>Р</i> 89 Cisco	L 14	# 290	
Comment Ty	pe TR	Comment Status D		PSE SD	Comment	Type ER	Comment Status D		Editorial	
In conjuct START_ into the f	ction with clarifica DETECT to make first IF statement.	tion of the constant CC_D e it clearer that a PSE ope	ET_SEQ, need erating over a sin	to update the logic in gle pairset does not fall	Need Suggested	a space betwee	n the section number and title.			
SuggestedR	emedy				Chang	je "33.2.6.1Con	nection check requirements"			
Change:					To "33	3.2.6.1 Connect	ion check requirements"			
start tdel IF (CC_I	t_timer DET_SEQ != 2) T	HEN			Proposed PROP	Response OSED ACCEP	Response Status W T IN PRINCIPLE.			
do_d	_temp = 0) THEN letect_pri	N			OBE b	oy 77.				
ELSE do_d	letect_sec				<i>Cl</i> 33 Walker, Dy	SC 33.2.6.1 /lan	P 89 Cisco	L 29	# 291	
det_t END END	temp <= 0				Comment Type TR Comment Status D Connection Check					
IF (mr_p do_det END To:	IF (mr_pse_alternative != both) THEN do_detect_pri END To:				Suggested Chang the en when	<i>IRemedy</i> Je "The specific d of detection o connected to a	ation of Tdet2det, defined in Ta n the first pairset to the beginr single-signature PD."	able 33–7, app ing of detectio	lies to the time between n on the other pairset	
start tdel IF (mr_p IF (det	t_timer se_alternative = l _temp = 0) THEN	both) THEN I			To "Th end of the se	ne specification detection on th cond detection	of Tdet2det, defined in Table 3 e first pairset to the beginning occurs before power up on the	33–7, applies to of detection or first pairset."	o the time between the the other pairset when	
do_d det_t ELSE	letect_pri temp <= 1				Proposed PROP	Response OSED ACCEP	Response Status W T.			
do_d det_t END ELSE	temp <= 0				C/ 33 Walker, Dy	SC 33.2.6.1 /lan	P 89 Cisco	L 41	# 292	
do_det END Proposed Re	tect_pri	Response Status W			Comment Table signati	<i>Type</i> TR 33-7, Item 2, Ao ure PDs. This is	Comment Status D ddtional Information states that s not the case.	t Tdet2det app	Connection Check lies only to single-	
PROPOS	SED ACCEPT.	- ,			Suggested	Remedy	itional Information including th			
					Proposed PROP	Response OSED ACCEP	Response Status W			

CI 33	SC 33 2 6 1	P 89	/ 48	# 203	CI 33	33265
Walker, D)ylan	Cisco	2 40	π 293	Walker, Dylan	55.2.0.5
Comment	tType ER	Comment Status D		Connection Check	Comment Type	ER
Use o	commas so that th	is sentence reads better.			The word "s	ections" should
Suggeste	dRemedy				strikethroug	n.

Change "The connection check is rerun before applying power if power up fails to meet the timing requirements in both Table 33–7 and 33.2.8.13 or power is absent on both pairsets simultaneously or if the state machine reaches the IDLE state."

To "The connection check is rerun before applying power if power up fails to meet the timing requirements in both Table 33-7 and 33.2.8.13, power is absent on both pairsets simultaneously, or the state machine reaches the IDLE state."

Proposed Response Response Status W Т.

PROPOSED AC	CEP
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C/ 33 SC	33.2.6.1	P 90	L 1	# 294
Walker, Dylan		Cisco		
Comment Type	TR	Comment Status D		Connection Check
Misplaced a	nd missing	commas.		

SuggestedRemedy

Change "If the voltage on either pairset rises above Vvalid max. (defined in Table 33-8) during connection check, the PSE shall reset the PD by bringing the voltage at the PI below Voff max, defined in Table 33-17 before performing classification."

To "If the voltage on either pairset rises above Vvalid max (defined in Table 33-8) during connection check, the PSE shall reset the PD by bringing the voltage at the PI below Voff max (defined in Table 33-17) before performing classification."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Need to add Treset condition...

Change to: "If the voltage on either pairset rises above Vvalid max (defined in Table 33-8) during connection check, the PSE shall reset the PD by bringing the voltage at the PI below Voff max (defined in Table 33–17) for at least T Reset (defined in Table 33-15) before performing classification."

CI 33	SC 33.2.6.5	P 92	L 19	# 295
Walker, Dyla	n	Cisco		
Comment Tv	pe ER	Comment Status D		Editorial

be singular. Looks like a remnant from a past draft given the

SuggestedRemedy

Change "The PSE shall reject a pairset within a link sections as having an invalid signature, when the pairset exhibits any of the following characteristics as specified in Table 33-10:"

To "The PSE shall reject a pairset within a link section as having an invalid signature, when the pairset exhibits any of the following characteristics as specified in Table 33-10:"

Proposed Response Response Status W PROPOSED ACCEPT.

C/ 33	SC 33.2.6.7	P 9	3	L 3	# 296
Walker, Dylan	1	Cisco			
Comment Typ	e ER	Comment Status	X		Pres: Yseboodt1
Section re	eference needs	to be corrected.			

SuggestedRemedy

Change "It shall be stored in the variable PD 4pair cand, defined in 33.2.5.4."

To "It shall be stored in the variable PD_4pair_cand, defined in 33.2.5.9."

Proposed Response Response Status W

WFP

TFTD

CI 33	SC 33.2.7.2	P 96	L 29	# 297
Walker, Dy	rlan	Cisco		
Comment .	Type ER	Comment Status D		Editorial

Sentence is missing pointers to other figures that make use of the class and mark events listed.

SuggestedRemedy

Change "...as defined in the state diagram in Figure 33–13 and Figure 33–19."

To "...as defined in the state diagram in Figure 33–13. Figure 33–19. Figure 33-20, and Figure 33-21."

Proposed Response Response Status W

PROPOSED 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 Z/withdrawn SORT ORDER: Comment ID

C/ 33 SC 33.1 Zimmerman. George	P 43 CME Consult	L 12 tina / Co	# 298	C/ 33 Zimmerm	SC 33.1.2 an. George	<i>P</i> 44 CME Consu	L 19 Itina / Co	# 301
Comment Type T Include Clause 126, 2.5	Comment Status X GBASE-T and 5GBASE-T.	3	General	Comment Figur CSM	<i>Type</i> E es 33-1 and 33-2 A/CD LAN model	Comment Status D titles: References in IEEE S , they now refer to Ethernet	itd 802.3-2015 nc	<i>Editorial</i> blonger refer to
Associated with present Change line to read, "Pf Also, change P47 L38 to there are numerous text Proposed Response	ation with proposed text cha HYs defined in Clause 25, C b insert, ", 2.5GBASE-T, 5G changes. See presentation Response Status W	anges to include Clause 40, Claus GBASE-T, " after n for complete l	e Clause 126 support. se 55, and Clause 126." r "1000BASE-T" - Note, isting	Suggeste Repla Proposed PROI	dRemedy ace CSMA/CD to Response POSED ACCEPT	with Ethernet in titles to Flg Response Status W	ures 33-1 and 33	-2
WFP TFTD				C/ 33 Zimmerm	SC 33.1.3.2 an, George	<i>P</i> 46 CME Consu	<i>L</i> 29 Iting / Co	# 302
Cl 25 SC 25.4.9.2 Zimmerman, George Comment Type E Somehow, "Insertion los 25.4.9.2.1) SuggestedRemedy Replace "ion loss" with "	P 26 CME Consult Comment Status D ss" has become "ion loss".	L 26 ting / Co (6 instances, th s)	# 299 <i>Editorial</i> rough note at end of	Comment the du defini passe neces Suggeste Insen electr 33.1.	Type E efinition of chann tion of "channel" es". For this clau ssarily a signal. <i>dRemedy</i> "Within Clause 3 ical path on whic 3.2 as a new para	Comment Status D el in 802.3-2015 has been a as "a defined path along whi se, we have a little different 33 and its annexes, "channe h the power signal passes, i agraph.	mended by 802.3 ich an electrical o situation, becaus I", as defined in 1 .e., the link sectio	Cabling by to allow local or optical signal e we have a power, not .4.134, refers to the on." at the begining of
PROPOSED ACCEPT.				Proposed PROI	POSED ACCEPT	Response Status W		
Sounds like a bulk delet	e of "insert" (one of the edit P 44	ting instructions)). # <u>300</u>	C/ 33 Zimmerm	SC 33.2.1 an, George	P 47 CME Consu	L 3 Iting / Co	# 303
Zimmerman, George Comment Type E Text now clearly says it external references shou final revision draft and th editor's note may be del SuggestedRemedy Replace 1.4.324 with 1 parentheticals "(1.4.xxx)	CME Consult Comment Status D is an amendment to IEEE S uld be to those in 802.3-201 he references in 802.3bx d3 eted since there is no duplin 4.337 (L43) and 1.4.256 with in P802.3bx/D3.1), Delete eter Delete eter	Stid 802.3-2015 15 (which was b 3.1 were the san cation of definiti ch 1.4.269 (L45). editor's note on	<i>Editorial</i> (on the first page). All x). I have checked the ne in the final rev. Also, ons to deal with. . Delete both page P45 L19.	"Tabl have Suggeste Repla Proposed PROI	e 33-2a summari "a" table inserts. <i>dRemedy</i> ace "Table 33-2a <i>Response</i> POSED ACCEPT by 57.	summarizes" With the complete rep It is now just Table 33-2 summarizes" with "Table 3 <i>Response Status</i> W IN PRINCIPLE.	olacement of clau 33-2 summarizes	Editorial ise 33, we no longer

CI 33 S	C 33.2.5.8	P 66	L 32	# 304	C/ 33	SC 33.2.5.9	P71	L1	# 307	
Zimmerman, G	eorge	CME Consulting	g/Co		Zimmerma	n, George	CIME Consul	Iting / Co		
"if the PSE if the dual s	e E Co uses the method signature PD is a	consisting in generating consisting for 4-pair power	3 class events er." text is uncle	PSE SD to determine ear and confusing	Comment Type E Comment Status D Editorial NOTE is important, and needs to stay on the same page as pse_ready. Set frame to keep the NOTE with the variable.					
SuggestedRem Replace wi power usin	nedy th "whether the Ps g 3 class events."	SE determines if a dual s	ignature PD is	a candidate for 4-pair	Suggested See co Proposed	IRemedy omment Response	Response Status W			
Proposed Resp PROPOSE	oonse Res D ACCEPT IN PF	sponse Status W RINCIPLE.			PROP	OSED ACCEPT				
OBE by 26	0.				CI 33 Zimmerma	SC 33.2.5.4 an, George	P 60 CME Consul	L 1 Iting / Co	# 308	
C/ 33 S	C 33.2.5.1	P 56	L 14	# 305	Comment	Туре Е	Comment Status D		Editorial	
Zimmerman, G Comment Type This section to separate For type 3/- nomenclatu SuggestedRem Retitle sect Specific Ov timing requ Additionally structure an semi-indep Proposed Resp	eorge T Co n really isn't an over the overview of T 4 state diagrams a ure (e.g., what _pr bedy cion into State diagrem verview and Timin irements and 6th y, place editor's no nd nomenclature of endent machines ponse Res	CME Consulting omment Status D verview, most of it could b Type 1 / 2 state diagrams a short overview of the st ri and _sec indicate) woul gram overview and timing g following 33.2.5.1 and I paragraph (beginning "In ote in Section 33.2.5.1.1 fo of the Type 3/4 state diag) when that text is stable. sponse Status W	g / Co be renamed "tir from the Type ate diagram str d be helpful for g, Insert sectio Move paragrap the Type 3 an that text is nee- gram (e.g., prim	PSE State Diagram ning". It would do well 3/4 state diagrams. ructure and r clarity. n 33.2.5.1.1 Type 3/4 h on Connection check d Type 4") to it. ded to describe the nary and secondary	"PSEs Table Also, i Suggested Insert 5. Sin "PSEs Table Proposed PROP C/ 33 Zimmerma	s shall meet at lea 33–6." this is in t t should say Typ <i>Remedy</i> "Type 1 and Typ nilarly, in the Typ s shall meet at lea 33–6." (P72 L1) <i>Response</i> OSED ACCEPT SC 33.2.5.11 an, George	ast one of the allowable vari he type 1/type 2 section, an e 1 or Type 2 PSEs. e 2 " prior to "PSEs shall", F e3/4 PSE section 33.2.5.9, ast one of the allowable vari <i>Response Status</i> W <i>P</i> 74 CME Consul	able definition pe d should refer to Fix cross reference insert "Type 3 an able definition pe <i>L</i> 45 Iting / Co	# 309	
Cl 33 S Zimmerman, G Comment Type dll_4PID do renamed?, SuggestedRem Either, corr to use it, or	D ACCEPT. C 33.2.5.9 eorge T Co pes not appear to or has it been over needy ect name to what delete definition	P 67 CME Consulting comment Status X be mentioned anywhere ertaken by events and so is used, provide an edito of variable dII_4PID,	L 36 g / Co else in the doc mething else h r's note as to v	# <u>306</u> <i>PSE SD</i> ument. (has it been as taken its place?) what needs to be done	"pd_cl do_cla Suggestec Delete Proposed PROP	s_4PID" - this va assification applie <i>IRemedy</i> pd_cls_4PID or <i>Response</i> OSED ACCEPT	riable is no longer used any so only to single-signature ca lines 45-49 <i>Response Status</i> W	where with "do_c ases, where 4PIE	Classification", because	
Proposed Resp TFTD	oonse Res	sponse Status W								

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

	IEEE P8	302.3bt D1.	6 4-Pair Power-over-Et	hernet 9th	Task Force r	eview comments			
C/ 33 SC 33.2.5.11	P 75	L 28	# 310	C/ 33	SC 33.2.5.1	2 P 88	L 38	# 313	
Zimmerman, George	CME Consulting	/ Co		Zimmerma	an, George	CME Consultir	ng / Co		
Comment Type ER Co do_classification only applies signatures, no accounting for	PSE SD apply for dual	Comment Type E Comment Status D Editoria classification has no need for PD_4pair_cand (although it has PD_4pair_cand_pri and _sec),							
SuggestedRemedy Delete second editor's note.				SuggestedRemedy Delete editor's note on PD_4pair_cand P88 L38					
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.					Proposed Response Response Status W PROPOSED ACCEPT.				
OBE by 70.	D 75	/ 27	# 244	Cl 33 Zimmerma	SC 33.2.5.1 an, George	2 P 88 CME Consultir	L 45 ng / Co	# 314	
Zimmerman. George	CME Consulting	/ Co	# 311	Comment	Туре Е	Comment Status D		Editorial	
Comment Type T Co	omment Status D	,	PSF SD	Editor's note about 4PID requirements is obsolete.					
mr_pd_class_detected repre the ultimate class. Delete Cl	sents the class signature lass 5 through 8, as they d	detected on a cannot occur.	particular event, not	Suggester Delete	<i>dRemedy</i> e editor's note or	ı figure 33-9(TBD), Lines 45-48	3		
SuggestedRemedy Delete editor's note "Valid ca through 8)	Issification" on Line 27.	Delete Lines	22-25 (Class 5	Proposed PROF	Response POSED ACCEPT	Response Status W			
Proposed Response Res	sponse Status W			C/ 33 Zimmerma	SC 33.2.6.7 an. George	P 92 CMF Consultir	L 51	# 315	
				Comment	Type T	Comment Status X	.g, cc	Pres: Yseboodt1	
OBE by 69 and 172.	P 76	L 4	# 312	This description of 33.2.6.7 is obsolete and its functionality is now captured in the state diagram as an integrated function.					
Zimmerman, George	CME Consulting	/ Co		Suggeste	dRemedy				
Comment Type T Co	omment Status D	Ds. nothing el	PSE SD	Delete Section 33.2.6.7. Alternatively, rewrite as informative text, describing the action in the single-signature and dual-signature state diagrams.					
into account, mr_pd_class_de similarly, for mr_pd_class_de	letected_pri relates only to etected_sec on line 25	the signature	e on one event	Proposed WFP	Response	Response Status W			
SuggestedRemedy Delete editor's notes P76 L4	and P76 L25			TFTD	1				
Proposed Response Res PROPOSED ACCEPT IN PR	sponse Status W RINCIPLE.								

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Comment ID

PSE Class

CI 33 SC 33.2	7 P 93	L 37	# 316	CI 33
Zimmerman, George	CME Con	sulting / Co		Zimmermai
Comment Type E	Comment Status D		Editorial	Comment 7

"Alternatively, PSE implementations may use VPSE = VPort_PSE-2P min and RChan = RCh when powering using a single pairset, or RChan = RCh/2 when powering using two pairsets to arrive at over-margined values as shown in Table 33–11." is unclear. It looks like it is alternative to the requirement for Equation 33-2. If that is the instance, then the alternatives should be shown at the variables that can be substituted.

SuggestedRemedy

I'm sorry, but I can't tell what the actual meaning is. If this was NOT to be an alternative to Equation 33-2, but rather is showing that Rchan has two values, then delete "Alternatively"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

delete "Alternatively"

C/ 33	SC 33.2.7	P 93	L 23	# 317
Zimmerman	George	CME Consulti	ng / Co	

Comment Status X

"The assigned Class is the Class that results from the PDs requested Class and the number..." This is actually the detected class. The assigned class may be different than the detected class, as specified under pd_req_pwr (and _pri or _sec), based also on the maximum class the PSE can support. (see eq P74 L51 or P97 L49)

SuggestedRemedy

Comment Type T

Change line 23 to read: "The assigned Class is the Class that results from the PDs requested Class, the highest class the PSE can support, and the number...".

Proposed Response Response Status W

TFTD

See 81.

The highest class the PSE can support is contained in the number of class events the PSE gives...

CI 33	SC 33.2.7.2	P 97	L 49	# 318
Zimmerman,	George	CME Cons		
Comment Ty	pe E	Comment Status X		PSE Class

"When a PD requests a higher class than a PSE can support, the PSE assigns the PD Class 3, 4, or 6, whichever is the highest that it can support." While this can only happen with multiple-event classification, this applies to classification in general and belongs at the description of assigned classes.

SuggestedRemedy

Move the sentence on P97 L49 to the end of the paragraph discussing assigned class at P93 L24, "When a PD requests a higher class than a PSE can support, the PSE assigns the PD Class 3, 4, or 6, whichever is the highest that it can support."

Proposed Response Response Status W

TFTD

This sentence is where it is because it addresses the portion of the state diagram where the PSE exits class early.

See 249

C/ 33	SC 33.2.7.2	P 96	L 30	# 319	
Zimmerman,	George	CME Co	onsulting / Co		

Comment Type T Comment Status D PSE Class

"When Multiple-Event Physical Layer classification is implemented, classification consists of the application of VClass and the measurement of IClass in a series of classification and mark events—CLASS_EV1 or CLASS_EV1_LCE, MARK_EV1, CLASS_EV2, MARK_EV2, CLASS_EV3, MARK_EV3, CLASS_EV4, MARK_EV4, CLASS_EV5, and MARK_EV_LAST—as defined in the state diagram in Figure 33–13 and Figure 33–19."

This description only applies properly to Type 3 & 4 PSEs when a single-signature PD is detected. It doesn't refer to the dual-signature state diagrams, or the signal names for Type 3 & 4 dual-signature PDs. It also implies Type 1 & 2 PSEs go on to 3 or more class events. It is best to stop the descriptive language and refer to the state diagrams, rather than create a tangled mess of description.

SuggestedRemedy

Put a period after "mark events" Delete "-CLASS_EV1..." through the end of the paragraph, and replace with "The sequences of CLASS _EVn and MARK_EVn events are defined in the classification state diagrams for PSEs in Figure 33-13, Figure 33-19, Figure 33-20, and Figure 33-21." (where the "n" is italicized).

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 33	SC 33.2.7.2	P 97	L 46	# 320	C/ 33	SC 33.2.9	P 114	L 32	# 322		
Zimmerm	an, George	CME Consult	ng / Co		Zimmerma	an, George	CME Consult	ting / Co			
Comment	Type T	Comment Status X		PSE Class	Comment Type T Comment Status X PSE Powe						
"Edito unma define	r's Note (Remove tched classes for ed, we should be a	prior to D2.0): We need to a mixed Type PDs" Now that able to do this - there are no	address behavion the dual signat special cases.	or for matched and ure state machines are	"A PSE shall not initiate power provision to a link or a pairset if the connected PD is not able to ascertain the available power based on the number of classification events produced by the PSE. For example, a PSE that has less than Class 3 power would not						
Suggeste	dRemedy				provis	ion power to the	link or pairset for a PD reque	sting a Class 3	or higher power level."		
Insert altern 20 an or Typ and tr	"A Type 3 or Typ atives independer d 33-21." This sta be 4 PSE connect ansition directly to	e 4 PSEs connected to a du htly, with a maximum class p atement should go on page 9 ed to a dual-signature PD sh MARK EV LAST if the cla	al-signature PD er pairset of 5, 98, line 3, imme all skip all subs	shall classify the two according to Figures 33- diately before "A Type 3 sequent class events tooted during	Unclear - multiple problems. The PSE is making a judegment that the PD is not able to ascertain the available power? The example doesn't help. It just says don't provision if power is less than the power available. The state diagrams already say this. (also, "link" should at least be "link section", or more clearly, "one or both pairsets")						
CLAS	S_EV3 is 0, 1, 2,	or 4."	ss signature de	lected during	Suggested	dRemedy					
Proposed TFTD	Response	Response Status W			Not sure what is meant, so can' t recommend what to say with confidence, but it seems, Change to "A PSE shall not initiate power provision to one or both pairsets if the PSE has less than class 3 power available and the connected PD requests class 3 or greater power						
See 9	3, 198				Proposed	Response	Response Status W				
01.00	00 00 0 5 40	0.07		# [00.1	TFTD						
Zimmerma	an, George	CME Consult	L 54 ng / Co	# 321	Can anyone think of another scenario? Obviously, there are more under 15W.						
Comment	Type E	Comment Status D		Editorial	PSE has class 1 available, PD asks for class 2.						
Туро	in figure title, says	"Primary Alternative" this is	the "Secondary	y Alternative"	How a	bout.					
Suggeste	dRemedy				"A PSE shall not initiate power provision to one or both pairsets if the PSE has less than class 3 power available and the connected PD requests more than the available power "						
See c	omment										
Proposed	Response	Response Status W									
PROF	POSED ACCEPT	IN PRINCIPLE.			Cl 33 Zimmorma	SC 33.2.5.12	2 P 82 CME Consult	L1	# 323		
OBE	by 218.				Zinnenna			ing / Cu			
					Comment	Type T	Comment Status D	undetee)" (Fige	PSE SD		
					P84) Class state machine tie ins appear to be there, but aren't tied into next leve one appears to be C2, and P84 L1 appears to be C3. Note - for the other two in this, P81 & P83 it is not yet clear what the tie ins are.						
					Suggested	Remedy					
					See c	omment.					
					Proposed	Response	Response Status W				
					PROF	OSED ACCEPT	•				

CI 33	SC 33.2.8.2	P 105	L 7	# 324	CI 33	SC 33.3.7	P 132	L 24	# 325	
Beia, Chr	istian	STMicroelecti	ronics		Beia, Christian STMicroelectronics					
Comment	Type TR	Comment Status X		Pres: Beia1	Comment 7	Type TR	Comment Status X		Pres: Beia1	
Seed	Dela_1_0316.pdf for	more details.			See be	ia_1_0316.pdf f	or more details.			
"The	minimum PD input o	apacitance allows a Type	1 or Type 2 PD	to operate for any input						
voltaç	ge transient lasting le	ess than 30 µs."			In orde transie	r to allow PD Ty nt, a larger minir	pes 3 and 4 to operate without num Cport is necessary	ut interruption di	uring a 30us input	
This sentence needs some improvement to ensure a proper specification of the voltage transients. "Any input voltage" is definitely too vague and thus incorrect					Suggested	Remedy				
Suaaeste	dRemedv				Table 3	3-28 Item 12				
Repla	Replace :				Split in 3 rows, one for Types 1 and 2, and two for Types 3 and 4.					
The n voltaç	The minimum PD input capacitance allows a Type 1 or Type 2 PD to operate for any input voltage transient lasting less than 30 $\mu s.$				Assign: 5.00uF as min value for Types 1,2					
With	With :					20.0uF as min value for Type 4				
The n	ninimum PD input ca	apacitance Cport defined in	n Table 33-28, a	allows PDs of any Type	Other of	ells don't need r	modification.			
to ope than 3	erate for input voltag 30 µs as specified in	je transients which cause 33.3.7.6	Vport to drop as	low as 0V lasting less	Proposed F	Response	Response Status W			
Proposed	l Response	Response Status 🛛 🛛 🛛 🛛 🛛 🛛 🖉			WFP					
WFP					TFTD					
TFTD)									