C/ 1	SC 1.4.33	3 P 24	L 40	# r01-60	C/ 1	SC 1	1.4.338	P 24	L 41	# r	01-3	
Yseboodt, Lennart		Philips Lighting			Anslow, F	Peter		Ciena Corpora	ation			
Comment T	vpe FR	Comment Status D		Editorial	Commen	t Type	FR	Comment Status D			Edito	rial

Comment Type ER Comment Status D

We pulled in the definition of PSE as modified by 802.3bu.

The term "DTE powering" is still used here, which we now refer to as Power over Ethernet. To be consistent, we call it "Power over Data Lines" for Clause 104.

There also seems to be a repeat of a sentence in the definition.

Given the extensive changes, we should just replace the definition completely.

SuggestedRemedy

1. Change the editing instruction from "Change 1.4.338 (as modified by IEEE Std 802.3bu-2016) as follows:"

to "Replace 1.4.338 (incorporating the changes made by IEEE Std 802.3bu-2016) as follows:"

2. New text:

"1.4.338 Power Sourcing Equipment (PSE): A DTE or midspan device that provides the power to a single link section. PSEs are defined for use with two different types of balanced twisted-pair PHYs. When used with 2 or 4 pair balanced twisted-pair (BASE-T) PHYs, see IEEE Std 802.3. Clause 33 and Clause 145. Power over Ethernet is intended to provide a single 10BASE-T. 100BASE-TX. 1000BASE-T. 2.5GBASE-T. 5GBASE-T. or 10GBASE-T device with a unified interface for both the data it requires and the power to process these data. When used with single balanced twisted-pair (BASE-T1) PHYs (see IEEE Std 802.3, Clause 104), Power over Data Lines is intended to provide a single 100BASE-T1 or 1000BASE-T1 device with a unified interface for both the data it requires and the power to process these data. A PSE used with balanced single twisted-pair PHYs is also referred to as a PoDL PSE."

Proposed Response Response Status W PROPOSED ACCEPT.

TFTD PA OBE by 3

Comment Type ER Comment Status D **F**ditorial

Comment i-2 was accepted in principle, but the change to the base text of 1.4.338 has not been done correctly.

When an amendment changes text that has already been changed by a prior amendment, the base text for the second amendment is the text as amended by the first amendment. This text is therefore shown without underline or strikethrough font. The only text in underline or strikethrough font is for changes being made by this amendment, not for changes already made by IEEE Std 802.3bu-2016.

SuggestedRemedy

Replace the current text of 1.4.338 with:

A DTE or midspan device that provides the power to a single link section. PSEs are defined for use with two different types of balanced twisted pair PHYs. When used with 2 or 4 pair balanced twisted-pair (BASE-T) PHYs, (see IEEE Std 802.3, Clause 33<u> or Clause 145</u>), DTE powering is intended to provide a single 10BASE-T. 100BASE-TX. <s> or </s>1000BASE-T<u>, 2.5GBASE-T, 5GBASE-T, or 10GBASE-T</u> device with a unified interface for both the data it requires and the power to process these data. When used with single balanced twisted-pair (BASE-T1) PHYs (see IEEE Std 802.3, Clause 104), DTE powering is intended to provide a single 100BASE-T1 or 1000BASE-T1 device with a unified interface for both the data it requires and the power to process these data. A PSE used with balanced single twisted-pair PHYs is also referred to as a PoDL PSE. <u>A DTE Power over Ethernet (Clause 33 and Clause 145) device that provides the power to a single link section. Power over Ethernet is intended to provide a single 10BASE-T. 100BASE-TX. 1000BASE-T. 2.5GBASE-T. 5GBASE-T. or 10GBASE-T device with a unified interface for both the data it requires and the power to process these data.</u> Where <u> and </u> denote the start and end of underline font and <s> and </s> denote the start and end of strikethrough font.

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

OBE by 60

TFTD PA

comment r01-60 is ACCEPT with part of the suggested remedy: Change the editing instruction from "Change 1.4.338 (as modified by IEEE Std 802.3bu-2016) as follows:" to "Replace 1.4.338 (incorporating the changes made by IEEE Std 802.3bu-2016) as

follows:"

The IEEE Style manual (and also the P802.3bt draft) contains: Replace is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one.

Consequently, "Replace" is not appropriate as an editing instruction for the text of 1.4.338. The change should be made in the format as proposed by comment r01-3 where the

TYPE: TR/technical required ER/editorial required GR/gene	ral required T/technical E/editorial G/general	Pa 24	Page 1 of 63
COMMENT STATUS: D/dispatched A/accepted R/rejected	RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn	Li 41	11/3/2017 11:50:59 AM
SORT ORDER: Page, Line			

changes from the base text as modified by IEEE Std 802.3bu-2016 are show. Of course, I don't have an issue with changes to the wording of the definition as proposed by r01-60, but these should be shown with underline and strikethrough with respect to the base definition in order to avoid a comment on the next recirculation.

C/ 1	SC	1.4.417	P 25	L17	# r <u>01-54</u>						
Agnes, Andr											
Comment Type G Comment Status D Defi											
The defi	The definition:										
1.4.417	1.4.417 Type 2 PD: A PD that provides a Class 4 signature during Physical Layer										
classific	classification, understands 2-Event classification, and is capable of Data Link Layer										

classification, understands 2-Event classification, and is capable of Data Link Layer classification requests Class 4 during Physical Layer classification, supports Multiple-Event Classification, and supports Data Link Layer classification (see IEEE 802.3, Clause 33).

uses a Multiple-Event Classification, but it is not defined in Clause 33.

SuggestedRemedy

Use the 2-Event Classification in the definition as called in Clause 33. Then the definition became:

1.4.417 Type 2 PD: A PD that provides a Class 4 signature during Physical Layer classification, understands 2-Event classification, and is capable of Data Link Layer classification requests Class 4 during Physical Layer classification, supports 2-Event Classification, and supports Data Link Layer classification (see IEEE 802.3, Clause 33).

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Change "Mulitple-Event" to "2"

TFTD CJ

if implemented as proposed the definition would change to 'supports 2 Classification'. response should be: AIP Change "Multiple-Event" to "2-Event"

C/ 1	SC 1.4.418ac	P 25	L 35	# r01-288
Zimmerman,	George	Aquantia, ADI,	Comm	
Comment Typ	be T	Comment Status D		Definitions
D (1 11)	(

Definition of Type 4 PD doesn't work for dual-signature PDs.

SuggestedRemedy

Change 1.4.418aa and 1.4.418ac to read:

1.4.418aa Type 3 PD: A single-signature PD that requests Class 1 to Class 6, or a dualsignature PD that requests Class 1 to Class 4 on both Modes during Physical Layer classification. Additionally, the PD implements Multiple-Event classification, and accepts power on both Modes simultaneously. (See IEEE 802.3, Clause 145).

1.4.418ac Type 4 PD: A single-signature PD that requests Class 7 or Class 8, or a dualsignature PD that request Class 5 on at least one Mode during Physical Layer classification. Additionally, the PD implements Multiple-Event classification, is capable of Data Link Layer classification, and accepts power on both Modes simultaneously. (See IEEE 802.3, Clause 145).

Proposed Response Response Status W

PROPOSED ACCEPT.

OOS

TFTD HS Add commas at **

1.4.418aa Type 3 PD: A single-signature PD that requests Class 1 to Class 6, or a dualsignature PD that requests Class 1 to Class 4 on both Modes** during Physical Layer classification. Additionally, the PD implements Multiple-Event classification, and accepts power on both Modes simultaneously. (See IEEE 802.3, Clause 145).

1.4.418ac Type 4 PD: A single-signature PD that requests Class 7 or Class 8, or a dualsignature PD that request Class 5 on at least one Mode** during Physical Layer classification. Additionally, the PD implements Multiple-Event classification, is capable of Data Link Layer classification, and accepts power on both Modes simultaneously. (See IEEE 802.3, Clause 145).

Pa **25** Li **35**

C/ 25	SC 25.4.5	P 29	L12	# <u>r</u> 01-61	C/ 30 S						
Yseboodt,	Lennart	Philips Lighting			Stewart, Heath						
Comment	Type TR	Comment Status D		PN	1D Comment Type						
"A 100 3, or T the Op require	BASE-TX transm ype 4 PD delivering oen Circuit Inductate ements of 25.4.5.1	itter in a Type 2, Type 3, or Typ ng or accepting more than 13.0 ance (OCL) requirement in 9.1.7 "	e 4 Endpoi W average d of TP- PM	nt PSE or Type 2, Type power shall meet either D, or meet the	· · Changes in aPSEPowe Clause 33.						
The re	ference to 13.0 W	is incorrect as the equivalent r	number on t	he PSE side is 15.4W.	SugaestedRem						
We rea	We really should be referring to Class here. But do we mean assigned Class ? It would be strange that a data requirement depends on the assigned Class										
lt seen	ns this whole cons	struction with "more than 13.0 V	V" was intro	oduced not to add a	Proposed Rest						
require	ement to Type 1.				PROPOSE						
Suggested - Char "A 100 more t - Add n "A 100 shall n meet t Proposed TFTD Add co A 1006 accept (OCL) A 1006 shall n meet t Respo	Internet. IRemedy lage quoted senten IBASE-TX transm han 13 W average ement in 9.1.7 of T new sentence: IBASE-TX transm neet either the Op he requirements of Response OSED ACCEPT. HS Dommas at ** BASE-TX transmit ing more than 13 requirement in 9. BASE-TX transmit neet either the Op he requirements of neet either the Op he requirements of he	itter in a Type 2 Endpoint PSE of e power shall meet either the O IP- PMD, or meet the requirement itter in a Type 3 or Type 4 Endp en Circuit Inductance (OCL) red of 25.4.5.1." <i>Response Status</i> W tter** in a Type 2 Endpoint PSE W average power** shall meet 1.7 of TP- PMD, or meet the red tter** in a Type 3 or Type 4 End en Circuit Inductance (OCL) red of 25.4.5.1. comments are not needed and	or Type 2 P pen Circuit ents of 25.4 point PSE o quirement in either the C quirements point PSE o quirement in only confus	D delivering or acceptin Inductance (OCL) 5.1." r Type 3 or Type 4 PD n 9.1.7 of TP- PMD, or Den Circuit Inductance of 25.4.5.1. or Type 3 or Type 4 PD* n 9.1.7 of TP- PMD, or se the shall.	Adopt char make the "t in both aPS TFTD LY We should typo in the Regardless Type 3/4 P In stead: - undo the s from an exi - Change a - Insert "Ty - Capitalize						

С	1 30 SC	C 30.9.1.1.5	P 36	L11	# r	01-368	
S	tewart, Heath		Analog Dev	ices Inc.			
С	omment Type	TR	Comment Status D			Management	

ent submitted with the file 94876100003-stewart_01_1117.pdf attached ***

ncorrectly pushed out to aPSEPowerDetectionStatus instead of erDetectionStatusS. This brings the removal of test mode into conflict with

nedy

rt_01_1117.pdf for remedy.

oonse Response Status W D ACCEPT IN PRINCIPLE.

nges shown in 94876100003-stewart_01_1117.pdf with the following change: True" in the text "...due to the variable error_condition = true" all caps ("TRUE") SEPowerDetectionStatus and aPSEPowerDetectionStatusS.

not create aPSEPowerDetectionStatusS. I assumed that this was a (confusing) baseline, hence not implementing it. s, adding aPSEPowerDetectionStatusS does not help us since a SE still needs to support the old object anyway.

strikeouts for 'test' and 'otherFault' as we can't remove stuff isting object

add "or Figure 145-13" after "Figure 33-9"

rpe 3 and Type 4 PSEs do not use the values "test" or "otherFault".

TRUE

Pa 36 Li 11

C/ 30	SC 30.9.1.1.6	P 37	L 32	# r01-363	C/ 30	SC 30.12.2.	1.14	P 42	L 30	# r01-75	
Stewart, H	leath	Analog Device	es Inc.		Yseboodt,	Lennart		Philips Lightir	ıg		
Comment	Type TR	Comment Status D		Management	Comment	Туре Т	Comm	ent Status X		Management	
*** Co The a	omment submitted	with the file 94875700003-s	stewart_02_111	7.pdf attached ***	aLldp) "The s set thi	Xdot3LocPower second bit indicate	Гуре:: ites PSE оі а PD."	PD. A PSE shall s	et this bit to indi	cate a PSE. A PD shall	
single should	-signature and two d get the same tre	o for Cl 145 dual-signature A atment.	/B. The aPSE F	PowerClassification	Why do we have 'shalls' on PSEs and PDs in Clause 30 ? That is to be handled by Clause						
Suggestee	dRemedy				33/14	5 or Clause 79,	not here. C	lause 79 already ha	as a shall for this	j.	
See s	tewart_02_1117.p	odf for remedy.			Suggestee	dRemedy					
Proposed	Response	Response Status W			Strike	last two senten	ces in quot	ed text.			
PROF	POSED ACCEPT.				Proposed	Response	Respor	nse Status 🛛 🛛 🛛 🛛 🛛 🗤			
					TFTD	as to the shalls	there are	other instances of	this as well (30.	12.2.1.9 for example).	
TFTD	LY is no reason to sp	olit this per the same logic of	f r01-368		OOS						
Cl 30 Thompsor	SC 30.9.1.1.7 n, Geoffrey	a P 41 Individual	L 24	# r01-488	TFTD REJE	GZ CT					
Comment	Туре Е	Comment Status D		Editorial	Comn	ses a substantiv	ope of the r e text chan	ecirculation. Comr	identify a materi	anged text and all problem in the draft.	
LATE balloti	COMMENT: Ballo	oting draft seems to be OK.	Compare doc d	oes not seem to match	C/ 30	SC 30.12.2.	1.18	P 43	L 4	# r01-490	
Suggestee	dRemedy				Thompsor	n, Geoffrey		Individual			
Make	sure compare doo	c is correct next time.			Comment	Туре Е	Comm	ent Status X		Management	
Proposed	Response	Response Status W			LATE BCD?	COMMENT: RE	: 'in units c	of 0.1 W.' Would th	at be expressed	in straight binary or	
PROF	POSED ACCEPT	IN PRINCIPLE.			Suggested	dRemedy					
OOS					Clarify	<i>.</i>					
Comp	pare docs are prod	uced by Frame. Editor to m	ake sure all set	tings are used correctly.	Proposed	Response	Respor	nse Status W			
TFTD	LY										
The c differe Frame indica	ompare book is ge ential document. N e introduces many te what is not righ	enerated by Frame. As far as lot that all numbering goes c r new Tables/Figures/Equation t.	s I can tell it pro out the window in ons to show diff	duces a correct n a compare file as erences. Please	OOS						

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

Pa **43** Li **4**

C/ 30 Yseboodt, L	SC 30.12.2.1.18a ennart	P 43 Philips Lighting	L 15	# r01-78	C/ 30 Yseboodt, L	SC 30.12.2. ennart	1.18g	P 44 Philips Lightir	L 44	#	r01-81
Comment T aLldpXc pse_dll Those v	ype T Comm dot3LocReadyA and aLldp _ready_alt(X) and pd_dll_ variables no longer exist a	ent Status D DXdot3LocReadyB wer ready_mode(X). nd are no longer need	e the objects f ed.	<i>Management</i> or the independent	Comment T "APPRO Referer	vpe E DPRIATE SYN	<i>Commen</i> ITAX: The sar es not exist.	t Status D ne as used for a	aPSEPowerPairs	sExt"	Editorial
SuggestedF Remove Clause	Remedy e in the entire draft aLldp) 79, Clause 145).	(dot3LocReadyA and a	aLldpXdot3Loc	ReadyB (Clause 30,	SuggestedF Copy A with "bo	Remedy PPROPRIATE th" as this is r	SYNTAX fror ot supported I	n aPSEPowerP by Table 79-3a.	airs to here, hov	vever rem	nove the line
Proposed R PROPC	esponse Respon SED ACCEPT.	se Status W			Proposed R PROPC	esponse ISED ACCEP	Response Г.	Status W			
TFTD Y Agree to C/ 30 Yseboodt, L	D o remove but keep aLldp) SC 30.12.2.1.18c ennart	Kdot3LocReady in the ² P 43 Philips Lighting	Tables of claus	se 79 # <u>r01-79</u>	TFTD L The AP An ENL altA: Al altB: Al both: Bo	Y PROPRIATE S IMERATED V ernative A ernative B oth Alternative	SYNTAX shou ALUE that has s	ld be: s one of the follo	owing entries:		
aLldpXo It make aLldpXo	ype E Comm dot3LocPDRequestedPow s more sense to put these dot3LocPDRequestedPow	verValueA is 30.12.2.1 e after 30.12.2.1.17 verValue.	.18c.	Editorial	Cl 30 Stewart, He	SC 30.12.2. ath	1.18h	P 45 Analog Devic	L 2 ces Inc.	#	r01-364
SuggestedF Move 3 aLldpXo aLldpXo Do the	Remedy 0.12.2.1.18c aLldpXdot3L lot3LocPDRequestedPow lot3LocPDRequestedPow same for the remove varia	ocPDRequestedPowe /erValueB to after 30.1 /erValue. ants.	rValueA and 3 2.2.1.17	0.12.2.1.18d	Comment T *** Com aLldpXc ill-forme these d	vpe TR ment submitte lot3Loc/RemD d aLldpXdot3l efinitions it will	Commen ed with the file ualSigPower Loc/RemPowe make more s	t Status X 94875800003-s ClassExtModeA/ erClassExtA/B vo ense.	stewart_03_1117 /B are all seemir ersions. By colla	7.pdf attao ngly redur apsing an	Management ched *** ndant with the d combining
Proposed R PROPC	esponse Respon SED ACCEPT.	se Status W			SuggestedF See ste	Remedy wart_03_1117	.pdf for remed	ly.			
OOS TFTD G REJEC Comme propose	Z T ent is out of scope of the r as a substantive text chan	ecirculation. Commen ge which does not ider	t is on unchan ntify a materia	ged text and problem in the draft.	Proposed R TFTD	esponse	Response	Status W			

Pa **45** Li **2**

C/ 30	SC 30.12.2.1.	18h P45	L 6	# r01-83	CI 30 S	SC 30.12.2.1	1.18m	P 46	L 17	#	r01-86
Yseboodt, L	ennart	Philips Light	ing		Yseboodt, Len	nart		Philips Lighti	ng		
Comment T aLldpXc	<i>Type</i> T dot3LocDualSigF	Comment Status X PowerClassExtModeA is m	issing an enume	<i>Management</i> erated value to indicate	Comment Type aLldpXdot3	e T 3LocPower(Comment S ClassExt	Status X			Management
SuggestedF SuggestedF Add val aLldpXo aLldpXo	signature . Remedy lue "singlesig :: S dot3LocDualSigF dot3LocDualSigF	Single-signature PD" to PowerClassExtModeA, PowerClassExtModeB and	their remote cou	unterparts.	- The enun Classes. - The desc SuggestedRen - Replace t	riptive text is nedy the ENUME	s incomplete.	Ξ and PD w	nen tney snoula	list the po	OSSIDIE
Proposed R TFTD possibly	Response y OBE by 364	Response Status W			^ duaisig * class8 * class7 * class6 * class5	:: Dual-sign :: Class 8 :: Class 7 :: Class 6 :: Class 5	nature PD				
C/ 30 Yseboodt, L	SC 30.12.2.1. .ennart	18k P45 Philips Light	L 48 ing	# <u>r01-85</u>	* class4 * class3 * class2 * class1	:: Class 4 :: Class 3 :: Class 2 :: Class 1					
Comment T Objects junk-rer SuggestedF Delete aLldpXc Proposed R	ype TR a ALIdpXdot3Lock mnants there is Remedy aLIdpXdot3LocP dot3RemPowerC Response	Comment Status D PowerClassExtA and aLldp in o corresponding Clause owerClassExtA, aLldpXdo lassExtA, aLldpXdot3Rem Response Status W	oXdot3LocPower 79 field. 3LocPowerClas PowerClassExt/	Management rClassExtB seems to be sExtB, A throughout the draft.	during Phy value set to the current read-only v	- Replace th 'For a single 'sical Layer o 'dualsig'. For a PSE c ly assigned value set to	e "BEHAVIOUF e-signature PD, Classification (s connected to a s Class (see 145 'dualsig'."	R DEFINED A a read-only v see 145.3.6). single-signatu s.2.7). For a F	NS:" by: ralue that indicat For a dual-signa re PD, a read-or PSE connected to	es the rec iture PD, a nly value t o a dual-s	quested Class a read-only that indicates signature PD, a
TFTD possibly	y OBE by 364				aLldpXdot3 aLldpXdot3 <i>Proposed Resp</i> TFTD OOS	- Change the 3LocDualSig 3LocDualSig conse BE by 364	e "BEHAVIOUR gPowerClassEx gPowerClassEx <i>Response</i> S	t DEFINED A tModeA and tModeB to fol tatus W	S:" for low the style ab	ove.	
					hossinih O	DE Dy 304					

Pa **46** Li **17**

C/ 30 Yseboodt,	SC 30.12.2.1. Lennart	18t P 47 Philips Li	L 51 ghting	# r01-88	C/ 30 Stewart, H	SC 30.12.3. eath	1.18k	P 56 Analog Devic	L 17 es Inc.	# r01-370
Comment aLldp2 value.	<i>Type</i> T Xdot3LocPowerDo	Comment Status X	RING of size 6, but	<i>Management</i> it is used as a numeric	Comment *** Co	<i>Type</i> TR mment submitte	Comme ed with the f	ent Status X ïle 94876200003-s	stewart_03_111	Management 7.pdf attached ***
Suggestee Chang	<i>dRemedy</i> ge to INTEGER. A	lso change the remote.			The al instea aLldp>	ldpXdot3Loc/R d has a cut/pasi (dot3Loc/RemP	emPowerCl e error cont owerClassE	lassExt variable sh taining PSE/PD er ExtA/B.	ould contain Clumerations. Si	ass enumerations but milar error to
Proposed	Response	Response Status W			Suggested	Remedy				
TFTD					See st	ewart_03_1117	.pdf for rem	iedy.		
OOS					Proposed TFTD	Response	Respon	se Status W		
Does local f	this work with the PD system is requ	description? ("A SET a esting a power down wh	ttribute for a bit strin the value is 0x1	ng that indicates the D.")	OOS					
CI 30 Yseboodt,	SC 30.12.2.1. Lennart	18ab15 P 52 Philips Li	L 9 ghting	# <u>r01-90</u>						
Comment aLldp2 power	<i>Type</i> T Xdot3LocPSEPow r.;" rerse, does not ext	Comment Status D erPriceIndex:: "A GET a	attribute that returns	<i>Management</i> an index of the price of						
Sugaester	dRemedv		- J							
Repla "A GE a PD 1	ice by: T attribute that ret this value is undef	urns an index of the pri ined.;"	ce of power being s	ourced by the PSE. For						
Add s	ame last sentence	to the remote variant.								
Proposed	Response	Response Status W								
PROF	POSED ACCEPT.									
OOS										
TFTD REJE Comn propo	GZ CT nent is out of scop ses a substantive	e of the recirculation. C text change which does	Comment is on unch s not identify a mate	anged text and rial problem in the draft.						

Pa **56** Li **17**

<i>CI</i> 30 Yseboodt, Le	SC 30.12.3.1.18k	Р 56 Philips Lighting	L 17 #	# r01-94	<i>Cl 33 Darshan, Y</i>	SC 33.4.6 Yair	; Р	68	L 31	# r01-403	1
Comment Ty aLldpXd - The en Classes - The de	pe T Contract of the text of	omment Status X Ext Iy list PSE and PD when	they should list the p	possible	Comment The co Suggested Chang	Type T pupled noise o <i>Remedy</i> ue to 2mV	Comment Statu of 1mV for 2.5GHz to 1	is X I0GHz is too s	small.	AES	•
SuggestedR	emedy				Proposed I	Response	Response Status	s W			
- Replac	e the ENUMERATE	D VALUEs by:			TFTD						
* class8	:: Class 8				OOS						
^ class/ * class6 * class5	:: Class 7 :: Class 6 :: Class 5				What i	is the technica	al justification of this?				
* class4	:: Class 4				TFTD	YD					
* class3	:: Class 3				"1. Wh	hat is the tech	nical iustification for 1r	mV? Based o	on the replay to this	auestion we will	
* class2	:: Class 2				know i	f 2mV is too I	ow or too high 2. Still	checking resu	ults in the lab howe	ever we need	
* class1	:: Class 1				worst o	case theoretic	cal calculations as well	."			

- Replace the "BEHAVIOUR DEFINED AS:" by: "For a single-signature PD, a read-only value that indicates the currently assigned Class by the remote PSE. For a dual-signature PD, a read-only value set to 'dualsig' by the remote PSE.

For a PSE connected to a single-signature PD, a read-only value that indicates the requested Class during Physical Layer classification (see 145.2.7) by the remote PD.

For a PSE connected to a dual-signature PD, a read-only value set to 'dualsig' by the remote PD."

- Change the "BEHAVIOUR DEFINED AS:" for aLldpXdot3RemDualSigPowerClassExtModeA and aLldpXdot3RemDualSigPowerClassExtModeB to follow the style above.

Proposed Response Response Status W

TFTD

OOS

possibly OBE by 364

Pa 68 Li 31

C/ 33 SC	33.4.9.2.1	P 71	L 42	# r01-14	33.4.9. ⁻ 33.4.9. ⁻	b Coupling b.1 Multiple	parameters between lir disturber power sum a	nk segments alien near-enc	d crosstalk (PSAN	JEXT) loss				
Anslow, Peter		Ciena Corporatio	on		33.4.9.	b.2 Multiple	e disturber power sum a	alien far-end o	crosstalk (PSAFE	XT) loss				
Comment Type	ER (Comment Status D		Editorial	Proposed F	esponse	Response Status	s W						
Comment Type The editing garbled (e.g The base dc 33.4.9.1.3 R 33.4.9.1.4 V 33.4.9.2 Mic 33.4.9.2 I A Attempting t 33.4.9.2.1 A 33.4.9.2 Col 33.4.9.2.1 N 33.4.9.2 Col 33.4.9.2.1 N 33.4.9.3 Col 33.4.9.3 Col 33.4.9.3.1 N subclause] 33.4.9.3.2 M subclause] 33.4.9.4 Mic 33.4.9.4 I A	Comment Status D d subclause numbering for 3 ruction for a new subclause uppment cable Midspan PSE th requirements dspan PSE signal path trans he intent of the draft, it appe anged subclause] E [changed subclause] elay skew [new subclause] elay skew [new subclause] ers between link segments [er power sum alien near-end er power sum alien far-end c th requirements [re-number dspan PSE signal path trans	C/ 33 Proposed F PROPC OOS TFTD L George C/ 33 Yseboodt, L Comment 7 In 802.3 PSE all By mist The val In 802.3 signatu However value fo Since th	Y - I stumbled SC 33.6.3 ennart ype TR -2015, in Cl ocated power ake, in Clau ue of zero is bb we are cl e power neg or that, in con r legacy dev is is undefir	Response Status PT. d over this if you recall. 3.3 <i>P</i> Phili <i>Comment Status</i> lause 79, the permitted er value fields ranged 1 ise 33 the permitted ran is undefined in DLL. hanging Clause 79 to p gotiation. mbination with the curre vices. ned, we must prevent th	Please verify 73 ps Lighting s X value range to 255. ige started at ermit value z ent value range	this IS your inter <i>L</i> 19 for the PD reques zero. ero, this is require ges in 33.6.3.3 m	It. # [r01-97 DLL sted power and ed to support dual- akes zero a legal							
Assuming th would be: 33.4.9.1.3 R 33.4.9.1a C 33.4.9.1a.1 33.4.9.1a.2 33.4.9 1b C	ct, then a scheme in line wit anged subclause] SE [changed subclause re-n delay [new subclause] delay skew [new subclause] zters between link segments	umbering rules 4.9.1.4]	The proposed solution is to restrict the value range in 33.6.3.3. In summary, we are moving a restriction from Clause 79 to 33.6.3.3, the net result is an identical permitted value range for legacy devices. A supporting MR has been filed for this comment. SuggestedRemedy											
33.4.9.1b.1 subclause] 33.4.9.1b.2 subclause] 33.4.9.2 Mic 33.4.9.2.1 A	 33.4.9.1b Coupling parameters between link segments [new subclause] 33.4.9.1b.1 Multiple disturber power sum alien near-end crosstalk (PSANEXT) loss [new subclause] 33.4.9.1b.2 Multiple disturber power sum alien far-end crosstalk (PSAFEXT) loss [new subclause] 33.4.9.2 Midspan signal path requirements [unaltered subclause] 33.4.9.2.1 Alternative A Midspan PSE signal path transfer function [unaltered subclause] 						In subclause 33.6.3.3 (variables, DLL classification), change the "Values:0 through 255" to "Values 1 through 255" for the following: - MirroredPDRequestedPowerValue - MirroredPSEAllocatedPowerValue - PDRequestedPowerValueEcho - PDRequestedPowerValue (here change to "0 through PD_DLLMAX_VALUE") - PSEAllocatedPowerValue							
SuggestedReme	edy	and the second data the state of the second			- PSEA	locatedPow	/erValueEcho							
On page 71 "Change the On page 71 "Insert 33 4	, line 21, chang title and text o , line 42, chang 9.1a.1, 33 4 9	the editing instruction to: of 33.4.9.1.4 and re-number the editing instruction to: 1a.2, and 33.4.9.1b (includi	it to 33.4.9.1a as fo	ollows:" as follows:"	Proposed F TFTD	esponse	Response Status	5 W						
On page 72 Re-number 33.4.9.1a Co 33.4.9.1a.1 33.4.9.1a.2	, line 18, remov the headings to ord Midspan PS Maximum link (Maximum link)	ve the "change" editing instru D: SE delay delay skew	uction.		Does th	is need to b	e maintenance?							
TYPE: TR/techn COMMENT STA	ical required E	R/editorial required GR/ger	neral required T/te	chnical E/editorial G	/general vritten C/closed	U/unsatisfie	ed Z/withdrawn	Pa 73 Li 19		Page 9 of 63 11/3/2017 11:50:				

SORT ORDER: Page, Line

50:59 AM

C/ 79 SC 79.3.2 RAN, ADEE	P 80 Intel Corporation	L 51	# <u>r01-46</u>	CI 79 SC 79.3.2.6c.1 P 86 Yseboodt, Lennart Philips Lig	L 50 # r <u>01-109</u>
Comment Type T LLDPDU is a field in the fields; it is the Power Vi	Comment Status D e LLDP frame (see 79.1.1.4). I a MDI TLV that may include th	LDPDU does	LLDP not have extension	Comment Type TR Comment Status D Table 79-6c, Power status field, item 'Power Cla This class is not requested or assigned by Type	LLDP ass ext' contains a value for Class 0. 9 3/4 devices.
SuggestedRemedy Change "in transmitted	LLDPDU's" to "in the transmit	ted Power Via	MDI TLV".	SuggestedRemedy Replace by "0 0 0 0 = Reserved/Ignore"	
Proposed Response TFTD	Response Status W			Proposed Response Response Status W PROPOSED REJECT.	
is this correct?				OOS	
Cl 79 SC 79.3.2.4 Anslow, Peter Comment Type ER The editing instruction unchanged) should not SuggestedRemedy delete the text in 79.3.2 Proposed Response PROPOSED ACCEPT. TFTD LY OBE to r01-104	P83 Ciena Corporal <i>Comment Status</i> D only refers to Table 79-4, so t be shown. A Response Status W	L3 ion he text of 79.3	# <u>r01-16</u> Editorial .2.4 (which is	The description says this is for Type 1 and Type When the 'power type ext' field indicates a PD for Type 2 PD the 'power Class ext' field shall be se Physical Layer Classification as defined in 145.3 TFTD LY Good catch. The description is wrong however. This field is part of the Type 3/Type 4 extension On page 87, line 34 change: "When the 'power type ext' field indicates a PD Type 1 and Type 2 PD the 'power Class ext' fiel Class of the PD during Physical Layer Classifica to "When the power type is PD the 'power Type ext requested Class of the PD during Physical Layer as defined in 145 3.6."	 2 PDs as well or a single-signature PD or Type 1 and at to the requested Class of the PD during 3.6. for a single-signature PD or d shall be set to the requested ation as defined in 145.3.6." the field' shall be set to the er Classification

Pa **86** Li **50**

Yseboodt, Lennart Philips Lighting		Darshan, Yair	Ju.3 F 00	L 32	# 101-404
 Yseboodt, Lennart Philips Lighting Comment Type TR Comment Status D "PSEs connected to a Type 1, Type 2 or single-signatuu The PSE is not always able to distinguish the Type of th There is also the open issue of Type 3 PSEs that are 21 field ? This also should be a requirement. SuggestedRemedy "PSEs connected to a single-signature PD, or Type 3 P mode, shall set this field to value 7." Do the same for 79.3.2.6c.5 Proposed Response Response Status W PROPOSED ACCEPT. OOS TFTD HS Invert the logic PSEs not connected to a dual-signature PD, or Type 3 mode, shall set this field to value 7. Response DNA: why? What does this help? 	LLDi re PD set this field to value 7." he PD (for Class <= 4). P only how are they to set this PSEs that operate only in 2-pair	Darshan, Yair Comment Type T This comment is marked in the text for 79.3.2.6 the power type is PD. field shall mean great of Mode A and any or 2P minimum for Type have few issues: 1) The part "betwee B" is not clear and r is for the load during p classification states. 2) The isolation during 500K) and is required Regarding the positive 3) These requirement SuggestedRemedy Change from "This field shall be set isolated for this bit fie any one connection o power on states and 4 detection and classifie for Type 3 and Type 4 Proposed Response TFTD OOS TFTD LY Already TFTD, but so This is a detailed ELE when there is no men What is the purposed PSE might do with thi	Comment Status X ked PDISO-1. 3d.3 PD Load: "This field shall Electrically isolated for this bit are than or equal to 50 k ohm m be connection on Mode B, whe 4 PSEs. This field shall be set aren any one connection of Mod power up and power on states g detection of dual-signature P between the negative connect e pairs, this requirement is opt are for Type 3 and 4 PSEs and or this bit field shall mean great nection of Mode A and any on ast VPort_PSE-2P minimum for yop is PSE." et according to Table 79-6d wh ld shall mean greater than or ef f Mode A and any one connect 500K between the negative pa cation states, when measured 4 PSEs. This field shall be set <i>Response Status</i> W me thoughts: CCTRICAL requirement. What tion of this in Clause 145 ? of this bit ? There is zero hint a is information.	be set accordin t esistance betwee an measured using to 0 when the de A and any on urrent isolation in and not during 2D need to be his tions of Mode A tional. and not just for T able 79-6d when ther than or equa e connection or for Type 4 PSEs then the power ty equal to 50 k oh tion on Mode B du using at least V to 0 when the p is it doing in Cla as to what the	LLDF g to Table 79-6d when en any one connection ing at least VPort_PSE power type is PSE." we requirement of 50 Kohm detection and igher than 50K (at least and Mode B. Type 4 PSE. The power type is PD. to 50 k ohm resistance Mode B, when This field shall be set pe is PD. Electrically m resistance between in the powerup and urg connection check, (Port_PSE-2P minimum ower type is PSE." ause 79

Pa **88** Li **32**

C/ 79 SC 79.3.8.2	P 92 Philips Lightin	L 33	# r01-123	C/ 145 S	SC 145.1	P103	L 19	# r01-32			
i seboout, Lennan	Filiips Lighti	ig		Julies, Chau		CISCO System	5, 110.				
Comment Type TR	Comment Status X		Pres: Yseboodt1	Comment Type	e E	Comment Status D		Editorial			
"The PSE power price electricity within the P defined in Table 79-70 power from any extern	e index field shall contain a line SE. This is a 15 bit unsigned i d. The PSE shall set the value hal and internal resources, and	ear index of the integer in the ra- of this field tal d the relative s	e current value of ange 0 through 32767, as king the availability of upply and demand	"The PSE is normally an element of the powering DTE but may, instead, be located w the cabling portion of the system." This seems like a good spot to introduce the term Midspan which just pops up unintroduced a few pages later.							
balance, into account	. A value of zero means that n	o power price	ndex is available. The	SuggestedRen	nedy						
meaning of this field is	s implementation dependent.			Add this se	entence to t	the end of the 2nd paragraph ir	145.2:				
Contradicts itself: it ne	eeds to be both a linear index,	but it's also im	plementation dependent.	PSEs loca Midspans.	ited within tl	he cabling portion of the syster	n are called Mi	dspan PSEs, or simply			
As currently specified	this isn't terribly useful. We sh	nould come up	with a specification.	Proposed Res	ponse	Response Status W					
SuggestedRemedy				PROPOSE	ED ACCEP	T IN PRINCIPLE.					
Adopt yseboodt_01_1	117_powerpriceindex.pdf										
Proposed Response	Response Status W			Add this se	entence afte	er sentence quoted in the comi	nent (the sente	ence may be moved by			
TFTD				PSEs loca Midspans	ited within the	he cabling portion of the syster	n are called Mi	dspan PSEs, or simply			
OOS											
				TFTD LY	~ 4						
WFP				There are Make then	24 occuren n all Midspa	ces of "midspan" in the draft ai an ?	nd 173 of "Mide	span".			
				TFTD CJ responding 1.4.338 for three more	g to Lennari r instance. f e on P222, l	ts TFTD - not all occurrences o found three on P221 L45, L46, L12, 13,16.	of midspan war L48 need caps	rant capitalization. s (the ones before PSE).			

Pa **103** Li **19**

0.445	00 445 4 0	Dior	1.04	# 04.404	01.445	00 445 4 0	D400	1.00	# 01.100
Yseboodt,	Lennart	P 105 Philips Lightin	2 3 1 Ig	# <u>r01-131</u>	Yseboodt,	Lennart	P 106 Philips Lighting	L 28	# <u>r01-132</u>
Comment Table from t As su Suggested Swap Proposed PROF OOS	Type E 145-1 lists the sy he PSE Type and ch, it would make dRemedy position of colum Response POSED ACCEPT.	Philips Lightin Comment Status D stem parameters. The Nomi the number of powered pair sense to swap the order of t ns 2 and 3 in Table 145-1. Response Status W	ig nal highest curi 's. hose columns.	<i>Editorial</i> rent per pair is derived	Comment TOPIC These When When signate The dr "Wher signate of the Alterna	Lennart <i>Type</i> ER C:SIGNATURE comments fix in referring to dete referring to sign- ure PD, or PD si raft contains 12 i n connected to a ure has not yet b pairset and any ative."	Comment Status D consistencies in the word 'sign ction, we should talk about "PI ature configuration, we should gnature configuration". nstances of the ambiguous "PI dual- signature PD, when ope been identified, V PSE is meas negative conductor of the corre	ature'.) detection sig either say "sii) signature". rating in 2-pai ured between esponding pai	Editorial gnature". ngle-signature PD, dual- r mode, or when the PD any positive conductor irset, for the given
TFTD REJE Comm propos	GZ CT nent is out of scop ses a substantive	be of the recirculation. Comr text change which does not	ment is on unch identify a mate	nanged text and rial problem in the draft.	Suggested "Wher signate positiv for the	<i>Remedy</i> a connected to a ure **configuration e conductor of the given Alternative	dual- signature PD, when ope on** not yet been identified, V he pairset and any negative co e."	rating in 2-pai PSE is measunductor of the	r mode, or when the PD ured between any corresponding pairset,
C/ 145	SC 145.1.3	P105	L 45	# r01-376	Proposed	Response	Response Status W		
Comment "For 2 source Add "i Suggestee Chang requir twiste	<i>Type</i> T -pair systems that e Icable" easily m n order for", which <i>dRemedy</i> ge "For 2-pair systed to source Icab d pairs are require	Comment Status D It provide Class 4 power or le isinterpreted as though there in matches related Icable star tems that provide Class 4 po le" to "For 2-pair systems that ed in order for the PSE to so	ess, two twisted is a minimum tements elsewh ower or less, two at provide Class urce Icable"	PSE Types pairs are required to current requirement. here in this paragraph. to twisted pairs are s 4 power or less, two	OOS TFTD REJE(Comm propos	GZ GZ CT lent is out of sco ses a substantive	pe of the recirculation. Comm e text change which does not id	ent is on uncl dentify a mate	nanged text and rrial problem in the draft.
Proposed PROF	Response POSED ACCEPT.	Response Status W							
TFTD REJE Comn propos	GZ CT nent is out of scop ses a substantive	be of the recirculation. Comr text change which does not	nent is on unch identify a mate	anged text and rial problem in the draft.					

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

Pa **106** Li **28**

C/ 145 SC Yseboodt, Lenna	745.2.1 art	P 107 Philips Lightin	L 28 g	# r01-135	C/ 145 Yseboodt,	SC 145.2.1 Lennart	P 107 Philips Lighting	L 30	# r01-136
Comment Type	ER	Comment Status D		Editor	ial Comment	Type TR	Comment Status D		PSE Types
"PSE Type i	s a constar	nt."			l lost o confu	ount of how ma	any times we have changed Tab	le 145-2, and	it is STILL wrong and
False. A PS requirement Rather than This is one o	E could be s) when it is open that c of those ser	reconfigured between Type 3 s in the IDLE/DISABLED stat can of worms, how about we ntences that causes more tro	3 and Type 4 (if e. just remove this uble than what	it meets all the s text. it tried to solve.	Issue: - 'Sup - "Rar	: ports 4-pair pow ge of maximum	ver' has entry 'Optional' and 'Yes I Class supported" ==> requires	s' ==> this ove a PhD in sub	erlaps. tle standards language
SuggestedReme	edy				to und	erstand	the values for "Pange of maxim	um Class sup	ported" is wrong per the
Remove que	oted senten	ce.			chang	es to D3.0		un Class sup	ported is wrong per the
Proposed Respo	onse	Response Status W			Suggestee	Remedy			
PROPOSED TFTD CJ This is not fa power less t Type 4 PDs. the same Ty Type to use	D ACCEPT. alse. A Type han Type 3 . Furthermo ype then we it's last bit	e 3 PSE cannot be a Type 4 PDs. A Type 4 PSE does no ore, if the PSE needed to cha e failed. And a power limited l power power. did we fail here	PSE and does of need to chan nge it's Type to PSE should not a too?	not need to change to ge to power less than power PDs that weren need to change it's	Will u ((('t ((e column,row c hange: 2,1) replace "Op 3,0) replace "Ra 3,1) replace "Cli 3,2) replace "Cli 3,3) replace "Cli traddle column	coordinates for changes, the her otional" by "No" ange of maximum Class suppor ass 3 to 4" by "1 to 4" ass 5 to 6" by "1 to 6" ass 8" by "7 to 8" s with identical content where a	ading row cou ted" by "Highe ppropriate.	nts as row 0. st Class supported"
TFTD HS Chad put thi is okay but r Propose:	s in to limit emoving is	the ability to change PSE Ty not an good option.	pe during powe	er up / on states. Fixing	Proposed PROF	Response OSED ACCEP ⁻	Response Status W T.	FF • F • • • • • • • • • • • • • • • • • • •	
PSÉ Type m	nay only be	modified in DISABLED or ID	LE.		OOS				
					TFTD I want tweak modifi	CJ to see the new I don't like the ed table for revi	table before i agree to yet anot terminology, you are making m ew.	her tweak to th e do your wor	nis table - and an OOS k. Please provide a
					WOR	K			

Pa **107** Li **30**

<i>CI</i> 145 SC RAN, ADEE	345.2.4	P1 Intel	1 15 Corporation	L1	# <u>r01-2</u>	91	C/ 145 Yseboodt,	SC 1 Lennart	45.2.5.1	P [,] Philip	1 16 os Lighting	L 26	#	r01-138	
Comment Type This subclau normative re	T use it titled " equirements	Comment Status PI pin assignments about them, so it's	D but it also c not just pin a	defines alternatives assignments.	s and has	PSE PI	Comment TOPIC These When When	<i>Type</i> CSIGNA comme referring	ER TURE nts fix inco to detecti	Comment Status	D word 'signat about "PD o	ture'. detection sig	nature".	Edi	torial
SuggestedReme Rename this	edy s subclause	"PSE PI".	511.				signati The dr	ure PD, or aft conta	or PD sign ains 12 ins	nature configuration, a stances of the amb	iguous "PD :	signature".	gie orginati	uic i b, du	
Proposed Respo PROPOSEI OOS	onse D ACCEPT.	Response Status	w				"If a P comple attemp an Alte signati	SE perfo ete a seo ot. This a ernative ure."	orming detection	ection using Altern ction in less than T Alternative A PSE t esent on the same	ative A dete dbo after th o complete link section	ects an invalie le beginning a successful that may hav	d signature of the first detection ve caused	e, it should detection cycle prior the invalid	· to
OOS TFTD CJ This is called PI pin assignn that readers tend to read on PD) so we included a PD PI This is an out of scope edito		ignments because d only the section th D PI section with po editorial change tha	it applies to b nat concerns binters back t t harms the c	both the PSE and t them (145.3 if the to 145.2.4 to get th document. Reject	he PD. W y are desi le whole s	'e found gning a tory.	Suggested Chang "If a P signate the firs detecti have c	IRemedy le as foll SE perfo ure, it sh at detecti ion cycle caused th	/ ows: orming detend ould comp ion attemp oprior to a he invalid *	ection using Altern olete a second deto t. This allows an A n Alternative B PS **detection** signa	ative A dete ection in less Iternative A E present or ture."	ects an invalie s than T dbo PSE to com n the same li	d **detection after the b plete a such nk section	on** beginning c ccessful that may	əf
							Proposed of PROP OOS TFTD REJEC Comm propos	Respons OSED A GZ CT Ses a sul	se ACCEPT. ut of scope bstantive to	e of the recirculatio	W n. Commer does not ide	nt is on unchant	anged text ial problen	and n in the dra	aft.

Pa **116** Li **26**

C/ 145	SC 145.2.5.1	P116	L 49	# r01-405	C/ 145	SC 145.2.5.1	P116	L 51	# r01-139
Darshan,	Yaır				Yseboodt,	Lennart	Philips Ligh	ting	
Comment	Туре Т	Comment Status D		PSE SD	Comment	Туре Е	Comment Status D		PSE SI
lt will mach The p	help the reader if ine is based on th rimary alternative	we add text in the intro to the the following concept: the is the OmasterO and powering	state machine that	at the PSE state ending if primary is	"Monit This s PSE s	oring of inrush is entence is to be r tatediagram.	described by the state diag emoved when the inrush s	gram in Figure 14 tatediagrams are	5-19." included in the top level
valid,	so if primary fails	detection, we donOt power th	e secondary rega	ardless if its signature	Suggested	Remedy			
(As a IDLE	result, if we want and set the other	to power secondary if primary alternative as primary.)	fails detection, w	ve can flip by going to	Remove stated	ve this sentence v agram.	when the inrush statediagra	ams are included	in the top level PSE
Suggeste	dRemedy				Proposed	Pesnonse			
Add tl	ne following text a	after line 49:		and the stars are the sould de-					
"Whe regard	n PSE supports o diess if secondary	lual-signature PD, powering se	condary is enable	ed if primary is valid	FNOF	USED ACCEPT			
during	g 4-pair operation	, it may be necessary to swap	the roles pf Alterr	native A and	OOS				
Altern Proposed	ative B in IDLE ir	order to power the secondary	<i>.</i> ."		OBE b	y 179			
PROF	POSED REJECT				TETD	YD			
					The is	sue is not clear			
OOS									
The s altern not tru detec	uggested remedy atives even witho ue. Any pairset c ted on that pairse	r implies that when a DS PD is out a valid detection signature of annot be powered until a valid ot.	connected, the F on the secondary detection signatu	PSE powers both alternative. This is ire has been					
Furthe invalio altern page:	ermore, if the inte d signature on the ative powered, w	ent of the comment is to alert the primary alternative (for some e already have a note for that.	ne reader that a D reason) will neve Quoting from line	DS PD that has an er have its secondary e 39 on the same					
NOTE Altern	E—During 4-pair o ative B in IDLE ir	operation, it may be necessary n order to detect a PD.	to swap the roles	s of Alternative A and					
TFTD "a) Da power clear ""Furt propo conce a resu	YD avid is correct tha rup without detec in explaining the her more"" but sed remedy to:1. upt that the behav ult, when PSE sup	t in the proposed text it may w tion on the secondary.b) The N state machine concept.c) Yes, this is far from how it explaine "The semi independent PSE ior of the secondary depends of oports dual-signature PD, powe	vrongly interpreted IOTE in line 9 is r the intent is what id in the NOTE in state machine is on a valid signatu ering secondary a	d that secondary can not sufficiently t you said in the line 9. Change the based on the ire on the primary. As after successful					

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

detection on secondary is not possible if primary failed detection. If powering secondary is needed when primary is not valid during 4-pair operation, it may be necessary to swap the roles pf Alternative A andAlternative B in IDLE.""2. Delete the NOTE in line 39."

> Pa 116 Li 51

PSE SD

C/ 145	SC 145.2.5.2	P117	L 1	# r01-140	C/ 145	SC 145.2.5.3	P117	L 49	# r01-141		
Yseboodt	, Lennart	Philips Lighting			Yseboodt,	Lennart	Philips Lighting	9			
Comment	Type TR	Comment Status X		Pres: Yseboodt6	Comment	Type TR	Comment Status D		PSE SD		
Given Given consis Speci - may - only - is it - is it	tate diagrams are ent count 163 for t n that our state dia stency in our varia ifically, it is unclea r it be set external r in IDLE, or at any a state diagram ir a variable that mu	a inordinately complex, with a v he PSE). Igrams mutated out of the Clau able descriptions. Ir what the rules are pertaining ly ? / time ? Iternal variable ? Ist be set according to certain i	very large nun lise 33 state d to each varia rules (eg. mps	nber of variables iagrams, we have low ble: s_valid) ?	A bun "For a within For a within For a done i For a differe	ch of descriptive tex single-signature PI the T det time perio dual-signature PD, the same T det tim single-signature PI n different T det cyo dual-signature PD, nt T det cycles."	xt was added after CC_DET D, parallel detection means od. e parallel detection means e period. D, staggered detection mea cles. parallel detection means	_SEQ: that detection that detection ns that detection that detection	on both pairsets is done on both pairsets is done on on both pairsets is both pairsets is done in		
The c Some	current description	s don't help.			l feel t to kee	his text adds more p it ?	confusion / risk of contradic	tion than that i	t clarifies. Do we want		
alt_dc alt_pr alt_pv autoc class_ det_o Mirror mps	one_pri: A variable i: A variable used wrd_pri: A variable lass_enable: A cc _4PID_mult_even ince_sec: This variable valid: This variable	e used to coordinate [this one to select [this is a config var e that controls [also reserved ontrol variable indicating [con ts_pri: A variable indicating [riable indicates [reserved for equest: A control variable outp e indicates the presence or ab	is reserved f iable] for the state of figuration] configuration] state diagram ut [reserved sence of a va	for the state diagram] diagram]]]] for state diagram]] [id MPS [mandatory	If yes, - last s - That same. - Is the revers	the following issue entence seems to means the definitio ere a difference bet ed ?	s: want to say 'staggered dete on for staggered detection is ween the first two sentence	ction' rather th the same for s ? If yes it fo	an parallel detection. single and dual is the eels like it should be		
set pe	er requirements] don't specify the '	usage rules' of variables, the s	tate diagram o	can be made to do	Descriptive text like this does NOTHING technically. If we're worried about 'parallel detection' being interpreted as the actual detection happining precisely at the same time, I would offer that a do_detection_xxx function is perfectly allowed to be called, and wait around doing nothing for a while, (eg. while the other function						
Suggeste	dRemedy				is doin	g it's thing), as long	g as it meets the Tdet timing	j.			
Adopt	t vseboodt 06 01	17 variablerules.pdf			In fact	, as we discovered,	, the functions MUST be ab	e to wait in ord	der to correctly be able		
Proposed	l Response	Response Status W			at the	same time.					
TFTD)				Suggested	Remedy					
009					Optior	1: remove quoted	text.				
WFP					Option Replac "Paral	2: [my suggestion ce by:	based on some guess worl	<]	ned in the same Tdet		
TFTD "For r is out	YD most of the issues of scope for mos	showed in this comment are r t of the issues and not only out	eally not a pro	bblem. I believe that this to procedural	time p Staggo cycle.'	eriod. ered detection refer	rs to detection on both pairs	ets being perfo	prmed in a different Tdet		
argun	nents. The only is neters are set onc	sue that we may need to addre	ess is the que	stion which rwards First we need	Proposed	Response	Response Status W				
to che	eck in the manual	what are the usage rules before	re we add nev	v once"	PROP	OSED ACCEPT IN	I PRINCIPLE.				
					Replac "Paral time p	ce by: el detection refers eriod.	to detection on both pairset	s being perforr	ned in the same Tdet		

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/generalPa117Page 17 of 63COMMENT STATUS: D/dispatched A/accepted R/rejectedRESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawnLi4911/3/2017 11:50:59 AM

SORT ORDER: Page, Line

PSE SD

Staggered detection refers to detection on both pairsets being performed in a different Tdet cycle."

TFTD YD

"We need both definitions for parallel and staggered detection. Change the propose remedy to:""Parallel detection refers to detection on both pairsets being performed in the same Tdettime period. Staggered detection means that detection on both pairsets is done in different Tdetcycles. See Annex 145B.1 for details."""

C/ 145	SC 145.2.5.3	P 117	L 52	#	r01-408
Darshan, Yai	r				

Comment Type	т	Comment Status D	
--------------	---	------------------	--

1) The definition of staggered detection for single-signature and for dual-signature are the same. As a result text can be simplified.

2) In addition, typo in page 118 line 1, the "parallel" need to be staggered".

SuggestedRemedy

Change from: "For a single-signature PD, staggered detection means that detection on both pairsets is done in different Tdet cycles. For a dual-signature PD, parallel detection means that detection both pairsets is done in different Tdet cycles."

To: "Staggered detection means that detection on both pairsets is done in different Tdet cycles. See Annex 145B.1 for details. "

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

OBE by 141

TFTD YD

"This comment is talked about staggered detection and not parallel detection, therefore it can't be OBE to 141 unless the proposed remedy is as I suggested for comment 141."

C/ 145	145 SC 145.2.5.4		4 <i>P</i> 118	P118 L31			
Yseboodt, L	.ennart		Philips Lighting				
Comment T	ype	Е	Comment Status X		Altpwrd		
Variable "The PS powerin	e alt_pw E has g the F	vrd_pri, detecte ² rimary	TRUE: ed, classified, and will power a PD Alternative.") on the Prin	nary Alternative, is		

SuggestedRemedy

"The PSE has detected, classified, and will power a PD on the Primary Alternative, **or** is powering the Primary Alternative."

Ignore if comment marked ALT_PWRD is accepted.

Proposed Response Response Status W

TFTD

waiting on 142

Pa 118 Li 31

C/ 145 SC 14 Yseboodt, Lennart	45.2.5.4	P 118 Philips Lighting	L 31	# r01	-142	Cl 145 Darshan, Y	SC 1 Yair	145.2.5.3	P118	L 36	#	r01-410
Comment Type COMMENT: AL The TRUE "The PSE powering the P and "The PSE Other com	TR Con T_PWRD definition of al has detected, o rimary Alternati has detected, o nments fix the e	nment Status X t_pwrd_pri and alt_pwr classified, and will powr ve." classified, and will powr ditorial issues with these meeting and I feel we d	d_sec is: er a PD on the er a PD on the se sentences. id not end up y	Primary Alter Secondary A with a good so	<i>Altpwrd</i> mative, is Iternative."	Comment Type T Comment Status X The text of alt_pwrd_pri variable "TRUE: The PSE has detected, classified, and will a PD on the Primary Alternative, is powering the Primary Alternative.", looks it has a copy past error. The part "is pow the Primary Alternative" need to be deleted. It should be similar to what we have in alt_pwrd_sec variable. SuggestedRemedy Change from: "TRUE: The PSE has detected, classified, and will power a PD on the Primary Alternative, is powering the Primary Alternative." To: "TRUE: The PSE has detected, classified, and will power a PD on the Primary Alternative."						<i>Altpwrd</i> nd will power "is powering ave in D on the rimary
The definition o These variables past, as well as If we look at ho	sents. ened in the nple:	Alterna Proposed TFTD waiting	ative." <i>Respons</i> g on 142	Se 2	Response Status W	/ 38	#	-01 146				
FALSE = The F TRUE = The PS	PSE is not to ap SE is to apply p	oply power to the XYZ A oower to the XYZ Altern	lternative. ative.			Yseboodt,	Lennart	143.2.3.4	Philips Light	L 30 ing	#	101-146
IRUE = The PSE is to apply power to the XY2 Alternative. SuggestedRemedy Replace quoted sentences by: "FALSE: The circuitry that applies operating voltage to the Primary Alternative is disabled." and "TRUE: The circuitry that applies operating voltage to the Primary Alternative is enabled."						Comment Variab "The F Missin Suggested	<i>Type</i> ole alt_py PSE has og the bit <i>IRemed</i> y	TR wrd_sec, T detected, t where it is	Comment Status X RUE: classified, and will power s already powering the Se	a PD on the Sec condary.	condary Alt	<i>Altpwrd</i> ernative."
And the same f Proposed Respons TFTD	for Secondary. e Resp	ary. Response Status W				"The PSE has detected, classified, and will power a PD on the Secondary Alternative **." Proposed Response Response Status W TFTD waiting on 142						ernative**, or

Pa **118** Li **38**

C/ 145 SC 145.2.5	5.4 <i>P</i> 118	L 38	# r01-145	C/ 145	SC 145.2.5.4	P125	L 32	# r01-155
Yseboodt, Lennart	Philips Lightir	g		Yseboodt, I	ennart	Philips Lightir	ng	
Comment Type E Variable alt_pwrd_se "The PSE has detect Does not match Prim	Comment Status X ec, TRUE: ted, classified, and will power a nary definition.	PD on the Sec	Altpwrd	Comment T TOPIC These When When	<i>Type</i> ER SIGNATURE comments fix in referring to deter referring to signa	Comment Status D consistencies in the word 'sig ction, we should talk about "F ature configuration, we should	nature'. 2D detection sig d either say "sin	<i>Editorial</i> Inature". Igle-signature PD, dual-
SuggestedRemedy				signatu The dra	re PD, or PD sig aft contains 12 in	gnature configuration". nstances of the ambiguous "F	PD signature".	
"The PSE has o is powering the Seco	letected, classified, and will por ndary Alternative."	wer a PD on the	e Primary Alternative, or	"NOTE using A betwee	Care should b Iternative A afternative A afternative A	be taken when negating this ver an invalid signature is dete mpts (see 145.2.5.1)."	variable in a PS cted due to the	E performing detection delay it introduces
Ignore if comme Proposed Response TFTD waiting on 142	ent marked ALT_PWRD is acce Response Status W	epted.		Suggested Changu "NOTE using A introdu	Remedy e as follows: Care should b Iternative A afte ces between de	be taken when negating this ver an invalid **detection** sign tection attempts (see 145.2.5	variable in a PS nature is detecte 5.1)."	E performing detection ed due to the delay it
C/ 145 SC 145.2.5 Agnes, Andrea	5.4 P118 STMicroelectr	L 42 onics	# r01-58	Proposed F PROP	Response DSED ACCEPT	Response Status W		
Comment Type E alt_pwrd_sec has va SuggestedRemedy Change the definition TRUE: The PSE has	Comment Status X lue TRUE also when power is a n of TRUE:	upplied (as alt_j	<i>Altpwrd</i> pwrd_pri) he Secondary	OOS TFTD (REJEC Comm propos	GZ T ent is out of sco es a substantive	pe of the recirculation. Comr e text change which does not	nent is on unch identify a mater	anged text and rial problem in the draft.
Alternative, or is pow	vering Secondary Alternative.							
Proposed Response TFTD	Response Status W							
OOS								
waiting on 142								

Pa **125** Li **32**

C/ 145 SC 145.2 Yseboodt, Lennart	2.5.4 P126 Philips Li	L 7 ighting	# r01-157	C/ 145 SC 145.2 Yseboodt, Lennart	.5.5	P 128 Philips Lighti	L 14 ng	# r01-161
Comment Type T	Comment Status D		PSE SD	Comment Type ER	Comm	nent Status D		Editorial
"pse_ss_mode: A pair to a Class 0 to This refers to assig SuggestedRemedy Replace by: "pse_ 2 pair or 4 pair to a Also fix the bad ind	variable that controls whether 4 single-signature PD." and Class, and as such, it s as_mode: A variable that con single-signature PD assign- lenting.	er the PSE provides p hould be Class 1 to a htrols whether the PS ed to Class 1 through	bower over 2 pair or 4 4. SE provides power over h 4."	TOPIC:SIGNATUR These comments f When referring to c When referring to s signature PD, or PI The draft contains tdbo_timer: "A time dbo in Table 145-1	E x inconsisten letection, we s ignature confi D signature co 12 instances o r used to regu 6."	cies in the word 'sig should talk about "I iguration, we shoul onfiguration". of the ambiguous " ulate backoff upon	gnature'. PD detection sig ld either say "sin PD signature". detection of an i	inature". igle-signature PD, dual- invalid signature; see T
Proposed Response	Response Status W			SuggestedRemedy				
PROPOSED ACC OOS	EPT.			Change as follows: "A timer used to re dbo in Table 145-1	gulate backofi 6."	f upon detection of	an invalid **dete	ection** signature; see T
TFTD GZ REJECT Comment is out of proposes a substa	scope of the recirculation. (Comment is on unch s not identify a mater	anged text and rial problem in the draft.	Proposed Response PROPOSED ACCI OOS	Respor EPT.	nse Status W		
				TFTD GZ REJECT				

Comment is out of scope of the recirculation. Comment is on unchanged text and proposes a substantive text change which does not identify a material problem in the draft.

Pa **128** Li **14**

C/ 145 SC 145.2.5.6 P129 L 18 # r01-421	C/ 145 SC 145.2.5.6 P129 L 18 # r01-420
Darshan, Yair	Darshan, Yair
Comment Type T Comment Status X PSE S The function do_class_probe_pri doesnOt return a value for error code (we have it only if we go through the states). We can fix it in two ways: Option A: To add output for the function do_class_probe_pri such as class_error_pri OR Option B (preferred) : To add new variable class_error_pri to the variable list and add it to the input to the IDLE_PRI state in page 141. Repeat this solution for the secondary as well. PSE S	Comment Type T Comment Status X PSE SD The function do_class_probe doesnOt return a value for error code (we have it only if we go through the states in the procedure when available power >=4). We can fix it in two ways: Option A: To add output for the function do_class_probe such as class_error OR Option B (Preferred) : To add new variable class_error to the variable list and add it to the input to the IDLE state in page 135.
SuggestedRemedy 1. Add the variable class_error_pri to the variable list: class_error_pri A variable indicating if during do_class_probe_pri function, invalid class result was detecte Values: FALSE: No invalid class result was detected. TRUE: Invalid class result was detected. 2. Change the input condition to IDLE in page 141 from: sism * (pse_reset_pri + error_condition_pri + iclass_lim_det_pri) To: sism * (pse_reset_pri + error_condition_pri + iclass_lim_det_pri+class_error_pri) 3. repeat the above solution for the secondary.	SuggestedRemedy 1. Add the variable class_error to the variable list: class_error A variable indicating if during do_class_probe function, invalid class result was detected. Values: FALSE: No invalid class result was detected. TRUE: Invalid class result was detected. 2. Change the input condition to IDLE in page 130 from: (pse_enable = enable) * (pse_reset + iclass_lim_det + error_condition) To: (pse_enable = enable) * (pse_reset + iclass_lim_det + error_condition+class_error) Proposed Response
Proposed Response Response Status W	TFTD
TFTD	Why can't error_condition be used for this?
Waiting for 420	TFTD LY
TFTD YD	Recommend to add to the function description that it returns "0" in case of error,
"""Answer: Because errors in class codes i.e. getting different codes when expecting same	as this is compatible with later logic in the SD.

Also, this really only matters for the case that the PD shows an invalid signature during probing, but a valid one on the subsequent real classification.

TFTD YD

"Answer: Because errors in class codes i.e. getting different codes when expecting same code is not defined error during the state machine progress i.e. why if I am getting different class codes in sig_A it should be error?. That is why we need to define new variable as proposed etc."

different class codes in sig_A it should be error?. That is why we need to define new

variable as proposed etc."""

Pa **129** Li **18**

C/ 145 SC 145.2.5. Yseboodt, Lennart	6 P130 Philips Lighting	L 6	# 1	r01-162		C/ 145 Yseboodt, L	SC 1 ennart	45.2.5.6		P 130 Philips Lighting	L 21	#	r01-163
Comment Type ER The function do_class This variable is also d	Comment Status D _probe returns the variable pd_ efined in the variables section of	_req_pwr. 145.2.5.4.		Editoria	al	Comment T The fun do_clas A doubl	<i>ype</i> oction d ssification le defin	ER o_class_p on_pri. ition need	<i>Comment</i> S probe_pri retur ds to be kept ir	Status D Ins the variable p In perfect sync or	pd_req_pwr_pri	, as doe: imbiguity	Editorial s the function /.
A double definition ne It would be better sim	eds to be kept in perfect sync o ply to point to the variable than	or it can lead to ar re-describe it.	mbiguity.			It would Case in	l be bet	tter simply	ly to point to the	e variable than re	e-describe it.	drifted a	part (one has
SuggestedRemedy Replace line 6-15 on p	bage 130 by: reg. pwr' in 145 2 5 4 "					Class 0 SuggestedF	, the ot R <i>emed</i> y	ther does	s not).	1_pm_pn		united u	pur (one has
Proposed Response PROPOSED ACCEP	Response Status W					Replace "pd_rec 145.2.5	e lines : q_pwr_p 5.6."	21 to 28 c ori: See 'p	on page 130 w pd_req_pwr_pr	ith: i' in the function	do_classificatic	on define	d in
TFTD HS						Same f	ix for po	d_req_pw	vr_sec in do_cl	assification_sec).		
This creates a circular pd_req_pwr states (in If pse_avail_pwr is les	reference. part). s than 4 and option_class_prol	be is FALSE, this	variable	may not		Proposed R PROPC	Respons DSED A	se ACCEPT.	Response S	tatus W			
contain the r D reques	see 00_0835_p1006	.				TFTD Y The ren	′D nedy O	K. It is lin	ne 6 and not 21				
						Respon	nse DN/	A: No, it i	is line 21.				
						TFTD H in the fu	IS unction	do_class	sification"_pri"				

Pa **130** Li **21**

C/ 145	SC 145.2.5.6	P130	L 30	# r01-	164	C/ 145	SC	145.2.5.7	P135	L 6	# r01-170	
Commont.					Editorial	Commont	Tuno	тр				
The fu This va	nction do_class_p ariable is also defi	probe_pri returns the variable point in the variables section 145	d_cls_4PID_pri. 5.2.5.4.		Eulionai	We ne throug	ed to reh h the s	eset a coup tate diagrar	ble of variables / timers in the II m as indicated by simulation.	DLE state to allo	w multiple passes	
A doub It would Replac "pd_cls Same Proposed I PROPO TFTD T The re Respo	ble definition need d be better simply <i>Remedy</i> ce line 30-36 on pro- s_4PID_pri: See 'p fix for do_class_p <i>Response</i> OSED ACCEPT. YD medy OK but I tis nse DNA: No it is condary.	Is to be kept in perfect sync or it of to point to the variable than re- age 130 by: pd_cls_4PID_pri' in 145.2.5.4." robe_sec. <i>Response Status</i> W secondary not primary. In addit is line 30 and it is primary. The o	t can lead to ambig -describe it. tion it is 21 and no comment notes to	guity. t 30. do the sa	ame for	<pre>"stop tcc2det_timer" "stop tcc2det_timer" "stop tcc2det_timer" "sig_pri = FALSE" "sig_sec = FALSE" Proposed Response Response Status W PROPOSED ACCEPT. OOS TFTD LY -1 for Lennart. Should be sig_pri = invalid and sig_sec = invalid TFTD HS FALSE is not a valid sig_xxx enumeration Propose sig_pri = open_circuit sig_sec = open_circuit</pre>						
						C/ 145	SC SC	 145.2.5.7	P 135 Philips Lighting	L 13	# r01-172	
						<i>Comment</i> In IDLE alt_pri. This is We're	<i>Type</i> E we hat the on trying t	TR ave "alt_pri ily instance to textually o	Comment Status X = user defined". The value 'use in the state diagram where we describe that this variable may	er defined' is not do this. /must be set by t	Pres: Yseboodt6 a valid value for the "user".	
						Suggested Remov Setting by yse	<i>Remed</i> ve this alt_pr boodt_	dy ELSE state i is done 'ou _06_0117_v	ement. utside' of the state diagram, an 'ariablerules.pdf	d use of this var	iable will be clarified	
						Proposed I TFTD OOS	Respor	nse	Response Status W			
						WFP						
	ومعاربه والمعارفة المعام	L ED/aditarial required CD/mar	and no suite of The	ala di la c	Vaditarial O/				De 105		Dama 04 of CO	

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

Pa **135** Li **13**

CI 145 SC 145 2 5 7 P137 I 33	# r01-174	C/ 145	SC 145 2 5	7 P137	/ 45	# r01-425	
Yseboodt, Lennart Philips Lighting	101-174	Darshan, Y	air	, 101	240	" 101-423	
Comment Type TR Comment Status D	PSE SD	Comment	Гуре Т	Comment Status D		PSE	SD
There is a cornercase bug in single-signature classification. If: - pse_alternative = a or b (so, 2-pair PSE) - option_2ev = True (PSE only wants to do 2 class events when it has c	lass 4 power)	This co In the e tcev_tii (pse_a	omment will be exit from CLAS mer_done * (ps vail_pwr > 4) *	OBE to the comment mar S_EV3 to MARK_EV3 we e_alternative = both) * (po ((pd_class_sig = 0) + (ps	ked GIL_1 if GIL_1 have the following d_class_sig 4) * e_avail_pwr > 5))	will be accepted. condition:	
 pse_allocated_pwr > 4 (a bit strange, but it is an allowed permutation.))	T h a ma					
Then the branch logic out of CLASS_EV2 is wrong and it make event even though option_2ev is set.	es a third class	identica (pse_a mean: (X> 4)*/	rt (pse_avail_p al to: vail_pwr > 4)* (wr > 4) [*] ((pd_class_sig = pd_class_sig = 0)+(pse_a	: 0) + (pse_avali_pv ıvail_pwr > 4)*(pse_	vr > 5)) is logically _avail_pwr > 5) which	
Also, we should reset allocated power to zero in IDEE.		(+< </td <td>Domodu</td> <td>(20.</td> <td></td> <td></td> <td></td>	Domodu	(20.			
Change logic from CLASS, EVO to MARK, EV, LAST to:		Suggestea	Remedy				
<pre>- Change logic from CLASS_Ev2 to MARK_Ev_LAST to. "tcev_timer_done * option_2ev * ((pse_avail_pwr = 4) + (pse_alternative (pd_class_sig = 4)"</pre>	!= both)) *	tcev_tii (pse_a to:	mer_done * (ps vail_pwr > 4) *	e_alternative = both) * (po ((pd_class_sig = 0) + (ps	l_class_sig != 4) * e_avail_pwr > 5))		
- Change logic from CLASS_EV2 to MARK_EV2 to: "tcev_timer_done * (pd_class_sig = 4) * (((pse_avail_pwr > 4) * (pse_alter loption_2ev)"	ernative = both)) +	tcev_tii ((pse_	mer_done * (ps avail_pwr > 4)	e_alternative = both) * (po * (pd_class_sig = 0) + (ps	l_class_sig != 4) * e_avail_pwr > 5))		
		Proposed F	Response	Response Status W			
- Add to IDLE "pse_allocated_pwr = 0"		PROP	OSED ACCEPT	IN PRINCIPLE.			
Proposed Response Response Status W		IFID					
PROPOSED ACCEPT.		If we w change	ant to make the	e intent of the logic as clea	ar as possible we sh	nould consider this	
Propose we fix illogical selection of variables used as test condition. Change Table 145-6 to add pse_alternative column split Type 3 row into 2 rows 1st row: a/b 1-4 2nd row: both 1-6		Chang tcev_tii (pse_a to: tcev_tii (((pse_	e from: mer_done * (ps vail_pwr > 4) * mer_done * (ps avail_pwr = 5)	e_alternative = both) * (pc ((pd_class_sig = 0) + (ps e_alternative = both) * (pc * (pd_class_sig = 0)) + (ps	I_class_sig != 4) * e_avail_pwr > 5)) J_class_sig != 4) * se_avail_pwr > 5))		
		TFTD I Sugges	_Y sted response o	confirmed by simulation to) be OK.		
		TFTD I Also ch tcev_tii (pd_cla	DS hange CLASS_ mer_done * ((p: hss_sig != 0)) +	EV3->MARK_EV_LAST to se_alternative != both) + ((pse_avail_pwr < 5))	o be more obvious: pd_class_sig = 4) +	- (((pse_avail_pwr = 5) *	*

Pa **137** Li **45**

Cl 145 Darshan,	SC 145.2. Yair	5.7 <i>P</i> 13	9 L 33	# r01-427	<i>Cl</i> 145 Yseboodt,	SC 145.2.5 Lennart	5.7	P 141 Philips Lightin	L 7 a	# r01-177		
Comment This of In the be ac inrush So it	<i>Type</i> T comment is ma exit from POV curate since th n successfully. is recommend	Comment Status irked AVI_1. VER_ON to SEMI_PWR0 is signal is set prior to ini ed to replace the signal a	D ON_SEC, the usage o rush while pwr_app_se alt_pwrd_sec with pwr_	PSE SD f alt_pwrd_sec may not ec also address passing _app_sec because this	Comment State ' This co Also va Suggested	<i>Pres:</i> Yseboodt3 antly when sism is false. action.						
signa <i>Suggeste</i> Repla	l indicates that <i>dRemedy</i> ace the signal a	the alternative is deliveri	ng power after passing	g the inrush check.	Adopt Proposed TFTD	"yseboodt_03_ Response	_1117_psesdcon <i>Response</i> S	cur.pdf". Status W				
Proposed PROI	Response POSED ACCE	Response Status	w		WFP	00.445.0	· -	D.4.44		"		
TFTD Since play. This i pwr_a Also, in how TFTD Origin intent	 LY this arc is from s a redundant app_sec is far logic to ERRC w we check. DS nal logic is corr to power. If the 	n POWER_ON to SEMI_ change that makes the lo nore nebulous than that R_DELAY also uses alt_ ect; rightfully samples "al ere is a fault on SEC, it w	PWRON_SEC, inrush ogic weaker because to of alt_pwrd_sec. pwrd_sec, creating an lt_pwrd_sec", which is vill be handled in SEM	a no longer comes into he value of n inconsistency a logical test of PSE I_PWR_SEC.	Darshan, Yair Comment Status X Pres: Yse we need to set the sig_pri and sig_sec to FALSE in the top level state machine at IDLI state otherwise, we will have cross issues between two state machines parts. Analysis: When a single-signature is connected, ENTRY_PRI is processed continuously becaus "!sism" is TRUE which sets sig_pri to 'invalid' continuously, which breaks the main sta diagram. Same happen in the secondary. To resolve it, we need to set the sig_pri and sig_sec to FALSE in the top state machine							
Cl 145 Darshan	SC 145.2. Yair	5.7 P13	9 L 40	# r01-428	that is	not happening	currently.	ais for the sing	le signature sta	ate machine, something		
<i>Commenti</i> in the accur is bet addre	e exit from POV exit from POV ate (but it is go ter to change i ess passing inr	Comment Status VER_ON to ERROR_DEI od enugh in this case, ho t too) since this signal is ush successfully.	D LAY, the usage of alt_ owever for consistency set prior to inrush while	<i>PSE SD</i> pwrd_sec may not be y with comment AVI_1, it e pwr_app_sec also	Suggested Add th sig_pi sig_se Proposed	Remedy e following ass i <==FALSE c <== FALSE Response	signments to the <i>Response</i> S	IDLE state in p Status W	age 135 line 7	.:		
Suggeste	dRemedy	,			TFTD							
Repla	ace the signal a	alt_pwrd_sec with pwr_ap	pp_sec.		WEP							
Proposed PROI	Response POSED ACCE	Response Status PT.	w									
TFTD See 4	LY 127, no need to	change this.										
TFTD Do no	DS ot change origi	nal logic. See response to	o #427.									

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Page, Line Pa **141** Li **8**

C/ 145 SC 145.	2.5.7	P141	L 12	# r01-433	C/ 145	SC 145.2	.5.7	P 142	L 6	# r01-312
Darshan, Yair					Peker, Ark	adiy		Microsemi Co	rporation	
Comment Type T	Comme	nt Status X		Pres: Yseboodt3	Comment	Type TR	C	Comment Status D		PSE SE
This comment is r In the ENTRY_PR we will be always even if we didn't d START_CXN_CH Other issue that e wrong location in TRUE" is set after	harked AVI_22. state, the varian h ENRY_PRI who detect_pri. We C_DETECT in particular has with the sam DETECT_EVAL_ do_detect_sec who	ble "det_start_pri nen !sism=TRUE e need to move it age 135 line 47. ne remedy for "de _SEC state. The p was done.	<== TRUE" is in which will set de to the to state t_start_sec <== problem is that "	n the wrong place since et_start_pri<==TURE TRUE" which is in det_start_sec <==	This c Wrong CLAS pse_a option dual-s CLAS Suggested	omment is m and impose CPROBE_F ail_pwr_pri class_prob gnature part PROBE_F Remedy	arked C ible logic RI to ID < 4 per t definition of the P RI exit logical	LASS_PROB_PRI_1. c of pse_avail_pwr_pri >= LE_PRI if the input to CL he current option_class_p on is good for single-sign SE state machine per the ogics.	• 4) in the exit f ASS_PROBE_ probe definition ature PD but c e current imple	rom _PRI is only allowed for n. The annot be used in the mentation of the
SuggestedRemedy					1. In th	e exit from (LASSIF	CATION_PRI to CLASS	_PROBE_PR	, replace
1. Move "det_start 47 2. Move "det_start 47	_pri <== TRUE" _sec <== TRUE	to state START_	CXN_CHK_DE1 _CXN_CHK_DE	ECT in page 135 line TECT in page 135 line	option 2. Ado "option This v	_class_prob new variabl _class_prot triable indica	e with op e option_ e_pri ites if the	tion_class_probe_pri. _class_probe_pri to the va	ariable list with	the following definition: ted Class on the Primary
Proposed Response TFTD	Response	e Status W			Alterna to dete at leas Values	tive by issu rmine the P t TReset to :	ng 3 clas D reques he PI (se	ss events. When set to T sted Class, perform a clas ee Table 145-14), followe	RUE, the PSE ssification rese d by a normal	will issue 3 class events t by applying VReset for classification procedure.
WFP					FALS	: The PSE	vill not p	robe for the PD requested	d Class.	
C/ 145 SC 145.	2.5.7	P 142	L 6	# r01-434	3. Rep	eat the solu	ion for th	the PD requested Class.		
Darshan, Yair					Proposed	Response	R	esponse Status W		
Comment Type T	Comme	nt Status X		Pres: Darshan3	PROP	OSED ACC	PT.			
In D3.1 we add the achieving some ol did, we found som corrected. Same a SuggestedRemedy	CLASSIFICATI jectives, and aft e errors in state pplies for secon	ION_PRI and DO er simulating som machine and vari dary parts.	_CLASS_PROE ne parts and and iable definitions	BE_PRI states for alyzing the changes we that need to be	TFTD "It is n dual-s We as your o	_Y ot clear why gnature and ked you (Ya vn baseline)	we used for singl r) at the for this a	single option_class_prot e-signature." D3.0 meeting if you were and you were.	be for both prin	nary and secondary with g option_class_probe (in
Adopt darshan_03	_117.pdf				Now the	is.				
Proposed Response TFTD	Response	e Status W			Also, I CLAS	we adopt the SIFICATION	is, need _PRI to (to change option_class_ CLASS_EV1_LCE_PRI.	probe in the ai	'c from
WFP					TFTD The si pse_a	HS sm state ma /ail_pwr_xxx	chine alr is not ex	eady allows classification kternally observable. Use	n for pse_avail_ CLASS_EV1_	_pwr_xxx >= 4. _LCE_XXX branch

Pa **142** Li **6**

C/ 145	SC 145.2	2.5.7	P143	L 10	# r01-317	TFT	D CJ					
Peker, Ark	kadiy		Microsemi Co	rporation		plea	se mark \ Is marke	WORK. wi d with WC	ill filter out in adh	oc and as	k people to get th	is done asap. 136
Comment	Type TR		Comment Status X		Pres: Darshan3	need	is marker		JKK 100.			
A prol issuin to issu	olem was ide g 3 class eve ue only one c	ntified v ents wh lass ev	with the primary (and seco en the available power is 3 ent and powering up. The	ndary) state ma 3 and powering problem has be	achine that results with up while the concept is een created at	TFTI See	D YD darshan_	_03_1117	Rev001.pdf for up	odated cor	mment and remed	ły.
4PID3 the qu	B_PRI state w lestions if (te	/hich do mp_va	pesn't allow going to CLAS _pri = 4) or not in the conditions:	S_RESET_PR ditions at the ex	I in this scenario due to its of 4PID3_PRI.	TFTI	D DS 9 stover_	02				
pse_a	vail_pwr_pri	<4	te tonowing conditions.			C/ 145	SC	145.2.5.7		P 143	L 22	# r01-391
Option	n_class_prob	e=FAL	SE			Stover, D	avid		Ar	nalog Devi	ices Inc.	
class_ pd_re	_4PID_muit_0 a pwr pri = 0	event_p class 3	ori=1RUE (code 3.3.0).			Commer	t Type	TR	Comment Sta	tus D		Pres: Darshan
Now v	ve are in CLA	SS_E	/3_PRI.			*** C	omment	submitted	d with the file 948	76300003	-stover_02_1117.	pdf attached ***
Now, for 4PI 0)=TR POWI The e While The p CLAS = 4) w If we r this pr This is going MARr = 4) w	the previous D3_PRI due RUE. As a res ER_UP. nd result is d the concept roblem result S_RESET_P thile what is i remove the p roblem will be s not the end to CLASS_E C_EV_LAST_ thile pd_class	temp_\ to (pd_ sult, mo orequire require ed from 'RI due mporta art (tem > solved of this V1_LC P_RI is s_sig_rit	var_pri=3, the current pd_c class_sig_pri not equal ter ving to MARK_EV_LAST_ class events and power up s doing 1 class event and n the 4PID3_PRI exit that to redundant question if (in nt is only if (pse_avail_pwinp_var_pri = 4) and (temp_d) problem. Now After fixing E_4PID_PRI, we will not p blocked by the condition the ri=3. The proposed fix for from CLASS_EVIL	elass_sig_pri=0, mp_var_pri)* (p PRI, CLASS_E o even if pse_av power up. doesn't allow to ose_avail_pwr_ _pri < 4). _var_pri not equ it and doing CL ower because ce_timer_pri_d it is to delete th	resulting with moving d_class_sig_pri = :VAL_PRI and then /ail_pwr_pri<4 go pri < 4) * (temp_var_pri ual 4) from both exits, ASS_RESET_PRI and the access to one * (pd_class_sig_pri e part (pd_class_sig_pri	"In P ""pd_ betw Could To fi 1) er 2) cc Suggeste Adop Propose PRC	SE dual- class_si een class d have be x: ssure tha mpare te edRemed ot stover_ d Respor POSED	sig class of g_x = 4"" s reset eve een any va t pd_class emp_var_y dy _02_1117. nse ACCEPT.	diagrams, CLASS as a double-chec ents. Now that cla alid class_sig (not s_sig_x from class x to pd_class_sig .pdf <i>Response Stat</i>	S_EV1_LC k that PD ass_probe ; just 4). s_ev1 is re _x when e	CE_4PID_X states class_ev1 respor e dumps into this s ecorded to temp_ exiting state CLAS	s check for hse has not changed state, pd_class_sig_x var_x in all cases, and, 'S_EV1_LCE_4PID_X."
= 4) a Suggestee 1. Cha	dRemedy ange the exit (pse_avail	from 4 _pwr_p	PID3_PRI to CLASS_RES ri < 4) * (temp_var_pri = 4	ET_PRI from:	LE_FRI.	TFTI "I be did ii dars	D YD lieve that n r01-317 nan_03_	t you forgo 7. The prop 1117Rev0	ot to add ""I need posed solution in 001.pdf"	people to my opinio	review this and contract review this and contract of the second sec	onfirm it works."" as you ee details in
2. Cha 3. Cha tlce_t To: tlc 4. Del	ange the exit (pse_avail To: (pse_a ange the exit timer_pri_dor ce_timer_pri_ ete the exit fi	from 4 _pwr_p avail_pv from C ne * (pc done com CL	r_{1} (1 < 4) PID3_PRI to MARK_EV_L ri >= 4) + (temp_var_pri n vr_pri >= 4) LASS_EV1_LCE_4PID_P _class_sig_pri = 4) ASS_EV1_LCE_4PID_PR	AST_PRI from: ot equal 4) RI to to MARK_	EV_LAST_PRI from:	WOF	кĸ					
Proposed	Response		Response Status W									
TFTD	-											
l need	l people to re	view th	is and confirm it works.									

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

Pa 143 Li **22**

Pres: Darshan3

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C/ 145	SC	145.2.5.7	P144	L 10	# r01-484	(pse_allocate machines usi	d_pwr_pri > ng (pse_allo	> pse_avail_pwr_pri) in both pocated pwr sec > pse avail	h arcs. Repeat re ail pwr sec).	emedy for SEC state			
Darsha	ın, Yair						145 2 5 7	D145	/ 7	# -01 426			
Comm	ent Type	т	Comment Status D		Pres: Darshan3	Darshan Yair	145.2.5.7	F 143	LI	# 101-436			
Th Th do Suage	is is similar e exits fron esn't conta stedRemer	ot earlier c CLASS_E in the logics	comment but with updated r EVAL_PRI to POWER_DEN s for power demotion.	emedy. IIGED_PRI and	POWER_UP_PRI	Comment Type This commer In CC_DET_S	T nt marked as SEQ=3 and	Comment Status D s AVI5. CC_DET_SEQ=2 the state	e machine can a	PSE S			
1. !te (!p To !te (pc (pc To tec (pc	Change the d_timer_pr d_4pair_ca : d_timer_pr g_avail_pv d_req_pwr Change th d_timer_pri d_4pair_car : d_req_pwr_	e exit from (i_done + !te ind * alt_pw i_done + !te vr_pri < 3) + _pri = 0) * (p e exit from _done * ted nd + !alt_pv _done * ted pri 0) * (pd	CLASS_EVAL_PRI to POW ed_timer_done + (pd_req_p vrd_sec) ed_timer_done + (pd_req_p + pse_avail_pwr_pri < 3)) + (! CLASS_EVAL_PRI to POV _timer_done * (pd_req_pwr vrd_sec) _timer_done * ((pd_4pair_ d_req_pwr_pri <= pse_avail_	YER_DENIED_ wr_pri > pse_a pd_4pair_cand VER_UP_PRI _pri <= pse_av _cand + !alt_pw _pwr_pri) + (ps	PRI from: avail_pwr_pri) + avail_pwr_pri) * d * alt_pwrd_sec) from: vail_pwr_pri) * vrd_sec) + e_avail_pwr_pri > 2))	 to power up (pri signature was valid) but primary fails in classification. (Details: If sig_pri=valid and primary fails classification, it goes to IDLE_PRI. The nothing in IDLE_PRI that resets sig_pri to invalid. Now secondary has valid detectassification and powerup. If our intention is to not allow powering the secondar fails to power up, then we need to add sig_pri=invalid to IDLE_PRI state. Adding sig_pri<==invalid and sig_sec<==invalid in the IDLE_PRI and IDLE_SE resolve this issue. In addition, the lack of resetting sig_pri and sig_sec cause a issues in simulations that are covered in other comments. See simulation resul in darshan_06_1117.pdf. SuggestedRemedy Add sig_pri<==invalid in the IDLE_PRI. Add sig_sec<==invalid in the IDLE_SEC. 							
Propos	ed Respor	ise	Response Status W			PROPOSED		Response Status W					
PF	OPOSED	ACCEPT IN	N PRINCIPLE.			THOI OULD	AUGEI I.						
WI Al	FP SO. make	sure "less t	han or equal to" sign in inst	ruction 2 is imi	plemented correctly.	TFTD LY Not needed if OBE to 170	those state	ements are added to IDLE.					
TF Lo	TD LY gic in item :	2 is invalid.	"(pd_req_pwr_pri 0)"										
W	ORK												
TF "M ((p da	TD YD issing ""not d_req_pwr rshan_03 i	t equal"" in i _pri = 0) an n which the	item 2. In addition darshan_ id ((pd_req_pwr_pri NE 0) tl proposed remedy there is:	_03 shows sim hat doesn't exi	plified logic without sts in dual-sig. See								
1. to: +((2. tec + (Change the !ted_timer_ pd_req_pw Change th I_timer_dou pse_avail_	e exit from (_pri_done + /r_pri > pse e exit from ne * (pd_4p pwr_pri > 2	CLASS_EVAL_PRI to POW !ted_timer_done + (!pd_4p _avail_pwr_pri) * (pse_avai CLASS_EVAL_PRI to POW pair_cand + !alt_pwrd_sec) *))"	/ER_DENIGED pair_cand * alt_ I_pwr_pri < 3)) VER_UP_PRI 1 *((pd_req_pwr	D_PRI pwrd_sec) co:ted_timer_pri_done * _pri ≤ pse_avail_pwr_pri)								
TF Re	TD DS medy can l	be simplifie	d. Replace (pd_req_pwr_pr	i > pse_avail_p	owr_pri) with								

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

Pa 145 Li **7**

PSE SD

C/ 145 SC 1	145.2.5.7	P 145	L 10	#	r01-365		C/ 145	SC 14	45.2.5.7	P 148	L 10	#	r01-	440
Stewart, Heath		Analog Devic	es Inc.		_		Darshan, Y	air						
Comment Type	TR Co	omment Status D			PSI	E SD	Comment 7	уре	т	Comment Status D				PSE SD
*** Comment s	submitted with	the file 94875900003-s	stewart_04_1117	7.pdf attac	ched ***		The ex doesn't	ts from contain	CLASS_E the logics	EVAL_SEC to POWER_ s for power demotion.	_DENIGED_SEC a	Ind POWI	ER_UF	_SEC
A few issues e not account fo correctly refer pd_req_pwr_x limit of the PS The state mad The descriptio The Class 0 et variable enum SuggestedRemed See stewart_0 Proposed Respon PROPOSED A Adopt changes and 485. TFTD LY Baseline and o Please merge Stewart_004 u single-signatu TFTD CJ WORK - base TFTD YD "1. Possible cd addition, the re and proposed confusion to th others, please rest of page 3 darshan_03_1 review as a wh the result of cd integrate differ	exist. The usag or the updated ences pse_allo exx variable is i Es ability to kr chine CLASS_1 on of pd_req_p ncoding needs eration since i y 04_1117.pdf se Re ACCEPT IN Pf s in stewart_04 comments are in changes of uses different lo re version. Hai d on Lennart's onflict in pages emedy is not c to ACCEPT it. ne editor and n e ACCEPT Heat and 4 that deat 117Rev00x th hole solution.4 comments 484 a rent results of the	le of pd_req_pwr_pri in usage of pse_allocated ocated_pwr to decide if ntended to communicar iow that information. EVAL_PRI/SEC exit ard wr_pri/sec need to be u to be removed from the t is not a legal return vance <i>sponse Status</i> W RINCIPLE. 4_1117.pdf while combination in conflict. This is asking 484 and 485 into steward ogic to check for power rmonize. TFTD comment. s 3 and 4 in stewart_04, complete 2. Pages 1 and They doesn't conflict verther the the comment of the the state machine I and with state machine I and 485"" to prevent ur comment responses."	CLASS_EVAL_ _pwr_xxx. The r enough power en- te how much the cs need to refere pdated to correct e do_class_prob- alue (see do_class) ining with the rest and for mistakes. art_04. demotion than the _1117 with common d 2 in stewart_04 eave it to be ress s 484, 485 and co- editor response in- factarity from the set and another common to common the set and common the	PRI is dat nain PSE exists to tu PD requires the control of the control ence the control of the control of the control sult of cort sult of cort the ment r01	ted and doo state diagu urn on PD. lested, to the correct variation ibe the usa coreturn a_pri/sec.) mments 48- 484. In df, are OK prevent 485 and df, and the at need to b mbining wit what how t	es ram The he able. ge. 4	Suggestedi 1. Char !ted_tir (!pd_4r To: !ted_tir (pd_4r To: ted_tir (pd_4r To: ted_tir (pd_rec) Proposed F PROPC OBE by TFTD I Copy-p	Remedy nge the oner_sec pair_can ner_sec vail_pwr_s nge the er_sec_ air_canc er_sec_ air_canc er_sec_ t_pwr_s OSED A v 485 OS aste erro	exit from (_done + !! _sec < 3) sec = 0) * ((exit from _done * tea d + !alt_pw _done * tea ec 0) * (p e CCEPT IN	CLASS_EVAL_SEC to I ted_timer_done + (pd_r vrd_pri) ted_timer_done + (pd_r + (pse_avail_pwr_sec < 3 CLASS_EVAL_SEC to d_timer_done * (pd_req wrd_pri) d_timer_done * ((pd_4 vd_req_pwr_sec ?? pse_ <i>Response Status</i> W N PRINCIPLE. clarification. See respo	POWER_DENIGE req_pwr_sec > pse req_pwr_sec > pse)) + (!pd_4pair_car POWER_UP_SEC I_pwr_sec?? pse_a lpair_cand + !alt_p _avail_pwr_sec) +	D_SEC fr _avail_pv _avail_pv C from: avail_pwr_ wrd_pri) + (pse_ava	om: vr_sec) wrd_pr _sec) * il_pwr_) +) * i) sec > 2)

Pa **148** Li **10**

This is similar of earlier comment but with updated remedy. The exits from CLASS_EVAL_SEC to POWER_DENIGED_SEC and POWER_UP_SEC.	(pd_4pair_cand + !alt (pse_avail_pwr_sec >	o POWER_UP_SEC to:ted_tim _pwrd_pri) *((pd_req_pwr_sec = _2))"	lange the exit from her_sec_done * ted ≤ pse_avail_pwr_s	l_timer_done * ec) +
doesn't contain the logics for power demotion.	C/ 145 SC 145.2.5.	7 P150	L 1	# r01-179
SuggestedRemedy	Yseboodt, Lennart	Philips Lighting		
1. Change the exit from CLASS_EVAL_SEC to POWER_DENIGED_SEC from: !ted_timer_sec_done + !ted_timer_done + (pd_req_pwr_sec > pse_avail_pwr_sec) + !pd_4pair_cand To: !ted_timer_sec_done + !ted_timer_done +	Comment Type T The inrush monitor sta They've just become a asserted.	Comment Status D ate diagrams don't really moning a complicated way to start the in	tor anything do the rrush timer when al	PSE ey ? lt_pwrd_pri/sec is
<pre>(pd_req_pwr_sec > pse_avail_pwr_sec) * (pse_avail_pwr_sec < 3) + ((pd_req_pwr_sec= 0) * (pse_avail_pwr_sec < 3)) + !pd_4pair_cand 2. Change the exit from CLASS_EVAL_SEC to POWER_UP_SEC from: ted_timer_sec_done * ted_timer_done * (pd_req_pwr_sec ?? pse_avail_pwr_sec) * pd_4pair_cand) To: ted_timer_sec_done * ted_timer_done * pd_4pair_cand * ((pd_req_pwr_sec 0) * (pd_req_pwr_sec ?? pse_avail_pwr_sec) + (pse_avail_pwr_sec > 2))</pre>	SuggestedRemedy - Remove Figure 145- - in POWER_UP, afte - in POWER_UP, afte - in POWER_UP_PRI - in POWER_UP_SEC - Remove last sentend Proposed Response PROPOSED ACCEP	19 rr 'alt_pwrd_pri <= TRUE', add 's rr 'alt_pwrd_sec <= TRUE', add ' l, add 'start tinrush_pri_timer' C, add 'start tinrush_sec_timer' ce of paragraph at page 116, line <i>Response Status</i> W T IN PRINCIPLE.	start tinrush_pri_tim start tinrush_sec_t e 51.	ner' limer'
Proposed Response Response Status W PROPOSED ACCEPT.	OOS			
WFP TFTD LY There are question marks in the logic for item 2. TFTD HS What is 22	 Remove Figure 145- in POWER_UP, afte in POWER_UP, afte in POWER_UP_PRI in POWER_UP_SEC Remove last sentem 	19 er 'alt_pwrd_pri <= TRUE', add 's er 'alt_pwrd_sec <= TRUE', add ' l, add 'start tinrush_pri_timer' C, add 'start tinrush_sec_timer' ce of paragraph at page 116, line	start tinrush_pri_tim 'start tinrush_sec_t e 51.	ner' timer'
TFTD DS Proposed remedy has copy-paste error; uses "??" as an equality statement. What is the intended symbol?	TFTD YD Where you stop Tinru	ese two timers to the IDLE state ons. sh timer?	(s) if not done in ot	tner
Response DNA: Yeah, they imported wrong. Something to do with the foreign keyboard				
?? Should be <= (less than or equal to)				
TFTD YD "Missing ""not equal"" in item 2. In addition darshan_03 shows simplified logic without ((pd_req_pwr_sec= 0) that doesn't exists in dual-signature ((pd_req_pwr_sec NE 0). See				

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

Pa 150 Li 1

PSE SD

C/ 145	SC 145 2 6 1	P150	/ 37	# r01.191	CI 145	SC 145 2 7	P155	/ 30	#	r01_187
Yseboodt,	Lennart	Philips Lightin	g	# 101-181	Yseboodt,	Lennart	Philips Lightir	ng 2.33	π	101-107
Comment	Туре Т	Comment Status X		Connection Check	Comment	Type TR	Comment Status D			PD Power
"PSEs the cla single	s that will source p assification of a P -signature PD cor	bower on both pairsets shall D as defined in 145.2.7 to de nfiguration, a dual-signature	complete a con etermine if the F PD configuratio	nection check prior to PSE is connected to a n, or neither."	"Meas Rejec	ted comment i-79	be averaged using any slidii against D3.0 wanted to rem	ng window with ove this senter	a width of	e following
While Can w	I certainly agree version of the somehow derived and the somehow derived at the somehow der	with this requirement, how e the result of cc-check at th	are we going to e PI ?	o test this ?	This s	entence follows at whole section is interested	fter the definition of PClass a formative in nature.	and PClass-2P		
Suggested	Remedy				- Why	is this a should ?	t 2 PClass is a capability			
Rewrit [I knov	te this requiremer w this is not reme	nt such that it can be tested o dy, but I don't have a solution	or remove it. n offhand on ho	w to do this].	- The	actual power requ	irement of a PSE is encode	d in ICon-2P.		
Proposed TETD	Response	Response Status W			We ne	eed to find the app ured with a sliding	propriate place to indicate the window.	at PSE output p	oower cap	ability is to be
1110					Suggestee	Remedy				
TFTD Fair q many or DS	YD uestion but Rejec differences betwe PD that based or	t (no remedy) or leave it out sen the operation required front it we can differentiate.	of scope how to om the PSE who	e test it since there are en connected to SSPD	Outpu - Rem - In 14	t 'power' is encode ove quoted senter 5.2.8.5, page 164	ed in ICon-2P, hence it mak nce I, line 43, after:	es sense to pu	t a senten	ce there.
C/ 145	SC 145	P151	L 10	# r01-30	"PSEs	s shall be able to s	source I Con-2P, the curren	t the PSE supp	orts on ea	ich powered
Anslow, P	eter	Ciena Corpora	ation		apper	d:	Jualion (145-0).			
Comment	Type TR	Comment Status X		Editorial	"ICon-	2P should be mea	asured using a sliding windo	w with a width	of 1 secor	າd."
The re "We w There cell bl: indica would approp This ir used i 145 th in othe	esponse to unsatie vill work with edito is a distinction be ank. Eg. For para te there is lack of convey an incorre- priate." Interpretation of the n recent amendment at means that mater for recent amendment	sfied comment i-1 against D2 rial staff to try to clarify the s etween an em-dash, which ir meters that convey a range, data, rather that the minimu ect message. Em-dashes ha e style manual is different fro tents to IEEE Std 802.3. The ax or min cells without a valu- nents.	3.0 was: tyle guide. Here dicates 'a lack of having a blank m value is open ve been put in a om the interpreta ere is nothing di e should be sho	e is our opinion: of data', and leaving a 'Min' cell, does NOT -ended. An em-dash all cells where it is ation that has been fferent about Clause own differently to those	Proposed PROF TFTD What by mc	Response OSED ACCEPT. HS about 145.3.8.2.1 ving this specifica	Response Status W usage of PClass(-2P)? Is th tion?	nere an uninten	ded casca	ાded change
Suggested	lRemedy									
Make blank In part 145-32	sure all tables ha min or max colum ticular, Tables 14 2, 145-33.	ve an entry of em-dash or po ons in accordance with all oth 5-7, 145-8, 145-9, 145-10, 14	binter to the requiner recent amer 15-14, 145-16, 1	uirement in currently adments to IEEE 802.3. 145-21, 145-28, 145-29,						
Proposed	Response	Response Status W								
TFTD										
l need	a response from	the Editor or Chair								

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Page, Line Pa **155** Li **39**

C/ 145 SC Yseboodt, Lenna	145.2.7.2	P 160 Philips Light	L 32	# r01-190	C/ 145 Stewart, H	SC 145. eath	2.8	P 161 Analog Device	L 25 es Inc.	# r01-366
Yseboodt, Lenna Comment Type Autoclass mi resistance ar The current of New informa the July plen SuggestedReme Adopt ysebo Proposed Respo TFTD OOS WFP	TR inimum marg nd operating curve fits lea tition obtained ary) allow fo edy oodt_02_1111 onse	Philips Light Comment Status X gin was calculated with ov conditions. Id to excessive margin be d during recent testing (by r optimized curve fits. 7_autoclassmargin.pdf Response Status W	ing verly pessimistic a ing provisioned fo / UL and the mea	Pres: Yseboodt2 assumptions on cable or cable heating. surements presented at	Stewart, He Comment **** Cou Chang lunbala Suggested See pa Proposed A TFTD WFP TFTD "This c in last The nu 7 num have b Rpse_ for allo the exi other c the equatic http://v change 2P_un becam darsha derived lunaba	eath <i>Type</i> TR mment subr les made to ance-2P val <i>IRemedy</i> aul_01_1117 <i>Response</i> YD comment is cycle and m umbers for I bers in May been copied min/Rpse_r classes whill sting test vec classes whill sting test vec classes whill sting test vec classes cor www.ieee80.0 s.See darss b, Ipeak-2P le stable (I H n_07_1117 d.The only is alnce param	hitted w unbalar ues sho 7.pdf based o ainly th con-2P_ 2017 pi as is in nax range check erificatio he numl est verifi we add nment i 2.org/3/l han_05 _unb, IL nope) ar .pdf to s ssue tha eter and	Analog Device <i>Comment Status</i> X with the file 94876000003-p nce in Draft 3.1 have created build be reverted to the Draft <i>Response Status</i> W on incorrect assumptions for the wrong conclusion that in _unb in D3.0 where changed resentation (simulation) wh May 2017 draft. Lennart a ge with the test verification bers that where changed a ications load resistance val to handle the range for Ry 1-420 from D3.0 and bt/public/sep17/darshan_0 da _1117.pdf for simulation da _IM-2P, lunbalance) we ne ad after the addition of lunh see how the equation and ta at we must address regard d what its values should be	es Inc. aul_1117_01.p ed interoperabi t 3.0 values. or the reason for teroperability h ed per the follor here wrongly int model.b) I run that the equati accuracy and f s you can see, lues that remai ose_min are ba 2_0917_final.p ata and other u ed to do after u oalance parami est verification ing this comme which is addr	Pres: Paul1 df attached *** lity issues. The or the numbers changed as been compromised. wing reasons:a) class terpreted and should the same calculated the same calculated the same calculation on is still accurate with wither updated some has nothing to do with ins the same. d) In the same. d) In the same calculation on the existing df for why we did the pdates (such as Icon- inbalance requirements eter.See model where ent is the addition of essed by comment r01-

Pa **161** Li **25**

					-				
C/ 145	SC 145.2.8	P 162	L15	# r01-441	C/ 145	SC 145.2.8.5	P 164	L 23	# r01-195
Darshan, `	Yair				Yseboodt,	Lennart	Philips Lightin	ng	
Comment	Туре Т	Comment Status X		Pres: Darshan5	Comment	Type E	Comment Status D		Editorial
ILIM_2 in Icor	2P numbers nee n-2P_unb values	ed to in sync to Icon-2P_unb a s.	nd Ipeak-2P_u	nb after latest changes	"IPort-: pairset	2P and IPort-2P- s and are define	other are the currents on the d in Equation (145-5) and in	pairs with the sequation (145-	same polarity of the two 6)."
Suggested	dRemedy				"of the	two pairsets" do	es not add anything, remove	this part.	
Adopt	darshan_05_11	17.pdf			Suggested	Remedy			
Proposed TFTD	Response	Response Status W			Chang "IPort- defined	e to: 2P and IPort-2P· d in Equation (14	other are the currents on the 5-5) and in Equation (145-6)	e pairs with the s	same polarity and are
WFP					Proposed I PROP	Response OSED ACCEPT	Response Status W		
C/ 145 Yseboodt,	SC 145.2.8.2 Lennart	2 P163 Philips Lightin	L 51 g	# r01-193	OOS				
"VPort pairs v on sta	t_PSE_diff, as d with the same po te."	efined in Table 145-16, is the plarity, at no load condition, wh	maximum volta ien operating c	age difference between ver 4 pairs, in the power	IFID I disag to: "IP and an	cJ ree that this sen ort-2P and IPort e defined in Equ	tence shouldn't include the to -2P-other are the currents on ation (145-5) and in Equatior	erm pairset. cor ι the pairsets wi ι (145-6)."	npromise: Change th the same polarity
Multip	le power on stat	es, do not use "the power on s	state".						
Suggested	dRemedy								
Chang "VPort pairs v on sta	ge to: t_PSE_diff, as d with the same po te."	efined in Table 145-16, is the plarity, at no load condition, wh	maximum volta	age difference between ver 4 pairs, in a power					
Proposed PROP	Response POSED ACCEPT	Response Status W							
OOS									
TFTD editori	HS al. One of few c	losed subclauses. Use of sing	ular a is not ev	en correct.					

Pa **164** Li **23**

C/ 145 SC 145.2.8 Darshan, Yair	.5 P164	L 43	# r01-443	C/ 145 S RAN, ADEE	C 145.2.8.5	P166 Intel Corporation	L 16	# <u>r01-51</u>
Comment Type T Modified comment fro In the text "PSEs sha powered pairset, as o The text says that Ico 145-8. This current co numerical definition o equations in the spec is a spec and we can	Comment Status D om i-204 in D3.0. Ill be able to source ICon-2P, t defined in Equation (145-8).". on-2P is the current that the PS annot be calculated per Equation or can be calculated per the da c. One may ask why we need t not leave spec parameter/equ	the current the F SE must support ion 145-8 since ata in the spec at to calculate it? T uation that has n	PSE Power PSE supports on each t on each pair set per Eq Iport-2P_other has no s we do for all our the answer is because it no solution. Otherwise	Comment Type Per the sty Also in 14 SuggestedRen Change "th current ma Proposed Res	E E 5.3.8.10. <i>nedy</i> ne current wil ny not equally ponse	Comment Status D he use of the word will is depre I not equally divide" do "the cu divide". Response Status W	ecated. urrent does not	<i>Editorial</i> equally divide" or "the
why to spec it if it not SuggestedRemedy In the definition of Ipo text to the existing de "Iport-2P_other can b pairs of the same pol operating conditions	needed? prt-2P_other in the where list of finition: be found by the measurement arity when PSE is connected as described in 145.2.8.5.1"	of Equation 145- of the current dii to the test verific	8 append the following fference between two cation model and its	PROPOSE TFTD CJ two solutio change "th TFTD HS	ED ACCEPT.	gested remedy. this need to b not equally divide" to "the cur	e AIP. rent may not eo	qually divide"
Proposed Response TFTD The suggested remea and has nothing to do	Response Status W dy text is misleading. Iport-2p o with the current difference be	_other is the cur etween the pairs	rrent in the other pairset ets.	Response	DNA: Yep, r	nissed that.		
TFTD YD								

Change the remedy to: "Iport-2P and Iport-2P_other can be found by the measurement of the currents (i1, i2 and i3, i4 in Figure 145-22) over the pairs with the same polarity when PSE is connected to the test verification model and its operating conditions as described in 145.2.8.5.1."

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

Pa **166** Li **16**

C/ 145 Yseboodt, L	SC 145.2.8.5.1 _ennart	P 166 Philips Lighti	L 26 ng	# <mark>r0</mark>	1-198	<i>Cl</i> 145 Yseboodt, L	SC _ennar	145.2.8.5.1 t		P 166 Philips Lighting	L 27 g	#	[‡] r01-199	
Comment T	<i>уре</i> Е	Comment Status D			Editorial	Comment T	Гуре	TR	Comment S	Status X			Pres: Ysel	boodt7
In table maximu	145-17 which de um.	fined IUnbalance-2P the c	olumn "Value" do	pes not conve	ey this is a	In the la change This lea	ast cyc s to R ads to t	le the value Source and the 'extra' u	es of IUnbala RLoad. nbalance ma	nce-2P were in argin being assi	creased withou	t corres	ponding and the PD	
Suggested Change	Remedy e column name to	o "Max"				PSEs a IUnbala	and PD ance-2	s that meet P when hoo	their respectively the	tive unbalance	requirements w	vill now (exceed	
Proposed F PROPC	Response DSED REJECT.	Response Status W				l suspe	ct we r	need update	es to RSourc	e and RLoad.				
						Suggested	Remea	ly						
Max do	es not add any n	ew information. The table	conveys the valu	e of lunblanc	e-2p which	Adopt y	/seboo	dt_07_0117	_unbalance	.pdf				
is used	in a requirement	on page 165 line 10 which	makes it clear h	now to use thi	s value:	Proposed R	Respon	ise	Response S	Status W				
When p	owering a single	-signature PD over 4 pairs,	a PSE supports	:		TFTD								
— A tot polarity — A mi	tal current of ICor ; inimum current of	n, defined in Equation (145 f IUnbalance-2P over one c	–9), over both pa	airs with the s	ame tv under	WFP								
maximu	um unbalance co	ndition (see 145.2.8.5.1) in	POWER ON.	r same peram	i) and of	TFTD Y	/D							
TFTD Y "I believ to:(a) d the PSI unbalar	/D ve that there is m efine a number fo E and PD specs.(nce current capad	isunderstanding hereTabl or unbalance that is a maxi (b) to differentiate from Icor city that PSE has to suppor	le 145-17 for lur mum constant n n-2P_unb which t. lunbalance jus	nbalance was umber that is is a minimum st need to be	added used by epsilon	"This co for Icon unbalar should in D3.0 present	ommer 1-2P_u nce ma be upo where tation (nt is based on in last cyc argin and the dated due to changed p simulation)	on incorrect le and mainl e commente o the change er the follow where wrong	assumptions fo ly the wrong co r also wrongly o s.Here are the ing reasons:a) gly interpreted a	or the reason for nclusion that it expected that R facts:The numb class 7 number and should have	the nur may lea Source pers for 's in May e been (nber increa d to 'extra' and RLoad Icon-2P_ur y 2017 copied as is	ase I nb s in
above I	con-2P unb e.g.	epsilon=2mA.The respons	e David supplied	d is based on	page	May 20	17 dra	ft. Lennart a	and I found it	when we calcu	ulated Rpse mi	n/Rpse	max range	e with

above Icon-2P_unb e.g. epsilon=2mA.The response David supplied is based on page 165 line 10 and the lunbalance appear there is error and should be Icon-2Punb which is a current capacity, which still require us to make sure that table 145-17 values are maximum values. This explanation exist in page 166 line 20: "The maximum pair current in a system depends on the assigned Class (see 145.2.7), and is defined in Table 145–17."" which means that no need to change the ""value" Colum to ""Max value" etc."

Rpse_min until the equation loose its accuracy so all of this is based on the existing equations.See comment i-420 from D3.0 and http://www.ieee802.org/3/bt/public/sep17/darshan_02_0917_final.pdf for why we did the changes.See darshan_05_1117.pdf for simulation data and other updates (such as Ipeak-2P_unb, ILIM-2P, Iunbalance) we need to do after unbalance requirements became stable which I belive is the time now (I hope) and after the addition of Iunbalance parameter.See darshan_07_1117.pdf to see how the equation and test verification model where derived from the same equation.The only issue that we must address regarding this comment is the addition of Iunbalance parameter and what its values should be which is addressed by comment r01-444 and darshan_05_1117.pdf.Recommendations: OBE this comment to r01-444 where lunbalance numbers are discussed and resolved. In addition, see updated version of darshan_05_1117Rev001 that was not sent yet."

the existing test verification model.b) I run again the same calculation for all classes while

not change i.e. The results in the draft are due to the current equation so they are not need to be changed due to the increase of Icon-2P_unbc) The numbers that where changed as you can see, has nothing to do with the equations or test verifications load resistance values that remains the same and it is was updated just to cover the range for valid

checking Rose min valid range that the equation is still accurate with the existing test

verification model + test verification accuracy and further updated some other classes. Please not that Rsource, Rload, Rpse, Rpd are derived from the same equations and was

 Pa
 166
 Page

 Li
 27
 11/3/2

C/ 145 SC 145.2.8.5.1 Darshan, Yair	P 166	L 29	# r01-444	Cl 145 Zimmerma	SC 14 In, Georg	45.2.8.5. ′ je	1 P Aqua	66 antia, ADI	<i>L</i> 44 I, Comm	#	r01-286
Comment Type T Comm Table 145-17 has values that ar This intention of adding lunbalar minimum value of the current th current during unbalance condit is sufficient to define that lunba between min/max values of thes SuggestedRemedy In Table 145-17 make the follow 1) In the 2nd row, in the assigned	nent Status X e the same as the vance and Table 145-1 at PSE has to source ons that PSE and P ance-2P=Icon-2P_u e two parameters an ing changes: d class column chan	alues for Icon-2 7 was to clearly e and what is to D should not cr inb+2mA. This nd also result w nge from "5" to	Unbalance P_unb in Table 145-16. y specify what is o maximum value of the oss. For this purpose, it will set clear boundary with simpler spec.	Comment "The F (plug) only or require Suggested delete senter PSE s applies	Type PSE PI cc shall mee ne other r ement sho IRemedy page 160 nce after t hall not s s at the P	TR onnector et the req requirem ould be s 6, lines 4 the sente ource"; 2SE PI co	Comment Status (jack) when mated juirements of 145.2 ent listed in 145.2 stated so that it app 4-45 (the quoted so nace ending on line), new sentence to ponnector (jack) whe	D with a spe .8.5.1." - .5.1, and lies when entence ir : 30 of pa read ""Th n mated	ecified balance this is nonsens I believe the in the PSE PI is the comment ge 167 (senter is unbalance c with a specified	ed cabling sical. The ntent is the mated to), and inse nce begins current req d balance	Pres: Darshan1 connector re is actually at that a connector. ert new s on line 29 "A quirement d cabling
 2) In the 2nd row, in the Value of "lunbalance-2P=lcon-2P_unle" 3) Delete rows 4-6. Proposed Response Response TFTD 	olumn change from 9+0.002". nse Status W	"0.56" to		conne Proposed PROP WFP	ctor (plug <i>Response</i> OSED A	ı)." e CCEPT.	Response Status	w			
Icon-2p_unb is the sourcing cap using the unbalance test circuit. In Table 145-17 make the follow 1) In the 2nd row, in the assigne 2) In the 2nd row, in the Value of "lunbalance-2P=Icon-2P_und	ability of the PSE. I Thus, lunbalance r ing changes: d class column chai column change from -0.002"	unbalance is th needs to be less nge from "5" to "0.56" to	e limit for testing when than lcon-2p_unb. "5 to 8".	TFTD The re darsha the ne	YD medy is (an_01_11 w text pro	OK howe 17Rev00 oposed.	ever Figure 145-22 D1.pdf for updates a	seems no Ind verify	ot sync to the p that the propo	roposed te sed drawi	ext. See ng is sync with

3) Delete rows 4-6.

TFTD YD

"David took my proposal and changed it from lunbalance=lcon-2P_unb+0.002 To lunbalance=lcon-2P_unb-0.002 and explain it. He said that lcon-2p_unb is the sourcing capability of the PSE which I agree and therefore lcon-2P_unb has to be a minimum value.lunbalance on the other hand is the current that we should not cross due to testing current unbalance when using the unbalance test circuit. Thus, lunbalance needs to be less than lcon-2p_unb per David opinion. Per my opinion it is a maximum number not to cross therefore it need to be higher by epsilon from lcon-2P_unb otherwise how we can guarantee that you support current capacity of lcon-2P_unb as minimum value while you are not allowing the port current maximum value to exceed lunbalance if lunbalnce < lcon-2P_unb?In any case the difference between lcon-2P_unb to lunbalance but we had problem how to describe the same number once as a minimum to support and the other as the maximum not to cross. Conclusion: lunbalance=lcon-2P_unb + 0.002 as proposed."

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

Pa **166** Li **44**

Cl 145 Darshan,	SC 145 Yair	5.2.8.5.1	P167	L 36	# r01-445	C/ 145 Yseboodt,	SC 145.2.8 Lennart	8.6	P 169 Philips Lightii	L 30 ng	#	r01-208
Comment It is no load r resist as shi 22, to Pclas Suggeste Chan resist as shi To:	Type T ot clear in t resistances ances Rloa own in Figu correctly b s-PD at the <i>dRemedy</i> ge from "Th ances Rloa own in Figu	Con he following te Rload_min ar d1_min and R ire 145- e able to set t e load. he load resista d1_min and R ire 145-22, to	nment Status D ext to what the power s nd Rload_max are spli {load2_min, and Rload the power sink.". The p ances Rload_min and Rload2_min, and Rload correctly be able to se	sink is correctly it into two series d1_max and Ric power sink need Rload_max are d1_max and Ric et the power sinl	<i>Editorial</i> need to be set "The ad2_max respectively, I to be adjusted to get split into two series ad2_max respectively, <."	Comment "IInrus Suggested Chang Proposed PROP TFTD Propos TFTD Propos The al is the i	Type TR h-2P" is a rang <i>Remedy</i> e "IInrush-2P" Response OSED ACCEF HS se reject 15 uses are de maximum valu	Commen ge for dual-sigr to "Ilnrush-2P <i>Response</i> PT. efined in a sing e of Ilnrush-2P	et Status D hature, thus the n max", 5 occurar e Status W le Where block.	maximum value nces. The Where defi efined in Table 1	should be inition state 145-16	PSE Inrush used.
resista as shi Pclas Proposed PROF	ances Rloa own in Figu s_PD at the Response POSED AC	Inces Rioad_r d1_min and R ire 145-22, to e input of Ploa <i>Resp</i> CEPT IN PRII	Nin and Rioad_max ar {load2_min, and Rioad correctly be able to se ad." bonse Status W NCIPLE.	e split into two s d1_max and Ric at the power sini	eries bad2_max respectively, < to generate							
Chang "The l resista as sho the in	ge to: load resista ances Rloa own in Figu put of Ploa	inces Rload_r d1_min and R ire 145-22, su d."	nin and Rload_max ar ≀ load2_min, and Rloa ich that the power sink	re split into two s Id1_max and Ri c can be set to g	series bad2_max respectively, enerate Pclass_PD at							
TFTD It's a s "such Pload	LY sink, as suc that the po box equals	ch it does not wer sink can s PClass_PD.	generate power. be set that the power "	consumption ins	side the							

Pa **169** Li **30**

C/ 145 SC 145.2.8.10 P172 L 44 # r01-216
Comment Type TR Comment Status D PSE Power
"The voltage at the PI shall be equal or less than V Off , as defined in Table 145-16, when the PSE is in DISABLED, IDLE, or ERROR_DELAY."
Also applies to BACKOFF state. Or does that mess up detection by the other PSE ?
SuggestedRemedy
Add BACKOFF to the listed states.
Proposed Response Response Status W
PROPOSED ACCEPT.
TFTD DS This requirement applies to PSE/PD when returning to an idle state from a powered state; BACKOFF does not apply in this case. Also, the intent of BACKOFF is to let another PSE win a multi-PSE detection conflict. The voltage at the PSE PI will certainly not be below VOff when one PSE is on BACKOFF, even if the "backoff" PSE is not driving that voltage.
C/ 145 SC 145.2.8.12 P 173 L 8 # r01-217 Yseboodt, Lennart Philips Lighting Philips Lighting
Comment Type TR Comment Status D PSE Power
"Type 4 PSEs shall not source more power than P Type max, as defined in Table 145-16, measured using a sliding window with a width up to 4 seconds."
PSEs may source more than PType for up to 4 seconds. Text allows any sliding window
smaller than 4 seconds to be used. Also this doesn't work. We need a similar construct as for PPeak.
SuggestedRemedy
Replace by: "Type 4 PSEs shall not source more power than P Type max, as defined in Table 145-16, for longer than 4 seconds, with a maximum duty cycle of 1%."
Proposed Response Response Status W
PROPOSED ACCEPT.
TFTD YD Where the 1% came from?
TFTD HS Does 1% duty cycle mean 4 seconds out of 400 or 40ms out of 4s?

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Page, Line Pa **173** Li **8** Page 39 of 63 11/3/2017 11:51:00 AM

Cl 145 Darshan,	SC 145.2.8.12 Yair	P173	L 15	# r01-448	C/ 145 Yseboodt, L	SC 145.2.10 ennart	P 174 Philips Lighting	L 10	# r01-218
Commen	t Type T	Comment Status X		Pres: Darshan4	Comment T	ype ER	Comment Status D		Editorial
Equa darsl Suggeste Adop	ition 145-22 accura nan_04_1117.pdf. ed <i>Remedy</i> ot darshan_04_1117	cy need to be addressed. See 7.pdf	e proposed chan	ges in	Subclau "Figure These s Signatu	ise 145.2.10 "PS 145-17, Figure 1 tate diagrams m re (MPS)."	E power removal" contains jus 45-18, and Figure 145-19 show onitor for inrush current and th	t one sentend w the PSE mo e absence of	e: nitor state diagrams. the Maintain Power
Proposed	d Response	Response Status W			It is follo	owed by 145.2.1	1 which describes MPS.		
TFTI WFP)				In the b subdivio The cur 145.2.1	ase standard, th led in to AC and rent 145.2.10 as 1 (on MPS), doe	e MPS requirements were a su DC MPS. -is makes little sense. s a poor job of introducing the t	bclause of PS topic.	SE power removal and
					SuggestedF - Delete - Add a: "A PSE minimu This is i 145-17	Remedy 145.2.10 s new first parag is required to re m amount of cur referred to as the and Figure 145-	raph to 145.2.11: move power when a powered c rent. 9 'Maintain Power Signature'. The 18 monitor for the absence of N	connected PD he PSE state /IPS."	no longer draws a diagrams in Figure
					Proposed R	esponse	Response Status W		
					PROPC	SED ACCEPT.			
					OOS				
					TFTD C this is a solution editor w next tim Here's r Reject. In addit reference	J purely editorial as there are ref ould (maybe) dis e. this is why we ny proposed ren comment is a pu on, it is not a co ces to the delete	change that is out of scope. be erences in the doc to 145.2.10 scover this as he's generating I e don't make silly editorial chan nedy: irrely editorial change that is our mplete solution and would requ d section and adjustment of the	yond that, it is that would ne 03.2 - leading ges like this li t of scope and lire searching ose cross refe	a not a complete ed adjusted and the to more comments ate in the process. d does not add clarity. the doc for cross prences.
					TFTD H Propose Editoria repeate	IS ed reject I. Let's close a m dly.	najor technical subclause. This	subclause ha	is been word-smithed

Pa **174** Li **10**

Cl 145 SC Yseboodt, Lenna	145.2.11 rt	P 174 Philips Lightin	L 18 g	# r01-219		C/ 145 RAN, ADEI	SC 145.3.2 E		P 176 Intel Corporati	L 41 ion	#	r01-52
Comment Type	ER	Comment Status D		E	ditorial	Comment T	Type G	Comment	Status D			Editorial
"The specific	ation for T I	MPS in Table 145-16 applie	s only to the DO	CMPS component.		The NC (norma	OTE seems to tively).	repeat (informa	tively) what the	clause text abo	ove it is sta	iting
Remnant fror	m the past:	we only have DC MPS in C	ause 145, whic	h we just call "MPS	5".	(
SuggestedReme	dy					Saying	that somethin	g is not allowed	I does not belon	ig in an informa	tive note.	
- Remove qu	oted senter	nce				Suggested	Remedy					
- Search and	replace "D	C MPS" by "MPS" in Clause	e 145			Delete	the note.					
Proposed Responer	nse ACCEPT.	Response Status W				If it isn' in the p	t clear that bo	th Mode A and graph.	Mode B need to	be supported,	add a "sha	all" statement
OOS						Proposed F	Response OSED ACCEF	Response T.	Status W			
TFTD HS Proposed rej Editorial	ect					TFTD						
DC MPS is o	ver 10 year	s old. Let's maintain jargon	with at as we c	an.		Now th suppor	at we refer to ted? Do we si	Table 145-20, is till need these n	s there any conf otes?	usion about wh	at needs to	o be
						TFTD (piling o replacin historic text, so is in the this not	CJ on the the TFT ng implement cally, this text e that people c te text above, in te makes it cle	D. first, this is C with support an existed as a ger ould 'do what th n case anyone I ar. my suggest	OOS. yes there a d removing a co tleman's agreen eey want'. I like t nad questions. c ed response:	are change bars omma. the sent ment to keep so the text becaus our job is to clea	s but the ch ence is not ome shalls e it explicit arly convey	nange was t new. out of the ly states what y the rules.

reject

The shalls do exist and yes this is a restatement of the text above. It is in a note for emphasis. This comment is out of scope and does not add clarity to the document and is therefore rejected.

Pa **176** Li **41**

C/ 145 RAN, ADEE	SC 145.3.3.1	P ⁺ Intel	177 Corporation	L 53	# r01-2	89	C/ 145 RAN, ADEE	SC	145.3.3.3		P 178 Intel Corporation	L13	#	¢ r01-293	3
Comment Typ	be E	Comment Status	B D			PD SD	Comment Ty	pe	G	Comment	t Status D			E	Editorial
Three sub diagrams	oclauses (this o , which are all	one, 145.2.5.2, and the same.	l 145.5.3.1) d	efine conventi	ons for state		Subclaus	ses 1	45.3.3.3 th	rough 145.3	3.3.7 discuss single	-signature P	'Ds.		
It may be instead of	more clear for f having multip	readers to have or le "conventions" su	ne subclause Ibclauses.	for conventior	s under 145.	1,	Subclaus PDs.	ses 1	45.3.3.4 th	rough 145.3	3.3.12 are the equiv	alent of the	above fo	r dual-sigr	nature
SuggestedRe	medv						It would I	be fri	iendlier for	readers (wh	o may be interested	d in only one	kind of	PDs) to	
Move the	content of 145	5.2.5.2 to a new sul	oclause 145.	1.5.			separate of 145.5.	thes 3.	se clauses l	hierarchicall	ly. It would also be o	consistent w	ith the s	milar stru	cture
Refer to t	hat subclause	in 145.2.5. in 145.3	3.3. and in 14	5.5.3.			SuggestedRe	emec	dy						
				0.0.01			Create a	subo	clause hier	archy as foll	ows:				
Delete 14	5.2.5.2, 145.3.	.3.1, and 145.5.3.1	•				145 2 2 3	2 Cin	alo signatu	uro PD stato	diagrams				
Proposed Res	sponse	Response Status	W				145.3.3.3	3.1 C	constants	ile FD State	ulagrams				
PROPOS	ED REJECT.						145.3.3.3	3.2 V	ariables						
OOS							145.3.3.3	3.3 T 8 4 F	imers						
							145.3.3.3	3.5 S	state diagra	m					
This com	ment is Out of	Scope and does no	ot fix anything	g technically bi	oken.		145.3.3.4	Dua	al-signature	e PD state d	liagram				
TFTD YD							145.3.3.4 145.3.3.4	1.1 C 1 2 V	onstants ariables						
"I agree w	vith Lennart bu	t prefer different re	medy. PSE s	tate machine,	PD state ma	chine	145.3.3.4	I.3 T	imers						
and DLL :	state machine	should be in deper	nded parts in	the spec. Espe	ecially regardi	ng	145.3.3.4	1.4 F	unctions						
designer	often will not a	o to read PSF part	ember many etc.), 145.2.5	5.2 is in the PS	F section but	20	145.3.3.4	l.5 S	state diagra	m					
relevant f 145.2.5.2	or the PD section apply to it as v	ion as well in 145.3 well. Therefor, I sug	3.3.1. 145.5.3 ggest to acce	3.1 is for DLL s pt this comme	o the content nt in principle	of and	Consider	also	o moving th	e following t	text from 145.3.3:				
copy 145	.2.5.2 to 145.3	.3.1, and 145.5.3.1					"Single-s	igna	ture PDs sl	hall provide	the behavior of the	state diagra	ım showi	n in Figure	9 145-
Response	e DNA: Adee a	actually authored th	nis comment,	not Lennart.			26 and F commen	igure t)	e 145-27" -	to the new 1	145.3.3.3 (and char	ige to "diagr	ams" pe	r other	
							"Dual-sig	natu	ıre PDs ())" (the whole	e second paragraph) to the new	145.3.3	4.	
							Proposed Re	spor	nse	Response	Status W				
							PROPOS	SED	REJECT.						
							OOS								
							This com	men	nt is out of s	scope and d	oes not fix anything	technically	broken.		
							TFTD CJ while this should ve	con ote to	nment is O o accept or	OS it does o reject.	offer improvement ir	n document	clarity a	nd I think t	he TF
		- CD/aditorial	ined CD/com			aditarial C/	ven er el							Dogo 40	of 62

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C/ 145	SC 145.3.3.4	P 178	L 39	# r01-449	
Darshan, `	Yair				
Comment	Туре Т С	omment Status D		Pres: Yseboodt8	
The va	ariable nopower is not	clearly defined in the fo	llowing text:	licates VPD was below	
VOff_	PD while being power	ed, since the last time V	PD was below \	Reset for at least	
TRese	et.				
FALS	s. E: The PD has not be	en in NOPOWER.			CI
TRUE	: The PD has been in	NOPOWER.".			Ys
Few is	ssues:				Со
1. Vre	set need to be Vreset	_PD. if where it is used (Hey	uwa aan ha hak	www.Voff_DD.while being	
power	ed? We where in a po	owering state actually)	we can be beit	JW VOII_PD write beirig	
Suggested	dRemedy				
1. Cha	ange to:				Su
"nopo "A var	wer iable that indicates the	e PD has been in NOPC	WER which in	licates VPD was below	
VOff_	PD while being in pow	ering state, since the last	st time VPD was	s below Vreset for at	
least 1 Value	Freset.				Pr
FALS	E: The PD has not be	en in NOPOWER.			
TRUE	: The PD has been in	NOPOWER." ariable is missing from th	ne variable list	This is covered by the	
comm	ent marked nopower_	_mode(X). If this comme	nt will be accept	ed, to make sure that	
simila	r language are used ir) both variables.			
Proposed	Response Re	sponse Status W			
PROP	OSED ACCEPT IN P	RINCIPLE.			
WFP					
Chang	ge arc from POWERE	D to NOPOWER from "	VPD < Voff_PD'	to "VPD < 30V"	
Chang	ge nopower variable to):			
"nopo "A var	wer iable that indicates the	e PD has been in NOPC	WER, which inc	licates VPD went below	
30V at Treset longer	fter reaching POWER t. When this variable guaranteed.	ED, since the last time visit is TRUE interoperability	/PD was below between the PS	Vreset for at least E and the PD is no	
Value: FALSI TRUE	s: E: The PD has not be : The PD has been in	en in NOPOWER. NOPOWER."			
Add n	opower_mode(X) varia	able to DS PD SD with s	similar text.		

TD HS

plementations can't conform to single scalar 30V threshold, must be a range... eset PD not Vreset tReset in SM, variable definition is thus not normative structions to editor regarding "Similar text" is a bit vague e 353

esponse DNA: since everything in the nopower state is optional, thus the 30V (which ould be listed as Voff min) is actually just a maximum value that you can transition at.

C/ 145	SC 145.3.3.4	P 178	L 52	#	r01-224	
Yseboodt, Ler	inart	Philips Lighting				-
Comment Tvp	e E	Comment Status D			Editoria	1

nent Type E Comment Status D

Lacs_req: "This variable indicates whether the PD performs an Autoclass request during nysical Layer classification. See 145.3.6.2."

hat is a very poor description of what this variable does.

estedRemedy

eplace by:

his variable indicates if a PD will draw P_Autoclass_PD in the Autoclass time window ter reaching POWERED. See 145.3.6.2."

sed Response Response Status W

ROPOSED ACCEPT.

OS

TD HS

oposed reject etter as it was. New text contains will.

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

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C/ 145 Stewart, He	SC 145.3.3.5 eath	P 181 Analog Devic	L 25 es Inc.	# r01-349	C/ 145 Abramson,	SC 145.3.3.7 David	P1 Texas	83 L: Instruments Ind	22 #	^t r01-321
Comment ² A PD is text su Suggested Chang Also cl Proposed I PROPU	Type TR s allowed to rely o bclauses refer co <i>Remedy</i> e "tInrush_PD" to hange on page 18 <i>Response</i> OSED ACCEPT I	Comment Status D on the PSE inrush limiting for prectly to tInrush_PD max. o "tInrush_PD max" 38, lines 3 and 6. <i>Response Status</i> W IN PRINCIPLE.	or the entire tinre	PD SD ush_PD time (50ms). All	Comment 1 In orde allow fo Suggested/ in state change to: IF pd_r present ELSE present	ype TR r to allow for the or possibly valid of Remedy DO_CLASS_EV "present_det_sig eq_class>3 t_det_sig=either	Comment Status mark change in my detect signatures. /ENT1: ig <= invalid"	D other comments	s, we need to cha	PD SD ange the SD to
TFTD Are yo then tra am ok reality anythir Chang max in	u suggesting that ansition to POWE with this. It seen the PD just need ng, it just needs to e "see TInrush_F Table 145-29."	by changing this, the PD w FR_DELAY? This actually s to imply that the PD need to be done with INRUSH b be 50ms max. D in Table 145–29." to "This	ill stay in INRUS olves one of the ls an infinitely p by 50ms, so if it s timer has the	SH for exactly 50ms and e NoPower issues, so I recise timer, but in uses a timer for value of Tinrush_PD	Proposed F PROPO OOS TFTD N The iss TFTD I See res	Response DSED ACCEPT. /D ue in the comme DS sponse to #319.	Response Status	w		

Pa **183** Li **22**

C/ 145 Vseboodt L	SC 145.3.3.7	P 184 Philips Lighting	L 30	# r01-227	Cl 145 Darshan	SC Vair	145.3.3.7	P184	L 30	# r01-452
Cl 145 Yseboodt, Li Comment Ty There is A PD ca If it does loops th It is PD To close Suggested R - Remov - Same Proposed R PROPO TFTD, w	SC 145.3.3.7 ennart ype TR a possibility for i in exit the INRUS s so while the PS rough NOPOWE undemotion esse this hole we nee ethis hole we nee	P184 Philips Lighting Comment Status D Intentional abuse of the NOPO H state at any time less than 5 E is still in inrush, and VPD is I R and defeats classification. entially. ed to remove the arc from POV OWER_DELAY to NOPOWER nature state diagram. Response Status W P.	<i>L</i> 30 WER state in the P 50ms to POWER_D less than Voff_pd, t VER_DELAY to NC	# <u>r01-227</u> <i>PD SD</i> PD state diagram. DELAY. the state diagram DPOWER.	C/ 145 Darshan, ¹ Comment The P NOPC 1) Vio 2) Pos 3) Alla sensit we ne If PD (pse_) destro Detail When state of nopov back t overlo	SC Yair Type D state D state D WER s lation of ssible or wring in ive to 2 ed to al didnOt I bower_I yed. s of issu actual due to N ver varia o POW ading th	T machine fo state and go f tpowerdela verload conc compliant b nd inrush cc low it as opt ost its data evel <== 8) ye 1: Tinrush_PD /PD <voff_f able=TRUE ERED throu- he PSE which</voff_f 	P184 Comment Status X r single signature (and dual sig ing back to INRUSH and back by_timer when going from POW dition due to the assignment of ehavior of PDs that doesnOt lo bunted as additional class even tional behavior and not mandat when going to Vpd < Voff_pd, in NOPOWER spec so the con <25msec and transitioning from PD, sets nopower variable to TI will lead to bypassing tpowerdur ugh INRUSH and POWER_DE ch is still in INRUSH state. (The	L 30 nature) has fet to POWER_D /ER_DELAY to (pse_power_ ick their class it (I understan it doesnOt ne rrect assigned m POWER_D RUE. elay_timer (80 LAY states will e 25msec nur	 # r01-452 Pres: Yseboodt8 w issues concerning DELAY. to NOPOWER. level <== 8). event counter and d the need for this but for PDs. For example: wed to set l class will not be ELAY to NOPOWER Dimsec) when returning nich will lead to PD nber is due to the fact
This pro done in	blem is fixed by o comment 349.	changing the tinrushpd_timer v	alue to be Tinrush_	PD max. This is	This s POWI (regar In the transit POWI This is INRUS Same Detail In the pse_a than & As lor past, i transit PD re inrush Regar that w pse_a not ha In ado use fo mand Bottor behav we created	e ale gi cenario ERED s dless of case w ion fron ER_DEI s a viola SH. issue in s of issu NOPOV vailable dissort t was cl ioning f quired b . Any w ding PE e want i vailable we to de lition, w r abnor ory requ n line: N	happens w happens w tates, causi f the time VI here Tinrush in INRUSH to LAY to POW tion of Tdel in dual-signa ue 2: WER state, 	The NOSH state twice in the ab henever Vpd is lowered below ng a transition to NOPOWER s PD was below Voff_pd). h_PD = 0 to 25ms, then the PE o POWER_DELAY to NOPOW VERED in 2xTirush_PD. ay, which is minimum 80ms ar ture PD state machine. the assignment "pse_power_le even if originally prior to getting _th, PD remembers its data. In PD may think that we have add WER to INRUSH again. This a big hole here. .n't lock class event counting, t is case in the field as well so vo potional as function if we lost th e they may go to overload con dd text that explains that the No es and not as the typical beha the spec. ed to allow supporting non-com y making the state machine to compliant PDs doesnOt have a	Voff_pd in PC state, then rais) state-machir /ER to INRUS id may overloa avel <==8" will to NOPOWE the argument ditional class of rgument seen unts after first hey are not oc we need to ma the data or not ditions while t DPOWER sta viour otherwis pliant PDs or support those and we force t	WER_DELAY or sed above Von_pd ne will do the iH to ad PSE by PD during cause PD to have R state is was lower as why we add it in the event when ns not correct since t time going through ompliant. I understand ake the use of i.e. compliant PDs will hey behaves correctly. te was meant to be is we by pass the PDs that their PDs but on the way hem to behave in

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C/ 145

Peker, Arkadiy

SC 145.3.3.7

noncompliant way by violating other spec requirements.

Below is proposal to support those PDs without creating problems to PDs that behaves correctly.

SuggestedRemedy

1. In the exit from POWER DELAY to NOPOWER and in the exit from POWERED to NOPOWER, change the condition from VPD < VOff PD to (VPD < VOff PD)*go2nopower. 2. Add the new variable go2nopower:

ao2nopower

Implementation specific variable that indicates if PD will go to NOPOWER in case VPD < VOff PD during POWER DELAY or POWERED.

Values

FALSE PD will not use NOPOWER in case VPD < VOff PD during POWER DELAY or POWERED

TRUE PD will use NOPOWER in case VPD < VOff PD during POWER DELAY or POWERED

3. Repeat only steps 1 for dual-signature PD in page 190 for the above states.

4. [This solution allow not using pse power level <==8 in case PD didn't lost its data or change its data during the transition to POWER DELAY through NOPOWER)] Append the following text to the definition of nopower variable:

"If pse power level data was not lost or changed in the event of transitioning to POWER DELAY through NOPOWER, the assignment pse power level <== 8 may not be implemented in NOPOWERO

Proposed Response Response Status W

TFTD

WFP

Comment Type	TR Co	mment Status	Х	Pres: Yseboodt8
Comment Type PD state macl uncompliant b -If PD PI volta PD is required -If PSE PI volt compliant PSE As a result, fa -This behaviou -Specifically, i avoided or cou -The need to o 802.3bt is und maclo it action	TR Co hine (and any o ehavior. We ha ge is drop due to limit its pow tage is drop for E. Iling below VPE r should not be f this behavior of rrected. cover in the PD derstood but we	mment Status ther state mac we infinite num to overload or s er consumption a duration long 0 <voff_pd whi<br="">described in th cause violation state machine should not for</voff_pd>	X hine) doesn't need bers of them. short circuit, this P h to PClass_PD by ler than allowed by le PD was powere e PD state machin of other requirement legacy PD behavior on	Pres: Yseboodt8 to contain states to describe D is not compliant since the design. the transient spec, it is non- d is non-compliant behavior. e. ents in the spec, it should be or and newly designs of compliant PDs and at least
make it option Having the NC 1) Violation of 2) Possible ov	al. DPOWER state tpowerdelay_ti verload conditio	route creates i mer when goin n due to the as	new non-compliant g from POWER_D signment of (pse_	t behavior such IELAY to NOPOWER. power_level <== 8)
It is suggested	to delete the N	NOPOWER sta	te or to make the i	nputs to it selectable by the
SuggestedRemed	'Y			
Option 1: Delete NOPW it, including th Option 2:	/ER state from t e variables ass	the PD state m ociated with it.	achine with all the	inputs/outputs to it and from
1. Delete the e bypassing the 2a. Delete the 2b) add the fo state, the assi	exit from POWE 80msec timer. assignment ps llowing text to the ignment to the v	ER_DELAY to I] :e_avail_pwr<= he variable pse value 8 is optio	NOPOWER. [This =8 from the NOPC _power_level definal."	will resolve the issue of WER state OR hition: "When in NOPOWER

P184

Microsemi Corporation

L 30

r01-314

Option 3:

1. Make the two inputs to NOPWER optional and pending in implementation specific variable. Change the condition of these two inputs to (VPD<VOff PD) *option nopower. 2. Add the variable option nopower to the variable list. option nopower Implementation specific variable that indicates if PD will go to NOPOWER in case VPD < VOff PD during POWER DELAY or POWERED. Values FALSE PD will not use NOPOWER in case VPD < VOff PD during POWER DELAY or POWERED TRUE PD will use NOPOWER in case VPD < VOff PD during POWER DELAY or

POWERED.

After selecting one of the proposed solutions or any other solution, Repeat it for dual-

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IFID	
	Comment Type TR Comment Status D PD Mai
WFP CI 145 SC 145.3.5 P192 L22 # [01-392] Stover, David Analog Devices Inc. Comment Type TR Comment Status X PD Signature *** Comment submitted with the file 94876400003-stover_01_1117.pdf attached *** Missing description of single-signature PD behavior for VPD < 10.1V SuggestedRemedy Adopt stover_01_1117.pdf Proposed Response Response Status W TFTD OOS WFP	Comment Type TR Comment Status D PD Mail The group has expressed a desire to deprecate clause 33 in the future. I have found one case in which the clause 145 makes it harder/more expensive to build a compliant PD (without any real benefit) and thus I doubt users would move over the Type 3 and thus clause 33 would never be deprecated. The case is that of Type 1 PDs. Clause 145 currently requires all Type 3 PDs to include a mark signature, even class 1-3 PDs. This is a burden to the PD and we can elimate it easily. I suggest that we only lower the minimum Mark Current for Class 1-3 Type 3 PDs which would allow the detect circuit already present in these PDs to be a compliant mark current. SuggestedRemedy Split item 3 of table 145-25 into two rows. The first row for class 1-3 with a minimum of 180uA. The second row for classes 4-8, with a minimum of 250uA. Proposed Response Response Status W PROPOSED ACCEPT. OOS TFTD DS Propose we maintain original requirement. I'm trying to follow the commentor's line of reasoning: If the argument is, "Class 1-3 PDs may present a valid detection signature resistance in the mark voltage range," then Vmark, min/Rsig, max already exceeds the original 250uA minimum. Furthermore, dual-signature PDs (Class 1-3 included) must support Mark because Type 3/4 PSEs will issue multiple class events for all PD requested
	Response DNA: Yes, if you account for two diode drops from the bridge you end up below the Mark current requirements. You are correct about the 3rd event class sig change, but that only applies to DS PDs. We will need to make this SS PD specific if we want to do it.

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Cl 145 SC 145.3.6.1.1 P 196 L 22 # r01-320 Abramson, David Texas Instruments Inc Texas Instruments Inc <t< th=""><th>C/ 145 SC 145.3.6.2 P 196 L 46 # r01-460 Darshan, Yair</th></t<>	C/ 145 SC 145.3.6.2 P 196 L 46 # r01-460 Darshan, Yair
Comment Type TR Comment Status D PD Mark	Comment Type T Comment Status D PD Class
 "When the PD is presenting a mark event signature in a DO_MARK_EVENT state, as shown in the state diagram of Figure 145-26 and Figure 145-28, the PD shall draw IMark as defined in Table 145-25 and present a non-valid detection signature as defined in Table 145-22." This would prevent class 1-3 PDs from being able to show their detect signature during the MARK state. Since these PDs are not required to count the class events, this requirement should not apply to them (the reason for the requirement is that PDs that count class pulses can count an extra pulse if they have a valid signature during mark and if plugged in during a detect cycle). NOTE: I haven't considered DS PDs SuggestedRemedy Make this requirement only apply to class 4-8 PDs. "When the PD is presenting a mark event signature in a DO_MARK_EVENT state, as shown in the state diagram of Figure 145-26 and Figure 145-28, the PD shall draw IMark 	 In the text "After power up, a PD that implements Autoclass shall draw its highest required power, PAutoclass_PD, subject to the requirements on PClass_PD in 145.3.8.2, throughout the period bounded by" we have the following issue: According to the existing Autoclass text In 145.3.8.2 the text says that the limits of the autoclass power value is the assigned class. This may generate an overload condition according to the following example: 1) When we negotiate power through LLDP and we asked for 34W and received 34W. The assigned class will be 5 per table 145-12. 2) Now the PD requests Autoclass through LLDP and consumes 39W (it can consume more, up to the maximum of the assigned class=40W). 3) PSE will enter to overload condition/overpower and may shut the port off. Possible solutions: a) The fix for this is to limit autoclass power not according to the assigned class but to limit it to the PSE allocated power which is in the above example 34W and not 40W. b) (Preferred, simpler) To keep it per the assigned class when layer 1 autoclass is used and limit the value of the autoclass power to the pse allocated power when autoclass is used through LLDP.
as defined in Table 145-25 and Class 4-8 PDs shall present a non-valid detection signature as defined in Table 145-22."	SuggestedRemedy
 Proposed Response Response Status W PROPOSED ACCEPT. OOS TFTD LY We need to say this is PDs requesting Class 4 through 8 and also deal with dual-sig somehow. "When the PD is presenting a mark event signature in a DO_MARK_EVENT state, as shown in the state diagram of Figure 145-26 and Figure 145-28, the PD shall draw Imark as defined in Table 145-25. Single-signature PDs that request and Class 4 through 8 PDs, and dual-signature PDs shall present a non-valid detection signature as defined in Table 145-22." Response DNA: Looks good except for that extra comma TFTD YD I guess this comments relates to 319. To discuss implications. TFTD DS 	Change from: "After power up, a PD that implements Autoclass shall draw its highest required power, PAutoclass_PD, subject to the requirements on PClass_PD in 145.3.8.2, throughout the period bounded by TAUTO_PD1 and TAU-TO_PD2, measured from when VPD rises above VPort_PD-2P min. The PD shall not draw more power than PAutoclass_PD at any point until VPD falls below VReset_PD max, unless the PD successfully negotiates a higher power level, up to the PD requested Class, through Data Link Layer classification as defined in 145.5." To: "After power up, a PD that implements Autoclass shall draw its highest required power, PAutoclass_PD, subject to the requirements on PClass_PD in 145.3.8.2, throughout the period bounded by TAUTO_PD1 and TAU-TO_PD2, measured from when VPD rises above VPort_PD-2P min. When using Autoclass through LLDP, a PD that implements Autoclass shall draw its highest required power, PAutoclass_PD, up to PSEAllocatedPowerValue, throughout the period bounded by TAUTO_PD1 and TAU-TO_PD2, measured from the time MirroredPDAutoclassRequest is TRUE. The PD shall not draw more power than PAutoclass_PD at any point until VPD falls below VReset_PD max, unless the PD successfully negotiates a higher power level, up to the PD requested Class, through Data Link Layer classification as defined in 145.5."
See response to #319.	Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

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

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OBE by 239					C/ 145 Johnson.	SC Peter	145.3.8	P 198	L 39	# r01-394		
TFTD This o	TFTD YD This comment marked OBE by 239. Not clear how 239 resolves 460?					Comment Type T Comment Status D PD Power Draft 3.1 still has the issue where parameters entered as Maximums with no Minimums in Table 145-29 are sometimes treated as ranges and sometimes treated as constants. Example: Pport_PD (Items 8 and 9) are CLEARLY ranges, effectively from 0W to						
C/ 145 Yseboodt	C/ 145 SC 145.3.8 P 198 L 10 # [r01-235] Yseboodt, Lennart Philips Lighting											
Comment Type TR Comment Status D PD Power Last cycle we removed the PD Type column in Table 145-29, and in the process we found 1 parameter that seemed to depend on Type: V_Overload-2P. PD Power That is false like other power related parameters, this also depends on assigned Class					Pciass_PD. However Pciass_PD, Ppeak_PD, and their 2P equivalents are CLEARLY constants and are used as such in the text (e.g. 145.3.8.2, 145.3.8.3) and similarly in the PSE section (e.g. EQ 145-2). The PSE section does not have this problem as Pclass (and Pclass_2P) are defined in equations with maximum possible values in Table 145-11.							
not o Furth	n Type. ermore, the value for "Type	e 3" aka "Class 1-6"	is wrong, it sho	uld be 39.4V	Expar 2P (ac	nd Table dding 2	e 145-11 t columns)	o include Pclass_PD, Pclass_ It is not inappropriate to pla	_PD-2P, Ppeak	_PD, and Ppeak_PD-		
SuggestedRemedy Replace rows: - Single-signature PD, Class 1-6 and dual-signature PD Class 1-4 = 39.4V - Single-signature PD, Class 7-8 and dual-signature PD Class 5 = 40.4V Editor to split VOverload into a single-signature and dual-signature subitem in order to prevent large amount of text in the Parameter cell.			there are equations in the PSE section that use all four parameters. Table 145-11 includes the column "Assigned Class" - so it has the correct index for these values. THEN remove them from Table 145-29.									
			40.4V	Proposed Response Response Status W								
			PROPOSED ACCEPT IN PRINCIPLE.									
Proposed	Response Respo	nse Status W			Remo	we Ppu	n_pu anu	rpoit_pu-zp itoin table 145-2	29.			
PROPOSED ACCEPT. TFTD YD "1. per assigned class, we have different values for each class. Why we have the same umber for class 1-6?2. How you got 39.4V ? At the worst case which is class 6: Vpse=52V, Ppeak_PD=74.86v, Rchan=6.25 ohm results with 40.425V and not 39.4V.3. In dual sig I get also different numbers per class."				Add as new second paragraph of 145.3.8.2: "Pport_PD and Pport_PD-2P are the power drawn by a single-signature PD, and by a Mode of a dual-signature PD respectively, and defined in Equation 145-23a. Equation 145-23a: Pport_PD = VPD * Iport Pport_PD-2P = VPD * Iport-2P								
										WOR	К	
					l than)nort nd o	ad Daart ad 2D as sysmalas	of noromotoro	in this same table that		

I then used Pport_pd and Pport_pd-2P as examples of parameters in this same table that similarly have no minimum value but are in fact ranges where the inferred minimum could be zero W. I could have chosen other parameters like Inrush_PD or Vnoise_PD in this same table that also show no minimum value but should be interpreted as ranges.

The alternative remedy appears to be to extract Pport_PD and Pport_PD-2P from Table 149-25. This seems weird because it seems that they belong in this table with maximum value= Pclass_PD and Pclass_PD-2P respectively.

Also, the equations suggested seem to remove the restriction that Pport_PD cannot exceed Pclass_PD and Pport_PD-2P cannot exceed Pclass_PD-2P. There is nothing

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about the terms lport and VPD that introduce this fundamental restriction. Iport in fact is very seldom, if ever, seen in the PD section of the spec.

My solution here is to create the 802.3bt "super table" in 145-11. It solves the techn problem here and it provides technical background to the Pclass and Ppeak equation the PSE section.

I know it "feels like" a big change but I think it consolidates highly related information one single, easy-to-read place. :-}

Cl 145 So Yseboodt, Lenr	C 145.3.8 hart	P 199 Philips Lighting	L 40 g	# r01-236	In addition, per the s NOPOWER state, w
Comment Type Table 145-2 "PI capacita and "Pairset cap	T 29, items 15 ance during pacitance du	Comment Status D and 16: MDI_POWER states for sing Iring MDI_POWER states for	le-signature PI dual-signature	PD Power Os" 9 PDs"	We can't just change guaranteed to work i Proposed: 30V - 42V = Von_PE
MDI_POW	ER states ha nedy	aven't existed for a while now			30V - 36V = Voff_PL 36V - VPort-2P min VPort_PD-2P =
Replace ite "Single-sig and item 16 "Dual-signa	em 15 descrij nature PD ca 6: ature PD pair	ption by: apacitance while in INRUSH, rset capacitance while in INR	POWER_DEL USH, POWER	AY, or POWERED" DELAY, or POWERED"	SuggestedRemedy - Change VOff_PD r - Add sentence after
Proposed Resp PROPOSE	oonse D ACCEPT.	Response Status W			"The PD may turn of for longer than TCU"
005					Proposed Response
003					TFTD
TFTD HS What about	t SEMI_PWI	R_xxx			OOS
Propose "ir	nrush, power	delay or powered states."			WFP

actis	C/ 145 SC 145.3	.8 P 200	L 16	# r01-238
	Yseboodt, Lennart	Philips Light	ing	
nical ons in	Comment Type TR	Comment Status X		Pres: Yseboodt8
	Table 145-29, item	18: VOff_PD is a range from 30	0V to VPort_PD-2F	° min.
n into	This is in direct cor conditions that requ	tradiction with the peak and tra uire the PD to continue operatin	nsient specification g, but both cause ^v	n, both of which are /PD to go into the
36	In addition, per the NOPOWER state,	state diagram, drawing peak po which should never happen.	ower would warrant	a loop through the
PD Power	We can't just chang guaranteed to work	ge the max value though, as for in the VPort_PD-2P range.	normal operation a	a PD is only
	Proposed:			
	30V - 42V = Von_F 30V - 36V = Voff_F 36V - VPort-2P mir VPort_PD-2P	PD ==> PD shall turn on in this PD ==> PD shall turn off in this r ==> PD may turn off if conditi ==> PD shall stay on in this rar	range ange on persists longer nge	than TCUT min
=D"	SuggestedRemedy			
WERED"	- Change VOff_PD - Add sentence afte Off_PD." as follows "The PD may turn	max to 36 volt. (# This is the m er p201,line 6: "The PD shall tur ::	inimum voltage du n off at a voltage in	ring transients) In the range of V
	for longer than TCL	JT min".		
	Proposed Response TFTD	Response Status W		
	OOS			
	WFP			

Pa 200 Li 16

C/ 145 SC 145.3.8.1	P 201 L Silicon Laboratories	. 16 # [01-322	C/ 145	SC 145.3.8.2.	1 Ph	P 201	L 37	# r01-239
Comment Type F	Comment Status X		PD Power	Comment Ty	De TR	Comment Stat	tus D		PD Power
It is confusing that mult SuggestedRemedy Change the text to: When the PD is in POV transitions to NOPOWI invalid detection signat and show MPS.	WER_DELAY or POWERED and V ER and - depending on the value of ture, and may or may not draw mark	ence. od falls below VOff_f Vpd - may show a v current, draw any c	PD, the PD alid or lass current,	A PD has consump - P_Auto - PDMaxl - PClass_ A succes	three different tion, with prece class_PD PowerValue _PD sful DLL negot	t parameters that endence for the le	t govern it's ma esser value in ne P_Autoclass	aximum DC averag this order: s_PD limit.	e power
Proposed Response	Response Status W			The input	average powe	er exceptions curr	rently do not ta	ake PDMaxPowerV	alue into account.
IFID				In 145.3.8 145.3.6.2	3.2 we should ().	cluster all of the F	PD power requ	irements (Autoclas	s currently sits in
Wall für 236				SuggestedRe	medy				
				- Change "For sing 510 or at - Change "For dual to: "For dual 355, whe - In 145.3 "The max PDMaxPu averaged to: "The max	e-signature PI iove 712, wher : -signature PDs -signature PDs n additional inf 2.8.2 (line 26) c cimum average owerValue in 1 over a 1 seco	Ds assigned to Cl Ds assigned to Cl additional inform additional inform assigned to Class assigned to Class ormation" change: power, P Class_ 45.5.3.3.3, include nd sliding window	lass 6 or Class nation" ss 5, when add ss 5 and a PD _PD or P Class Jing any peak v."	s 8, when additiona s 8, and PDMaxPov ditional information MaxPowerValue_m s_PD-2P in Table 1 power drawn per 14	I information" verValue set to " node(X) set above 45-29 or 15.3.8.4 is
				PDMaxP power dra "The PD negotiate classifica - Replace "The PD below V I the PD re by:	owerValue in 1 awn per 145.3. new paragrap shall not draw s a higher pow tion as defined on page 196- shall not draw Reset_PD max equested Class	45.5.3.3.3, **or F 8.4 is averaged of h to 145.3.8.2: more power than ver level, up to the l in 145.5." 197, line 54: more power than c, unless the PD c, through Data Li	Autoclass_P over a 1 secon P Autoclass_ e PD requeste P Autoclass_ successfully n ink Layer class	D in 145.3.6.2**, ir d sliding window." PD, unless the PD d Class, through D PD at any point un egotiates a higher sification as defined	cluding any peak successfully ata Link Layer il V PD falls power level, up to l in 145.5."
TYPE: TR/technical require COMMENT STATUS: D/dis	ed ER/editorial required GR/genera spatched A/accepted R/rejected	I required T/technic RESPONSE STATI	al E/editorial G/ge JS: O/open W/writ	eneral ten C/closed L	J/unsatisfied Z	/withdrawn	Pa 201 Li 37		Page 51 of 63 11/3/2017 11:51:00 Al

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"The PD is restricted to a maximum power draw of P Autoclass PD until the PD successfully negotiates a higher power level through Data Link Layer classification as defined in 145.5."

Proposed Response Response Status W PROPOSED ACCEPT.

OOS

TFTD HS I'm surprised this was not TFTD. "PDMaxPowerValue set to 510" is a bit suspect

C/ 145	SC ·	145.3.8.4	P 203	L 25	#	r01-2
Brillhart, T	heodore)	Fluke Corporation			
Comment	Type	т	Comment Status X			PD Power

Comment Type T Comment Status X

The note under Figure 145-30 points out that a dual signature PD may have a single load. It does not indicate whether that common load is isolated from the pair-sets or not. This implies that a dual signature PD might tie Vpse- (Mode A) to Vpse- (Mode B), and leaving Vpse+ (mode A) and VPse+ (mode B) independent. This would meet all the requirements for measuring signature resistors and classification currents. Alternatively, the PD could tie Vpse+ (Mode A) to Vpse+ (Mode B) together, leaving the negative sides independent. This would also meet all the signature and classification requirements. However, the first connection would prevent the PSE from correctly measuring currents on the low side of the PSE output, and the second would prevent the PSE from measuring currents on the high side of the PSE output. Since the specification seems to allow both, there is no way to create a reliable connection check from the PSE.

It would appear that somewhere in the specification, a dual signature PD must be constrained to prevent 'sharing' of current between the two pairsets. This constraint does not appear to exist in the current draft. Recommend to explicitly add this constraint. One place to do this might be in the definition of a dual-signature PD; section 1.4.186a.

SuggestedRemedy

Page 24, SubClause 1.4, line 19

From:

1.4.186a dual-signature PD: A PD that has independent detection signatures, class signatures, and maintain power signatures on each pairset (See IEEE 802.3, Clause 145).

Change to:

1.4.186a dual-signature PD: A PD that has independent detection signatures, class signatures, and maintain power signatures on each pairset, and where outgoing and return currents related to detection signatures, class signatures, and maintain power signatures are restricted to that pairset. (See IEEE 802.3, Clause 145).

Note: this is one among several likely options for introducing this constraint into the standard. The commenter is not wed to this proposal and will likely accept any resolution that produces clear guidance.

Proposed Response Response Status W

OOS

TFTD

TFTD YD

"OBE this comment to r01-463. The proposal as written is costly and not practical. It is recommended to use what is already working in the field which is to require not tying the negative rails only, keep negative rails isolated during detection and classification and require PSE to measure current on the negative rails.."

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C/ 145 SC 145.3.8. Yseboodt, Lennart	6 P 204 Philips Lighting	L 25	# r01-242	Cl 145 Lemahieu	SC , Joris	145.3.8.6	P 204 ON Semicon	L 40 ductor	# r01-371
Comment Type TR During the last meetir ambiguous and requir	Comment Status X ng it was identified that "Source re re-simulation of the transient	resistance" an requirements.	Pres: Yseboodt4 d "Source current" are	Comment It is co Suggested	<i>Type</i> onfusing dRemec	GR what is ac	Comment Status X stually meant by The Sourc	e current specifi	Pres: Yseboodt4 ed in Table 145-30.
SuggestedRemedy Adopt yseboodt_04_0	0117_pdtransients.pdf			The S single	ource c -signatu	urrent spec ire PDs, a	cified in Table 145-30 is act voltage source with a curre	ually the per pai nt limit of twice t	rset current limit. For his value may be used.
Proposed Response TFTD WFP	Response Status W			Proposed TFTD WFP	Respor	ise	Response Status W		
<i>Cl</i> 145 <i>SC</i> 145.3.8. Lemahieu, Joris	6 P204 ON Semicond	L 40 uctor	# r01-372	TFTD Are yo	YD ou askin	g to add th	is text? Where?		
Comment Type GR It is confusing what is	Comment Status D actually meant by The Source	resistance spe	Pres: Yseboodt4 cified in Table 145-30.	C/ 145 Lemahieu	SC , Joris	145.3.8.6	P 204 ON Semicon	L 47 ductor	# r01-373
SuggestedRemedy The Source resistanc single-signature PDs, this value.	e specified in Table 145-30 is a the equivalent resistance betw	actually the per veen source and	pairset resistance. For d load is actually half	<i>Comment</i> "aThe This s pairse	<i>Type</i> source seems to at DC loo	G resistance contradic op resistan	Comment Status X is the effective 4-pair resis t with 'Rch' in the table that ce, as defined in Table 145	tance." is defined as "R -1." on page 106	Pres: Yseboodt4 Ch is the maximum 6 in 145.1.3.
Proposed Response TFTD	Response Status W			Suggested Repla	d <i>Remec</i> ce Rch	' <i>ly</i> by Rchan (or replace 4-pair by pairset.	1 0	
WFP				Proposed TFTD	Respor	ise	Response Status W		
TFTD YD Are you asking to add	I this text? Where?			WFP					

Pa **204** Li **47**

C/ 145 SC 145.3.8.	6 P 204 ON Semicono	L 50	# r01-325	Cl 145	SC 145.3.8.0	6 P 204 ON Semico	L 52	# r01-393
Comment Type GR	Comment Status X		Pres: Yseboodt4	Comment T	vpe GR	Comment Status X		Pres: Yseboodt4
"When transient TR1 TTransient as defined in Table 145- It is unclear what exa PSE side as well as F power limits at PSE a clearly defined.	or TR2 is applied, the PD shal 30." ctly is meant by 'the operating PD side. Moreover because the nd the PD are no longer "in sy	I meet the opera power limits'. The voltage at the nc". Alsothe 'aft	ating power limits after he limits could be at PI is no longer static the er TTransient' is not	What is TR1 an backup TR3 is a related having a expect	the benefit of d TR2 cover lo power supplies a very fast (0.7 to load change a lower interme the Cport to dis	defining TR3? ng ("lasting more than 250 s. 1us is way below 250us an sone would expect the initi ediate voltage. If the fall and scharge and recharge much	is") transients rel d even 30us). Fo al and final voltag I rise times are si	ated to the switchover of r relatively fast transients ge to be the same and mall, one would not
SuggestedRemedy				Peak cu For the	irrents way bei rest the definit	low IIIm are listed and experi- ion seems completely arbiti	cted to happen.	e 5A 1 50hm and 4ms
Referring back to 802 used, the term "PSE I Also note 'TTransient	.3-2015_SECTION2.pdf (p653 owerbound template" (p170-1 is the same as 'TLIM min'.) where "PD up 72 in Draft3.1) is	perbound template" is s related.	come fr dual sig The def	om. Also how s nature? inition of TR3 r	should the 1.50hm and 5A l	be interpreted for	single signature and
Replace "the operatin defined in Table 145- 145-25)"	g power limits after TTransien 30." by "the PSE lowerbound to	t as emplate (see Fi	gure 145-24 and Figure	SuggestedF I think it	Remedy is better to jus	st delete the TR3 requireme	nt.	
Proposed Response	Response Status W			Proposed R	esponse	Response Status W		
TFTD				IFID				
005				WFP				
WFP				C/ 145 Darshan, Ya	SC 145.3.8. 9 air	9 P 205	L 24	# r01-461
				Comment T Missing	ype E link to Annex	Comment Status D 145A.		PD Power
				SuggestedF Append	Remedy the text "See J	Annex 145 for details" after	line 24	
				Proposed R PROPC	esponse SED ACCEPT	Response Status W		
				Append	the text "See	Annex 145A for details." aft	er line 24	
				TFTD H There a and red Propose	IS re already quit undant. e reject.	e a few references in appro	priate locations to	o Annex 145A. Editorial

Pa **205** Li **24**

C/ 145 SC 145.3.8.9 P 205 L 26 # r01-244 Vseboodt Leppart Philips Lighting	C/ 145 SC 145.3.8.9 P205 L 50 # r01-287
Comment Trace TD Comment Office D	
Comment type TR Comment status D PD Power Table 145-31 (Maximum pair-to-pair current unbalance) is the duplicate of 145-17 for the PD section. Some modifications are needed to make it work here. SuggestedRemedy 1. ICon is not a parameter known to the PD. Replace ICon by "PClass_PD / VPD" 2. Add a footnote to assigned Class "1 to 4" that says "There is no maximum unbalance current requirement for these assigned Classes." 3. By duplicating the Table we get a duplicate parameter name.	 "The PD PI connector (jack) when mated with a specified balanced cabling connector (plug) shall meet the requirements of 145.3.8.9" - this is nonsensical. This is a dual of a comment on 145.2.8.5.1. There is actually only one other requirement (one for single-sig, and the same for dual-sig) listed in 145.3.8.9 and I believe the intent is that that requirement should be stated so that it applies when the PD PI is mated to the specified balanced cabling connector. SuggestedRemedy delete page 205 lines 50-51 (the quoted sentence in the comment), and insert new
Even though the values are the same, we should give them proper names. Rename I_Unbalance-2P to I_Unbalance_PD-2P in subclause 145.3.	paragraph after the sentence ending on line 34 of page 206 (previous paragraph begins on line 29 "Dual-signature PDs shall not exceed"), new paragraph to read ""The unbalance
Proposed Response Response Status W	current requirement for both single-signature and dual-signature PDs applies at the PD PI connector (jack) when mated with a specified balanced cabling connector (plug)."
PROPOSED ACCEPT.	Proposed Response Response Status W
TFTD HS We should have one table and reference it as needed. We do not want the PSE/PD numbers to diverge.	PROPOSED ACCEPT. WFP
C/ 145 SC 145.3.8.9 P 205 L 50 # r01-356 Stewart, Heath Analog Devices Inc. #	TFTD YD The remedy is OK however Figure 145-31 seems not sync to the proposed text. See
Comment Type TR Comment Status D Unbalance It is extremely unclear how to interpret the shall which shalls the entire sections requirements. Are the requirements limited to the sections shalls? Thus did we shall the shall? Unbalance	the new text proposed.
SuggestedRemedy	
Delete The PD PI connector (jack) when mated with a specified balanced cabling connector (plug) shall meet the requirements of 145.3.8.9.	
Proposed Response Response Status W	
PROPOSED ACCEPT IN PRINCIPLE.	
OBE by 287	
TFTD HS Not OBE It is extremely unclear how to interpret the shall which shalls the entire sections requirements. Are the requirements limited to the sections shalls? Thus did we shall the shall?	

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Page, Line Pa **205** Li **50** Page 55 of 63 11/3/2017 11:51:00 AM

Cl 145 Yseboodt	SC 145.3.8.9 Lennart	P 206 Philips Lightin	L 25	# r01-24	46	C/ 145 Stover, Day	SC 145.3.8.9	P 207 Analog Dev	L 17 ices Inc.	# r01-378
Comment	Type T (Comment Status D	.а	Pres: D	arshan5	Comment	Гуре Т	Comment Status X		Pres: Darshan1
"Singl duty c pair"	e-signature PDs shal cycle, and shall not ex	I not exceed I Unbalance cceed I Peak-2P-unb , as	-2P for longer tl defined in Equa	nan T CUT min a ation (145-12) on	and 5 % any	Vsourc statem resista to achi	e appears to be ents on page 20 nce model incluc eve VPort_PSE-	"any voltage in the range c 6. Vsource is specified beh les PSE resistance contrib 2P at the virtual PSE outpu	of Vport_PSE-2P ind Rsource, wh utions. Actually, ut.	' per the shall ile Rsource lumped Vsource should be tuned
This li	nks back to a PSE pa use we have local PD	arameter in the PD section	on. We are now	able to clean tha	t up	Suggested	Remedy			
Note:	values are I_LIM-2P	minus 2mA.				Split R betwee	source into Rsou n Rsource1 and	rce1, Rsource2. Specify V Rsource2. TFTD values of	source as Vport_ f Rsource1, Rsoເ	PSE-2P, measured
Suaaestee	dRemedv					Proposed I	Response	Response Status W		
- To T Assig	able 145-31, add nev	v parameter I_Unbalance	e_peak-2P:			TFTD				
1 to 4 5	PPeak_PD 0.56	/ VPD				WFP				
6 7	0.7 0.827					TFTD I Given 1	_Y hat we're dealing	g with a 10mV difference, t	his is a lot of con	nplexity for nothing.
8 <i>Proposed</i> PROF	0.994 Response R POSED ACCEPT.	esponse Status W				TFTD ` No clea darsha	YD ar remedy was si n_01_1117Rev0	upplied however David may 01.pdf for remedy.	y be correct. Yair	to verify.See
WFP						<i>Cl</i> 145 Darshan, Y	SC 145.3.8 air	P 207	L 22	# r01-462
TFTD	LY na up with Vair's com	mont on this roplace the	rowe 5 through	9 with		Comment	Type T	Comment Status X		Pres: Darshan1
a sing While	le row "5 to 8" "ILIM-2 this re-introduces a li	2P - 0.002". ink back to the PSE sect	ion, that is the lo	esser evil		Per the PI for u	atest changes	we did to include Equipmen Figure 145-31 and NOTE 1	nt connector in th I in line 33 need	e PSE PI and in the PD some adjustments.
compa	ared with duplicating	numbers all over the place	ce and risking th	ney get out of syn	IC	Suaaested	Remedv	0		
TFTD	YD					Adopt	darshan_01_111	7.pdf		
The n	umbers need to be up	pdated per darshan_05_	1117Rev001			Proposed I TFTD	Response	Response Status W		
TFTD WFP	HS paul_1117_01					WFP				
						TFTD Need o 145-22	YD heck that the ne and 145-31. Se	w proposed text for comme e darshan_01_1117Rev00	ents 286 and 287 1.pdf.	is sync with drawing

Pa **207** Li **22**

C/ 145 Darshan, Y	SC 145.4.1.1.1 ′air	P 210	L 7	# r01-4	63	C/ 145 Darshan, Y	SC ′air	145.4.4	P 213	L12	# r01-4	64
Comment To ens	<i>Type</i> T sure proper operati	Comment Status X	detection, we	e need to require t	AES	Comment After a	<i>Type</i> ddina 2	T 2.5/5/10G	Comment Status D	aximum frequency	range in the text	AE
PSE m (We ha Switch The PI when o As a re do, it s In addi as PDI	heasures the curre ave already a requing the positive sic D must show valid connected to the P esult, we don't nee surely make the station 79.3.2.6d.3 net ISO-1.	to not the same side it switch irement that PSE will switch le is possible as an option l detection on each pairset s SE above. d to require dual-sigs to no indard clearer. and supdated and will be ac	the sthe currern the current o but not instead et per the dua tie negatives ddressed in se	ntee negative sic of the negative sic l of the negative s l-signature definit together however parate comment i	de. side). ions r if we marked	Suggested Chang To: "** the de Proposed I PROP	acitor i Remed e from Capac vice." Respoi	mpedance dy " **Capacit itor impeda nse ACCEPT	tor impedance less than 1 ohm from 1 ance less than 1 ohm from 1 ance less than 1 ohmrom <i>Response Status</i> W IN PRINCIPLE.	MHz to 100 MHz" 1 ohm from 1 MHz 1 MHz to maximum	ιο 100 MHz" ι operating frequ	ency of
Suggestea 1) On "An Er both cu To: "An the cu 2) On "An en condu To: "An en condu 3) On shall n	IRemedy page 210 line 7, ch nvironment A PSE onductors." In Environment A P rrent through it. It is page 210 line 18, c ivironment B PSE ctor. It is allowed to avironment B PSE ctor and shall mea page 209 clause 1 ot tie the negative	ange from: shall switch the more nega SE shall switch the more n s allowed to switch both co hange from: that supports 4-pair power : switch both conductors." that supports 4-pair power : sure the current through it. 45.4.1 after line 38, add the pairs during detection and	tive conductor egative condu nductors." shall switch the shall switch the It is allowed to of collowing text classification s	. It is allowed to s ctor and shall me e more negative e more negative switch both cond : ODual-signature states.O	witch asure ductors." e PDs	OOS Chang To: "** of the TFTD Takes unspec	e from Capac device LY a testa cified u	" **Capacit itor impeda " ble, well d pperbound	tor impedance less than ance less than 1ohm fron lefined range, and turns i d.	1 ohm from 1 MHz n 1 MHz to maximu t into an untesteabl	to 100 MHz" m operating freq ∋ range with	luency
Proposed A TFTD OOS I don't all spe PSE is TFTD "After	Response know how you req cs shall be met on s measuring? YD reading David A re	Response Status W uire a PSE to measure cur the negative conductors, b sponse, I am suggesting th	rent somewhe ut how will you e following rev	re. I can see sayi u ever know wher vised remedy:1) C	ing that e the On							

negative conductors"""

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

Pa 213 Li **12**

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AES

C/ 145	SC 1	45.4.4		P 213	L 21	# r01-465	C/ 145	SC	145.4.4	P 214	L 33	#	r01-466			
Darshan, `	Yair						Darshan, `	Yair								
Comment	Туре	т	Comment Sta	tus D		AES	Comment	Туре	т	Comment Status D			AES			
The te 35. Th	ext "1) Fo ne PSE lo and the	or a PSE, the bad, R, in Fig	e PI that supp gure 145-35 is	lies power is te adjusted so t	erminated as ill hat the PSE ou	ustrated in Figure 145- Itput current, lout, is	After adding 2.5/5/10G we need to update the maximum frequency range in the text "**Capacitor impedance less than 1 ohm from 1 MHz to 100 MHz"									
we ha	d only 35	50mA. Need	to adjust it to	Icon or Icon-2	P.		Suggested	dRemed	dy							
Suggestee	dRemedy	/					Change from" **Capacitor impedance less than 1 ohm from 1 MHz to 100 MHz" To: "**Capacitor impedance less than 1ohmrom 1 MHz to maximum operating frequency the device."									
Chang	ge from:	"1) For a PS	SE, the PI that	t supplies pow	er is terminate	d as illustrated in										
currer	e 145-35. nt, lout, is	s 10 mA and	ad, R, In Figu I then 350 mA	, while measu	djusted so that ring Ecm_out c	in the PI."	Proposed	Respor	nse	Response Status W						
To: "1	1) For a F	PSE, the PI	that supplies	ower is termi	nated as illustra	ated in Figure 145-35.	PROF	OSED	ACCEPT.							
mA ar while	nd then load, nd then lo	con for singl	e-signature P	D or Icon-2P c	n each pairset	for dual-signature PD,	OOS									
Proposed	Respons	se F	Response Stat	us W			TFTD	LY	مام سمال	ofined renge and turne i	t into on untootook	la ranga u				
PROF	POSED A	CCEPT IN	PRINCIPLE.				unspe	cified u	pperbound	l.	t into an untesteat	ne range w	VILLI			
005							TETD	YD								
TFTD							Correct the typo in the remedy: "**Capacitor impedance less than 10hm from 1 MHz to maximum operating frequency of the device."									
Shoul	d we also	o not use lha	old? What wa	s 10m∆ mean	t to represent?	MPS can be pulses	C/ 145	SC	145.4.6	P215	L 39	#	r01-467			
so tec	hnically	the lout can	be 0 for long	periods of time	e (300ms)		Darshan,	Yair								
TFTD	LY						Comment Type T Comment Status X AE									
ICon a	and ICon	-2P are dyn	amic values d	epending on s	ystem conditio	ns.	The coupled noise of 1mV for 2.5GHz to 10GHz is too small.									
YOUW	ant to te	st at ICable	(and 2xiCable	e), not iCon.			Suggested	dRemed	dy							
TFTD	YD	a far Ibald in	ite DC form				Chang	ge to 2n	nV							
The h	UIIA was		IIS DC IOIIII.				Proposed	Respor	nse	Response Status W						
							TFTD									
							Is the	re any r	easoning o	or justification behind this	? (not my area of	expertise)				
							TFTD	LY is only	one reaso	n						
							THEFE	13 Only								
							TFTD Check	YD king with	n experts.							
TYPE: TR	/technica	al required E	ER/editorial re	auired GR/ae	neral required	T/technical E/editorial G	general			Pa	215		Page 58 of 63			

Pa **215** Li **39**

C/ 145	SC 145	5 P22	22	L 28	# r01-251	C/ 145	SC	145.5	P 222	L 28	#	r01-250
Yseboodt,	Lennart	Philips	s Lighting			Yseboodt,	Lennar	rt	Philips Lighting	9		
Comment	Туре Т	Comment Status	Х		Pres: Yseboodt5	Comment	Туре	TR	Comment Status X			Pres: Yseboodt5
There This is	is a basic o what happ	onflict between DLL power ens:	r negotiation	and Autoclass	i.	There i	s a ba	sic timing	issue in DLL power negotiation	ons which is c	urrently no	ot addressed.
CC, De PD rec The PS budge DLL is Per the Class	etect, Class quests Auto SE perform t. initialized e DLL state	s happens. An initial Class class s the Autoclass measurem diagrams, the PSE uses a	is assigned tient and bas a PSE_INITI	and power allo ed on this redu AL_VALUE bas	cated. Assume the ices the power sed on the assigned	When - - it mu (throug - it mu to lowe When - - it mu	a PD n st cont h pd_r st wait er MPS a PD n st wait	egotiates form to the max_powe for the P current b regotiates	power DOWN: e newly requested power imm er) SE to be in sync before it trigg efore the PSE is ready for it) power UP: SE to be in sync before change	ediately as th ers power up	e requests date (othe	s goes out rwise it can flip
At this puts in	point the A	utoclass optimization is for atedPowerValue is the amo	rgotten aft ount of powe	er all, whatever r the PSE guar	r power the PSE antees at the PD PI.	- it mu require	st imm ments	nediately t as the re	rigger power update to conform quest goes out	n to potential	ly higher N	MPS
These			مغادلة المحمد			Suggested	Remed	dy				
invalid The ro value.	ated becau ot cause o The whole	se the value in PSEAllocat this is that DLL always rec point of Autoclass is that n	edPowerVa duires both f either party	lue prevails. PSE and PD to necessarily know	negotiate to some ows about cable	This is yseboo	sue, as odt_05 <u>-</u>	s well as t _0117_dll	he Autoclass DLL issue is add autoclass.pdf.	lressed in		
resista	nce and po	ower at the PD PI.				Adopt	yseboo	odt_05_01	17_dllautoclass.pdf			
We ne DLL or	ed a way to peration is	o indicate at DLL level that suspended.	Autoclass is	being used ar	nd that the normal	Proposed F TFTD	Respor	nse	Response Status W			
Ideally go bac	what I wou k to "norm	Ild want is that a PD or PS	E can, at an	y time, switch o	out of this mode and	WFP						
Thus, PSEAI	l would sug locatedPov	gest that we take a magic verValue fields that indicate	number for es that the p	the PDRequest ower allocation	edPowerValue and = the most recent	C/ 145 RAN, ADEI	SC E	145.5.3	P 223 Intel Corporati	L 19	#	r01-304
A logic	al value fo	this would be 0xACAC.				Comment	Tvpe	т	Comment Status D			Fditoiral
So, wh PDRec	at would h questedPor	appen after a Physical Lay verValue=0xACAC which in	er Autoclass	s is that the PD oclass.	initializes with a	"diagram" was changed to "diagrams" in the previous paragraph, but this paragraph still has "diagram" referring to two different diagrams, twice.						ragraph still
If it do	esn't, the F	SE can set PSEAllocatedF	PSEAlloca	to the assigned	I Class.	Also, fi which i Dual-si	gure 1 s optio	45-42 (as onal. Is the	numbered in the clean docum shall appropriate for it too?	ient) seems to Is there a pai	o deal with rallel requi	n Autoclass, irement for
This w value,	ay, a PD tr and then la	at operates under Autocias	ss, is able to s using DLL.	renegotiate to	o a fixed PD PI	Suggested	Remer					
Suaaestea	Remedv		0			Chang	e "diac	iram" to "o	liagrams" twich in the second	paragraph.		
Adopt	yseboodt_	05_0117_dllautoclass.pdf										
Proposed	Response	Response Status	w			Consid	er wha	at to do wi	th the Autoclass state diagram	1.		
TFTD						Proposed PROP	<i>Respor</i> DSED	nse ACCEPT	Response Status W			
OOS						TFTD f	or Aut	oclass sh	all			
WFP												
TYPE: TR/	technical r	equired ER/editorial require	ed GR/gene	eral required T	/technical E/editorial G/o	general			Pa 22 :	3		Page 59 of 63

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn Li 19 11/3/2017 11:51:00 AM SORT ORDER: Page, Line

C/ 145	SC 145.5.5.5	2 P 22	6 L 28	# <u>r01-4</u>	68	C/ 145	SC 145.5.	5.1	P 245	L 20	# r01-400		
Darshan, Ya	air					Skinner, John							
Comment Ty	ype T	Comment Status	D		DLL	Comment Typ	e E		Comment Status D		DLL		
In the pse_power_review function definition, missing "or changes in PD requested power value" to the text "This function evaluates the power allocation or budget of the PSE based on local system changes.". See for reference how pd_power_review is defined.						The statement "When the PSE is not in sync with the PD, the PSE is allowed to change its power allocation." is too broad, based on the conditions shown in Figure 145-39. The transition from PSE_POWER_REVIEW to MIRROR_UPDATE is governed by the							
SuggestedRemedy Change from " "This function evaluates the power allocation or budget of the PSE based on local system changes.""							conditions: Either (pse_new_value < PSEAllocatedPowerValue) OR (PSEAllocatedPowerValue=MirroredPSEAllocatedPowerValueEcho). Therefore, the transition can only occur when the PSE is reducing the allocation OR when the PSE and PD are in sync.						
Proposed Re PROPO		Change the statement in line 20 to "When the PSE is not in sync with the PD, the PSE is allowed to reduce its power allocation.". Alternatively, remove the statement, as the conditions are correctly discussed in the paragraph starting on line 23.											
TFTD LY "This function evaluates the power allocation or budget of the PSE based on local system changes or changes of the PD requested power value."						Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.							
												C/ 145	SC 145.5.3.5
Yseboodt, Lennart Philips Lighting						Change the statement in line 20 to "When the PSE is not in sync with the PD, the PSE is							
Comment Ty	ype ER	Comment Status	D		Editorial	allowed to		s pow					
In Table 145-41 we find the mappings between state diagram variables and Clause 30 objects. For dual-signature, we've used the notation "PDRequestedPowerValueEcho_alt(X=A)" to indicate we refer to variable PDRequestedPowerValueEcho_alt(A).						TFTD LY We should not textually describe behavior covered by the state diagram. Remove quoted sentence.							
Given th notation	nat we now also no longer feels	use "P" as a variable right.	pointing to the active	e state diagram, tł	his								
SuggestedR	Remedy												
Replace	e in Table 145-41	every instance of "(2	X=A)" with "(A)" and	"(X=B)" with "(B)".									
Proposed R PROPO	esponse SED ACCEPT.	Response Status	w										
oos													

TFTD YD Not clear how this comments resolves 460

Pa **245** Li **20**

C/ 145	SC 145.5.6.2	P 247	L 4	# r01-401	C/ 145	SC 145.7.2.4	P 252	L 19	# r01-310			
Skinner, J	lohn				RAN, ADE	E	Intel Corpor	ation				
Comment	Type E	Comment Status D		DLL	Comment	Туре Т	Comment Status X		Pres: Chabot1			
The s powe 44. Tl gover	tatement "When th r allocation." is too ne transition from F ned by the conditio	e PSE is not in sync with th broad, based on the condit 'SE_POWER_REVIEW to ns: Either (pse_new_value	ie PD, the PSE ons shown in F MIRROR_UPD/ alt(X) <	is allowed to change its igures 145-43 and 145- ATE in Figure 145-43 is	ltem " 21.6.2 <n> is</n>	*MID" has status definition: "one a required"	"O/1" which means it is mu and only one of the group o	itually exclusive w f options labeled	vith item "*CL" (per by the same numeral			
PSEAllocatedPowerValue_alt(X)) OR (PSEAllocatedPowerValue_alt(X)=MirroredPSEAllocatedPowerValueEcho_alt(X)). The transition from PSE_POWER_REVIEW to MIRROR_UPDATE in Figure 145-44 is governed by the conditions: Either (pse_new_value_alt(P) < PSEAllocatedPowerValue) OR (PSEAllocatedPowerValue_MirroredPSEAllocatedPowerValueEcho)_Therefore_in_both						Is Midspan PSE incompatible with "Implementation supports Physical Layer classification"? From reading the corresponding subclauses, 145.2.3 and 145.2.7, it isn't clear to me why this is so.						
Suggeste	dRemedy				SuggestedRemedy							
Change the statement in line 4 to "When the PSE is not in sync with the PD, the PSE is allowed to reduce its power allocation.". Alternatively, remove the statement, as the conditions are correctly discussed in the paragraph starting on line 7.						Edit the PICS item list to make it correct.						
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.						If there is indeed a reason for this mutual exclusion, include clear statements in the referenced subclauses. Proposed Response Response Status W						
												OOS
Chan allow	ge the statement in ed to reduce its poy	line 4 to "When the PSE is ver allocation."	s not in sync wit	h the PD, the PSE is	WFP							
TETO					C/ 145	SC 145.7.3.3	P 265	L 12	# r01-369			
TFTD LY We should not textually describe behavior covered by the state diagram. Remove quoted sentence.						Joris	ON Semico	nductor				
						Type G	Comment Status D		PICS			
C/ 145	SC 145.7	P 250	L1	# r01-318	"Meet the operating power limits after TLIM min" It is unclear what exactly is meant by 'the operating power limits'.							
Jones, Ch	had	Cisco System	s, Inc.		Suggested	Remedy						
Comment Type E Comment Status D Pres: Chabot1				Re-use "In accordance with ILIM-2P and TLIM in Table 145-16" as in PSE76								
Submitted by the Chair on behalf of Craig Chabot: PICS need to be updated to reflect changes in the normative text of the Clause 145						Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE						
Suggeste	dRemedy											
Adop	t changes in chabo	t_01_1117.pdf			OBE b	by ???						
Proposed	Response	Response Status W			TFTD							
TFTD	1				will bo	OBE by Veebee	dt1 and Chabat1					
WFP						OBE BY ISEDOO						

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Page, Line Pa **265** Li **12** Page 61 of 63 11/3/2017 11:51:00 AM C/ 145B SC 145B.1 P 281 C/ 145B P 283 L45L 21 # r01-475 SC 145B.1.3 # r01-477 Darshan, Yair Darshan, Yair Comment Type т Comment Status X Pres: Darshan2 Comment Type T Comment Status X Annex For clarity, to add drawings to Annex 145B.1 demonstrating the definition of In "Figure 145B-8NPSE implementing CC DET SEQ=2. do cxn chk result is dual. parallel/staggered detection simultaneous power on", remove the text "simultaneous power on" which may be incorrect for dual-signature PD case. SuggestedRemedy SugaestedRemedv Adopt darshan 02 1117.pdf remove the text "simultaneous power on" which may be incorrect for dual-signature PD Proposed Response Response Status W case TFTD Proposed Response Response Status W TFTD OOS OOS WFP C/ 145B SC 145B.1.3 P 283 L 32 # r01-476 This diagram is showing simultaneous power on, right? Darshan, Yair C/ 145B SC 145B.1.3 P284 L2 # r01-478 Comment Status X Comment Type T Annex Darshan, Yair The text "Figure 145B-8 illustrates a PSE implementing CC DET SEQ=2 when the Comment Type T Comment Status X Annex connection check result is dual and pd_4pair_cand is initially TRUE." is incorrect. The text "Figure 145B-9 illustrates a PSE implementing CC DET SEQ=2 when the "pd_4pair_cand is initially TRUE" should be "class_4PID_mult_events_pri or connection check result is dual and pd_4pair_cand is initially FALSE." is incorrect. class 4PID mult events sec is TRUE" "pd 4pair cand is initially TRUE" should be "class 4PID mult events pri or SuggestedRemedy class 4PID mult events sec is TRUE" Change from: "Figure 145B-8 illustrates a PSE implementing CC_DET_SEQ=2 when the SuggestedRemedy connection check result is dual and pd 4pair cand is initially TRUE." Change from: "Figure 145B-9 illustrates a PSE implementing CC DET SEQ=2 when the To: "Figure 145B-8 illustrates a PSE implementing CC DET SEQ=2 when the connection check result is dual and class_4PID_mult_events_sec is TRUE." connection check result is dual and pd 4pair cand is initially FALSE.' To: "Figure 145B-9 illustrates a PSE implementing CC DET SEQ=2 when the connection Proposed Response Response Status W check result is dual and class 4PID mult events sec is TRUE." TFTD Proposed Response Response Status W TFTD OOS OOS Does this match the SD?

IEEE P802.3bt D3.1 4-Pair PoE 1st Sponsor recirculation ballot comments

does this match the SD?

Pa **284** Li **2**

C/ 145B	SC 145B.1.4	P 28	4	L 34	# r01-479						
Darshan, Yair											
Comment Type	e T	Comment Status	Х			Annex					
The text "Figure 145B-11 illustrates a PSE implementing CC_DET_SEQ=3 when the connection check result is dual." is incomplete.											
SuggestedRemedy											
Change from: ""Figure 145B-11 illustrates a PSE implementing CC_DET_SEQ=3 when the connection check result is dual." " To: "Figure 145B-11 illustrates a PSE implementing CC_DET_SEQ=3 when the connection check result is dual and class_4PID_mult_events_sec is FALSE."											
Proposed Res TFTD	ponse	Response Status	w								
OOS											
I thought that SEQ=3 was for staggered turn on of DS PDs. Why do we have to note that the other variable is false? Is SEQ=3 also used for simultaneous power on?											
The definition is "Connection check is followed by staggered detection."											
C/ 145C S	SC 145C.1	P 2 8	37	L1	# r01-42						
Jones, Chad		Cisco	Systems, Ir	IC.							
Comment Type *** Comme	e E ent submitted v	<i>Comment Status</i> with the file 9481760	X)0003-Anne	x_145C_marku	Pres: . p.docx attache	<i>lones1</i> ed ***					
section is new and contains many editorial errors.											
SuggestedRemedy											
see the attached Annex_145C_markup.docx for editorial corrections, submitted for adoption.											
Proposed Res TFTD	ponse	Response Status	w								
WFP											
There are	There are some mistakes that need to be cleaned up in the markup document.										

Pa **287** Li **1**