C/ 177	SC 177.10	P 325	L 29	# 1	Cl 176	SC	176.11	P 300	L15	# 5	
Marris, Art	hur	Cadence Des	ign Systems		Marris, A	rthur		Cadence	Design Systems		
Comment	Type TR	Comment Status A		(bucket,	Commen	t Type	т	Comment Status A			(bucket)
Chang	ge the "enable" co	ontrol variables to a single "re	eset" variablef		Table	e 176–8	needs po	pulating			
Suggestee	dRemedy				Suggeste	dRemed	dy				
In Tab Make	ble 177–6 rename the variable refer	e "Inner FEC enable lane 0" to rence be to 177.6.2.1 (where	o "Inner FEC res Inner FEC reset	set" is defined)	Refe bit re	r to "Tab ferences	ole 45–3– s	PMA/PMD registers" in I	EEE Std 802.3 for t	he correct MDI	O register
Delete	e rows for "Inner I	FEC enable lane 1" to "Inner	FEC enable lan	e 7"	Respons	е		Response Status C			
In Tab	row for "1.2400.0	te rows "Inner FEC enable lar " change "enable" to "reset"	ne 1" to "Inner F	EC enable lane 7" and	ACC Imple	EPT IN I ement th	PRINCIPL	E. ed remedy with editorial	license.		
On pa "45.2.	ge 320 line 53 fo 1.213a"	r the reset variable change tr	ie cross referen	ce from "45.2.1.1.1" to	CI 45	SC	45.2.1.21	3a P92	L13	# 6	
Response		Response Status C			Marris, A	rthur		Cadence	Design Systems		
ACCE	PT IN PRINCIPL	.E.			Commen	t Type	т	Comment Status A			(bucket)
Impler	ment the suggest	ed remedy with editorial licer	ise.		Repl	ace the 8	8 enable b	oits with a single reset bit	in Table 45–177a		
C/ 184	SC 184.9	P535	L15	# 2	Suggeste	edRemed	dy				
Marris, Art	hur	Cadence Des	ign Systems		In Ta in the	ble 45–1 e row for	177a dele [.] 1.2400.0	te rows "Inner FEC enabl)" change "enable" to "res	e lane 1" to "Inner I set"	FEC enable lan	e 7" and
Comment	Type TR	Comment Status A		reset variable	Respons	е		Response Status C			
маке	FEC_reset refere	ence inner FEC control regist	er 1.2400		ACC	EPT IN F	PRINCIPL	.E.			
Suggestee	dRemedy				Reso	lve using	g the resp	onse to comment #1.			
In Tab Chang	ole 184-4 make th ge variable name	ne MDIO bit 1.2400.0 and refe from "FEC_reset" to "Inner_I	erence 45.2.1.2 ⁻ FEC_reset" and	3a also on page 530 line	C/ 178B	SC	178B.15	P 792	L 6	# 7	
47 In Tab	le 45–177a delet	e rows "Inner FEC enable la	ne 1" to "Inner F	FC enable lane 7" and	Marris, A	rthur		Cadence	Design Systems		
in the	row for "1.2400.0)" change "enable" to "reset"			Commen	t Type	т	Comment Status A			(bucket)
On pa	ge 530 line 47 fo	r the reset variable change th	e cross referen	ce from "45.2.1.1.1" to	MDIC	O registe	er bit refer	ences need to be added	to Tables 178B-6 a	nd 178B-7	
45.2.	1.213a				Suggeste	dRemed	dy				
Response		Response Status C			Cons	ider a pi	roposal or	n how to do this during the	e January 2025 802	2.3dj task force	meeting
ACCE		E.			Respons	е		Response Status C			
Resol	ve using the resp	onse to comment #88.			ACC Reso	EPT IN I	PRINCIPL g the reps	E. onse to comment #170			

-				· · · · ·					
C/ 00	SC O	Р	L	# 11	C/ 119	SC 119.3	P162	L 33	# 14
Brown, Ma	itt	Alphawave S	Semi		Brown, Ma	itt	Alphawave Ser	mi	
Comment	Type E	Comment Status A		(bucket)	Comment	Туре Т	Comment Status A		(bucket)
The fo (176.7 Rewrit	rmat used for defi (.4.1), and Inner F re/reformat the co	ning the various status cou EC (177.5.4.1, 184.5.7) va unter definitions in the sam	unters for the PCS ry wildly from clau ne style.	S (175.2.5.3), PMA use to clause.	Error b 200GE PHY re	oin counters are BASE-R or 4000 eceive path per	provided for 800GBASE-R and BASE-R PCS. These counters 174A.7.	1.6TBASE-F are needed	R PCS but not for the for accurate testing of a
Suggested	Remedy				Suggested	Remedy			
Reforr same	nat the counter de format. Use eithei	efinitions in 175.2.5.3, 176. 175.2.5.3 ro 177.5.4.1/18	7.4.1, 177.5.4.1, a 4.5.7 as the temp	and 184.5.7 to be the late.	In Clau that th	use 119 add bin ese counters ar	counters FEC_codeword_error e optional if the PCS is used in	r_bin_i as def a PHY that in	fined in 172.3.6 stating ncludes 200 Gb/s per
Response		Response Status C			lane P	MD.			
ACCE	PT IN PRINCIPLE				Response		Response Status C		
format format Impler [Editor	at the counter de as 175.2.5.3. nent with editoria 's note: CC: 176	efinitions in 176.7.4.1, 177 license. , 177, 184]	.5.4.1, and 184.5	7 to use the same	ACCE In addi FEC_c Clause lane P	PT IN PRINCIP ition to bin cour cw_counter as d a 172, there is n MD"	LE. hters FEC_codeword_error_bin lefined in 172.3.5. Since these o need to restrict the optionality	_i as defined counters are / to " PHYs th	in 172.3.6, also add already optional in nat includes 200 Gb/s per
C/ 177	SC 177.5.4.1.	5 <i>P</i> 319	L 48	# 13	Implen	ment with editori	al license.		
Brown, Ma	itt	Alphawave S	Semi		C/ 176	SC 176.1.3	P 270	L32	# 16
Comment	Туре Т	Comment Status A		(bucket)	Brown Ma	itt	Alphawaye Ser	mi	
The in	dex "i" is typically	used for the lane number.	Since counters n	eed to be defined per	Comment	Type E	Comment Status A		(bucket)
registe used f	or this purpose.	similar bin counters define	d in 174A.6 and 1	76.7.4.1 the index "k" is	The te definiti	erms defined in the	his subclause are not ordered i em alphanumerically according	n a consisten to the rules	it way. Typically for according to the
Suggested	lRemedy				http://v	ines nere: www.ieee802.or	a/3/WG tools/editorial/requirem	nents/words.h	ntml#sort
For the	e bin counters def	ined in 177.5.4.1.5 change	e the index "i" to "I	. Also update Table	Suggested	Remedy			
Response		Response Status C			Reorde	er the terms alp	hanumerically according to the	guidelines.	
ACCE	PT.				Response		Response Status C		
					ACCE Implen	PT IN PRINCIP ment the sugges	LE. ted remedy with editorial licens	se.	
					C/ 177	SC 177.10	P 326	L 9	# 17
					Brown, Ma	itt	Alphawave Ser	mi	
					Comment	Туре Т	Comment Status A		(bucket)
					In Tab	le 177-6 the ena	able bits are never defined in th	is clause nor	are they necessary.
					Suggested	Remedy			
					Remov	ve the enable bi	ts from Table 177-6 and delete	the editor's n	note below.
					Response		Response Status C		
					ACCE Resolv	PT IN PRINCIP	LE. ponse to comment #1.		

Comment ID 17

C/ 176 SC 176.5.4.1.5 P 319 L 48 # 20 C/ 116 SC 116.4 P 150 Brown, Matt Alphawave Semi Alphawave Semi Brown, Matt Alphawave Semi Brown, Matt Alphawave Semi Comment Type T Comment Status R (withdrawn) Comment Type E Comment Status A The index "i" is typically used for the lane number. Since counters need to be defined per lane, this index "i" will cause some ambiguity in the management variables and MDIO register definitions. For similar bin counters defined in 174A.6 and 176.7.4.1 the index "k" is C/ 116 SC 116.4 P150 SuggestedRemedy The index "i" stypically used for the lane number. Since counters need to be defined per lane, this index "i" will cause some ambiguity in the management variables and MDIO register definitions. For similar bin counters defined in 174A.6 and 176.7.4.1 the index "k" is Delay limits for the 200GBASE-R Inner FEC are TBD in T in 177.7. SuggestedRemedy SuggestedRemedy SuggestedRemedy SuggestedRemedy	L52 # 24 (bucket) Table 116-6 but are indeed defined
Brown, Matt Alphawave Semi Brown, Matt Alphawave Semi Comment Type T Comment Status R (withdrawn) The index "i" is typically used for the lane number. Since counters need to be defined per lane, this index "i" will cause some ambiguity in the management variables and MDIO register definitions. For similar bin counters defined in 174A.6 and 176.7.4.1 the index "k" is Brown, Matt Alphawave Semi SuggestedRemedy SuggestedRemedy SuggestedRemedy SuggestedRemedy	<i>(bucket)</i> Table 116-6 but are indeed defined
Comment Type T Comment Status R (withdrawn) Comment Type E Comment Status A The index "i" is typically used for the lane number. Since counters need to be defined per lane, this index "i" will cause some ambiguity in the management variables and MDIO register definitions. For similar bin counters defined in 174A.6 and 176.7.4.1 the index "k" is Comment Type E Comment Status A SuggestedRemedy Delay limits for the 200GBASE-R Inner FEC are TBD in T In 177.7. SuggestedRemedy	<i>(bucket)</i> Table 116-6 but are indeed defined
The index "i" is typically used for the lane number. Since counters need to be defined per lane, this index "i" will cause some ambiguity in the management variables and MDIO register definitions. For similar bin counters defined in 174A.6 and 176.7.4.1 the index "k" is used for the number.	Table 116-6 but are indeed defined
register definitions. For similar bin counters defined in 1/4A.6 and 1/6.7.4.1 the index "k" is SuggestedRemedy	
USED TO LIDIS DITIONE	
Suggested Parady Update Table 116-6 with the delay numbers specified in 1	177.7.
For the hin counters defined in 177.5.4.1.5 change the index "i" to "k". Also undate Table Response Response Status C	
177-7 and definitions in Clause 45 appropriately. ACCEPT.	
Response Response Status Z	/ 10 // 27
REJECT. C/ 116 SC 116.4 P151	L 49 # <u>25</u>
Brown, Matt Alphawave Semi	
This comment was WITHDRAWN by the commenter. Comment Type E Comment Status A	(bucket)
C/ 175 SC 175.2.5.3 P254 L41 # 21 Delay limits for the 400GBASE-R Inner FEC are TBD in T	Table 116-7 but are indeed defined
Brown, Matt Alphawave Semi Suggested Bemody	
Comment Type T Comment Status A (bucket) Undeto Table 116 7 with the delay numbers specified in 1	177 7
The following description is overly specific: "The following counters shall be implemented to aid a network operator in determining the link quality." It is also for PHY and LINK testing in general.	
SuggestedRemedy	
Change to "The following counters shall be implemented:"	L 42 # <u>28</u>
Response Response Status C Brown, Matt Alphawave Semi	
ACCEPT. Comment Type T Comment Status A	(bucket)
The skew numbers from previous generations should be f	fine.
Cl 176 SC 176.8 P199 L9 # 22 SuggestedRemedy	
Brown, Matt Alphawave Semi Delete the editor's note.	
Comment Type T Comment Status A PMA delay Response Response Status C Delay limits for 200GBASE-R, 400GBASE-R, and 1.6TBASE-R PMAs are TBD and the one for 800GBASE-R PMAs may need to be refined. ACCEPT. ACCEPT.	
SuggestedRemedy	
Expect a contribution with proposals. Update Table 116-6, Table 116-7, 169-4, and Table 174-4 with the adopted numbers.	
Response Response Status C	
ACCEPT IN PRINCIPLE. Resolve using the response to comment #451.	

Cl 178	SC 178.7.2	P339	L 12	# 29		C/ 184	SC	184.4.5	P 52	2	L 5	# 35	
Brown, Ma	tt	Alphawave Se	mi			Huber, Tho	mas		Nokia				
Comment	Туре т	Comment Status A		(bı	ucket)	Comment	Гуре	т	Comment Status	Α		(bu	cket)
Skew of Suggested Delete	constraints for <i>Remedy</i> the editor's no	1.6TBASE-R based on 800GB	ASE-R should be	e fine.		The de as the shown in equa	scriptic remain in Equ ation 18	on of the pa der from the ation (184 34-2 (with t	arity polynomial says he division (modulo 2 I-2)". The intent of th the generator polynor	"A partity p) of m(x) x > is is that the mial in (184-	oolynomial p x^16 by the e resulting p -1), but that	(x) of degree 15 is el generator polynomia arity polynomial p(x) isn't what the text sa	ind I is ys.
Response		Response Status C				Suggested	Remea	lv .		·			-
ACCEI	PT.	,				Chang	e the te	ext to read	: "A parity polynomial	p(x) of deg	ree 15 is de	fined as the remaind	er
C/ 182	SC 182.7.1	P 471	L 27	# 33		from th Equation	e divis on (184	ion (modul 1-2)."	lo 2) of m(x) x x^16 b	y the genera	ator polymo	mial, as shown in	
Landrv. Ga	arv	Texas Instrum	ents			Response			Response Status	С			
Comment OMAou values Suggested Update dBm fo	Type TR uter vs max(TI were changed <i>Remedy</i> the figure to pr max(TECQ.	Comment Status A ECQ, TDECQ) figure was not up I in D1.3. match D1.3 data. To be specific TDECQ) < 0.9 dB and 1.2+max	odated when the , OMAouter (min (TECQ, TDECC	(bu OMAouter (min) n) line should be -0 2) dBm for > 0.9 dB	ucket) 1.3 3.	ACCEI Chang division to: "A p remain Equatio Implen	PT IN F e: "A pa o (modu parity p der from on (184 ment with	PRINCIPLE arity polyn- ulo 2) of m olynomial m the divis I–1)" th editorial	E. omial p(x) of degree I(x) x x16 by the gene p(x) of degree 15 (sh sion (modulo 2) of m(license.	15 is define erator polyno own in Equa x) x x16 by t	d as the ren omial showr ation 184-2) the generate	nainder from the n in Equation (184–2) is defined as the or polynomial shown	" in
Response		Response Status C		x) a2		C/ 186	SC	186.2.2	P56	8	/ 23	# 37	
ACCEI	PT IN PRINCI	PLE.				Huber, Tho	mas	100.2.2	Nokia		-20		
	ion ouggooto					Comment	Гуре	т	Comment Status	Α		(bu	cket)
C/ 177	SC 177.4.2	<i>P</i> 311	L 25	# 34		The Al	/I field v	was renam	ned FAM to clarify that	at it is not th	e 800GBAS	SE-R AMs.	
Huber, Tho	omas	Nokia				Suggested	Remea	ly					
Comment	Туре Т	Comment Status A		(bı	ucket)	Chang	e OH/A	M to OH/F	FAM				
The tex delays abstrac	xt here seems for each delay ct specification	a bit repetetive. The four paraget Ine for each rate in detail, and of the same thing.	graphs that start then at line 50 t	at line 25 spell out there is a more	the	Response ACCEI	PT.		Response Status	С			
Suggested	Remedy					C/ 186	SC	186.2.3.6	P 57	2	L 5 1	# 38	
Rewrite	e the first para	graphs to be algorithmic rather	than per-rate:		-	Huber, Tho	mas		Nokia				
(Delav	Line 1) bv 4x1	Ine 0) delays the data by 4x2x	ast line (Delav L	ine 2) adds no dela	ie av.	Comment	Гуре	т	Comment Status	Α		(bu	cket)
The va Add a	lues of Q are table with a co	shown in table 177-X." lumn for the rate (200GBASE-F	R, 400GBASE-R	, etc.) and a colum	n for	With th IA. Als	e addit so, the	tion of the reference	AML field, the overhe to ITU-T G.709.6 sho	ead is no lor ould be to IT	nger a subse U-T G.709.	et of what is in the O 1	IF
the val	ue of Q.	at lin 51 that starts with "The n	mber 0 differs f	or each " and the		Suggested	Remea	ły					
bullet l	ist that follows	(this information is replaced by	the table).			Revise	the tex	xt to read:	"The frame overhead	l is based o	n the frame	defined in subclause	9
Response		Response Status C				4.3.3 o G 709	f OIF-8 1 "	300ZR-01.0	0, which is a subset o	of what is de	efined in Red	commendation ITU-T	•
ACCEI	PT IN PRINCI	PLE.				Response			Posponso Status	c			
Implen	nent the sugge	ested remedy with editorial licen	se.			ACCEI	PT.		Response Status	C			
TYPE: TR/ COMMENT SORT ORI	technical requ Γ STATUS: D/ DER: Commer	ired ER/editorial required GR/ dispatched A/accepted R/reject t ID	general required ted RESPON	T/technical E/edit ISE STATUS: O/op	torial G/g ben W/wri	eneral tten C/closed	Z/with	ndrawn		Comment li	D 38	Page 4 of 4 1/21/2025	9 9:54:19 AM

C/ 186	SC	186.3.3.1.2	P5	89	L17	# 40	
Huber, Th	omas		Nokia	I			
Comment	Туре	т	Comment Status	Α			(bucket)
In figu to avo	id conf	-13, 'mfas' s lict with the	hould be 'faw' to ali MFAS field in the F	ign with 'CS fra	h the text in 186.3.3 ame structure in cla	3.1.5 (faw is us sue 186.2)	ed here
Suggested	dReme	dy					
Chang	ge mfas	s to faw					
Response			Response Status	С			
ACCE	PT.						
C/ 186	SC	186.4.2.1	P 5	97	L 6	# 41	
Huber, Th	omas		Nokia	l			
Comment	Туре	т	Comment Status	Α			(bucket)
Revise alignm "A Boo frame	e the d nent pa olean v alignm	efinition of fa Ittern rather variable that ient mechan	am_valid to conside than the entire FAN is set to true if the ism sequence"	er only ∕I field: first 25	the 32 bytes that h 6 bits of the FAM f	ave the frame ield are a valid	PCS
Response			Response Status	С			
Response ACCE	PT.		Response Status	С			
Response ACCE Cl 169	PT.	169.2.4	Response Status P1	C 72	L 50	# 42	
Response ACCE Cl 169 Huber, The	PT. SC	169.2.4	Response Status P1 Nokia	C 72	L 50	# 42	
Response ACCE Cl 169 Huber, The Comment	PT. SC omas <i>Type</i>	169.2.4 T	Response Status P1 Nokia Comment Status	C 72 A	L 50	# 42	(bucket)
Response ACCE Cl 169 Huber, The Comment This c	PT. SC omas <i>Type</i> lause s	169.2.4 T should includ	Response Status P1 Nokia Comment Status le a reference to th	C 72 A e 8000	L 50 GBASE-ER1 PMA	# 42	(bucket,
Response ACCE Cl 169 Huber, The Comment This c Suggested	PT. SC omas <i>Type</i> lause s d <i>Reme</i>	169.2.4 T should includ	Response Status P1 Nokia Comment Status le a reference to th	C 72 A e 8000	L 50 GBASE-ER1 PMA	# 42	(bucket)
Response ACCE Cl 169 Huber, Thi Comment This c Suggested Add a	PT. SC omas Type lause s dReme senter	169.2.4 T should includ dy nce: The 800	Response Status P1 Nokia Comment Status de a reference to th	C 72 A ie 8000	L 50 GBASE-ER1 PMA crified in clause 186	# <u>42</u> 5.3	(bucket,
Response ACCE Cl 169 Huber, The Comment This c Suggested Add a Response	PT. SC omas Type lause s dReme senter	169.2.4 T should includ <i>dy</i> nce: The 800	Response Status P1 Nokia Comment Status de a reference to th)GBASE-ER1 PMA Response Status	C 72 A ie 8000 . is spe C	L 50 GBASE-ER1 PMA crified in clause 186	# <u>42</u>	(bucket,

C/ 169	SC	169.4	P1	78	L 22	# 43	
Huber, The	omas		Nokia	a			
Comment	Туре	т	Comment Status	Α			(bucket)
Table	169-4 i	s missing r	ows for the 800GBA	ASE-E	R1 PCS and PMA		
Suggested	Reme	dy					
Add a archite are sti	row for ecture, II TBD.	the PMA. add a row f	Depending on the d or the ER1 PCS or	lisposi the El	tion of other comme R1 FEC. The values	ents about ER1 for both in cla	use 186
Response			Response Status	С			
ACCE Impler	PT IN I nent th	PRINCIPLE e suggeste	d remedy with edito	orial lic	ense.		
C/ 169	SC	169.4	P1	78	L 23	# 44	
Huber, The	omas		Nokia	a			
Comment	Type	т	Comment Status	Α			(bucket)
800GE Suggested	BASE-F	as delay co R inner FEC dy), and clause 184 h	as val	ues for the LR1 inne	e 177 has vaiu er FEC	ies for
Replac clause	ce the 184.7	FBDs wiith for the LR1	the appropriate valu inner FEC.	ues fro	m Table 176-7, Tab	ble 177-5, and t	from
Response			Response Status	С			
ACCE Impler	PT IN I nent th	PRINCIPLE e suggeste	d remedy with editc	orial lic	ense.		
C/ 177	SC	177.4.1.3	P 3	10	L 47	# 45	
Huber, The	omas		Nokia	1			
Comment	Туре	т	Comment Status	Α			(bucket)
The we tolerar PCSLs shall s	ording nce in t s is ren upport	here is a bi he inner FE hoved as de a maximur	t awkward - the inte C than in 800GBAS efined in 172.2.5.1, n Skew of 25 ns be	ent is te SE-R I excep tween	o define a much strie PCS, but the text sa t that the 800GBAS PCS lanes"	cter maximum ys " Skew be E-R deskew fu	skew etween inction
Suggested	Reme	dy					
Use la PCSLs suppo	nguage s is ren rted be	e more like hoved as de tween PCS	what 172.2.5.1 use efined in 172.2.5.1, anes"	s. Ch excep	ange the text to read t that a maximum S	d " Skew bet kew of 25 ns is	tween S

Response

ACCEPT IN PRINCIPLE.

Implement the suggested remedy with editorial license.

Response Status C

Comment ID 45

C/ 177	SC 177.4.1.3	P 310	L 52	# 46	C/ 185	SC 185.3.1.1	P 545	L13	# 72
Huber, Tl	homas	Nokia			Sluyski, M	like	Cisco		
Commen	t Туре Т	Comment Status A		(bucket)	Comment	Type E	Comment Status R		(bucket)
The	wording here is a	bit awkward - the intent is to	define a much st	ricter maximum skew	This c	lause include a r	eference (184.4.11.1) and la	ter to (185.5.2).	
tolera	ance in the inner F	eC than in 800GBASE-R P0	that the 1.6TBAS	ays " Skew between SF-R deskew function	Suggested	dRemedy			
shall	support a maximu	um Skew of 25 ns between F	CS lanes"		Would	d it be better and	clearer to reference Figure 1	85-2 instead of	text 184.4.11.1 (Picture
Suggeste	edRemedy				is clea	arer than words).	Likewise Reference to Figure	e 185-5 than tex	t in 185.5.2.
Use	language more lik	e what 175.2.5.1 uses. Cha	nge the text to re	ad " Skew between	Response	, 	Response Status C		
PCSI supp	Ls is removed as orted between PC	defined in 175.2.5.1, except S lanes"	that a maximum	Skew of 25 ns is	Subcla	CT. ause 185.3.1.1 sj	pecifies the receipt of the PM	ID:IS_UNITDAT	A.request primitive.
Respons	e	Response Status C			The no	oted referece to 7	84.4.11.1 specifies how the	primitive is crea	ited and contains
ACC	EPT IN PRINCIPL	.E.			No ch	ange to the draft	chickded in the righte 100-	2 01 105-5.	
Imple	ement the suggest	ted remedy with editorial lice	nse.		[Edito	r's note: changed	subclause from 185.3.1.1 8	00GBASE-L to	185.3.1.1]
C/ 185	SC 185.2	P 542	L 36	# 71	C/ 187	SC 187.1	P 614	L 8	# 74
Sluyski, N	Vike	Cisco			Sluyski, M	like	Cisco		
Commen	t Type E	Comment Status R		(bucket)	Comment	Type E	Comment Status A		(bucket)
Does equa	IEEE style allow to 3.2 x 10-5 and	embedded parameter values BERadded equal to 6.4 x 1	s as part of the te 0-5)	ext (e.g. BERadded	The oppolarized	ptical signal gene zation 16-state qu	erated by these PMD types a adrature amplitude modulat	re modulated us ion	sing a dual
Suggeste	edRemedy				Suggested	dRemedy			
A sm	all table might be	clearer than values buried Ir	n text.		either	signal is plural a	s in signals or the are should	l be is if singular	
Respons	e	Response Status C			Response	•	Response Status C		
REJE Statii 2022 No.cl	ECT. ng parameter valu hanges to the drat	es as text is supported by IE	EE and widely u	sed in IEEE Std 802.3-	ACCE Chang signal	PT IN PRINCIPL ge "The optical si s generated by th	E. gnal generated by these PM nese PMD types are modulat	D types are mod red".	dulated" to "The optical
[Edite	or's note: changed	l subclause from 185.5.2 Err	or ratio allocation	n to 185.2]	C/ 187	SC 187.2	P615	L 34	# 75
					Sluyski, M	like	Cisco		
					Comment	Туре Е	Comment Status A		(bucket)
					Refere	ence 174A.4 is no	ot linked.		
					Suggested	dRemedy			
					Link re	eference to 174A	.4		
					Response ACCE	PT	Response Status C		

C/ 187	SC 187.3.1.1	P618	L13	# 76	C/ 176	SC	176.2	P 274	L17	# 85
Sluyski, M	ike	Cisco			Opsasnick	, Euger	ne	Broadcom		
Comment	Туре Е	Comment Status R		(bucket)	Comment	Туре	TR	Comment Status A		(bucket)
This c	lause include a re	eference (186.3.3.1.6) and la	ter to (187.5.2).		In the	last ser	ntence of	the pargraph right before Tab	le 176-5, the st	atement "[the
Suggested	IRemedy				param	eter] is	Set to the	e value of the received SIGNA	L_OK value" is	ambigous. Which
Would is clea	it be better and or rer than words).	clearer to reference Figure 18 Likewise Reference to Figure	87-2 instead of to 187-5 than text	ext 186.3.3.1.6 (Picture in 187.5.2.	The sa	ame kin	d of state	ement is made in the last sent	ence of the para	agraph immediately
Response		Response Status C			before	Table '	176-6 on	page 275, in subclause 176.3	3, line 29.	
REJE	CT.				Both o	f these	stateme	nts should be made more clea	ar.	
Subcla The n	ause 187.3.1.1 sp ated referece to 1	ecifies the receipt of the PM 86.3.3.1.6 specifies how the	D:IS_UNITDATA primitive is crea	A.request primitive.	Suggested	Remed	ły			
releve No ch [Editor	nt information not ange to the draft 's note: changed	subclause from "187.3.1.1 8	2 or 187-3. 00GBASE-E" to	187.3.1.1]	In 176 "For th the rec	.2, imm ne n:n P ceived S	ediately p MAs, the SIGNAL_	prior to Table 176-5 change th SIGNAL_OK parameter at th OK value.	ne sentence fror ne client interfac	n: e is set to the value of
CI 476	SC 476 4 4 2	D 201	12	# 04	to: "Easth	D			a allows instantes	a ia ant ta tha unlus of
	50 176.4.4.3	F 291	LZ	# 84	the rec	ceived S	SIGNAL	OK parameter from the sublay	ver below the P	MA
Opsasnick	, Eugene				(inst:IS	S_SIGN	IAL.indica	ation(SIGNAL_OK))."		
Comment	Type IR	Comment Status A		(bucket)	And in	cubela	uco 176 ⁴	a change the last contence in	nmodiately prio	r to Table 176 6 from:
is "res	et + !all locked r	nux". (!signal ok mux) shou	ld be added to t	nis condition	"For th	ie n:n P	MAs, the	SIGNAL_OK parameter at th	interface belo	ow the PMA is set to the
Suaaestea	IRemedv				value	of the re	eceived S	GIGNAL_OK value."		
Chang reset - to:	le the open arrow ⊦ !all_locked_mu	condition to enter LOSS_OF	F_ALIGNMENT	state from:	to: "For th value ((PMA:	ne n:n P of the re IS_SIG	MAs, the eceived S NAL.requ	SIGNAL_OK parameter at th GONAL_OK parameter from the st(SIGNAL_OK)."	he interface belo he sublayer abo	ow the PMA is set to the ove the PMA
reset -	⊦ !signal_ok_mux	+ !all_locked_mux			Response			Response Status C		
Response		Response Status C			ACCE	PT IN F	PRINCIPL	.E.		
ACCE Impler	PT IN PRINCIPL nent the suggest	E. ed remedy with editorial licen	ise.		Impler	nent the	e sugges	ted remedy with editorial licen	se.	

Comment ID 85

C/ 174	SC 174.3.2	P 235	L 20	# 87
Opsasnick	, Eugene	Broadcom		
Comment	Туре Т	Comment Status R		(bucket)
In Fig FEC v would showr	ure 174-4 (1.6T In vill (almost) always be better to show n, while logically co	ter-sublayer interfaces with luss be in an optical module belute the Inner FEC below an AUI prrect, will rarely, if ever, be u	nner FEC), ther ow an AUI conr in this figure si ised.	e is no AUI. The Inner nection to a host. It nce the layer stack
Suggestee	dRemedy			
Add a "1.6TE And th PMAs	"1.6T BASE-R 8: BASE-R Inner FEC hen add the neces	8 PMA" between the "1.6T B. C" on line 20 which creates a sary inter-layer signals on th	ASE-R 16:8 PM n AUI interface e AUI connectio	IA" on line 14 and the between the two PMAs. on between the two
Response		Response Status C		
REJE The in exhau	CT. Itent of this diagra stive set of impler	m (see figure title) is to show nentation configurations, whi	intersublayer in ch is provided i	nterfaces not provide an nstead in Annex 176B.
C/ 177	SC 177.6.2.1	P 320	L 53	# 88
Opsasnick	k, Eugene	Broadcom		
Comment	Туре Т	Comment Status A		reset variable
FEC_ define (Table	reset is referred to d except through e 177-6) should ins	o in the definition of the "rese a cross-reference to 45.2.1.1 stead be used for the cross re	" variable, but I .1. The MDIO c eference to CL	FEC_reset is not control variable table 45 registers).
Suggested	dRemedy			
Remo	ve the cross-refer	ence text "(see 45.2.1.1.1)" f	rom the definition	on of reset in 177.6.2.1.
Add th that is	ne definition of "FE true when set by	EC_reset" to the list of variable a management entity and is	es in 177.6.2.1 false otherwise	as: "Boolean variable ".
Add F cross-	EC_reset to the M references to 177	1DIO control variables table (.6.2.1 and 45.2.1.1 and the N	Table 177-6) in IDIO register bi	subclause 177.10 with it number, 1.0.15.
Response		Response Status C		
ACCE	PT IN PRINCIPLE	≣.		
Editor CRG:	ial slides with topi	c "Reset variables" in the foll	owing contributi	ion was reviewed by the
https:/	//www.ieee802.org	y/3/dj/public/25_01/brown_3d	_03a_2501.pdf	f
Impler Annex slide 1	ment the proposed 178B align with t 17.	d changes in slides 10 to 18 i he resets defined for PMA ar	n brown_3dj_03 Id PMD, rather	Ba_2501, except that in than as proposed on

Implement with editorial license.

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

C/ 184	SC 184.6.2.2	P 530	L 47	# 89
Opsasnick,	Eugene	Broadcom		
Comment 7	Гуре Т	Comment Status A		reset variable

FEC_reset is referred to in the definition of the "reset" variable, but FEC_reset is not defined except through a cross-reference to 45.2.1.1.1. The MDIO control variables table (Table 184-4) already has a cross reference to 184.6.2.2 as well as CL 45 and the MDIO register bit number,

SuggestedRemedy

Remove the cross-reference text "(see 45.2.1.1.1)" from the definition of reset in 184.6.2.2.

Add the definition of "FEC_reset" to the list of variables in 184.6.2.2 as: "Boolean variable that is true when set by a management entity and is false otherwise".

Response Response Status C

ACCEPT IN PRINCIPLE.

Resolve using the response to comment #88.

C/ 179	SC 179.14	P 400	L10	# 90
Opsasnick,	Eugene	Broadcom		
Comment T	vpe TR	Comment Status A		reset variable

In Table 179-20, the variable PMD_reset has a variable reference to subclause 178B.14.2.1; however, that subclause does not define "PMD_reset".

SuggestedRemedy

Suggest adding a subclause to CL 179 (perhaps 179.8.10) to define the PMD_reset variable similar to 180.5.6, 181.5.6, 182.5.6, 183.5.6, and 185.5.6 and 187.5.6 with title "PMD reset function" and subclause text:

"If the variable PMD_reset is asserted, the PMD shall be reset as defined in 45.2.1.1.1.".

And change the cross-reference in Table 179-20 from 178B.14.2.1 to this new subclause in Clause 179.

A similar subclause should also be added as 178.8.10 titled "PMD reset function" with the same text as above.

Response Response Status C

ACCEPT IN PRINCIPLE.

Resolve using the response to comment #88.

CI 45	SC 45.2.1.21	3a P 92	L14	# 91	CI 73	SC	73.8	P 128	L 21	# 94
Nicholl, SI	hawn	AMD			Nicholl, S	hawn		AMD		
Comment	Type TR	Comment Status A		(bucket)	Comment	Туре	ER	Comment Status A		(bucket)
Descr incons	iption column of f sistent with other	ields in "Table 45-177a - Inr MDIO registers.	ner FEC control re	egister bit definitions" is	Typo variat	mr_lp_a ble to M	adv_extene IDIO registe	d_ability[32:1] in "Table 73 r mapping"	-6-Backplane Eth	nernet Auto-Negotiation
Suggestee	dRemedy				Suggeste	dReme	dy			
Propo	se the following t	ext for the description colum	n of 1.2400.7 rov	/:	Propo	ose mr_	_lp_adv_exte	ended_ability[32:1]		
1 = Eı 0 = Di	nable Inner FEC o isable Inner FEC	on lane 7 on lane 7			Response ACCE	e PT.		Response Status C		
Propo	se similar update	to description column of 1.2	2400.0 through 1.	2400.6 rows.						
Response	;	Response Status C			C/ 171	SC	171.9.5.5	P 216	L 22	# 95
ACCE	PT IN PRINCIPL	E.			Nicholl, S	hawn		AMD		
Resol	ve using the resp	onse to comment #1.			Comment	Туре	TR	Comment Status A		(bucket)
CI 73	SC 73.6.2.5.3	B P122	L 46	# 92	Curre pertai	ntly say	/s "transmit: .6TXS.	s what it receives from the	800GMII". Howe	ever, this sub-clause
Nicholl, SI	hawn	AMD			Suggeste	dReme	dy			
Comment	Type TR	Comment Status A		(bucket)	Propo	ose "trar	nsmits what	it receives from the 1.6TN	111".	
The p	aragraph that beg	gins "The variable an_rs_fec	_int_negotiated_o	control indicates that	Response	9		Response Status C		
К З -ГІ		ed in the incorrect sub-claus	e.		, ACCE	EPT.				
Suggester	aRemeay	aragraph such that it is inco	rtad aftar the see	and paragraph of						
73.6.2	2.5.4 (consistent v	with editorial guidance found	l in 802.3ck-2022.	Sub-Clause "73.6.5.3	C/ 176	SC	176.4.2.4.2	2 P 281	L 32	# 96
FEC o	control variables")				Nicholl, S	hawn		AMD		
Response	9	Response Status C			Comment	Туре	TR	Comment Status A		(bucket)
ACCE	PT.				Curre	ntly say	/s " and fo	or the 400GBASE-R 32:4 F	PMA, the odd lane	es"
CI 73	SC 7364	P125	/ 25	# 03	Suggeste	dReme	dy			
Nicholl SI	hawn		220	# 33	Propo	ose "	and for the	400GBASE-R 16:2 PMA, 1	the odd lanes'	1
Comment		Comment Status		(bucket)	Response	9		Response Status C		
Curre use th	ntly says "D[10:0] ne singular verb.	and D[47:16] contains the l	Unformatted Code	Field", but should	ACCE	EPT.				
Suggestee	dRemedy									
Propo	se "D[10:0] and [D[47:16] contain the Unforma	atted Code Field"							
Response)	Response Status C								

ACCEPT.

CI 73A	SC 73A.1a	P 640	L 40	# 97		C/ 177	SC 17
Nicholl, Sh	awn	AMD				Mi, Guang	can
Comment	Туре Е	Comment Status A			(bucket)	Comment	Туре
Currer codew	ntly says " indica ord Base Page	tes additional abilities that w " Present tense seems more	ere not accomm e appropriate.	nodated in the lin	nk	inner f BER i	FEC bin c is implicit.
Suggested	IRemedy					Suggested	Remedy
Propos	se " indicates ac	Iditional abilities that are not	accommodated	in the link code	word	chang	e to "pre-
Base F	Page"					Response	
Response ACCE	PT.	Response Status C				ACCE	PT IN PR
C/ 174A	SC 174A.7.1.4	P667	L 35	# 106		C/ 182	SC 18
Mi, Guang	can	Huawei Techn	ologies Co., Ltd			Mi, Guang	can
Comment	Type TR	Comment Status A			(bucket)	Comment	Туре
The la	st sentence of this	s subclause "The measured of	codeword error i	ratio is expected	be	type 4	00GBASE
less th	an 1.45 e-11." is r	nisleading.				Suggested	Remedy
At the using I	beginning, it state FEC bin counters	s "The following method is u provided in the PCS."	sed to calculate	the block error	ratio	chang DR8-2	e to type"
Step h	defines the block	error ratio as Hms(16), not t	he code word e	rror ratio.		Response	
CL174	A.8 provides the	definition of FEC codeword e	rror ratio, which	seems to be Hr	n(16).	REJE	CT.
It is un	clear which error	ratio shoule be less than 1.4	5e-11.			This c	omment v
						C/ 182	SC 18
						Mi, Guang	can
Suggested	lRemedy					Comment	Туре
chang	e to "the measure	d block error ratio is expecte	d to be less".	Or state the rela	ation	PMD t	ypes sho
Detwee	en codeword error	ratio and block error ratio in	the subclause.			Suggested	dRemedy
ACCE		Response Status C				chang 800GE	e "type 40 3ASE-DR
Chang To "Th	e "I he measured he measured block	codeword error ratio" c error ratio"				Response REJE	CT.

77.5.4.1.4 P319 L45 # 108 Huawei Technologies Co., Ltd Comment Status A ER (bucket) counters can be used to roughly measure pre-Inner FEC BER. Pre-FEC -Inner-FEC BER" Response Status C RINCIPLE. suggested remedy with editorial license. 82.12 P490 L3 # 109 Huawei Technologies Co., Ltd ER Comment Status R (withdrawn) E-DR4 is not the PMD type of clause 182 200GBASE-DR1-2, 400GBASE-DR2-2, 800GBASE-DR4-2, and 1.6TBASE-Response Status Z was WITHDRAWN by the commenter. 82.12 P490 L**8** # 110 Huawei Technologies Co., Ltd ER Comment Status R (withdrawn) ould be updated in the text. 00GBASE-DR4" to " type 200GBASE-DR1-2, 400GBASE-DR2-2, R4-2, and 1.6TBASE-DR8-2" Response Status Z

This comment was WITHDRAWN by the commenter.

CI 116	SC 116 1 4	D129	/ 19	# 114	CL 177	SC 177 E 4 4	1 D240	/ 24	# 447
	.#	F 130	L 10	# [114	Ci III Sloviak la	.#		L 24	# 117
Slavick, Je				(1	Slavick, Je				(1
Comment	lype E	Comment Status A		(bucket)	Comment	Туре Т	Comment Status A		(bucket)
Table	116-3b has a thi	ck bar on the right side of clau	ise 73 M		There	is a reference to	o clause 45 here, I think we	want that all to be	e in the tables
Suggested	Remedy	- :			Suggested	Remedy	4.0406)#		
adddre	ess the formatting	gissue			In 177	5 4 1 add the fo	I.2130) Illowing senetence "Mappir	a of the counters	to management
Response		Response Status C			variabl	les is specified in	n 177.10"		to management
ACCE	PT.				Response	·	Response Status C		
C/ 177	SC 177.4.2	P311	L 42	# 115	ACCE Impler	PT IN PRINCIPI nent the sugges	LE. ted remedy with editorial lid	cense.	
Slavick, Je	eff	Broadcom							
Comment	Type TR	Comment Status A		(bucket)	C/ 177	SC 177.5.4	1.5 <i>P</i> 319	L 52	# 118
The de	eskewed data is	fed into the covolutioner.			Slavick, Je	ff	Broadcom		
Suggested	IRemedy				Comment	Туре Т	Comment Status A		(bucket)
Chang	e " The input dat	ta from the FEC service interfa	ace lane is fed i	nto"	We're	specifyng the be	ehavior of bin 3, so starting	with "Note' could	be a bit misleading
to: "Th	e data from desl	kewed PMA lane is fed into"			Suggested	IRemedy			
Response		Response Status C			Chang	e the last senter	nce to read "Error bin 3 inc	rments when three	e or more bits are
ACCE	PT IN PRINCIPL	.E.			correc	ted in an Inner F	EC codeword."		
Implen	nent the suggest	ed remedy with editorial licens	se.		Response		Response Status C		
C/ 177	SC 177.5.2	P 318	L19	# 116	ACCE	PT IN PRINCIPI	LE.		
Slavick, Je	eff	Broadcom			Impier	nent the sugges	ted remedy with editorial lid	cense.	
Comment	Туре Е	Comment Status A		(bucket)					
The st	atement that you	can identify flow 0 and how i	its done should	be one paragraph					
Suggested	IRemedy								
Combi	ine paragraph 4 a	& 5 in 177.5.2.							
Response		Response Status C							
ACCE Implen	PT IN PRINCIPL	E. ed remedy with editorial licens	se.						

C/ 177	SC 177.6.3	P 322	L 22	# 119	CI 177	SC 177.5.7	P 320	L15	# 122
Slavick, Je	eff	Broadcom			Slavick, Je	eff	Broadcom		
Comment	Type TR	Comment Status A		(bucket)	Comment	Type TR	Comment Status A		(bucket)
In Fig any sy proces	177-10 the exit t nc_flow is false as to set it to true	from INNER_FEC_SYNC can and in that state we set it fals e.	't be all_sync be e and need to g	cause that's false when o through the sync	We're can't s local c	restoring to the state it's the origone.	data stream to its original orden nial data from the SM-PMA an	er, but it could h d that'd be the	have errors in the so we far end SM-PMA not the
Suggested	Remedy				Suggested	Remedy			
Create sync_f	e new variable "r flow <x> is false</x>	none_synced" A Boolean va for all eight flows and is set to	ariable that is se false when syn	t to true when c_flow <x> is true for</x>	Chang the or	e "to restore the	e original data received from the eceived to be compatible with	the BASE-R SM- the BASE-R SM	-PMA." to be "to restore M-PMA."
any x.					Response		Response Status C		
In Fig. to be l	177-10 replace JCT	the all_sync criteria from INN	ER_FEC_SYNC	LINIT to GET_BLOCK	ACCE Impler	PT IN PRINCIP ment the sugges	LE. ted remedy with editorial licen	se.	
In Fig none_	177-11 replace synced	the restart_inner_fec_sync cri	teria for entering	FAS_LOCK_INIT with	C/ 177 Slavick. Je	SC 177.5	P 317 Broadcom	L 27	# 123
Response ACCE Resolu	PT IN PRINCIP	Response Status C LE.			Comment Introde	<i>Type</i> TR uctory sentence	Comment Status A could be useful		(bucket)
					Suggested	Remedy			
Cl 177 Slavick, Je	SC 177.4.1. ⁴	1 P310 Broadcom	L 29	# 120	Add th PMD s	e following to 17 service interface	77.5 "The following processes input lane.	are performed	independently on each
Comment	Type TR	Comment Status A		(bucket)	Response		Response Status C		
The de the Inr	emultiplexing fur her FEC.	nction refers to "service interfa	ice below the PI	MA" but this is above	ACCE	PT.			
Suggested	Remedy								
Add "v	vith the exceptio	n that it operates on the Inner	FEC service in	terface input lanes"					
Response		Response Status C							
ACCE Impler	PT IN PRINCIP	LE. sted remedy with editorial licer	ISE.						

C/ 178B SC 178B.14.2.1	P 783	L13	# 124	C/ 174A	SC 174A.7.1	.3 P667	L1	# 129
Slavick, Jeff	Broadcom			Slavick, Jet	if	Broadcom		
Comment Type TR	Comment Status A		Interfaces	Comment T	Гуре Т	Comment Status A		(bucket)
"other" interface is a bit an does not cover all use cas forwarding modes.	nbigous and the listed situ es. As a remote PCS (aft	ations are the t er a XS) could o	ypical use case but do either local or clock	This se acquiri title.	ection is not reang the data. In	lly "measuring" or comparir 174A.6.1.3 we don't incluce	ng the hisograms to e the word measur	o anything it's just rement in the section
SuggestedRemedy				Suggested	Remedy			
Rename client_is_pcs to b "Boolean variable that indi	e "uses_local_clock_only cates if the PMA will neve	and update the	e definition to be arded clock For	Remov	e the word "me	asurement" from the title of	f 174A.7.1.3	
example this will be true for	or the first PMA below the	RS."		Response		Response Status C		
Replace both uses of clier Response ACCEPT IN PRINCIPLE.	it_is_pcs with uses_local_ Response Status C	clock_only in F	g 178B-7	ACCEF The tex counte Howev Change	PT IN PRINCIP tt literally says t rs is measured er, it makes set the title of 174	LE. hat these are measuremen using the following method use to align the subclause t tA.6.1.3 to "PMA error histo	ts "An error histog :" itles in 174A.6.1.3 ogram measureme	ram using PCS and 174A.7.1.3. nt"
Related slides in the follow	ving contribution were revi	ewed by the CF	CG:	C/ 178B	SC 178B.14	.3.5 P789	L 41	# 141
https://www.ieee802.org/3	/dj/public/25_01/brown_3c	lj_03a_2501.pd	f	Slavick Jet	f	Broadcom		
Implement the changes pr	ovided on slide 26 of brow	/n 3dj 03a 250)1 with editorial license.	Comment T	vpe TR	Comment Status A		(bucket)
	DEDD		# [107]	Ambigo	ous transition if	timer_done and tf_lock bot	h occur simultaned	ously
C/ 186 SC 186.2.4.1	P580	L 20	# 127	Suggested	Remedy			
Slavick, Jeff	Broadcom			Add "!r	ecovery_timer_	done *" to the transition ba	ck to TRAIN_LOC	AL
Don't have the counters be the decoder.	comment Status A e their own sub-headings,	just be inline fu	(bucket) nctionality that is part of	Response ACCEF	PT.	Response Status C		
SuggestedRemedy				CI 470D	CC 470D 44	2.5 D700	/ 20	# 440
Add this sentence prior to	the 186.2.4.1.1 heading "	The following co	ounters shall be		3C 178B.14	.3.5 7790	L 20	# 142
implemented to aid a netw	ork operator in determinin	g the link qualit	y."	Slavick, Jei	T 5	Broadcom		(hushet)
Remove the sub-headings 175.2.5.3	of 186.2.4.1.1-4 and mak	e them inline de	efinitions like is done in	Fig 178	BB-9 has text bo	ox overlapping lines		(DUCKet)
Update the references in T Implement with editorial lig	Table 186-8 cense.			Suggested tf_offse	Remedy et in GET_NEW	_MARKER is covering up I	ies	
Response	Response Status C			Response		Response Status C		
ACCEPT IN PRINCIPLE.				ACCER	PT IN PRINCIP	LE.		
Implement suggested rem	edy with editorial license			Fix the	GET_NEW_M	ARKER box and text to avo	id overlap.	

C/ 178B SC 178B.1	4.3.5 P790	L 20	# 143	C/ 177	SC 177.4.2	P 311	L18	# 146
Slavick, Jeff	Broadcom			He, Xiang		Huawei		
Comment Type E	Comment Status A		(bucket)	Comment	Туре Т	Comment Status A		(bucket)
Fig 178B-9 has an e	xtraneous line			The te	rm "PMA lane"	is not accurate. Within the Ir	nner FEC sublaye	r, it is an "Inner FEC
SuggestedRemedy				lane".				
extran to th right of	the UCT exiting POLARIY_I	NVERT		Suggested	Remedy			
Response	Response Status C			Chang	je "PMA lane" to	"Inner FEC lane", to be cor	nsistent within the	clause.
ACCEPT IN PRINCI	PLE.			Response		Response Status C		
Remove extraneous	line from Figure 178B-9.			ACCE	PT.			
C/ 178B SC 178B.1	4.3.5 P790	L 27	# 144	C/ 177	SC 177.10	P 325	L 9	# 147
Slavick, Jeff	Broadcom			He, Xiang		Huawei		
Comment Type TR	Comment Status A		State diagram	Comment	Туре Т	Comment Status A		(bucket)
Fig 178B-9 needs to	clarify the transitions out of	TEST_MARKER.		"Inner	FEC enable lan	e x" variables are not define	d or backed by ar	ny proposal, and should
SuggestedRemedy				be ren	noved in the nex	tt draft.		
Change the transition	n from TEST_MARKER to IN	NVALID_MARKER	o be "(!valid_marker *	Suggested	Remedy			
!inverse_valid_marke	er) + (polarity_correction * in	verse_valid_marke	.)"	Remo	ve rows "Inner F	EC enable lane 0" through '	Inner FEC enable	e lane 7" in Table 177-6.
Change the transition	n from TEST_MARKER to P	OLARITY_INVERT	to be	Response		Response Status C		
"!polarity_correction	* inverse_marker_valid"	_		ACCE	PT IN PRINCIP	LE.		
Response	Response Status C			Resol	ve using the res	ponse to comment #1.		
ACCEPT IN PRINCI	PLE.			C/ 116	SC 116.3.3.	4.1 <i>P</i> 150	L12	# 152
Related slides in the	following contribution were	reviewed by the CR	G:	Bruckman	, Leon	Nvidia		
https://www.ieee802.	org/3/dj/public/25_01/brown	_3dj_03a_2501.pdf	-	Comment	Туре Е	Comment Status A		(bucket)
Implement the chang	ros on oithor clido 20 or clid	a 22 at the aditor's	discration of	Missin	g comma			
brown_3dj_03a_250	1 with editorial license.			Suggested	Remedy			
		124	# 445	To ma	ke consistent w	ith the text in the previous se	ection penumtima	te paragph, add a
0/1/6 30 1/6.4.4		L 34	# 145	comm Or del	a before: but it i	s considered the previous section penum	timate paragph w	vathever makes sense
He, Xiang	Huawei			gramn	natically.	the previous section penum	unate paragpii, w	valievel makes sense
Comment Type T	Comment Status A		(bucket)	Response	·	Response Status C		
The index y is not a l	PMAL but a PAML number.			ACCE	PT IN PRINCIP	LE.		
SuggestedRemedy				On pa	ge 149 line 27 d	lelete comma preceding " bu	ut it is considered"	
Change "where y is t	he input PMAL" to "where y	is the input PMAL r	number"					
Response	Response Status C							
ACCEPT.								

C/ 169	SC 169.4	P 178	L 23	# 154	C/ 174A	SC 174A.6.1.3	B P664	L 35	# 162
Bruckman	i, Leon	Nvidia			Bruckman,	Leon	Nvidia		
Comment	Type TR	Comment Status A		(bucket)	Comment	Type TR	Comment Status A		(bucket)
The v	alues for 800GBA	SE-R Inner FEC and 800GE	BASE-LR1 are d	efined in the respective	In Hm	is not clear what	is the meaning of "m"		
rerere	nced sections.				Suggested	Remedy			
Suggeste	aRemedy	60 4 for 900CBASE B Innor	EEC and 800C	PASE P1 with the	Define	the meaning of "	m" in Hm or remove the "n	ר"	
value	s in the reference	d sections	FEC and 600G		Response		Response Status C		
Response)	Response Status C			ACCE	PT IN PRINCIPLE			
ACCE	PT IN PRINCIPL	Е.			H_m is Chang	a set of measure e: "Hm(i)(k) is a s	ed histograms.		
Resol	ve using the resp	onse to comment #44.			To: "Hr	m(i)(k) is a set of	measured 17-bin histogram	ns"	
C/ 187	SC 187.8.6	P 628	L 8	# 160	C/ 174A	SC 174A.6.1.3	B P664	L 41	# 163
Bruckman	i, Leon	Nvidia			Bruckman,	Leon	Nvidia		
Comment	Type ER	Comment Status A		(bucket)	Comment	Type TR	Comment Status R		(bucket)
Redu	ndant "is".				The po	lynomial for PRB	S31Q is not defined		
Suggeste	dRemedy				Suggested	Remedy			
Chan To: "	ge: "ETCC is the o ETCC is the qualit	quality metric is used to defir ty metric used to define"	าe"		Define shown	that the PRBS31 in Figure 49-9.	Q is produced by the poly	nomial defined in	Equation (49–2) and
Response	9	Response Status C			Response		Response Status C		
ACCE	PT.				REJEC	CT.			
C/ 174A	SC 174A.4	P662	L 3	# 161	The PF This de	RBS31Q test patt etail is bevond the	ern is defined in the either e scope of this annex. The	the PMA clause of proposed change	or the Inner FEC clause.
Bruckmar	, Leon	Nvidia			clarity	or accuracy of the	e draft.	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Comment	Type TR	Comment Status A		(bucket)	C/ 174A	SC 174A.6.1.4	₽665	L 24	# 165
Pre-F	EC BER should b	e 2.21 × 10–4.			Bruckman.	Leon	Nvidia		
Suggeste	dRemedy				Comment	Type TR	Comment Status R		(bucket)
Chan To ⁻ "2	ge: " 2.21 × 10–14 2 21 × 10–4 "	ł."			Define	the ranges of k a	nd i		
Response)	Response Status C			Suggested	Remedy			
ACCE	PT.				Chang To: "fo	e: "for all k and i.' r k = 0 to 16 and	' i = 0 to p-1"		
					Response		Response Status C		
					REJEC The lar repeat	CT. ne index i and nui this elsewhere.	mber of lanes p are defined	d in 174A.6.1.2. It	is not necessary to

C/ 174A	SC 174A.7.1.4	4 <i>P</i> 667	L 26	# 168	C/ 181	SC 181.9.5	P 454	L 4	# 173
Bruckman	, Leon	Nvidia			Johnson, J	John	Broadcom		
Comment	Type TR	Comment Status A		(bucket)	Comment	Type TR C	Comment Status A		SER
Point e	e) is unclear				The T	DECQ test method po	pints to clause 121.8.5.3,	which uses a t	arget SER of 4.8e-4,
Suggested	Remedy				which value	is not appropriate for for 200G/lane AUIs sl	200G/lane AUIs. As give nould be 4.56e-4 for unco	en in Table 174/ orrelated bit erro	A-1, the appropriate ors.
Chang To: "si	je: "substituting H ubstituting Hms(k	ms(k) for Hx(k) for Hms (i)(k) for Hx(k) and Hms (i)(k) for	ː) for Hy(k)" ⁻ Hy(k)"		Suggested	Remedy			
Response		Response Status C			Add a "Targe	new exception to the	list: ratio of 4 56e-4 "		
ACCE	PT IN PRINCIPLI	Ξ.			Resnanse		nano ol 4.000 4.		
Impler	ment the suggeste	ed remedy with editorial licer	nse.						
C/ 180	SC 180.9.5	P 430	L 4	# 171	Add a	new exception to the	list:		
Johnson, J	John	Broadcom			"The t Impler	arget PAM4 symbol e nent with editorial lice	rror ratio is 4.56e-4 and t inse.	the related Q_t	value is 3.428."
Comment	Type TR	Comment Status A		SER					
The TI	DECQ test metho	d points to clause 121.8.5.3	, which uses a t	arget SER of 4.8e-4,	C/ 181	SC 181.9.5	P 454	L 31	# 174
which	is not appropriate	for 200G/lane AUIs. As giv	en in Table 174	A-1, the appropriate	Johnson,	John	Broadcom		
				515.	Comment	Type TR C	Comment Status A		taps
Suggested	Remedy	the list.			In Tab	le 181-13, the minimu	um number of equalizer p	ore-cursor taps	is TBD. In the absence
"Targe	et PAM4 symbol e	error ratio of 4.56e-4."			of furt 121.8.	ner proposals, this val 5.4.	lue should be 0, consiste	nt with the 5-ta	PFE defined in
Response		Response Status C			Suggested	Remedy			
ACCE Add a "The ta Impler	PT IN PRINCIPLI new exception to arget PAM4 symb nent with editorial	E. the list: ool error ratio is 4.56e-4 and license.	the related Q_t	value is 3.428."	Chang Delete For the and re	e TBD in Table 181-1 the associated edito e editor's consideratic fer to Table 180-18.	13 to 0. rs note. m: If the specs are ident	ical, delete Tab	le 181-13 completely
C/ 180	SC 180.9.5	P 430	L 32	# 172	Response	R	esponse Status C		
Johnson.	John	Broadcom			ACCE	PT IN PRINCIPLE.	to commont #400		
Comment	Type TR	Comment Status A		taps	Resor	ve using the response	to comment #186		
In Tab of furth 121.8.	le 180-18, the min ner proposals, this 5.4.	nimum number of equalizer s value should be 0, consiste	pre-cursor taps ent with the 5-ta	is TBD. In the absence p FFE defined in					
Suggested	Remedy								
Chang Delete	je TBD in Table 1 the associated e	80-18 to 0. ditors note.							
Response		Response Status C							
ACCE	PT IN PRINCIPLI	E. E. bonse to comment #186							

C/ 182	SC 182.9.	5 P483	/ 25	# 175
Johnson.	John	Broadcom	-20	" 110
Comment	Type TR	Comment Status A		taps
In Tab blank. in Tab the 5-	ble 182-18, the In the absend ble 180-18, and tap FFE define	minimum number of equalizer ce of further proposals, this FFI I the value for minimum pre-cu d in 121.8.5.4.	pre-cursor and p E definition shou rsor taps should	bost-cursor taps is left ld be the same as given be 0, consistent with
Suggestee	dRemedy			
Forma curson Delete For th and re	at Table 182-18 r taps), and cha e the associate e editor's cons efer to Table 18	3 to be the same as Table 180- ange the minimum number of p d editors note. ideration: If the specs are ider 30-18.	18 (delete the ro pre-cursor taps to ntical, delete Tab	w for number of post- o 0. le 182-18 completely
Response	•	Response Status C		
ACCE Resol	PT IN PRINCI	PLE. sponse to comment #186		
C/ 183	SC 183.9.	5 P 509	L14	# 176
Johnson,	John	Broadcom		
Comment	Type TR	Comment Status A		taps
In Tab of furt 121.8	ble 183-14, the her proposals, .5.4.	minimum number of equalizer this value should be 0, consist	pre-cursor taps ent with the 5-ta	is TBD. In the absence p FFE defined in
Suggestee	dRemedy			
Chang Delete For th and re	ge TBD in Tabl e the associate e editor's cons efer to Table 18	e 183-14 to 0. d editors note. ideration: If the specs are ider 30-18.	ntical, delete Tab	le 183-14 completely
Response)	Response Status C		

ACCEPT IN PRINCIPLE.

Resolve using the response to comment #186.

C/ 175	SC	175.2.4.6.1	P 2	47	L1	# 181
Brown, Ma	att		Alpha	wave S	Semi	
Comment	Туре	Е	Comment Status	Α		(bucket)
The a spell i	cronym t out.	n AM (and plu	ural AMs) is used a	a few tir	nes but never de	fined. Better to just
Suggeste	dReme	dy				
Chan 249/5	ge "AM 1,249/5	" to "alignme 54, 251/32 x2	nt marker" is seve 2, 253/16 x2	ral plac	es at page/line: 2	247/1, 248/12, 249/42,
Response)		Response Status	С		
ACCE Imple	EPT IN ment s	PRINCIPLE.	nedy with editorial	license	·.	
C/ 186	SC	186	P 5	76	L 6	# 182
Brown, Ma	att		Alpha	wave S	Semi	
Comment	Туре	Е	Comment Status	Α		(bucket)
The a used	cronym specific	AMs is use ally for a fiel	d but never defined d name of "AM".	d. Bette	er to just spell it ou	ut. Exception is if it is
Suggeste	dReme	dy				
	ne "AM	s" to "alignm	ent markers".			
Chan	90 /	0				
Chan Response	90 / W	0	Response Status	С		

Make suggested change throughout clause 186. Implement with editorial license.

CI 400	SC 400 0		D 400	1.00	# 400		CI 404	SC 404 0	F	DAEA	1.20	# 407	
C/ 180	SC 180.9	9.4	P43U	L 32	# 186		C/ 181	ວບ 1 81.9 . 	5	P454	L30	# 187	
Brown, Ma		0	Alphawave 5	emi		tono	Brown, Ma	itt Turno T	~	Alphawave Se	mi		40.00
Value	for minimum	u "number	of equalizer pre-cursor	tans" is TBD		taps	Value	for minimum	umber	oniment status A	ans" is TRD		taps
Currente		muniber					Querrantes		number		aps 13 1 DD.		
Suggester	aremeay						Suggested	Remeay					
Either	le the minim	alue to 0 a um/maxim	allowing the number of number of num columns with a val	pre-cursor taps lue of 3, permitti	ng only a value of 3	or 3.	Either stradd	set the the value the value the minimu	ilue to 0 m/maxir	allowing the number of p num columns with a valu	e of 3, permittir	ng only a value of 3	or
Response)	Re	sponse Status C				Response		Re	esponse Status C			
ACCE	PT IN PRIN	CIPLE.					ACCE Resolv	PT IN PRINC	IPLE. esponse	to comment #186			
Baseo Table	d on the resul 183-14 set tl	lts of straw he minimu	v polls TF-1/2/3, in Tab m number of pre-curso	le 180-18, Table or taps to 0.	e 181-13, Table 182	2-18,	C/ 183	SC 183.9	5	P509	L14	# 188	
In Tak	nle 182-18 di	elete the r	ow specifying number	of post-cursor te	ins		Brown, Ma	itt		Alphawave Se	mi		
in rac	102 10, 0				.po.		Comment	Туре Т	C	Comment Status A			taps
Imple	ment with ed	itorial licer	ise.				Value	for minimum	"number	r of equalizer pre-cursor t	aps" is TBD.		
Straw In Tat numb	poll #TF-1 (0 ble 180-18, T er of pre-curs	Chicago ru able 181-1 sor taps to	les) #TF-2 (choose 1) 3, Table 182-18, Table :	directional 3 183-14, I supp	ort setting minimur	n	Suggested Either stradd	<i>Remedy</i> set the the va le the minimu	llue to 0 m/maxir	allowing the number of p num columns with a valu	pre-cursor taps le of 3, permittir	to vary from 0 to 3 and to a value of 3	or
A: 0 B: 1 C: 2 D: 3	A: 44 D: 24 (C: 04 D: 00					Response ACCE Resolv	PT IN PRINC	Re IPLE. esponse	esponse Status C to comment #186.			
TF-1:	A: 41 B: 24 C A: 34 B: 7 C:	: 7 D: 20	J				C/ 182	SC 182.9	5	P 483	L 25	# 189	
Chronie			dine etien el				Brown, Ma	itt		Alphawave Se	mi		
Straw In Tat	poll #1F-3 (0 ble 180-18, T	noose 1) able 181-1	directional	- 183-14. I supp	ort setting minimur	n	Comment	Туре Т	С	Comment Status A			taps
numb	er of pre-curs	sor taps to	:	, 100 I I, 100 p	or ootg		Value	for minimum	"number	of equalizer pre-cursor t	aps" is not spe	cified.	
A: 0 B: 3							Suggested	Remedy					
A: 43	B: 22						Either stradd	set the the value of the minimum	llue to 0 m/maxir	allowing the number of p num columns with a valu	ore-cursor taps te of 3, permittir	to vary from 0 to 3 only a value of 3	or
							Response		Re	esponse Status C			
							ACCE Resolv	PT IN PRINC	IPLE. esponse	to comment #186			

C/ 186 SC 186.5	P605	L 40	# 192	C/ 176	SC 176.8	P 299	L 6	# 222
Brown, Matt	Alphawave Ser	ni		de Koos, A	Andras	Microchip Tee	chnology	
Comment Type T Delay constraints are	Comment Status R TBD.		(withdrawn)	<i>Comment</i> For Ta	<i>Type</i> T Ible 176-6, the dela	Comment Status A y of the 1:8 and 8:1 (for 20	00GBASE-R) ar	<i>PMA delay</i> nd 2:16 and 16:2 (for
SuggestedRemedy Expect a contribution Response	with proposals. Response Status Z			400GE carefu (which the inte the ske	BASE-R) PMAs is c I to avoid double-ac is for the *sum* of entional skew, (not ew's contribution or	complicated because of the counting the delay due to Rx and Tx) should thus be 2x the intentional skew).	e 2CW skew int this skew! The e calculated as This way, the to	roduced. Must be max delay constraint the max base delay plus tal constraint will count
REJECT.				Suggested	IRemedy			
This comment was W	ITHDRAWN by the commenter.			For the	e 1:8, 8:1, PMAs us	se the base max delay valu	ue (same as the	800GBASE-R 4:32
CI 176C SC 176C.5.	1 <i>P</i> 711	L 37	# 203	PMA c Skew :	= 2 FEC CWs = 51	.2ns for 200Gbps	ai skew.	
Brown, Matt Comment Type E 46.25 has orange hig	Alphawave Ser <i>Comment Status</i> A hlight.	ni	(bucket)	200GE Maxim Maxim Maxim	BASE-R 1:8 PMA o num (bit time): 3680 num (pause_quanta	r 8:1 PMA : 64 + 40960 = 77824 1): 72 + 80 = 152 51 2 - 97 28		
SuggestedRemedy Remove highlight. Response ACCEPT.	Response Status C			For the PMA c Skew : 400GE	e 2:16, 16:2, PMAs or 32:4 PMA, presu = 2 FEC CWs = 25 3ASE-R 2:16 PMA	use the base max delay v mably?) plus the intentiona 5.6ns for 400Gbps or 16:2 PMA :	ralue (same as f al skew.	he 800GBASE-R 4:32
C/ 179B SC 179B.4 .	6 P811	L 8	# 216	Maxim Maxim Maxim	ium (bit time): 3680 ium (pause_quanta	64 + 20480 = 57334): $72 + 40 = 112$		
Comment Type E	Comment Status A		(bucket)	Response	ium (ns): 46.08 + 2	25.0 = 71.08		
It is out of convention Similar issue in Table	to specify a value "Less than xx 179B-5.	κ χ ".	(ACCE	PT IN PRINCIPLE.	ise to comment #451.		
SuggestedRemedy Change "Integrated n noise voltage (max)" Change "Less than T Make similar updates	ear-end crosstalk noise voltage' BD" to "TBD" in Table 179B-5.	" to "Integrate	d near-end crosstalk	C/ 176 de Koos, A Comment	SC 176.8 Andras Type T	P299 Microchip Tea Comment Status A	L 6 chnology	# 223 PMA delay
Response ACCEPT IN PRINCIF	Response Status C PLE.			Should the 4-codeword deskew (compensating for skew across an AUI) be included in the PMA delay constraint? I think not. This should be seen as the delay of the AUI itself, and should not be included in the PMA's delay constraint.				
Implement suggested Note that comment #	l remedy with editorial license. 217 proposes a value to use in p	place of TBD.		Suggested	IRemedy			
				Response ACCE	PT IN PRINCIPLE.	Response Status C		

Resolve using the response to comment #451.

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

Comment ID 223

Page 19 of 49 1/21/2025 9:54:20 AM

C/ 176	SC 176.8	P 299	L 21	# 224	C/ 176	SC 176.8	P 299	L 6	# 226	
de Koos, A	ndras	Microchip Tec	hnology:		de Koos, A	Andras	Microchip Tech	nnology	-	
Comment	Туре т	Comment Status A		PMA delay	Comment	Туре Т	Comment Status A		PMA delay	
Whate Table may ge isolatio	ver method is us 176-6, a footnote et confused: look n, one could con	ed to specify the max delay f to the table is required to ex ing at the delay through the l clude that they should each	or the 1:8, 8:1 plain the meth Rx PMA in isol have a 2CW d	, 2:16, 16:2 SM-PMAs in od. Otherwise, readers ation, and the Tx PMA in elay for the skew.	In the table, why is the value for a 4:4 PMA so large (2x the 4:32 / 32:4 PMA)? Wou just be a wire? Is it because it could resonably be implemented with a 4:32 PMA in series with a 32 PMA? Assuming the 4:4 PMA value is correct, the same rules can be used for the 1:1, 2:2					
Suggested	Remedy				PMAs	ing the 4.4 PM	values of the 1:8. 2:16 . and 8:1	16 PMA. resp	ectively.	
Add the Note th intentio (25.6ns Response ACCER	e following note a nat since the dela onal skew for the s) contributes on PT IN PRINCIPL	after the table: ny constraint is respect to the 1:8 and 8:1 PMAs (51.2ns) a y ONCE. <i>Response Status</i> C E.	e sum of Rx and and for the 2:10	d Tx delays, the 6 and 16:2 PMAs	SuggestedRemedy For the '200GBASE-R 1:1 PMA' delay constraint values, double the delay constraint value of the '200GBASE-R 1:8 PMA or 8:1 PMA' delay constraints. For the '400GBASE-R 2:2 PMA' delay constraint values, double thedelay constraint values of the '400GBASE-R 2:16 PMA or 16:2 PMA' delay constraints.					
Resolv	e using the respo	onse to comment #451.			of the	'1.6TBASE-R 8	:16 PMA or 16:8 PMA' delay co	onstraints.	,	
Cl 176 de Koos, A Comment T The ma equal t	SC 176.8 ndras <i>Type</i> T ax delay values f o those of the 80	P299 Microchip Teo Comment Status A or the '1.6TBASE-R 8:16 PM 0GBASE-R 4:32 PMA or 32:	L6 hnology IA or 16:8 PMA 4 PMA, It is tr	# 225 <i>PMA delay</i> A' should be roughly ue that the 1.6T PMA	Response ACCE Resolv	PT IN PRINCIP ve using the res	Response Status C PLE. ponse to comment #451.			
does n of one	ot have the 'Dela 10-bit symbol is Remedy	y odd PCSLs by one symbol negligible in the context of th	l' function (176 lese delays.	.4.2.4.1), but the latency						

For the '1.6TBASE-R 8:16 PMA or 16:8 PMA' delay constraints, use the same values as the '800GBASE-R 4:32 PMA or 32:4 PMA'

Response Response Status C

ACCEPT IN PRINCIPLE. Resolve using the response to comment #451.

Ghiasi, Ali Ghiasi Qunatum/Marvell	
Comment Type TR Comment Status A	signal ok
Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_(jump into inter-suplayer variables before intorudcing ILT.	ILT box OK then
SuggestedRemedy	
Referencing Fig 180-2 would be helfull here. After the 1st paragraph add sentence PMD in this clause support Inter-sublayer Layer Training (ILT) type O1, see Anne	e: The x 178B.
Response Response Status C ACCEPT IN PRINCIPLE.	
A definitive statement as proposed in the suggested remedy is beyond the intent of service interface clause, which is defining interfaces between sublayers.	of the
However, it would be helpful to the reader to point out references for each of the m functions in the block diagram.	najor
In 180.3, change "training_status of the inter-sublayer training function" to "training of the inter-sublayer training (ILT) function (see 180.5.12)". Update 181.3, 182.3, 1 similar way.	g_status 83.3 in a
In 180.5.1 add text pointing out reference to subclauses defining these. Update , 1 182.5.1, and 183.5.2 in similar way.	81.5.1,
Implement with editorial license.	
C/ 181 SC 181.3 P440 L2 # 228	
C/ 181 SC 181.3 P440 L2 # 228 Ghiasi, Ali Ghiasi Qunatum/Marvell	
Cl 181 SC 181.3 P440 L2 # 228 Ghiasi, Ali Ghiasi Qunatum/Marvell Comment Type TR Comment Status A Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_C jump into inter-suplayer variables before intorudcing ILT.	<i>signal ok</i> ILT box OK then
Cl 181 SC 181.3 P 440 L2 # 228 Ghiasi, Ali Ghiasi Qunatum/Marvell Comment Type TR Comment Status A Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_OK jump into inter-suplayer variables before intorudcing ILT. SuggestedRemedy	<i>signal ok</i> ILT box OK then
Cl 181 SC 181.3 P 440 L2 # 228 Ghiasi, Ali Ghiasi Qunatum/Marvell Comment Type TR Comment Status A Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_C jump into inter-suplayer variables before intorudcing ILT. SuggestedRemedy Referencing Fig 180-2 would be helfull here. After the 1st paragraph add sentence PMD in this clause support Inter-sublayer Layer Training (ILT) type O1, see Anne:	<i>signal ok</i> ILT box OK then e: The x 178B.
Cl 181 SC 181.3 P 440 L2 # 228 Ghiasi, Ali Ghiasi Qunatum/Marvell Comment Type TR Comment Status A Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_C jump into inter-suplayer variables before intorudcing ILT. SuggestedRemedy Referencing Fig 180-2 would be helfull here. After the 1st paragraph add sentence PMD in this clause support Inter-sublayer Layer Training (ILT) type O1, see Annet Response Response Status	<i>signal ok</i> ILT box OK then e: The x 178B.

Cl 182	SC 182.3	P 465	L 6	# 2	229
Ghiasi, Ali		Ghiasi Qunatu	m/Marvell		
Comment Typ	be TR	Comment Status A			signal ok

Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into ILT box on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_OK then jump into inter-suplayer variables before intorudcing ILT.

SuggestedRemedy

Referencing Fig 180-2 would be helfull here. After the 1st paragraph add sentence: The PMD in this clause support Inter-sublayer Layer Training (ILT) type O1, see Annex 178B.

Response	Response Status	С	
	_		

ACCEPT IN PRINCIPLE. See resolution to comment #227

C/ 183	SC 183.3	P 494	L 6	# 230
Ghiasi, Ali		Ghiasi Qunat	um/Marvell	
Comment	Type TR	Comment Status A		signal ok

Signal_OK as shown in Fig 180-2 is from the Inner sublayer above then goes into ILT box on TX and another ILT box on the RX has Signal_OK out. We talk about Signal_OK then jump into inter-suplayer variables before intorudcing ILT.

SuggestedRemedy

Referencing Fig 180-2 would be helfull here. After the 1st paragraph add sentence: The PMD in this clause support Inter-sublayer Layer Training (ILT) type O1, see Annex 178B.

onse Response Status C

ACCEPT IN PRINCIPLE. Resolve using the response to comment #227

net 4th Task Force review comment

		EEE P802.3dj D1.	3 200 Gb/s,	400 Gb/s, 80	00 Gb/s, an	d 1.6 Tb/s	Ether
C/ 180	SC 180.9.5	P430	L 22	# 240		l supp	ort add
Ghiasi, Ali		Ghiasi Qunatu	um/Marvell			PMD I	receive
Comment	Type TR	Comment Status A			TDECQ	3, 5, 0 Xoo: 4	or 7. Fo
TDEC	Q masuremnt nee	eds to define test condition w	hen there is ar	optional AUI		No: 20)
Suggested	dRemedy					Strow	
Add fo confor applic Modul recove	bllowing codition to rming implementa able module stres le stressed input to ered AUI clock driv	the list of requiremetns in 1 tion must meet TDECQ with s input test as in 176C.4.4.5 blerance, or 120E.3.4.1 Mod ving the TDECQ pattern. S	80.9.5: Where the exposed A Receiver jitter ule stressed in see Ghiasi_3dj_	AUI is exposed UI configured for tolerance, 1200 put test and the _01_2501	, a)r ∋.3.4.3	I supp AUI in may b Yes: 3 No: 28	ort add put red e eithe 38 3
Response)	Response Status C				CI 494	
ACCE	PT IN PRINCIPLE	<u>.</u>					30
The fo https:/	bllowing contribution//www.ieee802.org	on was reviewed by the CRG J/3/dj/public/25_01/ghiasi_3d	6: lj_01a_2501.pd	lf		Comment TDEC	<i>Type</i> Q mas
Add th - Cour aggres Claus the cre	ne following TDEC nter-propagating a ssor used in receiv e 180/181, the cro osstalk pattern car	Q exceptions to be appropria synchronous optical signals ver stress tests is applied to sstalk test pattern can be pa n be pattern 5 or 7.	ately reworded: (crosstalk) as s all the PMD rea attern 3, 5, or 7.	specified for the ceive inputs at 7 . For Clause 18	ГРЗ. For 2/183,	Suggested Add fo confor applic Modul	IReme ollowing ming in able m le stres
Note t	that another comm	ient proposes adding a new nich if adopted may also be i	pattern: PRBS	31 encoded by 1 a 182/183	the	Response	
- Whe	- Where transmit direction where AUI is exposed, the AUI input recovered clock is the clock					ACCE Resol ¹	PT IN ve usin
xBASI	E-R signal.		- ,			C/ 182	SC
Impler	ment with editorial	license.				Ghiasi, Ali	
Straw	poll TF-4 (choose	1) directional	here counter-n	vrogagating sign	ale with	Comment TDEC	<i>Type</i> Q mas
data s as pro Yes: 4 No: 18	stream asynchrono pposed in ghiasi_3 48 3	dj_01.	re applied to the	eceive optica	l inputs	Suggested Add fo confor applic	dReme ollowing ming iu able m
Straw I supp	poll TF-5 direct	ional ditional criteria for TDECQ w	vhere PMD tran	ismit clock is		Modul	e stres ered Al
synch	ronized to the cloc	k recovered on the AUI inpu	it (with or witho	ut jitter stress) a	as	Response	I.
propo Yes: 4	sea in gniasi_3dj_ 12	U1.				ACCE	PT IN

No: 24

Straw poll TF-6 -- decision

opting exception "- Counter-propagating asynchronous optical signals s specified for the aggressor used in receiver stress tests is applied to all the inputs at TP3. For Clause 180/181, the crosstalk test pattern can be pattern or Clause 182/183, the crosstalk pattern can be pattern 5 or 7."

F-7 -- decision

opting TDECQ exception "- Where transmit direction where AUI is exposed, the covered clock is the clock source for the SSPRQ test pattern. The AUI pattern er PRBS31Q or a valid xBASE-R signal.

C/ 181	SC 181.9.5	P 454	L 22	# 241
Ghiasi, Ali		Ghiasi Qunatum	/Marvell	
Comment Tv	vpe TR	Comment Status A		TDECQ

suremnt needs to define test condition when there is an optional AUI

edy

g codition to the list of requiremetns in 180.9.5: Where AUI is exposed, a mplementation must meet TDECQ with the exposed AUI configured for nodule stress input test as in 176C.4.4.5 Receiver jitter tolerance, 120G.3.4.3 sed input tolerance, or 120E.3.4.1 Module stressed input test and the UI clock driving the TDECQ pattern. See Ghiasi_3dj_01_2501

Response	Response Status	С
,		-

PRINCIPLE.

ng the response to comment #240

C/ 182	SC 182.9.5	P 483	L17	# 242
Ghiasi, Ali		Ghiasi Qunat	um/Marvell	
Comment T	vpe TR	Comment Status A		TDECQ

suremnt needs to define test condition when there is an optional AUI

edy

g codition to the list of requiremetns in 180.9.5: Where AUI is exposed, a mplementation must meet TDECQ with the exposed AUI configured for odule stress input test as in 176C.4.4.5 Receiver jitter tolerance, 120G.3.4.3 ssed input tolerance, or 120E.3.4.1 Module stressed input test and the UI clock driving the TDECQ pattern. See Ghiasi_3dj_01_2501

Response Status C

PRINCIPLE. Resolve using the response to comment #240

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

Comment ID 242

-									
C/ 183	SC 183.9.5	P 509	L 4	# 243	C/ 181	SC 181.9.5	P 454	L 30	# 250
Ghiasi, Ali		Ghiasi Qunatu	m/Marvell		Ghiasi, Ali		Ghiasi Quna	atum/Marvell	
Comment	Type TR	Comment Status A		TDECQ	Comment	Type TR	Comment Status A		taps
TDEC	Q masuremnt ne	eds to define test condition w	hen there is an	optional AUI	Numb	er of pre-cursor	is maximum with min TBD		
Suggested	lRemedy				Suggested	Remedy			
Add fo confor applic	llowing codition t ming implementa able module stre	to the list of requiremetns in 1 ation must meet TDECQ with ss input test as in 176C.4.4.5	80.9.5: Where A the exposed AL Receiver jitter to	AUI is exposed, a II configured for olerance, 120G.3.4.3	What floatin 3 simi	was agreed duri g at least for nov lar to FFE length	ng Sept 2024 meeting to go w, given than agreement me n of 15.	with fixed 3 pre-c rge the TBD and	ursors and not a max line and just enter
Modul	e stressed input	tolerance, or 120E.3.4.1 Mod	ule stressed inp	ut test and the	Response		Response Status C		
	ered AUT Clock dr	Ning the TDECQ pattern. S	ee Ghiasi_3uj_0	J1_2501	ACCE	PT IN PRINCIP	LE.		
(esponse		Response Status C			Resolv	ve using the resp	ponse to comment #186		
Resol	e using the resp	e. onse to comment #240			C/ 180	SC 180.9.5	P 430	L 30	# 251
7/ 183	SC 183 9 5	P509	/ 14	# 248	Ghiasi, Ali		Ghiasi Quna	atum/Marvell	
hiasi Ali		Chiasi Ounatu	m/Marvell	11 240	Comment	Type TR	Comment Status A		taps
niasi, Ali		Comment Status		tans	Numb	er of pre-cursor	is maximum with min TBD		
Numh	er of pre-cursor i	s maximum with min TRD		iaps	Suggested	Remedy			
Suggested What	IRemedy was agreed durir	ng Sept 2024 meeting to go w	ith fixed 3 pre-c	ursors and not a	What floatin 3 simi	was agreed duri g at least for nov lar to FFE length	ng Sept 2024 meeting to go w, given than agreement me n of 15.	with fixed 3 pre-c rge the TBD and	ursors and not a max line and just enter
floatin 3 simi	g at least for now	v, given than agreement merg	e the TBD and i	max line and just enter	Response		Response Status C		
J Siiiii Resnonse		Response Status C			ACCE	PT IN PRINCIP	LE.		
ACCE Resolv	PT IN PRINCIPL /e using the resp	E. onse to comment #186.			Resol	ve using the resp	ponse to comment #186		
C/ 182	SC 182.9.5	P 483	L 25	# 249					
Shiasi, Ali		Ghiasi Qunatu	m/Marvell						
Comment Numb	<i>Type</i> TR er of pre-cursor is	Comment Status A s not maximum but rather just	t 3	taps					
Suggested	IRemedy								
What floatin simila	was agreed durin g at least for now to FFE length o	ng Sept 2024 meeting to go w v, given than agreement merg f 15.	ith fixed 3 pre-co e the cell with m	ursors and not a nax cell and just enter 3					
Response		Response Status C							
ACCE Resolv	PT IN PRINCIPL	E. onse to comment #186							

C/ 1	SC	1.4.92a	P53	L10	# 269	C/ 45	SC	45.2.1	P 70	L 7	# 272
Ran, Ade	e		Cisco			Ran, Ade	Э		Cisco		
Commen	nt Type	Е	Comment Status R		(withdrawn)	Comment	Туре	т	Comment Status R		(bucke
The inter	definitior faces" fo	n of 1.6TAU	JI-n includes "used for chip-to "For chip-to-module interfaces	-chip or chip-to and for chip-to	o-module electrical o-chip interfaces". This	Inner inner	FEC reg FEC po	gisters ar sitioning i	e contained in the PMA/PMD s in the stack, nor to the clauses	section but the s where it is de	ere is no reference to the efined (177 and 184).
dupli	icity is no	ot helpful.				Suggeste	dRemed	dy			
Follo	wing the	e new desc	riptions introduced in the new	AUI annexes,	the clarity of this	Add t	est desc	ribing the	e inner FEC MDIO positioning	(in the same I	MMD as the PMD).
defin	ition can	h be improv	ved.			Response	;		Response Status C		
Simi	lar conce	erns exist i	n the definitions of 200GAUI-n	, 400GAUI-n,	and 800GAUI-n.	REJE	CT.				
Suggeste	edReme	dy				There	is prec	edence fo e postioni	or having FEC control and stat	us registers in not called out	the PMA/PMD address
Char	nge the c	definition te	ext to:			justifi	cation fo	or making	an exception for the inner FE	C registers.	
"A pł	hysical ir	nstantiation	n of the PMA service	h/c Physical L	aver implementation	CL 00	SC	0	Past	/ 17	# 273
acros	ss multip	ole devices	. Specified separately for chip	-to-chip and ch	nip-to-module electrical	Ban Ada		U	Cisco		# 210
inter	faces. T		defined: 40 Jane (4 CTALU 40	000 and 4 07		Common	Type	тр	Comment Status A		Management interfac
widtr	1S OF 1.6 t-lane	I AUI-n are	e defined: 16-lane (1.61AUI-16	C2C and 1.6	AUI-16 C2M), and	"If the		Intorfaco	is not implemented provision	of an oquivalo	nt mochanism to accoss
(1.67	TAUI-8 C	2C and 1.	6TAUI-8 C2M)."			the va	ariables	is recomi	mended."		
A						This	sentence	e is repea	ated in multiple clauses and an	inexes (14 ins	tances).
Аррі	y corresp	ponaing ch	langes in the definitions of 200	IGAUI-n, 400G	AUI-n, and 800GAUI-n.	Acce	es to the	manada	ment variables is required ("st	all") if MDIO i	s implemented but
Respons	e Fot		Response Status Z			other	wise it is	s only rec	commended to have them acce	essible.	o implemented, but
REJI	ECT.						io ontio		ecces to the management ver	ablaa abauld	ha a raquirament avan if
This	commer	nt was WIT	HDRAWN by the commenter.			it is n	ot imple	mented.	iccess to the management van	ladies should	be a requirement even ir
C/ 45	SC	45.2.1	P 70	L 7	# 271	Suggeste	dRemed	dy			
Ran, Ade	e		Cisco			Chan	ge "prov	vision of	. is recommended" to "shall be	e provided", w	ith editorial license, in all
Commen	nt Type	ER	Comment Status A		(bucket)	Response	5		Poononoo Statua C		
The	base tex	t of 45.2.1	includes references to multipl	e PMA sublaye	ers and how MMD						
addr	esses ar	e allocated	1. 4 100 1 4 and 120 1 4 but d	oos not include	the corresponding	In 17	5.8. 176	.11. 177.	∟∟. 10. 178.13. 179.14. 180.11. 18	31.11. 182.11.	184.9. 185.11. 186.7.
refer	ences to	the new F	PMAs: 173.1.4 (apparently mis	sed by 802.3d	f) and 176.11.	187.1	1, and 1	78 ⁶ .15.	-,, - , , -	, - ,	, , ,
Suaaeste	edReme	dv			,	Chan to acc	ge "If the	e MDIO I	nterface is not implemented, p	rovision of an	equivalent mechanism
Bring	g in the fi	irst paragra	aph of 45.1.2 and add referend	ces to 173.1.4	and 176.11.	To: "I	f the MD	DIO Interfa	ace is not implemented, an alt	ernate mecha	nism to access
Respons	e		Response Status C			mana	gement	variables	s shall be provided."		
ACC	EPT IN	PRINCIPI	E.			imple	ment W		ai iicense.		
Bring	g in the fi 176.1.5	irst paragra	aph of 45.2.1 from the base st	andard and ad	d references to 173.1.4						

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

Management interface

(bucket)

C/ 177	SC 177.4.1	P309	L 32	# 276
Ran, Adee	•	Cisco		
Comment	Type ER	Comment Status A		(bucket)
"4-syn	nbol" is used only	here, elsewhere the term "s	symbol quartet" i	s used instead.
Suggested	Remedy			
Chang	je to "symbol qua	rtet"		
Response		Response Status C		
ACCE	PT.			
C/ 177	SC 177.4.1.5	P 311	L15	# 277
Ran, Adee		Cisco		
Comment	Туре Т	Comment Status A		(bucket)
The re 400GE	ader may be curi BASE-R PHYs.	ous why symbol multiplexing	g is not performe	ed for 200GBASE-R and
This is perform unders	because the data med by the PMA stand if not stated	a on each PCS lane already (as illustrated in Figure 176- l explicitly.	includes 4-way -6). But that may	RS-FEC interleaving / be difficult to
Suggested	Remedy			
Add ar "NOTE output (see F	n informative note EIn 200GBASE- of the PMA belov igure 176–6)."	e at the end of 177.4.1.5: R and 400GBASE-R PHYs, w the PCS is already symbo	this operation is I multiplexed wit	not required, since the h4-way interleaving
Response		Response Status C		
ACCE Impler	PT IN PRINCIPLI ment the suggeste	E. ed remedy with editorial lice	nse.	

C/ 177	SC 177.4.2	P 311	L 24	# 278
Ran, Adee		Cisco		
Comment Typ	De T	Comment Status R		(withdrawn)

The last delay line (labeled "Delay Line 2") is actually not a delay line. The interleaver can be described as being composed of three data paths, of which the first two include delay lines (0 and 1) and the third does not.

SuggestedRemedy

Rephrase the text in this subclause and change Figure 177-4 per this comment, changing "Delay Line n" to "interleaver path n".

Implement any additional edits required by this change with editorial license.

Response	Response Status	Ζ
----------	-----------------	---

REJECT.

This comment was WITHDRAWN by the commenter.

/ 177	SC 177.4.2	P311	L 26	# 279
an, Adee		Cisco		
Comment Typ	be ER	Comment Status A		(bucket)

Commas are missing in the 4 paragraphs about delay lines, and periods are inconsistent.

SuggestedRemedy

In the first paragraph, add commas after "200GBASE-R" and before "and the last line". Similarly for the other 3 paragraphs.

Add a period at the end of the second and third paragraphs.

Response ACCEPT.		Response Status C		
C/ 177	SC 177.4.4	P 312	L 34	# 280
Ran, Adee		Cisco		
Comment	Type ER	Comment Status A		(bucket)

The last sentence in 177.4.4 is "Within each RS-FEC symbol, bit 0 is transmitted first and bit 9 is transmitted last". The transmission order is relevant for the 120-bit block creation, not for the circular shift (circular shift would be the same regardless of the bit order within a symbol).

SuggestedRemedy

Move the quoted sentence to 177.4.3.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement the suggested remedy with editorial license.

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

Comment ID 280

Page 25 of 49 1/21/2025 9:54:20 AM

C/ 177	SC 177.4.5	P 313	L 24	# 281
Ran, Adee		Cisco		
Comment Missin	<i>Type</i> ER g commas	Comment Status A		(bucket
Suggested Add a Add co	<i>IRemedy</i> comma after "flo ommas before an	ws". d after "m<119:0>".		
Response ACCE	PT.	Response Status C		
Cl 177	SC 177.4.5	P 313	L 51	# 282
Ran, Adee		Cisco		
Comment the inte other in Suggested	<i>Type</i> ER eger i is a scalar, nstances) <i>IRemedy</i>	Comment Status A not a vector, so it should no	t be in boldface ł	<i>(bucket</i>) nere (it is not bold in
Remov	ve the boldface for	ormat from i.		
Response ACCEI	PT.	Response Status C		
C/ 177	SC 177.4.5	P 313	L 51	# 283
		Cisco		
Ran, Adee				

This reads as if the s bits are the binary representation of the 128 elements of the field - but per Equation 177-2 these are actually the binary coefficients in the linear combination of α_0 through α_6 that creates α_i . I suspect these are not the same.

SuggestedRemedy

Move the quoted sentence after the subsequent one (which states that the elements can be expressed as a linear combination), and change "binary vector corresponding to" to "binary coefficients of the linear combination that creates".

Response Response Status C

ACCEPT IN PRINCIPLE. Implement the suggested remedy with editorial license.

C/ 177	SC	177.4.5	P	314	L1	# 284
Ran, Adee			Cisc	0		
Comment	Туре	ER	Comment Statu	s A		(bucket)
The se instand It also	econd s ces of " include	entence in and", and s "first", b	the first paragraph 2 instances of "who ut there seems to b	n spa ere". be no	ns 5 lines and includ It is difficult to follow further steps.	des 6 commas, 3 /.
Suggested	Remed	ły				
Rewrite	e this s	entence, p	referably breaking	it into	o more readable pie	ces.
Response			Response Status	C		
ACCEI Implem	PT IN F	PRINCIPLE e suggeste	E. d remedy with edit	orial	license.	
C/ 177	SC	177.4.7	P	315	L10	# 285
Ran, Adee			Cisc	0		
Comment	Туре	TR	Comment Statu	s A		(bucket)
"The ra The ex It would informa	ate is act rate d be he ation sl	s" e depends elpful for th nould prefe	on the input rate w e reader to write th rably be placed in	/hich le rati the "s	has some tolerance io of the output rate summary of functior	e. and the input rate. This ns" in 117.1.3 as well.
Suggested	Remed	ły				
Chang Add a	e "the i statem	rate" to "the ent about t	e nominal rate". he ratio, here and	in 17	7.1.3.	
Response			Response Status	C		
ACCEI Implem	PT IN F	PRINCIPLE e suggeste	 d remedy with edit 	orial	license.	

C/ 177	SC 177.4.9	P317	L 4	# 286	Cl 177	SC	177.5.2	P 318	L 7	# 289
Ran, Adee		Cisco			Ran, Ade	;		Cisco		
Comment	Type TR	Comment Status A		(bucket)	Comment	Туре	TR	Comment Status A		(bucket
"These betwee	e test patterns are en an Inner FEC	e used to test adjacent layer in and external testing equipment	nterfaces or to nt"	perform testing	"Blind perfor	1:8 bit- med to	pair deinte eight Inner	rleaving (each pair of bits co FEC flows"	orresponding to	a PAM4 symbol) is
Which	adjacent layer in	terfaces? and what is "testing	between"?		It is u occas	nclear v ional us	vhat "blind" se is incons	refers to in this operation. ' sistent.	'blind" is no def	ined in 802.3 and its
These PMD s	generators are o service interface (nly in the output direction, so which is then used with extern	they can only nal testing equ	be used to drive the lipment).	Perha	ps "initi	al" is more	adequate here.		
Suggested	lRemedy				Suggeste	dReme	dy			
Chang "If imp	e to lemented, these	est patterns can be used to d	rive the PMD	service interface for	Chan "blind	ge "bline ' in this	d" to "initial subclause	" in the quoted sentence an	id the one with t	the other instance of
PMD te	esting purposes".	_			Response			Response Status C		
ACCEI Implen	PT IN PRINCIPLI	Response Status C E. ed remedy with editorial licens	e.		ACCE Chan "1:8 b to eig	PT IN I ge the fi it-pair d nt Inner	PRINCIPLE irst sentend leinterleaving FEC flows	E. ce to: ng (each pair of bits corresp . The initial position is not s	oonding to a PA	M4 symbol) is performed
C/ 177	SC 177.4.9	P 317	L 5	# 287	CL 177	50	177 5 0	D210		# 200
Ran, Adee		Cisco				. 30	177.3.2		LI	# 290
Comment	Type TR	Comment Status A		(bucket)	Commont	; Turno	тр	Commont Status		(huoko
It is no lane. The de MDIO Note th enable	of specified what in efinitions in clause mappings, and the nat some of the p bits per lane.	appens when more than one e 120 which are referenced in he case where two are enable atterns in clause 120 are not	generator is e clude differen d is only cove per-lane but h	enabled on the same t control variables and ered in 45.2.1.170. ere all patterns have	The ir canno The s into b Howe than b	itial ("b t rely of ource o ts. ver, the vit pairs	lind") deinta n the FEC f the bit pa same deir . This is cu	erleaving and synchronizatio decoder. irs is likely hard decoding of nterleaving is later performe- rrently not stated.	on is performed f the input symb d on the input s	on bit pairs, since they bols into PAM4 and then symbols, which are more
Suggested	IRemedy				Suggeste	dReme	dy			
Add te genera	xt in 177.4.9 stati ators on a lane af	ng that all generators are per fects only that lane, and that t	lane, that ena	abling any of the pattern hen more than one	Add to hard o	ext stati lecodin	ng that the g is used fo	alignment found by the initi or deinterleaving of soft inpu	al synchronizat uts into the Inne	ion based on the PAM4 r FEC decoding.
genera	ator is enabled on	the same lane is not specifie	d.		Response			Response Status C		
Response ACCEI Implen	PT IN PRINCIPL	Response Status C E. ed remedy with editorial licens	e.		ACCE Imple	PT IN I ment th	PRINCIPLE e suggeste	 . .	nse.	

(bucket)

(bucket)

C/ 177	SC 177.5.4	P319	L10	# 291	C/ 177	SC	177.5.4	P 319	L11	# 293
Ran, Adee		Cisco			Ran, Adee			Cisco		
Comment 7	Гуре Е	Comment Status A		(bucket)	Comment	Гуре	TR	Comment Status A		(bucket)
"The In two bits	ner FEC decoder for each receive	r is a soft-decision decoder that d PAM4 symbols"	t requires a h	nigher resolution than	"The d value"	ecoder	evaluates	the incoming codeword a	and determines tl	he most likely codeword
Wordin	g can be improve	ed.			Then ir	nput to	the decode	er is not a codeword (a c	odeword is a mei	mber of a set of 128-bit
Suggested	Remedy				vectors	s). The	input is a v	ector of "soft" samples t	hat corresponds	to a transmitted codeword.
Change	e to				Suggested	Remed	ly			
"The In more th	ner FEC decodin nan two bits for ea	g assumes soft-decision opera ach received symbol".	tion that req	uires a resolution of	Change to "The decoder evaluates the incoming block of 64 rx_symbol inputs and determines the most likely codeword value".					
Response		Response Status C			Response			Response Status C		
ACCEPT IN PRINCIPLE. Implement the suggested remedy with editorial license.						PT IN I nent th	PRINCIPLE e suggeste	d remedy with editorial li	cense.	
C/ 177	SC 177.5.4	P 319	L11	# 292	C/ 177	SC	177.5.4.1.1	P319	L 21	# 294
Ran, Adee		Cisco			Ran, Adee			Cisco		
Comment 7	Type TR	Comment Status A		(bucket)	Comment	Гуре	ER	Comment Status A		(bucket)
The as Also, it decode stated. Compa specific This is implem The su https://	sumed correction is not stated what or does not mark in The error pattern re to the RS-FEC cations for correct important information. ggested remedy in www.ieee802.org	a capability of the decoder is no at happens when a codeword is the data as error in any way (si ns that appear in this case are C decoder specification in 91.5. tion capability and uncorrectab ation for testing, monitoring and is based on slide 9 of /3/df/public/22_05/22_0517/blis	t stated. uncorrectab nce it is an ir not describe 3.3 (where th e error mark d analyzing th ss_3df_01a_	le. I assume the oner code) but it is not d. here are normative ing). he performance of an 220517.pdf.	"The or correct The ou the typ Suggested Chang "The li Response ACCEF Chang "The li	utput o ed coo tput is e of co <i>Remed</i> e to nner F PT IN I e to: nner FE	f the Inner lewords." not a sepa deword it c dy EC decode PRINCIPLE EC decoder	FEC decoder will recogn rate entity, it is a block o ame from. The counter i r will treat any miscorrec <i>Response Status</i> C interprets miscorrected	f 120 bits that ha s internal to the c ted codeword as	cted codewords as is no information about decoder. a corrected codeword."
Suggested	Remedy				Implem	nent wi	th editorial	license.		
Add so "The de to one decode Or mod	me test e.g. ecoder is expecte bit error and mos ed correctly will co lifications of the a	ed to correct all codewords in w t codewords with up to three bi ontain at least four bit errors" above if necessary.	hich hard de t errors. Cod	cision would result in up ewords that are not						
If there editor's	is no consensus note inviting con	for additional text (either the o tributions in this area.	ne above or	otherwise), add an						
Response		Response Status C								
ACCEF Implem	PT IN PRINCIPLE ent the suggeste	d remedy with editorial license								
TYPE: TR/1 COMMENT SORT ORE	echnical requirec STATUS: D/disp ER: Comment IE	ER/editorial required GR/ger patched A/accepted R/rejecter	neral required d RESPOI	d T/technical E/editorial G/g NSE STATUS: O/open W/w	general ritten C/closed	Z/witl	ndrawn	Con	nment ID 294	Page 28 of 49 1/21/2025 9:54:2

1/21/2025 9:54:20 AM

C/ 177	SC 17	7.6.2.1	P:	320	L 34	# 296
Ran, Adee			Cisc	0		
Comment	Туре Е	R	Comment Status	s A		(bucket)
The de for all e Also, "a	efinition of eight flows and" here	all_sync but the has no s	ed does not (stric Inner FEC flow 0 special meaning a	tly) co is not nd sh	over the case where t identified. hould not be capitaliz	sync_flow <x> is true zed.</x>
Suggested	Remedy					
Chang Chang	e "set to f e "AND" t	alse whe o "and".	n sync_flow <x> is</x>	false	e for any x" to "set to	false otherwise".
Response			Response Status	C		
ACCEI	PT.					
C/ 177	SC 17	7.10.	P	325	L 9	# 298
Ran, Adee			Cisc	0		
Comment	Туре 1	R	Comment Status	s A		(bucket)
Table ² editor's	177-6 incl s note, the	udes con ese varial	trol variables for poles are not define	oer-la ed.	ne inner FEC enable	 As stated in the
There have n	idea of dis ever beer	abling th discuss	e FEC and the be	ehavio	ors of the encoder a	nd decoder in this state
If the ir enable need n	ntent is to and sign ot be spe	have a v al detect cified in a	vay to power down functions can be a standard.	n the used.	FEC logic, then the However, this would	adjacent PMD's output d not be observable and
Suggested	Remedy					
Delete registe	the "Inne rs in claus	r FEC en se 45.	able" control varia	ables	in table 177-6 and t	ne corresponding MDIO
Response			Response Status	C		
ACCEI Resolv	PT IN PRI ve using th	NCIPLE.	se to comment #	1.		

C/ 177	SC 1	77.10.	P 325 L 3 9	9 # 299	
Ran, Ad	lee		Cisco		
Comme	nt Type	TR	Comment Status A		(bucket)
The	status var	iable nam	e "pmal locked demux" is not menti	oned in the referenced	

The status variable name "pmal_locked_demux" is not mentioned in the referenced 177.4.1.2. It is defined in 176.4.4.2.1. Also, it is a per-lane variable.

SuggestedRemedy

Either change the cross-reference to clause 176, or add text in 177.4.1.2 that the inner FEC has separate status variables for this function (only in the transmit direction? Or both?) Add "lane 0 through 7".

Response Response Status C

ACCEPT IN PRINCIPLE.

Change the cross reference to clause 176, and implement with editorial license.

C/ 00 S	SC 0	P 338	L 30	# 302
Ran, Adee		Cisco		
Comment Typ	e T	Comment Status R		(withdrawn)

The Skew and Skew Variation at SP2 are specified with the words "is limited to", while for all other measurement points it is specified with "shall be less than".

"is limited to" reads like an informative statement, but it is a normative requirement (it is not related to the fact that SP2 may not be accessible; the same is true for SP5).

This wording appears in multiple places in the draft (per PMD and data rate). Note that the same wording is used in multiple clauses of the base standard. If necessary, it can be dealt with in maintenance.

SuggestedRemedy

Change "is limited to" to "shall be less than" in all instances of Skew and Skew variation at SP2.

Response Response Status Z

REJECT.

This comment was WITHDRAWN by the commenter.

Cisco ER Comment Status A ecified in 179.8 and 179.9. 179 t here. erence per the comment. Response Status C 50.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect b	Contains manage L1 L1 A A A A	<i>(bucket)</i> ement variable mapping # <u>318</u> <i>(bucketp)</i>	Ran, Adee Comment T The ma PMDs. I assur specific case c Should corresp Suggested Not sur Whate license	Type T aximum of ne this is a cation for a san still hav the transponding to Remedy e what the rer the sol	C btical return due to the t a 200GBAS e a single- nitter's RIN a single-la a single-la a answer is ution is, im	Cisco Comment Status R In loss tolerance in 200G Gransmitter's connector; SE-DR1 with a multi-fibe Jane MDI. JxxOMA in this case be ine MDI? and where this distinction oplement similarly in clau	BASE-DR1 is dif if that's true, sho ir MDI (breakout) measured with a on should be ma use 182 as neces	<i>(withdrawn)</i> fferent than in the other ould there be a different ? The receiver in that a reflectance ade. ssary, with editorial
ER Comment Status A ecified in 179.8 and 179.9. 179 t here. erence per the comment. Response Status (B0.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect (A contains manage C L1 A conveyed to 	(bucket) ement variable mapping # <u>318</u> (bucketp)	Comment T The ma PMDs. I assur specific case ca Should corresp Suggested. Not sur Whate license	Type 1 aximum op ne this is ation for an still hav the trans bonding to Remedy e what the rer the sol	C btical return due to the t a 200GBAS re a single- nitter's RIN a single-la a answer is ution is, im	Comment Status R In loss tolerance in 200G Irransmitter's connector; SE-DR1 with a multi-fibe lane MDI. NxXOMA in this case be ine MDI? Is and where this distinction uplement similarly in clau	BASE-DR1 is dif if that's true, sho r MDI (breakout) measured with a on should be ma use 182 as neces	<i>(withdrawn)</i> fferent than in the other build there be a different ? The receiver in that a reflectance ade. ssary, with editorial
ecified in 179.8 and 179.9. 179 t here. erence per the comment. <i>Response Status</i> 60.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect	.14 contains manage	ement variable mapping # [<u>318</u> (bucketp)	The ma PMDs. I assur specific case ca Should corresp Suggested Not sur Whate license	aximum o ne this is cation for an still hav the trans bonding to Remedy re what the rer the sol	due to the t a 200GBAS e a single- nitter's RIN a single-la a single-la a answer is ution is, im	n loss tolerance in 200G rransmitter's connector; SE-DR1 with a multi-fibe lane MDI. VxXOMA in this case be ine MDI? and where this distinction uplement similarly in clau	BASE-DR1 is dif if that's true, sho r MDI (breakout) measured with a on should be ma use 182 as neces	iferent than in the other ould there be a different ? The receiver in that a reflectance ade. ssary, with editorial
erence per the comment. Response Status (80.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect (5 L1	# <u>318</u> (bucketp)	l assur specifio case c: Should corresp <i>Suggested</i> Not sur Whate license	ne this is cation for an still hav the trans conding to Remedy re what the rer the sol	due to the t a 200GBAS re a single- nitter's RIN a single-la answer is ution is, im	ransmitter's connector; SE-DR1 with a multi-fibe lane MDI. JxxOMA in this case be ne MDI? and where this distinction uplement similarly in clau	if that's true, sho r MDI (breakout) measured with a on should be ma use 182 as neces	uld there be a different ? The receiver in that reflectance ade. ssary, with editorial
Response Status (80.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect (<i>L</i> 1	# <u>318</u> (bucketp)	Suggested Suggested Not sur Whate license	the trans conding to Remedy re what the ver the sol	a single-la answer is ution is, im	IxxOMA in this case be ne MDI? and where this distinction	measured with a on should be ma use 182 as neces	n reflectance ade. ssary, with editorial
B0.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect 1	5 L1	# 318 (bucketp)	Suggested Not sur Whate license	Remedy e what the ver the sol	answer is ution is, im	and where this distincti	on should be ma use 182 as neces	ade. ssary, with editorial
80.5.4 P415 Cisco TR Comment Status A e Global PMD signal detect	<i>L</i> 1	# 318 (bucketp)	Not sur Whate license	e what th	answer is ution is, im	and where this distincti	on should be ma use 182 as neces	ade. ssary, with editorial
Cisco TR Comment Status A e Global PMD signal detect y	A	(bucketp)	Whatev license	ver the so	ution is, im	plement similarly in clau	use 182 as neces	ssary, with editorial
TR Comment Status A	A	(bucketp)	license					
e Global PMD signal detect	variable is conveyed t			•				
rvice interface"		o PMD client sublayers	<i>Response</i> REJEC	:т.	Re	esponse Status Z		
anymore; the service interface agram). The variable has a diff	conveys the state of erent semantic and is	the ILT function (as only accessible through	This co	mment w	as WITHDF	RAWN by the commenter	er.	
			C/ 180	SC 180	.8	P 421	L 41	# 321
ad contance			Ran, Adee			Cisco		
ed sentence.			Comment T	ype E	R C	Comment Status A		(bucket)
larly in other optical PMD claus	ses as necessary, wit	h editorial license.	The wo	rds "shall	meet the" a	appear twice in success	ion.	
Response Status	;		Suggested	Remedy				
			Delete	once.				
			Response ACCEF	νT.	Re	esponse Status C		
a (d sentence. In other optical PMD claus <i>Response Status</i>	d sentence. Irly in other optical PMD clauses as necessary, wit <i>Response Status</i> C	d sentence. In other optical PMD clauses as necessary, with editorial license. <i>Response Status</i> C	This co Gram). The variable has a different semantic and is only accessible through d sentence. Intry in other optical PMD clauses as necessary, with editorial license. Response Status C This co C/ 180 Ran, Adee Comment 7 The wo Suggested/ Delete Response ACCEF	This comment was a different semantic and is only accessible through d sentence. In the variable has a different semantic and is only accessible through Cl 180 SC 180 Ran, Adee Comment Type El The words "shall SuggestedRemedy Delete once. Response Status C Response ACCEPT.	This comment was WITHDI This comment was WITHDI C/ 180 SC 180.8 Ran, Adee Comment Type ER C The words "shall meet the" SuggestedRemedy Delete once. Response Status C Response Reader C ACCEPT.	This comment was WITHDRAWN by the commenter of the restriction (as gram). The variable has a different semantic and is only accessible through d sentence. Industry in other optical PMD clauses as necessary, with editorial license. Response Status C C Comment Type ER Comment Status A The words "shall meet the" appear twice in success SuggestedRemedy Delete once. Response Status C Response Status C ACCEPT.	This comment was WITHDRAWN by the commenter. This comment was WITHDRAWN by the commenter. C/ 180 SC 180.8 P421 L41 Ran, Adee Cisco Comment Type ER Comment Status A The words "shall meet the" appear twice in succession. SuggestedRemedy Delete once. Response Status C ACCEPT.

Comment ID 321

C/ 180	SC 180.8	P 421	L 42	# 322	C/ 180	SC 180.9.5	P 430	L35	# 331
Ran, Adee		Cisco			Ran, Adee		Cisco		
Comment	Type TR	Comment Status A		(bucket)	Comment 7	Type TR	Comment Status A		(bucket)
"per th 180-10	e definitions in 18) in 180.9.	30.9" seems irrelevant. There	e are not specifi	cations related to Table	Footno "Main t	te a of Table 18 ap" is not define	0-18 says "Relative to main ta d anywhere, though it may be	ap". e assumed that	it is the largest positive
Suggested	Remedy				Even w	vith that assump	tion. It is unclear whether this	means that the	e coefficient limits are
Delete	"per the definitio	ns in 180.9".			normal main ta	lized by the mair	n tap's coefficient or that the c both.	coefficient indice	es are such that the
Implen	nent similarly in c	ther optical PMD clauses as	necessary, with	editorial license.	Leuene	act the answer is	"both" but it is not clear from	the text	
Response		Response Status C			Suggested			T THE TEXT.	
ACCEI	PT IN PRINCIPL	=. medy with editorial license			Suggesteal	Remeay	and "The metic ten is merical		·····
			/ 1	# 220	values	are relative to the	his tap's coefficient."	by I=0. The mir	nimum and maximum
	30 100.0.3.1.	1 F 424	21	# 320	Implem	nent similarly in	other optical PMD clauses as	necessary, with	h editorial license.
Commont		CISCO		(huakat)	Response		Response Status C		
Table	190-14 is for 800	GRASE-DR4		(DUCKEI)	ACCEF	PT IN PRINCIPL	.E.		
Suggested	Remedy				Implerr [Editor'	nent suggested i 's note: CC: 180	emedy (also in 181, 182, and , 181, 182, 183]	183) with edito	orial license.
Chang	e the reference to	o Table 180-13.				CC 400 40 4	D.422	/ 47	# 000
Response		Response Status C			C/ 180	30 180.10.1	P 433	L41	# 336
ACCEI	PT.				Ran, Adee		Cisco		
					Comment 1 Why is	<i>Type</i> ER = "IEC 62368-1" i	Comment Status A n green? It is not expected to	become an ac	<i>(bucket)</i> tive cross-reference.
					Similar	ly for IEC refere	nces in 180.10.2.		
					Suggested	Remedy			
					Change	e the format of t	hese references to regular te	xt.	
					Implem	nent similarly in	other optical PMD clauses as	necessary, with	n editorial license.
					Response		Response Status C		
					ACCEF Implem	PT IN PRINCIPL	E. emedy with editorial license.		
					•		-		

C/ 180	SC 180.11	P 435	L 46	# 337	C/ 181	SC ·	181.3	P 440	L 6	# 339
Ran, Adee	•	Cisco			Ran, Adee)		Cisco		
Comment	Type ER	Comment Status A		(bucket)	Comment	Туре	ER	Comment Status A		(bucket)
"PMD	_signal_detect_3	, to PMD_signal_detect_2"			"where	e i = 0 to	o n–1"			
Suggested Delete	dRemedy e "to".	other optical DMD elevance	a noncontra with	aditarial license	For thi Using appea explici	is PMD, "n" just irs a few it numbe	the num makes li times in ers are us	ber of PMD lanes is always a fe harder for the reader, espe the clause, and in some pla- sed.	ecially since n (ces (e.g. Figure	the subsequent line). with this meaning) only 181-2, 181.5.2, 181.5.3)
Response	fient similarly in	Booponoo Statuo	s necessary, with	eultonal license.	Note tl	hat the '	"n" in 800) GAUI-n is a different variabl	e and should be	e kept as is.
ACCE	PT IN PRINCIPI	F			Suggested	Remed	lv			•
Impler	nent the suggest	ted remedy with editorial lice	nse		Chang	, ge to "wł	, here i = 0) to 3".		
C/ 181	SC 181 1	P438	/ 49	# 338	Delete	e "The n	umber of	parallel streams, n, is 4.".		
Ran, Adee		Cisco	243	π 330	ln 181 In 181	.5.4 cha .5.5, in	ange n to Table 18	4. 1-15, and in Table 181-16, c	hange "n-1" to	3.
Comment	Type ER	Comment Status A		(bucket)	Response			Response Status C	-	
169.2	is included in this	s amendment.			ACCE	PT IN P	RINCIPI	_E.		
Suggested	Remedy				Impler	ment sug	ggested	remedy with editorial license.		
Make	it an active link.				C/ 181	SC ·	181.4.1	P 440	L 25	# 340
Response		Response Status C			Ran, Adee)		Cisco		
ACCE Impler	PT IN PRINCIPL ment suggested i	.E. remedy with editorial license			Comment 169.4	<i>Type</i> is incluc	ER ded in thi	Comment Status A s amendment.		(bucket)
					S <i>uggested</i> Make i	<i>Remed</i> it an act	<i>ly</i> tive link.			
					Response ACCE Impler	PT IN P nent su	PRINCIPI ggested	Response Status C E. remedy with editorial license.		
					C/ 181	SC ·	181.4.2	P 440	L 28	# 341
					Ran, Adee)		Cisco		
					Comment 169.5	<i>Type</i> is incluc	ER ded in thi	Comment Status A s amendment.		(bucket)
					S <i>uggested</i> Make i	<i>Remed</i> it an act	<i>ly</i> tive link (twice).		
					Response			Response Status C		
					ACCE Impler	PT IN P	PRINCIPI ggested	E. remedy with editorial license.		

Comment ID 341

Page 32 of 49 1/21/2025 9:54:20 AM

C/ 182	SC 182.9.5	P483	L1	# 346		C/ 178B	SC 178B 5	P766	L33	# 355
Ran. Adee		Cisco		,, 040		Ran. Adee		Cisco	-00	
Comment	Type TR Co	mment Status A			SER	Comment T	vpe E	Comment Status A		(bucket)
"Targe If this v ideal tr with th	t PAM4 symbol error ra value is used instead of ransmitter would be neg e BER and target symbol class TDECO correction	atio of 9.6 × 10^-3" f 4.8e-4 as TDECQ w gative, because the n pol error ratio for Gray	as originally defin ormalization fact coded PAM4" (v	ned, then TDECQ of or Q_t is "consistent which is 4.8e-4).	an	The firs and PM They se SuggestedP Move th	t two paragraph Ds. eem to belong to Remedy	s of 178B.5 are not about the 178B.4, based on its title.	e protocol, but ab	oout AUI components
This m		ig other than a penal	ity as it is typica	ny understood.		Response	lese paragraphic	Boononoo Statua		
In add feasibl It woul and ins	ition, as demonstrated e, as test signal achiev d make more sense to stead relax the maximu	by several presentation ing the maximum TDI keep the target PAM im TDECQ value in the	ons, TDECQ with ECQ cannot be r 4 SER as 4.8e-4 is clause by a fa	n such high SER is no neasured (with the same Q_t) ctor corresponding to	ot	ACCEP The firs Move th Implem	T IN PRINCIPL t paragraph of 1 le second parag ent with editoria	E. 78B.5 is related to the section graph of 178B.5 to the begini I license.	on, so it should st ng of 178B.4	ay in 178B.5.
the lov	ver Q function of the hig	gher SER, to allow a r	nore closed eye:			C/ 178A	SC 178A	P 757	L 26	# 360
- For S	ER=4.8e-4: Q(SER*2/3	3)=-3.414 (as in 121.8	3.5.3)			Shakiba, Ho	ossein	Huawei Tech	nologies Canada	
- For S - 10*lo Thus t	ER=9.6e-3: Q(SER*2/3 g10(3.414/2.489)=1.37 he relaxation should be	3)=-2.489 dB e 1.37 dB.				Comment T Add qua	<i>ype</i> T antization noise.	Comment Status R		Quantization noise
Suggested	Remedy					SuggestedF	Remedy			
Chang Chang	e the target PAM4 SEF e the maximum TDEC	R to 4.8e-4. Q and TECQ from 3.2	dB to 3.2+1.37=	=4.57 dB.		Add a r support	ew sub-section ing document fo	"178A.1.7.6 Quantization No or the proposed sub-section of	bise". Please refe	r to slides 2-4 of the
Make	corresponding changes	to the receiver speci	fications (SECQ)	in Table 181–6.		<i>Response</i> REJEC	т.	Response Status Z		
Implen	nent similarly in clause	183 with modified val	ues as necessar	y, with editorial licen	se.	This co	mmont was W/I	FUDPAW/N by the commont	or.	
Response	Res	ponse Status C				1115 CO			51.	
ACCE Simila SER v	PT IN PRINCIPLE. r as comment #146 to I alue 9.6x10-3. The con	D1.2. A strawpoll was	held and it was	agreed to maintain th	ne not	C/ 178A	SC 178A.1.7	P 754	L 50	# 361
sufficie	ent.					Shakiba, Ho	ssein -	Huawei Techi	nologies Canada	
Howev In 182 Chang	er, the Q_t value shoul .9.5 e: "Target PAM4 symb	ol error ratio of 9.6×10	0 with the SER va	alue.		Followin the sam	<i>ype</i> I ng first commen ppler.	t, Figure 178A-7 should show	w addition of the	Quantization noise after
To: "Tl In 183	ne target PAM4 symbol 95	l error ratio is 9.6×10-	3 and the related	I Q_t value is 2.489.'		Suggested	Remedy			
Chang LR4"	e: "Target PAM4 symb	.5 "Target PAM4 symbol error ratio of 9.6×10–3 for 800GBASE-FR4 and 800GBAS				Add qua the prop	antization noise	to the figure. Please refer to	slide 5 of the su	pporting document for
To: "Ti	ne target PAM4 symbol	l error ratio is 9.6×10-	3 and the related	I Q_t value is 2.489.'		Response		Response Status Z		
inplen						REJEC	Т.			
						This co	mment was WIT	THDRAWN by the commenter	er.	

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

Comment ID 361

C/ 178A	SC 178A.1.7	P 755	L 2	# 362	C/ 178A	SC 178A.1.7	P 755	L15	# 365
Shakiba, H	lossein	Huawei Techn	ologies Canada		Shakiba, H	lossein	Huawei Teo	hnologies Canada	
Comment	Туре Т	Comment Status R		Quantization noise	Comment	Туре Т	Comment Status R		Quantization noise
Follow	ing first comment	, Table 178A-9 should includ	e quantization n	oise parameters.	Follow	ing first commen	t, "sampler" should be repl	aced with "quantizer".	
Suggested	lRemedy				Suggested	Remedy			
Add tw	o quantization no	ise parameters to the table.	Please refer to s	slide 6 of the	Chang	e "sampler" to "c	juantizer".		
Response	ning document to	Response Status 7			Response		Response Status Z		
REIEC	T	Response Status Z			REJEC	CT.			
ILJL(51.				This co	omment was WI	THDRAWN by the commer	nter.	
This co	omment was WIT	HDRAWN by the commenter	r.						
					C/ 178A	SC 178A.1.8.	1 P 757	L 43	# 366
C/ 178A	SC 178A.1.7	P 755	L19	# 363	Shakiba, H	lossein	Huawei Teo	chnologies Canada	
Shakiba, H	lossein	Huawei Techn	ologies Canada		Comment	Туре Т	Comment Status R		Quantization noise
Comment	Type T	Comment Status R	to all the second de-	Quantization noise	Follow	ing first commen	t, "sampler" should be repl	aced with "quantizer".	
FOIIOW	ing first comment	, Equation (178A-14) should	include quantiza	ation noise PSD.	Suggested	Remedy			
Suggested	Remedy		lessinties to the	- descriptions - Discos	Chang	e "sampler" to "c	juantizer".		
refer to	b slide 7 of the su	oporting document for the pro	oposed change.	e descriptions. Please	Response		Response Status Z		
Response		Response Status Z			REJEC	CT.			
REJEC	CT.				This co	omment was WI	THDRAWN by the commer	nter.	
This co	omment was WIT	HDRAWN by the commenter	r				,		
1113 00		indication by the commenter			C/ 178A	SC 178A.1.8.	1 P 75 7	L18	# 367
C/ 178A	SC 178A.1.7	P 754	L 32	# 364	Shakiba, H	lossein	Huawei Teo	chnologies Canada	
Shakiba. H	lossein	Huawei Techn	ologies Canada		Comment	Туре Т	Comment Status R		Quantization noise
Comment	Туре Т	Comment Status R		Quantization noise	Follow	ing first commen	t, quantization noise shoul	d be added before sam	pler output is
Follow	ing first comment	, "sampler" should be replace	ed with "quantize	er".	applied	to the feed-forw	ard filter in Figure 178A-9.		
Suggested	IRemedy				Suggested	Remedy	to the figure Diagon refer	to olide Q of the outprov	ting document for
Chang	e "sampler" to "qu	uantizer".			the pro	posed change.	to the ligure. Please refer	to slide 8 of the suppor	ting document for
Response		Response Status Z			Response		Response Status Z		
REJEC	CT.				REJEC	CT.			
This co	omment was WIT	HDRAWN by the commenter	r.		This co	omment was WI	THDRAWN by the commer	nter.	

-										
C/ 178A	SC 178A.1.9	P 761	L10	# 368	C/ 178A	SC 178A	.1.11	P 762	L 39	# 370
Shakiba, H	lossein	Huawei Techr	nologies Canada		Shakiba, He	ossein		Huawei Techn	ologies Canad	a
Comment	Туре т	Comment Status R		Quantization noise	Comment 7	Гуре т		Comment Status R		Quantization noise
Followi	ing first comment	, Equation (178A-34) should	l include quantiza	tion noise PSD.	Followi	ng first com	ment,	quantization noise should b	e added befor	e sampler output is
Suggested	Remedy				applied	to the feed	-forwa	rd filter in Figure 178A-10.		
Add qu	antization noise	PSD to the equation. Please	refer to slide 9 o	f the supporting	Suggested	Remedy				
docum	ent for the propos	sed change.			Add qu	antization n	oise to	o the figure. Please refer to	slide 12 of the	supporting document for
Response		Response Status Z			Response	posed chan	ye.	Pooponoo Statua 7		
REJEC	CT.				Response	·T				
This co	omment was WIT	HDRAWN by the commente	er.		REJEC	· I .				
		,			This co	mment was	WITH	IDRAWN by the commente	r.	
C/ 178A	SC 178A.1.10	.2 P761	L 51	# 369		SC 4700	2	Deep	140	# 070
Shakiba, H	lossein	Huawei Techr	nologies Canada			30 1700	.3	F 003		# 378
Comment T	Туре т	Comment Status R		Quantization noise	D'Ambrosia	i, John		Futurewei, U.S	5. Subsidiary o	f Huawei
Followi	ing first comment	, more text should be added	to describe the p	procedure for deriving	Comment 1	ype E		Comment Status A		(bucket)
the pro distribu	bability density fu ution function of th	Inction of the quantization no ne noise and interference.	oise and its additi	on to the probability	This su implem help	bclause is in entation, bu	nclude It the f	ed to highlight the co-exister figure uses generic language	ice of bit and s e fort he PMA	ymbol muxing in an sublayers that doesn't
Suggested	Remedy				Suggested	Pomody				
Add the p	e suggested text paragraph.	in slides 10-11 of the suppor	rting document be	efore the last sentence	Add "B	M-" or "SM-	" as a	ppropriate to the PMA subla	yer boxes in F	ig 176B-4.`
Response		Response Status Z			Response			Response Status C		
REJEC	CT.				ACCEF	РТ.				
This co	omment was WIT	HDRAWN by the commente	er.		C/ 179B	SC 179B	.4.1	P806	L 1	# 380
					D'Ambrosia	ı, John		Futurewei, U.S	S. Subsidiary o	f Huawei
					Comment 1	Type ER		Comment Status R		(bucket)
					There of	loesn't appe	ear to	be a figure - was it deleted?	is this an edit	orial issue?
					Suggestedl	Remedy				
					add fig	ure to 179B-	-2			
					Response			Response Status C		
					REJEC	т.				
					The iss implem	ue is not ed ent.	litorial.	. The suggested remedy do	es not provide	sufficient detail to

C/ 178B	SC	178B.5	P 767	L1	# 381	C/ 174A	SC	174A.7.1.4	P	667	L17	# 385
Healey, Ad	dam		Broadcom Inc.			Healey, Ad	lam		Broa	dcom In	с.	
Comment	Туре	т	Comment Status A		(bucket)	Comment	Туре	т	Comment Statu	5 R		(withdrawn)
The "c not po	continue	e training" l le definitio	bit is in the control field. Also t n of the "Continue training" bit	he cross-refer	ence to 178B.8.8 does	An "en option	ror ma can be	sk" test meth e used for lar	nod can also be d ne-by-lane testing	efined fo and woເ	r PCS-based me uld enable a quic	asurements. This k assessment of
Suggested	dRemed	ly				whethe	er or no	ot the block e	error ratio require	nent is n	net with reduced	(or no additional) post-
Chang 178B.	ge to "T 7.2) if tr	he continu aining is e	e training bit in the control field	d of the trainin	ng frames (see	does n that th	ot nec e meth	essarily mea	an the block error defined in 174A.	ratio req 7.1.4 wou	uirement is not m uld need to be us	net. It instead means ed to confirm whether
Response			Response Status C			the blo	ck erro	or ratio requi	rement is, or is no	ot, met.		
ACCE	PT.					Suggested	Reme	dy				
C/ 178B	SC	178B.14.2	2.1 <i>P</i> 783	L 31	# 382	Consid measu	ler ado Iremen	ling a subcla its". The erro	use for "Error ma or mask is compu	sk test n ed in the	nethod using PCS same way as de	S-based efined in 174A.6.1.4
Healey, Ad	dam		Broadcom Inc.			(using	the va	lue of BERa	dded appropriate	for PCS-	based measurm	ents). The new
Comment	Туре	т	Comment Status A		(bucket)	the lan	ie unde	er test and sh	hould be minimize	ed for the	e most accurate r	esults.
The "C	Continu	e training"	bit is in the control field.			Response			Response Status	z		
Suggested	dRemed	ly				REJEC	CT.					
Chang encod	ge the la ed as tl	ast sentend ne "continu	ce of the definition of local_rts ue training" bit in the control fie	to "The logica eld of transmitt	al-NOT of this variable is ted training frames."	This co	ommer	nt was WITH	DRAWN by the c	omment	er.	
Response			Response Status C			C/ 177	SC	177.5.4.1.5	P	319	L 49	# 395
ACCE	PT IN F	PRINCIPLE	E			Shrikhande	e, Kapi	I	Mary	vell		
Impler Also ir	nent su n the de	ggested re	emedy with editorial license.	utus field" to "c	of the control field"	Comment	Type	т	Comment Statu	5 A		(bucket)
7100 1						The de	efinitior align to	n of the inner the FEC co	fec codeword er	or bin co counter i	ounters in 177.5.4 in 175.2.5.3.	1.1.5 could be edited to
						Suggested	Reme	dy				
						Align b	oin cou	nter definitio	n format in 177.5	4.1.5 to	the bin counter ir	า 175.2.5.3.
						Response			Response Status	С		
						ACCE	PT IN I	PRINCIPLE.	, ise to comment #	11		
						C/ 185	SC	185.12.4.1	P	562	L10	# 401
						Maniloff, E	ric		Cien	а		
						Comment	Type	т	Comment Statu	5 A		(bucket)
						Transr	nitter n	nominal cente	er frequency is no	t applica	ble to this PMD.	. ,
						Suggested	Reme	dy				
						Delete	this er	ntry.				
						Response			Response Status	С		
						ACCE	PT.			-		
TYPE: TR	/technic	al required	d FR/editorial required GR/ge	eneral required	d T/technical F/editorial G/o	reneral				Comm	nent ID 401	Page 36 of 49

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

C/ 185	SC 185.12.	4.1	P 562	L13	# 402		C/ 185	SC	185.12.4.4	P56	63	L 36	# 406
Maniloff, E	Eric		Ciena				Maniloff, E	ric		Ciena			
Comment	Туре Т	Comn	nent Status A			(bucket)	Comment	Туре	т	Comment Status	Α		(bucket)
Recei	iver nominal cer	nter frequer	icy is not applicable	e to this PMD			Minim clause	um ave 9 185 P	erage chann MDs	el power at maximu	m adjustable	e power set	ting is not applicable to
Suggester	dRemedy						Suggested	Reme	dy				
Delete	e uns enuy.	_					Delete	this e	ntry.				
ACCE	, EPT.	Respo	nse Status C				Response			Response Status	с		
01.405	00 405 40		0500	1.40	" 400		ACCE	PT.					
C/ 185	SC 185.12.	4.24	P562	L 40	# 403		C/ 187	SC	187.12.4.1	P6;	34	L10	# 410
		Comp				(huakat)	Maniloff, E	ric		Ciena			
	rype I		hility is not applicat	le to this PMD		(рискет)	Comment	Туре	т	Comment Status	Α		(bucket)
		icqueriey a	bility is not applicat				Transi	mitter r	nominal cent	er frequency is not	applicable to	this PMD.	
Delete	e this entry.						Suggested	Reme	dy				
Response)	Respo	nse Status C				Delete	e this e	ntry.				
ACCE	PT.						Response ACCE	PT.		Response Status	С		
C/ 185	SC 185.12.	4.4	P 563	L 34	# 405		01.407	00				1.40	"
Maniloff, E	Eric		Ciena				C/ 187	SC	187.12.4.1	P6;	34	L13	# 411
Comment	Туре Т	Comn	nent Status A			(bucket)	Maniloff, E	ric	_	Ciena	_		
Adjust optica	table range of t al power is not d	ansmit efined for c	lause 185				Comment Recei	<i>Type</i> ver nor	T minal center	Comment Status frequency is not ap	A plicable to th	is PMD	(bucket)
Suggestee	dRemedy						Suggested	Reme	dy				
Delete	e this entry.						Delete	this e	ntry.				
Response ACCE	e PT.	Respo	nse Status C				Response ACCE	PT.		Response Status	С		
							C/ 187	SC	187.12.4.2	P6:	34	L 40	# 412
							Maniloff, E	ric		Ciena			
							Comment	Туре	т	Comment Status	Α		(bucket)
							PMD ı	eceive	center freque	uency ability is not a	applicable to	this PMD	
							Suggested Delete	dReme this e	<i>dy</i> ntry.				
							Response ACCE	PT.		Response Status	с		
TYPE: TR	/technical requi	red ER/edi	torial required GR	general required	/technical E	/editorial G/c	peneral				Comment IL	412	Page 37 of 49

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

Page 37 of 49 1/21/2025 9:54:20 AM

C/ 187	SC 187.12.4.4	P635	L 34	# 413	C/ 171	SC 171.7	P 200	L 41	# 418
Maniloff, I	Eric	Ciena			Nicholl, Gar	ту	Cisco Sy	stems	
Comment	туре т	Comment Status A		(bucket)	Comment T	ype TR	Comment Status A		(bucket)
Adjus	table range of trans	smit			Annex ?	176B does not	show any MMD numberi	ng.	
optica	al power is not defir	ned for clause 187			Suggested	Remedy			
Suggeste	dRemedy				Change	e the second se	entence from:		
Delet	e this entry.				"Annex	173A and Ann	ex 176B show additional	examples of 800GX	(S partitioning and MMD
Response	e	Response Status C			to:	ing			
ACCE	EPT.				"Annex	173A shows a	dditional examples of 800	GXS partitioning ar	nd MMD numbering
C/ 187	SC 187 12 4 4	P635	/ 36	# 414	using th BM PM	ne BM PMA. 17	6B.6.2 shows additional	examples of 800GX	S paritioning using both
Maniloff I		Ciona	200		Bintin				
Common				(hugkat)	Change	the second se	entrice of the second para	grpah from:	
Minim	num average chanr	nel power at maximum adiu	stable power sett	ing is not applicable to	to:	176B shows a	doltional examples of 1.6	1XS partitioning and	a MIND numbering.
claus	e 187 PMDs	. ,		0 11	"176B.7	7.2 shows addi	tional examples of 1.6TX	3 partitioning"	
Suggeste	dRemedy				Change	e the title of 17	1.7 from:		
Delet	e this entry.				"800GX	(S and 1.6TXS	partitioning example"		
Response	e	Response Status C			to: "800GX	(S and 1.6TXS	partitioning examples"		
ACCE	EPT.						p		
CL 4700	SC 4700 0 0	Dear	1.00	# 447	Make s	ure to underline	e any added text and to s	trikethrough any del	leted text.
C/ 1/6B	SC 176B.6.2	P 695	L 28	# 417	Response		Response Status C		
Nicholl, G	ary	Cisco System	IS		ACCEP	РТ.			
Comment Incori	t <i>Type</i> TR rect reference. Refe	Comment Status A erence to "Figure 176B-2" s	hould be "Fgure	<i>(bucket)</i> 176B-3"					
Suggeste	dRemedy								
Chan	ge "Figure 176B-2"	' to "Figure 176B-3".							
Response	è	Response Status C							

ACCEPT.

C/ 177	SC 177.4.1.2	P 310	L 36	# 419	C/ 18						
Nicholl, G	ary	Cisco System	IS		Dude						
Comment	Туре Т	Comment Status A		(bucket)	Com						
I think strear the su 176.4	the sentence "The n is not altered.", alt bclause states that .3.3.", , and 176.4.3	data hough accurate, is confus "The alignment marker loo .3 by definition does alter	ing/contradictor ck function is pe the data strean	y as the first sentence in rformed as defined in n.	F d T 1 n						
alignn path, (indica	nent marker lock fun with the main data p ating that the main d	ctions for 200G/400G to ath drawn as a straight ar ata path is passthrough a	be "off to the sid row from top to nd is not altered	de" from the main data bottom of diagram d in any way).	8 2 F						
Suggeste	dRemedy				Sugg						
Delete	Delete the sentence "The data path is not altered" on line 36.										
Updat comm	Update the 200GBASE-R/400GBASE-R portion of Figure 177-3 as described in the comment.										
Response	esponse Response Status C										
Keep Other Cl 177	the "data stream is r wise implement the SC 177.4.7.1	not altered", and update th suggested remedy with ec P 316	he diagram to sl ditorial license.	now a straight arrow. # 421	CI 1: Dude Com						
Dudek, Mi	ke	Marvell			г						
Comment	Туре Т	Comment Status A		(bucket)	Sugg						
The F and a transr be int	AS descriptions in tass is shown with the v nitted first and is sho erpreted as the FAS	able 177-4 have the MSB rectors in Annex 177A. In own as the left most bit in being transmitted in the c	transmitted first n other clauses diagrams. Figu other order.	as other clauses do the MSB is also re 177-8 however might	N Resp A						
Suggeste	dRemedy				C/ 1						
Clarify	/ Figure 177-8 to ma	atch the text and Annex			Dude						
Response ACCE Imple	PT IN PRINCIPLE.		Com r								
					Sugg (
					Resp F						

180 SC	180.9.5	P 430	L 32	# 422
ıdek, Mike		Marvell		
omment Type	TR	Comment Status A		taps

For commonality of implementation and becasue there is no expected reason for needing a different tap allocation for the TDECQ reference equalizer for the different clauses the TDECQ reference equalizer should be made the same for the clauses 180,181,182 and 183. In D1.3 all the clauses have the same 15 FFE length and the same 3 maximum number of pre-cursor taps however the minimum number of equalizer pre-cursor taps for the TDECQ reference equalizer is TBD in table 180-18 (for 200GBASE-DR1 etc.) as it is for 800GBASE-FR4-500 in table 181-13 and 800GBASE-FR4 etc. in table 183- 14 whereas for 200GBASE-DR1-2 etc in table 182-18 the format is different with a maximum number of post cursor taps of 13 implying a minimum number of pre-cursor taps of 2.

SuggestedRemedy

Make the format of the tables the same. Adopt a minimum number of pre-cursor taps of 2 and maximum number of ppre-cursor taps of 3 for all the tables.

Response ACCEPT Resolve	IN PRINCIPL	Response Status E. onse to comment #1	C 86			
C/ 120F	SC 120F.1	P6	45	L53	# 428	
Dudek, Mike		Marve	ell			
Comment Ty	pe E	Comment Status	Α			(bucket)
The refer	rence to 120F.	4 should be a hot linl	k as	this is changed in 802.3dj		
SuggestedRe Make it s	emedy :0.					
Response ACCEPT		Response Status	С			
C/ 120F	SC 120F.1	P6	46	L 9	# 429	
Dudek, Mike		Marve	ell			
Comment Ty The refer rate.	pe ER rence to 135F.	Comment Status 3.2.1 is not correct.	R Tha	at subsection is about Reco	(ห eiver Sigr	<i>ithdrawn)</i> alling
SuggestedRe	emedy					
Change	ine reference t	0 135F.5				
Response REJECT		Response Status	Z			

This comment was WITHDRAWN by the commenter.

Comment ID 429

C/ 174A	SC 174A.6.1.3	P664	L 48	# 432	C/ 179B	SC	179B.2.1	P 803	L 39	# 453
Dudek, Mik	æ	Marvell			Sekel, Stev	ve		Wilder Tech	nnologies	
Comment	Туре Т	Comment Status A		(bucket)	Comment	Туре	т	Comment Status R		(withdrawn)
Wrong	equation reference	ce			ILdd is	s listec	l as TBD			
Suggested	Remedy				Suggested	Reme	dy			
Chang	e Equation 174A-	3 to 174A-1			Propos	sed va	lues and eq	uations will be presented	with measuremer	nt data in contribution
Response		Response Status C			during	Janua	ry 802.3 Int	erim meeting.		
ACCE	PT.				Response	.		Response Status Z		
CL 174A	SC 174A 9	Pees	/ 16	# 133	REJEU	JI.				
	00 174 A.9	Manyoll	210	# 455	This co	ommei	nt was WIT	HDRAWN by the commer	nter.	
Comment	Tvpe E	Comment Status A		(bucket)	C/ 179B	SC	179B.(new	r) P811	L 54	# 455
Footno	ote a should be ap	plied to the xAUI-n C2C in	the bottom row a	s well as the top.	Sekel, Stev	ve		Wilder Tech	nnologies	
Suaaested	Remedy				Comment	Туре	т	Comment Status R	-	(withdrawn)
Make t in the l	his change in tabl ast sentence of fo	es 174A-1 and 174A-2 Al potnote a where it says "to p	lso in a74A-1 dele meet at the BER	ete the extraneous "at" allocations"	Refere differe which	nce in ntial (5 does n	npedance is 0 ohm sing 10t exist in a	92.5 ohm differential, wit le ended). This introduce application environment.	h test instruments s a discontunity ir _ab measurement	being 100 ohm the test environment ts suggest the location
Response ACCEI	PT.	Response Status C			(in time The loc 179B.4	e delay cation	/) of this dis within the to	continunity will change so est fixtures should be spe	ome compliance n cified in a new sul	heasurement results. b-clause in section
C/ 176	SC 176.8	P 299	L 4	# 451	Suaaested	Reme	dv			
Shrikhande	e, Kapil	Marvell			Proble	m will	be presente	ed with proposed location	of 92.5 to 100 ohi	m discontinunity within
Comment	Type TR	Comment Status A		PMA delay	the cor	mplian	ce test fixtu	res will be presented in co	ontribuion during 8	302.3 interim meeting
In Tab	le 176-7, complete	e the TBD delay values for	the SM-PMAs.		Response			Response Status Z		
Suggested	Remedy				REJEC	CT.				
A pres	entation will be pr	ovided for the TBD values	in Table 176-7.		This co	ommei	nt was WIT	HDRAWN by the commer	nter.	
Response		Response Status C			CI 170A	50	170 4 5	P700	/ 16	# 459
ACCE	PT IN PRINCIPLE				Koosia Sa	- 30 	17 5 A.5	Amphopol	210	# 450
The fo	llowina contributio	n was reviewed by the CR	G.		Comment	III Tyne	т	Comment Status P		(withdrawn)
https://	www.ieee802.org	/3/dj/public/25_01/shrikhan	de_3dj_01b_250	1.pdf		A.min i	s greater th	an II ddCH.min		(withdrawn)
Implen	nent the proposals	s on slide 16 and 17 for all	sublavers listed o	n slide 16. including	Suggested	IRomo	dv			
changi	ng CR/KR PMD d	elay values to 74.24 ns.			Add ar	n Edito	r's note to r	provide context and explai	n that testing the	II ddCH min condition is
Implen	nent with editorial	license			not pos	ssible.			in that toothing the	
implen					Response			Response Status Z		
					REJEC	CT.				
					This co	ommei	nt was WIT	HDRAWN by the commer	nter.	
	toobnical requires	ED/aditorial required CD	annoral required	T/toophical E/aditorial C/a	oporal			Com	ment ID 150	Page 40 of 40
		atabad A/asserted D/reis			jerierai Stan Olalaaad	7/	le de serve	Com	1110 4 30	Fage 40 01 49

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

1/21/2025 9:54:20 AM

CI 174A SC 174A.9	P 668	L 29	# 468	C/ 174A	SC 174A.5	P668	L19	# 471		
Maki, Jeffery	Juniper Networ	ks		Maki, Jeffe	ry	Juniper Netwo	orks			
Comment Type T	Comment Status R		(bucket)	Comment T	Туре т	Comment Status R		(bucket)		
"Frame loss ratio for one significant digit. ratio for entire PHY"	entire PHY" is wrong or at least in turn, the "Codeword error is wrong and the "BER for entire	has been unn PHY (BERtot	ecessarily truncated to al)" is wrong.	"Frame loss ratio for entire PHY" is wrong or at least has been unnecessarily truncated to one significant digit. In turn, the "BER for entire PHY (BERtotal)" is wrong.						
SuggestedRemedy		·	, .	Suggestea	e "BER for entir	PHV (REPtotal)" to 2 03v10	<u>^_1</u>			
Change "Frame loss ratio for entire PHY" 2.93x10^-4.	ratio for entire PHY" to 6.2x10^- to 1.50x10^-11, and change "BE	11, "Codewor R for entire Pl	d error HY (BERtotal)" to	Response	CT.	Response Status C	-4.			
Response	Response Status C			Resolv	e using the resp	onse to comment #467.				
REJECT. Resolve using the re-	sponse to comment #467.			C/ 175 Opsasnick,	SC 175.2.4.6 Eugene	.2 P266 Broadcom	L 2	# 476		
C/ 174A SC 174A.5	P668	L14	# 469	Comment T	Туре Е	Comment Status A		(bucket)		
Maki, Jeffery	Juniper Networ	ks		Typo ir	n variable name	tx_acrambled_f1_i<256:0>.				
Comment Type T "Frame loss ratio for one significant digit of standard. SuggestedRemedy	Comment Status R entire PHY" is wrong or at least ompared to other cases in the d	has been unn raft and in the	<i>(bucket)</i> ecessarily truncated to published 802.3-2022	Suggested Chang Response ACCEF	<i>Remedy</i> e tx_acrambled_ PT.	f1_i<256:0> to be tx_scramb Response Status C	led_f1_i<256:0	>.		
Change "Frame loss	ratio for entire PHY" to 6.2x10^-	11.		CI 176	SC 176 1 4	P 371	1 22	# 477		
Response REJECT. Resolve using the res	Response Status C			Opsasnick, Comment T	, Eugene <i>Type</i> E	Broadcom Comment Status R	ESC codeword	(bucketp)		
C/ 174A SC 174A.5	P668	L17	# 470	alterna	ting PCSLs by t	wo RS-FEC codewords"				
Maki, Jefferv	Juniper Networ	ks		Suggested	Remedy					
Maki, Jettery Juniper Networks Comment Type T Comment Status R (bucket) "Frame loss ratio for entire PHY" is wrong or at least has been unnecessarily truncated to one significant digit. In turn, the "Codeword error" (bucket)				Change: "Delay alternating PCSLs by two RS-FEC codewords …" To: "Delay of alternating PCSLs by two RS-FEC codewords …".						
SuggestedPomody	s wrong.			Response		Response Status Z				
Change "Codeword e	error ratio for entire PHY" to 1.50	x10^-11.		REJEC	CT.					
Response REJECT. Resolve using the rea	Response Status C			This co	omment was Wi	THDRAWN by the commente	r.			

C/ 176	SC 176.1.4	P271	L 42	# 478	C/ 176	SC 176.4	P276	L16	# 481	
Opsasnick	. Eugene	Broadcom			Opsasnick	Eugene	Broadcom			
Comment	Type E	Comment Status A		(bucket)	Comment	Type E	Comment Status A		(bucket)	
Now ti to "(Pi	hat PMAL is a de MALs)".	fined term, the parenthetical "(la	nes)" on line	e 43 should be updated	Now th lanes".	hat PMAL is a de	efined term, it can be used to re	eplace term "2	12.5 Gb/s interface	
Suggested	dRemedy				Suggested	Remedy				
Repla with: (ce "(lanes)" PMALs).				Replac "Note t	ce: that m equals th	e number of PCSLs and n equ	als the numbe	r 212.5 Gb/s interface	
Response		Response Status C			lanes f	or each xBASE	-R m:n PMA."			
ACCE Since replac Impler	PT IN PRINCIPL PMAL has been e " and data str ment the suggest	E. defined as lanes operating at 21 reams (lanes) operating at 212.5 ed remedy with editorial license.	2.5Gb/s, it v Gb/s" with	vill be better to simply "and PMALs".	With: "Note that m equals the number of PCSLs and n equals the number PMALs for each xBASE-R m:n PMA." Similar updates can be made thoughout Clause 176 where there are references to "21					
C/ 176	SC 176 3	P275	/ 6	# 479	Gb/s ir	nterface lanes" s	such as line 51 on page 292.			
Onsasnick		Broadcom	-•	" 10	Response		Response Status C			
Comment Verb t	<i>Type</i> E ense is not corre	Comment Status A		(bucket)	ACCE Implen	PT IN PRINCIP nent the sugges	LE. ted remedy with editorial licens	se.		
Suggested Chang to: "	dRemedy ge: ", the m:n P , the m:n PMAs s	MAs sends n parallel symbol streams	eams" .".							
And o Chang to: "	n line 11 of the sa ge: ", the n:m P , the n:m PMAs s	ame page 275, PMAs sends m parallel symbol st send m parallel symbol streams .	eams" "							
And o Chang to: "	n line 18 of the sa ge: ", the n:n Pl , the n:n PMAs s	ame page 275, MAs sends n parallel symbol stre end n parallel symbol streams	ams" "							
Response		Response Status C								
ACCE	PT.									

C/ 176	SC 176.4.1	P 276	L 21	# 482
Opsasnick, E	ugene	Broadcom		
Comment Ty	pe E	Comment Status A		(bucket)

Should add "PMAL" term when referring to the appropriate PMA interface lanes.

SuggestedRemedy

Replace:

"In the transmit (multiplexing) direction, the m:n PMAs perform a transmit function which multiplexes RS-FEC symbols from m PCSL input lanes received at the PMA service interface to n output lanes at the service interface below the PMA. In the receive (demultiplexing) direction, the m:n PMAs perform a receive function which demultiplexes RS-FEC symbols from n input lanes at the service interface below the PMA to m PCSL output lanes toward the PMA service interface."

With:

"In the transmit (multiplexing) direction, the m:n PMAs perform a transmit function which multiplexes RS-FEC symbols from m PCSL input lanes received at the PMA service interface to n PMAL output lanes at the service interface below the PMA. In the receive (demultiplexing) direction, the m:n PMAs perform a receive function which demultiplexes RS-FEC symbols from n PMAL input lanes at the service interface below the PMA to m PCSL output lanes toward the PMA service interface."

Response Status C

Similar updates can be made to 176.5.1.

Response

ACCEPT IN PRINCIPLE.

ln 176.4.1

Change:

"In the transmit (multiplexing) direction, the m:n PMAs perform a transmit function which multiplexes RS-FEC symbols from m PCSL input lanes received at the PMA service interface to n output lanes at the service interface below the PMA. In the receive (demultiplexing) direction, the m:n PMAs perform a receive function which demultiplexes RS-FEC symbols from n input lanes at the service interface below the PMA to m PCSL output lanes toward the PMA service interface."

To:

"In the transmit (multiplexing) direction, the m:n PMAs mutiplex RS-FEC symbols from m PCSLs at the PMA service interface to n PMALs at the service interface below the PMA. In the receive (demultiplexing) direction, the m:n PMAs demultiplex RS-FEC symbols from n PMALs at the service interface below the PMA to m PCSLs toward the PMA service interface."

In 176.5.1

Change:

"In the transmit (demultiplexing) direction, the n:m PMAs perform a transmit function which demultiplexes RS-FEC symbols from n input lanes at the PMA service interface to m PCSL output lanes at the service interface below the PMA. In the receive (multiplexing) direction, the n:m PMAs perform a receive function which multiplexes RS-FEC symbols from m

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

 PCSL input lanes at the service interface below the PMA to n output lanes at the PMA service interface."

To:

"In the transmit (demultiplexing) direction, the n:m PMAs demultiplex RS-FEC symbols from n PMALs at the PMA service interface to m PCSLs at the service interface below the PMA. In the receive (multiplexing) direction, the n:m PMAs multiplex RS-FEC symbols from m PCSLs at the service interface below the PMA to n PMALs at the PMA service interface."

Implement the with editorial license.

C/ 176	SC 176.4.4.2.1	P 289	L 25	# 483
Opsasnick,	Eugene	Broadcom		
Comment T	Гуре Т	Comment Status A		(bucket)
Definiti SYMB0 state d	on of variable res DL_LOCK_REST iagram Figure 170	tart_lock_demux <y> sta ART state, but is is actu 5-10.</y>	tes that it is se ally set to true	et to true in the in two separate states in
Suggested	Remedy			
Chango restart To: "Bo SLIP_0	e: "Boolean variat " polean variable the CONTROL states	ble that is set to true in the synthesis set to true in the synthesis to restart"	ne SYMBOL_L 'MBOL_LOCK	OCK_RESTART state to
Response		Response Status C		
ACCEF Impler	PT IN PRINCIPLE nent the suggeste	d remedy with editorial li	cense.	
C/ 176	SC 176.4.4.2.3	B P290	L 4	# 484
Opsasnick,	Eugene	Broadcom		
Comment T	Гуре Е	Comment Status A		(bucket)
Numbe	ers less than or ec	ual to 10 (ten) should be	e written out.	
Suggested	Remedy			
Change To: "Co	e: "Counts 3 align ounts three alignm	ment marker intervals." nent marker intervals."		
Response		Response Status C		
ACCE	PT.			

Comment ID 484

C/ 176	SC 176.4.4.3	P 292	L17	# 485	C/ 177 SC 177.4.2	2.5 <i>P</i> 311	L 50	# 490
Opsasnick,	Eugene	Broadcom			Opsasnick, Eugene	Broadcom		
Comment T	Туре Е	Comment Status A		(bucket)	Comment Type TR	Comment Status A		(bucket)
In Figu SYMB0	re 176-10, the sta OL_LOCK_REST	ate transitions out of SLIP_CC ART do not have a condition.	NTROL and		Incorrect cross-refer	ence.		
Suggested	Remedy				Change "Figure 177	5" to "Figure 177-4"		
Uncon	ditional state trans	sitions should be labelled "UC	Т".		Pesnonse	Boononoo Statuo		
Response		Response Status C			ACCEPT.	Response Status C		
In Fig 1	TIN PRINCIPLE 176-10, label the u DL_LOCK_REST	unconditional state transitions ART with "UCT"	out of SLIP_C	ONTROL and	CI 177 SC 177.5.	I.1 <i>P</i> 317	L 43	# 491
CI 177	SC 177 E 4	D210	/ 10	# 499	Opsasnick, Eugene	Broadcom		<i>4</i> • • • • •
	50 177.3.4		210	# 400	Comment Type E	Comment Status A		(bucket)
Opsasnick,	Eugene				Also, this is the first	use of "II T" in this clause and it	should be spel	led out.
Comment I	lype E	Comment Status A		(bucket)	Suggested Remedy			
i ypo ir	tense of "PAM4	symbols".			Suggested terriedy			
Suggested Change To: "	<i>Remedy</i> e: " for each reo . for each receive	ceived PAM4 symbols." d PAM4 symbol."			"If ILT function is en the precoding state of is disabled by the m	abled by the management varial on the link partner transmitter is anagement variable mr. training	ble mr_training_ requested using enable, the pre	enable (see 178B.15), g the ILT function. If ILT ecoding state on the link
Response		Response Status C			partner transmitter is	set by management."		
ACCEF	PT.	, -			to:			
C/ 177	SC 177.4.2.5	P311	L10	# 489	"If inter-sublayer link (see 178B.15), prece	training (ILT) is enabled by the oding of the received data is ena	control variable abled at the link	mr_training_enable partner (transmitter) as
Opsasnick,	Eugene	Broadcom			requested by the rec	eiver using ILT. If ILT is disable	d, then the prec	oding of data at the
Comment T	Type E	Comment Status A		(bucket)	Response	Response Status C		
					ACCEPT IN PRINCI	PLE.		
Change	<i>Remeay</i> e "PCSLS" to "PC	SLs" (lowercase s).			Implement the sugg	ested remedy with editorial licen	ISE.	
Response ACCEF	PT.	Response Status C						

C/ 177	SC 177.6.2.1	P 320	L 43	# 492	C/ 177 S	SC 177.6.2.1	P 321	L13	# 497	
Opsasnick	Eugene	Broadcom			Opsasnick, Eu	igene	Broadcom			
Comment	Type ER	Comment Status A		(bucket)	Comment Typ	e TR	Comment Status A		(bucket)	
The wo	ord boolean shoul	ld be capitalized.			The definition of sync_flow <x> should be made more clear. What does it mean to be "in a</x>					
Suggested	Remedy				flow of Inn	her FEC"? Also	o, a range of values should b	e given as "A to	b B" instead of "A:B".	
Replace "boolean" with "Boolean" in the definition of these variables: fas_valid Inner_FEC_sync_status slip_done test_cw test_fas Response Response Status ACCEPT.					SuggestedRemedy Suggest changing the definition of sync_flow <x> from: "A Boolean variable that is set to true when the receiver has found the correct boundary of codewords in a flow of Inner FEC, where x = 0:7" to:</x>					
					"A Boolea an inner F the actual	n variable tha EC flow, when inner FEC flo	t is set to true after the inner re x=0 to 7 and represents a w numbering."	FEC codeword n inner FEC flov	boundary is found for v ID before identifing	
Cl 177 Opsasnick	SC 177.6.2.1 Eugene	P 320 Broadcom	L 33	# 493	Response ACCEPT Implemen	IN PRINCIPLE	<i>Response Status</i> C <u>=</u> . ed remedy with editorial licen	se.		
Comment	Туре Е	Comment Status A		(bucket)	C/ 177 S	SC 177.6.2.1	P321	12	# 498	
The wo	ord AND should b	e lowercase.			Opsasnick Fu	idene	Broadcom			
Suggested	Remedy				Comment Typ	∟gonio no T	Comment Status A		(bucket)	
Chang to: "	e: " for all eight for all eight flows	flows AND the Inner FEC' and the Inner FEC"	1		The definit	tion of the var	iable restart_inner_fec_sync	states it is set b	bucket) by a process, but it can	
Response		Response Status C			now be se	et by two sepa	rate processes.			
ACCE	PT.				Suggested Ref Replace: "	<i>medy</i> 'A Boolean va	riable that is set by the Inne	FEC synchroni	ization process"	
					with: "A Bo FEC pad o	oolean variabl detection proc	e that is set by the Inner FE	C synchronizatio	on process or the Inner	
					Response		Response Status C			

ACCEPT.

C/ 177	SC 177.6.3	P 321	L 53	# 499	C/ 177	SC 177.5.2		
Opsasnick,	, Eugene	Broadcom			Opsasnick	, Eugene		
Comment	Type TR	Comment Status A		(bucket)	Comment	Type ER		
Should	l add a statemen	t that the 8 self-sync processe	es operate inde	ependantly of each other	Extra "to" and missing			
and sp require	ell out the word s d on each input l	synchronization. Should also s lane.	state that 8 suc	ch processes are	Suggested	lRemedy		
Sugaested	Remedv				Chang	e:		
Chang	e:				and th	en removed befo		
"The Ir	ner FEC sublaye	er shall implement eight self-s	ync processes	as shown in Figure	to:			
177-10	o identify the b		odewords.		are the	en removed befo		
to: "The Ir		ar shall implement eight solf s	vnehronization	processes as shown in	Response			
Figure	177–10 for each es independantly	input lane in the receive direct on an Inner FEC flow to iden	tify the bounda	nchronization process nries of the Inner FEC	ACCE	PT.		
codew	ords."				C/ 177	SC 177.6.2.3		
Response		Response Status C			Opsasnick	, Eugene		
ACCEI	PT IN PRINCIPL	E. ed remedy with editorial licens	Se.		Comment	Type TR		
			/ - .		The de adiace	efinion of "fas_cn ent pads." What		
C/ 177	SC 177.6.3	P321	L 54	# 500	Suggesteg	IRemedv		
Opsasnick,	, Eugene	Broadcom		(1	Add a	number to to exp		
Should	<i>l ype</i> IR	t that a PAD detection proces	s is required fo	(DUCKET)	add a	cross-reference i		
Suggested	Bomodu				Response			
Chang	e:				ACCE Add a	PT IN PRINCIPL cross-reference		
"Pad d	etection process	follows the process shown in	Figure 177-10)."				
to:					C/ 177	SC 177.6.3		
"An inr	ner FEC Pad dete	ection process as illustrated ir	the state diag	ram in Figure 177–10	Opsasnick	, Eugene		
shall b	e implemented fo	or each input lane in the recei	ve direction."		Comment	<i>lype</i> TR		
Response	DT	Response Status C			in ngu	10 176-10, the co		
ACCEI	P1.				Suggested	remeay the condition f		
					Response			
					ACCE	PT.		
TYPE: TR/ COMMENT SORT ORI	technical require Γ STATUS: D/dis DER: Comment I	d ER/editorial required GR/g patched A/accepted R/rejec D	eneral require ted RESPO	d T/technical E/editorial G/g NSE STATUS: O/open W/w	general ritten C/closec	Z/withdrawn		

P318 L**4** # 501 Broadcom Comment Status A (bucket)

verb in second sentence of 177.5.2.

nserted as pad (see 177.4.7) are used to frame to the data stream ore the received data is processed."

nserted as pad (see 177.4.7) are used to frame the data stream and re the received data is processed further."

Response	Response Status	С	

C/ 177	SC 177.6.2.3	P 321	L 45	# 502
Opsasnick, Eu	igene	Broadcom		
Comment Typ	e TR	Comment Status A		(bucket)

t" is "Counts the interval of Inner FEC codewords between two is the interval value? How many codewords?

blicitly state the number of codewrds that need to be counted or else to the subclause with this information.

esponse	Response Status	С
	100000100 010100	•

Ε.

to the subclause, and implement this change with editorial license.

C/ 177	SC 177.6.3	P 322	L10	# 504
Opsasnick,	Eugene	Broadcom		
Comment 7	vpe TR	Comment Status A		(bucket)

ondition to transition out of stte INNER_FEC_SYNC_INIT is incorrect.

Comment ID 504

rom:"all_synced" to "UCT"

Response Status C

C/ 177	SC 177.6.3	P 322	L 12	# 505	C/ 177	SC 177.6.3	P 323	L 9	# 509
Opsasnick	, Eugene	Broadcom			Opsasnick	, Eugene	Broadcom		
Comment	Type ER	Comment Status A		(bucket)	Comment	Type TR	Comment Status A		(bucket)
In figu incren	re 176-10, in CW nent operator ++ :	_CHECK_3 state, the extra s should be removed.	pace between v	ariable names and	In figur	re 177-11, there ent #389.	is an incomplete change to I	FAS_LOCK_INI	F state from D1.2
Suggestee	Remedy				Suggested	IRemedy			
Repla and	ce "cw_cnt ++" w	ith "cw_cnt++"			In FAS "fas_lo	S_LOCK_INIT st ock <= false"	ate, add:		
replac	e "bad_cw_cnt +-	+" with "bad_cw_cnt++"			Response		Response Status C		
Response	DT	Response Status C			ACCE	PT.			
ACCE	ΡΙ.				C/ 177	SC 177.6.3	P 323	L13	# 510
C/ 177	SC 177.6.3	P 322	L 21	# 506	Opsasnick	, Eugene	Broadcom		
Opsasnick	, Eugene	Broadcom			Comment	Type ER	Comment Status A		(bucket)
Comment In figu	<i>Type</i> E re 176-10, the ne	Comment Status A	a better name.	(bucket)	In figui increm	re 177-11, in BA ient operator ++	D_FAS state, the extra spac should be removed.	e between varial	ble names and
Suggestee	Remedy				Suggested	IRemedy			
Renar	ne state "UNSYN	IC" to be "RESTART_SYNC"			Replac	ce "bad_fas_cnt	++" with "bad_fas_cnt++"		
Response		Response Status C			Response		Response Status C		
ACCE	PT.				ACCE	PT.			
C/ 177	SC 177.6.3	P 322	L 4	# 507	C/ 179D	SC 179D.1.1	P828	L 34	# 518
Opsasnick	, Eugene	Broadcom			Dawe, Pier	rs	Nvidia		
Comment	Type E	Comment Status A		(bucket)	Comment	Туре Т	Comment Status A		(bucket)
In figu Suggester	re 176-10, a spac /Remedy	ce is needed between the log	ical-OR (+) oper	ator and variable name.	This sa length	ays "a common ". What length(set of electrical parameters s s) it enables is not relevant to	specified in 179.7 this discussion	11, enabling a 1 m of connector types and
Repla	ce "+restart inne	r fec sync" with "+ restart in	ner fec sync".		Dieako		accurate.		
					Suggested	Remedy	a longth"		
And m	ake the same ch	ange in Figure 177-11 on pag	ge 323, line 4.		Delete	enabling a 1 n			
Response		Response Status C			Response		Response Status C		
ACCE	PT.				The cu curren Implen	PT IN PRINCIP irrent project sc t text is incorrect nent the sugges	LE. ope supports multiple cable t t. ted remedy with editorial lice	ypes of varying l nse.	engths, and so the

01 4700	00 4700 4		1.10	" =	01 470 4	00 4704 5			# [100
C/ 1/9C	SC 179C.1	P814	L12	# 519	C/ 1/9A	SC 179A.5	P801	L47	# 532
Dawe, Piers	S	Nvidia			Dawe, Piers	6	Nvidia		
Comment Type E Comment Status A (bucket) Media Dependent Interface				Comment 7 17.5	ype TR	Comment Status A		(bucket)	
Suggested	Pomody				Suggested	Pomody			
Medium Dependent Interface									
	n Dependent in				17.75,1	wice			
Response Response Status C					Response		Response Status C		
ACCEF Mediun Change with ed	n Dependent In n Dependent In e "Media Depen litorial license.	LE. terface is consistent with the ident Interface" to "Medium D	current nomencl ependent Interfa	ature definitions. ce" across the draft	ACCEF The co Implem	ent formating	LE. es a typo in a label in Figure 1 with editorial license.	79A-2. Replace	17.5 with 17.75 and
CI 195A	SC 195A	D920	16	# 520	C/ 178A	SC 178A.1.	8.1 <i>P</i> 758	L 33	# 534
	00 103A	1 039	20	# 520	Dawe, Piers	6	Nvidia		
Dawe, Piers Nvidia				Comment 7	уре Е	Comment Status A		(bucket)	
Comment Type TR Comment Status A (bucket) ETCC is normative, like TDECQ or COM. Image: Comment Status A (bucket)				(bucket)	If Nb is the number of feedback taps, Nf is the number of feedforward taps. Obvs. Although OIF use it for something else. 10GBASE-LRM uses EqNf and EqNb. 802.3ck				
Suggestedl	Remedy				has:		naluding floating tong NL f (hu	t it dooon't hour	reachuar FFF tana ao
Change	e "informative" t	o "normative.			the con	tradiction does	sn't apply) and	t it doesn't have	receiver FFE laps so
Response		Response Status C			Numbe	r of DFE floatir	ng tap banks N_bg.		
	эт				Suggestedl	Remedy			
ACCEI	1.				Change Number of (FFE) taps per floating tap group, from Nf to N_fg				
C/ 179A	SC 179A.5	P 802	L13	# 531	Response		Response Status C		
Dawe, Piers	S	Nvidia			ACCEF	T IN PRINCIP	PLE.		
Comment Type TR Comment Status A (bucket) 13 dB = (16+4.45+4.45)-(2*9.75)				For consistency with the notation used in Annex 93A, change "Number of floating tap					
					groups" from N_{g} to N_{wg} and change "Number of taps per floating tap group" from				
Suggested	Remedy				structu	e is in the feed	d-forward filter defined in Anne	ex 178A, whose t	ap coefficients are
13 dB .		25)-(2*9.75)			denoted	d as w(i), and r	not in the feedback filter as de	fined in Annex 9	3Å.
					Implement with editorial license.				
Response		Response Status C							
Resolve	e using the resp	₋∟. ponse to comment #560.							

C/ 178B	SC 178B	P 765	L19	# 542	C/ 176C	SC 176C.5.1	P 711	L 37	# 559	
Dawe, Pier	'S	Nvidia			Heck, How	ard	TE Connectiv	vity		
Comment	Type TR	Comment Status R		Introduction	Comment	Туре Е	Comment Status A		(bucket)	
This ar	nnex needs an	introductory diagram, and the	terminology nee	ds cleaning up	The va	lue for COM sing	gle-ended receiver transmitte	er termination re	sistance in Table 176C-	
Suggested	Remedy				6 is hi	ghlighted in orang	ge. This value is consistent w	vith those in 178	and 179.	
Per comment					Suggested	Remedy				
Response		Response Status C			Remo	ve the orange hig	ghlighting.			
REJECT.					Response		Response Status C			
The su	iggested remed	ly does not provide sufficient of	detail to impleme	ent.	ACCE	PT.				
CI 73	SC 73.10.2	P130	L14	# 546	C/ 179A	SC 179A.5	P 802	L12	# 560	
Dawe, Pier	S	Nvidia			Heck, How	ard	TE Connectiv	vity		
Comment	Туре Е	Comment Status R		(bucket)	Comment	Туре т	Comment Status A		(bucket)	
This is	contrary to the	standard order (slow to fast).			The fir	st channel min c	alculation in Figure 179A-3 c	ontains an error	. The equation states	
Suggested	Remedv				that 13	3 dB @ 53.125 G	Hz = (16+4.45+4.45)-(2*9.75	5). The correct e	quationis 13 dB =	
Put the	e new entry imn	nediately below the 100G/lane	one. As the ba	se document is out of	(16+8. budge	25+8.25)=(2*9.7 t values at 53.12	5). The 8.25 dB is taken from	n Table 179A-3 (Minimum insertion loss	
order a	and this project	amendment cannot deliver a	properly ordered	table without cleaning	SuggestedRemedy					
it up, b	oring the other t	wo link_fail_inhibit_timer rows	into the draft ar	d put them in the right						
order.					GHz =	e the equation in (16+8.25+8.25)	(2*9.75)	IVIIN (1900-1950	I) = 13 dB @ 53.125	
	¬ т	Response Status C			Response		Response Status C			
This w	ould be best ac	dressed at the revision project	t to create the u	odated base standard.	, ACCE	PT IN PRINCIPL	Е.			
Bringir	ng in additional	rows not relevant to 802.3dj s	cope would not	pe useful.	Impler	nent as proposed	d in suggested remedy.			
C/ 178	SC 178.10.1	1 P 350	L 38	# 558						
Heck, How	ard	TE Connectiv	vity							
Comment	Type E	Comment Status A	-	(bucket)						
The va orange	lue for COM sine. This value is c	ngle-ended receiver terminatio consistent with those in 179 ar	on resistance is nd 176C.	highlighted in						
Suggested	Remedy									
Remov	ve the orange h	ighlighting.								
Response	-	Response Status C								
ACCE	РТ									