C/ 01 SC 1.3 Booth, Brad	P 3 Intel	L 24	# 121	Cl 28 So Booth, Brad	C	P 5 Intel	L 1	# 124
Comment Type E Typo.	Comment Status X			Comment Type Remove un	E edited text.	Comment Status X		
Suggested Remedy Change "augemented	d" to "augmented".			Suggested Rem Remove 28	<i>edy</i> .1, 28.4 and	28.6.		
Response	Response Status O			Response		Response Status O		
C/ 01 SC 1.4 Booth, Brad	P 3 Intel	L 35	# 122	<i>Cl</i> 28 So Booth, Brad	C 28.2.1.2	P 12 Intel	L 34	# 126
Comment Type E Text not required. Suggested Remedy Remove "is used in 1	Comment Status X			Comment Type In Figure 28 modified to it is an auto	T B-7, the Tech be an indica -negotiation	Comment Status X anology Ability Field arrow in tion for extended next page ability.	ncludes bit D12 (is which is less c	A7). This bit has been f a technology ability as
Response	Response Status 0			Suggested Ren Change A7 28.2.1.2.4-6 information	nedy to be XNP. 5. Add new 2 from Annex	Shift the arrow to only point 28.2.1.2.3 as found in 28B.3 28B.	t to A6. Shift 28.3 3. Remove A7 a	2.1.2.3-5 to be nd extended next page
C/ 01 SC 1.5 Booth, Brad	P 3 Intel	L 56	# 123	Response		Response Status O		
Comment Type E Change "CAT6" to be Suggested Remedy As per comment. Response	Comment Status X e "Cat 6". Response Status O			Cl 28 So Lynskey, Eric Comment Type Two periods Suggested Ren Remove pe	E 28.2.3.4.2 E s at end of somedy riod.	P18 UNH-IOL Comment Status X entence.	L 28	# 7 <u>5</u>
C/ 28 SC Booth, Brad	P 5 Intel	L1	# 125	Response		Response Status O		
Comment Type T This should be a revi	Comment Status X sion to 802.3REVam.			C/ 28 SC	C 28.2.4.1.1	P 21 SolarElare Co	L 34	# 12
Suggested Remedy Verify that this is a re	vision to the existing REVam dra	ft.		Comment Type	E E	Comment Status X		
Response	Response Status 0			Suggested Ren Change 28.	2.4.1 to 22.2	2.4.1.	annea in 22.2.4.1	
				Response		Response Status 0		

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn C/ 28

C/ 28 SC 28.2.4.1.2	P 21	L 54	# 13	CI 28	SC 28.3.2	P 36	L	# 14
Thompson, Todd	SolarFlare Co	ommunica		Thompson	n, Todd	SolarFlare (Communica	
Comment Type E	Comment Status X			Comment	Туре Т	Comment Status X		
The MII status register	1 is defined in 22.2.4.2 not 2	8.2.4.2.		This is	s on page 36 lines	s 57-59 and page 37 lines $^{\prime}$	1-2 and the table	28-9. Regarding the
Suggested Remedy				time o	out values for nlp_	test_min_timer, I don't thin	k it's clear if the ti	me out values is tied to
Change 28.2.4.2 to 22.2	2.4.2.			exten	ded next pages. T	The spec seems to be sayir	ig that a phy that	has support of
Response	Response Status O			exten	ded next pages sl	hould always use the 6.75-	7.25 timeout valu	e. The base page is to
				page	exchanged using the	all the non-extended next p	age timeout valu	e expected the base es and counts. However,
	Dac	1.4	# 407 -	this p	art of the spec see	ems to be saying that the e	xtended next pag	e value is to be used
C/ 28 SC 28.2.4.1.8	i P 20	LI	# 127	even	during base page	exchange.		
				Suggeste	d Remedy		- • • •	
In Table 28-8, break the	e MII/MDIO column into two o	columns.		timeo	y when the second ut value is to be u	d timeout value of 6.75-7.2 ised.	5 ms is to be use	d and when the 5-7 ms
Suggested Remedy				Response)	Response Status 0		
Create one column for I	MII (Clause 22), and another	column for MDI	O (Clause 45).	_				
Response	Response Status 0			CI 28	SC 28.3.2	P37	L 42	# 129
				Booth, Bra	ad	Intel		
C/ 28 SC 28 3 1	P30	/ 31	# 128	Comment	Туре Е	Comment Status X		
Booth, Brad	Intel	201	" 120	Remo	ove wasted space.			
Comment Type E	Comment Status X			Suggeste	d Remedy			
Remove wasted space.				Fix.				
Suggested Remedy				Response	9	Response Status 0		
Fix								
Response	Response Status 0			CI 28	SC 28 5 3	PAA	/ 37	# 130
Response				Booth, Bra	ad	Intel	237	# 130
				Comment	Туре Т	Comment Status X		
				lt sho optim requir	uld be mandatory ized FLP-to-FLP t ed to be listed are	that AN support non-exten ourst timing. Therefore, the e *ENP and *OPT.	ded next page ex e only options/cap	changes and non- babilities that should be
				Suggeste	d Remedy			
				Remo	ove *RNP and *RF	PT from options table and f	om other PICS e	ntries.
				Response	9	Response Status 0		

C/ 28 SC 28.6	Р 57 UNH-IOL	L 54	# 76	C/ 28C So Booth, Brad	C 28C.11	P 66 Intel	L 55	# 134
Comment Type E Missing text. I don't re	Comment Status X emember removing this text.			Comment Type Replace TB	T D.	Comment Status X		
Suggested Remedy Insert "Annex 28B" in	appropriate location.			Suggested Ren Cross-refer	nedy ence to 55.6	5.1 .		
Response	Response Status O			Response		Response Status O		
Cl 28C SC Booth, Brad	P 64 Intel	L18	# 1 <u>31</u>	C/ 28D So Booth, Brad	C 28D.5	P 69 Intel	L 45	# 1 <u>35</u>
Comment Type T The use of M10 to ind have exchanged exter	Comment Status X icate extended next pages see nded next page capabilities in t	ms to be overki he base page.	Il considering that we	Comment Type The addition now suppor message co	T n of "extend ts extended ode #9, we d	Comment Status X ed next pages" in this norma next pages. While the Task don't need to call out "extended	tive annex would Force is permitied".	d imply that Clause 40 ting this ability with
Delete text about M10	and its association with extend	ded next pages.		Suggested Ren Remove ins	<i>nedy</i> serted text ir	n item b).		
Response	Response Status U			Response		Response Status O		
Cl 28C SC Booth, Brad	P 65 Intel	L 9	# 132	C/ 40 So Thompson, Tod	C 40.4	P 185 SolarFlare Co	L	# 1 <u>1</u>
Comment Type E In Table 28C-1, the 10 about 1000BASE-T.	Comment Status X OGBASE-T Technology Messag	je Code also co	ntains information	Comment Type The auto-cr just after the	T ossover sta e link monito	Comment Status X te diagram (figure 40-17 in 80 or state diagram, figure 55-19	02.3-2002) shou 9.	ld be duplicated here
Add 1000BASE-T to th	ne message code description.			Suggested Ren	nedy			
Response	Response Status 0			Include the Response	diagram.	Response Status 0		
C/ 28C SC 28C.11 Booth, Brad	P 66 Intel	L 51	# 133	CI 44 S(C 44	P89	L 20	# 33
Comment Type T Message code #9 sho	Comment Status X uld be able to work even if exte	ended next page	es are not used.	Lynskey, Eric Comment Type The draft in	E cludes an A	UNH-IOL Comment Status X		
Suggested Remedy Remove "extended" fr	om first sentence. Delete last s	entence		Suggested Ren	nedy			
Response	Response Status O	ontonoc.		Change tex Response	t to read "	and Annex 44A through Anno Response Status O	ex 55A."	

C/ 45 SC 45.2.1 Booth, Brad	P101 Intel	L 47	# 136	<i>Cl</i> 45 Booth, Bra	SC 45.2.1.7. 4	P102	L 50	# 137
Comment Type E Numbering is not in ord	Comment Status X der.			Comment [®] Replac	<i>Type</i> E ce TBD.	Comment Status X		
Suggested Remedy Change 1.132 to 1.131	. Change the next row of the	e table to start at	1.132 instead of 1.133.	<i>Suggested</i> Chang	<i>Remedy</i> e TBD to 55.4.2.	2.		
Response	Response Status 0			Response		Response Status O		
C/ 45 SC 45.2.1.59 Booth, Brad	9.1 P104 Intel	L35	# 142	<i>Cl</i> 45 Booth, Bra	SC 45.2.1.7.5 d	5 P103 Intel	L 8	# 139
Comment Type E Sentence does make s	Comment Status X sense.			Comment [®] Replac	<i>Type</i> T ce TBD with refer	Comment Status X		
Suggested Remedy Change " during the invalid." Response	startup protocol and invalid." <i>Response Status</i> 0	to " during the	startup protocol are	Suggested Chang Response	Remedy e TBD to be 55.4	1.2.3. Response Status O		
C/ 45 SC 45.2.1.59 Booth, Brad	9.1 <i>P</i> 104 Intel	L 36	# 143	C/ 45 Booth, Brad	SC 45.2.1.8 d	P103 Intel	L 28	# 141
Comment Type T Replace TBD.	Comment Status X			There	is only one 10GE	BASE-CX4 PMD.		
Suggested Remedy Change TBD to read: PMA link_status = FAII	L.			Suggested Insert a Response	a "the" before 10	GBASE-CX4 and change P Response Status 0	MDs to PMD.	
Response	Response Status O			CI 45	SC 45.2.3.1.2	2 P	L	# 83
C/ 45 SC 45.2.1.61 Booth, Brad	P106 Intel	L 41	# 144	McClellan, <i>Comment</i>	Brett <i>Type</i> T	Solarflare Comment Status X		
Comment Type E	Comment Status X			The Lo Suggested	oopback (3.0.14) <i>Remedy</i>	bit description needs to be	updated to includ	le 10GBASE-T.
Suggested Remedy Change 1.133 to be 1.	131.			Add te When path ar	xt: bit 3.0.14 is set t nd return it on the ick is specified in	o a one, the 10GBASE-T Pe e receive path. The specific	CS shall accept c behavior of the 1	lata on the transmit 0GBASE-T PCS during
Response	Response Status O			Response		Response Status O		

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

C/ 45 SC 45.2.3.4	11.1 P113	L 36	# 145	C/ 45 SC 45.2.7	P115 SolarElare C	L25	# 23			
Comment Type E Need a space.	Comment Status X			Comment Type TR This comment applie	Comment Status X es to all of Clause 45.2.7 and a	also 55.6.				
Suggested Remedy Insert a space betwe Response	een & and 10GBASE-T. <i>Response Status</i> O	k and 10GBASE-T. Response Status O		Only when coming upon a reference to bit 6.1 in Table 45-121 and Clause 45. become clear that it's intended that a mixture of Clause 22/28 registers and Cl registers will be required to manage auto-negotation for a 10GBASE-T PHY.						
Cl 45 SC 45.2.7 Thompson, Todd Comment Type E	P115 SolarFlare Co Comment Status X	<i>L</i> ommunica	# 1 <u>5</u>	registers. A single-speed 10Gl Clause 45 registers. Suggested Remedy	BASE-T PHY should be capab	le of being mana	ged entirely using			
Table 45-117 and the 4 in Clause 55.6.	e entire clause 45.2.7 numberir	ng of registers do	bes not match Table 55-	Duplicate the function 45 so that a 10GBAS	nality of Clause 22/28 Registe SE-T PHY may be managed er	rs needed for aut	o-negoation in Clause			
The bottom line of Ta Suggested Remedy Make table 55-4 mat	able 45-117 on page 115 is mis ch Table 45-117 or vise versa.	ssing.		Make the Clause 22. implementing a mult only needs to turn to functionality offered	/28 registers optional for 10GB i-speed PHY can manage the Clause 45 registers when nee in Clause 45.	ASE-T, so that a auto-negotiation added to support the	n implementor who is using Clause 22/28 and ne extended next page			
Fix the bottom outline Response	e of Table 45-117 on page 115 <i>Response Status</i> O			If this approach is no 22/28 and 45 is used in the Clause 22/28 example, there's a re resetting all MMD's of bits in the Clause 22 in. (status bits, etc.)	ot taken, and an approach that d, then write a section docume registers which apply and do n eset bit in the clause 22 register within the PHY? Just the auto-n registers whose usage becom	splits the function nting the bits and ot apply to manager of 0. Does setting neg MMD? Etc. The vague when th	nality between Clause their usage for all bits ging the PHY. (For this bit result in "here are several other tese registers get pulled			
				Finally, some of the 22/28 registers are lo 7.0.9 are also locate	bits in Clause 22/28 were mov eft, these should be removed f d in Clause 22 Register 0.	ed to Clause 45 r rom Clause 45 (fr	egisters. If the Clause or example, 7.0.12 and			

Response

Response Status 0

SC 45.2.7

C/ 45 SC 45.2.7	P116	L15	# 18	C/ 45	SC 45.2.7	.10	P 122	L 50	# 150
Thompson, Todd	SolarFlare Co	ommunica		Booth, Bra	ad		Intel		
Comment Type E	Comment Status X			Comment	t <i>Туре</i> т	Comment	Status X		
Lines 15-17, Table 45-117 throughout Clause 45.2.7	. This comment also app n all other places.	lies to Table 55-4	in Clause 55.6 and	The c page, mista	order in Table 4 then two unfo ke the order of	5-124 seems a l matted code me the data.	oit strange. Not essages. From	rmal transmission reading this table	n is the message next e, someone might
The names in these two ta	bles do not match and th	e names in Table	e 45-117 are incorrect	Suaaeste	d Remedv				
(and throughout Clause 45 Clause 22 even though the	ey share the same function	ent with the name onality.	es in Clause 28 and	List re	egister 19, ther	20, followed by	21.		
Suggested Remedy				Same	applies to Tal	ole 45-125.			
Both tables should have the	e same register names a	ind register numb	pering.	Response	9	Response	Status O		
Registers 7.19-7.21 in both XNP ability register" to "AN 28 and to match it's functionRegisters 7.22-7.24 in both XNP ability register" to eith "AN LP Received Next Pag- page" in the name so as nResponseResponseC/ 45SC 45.2.7.1	a tables and throughout 4 I XNP Transmit Register inality. In tables and throughout 4 er "AN LP Next Page Ab ge" to match Clause 22. A bot to confuse it with regis Response Status O P116	5.2.7 should be to match the sir 5.2.7 should be ility Register" to At least it should ter 7.16 in that sa <i>L</i> 36	changed from "AN LD nilar name in Clause changed from "AN LP match Clause 28 or have the words "next ame table (45-117). # 146	Cl 45 Thompson Comment Table Suggeste It sho Response	SC 45.2.7 n, Todd t <i>Type</i> E e 45-122 refere d <i>Remedy</i> uld be Table 4	2 Comment nce is wrong. 5-119. Response	P 117 SolarFlare Co <i>Status</i> X Status O	L 20 ommunica	# 1 <u>6</u>
Booth, Brad	Intel			C/ 45	SC 45 2 7	2	P117	/ 34	# 17
Comment Type T	Comment Status X			Thompson	n. Todd	-	SolarFlare Co	ommunica	
Table 45-118 for register 7	.0 should have a reset bi	t.		Common		Commont	Status V		
Suggested Remedy Add reset bit (7.0.15) to th Resetting AN is accomplis registers to their default st state of AN and the state of other MMDs that are insta shall return a value of one otherwise. AN is not requir reset process is completed	e table and the following hed by setting bit 7.0.15 ates. As a consequence, f the physical link. This a tiated in the same packa in bit 7.0.15 when a rese ed to accept a write trans I. The reset process shal	text as 45.2.7.1.1 to a one. This ac this action may c ction may also in age. This bit is se t is in progress a saction to any of I be completed w	: ion shall set all AN hange the internal itiate a reset in any lf-clearing, and AN nd a value of zero ts registers until the ithin 0.5 s from the	Remo behav Suggeste Add S Response	ote fault bit sho vior of this bit a <i>d Remedy</i> SC and LH to the	uld be SC and L nd also see the ne R/W column f <i>Response</i>	H in addition to similar bit defini or this bit. Status O	RO. See the tex ition in Clause 22	t regarding the 2.

NOTE—This operation may interrupt data communication.

other register bits should be ignored.

Response

Response Status 0

setting of bit 7.0.15. During a reset, AN shall respond to reads from register bit 7.0.15. All

2

C/ 45 SC 45.2	2.7.2.1 <i>P</i> 117	L 47	# 19	C/ 45	SC 45.2.7.5	P118	L 26	# 148
Thompson, Todd	SolarFlare C	ommunica		Booth, Brad		Intel		
Comment Type E	Comment Status X			Comment Typ	be TR	Comment Status X		
Lines 47-53.				The setur	o of the registe	ers here are a little jumbled b	ecause there is	a mix of Clause 22
The references to	7.16 and 7.19-7.21 are incorrect.			functional of the PH	lity. Unlike Cl Y. AN should	ause 22, Clause 45 has the a I be treated as a separate en	ability to separat tity.	ely manage each part
				Suggested Re	emedv			
Looking at the sir	nilar Clause 28.2.4.1.2, the registe 'AN Advertisement Register" "I P	ers listed are 4,5	,6 (in Clause 28) which ster" and the "AN	In Table 4	45-117, shift re	egisters 7.16 to 7.24 to be 7.	19 to 7.27. Add	register 7.16 to be AN
Expansion Regist	ter".	, at , using rogic		LD base	page ability re	gister. Change register 7.7 t	o indicate the st	atus of next page
This confusion se	ems to have been partially a resu	t of the name by	and incorrect for	transmiss to registe	rs 7.32 and 7.	.33. Register 6), delete all other i	renamed "10GE	Ve registers 7.8 and 7.9 BASE-T AN status
Registers 7.19-21	being labelled "ability" when it is	in fact a "transm	it" register.	register".	Information f	or the base pages and next p	ages should be	contained in 55.6.
Suggested Remedy				Response		Response Status 0		
7.16 should be lis	sted, but not 7.19-21.							
Until the Clause 2	22/28 issues are resolved, it's not	clear which othe	r registers should be	C/ 45	SC 45.2.7.5.1	1 P119	L 4	# 21
listed in addition t	to 7.16.			Thompson, Te	odd	SolarFlare Co	ommunica	
If the Clause 22/2	28 registers are left, then registers	4 and 6 should	be added to the list. If	Comment Typ	pe E	Comment Status X		
the functionality of	of registers 4 and 6 are moved to e	quivalent Claus	e 45 registers, the new	Word is n	nissing on line	e 4.		
registers should t	be listed.			Suggested Re	emedy			
Response	Response Status O			Add the v	vord "use" bet	ween the words "will" and "A	uto-negotiation"	
				Response		Response Status O		
C/ 45 SC 45.2	2.7.2.2 P117	L 55	# 147					
Booth, Brad	Intel			C/ 45	SC 45.2.7.5.	5 <i>P</i> 119	L37	# 22
Comment Type E	Comment Status X			Thompson, T	odd	SolarFlare Co	ommunica	
Remote fault bit r	eferences PMA/PMD when this bi	t is only associa	ted with AN.	Comment Typ	pe E	Comment Status X		
Suggested Remedy				211 shou	ld be 2 raised	to the 11th power.		
Change PMA/PM	D in the subclause to be AN.			Suggested Re	emedy			
Response	Response Status 0			Modify 11	to be an exp	onent of 2.		
				Response		Response Status 0		

Cl 45 SC 49 Booth, Brad	5.2.7.6	P 120 Intel	L1	# 149	C/ 55 Booth, Brad	SC d	P 225 Intel	L1	# 154
Comment Type Register 7.8 is device and link	E Common not about the statu partner.	ent Status X is of 10GBASE-T,	but about the res	olution of the local	Comment Annex	<i>Type</i> E 55A doesn't f	Comment Status X ollow the correct format.		
Suggested Remedy Change headin resolution statu	/ ig and supporting t is register".	ext to reference re	gister as "10GBA	SE-T auto-negotiation	Suggested Update Response	e the format to	comply with the IEEE style gu Response Status 0	ide.	
Response	Respon	se Status O							
	5 2 7 7	P 121	/ 26	# 24	<i>Cl</i> 55 Tellado, Jo	SC 3.12 se	P 165 Teranetics	L 8	# 99
Thompson, Todd		SolarFlare Co	ommunica	" 27	Comment	Туре Т	Comment Status X		
Comment Type Test Mode Reg Suggested Remedy	T Communication	ent Status X seem to be auto-n	egotiation related		values The se describ	were replace cond test is n bed does not i	d by TBD. The first test should ot useful. The third test is inten nclude the LDPC error correcti	be covered by the ded to measure ng capability	the PMA electrical tests. the link BER, but as
Place the test n	node control regist	er into another MM	MD (PMA or PCS)	, or explain the	Suggested	Remedy	older reference test 1 and 2 an	d undata tha laa	at toot to include the
Response	Respon	se Status O			LDPC	encoder and ed, use the 58	DPC decoder. Moreover, to re bit PCS scrambler PRBS to ge	educe the numbe enerate pseudo r	r of PRBS generators andom binary data.
C/ 45 SC 4	5.2.7.9	P 122	L123	# 25	Response		Response Status O		
Thompson, Todd	-	SolarFlare Co	ommunica		C/ 55	SC 3.16	P167	L 22	# 100
Comment Type	E Comm	ent Status X	ns and tables rel	ated to the registers	Tellado, Jo	se	Teranetics		
below.	its apply to pages	122-123, all 3ectio		ated to the registers	Comment	Туре Т	Comment Status X		
	incorrect for regis	ters 7.19-21 and 7	.22-24. See previ	ous comment	Repetit be a m	tion period for ultiple of 256	periodic PMA training sequence the repetition period of the pair	ce mode is TBD. A sync bit which	For simplicity it should
The names are regarding these	e names.				LDFC	codeword bot	inual y		n is aligned with the
The names are regarding these Suggested Remedy	e names.				Suggested	Remedy	indary		n is alighed with the
The names are regarding these Suggested Remedy Change the nar	e names. / mes as per previou	us comment.			Suggested Replac	<i>Remedy</i> Remedy Remediation	c with 2^16=16384		

CI 55	SC 3.16.2	P169	L10	# 101	C/ 55	SC 3.6		P163	L 1	# 98
Tellado, J	ose	Teranetics			Tellado, J	ose		Teranetics		
Comment	Туре Т	Comment Status X			Comment	Туре Т	Comment S	Status X		
InfoFi THP/f	eld bits must be de PBO desired remo	efined to indicate current local te tx THP/PBO, counters, SNF	tx THP/PBO, fit R and loc_rcv_s	uture local tx status.	Maste the in	er and Slave	have different 58bit is different	self sync scra	mblers. There is	no need make sure
Suggeste	d Remedy				Suggeste	d Remedy				
'4' bits	s for each THP ind	ex, '3' bits for each PBO index	, 12 bits for eac	ch counter to indicate	Make	initial seeds	implementer's choi	се		
multip 335m numb perioo	bles of PMA trainin s), 5 bits for slicer er of counters sho ds to THP update a	g periods with a max time inte SNR margin in 0.5dB increme uld include remaining periods and periods to transition to dat	rval of 2^14/800 nts from -5dB t to Master THP/ a PCS mode	De6*(2^12-1) = o 10.5dB. The /PBO increase,	Response)	Response S	Status O		
Response	9	Response Status O			C/ 55	SC 4.2.4	l.	P179	L14	# 105
,					Tellado, J	ose		Teranetics		
	00.040.0	D400	1.04		Comment	Туре Т	Comment S	Status X		
C/ 55 Tellado, J	SC 3.16.3 ose	P169 Teranetics	L Z 1	# 102	PHY o more	control defin details from	es the start-up sequ THP and Power Ba	ence. Draft 1.3 ckoff settings a	has a baseline and timers for ea	start-up that requires ach state.
Comment	Туре Е	Comment Status X			Suggeste	d Remedy				
This s	section header was	s copied from clause 40 and is	not needed he	re. This section is	Updat	te PHY cont	ol diagram based o	n tellado_1_02	05.pdf	
currer	ntly empty				Response)	Response S	Status O		
Suggester Remo	<i>d Remedy</i> ove this header									
Response	9	Response Status 0			C/ 55	SC 4.2.4	L	P179	L 27	# 8
					Zimmerma	an, George		Solarflare Cor	nmunicat	
	SC 248.2	D479	1.20	# 400	Comment	Type T F	Comment S	Status X		
Tellado	050 3.10.2	Teranetics	L 39	# 103	Powe	r backoff lev	els require definitior	n to work with A	AFEXT and AFE	XT scaling.
					Suggestee	d Remedy				
Error	block counter is Tl	BD			Define Powe	e 2 dB steps r Backoff Sc	as in zimmerman_' hedule	1_0205.pdf, as	follows:	
Suggeste	d Remedy				l enat	h(m) II 2	50 MHz (dB) Bac	koff (dB)		
Repla	ace with 6 bit count	er								
Response	3	Response Status O			0-25 25-4 45-5 55-6 65-7 75-8 85-9 >95	5 <9.	14 16.2 12 19.8 10 .23.4 8 .26.9 6 .30.5 4 .34.1 2 1 0			
					Response)	Response S	Status O		

C/ 55 SC 4.3.1 Tellado, Jose	P180 Teranetics	L 34	# 106	C/ 55 SC 5.10 Tellado, Jose	P195 Teranetics	L 34	# 97
Comment Type T THP details are missing	Comment Status X . Specifically FIR and IIR coef	icients and nu	mber of sets	Comment Type T Complete and approv	Comment Status X re 55.5.10		
Suggested Remedy Update THP details with	updated THP proposal in tell	ado_1_0205.p	df	Suggested Remedy On line 35, replace T	BD with '2' and f1 with 80MHz		
Response	Response Status O			Response	Response Status O		
<i>Cl</i> 55 SC 4.5.1 Tellado, Jose	P 182 Teranetics	L16	# 1 <u>04</u>	Cl 55 SC 5.2 Tellado, Jose	P188 Teranetics	L10	# 93
Comment Type T Power backoff levels har appropriate PBO setting	Comment Status X ve been specified, but the req as a function a channel chara	uired algorithm acteristics is m	n to select the issing	Comment Type T Test channel for trans Suggested Remedy	Comment Status X smitter jitter test is not approved		
Adopt PBO values from Response	joint Power Back Presentation Response Status 0	n zimmerman_	1_0205.pdf	Remove table Response	Response Status O		
C/ 55 SC 4.6.2 Tellado, Jose	P185 Teranetics	L 31	# 107	CI 55 SC 5.3 Tellado, Jose Comment Type T	P 189 Teranetics Comment Status X	L1	# 89
Figure reference to auto	neg ref is not confirmed			TBDnumbsym is uns 40MHz	pecified. Setting this to 10 corresp	onds to an o	utput frequency of
Suggested Remedy Eric L. should confirm				Suggested Remedy Replace TBDnumbsy	m by 10		
Response	Response Status O			Response	Response Status O		
<i>Cl</i> 55 <i>SC</i> 5.1 Tellado, Jose	P 187 Teranetics	L10	# 88	C/ 55 SC 5.3 Tellado, Jose	P189 Teranetics	L19	# 90
Comment Type TR Review and approve tex text with references upd	Comment Status X trelating to isolation requirem ated	ent. This text i	s similar to clause 40	Comment Type T Specify frequencies f	Comment Status X or single tone nonlinearity test		
Suggested Remedy Review and approve tex text with references upd	t relating to isolation requirem	ent. This text i	s similar to clause 40	Suggested Remedy Frequencies shall be Response	800/1024*[13 23 53 101 167] Response Status 0		
Response	Response Status O						

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 10 of 25
 Page 10 of 25

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 U/unsatisfied Z/withdrawn
 C/ 55 SC 5.3

C/ 55 SC 5.3 P189 L 21 # 91 C/ 55 SC 5.5 P192 Tellado, Jose Teranetics Zimmerman, George Solarflare	L 17 Communicat	# 7
Lomment Ivne I Comment Status X Comment Status X		
Frequency pairs for two tone tests are not specified TX nonlinearity specification is overly complex.	Specification requ	iires synchronous
Suggested Remedy maintenance of frequecy breakpoints, slope and	d floor. Simplify.	
The following pairs shall be used for the two tone test:Suggested Remedy800/1024*{ [179,181], [277,281], [397,401]}Replace equation 55-7 with form as in pagnanel	lli_4_0105.pdf, slid	de 1.
Response Response Status O Response Response Status O		
C/ 55 SC 5.3 P192 L10 # 92 C/ 55 SC 5.5 P193	L18	# 95
Tellado, JoseTeraneticsTellado, JoseTeranetics	S	
Comment Type T Comment Status X Comment Type T Comment Status X Test setup for tx jitter measurements is not approved Lower end of frequency range for nonlinearity measurements Lower end of frequency range for nonlinearity measurements X	neasurement, Fo is	s not specified.
Suggested Remedy Suggested Remedy Replace figure 55-24 with figure in presentation tellado_1_0205.pdf Replace Fo with 5 MHz		
Response Response Status O Response Response Status O		
C/ 55 SC 5.4 P 192 L 42 # 94 C/ 55 SC 5.5 P 193 Tellado, Jose Teranetics Terlado, Jose Teranetic	L 37	# 96
Comment TypeTComment StatusXComment TypeTComment StatusXTransmit voltage is provided as a range (2V,2.5V); recommend a specific voltageThe draft calls out recommended nonlinearity sp	pecs, which are un	specified
Suggested Remedy Suggested Remedy 2V +- 15% Set recommended values as Xnonlin=60, Xnlslc	ope=0 or eliminate	reference to
Response Response Status O recommended values.		
Response Response Status O		
C/ 55 SC 5.4 P192 L42 # 6		
Zimmerman, George Solarflare Communicat		
Comment Type T Comment Status X		
Peak to peak voltage spec is redundant and unnecessary now that transmit power and PSD mask defined. Keeping this redundant spec also comes with the cost of an additional test mode.		
Suggested Remedy Delete peak-to-peak voltage specification.		
Response Response Status O		

SC 5.5

C/ 55	SC 5.5	P193	L 37	# 5	CI 55	SC 55.12	P 219	L1	# 51	
Zimmerma	n, George	Solarflare Con	nmunicat		Lynskey,	Eric	UNH-IOL			
Comment T "Recor are not specific	Type E mmended" linearit t required for inter cations has highlig	Comment Status X y specification is TBD. Value operability by definition. Det ghted significant differences	es are internal t bate on simply t in vendors' line	to vendors' designs and the required (normative) arity requirements.	Comment PICS Suggeste	<i>Type</i> E are incomplete, and <i>Remedy</i>	Comment Status X nd in different format than o	other recent clauses.		
Suggested Delete specific	<i>Remedy</i> reference to "reconcertor" reference to to reconcertor	ommended" linearity specific r interoperability.	ation. Provide	only normative	Response		Response Status O			
Response		Response Status O			C/ 55 McClellan	SC 55.2.1.2.1 , Brett	P146 Solarflare	L31	# 87	
CI 55 Eisler, Geo Comment T Recom	SC 55.1 orge <i>Type</i> TR omendation for test	P139 Solarflare Comment Status X sting all cabling systems prio	L 12	# 9	Comment The v Suggeste Remo	<i>Type</i> T alue link_status = <i>d Remedy</i> we this value.	Comment Status X READY is defined but neve	er used.		
Suggested Add the "It is hi measu guidelin Response	Remedy e following text: ghly recommende red/tested before nes in (proposed)	ed that any cabling system, n the installation of 10GBASE ANSI/TIA/EIA TSB 155." <i>Response Status</i> 0	ewly or previou -T equipmentby	sly installed, be following the	CI 55 Lynskey, Comment The s Suggeste	SC 55.3.10 Eric Type E econd figure refer d Remedy	Response Status O P164 UNH-IOL Comment Status X ence does not contain a fig	L 58 ure number.	# 43	
Cl 55 Powell, Sco	SC 55.1 ott	P139 Broadcom	L 35	# 32	Repla Response	ce with Figure 55.	-6. Response Status O			
55m to FEXT r E cabli bundle	100m Class E of measurements ind ing. No data has d class E cabling	ojective is misleading as to si dicate that 10Gbps cannot be been presented to indicate w is capable of supporting 10G	upport over the broadly suppo hat percentage BASE-T.	installed base. Alien rted over bundled class of currently installed	Cl 55 Lynskey, Comment	SC 55.3.10 Eric <i>Type</i> E	P164 UNH-IOL Comment Status X f sentence	L 59	# 42	
Chang Some carry 1	e "Class E" in obj portion of the inst 0GBASE-T traffic	ective (f) to "cat 6a" (or the a alled Class E will meet cat 6a . See presentation for meas	ppropriate nam a specifications ured AFEXT da	e for the new cable). and this portion can ata.	Suggeste Add p	d Remedy eriod.				
Response		Response Status O			Response)	Response Status O			

Cl 55 SC 55.3 Lynskey, Eric	.11 <i>P</i> 165 UNH-IOL	L 6	# 44	C/ 55 Lynskey, Eric	SC 55.3.12	Р 165 UNH-IOL	L 9	# 45
Comment Type E Give full primitive	Comment Status X name.			Comment Typ Are additi	e TR onal test patt	Comment Status X terns needed besides the one	es defined in 55.	5.3? Presently, I am
Suggested Remedy Replace UNIDAT	A.request with PMA_UNITDATA.re	equest.		not aware these test connect d	of tests that patterns are irectly to the	are being defined that would defined to bypass all of the s PMA. Unless a proposal is b	l require these te scrambling and o prought forward t	est patterns. Currently, coding of the PCS, and to fully define these
Response	Response Status O			patterns, I Suggested Re	recommend	d removing this section.		
Cl 55 SC 55.3 McClellan, Brett	.12 P165 Solarflare	L 8	# 7 <u>8</u>	Response	Subclause 55	Response Status O		
Comment Type T This test pattern s 10GBASE-T. 55.5	Comment Status X section was copied from clause 49, 5.3 already specifies Transmitter te	but doesn't ad st modes	dd any value for	<i>CI</i> 55 Lynskey, Eric	SC 55.3.14	<i>P</i> 166 UNH-IOL	L14	# 46
Suggested Remedy Remove this secti	on.			Comment Typ The sente defined.	e TR ence is incom	Comment Status X nplete. Also, the descrambler	being used by t	he MASTER should be
Response				Suggested Re	emedy			
Cl 55 SC 55.3 Seki Katsutoshi	.12 P165	L 8	# 111	Finish ser implemen the MAST	tence with ". tation shown ER descram	for the SLAVE, and shall pro n in Figure 55-12 for the MAS abler.	oduce the same TER." Also, add	result as the I figure 55-12 to show
Comment Type T	Comment Status X			Response		Response Status O		
The proposed path AFE and cable.	tern is useful to evaluate link inclu	ding LDPC end	coder/decoder, tx and rx	<i>CI</i> 55 Lynskey, Eric	SC 55.3.16	P 167 UNH-IOL	L 22	# 47
Test patterns for the Pseudo random te	ransmitter and thier control MDIO est mode should be marged into M	register are als DIO register fo	so defined in 55.5.3. or transmitter test mode.	Comment Typ Wrong wo	e E ord for Auto-N	Comment Status X	ine 30 on this sa	me page and subclause.
Suggested Remedy				Suggested Re				no pago ana caboladoo.
See proposal in se	eki_1_0205.pdf			Replace a	utoneg with	Auto-Negotiation.		
Response	Response Status O			Response	- 5	Response Status O		

SC 55.3.16

C/ 55 SC 55.3.16 Lynskey, Eric	P 167 UNH-IOL	L 22	# 50	<i>Cl</i> 55 McClellan, Br	SC 55.3.18.2 ett	P173 Solarflare	L 39	# 81
Comment Type TR Currently, no bits exist	Comment Status X that allow for the resetting of t	he scrambler st	ate after TBD periods.	Comment Typ Error bloo	be T cks counter is d	Comment Status X lefined in 45.2.3.12.4 to be 8 bit	S.	
Suggested Remedy Remove this from the	Auto-Negotiation process or de	efine these page	es.	Suggested R Change	e <i>medy</i> ſBD-bit to 8-bit.			
Response	Response Status 0			Response		Response Status 0		
C/ 55 SC 55.3.16 Lynskey, Eric	P167 UNH-IOL	L 29	# 49	<i>CI</i> 55 Lynskey, Eric	SC 55.3.18.2	Р 174 UNH-IOL	L14	# <mark>54</mark>
Comment Type TR Currently, there exists between link partners of Suggested Remedy Remove this from the J	Comment Status X no page defined to transmit th during Auto-Negotiation. Auto-Negotiation process or de	ese 66 bit scrar efine these page	nbler state seed values	Comment Tyj Relating Suggested Re Need to a	be T to Figure 55-13 emedy add subclause p	Comment Status X , the 125us_timer is not defined prior to the state diagrams.	J.	
Response	Response Status O			55.x.x.x T State dia	Timers gram timers foll	ow the conventions of 14.2.3.2		
Cl 55 SC 55.3.16.2 McClellan, Brett	2 P169 Solarflare	L 8	# 80	125us_tir Timer ti <i>Response</i>	ner hat is triggered	every 125us +1%, -25% Response Status O		
The description of the Suggested Remedy Fill in complete descrip	info field is incomplete.			C/ 55 Lynskey, Eric	SC 55.3.18.2	P174 UNH-IOL	L 3	# 53
Response	Response Status 0			Comment Typ As showr	pe T n in Figure 55-1	Comment Status X 3, the variable r_test_mode is r	not defined	anyplace.
Cl 55 SC 55.3.16.3 McClellan, Brett	3 P169 Solarflare	L 20	# <u>79</u>	If no PCS diagram. Recomm	ernedy 5 test modes an Or, if PCS test end renaming t	e defined, then this variable car modes will be defined, then this o rx_test_mode and defining as	n be remov s variable r s such:	ed from the state needs to be defined.
This section is a remna Suggested Remedy	ant from clause 40 and should	be eliminated.		rx_test_n the receiv test-patte	node: Boolean v ve channel ope ern mode.	variable controlling receive char rates in normal mode. When tr	nnel operat ue, the reco	ing mode. When false, eive channel operates in
Remove the section. Response	Response Status O			Response		Response Status O		

SC 55.3.18.2

C/ 55 SC 55.3.18.2	P 174	L 4	# 55	CI 55	SC 55.3.2.1	P154	L16	# 108
Lynskey, Eric	UNH-IOL			Seki, Kats	utoshi	NEC Electronics		
Comment Type T	Comment Status X			Comment	Туре Т	Comment Status X		
As shown in Figure 55- ² or RX_INIT states if !blc how the block_lock varia	13 and Figure 55-15, the device ock_lock is true. None of the sable is set or used. Its definiti	ce will be stuck state diagrams on states that	in the LFER_MT_INIT in this clause define it is set true when the	PMA_ macth	SIGNAL.indicate	es(SIGNAL_OK)" and "sync_stati se55	us" are not	defined and doesn't
receiver acquires block	delineation, but this is never e	explicitly define	ed.	Chen	ne "PMA_SIGNA	Jundicates(SIGNAL_OK)" to "PM	A RXSTA	TUS indicates (OK)"
Suggested Remedy				Chen	ge "sync_status"	to "block_lock"		
Explicitly define the circ a state diagram.	umstances that set block_lock	(and also how	w it is lost), preferably in	Response	,	Response Status O		
Response	Response Status O							
				CI 55	SC 55.3.2.2	P154	L16	# 34
C/ 55 SC 55.3.18.2	P 176	L 2	# 56	Lynskey, I	Eric	UNH-IOL		
Lynskey, Eric	UNH-IOL			Comment	Type T	Comment Status X		
Comment Type T	Comment Status X			The P	MA_SIGNAL.ind	dicate primitive used here is not d	lefined any	place.
In Figure 55-15, there is seems that there is no r and the reset (used in F	a reset variable that brings yo need to have both a pcs_reset igure 55-15).	ou back to the (used in Figu	RX_INIT state. It res 55-14 and 55-13)	Suggester Chang indica	d Remedy ge text to "PM/ tes OK"	A_RXSTATUS.indicate(loc_rcvr_:	status). Wl	hen loc_rcvr_status
Suggested Remedy				Response	,	Response Status 0		
Collapse into a single va	ariable and make consistent the	nroughout diag	grams.					
Response	Response Status O			C/ 55 Lynskey, I	SC 55.3.2.2 Eric	P 154 UNH-IOL	L17	# 35
C/ 55 SC 55.3.18.3 McClellan, Brett	P 174 Solarflare	L 52	# 82	<i>Comment</i> The P	<i>Type</i> E MA_UNITDATA	Comment Status X primitive name is chopped off.		
Comment Type T The Loopback mode reg	Comment Status X gister bit is located in 3.0.14.			Suggester Chang	d Remedy ge to "PMA_UNI	TDATA.indicate primitive".		
Suggested Remedy Change TBD to 3.0.14. Also update 45.2.3.1.2 ((see other comment).			Response		Response Status O		
Response	Response Status O			C/ 55 Lynskey, I	SC 55.3.2.2 Eric	P 154 UNH-IOL	L 20	# 36
				<i>Comment</i> The s	<i>Type</i> T ync_status flag i	<i>Comment Status</i> X s not defined anywhere.		
				Suggestee Define	d Remedy e.			
				Response	,	Response Status O		

CI 55	SC 55.3.4.1	P155	L 5 1	# 109	C/ 55 SC 55.3.6	P163	L1	# 77
Seki, Kats	utoshi	NEC Electronic	CS		McClellan, Brett	Solarflare		
Comment corres	<i>Type</i> T spondence betwee	Comment Status X en DSQ symbols and air A/B/0	C/D should be	defined	Comment Type T The scrambler initial	Comment Status X states are TBD.		
Suggested Define Pair A Pair B Pair C Pair D	d Remedy e correspondence : DSQ<4*n> 5 : DSQ<4*n+1> 2 : DSQ<4*n+2> 0 : DSQ<4*n+3>	as follow			Suggested Remedy Replace with: "The master and sla between the remote Response	ve scrambler initial values shall and local device as well as adja Response Status O	be set to ensur acent devices."	e sufficient randomness
Response		Response Status O			C/ 55 SC 55.3.6	P163	L1	# 39
C/ 55 Seki, Kats	SC 55.3.4.6 utoshi	P160 NEC Electronic	L11 cs	# 110	Comment Type T	UNH-IOL Comment Status X	ressary to defin	a initial values?
Comment The pa to erro	<i>Type</i> T ayload of invalid F or block in order to	Comment Status X PHY frame and first 65B block prevent undetected packet e	of next PHY fr error.	ame should be forced	Suggested Remedy Replace the first two value of the scrambl	sentences on this page with "T er."	here is no requi	rement on the initial
Add th e) Th	ne following condit ne payload of inva	tions for invalid block. Iid PHY frame and the first blo	ock of next PH	Y frame	Response	Response Status 0		
Response		Response Status 0			C/ 55 SC 55.3.7 Lynskey, Eric	P 163 UNH-IOL	L 27	# 38
CI 55 Lynskey, E	SC 55.3.6 Eric	P 162 UNH-IOL	L 53	# 37	Comment Type T No diagram currently	Comment Status X y exists for CRC8.		
Comment No dia	<i>Type</i> T agram currently ex	Comment Status X kists for SLAVE scrambler.			Suggested Remedy Add diagram.			
Suggested Add d	<i>d Remedy</i> iagram for SLAVE	scrambler.			Response	Response Status O		
Response	,	Response Status 0						

C/ 55 SC 55.3.8	P163	L32	# 41	C/ 55	SC 55.4.2.2	P178	L 48	# 138
Lynskey, Eric	UNH-IOL	-		Booth, Bra	ad	Intel		
Comment Type T	Comment Status X			Comment	Туре Т	Comment Status X		
It is not clear, from n	ny reading of the text, which bits	are to be coded	and which are to be	Insert	text for transmit	fault.		
However, this diagra	im appears to be informational,	and not supporti	ng mandatory text	Suggested	d Remedy			
describes how this w	vorks. Since I am not exactly cle	ear how the bits	are split up, l cannot	Insert	the following part	ragraph: t function is optional. The faul	Its detected by	this function are
Suggested Remedy	esteu remeuy.			impler	mentation specifi	c. If the MDIO interface is imp	plemented, ther	this function shall be
Define how the scrat	mbled bits enter the LDPC enco	der.		mappe	ed to the transmi	t fault bit as specified in 45.2.	1.7.4.	
Response	Response Status O			Response		Response Status O		
Rooponoo								
0.55		1.10		C/ 55	SC 55.4.2.3	P 179	L 9	# 140
C/ 55 SC 55.3.8		L 42	# 40	Booth, Bra	ad	Intel		
Commont Typo E	Commont Status V			Comment	Туре Т	Comment Status X		
Wrong word				Intere	st text for receive	e fault function.		
Suggested Remedy				Suggested	d Remedy			
Change Appendix to	Annex.			The P	MA receive fault	fagraph: function is optional. The PMA	A receive fault f	unction is the logical
Response	Response Status O			OR of	link_status = FA	IL and any implementation sp	ecific fault. If the receive fault	ne MDIO interface is
				45.2.1	.7.5.			on specified in
CI 55 SC 55 3 8	2 P173	/ 30	# 52	Response	1	Response Status 0		
Lynskey, Eric	UNH-IOL	200	" JL					
Comment Type E	Comment Status X			C/ 55	SC 55.4.3.1	P180	L 40	# 48
Since 8 bits are defi	ned for this counter, maybe it sh	ould be an 8-bit	counter.	Lynskey, E	Eric	UNH-IOL		
Suggested Remedy				Comment	Type E	Comment Status X		
Change TBD to 8.				Wrong	g word for Auto-N	legotiation.		
Response	Response Status O			Suggested	d Remedy			
				Repla	ce with Auto-Neo	gotiation.		
				Response	1	Response Status O		

SC 55.4.3.1

C/ 55	SC 55.4.4.1	P181	L15	# 59	C/ 55	SC 55.4.5.2	P182	L 42	# 57
Comment No sta	<i>Type</i> T te diagram is defi	Comment Status X ned for 10GBASE-T Automa	tic MDI/MDI-X	operation.	Comment In cas	<i>Type</i> T e vendors want t	Comment Status X o support both 1000BASE-T	and 10GBASE-	T, there is no need to
Suggested Define Response	<i>l Remedy</i> a new state diag	ram in Clause 55 or referenc Response Status O	e the diagram f	rom Clause 40.	Suggested This ti Response	<i>d Remedy</i> mer shall have a	period of 1.3s +/- 25%. Response Status O		
CI 55 Seki, Katsu Comment Figure Suggested Refer	SC 55.4.4.1 utoshi <i>Type</i> T of Automatic MD <i>I Remedy</i> to Figure 40-17 "1	P181 NEC Electron Comment Status X I/MDI-X state machine are m 000BASE-T Auto Crossover	L 16 ics hissing	# 1 <u>12</u> , or copy it.	Cl 55 Lynskey, E Comment In cas have o Suggested	SC 55.4.5.2 Eric Type T e vendors want t different values for d Remedy	P183 UNH-IOL Comment Status X o support both 1000BASE-T or sample_timer.	L7 and 10GBASE-	# 58
Response		Response Status 0			This ti Response	mer shall have a	period of 62 +/- 2ms. Response Status O		
CI 55 McClellan, Comment The "A Either clause I propo same to Suggested Delete Removi shall c	SC 55.4.5.2 Brett <i>Type</i> T A_timer" defines a the Clause 40 Au 55 or this timer s bese that this text b text in clause 55. <i>I Remedy</i> A_timer text. ve text in 55.4.4, 5 omply with 40.4.4	P182 Solarflare Comment Status X timer for a state diagram no to Crossover state diagram of hould be removed. e removed and have 55.4.4	L 35 t included in the (Fig 40-17) nee refer to 40.4.4 stead place a re	# 86	CI 55 McClellan Comment The L vs. PC Furthe link_fa I prop See p Suggestee Updat Response	SC 55.4.6 Brett Type T ink Monitor state CS_status) ermore, this state il_inhibit_timer). ose a new state of resentation. d Remedy e state diagram	P185 Solarflare Comment Status X diagram does not match the diagram allows only 558 ms diagram that corrects these is ber the presentation. Response Status 0	L1 text on page 18 for startup (see ssues.	# 85 2 ln 52 (loc_rcvr_status page 36:
Response		Response Status O			10000100				

									-		
C/ 55	SC 55.4.6.1	P184	L1	# 84	Cl 55	SC 55.5.3	P189	L	# 114		
McClellan	, Brett	Solarflare			Chris, Pag	ynanelli	Solarflare Corr	nmunicat			
Comment	t <i>Туре</i> Т	Comment Status X			Comment	Type TR	Comment Status X				
The F and e	PHY Control state indless loops.	diagram has missing transitio	ns, unused tim	ners, missing timer start	Need TBD.	to specify frequen	ncies for single-tone and two-t	one tests. Fre	equencies are currently		
Additi See n	ionally, the maxwa	ait and minwait timers on page	e 182 are TBD		Suggested Remedy Replace TBDs with test frequencies proposed in contribution titled "Proposal for						
Suggeste	d Remedy	opoood olalo alagiam ana im									
Unda	te section with pro	posed state diagram and time	ers		l rans ensur	mitter Linearity Sp e linearity requirer	pecification". Test frequencies ments are met.	s below 40 MF	Iz are not required to		
Response	?	Response Status O			Response))	Response Status 0				
Cl 55SC 55.4.6.1P184L1# B4McClelan, BrettSolarliareSolarliareComment Status XComment Type TComment Status XSolarliareComment Status XAdditionally, the maxwait and minwait timers on page 182 are TBD. See presentiation for proposed state diagram and timers.Comment Type TRComment Type TRComment Status XSuggested Remedy Updata saction with proposed state diagram and timers.# 117 Comment Type TRComment Status XComment Type TRComment Status XComment Status XResponse Status OC 155SC 55.5.2P187L# 117 Chris, PagnanelliSolarliare CommunicatComment Type TRComment Status XComment Type TRComment Status XComment Status XThe test channel specified in paragraph 55.5.2.P187L# 116 Suggested Remedy productions of the connections be mained to resistive terminations or Master/Slave terminatis using short lengths of UTP cabling.Solarliare CommunicatSuggested Remedy Delete paragraph 55.5.2.P188L 35# 64 Suggested Remedy Delete paragraph 55.5.2.P188L 35# 64 Suggested Remedy Comment Type EComment Type TComment Status XComment Type EComment Status XCComment Type EComment Status XComment Type EComment Status XSuggested Remedy Lynskey, Eric UNH-IOLUNH-IOLComment Type EComment Status XComment Type EComment Status XC											
CI 55	SC 55.5.2	P187	L	# 117	C/ 55	SC 55.5.3	P192	L	# 116		
Chris, Pag	gnanelli	Solarflare Con	nmunicat		Chris, Pag	ynanelli	Solarflare Com	municat			
Comment	t Type TR	Comment Status X			Comment	Type TR	Comment Status X				
jitter a contri proce Maste Suggeste Delete	and distortion can butions addressin dures only require er/Slave terminals <i>d Remedy</i> e paragraph 55.5.	be measured using the simplified and g the subject of timing jitter and a that connections be made to using short lengths of UTP ca 2.	ifed procedure nd distortion. ⁻ o resisitive term abling.	s given in recent These simplified hinations or	neces signa Suggeste Repla Timin Response	isary for loop timin ls. <i>d Remedy</i> ice Figure 55-24 w g Jitter Specification	ig and does not show means vith figure provided in contribu on." <i>Response Status</i> O	of isolating M tion titled "Pro	aster and Slave output		
Response	9	Response Status 0									
					Cl 55	SC 55.5.5	P103	L18	# 119		
Cl 55	SC 55.5.3	P188	L 35	# 64	Halder, B	jit	Plato Networks	6			
Lynskey,	Eric	UNH-IOL			Comment	Туре Т	Comment Status X				
Comment In Tal	t <i>Type</i> E ble 55-3, the test r	Comment Status X mode bits can be defined. Th	is also applies	to the TBD in line 28 on	The c receiv	istortion specificat /er SNR, say no m	tions should be calculated so hore than a small fraction of a	that there is no dB.	o significant loss of		
this s	ame page.				Suggeste	d Remedy					
Suggeste	d Remedy	an able d bur a uta a bite 7.0.45	10)		Giver	the reduction in a ting values for the	average PSANEXT and new F	SAFEXT mod	lel, we recommend the		
⊢or lir	ne ∠ơ: "snail bê	enabled by setting bits 7.9.15	:13)		1. X_	_nonlin =52					
For T	able, replace bit 3	with 7.9.13; bit 2 with 7.9.14;	and bit one w	ith 7.9.15.	2. X_	Cl 55 SC 55.5.3 P189 L # 114 Chris, Pagnanelli Solarflare Communicat Comment Type TR Comment Status X Need to specify frequencies for single-tone and two-tone tests. Frequencies are currently TBD. Suggested Remedy Replace TBDs with test frequencies proposed in contribution titled "Proposal for Transmitter Linearity Specification". Test frequencies below 40 MHz are not required to ensure linearity requirements are met. Response Response Status O Cl 55 SC 55.5.3 P192 L # 116 Chris, Pagnanelli Solarflare Communicat Comment Type TR Comment Status X Test set up (Figure 55-24) for transmitter timing jitter measurement is not suitable and lacks sufficient detail. Figure does not show connection between Master and Slave output signals. Suggested Remedy Replace Figure 55-24 with figure provided in contribution titled "Proposal for Transmitter Timing Jitter Specification." Response Response Status O Cl 55 SC 55.5.5 P103 L18 # 119 Halder, Bijit Plato Networks Comment Type T Comment Status X The distortion specifications should be calculated so that there is no significant loss of receiver SNR, say no more than a small fraction of a dB.					
McClellan, Brett Solarflare Chris, Pagnanelli Solarflare Communicat Comment Type T Comment Status X Need to specify frequencies for single-tone and two-tone tests. Free TBD. See presentation for proposed state diagram and timers. Suggested Remedy Vise of the specification of the specification. Test frequencies below 40 MH ensue linearity requirements are met. Response Response Status O Ci 55 SC 55.2 P187 L # 117 Chris, Pagnanelli Solarflare Communicat Comment Status X Ci 55 SC 55.3 P192 L Chris, Pagnanelli Solarflare Communicat Comment Status X Ci 55 SC 55.5.3 P192 L Chris, Pagnanelli Solarflare Communicat Comment Status X Ci 55 SC 55.5.3 P192 L Comment Type The test channel specification can be measuring Master/Slave timing juter and distortion. Master and Slave timing juter master meature treated to measurement isolating Master/Slave terminatis using short lengths of UTP cabling. Ci 55 SC 55.5.3 P192 L Comment Type Response Status O O Ci 55 SC 55.5.5 P103 L18 Comment Type Response Status O O Ci 55											
					This speci	etting is to be app fied values results	blied for full power operation, t in 0.4dB loss in SNR for 100	hat is with 0dE m Class E cab	3 power back off. The ble.		

Response Status 0

Cl 55	SC 55.5.5	P193	L	# 113	CI 55	SC 55.6	P 197	L 35	# 151
Chris, Pagna	anelli	Solarflare Com	municat		Booth, Bra	d	Intel		
Comment Ty	vpe TR	Comment Status X			Comment	Туре Т	Comment Status X		
Transmi	tter linearity spe	ecification based on SFDR and	d IMD does no	t properly address	Table	55-4 references	s Clause 22 register set.		
distortioi range (fo	n due to jitter ar o) and breakpoi	nd noise, and TBDs make spe nt for frequency roll off (f1) are	cification incor	nplete: lower end of	Suggested	Remedy			
(Xnonlin	and distortion	slope (NLslope) are not spec	ified.		Delete	CLause 22 reg	gister references from the table.		
Suggested F	Remedy				Response		Response Status 0		
Specify	transmitter linea	arity in terms of frequency-dep	endent signal-	to-noise-plus distortion					
ratio ove slope. T	er 5 MHz to 400 Fabulate specifi	MHz band, using single equa	ition with appro	priate lower limit and ter linearity	CI 55	SC 55 6	P198	1	# 20
specifica	ation text with n	ew text as proposed in contrib	oution titled "Pr	oposal for Transmitter	Thompson	. Todd	SolarFlare Com	munica	# 20
Linearity	Specification."				Comment	Type F	Comment Status X		
Response		Response Status O			Table	55-4 is missing	several registers defined in 45.2	.7.	
					Suggested	u Remedv	, U		
C/ 55	SC 55.5.6	P193	L	# 115	Add th	e missing regis	sters into Table 55-4.		
Chris, Pagna	anelli	Solarflare Com	municat		_				
Comment Ty	vpe TR	Comment Status X			For ex	ample, 7.2, 7.3	, 7.5, 7.6.		
Transmi for maxi	tter timing jitter mum jitter intro	specification is incomplete. T duced by Slave loop timing fur	ext is needed.	Specification is needed	Response		Response Status O		
Suggested F	Remedy				C/ 55	SC 55.6.1	P197	/ 21	# 60
Adopt sp Specifica	pecification prop ation"	oosed in contribution titled "Pr	oposal for Trar	nsmitter Timing Jitter	Lynskey, E	ric	UNH-IOL		# 00
Response		Response Status O			Comment Anothe	<i>Type</i> E er purpose of A	Comment Status X uto-Negotiation for 10GBASE-T is	s to negotiat	e loop timing.
					Suggested	Remedy			
C/ 55	SC 55.5.7	P194	L17	# 118	Add ite	em mentioning	loop timing to list.		
Halder, Bijit		Plato Networks	5		Response		Response Status 0		
Comment Ty	vpe T	Comment Status X	-						
I he defi cut off to	nition of lower F	SD mask starts from 5MHz.	this allows trai	nsformer 3dB high pass will produce excessive			D107	1.24	# 64
droop. T significa	he range of training the range of training the range of t	nsformer allowed by the curre nteroperability.	nt specification	is is too loose and pose	Lynskey, E	ric	UNH-IOL	L 24	# 61
Suggested F	Remedy				Comment	Туре Т	Comment Status X		
Reduce	the start freque	ncy for lower mask to no large	er than 500KH:	Ζ.	With th	ne addition of lo	pop timing negotiation, this statem	nent is not co	orrect.
Response		Response Status 0			Suggested	Remedy			
					Recom	nmend removin	ig these 3 sentences.		
					Response		Response Status O		

<i>Cl</i> 55 <i>SC</i> 55.6.1.1 Thompson, Todd	P 197 SolarFlare Co	L 36 ommunica	# 26	C/ 55 Lynskey, E	SC 55.6.1.3	<i>P</i> 199 UNH-IOL	L 55	# 62
Comment Type E Table 55-4 Register 0, T Suggested Remedy Control register 0 is a wr	Comment Status X ype should be R/W. iteable register. Change it t	o R/W.		Comment Referri Annex negotia ways to	Type T ng readers to Ar written to talk ab ation. Going bac proceed with th	Comment Status X nex 40C may not be the bes pout sending normal next pag k to this Annex could lead to his.	t thing to do. Th jes following a 10 reader confusio	is is an informative 000BASE-T page n. I think there are two
Response	Response Status O			Suggested Option negotia	Remedy A: We could wri tion (extended r	te a new informative Annex to here the set of the set o	hat shows sever gular next page;	al examples of auto- sending extra extended
Cl 55 SC 55.6.1.1 Thompson, Todd Comment Type E Table 55-4 is inconsister	P198 SolarFlare Co Comment Status X ht with Clause 45.2.7.	L 1 ommunica	# 2 <u>7</u>	next pa Option addition Response	ages;) B: We can simp nal pages.	ly remove most of this text, a <i>Response Status</i> O	s Clause 28 doe	es define how to send
Make the register number in the Description/paragr defined in 45.2.7, and the ability register. Response	ering, Names, and descripti raph numbers, numbering, s e name of AN LP XNP NP <i>Response Status</i> O	ons match 45.2 some AN regist TX register sho	.7. There are mistakes ers are missing that are build be AN LP XNP NP	C/ 55 Thompson, Comment T	SC 55.6.2 Todd <i>Type</i> E ent applies to 55	P 200 SolarFlare Co <i>Comment Status</i> X 5.6.2 in its entirety.	L 1 ommunica	# <mark>28</mark>
Cl 55 SC 55.6.1.2 Booth, Brad Comment Type T Table 55-5 is a bit confus	P198 Intel Comment Status X sing.	L 45	# 152	There a Suggested Remov Response	are a number of <i>Remedy</i> re TBD's and rep	TBD's that should now be read blace with appropriate registe <i>Response Status</i> O	solved. r/bit definitions.	
Suggested Remedy Change table headings t Under base page: D15 is 28.2.1.2.4, D13 is remote reference based on a Cla 28.2.1.2.2, and D4:D0 is Under extended next pager 28.2.3.4.7, Ack2 is a	to be Bit, Name and Descripts a next page as per 28.2.1.2. e fault as per 28.2.1.2.3, D1 ause 28 comment, D11:D5 the selector field as per 28 ge: M10:M0 is the message cknowledge 2 as per 28.2.3	otion. 5, D14 is ackno 2 is extended r is the technolog 2.1.2.1. code as per A 4.4.6, MP is me	owledge as per hext page as per a new gy ability field as per hnex 28C, T is toggle as ssage page as per	Cl 55 Lynskey, E Comment T Since o Suggested Replac Response	SC 55.6.2 ric <i>Type</i> E only a single pag <i>Remedy</i> e with "10GBAS	P 200 UNH-IOL Comment Status X Je is being sent, it is not corre E-T Technology Message Co Response Status O	L 20 ect to refer to "un ode".	# 63
28.2.3.4.5, Ack is acknow The unformatted portion reference. Response	wledge as per 28.2.3.4.4 an looks okay other than spec <i>Response Status</i> 0	d NP is next pa	age as per 28.2.3.4.3. er, give the subclause			,		

Cl 55	SC Todd	55.6.2	P 200 SolarElare Co	L 5	# 29	CI 55	SC 55.6.2	P 201 UNH-IQI	L 46	# 66
Comment There	<i>Type</i> are sev	E veral TBDs	<i>Comment Status</i> X in this section.			Comment Repla	<i>t Type</i> E ace TBD.	Comment Status X		
On pa new fa	ige 201 ault bit.	line 42 the	re is a reference to 10.15 w	nich should be c	hanged to refer to the	Suggeste Repla	ed Remedy ace TBD with 7.7	7.15.		
Suggestee Repla	d Reme ce the 1	<i>dy</i> TBD's belov	v with the text indicated:			Response	9	Response Status 0		
Page	Line	e New Va	lue			CI 55	SC 55.6.2	P 201 UNH-IOI	L 47	# 67
200 200 200 201	5 6 28 42	Table 55- Table 55- Table 55- Is 10,15 s	6 5 6 should be 7.8.15			Comment Repla	<i>t Type</i> E ace TBD.	Comment Status X		
201 201 201 201	46 47 51	7.7.15 7.7.14 7.8.15				Suggeste Repla	ed Remedy ace TBD with 55	.4.2.4.		
201 202 202	57 1 9	55.4.2.4 7.7.15 First occu	rence 7 8 15 second 7 8 14			Response	9	Response Status 0		
202 202	13 16	55.2.4 7.8.15				<i>CI</i> 55 Lynskey,	SC 55.6.2 Eric	Р 201 UNH-IOL	L 5 1	# 68
Response			Response Status O			Comment Repla	<i>t Type</i> E ace TBD.	Comment Status X		
<i>Cl</i> 55 Lynskey, E	SC Eric	55.6.2	P 201 UNH-IOL	L 42	# 65	Suggeste Repla	ed Remedy ace TBD with 7.8	3.15.		
Comment Wrong	<i>Type</i> g bit refe	E erence.	Comment Status X			Response	9	Response Status O		
Suggested Chang	d Reme ge 10.1	dy 5 to 7.8.15.				C/ 55	SC 55.6.2	P 201 UNH-IOI	L 57	# 69
Response			Response Status O			Comment Repla	<i>t Type</i> E ace TBD.	Comment Status X		
						Suggeste Repla	ed Remedy ace TBD with 7.8	3.14.		
						Response	е	Response Status 0		

C/ 55 SC 55.6.2 Lynskey, Eric	Р 202 UNH-IOL	L1	# 70	C/ 55 SC 55.6.2 P202 L23 # 74
Comment Type E Replace TBD.	Comment Status X			Comment Type E Comment Status X Change note to include 1000BASE-T.
Suggested Remedy Replace TBD with 7.7	.15.			Suggested Remedy Modify to "if 10GBASE-T or 1000BASE-T is selected"
Response	Response Status O			Response Response Status O
C/ 55 SC 55.6.2 Lynskey, Eric	Р 202 UNH-IOL	L10	# 7 <u>1</u>	C/ 55 SC 55.7 P 203 L 9 # 10 Eisler, George Solarflare
Comment Type E Replace TBDs.	Comment Status X			Comment Type TR Comment Status X Recommendation for testing all cable installations
Suggested Remedy Replace first TBD on t	this line with 7.8.15, and repla	ce second TBD	vith 7.8.14.	Suggested Remedy Add the following paragraph:
Response	Response Status O			"It is highly recommended that any cabling system, newly or previously installed, be measured/tested before the installation of 10GBASE-T equipmentby following the quidelines in (proposed) ANSI/TIA/EIA TSB 155."
C/ 55 SC 55.6.2 Lynskey, Eric	Р 202 UNH-IOL	L13	# 72	Response Response Status O
Comment Type E Replace TBD.	Comment Status X			C/ 55 SC 55.7.2 P203 L37 # 1
Suggested Remedy Replace TBD with 55.	2.4.			Alan Flatman LAN Technologies Comment Type TR Comment Status
Response	Response Status O			We need to reference the ISO/IEC specification for installed cabling. Suggested Remedy
C/ 55 SC 55.6.2 Lynskey, Eric	Р 202 UNH-IOL	L17	# 73	Insert the following editor's note at the end of this subclause: "Editor's Note: ISO/IEC TR-24750: Assessment of installed Class E and Class F cabling beyond their maximum specified frequencies, should be available before 802.3an is approved. In which case, it will replace the above reference to TIA/EIA TSB-155."
Comment Type E Replace TBD.	Comment Status X			Response Response Status O
Suggested Remedy Replace TBD with 7.8	.15.			
Response	Response Status 0			

Cl 55 Booth, Brad	SC 55.7.3.	I.2 P2 Intel	208	L 56	# 153	
Comment Ty Note c is	/pe T s not applicat	Comment Status	X not ne	eed to be extrapolate	ed to 500 MHz.	
Suggested F Remove	Remedy note c.					
Response		Response Status	0			
CI 55	SC 55.7.3.	1.2 P2	209	L 4	# 2	
Alan Flatma	n	LAN	Techn	ologies		
Comment Ty We need	/pe TR d to reference	Comment Status the ISO/IEC specification	X Ation fo	or installed cabling.		
Suggested F	Remedy					
Insert th "Editor's beyond approve	e following e Note: ISO/IE their maximu d. In which c	ditor's note at the end C TR-24750: Assessr m specified frequencie ase, it will replace the	of this nent o es, sho above	subclause: f installed Class E a ould be available befor reference to TIA/EI/	nd Class F cabling ore 802.3an is A TSB-155."	
Response		Response Status	0			
CI 55	SC 55.7.3.2	2.2 P2	210	L 45	# 31	
Powell, Scot	t	Broa	dcom			
Comment Ty The PS measure	/pe TR AELFEXT co ed data previo	Comment Status Instant for 55m Catego Dusly reported to the ta	X Dry 6 c ask for	abling is substantiall ce (vanderlaan_1_0	y better than 303.pdf).	
Suggested F	Remedy					
See pre	sentation for	independent confirmat	tion of	measured data. Su	ggest operation ov	er

Cat 6 be optional, rather than required, for 10GBASE-T compliance. Cat 6 specifications could be included as informative.

Response

Response Status 0

C/ 55	SC 5	5.7.3.2.2	P 2 1	10	L 53	# 3
Alan Flatman		LAN Technologies				
Comment	Туре	TR	Comment Status	х		
We ne	ed to re	ference the	e ISO/IEC specificat	ion for in	stalled cabling	
Suggestee	d Remea	ly				
Insert "Edito beyon appro	the follo r's Note: d their m ved. In w	wing editor ISO/IEC T naximum s /hich case,	's note at the end o R-24750: Assessm pecified frequencies it will replace the a	f this sub ent of ins s, should bove refe	oclause: stalled Class E be available b erence to TIA/E	and Class F cabling efore 802.3an is EIA TSB-155."
Response			Response Status	0		
C/ 55	SC 5	5.7.3.2.2	P 2 1	11	L1	# 30
Powell, Sc	ott		Broad	com		
Comment	Туре	TR	Comment Status	х		
Comn AFEX on eae "uneq claim.	nent impl T on eac ch wire p ual" AFE	ies (to me ch wire pair pair - as lor XT. No pr	, anyway) that the c will perform the same g as the "identical" esentation has been	urrently e me as th AFEXT i n made t	envisioned syst e same system s equal to the a o support the a	em with identical a with unequal AFEXT average of the accuracy of this implied
Suggestee	d Remea	ly				
Remo worst pairs. situati	ve this c case wir See pre on to eq	laim. A mo e pair with sentation ual SNR/pa	ore accurate statem AFEXT that is 4dB with simulations cor air situation.	ent is tha higher th nparing p	at simulations s an the average performance ur	should assume one e AFEXT over all 4 nder unequal SNR/pair

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

CI 55	SC 55.7.3.2.2	2 P 2 11	L 2	# 120		
Halder, Bij	jit	Plato Networks				
Comment The N 4dB o and sy the 4c is not the sli Simila	Type T lote states for call ver the limit line f ystem are design B average impro seen in practice, m system margin ar comment applie	Comment Status X culating the system margin w or PSAFEXT. Since the cable ed with the 4dB margin, it is r vement. In other words, in the how does the standard guara even with the 4dB improvem es to 3.5 dB improvement for	re must use an a e are certified b not clear how th e event the 4dB antees operation nent. PSANEXT num	average improvement of ased on the limit line e standard guarantees gain due to averaging n of 10G system given aber in Section		
55.7.3	3.1.2, page 209, li	ne 11.				
Suggested	d Remedy					
Either for ave	change the limit erage PSAFEXT	line to match the improvement lines in addition to the worst	nt, or require the case limit line.	e cable to qualify a test		
Response		Response Status O				
C/ 55	SC 55.8.3.1	P214	L 37	# 4		
Cobb, Ier	ry	Systimax				
Comment Return	<i>Type</i> T n loss requiremer	Comment Status X its and measurements do no	t use a referenc	e that has a tolerance.		
Suggested Remo charad	d Remedy we the +/- TBD % cteristic impedance	and replace "an impedance' ce"	" with "a nomina	al differential		
Response	•	Response Status 0				