C/ 120F	SC 120F.4.2	P 211	L 26	# 90		C/ 120G	SC ·	120G.3.1.3	P	22	L 36	# 10071	
Ghiasi, Ali		Ghiasi Quant	um/Inphi			Wu, Mau-L	in		Med	aTek			
Comment Typ	pe TR	Comment Status R			ERL	Comment T	уре	т	Comment Status	Α			ERL
ERL is T	BD					[Comm	ent res	submitted fi	rom Draft 1.0. Sub	cl. 120G	.3.1.3 - Pg 215 -	ln 28]	
SuggestedRe ERL(min) Response REJECT	emedy)=14.5 dB	Response Status C				In the p twice th becaus output I is not a	aragra le dela e the s ERL, M	ph of "Hos y associate ection of 1 lodule inpu	t output effective re ad with the TP1a te 20G.3.1.3 is used t ERL, and Host in	eturn los est fixture not only put ERL	s", the sentence e being used" is N for Host output E Based on this, t	of "The value of T_ VOT appropriate :RL, but also Modu the current descrip	_fx is Ile tion
0	Latter te serve					Suggested	Remed	late.					
See reso	olution to comm	nent #80.				The ser	ntence	of "The va	lue of T_fx is twice	the dela	ay associated witl	h the TP1a test fixt	ture
기 120G	SC 120G.3.1	P 221	L 23	# 118		being u	sed" s	hall be cha	nged as "The valu	e of T_fx	is twice the dela	y associated with t	the
Shiasi, Ali		Ghiasi Quant	um/Inphi			Response	iest II.	xture being	Bosponso Status	c			
Comment Typ ERL is Th	pe TR BD	Comment Status R			ERL	ACCEF	PT IN F	RINCIPLE		C			
SuggestedRe	emedy					Resolve	e using	the respor	nse to #10057.				
ERL=10.	5 dB, see ghia	asi_3ck_03_0320				C/ 120G	SC ·	120G.3.1.3	P2	22	L37	# 19	
Response REJECT.		Response Status C				Sun, Junqir	ng	тр	Cred	o Semic	conductor		EDI
See reso	lution to comm	nent #80.				Nb is d	efined	in Table 12	20G-9	A			ERL
C/ 120G	SC 120G.3.1	.3 P 222	L 33	# 10059		Suggested Chang	Remed	ly Fable 120G	-9"				
Judek, Mike		Marvell			501	Response			Response Status	C			
Comment Typ	pe E nt resubmitted	from Draft 1.0. Subcl. 120G.	3.1.3 - Pg 215	- ln 25]	ERL	ACCEF	PT IN F	RINCIPLE		Ū			
This sect test, the I	tion labelled He Host input test	ost output effective return los t and the module input test.	s is referenced	by the Module outp	ut	See res	olutior	n to comme	ent #80.				
SuggestedRe	emedy												
Either add this section for the Ho	ld separate see on to include t ost tests (using	ctions for the module output he other points. I think it ma g the HCB) and one for the N	ERL test or broa ay be better to h lodule tests (us	aden the title and te have two sections on ing the MCB).	xt of ne								
Response		Response Status C											
ACCEPT	IN PRINCIPL	E.											
Create a module o	new ERL subo output using 12	clause for each of the followin 20G.3.1.3 as a template. Upc	ng: host input, r late references	nodule input, and appropriately.									
Implemer	nt with editoria	al license.											
TYPE: TR/teo COMMENT S SORT ORDE	chnical require STATUS: D/dis R: Clause, Su	ed ER/editorial required GR/ spatched A/accepted R/reje ibclause, page, line	general require cted RESPO	d T/technical E/edi NSE STATUS: O/op	torial G/g ben W/wr	eneral itten C/closed	Z/with	drawn		C/ 12 SC 12	20G 20G.3.1.3	Page 1 of (2020-03-3(6 0 1:17:

C/ 120G	SC 120G.3.1	.3 P 222	L 37	# 10057	C/ 120G SC 120G.3	.2 P 224	L 53	# 121			
Dudek, Mik	e	Marvell			Ghiasi, Ali	Ghiasi Qua	ntum/Inphi				
Comment 7	<i>уре</i> т	Comment Status A		ERL	Comment Type TR	Comment Status R		ERL			
[Comm	ent resubmitted	from Draft 1.0. Subcl. 12	20G.3.1.3 - Pg 215 -	ln 29]	ERL is TBD						
The tes that is r	t fixture delay sl emoved	hould be clarified so that	the connector is not	t included in the delay	SuggestedRemedy ERL=11.5 dB, see gl	niasi_3ck_03_0320					
Suggested	Remedy				Response	Response Status C					
Change beginni	e "associated winning of the TP1a	th the TP1a test fixture" t test fixture MDI connecto	to from the measure or".	ment point TP1a to the	REJECT.						
Response		Response Status C			See resolution to cor	nment #80.					
ACCEF	PT IN PRINCIPL	.E.			C/ 120G SC 120G.3	.3 P 226	L 43	# 122			
"The va	alue of T fx is tw	vice the delay from the m	easurement point T	P1a to the beginning of	Ghiasi, Ali	Ghiasi Qua	ntum/Inphi				
the hos	t connector."				Comment Type TR	Comment Status R		ERL			
Add sin	nilar text for the	module input and output			ERL is TBD						
Add Sill					SuggestedRemedy						
Implem	ent with editoria	Il license.			ERL=10.5 dB, see gl	niasi_3ck_03_0320					
C/ 120G	SC 120G.3.1	.3 P 223	L12	# 120	Response	Response Status C					
Ghiasi, Ali		Ghiasi Qu	uantum/Inphi		REJECT.						
Comment 7 ERL is	<i>ype</i> TR TBD	Comment Status R		ERL	See resolution to cor	nment #80.					
Suaaested	Remedv				C/ 120G SC 120G.3	.3 P 226	L 60	# 10060			
ERL=1	0.5 dB, see ghia	asi 3ck 03 0320			Dudek, Mike	Marvell					
Response		– – – Response Status C			Comment Type E	Comment Status D		ERL			
REJEC	т.				[Comment resubmitte	า 43]					
See res	solution to comn	nent #80.			The reference to ERL in table 120G-4 is directly to 120G.3.1.3 but there is a separate section 120G.3.3.1 (but it points directly to 120G.3.1.3 see other comment) SuggestedRemedy Either delete section 120G.3.3.1 or change the reference in table 120G-4 to 120G.3.3.1						
					Proposed Response	Response Status Z					
					REJECT.						
					This comment was V	VITHDRAWN by the commen	nter.				

C/ 120G SC 120G.3.3

Ghiasi, Ali Ghiasi Quantum/Inphi Comment Type TR Comment Status R ERu ERL is TBD SuggestedRemedy ERL=11.5 dB, see ghiasi_3ck_03_0320 ERu Response Response Status C REJECT. C C C C C C	Ghiasi, Ali Ghiasi Quantum/Inphi Comment Type TR Comment Status A E Nbx and ERL, TBD, Bx, N, Rho are TBDs SuggestedRemedy E Nbx=12, ERL =11 dB, Bx=2.3047e9, Bx=0.19, and N=300 See ghiasi_3ck_03_0320 Response Response Status C
Comment Type TR Comment Status R ER. ERL is TBD SuggestedRemedy ERL=11.5 dB, see ghiasi_3ck_03_0320 ERL=11.5 dB, see ghiasi_3ck_03_0320 Response Response Status C REJECT. C	Comment Type TR Comment Status A E Nbx and ERL, TBD, Bx, N, Rho are TBDs SuggestedRemedy Nbx=12, ERL =11 dB, Bx=2.3047e9, Bx=0.19, and N=300 See ghiasi_3ck_03_0320 Response Response Status C
SuggestedRemedy ERL=11.5 dB, see ghiasi_3ck_03_0320 Response Response Status C REJECT.	SuggestedRemedy Nbx=12, ERL =11 dB, Bx=2.3047e9, Bx=0.19, and N=300 See ghiasi_3ck_03_0320 Response Response Status C
Response Response Status C REJECT.	See ghiasi_3ck_03_0320 Response Response Status C
See resolution to comment #80.	ACCEPT IN PRINCIPLE.
C/ 162 SC 162.9.3 P146 L 27 # 10003	
Mellitz, Richard Samtec	C/ 162 SC 162.9.4 P152 L14 # 10010
Comment Type TR Comment Status R ER	Mellitz, Richard Samtec
[Comment resubmitted from Draft 1.0. Subcl. 162.9.3 - Pg 139 - In 27]	Comment Type TR Comment Status R E [Comment resubmitted from Draft 1.0. Subcl. 162.9.4 - Pg 145 - In 15]
ERL of 11 dB seems to capture most of posted channel data. SuggestedRemedy In table 162-8 change ERL(min) to 11 dB as suggested on slide 5 of mellitz_3ck_04_1119.	ERL of 11 dB seems to capture most of posted channel data as suggested in slide 5 mellitz_3ck_04_1119
Response Response Status C	Change ERL min to 11 dB
REJECT.	Response Response Status C
See resolution to comment #80.	REJECT.
C/ 162 SC 162.9.3.4 P151 L 21 # 10009	See resolution to comment #80.
Mellitz, Richard Samtec	- C/ 162 SC 162.9.4 P152 L15 # 129
Comment Type TR Comment Status A ERI	Ghiasi Ali
[Comment resubmitted from Draft 1.0. Subcl. 162.9.3.4 - Pg 144 - In 26]	Comment Type TR Comment Status R E
The relation between Pmax/Vf and ERL has not been established for this data rate	ERL is TBD
SuggestedRemedy	SuggestedRemedy
Change line 36 to ERL >= 11 dB. Change TBD parameters in table 162-10 beta_x, rho_x,	ERL=11.0 dB, see ghiasi_3ck_03_0320
N, and N_bx to 2.4 GHz, 0.3, 1000 UI, and 12 UI respectively as suggested on slide 6 of mellitz_3ck_04_1119.	Response Response Status C
Response Response Status C	REJECT.
ACCEPT IN PRINCIPLE.	See resolution to comment #80.
See resolution to comment #80.	
TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open \	G/general C/ 162 Page 3 of 6 V/written C/closed Z/withdrawn SC 162.9.4 2020-03-30 1

C/ 162 SC 162.9.4.5	5 P156	L14	# 10011	C/ 162	SC 162.11.3	P157	L 43	# 10012		
Mellitz, Richard	Samtec			Mellitz, Ri	chard	Samtec				
Comment Type TR	Comment Status R		ER	Comment	Type TR	Comment Status A		ERL		
[Comment resubmitted	d from Draft 1.0. Subcl. 162.9	.4.5 - Pg 148 - Ir	1 48]	[Com	ment resubmitted	from Draft 1.0. Subcl. 162.1	1.3 - Pg 150 - In	39]		
ERL of 11 dB seems to mellitz_3ck_04_1119	o capture most of posted cha	nnel data as sug	ggested in slide 5	ERL of 13.5 dB seems to capture most of posted channel data as suggested in slide 3 mellitz_3ck_04_1119						
SuggestedRemedy				Suggestee	dRemedy					
Change to "Receiver E	RL at TP3 shall be greater th	an or equal to 1	1dB"	Chang	ge line 39 to Cable	e assembly ERL at TP1 and	at TP4 shall be	greater than or equal to		
Response REJECT.	Response Status C			13.5 dB for cable assemblies that have a COM less than 4 dB. Also change TBD parameters in table 162-14 beta_x, rho_x, N, and N_bx to 2.4 GHz, 0.21, 3000 UI, and 12 UI respectively as suggested on slide 4 of mellitz_3ck_04_1119.						
See resolution to com	ment #80			Response		Response Status C				
	ment #00.			ACCE	PT IN PRINCIPLI	E.				
C/ 162 SC 162.9.4.5	5 P156 Chiasi Quant	L 15 um/loobi	# 131	See re	esolution to comm	nent #80.				
Comment Type TR	Comment Status R	am/mpm	FR							
ERL is TBD										
SuggestedRemedy										
ERL=11.0 dB, see ghi	asi_3ck_03_0320									
Response	Response Status C									
REJECT.										
See resolution to com	ment #80.									
C/ 162 SC 162.11.3	P 157	L11	# 10013							
Mellitz, Richard	Samtec									
Comment Type TR	Comment Status R		ER							
[Comment resubmitted	d from Draft 1.0. Subcl. 162.1	1.3 - Pg 150 - In	8]							
ERL of 13.5 dB seems mellitz 3ck 04 1119	s to capture most of posted ch	nannel data as s	uggested in slide 3							
SuggestedRemedy										
Change Minimum cabl	e assembly ERL to 13.5 dB i	n table 162-13.								
Response	Response Status C									
REJECT	nesponse status U									
See resolution to com	ment #80.									

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: Clause, Subclause, page, line

C/ 162 SC 162.11.3 Page 4 of 6 2020-03-30 1:17:59 PM

C/ 163 SC 163.9.1.1	P 176	L 27	# 80		C/ 163	SC 163.9.1	.1	P176	L 27	# 10069		
Healey, Adam	Broadcom Inc				Wu, Mau-I	Lin		MediaTek				
Comment Type T Co	omment Status A			ERL	Comment	Туре т	Comment	Status D		ERL		
As observed in healey_3ck_ does not adequately constra arguably its primary function	[Comn Currer	nent resubmitt nt ERL calculat	ed from Draft 1.	0. Subcl. 163.9 sider DFE "float	.2.1 - Pg 171 - In ting-tap". The co	5] ncern is the ERL is						
SuggestedRemedy					very sensitive across "N_bx" boundary as raised in wu_3ck_02a_1119. We need to							
Modify parameters and/or mand set the limit accordingly.	ethod to achieve better Similar change would a	correlation to re apply to Annex 1	-reflection interfe	ennance ERL calculation methodology. SuggestedRemedy								
Response Re. ACCEPT IN PRINCIPLE. Based on January strawpoll methodology based on the p		Modify ERL as capable of DFE floating tap as proposed in wu_3ck_01_0120. The same methodology shall be applied to CR TX, CR RX, KR TX, & KR RX ERL calculations in the following subclauses. 162.9.3.4 Transmitter effective return loss (ERL) 162.9.4.5 Receiver ERL 163.9.2.1 Transmitter ERL 163.9.3 Receiver characteristics										
The strawpoll details may be http://www.ieee802.org/3/ck/		Proposed REJE	Response CT.	Response	Status Z							
The following presentations	were reviewed by the ta	sk force:			This c	omment was V	VITHDRAWN by	y the commente	er.			
http://www.ieee802.org/3/ck/ http://www.ieee802.org/3/ck/	.ttp://www.ieee802.org/3/ck/public/20_03/mellitz_3ck_01b_0320.pdf http://www.ieee802.org/3/ck/public/20_03/kochuparambil_3ck_01_0320.pdf					SC 163.9.1	.1	P176	L 30	# 10020		
No change to the ERL methodology is required. More analysis is required to determine some parameter values and ERL values. Implement the parameter values summarized on slide 3 of kochuparambil_3ck_01a_0320 with editorial license using slides 4 to 17 as a guide. The ERL values will remain TBD.						chard <i>Type</i> TR	Comment	Samtec Status A		ERL		
						[Comment resubmitted from Draft 1.0. Subcl. 163.9.2.1 - Pg 171 - In 5] Nbx=Nb has been shown not correlate well to COM in mellitz_3ck_adhoc_02_100219.						
						SuggestedRemedy Change "Nbx is set to the value of Nb in Table 163-10" to "Nbx is set to 24 UI"						
					Response ACCE	PT IN PRINCI	Response -	Status C				
					See re	solution to cor	nment #80.					

C/ 163 SC 163.9.1.1

C/ 163	SC 163.9.1.1	P 176	L34	# 10021	C/ 163 SC 163.10.2	2 <i>P</i> 184	L 24	# 10024			
Mellitz, R	ichard	Samtec			Mellitz, Richard	Samtec					
Comment	t Type TR	Comment Status A		ERL	Comment Type TR	Comment Status A		ERL			
[Com	ment resubmitted	from Draft 1.0. Subcl. 163.9	.2.1 - Pg 171 - Ir	10]	[Comment resubmitte	d from Draft 1.0. Subcl. 163.1	10.2 - Pg 177 - Ir	n 13]			
Table Reco	e 163-3 was develo mmendation were	ped for a different data rate proposed in mellitz_3ck_01	and reference p _1119 slide 7.	ackage assumption.	Table 163-11 was developed for a different data rate and reference package assumption. Recommendation were proposed in mellitz_3ck_01_1119 slide 5.						
Suggeste	dRemedy				SuggestedRemedy						
In Tal	ble 163-3 set: beta	_x=2.4 GHz , rho_x=.3			In Table 163-11 set: b	eta_x=2.4 GHz , rho_x=.19					
Response ACCE	e EPT IN PRINCIPLE	Response Status C			Response ACCEPT IN PRINCIF	Response Status C LE.					
This s	should be for Table	e 163-6 instead of Table 163	3-3.		See resolution to com	ment #80.					
See r	esolution to comm	ent #80.									
C/ 163	SC 163.9.2.1	P 178	L 52	# 10022							
Mellitz, R	ichard	Samtec									
Comment	t Type TR	Comment Status A		ERL							
[Com	ment resubmitted	from Draft 1.0. Subcl. 163.9	.3.1 - Pg 171 - Ir	44]							
Nbx= Nbx=	Nb has been show 24 seems to be a l	n not correlate well to CON petter choice	in mellitz_3ck_a	dhoc_02_100219.							
Suggeste	dRemedy										
Chan	ge "Nbx is set to th	ne value of Nb in Table 163	10" to "Nbx is se	t to 24 UI"							
Response ACCE	9 EPT IN PRINCIPLE	Response Status C E.									

See resolution to comment #80.

C/ 163 SC 163.10.2