SC 120G.3.3

C/ 120G	SC 120G.3.1	P 231	L 33	# 32	C/ 1200
Brown, Mat	tt	Huawei			Ran, Ac
Comment 7	Гуре Т	Comment Status A		CM noise, PP voltage, RLCC	Comme
The ed noise, l specifie	itor's note writter PP output voltag ed values have b	n in D1.0 indicates that th e, and RLCC require cor een submitted.	ne specified valu nfirmation. No p	ues for host output AC CM roposals to change the	For moo diffe
Suggested Remov	Remedy re the editor's not	e.			The
Response		Posponso Status C			Out
ACCEF	РТ.	Response Status			Cha
C/ 120G	SC 120G.3.2	P 234	L 30	# 126	Rep
Ran, Adee		Intel			Respon
Comment 7 (Addres Editor's been ca consen Work is of com phases	Type ER ssing editor's not a note indicates t onfirmed that the ssus on another v a planned to refir mon mode signa a of P802.3ck.	Comment Status A re requiring confirmation, hat AC common-mode s e existing limit of 17.5 m value. the the measurement met I and fine-tuned specific) pecification nee / RMS is obtain hod to allow se ation, but it will l	TP4 AC CM noise eds confirmation. It has not able, but there is no paration of different sources likely continue into later	ACC The By c cha Hov mod Also For
This sh Suggestedi Delete	ould not preclud Remedy the editor's note	e progressing to WGB w	ith the current r	nethod and limit.	In 1 For retu
ACCEF	PT.	Response Status C			Imp
C/ 120G	SC 120G.3.2	P 234	L 32	# 35	C/ 162
Brown, Mat	tt	Huawei			Brown,
Comment 1 The ed require Howeve	Type T itor's note indica s confirmation. N er, it should be n Remedy	Comment Status A tes that the value specifi lo proposals to change t oted that there is ongoin	ed for the modu he specified val g discussion on	TP4 AC CM noise le output AC CM noise ues have been accepted. this topic.	Comme In T retu Sugges Pro
Remov	e the editor's not	ie.			Respon
Response ACCEF Resolve	PT IN PRINCIPLI	Response Status C E. onse to comment #126.			AC(Res
TYPE: TR/t	echnical require STATUS: D/dis	d ER/editorial required patched A/accepted R/	GR/general req rejected RES	uired T/technical E/editorial PONSE STATUS: O/open W	G/general //written C/clc

_	Ran, Adee		Intel								
C	Comment Type	T Con	nment Status A	TI	P4a/TPRLCD (bucke	et1)					
	For module module inpl differential	For module output (120G.3.2, table 120G-3), host input (120G.3.3, table 120G-6), and module input (120G.3.4, table 120G-9), the reference subclause for "Common-mode to differential return loss (min)" is incorrect - 120G.3.1.2 discusses ERL.									
	There is on output.	e subclause that di	scusses RLCD, 120G	6.3.1.1, but it is cu	rrently specific to ho	ost					
	SuggestedRem	edy									
	Change ref	erence from 120G.	3.1.2 to 120G.3.1.1 in	the 3 tables.							
	Rephrase t	he text in 120G.3.1	.1 to refer to both hos	t and module, out	put and input.						
	Response	Resp	oonse Status C								
5	ACCEPT IN The referen By convent changing th However th mode (RLC Also, the va For commo 120G.3.1.1 In 120G.3.1 For Host In return loss Implement	N PRINCIPLE. ace to 120G.3.1.2 is ion, it is common to the text in the refere e specification for is D). ariable in 120G.3.1. an-mode to different I.1, change RLCD for put and Module inp and specify based with editorial licens	s incorrect and should o refer to specification nced subclause. module input and host 1 should be RLDC, no tial return loss in Table to RLDC. but change the parame on 120G.3.1.1.	l be 120G.3.1.1. is for different test t input should be o ot RLCD). e 120G-3, change eter to differential	points without lifferential to commo the reference to to common-mode	on-					
	C/ 162 S	C 162.9.3	P 152	L 30	# 23						
	Brown, Matt		Huawei								
20	Comment Type	T Con	nment Status A		TX RL	CD					
	In Table 16 return loss	In Table 162-10, the specified value for transmitter common-mode to differential mode return loss is TBD.									
	SuggestedRem	edy									
	Provide a v	Provide a value or equation and update PICS.									
	Response	Resp	oonse Status C								
	ACCEPT IN Resolve us	N PRINCIPLE.	o comment #118.								
al G/ge W/writt	neral ten C/closed Z/w	vithdrawn	C/ 16 SC 16	62 62.9.3	Page 1 of 5 2021-01-28	9:46:50 AM					

P 237

L 37

138

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SORT ORDER: Clause, Subclause, page, line

	01.400	00.4		_			
$C 162 SC 162.9.3 \qquad P 152 L 30 \# 118$	C/ 162	SC 16	52.9.4	P 158	L 16	# 119	
Ran, Adee Intel	Ran, Adee			Intel			
Comment Type TR Comment Status A TX RLCD	Comment T	уре	TR	Comment Status A		RX RLCD	
(addressing TBD) Tx CM to differential return loss refers to 92.8.3.3 with equation TBD.	(addres Rx diffe TBD.	sing TB erential to	D) o comm	on-mode (conversion) input r	eturn loss refere	s to 92.8.4.3 with value	
In clause 92 the RLCD of Tx and Rx have the same specifications - eq (92–2) in 92.8.3.3 and eq (92–21) in 92.8.4.3, respectively, which are identical; and there is no RLCD for cable assembly.	In clause 92 the RLCD of Tx and Rx have the same specifications - eq (92–2) in 92.8.3.3 and eq (92–21) in 92.8.4.3, respectively, which are identical; and there is no RLCD for cable assembly						
The conversion loss specifications may need more work, but for the purpose of technical completeness, it is suggested to use the same equation used for the cable assembly, since in both cases the measurement involves mated connectors and results should be comparable.	The cor comple since in	nversion teness, 1 both ca	loss sp it is sug ases the	ecifications may need more v gested to use the same equa measurement involves mate	work, but for the ation used for the ed connectors ar	e purpose of technical e cable assembly, nd results should be	
SuggestedRemedy	compa	able.					
Add a subclause for Tx differential to common mode return loss, with equation identical to equation (162–9), or point to (162–9).	As an alternative consider removing this specification (the Rx owns its performance).						
Response Response Status C	SuggestedRemedy Add a subclause for Rx differential to common mode return loss, with equation identical to equation (162–9), or point to (162–9).						
ACCEPT IN PRINCIPLE.							
Add a substaura for Tx common mode to differential return loss, with equation identical to	Response		-,, -,	Response Status C			
equation (162–9).	ACCEF	PT IN PR	RINCIPL	Ε.			
	Implem	ent the	suggest	ed remedy with editorial licen	ise.		
	Also, ad	aa "(min)" to the	end of the parameter name.			
C/ 162 SC 162.9.4 P 158 L 16 # 24	C/ 162	SC 16	62.11	P 162	L 36	# 91	
Brown, Matt Huawei	Haser, Alex	(Molex			
Comment Type T Comment Status A RX RLCD	Comment T	уре	E	Comment Status D		withdrawn	
In Table 162-13, the specified value for receiver differential to common-mode return loss is TBD	"Cable around	assemb a 1.75 r	ly suppo n cable	orts achievable cable lengtl	h of at least 2 m	"; spec is written	
SuggestedRemedy	SuggestedF	Remedy					
Provide a value or equation and update PICS.	Change	e text to	"achie	evable cable length of at leas	t 1.75 m"		
Response Response Status C	Proposed R	Respons	е	Response Status Z			
ACCEPT IN PRINCIPLE. Resolve using the response to comment #119.	PROPC This co	DSED R	EJECT. was WI1	HDRAWN by the commenter	er.		

C/ 162 SC 162.11

C/ 162	SC ·	162.11	P 162	L 38	# 92	C/ 162	SC 162.11.4	P 165	L 8	# 101		
Haser, Al	ex		Molex			Champion	, Bruce	TE Connectiv	vity			
Comment	t Type	Е	Comment Status D		withdrawn	Comment	Туре т	Comment Status R		CA RLCD		
"Cable assembly supports… achievable cable length of at least 2 m"; spec is written around a 1.75 m cable					Cable Assembly Diff-to-Common Mode Return loss is too tight for high volume production testing at the higher frequencies. Failures are occuring because of testing artifacts and not							
Suggeste	dRemed	ly				because of poor cable assemblies. A slight relaxation of the limit is requested to for this						
Chan	ge text to	o "achie	evable cable length of at leas	st 1.75 m"		Suggester	Remedy					
Proposed	l Respon	se	Response Status Z			Suggesteur territery						
PROF		REJECT.						ise the following equation for	uns min.			
This c	comment	t was WI	THDRAWN by the commenter	er.		Return Loss(f) \ge 22-10(f/26.56) for 0.05 \le f \le 26.56						
<u></u>						Return Loss(f) \ge 19 - 7(f/26.56) for 26.56 \le f \le 40 GHz						
C/ 162	SC ·	162.11	P 162	L 40	# 93	See presentation						
Haser, Al	ex		Molex			Response		Response Status C				
Comment	t Type	Е	Comment Status D		withdrawn	REJE	CT.					
"Cable assembly supports achievable cable length of at least 2 m"; spec is written around a 1.75 m cable					"; spec is written	This comment proposes a technical change to the draft that does not address technical						
Suggeste	dRemed	ly				compi	eleness.					
Change text to "achievable cable length of at least 1.75 m"						The following presentation was reviewed by the task force:						
Proposed	l Respon	se	Response Status Z			https://www.ieee802.org/3/ck/public/21_01/champion_3ck_02a_0121.pdf						
PROF This c	POSED I	REJECT. t was WI	THDRAWN by the commenter	er.		There further	was no consens r evidence how s	us on a single remedy. The o ystem performance is impac	commenter is e ted.	ncouraged to provide		

C/ 162 SC 162.11.4

C/ 162	SC 162.11.6	P 166	L 37	# 102	C/ 163	SC 163.9.2	P 185	L 28	# 133		
Champion,	Bruce	TE Connectivity	/		Ran, Adee		Intel				
Comment T	Туре т	Comment Status A		CA RLCC	Comment	Туре Е	Comment Status D		withdraw		
There i assem The M ⁻ used ir limit.	is a disrepancy b bly CM-to-CM RI TF CM-to-CM RL n cable assembly	etween what is specifed for th . limit is set to -3 dB. When M r Tp1-Tp4 channels, the Tp1-T	e MTF CM-to-C TFs designed o p4 CM-to-CM I	CM RL and the cable close to this limit are RL will fail the -2 dB	The editor's note states that "In Table 163–5, common-mode to common-mode return loss reference is not appropriate". But it is appropriate; comment #228 against D1.3 was referring to the frequency range of the test fixture's specification and did not request any change to this reference (the problem is in the response). SuggestedRemedy						
Suggested	Remedy				Delete	the editor's note	, without any change to the t	able.			
It is rec design	commended to us	se the following equation to tal	ke into account	the worst case MTF	Proposed Response Response Status Z PROPOSED REJECT. This comment was WITHDRAWN by the commenter.						
Return	$Loss(f) \ge 1.8$ for	$0.05 \le f \le 40$			C/ 163	SC 163.9.3	P 187	L 41	# 121		
					Ran, Adee		Intel				
Response		Response Status C			Comment	Type TR	Comment Status A		RX RLC		
ACCEF	PT IN PRINCIPL	E.			(addressing TBD) Rx Differential to common-mode (conversion) input return loss refers to 93.8.1.4 with value TBD. This subclause uses equation (93-5) to define the limit.						
The fol https://	lowing presentat www.ieee802.org	ion was reviewed by the task f g/3/ck/public/21_01/champion_	orce: _3ck_01a_012	1.pdf							
Implem	nent suggested r	emedy.		·	The conversion loss specifications may need more work, but for the purpose of technical completeness, it is suggested to use a piecewise-linear equation similar to (93-5).						
C/ 162D	SC 162D.1.1	P 283	L 50	# 10	Bounda GHz si	ary lines are sug analing frequenc	gested to match the ones us	ed in OIF CEI-1	12G-LR for the 53.125		
Dudek, Mił	ke	Marvell			01120	9.14.1.19.1.0440110	· ·				
Comment T	Туре Е	Comment Status D		withdrawn	As an a	alternative consid	der removing this specification	on (the Rx owns	its performance).		
There i	s an unfortunate	page break in the middle of T	able 162D-3		Suggested	Remedy					
Suggested	Remedy				Add a	new subclause fo	or Rx differential to common	mode return los	s with the equation:		
Adjust	formatting so that	at this table is all on one page			RLdc(f) ≥ 25-20*(f/fb) fo	or 0.05 ≤ f ≤ fb/2				
Proposed F	Response	Response Status Z			RLdc(f	$) \ge 15$ for fb/2 < f	$^{1} \leq 40$				
PROP	OSED REJECT.				Response	ris the frequency	Posponso Status				
This co	omment was WIT	HDRAWN by the commenter.			ACCEI Add a RLcd(f RLcd(f where Update Implem	PT IN PRINCIPL new subclause for) = $25-20^{\circ}$ (f/fb) for) = 15 for fb/2 < ff f is the frequency \Rightarrow PICS nent with editoria	Final points status 0 E. for RLCD for 0.05 <= f <= fb/2 f <= 40 y in GHz and fb=53.125.				

C/ 163 SC 163.9.3 withdrawn

RX RLCD

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C/ 163	SC 163.9.3	P 187	L 41	# 26	C/ 163	SC ·	163.10.4	P 192	L 44	# 27
Brown, Ma	att	Huawei			Brown, Ma	tt		Huawei		
Comment	Туре Т	Comment Status A		RX RLCD	Comment	Туре	т	Comment Status A		channel i
In Tab TBD	le 163-8, the spe	ecified value for receiver diffe	rential to comm	on-mode return loss is	The sp Suggested	ecified Remed	value for	channel differential to comm	on-mode conve	rsion loss is TBD.
Suggested	dRemedy				Provide	e a valu	le or equa	tion and update PICS.		
Provid	le a value or equ	ation and update PICS.			Response			Response Status C		
Response		Response Status C			ACCE	PT IN P				
ACCE Resolv	PT IN PRINCIPL	.E. e to comment #121			Resolv	e using	the respo	onse to comment #122		
CL 462	SC 462 40	D 400	1.00	# 420	C/ 163	SC ·	163.10.4	P 192	L 44	# 122
0/103	30 103.10	F 190	L 20	# 139	Ran, Adee			Intel		
Ran, Adee	e 	Intel			Comment	Туре	TR	Comment Status A		channel l
Comment There	is no specification	on for RLDC for the KR chanr	nel.	channel RLCD (CC)	(addres For the TP5" is	ssing T kR PH TBD.	BD) HY, the ch	annel "differential to commo	n-mode convers	sion loss of TP0 and
Without that w or con	ut such specifica ill be fed into the nmon mode sign	tion, a channel can cause a s Tx - and since Tx RLCD/RLC al can be reflected back with	strong common CC are not defir out control.	mode reflection signal red either, a differential	For the cable a insertio	e CR PH assemb on loss"	HY this pa ly differen ' with equa	rameter is specified in 162.1 tial to common-mode conve ation (162-10).	1.5 as "The differsion loss and th	erence between the ne cable assembly
compl	eteness, the cha	nnel RLDC from 162.11.4 ca	n be used.	e purpose of technical	For the	e purpos	se of tech	nical completeness, a simila	r equation can b	e used for KR.
Also ir	n missing 120F.				Suggested	Remed	ly			
Suggested	Remedy				Rewrite assem	e this si bly" wit	ubclause l h editorial	based on 162.11.5, substitut license.	ing "TP0 to TP5	channel" for "cable
Add a 162.1	new subclause f 1.4 with the same	or channel differential to com e limits, with editorial license.	mon mode retu	ırn loss, based on	Response			Response Status C		
Apply	similarly in 120F				ACCEI	PT IN P		E.	actituting "TPO +	o TP5 channel" for

Response

Response Status C

ACCEPT. [Editor's note: CC 163, 120F] Specify both ILDC and ILCD based on 162.11.5, substituting "TP0 to TP5 channel" for "cable assembly". Implement with editorial license.

C/ 163 SC 163.10.4 channel ILDC

channel ILDC