302.3ck D2.2 100/200/400 Gb/s Electrical Interfaces Task Force 2nd Working Group recirculation ballot co

C/ 120F	SC	120F.3.1	P 242	L 13	# 63	C/ 120G	SC	120G.3.2.	1 P 264	L 6	# 61
Mellitz, Ric	chardd		Samtec			Mellitz, Ri	chardd		Samtec		
Comment Comm	<i>Type</i> Ion mod	TR de measur	P 242 L 13 # 63 Samtec Comment Status D C M voltage (CC) (bucket2) Common mode voltage may not be detrimental as dhoc_01_090821. TR Common mode voltage may not be detrimental as dhoc_01_090821. n-mode RMS output voltage (max)" Replace item "AC common mode voltage may not be detrimental as illustrated in mellitz_3ck_adhoc_01_090821. Common mode measurements are not well enough defined to precisely specify CM voltage at TP4. In addition, all aspects of a common mode voltage (CC) (bucket2) P 261 L 13 # 60 C / 120G SC 162.9.3 P 170 L 24 # 62 Samtec Common mode voltage may not be detrimental as dhoc_01_090821. SuggestedRemedy Samtec P 261 L 13 # 60 The resolution to closed comment #59 indicates there was no consensus to make the proposed changes to C2M host output or module output. Resolute output or nocluge may not be detrimental as dhoc_01_090821. Ci 162 SC 162.9.3 P 170 L 24 # 62 Common mode well enough defined to precisely specify CM voltage at TP2. In addition, all aspects of a common mode voltage may not be detrimental as illustrated in mellitz, 3ck_adhoc_01_090821. Samtec Common mode measurements are not well enough defined to precisely specify CM voltage (CC) (bucket2) Comment Status D C CM voltage (CC) (bucket2) Ci 1								
at TP0v. In addition, all aspects of a common mode voltage may not be detrimental as illustrated in mellitz_3ck_adhoc_01_090821.						at TP4. In addition, all aspects of a common mode voltage may not be detrimental as illustrated in mellitz_3ck_adhoc_01_090821.					
Suggested	IRemed	ly				Suggested	Reme	dy			
Remov	ve item	"AC comn	non-mode RMS output voltag	ge (max)"		Repla With "	ce item Peak fi	n "AC comn itted AC co	non-mode RMS output voltage mmon mode (max) Pmax	ge (max)" cm" using a v	value of 50 mV
Proposed I	Respor		Response Status W			Proposed	Respo	nse	Response Status W	5	
The re commo Resolv	PROPOSED ACCEPT IN PRINCIPLE. The resolution to closed comment #50 provides an alternate parameter to constrain AC common-mode for KR and C2C TX. Resolve using the response to comment #59.					PROPOSED REJECT. The resolution to closed comment #59 indicates there was no consensus to make the proposed changes to C2M host output or module output. Resolve using the response to comment #59.					
C/ 120G	SC	120G.3.1	P 261	L 13	# 60	C/ 162	SC	162 9 3	P 170	/ 24	# 62
Mellitz, Ric	chardd		Samtec			Mallitz Di		102.0.0	Camtaa		<i>II</i> 02
Comment	Туре	TR	Comment Status D	C CI	M voltage (CC) (bucket2)		chardu T		Samec		
Comm at TP1 illustra	Common mode measurements are not well enough defined to precisely specify CM voltage at TP1a. In addition, all aspects of a common mode voltage may not be detrimental as illustrated in mellitz_3ck_adhoc_01_090821.				Comment Type TR Comment Status D C CM Voltage (CC) (bucketz) Common mode measurements are not well enough defined to precisely specify CM voltage at TP2. In addition, all aspects of a common mode voltage may not be detrimental as illustrated in mellitz, 3ck, adboc, 01, 090821						
Suggested	IRemed	ly				Suggostor	Domo	du			
Replace item "AC common-mode RMS output voltage (max)""Uncorrelated AC common mode SNR (min), With "Peak fitted AC common mode (max) Pmax, ccm" using a value of 50 mV					Replace item "AC common-mode RMS output voltage (max)" With "Peak fitted AC common mode (max) Pmax_ccm" using a value of 50 mV						
Proposed I	Proposed Response Response Status W					Proposed Response Response Status W					
PROPOSED REJECT. The resolution to closed comment #59 indicates there was no consensus to make the proposed changes to C2M host output or module output. Resolve using the response to comment #59. [Editor's note: Changed page from 161 to 261.]				PROPOSED REJECT. The resolution to closed comment #59 indicates there was no consensus to make the proposed changes to CR TX. Resolve using the response to comment #59.							

C/ 162 SC 162.9.3 302.3ck D2.2 100/200/400 Gb/s Electrical Interfaces Task Force 2nd Working Group recirculation ballot co

C/ 162	SC 162.9.3.	I.1 P 1 72	L 8	# 23
Wu, Mau-	Lin	MediaTek Inc		
Comment	Type TR	Comment Status D		TX Np (bucket2)
For th instea Relate wu_3e	e linear-fit proce ad of N_p = 29. N ed rationale had ck_adhoc_01b_0	dure adopted for TX SNDR ca I_p = 29 was used for SNR_T been disclosed in previous co i71421.pdf.	alcuation, N_p X calibration ir ntribution,	= 200 shall be adopted, n RITT test instead.
Suggeste	dRemedy			
Chang	ge 'N_p = 29' to '	N_p = 200'.		
Proposed	Response	Response Status W		
PROF The re Resol	POSED ACCEPT esolution to com	IN PRINCIPLE. ment #50 changes N_p to 200 ponse to comment #50.).	
C/ 162	SC 162.9.3.	I.1 P 172	L 8	# 55
Hidaka, Y	asuo	Credo Semic	onductor	
Comment	Type ER	Comment Status D		TX Np (bucket2)
Np for Howe It see D2.0 canno 162.9 So, I t	r TX SNDR in cla ver, I cannot find ms that this was which was close of find a record o .3.1.1. think Np for TX S	ause 162.9.3.1.1 was changed any comment on D2.0 to cha an editorial error to implemer d to change Np for RX ITT fro f consensus to change Np for NDR in clause 162.9.3.1.1 sh	d from 200 in D ange Np for TX at the resolution m 15 to 29 in c TX SNDR fror nould remain 2	02.0 to 29 in D2.1. (SNDR from 200 to 29. n of comment #197 on clause 162.9.4.3.3. I n 200 to 29 in clause 00.
Suggeste	dRemedy			
Chang	ge Np for TX SN	DR from 29 back to 200 on lir	ie 8 in page 17	2, clause 162.9.3.1.1.
Proposed	Response	Response Status W		
PROF The re Resol	POSED ACCEPT esolution to com	IN PRINCIPLE. ment #50 changes the value oponse to comment #50.	of N_p to 200.	

C/ 162	SC 162.9.3.1.2	P 1	73	L 3	#	25
Ran, Adee		Cisco)			
Comment Ty	be TR	Comment Status	D			TX Vf (bucket2)

The definition of the steady-state voltage is currently a pointer to 136.9.3.1.2 with essentially three exceptions: the fitted pulse is calculated by another procedure (162.9.3.1.2), and Np and Nv are different. 136.9.3.1.2 itself is a simple definition of a sum of Nv values; there is no need for a reference to this definition, when all other things are exceptions.

What the reader is not told is that the required specification is with equalization turned off; this is written in 136.9.3.1.2 but as part of a normative requirement for the limits, which does not hold here (the values are different). One could interpret it as if it is required for all equalization settings (as implied by the text in 162.9.3.1.2), which is clearly not what we intend.

SuggestedRemedy

Change the first paragraph of 162.9.3.1.2 to the following:

The steady-state voltage v_f is defined as the sum of the linear fit pulse p(1) through $p(M \times N v)$ divided by M, measured with transmit equalizer set to preset 1 (no equalization). Nv is set equal to Np. The linear fit procedure for obtaining p and the values of M and Np are defined in 162.9.3.1.1.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

The resolution to closed comment #50 provides updated text that resolves this comment. Resolve using the response to comment #50.

C/ 162	SC 162.9.3.1.2	P 173	L 4	# 69
Healey, A	dam	Broadcom Inc.		
_				

Comment Type T Comment Status D

TX Vf (bucket2)

Steady state voltage is measured at the output of a lossy host channel without equalization and its value will be larger for larger Nv (at least up to a point). Setting Nv to 200 may overestimate the amplitude that the receiver will actually see since that amplitude will only be realized when Nv consecutive identical symbols are transmitted. The number of consecutive identical symbols transmitted during normal operation is likely to be much lower. This suggests that the value of Nv should be lower so that the measured steady state voltage is closer to the amplitude the receiver might see in practice.

SuggestedRemedy

Change Nv for the Clause 162 steady-state voltage calculation to 29.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

The resolution to closed comment #50 retains the value of N_v to 200. Straw poll #3 indicated preference to use a value of 200 for N_v . Resolve using the response to comment #50.

TYPE: TR/technical required ER/editorial required GR/gener	al required T/technical E/editorial G/general	C/ 162	Page 2 of 3
COMMENT STATUS: D/dispatched A/accepted R/rejected	RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn	SC 162.9.3.1.2	2021-09-30 9:33:19 AN

SORT ORDER: Clause, Subclause, page, line

302.3ck D2.2 100/200/400 Gb/s Electrical Interfaces Task Force 2nd Working Group recirculation ballot co

C/ 163	SC 163.9.2	P 207	L 43	# 64	
Mellitz, Ri	ichardd	Samtec			
Comment	Type TR	Comment Status D	CC	M voltage (CC) (bu	ıcket2)
Comr at TP illustra	non mode meas 0v. In addition, a ated in mellitz_3	urements are not well enough Il aspects of a common mode ck_adhoc_01_090821.	defined to prec voltage may no	isely specify CM vo t be detrimental as	oltage S
Suggeste	dRemedy				
Remo	ove item "AC cor	mmon-mode RMS output volta	ige (max)"		
Proposed	Response	Response Status W			
The re comm Resol	esolution to close non-mode for KR ve using the res	ed comment #59 provides an a and C2C TX. ponse to comment #59.	alternate param	eter to constrain A	С
C/ 163	SC 163.9.2	P 208	L 12	# 68	
Healey, A	dam	Broadcom Inc	:		
Comment	Type TR	Comment Status D		TX SNDR (CC) (bu	icket2)
The re Reflec UI wh relatio ISI_R to cor sugge 200 to	eference for the sections from the tections from the tections from the tection will degrade onship to the quater specification between the specification between the section of the sectio	SNDR specification is 162.9.3. est fixture can easily have a ro the SNDR measurement. How lity of the transmitter under tes in Draft 2.2 limits intersymbol the SNDR measurement. The bise and distortion. Prior specif intersymbol interference in the	3 which specifi und-trip delay e vever, such refle st. Also, the intri interference an purpose of SN fications have u e result.	es Np to be 29. exceeding 25 (29-1- ections have no oduction of the d makes it unnece DR, as the name sed and Np value of	-Dp) ssary of
Suggeste	dRemedy				
Chan	ge Np for the Cla	ause 163 SNDR specification to	o 200.		
Proposed		Response Status W			

PROPOSED ACCEPT IN PRINCIPLE. The resolution to comment #50 changes the value of N_p to 200 in 162.9.3.3, which is referenced from the SNDR specification in Table 163-5. [Editor's note: Changed page from 207 to 208.]

C/ 163 SC 163.9.2