

Setup Information			
DUT ID	X303_EC_A_SPE_LAN_1000_CN2_CRB	TekExpress Automotive-Ethernet	1.5.4.8
Date/Time	2025-06-09 15:15:56	Framework Version	5.7.0.33
Pre-Recorded Mode	False	Scope Model	MSO64 (4.0GHz)
Compliance Mode	True	Firmware Version	2.12.5.2206
Suite Name	1000Base-T1	DUT Automation	None
Overall Execution Time	0:06:04	Probing Type	Single-Ended (CH1, CH3)
Overall Test Result	Fail	Probe1 Model	TPA-BNC
		Probe1 Serial Number	B022273
DUT COMMENT:		Automotive Ethernet DUT	

Test Name Summary Table	
Transmit Clock Frequency	Pass
Transmitter Timing Jitter – MDI Jitter	Fail
Transmitter Output Droop	Pass
Transmitter Power Spectral Density and Power Level	Fail
Transmitter Peak Differential Output	Pass

Transmit Clock Frequency							
Measurement Details	Test Result	Low Limit	Measured Value	High Limit	Units	Margin	Run#
Tx Clock Frequency	Pass	124.9875	124.98776	125.0125	MHz	LL: 0.0, HL: 0.025	1
Tx Symbol Frequency	Pass	749.925	749.926563	750.075	MHz	LL: 0.002, HL: 0.148	1
COMMENTS		Signal Validation : Use signal as is – Don't Check Number of unit Intervals: 54994 Scope Bandwidth Limiting Filter of 2GHz is applied.					

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Transmitter Timing Jitter – MDI Jitter							
Measurement Details	Test Result	Low Limit	Measured Value	High Limit	Units	Margin	Run#
MDI Jitter RMS	Fail	N.A	10.692	5	ps	LL: N.A, HL: – 5.692	1
MDI Jitter Pk-Pk	Fail	N.A	85.298	50	ps	LL: N.A, HL: – 35.298	1
COMMENTS		Signal Validation : Use signal as is – Don't Check Number of Edges: 129983 Scope Bandwidth Limiting Filter of 2GHz is applied. Band-pass Hamming Filter of Lower cut-off frequency 122.5 MHz and Upper cut-off frequency 127.5 MHz is applied.					

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Transmitter Output Droop							
Measurement Details	Test Result	Low Limit	Measured Value	High Limit	Units	Margin	Run#
N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Positive Output Droop	Pass	N.A	– 1.746	10	%	LL: N.A, HL: 11.746	1
Negative Output Droop	Pass	N.A	– 1.689	10	%	LL: N.A, HL: 11.689	1
COMMENTS		Signal Validation : Use signal as is – Don't Check Positive droop: Max value = – 1.11%, Min value = – 2.34%, Count = 199 Negative droop: Max value = – 0.98%, Min value = – 2.31%, Count = 198 Scope Bandwidth Limiting Filter of 2GHz is applied.					

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Transmitter Power Spectral Density and Power Level							
Measurement Details	Test Result	Low Limit	Measured Value	High Limit	Units	Margin	Run#
N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Tx Power Spectral Density	Fail	N.A	7039	0	Hits	LL: N.A, HL: – 7039	1
Power Level	Pass	N.A	– 4.231	5.0	dBm	LL: N.A, HL: 9.231	1
COMMENTS		RBW: 100.0kHz, Start frequency: 0.0MHz, Stop frequency: 600.0MHz, Spectral average value: 64, FFT Window type: Gaussian Scope Bandwidth Limiting Filter of 2GHz is applied.					

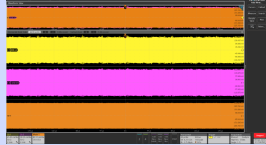
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Transmitter Peak Differential Output							
Measurement Details	Test Result	Low Limit	Measured Value	High Limit	Units	Margin	Run#
N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Tx Peak Diff Output	Pass	N.A	0.743	1.3	VPP	LL: N.A, HL: 0.557	1
COMMENTS		Signal Validation : Use signal as is – Don't Check Scope Bandwidth Limiting Filter of 2GHz is applied.					

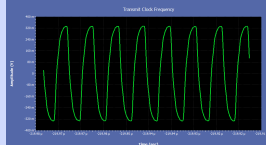
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Transmit Clock Frequency

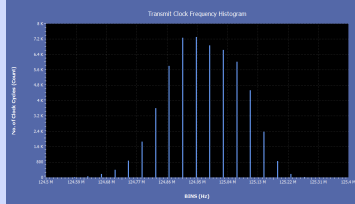
Transmit Clock Frequency_Run1



Transmit Clock Frequency_Run1

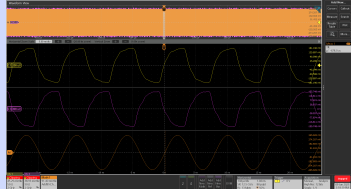


Transmit Clock Frequency Histogram_Run1

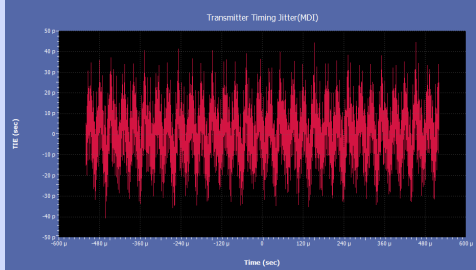


Transmitter Timing Jitter – MDI Jitter

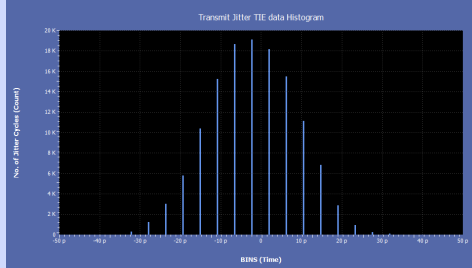
Transmitter Timing Jitter – MDI Jitter_Run1



Transmitter Timing Jitter – MDI Jitter_DataPlotImage_Run1

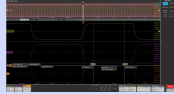


Transmitter Timing Jitter – MDI Jitter_HistPlotImage_Run1

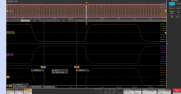


Transmitter Output Droop

Positive Droop_Run1

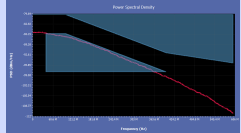


Negative Droop_Run1

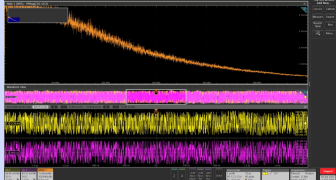


Transmitter Power Spectral Density and Power Level

Power Spectral Density_Run1



Transmitter Power Spectral Density_Run1



Transmitter Peak Differential Output

Transmitter Peak Differential Output_Run1

