

10/100/1000 Base-T Test Report

Overall result: Pass

DUT: dummy
Comment:
Time of session start: 11/10/2023 16:15:20
Operator: test user
Temperature: 25° C
Standard in use: 10/100/1000 Base-T

Session ID: 93, Continuation #: 1:

Time of run: 2023/11/10 16:15:32
Configuration in use: 100BASE-TX All tests (Copy)
Limits in use: Default
Oscilloscope Name: LCRY0427N50357 Model: SDA816ZI
Oscilloscope Serial #: LCRY0427N50357
Computer: LCRY0427N50357
Oscilloscope firmware version: 10.3.0.2 (Build 372273)
QualiPHY core version: 10.3.0.3 (Build 369776)

QualiPHY script version: 10.3.0.3
Stylesheet version: 1.2.0.8

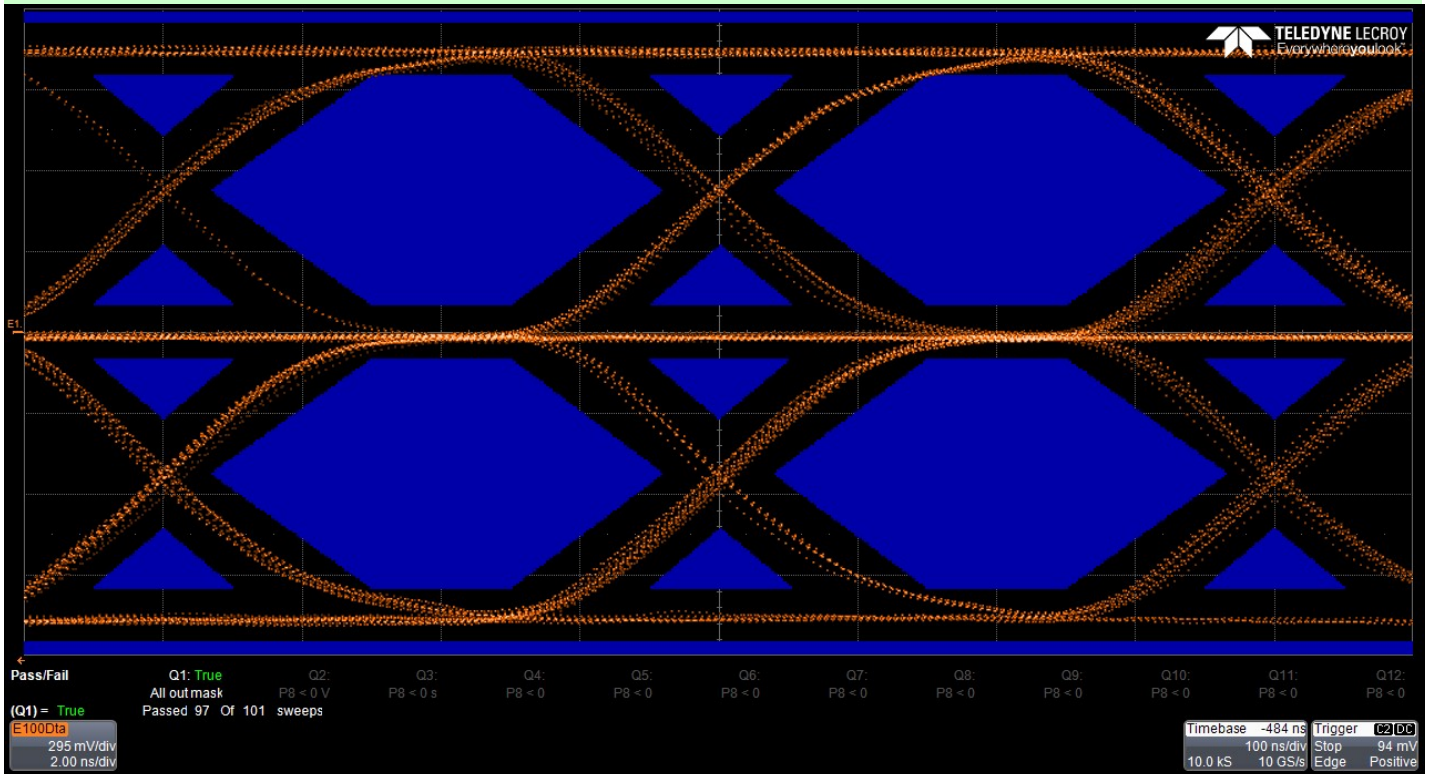
Summary Table

[\[Hide Table\]](#)

Pass #	Test	Measurement	Current Value	Test Criteria
✓	1 Mask Fail (informative)	Twisted Pair Active Output Interface template	LastPass	x = AllPass
✓	1 ANSI 9.1.9	Jitter Base to Upper	517 ps	x <= 1.400 ns
✓	1 ANSI 9.1.9	Jitter Base to Lower	728 ps	x <= 1.400 ns
✓	1 ANSI 9.1.2.2	UTP DOV Base to Upper	979.1 mV	950.0 mV < x < 1.0500 V
✓	1 ANSI 9.1.2.2	UTP DOV Base to Lower	1.0044 V	950.0 mV < x < 1.0500 V
✓	1 ANSI 9.1.4	Signal Amplitude Symmetry	1.0051	980.0 m < x < 1.0200
✓	1 Test ANSI 9.1.3	Overshoot Positive	1.8 %	x <= 5.0 %
✓	1 Test ANSI 9.1.3	Overshoot Negative	2.2 %	x <= 5.0 %
✓	1 ANSI 9.1.6	Rise Base to Upper	4.481 ns	x = 4.000 ns +/- 1.000 ns
✓	1 ANSI 9.1.6	Fall Upper to Base	4.114 ns	x = 4.000 ns +/- 1.000 ns
✓	1 ANSI 9.1.6	Rise Lower to Base	4.074 ns	x = 4.000 ns +/- 1.000 ns
✓	1 ANSI 9.1.6	Fall Base to Lower	4.383 ns	x = 4.000 ns +/- 1.000 ns
✓	1 ANSI 9.1.6	Rise/Fall Symmetry	407 ps	x <= 500 ps
✓	1 ANSI 9.1.8	Duty Cycle Distortion	74.3 ps	-250.0 ps < x < 250.0 ps

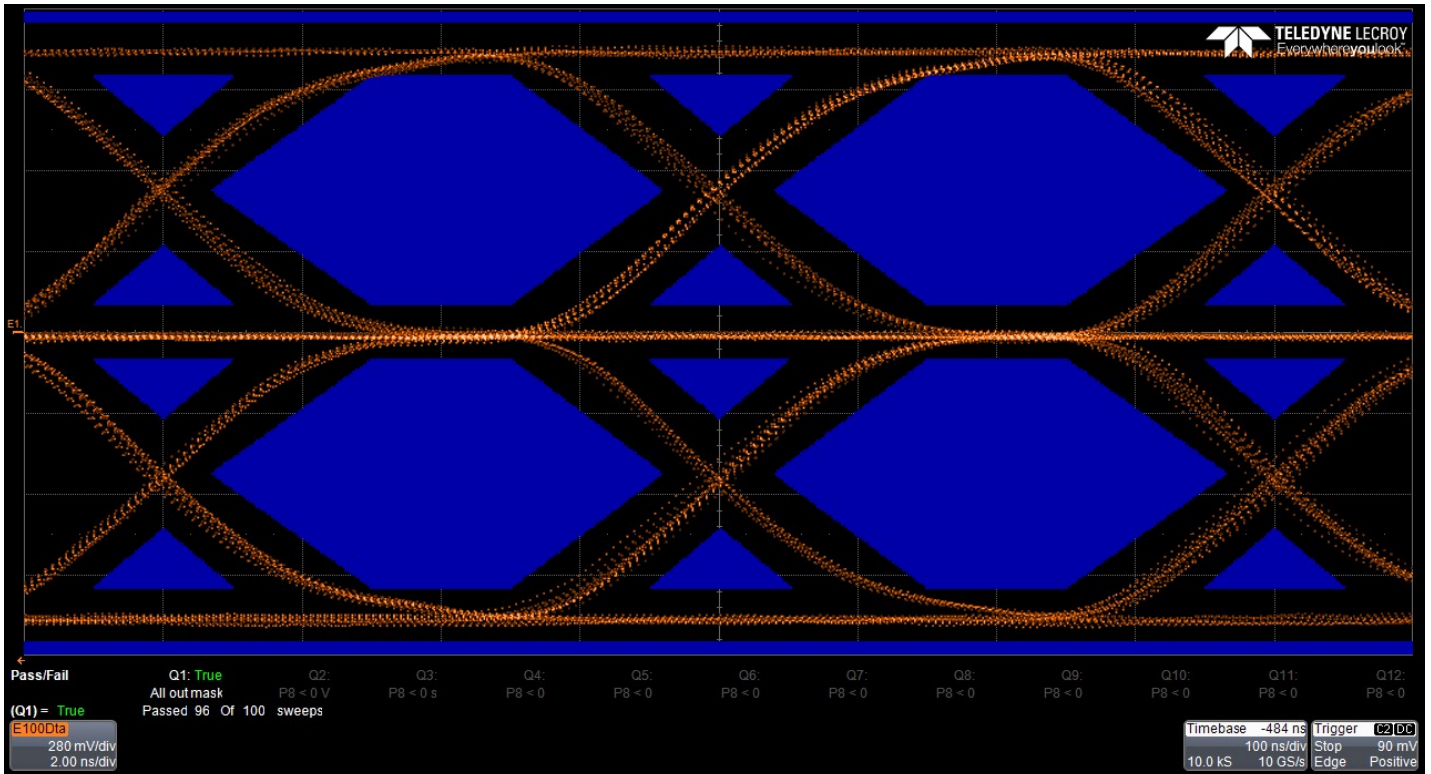
Details

Test ANSI Appendix J - Twisted Pair Active Output Interface template



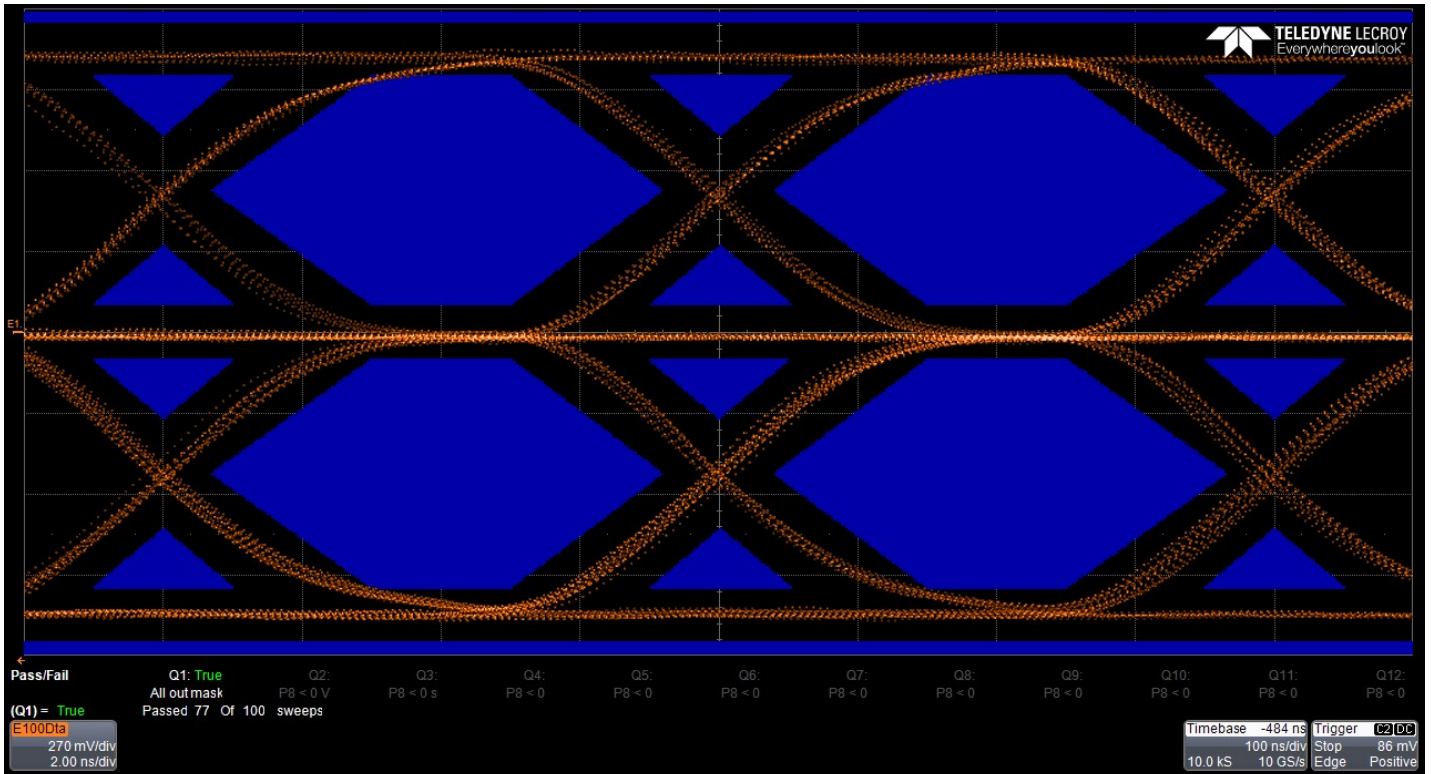
100Base-TX Template, scale factor 1.05

Timestamp: 11/10/2023 16:17:41



100Base-TX Template, scale factor 1.00

Timestamp: 11/10/2023 16:17:44



100Base-TX Template, scale factor 0.95

Timestamp: 11/10/2023 16:17:48

[Up]

Pass	Measurement: Twisted Pair Active Output Interface template	
	Current Value: LastPass	Test Criteria: x = AllPass
	Timestamp: 11/10/2023 16:17:48	Limit Name: template
	Description: ANSI X3.263-1995 Appendix J	

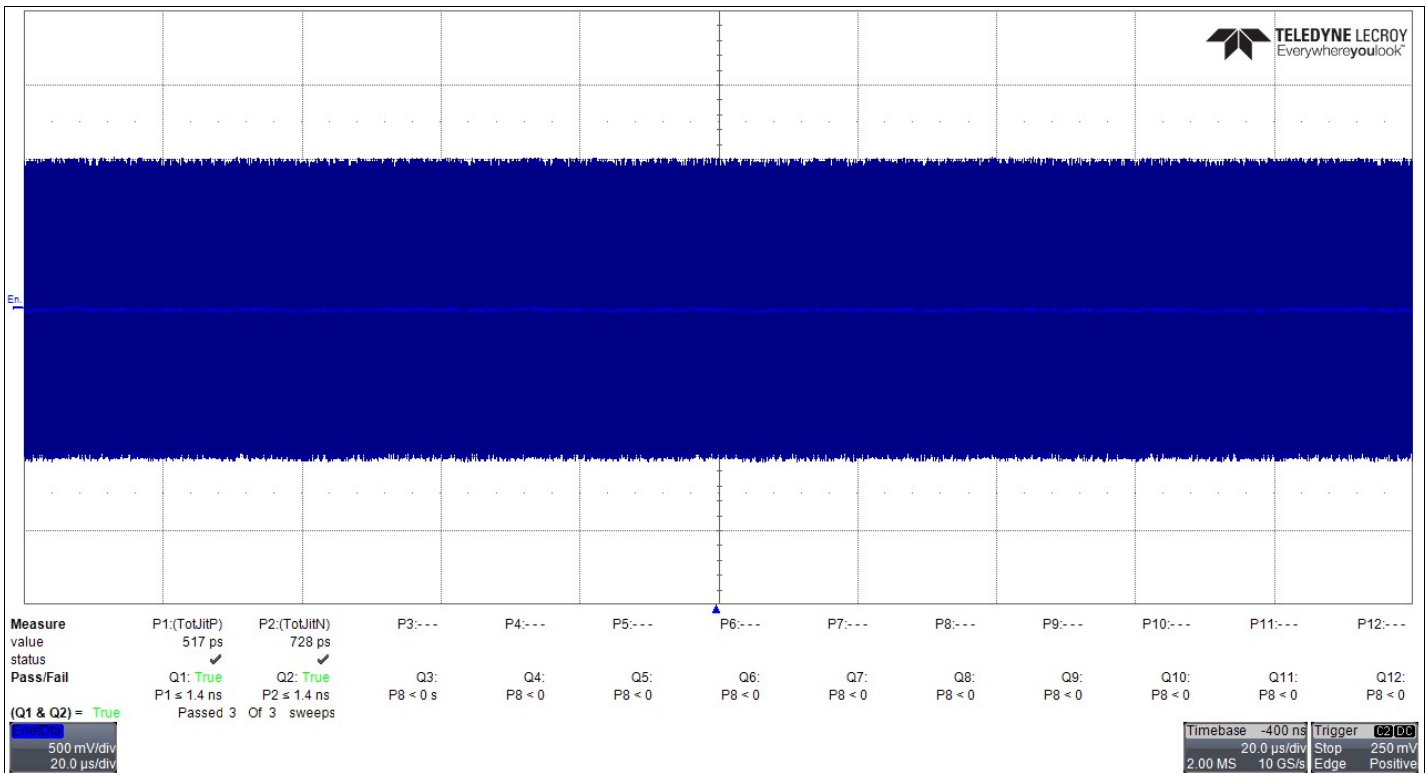
Test ANSI 9.1.9 - Jitter

[Up]

Pass	Measurement: Jitter Base to Upper	
	Current Value: 517 ps	Test Criteria: x <= 1.400 ns
	Timestamp: 11/10/2023 16:17:53	Limit Name: 100BT-Jitter

[Up]

Pass	Measurement: Jitter Base to Lower	
	Current Value: 728 ps	Test Criteria: x <= 1.400 ns
	Timestamp: 11/10/2023 16:17:53	Limit Name: 100BT-Jitter




100Base-TX Jitter


Timestamp: 11/10/2023 16:17:53

Test ANSI 9.1.2.2 - UTP differential output voltage

[\[Up\]](#)


 Pass	Measurement: UTP DOV Base to Upper	
	Current Value: 979.1 mV	Test Criteria: 950.0 mV < x < 1.0500 V
	Timestamp: 11/10/2023 16:17:59	Limit Name: 100BT-DOV

[\[Up\]](#)

 Pass	Measurement: UTP DOV Base to Lower	
	Current Value: 1.0044 V	Test Criteria: 950.0 mV < x < 1.0500 V
	Timestamp: 11/10/2023 16:17:59	Limit Name: 100BT-DOV


Test ANSI 9.1.4 - Signal amplitude symmetry

[\[Up\]](#)


 Pass	Measurement: Signal Amplitude Symmetry	
	Current Value: 1.0051	Test Criteria: 980.0 m < x < 1.0200
	Timestamp: 11/10/2023 16:17:59	Limit Name: 100BT-SAS

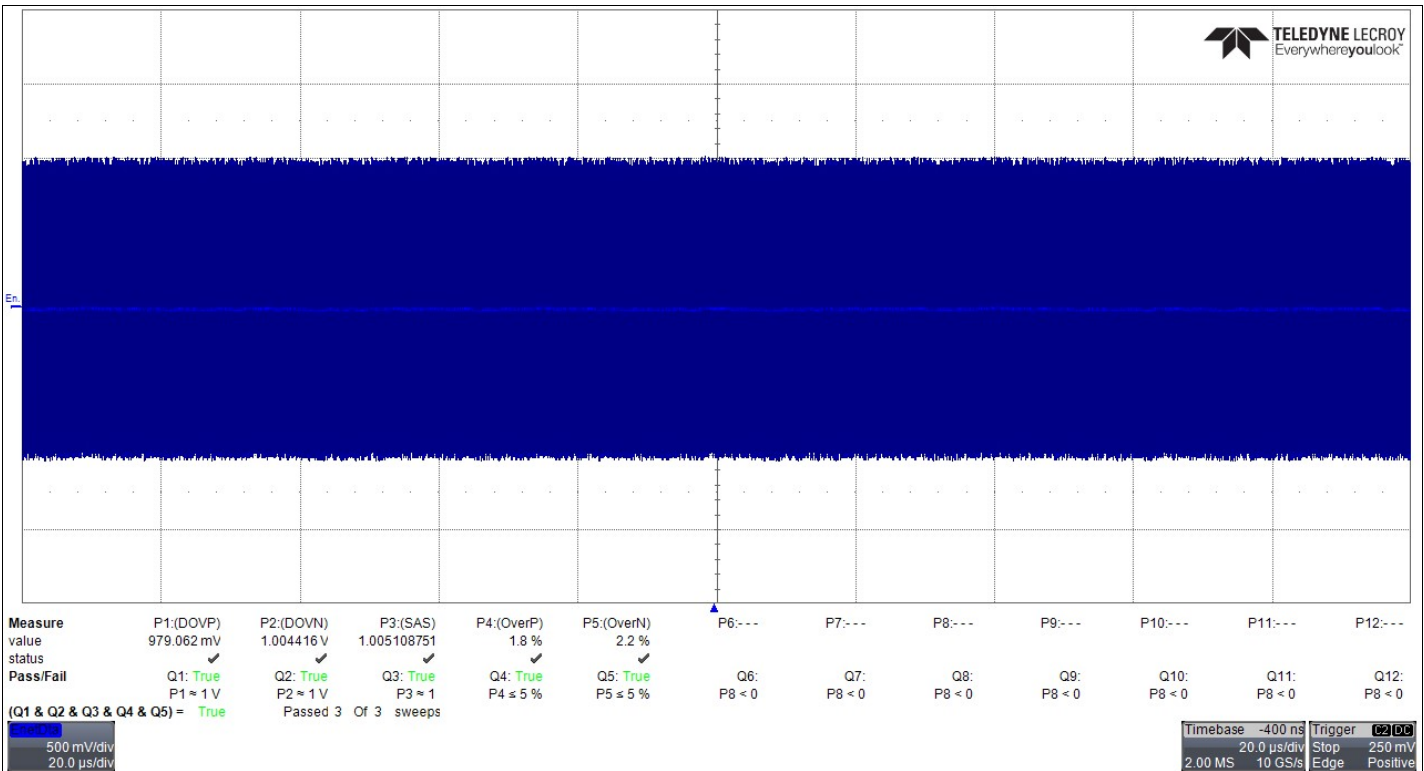
Test ANSI 9.1.3 - Waveform overshoot

[\[Up\]](#)

 Pass	Measurement: Overshoot Positive	
	Current Value: 1.8 %	Test Criteria: x <= 5.0 %
	Timestamp: 11/10/2023 16:17:59	Limit Name: 100BT-OverP

[\[Up\]](#)

 Pass	Measurement: Overshoot Negative	
	Current Value: 2.2 %	Test Criteria: x <= 5.0 %
	Timestamp: 11/10/2023 16:17:59	Limit Name: 100BT-OverN




100Base-TX Differential Output Voltage, symmetry, overshoot


Timestamp: 11/10/2023 16:17:59

Test ANSI 9.1.6 - Rise/Fall


[\[Up\]](#)

 Pass	Measurement: Rise Base to Upper	
	Current Value: 4.481 ns	Test Criteria: $x = 4.000 \text{ ns} \pm 1.000 \text{ ns}$
	Timestamp: 11/10/2023 16:18:03	Limit Name: 100BT-URise


[\[Up\]](#)

 Pass	Measurement: Fall Upper to Base	
	Current Value: 4.114 ns	Test Criteria: $x = 4.000 \text{ ns} \pm 1.000 \text{ ns}$
	Timestamp: 11/10/2023 16:18:03	Limit Name: 100BT-UFall


[\[Up\]](#)

 Pass	Measurement: Rise Lower to Base	
	Current Value: 4.074 ns	Test Criteria: $x = 4.000 \text{ ns} \pm 1.000 \text{ ns}$
	Timestamp: 11/10/2023 16:18:03	Limit Name: 100BT-LRise

[\[Up\]](#)


 Pass	Measurement: Fall Base to Lower	
	Current Value: 4.383 ns	Test Criteria: $x = 4.000 \text{ ns} \pm 1.000 \text{ ns}$
	Timestamp: 11/10/2023 16:18:04	Limit Name: 100BT-LFall

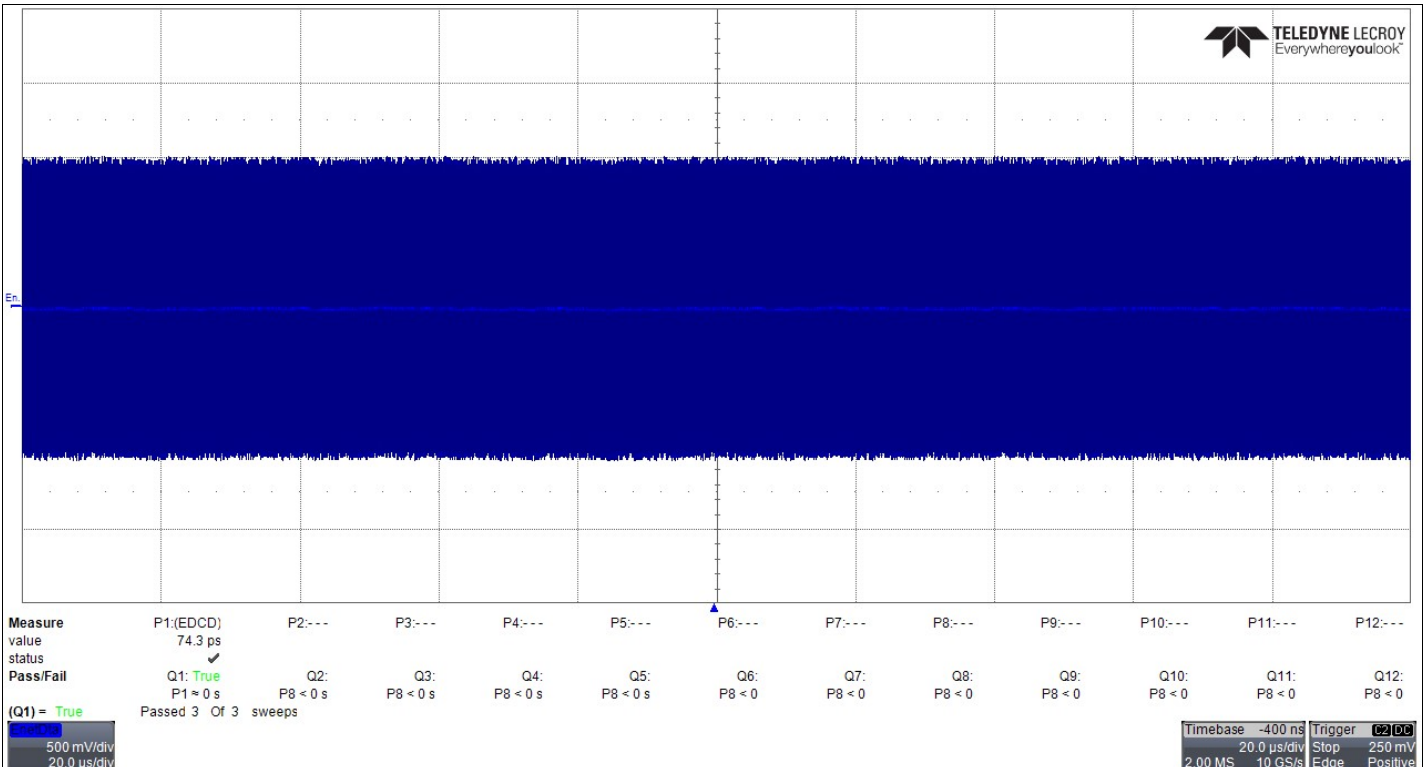
[\[Up\]](#)

 Pass	Measurement: Rise/Fall Symmetry	
	Current Value: 407 ps	Test Criteria: $x \leq 500 \text{ ps}$
	Timestamp: 11/10/2023 16:18:04	Limit Name: 100BT-RFSymmetry

Test ANSI 9.1.8 - Duty Cycle Distortion

[\[Up\]](#)

 Pass	Measurement: Duty Cycle Distortion	
	Current Value: 74.3 ps	Test Criteria: $-250.0 \text{ ps} < x < 250.0 \text{ ps}$
	Timestamp: 11/10/2023 16:18:08	Limit Name: 100BT-DCD



100Base-TX Duty Cycle Distortion

Timestamp: 11/10/2023 16:18:08

--- End of report ---