ENET Test Report

Overall result: Pass

DUT:	BD642A_OUT PORT_B_PAIR
Comment:	Temperature is PHY IC.
Time of session start:	03/23/2023 10:42:56
Operator:	Lyoo.H.S.
Temperature	28° C
Standard in use:	ENET

Session ID: 65, Continuation #: 1:

Time of run:	2023/03/23 10:43:05
Configuration in use:	10/100BASE-T All tests (Copy)
Limits in use:	Default
Oscilloscope Name:	LCRY2805N56639 Model: WR640ZI
Oscilloscope Serial #:	LCRY2805N56639
Computer:	LCRY2805N56639
Oscilloscope firmware version:	9.2.0.4 (Build 278085)
QualiPHY core version:	8.7.0.1 (Build 255738)

QualiPHY script version:	8.7.0.1
Stylesheet version:	1.2.0.7

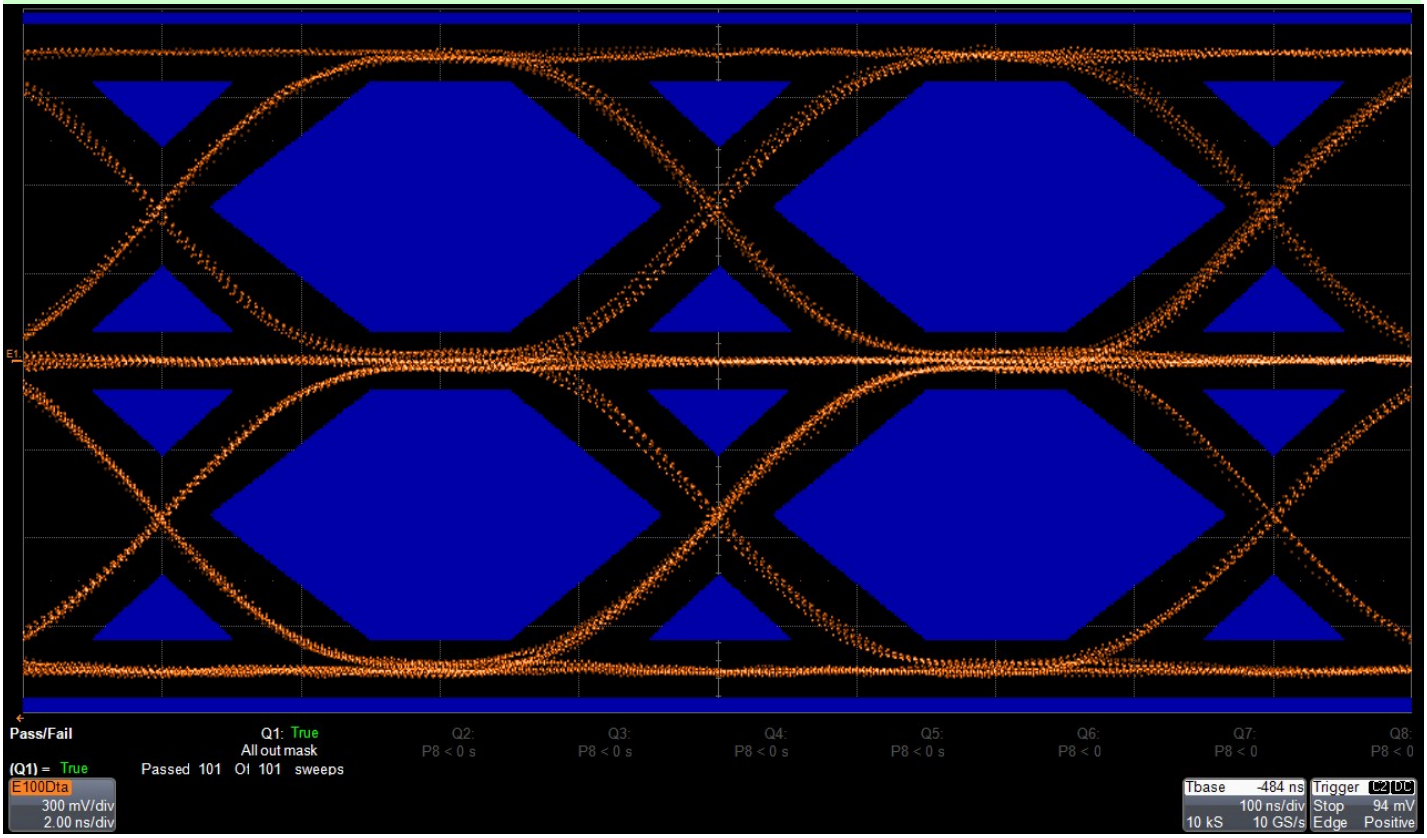
Summary Table

[Hide Table]

Pass	#	Test	Measurement	Current Value	Test Criteria
✔	1	ANSI Appendix J	Twisted Pair Active Output Interface template	AllPass	match
✔	1	ANSI 9.1.9	Jitter Base to Upper	546 ps	x <= 1.400 ns
✔	1	ANSI 9.1.9	Jitter Base to Lower	549 ps	x <= 1.400 ns
✔	1	ANSI 9.1.2.2	UTP DOV Base to Upper	991.1 mV	950.0 mV < x < 1.0500 V
✔	1	ANSI 9.1.2.2	UTP DOV Base to Lower	999.3 mV	950.0 mV < x < 1.0500 V
✔	1	ANSI 9.1.4	Signal Amplitude Symmetry	991.8 m	980.0 m < x < 1.0200
✔	1	ANSI 9.1.3	Overshoot Positive	1.6 %	x <= 5.0 %
✔	1	ANSI 9.1.3	Overshoot Negative	1.8 %	x <= 5.0 %
✔	1	ANSI 9.1.6	Rise Base to Upper	3.823 ns	x = 4.000 ns +/- 1.000 ns
✔	1	ANSI 9.1.6	Fall Upper to Base	3.831 ns	x = 4.000 ns +/- 1.000 ns
✔	1	ANSI 9.1.6	Rise Lower to Base	4.116 ns	x = 4.000 ns +/- 1.000 ns
✔	1	ANSI 9.1.6	Fall Base to Lower	3.824 ns	x = 4.000 ns +/- 1.000 ns
✔	1	ANSI 9.1.6	Rise/Fall Symmetry	293 ps	x <= 500 ps
✔	1	ANSI 9.1.8	Duty Cycle Distortion	59.7 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: 03/23/2023 10:43:27

[Up]

Pass	Measurement:	***Twisted Pair Active Output Interface template***		
	Current Value:	AllPass	Test Criteria:	match
	Timestamp:	03/23/2023 10:43:27	Limit Name:	Mask-Test

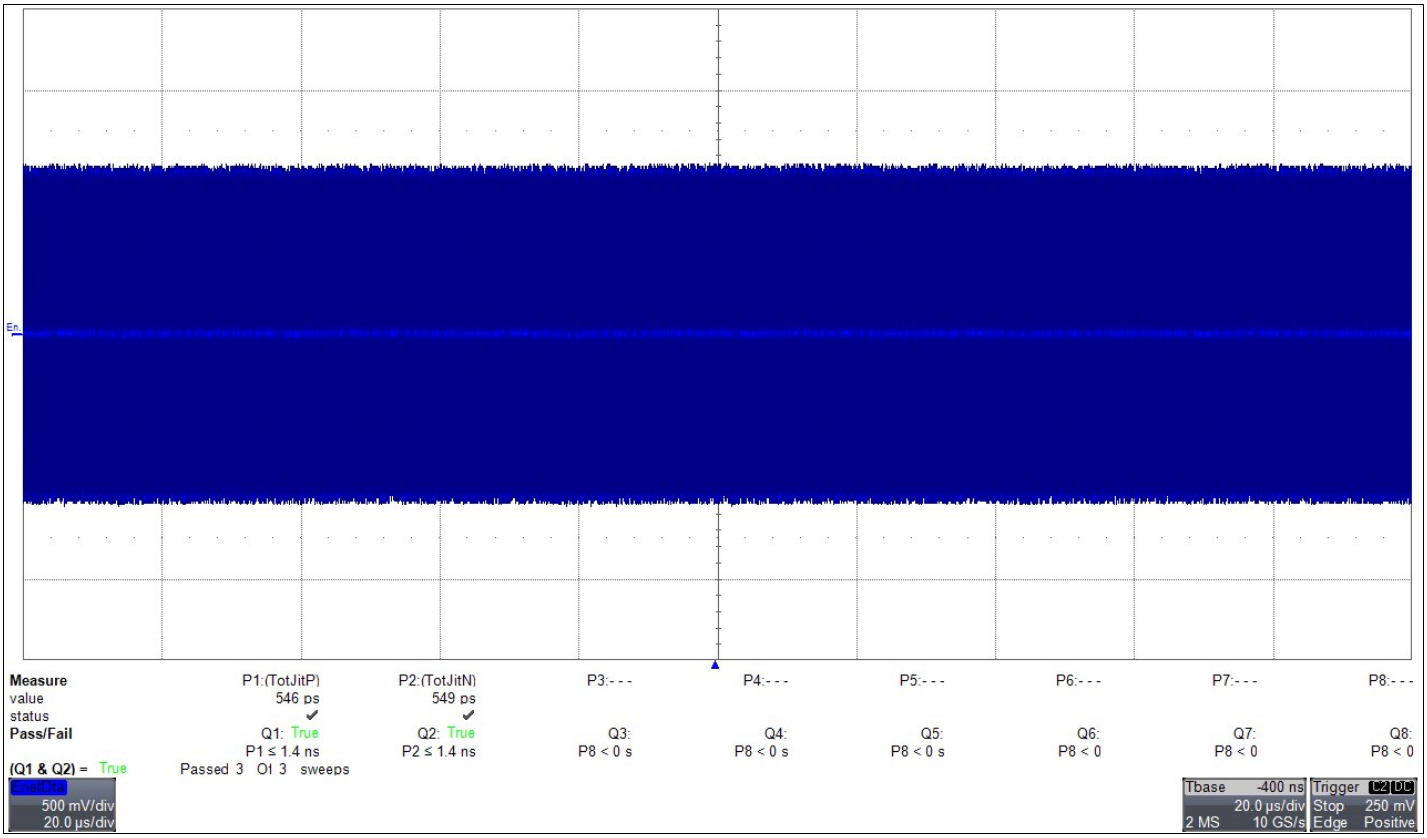
Test ANSI 9.1.9 - Jitter

[Up]

Pass	Measurement:	***Jitter Base to Upper***		
	Current Value:	546 ps	Test Criteria:	x <= 1.400 ns
	Timestamp:	03/23/2023 10:43:39	Limit Name:	100BT-Jitter

[Up]

Pass	Measurement:	***Jitter Base to Lower***		
	Current Value:	549 ps	Test Criteria:	x <= 1.400 ns
	Timestamp:	03/23/2023 10:43:39	Limit Name:	100BT-Jitter



100Base-TX Jitter
Timestamp: 03/23/2023 10:43:39

Test ANSI 9.1.2.2 - UTP differential output voltage

[Up]

Pass	Measurement: ***UTP DOV Base to Upper***			
	Current Value:	991.1 mV	Test Criteria:	950.0 mV < x < 1.0500 V
	Timestamp:	03/23/2023 10:43:51	Limit Name:	100BT-DOV

[Up]

Pass	Measurement: ***UTP DOV Base to Lower***			
	Current Value:	999.3 mV	Test Criteria:	950.0 mV < x < 1.0500 V
	Timestamp:	03/23/2023 10:43:51	Limit Name:	100BT-DOV

Test ANSI 9.1.4 - Signal amplitude symmetry

[Up]

Pass	Measurement: ***Signal Amplitude Symmetry***			
	Current Value:	991.8 m	Test Criteria:	980.0 m < x < 1.0200
	Timestamp:	03/23/2023 10:43:51	Limit Name:	100BT-SAS

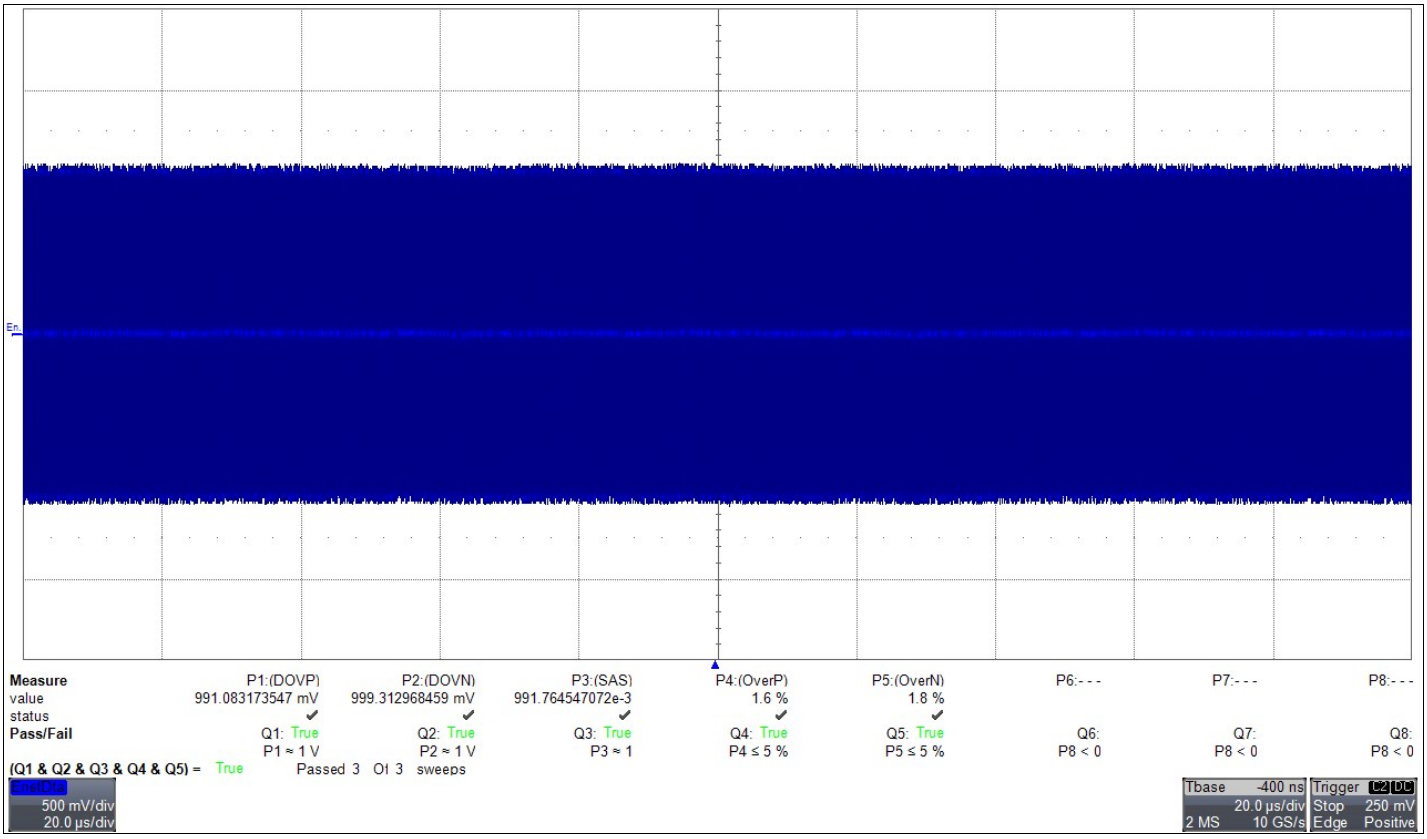
Test ANSI 9.1.3 - Waveform overshoot

[Up]

Pass	Measurement: ***Overshoot Positive***			
	Current Value:	1.6 %	Test Criteria:	x <= 5.0 %
	Timestamp:	03/23/2023 10:43:51	Limit Name:	100BT-OverP

[Up]

Pass	Measurement: ***Overshoot Negative***			
	Current Value:	1.8 %	Test Criteria:	x <= 5.0 %
	Timestamp:	03/23/2023 10:43:51	Limit Name:	100BT-OverN



100Base-TX Differential Output Voltage, symmetry, overshoot

Timestamp: 03/23/2023 10:43:51

Test ANSI 9.1.6 - Rise/Fall

[Up]

Pass	Measurement:	***Rise Base to Upper***		
	Current Value:	3.823 ns	Test Criteria:	x = 4.000 ns +/- 1.000 ns
	Timestamp:	03/23/2023 10:43:58	Limit Name:	100BT-URise

[Up]

Pass	Measurement:	***Fall Upper to Base***		
	Current Value:	3.831 ns	Test Criteria:	x = 4.000 ns +/- 1.000 ns
	Timestamp:	03/23/2023 10:43:58	Limit Name:	100BT-UFall

[Up]

Pass	Measurement:	***Rise Lower to Base***		
	Current Value:	4.116 ns	Test Criteria:	x = 4.000 ns +/- 1.000 ns
	Timestamp:	03/23/2023 10:43:58	Limit Name:	100BT-LRise

[Up]

Pass	Measurement:	***Fall Base to Lower***		
	Current Value:	3.824 ns	Test Criteria:	x = 4.000 ns +/- 1.000 ns
	Timestamp:	03/23/2023 10:43:58	Limit Name:	100BT-LFall

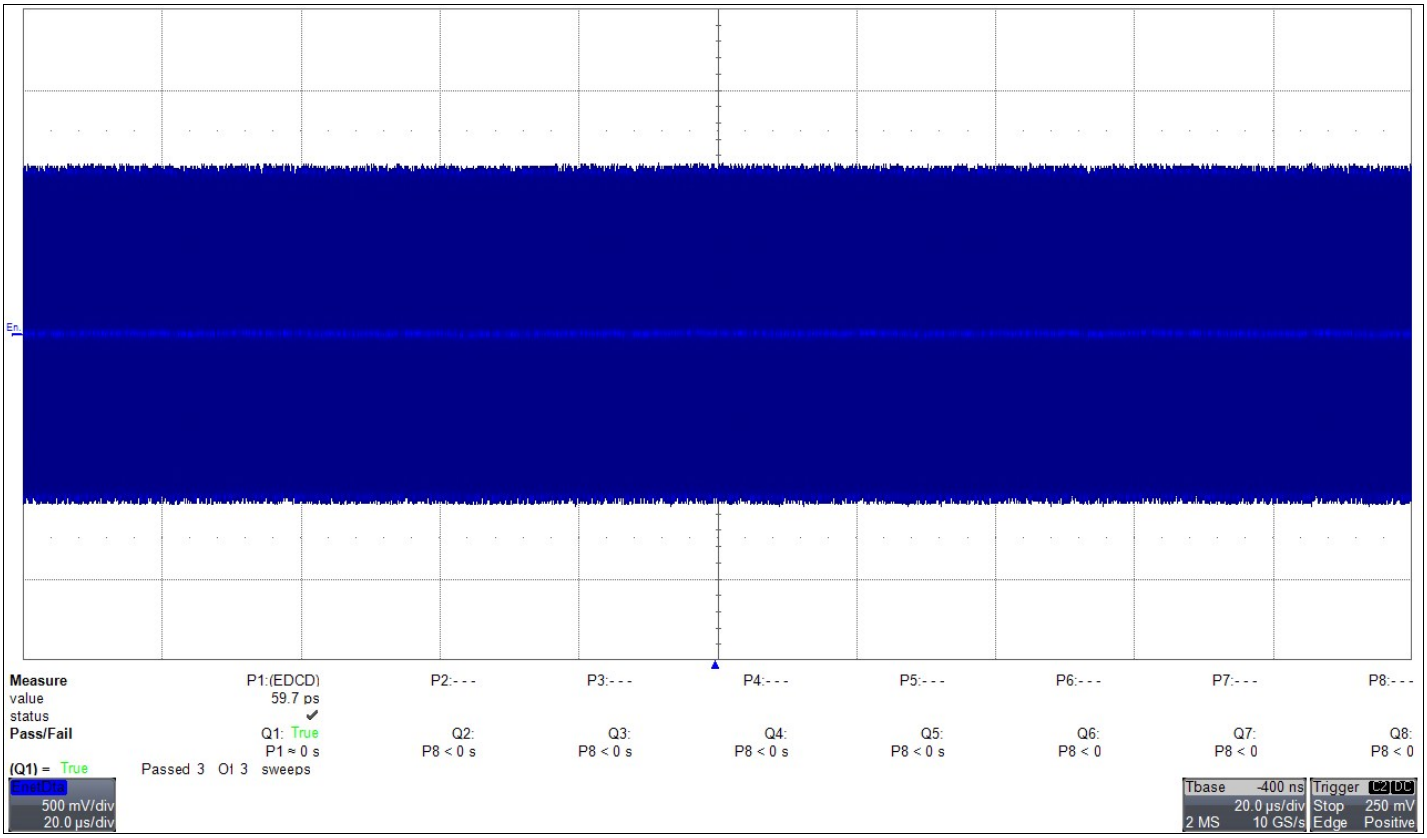
[Up]

Pass	Measurement:	***Rise/Fall Symmetry***		
	Current Value:	293 ps	Test Criteria:	x <= 500 ps
	Timestamp:	03/23/2023 10:43:58	Limit Name:	100BT-RFSymmetry

Test ANSI 9.1.8 - Duty Cycle Distortion

[Up]

Pass	Measurement:	***Duty Cycle Distortion***		
	Current Value:	59.7 ps	Test Criteria:	-250.0 ps < x < 250.0 ps
	Timestamp:	03/23/2023 10:44:05	Limit Name:	100BT-DCD



100Base-TX Duty Cycle Distortion

Timestamp: 03/23/2023 10:44:06

--- End of report ---