



XQSLN9-10LY

10 km 100GBASE-LR4 QSFP28

DVT Report

Applications

- 100GBASE-LR4 100G Ethernet
- Telecom networking
- Data Center Interconnect
- Enterprise networking

Features

- QSFP28 MSA compliant
- Compliant to IEEE 802.3ba 100GBASE-LR4
- Digital diagnostic monitoring support
- Hot pluggable 38 pin electrical interface
- 4 LAN-WDM lanes MUX/DEMUX design
- 4x25G electrical interface
- Maximum power consumption 4 W
- LC duplex connector
- Supports 103.125 Gb/s aggregate bit rate
- Up to 10 km transmission on single mode fiber
- Operating case temperature: 0°C to 70°C
- Single 3.3 V power supply
- RoHS 2.0 compliant

Description

This document describes the DVT result of 100GBASE-LR4 100GE (4*25G) QSFP28 10 km Optical Transceiver.

Test Specification

Parameters	Unit	Min	Typ	Max	Sample Size	Pass/Fail
Electrical Power Consumption						
Power dissipation	W			4	11	Pass
Supply Current	A			1.1544	11	Pass
DDM-Supply Voltage	%	-3		3	3	Pass
Receiver 25G Electrical Interface						
Differential Voltage pk-pk	mV			900	3	Pass
Common Mode Noise, RMS	mV			17.5	3	Pass
Output Rise time (20% to 80%)	ps	12			3	Pass
Output Fall time (20% to 80%)	ps	12			3	Pass
Eye width	UI	0.57			3	Pass
Eye height	mV	228			3	Pass
Transmitter 25G						
Transmit wavelengths	nm	1294.53		1296.59	11	Pass
		1299.02		1301.09	11	Pass
		1303.54		1305.63	11	Pass
		1308.09		1310.19	11	Pass
Total Average Launch Power	dBm			10.5	11	Pass
Average launch power, each lane	dBm	-4.3		4.5	11	Pass
Optical Modulation Amplitude (OMA), each lane	dBm	-1.3		4.5	11	Pass
Extinction Ratio (ER)	dB	4			11	Pass
Side-Mode Suppression Ratio (SMSR)	dB	30			11	Pass
Launch power in OMA minus TDP, each lane	dB	-2.3			11	Pass
Transmitter and Dispersion Penalty (TDP), each lane	dB			2.2	11	Pass
Power off average launch power, each lane	dBm			-30	11	Pass
DDM-Tx Power	dB			3	11	Pass
Receiver 25G						
Signaling Speed per Lane	Gb/s	25.78125 ± 100 ppm			11	Pass
Receiver power, each lane (OMA)	dBm			4.5	11	Pass
Receiver sensitivity (OMA), each lane	dBm			-8.6	11	Pass
Stressed receiver Sensitivity (OMA) , each lane	dBm			-6.8	11	Pass
LOS Assert	dBm	-26			11	Pass
LOS Deassert	dBm			-13	11	Pass
LOS Hysteresis	dB	0.5			11	Pass
DDM-Rx Power	dB			3	11	Pass

Test Conditions

The DVT tests were performed at the following conditions, unless otherwise noted.

Data Rate: 25.78125 Gb/s (each lane)

Pattern: PRBS31

Case Temperatures: 0°C, 35°C and 70°C

Tested at normal voltage (3.3 V)

Ordering information

Part number	Product Description
XQSNL9-10LY	100GBASE-LR4 100GE QSFP28 10 km Optical Transceiver. LC, DDMI, 0°C ~ 70°C

Notes

¹ For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.

Please specify any compatibility requirements at time of ordering. Standard MSA compatible pluggable components may not work or some function of these components may not be available in devices that require customized compatible devices. Pluggable components compatible with one type of communications equipment may not work in other type of communications equipment.

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