OPTCORE

Transceiver Test Report

PN: QSFP-100G-SR4

Test by: Maddy | Date: 2025/12/19

I. Test Purpose

By building realistic switch use cases, we test whether the QSFP-100G-SR4 transceiver meets industry standards, performs at a high level, and is compatible with the target switch platform.

II. Test Results Summary

Test items	Test Result	Note
Compatibility Test	Pass	Check whether the transceiver is compatible with the target switch
Digital Diagnostic Monitoring	Pass	Check whether the DDM parameters have exceeded the threshold value
Transmission Distance Test	Pass	Check whether the transceiver meets the distance specification

III. Test Environment

3.1 Test Sample

Vendor Name	Part Number	Serial Number	Description
OPTCORE	QSFP-100G-SR4	25B4806951	100GBASE-SR4 QSFP28 850nm 100m Transceiver
OPTCORE	QSFP-100G-SR4	25B4806923	100GBASE-SR4 QSFP28 850nm 100m Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Extreme	VSP-7400-48Y-8C	8.0.5.1
OPTCORE	MT-MPO/F-MPO/F-12OM3-70M-B-LS	70M Multimode OM3 MPO Fiber Trunk Cable,12-Fiber, Female, UPC, Polarity B
OPTCORE	MT-MPO/F-MPO/F-12OM4-100M-B-LS	100M Multimode OM4 MPO Fiber Trunk Cable,12-Fiber, Female, UPC, Polarity B

IV. Test Data

4.1 Compatibility Test

Test Data	 THQ-DISTRO-TA-MELSW016006:1#show pluggable-optical-modules basic ********** Command Execution Time: Fri Dec 19 03:29:49 2025 UTC ********** ========== Pluggable Optical Module Info ========== PORT DDM NUM TYPE SUPPORTED VENDOR NAME PART NUMBER ---------- 1/49 100GbSR4 TRUE OPTCORE QSFP-100G-SR4 1/51 100GbSR4 TRUE OPTCORE QSFP-100G-SR4
Test Conclusion	The optical transceiver was successfully recognized by the Extreme VSP-7400-48Y-8C, with all identification information accurately displayed in the outputs.

4.2 Digital Diagnostic Monitoring

Test Data	THQ-DISTRO-TA-MELSW016006:1#show pluggable-optical-modules detail ********** Command Execution Time: Fri Dec 19 03:29:55 2025 UTC ********** ========== Pluggable Optical Module Info 1/49 Detail ========== Port: 1/49 Type: 100GbSR4 DDM Supported : TRUE Vendor Name : OPTCORE Partnumber : QSFP-100G-SR4 Vendor REV : 00 Vendor SN : 25B4806951 Vendor Date : 03/04/25 Wavelength : 850.00 nm Digital Diagnostic Interface Supported Optics Status : Ok Calibration : Internal

RX Power Measurement : Average
Auxiliary 1 Monitoring : Not Implemented
Auxiliary 2 Monitoring : Not Implemented

	LOW_ALARM THRESHOLD	LOW_WARN THRESHOLD	ACTUAL VALUE	HIGH_WARN THRESHOLD	HIGH_ALARM THRESHOLD	THRESHOLD STATUS
Temp(C)	-10.0	0.0	21.6171	70.0	85.0	Normal
Voltage(V)	2.9000	3.1000	3.2670	3.5000	3.6000	Normal
Tx1Bias(mA)	1.0	2.0	6.2920	12.0	15.0	Normal
Tx2Bias(mA)	1.0	2.0	6.3180	12.0	15.0	Normal
Tx3Bias(mA)	1.0	2.0	6.3120	12.0	15.0	Normal
Tx4Bias(mA)	1.0	2.0	6.3040	12.0	15.0	Normal
Tx1Power(dBm)	-11.4000	-8.4000	0.1000	2.4000	4.0	Normal
Tx2Power(dBm)	-11.4000	-8.4000	0.0	2.4000	4.0	Normal
Tx3Power(dBm)	-11.4000	-8.4000	-0.1000	2.4000	4.0	Normal
Tx4Power(dBm)	-11.4000	-8.4000	-0.3000	2.4000	4.0	Normal
Rx1Power(dBm)	-14.0	-11.0	-0.2000	2.4000	4.0	Normal
Rx2Power(dBm)	-14.0	-11.0	-4.7000	2.4000	4.0	Normal
Rx3Power(dBm)	-14.0	-11.0	-0.4000	2.4000	4.0	Normal
Rx4Power(dBm)	-14.0	-11.0	0.1000	2.4000	4.0	Normal

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Pluggable Optical Module Info 1/51 Detail

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Port: 1/51
Type: 100GbSR4
DDM Supported : TRUE
Vendor Name : OPTCORE Partnumber : QSFP-100G-SR4
Vendor REV : 00 Vendor SN : 25B4806923
Vendor Date : 02/28/25
Wavelength : 850.00 nm

Digital Diagnostic Interface Supported

Optics Status : Ok
Calibration : Internal
RX Power Measurement : Average
Auxiliary 1 Monitoring : Not Implemented
Auxiliary 2 Monitoring : Not Implemented

	LOW_ALARM THRESHOLD LOW_WARN THRESHOLD ACTUAL VALUE HIGH_WARN THRESHOLD HIGH_ALARM THRESHOLD STATUS --- Temp(C) -10.0 0.0 23.6250 70.0 85.0 Normal Voltage(V) 2.9000 3.1000 3.3020 3.5000 3.6000 Normal Tx1Bias(mA) 1.0 2.0 6.9860 12.0 15.0 Normal Tx2Bias(mA) 1.0 2.0 6.9800 12.0 15.0 Normal Tx3Bias(mA) 1.0 2.0 7.0060 12.0 15.0 Normal Tx4Bias(mA) 1.0 2.0 7.0 12.0 15.0 Normal Tx1Power(dBm) -11.4000 -8.4000 0.3000 2.4000 4.0 Normal Tx2Power(dBm) -11.4000 -8.4000 0.5000 2.4000 4.0 Normal Tx3Power(dBm) -11.4000 -8.4000 0.6000 2.4000 4.0 Normal Tx4Power(dBm) -11.4000 -8.4000 0.3000 2.4000 4.0 Normal Rx1Power(dBm) -14.0 -11.0 -0.7000 2.4000 4.0 Normal Rx2Power(dBm) -14.0 -11.0 -0.7000 2.4000 4.0 Normal Rx3Power(dBm) -14.0 -11.0 -1.6000 2.4000 4.0 Normal Rx4Power(dBm) -14.0 -11.0 -0.8000 2.4000 4.0 Normal
Test Conclusion	After testing, the above transceiver on the Extreme VSP-7400-48Y-8C DDM is normally identified, the parameters do not exceed thresholds, and the transceiver operates normally.

4.3 Transmission Distance Test

Test Conclusion	In this test, optical transceiver modules were connected using 70-merter OM3 and 100-meter OM4 fiber cables to verify link stability. The modules were inserted into the switches and established a point-to-point connection. The link was monitored for one hour to check for any bit errors, packet loss, link drops, or interruptions. All connections remained stable and error-free, indicating that the modules perform reliably over an 100-meter fiber link.

Appendix A. Document Revision

Version No	Date	Description
V1.0/EN	2025-12-19	Preliminary test report