OPTCORE

Transceiver Test Report

PN: QSFP-40G-SR4

Test by: Maddy | Date: 2026/02/02

I. Test Purpose

By building realistic switch use cases, we test whether the QSFP-40G-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-40G-SR4	25K4807128	40GBASE-SR4 QSFP+ 850nm 100m Transceiver
OPTCORE	QSFP-40G-SR4	25K4807127	40GBASE-SR4 QSFP+ 850nm 100m Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Juniper	QFX5200-32C	19.2R3-S1.3 flex
OPTCORE	MT-MPO/F-MPO/F-12OM3-100M-B-LS	100M Multimode OM3 MPO Fiber Trunk Cable,12-Fiber, Female, UPC, Polarity B
OPTCORE	MT-MPO/F-MPO/F-12OM4-150M-B-LS	150M Multimode OM4 MPO Fiber Trunk Cable,12-Fiber, Female, UPC, Polarity B

IV. Test Data

4.1 Compatibility Test

Test Data	 {master:0} root> show interfaces statistics | match et-0/0 Physical interface: et-0/0/17, Enabled, Physical link is Up Logical interface et-0/0/17.0 (Index 557) (SNMP ifIndex 530) Physical interface: et-0/0/23, Enabled, Physical link is Up Logical interface et-0/0/23.0 (Index 558) (SNMP ifIndex 533)
Test Conclusion	The optical transceiver was successfully recognized by the Juniper QFX5200-32C, with all identification information accurately displayed in the outputs.

4.2 Digital Diagnostic Monitoring

Test Data	{master:0} root> show interfaces diagnostics optics Physical interface: et-0/0/17 Module temperature : 27 degrees C / 80 degrees F Module voltage : 3.2900 V Module temperature high alarm : Off Module temperature low alarm : Off Module temperature high warning : Off Module temperature low warning : Off Module voltage high alarm : Off Module voltage low alarm : Off Module voltage high warning : Off Module voltage low warning : Off Module temperature high alarm threshold : 85 degrees C / 185 degrees F Module temperature low alarm threshold : -10 degrees C / 14 degrees F Module temperature high warning threshold : 70 degrees C / 158 degrees F Module temperature low warning threshold : 0 degrees C / 32 degrees F Module voltage high alarm threshold : 3.5990 V Module voltage low alarm threshold : 2.9000 V Module voltage high warning threshold : 3.4990 V Module voltage low warning threshold : 3.0990 V Laser bias current high alarm threshold : 14.999 mA Laser bias current low alarm threshold : 0.999 mA Laser bias current high warning threshold : 11.999 mA Laser bias current low warning threshold : 1.999 mA Laser output power high alarm threshold : 2.5119 mW / 4.00 dBm Laser output power low alarm threshold : 0.0871 mW / -10.60 dBm

	Laser output power high warning threshold : 1.7378 mW / 2.40 dBm Laser output power low warning threshold : 0.1738 mW / -7.60 dBm Laser rx power high alarm threshold : 2.5119 mW / 4.00 dBm Laser rx power low alarm threshold : 0.0158 mW / -18.01 dBm Laser rx power high warning threshold : 1.7378 mW / 2.40 dBm Laser rx power low warning threshold : 0.0316 mW / -15.00 dBm Lane 0 Laser bias current : 6.397 mA Laser output power : 0.638 mW / -1.95 dBm Laser receiver power : 1.049 mW / 0.21 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Lane 1 Laser bias current : 6.296 mA Laser output power : 0.635 mW / -1.97 dBm Laser receiver power : 1.069 mW / 0.29 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Lane 2 Laser bias current : 6.191 mA Laser output power : 0.631 mW / -2.00 dBm Laser receiver power : 1.072 mW / 0.30 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off

	Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Lane 3 Laser bias current : 6.613 mA Laser output power : 0.647 mW / -1.89 dBm Laser receiver power : 1.050 mW / 0.21 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Physical interface: et-0/0/23 Module temperature : 25 degrees C / 78 degrees F Module voltage : 3.2950 V Module temperature high alarm : Off Module temperature low alarm : Off Module temperature high warning : Off Module temperature low warning : Off Module voltage high alarm : Off Module voltage low alarm : Off Module voltage high warning : Off Module voltage low warning : Off Module temperature high alarm threshold : 85 degrees C / 185 degrees F Module temperature low alarm threshold : -10 degrees C / 14 degrees F Module temperature high warning threshold : 70 degrees C / 158 degrees F Module temperature low warning threshold : 0 degrees C / 32 degrees F Module voltage high alarm threshold : 3.5990 V Module voltage low alarm threshold : 2.9000 V Module voltage high warning threshold : 3.4990 V Module voltage low warning threshold : 3.0990 V Laser bias current high alarm threshold : 14.999 mA Laser bias current low alarm threshold : 0.999 mA Laser bias current high warning threshold : 11.999 mA Laser bias current low warning threshold : 1.999 mA Laser output power high alarm threshold : 2.5119 mW / 4.00 dBm Laser output power low alarm threshold : 0.0871 mW / -10.60 dBm

	Laser output power high warning threshold : 1.7378 mW / 2.40 dBm Laser output power low warning threshold : 0.1738 mW / -7.60 dBm Laser rx power high alarm threshold : 2.5119 mW / 4.00 dBm Laser rx power low alarm threshold : 0.0158 mW / -18.01 dBm Laser rx power high warning threshold : 1.7378 mW / 2.40 dBm Laser rx power low warning threshold : 0.0316 mW / -15.00 dBm Lane 0 Laser bias current : 6.618 mA Laser output power : 0.647 mW / -1.89 dBm Laser receiver power : 0.954 mW / -0.20 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Lane 1 Laser bias current : 6.576 mA Laser output power : 0.645 mW / -1.90 dBm Laser receiver power : 0.973 mW / -0.12 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Lane 2 Laser bias current : 6.254 mA Laser output power : 0.633 mW / -1.99 dBm Laser receiver power : 0.933 mW / -0.30 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off

	Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off Lane 3 Laser bias current : 6.776 mA Laser output power : 0.653 mW / -1.85 dBm Laser receiver power : 0.904 mW / -0.44 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser receiver power high alarm : Off Laser receiver power low alarm : Off Laser receiver power high warning : Off Laser receiver power low warning : Off Tx loss of signal functionality alarm : Off Rx loss of signal alarm : Off Tx laser disabled alarm : Off
Test Conclusion	After testing, the above QSFP-40G-SR4 transceiver on the Juniper QFX5200-32C 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 100-merter OM3 and 150-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	2026-02-02	Preliminary test report