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
Cisco	Nexus 9000 C92160YC-X Switch	07.59
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	 switch# show interface transceiver Ethernet1/1 transceiver is not present Ethernet1/2 transceiver is not present Ethernet1/3 transceiver is not present Ethernet1/4 transceiver is not present Ethernet1/5 transceiver is not present Ethernet1/6 transceiver is not present Ethernet1/7 transceiver is not present Ethernet1/8 transceiver is not present Ethernet1/9 transceiver is not present Ethernet1/10 transceiver is not present Ethernet1/11 transceiver is not present Ethernet1/12 transceiver is not present Ethernet1/13 transceiver is not present Ethernet1/14 transceiver is not present Ethernet1/15 transceiver is not present Ethernet1/16 transceiver is not present Ethernet1/17 transceiver is not present Ethernet1/18 transceiver is not present Ethernet1/19 transceiver is not present

	Ethernet1/20 transceiver is not present Ethernet1/21 transceiver is not present Ethernet1/22 transceiver is not present Ethernet1/23 transceiver is not present Ethernet1/24 transceiver is not present Ethernet1/25 transceiver is not present Ethernet1/26 transceiver is not present Ethernet1/27 transceiver is not present Ethernet1/28 transceiver is not present Ethernet1/29 transceiver is not present Ethernet1/30 transceiver is not present Ethernet1/31 transceiver is not present Ethernet1/32 transceiver is not present Ethernet1/33 transceiver is not present Ethernet1/34 transceiver is not present Ethernet1/35 transceiver is not present Ethernet1/36 transceiver is not present Ethernet1/37 transceiver is not present Ethernet1/38 transceiver is not present Ethernet1/39 transceiver is not present Ethernet1/40 transceiver is not present Ethernet1/41 transceiver is not present Ethernet1/42

transceiver is not present
Ethernet1/43
transceiver is not present
Ethernet1/44
transceiver is not present
Ethernet1/45
transceiver is not present
Ethernet1/46
transceiver is not present
Ethernet1/47
transceiver is not present
Ethernet1/48
transceiver is not present
Ethernet1/49
transceiver is not present
Ethernet1/50
transceiver is present
type is QSFP-100G-SR4
name is OPTCORE
part number is QSFP-100G-SR4
revision is 00
serial number is 25B4806923
nominal bitrate is 25500 MBit/sec per channel
Link length supported for 50/125um OM2 fiber is 30 m
Link length supported for 50/125um OM3 fiber is 100 m
cisco id is 17
cisco extended id number is 140 Ethernet1/51
transceiver is not present
Ethernet1/52
transceiver is present
type is QSFP-100G-SR4
name is OPTCORE
part number is QSFP-100G-SR4
revision is 00
serial number is 25B4806951
nominal bitrate is 25500 MBit/sec per channel
Link length supported for 50/125um OM2 fiber is 30 m
Link length supported for 50/125um OM3 fiber is 100 m
cisco id is 17
cisco extended id number is 140
Ethernet1/53
transceiver is not present
Ethernet1/54
transceiver is not present

Test Conclusion	The optical transceiver was successfully recognized by the Cisco Nexus9000 C92160YC-X chassis, with all identification information accurately displayed in the outputs.

4.2 Digital Diagnostic Monitoring

Test Data

```
switch# show interface transceiver details

Ethernet1/50
    transceiver is present
    type is QSFP-100G-SR4
    name is OPTCORE
    part number is QSFP-100G-SR4
    revision is 00
    serial number is 25B4806923
    nominal bitrate is 25500 MBit/sec per channel
    Link length supported for 50/125um OM2 fiber is 30 m
    Link length supported for 50/125um OM3 fiber is 100 m
    cisco id is 17
    cisco extended id number is 140

Lane Number:1 Network Lane
            SFP Detail Diagnostics Information (internal calibration)
  ----------------------------------------------------------------------------
                  Current              Alarms                  Warnings
                  Measurement      High          Low         High          Low
  ----------------------------------------------------------------------------
  Temperature     24.20 C          85.00 C       -10.00 C    70.00 C       0.00 C
  Voltage          3.27 V           3.59 V        2.90 V      3.50 V        3.09 V
  Current          7.00 mA         15.00 mA       1.00 mA    12.00 mA      2.00 mA
  Tx Power         0.38 dBm         3.99 dBm    -11.42 dBm     2.39 dBm    -8.41 dBm
  Rx Power        -0.59 dBm         3.99 dBm    -14.08 dBm     2.39 dBm    -11.02 dBm
  Transmit Fault Count = 0
  ----------------------------------------------------------------------------
  Note: ++    high-alarm; +    high-warning; --    low-alarm; -    low-warning

Lane Number:2 Network Lane
            SFP Detail Diagnostics Information (internal calibration)
  ----------------------------------------------------------------------------
                  Current              Alarms                  Warnings
                  Measurement      High          Low         High          Low
  ----------------------------------------------------------------------------
  Temperature     24.20 C          85.00 C       -10.00 C    70.00 C       0.00 C
  Voltage          3.27 V           3.59 V        2.90 V      3.50 V        3.09 V
  Current          6.99 mA         15.00 mA       1.00 mA    12.00 mA      2.00 mA
  Tx Power         0.53 dBm         3.99 dBm    -11.42 dBm     2.39 dBm    -8.41 dBm
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	Rx Power -0.38 dBm 3.99 dBm -14.08 dBm 2.39 dBm -11.02 dBm Transmit Fault Count = 0 ---------- Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning Lane Number:3 Network Lane SFP Detail Diagnostics Information (internal calibration) ---------- Current Alarms Warnings Measurement High Low High Low ---------- Temperature 24.20 C 85.00 C -10.00 C 70.00 C 0.00 C Voltage 3.27 V 3.59 V 2.90 V 3.50 V 3.09 V Current 6.98 mA 15.00 mA 1.00 mA 12.00 mA 2.00 mA Tx Power 0.67 dBm 3.99 dBm -11.42 dBm 2.39 dBm -8.41 dBm Rx Power -1.75 dBm 3.99 dBm -14.08 dBm 2.39 dBm -11.02 dBm Transmit Fault Count = 0 ---------- Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning Lane Number:4 Network Lane SFP Detail Diagnostics Information (internal calibration) ---------- Current Alarms Warnings Measurement High Low High Low ---------- Temperature 24.20 C 85.00 C -10.00 C 70.00 C 0.00 C Voltage 3.27 V 3.59 V 2.90 V 3.50 V 3.09 V Current 7.01 mA 15.00 mA 1.00 mA 12.00 mA 2.00 mA Tx Power 0.36 dBm 3.99 dBm -11.42 dBm 2.39 dBm -8.41 dBm Rx Power -0.74 dBm 3.99 dBm -14.08 dBm 2.39 dBm -11.02 dBm Transmit Fault Count = 0 ---------- Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning Ethernet1/52 transceiver is present type is QSFP-100G-SR4 name is OPTCORE part number is QSFP-100G-SR4 revision is 00 serial number is 25B4806951 nominal bitrate is 25500 MBit/sec per channel Link length supported for 50/125um OM2 fiber is 30 m Link length supported for 50/125um OM3 fiber is 100 m cisco id is 17

cisco extended id number is 140

Lane Number:1 Network Lane

SFP Detail Diagnostics Information (internal calibration)

	Current Measurement	Alarms High	Alarms Low	Warnings High	Warnings Low
Temperature	21.32 C	85.00 C	-10.00 C	70.00 C	0.00 C
Voltage	3.23 V	3.59 V	2.90 V	3.50 V	3.09 V
Current	6.31 mA	15.00 mA	1.00 mA	12.00 mA	2.00 mA
Tx Power	0.13 dBm	3.99 dBm	-11.42 dBm	2.39 dBm	-8.41 dBm
Rx Power	0.31 dBm	3.99 dBm	-14.08 dBm	2.39 dBm	-11.02 dBm

Transmit Fault Count = 0

Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning

Lane Number:2 Network Lane

SFP Detail Diagnostics Information (internal calibration)

	Current Measurement	Alarms High	Alarms Low	Warnings High	Warnings Low
Temperature	21.32 C	85.00 C	-10.00 C	70.00 C	0.00 C
Voltage	3.23 V	3.59 V	2.90 V	3.50 V	3.09 V
Current	6.30 mA	15.00 mA	1.00 mA	12.00 mA	2.00 mA
Tx Power	0.03 dBm	3.99 dBm	-11.42 dBm	2.39 dBm	-8.41 dBm
Rx Power	-0.15 dBm	3.99 dBm	-14.08 dBm	2.39 dBm	-11.02 dBm

Transmit Fault Count = 0

Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning

Lane Number:3 Network Lane

SFP Detail Diagnostics Information (internal calibration)

	Current Measurement	Alarms High	Alarms Low	Warnings High	Warnings Low
Temperature	21.32 C	85.00 C	-10.00 C	70.00 C	0.00 C
Voltage	3.23 V	3.59 V	2.90 V	3.50 V	3.09 V
Current	6.29 mA	15.00 mA	1.00 mA	12.00 mA	2.00 mA
Tx Power	-0.10 dBm	3.99 dBm	-11.42 dBm	2.39 dBm	-8.41 dBm
Rx Power	-0.31 dBm	3.99 dBm	-14.08 dBm	2.39 dBm	-11.02 dBm

Transmit Fault Count = 0

Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning

	Lane Number:4 Network Lane SFP Detail Diagnostics Information (internal calibration) ---------- Current Alarms Warnings Measurement High Low High Low ---------- Temperature 21.32 C 85.00 C -10.00 C 70.00 C 0.00 C Voltage 3.23 V 3.59 V 2.90 V 3.50 V 3.09 V Current 6.29 mA 15.00 mA 1.00 mA 12.00 mA 2.00 mA Tx Power -0.30 dBm 3.99 dBm -11.42 dBm 2.39 dBm -8.41 dBm Rx Power -0.46 dBm 3.99 dBm -14.08 dBm 2.39 dBm -11.02 dBm Transmit Fault Count = 0 ---------- Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning
Test Conclusion	After testing, the above transceiver on the Cisco Nexus9000 C92160YC-X chassis 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