OPTCORE

Transceiver Test Report

PN: OPB10G-2310DCR / OPB10G-3210DCR
(SFP-10G-BX10-U / SFP-10G-BX10-D)

Test by: Maddy | Date: 2025/12/30

I. Test Purpose

By building realistic switch use cases, we test whether the OPB10G-2310DCR (SFP-10G-BX10-U) & OPB10G-3210DCR (SFP-10G-BX10-D) 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

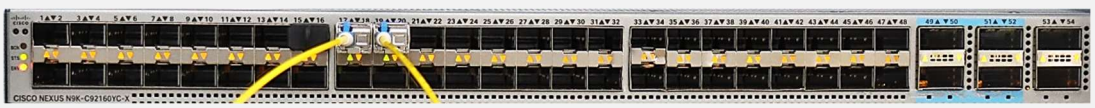
Vendor Name	Part Number	Serial Number	Description
OPTCORE	OPB10G-3210DCR	24H4401242	10G SFP+ BiDi 1330nm-TX/1270nm-RX 10km Transceiver
OPTCORE	OPB10G-2310DCR	24E4404945	10G SFP+ BiDi 1270nm-TX/1330nm-RX 10km Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Cisco	Nexus9000 C92160YC-X switch	07.59
OPTCORE	LC-LC-SM-S10KM	10km simplex LC single mode patch cable

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 present type is 10Gbase-LR name is OPTCORE part number is OPB10G-2310DCR revision is B serial number is 24E4404945 nominal bitrate is 10300 MBit/sec Link length supported for 9/125um fiber is 10 km cisco id is 3 cisco extended id number is 4 Ethernet1/18 transceiver is not present Ethernet1/19 transceiver is present type is 10Gbase-LR

	name is OPTCORE part number is OPB10G-3210DCR revision is B serial number is 24H4401242 nominal bitrate is 10300 MBit/sec Link length supported for 9/125um fiber is 10 km cisco id is 3 cisco extended id number is 4Ethernet1/20 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 not present Ethernet1/51 transceiver is not present Ethernet1/52 transceiver is not present 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
Ethernet1/17
transceiver is present
type is 10Gbase-LR
name is OPTCORE
part number is OPB10G-2310DCR
revision is B
serial number is 24E4404945
nominal bitrate is 10300 MBit/sec
Link length supported for 9/125um fiber is 10 km
cisco id is 3
cisco extended id number is 4
SFP Detail Diagnostics Information (internal calibration)

	Current	Alarms		Warnings	
	Measurement	High	Low	High	Low
Temperature	6.48 C	105.00 C	-45.00 C	100.00 C	-40.00 C
Voltage	3.28 V	3.70 V	2.90 V	3.59 V	3.00 V
Current	15.64 mA	100.00 mA	1.00 mA	90.00 mA	3.00 mA
Tx Power	-1.71 dBm	4.99 dBm	-7.01 dBm	3.99 dBm	-6.00 dBm
Rx Power	2.82 dBm	4.99 dBm	-20.00 dBm	2.99 dBm	-18.23 dBm

Transmit Fault Count = 0

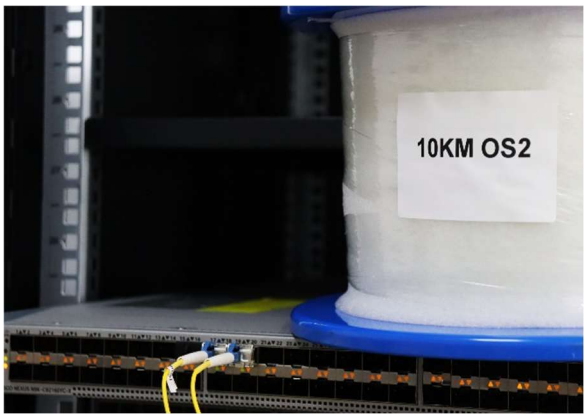
Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning

Ethernet1/19
transceiver is present
type is 10Gbase-LR
name is OPTCORE
part number is OPB10G-3210DCR
revision is B
serial number is 24H4401242
nominal bitrate is 10300 MBit/sec
Link length supported for 9/125um fiber is 10 km
cisco id is 3
cisco extended id number is 4
SFP Detail Diagnostics Information (internal calibration)

	Current	Alarms		Warnings	
	Measurement	High	Low	High	Low
Temperature	10.23 C	105.00 C	-45.00 C	100.00 C	-40.00 C

	Voltage 3.28 V 3.70 V 2.90 V 3.59 V 3.00 V Current 13.66 mA 100.00 mA 1.00 mA 90.00 mA 3.00 mA Tx Power 1.69 dBm 4.99 dBm -7.01 dBm 3.99 dBm -6.00 dBm Rx Power -0.40 dBm 4.99 dBm -20.00 dBm 2.99 dBm -18.23 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, OPB10G-2310DCR (SFP-10G-BX10-U) & OPB10G-3210DCR (SFP-10G-BX10-D) modules were connected using 10km single mode fiber (SMF) 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 10km single mode fiber link.

Appendix A. Document Revision

Version No	Date	Description
V1.0/EN	2025-12-30	Preliminary test report