

Transceiver Test Report

PN: QSFP-40G-SR4

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	24G2002163	40GBASE-SR4 QSFP+ 850nm 100m Transceiver
OPTCORE	QSFP-40G-SR4	24G2002164	40GBASE-SR4 QSFP+ 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-12OM3-100M-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



THQ-DISTRO-TA-MELSW016006:1#show interfaces gigabitEthernet

Command Execution Time: Fri Jan 30 03:29:26 2026 UTC

=====

Port Interface

=====

PORT NUM	INDEX	DESCRIPTION	LINK TRAP	PORT LOCK	PHYSICAL MTU	PHYSICAL ADDRESS	STATUS	ADMIN
OPERATE								

1/1	192	25GbNone	true	false	1950	20:9e:f7:8d:84:00	up	down
1/2	193	25GbNone	true	false	1950	20:9e:f7:8d:84:01	up	down
1/3	194	25GbNone	true	false	1950	20:9e:f7:8d:84:02	up	down
1/4	195	25GbNone	true	false	1950	20:9e:f7:8d:84:03	up	down
1/5	196	25GbNone	true	false	1950	20:9e:f7:8d:84:04	up	down
1/6	197	25GbNone	true	false	1950	20:9e:f7:8d:84:05	up	down
1/7	198	25GbNone	true	false	1950	20:9e:f7:8d:84:06	up	down
1/8	199	25GbNone	true	false	1950	20:9e:f7:8d:84:07	up	down
1/9	200	25GbNone	true	false	1950	20:9e:f7:8d:84:08	up	down
1/10	201	25GbNone	true	false	1950	20:9e:f7:8d:84:09	up	down
1/11	202	25GbNone	true	false	1950	20:9e:f7:8d:84:0a	up	down
1/12	203	25GbNone	true	false	1950	20:9e:f7:8d:84:0b	up	down
1/13	204	25GbNone	true	false	1950	20:9e:f7:8d:84:0c	up	down
1/14	205	25GbNone	true	false	1950	20:9e:f7:8d:84:0d	up	down
1/15	206	25GbNone	true	false	1950	20:9e:f7:8d:84:0e	up	down
1/16	207	25GbNone	true	false	1950	20:9e:f7:8d:84:0f	up	down
1/17	208	25GbNone	true	false	1950	20:9e:f7:8d:84:10	up	down
1/18	209	25GbNone	true	false	1950	20:9e:f7:8d:84:11	up	down
1/19	210	25GbNone	true	false	1950	20:9e:f7:8d:84:12	up	down
1/20	211	25GbNone	true	false	1950	20:9e:f7:8d:84:13	up	down
1/21	212	25GbNone	true	false	1950	20:9e:f7:8d:84:14	up	down
1/22	213	25GbNone	true	false	1950	20:9e:f7:8d:84:15	up	down
1/23	214	25GbNone	true	false	1950	20:9e:f7:8d:84:16	up	down

Test Data

	1/24	215	25GbNone	true	false	1950	20:9e:f7:8d:84:17	up	down
	1/25	216	25GbNone	true	false	1950	20:9e:f7:8d:84:18	up	down
	1/26	217	25GbNone	true	false	1950	20:9e:f7:8d:84:19	up	down
	1/27	218	25GbNone	true	false	1950	20:9e:f7:8d:84:1a	up	down
	1/28	219	25GbNone	true	false	1950	20:9e:f7:8d:84:1b	up	down
	1/29	220	25GbNone	true	false	1950	20:9e:f7:8d:84:1c	up	down
	1/30	221	25GbNone	true	false	1950	20:9e:f7:8d:84:1d	up	down
	1/31	222	25GbNone	true	false	1950	20:9e:f7:8d:84:1e	up	down
	1/32	223	25GbNone	true	false	1950	20:9e:f7:8d:84:1f	up	down
	1/33	224	25GbNone	true	false	1950	20:9e:f7:8d:84:20	up	down
	1/34	225	25GbNone	true	false	1950	20:9e:f7:8d:84:21	up	down
	1/35	226	25GbNone	true	false	1950	20:9e:f7:8d:84:22	up	down
	1/36	227	25GbNone	true	false	1950	20:9e:f7:8d:84:23	up	down
	1/37	228	25GbNone	true	false	1950	20:9e:f7:8d:84:24	up	down
	1/38	229	25GbNone	true	false	1950	20:9e:f7:8d:84:25	up	down
	1/39	230	25GbNone	true	false	1950	20:9e:f7:8d:84:26	up	down
	1/40	231	25GbNone	true	false	1950	20:9e:f7:8d:84:27	up	down
	1/41	232	25GbNone	true	false	1950	20:9e:f7:8d:84:28	up	down
	1/42	233	25GbNone	true	false	1950	20:9e:f7:8d:84:29	up	down
	1/43	234	25GbNone	true	false	1950	20:9e:f7:8d:84:2a	up	down
	1/44	235	25GbNone	true	false	1950	20:9e:f7:8d:84:2b	up	down
	1/45	236	25GbNone	true	false	1950	20:9e:f7:8d:84:2c	up	down
	1/46	237	25GbNone	true	false	1950	20:9e:f7:8d:84:2d	up	down
	1/47	238	25GbNone	true	false	1950	20:9e:f7:8d:84:2e	up	down
	1/48	239	25GbNone	true	false	1950	20:9e:f7:8d:84:2f	up	down
	1/49	256	40GbSR4	true	false	1950	20:9e:f7:8d:84:30	up	up
	1/50	257	100GbNone	true	false	1950	20:9e:f7:8d:84:31	up	down
	1/51	258	100GbNone	true	false	1950	20:9e:f7:8d:84:32	up	down
	1/52	259	100GbNone	true	false	1950	20:9e:f7:8d:84:33	up	down
	1/53	260	40GbSR4	true	false	1950	20:9e:f7:8d:84:34	up	up
	1/54	261	100GbNone	true	false	1950	20:9e:f7:8d:84:35	up	down
	1/s1	320	10GbInsight	true	false	1950	20:9e:f7:8d:84:38	down	down
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	<pre> THQ-DISTRO-TA-MELSW016006:1#show pluggable-optical-modules detail ***** Command Execution Time: Mon Feb 02 06:14:42 2026 UTC ***** ===== </pre>
-----------	---

```

=====
Pluggable Optical Module Info 1/49 Detail
=====
Port: 1/49
Type: 40GbSR4
DDM Supported : TRUE
Vendor Name   : OPTCORE           Partnumber : QSFP-40G-SR4
Vendor REV    : A1                Vendor SN   : 24G2002163
Vendor Date   : 07/09/24
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 LOW_WARN  ACTUAL  HIGH_WARN HIGH_ALARM THRESHOLD
          THRESHOLD THRESHOLD  VALUE   THRESHOLD THRESHOLD  STATUS
-----
Temp(C)      -10.0    0.0    18.6992  70.0    85.0    Normal
Voltage(V)    2.9000   3.1000   3.2720   3.5000   3.6000   Normal
Tx1Bias(mA)   1.0      2.0     6.3980   12.0     15.0     Normal
Tx2Bias(mA)   1.0      2.0     6.2920   12.0     15.0     Normal
Tx3Bias(mA)   1.0      2.0     6.1720   12.0     15.0     Normal
Tx4Bias(mA)   1.0      2.0     6.6000   12.0     15.0     Normal
Tx1Power(dBm) -10.6000  -7.6000  -2.0     2.4000   4.0     Normal
Tx2Power(dBm) -10.6000  -7.6000  -2.0     2.4000   4.0     Normal
Tx3Power(dBm) -10.6000  -7.6000  -2.1000  2.4000   4.0     Normal
Tx4Power(dBm) -10.6000  -7.6000  -1.9000  2.4000   4.0     Normal
Rx1Power(dBm) -18.0     -15.0    0.4000   2.4000   4.0     Normal
Rx2Power(dBm) -18.0     -15.0    0.4000   2.4000   4.0     Normal
Rx3Power(dBm) -18.0     -15.0    0.4000   2.4000   4.0     Normal
Rx4Power(dBm) -18.0     -15.0    0.3000   2.4000   4.0     Normal
=====
Pluggable Optical Module Info 1/53 Detail
=====

```

	<p>Port: 1/53 Type: 40GbSR4 DDM Supported : TRUE Vendor Name : OPTCORE Partnumber : QSFP-40G-SR4 Vendor REV : A1 Vendor SN : 24G2002164 Vendor Date : 07/09/24 Wavelength : 850.00 nm</p> <p>Digital Diagnostic Interface Supported</p> <p>Optics Status : Ok Calibration : Internal RX Power Measurement : Average Auxiliary 1 Monitoring : Not Implemented Auxiliary 2 Monitoring : Not Implemented</p>																																																																																																									
	<p>-----</p> <table border="1"> <thead> <tr> <th></th> <th>LOW_ALARM THRESHOLD</th> <th>LOW_WARN THRESHOLD</th> <th>ACTUAL VALUE</th> <th>HIGH_WARN THRESHOLD</th> <th>HIGH_ALARM THRESHOLD</th> <th>STATUS</th> </tr> </thead> <tbody> <tr> <td>Temp(C)</td> <td>-10.0</td> <td>0.0</td> <td>18.2968</td> <td>70.0</td> <td>85.0</td> <td>Normal</td> </tr> <tr> <td>Voltage(V)</td> <td>2.9000</td> <td>3.1000</td> <td>3.2740</td> <td>3.5000</td> <td>3.6000</td> <td>Normal</td> </tr> <tr> <td>Tx1Bias(mA)</td> <td>1.0</td> <td>2.0</td> <td>6.6040</td> <td>12.0</td> <td>15.0</td> <td>Normal</td> </tr> <tr> <td>Tx2Bias(mA)</td> <td>1.0</td> <td>2.0</td> <td>6.5760</td> <td>12.0</td> <td>15.0</td> <td>Normal</td> </tr> <tr> <td>Tx3Bias(mA)</td> <td>1.0</td> <td>2.0</td> <td>6.2540</td> <td>12.0</td> <td>15.0</td> <td>Normal</td> </tr> <tr> <td>Tx4Bias(mA)</td> <td>1.0</td> <td>2.0</td> <td>6.7680</td> <td>12.0</td> <td>15.0</td> <td>Normal</td> </tr> <tr> <td>Tx1Power(dBm)</td> <td>-10.6000</td> <td>-7.6000</td> <td>-1.9000</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Tx2Power(dBm)</td> <td>-10.6000</td> <td>-7.6000</td> <td>-2.0</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Tx3Power(dBm)</td> <td>-10.6000</td> <td>-7.6000</td> <td>-2.0</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Tx4Power(dBm)</td> <td>-10.6000</td> <td>-7.6000</td> <td>-1.9000</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Rx1Power(dBm)</td> <td>-18.0</td> <td>-15.0</td> <td>-0.2000</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Rx2Power(dBm)</td> <td>-18.0</td> <td>-15.0</td> <td>0.1000</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Rx3Power(dBm)</td> <td>-18.0</td> <td>-15.0</td> <td>-0.4000</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> <tr> <td>Rx4Power(dBm)</td> <td>-18.0</td> <td>-15.0</td> <td>-0.3000</td> <td>2.4000</td> <td>4.0</td> <td>Normal</td> </tr> </tbody> </table> <p>-----</p>		LOW_ALARM THRESHOLD	LOW_WARN THRESHOLD	ACTUAL VALUE	HIGH_WARN THRESHOLD	HIGH_ALARM THRESHOLD	STATUS	Temp(C)	-10.0	0.0	18.2968	70.0	85.0	Normal	Voltage(V)	2.9000	3.1000	3.2740	3.5000	3.6000	Normal	Tx1Bias(mA)	1.0	2.0	6.6040	12.0	15.0	Normal	Tx2Bias(mA)	1.0	2.0	6.5760	12.0	15.0	Normal	Tx3Bias(mA)	1.0	2.0	6.2540	12.0	15.0	Normal	Tx4Bias(mA)	1.0	2.0	6.7680	12.0	15.0	Normal	Tx1Power(dBm)	-10.6000	-7.6000	-1.9000	2.4000	4.0	Normal	Tx2Power(dBm)	-10.6000	-7.6000	-2.0	2.4000	4.0	Normal	Tx3Power(dBm)	-10.6000	-7.6000	-2.0	2.4000	4.0	Normal	Tx4Power(dBm)	-10.6000	-7.6000	-1.9000	2.4000	4.0	Normal	Rx1Power(dBm)	-18.0	-15.0	-0.2000	2.4000	4.0	Normal	Rx2Power(dBm)	-18.0	-15.0	0.1000	2.4000	4.0	Normal	Rx3Power(dBm)	-18.0	-15.0	-0.4000	2.4000	4.0	Normal	Rx4Power(dBm)	-18.0	-15.0	-0.3000	2.4000	4.0	Normal
	LOW_ALARM THRESHOLD	LOW_WARN THRESHOLD	ACTUAL VALUE	HIGH_WARN THRESHOLD	HIGH_ALARM THRESHOLD	STATUS																																																																																																				
Temp(C)	-10.0	0.0	18.2968	70.0	85.0	Normal																																																																																																				
Voltage(V)	2.9000	3.1000	3.2740	3.5000	3.6000	Normal																																																																																																				
Tx1Bias(mA)	1.0	2.0	6.6040	12.0	15.0	Normal																																																																																																				
Tx2Bias(mA)	1.0	2.0	6.5760	12.0	15.0	Normal																																																																																																				
Tx3Bias(mA)	1.0	2.0	6.2540	12.0	15.0	Normal																																																																																																				
Tx4Bias(mA)	1.0	2.0	6.7680	12.0	15.0	Normal																																																																																																				
Tx1Power(dBm)	-10.6000	-7.6000	-1.9000	2.4000	4.0	Normal																																																																																																				
Tx2Power(dBm)	-10.6000	-7.6000	-2.0	2.4000	4.0	Normal																																																																																																				
Tx3Power(dBm)	-10.6000	-7.6000	-2.0	2.4000	4.0	Normal																																																																																																				
Tx4Power(dBm)	-10.6000	-7.6000	-1.9000	2.4000	4.0	Normal																																																																																																				
Rx1Power(dBm)	-18.0	-15.0	-0.2000	2.4000	4.0	Normal																																																																																																				
Rx2Power(dBm)	-18.0	-15.0	0.1000	2.4000	4.0	Normal																																																																																																				
Rx3Power(dBm)	-18.0	-15.0	-0.4000	2.4000	4.0	Normal																																																																																																				
Rx4Power(dBm)	-18.0	-15.0	-0.3000	2.4000	4.0	Normal																																																																																																				
<p>Test Conclusion</p>	<p>After testing, the above QSFP-40G-SR4 transceiver on the Extreme VSP-7400-48Y-8C DDM is normally identified, the parameters do not exceed thresholds, and the transceiver operates normally.</p>																																																																																																									

4.3 Transmission Distance Test

<p>Test Conclusion</p>	<p>In this test, optical transceiver modules were connected using 100-meter 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</p>
------------------------	--

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

For more information, visit us on the web at www.optcore.net



V1.0/EN Copyright © 2026 Optcore Technology Co., Ltd. All rights reserved. Optcore, Optcore logo are registered trademarks of Optcore Technology Co., Ltd. All other brands, product names, or trademarks mentioned are the property of their respective owners. Specifications and product availability are subject to change without notice. Optcore assumes no responsibility for inaccuracies contained herein.

