OPTCORE

# AOC Cable Test Report

PN: SFP-25G-AOC1M

Test by: Maddy | Date: 2026/1/27

## I. Test Purpose

By building realistic switch use cases, we test whether the SFP-25G-AOC1M cable 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 cable is compatible with the target switch |
| Digital Diagnostic Monitoring | Pass | Check whether the DDM parameters have exceeded the threshold value |

## III. Test Environment

### 3.1 Test Sample

| Vendor Name | Part Number | Serial Number | Description |
|---|---|---|---|
| OPTCORE | SFP-25G-AOC1M | 2011184480 | 25G SFP28 Active Optical Cable |

### 3.2 Test Equipment Used

| Equipment Brand | Equipment Model | Software Version/Note |
|---|---|---|
| Mellanox | SN2410 | 3.10.4006 |

## IV. Test Data

### 4.1 Compatibility Test

Test Data

```
switch-3858d4 [standalone: master] # show interfaces status
------------------------------------------------------------------------------------------------------------------------
Port    Operational state    Admin      Speed      MTU       Description
------------------------------------------------------------------------------------------------------------------------
mgmt0   Down      Enabled   UNKNOWN    1500-
mgmt1   Down      Enabled   UNKNOWN    1500-
Eth1/1  Down      Enabled   Unknown    9216-
Eth1/2  Down      Enabled   Unknown    9216-
Eth1/3  Down      Enabled   Unknown    9216-
Eth1/4  Down      Enabled   Unknown    9216-
Eth1/5  Down      Enabled   Unknown    9216-
Eth1/6  Down      Enabled   Unknown    9216-
```

| | | | | | | |
|---|---|---|---|---|---|---|
| | Eth1/7 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/8 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/9 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/10 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/11 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/12 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/13 | Up | Enabled | 25G | 9216 | - |
| | Eth1/14 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/15 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/16 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/17 | Down | Enabled | Unknown | 9216 | -- |
| | Eth1/18 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/19 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/20 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/21 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/22 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/23 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/24 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/25 | Up | Enabled | 25G | 9216 | - |
| | Eth1/26 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/27 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/28 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/29 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/30 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/31 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/32 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/33 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/34 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/35 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/36 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/37 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/38 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/39 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/40 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/41 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/42 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/43 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/44 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/45 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/46 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/47 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/48 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/49/1 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/49/2 | Down | Enabled | Unknown | 9216 | - |
| | Eth1/49/3 | Down | Enabled | Unknown | 9216 | - |

| | |
|---|---|
| | Eth1/49/4 Down Enabled Unknown 9216-<br>Eth1/52 Down Enabled Unknown 9216-<br>Eth1/53 Down Enabled Unknown 9216-<br>Eth1/54 Down Enabled Unknown 9216-<br>Eth1/55 Down Enabled Unknown 9216-<br>Eth1/56 Down Enabled Unknown 9216 |
| Test Conclusion | The SFP28 AOC Cable was successfully recognized by the Mellanox SN2410, with all identification information accurately displayed in the outputs. |

### 4.2 Digital Diagnostic Monitoring

| | |
|---|---|
| Test Data | switch-3858d4 [standalone: master] # show interfaces ethernet 1/13 transceiver diagnostics<br><br>Port 1/13 transceiver diagnostic data:<br>Temperature (-127C to +127C):<br>Temperature : 16 C<br>Hi Temp Alarm Thresh : 80 C<br>Low Temp Alarm Thresh: -10 C<br>Temperature Alarm : None<br><br>Voltage (0 to 6.5535 V):<br>Voltage : 3.30600 V<br>Hi Volt Alarm Thresh : 3.63000 V<br>Low Volt Alarm Thresh: 2.97000 V<br>Voltage Alarm : None<br><br>Tx Bias Current (0 to 131 mA):<br>Ch1 Tx Current : NA<br>Hi Tx Crnt Alarm Thresh : NA<br>Low Tx Crnt Alarm Thresh: NA<br>Ch1 Tx Current Alarm : NA<br><br>Tx Power (0 mW to 6.5535 mW / 8.1647 dBm):<br>Ch1 Tx Power : 1.52210 mW / 1.82443 dBm<br>Hi Tx Power Alarm Thresh : 2.23870 mW / 3.49996 dBm<br>Low Tx Power Alarm Thresh: 0.12580 mW / -9.00319 dBm<br>Ch1 Tx Power Alarm : None<br><br>Rx Power (0 mW to 6.5535 mW / 8.1647 dBm):<br>Ch1 Rx Power : 1.75370 mW / 2.43955 dBm<br>Hi Rx Power Alarm Thresh : 2.23870 mW / 3.49996 dBm<br>Low Rx Power Alarm Thresh: 0.05010 mW / -13.00162 dBm<br>Ch1 Rx Power Alarm : None<br><br>Vendor Date Code (dd-mm-yyyy): 23-11-2020 |

| | |
|---|---|
| | switch-3858d4 [standalone: master] # show interfaces ethernet 1/25 transceiver diagnostics<br><br>Port 1/25 transceiver diagnostic data:<br>Temperature (-127C to +127C):<br>Temperature : 16 C<br>Hi Temp Alarm Thresh : 80 C<br>Low Temp Alarm Thresh: -10 C<br>Temperature Alarm : None<br><br>Voltage (0 to 6.5535 V):<br>Voltage : 3.31000 V<br>Hi Volt Alarm Thresh : 3.63000 V<br>Low Volt Alarm Thresh: 2.97000 V<br>Voltage Alarm : None<br><br>Tx Bias Current (0 to 131 mA):<br>Ch1 Tx Current : NA<br>Hi Tx Crnt Alarm Thresh : NA<br>Low Tx Crnt Alarm Thresh: NA<br>Ch1 Tx Current Alarm : NA<br><br>Tx Power (0 mW to 6.5535 mW / 8.1647 dBm):<br>Ch1 Tx Power : 1.53570 mW / 1.86306 dBm<br>Hi Tx Power Alarm Thresh : 2.23870 mW / 3.49996 dBm<br>Low Tx Power Alarm Thresh: 0.12580 mW / -9.00319 dBm<br>Ch1 Tx Power Alarm : None<br><br>Rx Power (0 mW to 6.5535 mW / 8.1647 dBm):<br>Ch1 Rx Power : 1.86650 mW / 2.71028 dBm<br>Hi Rx Power Alarm Thresh : 2.23870 mW / 3.49996 dBm<br>Low Rx Power Alarm Thresh: 0.05010 mW / -13.00162 dBm<br>Ch1 Rx Power Alarm : None<br><br>Vendor Date Code (dd-mm-yyyy): 23-11-2020 |
| Test Conclusion | After testing, the The SFP28 AOC Cable on the Mellanox SN2410 DDM is normally identified, the parameters do not exceed thresholds, and the cable operates normally. |

## Appendix A. Document Revision

| Version No | Date | Description |
|---|---|---|
| V1.0/EN | 2026-1-27 | Preliminary test report |

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