SFP-10G32-BX10

TEST REPORT (Cisco)

Content

1. Test Purpose 3

2. Test Result Summary 3

3. Test Equipment Used 3

4. Test Data 4

4.1 Test Scenario 4

4.2 Test Result 5

1.Test Purpose

By building test scenarios and simulating the customer's usage environment, we test whether the module performance meets the customer's requirements.

2.Test Result Summary

Table 2-1: Test Result Summary

Test Items	Test Result
Muti-Version	Pass
Connectivity	Pass
Module Basic Information	Pass
Digital Diagnostic Monitoring	Pass

3.Test Equipment Used

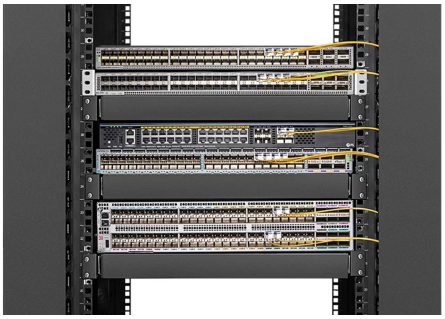
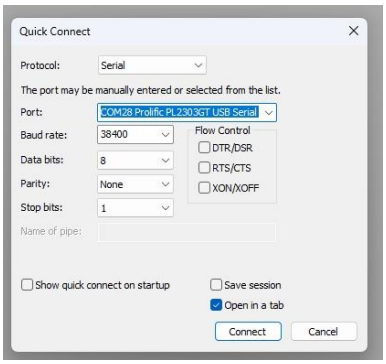
Table 3-1: Test Equipment Used

Vendor	Device	Soft Version/Compatible Brand	Serial Number
Cisco Switch	C9300X-12Y	17.12.03	/
FS Optical Transceiver Module	SFP-10G32-BX10	Cisco Compatible	Y2311282625 Y2311282879

4. Test Data

4.1 Test Scenario

Table 4-1: Test Scenario

Test Topology	Network topology: Interoperability test scenario : 
Test Premise	1. Confirm the brand, quantity and placement of the switches to be tested. 2. Prepare control cables, test software and optical fiber patch cords. Power on the switches in advance. 3. Locate the Console port on the switch, which is usually marked as "CON" on the switch, although some switches may display it as "IOIOI" or a computer monitor icon, etc. Use a control cable to connect the switch to the computer. 4. Before connecting the software, it is necessary to confirm the connection port of the control cable. Go to the computer device manager, click on the ports (COM and LPT) to view the ports. After confirming the ports, proceed with the next step.
Test Method	Click to open the SecureCRT Portable software and enter the quick connection interface. ① Protocol selection: Serial ② Port selection: The same as the port you viewed in the previous step ③ Baud rate selection: The same as the baud rate of the port on the target switch ④ Flow control: Do not check this option The remaining configurations can keep the default values. 

Test Steps	① Insert the module into the corresponding rate port of the switch, and connect the TX-RX ends with an optical fiber jumper or an MTP self-loop device. Observe whether the module is connected. If not connected, please check the jumper connection or the switch port configuration (login to the switch is required). ② Enter the test interface, input the account and password, log in to the switch and enter privileged mode. ③ According to the switch command configuration table, input the corresponding test command and view the relevant information: port status (connectivity), connection rate, alarm status, module basic information, DDM information, etc. Determine whether it meets the requirements.

4.2 Test Result

Table 4-2: Test Result

Test Information

1.Read the switch model name and software version, and read the status of all ports on the switch

```
Switch#show version
Cisco IOS XE Software, Version 17.12.03
Cisco IOS Software [Dublin], Catalyst L3 Switch Software (CAT9K_IOSXE), Version 17.12.3, RELEASE SOFTWARE (fc7)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2024 by Cisco Systems, Inc.
Compiled Wed 20-Mar-24 15:40 by mcpre
```

```
Switch#show interfaces status

Port      Name          Status       Vlan     Duplex  Speed Type
Twe1/0/1                connected    1          full    10G SFP-10G-BX-UI
Twe1/0/2                connected    1          full    10G SFP-10G-BX-UI
Twe1/0/3                err-disabled 1          full    25G unknown
Twe1/0/4                err-disabled 1          full    25G unknown
Twe1/0/5                notconnect   1          full    auto unknown
Twe1/0/6                notconnect   1          full    auto unknown
Twe1/0/7                notconnect   1          auto    auto unknown
Twe1/0/8                notconnect   1          auto    auto unknown
Twe1/0/9                notconnect   1          auto    auto unknown
Twe1/0/10               notconnect   routed     auto    auto unknown
Twe1/0/11               notconnect   1          auto    10G unknown
Twe1/0/12               notconnect   1          auto    10G unknown
Ap1/0/1                 connected    1          a-full  a-10G App-hosting port
Ap1/0/2                 connected    1          a-full  a-10G App-hosting port
```

Test Information	2.Read the module's basic information from the switch side Switch#show idprom interface twe1/0/1 detail General SFP Information ---------- Identifier : SFP/SFP+ Ext.Identifier : SFP function is defined by two-wire interface ID only Connector : LC connector Transceiver 10/40GE Comp code : Unknown SONET Comp code : Unknown GE Comp code : Unknown Link length : Unknown Technology : Unknown Media : Unknown Speed : Unknown Encoding : 64B/66B BR_Nominal : 10300 Mbps Length(9um)-km : 10 km Length(9um) : 10000 m Length(50um) : GBIC does not support 50 micron multi mode OM2 fibre Length(62.5um) : GBIC does not support 62.5 micron multi mode OM1 fibre Length(Copper) : GBIC does not support 50 micron multi mode OM4 fibre Vendor Name : FS Vendor Part Number : SFP-10G32-BX10 Vendor Revision : 0x20 0x20 0x20 0x20 Vendor Serial Number : Y2311282625 Wavelength : 1270.00 nm CC_BASE : 0x01 ---------- Extended ID Fields ---------- Options : 0x00 0x1A BR, max : 0x00 BR, min : 0x00 Date code : 231213 Diag monitoring : Implemented Internally calibrated : Yes Exeternally calibrated: No Rx.Power measurement : Avg.Power Address Change : Not Required CC_EXT : 0xDA ---------- Other Information ---------- Chk for link status : 00 Flow control Receive : ON Flow control Send : Off Administrative Speed : 10000 Administrative Duplex : full Operational Speed : 10000 Operational Duplex : full ----------

Test Information	Switch#show idprom interface twe1/0/2 detail General SFP Information ---------- Identifier : SFP/SFP+ Ext.Identifier : SFP function is defined by two-wire interface ID only Connector : LC connector Transceiver 10/40GE Comp code : Unknown SONET Comp code : Unknown GE Comp code : Unknown Link length : Unknown Technology : Unknown Media : Unknown Speed : Unknown Encoding : 64B/66B BR_Nominal : 10300 Mbps Length(9um)-km : 10 km Length(9um) : 10000 m Length(50um) : GBIC does not support 50 micron multi mode OM2 fibre Length(62.5um) : GBIC does not support 62.5 micron multi mode OM1 fibre Length(Copper) : GBIC does not support 50 micron multi mode OM4 fibre Vendor Name : FS Vendor Part Number : SFP-10G32-BX10 Vendor Revision : 0x20 0x20 0x20 0x20 Vendor Serial Number : Y2311282879 Wavelength : 1270.00 nm CC_BASE : 0x01 ---------- Extended ID Fields ---------- Options : 0x00 0x1A BR, max : 0x00 BR, min : 0x00 Date code : 231213 Diag monitoring : Implemented Internally calibrated : Yes Exeternally calibrated: No Rx.Power measurement : Avg.Power Address Change : Not Required CC_EXT : 0xE5 ---------- Other Information ---------- Chk for link status : 00 Flow control Receive : ON Flow control Send : Off Administrative Speed : 10000 Administrative Duplex : full Operational Speed : 10000 Operational Duplex : full ----------

Test Information

3. Read the DDM information of the module

```
Switch#show interfaces twe1/0/1 transceiver detail
ITU Channel not available (Wavelength not available),
Transceiver is internally calibrated.
mA: milliamperes, dBm: decibels (milliwatts), NA or N/A: not applicable.
++ : high alarm, +  : high warning, -  : low warning, -- : low alarm.
A2D readouts (if they differ), are reported in parentheses.
The threshold values are calibrated.

                          High Alarm  High Warn  Low Warn   Low Alarm
          Temperature       Threshold   Threshold  Threshold  Threshold
Port        (Celsius)        (Celsius)   (Celsius)  (Celsius)  (Celsius)
---------   ----------------- ---------- --------- --------- ---------
Twe1/0/1    37.1                88.0       85.0      -40.0     -43.0

                          High Alarm  High Warn  Low Warn   Low Alarm
          Voltage           Threshold   Threshold  Threshold  Threshold
Port        (Volts)          (Volts)     (Volts)    (Volts)    (Volts)
---------   ----------------- ---------- --------- --------- ---------
Twe1/0/1    3.26                3.63       3.46       3.13       2.97

                           High Alarm  High Warn  Low Warn   Low Alarm
            Current          Threshold   Threshold  Threshold  Threshold
Port      Lane  (milliamperes)  (mA)       (mA)       (mA)       (mA)
--------- ---- --------------- ---------- --------- --------- ---------
Twe1/0/1   N/A   42.9              90.0       85.0       15.0       10.0

            Optical          High Alarm  High Warn  Low Warn   Low Alarm
            Transmit Power   Threshold   Threshold  Threshold  Threshold
Port      Lane  (dBm)           (dBm)      (dBm)      (dBm)      (dBm)
--------- ---- --------------- ---------- --------- --------- ---------
Twe1/0/1   N/A   -1.6              2.0        0.5       -8.5      -10.0

            Optical          High Alarm  High Warn  Low Warn   Low Alarm
            Receive Power    Threshold   Threshold  Threshold  Threshold
Port      Lane  (dBm)           (dBm)      (dBm)      (dBm)      (dBm)
--------- ---- --------------- ---------- --------- --------- ---------
Twe1/0/1   N/A   -1.5              2.5        0.5       -14.1     -16.5
```

```
Switch#show interfaces twe1/0/2 transceiver detail
ITU Channel not available (Wavelength not available),
Transceiver is internally calibrated.
mA: milliamperes, dBm: decibels (milliwatts), NA or N/A: not applicable.
++ : high alarm, +  : high warning, -  : low warning, -- : low alarm.
A2D readouts (if they differ), are reported in parentheses.
The threshold values are calibrated.

                          High Alarm  High Warn  Low Warn   Low Alarm
          Temperature       Threshold   Threshold  Threshold  Threshold
Port        (Celsius)        (Celsius)   (Celsius)  (Celsius)  (Celsius)
---------   ----------------- ---------- --------- --------- ---------
Twe1/0/2    36.7                88.0       85.0      -40.0     -43.0

                          High Alarm  High Warn  Low Warn   Low Alarm
          Voltage           Threshold   Threshold  Threshold  Threshold
Port        (Volts)          (Volts)     (Volts)    (Volts)    (Volts)
---------   ----------------- ---------- --------- --------- ---------
Twe1/0/2    3.25                3.63       3.46       3.13       2.97

                           High Alarm  High Warn  Low Warn   Low Alarm
            Current          Threshold   Threshold  Threshold  Threshold
Port      Lane  (milliamperes)  (mA)       (mA)       (mA)       (mA)
--------- ---- --------------- ---------- --------- --------- ---------
Twe1/0/2   N/A   37.4              90.0       85.0       15.0       10.0

            Optical          High Alarm  High Warn  Low Warn   Low Alarm
            Transmit Power   Threshold   Threshold  Threshold  Threshold
Port      Lane  (dBm)           (dBm)      (dBm)      (dBm)      (dBm)
--------- ---- --------------- ---------- --------- --------- ---------
Twe1/0/2   N/A   -1.8              2.0        0.5       -8.5      -10.0

            Optical          High Alarm  High Warn  Low Warn   Low Alarm
            Receive Power    Threshold   Threshold  Threshold  Threshold
Port      Lane  (dBm)           (dBm)      (dBm)      (dBm)      (dBm)
--------- ---- --------------- ---------- --------- --------- ---------
Twe1/0/2   N/A   -1.2              2.5        0.5       -14.1     -16.5
```

Test Conclusion

After completing the above test content, all the test information should be copied and pasted into a TXT document.

Remarks