SFP-10G-T-100

TEST REPORT (Cisco)

Content

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

3. Test Equipment Used

Table 3-1: Test Equipment Used
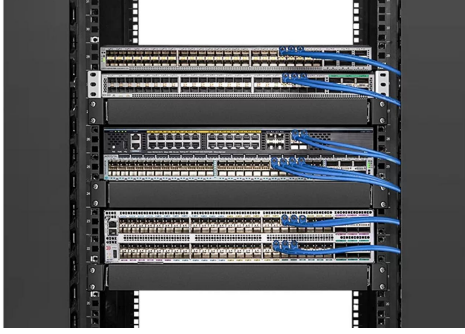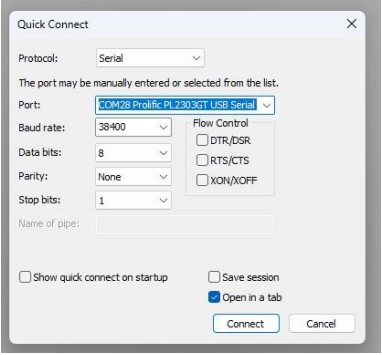
Vendor	Device	Soft Version/Compatible Brand	Serial Number
Cisco Switch	C1000-24T-4X-L	15.2(7)E4	/
Intel Network Interface Card (NIC)	Intel X710-DA2	9.50 0x8000f167	/
FS Optical Transceiver Module	SFP-10G-T-100	Cisco Compatible	CS220427053 CS220427054
FS Server	RS7260	/	/

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, 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 Software, C1000 Software (C1000-UNIVERSALK9-M), Version 15.2(7)E4, RELEASE SOFTWARE (fc2)
	Technical Support: http://www.cisco.com/techsupport
	Copyright (c) 1986-2021 by Cisco Systems, Inc.
	Compiled Mon 08-Mar-21 09:07 by prod_rel_team
	
	Switch#show interface status
	
	<pre>Port Name Status Vlan Duplex Speed Type
	Gi1/0/1 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/2 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/3 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/4 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/5 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/6 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/7 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/8 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/9 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/10 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/11 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/12 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/13 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/14 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/15 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/16 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/17 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/18 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/19 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/20 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/21 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/22 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/23 notconnect 1 auto auto 10/100/1000BaseTX
	Gi1/0/24 notconnect 1 auto auto 10/100/1000BaseTX
	Te1/0/1 err-disabled 1 full 10G Not Present
	Te1/0/2 err-disabled 1 full 10G Not Present
	Te1/0/3 connected 1 full 10G SFP-10GBase-SR
	Te1/0/4 connected 1 full 10G SFP-10GBase-SR</pre>

Test Information	2. Verify the NIC port status
	
	[root@RS5220 ~]# ethtool ens4f0
	Settings for ens4f0:
	    Supported ports: [FIBRE]
	    Supported link modes: 10000baseT/Full
	    Supported pause frame use: Symmetric Receive-only
	    Supports auto-negotiation: No
	    Supported FEC modes: Not reported
	    Advertised link modes: 10000baseT/Full
	    Advertised pause frame use: No
	    Advertised auto-negotiation: No
	    Advertised FEC modes: Not reported
	    Speed: 10000Mb/s
	    Duplex: Full
	    Auto-negotiation: off
	    Port: Direct Attach Copper
	    PHYAD: 0
	    Transceiver: internal
	    Supports Wake-on: d
	    Wake-on: d
	    Current message level: 0x00000007 (7)
	               drv probe link
	    Link detected: yes
	[root@RS5220 ~]# ethtool ens4f1
	Settings for ens4f1:
	    Supported ports: [FIBRE]
	    Supported link modes: 10000baseT/Full
	    Supported pause frame use: Symmetric Receive-only
	    Supports auto-negotiation: No
	    Supported FEC modes: Not reported
	    Advertised link modes: 10000baseT/Full
	    Advertised pause frame use: No
	    Advertised auto-negotiation: No
	    Advertised FEC modes: Not reported
	    Speed: 10000Mb/s
	    Duplex: Full
	    Auto-negotiation: off
	    Port: Direct Attach Copper
	    PHYAD: 0
	    Transceiver: internal
	    Supports Wake-on: d
	    Wake-on: d
	    Current message level: 0x00000007 (7)
	               drv probe link
	    Link detected: yes

Test Information

3. Read the module's basic information from the switch side

SFP+ Transceiver Module Serial EEPROM Contents:
Common block:
 Identifier   : SFP
 Connector   : LC connector [0x07]
 Transceiver
  Type   : SFP-10GBase-SR
  Speed   : [0x00]
  Media   : Multi-mode, 50u (M5), 62.5u (M6) [0x0C]
  Technology   : [0x00]
  Link Length   : Short Distance (S) [0x40]
 Encoding   : serial encoding algorithm 10GE, 64B/66B [0x06]
 BR, Nominal   : 103x100 MHz [0x67]
 Rate Identifier   : [0x00]

 Length(9u)   :
 Length(50u)   : [0x0A]
 Length(62.5u)   : [0x04]
 Length(OM3)   : [0x00]
 Vendor Name   : FS
 Vendor OUI   : Unspecified
 Vendor PN   : SFP-10G-T
 Vendor rev   :
 CC_BASE   : 0x32

Extended ID Fields
 Options   :
     Class : Limiting Class [0x00]
     More Options : 10GE - TX_DISABLE, TX_FAULT and LOS [0x1A]
 BR, max   : 10%
 BR, min   : 88%
 Vendor SN   : C S 2 2 0 4 2 7 0 5 4
 Date code   : 220427
 DOM Type   : [0x00]
 CC_EXT   : 0xE0

Vendor Specific ID Fields:

 0x00: 00 00 08 33 4B 99 70 47 A2 10 4B AA 99 7A 61 D5
 0x10: 5F AF E1 00 00 00 00 00 00 00 00 00 D9 E7 33 5D

Test Information

SFP+ Transceiver Module Serial EEPROM Contents:
Common block:
 Identifier   : SFP
 Connector   : LC connector [0x07]
 Transceiver
  Type   : SFP-10GBase-SR
  Speed   : [0x00]
  Media   : Multi-mode, 50u (M5), 62.5u (M6) [0x0C]
  Technology   : [0x00]
  Link Length   : Short Distance (S) [0x40]
 Encoding   : serial encoding algorithm 10GE, 64B/66B [0x06]
 BR, Nominal   : 103x100 MHz [0x67]
 Rate Identifier : [0x00]

 Length(9u)   :
 Length(50u)   : [0x0A]
 Length(62.5u)   : [0x04]
 Length(OM3)   : [0x00]
 Vendor Name   : FS
 Vendor OUI   : Unspecified
 Vendor PN   : SFP-10G-T
 Vendor rev   :
 CC_BASE   : 0x32

Extended ID Fields
 Options   :
    Class : Limiting Class [0x00]
    More Options : 10GE - TX_DISABLE, TX_FAULT and LOS [0x1A]
 BR, max   : 10%
 BR, min   : 88%
 Vendor SN   : C S 2 2 0 4 2 7 0 5 3
 Date code   : 220427
 DOM Type   : [0x00]
 CC_EXT   : 0xDF

Vendor Specific ID Fields:

 0x00: 00 00 08 92 83 0C AF 3F EE 1C FA A2 E8 BD B2 CC
 0x10: 66 98 4E 00 00 00 00 00 00 00 00 00 D0 F9 5D B7

Test Information	4. Read the module's basic information from the NIC side
	
	``
	[root@RS5220 fs]# ethtool -m ens4f0
	        Identifier : 0x03 (SFP)
	        Extended identifier : 0x04 (GBIC/SFP defined by 2-wire interface ID)
	        Connector : 0x22 (RJ45)
	        Transceiver codes : 0x00 0x00 0x00 0x00 0x00 0x04 0x00 0x00 0x00
	        Transceiver type : Passive Cable
	        Encoding : 0x06 (64B/66B)
	        BR, Nominal : 10300MBd
	        Rate identifier : 0x02 (8/4/2G Rx Rate_Select only)
	        Length (SMF,km) : 0km
	        Length (SMF) : 0m
	        Length (50um) : 0m
	        Length (62.5um) : 0m
	        Length (Copper) : 100m
	        Length (OM3) : 0m
	        Passive Cu cmplnce. : 0x00 (unspecified) [SFF-8472 rev10.4 only]
	        Vendor name : FS
	        Vendor OUI : 00:1b:21
	        Vendor PN : SFP-10G-T-100
	        Vendor rev : A
	        Option values : 0x00 0x3a
	        Option : RX_LOS implemented
	        Option : TX_FAULT implemented
	        Option : TX_DISABLE implemented
	        Option : RATE_SELECT implemented
	        BR margin, max : 0%
	        BR margin, min : 0%
	        Vendor SN : 2407180062
	        Date code : 240716
	``

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