SFP-10G-T-30

TEST REPORT (Juniper)

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

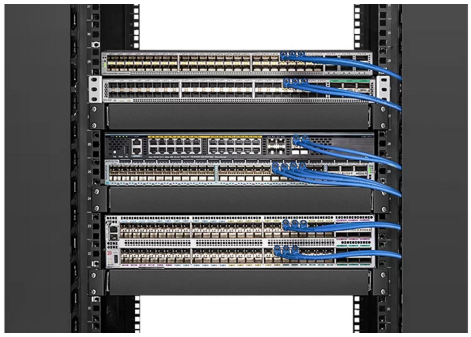
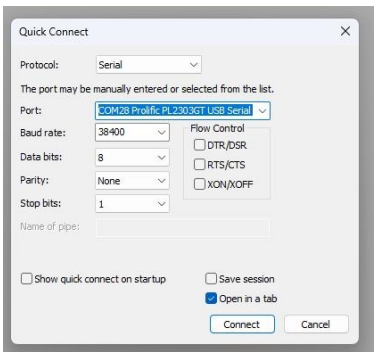
Table 3-1: Test Equipment Used

Vendor	Device	Soft Version/Compatible Brand	Serial Number
Juniper Switch	SRX380-POE-AC	20.2R3.9	/
Intel Network Interface Card (NIC)	IntelXXV710-DA2	9.500x8000f177	/
FS Optical Transceiver Module	SFP-10G-T-30	Juniper Compatible	A2408280023 A2408280022
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 root> show version Model: srx380-poe-ac Junos: 20.2R3.9 JUNOS Software Release [20.2R3.9] root> show chassis hardware Hardware inventory: Item Version Part number Serial number Description Chassis EW3721AN0001 SRX380-POE-AC Routing Engine REV 06 650-097090 EW3721AN0001 RE-SRX380-POE-AC FPC 0 FPC PIC 0 16xGE,4*SFP+ Base PIC Xcvr 16 REV 01 740-083295 A2408280023 10GBASE-T Xcvr 17 REV 01 740-083295 A2408280022 10GBASE-T Xcvr 18 REV 01 740-031980 A2407030571 SFP+-10G-SR Xcvr 19 REV 01 740-031980 A2407030572 SFP+-10G-SR Power Supply 0 REV 04 640-060602 1EDXB270DVK JPSU-600W-AC-AFO

Test Information	2. Verify the NIC port status [root@RS5220 ~]# ethtool enp134s0f0 Settings for enp134s0f0: 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 enp134s0f1 Settings for enp134s0f1: 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

```
root> show interfaces diagnostics optics
Physical interface: xe-0/0/18
    Laser bias current                  :  6.016 mA
    Laser output power                  :  0.3800 mW / -4.20 dBm
    Module temperature                  :  49 degrees C / 120 degrees F
    Module voltage                      :  3.2500 V
    Laser receiver power                :  0.5108 mW / -2.92 dBm
    Laser bias current high alarm       :  Off
    Laser bias current low alarm        :  Off
    Laser bias current high warning     :  Off
    Laser bias current low warning      :  Off
    Laser output power high alarm       :  Off
    Laser output power low alarm        :  Off
    Laser output power high warning     :  Off
    Laser output power low warning      :  Off
    Module temperature high alarm       :  Off
    Module temperature low alarm        :  Off
    Module temperature high warning     :  Off
    Module temperature low warning      :  Off
    Module voltage high alarm           :  Off
    Module voltage low alarm            :  Off
    Module voltage high warning         :  Off
    Module voltage low warning          :  Off
    Laser rx power high alarm           :  Off
    Laser rx power low alarm            :  Off
    Laser rx power high warning         :  Off
    Laser rx power low warning          :  Off
    Laser bias current high alarm threshold  :  25.000 mA
    Laser bias current low alarm threshold   :  1.000 mA
    Laser bias current high warning threshold :  20.000 mA
    Laser bias current low warning threshold  :  1.200 mA
    Laser output power high alarm threshold  :  1.5840 mW / 2.00 dBm
    Laser output power low alarm threshold   :  0.1120 mW / -9.51 dBm
    Laser output power high warning threshold :  1.0000 mW / 0.00 dBm
    Laser output power low warning threshold  :  0.1770 mW / -7.52 dBm
    Module temperature high alarm threshold  :  125 degrees C / 257 degrees F
    Module temperature low alarm threshold   :  -50 degrees C / -58 degrees F
    Module temperature high warning threshold :  100 degrees C / 212 degrees F
    Module temperature low warning threshold  :  -45 degrees C / -49 degrees F
    Module voltage high alarm threshold      :  3.600 V
    Module voltage low alarm threshold       :  2.900 V
    Module voltage high warning threshold    :  3.500 V
    Module voltage low warning threshold     :  3.000 V
    Laser rx power high alarm threshold      :  1.5849 mW / 2.00 dBm
    Laser rx power low alarm threshold       :  0.0316 mW / -15.00 dBm
    Laser rx power high warning threshold    :  1.0000 mW / 0.00 dBm
    Laser rx power low warning threshold     :  0.0501 mW / -13.00 dBm
```

Test Information	Physical interface: xe-0/0/19 Laser bias current : 6.016 mA Laser output power : 0.3800 mW / -4.20 dBm Module temperature : 42 degrees C / 108 degrees F Module voltage : 3.2500 V Laser receiver power : 0.5108 mW / -2.92 dBm Laser bias current high alarm : Off Laser bias current low alarm : Off Laser bias current high warning : Off Laser bias current low warning : Off Laser output power high alarm : Off Laser output power low alarm : Off Laser output power high warning : Off Laser output power low warning : Off Module temperature high alarm : Off Module temperature low alarm : Off Module temperature high warning : Off Module temperature low warning : Off Module voltage high alarm : Off Module voltage low alarm : Off Module voltage high warning : Off Module voltage low warning : Off Laser rx power high alarm : Off Laser rx power low alarm : Off Laser rx power high warning : Off Laser rx power low warning : Off Laser bias current high alarm threshold : 25.000 mA Laser bias current low alarm threshold : 1.000 mA Laser bias current high warning threshold : 20.000 mA Laser bias current low warning threshold : 1.200 mA Laser output power high alarm threshold : 1.5840 mW / 2.00 dBm Laser output power low alarm threshold : 0.1120 mW / -9.51 dBm Laser output power high warning threshold : 1.0000 mW / 0.00 dBm Laser output power low warning threshold : 0.1770 mW / -7.52 dBm Module temperature high alarm threshold : 125 degrees C / 257 degrees F Module temperature low alarm threshold : -50 degrees C / -58 degrees F Module temperature high warning threshold : 100 degrees C / 212 degrees F Module temperature low warning threshold : -45 degrees C / -49 degrees F Module voltage high alarm threshold : 3.600 V Module voltage low alarm threshold : 2.900 V Module voltage high warning threshold : 3.500 V Module voltage low warning threshold : 3.000 V Laser rx power high alarm threshold : 1.5849 mW / 2.00 dBm Laser rx power low alarm threshold : 0.0316 mW / -15.00 dBm Laser rx power high warning threshold : 1.0000 mW / 0.00 dBm Laser rx power low warning threshold : 0.0501 mW / -13.00 dBm

Test Information	4. Read the module's basic information from the NIC side [root@RS5220 ~]# ethtool -m enp134s0f1 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) : 30m 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-30 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 : A2407030456 Date code : 240712 [root@RS5220 ~]# ethtool -m enp134s0f0 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) : 30m 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-30 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 : A2407030457 Date code : 240712 [root@RS5220 ~]#
Test Conclusion	After completing the above test content, all the test information should be copied and pasted into a TXT document.
Remarks	