SFP1G-SX-85

TEST REPORT (Juniper)

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1. Test Purpose

By building test scenarios and simulating the customer's usage environment, we test whether the module's 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
Digital Diagnostic Monitoring	Pass

3. Test Equipment Used

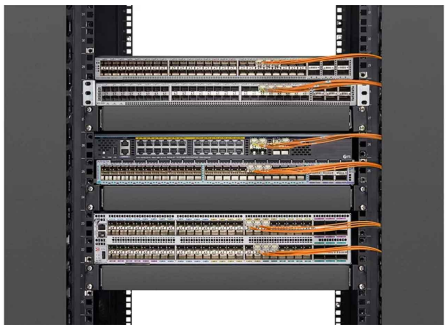
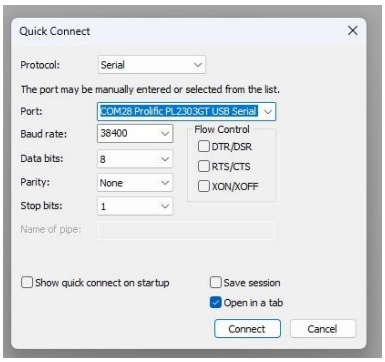
Table 3-1: Test Equipment Used

Vendor	Device	Soft Version/Compatible Brand	Serial Number
Juniper Switch	SRX380-POE-AC	20.2R3.9	/
Intel Network Interface Card (NIC)	Intel X710-DA2	/	/
FS Optical Transceiver Module	SFP1G-SX-85	Juniper Compatible	A1911001976 A1911001977
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 optical 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. ③According 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

<table>
<tr><td>Test Information</td><td>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 pic fpc-slot 0 pic-slot 0
FPC slot 0, PIC slot 0 information:
Type 16xGE,4*SFP+ Base PIC
State Online
PIC version 1.6
Uptime 2 minutes, 55 seconds

PIC port information:
Fiber Xcvr vendor Wave- Xcvr JNPR
Port Cable type type Xcvr vendor part number length Firmware Rev
16 GIGE 1000SX MM FS SFP1G-SX-85 850 nm 0.0 REV 01
17 GIGE 1000SX MM FS SFP1G-SX-85 850 nm 0.0 REV 01</td></tr>
</table>

Test Information	2. Verify the NIC port status [FS@localhost ~]$ ethtool enp1s0f0 Settings for enp1s0f0: Supported ports: [FIBRE] Supported link modes: 1000baseX/Full Supported pause frame use: Symmetric Receive-only Supports auto-negotiation: Yes Supported FEC modes: Not reported Advertised link modes: 1000baseX/Full Advertised pause frame use: No Advertised auto-negotiation: Yes Advertised FEC modes: Not reported Speed: 1000Mb/s Duplex: Full Auto-negotiation: on Port: FIBRE PHYAD: 0 Transceiver: internal netlink error: Operation not permitted Current message level: 0x00000007 (7) drv probe link Link detected: yes [FS@localhost ~]$ ethtool enp1s0f1 Settings for enp1s0f1: Supported ports: [FIBRE] Supported link modes: 1000baseX/Full Supported pause frame use: Symmetric Receive-only Supports auto-negotiation: Yes Supported FEC modes: Not reported Advertised link modes: 1000baseX/Full Advertised pause frame use: No Advertised auto-negotiation: Yes Advertised FEC modes: Not reported Speed: 1000Mb/s Duplex: Full Auto-negotiation: on Port: FIBRE PHYAD: 0 Transceiver: internal netlink error: Operation not permitted Current message level: 0x00000007 (7) drv probe link Link detected: yes

Test Information	3. Read the DDM information of the module root> show interfaces diagnostics optics Physical interface: xe-0/0/16 Laser bias current : 5.512 mA Laser output power : 0.2660 mW / -5.75 dBm Module temperature : 33 degrees C / 91 degrees F Module voltage : 3.3230 V Laser receiver power : 0.2624 mW / -5.81 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 : 15.000 mA Laser bias current low alarm threshold : 1.000 mA Laser bias current high warning threshold : 12.000 mA Laser bias current low warning threshold : 2.000 mA Laser output power high alarm threshold : 0.6310 mW / -2.00 dBm Laser output power low alarm threshold : 0.0890 mW / -10.51 dBm Laser output power high warning threshold : 0.5010 mW / -3.00 dBm Laser output power low warning threshold : 0.1120 mW / -9.51 dBm Module temperature high alarm threshold : 75 degrees C / 167 degrees F Module temperature low alarm threshold : -5 degrees C / 23 degrees F Module temperature high warning threshold : 70 degrees C / 158 degrees F Module temperature low warning threshold : 0 degrees C / 32 degrees F Module voltage high alarm threshold : 3.630 V Module voltage low alarm threshold : 2.970 V Module voltage high warning threshold : 3.465 V Module voltage low warning threshold : 3.135 V Laser rx power high alarm threshold : 1.0000 mW / 0.00 dBm Laser rx power low alarm threshold : 0.0100 mW / -20.00 dBm Laser rx power high warning threshold : 0.7943 mW / -1.00 dBm Laser rx power low warning threshold : 0.0126 mW / -19.00 dBm Physical interface: xe-0/0/17 Laser bias current : 4.664 mA Laser output power : 0.2570 mW / -5.90 dBm Module temperature : 31 degrees C / 88 degrees F Module voltage : 3.3110 V Laser receiver power : 0.2947 mW / -5.31 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 : 15.000 mA Laser bias current low alarm threshold : 1.000 mA Laser bias current high warning threshold : 12.000 mA Laser bias current low warning threshold : 2.000 mA Laser output power high alarm threshold : 0.6310 mW / -2.00 dBm Laser output power low alarm threshold : 0.0890 mW / -10.51 dBm Laser output power high warning threshold : 0.5010 mW / -3.00 dBm Laser output power low warning threshold : 0.1120 mW / -9.51 dBm Module temperature high alarm threshold : 75 degrees C / 167 degrees F Module temperature low alarm threshold : -5 degrees C / 23 degrees F Module temperature high warning threshold : 70 degrees C / 158 degrees F Module temperature low warning threshold : 0 degrees C / 32 degrees F Module voltage high alarm threshold : 3.630 V Module voltage low alarm threshold : 2.970 V Module voltage high warning threshold : 3.465 V Module voltage low warning threshold : 3.135 V Laser rx power high alarm threshold : 1.0000 mW / 0.00 dBm Laser rx power low alarm threshold : 0.0100 mW / -20.00 dBm Laser rx power high warning threshold : 0.7943 mW / -1.00 dBm Laser rx power low warning threshold : 0.0126 mW / -19.00 dBm
Test Conclusion	After completing the above test content, all the test information should be copied and pasted into a TXT document.
Remarks	