



QSFP-PSM4-100G

**OPTICAL TRANSCEIVER
MODULE**

Scenario Application 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 Results Summary

Table 2: Test Results

Items	Test Data	Remarks
Multi-Version	Pass	/
Connectivity	Pass	/
Module Basic Information	Pass	/
Digital Diagnostic Monitoring	Pass	/

3. Test Environment

3.1 Test Equipment Used

Table 3-1: Test Equipment Used

Vendor	Device	Soft Version
Juniper Switch	QFX10002-72Q	21.4R3-S2.3
NVIDIA NICs	MCX755106AS-HEAT	28.43.1014
DELL Server	PowerEdge R860	/

3.2 Test Sample

Table 3-2: Test Sample

Product ID	P/N	Serial Number
#71643	QSFP-PSM4-100G	A1930008041 A1930009037 A1930009036

4. Test Data

Table 4: Scenario Application Testing

Test Topology	
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.

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

```
root>
(master:0)
root> show version
Model: qfx10002-72q
Junos: 21.4R3-S2.3
JUNOS OS Kernel 64-bit [20221028.898be19_builder_stable_12_214]
JUNOS OS libs [20221028.898be19_builder_stable_12_214]
JUNOS OS runtime [20221028.898be19_builder_stable_12_214]
JUNOS OS time zone information [20221028.898be19_builder_stable_12_214]
JUNOS OS libs compat32 [20221028.898be19_builder_stable_12_214]
JUNOS OS 32-bit compatibility [20221028.898be19_builder_stable_12_214]
JUNOS py extensions [20221124.223001_builder_junos_214_r3_s2]
JUNOS py base [20221124.223001_builder_junos_214_r3_s2]
JUNOS OS vmguest [20221028.898be19_builder_stable_12_214]
JUNOS OS crypto [20221028.898be19_builder_stable_12_214]
JUNOS OS boot-ve files [20221028.898be19_builder_stable_12_214]
JUNOS network stack and utilities [20221124.223001_builder_junos_214_r3_s2]
JUNOS libs [20221124.223001_builder_junos_214_r3_s2]
JUNOS libs compat32 [20221124.223001_builder_junos_214_r3_s2]
JUNOS runtime [20221124.223001_builder_junos_214_r3_s2]
JUNOS na telemetry [21.4R3-S2.3]
JUNOS Web Management Platform Package [20221124.223001_builder_junos_214_r3_s2]
JUNOS qfx modules [20221124.223001_builder_junos_214_r3_s2]
JUNOS qfx runtime [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing mpls-oam-basic [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing mpls-oam-advanced [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing lsys [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing controller-internal [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing controller-external [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing 32-bit Compatible Version [20221124.223001_builder_junos_214_r3_s2]
JUNOS Routing aggregated [20221124.223001_builder_junos_214_r3_s2]
JUNOS probe utility [20221124.223001_builder_junos_214_r3_s2]
JUNOS common platform support [20221124.223001_builder_junos_214_r3_s2]
JUNOS qfx platform support [20221124.223001_builder_junos_214_r3_s2]
JUNOS Openconfig [21.4R3-S2.3]
JUNOS dcp network modules [20221124.223001_builder_junos_214_r3_s2]
JUNOS modules [20221124.223001_builder_junos_214_r3_s2]
JUNOS L2 RSI Scripts [20221124.223001_builder_junos_214_r3_s2]
JUNOS qfx Data Plane Crypto Support [20221124.223001_builder_junos_214_r3_s2]
JUNOS daemons [20221124.223001_builder_junos_214_r3_s2]
JUNOS qfx daemons [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services URL Filter package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services TLB Service PIC package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Telemetry [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services TCP-LOG [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services SSL [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services SOFTWARE [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Stateful Firewall [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services RTCOM [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services RPM [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services PCEF package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services NAT [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Mobile Subscriber Service Container package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services MobileNext Software package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Logging Report Framework package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services LL-PDF Container package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Jflow Container package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Deep Packet Inspection package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services IPSec [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services IDS [20221124.223001_builder_junos_214_r3_s2]
JUNOS IDP Services [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services HTTP Content Management package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services DNS Filter package (i386) [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Crypto [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Captive Portal and Content Delivery Container package [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services COS [20221124.223001_builder_junos_214_r3_s2]
JUNOS Appld Services [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services Application Level Gateways [20221124.223001_builder_junos_214_r3_s2]
JUNOS Services AACL Container package [20221124.223001_builder_junos_214_r3_s2]
JUNOS SDN Software Suite [20221124.223001_builder_junos_214_r3_s2]
JUNOS Extension Toolkit [20221124.223001_builder_junos_214_r3_s2]
JUNOS Phone-home [20221124.223001_builder_junos_214_r3_s2]
JUNOS Packet Forwarding Engine Support (DC-PFE) [20221124.223001_builder_junos_214_r3_s2]
JUNOS Packet Forwarding Engine Support (M/T Common) [20221124.223001_builder_junos_214_r3_s2]
JUNOS Juniper Malware Removal Tool (JMRT) [1.0.0+20221124.223001_builder_junos_214_r3_s2]
JUNOS J-Insight [20221124.223001_builder_junos_214_r3_s2]
JUNOS jfirmware [20220818.061404_builder_junos_214_r3]
JUNOS Online Documentation [20221124.223001_builder_junos_214_r3_s2]
JUNOS jail runtime [20221028.898be19_builder_stable_12_214]
JUNOS FIPS mode utilities [20221124.223001_builder_junos_214_r3_s2]
JUNOS dsa dsa [21.4R3-S2.3]
JUNOS Host Software [3.14.64-rt67-WR7.0.0.31_ovp:3.1.0]
JUNOS Host qfx-10-f platform package [21.4R3-S2.3]
JUNOS Host qfx-10-f base package [21.4R3-S2.3]
JUNOS Host qfx-10-f data-plane package [21.4R3-S2.3]
JUNOS Host qfx-10-f control-plane package [21.4R3-S2.3]

(master:0)
```

Test Information

Test Information

```
{master:0}
root> show interfaces et-0/0/19
Physical interface: et-0/0/19, Enabled, Physical link is Up
Interface index: 139, SNMP ifIndex: 529
Link-level type: Ethernet, MTU: 1514, LAN-PHY mode, Speed: 100Gbps,
BPDU Error: None, Loop Detect PDU Error: None, Ethernet-Switching Error: None,
MAC-REWRITE Error: None, Loopback: Disabled, Source filtering: Disabled,
Flow control: Disabled, Media type: Fiber
Device flags : Present Running
Interface flags: SNMP-Traps Internal: 0x4000
Link flags : None
CoS queues : 8 supported, 8 maximum usable queues
Current address: 08:b2:58:93:fb:35, Hardware address: 08:b2:58:93:fb:35
Last flapped : 2022-01-25 08:24:34 UTC (00:01:09 ago)
Input rate : 0 bps (0 pps)
Output rate : 0 bps (0 pps)
Active alarms : None
Active defects : None
Pre-emphasis(reg 236/237)
Register-value 0
Ctle(reg 234/235)
Register-value 0
Differential-amplitude(reg 238/239)
Register-value 0
PCS statistics
Seconds
Bit errors 0
Errored blocks 0
Ethernet FEC Mode : FEC91
Ethernet FEC statistics
Errors
FEC Corrected Errors 0
FEC Uncorrected Errors 0
FEC Corrected Errors Rate 0
FEC Uncorrected Errors Rate 0
PRBS Statistics : Disabled
Interface transmit statistics: Disabled

Logical interface et-0/0/19.0 (Index 555) (SNMP ifIndex 531)
Flags: Up SNMP-Traps 0x4004000 Encapsulation: ENET2
Input packets : 0
Output packets: 0
Protocol inet, MTU: 1500
Max nh cache: 75000, New hold nh limit: 75000, Curr nh cnt: 0,
Curr new hold cnt: 0, NH drop cnt: 0
Flags: Sendbcast-pkt-to-re
Addresses, Flags: Is-Preferred Is-Primary
Destination: 192.168.1/24, Local: 192.168.1.29,
Broadcast: 192.168.1.255
```

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

```
{master:0}
root> show chassis hardware
Hardware inventory:
Item      Version  Part number  Serial number  Description
Chassis   DG846    QFX10002-72Q
Pseudo CB 0
Routing Engine 0    BUILTIN    BUILTIN      RE-QFX10002-72Q
FPC 0      REV 36   750-055415  ACPN8273      QFX10002-72Q
CPU        BUILTIN  BUILTIN      FPC CPU
PIC 0      BUILTIN  BUILTIN      72X40G
Xcvr 19    REV 01   740-061406  A1930009037   QSFP-100G-PSM4
Xcvr 23    REV 01   740-061406  A1930009036   QSFP-100G-PSM4
Mezz       REV 06   711-064764  ACPN3343      Mezz Board 36X40GE
Power Supply 0  REV 04   740-054405  1EDN6510141   AC AFO 1600W PSU
Power Supply 1  REV 04   740-054405  1EDN6519751   AC AFO 1600W PSU
Power Supply 2  REV 04   740-054405  1EDN6476203   AC AFO 1600W PSU
Power Supply 3  REV 04   740-054405  1EDN6519786   AC AFO 1600W PSU
Fan Tray 0
Fan Tray 1
Fan Tray 2
```

QFX10002 Fan Tray 0, Front to Back Airflow - AFO
QFX10002 Fan Tray 1, Front to Back Airflow - AFO
QFX10002 Fan Tray 2, Front to Back Airflow - AFO

Test Information

3. Read the DDM information of the module

```

root>

(master:0)
root> show interfaces diagnostics optics
Physical interface: et-0/0/19
  Module temperature       : 29 degrees C / 84 degrees F
  Module voltage          : 3.2810 V
  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
  Module temperature high alarm threshold : 80 degrees C / 176 degrees F
  Module temperature low alarm threshold  : -10 degrees C / 14 degrees F
  Module temperature high warning threshold : 75 degrees C / 167 degrees F
  Module temperature low warning threshold : -5 degrees C / 23 degrees F
  Module voltage high alarm threshold : 3.5990 V
  Module voltage low alarm threshold  : 2.9990 V
  Module voltage high warning threshold : 3.4990 V
  Module voltage low warning threshold  : 3.0990 V
  Laser bias current high alarm threshold : 64.999 mA
  Laser bias current low alarm threshold  : 6.999 mA
  Laser bias current high warning threshold : 59.999 mA
  Laser bias current low warning threshold : 7.999 mA
  Laser output power high alarm threshold : 3.1622 mW / 5.00 dBm
  Laser output power low alarm threshold  : 0.2818 mW / -5.50 dBm
  Laser output power high warning threshold : 2.8183 mW / 4.50 dBm
  Laser output power low warning threshold : 0.3162 mW / -5.00 dBm
  Laser rx power high alarm threshold : 3.5481 mW / 5.50 dBm
  Laser rx power low alarm threshold  : 0.0331 mW / -14.80 dBm
  Laser rx power high warning threshold : 3.1622 mW / 5.00 dBm
  Laser rx power low warning threshold  : 0.0416 mW / -13.81 dBm
Lane 0
  Laser bias current       : 31.955 mA
  Laser output power       : 0.774 mW / -1.11 dBm
  Laser receiver power     : 0.163 mW / -7.87 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 receiver power high alarm : Off
  Laser receiver power low alarm  : Off
  Laser receiver power high warning : Off
  Laser receiver power low warning : Off
  Tx loss of signal functionality alarm : Off
  Rx loss of signal alarm : Off
  Tx laser disabled alarm : Off
Lane 1
  Laser bias current       : 32.102 mA
  Laser output power       : 0.890 mW / -0.51 dBm
  Laser receiver power     : 0.111 mW / -9.56 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 receiver power high alarm : Off
  Laser receiver power low alarm  : Off
  Laser receiver power high warning : Off
  Laser receiver power low warning : Off
  Tx loss of signal functionality alarm : Off
  Rx loss of signal alarm : Off
  Tx laser disabled alarm : Off
Lane 2
  Laser bias current       : 32.102 mA
  Laser output power       : 1.191 mW / 0.76 dBm
  Laser receiver power     : 0.143 mW / -8.45 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 receiver power high alarm : Off
  Laser receiver power low alarm  : Off
  Laser receiver power high warning : Off
  Laser receiver power low warning : Off
  Tx loss of signal functionality alarm : Off
  Rx loss of signal alarm : Off
  Tx laser disabled alarm : Off

```

4. Read the NIC model and the status of all ports

```
root@fs1-PowerEdge-R860:~# mlxfwmanager -u
Querying Mellanox devices firmware ...
```

Device #2:

```
-----
Device Type:    ConnectX7
Part Number:    MCX755106AS-HEA_Ax
Description:    NVIDIA ConnectX-7 HHHH Adapter Card; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe 5.0 x16 with x16 PCIe extension option; Cry
PSID:          MT_0000000834
PCI Device Name: /dev/mst/mt4129_pciconf3
Base MAC:      a088c2d55882
Versions:      Current  Available
FW             28.43.1014  N/A
PXE            3.7.0500   N/A
UEFI           14.36.0016  N/A

Status:        No matching image found
```

```
root@fs1-PowerEdge-R860:~#
root@fs1-PowerEdge-R860:~# mlxlink -d mlx5_7
```

Operational Info

```
-----
State           : Active
Physical state  : LinkUp
Speed           : 100G
Width           : 4x
FEC             : Standard RS-FEC - RS(528,514)
Loopback Mode   : No Loopback
Auto Negotiation : ON
```

Supported Info

```
-----
Enabled Link Speed (Ext.) : 0x00003ff2 (200G_2X,200G_4X,100G_1X,100G_2X,100G_4X,50G_1X,50G_2X,40G,25G,10G,1G)
Supported Cable Speed (Ext.) : 0x000002f2 (100G_4X,50G_2X,40G,25G,10G,1G)
```

Troubleshooting Info

```
-----
Status Opcode      : 0
Group Opcode       : N/A
Recommendation     : No issue was observed
```

Tool Information

```
-----
Firmware Version   : 28.43.1014
amBER Version      : 3.6
MFT Version        : mft 4.30.1-113
```

5. Read the module basic information on NIC

```
root@fs1-PowerEdge-R860:~# mlxlink -d mlx5_7 -c -m -e
```

Operational Info

```
-----
State           : Active
Physical state  : LinkUp
Speed           : 100G
Width           : 4x
FEC             : Standard RS-FEC - RS(528,514)
Loopback Mode   : No Loopback
Auto Negotiation : ON
```

Supported Info

```
-----
Enabled Link Speed (Ext.) : 0x00003ff2 (200G_2X,200G_4X,100G_1X,100G_2X,100G_4X,50G_1X,50G_2X,40G,25G,10G,1G)
Supported Cable Speed (Ext.) : 0x000002f2 (100G_4X,50G_2X,40G,25G,10G,1G)
```

Troubleshooting Info

```
-----
Status Opcode      : 0
Group Opcode       : N/A
Recommendation     : No issue was observed
```

Tool Information

```
-----
Firmware Version   : 28.43.1014
amBER Version      : 3.6
MFT Version        : mft 4.30.1-113
```

Physical Counters and BER Info

```
-----
Time Since Last Clear [Min] : 0.6
Effective Physical Errors    : 0
Effective Physical BER       : 15E-255
Raw Physical Errors Per Lane : 67016614,0,0,0
Link Down Counter           : 7
Link Error Recovery Counter  : 0
Raw Physical BER            : 5E-10
```

Test Information

Module Info

Temperature [C] : N/A
Voltage [mV] : N/A
Bias Current [mA] : N/A
Rx Power Current [dBm] : N/A
Tx Power Current [dBm] : N/A
Identifier : QSFP28
Compliance : 100G PSM4 Parallel SMF
Cable Technology : 1310 nm DFB laser
Cable Type : Optical Module (separated)
OUI : Mellanox
Vendor Name : FS
Vendor Part Number : QSFP28-PIR4-100G
Vendor Serial Number : A1930008041
Rev : A2
Wavelength [nm] : 1302
Transfer Distance [m] : 0
Attenuation (5g,7g,12g)[dB] : N/A
FW Version : N/A
Digital Diagnostic Monitoring : No
Power Class : 3.5 W max
CDR RX : ON,ON,ON,ON
CDR TX : ON,ON,ON,ON
LOS Alarm : N/A
SNR Media Lanes [dB] : N/A
SNR Host Lanes [dB] : N/A
IB Cable Width : 1x,2x,4x
Memory Map Revision : 7
Linear Direct Drive : 0
Cable Breakout : Channels implemented [1,2,3,4]/Far end is unspecified
SMF Length : N/A
MAX Power : 0
Cable Rx AMP : 0
Cable Rx Emphasis : 0
Cable Rx Post Emphasis : 0
Cable Tx Equalization : 0
Wavelength Tolerance : 1.0nm
Module State : N/A
DataPath state [per lane] : N/A
Rx Output Valid [per lane] : N/A
Nominal bit rate : 26.000Gb/s
Rx Power Type : Average power
Manufacturing Date : 31_12_20
Active Set Host Compliance Code : N/A
Active Set Media Compliance Code : N/A
Error Code Response : N/A
Module FW Fault : N/A
DataPath FW Fault : N/A
Tx Fault [per lane] : N/A
Tx LOS [per lane] : N/A
Tx CDR LOL [per lane] : N/A
Rx LOS [per lane] : N/A
Rx CDR LOL [per lane] : N/A
Tx Adaptive EQ Fault [per lane] : N/A

EYE Opening Info

FOM Mode : SLRG_FOM_MODE_EYEO
Lane : 0, 1, 2, 3
Initial FOM : 167, 185, 178, 175
Last FOM : 160, 176, 178, 173

6. Read the module DDM on NIC

```
root@fs1-PowerEdge-R860:~# mxlink -d mx5_7 -cable -ddm

Operational Info
-----
State : Active
Physical state : LinkUp
Speed : 100G
Width : 4x
FEC : Standard RS-FEC - RS(528,514)
Loopback Mode : No Loopback
Auto Negotiation : ON

Supported Info
-----
Enabled Link Speed (Ext.) : 0x00003ff2 (200G, 2X,200G, 4X,100G, 1X,100G, 2X,100G, 4X,50G, 1X,50G, 2X,40G,25G,10G,1G)
Supported Cable Speed (Ext.) : 0x000002f2 (100G, 4X,50G, 2X,40G,25G,10G,1G)

Troubleshooting Info
-----
Status Opcode : 0
Group Opcode : N/A
Recommendation : No issue was observed

Tool Information
-----
Firmware Version : 28.43.1014
amBER Version : 3.6
MFT Version : mft 4.30.1-113

Cable DDM Information
-----
Temperature : 32C
Voltage : 3.2840V
Channels : Channel 1 Channel 2 Channel 3 Channel 4
RX Power : -10.000dBm -6.000dBm -10.000dBm -6.000dBm
TX Power : -4.000dBm -2.000dBm -2.000dBm -4.000dBm
TX Bias : 39.808mA 38.272mA 40.576mA 37.760mA

DDM Flags
-----
Temperature Alarm high : 0
Temperature Warning high : 0
Temperature Warning low : 0
Temperature Alarm low : 0

Voltage Alarm high : 0
Voltage Warning high : 0
Voltage Warning low : 0
Voltage Alarm low : 0

Channel 1 Flags
-----
RX Power Alarm high : 0
RX Power Warning high : 0
RX Power Warning low : 0
RX Power Alarm low : 0

TX Power Alarm high : 0
TX Power Warning high : 0
TX Power Warning low : 0
TX Power Alarm low : 0

TX Bias Alarm high : 0
TX Bias Warning high : 0
TX Bias Warning low : 0
TX Bias Alarm low : 0

Channel 2 Flags
-----
RX Power Alarm high : 0
RX Power Warning high : 0
RX Power Warning low : 0
RX Power Alarm low : 0

TX Power Alarm high : 0
TX Power Warning high : 0
TX Power Warning low : 0
TX Power Alarm low : 0

TX Bias Alarm high : 0
TX Bias Warning high : 0
TX Bias Warning low : 0
TX Bias Alarm low : 0

Channel 3 Flags
-----
RX Power Alarm high : 0
RX Power Warning high : 0
RX Power Warning low : 0
RX Power Alarm low : 0

TX Power Alarm high : 0
TX Power Warning high : 0
TX Power Warning low : 0
TX Power Alarm low : 0

TX Bias Alarm high : 0
TX Bias Warning high : 0
TX Bias Warning low : 0
TX Bias Alarm low : 0

Channel 4 Flags
-----
RX Power Alarm high : 0
RX Power Warning high : 0
RX Power Warning low : 0
RX Power Alarm low : 0

TX Power Alarm high : 0
TX Power Warning high : 0
TX Power Warning low : 0
TX Power Alarm low : 0

TX Bias Alarm high : 0
TX Bias Warning high : 0
TX Bias Warning low : 0
TX Bias Alarm low : 0

DDM Thresholds
-----
Thresholds : Temperature ,Voltage ,RX Power ,TX Power ,TX Bias
High alarm threshold : 80C ,3.700V ,4.500dBm ,3.500dBm ,75.000mA
High warning threshold : 75C ,3.595V ,2.500dBm ,2.500dBm ,70.000mA
Low warning threshold : -5C ,3.002V ,-13.507dBm ,-9.401dBm ,15.000mA
Low alarm threshold : -10C ,2.904V ,-15.513dBm ,-10.400dBm ,10.000mA
```

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