

OSFP-800G-20FLPCxxx TEST REPORT



Contents

1. List of Test Items	3
2. Product Photoelectric Testing	3
2.1 Traffic Transmission Test	3
3. Brand Compatibility Test	4
3.1 Brand Compatibility Test	4
4. Business Network Testing	5
4.1 Port Splitting Application Test	5
4.2 Port Speed Reduction Application	6

1. List of Test Items

Test Items	Test Sub-Items	Test Contents	Test Results
Test Lanes	Test Lanes	Lane0~Lane7	/
Product Photoelectric Testing	Traffic Transmission Test	Raw Physical BER	Pass
		Symbol Errors	Pass
		Link Down Counter	Pass
Adaptability Test	Brand Compatibility Test	Brand Equipment Compatibility Test	Pass
Business Network Testing	Port Splitting Application Test	Port Splitting Application Testing	Pass
	Port Speed Reduction Application	Port Speed Reduction Application Testing	Pass

2. Product Photoelectric Testing

2.1 Traffic Transmission Test

2.1.1 Test Introduction

Device Type	Brands	Test Items	Test Results	Testing Environment
Traffic Tester	NVIDIA	Raw Physical BER	Pass	
		Symbol Errors	Pass	
		Link Down Counter	Pass	

2.1.2 Test Procedures

Steps	Summary of Test Steps
1	Configure a traffic tester and generate data streams through optical modules.
2	Measure the forward error correction pre-error rate and frame loss rate of each channel in the test environment.
3	Verify whether the results meet the specification requirements.

2.1.3 Test Results

Table 2-1: Traffic Transmission Test Results

No.	Raw Physical BER	Symbol Errors	Link Down Counter
SN 1	7.00E-12	0	0
SN 2	8.00E-12	0	0

3. Brand Compatibility Test

3.1 Brand Compatibility Test

3.1.1 Test Introduction

Device Type	Brands	Test Items	Test Results	Testing Environment
Switches\NICs	NVIDIA	Brand Equipment Compatibility Test	Pass	

3.1.2 Test Procedures

Steps	Summary of Test Steps
1	Insert the optical module into the switch\network card port.
2	Verify the connection status, alarm information, type information and DDM information.
3	Ensure compatibility with the device software version.

3.1.3 Test Results

Table 3-1: Brand Compatibility Test Results

Equipment Brand	Device Version	Software Version of The Equipment	Warning Message	Connectivity	Type Information
NVIDIA IB	MQM9700-NS2F	3.11.1004	No Warning	Link Up	Passive Copper Cable
	MCX75310AAS-NEAT	28.42.1000	No Warning	Link Up	IB NDR
NVIDIA IB	MQM9790-NS2F	31.2012.1068	No Warning	Link Up	IB NDR
	MCX75310AAS-NEAT	28.41.1000	No Warning	Link Up	IB NDR
NVIDIA ETH	SN5600	Cumulus Linux 5.10.0	No Warning	Link Up	IB NDR
	MCX75310AAS-NEAT	28.42.1000	No Warning	Link Up	IB NDR

4. Business Network Testing

4.1 Port Splitting Application Test

4.1.1 Test Introduction

Device Type	Brands	Test Items	Test Results	Testing Environment
Switches\NICs	NVIDIA	Port Splitting Application Test	Pass	

4.2.2 Test Procedures

Steps	Summary of Test Steps
1	Configure the switch to operate in the speed reduction mode (e.g., from 400G to 2*200G IB、 200G to 2*100G IB).
2	Use test equipment to verify the running information, port module information, and information such as port count/ bit error rate.
3	Take screenshots to record the output results of the tool.

4.2.3 Test Results

Table 4-2: Port Speed Reduction Application Testing

Split Mode	Test Equipment	Tool and Device Info	Operational Info	Supported Info	Physical Counters and BER Info
400G to 2*200G IB	NVIDIA 9700 to NVIDIA 75310AAS	<pre> MCM700 NS2F (standalone master) # show version Product name: MKNX-OS Product release: 3.11.1004 Build ID: #1-dev Build date: 2023-08-09 11:05:30 Target arch: a64_64 Build for: san-650-800-300-32015x69 Version summary: M8_54 3.11.1004 2023-08-09 11:05:30 a64_64 Product model: s800a Host ID: A8BAC20579C System serial num: M7247702EC System UUID: 87ba679a-7038-11ee-8000-6a6a1e50240 Uptime: 7d 19h 33m 45.792s CPU load averages: 0.05 / 0.03 / 0.00 Number of CPUs: 4 RAM used / total / 6802 MB free / 7327 MB total Swap: 0 MB used / 0 MB free / 0 MB total </pre>	<pre> State: Active Physical state: LinkUp Speed: IB-HDR Width: 4x FEC: N/A Loopback Mode: No Loopback Auto Negotiation: ON </pre>	<pre> MCM700 NS2F (standalone master) # show interfaces 0/1/0/1 E1/0/1 state: Active Logical port state: LinkUp Physical port state: LinkUp Current line rate: 200Gbps Supported speeds: sdr, hdr Speed: 40G Supported widths: 1x, 2x, 4x Width: 4x Max supported MTU: 4096 MTU: 4096 Vx admin capabilities: V10-V17 Operational Vx: V10-V13 Description: infiband-default Phy profile: high-speed Ser Width reduction mode: Not supported Telemetry sampling: Disabled Telemetry threshold: Disabled Telemetry record: Disabled Telemetry threshold level: N/A bytes RX: Bytes: 28376 Packets: 102 Errors: 0 Symbol errors: 0 %1's dropped packets: 0 TX: Bytes: 28376 Packets: 102 Mist: 0 Discarded packets: 0 </pre>	<pre> Physical Counters and BER Info ----- Time Since Last Clear [Min]: 3.4 Symbol Errors: 0 Symbol BER: 15E-255 Effective Physical Errors: 0 Raw Physical Errors Per Lane: 0.0,0.0 Raw Physical BER: 15E-255 Link Down Counter: 0 Link Error Recovery Counter: 0 </pre>
		<pre> Tool Information ----- Firmware Version: 28.42.1000 amBER Version: 3.3 MFT Version: mft 4.29.0-131 </pre>	<pre> Operational Info ----- State: Active Physical state: LinkUp Speed: IB-HDR Width: 4x FEC: N/A Loopback Mode: No Loopback Auto Negotiation: ON </pre>	<pre> Supported Info ----- Enabled Link Speed: 0x00000001 0x00000001 0x00000001 0x00000001 Supported Cable Speed: 0x00000001 0x00000001 0x00000001 0x00000001 </pre>	<pre> Physical Counters and BER Info ----- Time Since Last Clear [Min]: 3.4 Symbol Errors: 0 Symbol BER: 15E-255 Effective Physical Errors: 0 Raw Physical Errors Per Lane: 0.0,0.0 Raw Physical BER: 15E-255 Link Down Counter: 0 Link Error Recovery Counter: 0 </pre>
200G to 2*100G IB	NVIDIA 9700 to NVIDIA 75310AAS	<pre> MCM700 NS2F (standalone master) # show version Product name: MKNX-OS Product release: 3.11.1004 Build ID: #1-dev Build date: 2023-08-09 11:05:30 Target arch: a64_64 Build for: san-650-800-300-32015x69 Version summary: M8_54 3.11.1004 2023-08-09 11:05:30 a64_64 Product model: s800a Host ID: A8BAC20579C System serial num: M7247702EC System UUID: 87ba679a-7038-11ee-8000-6a6a1e50240 Uptime: 7d 19h 33m 45.792s CPU load averages: 0.05 / 0.03 / 0.00 Number of CPUs: 4 RAM used / total / 6802 MB free / 7327 MB total Swap: 0 MB used / 0 MB free / 0 MB total </pre>	<pre> State: Active Physical state: LinkUp Speed: IB-EDR Width: 4x FEC: Standard LD-RS-FEC-RS(271,237) Loopback Mode: No Loopback Auto Negotiation: ON </pre>	<pre> MCM700 NS2F (standalone master) # show interfaces 0/1/0/1 E1/0/1 state: Active Logical port state: LinkUp Physical port state: LinkUp Current line rate: 100Gbps Supported speeds: sdr, edr Speed: 40G Supported widths: 1x, 2x, 4x Width: 4x Max supported MTU: 4096 MTU: 4096 Vx admin capabilities: V10-V17 Operational Vx: V10-V13 Description: infiband-default Phy profile: high-speed Ser Width reduction mode: Not supported Telemetry sampling: Disabled Telemetry threshold: Disabled Telemetry record: Disabled Telemetry threshold level: N/A bytes RX: Bytes: 39456 Packets: 137 Errors: 0 Symbol errors: 0 %1's dropped packets: 0 TX: Bytes: 39456 Packets: 137 Mist: 0 Discarded packets: 0 </pre>	<pre> Physical Counters and BER Info ----- Time Since Last Clear [Min]: 2.5 Symbol Errors: 0 Symbol BER: 15E-255 Effective Physical Errors: 0 Effective Physical BER: 15E-255 Raw Physical Errors Per Lane: 0.0,0.0 Raw Physical BER: 15E-255 Link Down Counter: 0 Link Error Recovery Counter: 0 </pre>
		<pre> Tool Information ----- Firmware Version: 28.42.1000 amBER Version: 3.3 MFT Version: mft 4.29.0-131 </pre>	<pre> Operational Info ----- State: Active Physical state: LinkUp Speed: IB-EDR Width: 4x FEC: Standard LD-RS-FEC-RS(271,237) Loopback Mode: No Loopback Auto Negotiation: ON </pre>	<pre> Supported Info ----- Enabled Link Speed: 0x00000001 0x00000001 0x00000001 0x00000001 Supported Cable Speed: 0x00000001 0x00000001 0x00000001 0x00000001 </pre>	<pre> Physical Counters and BER Info ----- Time Since Last Clear [Min]: 2.5 Symbol Errors: 0 Symbol BER: 15E-255 Effective Physical Errors: 0 Effective Physical BER: 15E-255 Raw Physical Errors Per Lane: 0.0,0.0 Raw Physical BER: 15E-255 Link Down Counter: 0 Link Error Recovery Counter: 0 </pre>