



FTBx-8870 Report

PASS

Report Header: EXFO Inc.
Report Title:
Report Date: 3/27/2023 6:20:50 PM
Type: EtherSAM (Y.1564)

Job Information

Job ID: INC2582910
Circuit ID: StarTouch: EPHWESK2-1G-061015
Contractor Name:
Customer Name: ephrata-k12
Operator Name: kithc
Comment:

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SUMMARY

Results Summary

Test Status	
Service Configuration Test Status	Completed, Pass
Service Performance Test Status	Completed, Pass
Pass/Fail Verdict	PASS
Start Time	3/27/2023 06:09:10 PM
Duration	00d:00:10:53
Test Recovery	0

EtherSAM

Services Summary			
	Service Name	Service Configuration Test	Service Performance Test
1	Service 1	PASS	PASS

Service Configuration Summary							
	Service Name	Direction	Frame Loss Rate	Max Jitter (ms)	Max Latency (ms)	Max Throughput (Mbit/s)	Service Verdict
1	Service 1	L->R	0.0E-00	0.23175		949.996	PASS
		R->L	0.0E-00	0.14048	8.58734	949.990	PASS

Service Performance Summary							
	Service Name	Direction	Frame Loss Rate	Max Jitter (ms)	Max Latency (ms)	Avg Throughput (Mbit/s)	Service Verdict
1	Service 1	L->R	3.7E-05	0.28115		949.964	PASS
		R->L	5.7E-08	0.14235	11.65931	949.990	PASS

VLAN Preservation	No Mismatch Detected
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RX Power Level		
	Min	Max
Power Range (dBm)	-19.0	-1.0
RX Power Level (dBm)	-2.4	-2.4

RX Frequency		
	Max Negative Offset	Max Positive Offset
Frequency Offset (ppm)	0.0	0.1

Alarms/Errors

Alarms/Errors List	
Active/Historical Alarms/Errors	Frame Loss, UDP Chksum

Interface	
Alarms	Seconds
LOS	0
Frequency	0

Ethernet	
Alarms	Seconds
Link Down	0
Local Fault Detected	0
Local Fault Received	0
Remote Fault	0

Errors	Seconds	Count	Rate
Block	0	0	0.00E00
FCS	0	0	0.00E00
Jabber	0	0	0.00E00
Oversize	Disabled		
Runt	0	0	0.00E00
Undersize	0	0	0.00E00
Total		0	

Clock Sync	
Alarm	Seconds
LOC	0

IP/UDP/TCP			
Errors	Seconds	Count	Rate
IP Checksum	0	0	0.00E00
UDP Checksum	1	1	1.11E-08
TCP Checksum	0	0	0.00E00
Total		1	

Setup Summary

Application Type	EtherSAM (Y.1564)
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Topology	Single Port
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Interface	Port 1
Interface/Rate	10GE LAN
Connector	SFP+

Flow Control	None
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EtherSAM

DTS Enabled	
Remote ID	MAX-860G81
Nat Router Detection	No NAT
Local WAN IP	N/A
Pass/Fail Verdict	Enabled

Sub-Tests

Service Configuration Test		Service Performance Test	
Ramp Test	Enabled	Status	Enabled
Burst selection	Disabled	Duration	00d:00:10:00
Duration	00:00:20		

Ramp

Step Time (s)	5
Step Values	
1	50 %
2	75 %
3	90 %
4	100 %

Services

Total Committed TX Rate (Mbit/s)	L->R	950.00
	R->L	950.000

Services Summary

	Service Name	Profile	Frame Size (Bytes)	Direction	CIR (Mbit/s)	Max Jitter (ms)	Max Latency (ms)	Frame Loss Rate	CBS (Bytes)
1	Service 1	Data	Random	L->R	950.00	2.00000		1.0E-04	--
				R->L	950.000	2.00000	28.00000	1.0E-04	

TEST RESULTS

Ethernet Traffic

Frame Type	TX Count	RX Count
Multicast	0	504
Broadcast	2	0
Unicast	89946235	89952585
Non-Unicast	2	504
Total	89946237	89953089

Frame Size (Bytes)	RX Count	%
< 64	0	0.0
64	486	0.0
65 - 127	3716746	4.1
128 - 255	7941911	8.8
256 - 511	15871665	17.6
512 - 1023	31738291	35.2
1024 - 1518	30683990	34.1
> 1518	0	0.0
Total	89953089	

Detailed EtherSAM Results

Service Configuration Test**Service 1 : Service 1**

Committed Steps						
Committed Step	Direction	Frame Loss Rate	Max Jitter (ms)	Max Latency (ms)	Verdict	Avg Throughput (Mbit/s)
1-50%CIR	L->R	0.0E-00	0.23175	6.85571	PASS	474.989
	R->L	0.0E-00	0.14048		PASS	474.99
2-75%CIR	L->R	0.0E-00	0.19268	7.63577	PASS	712.489
	R->L	0.0E-00	0.12825		PASS	712.49
3-90%CIR	L->R	0.0E-00	0.16218	7.66214	PASS	855.004
	R->L	0.0E-00	0.09960		PASS	854.99
CIR	L->R	0.0E-00	0.16699	8.58734	PASS	949.996
	R->L	0.0E-00	0.08761		PASS	949.99

Service Performance Test

Service 1 : Service 1

	Direction	Average	Minimum	Maximum	Estimate
Throughput (Mbit/s)	L->R	949.96	946.17	953.15	N/A
	R->L	949.999	949.931	950.057	N/A
Jitter (ms)	L->R	0.00065	< 0.00001	0.28115	0.00035
	R->L	0.00882	< 0.00001	0.14235	0.00859
Latency (ms)	Round-trip	6.49297	6.27684	11.65931	N/A
		Seconds	Count	Rate	
Frame Loss	L->R	14	3268	3.7E-05	
	R->L	2	5	5.7E-08	
Out-of-Sequence	L->R	0	0	0.0E00	
	R->L	0	0	0.0E00	

TEST SETUP

Clock Synchronization

Clock Mode	Internal
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Detailed Services Configuration

IP Version	IPv4	
Layer Mode	Mixed	
Global Pass/Fail Verdict	Enabled	
	L->R	R->L
Total Committed TX Rate (Mbit/s)	950.00	950.000

Service 1

Service Profile	
Service Name	Service 1
Profile	Data
Frame Size Type	Random

SLA Parameters		
	L->R	R->L
Information Rate		
CIR (Mbit/s)	950.00	950.00
Performance Criteria		
Max Jitter (ms)	2.00000	2.00000
Max Latency (ms)	28.00000	28.00000
Frame Loss Rate	1.0E-04	

Test Parameters		
	L->R	R->L

Framing		
Frame Format	Ethernet II	
Network Layer	IPv4	
Transport Layer	UDP	
	L->R	R->L
VLAN	None	None

Addressing

		MAC	IP Address	UDP Port
L->R	Source	00:03:01:F8:22:DD	68.179.213.154 / 255.255.255.254	49184
	Destination	68:3B:78:F5:1D:BF	169.204.228.202	7
R->L	Source	68:3B:78:F5:1D:BF	169.204.228.202 / 255.255.255.252	7
	Destination	00:03:01:F8:22:DD	68.179.213.154	49184

	L->R	R->L
EtherType	0x0800	0x0800
Automatic IP (DHCP)	Disabled	No
TTL	128	128
TOS	0x00	0
Default Gateway	68.179.213.155	169.204.228.201

FUNCTIONS

Ping & Trace Route

Network	
Source MAC Address	00:03:01:F8:22:DD
Source IP Address	68.179.213.154 (Stream 1)
Destination IP Address	68.179.213.155

Ping	
Timeout (ms)	4000
Delay (ms)	1000
Data Size (Bytes)	32
TTL	128
Type Of Service (TOS)	0x00

Ping Results		
No.	Status	Reply Details
1	Successful	IP=169.204.228.202, Bytes=32, Time=6 ms, TTL=126

Ping Statistics	
Packets Transmitted	1
Packets Received	1
Percentage Lost (%)	0.0
Minimum Round Trip Time (ms)	6
Maximum Round Trip Time (ms)	6
Average Round Trip Time (ms)	6

Trace Route	
Timeout (ms)	4000
Max Hop Count	128

SYSTEM INFORMATION

Product Name	Power Blazer Series
Version	Power Blazer Series 1.100
Module ID	FTBx-8870
Slot ID	1
Software Product Version	1.100.0.55
	Power Blazer Series 1.100
Assembly Hardware Revision	B
Serial Number	1343183
Calibration Date	4/20/2020 9:30:00 PM

Pluggable Module

Module ID	SFP+
Vendor Name	WFS
Part Number	10GB-SFP-LR-JN
Serial Number	WFJNXPL917
Hardware Revision	1.0
Connector Type	LC
Speed	10G
Type/Compliance Code	LR, 10.0 km (SMF)
Wavelength	1310 nm
Mode	Single-Mode Fiber
Power Class	Power Class 1 Module (<= 1W max)
Temperature (Max)	28.7 °C

Software Options

100electrical	Ethernet 100Base-TX (Electrical) Interface	Enabled
100optical	Ethernet 100Base-FX (Optical) Interface	Disabled
10electrical	Ethernet 10Base-T (Electrical) Interface	Enabled
10G_LAN	Ethernet 10G LAN optical interface	Enabled
10G_WAN	Ethernet 10G WAN optical interface	Enabled
155M	155 Mbit/s	Disabled
1588PTP	1588 Precision Time Protocol	Disabled
2488M	2.488 Gbit/s	Disabled
52M	52 Mbit/s	Enabled
622M	622 Mbit/s	Disabled
9953M	9.953 Gbit/s	Disabled
Cable_Test	Cable Test	Disabled
CPRI	CPRI 2.4576 Gbit/s and 3.072 Gbit/s	Disabled
CPRI-1.2G	CPRI 1.2288 Gbit/s	Disabled
CPRI-10.1G	CPRI 10.1376 Gbit/s	Disabled
CPRI-4.9G	CPRI 4.9152 Gbit/s	Disabled
CPRI-6.1G	CPRI 6.144 Gbit/s	Disabled
CPRI-9.8G	CPRI 9.8304 Gbit/s	Disabled
DS1-FDL	DS1/1.5M Facility Data Link	Disabled
DSn	Digital Signal (DS1, DS3)	Disabled
eCPRI-10G	eCPRI over 10G Ethernet	Disabled
EoE	Ethernet over Ethernet Encapsulation (10GE and less)	Disabled
EoOTN	Ethernet over Optical Transport Network	Disabled
ETH-OAM	Carrier Ethernet OAM Test Application	Disabled
FC-10X	Fibre Channel 10X	Disabled
FC-1X	Fibre Channel 1X	Disabled
FC-2X	Fibre Channel 2X	Disabled
FC-4X	Fibre Channel 4X	Disabled
FC-8X	Fibre Channel 8X	Disabled
GCC-BERT	OTN Overhead BERT and Synchronization Validation	Disabled
GigE_Electrical	Ethernet 1000Base-T (Electrical) Interface	Enabled
GigE_Optical	Ethernet 1000Base-X (Optical) Interface	Enabled
iOptics	Intelligent Pluggable Optic Test Application	Disabled
iSAM	Intelligent Service Activation Methodology	Disabled
L2-Transparency	L2CP Handling Test in EtherSAM	Disabled
LINK-OAM	Link OAM	Disabled
MPLS	MPLS Encapsulation (10GE and less)	Disabled
NI-CSU	NI/CSU Emulation	Disabled
OBSAI	OBSAI 3.072 Gbit/s	Disabled
OBSAI-1.5G	OBSAI 1.536 Gbit/s	Disabled
OBSAI-6.1G	OBSAI 6.144 Gbit/s	Disabled
ODU0	OTN ODU0	Disabled
ODUflex	OTN ODUflex	Disabled
ODUMUX	ODU Multiplexing Payload Type 20 and 21	Disabled
OTN-INTR-THRU	OTN Intrusive Through Mode	Disabled
OTU1	Optical Transport Unit-1 (2.7 Gbit/s)	Disabled

OTU2	Optical Transport Unit-2 (10.7 Gbit/s)	Disabled
OTU2-1e-2e	Optical Transport Unit-2 Overclocked (11.049/11.096 Gbit/s)	Disabled
OTU2-1f-2f	Optical Transport Unit-2 Overclocked (11.270/11.317 Gbit/s)	Disabled
PBBTE	Provider Backbone Bridge Encapsulation (10GE and less)	Disabled
PDH	Plesiochronous Digital Hierarchy (E1, E3, E4)	Disabled
RFC6349	RFC 6349 Test Application (25GE and less)	Disabled
SDH	Synchronous Digital Hierarchy	Enabled
SONET	Synchronous Optical Network	Enabled
SyncE	Synchronous Ethernet	Disabled
TCM	Tandem Connection Monitoring HO/LO	Disabled
TCP-THPUT	Tcp Throughput Test Application	Disabled
TST-OAM	Test Over Service OAM	Disabled

LOGGER

ID	Start Time	Event	Duration	Details
1	03/27 06:09:10 PM	Test Started		2023-03-27
2	03/27 06:09:16 PM	Service Configuration test started		2023-03-27
3	03/27 06:09:51 PM	Service Performance test started		2023-03-27
4	03/27 06:13:21 PM	Frame Loss	00:00:01	3/3 S(1)
5	03/27 06:17:04 PM	Frame Loss	00:00:01	2/5 S(1)
6	03/27 06:19:17 PM	UDP Chksum	00:00:01	1/1
7	03/27 06:20:03 PM	Test Stopped		 PASS