



FTBx-8870 Report

| auburn-k12 |

PASS

Report Header:	EXFO Inc.
Report Title:	auburn-k12
Report Date:	11/5/2020 5:40:38 PM
Type:	EtherSAM (Y.1564)

Job Information

Job ID:	
Circuit ID:	FETH/TRANS/5G/0794
Contractor Name:	
Customer Name:	auburn-k12
Operator Name:	danieldh
Comment:	

Table of contents

SUMMARY	1
TEST RESULTS	5
TEST SETUP	6
FUNCTIONS	9
SYSTEM INFORMATION	14
LOGGER	17

SUMMARY

Results Summary

Test Status	
Service Configuration Test Status	Completed, Pass
Service Performance Test Status	Completed, Pass
Pass/Fail Verdict	PASS
Start Time	11/5/2020 05:20:00 PM
Duration	00d:00:10:47
Test Recovery	0

EtherSAM

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

Service Configuration Summary						
	Service Name	Frame Loss Rate	Max Jitter (ms)	Max Latency (ms)	Max Throughput (Mbit/s)	Service Verdict
1	Service 1	0.0E-00	0.03739	1.65963	4949.97	PASS

Service Performance Summary						
	Service Name	Frame Loss Rate	Max Jitter (ms)	Max Latency (ms)	Avg Throughput (Mbit/s)	Service Verdict
1	Service 1	0.0E-00	0.03463	2.21418	4949.99	PASS

VLAN Preservation	No Mismatch Detected
--------------------------	----------------------

RX Power Level		
	Min	Max
Power Range (dBm)	-15.0	0.5
RX Power Level (dBm)	-2.8	-2.8

RX Frequency		
	Max Negative Offset	Max Positive Offset
Frequency Offset (ppm)	-0.6	0.0

Alarms/Errors

Alarms/Errors List	
Active/Historical Alarms/Errors	None

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	0	0	0.00E00
TCP Checksum	0	0	0.00E00
Total		0	

Setup Summary

Application Type	EtherSAM (Y.1564)
-------------------------	-------------------

Interface	Port 1
Interface/Rate	10GE LAN
Connector	SFP+

Flow Control	None
---------------------	------

EtherSAM

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)	4950.00
----------------------------------	---------

Services Summary								
	Service Name	Profile	Frame Size (Bytes)	CIR (Mbit/s)	Max Jitter (ms)	Max Latency (ms)	Frame Loss Rate	CBS (Bytes)
1	Service 1	Data	Random	4950.00	2.00000	28.00000	1.0E-04	--

TEST RESULTS

Ethernet Traffic

Frame Type	TX Count	RX Count
Multicast	0	23
Broadcast	2	0
Unicast	469799180	469799180
Non-Unicast	2	23
Total	469799182	469799203

Frame Size (Bytes)	RX Count	%
< 64	0	0.0
64	333730	0.0
65 - 127	20359239	4.3
128 - 255	41326157	8.7
256 - 511	82642085	17.5
512 - 1023	165320236	35.1
1024 - 1518	159817756	34.0
> 1518	0	0.0
Total	469799203	

Detailed EtherSAM Results

Service Configuration Test

Service 1 : Service 1

Committed Steps					
Committed Step	Frame Loss Rate	Max Jitter (ms)	Max Latency (ms)	Verdict	Avg Throughput (Mbit/s)
1-50%CIR	0.0E-00	0.03739	1.57114	PASS	2475.00
2-75%CIR	0.0E-00	0.03198	1.62035	PASS	3712.49
3-90%CIR	0.0E-00	0.03216	1.64971	PASS	4455.00
CIR	0.0E-00	0.02777	1.65963	PASS	4949.97

Service Performance Test

Service 1 : Service 1

	Average	Minimum	Maximum	Estimate
Throughput (Mbit/s)	4949.99	4949.82	4950.20	N/A
Jitter (ms)	0.00091	< 0.00001	0.03463	0.00090
Latency (ms)	1.52763	1.51686	2.21418	N/A
	Seconds	Count	Rate	
Frame Loss	0	0	0.0E00	
Out-of-Sequence	0	0	0.0E00	

TEST SETUP

Clock Synchronization	
Clock Mode	Internal

Detailed Services Configuration

Layer Mode	Mixed
IP Version	IPv4
Global Pass/Fail Verdict	Enabled
Total Committed TX Rate (Mbit/s)	4950.00

Service 1

Service Profile

Service Name	Service 1
Profile	Data
Frame Size Type	Random

SLA Parameters

Information Rate	
CIR (Mbit/s)	4950.00
Performance Criteria	
Max Jitter (ms)	2.00000
Max Latency (ms)	28.00000
Frame Loss Rate	1.0E-04

Test Parameters

Framing

Frame Format	Ethernet II
Network Layer	IPv4
Transport Layer	UDP
VLAN	None
MPLS	Disabled

Addressing

	MAC	IP Address	UDP Port
Source	00:03:01:F8:22:D8	10.112.0.1 / 255.255.255.0	49184
Destination	00:03:01:F8:29:85	10.112.0.100	7

EtherType	0x0800
Automatic IP (DHCP)	Disabled
TTL	128
TOS	0x00
Default Gateway	Disabled

FUNCTIONS

Ping & Trace Route

Network	
Source MAC Address	00:03:01:F8:22:D8
Source IP Address	10.112.0.1 (Stream 1)
Destination IP Address	10.112.0.100

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	Timeout	
2	Timeout	
3	Timeout	
4	Timeout	
5	Timeout	
6	Timeout	
7	Timeout	
8	Timeout	
9	Timeout	
10	Timeout	
11	Timeout	
12	Timeout	
13	Timeout	
14	Timeout	
15	Timeout	
16	Timeout	
17	Timeout	
18	Timeout	
19	Timeout	
20	Timeout	
21	Timeout	
22	Timeout	
23	Timeout	

24	Timeout	
25	Timeout	
26	Timeout	
27	Timeout	
28	Timeout	
29	Timeout	
30	Timeout	
31	Timeout	
32	Timeout	
33	Timeout	
34	Timeout	
35	Timeout	
36	Timeout	
37	Timeout	
38	Timeout	
39	Timeout	
40	Timeout	
41	Timeout	
42	Timeout	
43	Timeout	
44	Timeout	
45	Timeout	
46	Timeout	
47	Timeout	
48	Timeout	
49	Timeout	
50	Timeout	
51	Timeout	
52	Timeout	
53	Timeout	
54	Timeout	
55	Timeout	
56	Timeout	
57	Timeout	
58	Timeout	
59	Timeout	
60	Timeout	
61	Timeout	
62	Timeout	
63	Timeout	
64	Timeout	
65	Timeout	
66	Timeout	

67	Timeout	
68	Timeout	
69	Timeout	
70	Timeout	
71	Timeout	
72	Timeout	
73	Timeout	
74	Timeout	
75	Timeout	
76	Timeout	
77	Timeout	
78	Timeout	
79	Timeout	
80	Timeout	
81	Timeout	
82	Timeout	
83	Timeout	
84	Timeout	
85	Timeout	
86	Timeout	
87	Timeout	
88	Timeout	
89	Timeout	
90	Timeout	
91	Timeout	
92	Timeout	
93	Timeout	
94	Timeout	
95	Timeout	
96	Timeout	
97	Timeout	
98	Timeout	
99	Timeout	
100	Timeout	
101	Timeout	
102	Timeout	
103	Timeout	
104	Timeout	
105	Timeout	
106	Timeout	
107	Timeout	
108	Timeout	
109	Timeout	

110	Timeout	
111	Timeout	
112	Timeout	
113	Timeout	
114	Timeout	
115	Timeout	
116	Timeout	
117	Timeout	
118	Timeout	
119	Timeout	
120	Timeout	
121	Timeout	
122	Timeout	
123	Timeout	
124	Timeout	
125	Timeout	
126	Timeout	
127	Timeout	
128	Timeout	
129	Timeout	
130	Timeout	
131	Timeout	
132	Timeout	
133	Timeout	
134	Timeout	
135	Timeout	
136	Timeout	
137	Timeout	
138	Timeout	
139	Timeout	
140	Timeout	
141	Timeout	
142	Timeout	
143	Timeout	
144	Timeout	
145	Timeout	
146	Timeout	
147	Timeout	
148	Timeout	
149	Timeout	
150	Timeout	
151	Timeout	
152	Timeout	

153	Timeout	
154	Timeout	
155	Timeout	
156	Timeout	
157	Timeout	
158	Timeout	
159	Timeout	
160	Timeout	
161	Timeout	
162	Timeout	
163	Timeout	
164	Timeout	
165	Timeout	
166	Timeout	
167	Timeout	
168	Timeout	
169	Timeout	
170	Timeout	
171	Timeout	
172	Timeout	
173	Timeout	
174	Timeout	
175	Timeout	
176	Timeout	
177	Timeout	
178	Timeout	
179	Timeout	
180	Timeout	
181	Timeout	
182	Timeout	
183	Timeout	
184	Timeout	
185	Timeout	
186	Timeout	
187	Timeout	
188	Timeout	
189	Timeout	
190	Timeout	
191	Timeout	
192	Timeout	
193	Timeout	
194	Timeout	
195	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127

196	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
197	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
198	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
199	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
200	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
201	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
202	Successful	IP=10.112.0.100, Bytes=32, Time=2 ms, TTL=127
203	User aborted	

Ping Statistics

Packets Transmitted	202
Packets Received	8
Percentage Lost (%)	96.0
Minimum Round Trip Time (ms)	2
Maximum Round Trip Time (ms)	2
Average Round Trip Time (ms)	2

Trace Route

Timeout (ms)	4000
Max Hop Count	128

SYSTEM INFORMATION

Product Name	Power Blazer Series
Version	Power Blazer Series 1.70
Module ID	FTBx-8870
Slot ID	1
Software Product Version	1.70.0.103
	Power Blazer Series 1.70
Assembly Hardware Revision	B
Serial Number	1343184
Calibration Date	4/20/2020 8:28:00 PM

Pluggable Module

Module ID	SFP+
Vendor Name	WFS
Part Number	WFSP-1396-10-J
Serial Number	3172922861
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)	32.7 °C

Software Options

DS1-FDL	DS1/1.5M Facility Data Link	Disabled
CPRI-10.1G	CPRI 10.1376 Gbit/s	Disabled
SDH	Synchronous Digital Hierarchy	Enabled
SONET	Synchronous Optical Network	Enabled
622M	622 Mbit/s	Disabled
eCPRI-10G	eCPRI over 10G Ethernet	Disabled
DSn	Digital Signal (DS1, DS3)	Disabled
PDH	Plesiochronous Digital Hierarchy (E1, E3, E4)	Disabled
155M	155 Mbit/s	Disabled
2488M	2.488 Gbit/s	Disabled
10G_LAN	Ethernet 10G LAN optical interface	Enabled
10G_WAN	Ethernet 10G WAN optical interface	Enabled
L2-Transparency	L2CP Handling Test in EtherSAM	Disabled
TCM	Tandem Connection Monitoring HO/LO	Disabled

TunableOptics	Tunable Wavelength Support for SFP+	Disabled
9953M	9.953 Gbit/s	Disabled
OTU1	Optical Transport Unit-1 (2.7 Gbit/s)	Disabled
OTU2	Optical Transport Unit-2 (10.7 Gbit/s)	Disabled
100Optical	Ethernet 100Base-FX (Optical) Interface	Disabled
GigE_Optical	Ethernet 1000Base-X (Optical) Interface	Enabled
GigE_Electrical	Ethernet 1000Base-T (Electrical) Interface	Enabled
FC-1X	Fibre Channel 1X	Disabled
FC-2X	Fibre Channel 2X	Disabled
TCP-THPUT	Tcp Throughput Test Application	Disabled
100electrical	Ethernet 100Base-TX (Electrical) Interface	Enabled
10electrical	Ethernet 10Base-T (Electrical) Interface	Enabled
ODUMUX	ODU Multiplexing Payload Type 20 and 21	Disabled
FC-10X	Fibre Channel 10X	Disabled
OTU2-1e-2e	Optical Transport Unit-2 Overclocked (11.049/11.096 Gbit/s)	Disabled
FC-4X	Fibre Channel 4X	Disabled
ADV-FILTERS	Advanced Filtering	Disabled
MPLS	MPLS Encapsulation (10GE and less)	Disabled
IPV6	Internet Protocol Version 6 (IPv6) (10GE and less)	Disabled
OTN-INTR-THRU	OTN Intrusive Through Mode	Disabled
EoOTN	Ethernet over Optical Transport Network	Disabled
ETH-THRU	Through Mode Test Application	Disabled
OTU2-1f-2f	Optical Transport Unit-2 Overclocked (11.270/11.317 Gbit/s)	Disabled
Cable_Test	Cable Test	Disabled
ODU0	OTN ODU0	Disabled
ETH-CAPTURE	Ethernet Frame Capture for Advanced Troubleshooting	Disabled
ODUflex	OTN ODUflex	Disabled
TRAFFIC-SCAN	Traffic Scan	Disabled
52M	52 Mbit/s	Enabled
NI-CSU	NI/CSU Emulation	Disabled
FC-8X	Fibre Channel 8X	Disabled
CPRI	CPRI 2.4576 Gbit/s and 3.072 Gbit/s	Disabled
OBSAI	OBSAI 3.072 Gbit/s	Disabled
1588PTP	1588 Precision Time Protocol	Disabled
SyncE	Synchronous Ethernet	Disabled
ETH-OAM	Carrier Ethernet OAM Test Application	Disabled
CPRI-1.2G	CPRI 1.2288 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
DUAL-PORT	Dual Port Test	Disabled
RFC6349	RFC 6349 Test Application (10GE and less)	Disabled
iSAM	Intelligent Service Activation Methodology	Disabled
PoE	Power Over Ethernet	Disabled
LINK-OAM	Link OAM	Disabled
DP-CPRI	Dual Port CPRI	Disabled

TST-OAM	Test Over Service OAM	Disabled
G82751	ITU-T G.8275.1 Profile	Disabled
iOptics	Intelligent Pluggable Optic Test Application	Disabled
EoE	Ethernet over Ethernet Encapsulation (10GE and less)	Disabled
PBBTE	Provider Backbone Bridge Encapsulation (10GE and less)	Disabled
RFC6349-EXFOWorx	Enables EXFO Worx Interop Operation Mode	Disabled
GCC-BERT	OTN Overhead BERT and Synchronization Validation	Disabled
OBSAI-1.5G	OBSAI 1.536 Gbit/s	Disabled
OBSAI-6.1G	OBSAI 6.144 Gbit/s	Disabled
DTS-NAT	NAT Traversal for DTS applications	Disabled

LOGGER

ID	Start Time	Event	Duration	Details
1	11/05 05:20:00 PM	Test Started		2020-11-05
2	11/05 05:20:04 PM	Service Configuration te		2020-11-05
3	11/05 05:20:38 PM	Service Performance tes		2020-11-05
4	11/05 05:30:47 PM	Test Stopped		 PASS