



FTBx-8870 Report

FAIL

Report Header: EXFO Inc.
Report Title:
Report Date: 9/14/2021 3:36:29 PM
Type: RFC 2544

Job Information

Job ID: RTASK1859549
Circuit ID: Zayo: ETYX/294413/ZYO
Contractor Name:
Customer Name: highline-k12
Operator Name: daniel dh
Comment:

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SUMMARY

Results Summary

Test Status	
Throughput	Completed 00d:00:20:37
Back-to-Back	Completed 00d:00:22:51
Frame Loss	Completed 00d:00:08:04
Latency	Completed 00d:00:01:38
Pass/Fail Verdict	FAIL
Start Time	9/14/2021 01:31:52 PM
Test Recovery	0

RFC 2544

Pass/Fail Verdict	
Throughput	FAIL
Back-to-Back	FAIL
Frame Loss	FAIL
Latency	PASS

Throughput (Mbit/s)						
Layer						
	All		Ethernet		IP	
	L->R	R->L	L->R	R->L	L->R	R->L
64	7824.99	7921.87	5961.90	6035.71	4285.11	4338.16
128	8476.56	8703.12	7331.07	7527.02	6300.14	6468.53
256	8734.37	9257.80	8101.44	8586.95	7531.81	7983.18
512	9273.43	9601.56	8924.80	9240.60	8611.04	8915.73
1024	9554.68	9789.05	9371.64	9601.52	9206.90	9432.75
1280	9813.12	9828.12	9662.15	9676.91	9526.27	9540.83
1518	9875.62	9851.56	9747.20	9723.45	9631.62	9608.15

Throughput (Frame/s)		
	L->R	R->L
64	11644342.8655	11788502.0856
128	7159257.4288	7350609.2927
256	3955785.2879	4192848.2167
512	2178908.5104	2256006.0570
1024	1143999.5985	1172061.5488
1280	943569.6444	945011.6448
1518	802635.2557	800679.5226

Back-to-Back (Mbit/s)						
Layer						
	All		Ethernet		IP	
	L->R	R->L	L->R	R->L	L->R	R->L
64	10.98	3.76	8.36	2.86	6.01	2.06
128	28.35	9.92	24.52	8.58	21.07	7.37
256	69.78	29.16	64.72	27.05	60.17	25.14
512	401.61	52.14	386.51	50.18	372.92	48.41
1024	10000.00	98.15	9808.42	96.27	9636.01	94.58
1280	10000.00	121.14	9846.15	119.28	9707.69	117.60
1518	10000.00	142.54	9869.96	140.68	9752.92	139.01

Back-to-Back (f/burst)		
	L->R	R->L
64	16347	5599
128	23950	8380
256	31604	13209
512	94364	12252
1024	1197319	11752
1280	961539	11649
1518	812744	11585

	Frame Loss (%)		Round-Trip Latency (ms, Cut Through Mode)
	(100.0000 % Step)	(100.0000 % Step)	
	L->R	R->L	
64	18.779	20.754	0.42087
128	11.023	12.939	0.42179
256	5.486	7.379	0.42342
512	2.456	3.968	0.42611
1024	0.833	2.060	0.43003
1280	0.296	1.661	0.51505
1518	0.187	1.407	0.77135

RX Power Level		
	Min	Max
Power Range (dBm)	-19.0	-1.0
RX Power Level (dBm)	-2.2	-2.1

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

Alarms/Errors

Alarms/Errors List

Active/Historical Alarms/Errors

None

Interface

Alarms	Seconds
LOS	0
Frequency	0

Clock Sync

Alarm	Seconds
LOC	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	

IP/UDP

Errors	Seconds	Count	Rate
IP Checksum	0	0	0.00E00
UDP Checksum	0	0	0.00E00
Total		0	

Setup Summary

Application Type	RFC 2544
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Interface	Port 1
Interface/Rate	10GE LAN
Connector	SFP+

Flow Control	None
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Framing: MAC/IP/UDP

IP Version	IPv4
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	MAC	IP Address	UDP Port
Source	00:03:01:F8:22:DD	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

RFC 2544

DTS Enabled	Enabled
Remote ID	MAX-860G84

Frame Size Distribution (Bytes)				
64	128	256	512	1024
1280	1518			

Enabled Subtests			
Throughput	Max. Rate (Mbit/s)		Accuracy (Mbit/s)
	L->R	R->L	
	10000.00	10000.00	10
	Threshold (Mbit/s)		
	L->R	R->L	
	1000.0	10000.0	
Back-to-Back	Burst Time (MM:SS)		Accuracy (Frames)
	00:01		1
	Threshold (%)		
	L->R	R->L	
	100.0	100.0	
Frame Loss	Max. Rate (Mbit/s)		Granularity (%)
	L->R	R->L	
	10000.00	10000.00	5
	Threshold (%)		
	L->R	R->L	
	0.01	0.1	
Latency	L->R		R->L
	Max. Rate (Mbit/s)		Max. Rate (Mbit/s)
	10000.00		10000.00
	Threshold (ms)		
	28.00000		

TEST RESULTS

Ethernet Traffic

Frame Type	TX Count	RX Count
Multicast	0	116
Broadcast	0	0
Unicast	2997854877	2882351312
Non-Unicast	0	116
Total	2997854877	2882351428

Frame Size (Bytes)	RX Count	%
< 64	0	0.0
64	1555014698	53.9
65 - 127	47	0.0
128 - 255	602287342	20.8
256 - 511	321561647	11.1
512 - 1023	161297370	5.5
1024 - 1518	242190324	8.4
> 1518	0	0.0
Total	2882351428	

Flow Control Monitoring

Frame Count	
Pause Frames	0
Abort Frames	0
Frames RX	0
Frames TX	0

Pause Time (Quanta)	
Total Pause Time	
Last Pause Time	
Minimum Pause Time	
Maximum Pause Time	

RFC 2544

Pass/Fail Verdict	
Throughput	FAIL
Back-to-Back	FAIL
Frame Loss	FAIL
Latency	PASS

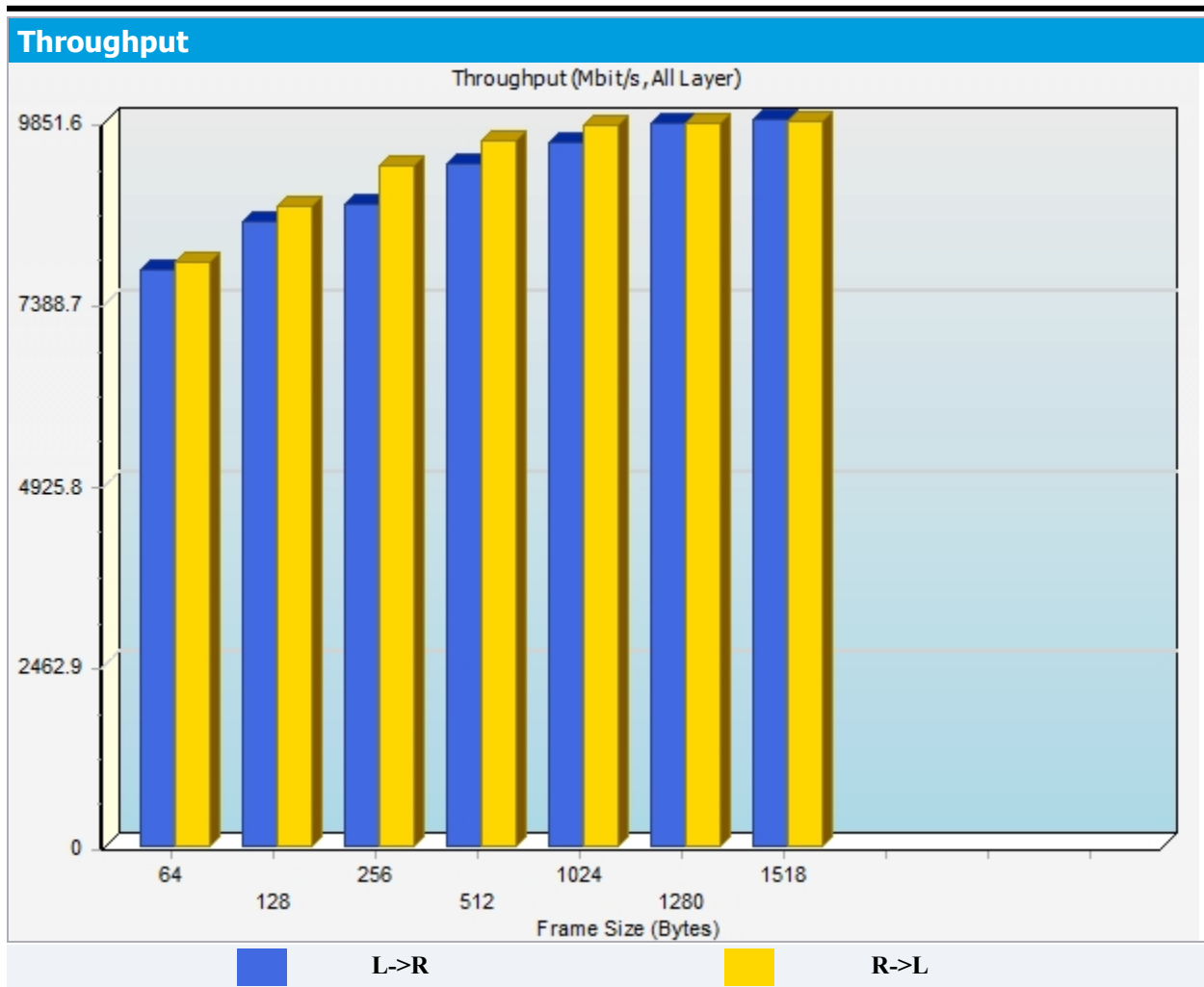
Throughput (Mbit/s)							
Layer							
		All		Ethernet		IP	
		L->R	R->L	L->R	R->L	L->R	R->L
64	Min.	7824.99	7921.87	5961.90	6035.71	4285.11	4338.16
	Max.	7824.99	7921.87	5961.90	6035.71	4285.11	4338.16
	Avg.	7824.99	7921.87	5961.90	6035.71	4285.11	4338.16
128	Min.	8476.56	8703.12	7331.07	7527.02	6300.14	6468.53
	Max.	8476.56	8703.12	7331.07	7527.02	6300.14	6468.53
	Avg.	8476.56	8703.12	7331.07	7527.02	6300.14	6468.53
256	Min.	8734.37	9257.80	8101.44	8586.95	7531.81	7983.18
	Max.	8734.37	9257.80	8101.44	8586.95	7531.81	7983.18
	Avg.	8734.37	9257.80	8101.44	8586.95	7531.81	7983.18
512	Min.	9273.43	9601.56	8924.80	9240.60	8611.04	8915.73
	Max.	9273.43	9601.56	8924.80	9240.60	8611.04	8915.73
	Avg.	9273.43	9601.56	8924.80	9240.60	8611.04	8915.73
1024	Min.	9554.68	9789.05	9371.64	9601.52	9206.90	9432.75
	Max.	9554.68	9789.05	9371.64	9601.52	9206.90	9432.75
	Avg.	9554.68	9789.05	9371.64	9601.52	9206.90	9432.75
1280	Min.	9813.12	9828.12	9662.15	9676.91	9526.27	9540.83
	Max.	9813.12	9828.12	9662.15	9676.91	9526.27	9540.83
	Avg.	9813.12	9828.12	9662.15	9676.91	9526.27	9540.83
1518	Min.	9875.62	9851.56	9747.20	9723.45	9631.62	9608.15
	Max.	9875.62	9851.56	9747.20	9723.45	9631.62	9608.15
	Avg.	9875.62	9851.56	9747.20	9723.45	9631.62	9608.15

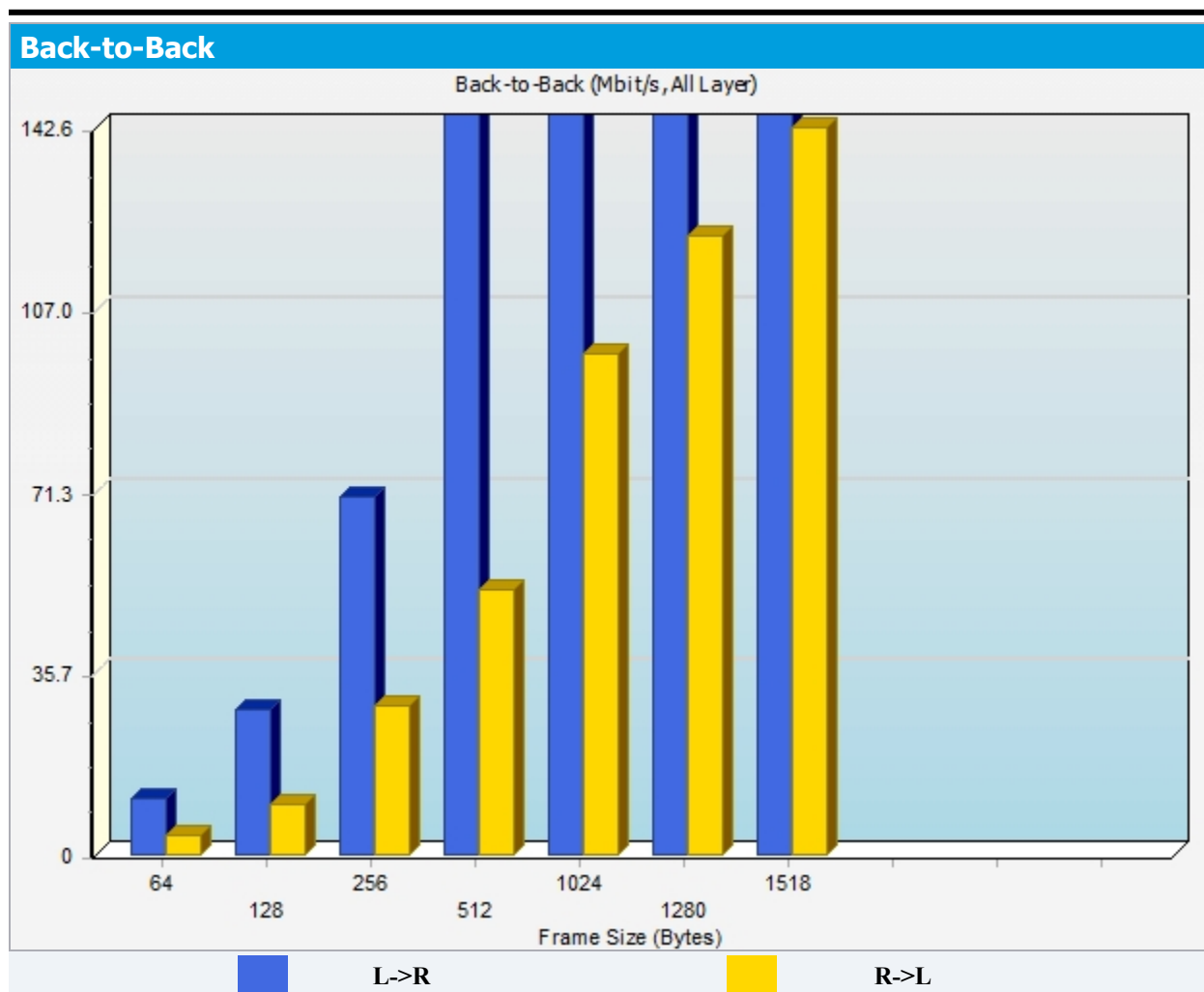
Throughput (Frame/s)			
		L->R	R->L
64	Min.	11644342.8655	11788502.0856
	Max.	11644342.8655	11788502.0856
	Avg.	11644342.8655	11788502.0856
128	Min.	7159257.4288	7350609.2927
	Max.	7159257.4288	7350609.2927
	Avg.	7159257.4288	7350609.2927
256	Min.	3955785.2879	4192848.2167
	Max.	3955785.2879	4192848.2167
	Avg.	3955785.2879	4192848.2167
512	Min.	2178908.5104	2256006.0570
	Max.	2178908.5104	2256006.0570
	Avg.	2178908.5104	2256006.0570
1024	Min.	1143999.5985	1172061.5488
	Max.	1143999.5985	1172061.5488
	Avg.	1143999.5985	1172061.5488
1280	Min.	943569.6444	945011.6448
	Max.	943569.6444	945011.6448
	Avg.	943569.6444	945011.6448
1518	Min.	802635.2557	800679.5226
	Max.	802635.2557	800679.5226
	Avg.	802635.2557	800679.5226

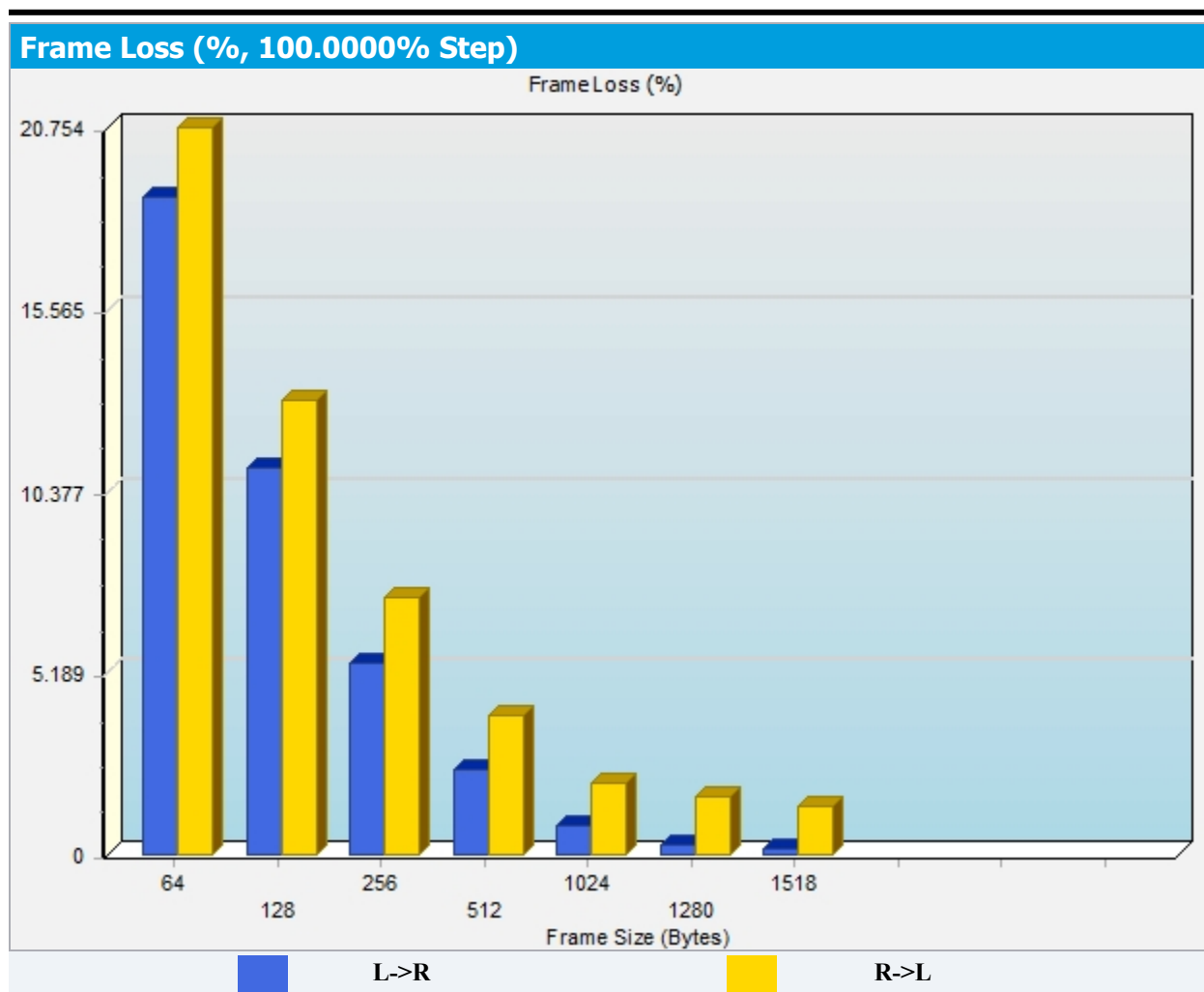
Back-to-Back (Mbit/s)							
Layer							
		All		Ethernet		IP	
		L->R	R->L	L->R	R->L	L->R	R->L
64	Min.	10.98	3.76	8.36	2.86	6.01	2.06
	Max.	10.98	3.76	8.36	2.86	6.01	2.06
	Avg.	10.98	3.76	8.36	2.86	6.01	2.06
128	Min.	28.35	9.92	24.52	8.58	21.07	7.37
	Max.	28.35	9.92	24.52	8.58	21.07	7.37
	Avg.	28.35	9.92	24.52	8.58	21.07	7.37
256	Min.	69.78	29.16	64.72	27.05	60.17	25.14
	Max.	69.78	29.16	64.72	27.05	60.17	25.14
	Avg.	69.78	29.16	64.72	27.05	60.17	25.14
512	Min.	401.61	52.14	386.51	50.18	372.92	48.41
	Max.	401.61	52.14	386.51	50.18	372.92	48.41
	Avg.	401.61	52.14	386.51	50.18	372.92	48.41
1024	Min.	10000.00	98.15	9808.42	96.27	9636.01	94.58
	Max.	10000.00	98.15	9808.42	96.27	9636.01	94.58
	Avg.	10000.00	98.15	9808.42	96.27	9636.01	94.58
1280	Min.	10000.00	121.14	9846.15	119.28	9707.69	117.60
	Max.	10000.00	121.14	9846.15	119.28	9707.69	117.60
	Avg.	10000.00	121.14	9846.15	119.28	9707.69	117.60
1518	Min.	10000.00	142.54	9869.96	140.68	9752.92	139.01
	Max.	10000.00	142.54	9869.96	140.68	9752.92	139.01
	Avg.	10000.00	142.54	9869.96	140.68	9752.92	139.01
	Min.	--	--	--	--	--	--
	Max.	--	--	--	--	--	--
	Avg.	--	--	--	--	--	--

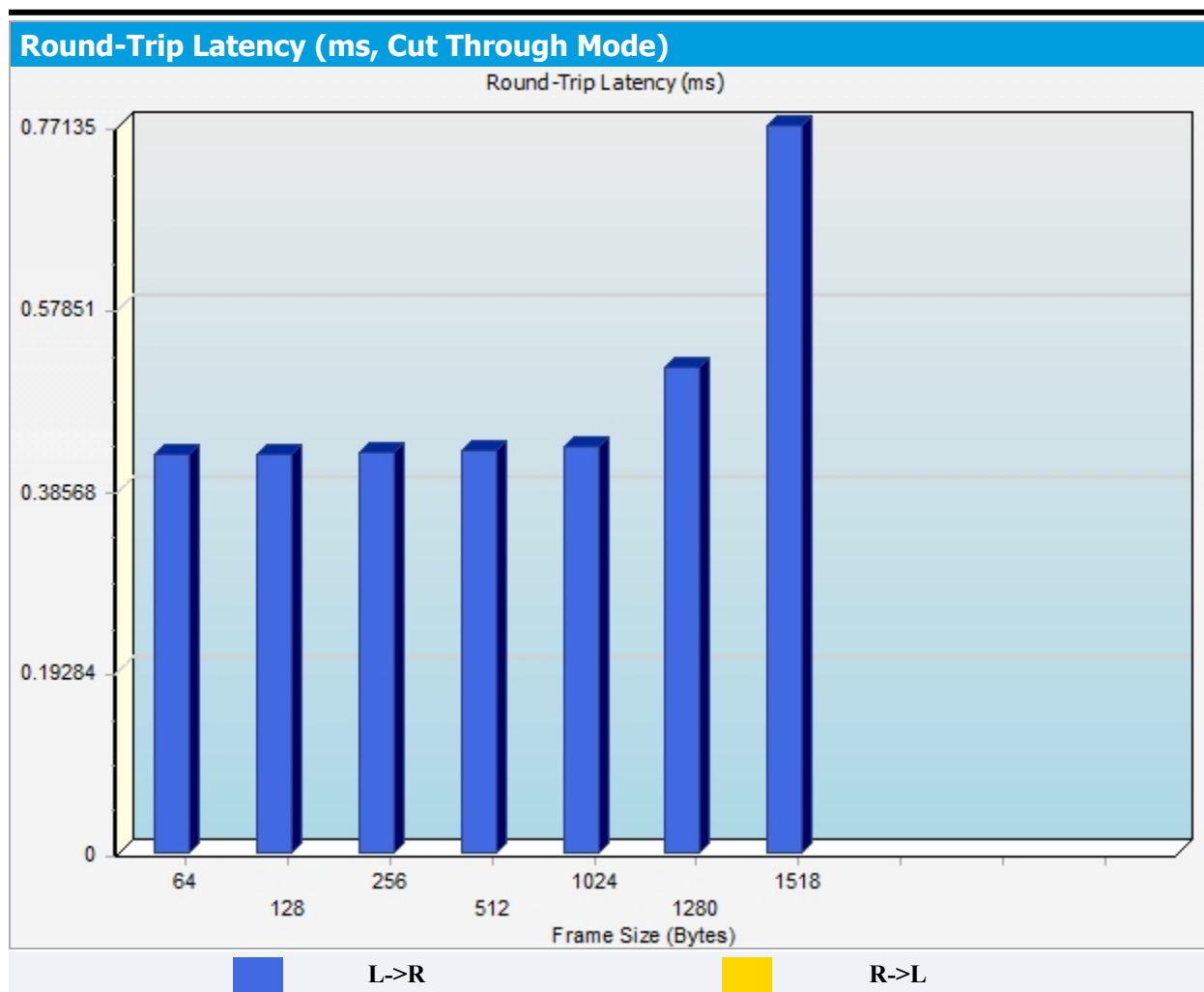
Back-to-Back (f/burst)			
		L->R	R->L
64	Min.	16347	5599
	Max.	16347	5599
	Avg.	16347	5599
128	Min.	23950	8380
	Max.	23950	8380
	Avg.	23950	8380
256	Min.	31604	13209
	Max.	31604	13209
	Avg.	31604	13209
512	Min.	94364	12252
	Max.	94364	12252
	Avg.	94364	12252
1024	Min.	1197319	11752
	Max.	1197319	11752
	Avg.	1197319	11752
1280	Min.	961539	11649
	Max.	961539	11649
	Avg.	961539	11649
1518	Min.	812744	11585
	Max.	812744	11585
	Avg.	812744	11585
	Min.	--	--
	Max.	--	--
	Avg.	--	--

		Frame Loss (% , 100.0000% Step)		Round-Trip Latency (ms, Cut Through Mode)
		L->R	R->L	
64	Min.	18.779	20.754	0.42087
	Max.	18.779	20.754	0.42087
	Avg.	18.779	20.754	0.42087
128	Min.	11.023	12.939	0.42179
	Max.	11.023	12.939	0.42179
	Avg.	11.023	12.939	0.42179
256	Min.	5.486	7.379	0.42342
	Max.	5.486	7.379	0.42342
	Avg.	5.486	7.379	0.42342
512	Min.	2.456	3.968	0.42611
	Max.	2.456	3.968	0.42611
	Avg.	2.456	3.968	0.42611
1024	Min.	0.833	2.060	0.43003
	Max.	0.833	2.060	0.43003
	Avg.	0.833	2.060	0.43003
1280	Min.	0.296	1.661	0.51505
	Max.	0.296	1.661	0.51505
	Avg.	0.296	1.661	0.51505
1518	Min.	0.187	1.407	0.77135
	Max.	0.187	1.407	0.77135
	Avg.	0.187	1.407	0.77135
	Max.	--	--	--









TEST SETUP

Clock Synchronization

Clock Mode	Internal
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RFC 2544

Frame Size Distribution (Bytes)

64	128	256	512	1024
1280	1518			

Enabled Subtests

Throughput	Max. Rate (Mbit/s)		Trial Duration (MM:SS)	Trials	Accuracy (Mbit/s)	Acceptable Errors	Validations
	L->R 10000.00	R->L 10000.00	00:05	1	10	0	1
Back-to-Back			Burst Time (MM:SS)	Trials	Accuracy (Frames)	Acceptable Errors	Bursts
			00:01	1	1	0	1
Frame Loss	Max. Rate (Mbit/s)		Trial Duration (MM:SS)	Trials	Granularity (%)		
	L->R 10000.00	R->L 10000.00	00:05	1	5		
Latency	Max. Rate (Mbit/s)		Trial Duration (MM:SS)	Trials	Latency Measurement Mode		
	L->R 7824.99 - 9875.62 (Frame Size Dependent)		00:01	1	Round-Trip		

FUNCTIONS

Ping & Trace Route

Network	
Source MAC Address	00:03:01:F8:22:DD
Source IP Address	10.112.0.1 (Stream 1)
Destination IP Address	0.0.0.0

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=10.112.0.100, Bytes=32, Time=0 ms, TTL=127

Ping Statistics	
Packets Transmitted	1
Packets Received	1
Percentage Lost (%)	0.0
Minimum Round Trip Time (ms)	0
Maximum Round Trip Time (ms)	0
Average Round Trip Time (ms)	0

Trace Route	
Timeout (ms)	4000
Max Hop Count	128

SYSTEM INFORMATION

Product Name	Power Blazer Series
Version	Power Blazer Series 1.75
Module ID	FTBx-8870
Slot ID	1
Software Product Version	1.75.0.85
	Power Blazer Series 1.75
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)	26.7 °C

Software Options

DS1-FDL	DS1/1.5M Facility Data Link	Disabled
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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
G82752	ITU-T G.8275.2 Profile	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	09/14 01:31:52 PM	Test Started		2021-09-14
2	09/14 02:25:05 PM	Test Stopped		 FAIL