

PacketExpert10GX Report

Test Report : PXN100 RFC2544

Start Date : 10/13/22

Start Time : 18:26:39

End Date : 10/13/22

End Time : 18:39:28

User Comments :

RFC2544 Testing on 1G Ports

 ***GL Communications Inc.***

Port - 1 Interface

Hardware MAC Address : 00-21-C2-00-25-52

Speed : 1000 Mbps

Link Status : Up

Duplex Mode : Full Duplex

Auto Negotiation Status : Complete

Flow Control : Enabled

Port - 2 Interface

Hardware MAC Address : 00-21-C2-00-25-55

Speed : 1000 Mbps

Link Status : Up

Duplex Mode : Full Duplex

Auto Negotiation Status : Complete

Flow Control : Enabled

Throughput Results

East ----> West

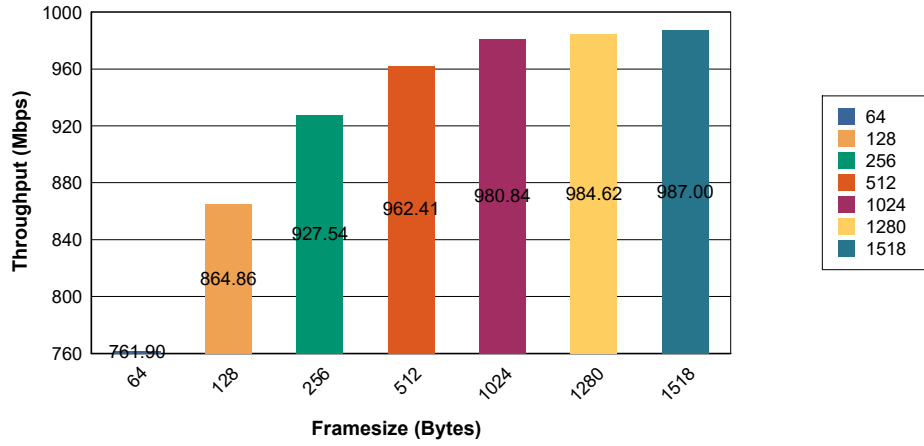
Frame Length	Throughput
64	100% 761.90 Mbps
128	100% 864.86 Mbps
256	100% 927.54 Mbps
512	100% 962.41 Mbps
1024	100% 980.84 Mbps
1280	100% 984.62 Mbps
1518	100% 987.00 Mbps

West ----> East

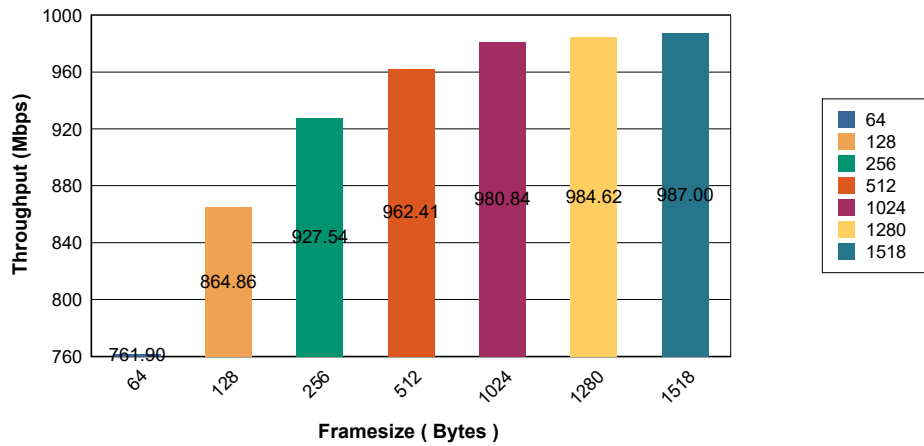
Frame Length	Throughput
64	100% 761.90 Mbps
128	100% 864.86 Mbps
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1024	100% 980.84 Mbps
1280	100% 984.62 Mbps
1518	100% 987.00 Mbps

Throughput Graph

East To West Throughput Result



West To East Throughput Results



Latency Results

East ----> West

Frame Size	Latency (Store & Forward, BitForward)
64	100% -, 0.408 us
128	100% -, 0.408 us
256	100% -, 0.408 us
512	100% -, 0.408 us
1024	100% -, 0.408 us
1280	100% -, 0.408 us
1518	100% -, 0.408 us

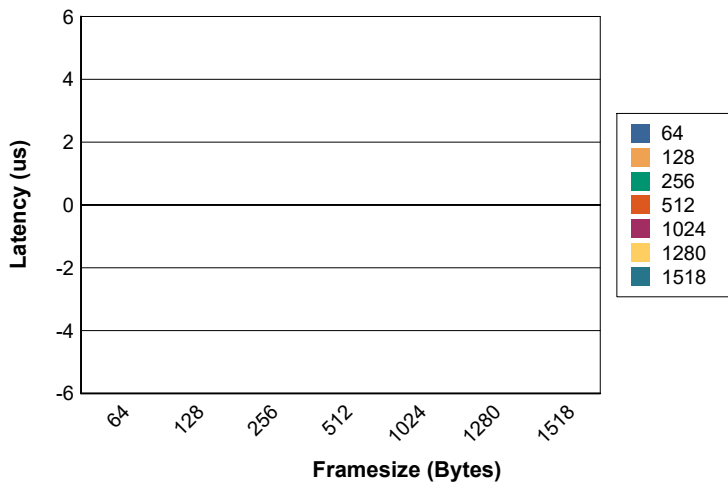
West ----> East

Frame Size	Latency (Store & Forward, BitForward)
64	100% -, 0.416 us
128	100% -, 0.416 us
256	100% -, 0.416 us
512	100% -, 0.408 us
1024	100% -, 0.416 us
1280	100% -, 0.408 us
1518	100% -, 0.408 us

Latency Graph

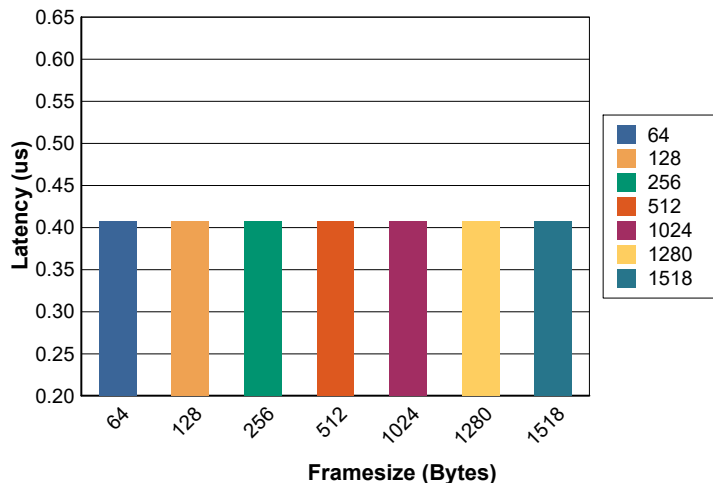
East To West Latency

Store And Forward



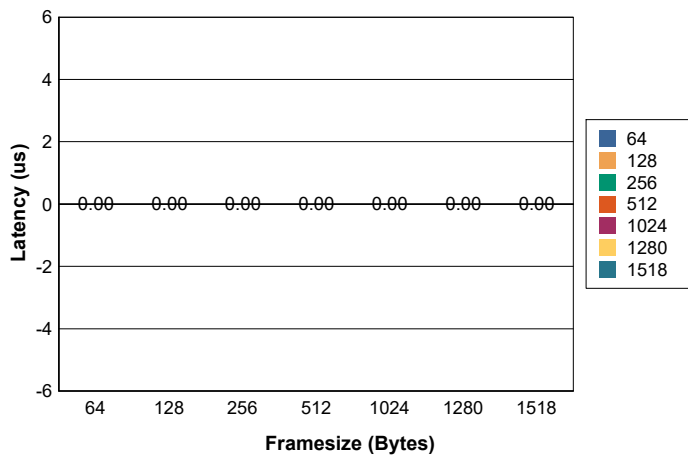
East To West Latency

Bit Forward



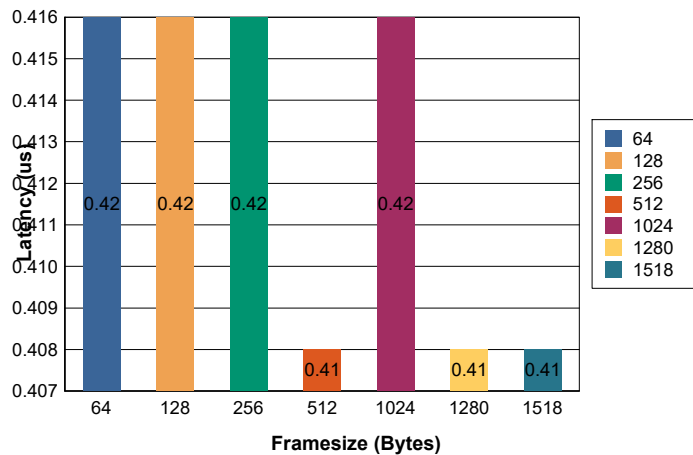
West To East Latency

Store And Forward



West To East Latency

Bit Forward



FrameLoss Results

East Port ----> West Port

West Port ----> East Port

Frame Length Bandwidth Loss

Frame Length Bandwidth Loss

64 100 % 0 %
 90 % 0 %
 80 % 0 %
 70 % 0 %
 60 % 0 %
 50 % 0 %
 40 % 0 %
 30 % 0 %
 20 % 0 %
 10 % 0 %

64 100 % 0 %
 90 % 0 %
 80 % 0 %
 70 % 0 %
 60 % 0 %
 50 % 0 %
 40 % 0 %
 30 % 0 %
 20 % 0 %
 10 % 0 %

128 100 % 0 %
 90 % 0 %
 80 % 0 %
 70 % 0 %
 60 % 0 %
 50 % 0 %
 40 % 0 %
 30 % 0 %
 20 % 0 %
 10 % 0 %

128 100 % 0 %
 90 % 0 %
 80 % 0 %
 70 % 0 %
 60 % 0 %
 50 % 0 %
 40 % 0 %
 30 % 0 %
 20 % 0 %
 10 % 0 %

256 100 % 0 %
 90 % 0 %
 80 % 0 %
 70 % 0 %
 60 % 0 %
 50 % 0 %
 40 % 0 %

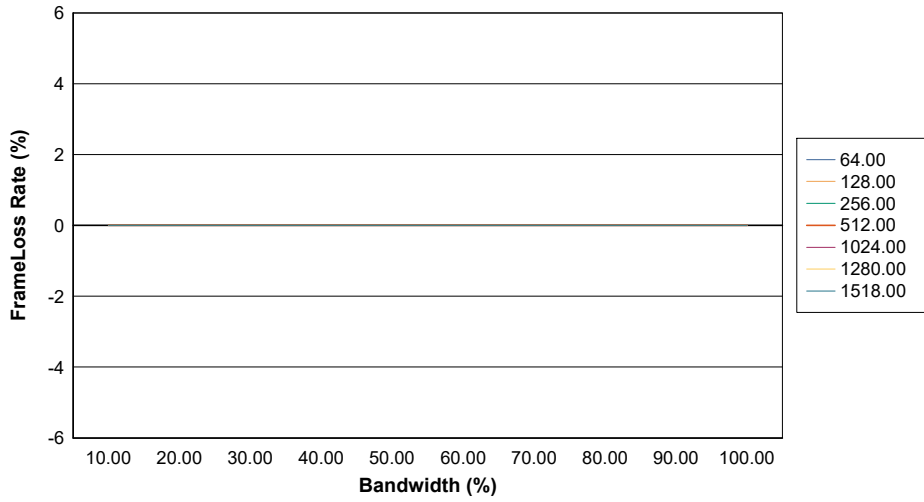
256 100 % 0 %
 90 % 0 %
 80 % 0 %
 70 % 0 %
 60 % 0 %
 50 % 0 %
 40 % 0 %

	30 % 0 %		30 % 0 %
	20 % 0 %		20 % 0 %
	10 % 0 %		10 % 0 %
512	100 % 0 %	512	100 % 0 %
	90 % 0 %		90 % 0 %
	80 % 0 %		80 % 0 %
	70 % 0 %		70 % 0 %
	60 % 0 %		60 % 0 %
	50 % 0 %		50 % 0 %
	40 % 0 %		40 % 0 %
	30 % 0 %		30 % 0 %
	20 % 0 %		20 % 0 %
	10 % 0 %		10 % 0 %
1024	100 % 0 %	1024	100 % 0 %
	90 % 0 %		90 % 0 %
	80 % 0 %		80 % 0 %
	70 % 0 %		70 % 0 %
	60 % 0 %		60 % 0 %
	50 % 0 %		50 % 0 %
	40 % 0 %		40 % 0 %
	30 % 0 %		30 % 0 %
	20 % 0 %		20 % 0 %
	10 % 0 %		10 % 0 %
1280	100 % 0 %	1280	100 % 0 %
	90 % 0 %		90 % 0 %
	80 % 0 %		80 % 0 %
	70 % 0 %		70 % 0 %
	60 % 0 %		60 % 0 %
	50 % 0 %		50 % 0 %
	40 % 0 %		40 % 0 %
	30 % 0 %		30 % 0 %

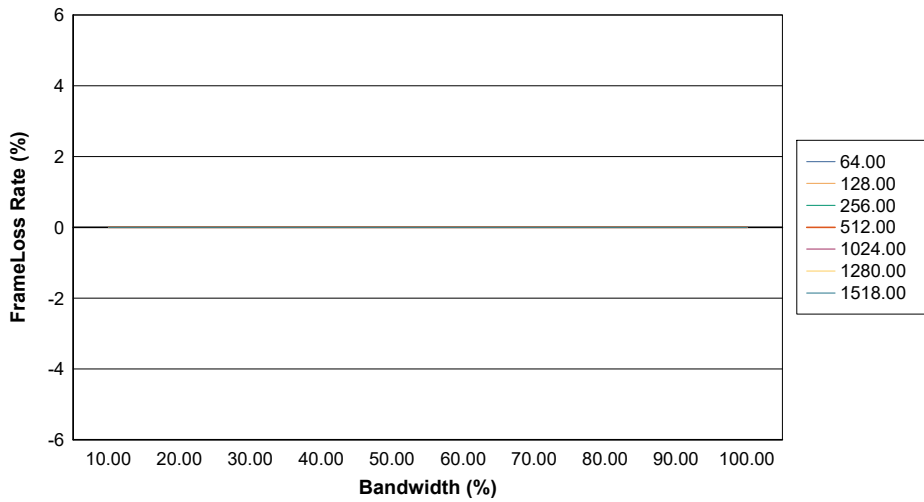
	20 % 0 %		20 % 0 %
	10 % 0 %		10 % 0 %
1518	100 % 0 %	1518	100 % 0 %
	90 % 0 %		90 % 0 %
	80 % 0 %		80 % 0 %
	70 % 0 %		70 % 0 %
	60 % 0 %		60 % 0 %
	50 % 0 %		50 % 0 %
	40 % 0 %		40 % 0 %
	30 % 0 %		30 % 0 %
	20 % 0 %		20 % 0 %
	10 % 0 %		10 % 0 %

FrameLoss Graph

East To West Frameloss Graph



West To East Frameloss graph



BackToBack Results

East Port ----> West Port

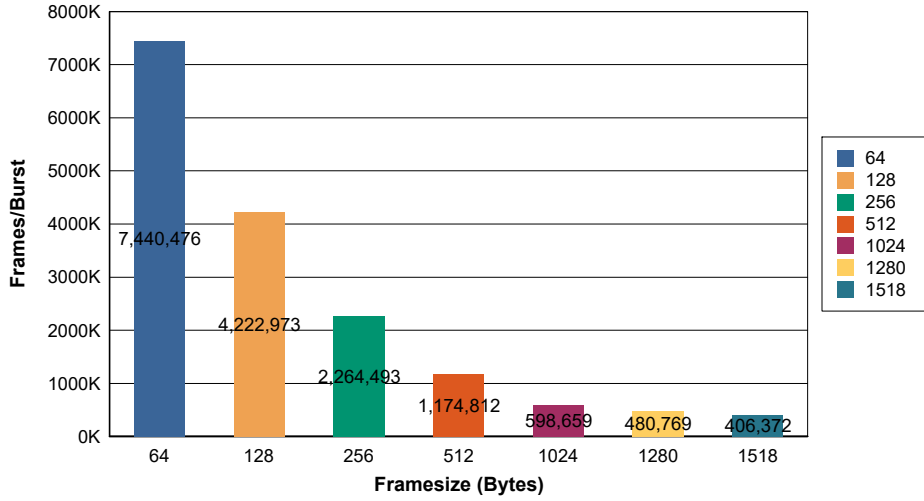
Frame Length	Frame Per Burst
64	7440476 Frames/Burst
128	4222973 Frames/Burst
256	2264493 Frames/Burst
512	1174812 Frames/Burst
1024	598659 Frames/Burst
1280	480769 Frames/Burst
1518	406372 Frames/Burst

West Port ----> East Port

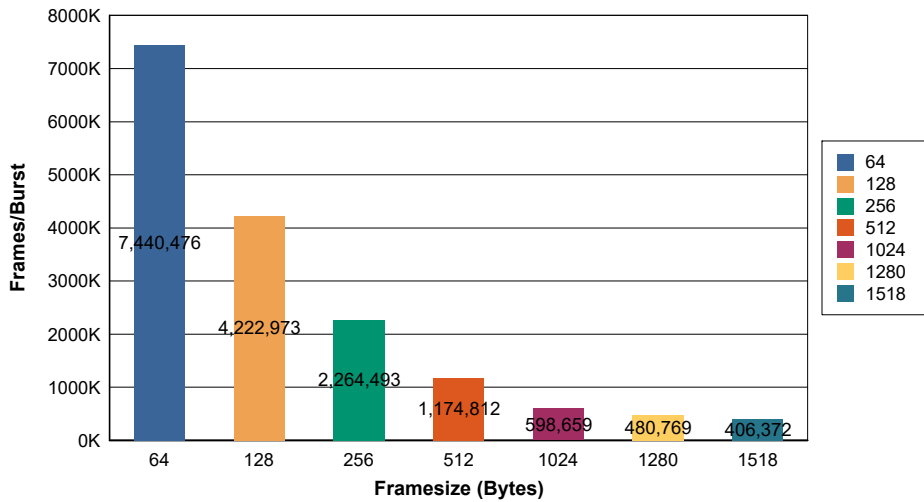
Frame Length	Frame Per Burst
64	7440476 Frames/Burst
128	4222973 Frames/Burst
256	2264493 Frames/Burst
512	1174812 Frames/Burst
1024	598659 Frames/Burst
1280	480769 Frames/Burst
1518	406372 Frames/Burst

BackToBack Graph

East To West BackToBack Graph



West To East BackToBack Graph



Global Configuration

Minimum Frame Length : 64
Maximum Frame Length : 16000

Framesize

Quantity : 7

64	128	256	512	1024
1280	1518	-	-	-
-	-	-	-	-
-	-	-	-	-

Port Selection

East Port	Direction	West Port
1	Bidirectional	2

Test Procedure

- Throughput :** Enabled
- Latency :** Enabled
- BackToBack :** Enabled
- FrameLoss :** Enabled

Test Configuration

Throughput East Port <-> West Port

Trial Duration (sec) : 5

Number Of Trials : 1

Min Bandwidth (%) : 10 | 10

Max Bandwidth (%) : 100 | 100

Latency East Port <-> West Port

Trial Duration (sec) : 5

Number Of Trials : 1

Bandwidth (%) : 100 | 100

Use Throughput Bw : Enabled

FrameLoss East Port <-> West Port

Trial Duration (sec) : 5

Number Of Trials : 1

Min Bandwidth (%) : 10 | 10

Max Bandwidth (%) : 100 | 100

BackToBack East Port <-> West Port

Trial Duration (sec) : 5

Number Of Trials : 1

Burst Size (msec) : 400 | 400

Number Of Bursts : 1 | 1

Port - 1 TxRx Configuration

MAC

Layer : UDP

Source MAC Address : 00-00-00-00-01-01

Destination MAC Address : 00-00-00-00-01-02

Length/Type : 08-00

VLAN Enable : Disabled

VLAN Level : -

VLAN Type 1 -

VLAN ID 1 : - VLAN Priority 1 : -

VLAN Type 2 -

VLAN ID 2 : - VLAN Priority 2 : -

VLAN Type 3 : -

VLAN ID 3 : - VLAN Priority 3 : -

MPLS Enable : Disabled

MPLS Level : -

MPLS Label 1 : -

MPLS CoS 1 : -

MPLS TTL 1 : -

MPLS Label 2 : -

MPLS CoS 2 : -

MPLS TTL 2 : -

MPLS Label 3 : -

MPLS CoS 3 : -

MPLS TTL 3 : -

IP

IP Type : IPv4

Source IPv4 Address : 192.168.1.11

Subnet Mask : 255.255.255.0

Enable Default Gateway : Enabled

Default Gateway : 192.168.1.1

Dest IPv4 Address : 192.168.1.12

Enable IP Checksum : Enabled

TOS/DS : 0

IP Checksum : -

TTL : 128

Enable IP Id Incr : Enabled

Protocol: 17

IP ID : -

Traffic Class : -

Next Header : -

Flow Label : -

Hop Limit : -

Source IPv6 Address Type : -

Source IPv6 Address : -

Dest IPv6 Address Type : -

Dest IPv6 Address : -

UDP

Source UDP Port : 1001

Destination UDP Port : 1002

UDP Checksum Enable : Enabled

UDP Checksum : -

Payload

Payload : 1234

Port - 2 TxRx Configuration

MAC

Layer : UDP

Source MAC Address : 00-00-00-00-01-02

Destination MAC Address : 00-00-00-00-01-01

Length/Type : 08-00

VLAN Enable : Disabled

VLAN Level : -

VLAN Type 1 -

VLAN ID 1 : - VLAN Priority 1 : -

VLAN Type 2 -

VLAN ID 2 : - VLAN Priority 2 : -

VLAN Type 3 : -

VLAN ID 3 : - VLAN Priority 3 : -

MPLS Enable : Disabled

MPLS Level : -

MPLS Label 1 : -

MPLS CoS 1 : -

MPLS TTL 1 : -

MPLS Label 2 : -

MPLS CoS 2 : -

MPLS TTL 2 : -

MPLS Label 3 : -

MPLS CoS 3 : -

MPLS TTL 3 : -

IP

IP Type : IPv4

Source IPv4 Address : 192.168.1.12

Subnet Mask : 255.255.255.0

Enable Default Gateway : Enabled

Default Gateway : 192.168.1.1

Dest IPv4 Address : 192.168.1.11

Enable IP Checksum : Enabled

TOS/DS : 0

IP Checksum : -

TTL : 128

Enable IP Id Incr : Enabled

Protocol: 17

IP ID : -

Traffic Class : -

Next Header : -

Flow Label : -

Hop Limit : -

Source IPv6 Address Type : -

Source IPv6 Address : -

Dest IPv6 Address Type : -

Dest IPv6 Address : -

UDP

Source UDP Port : 1002

Destination UDP Port : 1001

UDP Checksum Enable : Enabled

UDP Checksum : -

Payload

Payload : 1234

End Of Report