

Agilent Technologies N2X - Test Report	
Copyright 2007 Agilent Technologies	
Script	RFC 2544 Benchmark v2.0
Tester software	RouterTester900 6.10 System Release
QuickTest software	7.9 (29-Jan-2008)
Run started	Wed Dec 10 14:49:27 2008
Test engineer	
System under test	1.9.0. Build ID: 2.D262 F2093V1.0.0

Test Parameters	
Traffic mode	Use existing traffic

Test ports	
Name	103/1
Type	10GBASE_R
Framing mode	ETHERNET_FRAME
Link state	10G_FULLDUPLEX

Test cases	
Back-to-back Burst Length	Disabled
Forwarding Rate	Enabled
Loss Rate	Enabled
Throughput and Latency	Enabled
Operational mode	L2 frames
Report format	Results per port

Common traffic setup	
Frame length list (bytes)	64 128 256 512 1024 1280 1500 3000 4500 6000 7500 9000
Formal duration at each frame length (s)	60
Idle recovery time between frame lengths (s)	2
Trial duration when searching (s)	2

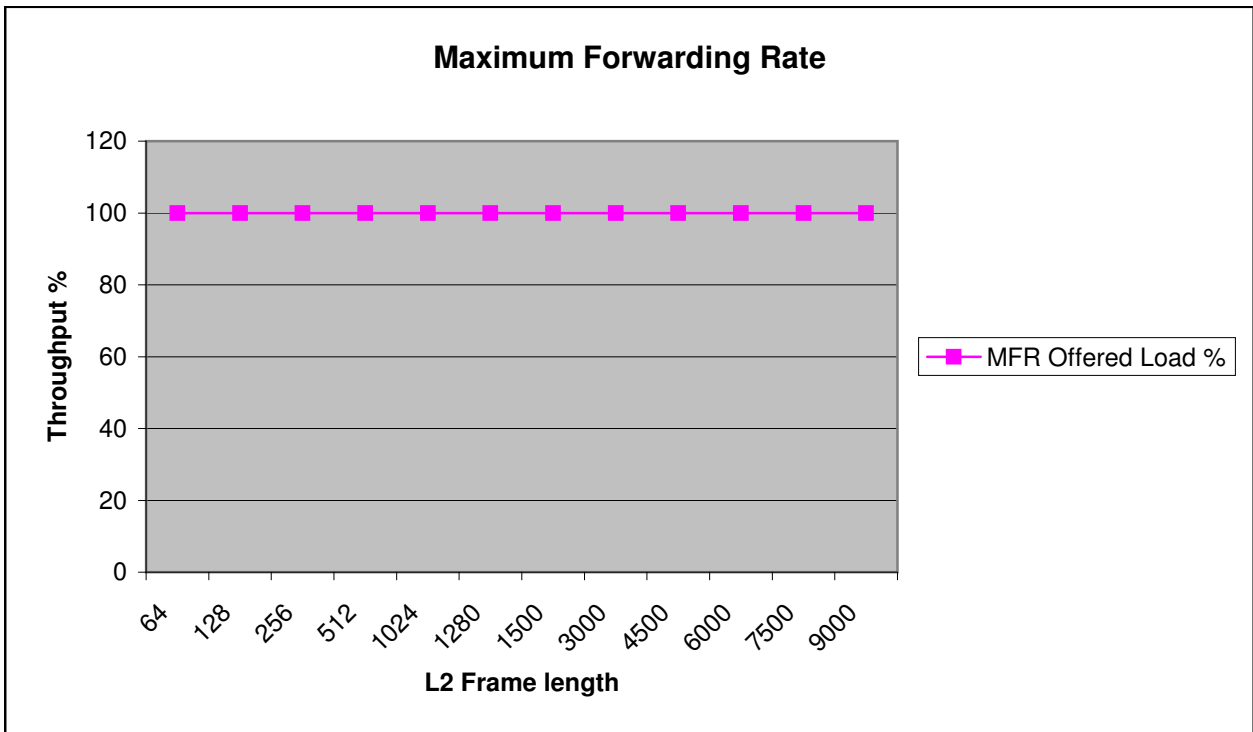
Stream Group Name	103/1 -> 103/1
Stream Index	0
Source Port	103/1
Destination Ports	103/1
Protocol	IPv4/Ethernet

Forwarding Rate Results

Bandwidths (% of theoretical max)	
Initial	100
Decrement	10
Final	0

--- Forwarding Rate - summary results ---				
Frame length (bytes)	FRMOL Offered load (%)	FRMOL Forwarding Rate (frames/s)	MFR Offered load (%)	MFR Forwarding Rate (frames/s)
64	100	14880952.37	100	14880952.37
128	100	8445945.95	100	8445945.95
256	100	4528985.517	100	4528985.517
512	100	2349624.067	100	2349624.067
1024	100	1197318.017	100	1197318.017
1280	100	961538.467	100	961538.467
1500	100	822368.433	100	822368.433
3000	100	413907.3	100	413907.3
4500	100	276548.683	100	276548.683
6000	100	207641.2	100	207641.2
7500	100	166223.417	100	166223.417
9000	100	138580.933	100	138580.933

FRMOL (Forwarding Rate at Maximum Offered Load)
MFR (Maximum Forwarding Rate)

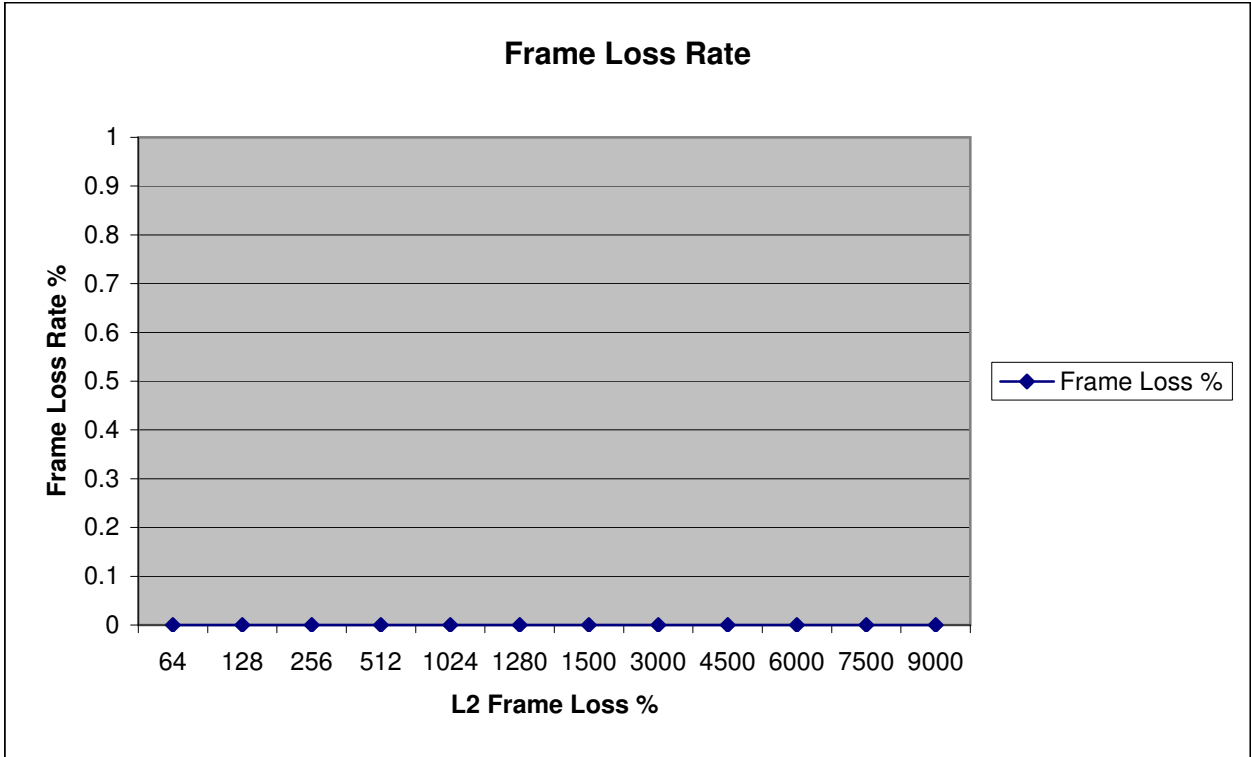


Loss Rate Results

Bandwidths (% of theoretical max)	
Initial	100
Decrement	10
Final	0

Trial Time (s)	60
Intended Load (%)	100
Offered Load (%)	100

--- Loss Rate - per port results ---			
Frame Length (bytes)	Max Theoretical Rate (frame/s)	Tx Rate (frame/s)	Frame Loss Rate (%)
64	14880952.38	14880952.38	0
128	8445945.946	8445945.946	0
256	4528985.507	4528985.507	0
512	2349624.06	2349624.06	0
1024	1197318.008	1197318.008	0
1280	961538.462	961538.462	0
1500	822368.421	822368.421	0
3000	413907.285	413907.285	0
4500	276548.673	276548.673	0
6000	207641.196	207641.196	0
7500	166223.404	166223.404	0
9000	138580.931	138580.931	0



Throughput and Latency Results	
Initial intended load (% of Theoretical max)	100
Bandwidth search initial step size (increment %)	5
Bandwidth search limiting precision (% of theoretical max)	1
Maximum allowable loss (% of transmitted frames)	0
Maximum allowable average latency (us)	100000
Bandwidth decrease for backoff latency (% change of max tput)	1
Bandwidth increase for saturation throughput (% change of max throughput)	1

--- Maximum Effective Throughput - summary results ---				
Frame Length (bytes)	Throughput (Rx/Tx %)	Tx Load (% of max)	Min Latency (us)	Avg Latency (us)
64	100	100	13.41	13.573
128	100	100	13.53	13.644
256	100	100	13.69	13.805
512	100	100	13.92	14.056
1024	100	100	14.25	14.314
1280	100	100	14.2	14.312
1500	100	100	14.17	14.301
3000	100	100	14.21	14.303
4500	100	100	14.19	14.308
6000	100	100	14.23	14.316
7500	100	100	14.2	14.306
9000	100	100	14.2	14.296

--- Backoff Latency - summary results ---				
Frame Length (bytes)	Throughput (Rx/Tx %)	Min Latency (us)	Avg Latency (us)	Max Latency (us)
64	99	13.42	13.507	13.63
128	99	13.49	13.577	13.68
256	99	13.66	13.763	13.87
512	99	13.89	13.982	14.08
1024	99	14.16	14.244	14.36
1280	99	14.14	14.234	14.35
1500	99	14.15	14.23	14.34
3000	99	14.14	14.219	14.33
4500	99	14.14	14.209	14.29
6000	99	14.14	14.209	14.28
7500	99	14.16	14.215	14.33
9000	99	14.16	14.216	14.32

--- Saturation Throughput - summary results ---				
Frame Length (bytes)	Throughput (Rx/Tx %)	Min Latency (us)	Avg Latency (us)	Max Latency (us)
64	100	13.43	13.584	13.67
128	100	13.52	13.634	13.72
256	100	13.68	13.818	13.96
512	100	13.89	14.052	14.14
1024	100	14.18	14.314	14.45
1280	100	14.21	14.306	14.44
1500	100	14.21	14.281	14.41
3000	100	14.17	14.299	14.38
4500	100	14.2	14.301	14.45
6000	100	14.2	14.313	14.38
7500	100	14.2	14.314	14.39
9000	100	14.23	14.306	14.48

Latency v Frame Length at 100% Throughput

