Xena2889 Test Report

Test Summary

Test company:	Teledyne LeCroy
Customer:	Xena Networks

Test Date and Time:	2025-04-08, 17:50
Test Duration:	02:16:41 (h:m:s)
Generated By:	Xena2889 v1.46, running on 'Microsoft Windows 10 Enterprise LTSC 2021'

Comments:

Components:
- host: aconbg027 (Windows 10 Enterprise LTSC)
- chassis: XenaBay (140.181.139.228)
- configuration: github.com/GSI-CS-CO/network_testing/wr_RFC_2889/xena_cfg/RFC_2889_4_switches_Xena.x2889

DUT:
- WRS: scb v3.4, Creotech
- name: nwt0010/16/296/297
- fw: v8.0
- dot-config: timing_localmaster_xenabay, timing_distribution, timing_access_all_xenabay

GSI use-case:
- B2B traffic, 17->1

Test Setup

Test Configuration

Subtest Selection

Rate Test: Full Mesh	Disabled
Rate Test: Part.Mesh, 1:N	Enabled
- Throughput	Enabled
- Forwarding	Disabled
Rate Test: Part.Mesh, N->N	Disabled
Congestion Control:	Disabled
Forward Pressure:	Disabled
Maximum Forwarding Rate:	Disabled
Address Caching Capacity:	Disabled
Address Learning Rate:	Disabled
Errored Frames Filtering:	Disabled
Broadcast Forwarding:	Disabled

Test Options

Packet Sizes Used:	90,134,222,398,574,750
Rate Type:	Fraction
Fraction per Port:	1,00%
Latency Measurement Mode:	Last-To-Last
Toggle Port Sync States:	Yes

Traffic Configuration

Used Chassis

Chassis ID	Chassis Name	Address

C-0	xenatos	140.181.139.228:22606

Used Ports

Port ID	Interface Type	Speed	IP Address & Gateway	Protocol Segment Profile
P-0-0-0	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-0-1	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-0-2	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-0-3	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-0-4	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-0-5	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-2-0	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-2-1	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-2-2	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-2-3	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-2-4	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-2-5	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-4-0	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-4-1	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-4-2	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-4-3	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-4-4	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet
P-0-4-5	SFP-O LR 1310 nm	AUTO	No address specified	1: Ethernet

Rate Test: Part.Mesh, 1:N Results

Test Setup

Duration: 30 seconds
Iteration: 3

Topology: Blocks
Direction: West-to-East

Throughput Options

Initial Rate: 1,00%
Maximum Rate: 100,00%
Minimum Rate: 0,01%
Resolution: 0,10%

Used Ports

Port ID	Port Role
P-0-0-0	West
P-0-0-1	West
P-0-0-2	West
P-0-0-3	West
P-0-0-4	West
P-0-0-5	West
P-0-2-0	East
P-0-2-1	West
P-0-2-2	West
P-0-2-3	West
P-0-2-4	West
P-0-2-5	West
P-0-4-0	West
P-0-4-1	West
P-0-4-2	West
P-0-4-3	West
P-0-4-4	West
P-0-4-5	West

Throughput Test Results

Frame Size	90	134	222	398	574	750
Result State	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL
Iter. #	(avg)	(avg)	(avg)	(avg)	(avg)	(avg)
Tx Rate (Percent)	0,072 %	0,072 %	0,381 %	0,072 %	0,216 %	0,382 %
Tx Rate (L1) (Bit/s)	109,71 K	109,61 K	582,91 K	109,91 K	328,52 K	581,78 K
Tx Rate (Fps)	125	89	301	33	69	94
Rx Rate (Percent)	0,07 %	0,07 %	0,38 %	0,07 %	0,22 %	0,38 %
Rx Rate (L1) (Bit/s)	107,95 K	108,42 K	582,33 K	108,68 K	327,73 K	581,16 K
Rx Rate (Fps)	122,67	88	300,79	32,5	68,97	94,34
Loss Rate (Percent)	1,6 %	1,09 %	0,1 %	1,12 %	0,24 %	0,11 %
Loss (Frames)	60	29	9	11	5	3
P-0-0-0						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-0-1						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0

- Flood Count (Frames)	0	0	0	0	0	0
P-0-0-2						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-0-3						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-0-4						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-0-5						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-2-0						
- Tx (Frames)	0	0	0	0	0	0
- Tx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Tx Rate (Fps)	0	0	0	0	0	0
- Rx (Frames)	3.680	2.640	9.018	975	2.069	2.819
- Rx Rate (L1) (Bit/s)	107,95 K	108,42 K	581,96 K	108,68 K	327,73 K	578,83 K
- Rx Rate (Fps)	123	88	301	33	69	94
- Flood Count (Frames)	0	0	0	0	0	0
P-0-2-1						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-2-2						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-2-3						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
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- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-2-4						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
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- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0

- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-2-5						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-4-0						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-4-1						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-4-2						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
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- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-4-3						
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- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-4-4						
- Tx (Frames)	220	157	531	58	122	166
- Tx Rate (L1) (Bit/s)	6,45 K	6,45 K	34,27 K	6,47 K	19,32 K	34,09 K
- Tx Rate (Fps)	7	5	18	2	4	6
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- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0
P-0-4-5						
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- Rx (Frames)	0	0	0	0	0	0
- Rx Rate (L1) (Bit/s)	0	0	0	0	0	0
- Rx Rate (Fps)	0	0	0	0	0	0
- Flood Count (Frames)	0	0	0	0	0	0

Note: One or more of the rate tests did not pass the test criteria!

Part.Mesh, 1:N: Throughput by Frame Size vs Theoretical Max