Xena2889 Test Report

Test Summary

Test company: Teledyne LeCroy
Customer: Xena Networks

Test Date and Time: 2024-12-09, 10:56
Test Duration: 01:41:48 (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: v7.0
- dot-config: timing_localmaster_xenabay, timing_distribution, timing_access_all_xenabay

Test Setup

Test Configuration

Subtest Selection

Rate Test: Full Mesh	Disabled
Rate Test: Part.Mesh, 1:N	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:	Enabled

Test Options

Packet Sizes Used:	90,134,222,398,574,750
Rate Type:	Fraction
Fraction per Port:	100,00%
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

Broadcast Forwarding Results

Test Setup

Duration:	30 seconds
Iteration:	3
Initial Rate:	0,10%
Maximum Rate:	100,00%
Minimum Rate:	0,01%
Resolution:	1,00%

Port ID	Port Role
P-0-2-0	Source
P-0-0-0	Destination
P-0-0-1	Destination
P-0-0-2	Destination
P-0-0-3	Destination
P-0-0-4	Destination
P-0-0-5	Destination
P-0-2-1	Destination
P-0-2-2	Destination
P-0-2-3	Destination
P-0-2-4	Destination
P-0-2-5	Destination
P-0-4-0	Destination
P-0-4-1	Destination
P-0-4-2	Destination
P-0-4-3	Destination
P-0-4-4	Destination
P-0-4-5	Destination

Test Results

Frame Size	90	134	222	398	574	750
Result State	PASS	PASS	PASS	PASS	PASS	PASS
Iter. #	(avg)	(avg)	(avg)	(avg)	(avg)	(avg)
Tx Rate (Percent)	89,854 %	92,586 %	94,537 %	97,073 %	97,659 %	98,463 %
Tx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
Tx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
Tx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
Loss Rate (Percent)	0 %	0 %	0 %	0 %	0 %	0 %
Loss (Frames)	0	0	0	0	0	0
P-0-0-0						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,923	11,874	11,741	11,904	11,798	13,181
- Min Latency (micsec)	10,585	11,611	11,571	11,683	11,555	11,667
- Max Latency (micsec)	14,073	15,316	13,880	15,604	14,899	22,540
- Avg Jitter (micsec)	0,008	0,006	0,004	0,001	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,477	2,092	2,116	1,828	1,924	1,948
P-0-0-1						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,921	11,873	11,759	11,924	11,800	13,187
- Min Latency (micsec)	10,681	11,611	11,571	11,708	11,579	11,667
- Max Latency (micsec)	14,073	15,460	14,674	15,580	14,899	22,540
- Avg Jitter (micsec)	0,008	0,006	0,004	0,001	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,309	1,972	2,092	2,116	1,852	1,804
P-0-0-2						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,936	11,884	11,781	11,936	11,813	13,204

- Min Latency (micsec)	10,705	11,635	11,595	11,708	11,603	11,691
- Max Latency (micsec)	14,386	15,268	13,904	15,580	14,923	22,564
- Avg Jitter (micsec)	0,008	0,006	0,003	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,453	2,116	2,140	1,924	2,020	1,828
P-0-0-3						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,924	11,842	11,781	11,885	11,792	13,179
- Min Latency (micsec)	10,681	11,467	11,451	11,587	11,411	11,499
- Max Latency (micsec)	14,049	15,171	14,915	15,556	14,899	22,829
- Avg Jitter (micsec)	0,009	0,006	0,007	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,381	2,116	2,044	1,972	1,900	1,900
P-0-0-4						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,933	11,870	11,802	11,908	11,810	13,206
- Min Latency (micsec)	10,705	11,587	11,547	11,683	11,555	11,619
- Max Latency (micsec)	14,097	15,219	15,011	15,580	14,875	22,540
- Avg Jitter (micsec)	0,008	0,006	0,007	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,429	1,996	2,020	2,092	1,972	1,924
P-0-0-5						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,930	11,874	11,818	11,906	11,785	13,197
- Min Latency (micsec)	10,537	11,587	11,547	11,683	11,555	11,619
- Max Latency (micsec)	14,025	15,243	14,121	15,604	14,899	22,540
- Avg Jitter (micsec)	0,009	0,006	0,007	0,003	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,525	2,068	2,092	2,116	2,044	1,900
P-0-2-1						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,241	11,174	11,120	11,225	11,104	12,498
- Min Latency (micsec)	9,855	10,906	10,866	11,002	10,874	10,962
- Max Latency (micsec)	13,343	14,562	13,728	14,875	14,386	21,858
- Avg Jitter (micsec)	0,008	0,006	0,007	0,003	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,285	2,164	2,044	2,116	1,924	1,900
P-0-2-2						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,249	11,203	11,094	11,254	11,142	12,509
- Min Latency (micsec)	10,024	10,930	10,914	11,026	10,922	11,010
- Max Latency (micsec)	13,439	14,538	13,199	14,899	14,265	22,796
- Avg Jitter (micsec)	0,008	0,006	0,003	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,573	2,044	2,092	1,828	1,996	1,804
P-0-2-3						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,233	11,170	10,989	11,236	11,101	12,502
- Min Latency (micsec)	9,879	10,834	10,866	10,882	10,850	10,866
- Max Latency (micsec)	13,319	15,428	14,305	14,875	14,193	21,882
- Avg Jitter (micsec)	0,008	0,006	0,004	0,003	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,453	2,140	2,092	1,972	2,020	1,900
P-0-2-4						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,253	11,199	11,016	11,240	11,126	12,519
- Min Latency (micsec)	9,903	10,834	10,890	10,906	10,874	10,914

- Max Latency (micsec)	13,343	14,538	14,161	14,899	14,337	21,834
- Avg Jitter (micsec)	0,008	0,006	0,004	0,001	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,285	2,140	2,212	1,828	1,924	1,972
P-0-2-5						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,260	11,211	11,021	11,249	11,122	12,533
- Min Latency (micsec)	9,903	10,858	10,890	10,930	10,874	10,914
- Max Latency (micsec)	13,536	14,971	13,584	14,947	14,578	21,858
- Avg Jitter (micsec)	0,009	0,006	0,004	0,001	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,381	2,044	2,188	1,828	1,924	2,020
P-0-4-0						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,391	11,333	11,264	11,376	11,281	12,664
- Min Latency (micsec)	10,144	11,050	11,058	11,122	11,066	11,178
- Max Latency (micsec)	13,536	14,682	14,690	15,043	14,963	22,003
- Avg Jitter (micsec)	0,008	0,006	0,004	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,285	2,092	2,092	1,852	1,948	1,876
P-0-4-1						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,372	11,318	11,258	11,357	11,281	12,649
- Min Latency (micsec)	10,144	11,050	11,010	11,122	11,042	11,154
- Max Latency (micsec)	13,512	14,899	13,439	15,043	14,434	22,003
- Avg Jitter (micsec)	0,008	0,006	0,004	0,003	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,381	2,068	2,140	1,900	1,972	1,828
P-0-4-2						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,395	11,340	11,275	11,344	11,304	12,668
- Min Latency (micsec)	10,120	11,074	11,058	11,122	11,042	11,178
- Max Latency (micsec)	13,536	15,019	13,391	15,067	14,386	22,003
- Avg Jitter (micsec)	0,008	0,006	0,004	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,381	2,068	2,116	1,972	1,852	1,876
P-0-4-3						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,413	11,357	11,297	11,367	11,310	12,683
- Min Latency (micsec)	10,144	11,074	11,082	11,146	11,042	11,202
- Max Latency (micsec)	13,560	15,260	14,113	15,091	14,530	22,003
- Avg Jitter (micsec)	0,008	0,006	0,004	0,001	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,309	1,972	2,092	1,948	1,924	1,852
P-0-4-4						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,392	11,322	11,266	11,335	11,269	12,668
- Min Latency (micsec)	10,144	11,074	11,010	11,122	11,018	11,178
- Max Latency (micsec)	13,512	15,380	13,367	15,067	14,410	22,003
- Avg Jitter (micsec)	0,008	0,006	0,005	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,333	2,044	2,116	1,972	1,924	2,068
P-0-4-5						
- Rx (Frames)	27.568.812	20.290.663	13.184.356	7.837.851	5.548.783	4.315.768
- Rx Rate (L1) (Bit/s)	808,69 M	833,27 M	850,83 M	873,66 M	878,93 M	886,17 M
- Rx Rate (Fps)	918.960	676.355	439.479	261.262	184.959	143.859
- Avg Latency (micsec)	10,422	11,362	11,281	11,377	11,315	12,698
- Min Latency (micsec)	10,168	11,098	11,034	11,146	11,042	11,202
- Max Latency (micsec)	13,536	14,706	13,391	15,067	14,410	22,027

- Avg Jitter (micsec)	0,008	0,007	0,007	0,002	0,001	0,001
- Min Jitter (micsec)	0,000	0,000	0,000	0,000	0,000	0,000
- Max Jitter (micsec)	2,333	2,116	2,116	1,948	1,876	1,828

Broadcast Throughput by Frame Size vs Theoretical Max