

PSE Conformance Test Suite

May 23 2020 4:23 AM

Port Count5 5 5 5 5 5 5 5 5 5 8
 Loop Count5 5 5 5 5 5 5 5 5 5 1
 PSE Tested: Sample Type-3 PSE PHY+LLDP



Sifos Technologies
 Safety Index: 95%
 Error Log: None

802.3bt 4Pr Conformance Report

version 5.2.12

PSE Type: 3 MDI-X+MDI-X
 Interop Index: 95%
 report version 5.2.00

Chassis ID: 192.168.221.103	PSA-3000 Ports								UNITS	Min	Max	Average	Low Limit	P/F	High Limit	P/F	
TestLoop: 1	1-1	1-2	2-1	2-2	3-1	3-2	4-1	4-2									
Test: det_v																	
Open Circuit Voc A=	15.6	15.4	15.7	15.5	15.4	15.5	15.4	15.3	volts	15.3	15.7	15.5	0	Pass	30	Pass	
Open Circuit Voc B=	15.3	15.4	15.2	15.5	15.3	15.2	15.2	15.5	volts	15.2	15.5	15.3	0	Pass	30	Pass	
Backoff Voltage A=	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	volts	0.6	0.7	0.6	0	Pass	2.8	Pass	
Backoff Voltage B=	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	volts	0.7	0.8	0.8	0	Pass	2.8	Pass	
Backoff Voltage Ss=	2.3	2.1	2.3	2.4	2.3	2.5	2.4	2.1	volts	2.1	2.5	2.3	0	Pass	2.8	Pass	
Max Det Step V A=	8.09	8.04	8.34	8.35	8.26	8.27	8.29	8.29	volts	8.04	8.35	8.24	3.8	Pass	10	Pass	
Max Det Step V B=	8.09	8.03	8.27	8.22	8.29	8.32	8.32	8.34	volts	8.03	8.34	8.24	3.8	Pass	10	Pass	
Min Det Step V A=	4.51	4.5	4.96	4.98	4.95	4.95	4.98	4.98	volts	4.5	4.98	4.85	2.8	Pass	9	Pass	
Min Det Step V B=	4.53	4.51	4.95	4.91	4.97	5	5	5.01	volts	4.51	5.01	4.86	2.8	Pass	9	Pass	
Det Step Changes A=	3	3	3	3	3	3	3	3	****	3	3	3	1	Pass	9	Pass	
Det Step Changes B=	3	3	3	3	3	3	3	3	****	3	3	3	1	Pass	9	Pass	
Min Step DV A=	1.73	1.69	1.77	1.77	1.74	1.77	1.73	1.74	volts	1.69	1.77	1.74	1	Pass	7.2	Pass	
Min Step DV B=	1.72	1.72	1.75	1.75	1.75	1.74	1.75	1.74	volts	1.72	1.75	1.74	1	Pass	7.2	Pass	
Pre-Det CC Step V A=	0	0	0	0	1.56	0	1.57	0	volts	0	1.57	0.39	0	Pass	10	Pass	
Pre-Det CC Step V B=	8.08	8.04	8.28	8.2	8.28	8.3	8.32	8.32	volts	8.04	8.32	8.23	0	Pass	10	Pass	
Test: det_cc																	
Presumed CC DET SEQ=	1	1	1	1	1	1	1	1	****	1	1	1	0	Pass	3	Pass	
Conn Chk SS V A=	6.11	5.89	6.26	6.27	6.34	6.37	6.34	6.34	volts	5.89	6.37	6.24	2.8	Pass	10	Pass	
Conn Chk SS V B=	6.06	5.84	6.18	6.21	6.29	6.32	6.3	6.29	volts	5.84	6.32	6.19	2.8	Pass	10	Pass	
Conn Chk DS V A=	5.46	5.39	5.42	5.42	5.41	5.46	5.46	5.41	volts	5.39	5.46	5.43	2.8	Pass	10	Pass	
Conn Chk DS V B=	5.34	5.32	5.34	5.44	5.4	5.39	5.42	5.37	volts	5.32	5.44	5.38	2.8	Pass	10	Pass	
High Signature CC A=	1	1	1	1	1	1	1	1	****	1	1	1	1	Pass	1	Pass	
High Signature CC B=	1	1	1	1	1	1	1	1	****	1	1	1	1	Pass	1	Pass	
4Pair Start Fail=	0	0	0	0	0	0	0	0	****	0	0	0	0	Pass	0	Pass	
Test: det_i																	
Isc Init A=	0.32	0.27	0.28	0.27	0.31	0.28	0.27	0.27	mA	0.27	0.32	0.28	0	Pass	5	Pass	
Isc Init B=	0.25	0.24	0.25	0.24	0.26	0.25	0.26	0.27	mA	0.24	0.27	0.25	0	Pass	5	Pass	
Isc Det A=	0.25	0.27	0.28	0.27	0.26	0.28	0.26	0.24	mA	0.24	0.28	0.26	0	Pass	5	Pass	
Isc Det B=	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	mA	0.22	0.23	0.23	0	Pass	5	Pass	
Det Slew A=	0.005	0.0054	0.0056	0.0054	0.0052	0.0056	0.0052	0.0048	V/usec	0.0048	0.0056	0.0053	0	Pass	0.1	Pass	
Det Slew B=	0.0044	0.0046	0.0044	0.0046	0.0046	0.0046	0.0046	0.0046	V/usec	0.0044	0.0046	0.0046	0	Pass	0.1	Pass	
Test: det_range																	
Rgood Max Single=	29	30	30	30	30	30	30	30	Kohm	29	30	29.9	27	Pass	32	Pass	
Rgood Min Single=	16	16	16	16	16	16	16	16	Kohm	16	16	16	16	Pass	19	Pass	
Cgood Max Single=	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	uF	0.1	0.1	0.1	0	Pass	10	Pass	
Rgood Max Dual A=	29	30	29	29	29	29	29	29	Kohm	29	30	29.3	27	Pass	32	Pass	
Rgood Max Dual B=	29	30	30	30	30	29	29	29	Kohm	29	30	29.4	27	Pass	32	Pass	
Rgood Min Dual A=	16	16	16	16	16	16	16	16	Kohm	16	16	16	16	Pass	19	Pass	
Rgood Min Dual B=	16	16	16	16	16	16	16	16	Kohm	16	16	16	16	Pass	19	Pass	
Cgood Max Dual A=	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	uF	0.1	0.1	0.1	0	Pass	10	Pass	
Cgood Max Dual B=	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	uF	0.1	0.1	0.1	0	Pass	10	Pass	
Test: det_time																	
Detect Time Tdet A=	259.8	259.8	250	259.8	259.8	261.7	261.7	261.7	msec	250	261.7	259.3	0	Pass	500	Pass	
Detect Time Tdet B=	261.7	261.7	259.8	259.8	259.8	261.7	259.8	261.7	msec	259.8	261.7	260.8	0	Pass	500	Pass	
Backoff Time SS=	15.6	19.5	15.6	15.6	15.6	15.6	15.6	15.6	msec	15.6	19.5	16.1	0	Pass	9999	Pass	
Det2Det Time=	382.8	380.9	33.2	386.7	382.8	378.9	380.9	378.9	msec	33.2	386.7	338.1	0	Pass	400	Pass	
Test: det_resource																	
PSE Detect Source=	1	1	1	1	1	1	1	1	****	1	1	1	0	Pass	1	Pass	
PSE Source Zout A=	300	300	300	300	300	300	300	300	Kohm	300	300	300	45	Pass	300	Pass	
PSE Source Zout B=	300	300	300	300	300	300	300	300	Kohm	300	300	300	45	Pass	300	Pass	
Test: cc_response																	
Single Sig Response=	1	1	1	1	1	1	1	1	****	1	1	1	1	Pass	1	Pass	
Dual Sig Response=	1	1	1	1	1	1	1	1	****	1	1	1	1	Pass	1	Pass	
2Pair_PD A=	1	1	1	1	1	1	1	1	****	1	1	1	0	Pass	2	Pass	
2Pair_PD B=	0	0	0	0	0	0	0	0	****	0	0	0	0	Pass	2	Pass	
Test: class_v																	
Vclass max SS=	18.1	18.3	18.2	18.3	18.4	18.4	18.1	18.3	volts	18.1	18.4	18.3	15.5	Pass	20.5	Pass	
Vclass min SS=	17.4	17.5	17.4	17.5	17.5	17.6	17.3	17.5	volts	17.3	17.6	17.5	15.5	Pass	20.5	Pass	
Vmark SS=	7.8	7.9	7.8	7.9	8	8.1	8.1	8.3	volts	7.8	8.3	8	7	Pass	10	Pass	
Vreset SS=	0.9	0.9	0.8	0.8	0.9	0.8	0.9	0.9	volts	0.8	0.9	0.9	0	Pass	2.8	Pass	
Vclass max DSA=	18.4	18.2	18.4	18.3	18.4	18.6	18.4	18.2	volts	18.2	18.6	18.4	15.5	Pass	20.5	Pass	
Vclass max DS B=	18.1	18.3	18.2	18.3	18.4	18.4	18.1	18.3	volts	18.1	18.4	18.3	15.5	Pass	20.5	Pass	
Vclass min DSA=	17.6	17.5	17.7	17.6	17.6	17.8	17.5	17.6	volts	17.5	17.8	17.6	15.5	Pass	20.5	Pass	
Vclass min DS B=	17.3	17.5	17.4	17.5	17.5	17.6	17.4	17.5	volts	17.3	17.6	17.5	15.5	Pass	20.5	Pass	
Vmark DSA=	8	7.9	8.1	8	8.1	8.3	8.4	8.2	volts	7.9	8.4	8.1	7	Pass	10	Pass	
Vmark DS B=	7.8	7.9	7.8	7.9	8	8.1	8.1	8.3	volts	7.8	8.3	8	7	Pass	10	Pass	
Vreset DSA=	-1	-1	-1	-1	-1	-1	-1	-1	****	-1	-1	-1	-1	Pass	2.8	Pass	
Vreset DS B=	-1	-1	-1	-1	-1	-1	-1	-1	****	-1	-1	-1	-1	Pass	2.8	Pass	
Test: class_time																	
Class Probe SS=	1	1	1	1	1	1	1	1	****	1	1	1	0	Pass	1	Pass	
EV Count 7 SS=	4	4	4	4	4	4	4	4	Events	4	4	4	4	1	Pass	5	Pass
Long EV1 Time SS=	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	msec	91.8	91.8	91.8	88	Pass	105	Pass	
Min Class EV Time SS=	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	msec	7.8	7.9	7.9	6	Pass	20	Pass	
Max Class EV Time SS=	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	msec	9.8	9.8	9.8	6	Pass	20	Pass	
Min Mark EV Time SS=	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.8	msec	7.8	7.9	7.9	6	Pass	12	Pass	
Max Mark EV Time SS=	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	msec	9.8	9.8	9.8	6	Pass	12	Pass	
Final Mark EV Time SS=	9.7	9.7	9.7	9.7	9.7	11.7	9.7	9.7	msec	9.7	11.7	10	6	Pass	256	Pass	
Cl Prb Reset Time SS=	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	msec	15.6	15.6	15.6	15	Pass	10000	Pass	
Class Probe DA=	0	0	0	0	0	0	0	0	****	0	0	0	0	Pass	1	Pass	
EV Count 5D DA=	3	3	3	3	3	3	3	3	Events	3	3	3	3	1	Pass	4	Pass
Long EV1 Time DA=	93.7	91.7	91.7	93.7	91.7	91.7	91.7	91.7	msec	91.7	93.7	92.2	88	Pass	105	Pass	
Min Class EV Time DA=	9.7	9.8	9.8	9.7	7.8	9.8	7.8	9.8	msec	7.8	9.8	9.3	6	Pass	20	Pass	
Max Class EV Time DA=	9.8																

PSE Conformance Test Suite

May 23 2020 4:23 AM

Port Count5 5 5 5 5 5 5 5 5 8
 Loop Count5 5 5 5 5 5 5 5 5 1
 PSE tested: Sample Type-3 PSE PHY+LLDP

Sifos Technologies
 Safety Index: 95%
 Error Log: None

802.3bt 4Pr Conformance Report

version 5.2.12

PSE Type: 3 MDI-X+MDI-X
 Interop Index: 95%
 report version 5.2.00

Chassis ID: 192.168.221.103

TestLoop: 1	PSA-3000 Ports								UNITS	Min	Max	Average	Low Limit	P/F	High Limit	P/F	
	1-1	1-2	2-1	2-2	3-1	3-2	4-1	4-2									
Pwr Cl 52 SS=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Pwr Cl 52 DSA=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Pwr Cl 52 DSB=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Mark 11m A=	87	88	92	86	84	86	85	82	mA	82	92	86.3	0	0	0	0	Pass
Mark 11m B=	84	87	87	84	84	84	87	84	mA	84	87	85.1	0	0	0	0	Pass
Inval Sig EV2 SS=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Inval Sig EV4 SS=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Inval Sig EV5 SS=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Inval Sig EV2 DSA=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Inval Sig EV2 DSB=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Inval Sig EV4 DSA=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Inval Sig EV4 DSB=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
Test: class lldp																	
PSE LLDP Time SS=	2.2	3.4	5.5	5.5	3.2	3.5	5.8	3.2	sec	2.2	5.8	4	0	0	0	0	Pass
LLDP Length=	29	29	29	29	29	29	29	29	****	29	29	29	29	29	29	29	Pass
PSE Pwr Pair=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
PSE MDI Pwr Sup=	7	7	7	7	7	7	7	7	****	7	7	7	7	7	7	7	Pass
PSE Pwr Class=	4	4	4	4	4	4	4	4	****	4	4	4	4	4	4	4	Pass
PSE Source Priority=	0	0	0	0	0	0	0	0	****	0	0	0	0	0	0	0	Pass
PSE Ext Type=	3	3	3	3	3	3	3	3	****	3	3	3	3	3	3	3	Pass
PSE Ext Status SS=	41	41	41	41	41	41	41	41	****	41	41	41	41	41	41	41	Pass
PSE Ext Class SS=	41	41	41	41	41	41	41	41	****	41	41	41	41	41	41	41	Pass
PSE Max Pwr SS=	51	51	51	51	51	51	51	51	Watts	51	51	51	51	51	51	51	Pass
PSE Pwr Class DS=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
PSE Echo Time 1SS=	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	sec	1.6	1.6	1.6	1.6	1.6	1.6	1.6	Pass
PSE Alloc Time 1SS=	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	sec	1.9	1.9	1.9	1.9	1.9	1.9	1.9	Pass
PSE Alloc LowPwr 1SS=	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	Watts	8.1	8.1	8.1	8.1	8.1	8.1	8.1	Pass
PSE Echo Time 2SS=	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	sec	1.9	1.9	1.9	1.9	1.9	1.9	1.9	Pass
PSE Alloc Time 2SS=	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	sec	2.3	2.3	2.3	2.3	2.3	2.3	2.3	Pass
PSE Alloc MaxPwr 2SS=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
Link Down Shutdown=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
Test: class lldp2																	
PSE LLDP Time DS=	3.2	5.8	5.6	3.5	3.5	3.5	3.6	5.9	sec	3.2	5.9	4.3	0	0	0	0	Pass
PSE Ext Status DS=	42	42	42	42	42	42	42	42	****	42	42	42	42	42	42	42	Pass
PSE Ext Class DSA=	42	42	42	42	42	42	42	42	****	42	42	42	42	42	42	42	Pass
PSE Ext Class DSB=	42	42	42	42	42	42	42	42	****	42	42	42	42	42	42	42	Pass
PSE Max Pwr DS=	51	51	51	51	51	51	51	51	Watts	51	51	51	51	51	51	51	Pass
PSE Pwr Class SS=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
PSE Echo Time 1DS=	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	sec	1.6	1.6	1.6	1.6	1.6	1.6	1.6	Pass
PSE Alloc Time 1DS=	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	sec	1.9	1.9	1.9	1.9	1.9	1.9	1.9	Pass
PSE Alloc LowPwr 1DS=	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	Watts	8.1	8.1	8.1	8.1	8.1	8.1	8.1	Pass
PSE Alloc LowPwr 1DSB=	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	Watts	8.1	8.1	8.1	8.1	8.1	8.1	8.1	Pass
PSE Echo Time 2DS=	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	sec	1.9	1.9	1.9	1.9	1.9	1.9	1.9	Pass
PSE Alloc Time 2DS=	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	sec	2.3	2.3	2.3	2.3	2.3	2.3	2.3	Pass
PSE Alloc MaxPwr 2DS=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
PSE Alloc MaxPwr 2DSB=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
PSE Alloc Limit DS=	1	1	1	1	1	1	1	1	****	1	1	1	1	1	1	1	Pass
Test: pwrup time																	
Pwr On Time Tpon SS=	284.4	288.3	284.4	284.4	284.4	288.3	288.3	284.4	msec	284.4	288.3	285.9	0	0	0	0	Pass
Pwr On Time Tpon DSA=	206.3	202.3	202.3	343	206.3	202.3	202.3	202.3	msec	202.3	343	220.9	0	0	0	0	Pass
Pwr On Time Tpon DSB=	343	343	343	202.3	343	343	343	343	msec	202.3	343	325.4	0	0	0	0	Pass
Pwrup Rise Time A=	23	24	23	24	23	23	23	23	usec	23	24	23	15	0	0	0	Pass
Pwrup Rise Time B=	24	26	24	24	23	25	24	24	usec	23	26	24	15	0	0	0	Pass
Pwr Stagger Time SS4=	-1	-1	-1	-1	-1	-1	-1	-1	msec	-1	-1	-1	-1	-1	-1	-1	Pass
Pwr Stagger Time SS5=	0	0	0	0	0	0	0	0	msec	0	0	0	0	0	0	0	Pass
Pwr Stagger Time DS=	169.6	169.7	169.7	169.7	169.5	169.5	169.5	169.6	msec	169.5	169.7	169.6	0	0	0	0	Pass
Test: pwrup inrush																	
Inrush min Class 3=	419.3	425.9	435.9	421.5	419.3	421.8	424.1	422	mA	419.3	435.9	423.7	400	0	0	0	Pass
Inrush min Class 5=	799.3	808.6	824.7	798.5	797.7	800.8	809.5	803.7	mA	797.7	824.7	805.4	400	0	0	0	Pass
Inrush min Class 7=	799.8	809	824.9	799.1	797.9	801.1	809.6	804.4	mA	797.9	824.9	805.7	400	0	0	0	Pass
Inrush min Class 1D A=	419.3	425.9	435.8	421.5	419.3	421.8	424	422	mA	419.3	435.8	423.7	400	0	0	0	Pass
Inrush min Class 1D B=	421.1	424.5	430.1	420.6	419.6	420.3	427.1	423.5	mA	419.6	430.1	423.4	400	0	0	0	Pass
Inrush 4P max Class 3=	434.8	439.6	444.3	432.8	435.4	436.5	429.6	439.3	mA	429.6	444.3	436.5	0	0	0	0	Pass
Inrush 4P max2 Class 5=	864	863.5	902.6	862.8	857.3	857.3	872.1	894.1	mA	857.3	902.6	871.7	0	0	0	0	Fail
Inrush 4P max2 Class 7=	865.1	864.2	903.9	864	855.1	860.3	871.1	893.3	mA	855.1	903.9	872.1	0	0	0	0	Fail
Inrush 2P max Class 3=	434.6	439.6	443.8	432.8	435.5	436.7	429.5	439.3	mA	429.5	443.8	436.5	0	0	0	0	Pass
Inrush 2P max2 Class 1D A=	433.4	434.8	454.3	433.9	432.9	433.6	436.4	450	mA	432.9	454.3	438.7	0	0	0	0	Pass
Inrush 2P max2 Class 1D B=	435	440.2	445	433.4	435.5	437.1	430	439.3	mA	430	445	436.9	0	0	0	0	Pass
Inrush 2P max2 Class 1D B=	431.5	435.5	441.3	429.2	428.5	428.3	436	437.3	mA	428.3	441.3	433.5	0	0	0	0	Pass
Tinrush minPr Class 3=	54.88	54.88	55.27	55.27	54.88	54.88	55.27	54.88	msec	54.88	55.27	55	50	0	0	0	Pass
Tinrush maxPr Class 3=	54.88	54.88	55.27	55.27	54.88	54.88	55.27	54.88	msec	54.88	55.27	55	50	0	0	0	Pass
Tinrush minPr Class 7=	38.87	31.45	43.16	49.81	40.43	36.13	40.43	49.41	msec	31.45	49.81	41.2	50	0	0	0	Fail
Tinrush maxPr Class 7=	38.87	31.45	43.16	49.81	40.43	36.13	40.43	49.41	msec	31.45	49.81	41.2	50	0	0	0	Fail
Tinrush Class 1D A=	54.88	54.88	55.27	55.27	54.88	54.88	55.27	55.27	msec	54.88	55.27	55.1	50	0	0	0	Pass
Tinrush Class 1D B=	54.88	54.88	55.27	54.88	54.88	54.88	55.27	54.88	msec	54.88	55.27	55	50	0	0	0	Pass
Delay Inrush Class 7=	54.88	54.88	55.27	55.27	54.88	54.88	55.27	55.27	msec	54.88	55.27	55.1	50	0	0	0	Pass
Delay Inrush Class 2D A=	54.88	54.88	55.27	55.27	54.88	54.88	55.27	55.27	msec	54.88	55.27	55.1	50	0	0	0	Pass
Delay Inrush Class 2D B=	54.88	54.88	55.27	55.27	54.88	54.88	55.27	55.27	msec	54.88	55.27	55.1	50	0	0	0	Pass
45ms Pwr Stat Class 7=	0	0	0	0	0	0	0	0	****	0	0	0	1	0	0	0	Fail
45ms Pwr Stat Class 2D A=	1</																

