

Report of Calibration  
PSC 4CH-MSS-AR Slow XY Corr\_S/N 0025  
2025-10-07 14:19:35

Calibration Current standard: BNL PSC ATE S/N 001  
Calibration Volt standard: HP 3458A-002 S/N 2823A 23647  
Calibration Resistance standard: Fluke 742A-1 S/N 1063008  
End Header

lab{1}Chan1  
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999968	1.002042	-1.008771	-1.009812	0.997826	-0.043781
-26.998224	27.011704	-26.831993	-26.841597	26.998041	0.035287

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001635	-0.015535	-0.016246	0.000000
Initial measured gains:	1.000439	0.993267	0.993597	0.999637
Gain corrections:	1.000439	1.006778	1.006444	1.000000

Writing gain and offset corrections for dacSP, dcct1, and dcct2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	0.998040
27.000000	26.999920

Measured offset: -0.002032  
Measured gain: 1.000072  
Gain correction: 0.999928

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999901	1.000402	-1.000245	-1.000177	1.000068	0.025240
-26.998393	26.998074	-26.998415	-26.998558	26.998196	0.039117

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000533	-0.000356	-0.000280	-0.000352
Final measured gains:	0.999968	0.999988	0.999996	1.000018

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000061	-0.000208	-0.000107	-0.000601
Final measured offsets stdev:	0.000286	0.000134	0.000100	0.000183
Final measured gains mean:	0.999984	0.999989	0.999995	1.000016
Final measured gains stdev:	0.000013	0.000009	0.000008	0.000005

Saving channel 1 calibration constants to qspi

lab{1}Chan2  
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999980	1.000706	-1.010509	-1.010080	0.998764	0.052008
-26.998258	27.003823	-26.822960	-26.826374	27.060093	0.024785

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000540	-0.017677	-0.017100	0.000000
Initial measured gains:	1.000186	0.992852	0.993000	1.002239
Gain corrections:	1.000186	1.007199	1.007049	1.000000

Writing gain and offset corrections for dacSP, dcct1, and dcct2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	0.998785
27.000000	27.061476

Measured offset: -0.003626

Measured gain: 1.002411

Gain correction: 0.997595

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999780	0.999805	-1.000000	-0.999996	0.999471	0.047712
-26.998248	26.997968	-26.997925	-26.998112	26.997547	0.012028

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000037	-0.000241	-0.000230	-0.000330
Final measured gains:	0.999988	0.999979	0.999986	0.999997

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000108	-0.000235	-0.000222	0.000150
Final measured offsets stdev:	0.000179	0.000122	0.000114	0.000345
Final measured gains mean:	0.999975	0.999980	0.999982	0.999996
Final measured gains stdev:	0.000012	0.000009	0.000010	0.000008

Saving channel 2 calibration constants to qspi

lab{1}Chan3  
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999716	1.002906	-1.008566	-1.008041	0.999624	0.010634
-26.997944	27.019002	-26.830513	-26.818161	27.021593	0.039689

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002503	-0.015628	-0.015558	0.000000
Initial measured gains:	1.000687	0.993220	0.992765	1.000226
Gain corrections:	1.000687	1.006827	1.007288	1.000000

Writing gain and offset corrections for dacSP, dcct1, and dcct2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	1.000096
27.000000	27.023512

Measured offset: -0.000805  
Measured gain: 1.000901  
Gain correction: 0.999100

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999415	1.000055	-1.000066	-1.000162	1.000041	0.044961
-26.997996	26.998280	-26.998165	-26.998413	26.998047	0.050769

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000654	-0.000669	-0.000759	-0.000006
Final measured gains:	0.999986	0.999981	0.999987	0.999992

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000092	-0.000307	-0.000268	0.000021
Final measured offsets stdev:	0.000321	0.000185	0.000251	0.000405
Final measured gains mean:	0.999988	0.999986	0.999987	1.000008
Final measured gains stdev:	0.000019	0.000009	0.000010	0.000015

Saving channel 3 calibration constants to qspi

lab{1}Chan4  
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999352	1.004168	-1.009573	-1.009668	0.998703	0.030987
-26.997988	26.995422	-26.810183	-26.845692	27.016115	0.009751

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005100	-0.017833	-0.016566	0.000000
Initial measured gains:	0.999716	0.992383	0.993745	1.001006
Gain corrections:	0.999716	1.007675	1.006294	1.000000

Writing gain and offset corrections for dacSP, dcct1, and dcct2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	0.999279
27.000000	27.018139

Measured offset: -0.001446  
Measured gain: 1.000725  
Gain correction: 0.999275

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999344	0.999488	-0.999820	-0.999674	0.999591	0.021145
-26.998020	26.997819	-26.998312	-26.998219	26.997837	0.001217

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000158	-0.000483	-0.000335	0.000106
Final measured gains:	0.999987	0.999993	0.999995	0.999997

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000046	-0.000330	-0.000256	0.000189
Final measured offsets stdev:	0.000144	0.000103	0.000055	0.000186
Final measured gains mean:	0.999995	0.999989	0.999988	1.000000
Final measured gains stdev:	0.000011	0.000009	0.000012	0.000018

Saving channel 4 calibration constants to qspi

Test data reviewed by  Date 10/13/25