

Report of Calibration  
PSC 4CH-MSS-AR Slow XY Corr\_S/N 0011  
2025-09-08 13:47:51

Calibration Current standard: BNL PSC ATE S/N 001  
Calibration Volt standard: HP 3458A-002 S/N 2823A 06900  
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
-1.000242	1.003366	-1.010246	-1.010361	0.998972	-0.014957
-26.998100	26.999089	-26.815586	-26.818571	27.008694	0.051878

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003206	-0.017411	-0.017416	0.000000
Initial measured gains:	0.999918	0.992595	0.992705	1.000539
Gain corrections:	0.999918	1.007460	1.007348	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	0.998923
27.000000	27.010557

Measured offset: -0.001525

Measured gain: 1.000447

Gain correction: 0.999553

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000334	1.000186	-1.000427	-1.000322	0.999838	-0.017907
-26.998267	26.998008	-26.998352	-26.998299	26.997805	0.069925

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000144	-0.000094	0.000013	-0.000353
Final measured gains:	0.999996	1.000000	1.000002	1.000006

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000089	-0.000100	-0.000003	-0.000310
Final measured offsets stdev:	0.000144	0.000090	0.000098	0.000083
Final measured gains mean:	0.999997	0.999998	1.000002	1.000013
Final measured gains stdev:	0.000012	0.000005	0.000008	0.000011

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
-0.999867	1.002635	-1.009362	-1.010295	0.995502	0.034675
-26.998153	26.990131	-26.807163	-26.823664	27.002821	0.044983

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003183	-0.017206	-0.017540	0.000000
Initial measured gains:	0.999585	0.992289	0.992887	1.000763
Gain corrections:	0.999585	1.007771	1.007164	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	0.995737
27.000000	27.005100

Measured offset: -0.004623

Measured gain: 1.000360

Gain correction: 0.999640

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000097	1.000037	-1.000316	-1.000553	1.000392	0.018040
-26.998165	26.998104	-26.998192	-26.998203	26.997971	0.026887

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000060	-0.000227	-0.000473	0.000374
Final measured gains:	1.000000	0.999993	0.999984	0.999981

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000036	-0.000278	-0.000405	0.000124
Final measured offsets stdev:	0.000115	0.000097	0.000163	0.000387
Final measured gains mean:	1.000004	0.999995	0.999988	0.999988
Final measured gains stdev:	0.000003	0.000010	0.000009	0.000009

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
-0.999773	1.004589	-1.011500	-1.011430	1.002530	0.033125
-26.997869	27.004177	-26.818935	-26.815922	27.005026	0.087403

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004758	-0.019059	-0.019102	0.000000
Initial measured gains:	1.000057	0.992666	0.992553	1.000112
Gain corrections:	1.000057	1.007388	1.007503	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	1.002809
27.000000	27.006828

Measured offset: 0.002655

Measured gain: 1.000155

Gain correction: 0.999845

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000069	0.999728	-1.000144	-1.000116	1.000342	-0.013705
-26.998026	26.997773	-26.997860	-26.997982	26.999575	0.066689

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000344	-0.000084	-0.000051	0.000569
Final measured gains:	1.000003	0.999991	0.999996	1.000046

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000014	-0.000205	-0.000247	0.000504
Final measured offsets stdev:	0.000258	0.000188	0.000207	0.000101
Final measured gains mean:	0.999993	0.999990	0.999989	1.000021
Final measured gains stdev:	0.000007	0.000001	0.000005	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
-1.000054	1.001231	-1.009601	-1.010726	0.996680	0.008397
-26.998129	27.000245	-26.822605	-26.821163	27.006680	0.033452

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001142	-0.016666	-0.017890	0.000000
Initial measured gains:	1.000036	0.992881	0.992783	1.000423
Gain corrections:	1.000036	1.007170	1.007270	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	0.996697
27.000000	27.008659

Measured offset: -0.003763

Measured gain: 1.000460

Gain correction: 0.999540

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000211	1.000093	-1.000508	-1.000260	1.000386	0.000903
-26.998127	26.998140	-26.998169	-26.998074	26.998365	0.063844

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000123	-0.000307	-0.000053	0.000296
Final measured gains:	1.000005	0.999990	0.999996	0.999997

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000052	-0.000294	-0.000255	0.000129
Final measured offsets stdev:	0.000086	0.000118	0.000115	0.000234
Final measured gains mean:	1.000000	0.999987	0.999988	1.000005
Final measured gains stdev:	0.000007	0.000005	0.000005	0.000012

Saving channel 4 calibration constants to qspi

Test data reviewed by S. A. S.

Date 9/16/25