

Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 0010
2025-09-22 14:14:38

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
-0.999904	1.003001	-1.011173	-1.009052	1.000628	-0.019482
-26.997390	27.003492	-26.821941	-26.820436	27.065466	0.109724

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002981	-0.018450	-0.016306	0.000000
Initial measured gains:	1.000116	0.992818	0.992842	1.002475
Gain corrections:	1.000116	1.007234	1.007210	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	1.000858
27.000000	27.068092

Measured offset: -0.001728
Measured gain: 1.002586
Gain correction: 0.997421

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999796	0.999947	-1.000092	-0.999990	0.999707	-0.010573
-26.997508	26.997109	-26.997517	-26.997568	26.996773	0.085219

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000171	-0.000306	-0.000199	-0.000236
Final measured gains:	0.999979	0.999989	0.999995	0.999996

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000117	-0.000260	-0.000205	0.000105
Final measured offsets stdev:	0.000230	0.000046	0.000069	0.000222
Final measured gains mean:	0.999986	0.999988	0.999988	0.999995
Final measured gains stdev:	0.000007	0.000004	0.000005	0.000010

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
-0.999734	1.000556	-1.009462	-1.009799	0.997974	0.002350
-26.997683	27.003505	-26.819155	-26.841232	27.085081	0.090758

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000630	-0.016967	-0.016468	0.000000
Initial measured gains:	1.000192	0.992759	0.993595	1.003236
Gain corrections:	1.000192	1.007294	1.006446	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	0.998133
27.000000	27.087204

Measured offset: -0.005293
Measured gain: 1.003426
Gain correction: 0.996586

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999791	1.000024	-0.999841	-0.999938	1.000046	0.032732
-26.997822	26.997639	-26.997589	-26.997871	26.996962	0.070958

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000248	-0.000060	-0.000150	0.000050
Final measured gains:	0.999984	0.999989	0.999996	0.999973

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000034	-0.000142	-0.000049	0.000204
Final measured offsets stdev:	0.000126	0.000090	0.000107	0.000158
Final measured gains mean:	0.999983	0.999994	1.000001	0.999993
Final measured gains stdev:	0.000004	0.000004	0.000004	0.000015

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
-0.999712	1.002195	-1.009155	-1.010531	1.000957	0.025892
-26.997681	26.996252	-26.807287	-26.812443	27.058630	0.093230

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002633	-0.017127	-0.018358	0.000000
Initial measured gains:	0.999850	0.992313	0.992459	1.002447
Gain corrections:	0.999850	1.007746	1.007599	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	1.001417
27.000000	27.060926

Measured offset: -0.000872
Measured gain: 1.002289
Gain correction: 0.997716

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999518	0.999628	-1.000098	-0.999846	0.999109	0.014415
-26.997600	26.997350	-26.997786	-26.997665	26.997290	0.079097

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000124	-0.000596	-0.000338	-0.000537
Final measured gains:	0.999986	0.999985	0.999990	1.000018

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000153	-0.000246	-0.000148	-0.000331
Final measured offsets stdev:	0.000175	0.000207	0.000152	0.000142
Final measured gains mean:	0.999997	0.999991	0.999993	1.000007
Final measured gains stdev:	0.000008	0.000006	0.000006	0.000005

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
-0.999859	1.003990	-1.009879	-1.008608	0.997881	0.034474
-26.997755	26.995404	-26.807472	-26.818298	27.050797	0.073142

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004381	-0.017723	-0.015988	0.000000
Initial measured gains:	0.999751	0.992295	0.992761	1.002366
Gain corrections:	0.999751	1.007764	1.007292	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	0.998095
27.000000	27.053215

Measured offset: -0.004025
Measured gain: 1.002120
Gain correction: 0.997884

Writing gain and offset constants for dacRB to PSC


Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999934	0.999845	-1.000277	-1.000366	0.999635	0.001851
-26.997688	26.997536	-26.997784	-26.997818	26.997795	0.088132

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000086	-0.000352	-0.000443	-0.000228
Final measured gains:	0.999998	0.999990	0.999988	1.000018

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000011	-0.000141	-0.000171	-0.000191
Final measured offsets stdev:	0.000123	0.000127	0.000213	0.000110
Final measured gains mean:	0.999996	0.999997	0.999994	1.000017
Final measured gains stdev:	0.000003	0.000005	0.000007	0.000005

Saving channel 4 calibration constants to qspi

Test data reviewed by  Date 9/26/25