

Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 0024
2025-10-20 11:28:44

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
-0.999348	1.001478	-1.010246	-1.009864	0.998517	0.033067
-26.997346	27.020403	-26.832041	-26.815424	27.056021	0.052558

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001326	-0.017671	-0.017913	0.000000
Initial measured gains:	1.000805	0.993222	0.992598	1.001483
Gain corrections:	1.000805	1.006824	1.007457	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	0.999230
27.000000	27.058575

Measured offset: -0.003053

Measured gain: 1.002283

Gain correction: 0.997723

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999242	0.999004	-0.999197	-0.999294	0.998961	0.011092
-26.997367	26.996505	-26.996939	-26.996780	26.996483	0.014031

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000214	0.000031	-0.000077	-0.000044
Final measured gains:	0.999976	0.999985	0.999975	1.000001

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000146	-0.000187	-0.000220	0.000041
Final measured offsets stdev:	0.000337	0.000207	0.000149	0.000158
Final measured gains mean:	0.999969	0.999976	0.999970	0.999990
Final measured gains stdev:	0.000016	0.000016	0.000015	0.000009

Saving channel 1 calibration constants to qspi

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lab{1}Chan2
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998972	1.001284	-1.006454	-1.010798	0.994526	0.051516
-26.997371	26.999754	-26.811087	-26.819416	27.031158	0.040630

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002310	-0.014927	-0.019119	0.000000
Initial measured gains:	1.000003	0.992547	0.992700	1.001468
Gain corrections:	1.000003	1.007509	1.007353	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	0.996039
27.000000	27.034250

Measured offset: -0.005431

Measured gain: 1.001470

Gain correction: 0.998532

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999148	0.998661	-0.999302	-0.999265	0.998150	0.026812
-26.997348	26.997279	-26.997517	-26.997589	26.996401	0.026879

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000504	-0.000154	-0.000112	-0.000497
Final measured gains:	1.000016	1.000001	1.000005	0.999986

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000112	-0.000241	-0.000214	-0.000232
Final measured offsets stdev:	0.000212	0.000066	0.000072	0.000378
Final measured gains mean:	0.999996	0.999995	0.999993	0.999993
Final measured gains stdev:	0.000013	0.000004	0.000008	0.000009

Saving channel 2 calibration constants to qspi

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lab{1}Chan3
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998911	1.001412	-1.008769	-1.009428	0.999668	0.035671
-26.997200	27.007246	-26.814190	-26.825745	27.042583	0.038388

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002211	-0.017267	-0.017508	0.000000
Initial measured gains:	1.000290	0.992582	0.993001	1.001426
Gain corrections:	1.000290	1.007474	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	1.000798
27.000000	27.045527

Measured offset: -0.000923

Measured gain: 1.001720

Gain correction: 0.998283

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998763	0.998800	-0.998960	-0.998966	0.999432	0.028807
-26.997337	26.997390	-26.997442	-26.997536	26.997883	0.052170

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000037	-0.000200	-0.000204	0.000638
Final measured gains:	1.000001	0.999996	1.000000	0.999995

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000003	-0.000240	-0.000139	0.000488
Final measured offsets stdev:	0.000177	0.000232	0.000150	0.000260
Final measured gains mean:	0.999999	0.999993	0.999996	0.999989
Final measured gains stdev:	0.000020	0.000014	0.000015	0.000011

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
-0.998993	1.001015	-1.009001	-1.010002	0.995502	0.032542
-26.997042	26.998659	-26.813032	-26.805016	27.014515	0.046566

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002037	-0.017464	-0.018811	0.000000
Initial measured gains:	0.999984	0.992537	0.992190	1.000822
Gain corrections:	0.999984	1.007519	1.007871	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 0.996428
27.000000 27.017002

Measured offset: -0.004363

Measured gain: 1.000791

Gain correction: 0.999209

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999155	0.999399	-0.999353	-0.999441	0.999438	0.034951
-26.997397	26.997216	-26.997364	-26.997272	26.997147	0.040033

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000260	-0.000207	-0.000302	0.000043
Final measured gains:	0.999984	0.999991	0.999984	0.999996

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000123	-0.000295	-0.000354	0.000323
Final measured offsets stdev:	0.000123	0.000089	0.000093	0.000168
Final measured gains mean:	0.999980	0.999982	0.999979	1.000000
Final measured gains stdev:	0.000007	0.000011	0.000005	0.000006

Saving channel 4 calibration constants to qspi

Test data reviewed by _____

Date 10/23/25