

Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 1004
2025-12-30 11:53:37

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{2}Chan1
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000724	1.001552	-0.999493	-1.000128	1.001519	-0.017479
-11.001802	10.996703	-10.920690	-10.924738	11.019895	0.021251

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001421	-0.006762	-0.007056	0.000000
Initial measured gains:	0.999407	0.992013	0.992354	1.002324
Gain corrections:	0.999407	1.008052	1.007705	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	1.000760
11.000000	11.018055

Measured offset: -0.000969
Measured gain: 1.001729
Gain correction: 0.998274

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000802	1.000827	-1.000851	-1.000746	1.000942	0.018338
-11.001837	11.001660	-11.001730	-11.001668	11.001349	0.015136

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000046	-0.000065	0.000044	0.000157
Final measured gains:	0.999980	0.999984	0.999989	0.999957

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000011	-0.000028	-0.000037	0.000157
Final measured offsets stdev:	0.000081	0.000099	0.000091	0.000102
Final measured gains mean:	0.999991	0.999993	0.999994	0.999972
Final measured gains stdev:	0.000009	0.000011	0.000009	0.000021

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000166	0.998896	-0.997218	-1.000334	0.997478	-0.002043
-11.001609	10.982038	-10.902740	-10.923059	11.001271	0.004766

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000560	-0.006644	-0.008040	0.000000
Initial measured gains:	0.998170	0.990409	0.992129	1.002069
Gain corrections:	0.998170	1.009684	1.007933	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	0.997293
11.000000	10.999666

Measured offset: -0.002944
Measured gain: 1.000237
Gain correction: 0.999763

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000220	1.000213	-1.000230	-1.000226	1.000394	0.001840
-11.001523	11.001746	-11.001777	-11.001723	11.001716	0.011480

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000030	0.000014	0.000013	0.000202
Final measured gains:	1.000023	1.000024	1.000019	0.999979

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000051	-0.000023	-0.000039	0.000128
Final measured offsets stdev:	0.000110	0.000056	0.000057	0.000105
Final measured gains mean:	1.000008	1.000006	0.999999	1.000004
Final measured gains stdev:	0.000035	0.000037	0.000034	0.000019

Saving channel 2 calibration constants to qspi

lab{2}Chan3
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000416	1.000152	-0.997747	-0.998460	1.001190	0.010815
-11.001469	10.979130	-10.901164	-10.910979	11.004571	0.009652

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001944	-0.007098	-0.006900	0.000000
Initial measured gains:	0.997793	0.990237	0.991148	1.002445
Gain corrections:	0.997793	1.009859	1.008931	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	1.000758
11.000000	11.003045

Measured offset: 0.000529
Measured gain: 1.000229
Gain correction: 0.999771

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999966	1.000013	-1.000046	-1.000046	1.000363	0.002321
-11.001515	11.001292	-11.001362	-11.001375	11.001849	-0.004510

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000073	-0.000104	-0.000102	0.000330
Final measured gains:	0.999973	0.999977	0.999978	1.000021

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000045	-0.000113	-0.000116	0.000401
Final measured offsets stdev:	0.000124	0.000092	0.000098	0.000059
Final measured gains mean:	0.999977	0.999971	0.999970	1.000001
Final measured gains stdev:	0.000029	0.000026	0.000024	0.000015

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000354	1.001206	-0.999615	-0.998632	1.000383	0.022908
-11.001479	10.998481	-10.917851	-10.917764	11.017404	0.008477

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001237	-0.007552	-0.006479	0.000000
Initial measured gains:	0.999615	0.991712	0.991802	1.001975
Gain corrections:	0.999615	1.008357	1.008266	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	1.000043
11.000000	11.015983

Measured offset: -0.001551
Measured gain: 1.001594
Gain correction: 0.998409

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000109	1.000009	-1.000201	-1.000215	1.000015	-0.018466
-11.001431	11.001482	-11.001513	-11.001500	11.001580	0.010056

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000116	-0.000093	-0.000110	-0.000003
Final measured gains:	1.000015	0.999999	0.999996	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000007	-0.000155	-0.000163	-0.000007
Final measured offsets stdev:	0.000091	0.000095	0.000105	0.000065
Final measured gains mean:	0.999994	0.999990	0.999987	0.999991
Final measured gains stdev:	0.000027	0.000020	0.000017	0.000015

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____