Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 0006
2025-12-30 17:04:54

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 = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000071	1.002393	-1.009279	-1.010402	1.001708	0.040342
-27.000886	26.992648	-26.805946	-26.814697	27.036880	0.031870

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002727	-0.017059	-0.017890	0.000000
Initial measured gains:	0.999594	0.992148	0.992442	1.001728
Gain corrections:	0.999594	1.007914	1.007616	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	1.001708
27.000000	27.035391

Measured offset: 0.000412
Measured gain: 1.001296
Gain correction: 0.998706

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000272	1.000060	-1.000382	-1.000306	1.000688	0.035422
-27.001041	27.001388	-27.001190	-27.001013	27.002354	0.056381

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000233	-0.000108	-0.000036	0.000615
Final measured gains:	1.000021	1.000001	0.999998	1.000013

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000028	-0.000295	-0.000176	0.000508
Final measured offsets stdev:	0.000358	0.000143	0.000144	0.000197
Final measured gains mean:	1.000001	0.999994	0.999997	1.000014
Final measured gains stdev:	0.000013	0.000008	0.000008	0.000008

Saving channel 1 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000180	1.002371	-1.007934	-1.010047	0.999602	0.047682
-27.001008	26.989501	-26.807072	-26.801815	27.079170	0.008614

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002717	-0.015512	-0.017909	0.000000
Initial measured gains:	0.999473	0.992243	0.991959	1.003557
Gain corrections:	0.999473	1.007818	1.008106	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	0.999301
27.000000	27.078213

Measured offset: -0.003734
Measured gain: 1.003035
Gain correction: 0.996974

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999927	1.000069	-1.000162	-1.000167	1.000200	0.047088
-27.001248	27.000962	-27.001162	-27.001163	27.001369	0.010707

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000158	-0.000247	-0.000253	0.000121
Final measured gains:	0.999984	0.999988	0.999987	1.000011

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.180109	-0.015561	-0.024210	-0.000164
Final measured offsets stdev:	0.360100	0.030860	0.047786	0.000327
Final measured gains mean:	0.999985	0.984493	0.976018	0.800012
Final measured gains stdev:	0.000017	0.031003	0.047939	0.400006

Saving channel 2 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999774	1.002723	-1.009633	-1.009971	1.001883	0.025768
-27.000868	26.975041	-26.790493	-26.818409	27.020315	0.024045

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004056	-0.018328	-0.017604	0.000000
Initial measured gains:	0.998893	0.991530	0.992590	1.001776
Gain corrections:	0.998893	1.008543	1.007465	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	1.002574
27.000000	27.019701

Measured offset: 0.001915
Measured gain: 1.000659
Gain correction: 0.999342

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999720	0.999700	-0.999887	-1.000127	1.000019	0.029063
-27.000784	27.001216	-27.001299	-27.001270	27.001637	0.057782

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000037	-0.000154	-0.000405	0.000315
Final measured gains:	1.000017	1.000013	1.000003	1.000004

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000043	-0.000162	-0.000350	0.001010
Final measured offsets stdev:	0.000112	0.000102	0.000056	0.000387
Final measured gains mean:	0.999992	0.999992	0.999985	0.999994
Final measured gains stdev:	0.000016	0.000013	0.000012	0.000016

Saving channel 3 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999701	1.005361	-1.010482	-1.010173	1.000315	0.026508
-27.000814	26.998847	-26.820517	-26.811649	27.073948	0.058873

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005953	-0.018127	-0.018148	0.000000
Initial measured gains:	0.999707	0.992651	0.992322	1.003083
Gain corrections:	0.999707	1.007403	1.007737	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	1.000721
27.000000	27.073074

Measured offset: -0.002062
Measured gain: 1.002783
Gain correction: 0.997225

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999751	0.999622	-0.999755	-0.999700	0.999306	0.047704
-27.000980	27.000359	-27.000851	-27.000967	27.000481	0.026622

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000110	-0.000009	0.000052	-0.000332
Final measured gains:	0.999981	0.999995	1.000001	1.000017

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000091	-0.000082	-0.000093	-0.000475
Final measured offsets stdev:	0.000067	0.000093	0.000093	0.000210
Final measured gains mean:	0.999990	0.999994	0.999994	1.000032
Final measured gains stdev:	0.000010	0.000007	0.000008	0.000010

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____