

Report of Calibration
PSC S/N: 2-HSS-001
2025-08-12 14:54:15

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 = 4.5000

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000986	1.018304	-1.249576	-1.215678	0.978755	0.007076
-400.065990	400.405836	-397.612366	-397.448517	400.672913	0.063210

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.016509	-0.255368	-0.221796	0.000000
Initial measured gains:	1.000808	0.993229	0.992903	1.000768
Gain corrections:	1.000808	1.006818	1.007148	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	0.976319
400.000000	400.607391

Measured offset: -0.025263
Measured gain: 1.001582
Gain correction: 0.998421

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001060	1.001547	-1.001826	-1.002197	0.991100	0.005966
-400.067004	400.066561	-400.064484	-400.065125	400.062744	0.081248

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000490	-0.000774	-0.001144	-0.010464
Final measured gains:	0.999998	0.999992	0.999992	1.000017

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000380	-0.000573	-0.000656	-0.010189
Final measured offsets stdev:	0.000445	0.000481	0.000262	0.000367
Final measured gains mean:	0.999996	0.999994	0.999993	1.000003
Final measured gains stdev:	0.000004	0.000003	0.000003	0.000011

Saving channel 1 calibration constants to qspi

lab{1}Chan2
Burden resistor = 9.0000

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001113	1.016823	-1.126369	-1.134224	1.000765	-0.000252
-200.012968	200.108255	-198.685410	-198.659744	200.249832	0.094319

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.0015310	-0.132564	-0.140588	0.000000
Initial measured gains:	1.000400	0.992700	0.992531	1.000792
Gain corrections:	1.000400	1.007354	1.007525	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	0.999953
200.000000	200.234650

Measured offset: -0.001226
Measured gain: 1.001179
Gain correction: 0.998822

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001316	1.001296	-1.001651	-1.001336	1.001374	0.011483
-200.012588	200.012613	-200.012665	-200.013382	200.017319	0.098665

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000020	-0.000337	-0.000017	0.000055
Final measured gains:	1.000000	0.999999	1.000004	1.000023

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000089	-0.000650	-0.000513	-0.000092
Final measured offsets stdev:	0.000442	0.000222	0.000313	0.000545
Final measured gains mean:	0.999995	0.999993	0.999993	1.000026
Final measured gains stdev:	0.000005	0.000006	0.000006	0.000008

Saving channel 2 calibration constants to qspi