

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0025
2025-10-08 09:53:32

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 = 18.0000

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000730	1.007519	-1.026548	-1.031263	1.003730	0.020604
-50.002617	50.043761	-49.705288	-49.693966	50.142532	0.058053

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.006087	-0.032418	-0.037461	0.000000
Initial measured gains:	1.000701	0.993405	0.993078	1.002092
Gain corrections:	1.000701	1.006638	1.006970	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	1.002918
50.000000	50.139954

Measured offset: 0.000121

Measured gain: 1.002797

Gain correction: 0.997211

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000459	1.000442	-1.000726	-1.000610	1.001730	0.012096
-50.002670	50.002109	-50.001976	-50.001949	50.003143	0.075923

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000005	-0.000287	-0.000169	0.001293
Final measured gains:	0.999989	0.999980	0.999982	0.999995

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000108	-0.000159	-0.000107	0.001256
Final measured offsets stdev:	0.000271	0.000155	0.000134	0.000255
Final measured gains mean:	0.999979	0.999980	0.999982	1.000005
Final measured gains stdev:	0.000011	0.000007	0.000006	0.000008

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
-1.000022	1.003253	-1.053479	-1.056021	0.999486	0.018850
-100.004087	100.063020	-99.387878	-99.332825	100.397285	0.145260

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002668	-0.060222	-0.063345	0.000000
Initial measured gains:	1.000563	0.993236	0.992654	1.003412
Gain corrections:	1.000563	1.006810	1.007400	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 0.999669
100.000000 100.392189

Measured offset: -0.004296

Measured gain: 1.003965

Gain correction: 0.996051

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000042	1.000110	-0.999932	-1.000179	0.999892	0.032645
-100.004304	100.003176	-100.003120	-100.003311	100.006523	0.142320

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000080	0.000099	-0.000149	-0.000254
Final measured gains:	0.999988	0.999989	0.999989	1.000036

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000054	-0.000010	-0.000235	-0.000272
Final measured offsets stdev:	0.000117	0.000151	0.000104	0.000283
Final measured gains mean:	0.999982	0.999985	0.999985	1.000006
Final measured gains stdev:	0.000007	0.000006	0.000003	0.000018

Saving channel 2 calibration constants to qspi

Test data reviewed by _____

Date 10/23/25