

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0028
2025-10-07 16:37:55

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
-1.000454	1.004989	-1.027521	-1.024303	0.999557	0.026057
-50.002777	50.045035	-49.698605	-49.652393	50.078037	0.077778

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003764	-0.033830	-0.031490	0.000000
Initial measured gains:	1.000770	0.993240	0.992363	1.000784
Gain corrections:	1.000770	1.006806	1.007696	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	0.999171
50.000000	50.075161

Measured offset: -0.002379
Measured gain: 1.001551
Gain correction: 0.998452

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000209	1.000315	-1.000198	-1.000306	1.001161	0.038377
-50.002688	50.001888	-50.002018	-50.002022	50.002697	0.067268

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000124	-0.000002	-0.000112	0.000848
Final measured gains:	0.999982	0.999987	0.999984	0.999999

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000020	-0.000047	-0.000101	0.000824
Final measured offsets stdev:	0.000208	0.000159	0.000075	0.000113
Final measured gains mean:	0.999977	0.999980	0.999979	0.999986
Final measured gains stdev:	0.000012	0.000006	0.000008	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
-0.999691	1.010352	-1.053822	-1.057514	1.001984	0.020374
-100.005024	100.086419	-99.361107	-99.353119	100.281250	0.134385

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.009946	-0.061179	-0.064989	0.000000
Initial measured gains:	1.000714	0.992949	0.992831	1.002051
Gain corrections:	1.000714	1.007101	1.007220	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	1.001984
100.000000	100.277328

Measured offset: -0.000798
Measured gain: 1.002781
Gain correction: 0.997226

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999843	0.999982	-1.000272	-1.000099	1.002065	0.020288
-100.005063	100.004061	-100.003876	-100.004105	100.002647	0.133269

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000151	-0.000445	-0.000268	0.002118
Final measured gains:	0.999988	0.999984	0.999988	0.999965

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000026	-0.000241	-0.000239	0.002387
Final measured offsets stdev:	0.000134	0.000310	0.000063	0.000373
Final measured gains mean:	0.999987	0.999982	0.999984	0.999980
Final measured gains stdev:	0.000006	0.000003	0.000004	0.000009

Saving channel 2 calibration constants to qspi

Test data reviewed by  Date 10/13/25