

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0031
2025-11-07 17:49:19

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{5}Chan1
Burden resistor = 18.0000

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999244	1.007745	-1.026399	-1.026909	0.998309	0.040905
-50.004216	50.031228	-49.666180	-49.654778	50.040520	0.075283

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.008124	-0.034602	-0.035354	0.000000
Initial measured gains:	1.000378	0.992548	0.992305	1.000382
Gain corrections:	1.000378	1.007508	1.007755	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	0.998938
50.000000	50.036877

Measured offset: -0.001836

Measured gain: 1.000774

Gain correction: 0.999226

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999349	0.999177	-0.999394	-0.999357	0.999842	0.034677
-50.004409	50.003729	-50.003735	-50.003876	50.004490	0.074253

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000162	-0.000059	-0.000018	0.000662
Final measured gains:	0.999990	0.999985	0.999989	1.000002

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000135	-0.000148	-0.000163	0.000485
Final measured offsets stdev:	0.000188	0.000067	0.000081	0.000153
Final measured gains mean:	0.999979	0.999979	0.999980	0.999993
Final measured gains stdev:	0.000009	0.000005	0.000006	0.000009

Saving channel 1 calibration constants to qspi

lab{5}Chan2
Burden resistor = 9.0000

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998966	1.007441	-1.047727	-1.055983	0.994329	0.027568
-100.009056	100.041850	-99.291275	-99.315704	100.380577	0.155921

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.008230	-0.056496	-0.064589	0.000000
Initial measured gains:	1.000246	0.992258	0.992421	1.003553
Gain corrections:	1.000246	1.007802	1.007637	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	0.995385
100.000000	100.372498

Measured offset: -0.008425

Measured gain: 1.003809

Gain correction: 0.996205

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999006	0.998909	-0.999394	-0.999391	0.997639	0.020312
-100.008944	100.007765	-100.007912	-100.007996	100.006386	0.145832

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000085	-0.000402	-0.000399	-0.001270
Final measured gains:	0.999989	0.999986	0.999987	0.999999

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000135	-0.000199	-0.000083	-0.001188
Final measured offsets stdev:	0.000210	0.000111	0.000211	0.000328
Final measured gains mean:	0.999983	0.999982	0.999984	1.000003
Final measured gains stdev:	0.000006	0.000004	0.000003	0.000010

Saving channel 2 calibration constants to qspi

Test data reviewed by _____

Date 11/12/25