

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0007
2025-09-09 09:07:25

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 = 18.0000

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000108	1.003719	-1.024638	-1.026490	1.000207	0.005219
-50.001257	50.010556	-49.662704	-49.666428	50.138004	0.081924

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003494	-0.031941	-0.033755	0.000000
Initial measured gains:	1.000116	0.992590	0.992629	1.002672
Gain corrections:	1.000116	1.007465	1.007426	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	1.000136
50.000000	50.136765

Measured offset: -0.002652
Measured gain: 1.002788
Gain correction: 0.997219

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000111	1.000195	-1.000146	-1.000083	1.000288	0.017037
-50.001322	50.000906	-50.001072	-50.001030	50.000328	0.067886

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000094	-0.000041	0.000022	0.000107
Final measured gains:	0.999990	0.999994	0.999995	0.999986

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000053	-0.000065	-0.000129	0.000108
Final measured offsets stdev:	0.000084	0.000145	0.000167	0.000126
Final measured gains mean:	0.999987	0.999988	0.999987	0.999983
Final measured gains stdev:	0.000005	0.000008	0.000008	0.000010

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
-0.999272	1.015923	-1.063753	-1.059868	1.002065	0.004618
-100.002485	100.075743	-99.324295	-99.312866	100.261673	0.059716

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.016079	-0.071977	-0.068168	0.000000
Initial measured gains:	1.000572	0.992499	0.992422	1.002017
Gain corrections:	1.000572	1.007558	1.007636	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	1.002735
100.000000	100.259132

Measured offset: 0.000145
Measured gain: 1.002590
Gain correction: 0.997417

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999229	0.999501	-0.999656	-0.999503	1.002166	0.010020
-100.002489	100.002650	-100.002251	-100.002136	100.003639	0.076771

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000273	-0.000434	-0.000280	0.002682
Final measured gains:	0.999999	0.999993	0.999994	0.999983

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000151	-0.000276	-0.000269	0.002927
Final measured offsets stdev:	0.000222	0.000120	0.000115	0.000163
Final measured gains mean:	0.999990	0.999991	0.999991	0.999990
Final measured gains stdev:	0.000009	0.000008	0.000002	0.000014

Saving channel 2 calibration constants to qspi

Test data reviewed by



Date 9/16/25