

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0009
2025-09-22 11:01:36

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
-1.000082	1.005878	-1.021635	-1.027221	0.995943	0.011874
-50.001483	50.016127	-49.647079	-49.669281	50.006195	0.081387

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005615	-0.029226	-0.034473	0.000000
Initial measured gains:	1.000181	0.992328	0.992667	1.000000
Gain corrections:	1.000181	1.007732	1.007387	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	0.995730
50.000000	50.004471

Measured offset: -0.004449
Measured gain: 1.000178
Gain correction: 0.999822

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999986	0.999972	-1.000093	-1.000086	0.999050	0.006970
-50.001533	50.001467	-50.001453	-50.001331	50.000957	0.078067

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000013	-0.000111	-0.000106	-0.000931
Final measured gains:	0.999999	0.999996	0.999994	1.000008

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000051	-0.000246	-0.000197	-0.000895
Final measured offsets stdev:	0.000157	0.000103	0.000069	0.000170
Final measured gains mean:	0.999992	0.999988	0.999989	1.000018
Final measured gains stdev:	0.000008	0.000007	0.000005	0.000007

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
-0.999434	1.008692	-1.055679	-1.058745	1.001273	0.011966
-100.003092	100.056953	-99.340797	-99.315460	100.247292	0.081570

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.008808	-0.063498	-0.066851	0.000000
Initial measured gains:	1.000451	0.992742	0.992455	1.001997
Gain corrections:	1.000451	1.007311	1.007602	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	1.002045
100.000000	100.245186

Measured offset: -0.000411
Measured gain: 1.002456
Gain correction: 0.997550

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999517	0.999308	-0.999755	-0.999641	1.001374	0.012172
-100.003364	100.002879	-100.002563	-100.002808	100.003738	0.083525

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000206	-0.000249	-0.000131	0.002079
Final measured gains:	0.999997	0.999990	0.999993	0.999988

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000218	-0.000261	-0.000187	0.001891
Final measured offsets stdev:	0.000088	0.000165	0.000179	0.000243
Final measured gains mean:	0.999990	0.999987	0.999990	0.999994
Final measured gains stdev:	0.000004	0.000002	0.000003	0.000008

Saving channel 2 calibration constants to qspi

Test data reviewed by  Date 9/26/25