

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0032
2025-09-03 11:07:13

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
-0.999699	0.992986	-1.022574	-1.023159	0.997842	0.011986
-50.002062	50.023781	-49.669914	-49.651924	50.117893	0.079803

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.007292	-0.030119	-0.031082	0.000000
Initial measured gains:	1.000580	0.992755	0.992376	1.001820
Gain corrections:	1.000580	1.007298	1.007683	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	0.998430
50.000000	50.115253

Measured offset: -0.003954
Measured gain: 1.002384
Gain correction: 0.997622

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999746	0.999330	-0.999706	-0.999617	0.999415	0.003986
-50.002299	50.001670	-50.002052	-50.001896	50.001945	0.072392

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000412	0.000036	0.000124	0.000081
Final measured gains:	0.999996	0.999996	0.999994	1.000004

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000007	-0.000132	-0.000112	-0.000076
Final measured offsets stdev:	0.000237	0.000086	0.000141	0.000108
Final measured gains mean:	0.999987	0.999988	0.999987	1.000008
Final measured gains stdev:	0.000008	0.000007	0.000007	0.000006

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
-0.999065	1.017711	-1.061828	-1.058038	1.006857	-0.000481
-100.004022	100.114084	-99.397240	-99.309113	100.242241	0.090707

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.017723	-0.069520	-0.066580	0.000000
Initial measured gains:	1.000923	0.993237	0.992385	1.001403
Gain corrections:	1.000923	1.006809	1.007673	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	1.007567
100.000000	100.238647

Measured offset: 0.005233
Measured gain: 1.002334
Gain correction: 0.997671

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999215	0.998964	-0.998869	-0.998768	1.003385	0.000596
-100.004076	100.003470	-100.003601	-100.004021	100.007439	0.073317

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000247	0.000344	0.000451	0.004425
Final measured gains:	0.999996	0.999999	1.000004	0.999995

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000021	-0.000053	-0.000044	0.004295
Final measured offsets stdev:	0.000134	0.000221	0.000261	0.000161
Final measured gains mean:	0.999993	0.999995	0.999994	0.999989
Final measured gains stdev:	0.000005	0.000007	0.000006	0.000012

Saving channel 2 calibration constants to qspi

Test data reviewed by _____ Date_____