

Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0029
2025-10-07 16:26:34

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
-1.000104	1.006709	-1.029806	-1.025211	1.002613	0.043298
-50.002910	50.049929	-49.681602	-49.660126	50.116959	0.060571

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005780	-0.036866	-0.032615	0.000000
Initial measured gains:	1.000825	0.992837	0.992492	1.001450
Gain corrections:	1.000825	1.007215	1.007564	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	1.002633
50.000000	50.112900

Measured offset: 0.000383
Measured gain: 1.002250
Gain correction: 0.997755

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000144	1.000197	-1.000414	-1.000431	1.001040	0.034743
-50.002861	50.002372	-50.002285	-50.002323	50.003719	0.067332

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000065	-0.000288	-0.000304	0.000832
Final measured gains:	0.999989	0.999983	0.999983	1.000010

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000039	-0.000168	-0.000133	0.000833
Final measured offsets stdev:	0.000209	0.000076	0.000102	0.000135
Final measured gains mean:	0.999981	0.999978	0.999980	1.000003
Final measured gains stdev:	0.000013	0.000006	0.000006	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
-0.999716	1.019922	-1.067180	-1.060218	1.008217	0.016209
-100.004705	100.002242	-99.282982	-99.384071	100.123154	0.142316

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.020435	-0.075433	-0.067380	0.000000
Initial measured gains:	0.999771	0.992029	0.993120	1.001340
Gain corrections:	0.999771	1.008035	1.006927	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	1.008156
100.000000	100.117676

Measured offset: 0.007050

Measured gain: 1.001106

Gain correction: 0.998895

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999607	0.999974	-0.999979	-1.000160	1.001517	0.020313
-100.005047	100.004420	-100.004448	-100.004120	100.006805	0.148363

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000377	-0.000381	-0.000568	0.001534
Final measured gains:	0.999990	0.999990	0.999985	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000142	-0.000287	-0.000436	0.001659
Final measured offsets stdev:	0.000176	0.000085	0.000122	0.000141
Final measured gains mean:	0.999988	0.999985	0.999983	1.000011
Final measured gains stdev:	0.000006	0.000004	0.000004	0.000017

Saving channel 2 calibration constants to qspi

Test data reviewed by DAB Date 10/13/25