

Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 1002
2025-12-30 10:15:17

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{2}Chan1
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000103	0.999547	-0.998075	-0.997988	0.999730	0.000259
-11.001499	10.984000	-10.907447	-10.908347	11.013728	0.018948

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001139	-0.007174	-0.006988	0.000000
Initial measured gains:	0.998306	0.990799	0.990898	1.002959
Gain corrections:	0.998306	1.009287	1.009186	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	0.999627
11.000000	11.011996

Measured offset: -0.001610
Measured gain: 1.001237
Gain correction: 0.998765

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000316	1.000392	-1.000482	-1.000489	1.000387	-0.011383
-11.001540	11.001245	-11.001293	-11.001279	11.001366	0.023561

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000113	-0.000207	-0.000217	-0.000017
Final measured gains:	0.999963	0.999959	0.999957	1.000012

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	9989.239430	-0.116587	-0.130188	-0.000033
Final measured offsets stdev:	19978.478720	0.233034	0.260207	0.000090
Final measured gains mean:	9989.455914	0.883486	0.869901	1.000017
Final measured gains stdev:	19976.911845	0.232990	0.260166	0.000014

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000572	1.000445	-0.998153	-0.997383	0.997791	-0.004196
-11.001832	10.982185	-10.904573	-10.902884	10.994285	0.012980

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001826	-0.007070	-0.006391	0.000000
Initial measured gains:	0.998048	0.990517	0.990425	1.001478
Gain corrections:	0.998048	1.009574	1.009667	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	0.997149
11.000000	10.992558

Measured offset: -0.002392
Measured gain: 0.999541
Gain correction: 1.000459

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000274	1.000253	-1.000268	-1.000325	1.000392	-0.004863
-11.001657	11.001966	-11.002028	-11.002090	11.001615	-0.006677

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000055	0.000044	-0.000012	0.000188
Final measured gains:	1.000033	1.000038	1.000038	0.999951

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000001	-0.000076	-0.000081	0.000156
Final measured offsets stdev:	0.000085	0.000086	0.000051	0.000060
Final measured gains mean:	1.000022	1.000017	1.000018	0.999969
Final measured gains stdev:	0.000019	0.000018	0.000015	0.000016

Saving channel 2 calibration constants to qspi

lab{2}Chan3
 Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000372	1.001567	-0.997805	-0.997964	1.001933	0.013265
-11.001579	10.985029	-10.906011	-10.912395	11.026090	0.013897

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002969	-0.006735	-0.006272	0.000000
Initial measured gains:	0.998226	0.990701	0.991324	1.004076
Gain corrections:	0.998226	1.009386	1.008752	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	1.001506
11.000000	11.024594

Measured offset: -0.000803
 Measured gain: 1.002309
 Gain correction: 0.997696

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000205	1.000241	-1.000390	-1.000379	1.000383	0.005415
-11.001381	11.001767	-11.001851	-11.001803	11.001697	0.013042

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000001	-0.000157	-0.000150	0.000164
Final measured gains:	1.000035	1.000028	1.000025	0.999979

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000013	-0.000056	-0.000015	0.000035
Final measured offsets stdev:	0.000070	0.000133	0.000109	0.000159
Final measured gains mean:	1.000010	1.000006	1.000008	1.000005
Final measured gains stdev:	0.000016	0.000020	0.000017	0.000019

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000406	1.000624	-0.997977	-0.998854	0.999725	0.000225
-11.001577	10.986218	-10.908875	-10.912416	11.008871	0.019500

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001776	-0.006601	-0.007211	0.000000
Initial measured gains:	0.998442	0.990974	0.991240	1.002359
Gain corrections:	0.998442	1.009108	1.008837	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	0.999273
11.000000	11.007435

Measured offset: -0.001543
Measured gain: 1.000816
Gain correction: 0.999185

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000486	1.000503	-1.000551	-1.000614	1.000486	-0.002303
-11.001603	11.001317	-11.001455	-11.001542	11.001328	-0.010687

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000048	-0.000087	-0.000148	-0.000020
Final measured gains:	0.999970	0.999979	0.999981	1.000003

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000073	-0.000063	-0.000056	-0.000040
Final measured offsets stdev:	0.000147	0.000090	0.000101	0.000089
Final measured gains mean:	0.999986	0.999997	0.999996	1.000002
Final measured gains stdev:	0.000025	0.000022	0.000019	0.000010

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____