

Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 0013
2025-10-23 17:04:01

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 = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000770	1.004095	-1.012494	-1.011848	1.001302	0.030379
-26.999125	27.015244	-26.829140	-26.827717	27.067724	0.052139

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002833	-0.018718	-0.018103	0.000000
Initial measured gains:	1.000492	0.993011	0.992981	1.002125
Gain corrections:	1.000492	1.007038	1.007069	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	1.000847
27.000000	27.068493

Measured offset: -0.001755
Measured gain: 1.002602
Gain correction: 0.997405

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000677	1.000457	-1.001029	-1.000873	1.000419	0.031060
-26.999057	26.998737	-26.999222	-26.998913	26.998711	0.025227

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000216	-0.000359	-0.000209	-0.000038
Final measured gains:	0.999996	0.999993	0.999987	1.000000

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000076	-0.000365	-0.000331	0.000029
Final measured offsets stdev:	0.000337	0.000119	0.000146	0.000445
Final measured gains mean:	0.999986	0.999979	0.999979	0.999986
Final measured gains stdev:	0.000018	0.000011	0.000011	0.000020

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000430	1.005525	-1.012702	-1.012721	0.998298	0.027937
-26.998841	27.015473	-26.831652	-26.808075	27.009800	0.029295

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004652	-0.019178	-0.020105	0.000000
Initial measured gains:	1.000444	0.993097	0.992190	1.000060
Gain corrections:	1.000444	1.006951	1.007872	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	0.997804
27.000000	27.011339

Measured offset: -0.002716
Measured gain: 1.000521
Gain correction: 0.999480

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000156	1.000222	-1.000496	-1.000529	0.999975	0.038163
-26.998822	26.998918	-26.999210	-26.999222	26.997849	0.055315

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000065	-0.000338	-0.000372	-0.000215
Final measured gains:	1.000001	1.000002	1.000001	0.999968

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000009	-0.000229	-0.000266	-0.000258
Final measured offsets stdev:	0.000058	0.000160	0.000171	0.000119
Final measured gains mean:	0.999991	0.999993	0.999991	0.999991
Final measured gains stdev:	0.000016	0.000011	0.000009	0.000012

Saving channel 2 calibration constants to qspi

lab{2}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000536	1.003224	-1.009991	-1.009821	1.003506	0.028219
-26.998916	27.008653	-26.820694	-26.818527	27.047810	0.044713

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002417	-0.016678	-0.016585	0.000000
Initial measured gains:	1.000271	0.992781	0.992704	1.001495
Gain corrections:	1.000271	1.007271	1.007349	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	1.003062
27.000000	27.049059

Measured offset: 0.001292
Measured gain: 1.001769
Gain correction: 0.998234

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000692	1.000568	-1.000841	-1.000704	1.001636	0.028418
-26.998865	26.998523	-26.998840	-26.998692	26.998770	0.035466

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000116	-0.000157	-0.000020	0.001100
Final measured gains:	0.999992	0.999993	0.999993	0.999968

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000084	-0.000182	-0.000058	0.001115
Final measured offsets stdev:	0.000153	0.000107	0.000084	0.000321
Final measured gains mean:	0.999982	0.999986	0.999987	0.999991
Final measured gains stdev:	0.000009	0.000011	0.000014	0.000020

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000331	1.003743	-1.009969	-1.009820	0.996867	0.039655
-26.998776	27.001987	-26.816431	-26.825207	26.996664	0.018314

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003419	-0.017025	-0.016532	0.000000
Initial measured gains:	0.999992	0.992616	0.992959	1.000060
Gain corrections:	0.999992	1.007439	1.007091	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	0.996472
27.000000	26.997843

Measured offset: -0.003581
Measured gain: 1.000053
Gain correction: 0.999947

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000439	1.000625	-1.000579	-1.000447	0.999641	0.039174
-26.998782	26.999194	-26.998783	-26.998810	26.998774	0.054234

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000178	-0.000146	-0.000007	-0.001006
Final measured gains:	1.000009	0.999995	1.000001	1.000022

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000167	-0.000288	-0.000206	-0.000593
Final measured offsets stdev:	0.000186	0.000143	0.000106	0.000292
Final measured gains mean:	0.999974	0.999976	0.999979	1.000019
Final measured gains stdev:	0.000023	0.000016	0.000018	0.000009

Saving channel 4 calibration constants to qspi

Test data reviewed by



Date 11/12/25