Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 0023
2025-11-25 10:35:11

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{3}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000659	1.003503	-1.010983	-1.012032	1.001620	0.034649
-27.000135	27.004734	-26.824295	-26.837008	27.036558	0.040002

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002777	-0.017490	-0.018089	0.000000
Initial measured gains:	1.000067	0.992840	0.993288	1.001296
Gain corrections:	1.000067	1.007212	1.006757	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	1.001220
27.000000	27.036459

Measured offset: -0.000136
Measured gain: 1.001355
Gain correction: 0.998646

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000400	1.000228	-1.000604	-1.000529	1.000458	0.041365
-27.000207	26.999936	-27.000051	-26.999954	26.999697	0.049802

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000168	-0.000218	-0.000143	0.000248
Final measured gains:	0.999996	0.999986	0.999985	0.999982

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000007	-0.000245	-0.000312	-0.000011
Final measured offsets stdev:	0.000143	0.000045	0.000100	0.000168
Final measured gains mean:	0.999978	0.999972	0.999973	0.999988
Final measured gains stdev:	0.000010	0.000008	0.000006	0.000011

Saving channel 1 calibration constants to qspi

```
lab{3}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets
       Itest       dacSP       dcct1       dcct2       dacRB         err
   -1.000415    1.006172   -1.009986   -1.011566    1.001017    0.040378
  -27.000316   27.011282  -26.830084  -26.820770   27.049442    0.040183

                                  dacSP         dcct1         dcct2         dacRB
Initial measured offsets:      -0.005557     -0.016489     -0.018488      0.000000
Initial measured gains:         1.000200      0.993084      0.992665      1.001666
Gain corrections:               1.000200      1.006964      1.007389      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   1.000660
27.000000   27.049217

Measured offset: -0.001207
Measured gain: 1.001868
Gain correction: 0.998136

Writing gain and offset constants for dacRB to PSC

Verification
       Itest       dacSP       dcct1       dcct2       dacRB         err
   -1.000107    1.000014   -1.000306   -1.000544    0.999718    0.017876
  -27.000224   27.000364  -27.000395  -27.000584   27.000036    0.042800


                                  dacSP         dcct1         dcct2         dacRB
Final measured offsets:        0.000102     -0.000200     -0.000440     -0.000295
Final measured gains:          1.000009      0.999999      0.999997      0.999999



                                  dacSP         dcct1         dcct2         dacRB
Final measured offsets mean:   0.000115     -0.000187     -0.000190     -0.000212
Final measured offsets stdev:  0.000109      0.000161      0.000149      0.000078
Final measured gains mean:     1.000001      0.999988      0.999986      1.000005
Final measured gains stdev:    0.000015      0.000008      0.000011      0.000011

Saving channel 2 calibration constants to qspi
```

lab{3}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999749	1.003632	-1.010189	-1.011359	1.002530	0.006109
-26.999941	27.006532	-26.825878	-26.839531	27.042578	0.037540

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003778	-0.017533	-0.018224	0.000000
Initial measured gains:	1.000104	0.992904	0.993384	1.001429
Gain corrections:	1.000104	1.007147	1.006660	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	1.003001
27.000000	27.042501

Measured offset: 0.001482
Measured gain: 1.001519
Gain correction: 0.998483

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999703	0.999452	-0.999913	-0.999879	1.000309	-0.022320
-27.000025	26.999673	-26.999809	-26.999844	27.001066	0.042343

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000248	-0.000226	-0.000190	0.000837
Final measured gains:	0.999996	0.999984	0.999986	1.000021

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000008	-0.000175	-0.000110	0.001156
Final measured offsets stdev:	0.000225	0.000166	0.000112	0.000262
Final measured gains mean:	0.999986	0.999989	0.999986	1.000000
Final measured gains stdev:	0.000018	0.000013	0.000015	0.000014

Saving channel 3 calibration constants to qspi

lab{3}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999618	1.002540	-1.010206	-1.009215	1.000765	0.042706
-26.999870	27.008874	-26.829491	-26.804920	27.047342	0.011186

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002688	-0.017546	-0.017461	0.000000
Initial measured gains:	1.000234	0.993040	0.992133	1.001547
Gain corrections:	1.000234	1.007009	1.007929	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	1.001110
27.000000	27.047287

Measured offset: -0.000666
Measured gain: 1.001776
Gain correction: 0.998227

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999607	0.999189	-0.999831	-0.999781	0.999383	-0.011971
-26.999777	26.999845	-26.999748	-26.999584	26.999872	0.049232

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000437	-0.000234	-0.000187	0.000200
Final measured gains:	1.000019	0.999990	0.999986	0.999994

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000130	-0.000277	-0.000248	-0.000311
Final measured offsets stdev:	0.000294	0.000153	0.000113	0.000385
Final measured gains mean:	0.999994	0.999980	0.999980	1.000008
Final measured gains stdev:	0.000015	0.000008	0.000008	0.000024

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____