Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 1003
2025-12-30 11:10:43

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
-1.000363	0.999669	-0.997449	-0.998430	0.999473	0.005895
-11.001844	10.970392	-10.893297	-10.912700	10.986225	0.010897

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002382	-0.007652	-0.006790	0.000000
Initial measured gains:	0.996925	0.989438	0.991280	1.001608
Gain corrections:	0.996925	1.010674	1.008797	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   0.999116
11.000000   10.984438

Measured offset: 0.000583
Measured gain: 0.998532
Gain correction: 1.001470

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000329	1.000321	-1.000419	-1.000400	1.000914	0.023075
-11.001592	11.001555	-11.001691	-11.001666	11.002032	0.009248

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000005	-0.000089	-0.000071	0.000604
Final measured gains:	0.999997	1.000001	1.000000	0.999988

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000061	-0.000122	-0.000076	0.000294
Final measured offsets stdev:	0.000052	0.000043	0.000081	0.000163
Final measured gains mean:	0.999975	0.999980	0.999981	1.000008
Final measured gains stdev:	0.000021	0.000023	0.000023	0.000016

Saving channel 1 calibration constants to qspi

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lab{2}Chan2
Burden resistor = 83.3333

Measuring initial gains and offsets
      Itest        dacSP        dcct1        dcct2        dacRB          err
   -1.000258     0.999376    -0.998188    -0.998532     0.999464     0.016640
  -11.001705    10.982888   -10.906429   -10.912396    11.001140    -0.011493

                                  dacSP         dcct1         dcct2         dacRB
Initial measured offsets:      -0.000912     -0.007252     -0.007034      0.000000
Initial measured gains:         0.998207      0.990681      0.991243      1.001819
Gain corrections:               0.998207      1.009407      1.008834      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   0.999214
11.000000   10.999358

Measured offset: -0.000800
Measured gain: 1.000014
Gain correction: 0.999986

Writing gain and offset constants for dacRB to PSC

Verification
      Itest        dacSP        dcct1        dcct2        dacRB          err
   -1.000272     1.000122    -1.000199    -1.000236     1.000098     0.019202
  -11.001727    11.001885   -11.001757   -11.001826    11.001966     0.013095


                                  dacSP         dcct1         dcct2         dacRB
Final measured offsets:         0.000181      0.000084      0.000050     -0.000035
Final measured gains:           1.000031      1.000010      1.000014      1.000011


                                  dacSP         dcct1         dcct2         dacRB
Final measured offsets mean: -0.000012     -0.000143     -0.000160     -0.000081
Final measured offsets stdev: 0.000126      0.000130      0.000119      0.000101
Final measured gains mean:    0.999982      0.999973      0.999978      1.000014
Final measured gains stdev:   0.000025      0.000020      0.000020      0.000009

Saving channel 2 calibration constants to qspi
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lab{2}Chan3
Burden resistor = 83.3333

Measuring initial gains and offsets
       Itest        dacSP        dcct1        dcct2        dacRB         err
   -1.000065     0.997458    -0.996458    -0.997715     0.999434    -0.018424
  -11.001457    10.980391   -10.900073   -10.907921    10.998403     0.015421


                                dacSP         dcct1         dcct2         dacRB
Initial measured offsets:     0.000761     -0.006169     -0.006768      0.000000
Initial measured gains:       0.998154      0.990224      0.990883      1.001606
Gain corrections:             0.998154      1.009873      1.009201      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   0.999398
11.000000   10.996907

Measured offset: -0.000352
Measured gain: 0.999751
Gain correction: 1.000249

Writing gain and offset constants for dacRB to PSC

Verification
       Itest        dacSP        dcct1        dcct2        dacRB         err
   -1.000043     1.000046    -1.000185    -1.000240     0.999879    -0.005513
  -11.001400    11.001157   -11.001260   -11.001345    11.000934     0.009327


                                dacSP         dcct1         dcct2         dacRB
Final measured offsets:      -0.000027     -0.000169     -0.000222     -0.000161
Final measured gains:         0.999975      0.999972      0.999975      0.999994



                                dacSP         dcct1         dcct2         dacRB
Final measured offsets mean: -11287.093153    -0.001757     -0.005587     -
0.000065
Final measured offsets stdev:22574.186374      0.003186      0.010885      0.000095
Final measured gains mean:   -11284.629379     0.998372      0.994535
1.000001
Final measured gains stdev:  22571.258741      0.003237      0.010912      0.000016

Saving channel 3 calibration constants to qspi
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lab{2}Chan4
Burden resistor = 83.3333

Measuring initial gains and offsets
       Itest        dacSP        dcct1        dcct2        dacRB          err
   -1.000583     1.000684    -0.998896    -0.999471     1.000361     0.009049
  -11.001914    10.981918   -10.903805   -10.919117    11.001047     0.020385

                                    dacSP        dcct1        dcct2          dacRB
Initial measured offsets:       -0.002111    -0.007960    -0.007060       0.000000
Initial measured gains:          0.997991     0.990359     0.991833       1.001949
Gain corrections:                0.997991     1.009735     1.008235       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    0.999734
11.000000   10.999164

Measured offset: -0.000209
Measured gain: 0.999943
Gain correction: 1.000057

Writing gain and offset constants for dacRB to PSC

Verification
       Itest        dacSP        dcct1        dcct2        dacRB          err
   -1.000775     1.000743    -1.000913    -1.000842     1.000822    -0.016456
  -11.001946    11.002068   -11.002363   -11.002293    11.001970    -0.023453


                                    dacSP        dcct1        dcct2          dacRB
Final measured offsets:          0.000048    -0.000110    -0.000040       0.000097
Final measured gains:            1.000015     1.000028     1.000028       0.999982


                                    dacSP        dcct1        dcct2          dacRB
Final measured offsets mean: -0.000048    -0.000162    -0.000146      -0.000062
Final measured offsets stdev: 0.000109     0.000092     0.000078       0.000187
Final measured gains mean:    0.999989     0.999983     0.999986       0.999992
Final measured gains stdev:   0.000028     0.000030     0.000025       0.000024

Saving channel 4 calibration constants to qspi




Test data reviewed by _____    Date_____


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