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

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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
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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
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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_____


Page 4 of 4
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