Report of Calibration
PSC 2CH-HSS-AR-QD-QF_S/N 0027
2025-12-17 14:17:50

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{4}Chan1
Burden resistor = 18.0000

Measuring initial gains and offsets
```
      Itest       dacSP        dcct1        dcct2        dacRB         err
   -1.001825    1.004796    -1.021328    -1.026619     0.995710     0.039898
  -50.007931   50.006018   -49.651100   -49.632843    50.045750     0.110002
```

```
                                     dacSP        dcct1        dcct2        dacRB
Initial measured offsets:         -0.003071    -0.027197    -0.032969     0.000000
Initial measured gains:            0.999900     0.992321     0.991840     1.000996
Gain corrections:                  0.999900     1.007739     1.008227     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   0.994197
50.000000   50.037495
```

Measured offset: -0.006687
Measured gain: 1.000884
Gain correction: 0.999117

Writing gain and offset constants for dacRB to PSC

Verification
```
      Itest       dacSP        dcct1        dcct2        dacRB         err
   -1.001993    1.001656    -1.002026    -1.002029     1.000765     0.018671
  -50.008313   50.006785   -50.007282   -50.007320    50.004982     0.065816
```

```
                                 dacSP        dcct1        dcct2        dacRB
Final measured offsets:        0.000312    -0.000055    -0.000057    -0.000873
Final measured gains:          0.999976     0.999978     0.999979     0.999981
```

```
                                 dacSP        dcct1        dcct2        dacRB
Final measured offsets mean:   0.000211    -0.000028    -0.000086    -0.000584
Final measured offsets stdev:  0.000231     0.000029     0.000077     0.000352
Final measured gains mean:     0.999995     0.999994     0.999993     0.999986
Final measured gains stdev:    0.000011     0.000008     0.000008     0.000014
```

Saving channel 1 calibration constants to qspi

```
Burden resistor = 9.0000

Measuring initial gains and offsets
       Itest       dacSP        dcct1        dcct2        dacRB          err
   -1.000851     1.003507    -1.053647    -1.060594     1.000359     0.020920
 -100.013810   100.050540   -99.307693   -99.344666   100.197853     0.142532


                                    dacSP          dcct1          dcct2          dacRB
Initial measured offsets:       -0.002311      -0.060467      -0.067110       0.000000
Initial measured gains:          1.000344       0.992335       0.992638       1.001519
Gain corrections:                1.000344       1.007724       1.007416       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    0.999040
100.000000    100.184692

Measured offset: -0.002836
Measured gain: 1.001875
Gain correction: 0.998128

Writing gain and offset constants for dacRB to PSC

Verification
       Itest       dacSP        dcct1        dcct2        dacRB          err
   -1.000945     1.001108    -1.001123    -1.001121     1.000359     0.018800
 -100.014255   100.013526  -100.013451  -100.013855   100.011375     0.139559


                                    dacSP          dcct1          dcct2          dacRB
Final measured offsets:         -0.000172      -0.000188      -0.000181      -0.000735
Final measured gains:            0.999991       0.999990       0.999994       0.999986


                                    dacSP          dcct1          dcct2          dacRB
Final measured offsets mean: -0.000022      -0.000233      -0.000090      -0.000225
Final measured offsets stdev: 0.000213       0.000211       0.000247       0.000372
Final measured gains mean:    0.999992       0.999991       0.999993       0.999986
Final measured gains stdev:   0.000004       0.000003       0.000001       0.000007

Saving channel 2 calibration constants to qspi




Test data reviewed by _____    Date_____
```