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Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0004
2025-10-22 12:00:28

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{1}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets
      Itest       dacSP        dcct1        dcct2        dacRB          err
   -0.999708     1.004562    -1.011559    -1.010134     1.001214     0.029438
  -26.997860    27.010376   -26.815842   -26.818115    27.058620     0.049541


                                    dacSP         dcct1         dcct2         dacRB
Initial measured offsets:        -0.004559     -0.019306     -0.017738      0.000000
Initial measured gains:           1.000295      0.992543      0.992685      1.001984
Gain corrections:                 1.000295      1.007513      1.007369      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   1.001713
27.000000   27.060373

Measured offset: -0.000543
Measured gain: 1.002256
Gain correction: 0.997749


Writing gain and offset constants for dacRB to PSC

Verification
      Itest       dacSP        dcct1        dcct2        dacRB          err
   -0.999535     0.999510    -0.999752    -0.999720     0.999279     0.014928
  -26.997619    26.997955   -26.997772   -26.997761    26.997673     0.057168



                                    dacSP         dcct1         dcct2         dacRB
Final measured offsets:           0.000039     -0.000220     -0.000187     -0.000229
Final measured gains:             1.000014      0.999998      0.999998      0.999998



                                    dacSP         dcct1         dcct2         dacRB
Final measured offsets mean: -0.000162     -0.000196     -0.000141     -0.000148
Final measured offsets stdev: 0.000251      0.000163      0.000165      0.000338
Final measured gains mean:    0.999985      0.999987      0.999988      1.000000
Final measured gains stdev:   0.000018      0.000009      0.000009      0.000011


Saving channel 1 calibration constants to qspi
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lab{1}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets
       Itest       dacSP        dcct1        dcct2        dacRB          err
   -0.999705     1.002493    -1.010411    -1.010598     0.999443     0.002250
  -26.997889    27.017388   -26.824888   -26.824066    27.079062     0.031815

                                  dacSP         dcct1         dcct2         dacRB
Initial measured offsets:     -0.002146     -0.017770     -0.017996      0.000000
Initial measured gains:        1.000643      0.992934      0.992895      1.002488
Gain corrections:              1.000643      1.007116      1.007156      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   0.999865
27.000000   27.080992

Measured offset: -0.003255
Measured gain: 1.003120
Gain correction: 0.996889

Writing gain and offset constants for dacRB to PSC

Verification
       Itest       dacSP        dcct1        dcct2        dacRB          err
   -0.999471     0.999614    -0.999733    -0.999898     0.999465     0.022371
  -26.997888    26.997466   -26.997654   -26.997498    26.996956     0.032332


                                  dacSP         dcct1         dcct2         dacRB
Final measured offsets:       -0.000165     -0.000281     -0.000459     -0.000135
Final measured gains:          0.999978      0.999981      0.999969      0.999986



                                  dacSP         dcct1         dcct2         dacRB
Final measured offsets mean:   0.000093     -0.000138     -0.000221     -0.000143
Final measured offsets stdev:  0.000174      0.000095      0.000196      0.000136
Final measured gains mean:     1.000000      0.999993      0.999991      0.999999
Final measured gains stdev:    0.000018      0.000011      0.000012      0.000010

Saving channel 2 calibration constants to qspi
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lab{1}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets
       Itest        dacSP         dcct1         dcct2         dacRB          err
   -0.999716      1.002631     -1.010310     -1.011892      1.004421      0.038081
  -26.997889     27.011941    -26.826504    -26.817810     27.099346      0.044590


                                   dacSP          dcct1          dcct2           dacRB
Initial measured offsets:       -0.002487      -0.017592      -0.019569       0.000000
Initial measured gains:          1.000428       0.993000       0.992605       1.003292
Gain corrections:                1.000428       1.007049       1.007450       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    1.004728
27.000000    27.101259

Measured offset: 0.001015
Measured gain: 1.003713
Gain correction: 0.996301

Writing gain and offset constants for dacRB to PSC

Verification
       Itest        dacSP         dcct1         dcct2         dacRB          err
   -0.999715      0.999852     -1.000049     -0.999983      0.999942      0.037056
  -26.997828     26.997635    -26.998106    -26.998070     26.998358      0.024794


                                   dacSP          dcct1          dcct2           dacRB
Final measured offsets:         -0.000149      -0.000336      -0.000269       0.000066
Final measured gains:            0.999987       0.999998       0.999999       1.000024



                                   dacSP          dcct1          dcct2           dacRB
Final measured offsets mean: -0.000109      -0.000205      -0.000212       0.000044
Final measured offsets stdev: 0.000196       0.000115       0.000041       0.000114
Final measured gains mean:    0.999985       0.999995       0.999990       1.000035
Final measured gains stdev:   0.000017       0.000007       0.000009       0.000010

Saving channel 3 calibration constants to qspi
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lab{1}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets
        Itest         dacSP         dcct1         dcct2         dacRB          err
    -0.999866      1.004527     -1.011497     -1.009496      1.001094      0.024951
   -26.998064     27.012108    -26.825661    -26.819658     27.078772      0.051087

                                      dacSP          dcct1          dcct2          dacRB
Initial measured offsets:         -0.004301      -0.018709      -0.016862       0.000000
Initial measured gains:            1.000361       0.992921       0.992767       1.002695
Gain corrections:                  1.000361       1.007129       1.007285       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   1.001263
27.000000   27.080614

Measured offset: -0.001788
Measured gain: 1.003052
Gain correction: 0.996957

Writing gain and offset constants for dacRB to PSC

Verification
        Itest         dacSP         dcct1         dcct2         dacRB          err
    -0.999887      1.000027     -1.000205     -1.000295      0.999531      0.032107
   -26.997993     26.997544    -26.997845    -26.997763     26.997055      0.033610


                                      dacSP          dcct1          dcct2          dacRB
Final measured offsets:           -0.000163      -0.000337      -0.000432      -0.000496
Final measured gains:              0.999977       0.999982       0.999975       1.000000


                                      dacSP          dcct1          dcct2          dacRB
Final measured offsets mean: -0.000044      -0.000133      -0.000250      -0.000545
Final measured offsets stdev: 0.000158       0.000167       0.000170       0.000079
Final measured gains mean:    0.999989       0.999991       0.999985       1.000004
Final measured gains stdev:   0.000012       0.000014       0.000015       0.000007

Saving channel 4 calibration constants to qspi




Test data reviewed by _____  Date_____


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