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Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0009
2025-10-03 11:36:58

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
   -1.000049    1.003462    -1.010147    -1.009724    1.001390     0.016542
  -26.998553   26.991996   -26.806080   -26.827188   27.047600     0.014398


                                    dacSP          dcct1          dcct2          dacRB
Initial measured offsets:       -0.003797      -0.017891      -0.016639       0.000000
Initial measured gains:          0.999616       0.992208       0.993037       1.002219
Gain corrections:                0.999616       1.007853       1.007012       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   1.001483
27.000000   27.049370

Measured offset: -0.000359
Measured gain: 1.001842
Gain correction: 0.998162


Writing gain and offset constants for dacRB to PSC

Verification
      Itest       dacSP        dcct1        dcct2       dacRB          err
   -1.000191    1.000278    -1.000277    -1.000288    0.999833     0.050237
  -26.998324   26.998495   -26.998323   -26.998529   26.998434     0.053027



                                    dacSP          dcct1          dcct2          dacRB
Final measured offsets:         -0.000084      -0.000089      -0.000093      -0.000460
Final measured gains:            1.000003       0.999997       1.000004       1.000015



                                    dacSP          dcct1          dcct2          dacRB
Final measured offsets mean:     0.000009      -0.000160      -0.000283      -0.000398
Final measured offsets stdev:    0.000177       0.000120       0.000125       0.000111
Final measured gains mean:       1.000006       1.000000       0.999997       1.000017
Final measured gains stdev:      0.000014       0.000007       0.000010       0.000009


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
   -1.000064     1.002555    -1.011096    -1.009701     0.997815       0.044369
  -26.998323    26.998890   -26.819424   -26.814003    27.044935       0.044293

                                   dacSP         dcct1         dcct2         dacRB
Initial measured offsets:      -0.002565     -0.018337     -0.017097      0.000000
Initial measured gains:         0.999926      0.992694      0.992540      1.001954
Gain corrections:               0.999926      1.007359      1.007516      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    0.997706
27.000000   27.046793

Measured offset: -0.004182
Measured gain: 1.001888
Gain correction: 0.998116

Writing gain and offset constants for dacRB to PSC

Verification
      Itest       dacSP        dcct1        dcct2         dacRB          err
   -1.000330     0.999959    -1.000407    -1.000596     0.999383      -0.025476
  -26.998504    26.997952   -26.998260   -26.998356    26.998100       0.033304


                                   dacSP         dcct1         dcct2         dacRB
Final measured offsets:         0.000364     -0.000089     -0.000282     -0.000604
Final measured gains:           0.999993      0.999988      0.999984      1.000028


                                   dacSP         dcct1         dcct2         dacRB
Final measured offsets mean: -0.000112     -0.000129     -0.000254     -0.000801
Final measured offsets stdev: 0.000246      0.000128      0.000084      0.000108
Final measured gains mean:    0.999993      0.999994      0.999989      1.000026
Final measured gains stdev:   0.000012      0.000009      0.000009      0.000008

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
    -0.999764     1.003189    -1.008368    -1.010601     1.001625      0.007174
   -26.998381    26.992255   -26.807438   -26.820351    27.023167     -0.010265


                                      dacSP          dcct1          dcct2          dacRB
Initial measured offsets:          -0.003793      -0.016278      -0.018100       0.000000
Initial measured gains:             0.999633       0.992325       0.992735       1.001250
Gain corrections:                   0.999633       1.007735       1.007318       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   1.001872
27.000000   27.024694

Measured offset: 0.000994
Measured gain: 1.000878
Gain correction: 0.999123

Writing gain and offset constants for dacRB to PSC

Verification
       Itest        dacSP        dcct1        dcct2        dacRB          err
    -1.000316     1.000409    -1.000200    -1.000122     1.001296      0.028666
   -26.998575    26.998685   -26.998653   -26.998505    26.999849      0.037661


                                      dacSP          dcct1          dcct2          dacRB
Final measured offsets:            -0.000092       0.000124       0.000199       0.000876
Final measured gains:               1.000001       1.000007       1.000005       1.000011


                                      dacSP          dcct1          dcct2          dacRB
Final measured offsets mean: -0.000064      -0.000126      -0.000104       0.000795
Final measured offsets stdev: 0.000226       0.000184       0.000180       0.000428
Final measured gains mean:    0.999995       0.999995       0.999994       1.000013
Final measured gains stdev:   0.000024       0.000015       0.000014       0.000018

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
    -1.000161     1.003391    -1.010797    -1.009110     0.999405     0.005398
   -26.998424    27.003602   -26.820408   -26.821409    27.034853     0.054431

                                    dacSP        dcct1        dcct2         dacRB
Initial measured offsets:        -0.003155    -0.017893    -0.016102      0.000000
Initial measured gains:           1.000075     0.992744     0.992847      1.001355
Gain corrections:                 1.000075     1.007309     1.007204      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   0.999301
27.000000   27.036137

Measured offset: -0.002116
Measured gain: 1.001417
Gain correction: 0.998585

Writing gain and offset constants for dacRB to PSC

Verification
        Itest       dacSP        dcct1        dcct2        dacRB          err
    -1.000058     1.000047    -1.000040    -1.000226     1.000266     0.037993
   -26.998334    26.998004   -26.998072   -26.998199    26.998787     0.050984


                                    dacSP        dcct1        dcct2         dacRB
Final measured offsets:          -0.000001     0.000010    -0.000179      0.000197
Final measured gains:             0.999988     0.999991     0.999988      1.000022



                                    dacSP        dcct1        dcct2         dacRB
Final measured offsets mean: -0.000119    -0.000206    -0.000357      0.000101
Final measured offsets stdev: 0.000131     0.000172     0.000129      0.000055
Final measured gains mean:    0.999996     0.999997     0.999988      1.000010
Final measured gains stdev:   0.000011     0.000010     0.000008      0.000013

Saving channel 4 calibration constants to qspi




Test data reviewed by _____   Date_____


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