Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0005
2026-01-05 17:56:33

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{3}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000795	1.003012	-1.008906	-1.009246	1.000781	0.013868
-27.001362	26.985320	-26.800270	-26.803440	27.018829	0.047920

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002919	-0.016163	-0.016394	0.000000
Initial measured gains:	0.999298	0.991954	0.992063	1.001376
Gain corrections:	0.999298	1.008111	1.008001	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   0.999893
27.000000   27.016893

Measured offset: -0.000761
Measured gain: 1.000654
Gain correction: 0.999347

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000690	1.001001	-1.000936	-1.000781	1.000803	0.041449
-27.001435	27.001567	-27.001652	-27.001629	27.001593	0.053753

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000318	-0.000247	-0.000088	-0.000207
Final measured gains:	0.999993	0.999999	1.000004	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000123	-0.000334	-0.000179	-0.000130
Final measured offsets stdev:	0.000216	0.000055	0.000061	0.000086
Final measured gains mean:	0.999971	0.999976	0.999981	1.000010
Final measured gains stdev:	0.000023	0.000016	0.000017	0.000010

Saving channel 1 calibration constants to qspi

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Burden resistor = 33.3333

Measuring initial gains and offsets
        Itest       dacSP        dcct1        dcct2        dacRB         err
    -1.000364     1.001309    -1.008671    -1.008855     0.996774     0.011893
   -27.001226    26.973350   -26.789501   -26.798447    26.987860     0.050603


                                     dacSP          dcct1          dcct2          dacRB
Initial measured offsets:         -0.002054      -0.016773      -0.016619       0.000000
Initial measured gains:            0.998892       0.991538       0.991875       1.000733
Gain corrections:                  0.998892       1.008535       1.008192       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    0.996494
27.000000    26.986917


Measured offset: -0.003138
Measured gain: 0.999632
Gain correction: 1.000368

Writing gain and offset constants for dacRB to PSC

Verification
        Itest       dacSP        dcct1        dcct2        dacRB         err
    -1.000311     1.000614    -1.000621    -1.000806     1.000644     0.019920
   -27.001332    27.000785   -27.001059   -27.001125    27.000290     0.042235


                                     dacSP          dcct1          dcct2          dacRB
Final measured offsets:           -0.000336      -0.000332      -0.000522       0.000050
Final measured gains:              0.999967       0.999978       0.999973       0.999980


                                     dacSP          dcct1          dcct2          dacRB
Final measured offsets mean:     0.000207      -0.000153      -0.000206      -0.000205
Final measured offsets stdev:    0.000394       0.000186       0.000172       0.000250
Final measured gains mean:       0.999990       0.999988       0.999987       0.999985
Final measured gains stdev:      0.000027       0.000014       0.000012       0.000014

Saving channel 2 calibration constants to qspi
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Burden resistor = 33.3333

Measuring initial gains and offsets
        Itest        dacSP        dcct1        dcct2        dacRB          err
    -0.999923     0.999793    -1.006935    -1.007983     1.001878     0.039289
   -27.001092    26.970418   -26.787014   -26.801689    27.022633     0.004835


                                    dacSP          dcct1          dcct2          dacRB
Initial measured offsets:        -0.001045      -0.015514      -0.016038       0.000000
Initial measured gains:           0.998825       0.991497       0.992021       1.001930
Gain corrections:                 0.998825       1.008576       1.008043       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    1.001894
27.000000    27.021383

Measured offset: 0.001144
Measured gain: 1.000750
Gain correction: 0.999251

Writing gain and offset constants for dacRB to PSC

Verification
        Itest        dacSP        dcct1        dcct2        dacRB          err
    -1.000015     0.999960    -1.000277    -0.999896     1.000677     0.017353
   -27.000986    27.001532   -27.001516   -27.001503    27.002163     0.026605


                                    dacSP          dcct1          dcct2          dacRB
Final measured offsets:          0.000078      -0.000251       0.000144       0.000720
Final measured gains:            1.000023       1.000010       1.000024       0.999997


                                    dacSP          dcct1          dcct2          dacRB
Final measured offsets mean: -0.000023      -0.000308      -0.000106       0.001207
Final measured offsets stdev: 0.000154       0.000064       0.000132       0.000335
Final measured gains mean:    1.000005       0.999997       1.000000       0.999997
Final measured gains stdev:   0.000014       0.000010       0.000014       0.000012

Saving channel 3 calibration constants to qspi
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Burden resistor = 33.3333

Measuring initial gains and offsets
        Itest        dacSP         dcct1         dcct2         dacRB          err
     -1.000138     1.001285     -1.010598     -1.009577      0.998363      0.038721
    -27.000897    26.987422    -26.804564    -26.804335     27.017162      0.049506


                                         dacSP           dcct1           dcct2           dacRB
Initial measured offsets:            -0.001710       -0.018415       -0.017363        0.000000
Initial measured gains:               0.999438        0.992047        0.992077        1.001257
Gain corrections:                     0.999438        1.008017        1.007986        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    0.998369
27.000000   27.016499


Measured offset: -0.002328
Measured gain: 1.000697
Gain correction: 0.999303

Writing gain and offset constants for dacRB to PSC

Verification
        Itest        dacSP         dcct1         dcct2         dacRB          err
     -1.000062     0.999904     -1.000341     -1.000493      1.000057     -0.000651
    -27.001087    27.000434    -27.000807    -27.000841     27.000347      0.033515



                                         dacSP           dcct1           dcct2           dacRB
Final measured offsets:               0.000139       -0.000300       -0.000457        0.000162
Final measured gains:                 0.999981        0.999979        0.999974        0.999991



                                         dacSP           dcct1           dcct2           dacRB
Final measured offsets mean:         -0.180100       -0.000227       -0.000262        0.000198
Final measured offsets stdev:         0.360127        0.000117        0.000178        0.000109
Final measured gains mean:            0.999979        0.799988        0.799987        0.799986
Final measured gains stdev:           0.000019        0.399994        0.399993        0.399993

Saving channel 4 calibration constants to qspi




Test data reviewed by _____    Date_____


Page 4 of 4
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