Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0008
2025-09-12 15:19:54

Calibration Current standard: BNL PSC ATE S/N 001
Calibration Volt standard: HP 3458A-002 S/N 2823A 06900
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
-1.000472	1.004450	-1.010959	-1.010165	1.001987	-0.002036
-26.998410	27.006564	-26.823658	-26.816111	27.065451	0.043666

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003817	-0.017615	-0.017081	0.000000
Initial measured gains:	1.000161	0.992875	0.992615	1.002359
Gain corrections:	1.000161	1.007176	1.007440	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	1.001439
27.000000	27.066975

Measured offset: -0.001082
Measured gain: 1.002521
Gain correction: 0.997486

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000539	1.000553	-1.000806	-1.000725	1.000962	0.006122
-26.998197	26.998237	-26.998255	-26.998013	26.998550	0.084033

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000013	-0.000274	-0.000200	0.000413
Final measured gains:	1.000001	0.999992	0.999986	0.999996

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000088	-0.000193	-0.000255	0.000437
Final measured offsets stdev:	0.000069	0.000100	0.000081	0.000241
Final measured gains mean:	0.999996	0.999991	0.999987	0.999988
Final measured gains stdev:	0.000010	0.000006	0.000005	0.000007

Saving channel 1 calibration constants to qspi

lab{1}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000005	1.002816	-1.009184	-1.007442	0.998725	0.028460
-26.997811	26.986417	-26.804060	-26.804138	27.066486	0.069204

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003357	-0.016984	-0.015172	0.000000
Initial measured gains:	0.999454	0.992194	0.992264	1.003239
Gain corrections:	0.999454	1.007867	1.007796	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	0.998698
27.000000	27.068415

Measured offset: -0.003984
Measured gain: 1.002681
Gain correction: 0.997326

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999955	1.000025	-1.000321	-1.000178	1.000589	0.020361
-26.997908	26.997852	-26.997704	-26.997774	26.997755	0.095606

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000074	-0.000387	-0.000236	0.000590
Final measured gains:	0.999995	0.999978	0.999986	0.999975

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000034	-0.000189	-0.000061	0.000621
Final measured offsets stdev:	0.000182	0.000120	0.000100	0.000129
Final measured gains mean:	0.999999	0.999992	0.999996	0.999983
Final measured gains stdev:	0.000003	0.000007	0.000006	0.000015

Saving channel 2 calibration constants to qspi

lab{1}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999843	1.001895	-1.010339	-1.009862	1.003412	-0.003242
-26.997956	26.983967	-26.804197	-26.820551	27.045063	0.063102

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002668	-0.018351	-0.017227	0.000000
Initial measured gains:	0.999383	0.992143	0.992791	1.002293
Gain corrections:	0.999383	1.007919	1.007261	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	1.003549
27.000000	27.047058

Measured offset: 0.001876
Measured gain: 1.001673
Gain correction: 0.998329

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000041	1.000147	-1.000226	-1.000211	1.000814	0.001933
-26.998086	26.997895	-26.998131	-26.998268	26.998573	0.053183

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000117	-0.000190	-0.000169	0.000667
Final measured gains:	0.999989	0.999995	1.000000	1.000000

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000220	-0.000211	-0.000179	0.000956
Final measured offsets stdev:	0.000296	0.000118	0.000124	0.000246
Final measured gains mean:	1.000000	0.999986	0.999990	0.999991
Final measured gains stdev:	0.000006	0.000007	0.000008	0.000015

Saving channel 3 calibration constants to qspi

lab{1}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000179	0.999666	-1.008870	-1.007778	0.998034	0.032307
-26.998010	26.997297	-26.811451	-26.811565	27.051865	0.041833

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.000506	-0.016202	-0.015064	0.000000
Initial measured gains:	0.999992	0.992490	0.992536	1.002162
Gain corrections:	0.999992	1.007567	1.007520	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	0.998067
27.000000	27.053587

Measured offset: -0.004068
Measured gain: 1.002135
Gain correction: 0.997869

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000147	1.000208	-1.000471	-1.000511	0.999849	0.026554
-26.997995	26.997942	-26.998112	-26.998169	26.998062	0.058914

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000065	-0.000333	-0.000371	-0.000377
Final measured gains:	0.999996	0.999992	0.999993	1.000018

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000244	-0.000208	-0.000241	-0.000274
Final measured offsets stdev:	0.000260	0.000130	0.000133	0.000149
Final measured gains mean:	0.999999	0.999990	0.999991	1.000009
Final measured gains stdev:	0.000007	0.000002	0.000007	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____