Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0017
2025-12-30 21:13:12

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{2}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001031	1.006995	-1.011470	-1.009832	1.001406	0.024361
-27.000872	26.989022	-26.804020	-26.801502	27.012161	0.051330

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.006650	-0.018420	-0.016816	0.000000
Initial measured gains:	0.999315	0.992027	0.991993	1.001106
Gain corrections:	0.999315	1.008037	1.008071	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	1.000468
27.000000	27.011000

Measured offset: 0.000063
Measured gain: 1.000405
Gain correction: 0.999595

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000888	1.001081	-1.001015	-1.001203	1.001433	0.043903
-27.000985	27.000005	-27.000450	-27.000475	27.001139	0.011304

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000239	-0.000153	-0.000347	0.000322
Final measured gains:	0.999955	0.999975	0.999968	1.000030

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000108	-0.000066	-0.000135	0.000427
Final measured offsets stdev:	0.000254	0.000069	0.000173	0.000192
Final measured gains mean:	0.999980	0.999983	0.999984	1.000016
Final measured gains stdev:	0.000017	0.000016	0.000015	0.000016

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000424	1.004105	-1.009107	-1.009806	0.997777	0.027243
-27.000894	26.995538	-26.813181	-26.809464	27.034880	0.031614

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004029	-0.016240	-0.017109	0.000000
Initial measured gains:	0.999652	0.992446	0.992277	1.001757
Gain corrections:	0.999652	1.007611	1.007784	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	0.997283
27.000000	27.033686

Measured offset: -0.004117
Measured gain: 1.001400
Gain correction: 0.998602

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000439	1.000446	-1.000758	-1.000496	1.000534	0.044927
-27.000863	27.001314	-27.001162	-27.001047	27.001078	0.055069

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000010	-0.000320	-0.000052	0.000101
Final measured gains:	1.000017	0.999999	1.000005	0.999988

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000042	-0.000150	-0.000160	0.000119
Final measured offsets stdev:	0.000115	0.000164	0.000100	0.000085
Final measured gains mean:	0.999994	0.999994	0.999991	0.999997
Final measured gains stdev:	0.000017	0.000008	0.000011	0.000010

Saving channel 2 calibration constants to qspi

lab{2}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000452	1.002613	-1.010733	-1.010269	1.003023	0.033599
-27.001105	26.980061	-26.792610	-26.810501	27.016933	-0.001699

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003053	-0.018698	-0.017529	0.000000
Initial measured gains:	0.999108	0.991586	0.992292	1.001404
Gain corrections:	0.999108	1.008486	1.007768	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	1.002782
27.000000	27.016258

Measured offset: 0.002264
Measured gain: 1.000518
Gain correction: 0.999482

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000332	1.000360	-1.000562	-1.000590	1.001302	0.038099
-27.001077	27.000960	-27.000965	-27.000973	27.001104	0.020986

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000034	-0.000243	-0.000272	0.000972
Final measured gains:	0.999994	0.999987	0.999986	0.999969

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000048	-0.000137	-0.000170	0.000906
Final measured offsets stdev:	0.000106	0.000097	0.000085	0.000163
Final measured gains mean:	0.999996	0.999991	0.999990	0.999991
Final measured gains stdev:	0.000006	0.000005	0.000002	0.000017

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000052	1.002735	-1.011249	-1.010511	0.999323	0.059502
-27.000827	26.988329	-26.807236	-26.815470	27.048143	0.029100

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003266	-0.019074	-0.017990	0.000000
Initial measured gains:	0.999416	0.992124	0.992469	1.002433
Gain corrections:	0.999416	1.007939	1.007588	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	0.999284
27.000000	27.046869

Measured offset: -0.002546
Measured gain: 1.001830
Gain correction: 0.998173

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000117	1.000109	-1.000375	-1.000312	0.999361	0.039152
-27.000818	27.001118	-27.001276	-27.001358	27.000765	0.023707

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000020	-0.000251	-0.000182	-0.000763
Final measured gains:	1.000012	1.000008	1.000013	1.000015

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000122	-0.000249	-0.000090	-0.000696
Final measured offsets stdev:	0.000106	0.000015	0.000101	0.000089
Final measured gains mean:	1.000008	1.000003	1.000009	1.000021
Final measured gains stdev:	0.000012	0.000007	0.000005	0.000014

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____