Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0012
2026-01-09 11:55:54

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
-1.001393	1.003561	-1.010904	-1.011963	0.999208	0.047359
-27.001442	27.009587	-26.821953	-26.811453	27.027081	0.041038

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001937	-0.016790	-0.018294	0.000000
Initial measured gains:	1.000230	0.992731	0.992286	1.000840
Gain corrections:	1.000230	1.007322	1.007774	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	0.998029
27.000000	27.025812

Measured offset: -0.003040
Measured gain: 1.001069
Gain correction: 0.998933

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001380	1.001108	-1.001544	-1.001660	1.000715	0.019650
-27.001391	27.001370	-27.001574	-27.001602	27.001560	0.049632

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000282	-0.000164	-0.000282	-0.000416
Final measured gains:	1.000010	1.000001	0.999997	1.000022

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000063	-0.000104	-0.000242	-0.000513
Final measured offsets stdev:	0.000235	0.000063	0.000063	0.000119
Final measured gains mean:	0.999993	0.999999	0.999997	1.000021
Final measured gains stdev:	0.000015	0.000006	0.000008	0.000008

Saving channel 1 calibration constants to qspi

lab{3}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000965	1.004881	-1.009866	-1.008385	0.994202	0.038191
-27.001326	26.994751	-26.803226	-26.799377	26.968596	0.023164

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004320	-0.016871	-0.015481	0.000000
Initial measured gains:	0.999597	0.992039	0.991947	0.999404
Gain corrections:	0.999597	1.008025	1.008118	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	0.993314
27.000000	26.967505

Measured offset: -0.005693
Measured gain: 0.999007
Gain correction: 1.000994

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000794	1.000791	-1.000970	-1.001132	1.001368	0.033723
-27.001320	27.001712	-27.001860	-27.001583	27.002148	0.057499

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000019	-0.000162	-0.000341	0.000582
Final measured gains:	1.000015	1.000014	0.999997	0.999995

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000034	-0.000224	-0.000351	0.000395
Final measured offsets stdev:	0.000183	0.000088	0.000108	0.000288
Final measured gains mean:	1.000006	0.999996	0.999989	0.999988
Final measured gains stdev:	0.000021	0.000015	0.000012	0.000005

Saving channel 2 calibration constants to qspi

lab{3}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000221	1.006750	-1.011493	-1.010572	1.000803	0.033633
-27.000963	26.986396	-26.798784	-26.813295	26.967680	0.036506

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.007340	-0.019483	-0.017969	0.000000
Initial measured gains:	0.999189	0.991791	0.992384	0.999508
Gain corrections:	0.999189	1.008277	1.007674	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	1.000874
27.000000	26.966730

Measured offset: 0.002188
Measured gain: 0.998687
Gain correction: 1.001315

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000289	1.000166	-1.000323	-1.000545	1.000885	0.026477
-27.001016	27.001112	-27.001299	-27.001310	27.002081	0.043452

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000131	-0.000025	-0.000255	0.000709
Final measured gains:	1.000008	1.000010	1.000001	1.000010

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.180060	-0.022945	-0.018403	0.000605
Final measured offsets stdev:	0.359943	0.045658	0.036261	0.000461
Final measured gains mean:	0.999985	0.977123	0.981828	0.799993
Final measured gains stdev:	0.000021	0.045746	0.036327	0.399997

Saving channel 3 calibration constants to qspi

lab{3}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000542	1.004505	-1.010368	-1.010350	0.995984	0.042505
-27.001175	27.000482	-26.819302	-26.802013	26.949984	0.021834

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004142	-0.017203	-0.017849	0.000000
Initial measured gains:	0.999821	0.992627	0.991963	0.998385
Gain corrections:	0.999821	1.007428	1.008102	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	0.995787
27.000000	26.948805

Measured offset: -0.002406
Measured gain: 0.998193
Gain correction: 1.001810

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000338	1.000154	-1.000534	-1.000765	0.999361	0.036168
-27.001166	27.001476	-27.001461	-27.001534	27.001587	0.052351

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000203	-0.000193	-0.000429	-0.000827
Final measured gains:	1.000019	1.000004	0.999998	1.000035

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-8341.817044	-0.066725	-0.054072	-0.000383
Final measured offsets stdev:	16683.633673	0.133201	0.107832	0.000320
Final measured gains mean:	-8336.406347	0.933394	0.946105	1.000013
Final measured gains stdev:	16674.812665	0.133188	0.107768	0.000016

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____