

Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0014
2026-01-08 12:56:27

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
-1.000743	0.996498	-1.010254	-1.010934	0.999136	0.024593
-27.001632	26.995904	-26.820934	-26.821014	27.003412	0.002268

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.004187	-0.016832	-0.017536	0.000000
Initial measured gains:	0.999943	0.992685	0.992661	1.000187
Gain corrections:	0.999943	1.007369	1.007393	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	0.998627
27.000000	27.002121

Measured offset: -0.001508
Measured gain: 1.000134
Gain correction: 0.999866

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000648	1.000335	-1.000856	-1.001091	0.999712	-0.008362
-27.001453	27.001291	-27.001610	-27.001701	27.001499	0.023590

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000319	-0.000210	-0.000450	-0.000655
Final measured gains:	1.000006	0.999998	0.999993	1.000032

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000032	-0.000184	-0.000296	-0.000504
Final measured offsets stdev:	0.000182	0.000077	0.000132	0.000196
Final measured gains mean:	0.999989	0.999990	0.999989	1.000019
Final measured gains stdev:	0.000015	0.000010	0.000008	0.000014

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
-1.000344	0.997221	-1.008814	-1.009535	0.997086	0.037045
-27.001664	26.996460	-26.808224	-26.802143	27.033077	0.040539

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.003043	-0.016238	-0.017221	0.000000
Initial measured gains:	0.999920	0.992235	0.991973	1.001414
Gain corrections:	0.999920	1.007826	1.008092	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 0.997075
27.000000 27.031618

Measured offset: -0.004253

Measured gain: 1.001329

Gain correction: 0.998673

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000554	1.000368	-1.000670	-1.000726	1.000118	0.050429
-27.001644	27.001438	-27.001774	-27.001598	27.001194	0.052700

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000186	-0.000115	-0.000180	-0.000250
Final measured gains:	0.999999	1.000001	0.999992	1.000000

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000324	-0.000083	-0.000235	-0.000286
Final measured offsets stdev:	0.000279	0.000096	0.000168	0.000175
Final measured gains mean:	1.000001	0.999999	0.999995	1.000014
Final measured gains stdev:	0.000017	0.000007	0.000006	0.000015

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
-1.000408	1.003848	-1.010796	-1.008999	1.002004	0.020270
-27.001541	26.994659	-26.811111	-26.798315	27.015495	0.042582

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003837	-0.018114	-0.016740	0.000000
Initial measured gains:	0.999603	0.992277	0.991854	1.000873
Gain corrections:	0.999603	1.007783	1.008213	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 1.001806

27.000000 27.013477

Measured offset: 0.001357

Measured gain: 1.000449

Gain correction: 0.999551

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000367	1.000506	-1.000510	-1.000595	1.001411	0.045309
-27.001349	27.001870	-27.001642	-27.001633	27.002602	0.030318

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000124	-0.000137	-0.000225	0.000912
Final measured gains:	1.000015	1.000006	1.000002	0.999993

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000004	-0.000244	-0.000218	0.000976
Final measured offsets stdev:	0.000169	0.000093	0.000048	0.000106
Final measured gains mean:	0.999993	0.999992	0.999990	0.999998
Final measured gains stdev:	0.000015	0.000011	0.000009	0.000009

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
-1.000199	1.003784	-1.010049	-1.009570	0.998561	0.058901
-27.001510	26.987700	-26.807587	-26.814886	27.016949	0.044629

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004255	-0.017689	-0.016911	0.000000
Initial measured gains:	0.999331	0.992163	0.992462	1.001327
Gain corrections:	0.999331	1.007899	1.007595	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	0.998473
27.000000	27.015360

Measured offset: -0.002177
Measured gain: 1.000649
Gain correction: 0.999351

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000377	1.000211	-1.000543	-1.000547	1.000408	0.042951
-27.001404	27.001305	-27.001516	-27.001734	27.001030	0.004537

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000169	-0.000168	-0.000164	0.000216
Final measured gains:	1.000003	0.999998	1.000006	0.999982

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000144	-0.000220	-0.000118	0.000206
Final measured offsets stdev:	0.000091	0.000133	0.000105	0.000115
Final measured gains mean:	0.999995	0.999991	0.999998	0.999985
Final measured gains stdev:	0.000012	0.000008	0.000008	0.000015

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____