

Report of Calibration
PSC 4CH-MSS-AR-SK_S/N 0016
2025-12-31 14:03:55

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
-1.000451	1.005034	-1.012675	-1.011008	1.004591	0.047249
-27.000932	27.003920	-26.823069	-26.850449	27.047352	0.031864

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004644	-0.019537	-0.016753	0.000000
Initial measured gains:	0.999939	0.992689	0.993806	1.001688
Gain corrections:	0.999939	1.007365	1.006232	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	1.004164
27.000000	27.046377

Measured offset: 0.002540
Measured gain: 1.001624
Gain correction: 0.998379

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000474	1.000386	-1.000408	-1.000549	1.001664	0.035221
-27.001103	27.001029	-27.001316	-27.001141	27.002569	0.043598

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000088	0.000076	-0.000077	0.001268
Final measured gains:	1.000001	1.000011	0.999999	1.000010

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000093	-0.000175	-0.000167	0.001134
Final measured offsets stdev:	0.000109	0.000146	0.000107	0.000185
Final measured gains mean:	0.999994	0.999996	0.999993	1.000008
Final measured gains stdev:	0.000011	0.000009	0.000006	0.000009

Saving channel 1 calibration constants to qspi

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lab{2}Chan2
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999604	1.000743	-1.008714	-1.009946	1.000194	0.047768
-27.000639	27.001459	-26.821152	-26.823277	27.069353	0.043344

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001151	-0.016360	-0.017558	0.000000
Initial measured gains:	0.999988	0.992747	0.992781	1.002632
Gain corrections:	0.999988	1.007306	1.007272	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	1.000660
27.000000	27.068575

Measured offset: -0.001952

Measured gain: 1.002612

Gain correction: 0.997395

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999557	0.999695	-0.999855	-0.999918	1.000118	0.038931
-27.000786	27.000140	-27.000530	-27.000614	27.000090	0.018574

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000168	-0.000319	-0.000381	0.000441
Final measured gains:	0.999970	0.999979	0.999980	0.999982

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000016	-0.000178	-0.000183	0.000401
Final measured offsets stdev:	0.000121	0.000111	0.000123	0.000281
Final measured gains mean:	0.999996	0.999998	0.999998	0.999991
Final measured gains stdev:	0.000016	0.000014	0.000012	0.000009

Saving channel 2 calibration constants to qspi

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lab{2}Chan3
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999592	0.999581	-1.007213	-1.009661	1.001603	0.046798
-27.001051	26.991249	-26.809622	-26.818903	27.049749	0.034063

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000365	-0.015274	-0.017459	0.000000
Initial measured gains:	0.999623	0.992345	0.992607	1.002173
Gain corrections:	0.999623	1.007714	1.007448	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	1.002185
27.000000	27.048609

Measured offset: 0.000399

Measured gain: 1.001786

Gain correction: 0.998218

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999798	0.999636	-1.000048	-0.999979	1.000715	0.024334
-27.000979	27.000322	-27.000652	-27.000504	27.001539	0.006889

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000143	-0.000272	-0.000207	0.001074
Final measured gains:	0.999981	0.999978	0.999975	1.000005

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000092	-0.000274	-0.000257	0.000814
Final measured offsets stdev:	0.000031	0.000106	0.000099	0.000446
Final measured gains mean:	0.999990	0.999986	0.999986	1.000004
Final measured gains stdev:	0.000011	0.000007	0.000006	0.000012

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
-0.999326	0.998397	-1.007334	-1.007606	0.998128	0.055577
-27.000698	26.998550	-26.820986	-26.809542	27.040983	0.050743

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.000882	-0.015222	-0.015945	0.000000
Initial measured gains:	0.999953	0.992780	0.992330	1.001642
Gain corrections:	0.999953	1.007272	1.007730	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	0.999109
27.000000	27.040331

Measured offset: -0.002476

Measured gain: 1.001585

Gain correction: 0.998417

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999588	0.999174	-0.999691	-0.999724	0.999125	0.033080
-27.000595	27.000343	-27.000843	-27.000755	27.000700	0.056514

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000420	-0.000097	-0.000135	-0.000064
Final measured gains:	1.000006	1.000006	1.000001	1.000016

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000367	-0.000066	-0.000085	-0.000011
Final measured offsets stdev:	0.000194	0.000152	0.000142	0.000222
Final measured gains mean:	0.999996	0.999995	0.999996	0.999999
Final measured gains stdev:	0.000010	0.000007	0.000002	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____