

Report of Calibration
PSC S/N: 0006
2025-08-29 16:39:52

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
-0.999892	1.003266	-1.012094	-1.008849	0.997525	-0.135008
-26.997601	27.001214	-26.814594	-26.802458	27.034107	-0.016185

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003365	-0.019709	-0.016807	0.000000
Initial measured gains:	1.000009	0.992491	0.992149	1.001486
Gain corrections:	1.000009	1.007565	1.007913	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	0.997738
27.000000	27.036154

Measured offset: -0.003739
Measured gain: 1.001478
Gain correction: 0.998525

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999795	1.001842	-1.000023	-1.000227	1.002250	-0.068436
-26.997666	26.999791	-26.997711	-26.997740	27.000196	0.041135

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.002043	-0.000235	-0.000446	0.000409
Final measured gains:	1.000003	0.999993	0.999986	1.000000

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.001917	-0.000201	-0.000288	0.000405
Final measured offsets stdev:	0.000113	0.000097	0.000089	0.000046
Final measured gains mean:	1.000006	0.999995	0.999989	1.000006
Final measured gains stdev:	0.000005	0.000003	0.000003	0.000008

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
-0.999676	1.001930	-1.010305	-1.008050	0.992629	-0.075609
-26.997567	27.001679	-26.826340	-26.807438	27.008940	-0.036038

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002182	-0.017622	-0.016007	0.000000
Initial measured gains:	1.000071	0.993005	0.992365	1.000637
Gain corrections:	1.000071	1.007044	1.007694	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	0.993101
27.000000	27.011101

Measured offset: -0.007592
Measured gain: 1.000692
Gain correction: 0.999308

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999560	1.000882	-1.000037	-1.000107	1.001099	-0.038812
-26.997528	26.999784	-26.997562	-26.997669	26.999674	0.039315

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.001286	-0.000494	-0.000562	0.000230
Final measured gains:	1.000036	0.999983	0.999984	0.999987

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.001312	-0.000355	-0.000411	0.000274
Final measured offsets stdev:	0.000035	0.000118	0.000111	0.000066
Final measured gains mean:	1.000037	0.999988	0.999985	1.000002
Final measured gains stdev:	0.000005	0.000008	0.000005	0.000013

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
-0.999708	1.002282	-1.010930	-1.010583	0.998566	-0.089082
-26.997484	26.999732	-26.815401	-26.816010	27.013107	0.039909

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002586	-0.018655	-0.018271	0.000000
Initial measured gains:	0.999987	0.992565	0.992601	1.000657
Gain corrections:	0.999987	1.007491	1.007454	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	0.998758
27.000000	27.015820

Measured offset: -0.001898
Measured gain: 1.000656
Gain correction: 0.999344

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999606	1.001155	-0.999909	-1.000027	1.001740	-0.042522
-26.997488	26.998631	-26.997307	-26.997534	26.998802	0.087236

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.001564	-0.000322	-0.000436	0.000602
Final measured gains:	0.999984	0.999981	0.999986	0.999984

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.001523	-0.000337	-0.000317	0.000326
Final measured offsets stdev:	0.000052	0.000082	0.000084	0.000282
Final measured gains mean:	0.999992	0.999989	0.999986	0.999990
Final measured gains stdev:	0.000005	0.000005	0.000004	0.000004

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
-0.999634	1.002268	-1.008869	-1.009849	0.993824	-0.090676
-26.997549	26.997530	-26.813255	-26.822636	26.991922	0.135635

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002736	-0.016676	-0.017333	0.000000
Initial measured gains:	0.999898	0.992556	0.992879	1.000109
Gain corrections:	0.999898	1.007500	1.007172	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	0.994126
27.000000	26.994078

Measured offset: -0.005872
Measured gain: 0.999998
Gain correction: 1.000002

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999614	1.001209	-1.000060	-1.000183	1.001998	-0.041829
-26.997681	26.997624	-26.997684	-26.997625	26.998217	0.128976

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.001659	-0.000463	-0.000594	0.000796
Final measured gains:	0.999936	0.999983	0.999976	0.999992

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.001595	-0.000284	-0.000378	0.000292
Final measured offsets stdev:	0.000040	0.000134	0.000157	0.000569
Final measured gains mean:	0.999943	0.999986	0.999988	1.000000
Final measured gains stdev:	0.000004	0.000004	0.000007	0.000009

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____