

Report of Calibration
PSC 4CH-MSS-AR-SK_S/N 0007
2025-12-10 18:33:31

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
-0.999466	1.001362	-1.009625	-1.009636	0.997870	0.026989
-27.000478	27.004057	-26.813187	-26.819416	27.020546	0.053031

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001831	-0.017749	-0.017521	0.000000
Initial measured gains:	1.000065	0.992406	0.992645	1.000768
Gain corrections:	1.000065	1.007652	1.007409	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	0.998550
27.000000	27.020086

Measured offset: -0.002279
Measured gain: 1.000828
Gain correction: 0.999172

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999322	0.999480	-0.999620	-0.999652	0.999696	0.046542
-27.000612	26.999814	-27.000256	-27.000343	26.999741	0.017304

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000195	-0.000324	-0.000353	0.000226
Final measured gains:	0.999963	0.999975	0.999977	0.999989

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000258	-0.000329	-0.000247	-0.000130
Final measured offsets stdev:	0.000519	0.000126	0.000077	0.000456
Final measured gains mean:	0.999981	0.999985	0.999988	0.999992
Final measured gains stdev:	0.000024	0.000009	0.000011	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
-0.999605	1.003348	-1.009036	-1.009281	0.994701	0.018672
-27.000666	27.008679	-26.816792	-26.808128	27.013681	-0.003021

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003578	-0.016862	-0.017450	0.000000
Initial measured gains:	1.000164	0.992565	0.992223	1.000525
Gain corrections:	1.000164	1.007490	1.007838	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	0.995293
27.000000	27.013304

Measured offset: -0.005399
Measured gain: 1.000693
Gain correction: 0.999308

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999434	0.999282	-0.999720	-0.999417	0.998813	-0.014756
-27.000591	27.000478	-27.000271	-27.000137	26.999811	0.041281

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000153	-0.000310	-0.000001	-0.000462
Final measured gains:	1.000001	0.999977	0.999983	0.999992

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000096	-0.000277	-0.000067	-0.000147
Final measured offsets stdev:	0.000208	0.000122	0.000064	0.000318
Final measured gains mean:	0.999986	0.999981	0.999983	1.000000
Final measured gains stdev:	0.000014	0.000005	0.000005	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
-0.999499	1.000731	-1.009377	-1.009305	1.003144	0.057399
-27.000681	27.001632	-26.816637	-26.815464	27.035631	0.030967

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001244	-0.017333	-0.017303	0.000000
Initial measured gains:	0.999989	0.992542	0.992499	1.001215
Gain corrections:	0.999989	1.007514	1.007557	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	1.003604
27.000000	27.035122

Measured offset: 0.002392
Measured gain: 1.001212
Gain correction: 0.998789

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999502	0.999536	-0.999700	-0.999683	1.000479	0.057167
-27.000587	26.999925	-27.000200	-27.000187	27.001139	0.036649

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000061	-0.000220	-0.000204	0.000933
Final measured gains:	0.999973	0.999977	0.999978	1.000010

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000036	-0.000221	-0.000194	0.000879
Final measured offsets stdev:	0.000107	0.000058	0.000062	0.000095
Final measured gains mean:	0.999981	0.999983	0.999984	1.000000
Final measured gains stdev:	0.000009	0.000009	0.000007	0.000016

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
-0.999632	1.001596	-1.009895	-1.009676	0.997393	0.053044
-27.000536	27.004471	-26.824568	-26.806709	27.006384	0.042065

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001888	-0.017423	-0.017882	0.000000
Initial measured gains:	1.000076	0.992837	0.992159	1.000235
Gain corrections:	1.000076	1.007214	1.007903	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	0.997914
27.000000	27.005840

Measured offset: -0.002391
Measured gain: 1.000305
Gain correction: 0.999695

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999569	0.999648	-0.999827	-0.999812	0.999219	0.051944
-27.000458	26.999990	-26.999994	-27.000050	26.999620	0.029576

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000099	-0.000285	-0.000268	-0.000431
Final measured gains:	0.999979	0.999972	0.999975	1.000002

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000124	-0.000218	-0.000300	-0.000259
Final measured offsets stdev:	0.000257	0.000166	0.000108	0.000224
Final measured gains mean:	0.999982	0.999980	0.999982	1.000004
Final measured gains stdev:	0.000019	0.000008	0.000008	0.000011

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____