

Report of Calibration
PSC 4CH-MSS-AR-SD-SF_S/N 0007
2025-09-03 08:59:03

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 = 15.3846

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999311	1.003412	-1.030122	-1.029403	0.994482	0.030338
-58.003504	58.061751	-57.652931	-57.633057	58.092083	0.084773

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003152	-0.037497	-0.037114	0.000000
Initial measured gains:	1.000950	0.993310	0.992974	1.000688
Gain corrections:	1.000950	1.006736	1.007076	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	0.994945
58.000000	58.088902

Measured offset: -0.006703
Measured gain: 1.001648
Gain correction: 0.998354

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999338	0.998899	-0.999848	-1.000044	0.999779	0.001615
-58.003334	58.003163	-58.003540	-58.003651	58.002026	0.050380

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000443	-0.000515	-0.000713	0.000915
Final measured gains:	1.000005	0.999995	0.999993	0.999965

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000172	-0.000515	-0.000769	0.000531
Final measured offsets stdev:	0.000354	0.000073	0.000086	0.000296
Final measured gains mean:	0.999991	0.999991	0.999989	0.999980
Final measured gains stdev:	0.000011	0.000006	0.000005	0.000009

Saving channel 1 calibration constants to qspi

lab{1}Chan2
Burden resistor = 7.1429

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998859	1.013687	-1.068390	-1.071159	0.971358	0.033904
-126.011111	126.095011	-125.198463	-125.204498	126.111122	0.084430

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.014276	-0.076580	-0.079323	0.000000
Initial measured gains:	1.000553	0.992943	0.992969	1.000467
Gain corrections:	1.000553	1.007107	1.007080	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	0.972381
126.000000	126.100197

Measured offset: -0.028641
Measured gain: 1.001023
Gain correction: 0.998979

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998882	0.998260	-0.999935	-0.999640	0.995969	0.004685
-126.011670	126.009159	-126.011780	-126.011589	126.008049	0.070203

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000607	-0.001060	-0.000765	-0.002300
Final measured gains:	0.999985	0.999992	0.999993	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000028	-0.001244	-0.000864	-0.001910
Final measured offsets stdev:	0.000745	0.000140	0.000157	0.001397
Final measured gains mean:	0.999985	0.999990	0.999988	1.000004
Final measured gains stdev:	0.000004	0.000002	0.000005	0.000011

Saving channel 2 calibration constants to qspi

lab{1}Chan3
Burden resistor = 15.3846

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998673	0.999836	-1.028346	-1.028866	1.003640	0.001067
-58.003737	58.013623	-57.617279	-57.627529	58.083878	0.073092

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001011	-0.036963	-0.037313	0.000000
Initial measured gains:	1.000153	0.992700	0.992871	1.001166
Gain corrections:	1.000153	1.007354	1.007180	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	1.004863
58.000000	58.079731

Measured offset: 0.003550
Measured gain: 1.001313
Gain correction: 0.998688

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999046	0.998434	-0.998969	-0.998954	1.001525	0.009413
-58.003820	58.003934	-58.003819	-58.003628	58.006073	0.082895

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000624	0.000079	0.000090	0.003108
Final measured gains:	1.000013	1.000001	0.999998	0.999983

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000199	-0.000068	-0.000326	0.002511
Final measured offsets stdev:	0.000378	0.000098	0.000266	0.000567
Final measured gains mean:	0.999996	0.999997	0.999991	0.999992
Final measured gains stdev:	0.000009	0.000004	0.000004	0.000013

Saving channel 3 calibration constants to qspi

lab{1}Chan4
Burden resistor = 7.1429

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998818	1.006320	-1.072957	-1.073756	0.983459	0.032241
-126.011960	126.135515	-125.296181	-125.210625	126.141235	0.055847

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.006574	-0.080449	-0.081939	0.000000
Initial measured gains:	1.000928	0.993681	0.992991	1.000228
Gain corrections:	1.000928	1.006359	1.007059	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	0.984533
126.000000	126.128517

Measured offset: -0.016619
Measured gain: 1.001152
Gain correction: 0.998849

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998920	0.998648	-0.999212	-1.000133	0.995406	0.001466
-126.011915	126.011433	-126.012100	-126.011459	126.008766	0.087262

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000271	-0.000292	-0.001226	-0.003246
Final measured gains:	0.999998	0.999999	0.999987	1.000005

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000042	-0.000487	-0.001334	-0.000978
Final measured offsets stdev:	0.000228	0.000145	0.000119	0.001559
Final measured gains mean:	0.999991	0.999993	0.999986	1.000010
Final measured gains stdev:	0.000006	0.000007	0.000006	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____