

Report of Calibration
PSC 4CH-MSS-AR-SD-SF_S/N 0018
2025-12-23 13:59:52

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 = 15.3846

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001084	1.002656	-1.029472	-1.030787	0.996145	0.010645
-58.010740	57.996111	-57.600266	-57.626667	58.092941	0.062550

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001856	-0.036093	-0.036968	0.000000
Initial measured gains:	0.999716	0.992302	0.992742	1.001813
Gain corrections:	0.999716	1.007758	1.007311	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	0.995230
58.000000	58.082878

Measured offset: -0.006308
Measured gain: 1.001538
Gain correction: 0.998465

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001060	1.001156	-1.001472	-1.001258	1.002309	0.023451
-58.010737	58.010636	-58.011009	-58.010651	58.010197	0.085795

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000099	-0.000414	-0.000203	0.001181
Final measured gains:	0.999997	0.999998	0.999995	0.999972

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000058	-0.000412	-0.000379	0.000224
Final measured offsets stdev:	0.000139	0.000166	0.000097	0.000519
Final measured gains mean:	0.999989	0.999990	0.999989	0.999980
Final measured gains stdev:	0.000010	0.000007	0.000008	0.000011

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 7.1429

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999615	1.014375	-1.071204	-1.059391	0.985250	0.002039
-126.026417	126.110247	-125.239517	-125.209999	126.155052	0.173338

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.014207	-0.078452	-0.066781	0.000000
Initial measured gains:	1.000552	0.993134	0.992992	1.000591
Gain corrections:	1.000552	1.006914	1.007058	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	0.986861
126.000000	126.128265

Measured offset: -0.014270
Measured gain: 1.001131
Gain correction: 0.998870

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999700	0.999447	-1.000408	-1.000408	0.998834	0.004910
-126.026970	126.025267	-126.026169	-126.026581	126.024033	0.155455

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000241	-0.000719	-0.000716	-0.000608
Final measured gains:	0.999988	0.999988	0.999991	0.999995

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000189	-0.000828	-0.000836	-0.000909
Final measured offsets stdev:	0.000075	0.000067	0.000096	0.000347
Final measured gains mean:	0.999987	0.999984	0.999987	1.000001
Final measured gains stdev:	0.000010	0.000007	0.000007	0.000009

Saving channel 2 calibration constants to qspi

lab{2}Chan3
Burden resistor = 15.3846

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999125	1.004311	-1.029697	-1.031779	1.002951	0.047945
-58.011403	58.003131	-57.594803	-57.634651	58.047791	0.014988

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005423	-0.038409	-0.039829	0.000000
Initial measured gains:	0.999764	0.992157	0.992819	1.000807
Gain corrections:	0.999764	1.007905	1.007233	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 1.003497

58.000000 58.036339

Measured offset: 0.002921

Measured gain: 1.000576

Gain correction: 0.999424

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999300	0.999338	-0.999370	-0.999488	1.000967	0.043596
-58.011383	58.011846	-58.011189	-58.010948	58.014652	0.081226

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000031	-0.000074	-0.000199	0.001608
Final measured gains:	1.000007	0.999995	0.999989	1.000021

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000070	-0.000252	-0.000463	0.001719
Final measured offsets stdev:	0.000274	0.000111	0.000236	0.000393
Final measured gains mean:	0.999982	0.999981	0.999978	1.000012
Final measured gains stdev:	0.000021	0.000015	0.000013	0.000011

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 7.1429

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998096	1.008896	-1.076494	-1.063670	0.989189	0.009815
-126.028105	126.046064	-125.156700	-125.188957	126.130646	0.152970

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.010742	-0.085979	-0.072795	0.000000
Initial measured gains:	1.000057	0.992403	0.992764	1.000834
Gain corrections:	1.000057	1.007655	1.007289	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	0.992618
126.000000	126.102783

Measured offset: -0.008264
Measured gain: 1.000881
Gain correction: 0.999119

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998229	0.997108	-0.999391	-0.998246	0.993411	0.009389
-126.028484	126.026663	-126.029015	-126.028145	126.022423	0.128695

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.001116	-0.001166	-0.000019	-0.003693
Final measured gains:	0.999994	0.999995	0.999997	0.999996

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000307	-0.001113	-0.000603	-0.000968
Final measured offsets stdev:	0.000415	0.000107	0.000518	0.001385
Final measured gains mean:	0.999990	0.999981	0.999990	1.000006
Final measured gains stdev:	0.000005	0.000008	0.000006	0.000010

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____