

Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0012
2026-01-12 17:20:48

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{3}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001202	1.003440	-1.011000	-1.012120	0.999038	0.048326
-27.001307	27.012630	-26.825489	-26.816231	27.028753	0.015639

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001889	-0.016946	-0.018465	0.000000
Initial measured gains:	1.000349	0.992861	0.992462	1.000789
Gain corrections:	1.000349	1.007190	1.007595	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	0.997864
27.000000	27.027721

Measured offset: -0.003284

Measured gain: 1.001148

Gain correction: 0.998853

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001282	1.001062	-1.001361	-1.001350	1.000567	0.019981
-27.001290	27.001487	-27.001637	-27.001705	27.001724	0.058301

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000236	-0.000069	-0.000055	-0.000523
Final measured gains:	1.000016	1.000010	1.000013	1.000028

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000036	-0.000353	-0.000175	-0.000418
Final measured offsets stdev:	0.000368	0.000327	0.000290	0.000257
Final measured gains mean:	0.999998	0.999989	0.999992	1.000015
Final measured gains stdev:	0.000011	0.000013	0.000014	0.000009

Saving channel 1 calibration constants to qspi

```
lab{3}Chan2
Burden resistor = 33.3333
```

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000929	1.004927	-1.010136	-1.008640	0.994131	0.020376
-27.001402	26.999432	-26.808083	-26.804541	26.971821	0.056779

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004228	-0.017004	-0.015586	0.000000
Initial measured gains:	0.999770	0.992211	0.992132	0.999353
Gain corrections:	0.999770	1.007851	1.007930	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	0.993221
27.000000	26.970459

Measured offset: -0.005903

Measured gain: 0.999125

Gain correction: 1.000876

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000843	1.001115	-1.001137	-1.001000	1.000468	0.031952
-27.001356	27.001368	-27.001366	-27.001482	27.000942	0.045142

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000282	-0.000305	-0.000159	-0.000655
Final measured gains:	0.999990	0.999989	0.999999	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000021	-0.000279	-0.000197	-0.000483
Final measured offsets stdev:	0.000276	0.000162	0.000131	0.000161
Final measured gains mean:	0.999993	0.999987	0.999989	1.000019
Final measured gains stdev:	0.000015	0.000005	0.000013	0.000013

Saving channel 2 calibration constants to qspi

```
lab{3}Chan3
Burden resistor = 33.3333
```

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000611	1.007408	-1.012226	-1.011068	1.001296	0.035720
-27.001394	26.992423	-26.804855	-26.819086	26.972038	0.017095

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.007403	-0.019626	-0.017875	0.000000
Initial measured gains:	0.999394	0.991994	0.992586	0.999451
Gain corrections:	0.999394	1.008070	1.007469	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 1.000891
27.000000 26.970762

Measured offset: 0.002049

Measured gain: 0.998841

Gain correction: 1.001160

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000599	1.000589	-1.000980	-1.000833	1.001357	0.031113
-27.001436	27.001357	-27.001621	-27.001427	27.002361	0.027177

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000007	-0.000389	-0.000244	0.000758
Final measured gains:	0.999997	0.999992	0.999991	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000076	-0.000088	-0.000238	0.000926
Final measured offsets stdev:	0.000207	0.000165	0.000087	0.000341
Final measured gains mean:	0.999995	0.999996	0.999992	0.999990
Final measured gains stdev:	0.000014	0.000005	0.000011	0.000011

Saving channel 3 calibration constants to qspi

lab{3}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000622	1.004584	-1.010649	-1.010532	0.996176	0.045908
-27.001387	27.006116	-26.824978	-26.806957	26.954863	0.036246

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003933	-0.017202	-0.017774	0.000000
Initial measured gains:	1.000030	0.992830	0.992141	0.998352
Gain corrections:	1.000030	1.007222	1.007921	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	0.995715
27.000000	26.953587

Measured offset: -0.002664

Measured gain: 0.998380

Gain correction: 1.001623

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000474	1.000425	-1.000688	-1.000839	0.999608	0.028374
-27.001310	27.001588	-27.001617	-27.001678	27.000568	0.043890

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000062	-0.000210	-0.000364	-0.000809
Final measured gains:	1.000013	1.000004	1.000000	0.999992

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000089	-0.000267	-0.000348	-0.000368
Final measured offsets stdev:	0.000326	0.000051	0.000124	0.000365
Final measured gains mean:	0.999993	0.999991	0.999989	1.000001
Final measured gains stdev:	0.000022	0.000010	0.000010	0.000008

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____