

Report of Calibration
PSC 4CH-MSS-AR-QFA_Shunt_S/N 0004
2026-01-02 22:03:32

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 = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000491	1.000896	-0.999310	-0.999711	1.000519	-0.022223
-11.001950	11.000106	-10.923023	-10.920454	11.018220	-0.015809

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000631	-0.006596	-0.007295	0.000000
Initial measured gains:	0.999775	0.992227	0.991929	1.001849
Gain corrections:	0.999775	1.007834	1.008136	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	0.999997
11.000000	11.016195

Measured offset: -0.001623

Measured gain: 1.001620

Gain correction: 0.998383

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000226	1.000388	-1.000281	-1.000403	1.000344	-0.010694
-11.001746	11.002107	-11.001917	-11.002000	11.002139	0.023899

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000143	-0.000044	-0.000170	-0.000052
Final measured gains:	1.000020	1.000012	1.000008	1.000008

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000066	-0.000005	-0.000038	-0.000062
Final measured offsets stdev:	0.000162	0.000141	0.000149	0.000087
Final measured gains mean:	0.999999	0.999996	0.999996	1.000002
Final measured gains stdev:	0.000015	0.000018	0.000017	0.000019

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999491	1.000977	-0.998601	-0.998993	1.000471	-0.001681
-11.001165	11.009602	-10.929854	-10.924848	11.037987	0.016925

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000791	-0.006147	-0.007078	0.000000
Initial measured gains:	1.000695	0.992959	0.992419	1.002887
Gain corrections:	1.000695	1.007091	1.007639	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	1.000894
11.000000	11.036811

Measured offset: -0.002698

Measured gain: 1.003592

Gain correction: 0.996421

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999565	0.999757	-0.999703	-0.999742	1.000056	0.023999
-11.001139	11.001272	-11.001270	-11.001286	11.001427	0.016381

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000198	-0.000139	-0.000180	0.000313
Final measured gains:	0.999994	0.999999	0.999997	0.999986

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000113	-0.000132	-0.000160	0.000280
Final measured offsets stdev:	0.000072	0.000045	0.000054	0.000122
Final measured gains mean:	0.999987	0.999988	0.999988	0.999978
Final measured gains stdev:	0.000023	0.000031	0.000029	0.000013

Saving channel 2 calibration constants to qspi

```
lab{2}Chan3
Burden resistor = 83.3333
```

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999856	1.001654	-0.999052	-0.999589	1.002074	0.004378
-11.001280	10.999054	-10.918186	-10.924008	11.019450	-0.000029

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002200	-0.007423	-0.007431	0.000000
Initial measured gains:	0.999598	0.991772	0.992301	1.001998
Gain corrections:	0.999598	1.008296	1.007759	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 1.002262
11.000000 11.018191

Measured offset: 0.000669

Measured gain: 1.001593

Gain correction: 0.998410

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999827	0.999859	-0.999939	-1.000028	1.000379	0.015652
-11.001010	11.001431	-11.001488	-11.001443	11.002100	0.006286

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000007	-0.000076	-0.000178	0.000505
Final measured gains:	1.000039	1.000037	1.000023	1.000015

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000011	-0.000139	-0.000137	0.000378
Final measured offsets stdev:	0.000139	0.000105	0.000119	0.000138
Final measured gains mean:	1.000002	1.000000	0.999997	1.000000
Final measured gains stdev:	0.000038	0.000032	0.000029	0.000008

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 83.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999519	1.002098	-0.998726	-0.999179	1.001523	0.008927
-11.001185	11.004478	-10.925934	-10.922825	11.035407	0.001524

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002508	-0.006649	-0.007457	0.000000
Initial measured gains:	1.000071	0.992555	0.992199	1.003150
Gain corrections:	1.000071	1.007500	1.007862	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	1.002043
11.000000	11.034335

Measured offset: -0.001186

Measured gain: 1.003229

Gain correction: 0.996781

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999466	0.999317	-0.999520	-0.999525	0.999495	-0.014729
-11.001018	11.000974	-11.000974	-11.000982	11.000802	0.015568

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000160	-0.000064	-0.000068	0.000213
Final measured gains:	1.000011	0.999990	0.999991	0.999965

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000026	-0.000184	-0.000148	0.000065
Final measured offsets stdev:	0.000160	0.000155	0.000154	0.000092
Final measured gains mean:	0.999990	0.999980	0.999984	0.999984
Final measured gains stdev:	0.000040	0.000035	0.000035	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____