

Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0019
2025-12-17 23:33:48

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{2}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000645	1.001881	-1.011699	-1.010219	1.002327	0.041829
-27.001569	27.030741	-26.849945	-26.822437	27.094028	0.038545

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000161	-0.017315	-0.016836	0.000000
Initial measured gains:	1.001074	0.993743	0.992742	1.002414
Gain corrections:	1.001074	1.006296	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	1.001631
27.000000	27.092361

Measured offset: -0.001859
Measured gain: 1.003490
Gain correction: 0.996522

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000328	1.000645	-1.000886	-1.000791	1.001187	0.015231
-27.001015	27.000538	-27.000710	-27.000801	27.001593	0.008865

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000347	-0.000592	-0.000489	0.000522
Final measured gains:	0.999969	0.999967	0.999974	1.000020

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000111	-0.000289	-0.000275	0.000448
Final measured offsets stdev:	0.000181	0.000195	0.000111	0.000320
Final measured gains mean:	0.999962	0.999966	0.999966	1.000002
Final measured gains stdev:	0.000010	0.000007	0.000009	0.000022

Saving channel 1 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999342	1.002839	-1.010626	-1.009540	0.997771	0.053148
-27.000278	27.004061	-26.812328	-26.828770	27.054535	0.049815

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003486	-0.018941	-0.017182	0.000000
Initial measured gains:	1.000011	0.992337	0.993012	1.002136
Gain corrections:	1.000011	1.007722	1.007038	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	0.998698
27.000000	27.054512

Measured offset: -0.003449

Measured gain: 1.002147

Gain correction: 0.997858

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999541	0.999129	-0.999642	-0.999476	0.998709	0.050977
-27.000360	26.999262	-26.999596	-26.999561	26.998781	0.045544

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000386	-0.000134	0.000037	-0.000417
Final measured gains:	0.999974	0.999967	0.999972	0.999998

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000088	-0.000226	-0.000163	-0.000205
Final measured offsets stdev:	0.000366	0.000071	0.000177	0.000193
Final measured gains mean:	0.999974	0.999975	0.999974	1.000001
Final measured gains stdev:	0.000010	0.000005	0.000003	0.000015

Saving channel 2 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000083	1.002616	-1.009567	-1.009462	1.004054	0.022959
-27.000796	27.002760	-26.815319	-26.824375	27.093534	0.030890

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002555	-0.016983	-0.016525	0.000000
Initial measured gains:	0.999978	0.992502	0.992854	1.003436
Gain corrections:	0.999978	1.007555	1.007197	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	1.004059
27.000000	27.093031

Measured offset: 0.000637

Measured gain: 1.003422

Gain correction: 0.996590

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000100	1.000162	-1.000226	-1.000341	1.001362	0.021203
-27.000954	27.000464	-27.000841	-27.000664	27.001900	0.019069

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000083	-0.000136	-0.000262	0.001191
Final measured gains:	0.999979	0.999991	0.999980	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000025	-0.000180	-0.000239	0.000897
Final measured offsets stdev:	0.000099	0.000039	0.000101	0.000250
Final measured gains mean:	0.999981	0.999982	0.999975	1.000000
Final measured gains stdev:	0.000010	0.000007	0.000007	0.000013

Saving channel 3 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000318	1.006203	-1.010040	-1.010113	1.000978	0.050308
-27.001300	26.997476	-26.807919	-26.818846	27.067665	0.039958

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.006259	-0.017537	-0.017192	0.000000
Initial measured gains:	0.999627	0.992189	0.992606	1.002902
Gain corrections:	0.999627	1.007873	1.007449	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	1.000803
27.000000	27.066448

Measured offset: -0.001722

Measured gain: 1.002525

Gain correction: 0.997482

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000406	0.999990	-1.000644	-1.000501	0.999871	0.022395
-27.001294	27.001297	-27.001431	-27.001293	27.001040	0.050948

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000432	-0.000242	-0.000099	-0.000113
Final measured gains:	1.000016	0.999996	0.999996	0.999995

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-11111.137502	-0.081825	-0.046701	0.000099
Final measured offsets stdev:	22222.275301	0.163392	0.093032	0.000362
Final measured gains mean:	-11109.098312	0.918291	0.953483	0.999987
Final measured gains stdev:	22220.196613	0.163398	0.093008	0.000008

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date _____