Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0019
2025-12-30 22:34:04

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
-1.000710	1.000932	-1.010316	-1.008030	1.000825	0.038536
-27.001101	26.998660	-26.816122	-26.788198	27.063120	-0.000311

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000325	-0.017096	-0.015796	0.000000
Initial measured gains:	0.999898	0.992516	0.991530	1.002484
Gain corrections:	0.999898	1.007540	1.008542	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	1.000123
27.000000	27.061712

Measured offset: -0.002246
Measured gain: 1.002369
Gain correction: 0.997637

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000570	1.000512	-1.000810	-1.000787	1.000617	0.024339
-27.001112	27.000997	-27.001024	-27.000988	27.001862	0.031133

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000056	-0.000252	-0.000229	0.000075
Final measured gains:	0.999998	0.999987	0.999987	1.000029

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000118	-0.000188	-0.000183	-0.000029
Final measured offsets stdev:	0.000151	0.000153	0.000180	0.000159
Final measured gains mean:	0.999998	0.999996	0.999996	1.000011
Final measured gains stdev:	0.000014	0.000008	0.000006	0.000013

Saving channel 1 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000346	1.002007	-1.008951	-1.007635	0.995995	0.022844
-27.000997	26.975145	-26.781721	-26.794529	27.028851	0.057258

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002720	-0.017372	-0.015513	0.000000
Initial measured gains:	0.998942	0.991236	0.991779	1.002299
Gain corrections:	0.998942	1.008842	1.008289	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	0.995759
27.000000	27.028002

Measured offset: -0.005481
Measured gain: 1.001240
Gain correction: 0.998761

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000330	1.000357	-1.000756	-1.000581	0.999608	0.015553
-27.001000	27.000566	-27.000793	-27.000721	26.999920	0.026755

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000045	-0.000451	-0.000272	-0.000753
Final measured gains:	0.999982	0.999976	0.999980	1.000004

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000055	-0.000310	-0.000161	-0.000294
Final measured offsets stdev:	0.000078	0.000116	0.000122	0.000401
Final measured gains mean:	0.999987	0.999982	0.999986	1.000004
Final measured gains stdev:	0.000014	0.000006	0.000007	0.000012

Saving channel 2 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000138	1.001806	-1.008367	-1.008065	1.002705	0.004062
-27.000869	26.978943	-26.788416	-26.793758	27.070522	0.023263

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002576	-0.016718	-0.016199	0.000000
Initial measured gains:	0.999093	0.991512	0.991730	1.003491
Gain corrections:	0.999093	1.008560	1.008339	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	1.003029
27.000000	27.069183

Measured offset: 0.000484
Measured gain: 1.002544
Gain correction: 0.997462

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000195	1.000299	-1.000406	-1.000589	1.001477	0.056344
-27.000876	27.000916	-27.000954	-27.001026	27.001720	0.035238

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000107	-0.000216	-0.000404	0.001192
Final measured gains:	0.999997	0.999995	0.999991	0.999986

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000049	-0.000200	-0.000243	0.001060
Final measured offsets stdev:	0.000193	0.000134	0.000195	0.000150
Final measured gains mean:	0.999992	0.999990	0.999985	0.999998
Final measured gains stdev:	0.000019	0.000006	0.000005	0.000017

Saving channel 3 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000180	1.004934	-1.008060	-1.008207	0.998873	0.040170
-27.000767	26.972408	-26.777637	-26.790030	27.044031	0.053333

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.006028	-0.016767	-0.016442	0.000000
Initial measured gains:	0.998726	0.991115	0.991586	1.002992
Gain corrections:	0.998726	1.008964	1.008485	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	0.998923
27.000000	27.042940

Measured offset: -0.002770
Measured gain: 1.001693
Gain correction: 0.998310

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000138	0.999967	-1.000263	-1.000444	1.000545	0.008852
-27.000846	27.000768	-27.000706	-27.000893	27.001715	0.052424

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000174	-0.000135	-0.000316	0.000564
Final measured gains:	1.000004	0.999990	0.999990	1.000014

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000170	-0.000031	-0.000122	0.000416
Final measured offsets stdev:	0.000157	0.000093	0.000107	0.000266
Final measured gains mean:	1.000013	1.000003	1.000000	1.000005
Final measured gains stdev:	0.000014	0.000010	0.000010	0.000010

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____