Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0026
2025-10-02 15:27:48

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{1}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000017	1.001081	-1.008822	-1.009229	0.998648	0.021887
-26.998447	26.994781	-26.812769	-26.822754	27.018801	-0.009267

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001246	-0.016286	-0.016325	0.000000
Initial measured gains:	0.999818	0.992519	0.992888	1.001018
Gain corrections:	0.999818	1.007537	1.007163	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	0.998895
27.000000	27.020319

Measured offset: -0.001929
Measured gain: 1.000824
Gain correction: 0.999177

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999721	0.999864	-0.999963	-1.000129	1.000529	0.042613
-26.998349	26.998223	-26.998402	-26.998280	26.998676	0.022917

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000153	-0.000249	-0.000426	0.000674
Final measured gains:	0.999990	0.999993	0.999982	0.999992

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000194	-0.000321	-0.000348	0.000257
Final measured offsets stdev:	0.000294	0.000109	0.000155	0.000598
Final measured gains mean:	0.999984	0.999987	0.999983	1.000006
Final measured gains stdev:	0.000021	0.000012	0.000007	0.000011

Saving channel 1 calibration constants to qspi

lab{1}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999569	1.001730	-1.008072	-1.007388	0.995376	0.014007
-26.998316	27.001351	-26.816372	-26.829220	26.997606	0.033834

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002126	-0.015825	-0.014621	0.000000
Initial measured gains:	1.000034	0.992675	0.993195	1.000100
Gain corrections:	1.000034	1.007379	1.006851	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	0.996061
27.000000	26.998857

Measured offset: -0.004047
Measured gain: 1.000108
Gain correction: 0.999892

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999439	0.999634	-0.999705	-0.999990	0.999273	0.027455
-26.998156	26.998312	-26.998154	-26.998478	26.998453	0.056004

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000196	-0.000277	-0.000560	-0.000380
Final measured gains:	0.999999	0.999990	0.999991	1.000019

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000175	-0.000197	-0.000266	-0.000362
Final measured offsets stdev:	0.000247	0.000149	0.000155	0.000273
Final measured gains mean:	0.999997	0.999988	0.999989	1.000011
Final measured gains stdev:	0.000009	0.000002	0.000009	0.000010

Saving channel 2 calibration constants to qspi

lab{1}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999879	1.002098	-1.010079	-1.009202	1.000973	0.050425
-26.998462	27.001259	-26.821022	-26.806637	27.012754	0.011217

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002197	-0.017417	-0.017059	0.000000
Initial measured gains:	1.000022	0.992783	0.992263	1.000485
Gain corrections:	1.000022	1.007270	1.007797	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	1.001220
27.000000	27.013983

Measured offset: 0.000729
Measured gain: 1.000491
Gain correction: 0.999509

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999757	0.999957	-1.000068	-1.000089	1.001039	0.040725
-26.998385	26.998985	-26.998734	-26.998775	27.000387	0.054584

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000185	-0.000310	-0.000330	0.001070
Final measured gains:	1.000015	1.000001	1.000002	1.000012

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000178	-0.000333	-0.000321	0.001149
Final measured offsets stdev:	0.000055	0.000160	0.000094	0.000087
Final measured gains mean:	0.999992	0.999988	0.999989	1.000001
Final measured gains stdev:	0.000019	0.000012	0.000010	0.000010

Saving channel 3 calibration constants to qspi

lab{1}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999722	0.992680	-1.010728	-1.008760	0.997289	0.058168
-26.998238	27.002094	-26.826365	-26.805172	26.985815	-0.006235

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.007462	-0.018038	-0.016810	0.000000
Initial measured gains:	1.000419	0.992966	0.992226	0.999197
Gain corrections:	1.000419	1.007084	1.007835	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	0.997738
27.000000	26.987617

Measured offset: -0.001872
Measured gain: 0.999611
Gain correction: 1.000389

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999577	0.999228	-0.999826	-0.999691	0.999580	0.019409
-26.998216	26.997616	-26.998140	-26.998035	26.998079	0.012845

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000340	-0.000261	-0.000126	0.000349
Final measured gains:	0.999990	0.999988	0.999989	1.000004

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000208	-0.000114	-0.000078	0.000347
Final measured offsets stdev:	0.000114	0.000115	0.000129	0.000102
Final measured gains mean:	0.999999	0.999999	0.999996	1.000019
Final measured gains stdev:	0.000011	0.000007	0.000008	0.000009

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____