

Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0007
2025-12-18 15:31:27

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
-0.999704	1.000156	-1.0008744	-1.0009806	0.999493	-0.0005680
-27.000822	26.991030	-26.812998	-26.823984	27.042732	0.053066

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000846	-0.016609	-0.017289	0.000000
Initial measured gains:	0.999606	0.992429	0.992810	1.002015
Gain corrections:	0.999606	1.007629	1.007242	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	0.999805
27.000000	27.042013

Measured offset: -0.001818
Measured gain: 1.001623
Gain correction: 0.998379

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999591	1.000018	-1.000145	-1.000057	0.999931	0.0006396
-27.000443	27.000220	-27.001694	-27.001606	26.999872	0.010422

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000452	-0.000527	-0.000440	-0.000077
Final measured gains:	0.999975	1.000027	1.000027	0.999990

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000220	-0.000063	-0.000056	0.000170
Final measured offsets stdev:	0.000133	0.000261	0.000207	0.000193
Final measured gains mean:	0.999977	1.000043	1.000040	0.999988
Final measured gains stdev:	0.000020	0.000037	0.000034	0.000005

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999445	1.001443	-1.007993	-1.006827	0.992848	-0.051631
-27.000594	26.978889	-26.788994	-26.807789	26.986885	0.047342

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002909	-0.017010	-0.015077	0.000000
Initial measured gains:	0.999088	0.991533	0.992301	1.000639
Gain corrections:	0.999088	1.008539	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	0.993457
27.000000	26.986298

Measured offset: -0.006268
Measured gain: 0.999725
Gain correction: 1.000275

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999388	1.000334	-0.999480	-0.999683	1.000019	-0.019584
-27.000379	27.000219	-27.001652	-27.001768	27.000101	0.002114

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000989	-0.000047	-0.000253	-0.000323
Final measured gains:	0.999957	1.000045	1.000042	1.000008

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000807	0.000010	-0.000196	-0.000158
Final measured offsets stdev:	0.000102	0.000100	0.000095	0.000178
Final measured gains mean:	0.999966	1.000047	1.000039	0.999996
Final measured gains stdev:	0.000005	0.000006	0.000003	0.000009

Saving channel 2 calibration constants to qspi

lab{2}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999734	1.000559	-1.008730	-1.009452	0.999663	-0.050919
-27.000958	26.990767	-26.802128	-26.815037	27.017370	0.056474

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001248	-0.016987	-0.017241	0.000000
Initial measured gains:	0.999576	0.992007	0.992476	1.001058
Gain corrections:	0.999576	1.008057	1.007581	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	1.000057
27.000000	27.016390

Measured offset: -0.000571
Measured gain: 1.000628
Gain correction: 0.999372

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999738	1.000325	-0.999818	-0.999846	1.000315	-0.028299
-27.000610	27.000207	-27.001699	-27.001631	27.000008	0.003551

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000625	-0.000041	-0.000073	-0.000003
Final measured gains:	0.999962	1.000039	1.000035	0.999993

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000611	0.000036	0.000036	-0.000066
Final measured offsets stdev:	0.000070	0.000078	0.000072	0.000079
Final measured gains mean:	0.999963	1.000042	1.000038	0.999993
Final measured gains stdev:	0.000004	0.000007	0.000008	0.000008

Saving channel 3 calibration constants to qspi

lab{2}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999547	1.000531	-1.008733	-1.007494	0.993621	-0.046056
-27.000752	26.983288	-26.796509	-26.796703	26.983135	0.051094

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001693	-0.017390	-0.016096	0.000000
Initial measured gains:	0.999291	0.991792	0.991847	1.000260
Gain corrections:	0.999291	1.008276	1.008220	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	0.994060
27.000000	26.982466

Measured offset: -0.005494
Measured gain: 0.999554
Gain correction: 1.000446

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999679	1.000379	-0.999918	-0.999831	1.000644	-0.028158
-27.000581	27.000226	-27.001751	-27.001472	27.001148	0.012911

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000741	-0.000203	-0.000124	0.000240
Final measured gains:	0.999959	1.000036	1.000028	1.000025

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000740	-0.000078	-0.000184	0.000098
Final measured offsets stdev:	0.000091	0.000075	0.000048	0.000262
Final measured gains mean:	0.999963	1.000040	1.000031	1.000011
Final measured gains stdev:	0.000003	0.000005	0.000007	0.000012

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____