

Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0019
2025-09-08 10:52:06

Calibration Current standard: BNL PSC ATE S/N 001
Calibration Volt standard: HP 3458A-002 S/N 2823A 06900
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
-0.999228	0.999811	-1.009276	-1.008640	1.000567	0.014859
-26.997514	26.999819	-26.820103	-26.813652	27.061003	0.042447

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000517	-0.017253	-0.016841	0.000000
Initial measured gains:	1.000066	0.992790	0.992566	1.002324
Gain corrections:	1.000066	1.007263	1.007490	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	1.001335
27.000000	27.063892

Measured offset: -0.001071

Measured gain: 1.002406

Gain correction: 0.997600

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999119	0.999487	-0.999199	-0.999264	0.999822	0.030373
-26.997542	26.998735	-26.997551	-26.997494	26.999384	0.086977

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000336	-0.000083	-0.000152	0.000323
Final measured gains:	1.000032	0.999997	0.999993	1.000012

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000149	-0.000097	-0.000117	0.000177
Final measured offsets stdev:	0.000127	0.000132	0.000139	0.000111
Final measured gains mean:	1.000040	0.999995	0.999997	0.999990
Final measured gains stdev:	0.000006	0.000008	0.000008	0.000017

Saving channel 1 calibration constants to qspi

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lab{1}Chan2
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999248	1.000674	-1.009266	-1.007653	0.995365	-0.020995
-26.997339	26.993548	-26.795029	-26.795849	27.042589	0.304631

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001626	-0.018179	-0.016472	0.000000
Initial measured gains:	0.999799	0.991833	0.991927	1.002091
Gain corrections:	0.999799	1.008234	1.008139	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	0.996319
27.000000	27.045462

Measured offset: -0.005572

Measured gain: 1.001890

Gain correction: 0.998113

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998987	0.999939	-0.999142	-0.999369	0.999739	0.010506
-26.997436	26.995218	-26.997673	-26.997829	26.995979	0.233125

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.001075	-0.000152	-0.000382	-0.000237
Final measured gains:	0.999878	1.000003	1.000000	1.000037

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000921	-0.000169	-0.000390	-0.000525
Final measured offsets stdev:	0.000129	0.000134	0.000138	0.000330
Final measured gains mean:	0.999885	0.999997	0.999996	1.000024
Final measured gains stdev:	0.000008	0.000005	0.000007	0.000010

Saving channel 2 calibration constants to qspi

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lab{1}Chan3  
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999619	1.000978	-1.009218	-1.008948	1.001806	-0.038836
-26.997619	26.997691	-26.807310	-26.810720	27.085701	0.134550

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001408	-0.017286	-0.016874	0.000000
Initial measured gains:	0.999951	0.992311	0.992452	1.003354
Gain corrections:	0.999951	1.007749	1.007605	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	1.002256
27.000000	27.087889

Measured offset: -0.001038

Measured gain: 1.003294

Gain correction: 0.996717

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999803	1.000395	-0.999745	-0.999697	1.000825	-0.012726
-26.997731	26.997558	-26.997797	-26.998043	26.997942	0.139970

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000622	0.000063	0.000122	0.000432
Final measured gains:	0.999971	1.000005	1.000016	0.999998

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000702	-0.000117	-0.000082	0.000191
Final measured offsets stdev:	0.000121	0.000104	0.000113	0.000364
Final measured gains mean:	0.999969	0.999993	0.999995	1.000009
Final measured gains stdev:	0.000006	0.000007	0.000011	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
-0.999900	1.002577	-1.009858	-1.009613	0.997031	-0.103858
-26.997702	27.000257	-26.810963	-26.817404	27.067753	0.018298

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002682	-0.017524	-0.017021	0.000000
Initial measured gains:	0.999995	0.992434	0.992691	1.002810
Gain corrections:	0.999995	1.007624	1.007363	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	0.997042
27.000000	27.070351

Measured offset: -0.005777

Measured gain: 1.002820

Gain correction: 0.997188

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999727	1.001490	-1.000159	-0.999900	1.001137	-0.055438
-26.997828	26.999112	-26.997763	-26.997648	26.998655	0.069500

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.001781	-0.000451	-0.000186	-0.000348
Final measured gains:	0.999982	0.999981	0.999986	0.999996

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.001625	-0.000187	-0.000032	-0.000339
Final measured offsets stdev:	0.000083	0.000189	0.000202	0.000291
Final measured gains mean:	0.999994	0.999994	0.999998	1.000007
Final measured gains stdev:	0.000007	0.000008	0.000010	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____