

Report of Calibration
PSC 4CH-MSS-AR Slow XY Corr_S/N 0022
2025-12-05 10:16:24

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
-1.001676	1.005599	-1.013153	-1.012068	1.001450	0.030141
-27.001324	27.020304	-26.829517	-26.823904	27.056980	0.044172

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003342	-0.018538	-0.017627	0.000000
Initial measured gains:	1.000579	0.992951	0.992776	1.001569
Gain corrections:	1.000579	1.007099	1.007276	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	0.999882
27.000000	27.056030

Measured offset: -0.002278

Measured gain: 1.002160

Gain correction: 0.997845

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001909	1.001897	-1.002014	-1.001880	1.001669	0.047326
-27.001421	27.000746	-27.001276	-27.000933	27.000957	0.039114

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000014	-0.000115	0.000011	-0.000245
Final measured gains:	0.999974	0.999990	0.999982	1.000017

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000037	-0.000205	-0.000140	-0.000247
Final measured offsets stdev:	0.000238	0.000088	0.000159	0.000202
Final measured gains mean:	0.999967	0.999972	0.999973	1.000009
Final measured gains stdev:	0.000024	0.000016	0.000007	0.000010

Saving channel 1 calibration constants to qspi

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lab{2}Chan2
Burden resistor = 33.3333
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Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001337	1.003238	-1.011644	-1.011418	0.999602	0.044238
-27.001112	26.997013	-26.809307	-26.829582	27.043406	0.032064

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002132	-0.018090	-0.017075	0.000000
Initial measured gains:	0.999769	0.992226	0.993015	1.001925
Gain corrections:	0.999769	1.007834	1.007034	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	0.998100
27.000000	27.042370

Measured offset: -0.003602

Measured gain: 1.001703

Gain correction: 0.998300

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001399	1.001560	-1.001518	-1.001576	1.001362	0.043622
-27.001159	27.000430	-27.000343	-27.000557	26.999527	0.042752

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000196	-0.000156	-0.000207	-0.000171
Final measured gains:	0.999966	0.999964	0.999970	0.999973

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000054	-0.000087	-0.000198	0.000130
Final measured offsets stdev:	0.000273	0.000078	0.000072	0.000257
Final measured gains mean:	0.999976	0.999980	0.999976	0.999986
Final measured gains stdev:	0.000023	0.000015	0.000013	0.000019

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
-1.001593	1.004052	-1.013426	-1.010380	1.005244	0.048496
-27.001455	27.011475	-26.822268	-26.820024	27.052721	-0.001223

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002167	-0.019191	-0.016115	0.000000
Initial measured gains:	1.000291	0.992653	0.992684	1.001540
Gain corrections:	1.000291	1.007401	1.007370	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	1.003950
27.000000	27.051268

Measured offset: 0.002130

Measured gain: 1.001820

Gain correction: 0.998183

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001437	1.001197	-1.001904	-1.001754	1.002289	0.028816
-27.001635	27.001263	-27.001545	-27.001287	27.002432	0.027283

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000235	-0.000488	-0.000342	0.001089
Final measured gains:	0.999995	0.999979	0.999974	1.000003

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000085	-0.000238	-0.000285	0.000526
Final measured offsets stdev:	0.000106	0.000169	0.000076	0.000425
Final measured gains mean:	0.999984	0.999979	0.999984	1.000016
Final measured gains stdev:	0.000014	0.000013	0.000013	0.000016

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
-1.001248	1.002433	-1.010659	-1.010486	0.999822	0.043644
-27.001094	26.995768	-26.808533	-26.807083	27.039108	0.053691

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001436	-0.017188	-0.017065	0.000000
Initial measured gains:	0.999750	0.992232	0.992183	1.001768
Gain corrections:	0.999750	1.007829	1.007879	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 0.998720
27.000000 27.038202

Measured offset: -0.002799

Measured gain: 1.001519

Gain correction: 0.998484

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001178	1.001227	-1.001258	-1.001538	1.001669	0.044024
-27.001229	27.000679	-27.000935	-27.001179	27.001133	0.036817

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000073	-0.000095	-0.000376	0.000441
Final measured gains:	0.999977	0.999986	0.999984	1.000000

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000071	-0.000117	-0.000208	0.000214
Final measured offsets stdev:	0.000252	0.000131	0.000143	0.000273
Final measured gains mean:	0.999999	0.999994	0.999990	1.000010
Final measured gains stdev:	0.000025	0.000011	0.000010	0.000010

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____