

Report of Calibration  
PSC 4CH-MSF-AR-Fast XY Corr\_S/N 0022  
2025-10-07 14:40:18

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
-0.999467	1.002193	-1.012025	-1.008490	0.999608	0.026731
-26.998162	27.023443	-26.835125	-26.814142	27.015770	0.055425

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001858	-0.019308	-0.016444	0.000000
Initial measured gains:	1.000868	0.993246	0.992575	0.999804
Gain corrections:	1.000868	1.006800	1.007481	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	1.000238
27.000000	27.017399

Measured offset: -0.000422  
Measured gain: 1.000660  
Gain correction: 0.999340

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999586	0.999442	-0.999590	-0.999685	0.999602	0.039655
-26.998172	26.997642	-26.998020	-26.998146	26.997784	0.040850

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000129	-0.000010	-0.000103	0.000161
Final measured gains:	0.999985	0.999994	0.999995	0.999999

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000037	-0.000196	-0.000295	0.000137
Final measured offsets stdev:	0.000179	0.000191	0.000168	0.000195
Final measured gains mean:	0.999978	0.999979	0.999982	0.999985
Final measured gains stdev:	0.000011	0.000010	0.000011	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
-0.999508	1.001052	-1.008127	-1.010261	0.994137	0.024920
-26.998356	26.995751	-26.813330	-26.815779	26.987371	0.040331

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001703	-0.016063	-0.018185	0.000000
Initial measured gains:	0.999840	0.992552	0.992564	0.999944
Gain corrections:	0.999840	1.007504	1.007492	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	0.994751
27.000000	26.989164

Measured offset: -0.005035  
Measured gain: 0.999785  
Gain correction: 1.000215

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999247	0.999260	-0.999452	-0.999574	0.999378	0.026989
-26.998028	26.998368	-26.998123	-26.997992	26.998577	0.049576

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000000	-0.000208	-0.000340	0.000114
Final measured gains:	1.000013	0.999996	0.999986	1.000004

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000002	-0.000155	-0.000242	0.000187
Final measured offsets stdev:	0.000202	0.000182	0.000155	0.000247
Final measured gains mean:	0.999989	0.999986	0.999979	0.999993
Final measured gains stdev:	0.000014	0.000006	0.000004	0.000014

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
-0.999241	1.002268	-1.009690	-1.009972	1.000776	0.046754
-26.998023	27.007456	-26.816231	-26.820997	26.993429	0.059314

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002780	-0.017837	-0.017947	0.000000
Initial measured gains:	1.000246	0.992606	0.992778	0.999518
Gain corrections:	1.000246	1.007449	1.007274	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	1.001888
27.000000	26.995014

Measured offset: 0.002153  
Measured gain: 0.999736  
Gain correction: 1.000264

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999076	0.998987	-0.999541	-0.999362	0.999887	0.057642
-26.997925	26.997567	-26.998060	-26.997772	26.998501	0.047308

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000079	-0.000477	-0.000303	0.000899
Final measured gains:	0.999990	0.999987	0.999983	1.000001

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000007	-0.000258	-0.000294	0.000917
Final measured offsets stdev:	0.000089	0.000218	0.000148	0.000369
Final measured gains mean:	0.999981	0.999977	0.999975	1.000012
Final measured gains stdev:	0.000019	0.000018	0.000019	0.000012

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
-0.998558	0.999580	-1.006705	-1.007545	0.993928	0.041153
-26.997705	26.990797	-26.811859	-26.815811	26.949238	0.020050

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001326	-0.015597	-0.016318	0.000000
Initial measured gains:	0.999695	0.992539	0.992658	0.998618
Gain corrections:	0.999695	1.007518	1.007396	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    0.995354  
27.000000    26.950739

Measured offset: -0.002930

Measured gain: 0.998284

Gain correction: 1.001719

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.998873	0.998950	-0.998883	-0.999042	0.998665	0.046155
-26.997896	26.998076	-26.997639	-26.997660	26.998541	0.059469

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000074	-0.000020	-0.000185	-0.000314
Final measured gains:	1.000004	0.999990	0.999984	1.000029

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000077	-0.000231	-0.000161	-0.000326
Final measured offsets stdev:	0.000312	0.000168	0.000130	0.000068
Final measured gains mean:	0.999994	0.999989	0.999994	1.000018
Final measured gains stdev:	0.000021	0.000009	0.000011	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by \_\_\_\_\_ Date\_\_\_\_\_