

Report of Calibration  
PSC 4CH-MSF-AR-Fast XY Corr\_S/N 0007  
2025-12-17 22:29:18

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{2}Chan1  
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000907	1.000264	-1.009326	-1.010232	0.999739	-0.022314
-26.998767	26.986404	-26.808249	-26.818668	27.039305	0.052605

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.000192	-0.016079	-0.016618	0.000000
Initial measured gains:	0.999549	0.992348	0.992714	1.002056
Gain corrections:	0.999549	1.007711	1.007340	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	0.999383
27.000000	27.040846

Measured offset: -0.002212

Measured gain: 1.001595

Gain correction: 0.998408

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000887	1.000341	-1.001030	-1.000998	1.000474	-0.027449
-27.001329	26.997991	-26.998524	-26.998631	26.997503	0.050412

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000438	-0.000257	-0.000219	0.000157
Final measured gains:	0.999893	0.999887	0.999892	0.999976

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000587	-0.000250	-0.000221	-0.000198
Final measured offsets stdev:	0.000120	0.000086	0.000084	0.000214
Final measured gains mean:	0.999974	1.000012	1.000011	1.000000
Final measured gains stdev:	0.000042	0.000063	0.000060	0.000016

Saving channel 1 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcctl1	dcctl2	dacRB	err
-0.999533	1.001952	-1.007970	-1.006791	0.993429	-0.037919
-27.000851	26.976105	-26.785749	-26.804878	26.984978	0.048808

	dacSP	dcctl1	dcctl2	dacRB
Initial measured offsets:	-0.003463	-0.017029	-0.015070	0.000000
Initial measured gains:	0.998955	0.991403	0.992184	1.000670
Gain corrections:	0.998955	1.008672	1.007878	1.000000

Writing gain and offset corrections for dacSP, dcctl1, and dcctl2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	0.994131
27.000000	26.984177

Measured offset: -0.005486

Measured gain: 0.999617

Gain correction: 1.000383

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcctl1	dcctl2	dacRB	err
-27.000830	1.900000	-27.000626	-27.000767	1.899555	-10.000000
-27.000742	26.999866	-27.000664	-27.000750	26.999668	0.026455

	dacSP	dcctl1	dcctl2	dacRB
Final measured offsets:	-7640556.997506	-38.612801	-21.775288	-0.000464
Final measured gains:	-282974.818068	-0.430067	0.193530	1.000010

	dacSP	dcctl1	dcctl2	dacRB
Final measured offsets mean:	-7024588.385528	-19.805714	-19.779640	-0.000100
Final measured offsets stdev:	10648336.796798	25.217463	29.885827	0.000301
Final measured gains mean:	-260162.116189	0.266504	0.267465	1.000006
Final measured gains stdev:	394372.631203	0.933977	1.106870	0.000012

Saving channel 2 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcctl1	dcctl2	dacRB	err
-0.999528	1.000534	-1.008463	-1.009343	0.999794	-0.046608
-27.000795	26.988754	-26.800064	-26.812767	27.016521	0.049523

	dacSP	dcctl1	dcctl2	dacRB
Initial measured offsets:	-0.001507	-0.016995	-0.017420	0.000000
Initial measured gains:	0.999498	0.991936	0.992391	1.001097
Gain corrections:	0.999498	1.008129	1.007667	1.000000

Writing gain and offset corrections for dacSP, dcctl1, and dcctl2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	1.000101
27.000000	27.015591

Measured offset: -0.000495

Measured gain: 1.000596

Gain correction: 0.999405

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcctl1	dcctl2	dacRB	err
-0.999669	1.000364	-0.999757	-0.999760	1.000342	-0.023389
-27.000635	27.000260	-27.001938	-27.001709	27.000156	-0.002076

	dacSP	dcctl1	dcctl2	dacRB
Final measured offsets:	-0.000736	-0.000041	-0.000053	-0.000019
Final measured gains:	0.999959	1.000047	1.000038	0.999997

	dacSP	dcctl1	dcctl2	dacRB
Final measured offsets mean:	-0.000614	-0.000176	-0.000179	0.000150
Final measured offsets stdev:	0.000248	0.000076	0.000125	0.000188
Final measured gains mean:	0.999966	1.000042	1.000036	1.000002
Final measured gains stdev:	0.000008	0.000006	0.000005	0.000012

Saving channel 3 calibration constants to qspi

Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcctl1	dcctl2	dacRB	err
-0.999768	1.000657	-1.008977	-1.007683	0.993605	-0.055747
-27.000953	26.981465	-26.794127	-26.794247	26.982410	0.057841

	dacSP	dcctl1	dcctl2	dacRB
Initial measured offsets:	-0.001673	-0.017515	-0.016167	0.000000
Initial measured gains:	0.999216	0.991691	0.991746	1.000308
Gain corrections:	0.999216	1.008378	1.008323	1.000000

Writing gain and offset corrections for dacSP, dcctl1, and dcctl2 to PSC

Measuring DAC readback gain and offset

DAC SP	DAC RB
1.000000	0.994109
27.000000	26.981281

Measured offset: -0.005397

Measured gain: 0.999507

Gain correction: 1.000494

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcctl1	dcctl2	dacRB	err
-0.999851	1.000423	-0.999979	-1.000068	0.999849	-0.031035
-27.000953	27.000213	-27.002151	-27.001951	26.999636	0.003699

	dacSP	dcctl1	dcctl2	dacRB
Final measured offsets:	-0.000622	-0.000087	-0.000187	-0.000574
Final measured gains:	0.999950	1.000041	1.000030	1.000000

	dacSP	dcctl1	dcctl2	dacRB
Final measured offsets mean:	-7840.312223	-0.022149	-0.011792	-0.000279
Final measured offsets stdev:	15680.623233	0.043857	0.023214	0.000325
Final measured gains mean:	-7839.717397	0.978119	0.988415	1.000006
Final measured gains stdev:	15681.434710	0.043831	0.023238	0.000006

Saving channel 4 calibration constants to qspi

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