Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0006
2025-09-25 20:01:33

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
-1.000292	1.007898	-1.012646	-1.009621	1.001126	0.022097
-26.998067	27.010859	-26.822224	-26.810909	27.035999	0.089764

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.007406	-0.019594	-0.016889	0.000000
Initial measured gains:	1.000200	0.992761	0.992442	1.001227
Gain corrections:	1.000200	1.007292	1.007615	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	1.001033
27.000000	27.038017

Measured offset: -0.000389
Measured gain: 1.001422
Gain correction: 0.998580

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000478	1.000543	-1.000689	-1.000932	1.000529	0.024445
-26.998127	26.997678	-26.997883	-26.998047	26.998205	0.072805

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000085	-0.000228	-0.000474	-0.000035
Final measured gains:	0.999980	0.999983	0.999979	1.000021

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000013	-0.000177	-0.000166	-0.000050
Final measured offsets stdev:	0.000497	0.000562	0.000521	0.000162
Final measured gains mean:	0.999991	0.999988	0.999989	1.000005
Final measured gains stdev:	0.000019	0.000013	0.000013	0.000012

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
-1.000186	1.005202	-1.010998	-1.008854	0.996121	0.030903
-26.998068	27.010536	-26.832418	-26.814291	27.012020	0.073732

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004729	-0.017601	-0.016071	0.000000
Initial measured gains:	1.000287	0.993212	0.992598	1.000406
Gain corrections:	1.000287	1.006834	1.007457	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	0.996143
27.000000	27.013693

Measured offset: -0.004532
Measured gain: 1.000675
Gain correction: 0.999325

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000104	1.000026	-1.000353	-1.000253	0.999800	0.044841
-26.998324	26.997725	-26.998356	-26.998051	26.997625	0.019988

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000057	-0.000258	-0.000166	-0.000232
Final measured gains:	0.999980	0.999992	0.999984	1.000005

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000003	-0.000297	-0.000275	0.000143
Final measured offsets stdev:	0.000206	0.000214	0.000195	0.000290
Final measured gains mean:	0.999982	0.999987	0.999981	1.000004
Final measured gains stdev:	0.000012	0.000011	0.000011	0.000013

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
-0.999974	1.005856	-1.011485	-1.011163	1.001806	0.029180
-26.997871	27.004584	-26.820345	-26.821907	27.012596	0.069266

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005850	-0.018782	-0.018388	0.000000
Initial measured gains:	1.000032	0.992729	0.992801	1.000464
Gain corrections:	1.000032	1.007325	1.007251	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	1.002058
27.000000	27.014542

Measured offset: 0.001578
Measured gain: 1.000480
Gain correction: 0.999520

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000128	0.999919	-1.000141	-1.000289	1.000869	0.016035
-26.998071	26.997951	-26.998049	-26.998188	26.998974	0.056202

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000213	-0.000014	-0.000163	0.000947
Final measured gains:	1.000003	0.999999	0.999998	1.000003

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000142	-0.000085	-0.000196	0.000978
Final measured offsets stdev:	0.000158	0.000080	0.000060	0.000079
Final measured gains mean:	0.999999	0.999993	0.999990	1.000002
Final measured gains stdev:	0.000007	0.000010	0.000010	0.000003

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
-1.000116	1.005562	-1.009762	-1.010583	0.997546	-0.004070
-26.998144	26.999492	-26.819191	-26.828505	26.988930	0.045371

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.005603	-0.016901	-0.017395	0.000000
Initial measured gains:	0.999842	0.992746	0.993072	0.999902
Gain corrections:	0.999842	1.007307	1.006976	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	0.997563
27.000000	26.990887

Measured offset: -0.002180
Measured gain: 0.999743
Gain correction: 1.000257

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000192	1.000236	-1.000262	-1.000222	1.000518	0.040186
-26.998047	26.998019	-26.998192	-26.997820	26.997986	0.079026

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000047	-0.000067	-0.000040	0.000294
Final measured gains:	0.999997	1.000003	0.999990	0.999988

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000066	-0.000126	-0.000319	0.000219
Final measured offsets stdev:	0.000197	0.000043	0.000167	0.000178
Final measured gains mean:	0.999992	0.999996	0.999986	0.999992
Final measured gains stdev:	0.000008	0.000006	0.000004	0.000007

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____