Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0007
2025-12-08 17:06:11

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
-1.000809	1.000444	-1.010130	-1.011148	0.999613	-0.034043
-27.001155	26.995070	-26.817623	-26.830450	27.045549	0.050504

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.000145	-0.016744	-0.017308	0.000000
Initial measured gains:	0.999780	0.992583	0.993037	1.001974
Gain corrections:	0.999780	1.007473	1.007012	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	0.999197
27.000000	27.044224

Measured offset: -0.002535
Measured gain: 1.001732
Gain correction: 0.998271

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000865	1.000475	-1.001106	-1.001268	1.000567	-0.038898
-27.000924	27.000286	-27.002031	-27.002203	26.999949	-0.000389

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000380	-0.000207	-0.000369	0.000108
Final measured gains:	0.999990	1.000033	1.000034	0.999983

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000352	-0.000199	-0.000227	0.000303
Final measured offsets stdev:	0.000094	0.000094	0.000104	0.000257
Final measured gains mean:	0.999989	1.000030	1.000028	0.999986
Final measured gains stdev:	0.000004	0.000005	0.000007	0.000009

Saving channel 1 calibration constants to qspi

lab{2}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999843	1.002529	-1.009096	-1.007820	0.993901	-0.049788
-27.000751	26.985632	-26.796444	-26.816216	26.992136	0.046434

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003370	-0.017465	-0.015380	0.000000
Initial measured gains:	0.999315	0.991786	0.992596	1.000582
Gain corrections:	0.999315	1.008282	1.007459	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	0.993857
27.000000	26.991264

Measured offset: -0.006043
Measured gain: 0.999900
Gain correction: 1.000100

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000212	1.000576	-1.000225	-1.000288	1.000803	-0.042705
-27.000616	27.000350	-27.001652	-27.001640	26.999811	-0.003796

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000388	0.000027	-0.000039	0.000256
Final measured gains:	0.999976	1.000039	1.000036	0.999971

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000169	-0.000095	-0.000192	0.000329
Final measured offsets stdev:	0.000187	0.000120	0.000147	0.000225
Final measured gains mean:	0.999979	1.000039	1.000031	0.999986
Final measured gains stdev:	0.000003	0.000006	0.000011	0.000011

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
-1.000203	1.001302	-1.009425	-1.010257	1.000200	-0.052669
-27.000954	26.996328	-26.807550	-26.820940	27.021471	0.055081

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001320	-0.017017	-0.017366	0.000000
Initial measured gains:	0.999780	0.992207	0.992690	1.001010
Gain corrections:	0.999780	1.007854	1.007364	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	1.000178
27.000000	27.020420

Measured offset: -0.000601
Measured gain: 1.000779
Gain correction: 0.999222

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000006	1.000504	-1.000441	-1.000308	1.000617	-0.035163
-27.000454	27.000228	-27.001768	-27.001812	27.000689	0.005789

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000526	-0.000402	-0.000262	0.000099
Final measured gains:	0.999972	1.000034	1.000041	1.000013

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000255	-0.000203	-0.000099	0.000387
Final measured offsets stdev:	0.000162	0.000200	0.000177	0.000267
Final measured gains mean:	0.999975	1.000033	1.000033	0.999999
Final measured gains stdev:	0.000004	0.000005	0.000006	0.000015

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
-1.000441	1.001957	-1.010101	-1.008841	0.994899	-0.043631
-27.001195	26.988346	-26.801600	-26.802172	26.986961	0.048581

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002069	-0.017712	-0.016382	0.000000
Initial measured gains:	0.999447	0.991952	0.992022	1.000218
Gain corrections:	0.999447	1.008113	1.008042	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	0.994581
27.000000	26.985645

Measured offset: -0.005076
Measured gain: 0.999656
Gain correction: 1.000344

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000518	1.000533	-1.000826	-1.000666	1.000726	-0.038878
-27.001025	27.000327	-27.002102	-27.001802	27.000902	0.002228

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000042	-0.000278	-0.000123	0.000179
Final measured gains:	0.999973	1.000030	1.000024	1.000015

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000020	-0.000232	-0.000130	0.000127
Final measured offsets stdev:	0.000062	0.000065	0.000124	0.000211
Final measured gains mean:	0.999976	1.000031	1.000029	0.999997
Final measured gains stdev:	0.000003	0.000006	0.000009	0.000012

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____