Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0007
2025-12-18 12:20:02

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
-1.001060	1.000515	-1.010191	-1.011348	0.999487	-0.035872
-27.001287	26.993937	-26.815956	-26.827667	27.042946	0.053380

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	0.000283	-0.016618	-0.017368	0.000000
Initial measured gains:	0.999738	0.992521	0.992927	1.001925
Gain corrections:	0.999738	1.007536	1.007124	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	0.998550
27.000000	27.041931

Measured offset: -0.003119
Measured gain: 1.001669
Gain correction: 0.998334

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000729	1.000571	-1.001011	-1.001021	1.000852	-0.043125
-27.001060	27.000306	-27.002106	-27.002010	27.000145	0.005058

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000135	-0.000253	-0.000267	0.000299
Final measured gains:	0.999977	1.000029	1.000025	0.999983

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000369	-0.000093	-0.000044	0.000332
Final measured offsets stdev:	0.000346	0.000138	0.000131	0.000224
Final measured gains mean:	0.999986	1.000037	1.000036	0.999989
Final measured gains stdev:	0.000012	0.000008	0.000007	0.000006

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
-0.999775	1.002200	-1.008758	-1.007527	0.993407	-0.048053
-27.000680	26.983525	-26.794132	-26.813158	26.987453	0.050972

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003178	-0.017270	-0.015261	0.000000
Initial measured gains:	0.999247	0.991711	0.992490	1.000490
Gain corrections:	0.999247	1.008359	1.007567	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	0.993479
27.000000	26.986885

Measured offset: -0.006268
Measured gain: 0.999746
Gain correction: 1.000254

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999790	1.000396	-1.000130	-1.000107	1.000134	-0.036327
-27.000573	27.000262	-27.001869	-27.001801	26.999832	0.000610

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000641	-0.000304	-0.000282	-0.000255
Final measured gains:	0.999965	1.000037	1.000035	0.999994

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000339	-0.000266	-0.000166	0.000025
Final measured offsets stdev:	0.000190	0.000076	0.000107	0.000370
Final measured gains mean:	0.999974	1.000036	1.000037	1.000000
Final measured gains stdev:	0.000006	0.000006	0.000005	0.000009

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
-0.999890	1.000702	-1.009125	-1.009871	0.999438	-0.057174
-27.000794	26.994759	-26.805950	-26.818010	27.017355	0.050003

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001075	-0.017082	-0.017393	0.000000
Initial measured gains:	0.999737	0.992151	0.992586	1.000918
Gain corrections:	0.999737	1.007911	1.007469	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	0.999476
27.000000	27.016621

Measured offset: -0.001183
Measured gain: 1.000659
Gain correction: 0.999341

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999992	1.000569	-1.000271	-1.000308	1.000803	-0.043792
-27.000728	27.000327	-27.001892	-27.001873	27.000486	0.003569

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000614	-0.000245	-0.000284	0.000237
Final measured gains:	0.999962	1.000034	1.000032	0.999997

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000499	-0.000211	-0.000223	-0.000020
Final measured offsets stdev:	0.000134	0.000180	0.000140	0.000228
Final measured gains mean:	0.999970	1.000040	1.000032	0.999995
Final measured gains stdev:	0.000005	0.000005	0.000003	0.000011

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
-0.999900	1.001233	-1.009559	-1.008276	0.993841	-0.045961
-27.000986	26.987375	-26.800529	-26.800236	26.982258	0.053930

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001907	-0.017739	-0.016418	0.000000
Initial measured gains:	0.999425	0.991919	0.991957	1.000088
Gain corrections:	0.999425	1.008147	1.008108	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	0.994148
27.000000	26.980976

Measured offset: -0.005346
Measured gain: 0.999493
Gain correction: 1.000507

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000016	1.000400	-1.000162	-1.000253	0.999745	-0.031576
-27.000602	27.000212	-27.001907	-27.001667	26.999598	0.008499

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000414	-0.000101	-0.000206	-0.000656
Final measured gains:	0.999970	1.000045	1.000032	1.000002

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.180453	-1.938363	-3.498652	-0.000423
Final measured offsets stdev:	0.360057	3.876221	6.996811	0.000263
Final measured gains mean:	0.999963	0.928254	0.870461	0.800006
Final measured gains stdev:	0.000011	0.143575	0.259147	0.400003

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____