Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0011
2025-11-25 10:09:20

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{3}Chan1
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001374	1.004972	-1.011216	-1.009861	0.999619	0.031327
-27.000595	26.996851	-26.809313	-26.828579	27.005907	0.033893

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003880	-0.017588	-0.015439	0.000000
Initial measured gains:	0.999718	0.992264	0.993057	1.000554
Gain corrections:	0.999718	1.007796	1.006991	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	0.998199
27.000000	27.005228

Measured offset: -0.002071
Measured gain: 1.000270
Gain correction: 0.999730

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.001116	1.001236	-1.001346	-1.001333	1.001187	0.036564
-27.000506	27.000480	-27.000549	-27.000301	27.000284	0.027979

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000125	-0.000237	-0.000234	-0.000044
Final measured gains:	0.999994	0.999993	0.999984	0.999994

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000048	-0.000227	-0.000234	-0.000158
Final measured offsets stdev:	0.000101	0.000121	0.000218	0.000113
Final measured gains mean:	0.999976	0.999977	0.999975	1.000013
Final measured gains stdev:	0.000013	0.000012	0.000007	0.000013

Saving channel 1 calibration constants to qspi

lab{3}Chan2
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000613	1.003727	-1.010143	-1.011388	0.998528	0.053890
-27.000559	26.998913	-26.823658	-26.809742	27.040314	0.012834

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003297	-0.016705	-0.018533	0.000000
Initial measured gains:	0.999817	0.992830	0.992246	1.001793
Gain corrections:	0.999817	1.007222	1.007814	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	0.998034
27.000000	27.039375

Measured offset: -0.003556
Measured gain: 1.001590
Gain correction: 0.998412

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000668	1.000534	-1.001015	-1.000944	1.000342	0.043472
-27.000456	27.000053	-27.000362	-27.000381	27.000338	0.017371

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000124	-0.000364	-0.000290	-0.000210
Final measured gains:	0.999990	0.999983	0.999987	1.000018

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000062	-0.000279	-0.000273	0.000298
Final measured offsets stdev:	0.000106	0.000155	0.000079	0.000260
Final measured gains mean:	0.999981	0.999979	0.999982	0.999999
Final measured gains stdev:	0.000012	0.000009	0.000008	0.000018

Saving channel 2 calibration constants to qspi

lab{3}Chan3
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999996	1.003393	-1.009810	-1.009477	1.000962	0.031417
-27.000131	26.996460	-26.817993	-26.814861	27.027155	0.057285

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.003669	-0.017197	-0.016971	0.000000
Initial measured gains:	0.999728	0.992617	0.992510	1.001274
Gain corrections:	0.999728	1.007438	1.007547	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	1.001307
27.000000	27.027119

Measured offset: 0.000315
Measured gain: 1.000993
Gain correction: 0.999008

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999922	0.999858	-1.000093	-0.999971	1.000151	0.040691
-27.000089	26.999515	-26.999725	-26.999775	27.000244	0.025567

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000045	-0.000191	-0.000062	0.000276
Final measured gains:	0.999980	0.999979	0.999986	1.000017

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000036	-0.000138	-0.000159	0.000111
Final measured offsets stdev:	0.000300	0.000145	0.000147	0.000165
Final measured gains mean:	0.999991	0.999988	0.999988	1.000015
Final measured gains stdev:	0.000011	0.000009	0.000008	0.000012

Saving channel 3 calibration constants to qspi

lab{3}Chan4
Burden resistor = 33.3333

Measuring initial gains and offsets

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999875	1.004459	-1.012083	-1.009559	0.999794	0.058046
-27.000096	27.003211	-26.812435	-26.802048	27.046684	0.053446

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004641	-0.019894	-0.017674	0.000000
Initial measured gains:	0.999944	0.992313	0.992010	1.001852
Gain corrections:	0.999944	1.007747	1.008054	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	0.999970
27.000000	27.046585

Measured offset: -0.001823
Measured gain: 1.001793
Gain correction: 0.998210

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999953	0.999803	-1.000263	-1.000057	0.999893	0.043370
-27.000249	26.999460	-26.999857	-26.999668	26.999773	0.059493

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000125	-0.000337	-0.000130	0.000081
Final measured gains:	0.999975	0.999973	0.999974	1.000009

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000028	-0.000244	-0.000167	-0.000195
Final measured offsets stdev:	0.000163	0.000120	0.000089	0.000406
Final measured gains mean:	0.999986	0.999979	0.999981	1.000013
Final measured gains stdev:	0.000017	0.000009	0.000012	0.000012

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____