Report of Calibration
PSC 4CH-MSF-AR-Fast XY Corr_S/N 0028
2025-09-25 16:21:15

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
-1.000138	1.001134	-1.010341	-1.008150	0.999251	0.050422
-26.997951	27.001296	-26.815813	-26.815113	27.005901	0.091734

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.000906	-0.017602	-0.015354	0.000000
Initial measured gains:	1.000090	0.992602	0.992659	1.000250
Gain corrections:	1.000090	1.007453	1.007395	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	0.999065
27.000000	27.007788

Measured offset: -0.001270
Measured gain: 1.000335
Gain correction: 0.999665

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000234	1.000038	-1.000611	-1.000482	1.000085	0.003679
-26.997934	26.997720	-26.998043	-26.997814	26.998320	0.057594

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000196	-0.000387	-0.000263	0.000026
Final measured gains:	0.999999	0.999990	0.999986	1.000021

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	-0.000080	-0.000276	-0.000185	-0.000244
Final measured offsets stdev:	0.000169	0.000141	0.000115	0.000194
Final measured gains mean:	0.999985	0.999988	0.999993	1.000007
Final measured gains stdev:	0.000012	0.000005	0.000006	0.000008

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
-0.999966	1.001767	-1.010628	-1.010319	0.996061	-0.017168
-26.997837	27.007638	-26.826479	-26.824669	27.011339	0.088346

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.001493	-0.017664	-0.017412	0.000000
Initial measured gains:	1.000308	0.992999	0.992941	1.000362
Gain corrections:	1.000308	1.007051	1.007109	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	0.996373
27.000000	27.013483

Measured offset: -0.004285
Measured gain: 1.000658
Gain correction: 0.999342

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999753	1.000015	-0.999990	-0.999912	1.000019	0.026349
-26.997824	26.997737	-26.997597	-26.997637	26.997437	0.093835

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000275	-0.000255	-0.000172	0.000016
Final measured gains:	0.999987	0.999982	0.999987	0.999988

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000028	-0.000156	-0.000129	0.000203
Final measured offsets stdev:	0.000211	0.000105	0.000111	0.000147
Final measured gains mean:	0.999995	0.999988	0.999992	1.000002
Final measured gains stdev:	0.000005	0.000004	0.000006	0.000014

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
-1.000046	1.002862	-1.009876	-1.010082	1.001494	-0.010857
-26.998018	27.007304	-26.820255	-26.814846	27.017294	0.071828

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.002567	-0.017046	-0.017467	0.000000
Initial measured gains:	1.000249	0.992784	0.992568	1.000437
Gain corrections:	1.000249	1.007268	1.007487	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	1.001724
27.000000	27.019762

Measured offset: 0.001030
Measured gain: 1.000694
Gain correction: 0.999307

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-0.999944	0.999924	-1.000186	-1.000190	1.000584	-0.002019
-26.997972	26.997843	-26.998070	-26.997997	26.998173	0.098868

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	0.000015	-0.000248	-0.000255	0.000672
Final measured gains:	0.999996	0.999994	0.999991	0.999987

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000219	-0.000215	-0.000272	0.000940
Final measured offsets stdev:	0.000204	0.000055	0.000086	0.000146
Final measured gains mean:	1.000001	0.999994	0.999990	0.999981
Final measured gains stdev:	0.000009	0.000004	0.000003	0.000007

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
-1.000098	1.004608	-1.010415	-1.009279	0.998446	0.048503
-26.997997	27.011569	-26.833435	-26.813854	26.999071	0.110702

	dacSP	dcct1	dcct2	dacRB
Initial measured offsets:	-0.004161	-0.017044	-0.016618	0.000000
Initial measured gains:	1.000349	0.993273	0.992564	0.999756
Gain corrections:	1.000349	1.006772	1.007492	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	0.998358
27.000000	27.001127

Measured offset: -0.001749
Measured gain: 1.000107
Gain correction: 0.999893

Writing gain and offset constants for dacRB to PSC

Verification

Itest	dacSP	dcct1	dcct2	dacRB	err
-1.000028	1.000035	-1.000359	-1.000359	0.999339	0.040936
-26.997988	26.997784	-26.998032	-26.997946	26.997004	0.108241

	dacSP	dcct1	dcct2	dacRB
Final measured offsets:	-0.000015	-0.000342	-0.000346	-0.000692
Final measured gains:	0.999992	0.999989	0.999986	0.999997

	dacSP	dcct1	dcct2	dacRB
Final measured offsets mean:	0.000234	-0.000167	-0.000171	-0.000525
Final measured offsets stdev:	0.000279	0.000169	0.000186	0.000217
Final measured gains mean:	1.000000	0.999994	0.999993	1.000015
Final measured gains stdev:	0.000013	0.000007	0.000009	0.000013

Saving channel 4 calibration constants to qspi

Test data reviewed by _____ Date_____