12W (ctacf001) Card 3 – Top Out

DIGITAL POWER:

ANALOG POWER:
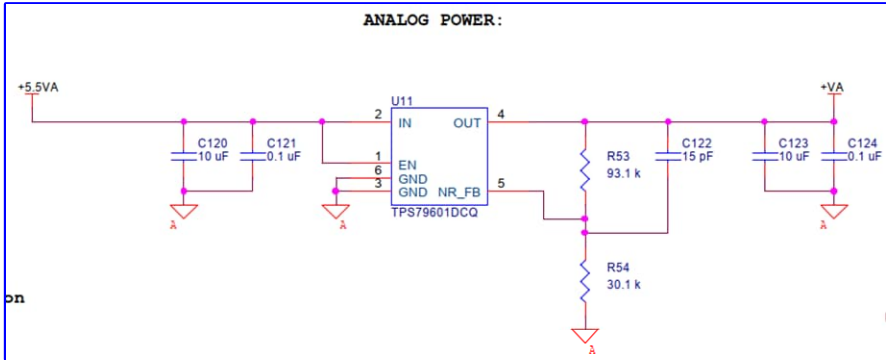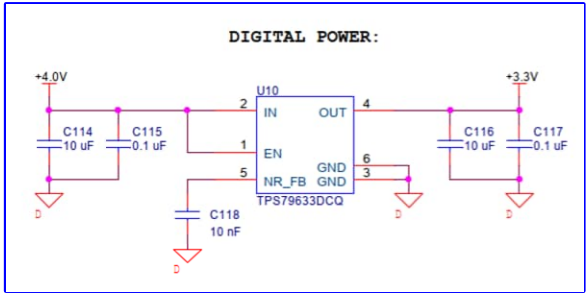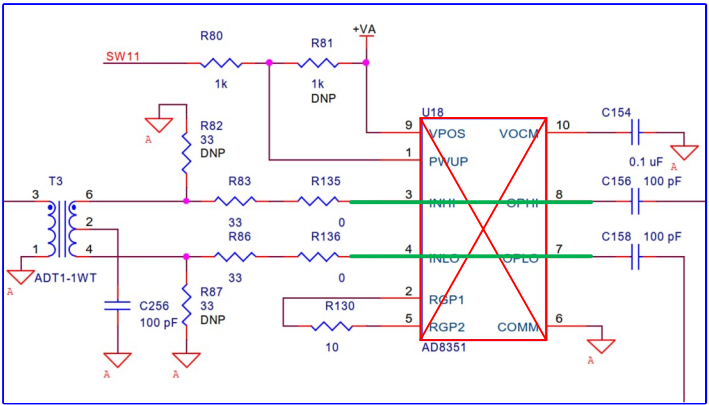
TPS79601: Vref:	Low =	1.2	R1 =		93100	R2 =		30100
	Nom =	1.2246	+1%		94031	+1%		30401
	Hi =	1.25	-1%		92169	-1%		29799

Vout = Vref x (1+R1/R2) = 4.83813
Vref (Low), R1(Low) & R2(Hi):

Vout = Vref x (1+R1/R2) = 4.98661
Vref (Low), R1(Hi) & R2(Low):

Vout = Vref x (1+R1/R2) = 5.039719
Vref (Hi), R1(Low) & R2(Hi):

Vout = Vref x (1+R1/R2) = 5.194386
Vref (Hi), R1(Hi) & R2(Low):

Vout = Vref x (1+R1/R2) = 5.012316
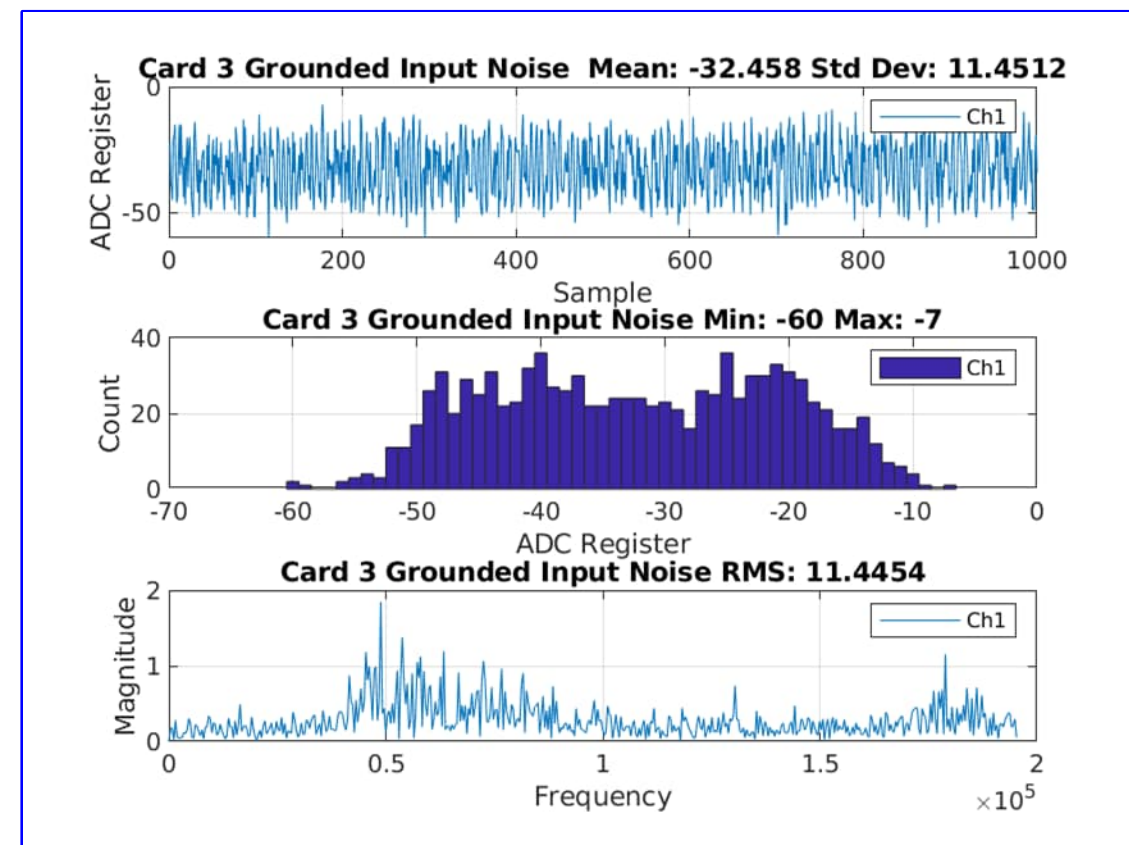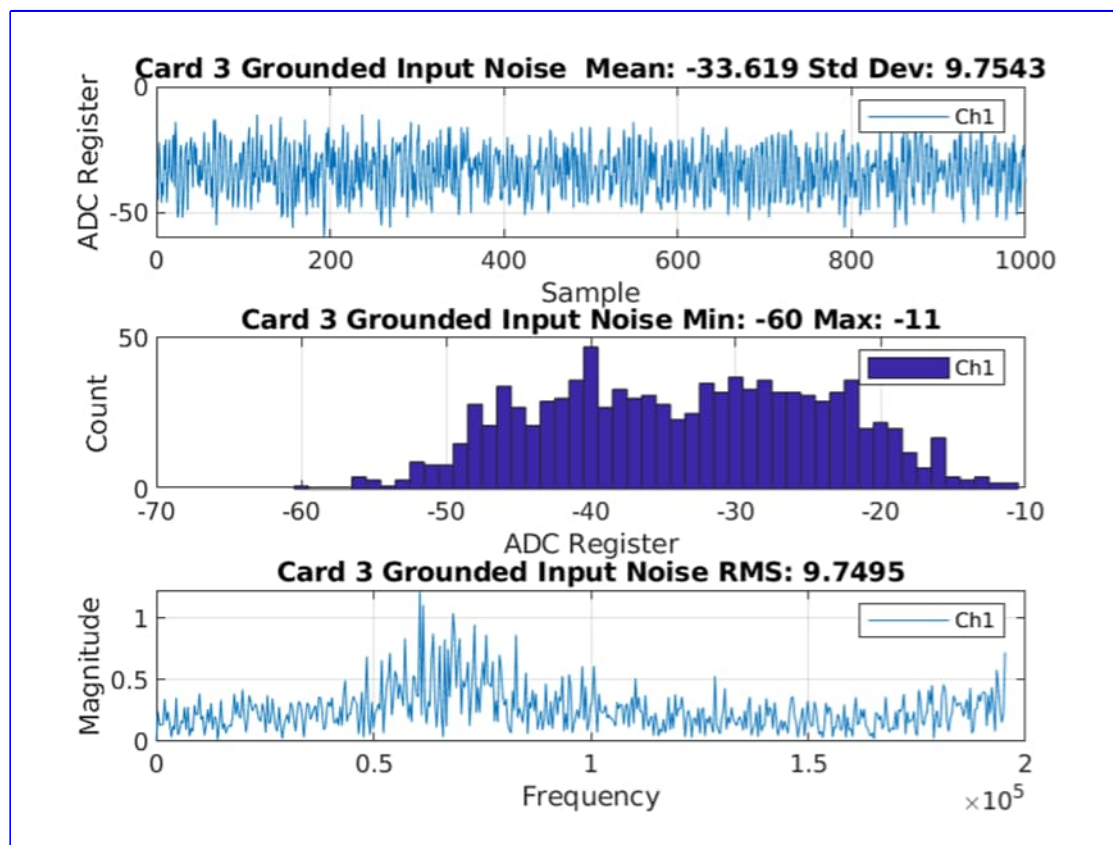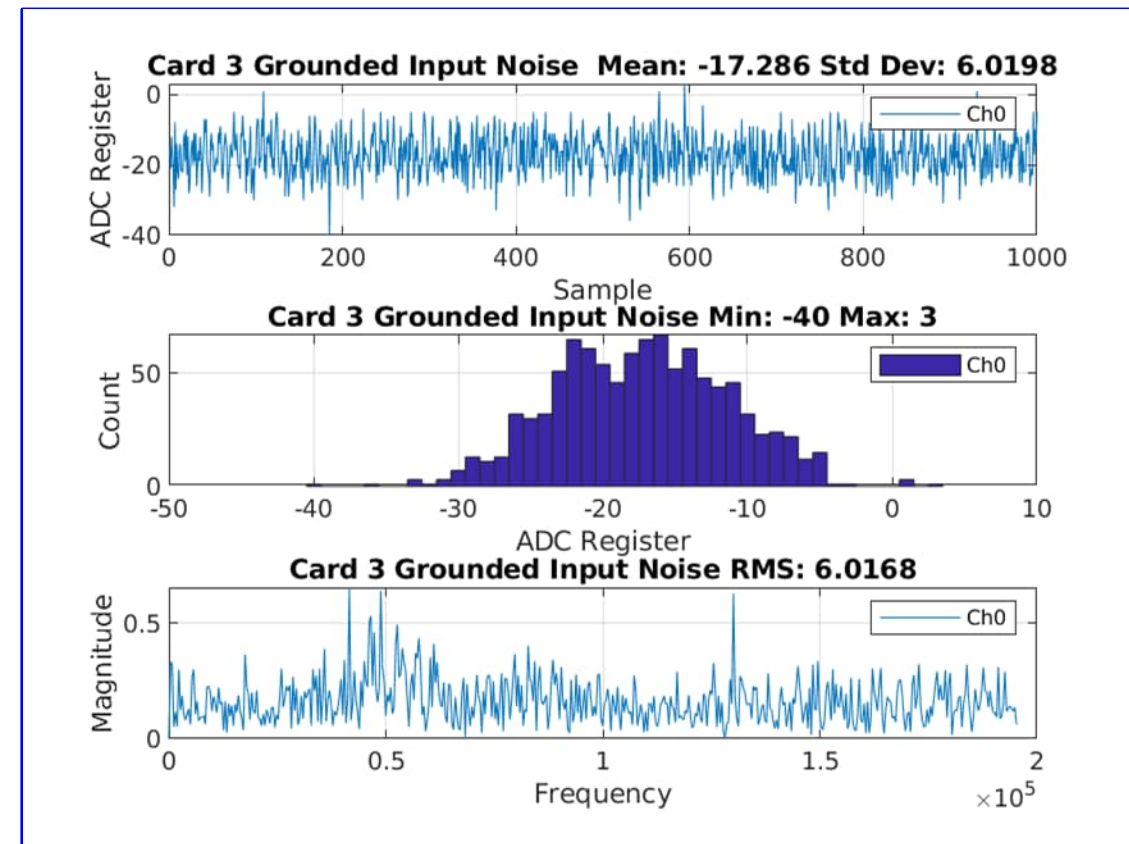Vref (Nom), R1(Nom) & R2(Nom):

TPS79650: Vout = 5.0	
+3%	5.150
-3%	4.850

TPS79633: Vout = 3.3	
+2%	3.366
-2%	3.234

AVDD1 = 3.3V, 1 A
spec, 500 mA design

AVDD2 = 5.0V, 1 A
spec, 150 mA design

AVDD1 = 3.3V, 1 A
spec, 500 mA design

AVDD2 = 5.0V, 1 A
spec, 150 mA design

Before (+Va = 4.935V)

Card 3 Grounded Input Noise Mean: -16.709 Std Dev: 5.8248

Card 3 Grounded Input Noise Min: -34 Max: 1

Card 3 Grounded Input Noise RMS: 5.8219

After (+Va = 5.002V)

Card 3 Grounded Input Noise Mean: -17.286 Std Dev: 6.0198

Card 3 Grounded Input Noise Min: -40 Max: 3

Card 3 Grounded Input Noise RMS: 6.0168

Card 3 Grounded Input Noise Mean: -33.619 Std Dev: 9.7543

Card 3 Grounded Input Noise Min: -60 Max: -11

Card 3 Grounded Input Noise RMS: 9.7495

Card 3 Grounded Input Noise Mean: -32.458 Std Dev: 11.4512

Card 3 Grounded Input Noise Min: -60 Max: -7
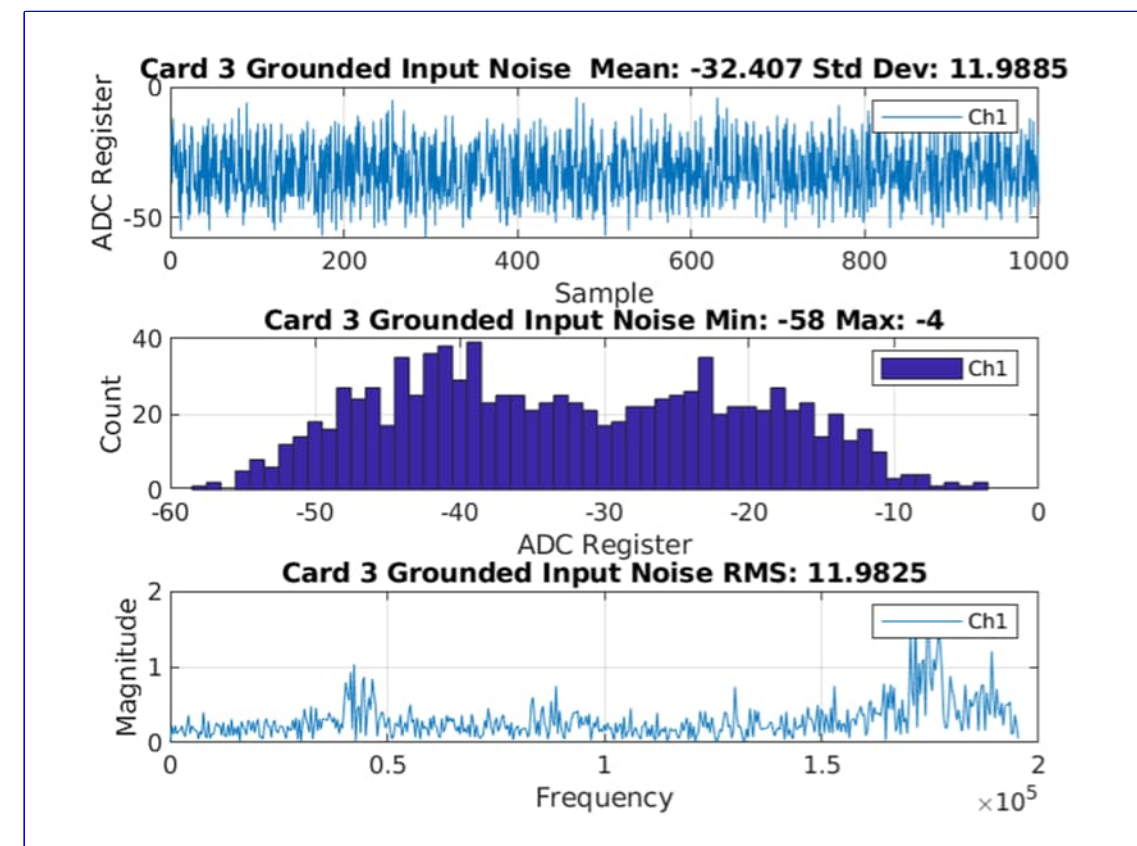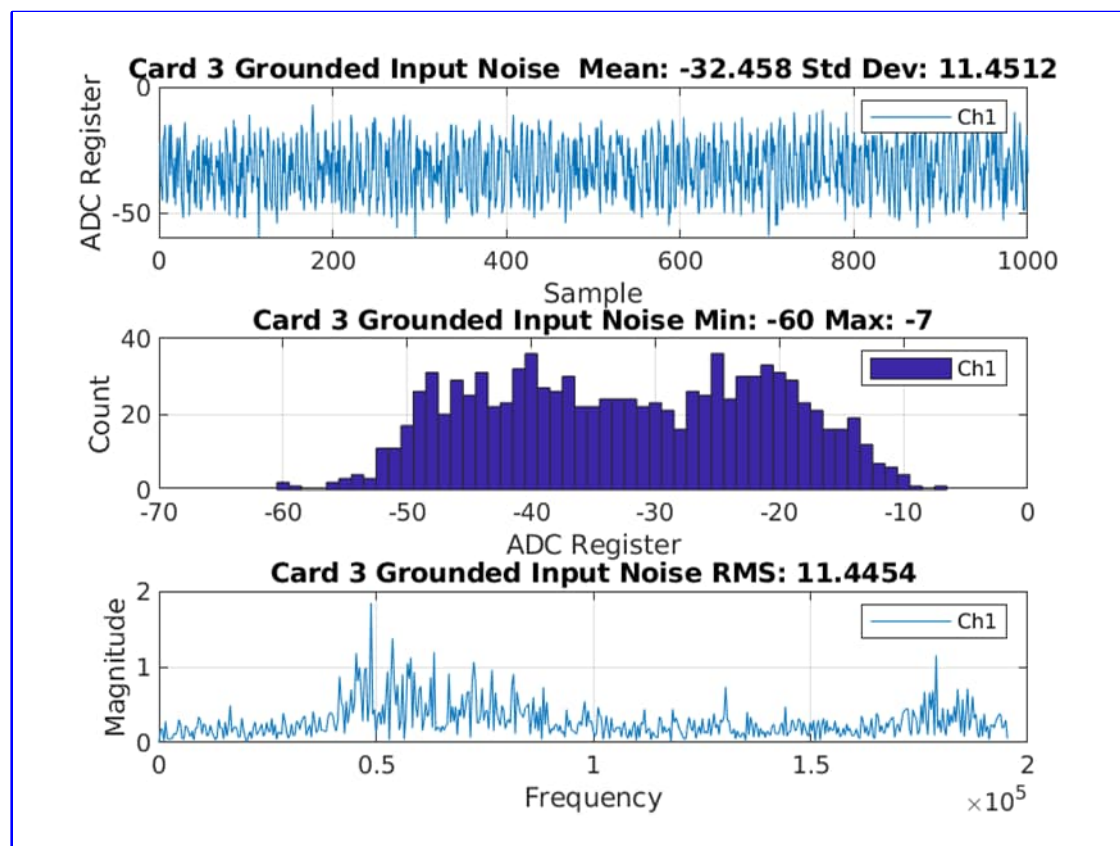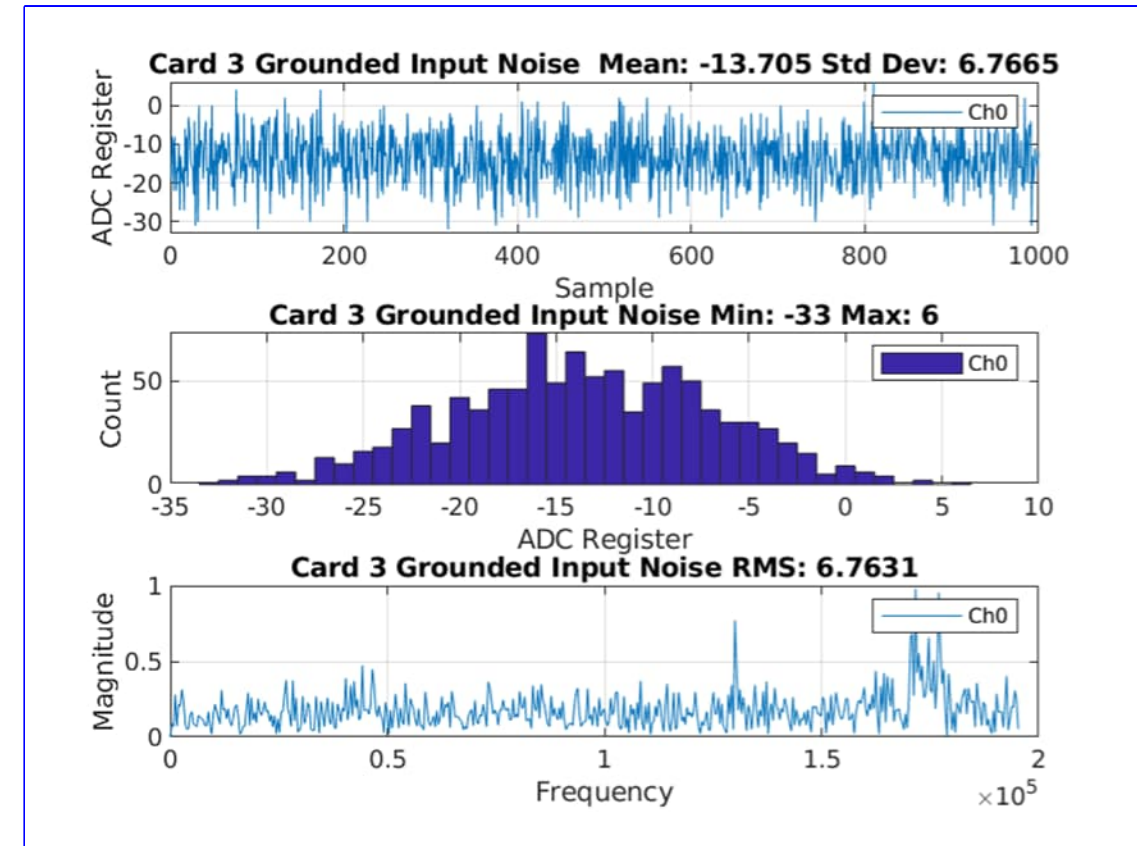
Card 3 Grounded Input Noise RMS: 11.4454

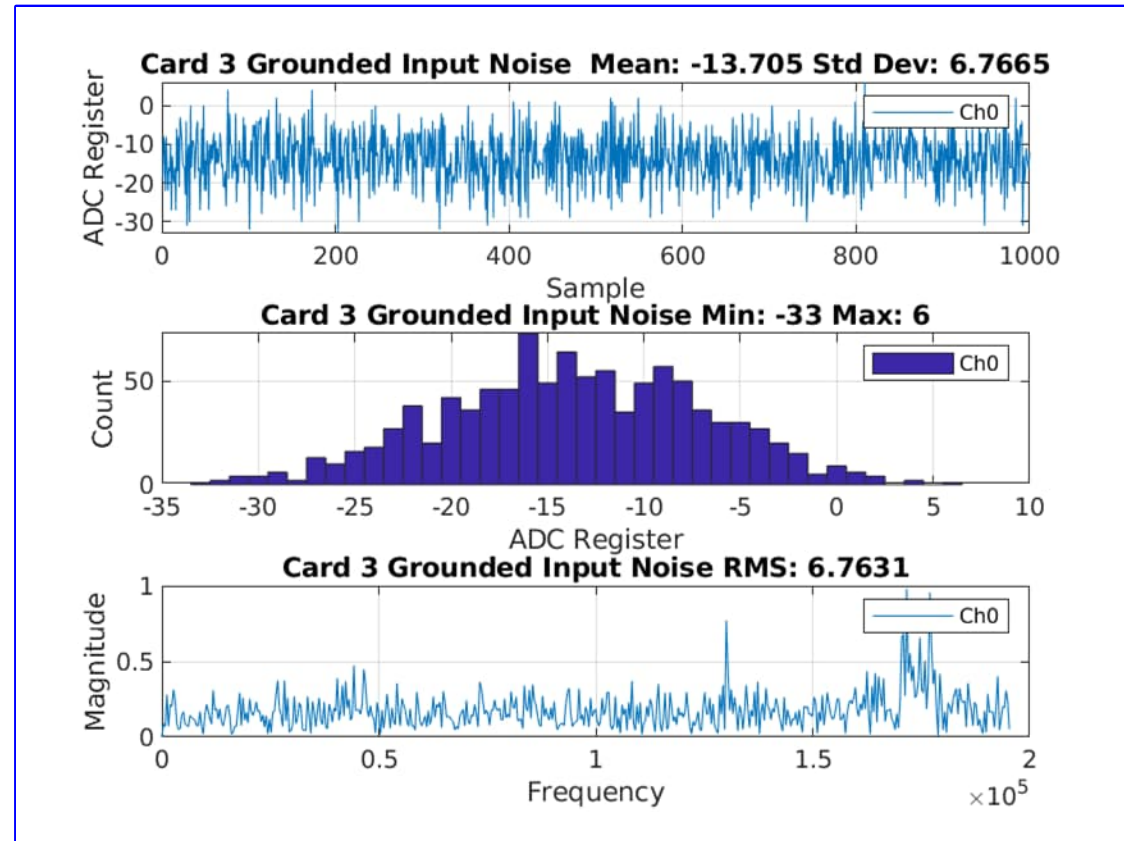+5VA(U11) Regulator Change (No Heatsink)
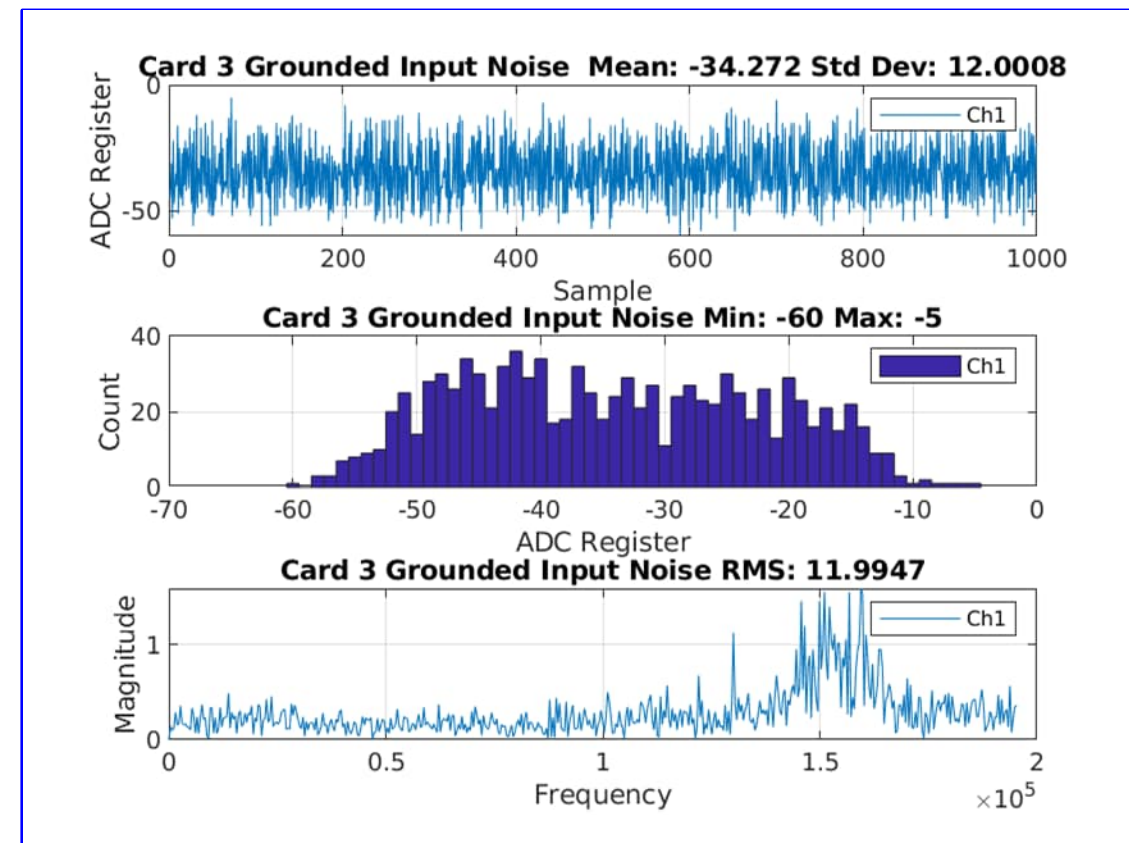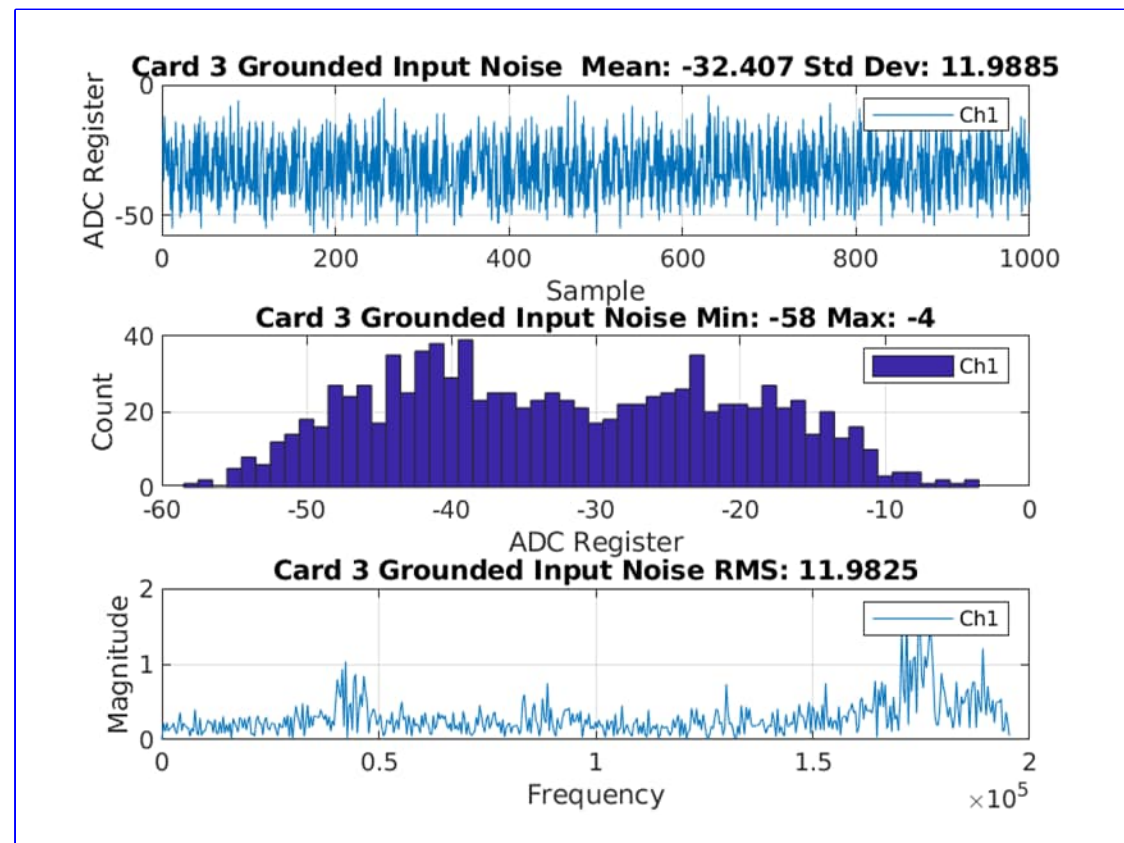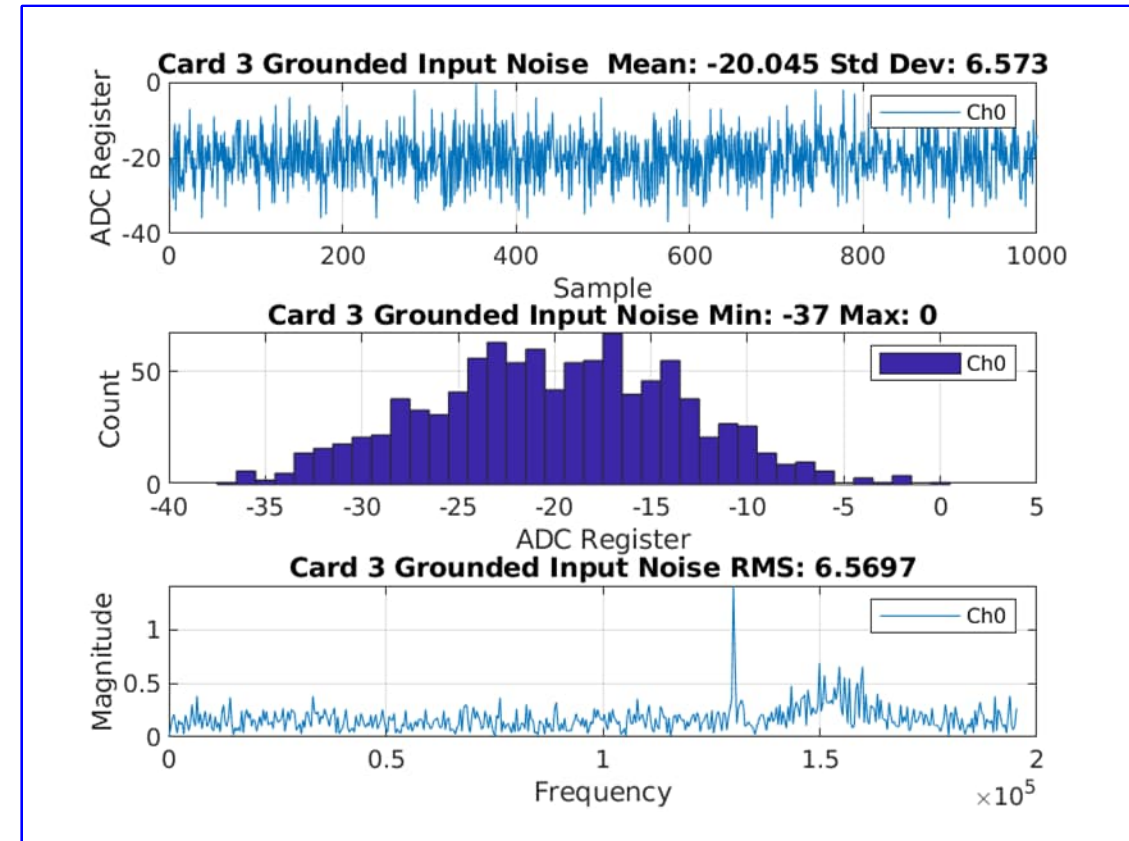
Before (+3.3V = 3.153V)
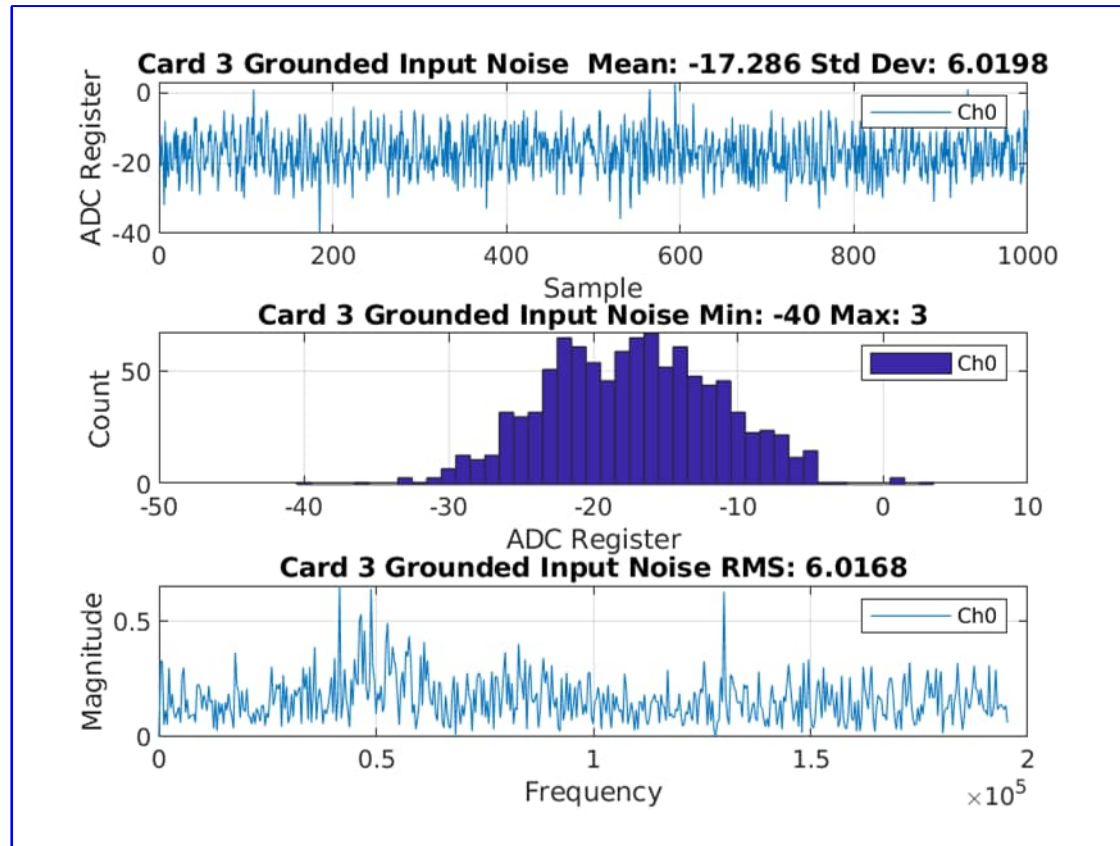
After (+3.3V = 3.309V)

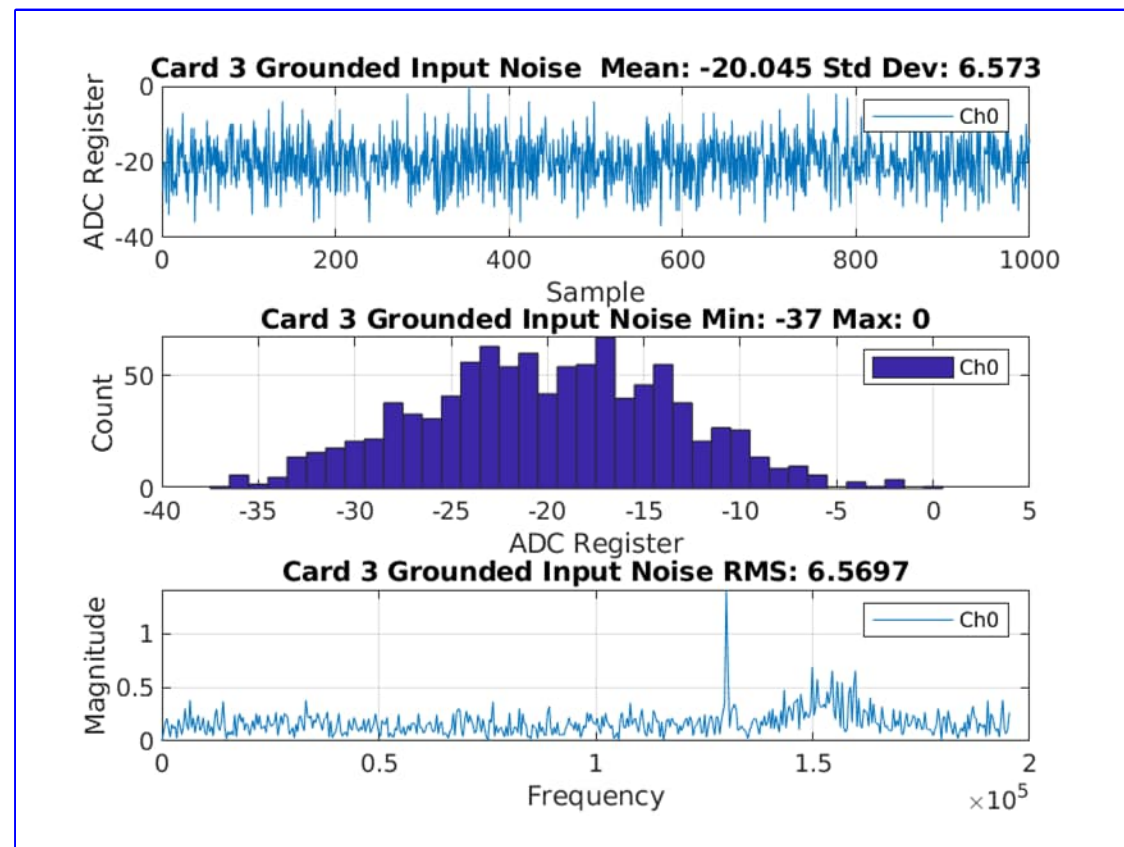+3.3V(U10) Regulator Change (No Heatsink)
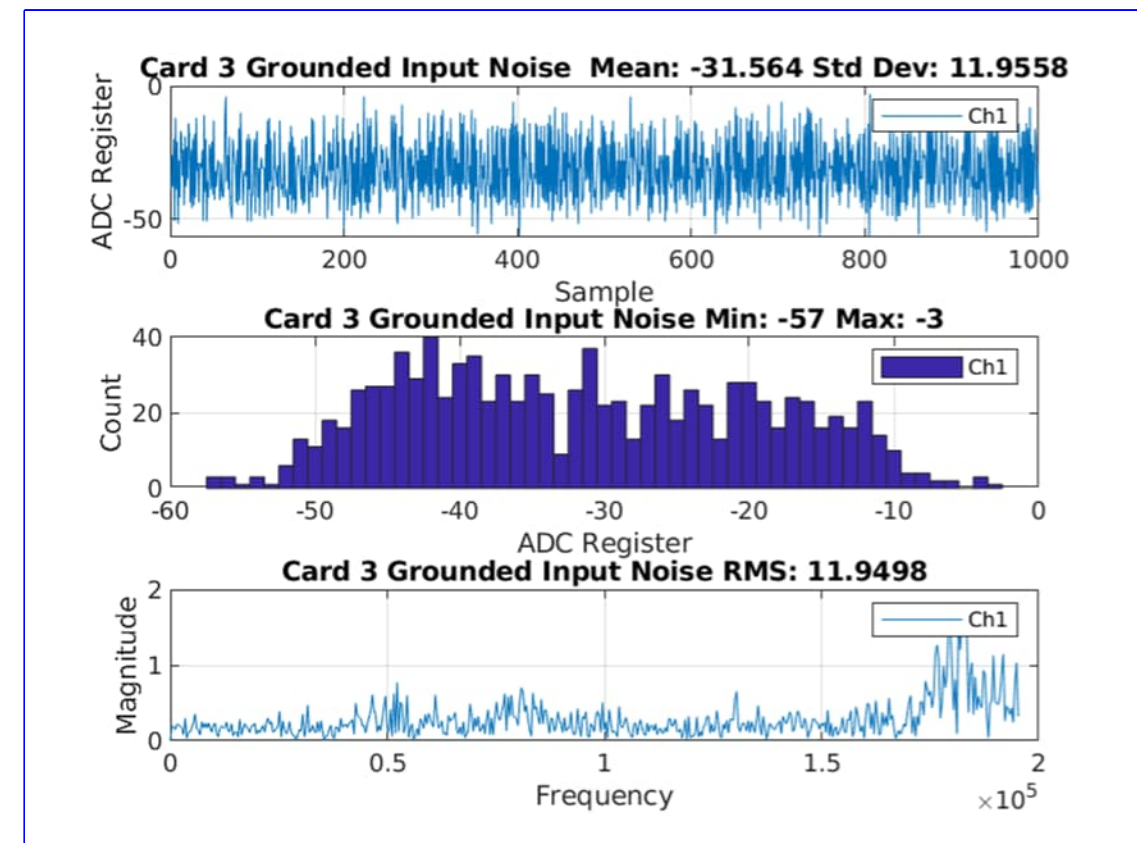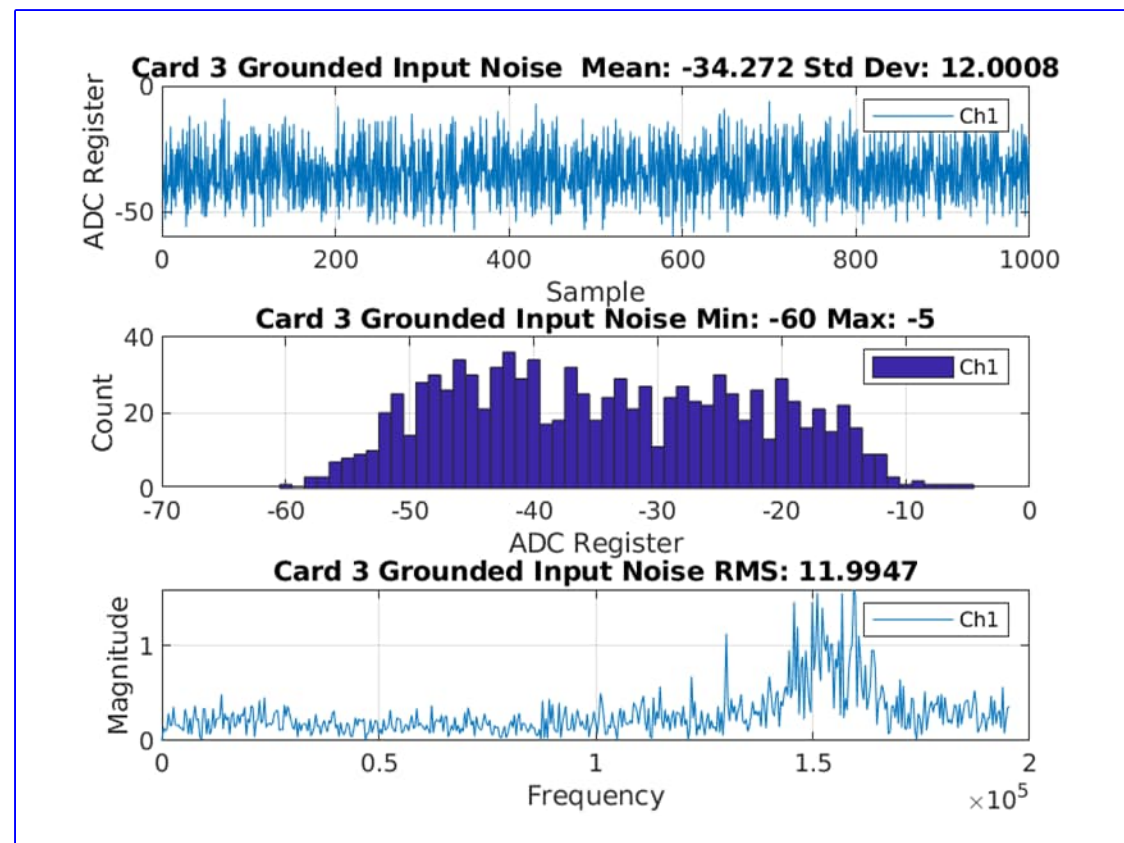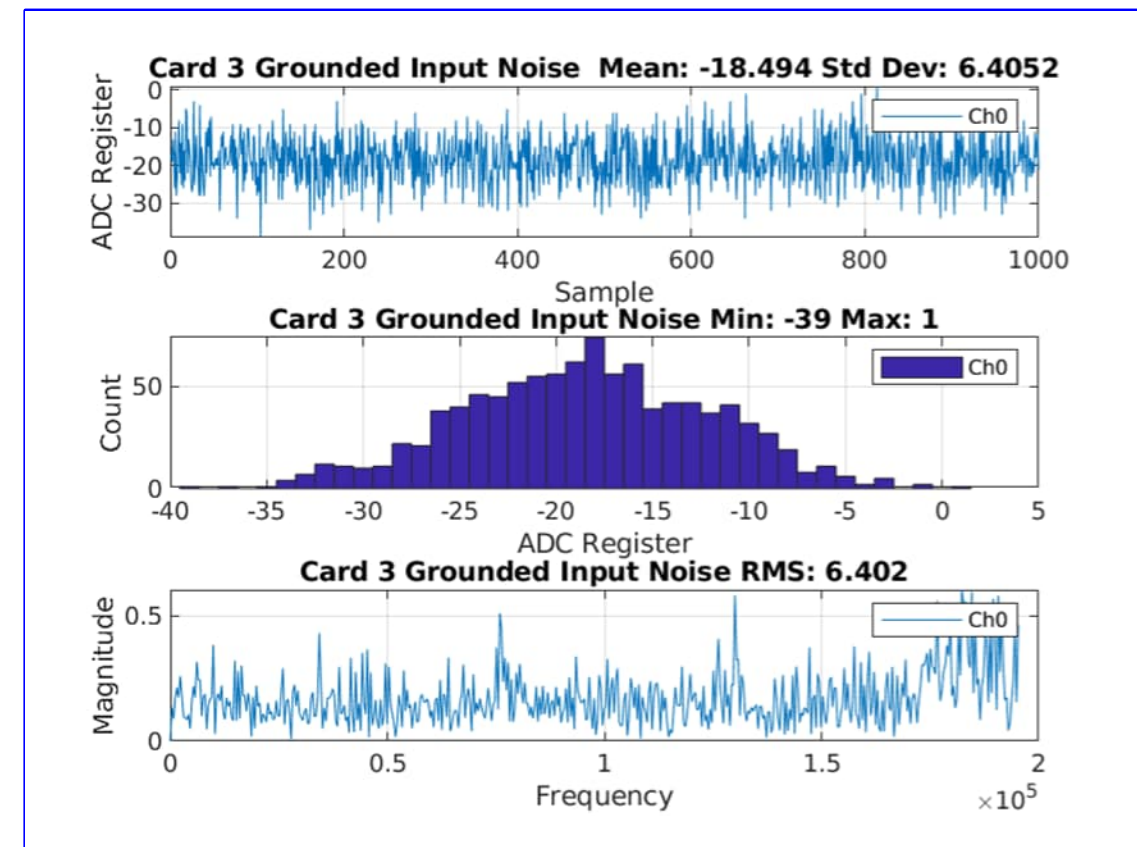
Before (AVDD10 = 3.209V)

After (AVDD10 = 3.313V)

AVDD10(U1) Regulator Change (No Heatsink)
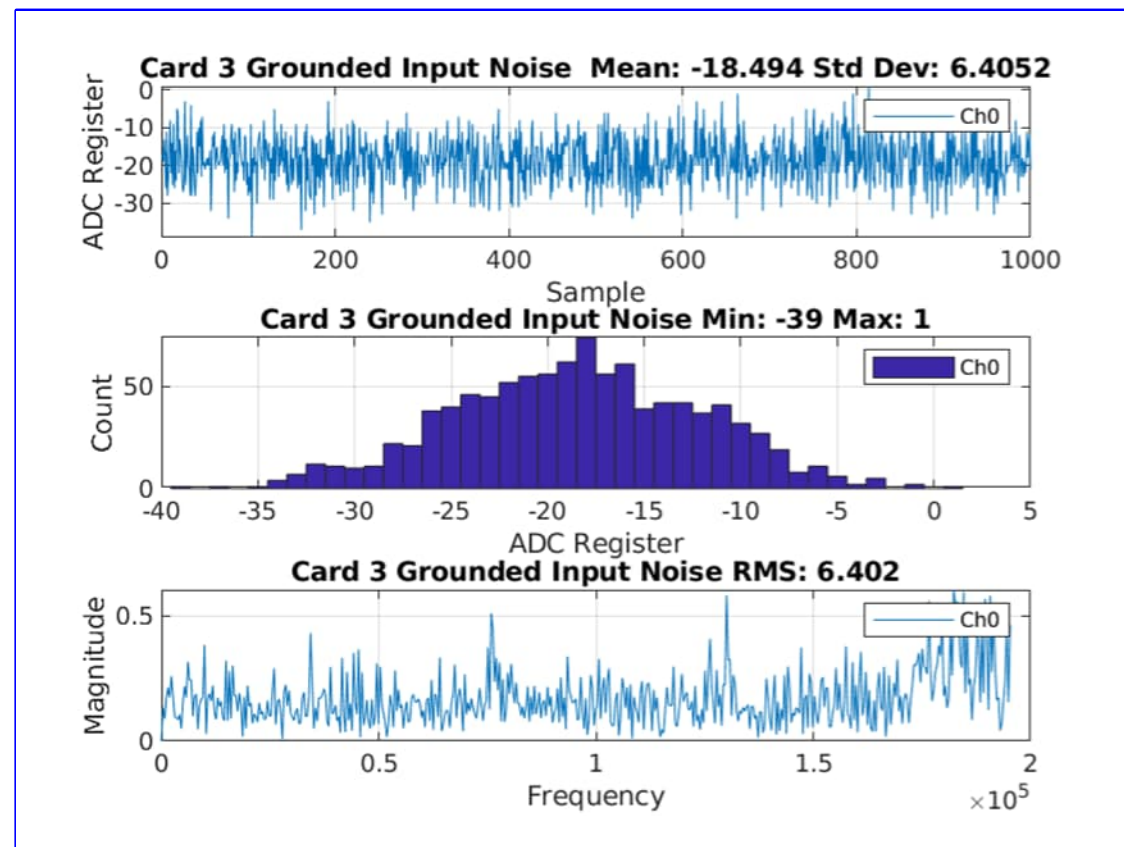
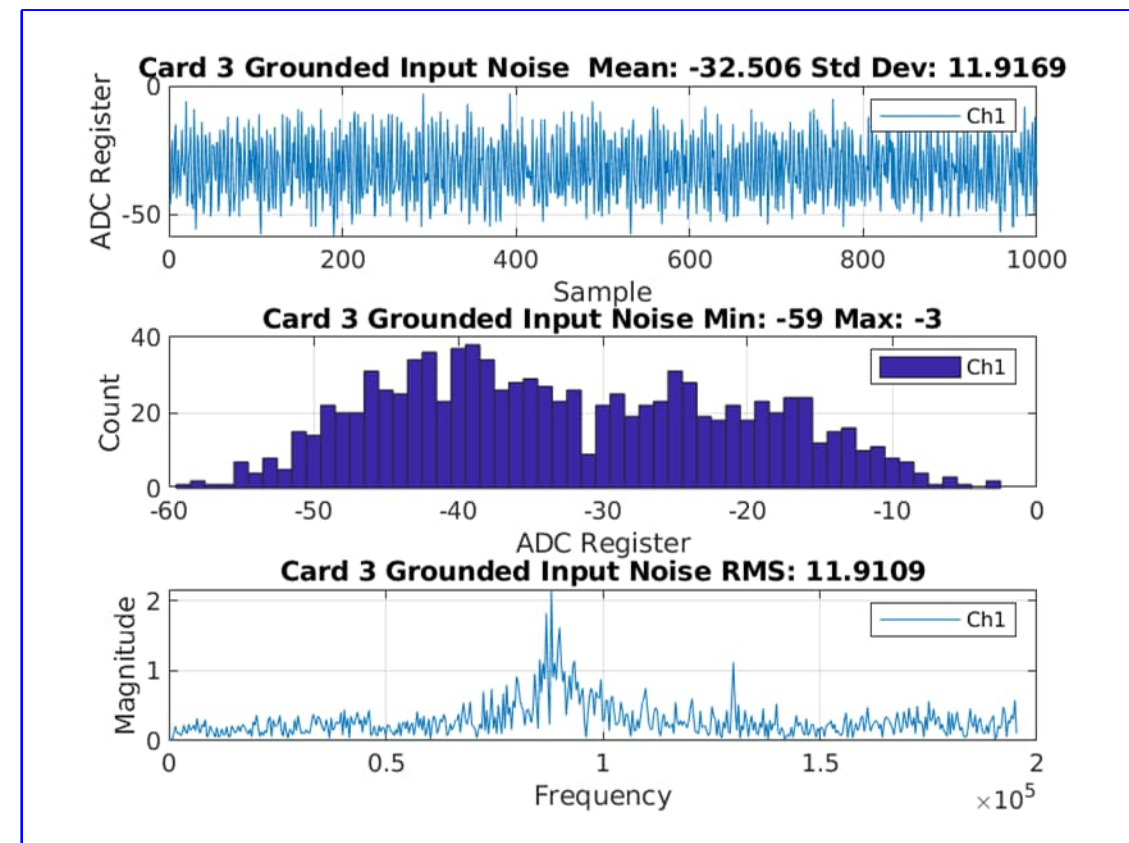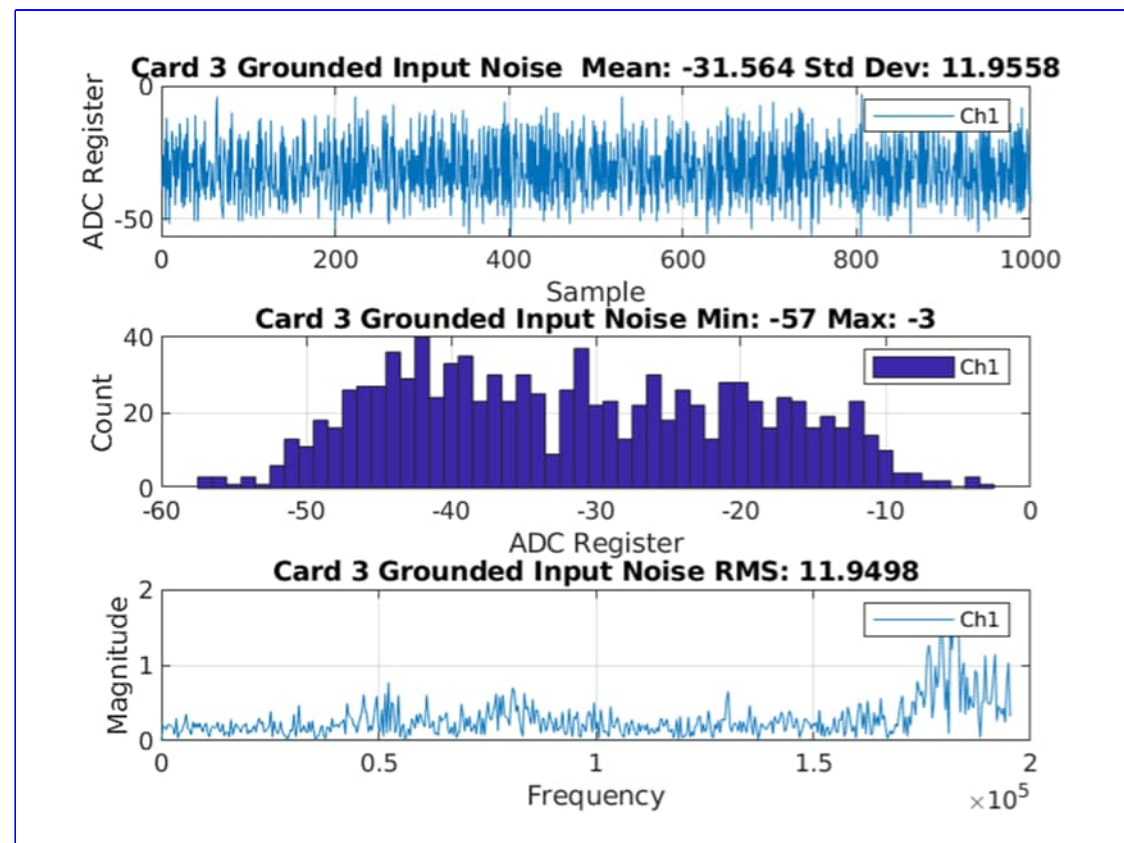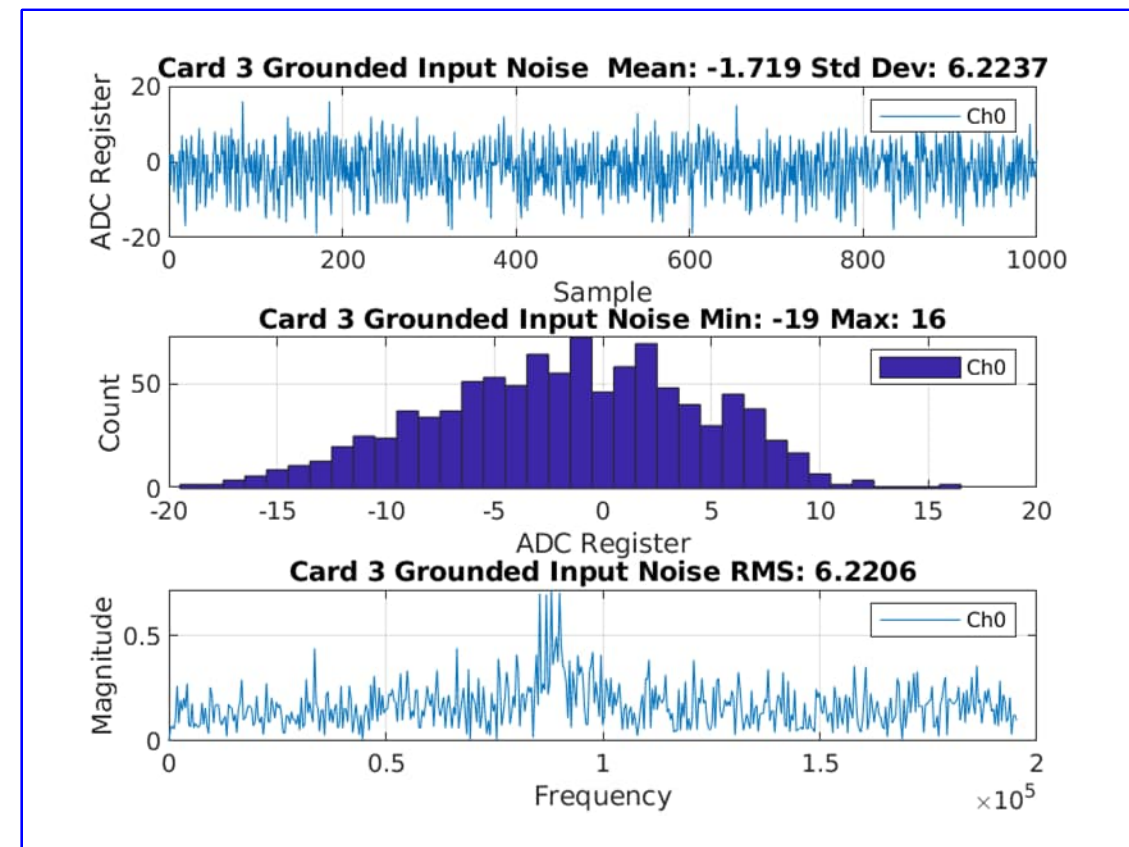## Before (AVDD11 = 3.242V)

After (AVDD11 = 3.316V)

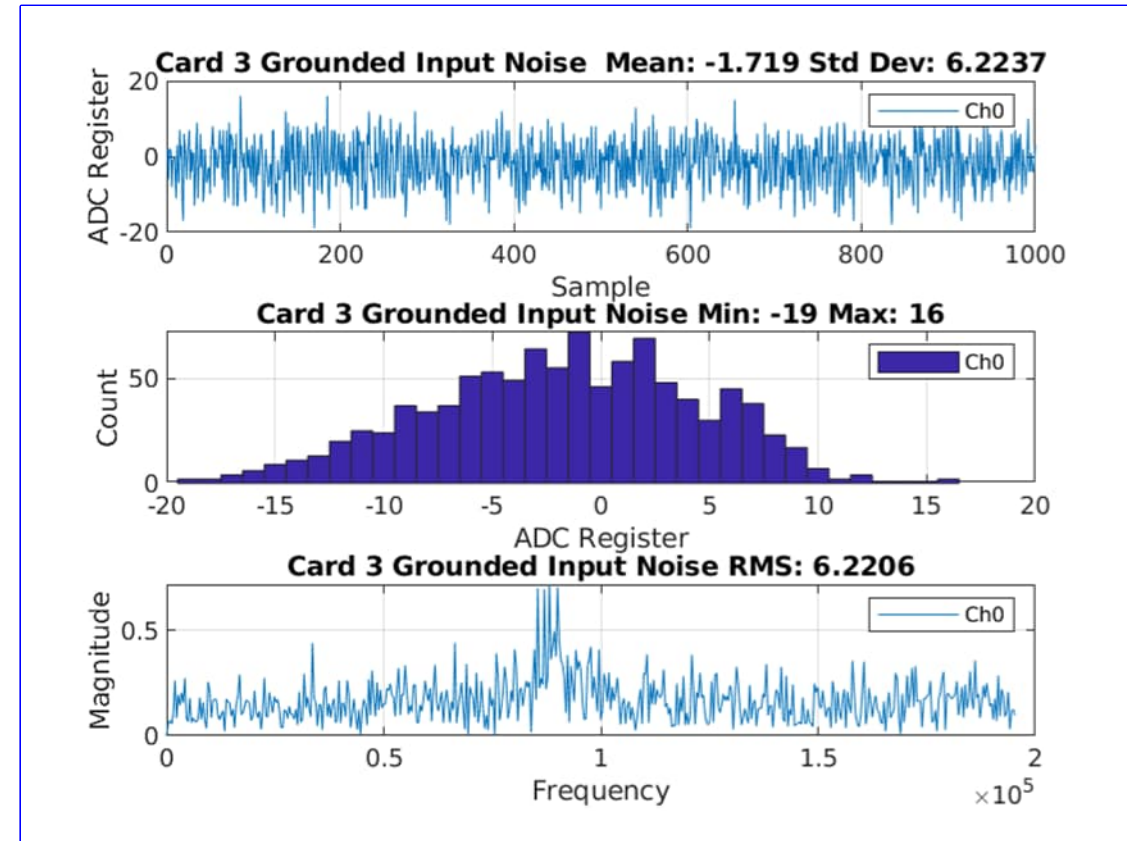AVDD11(U4) Regulator Change (No Heatsink)
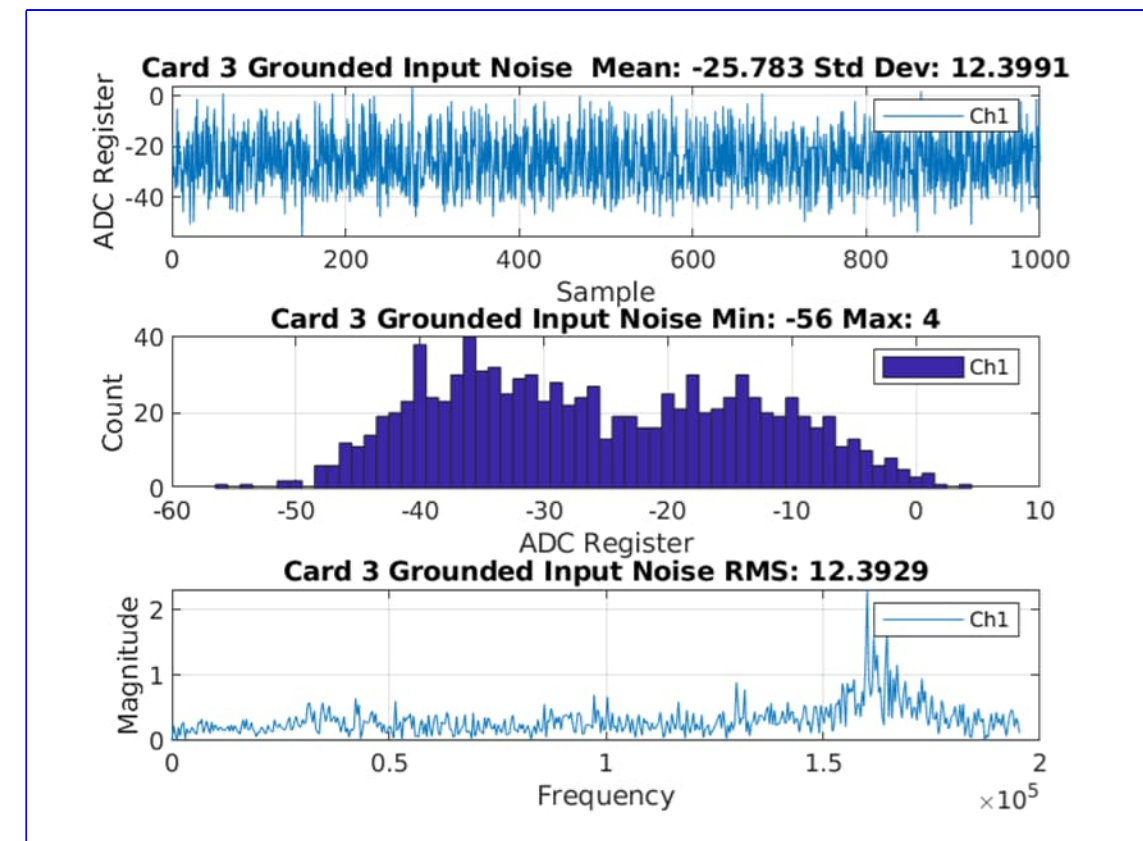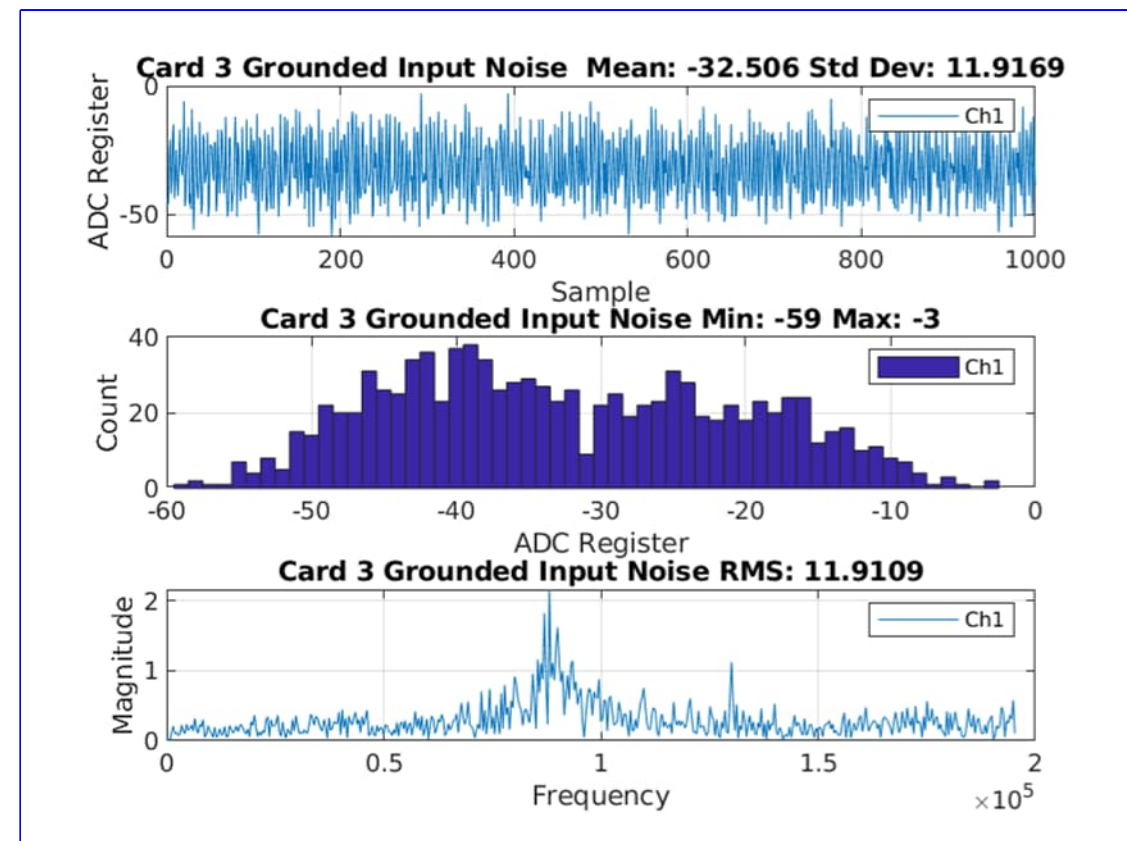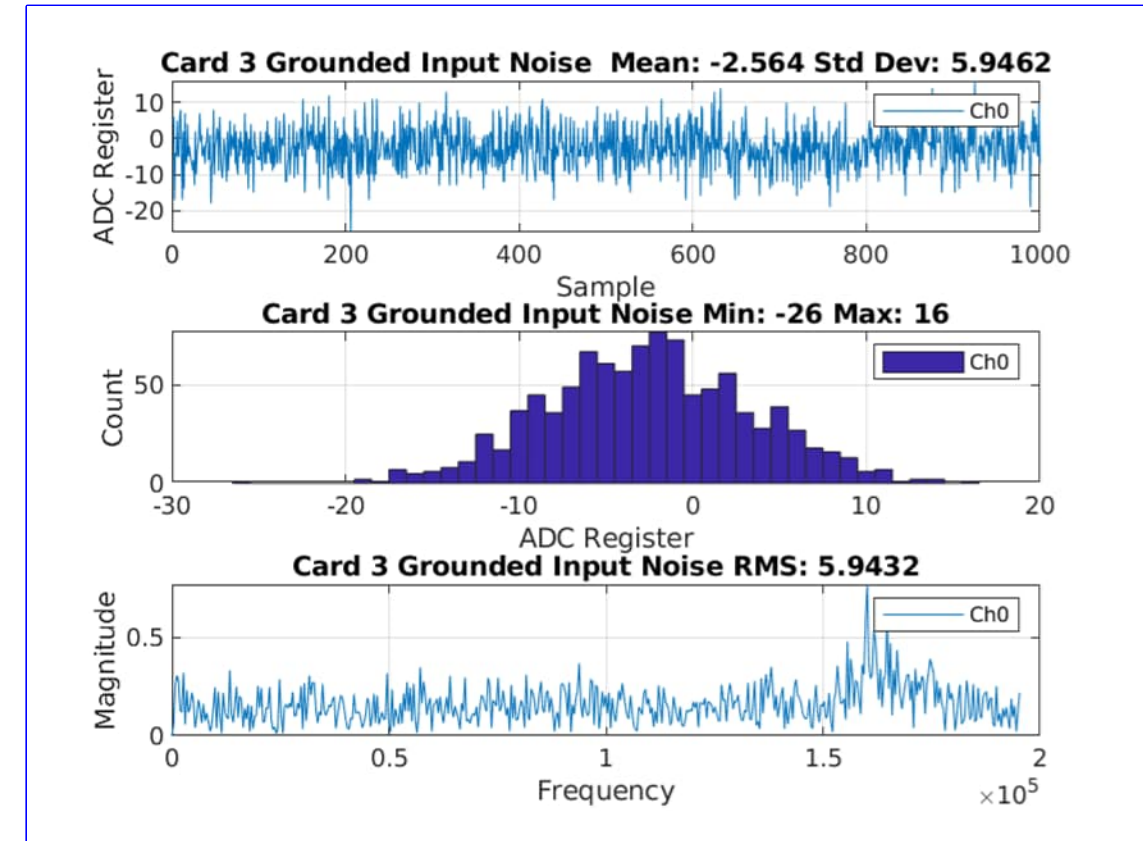
Before (AVDD20 = 4.886V)

After (AVDD20 = 5.004V)

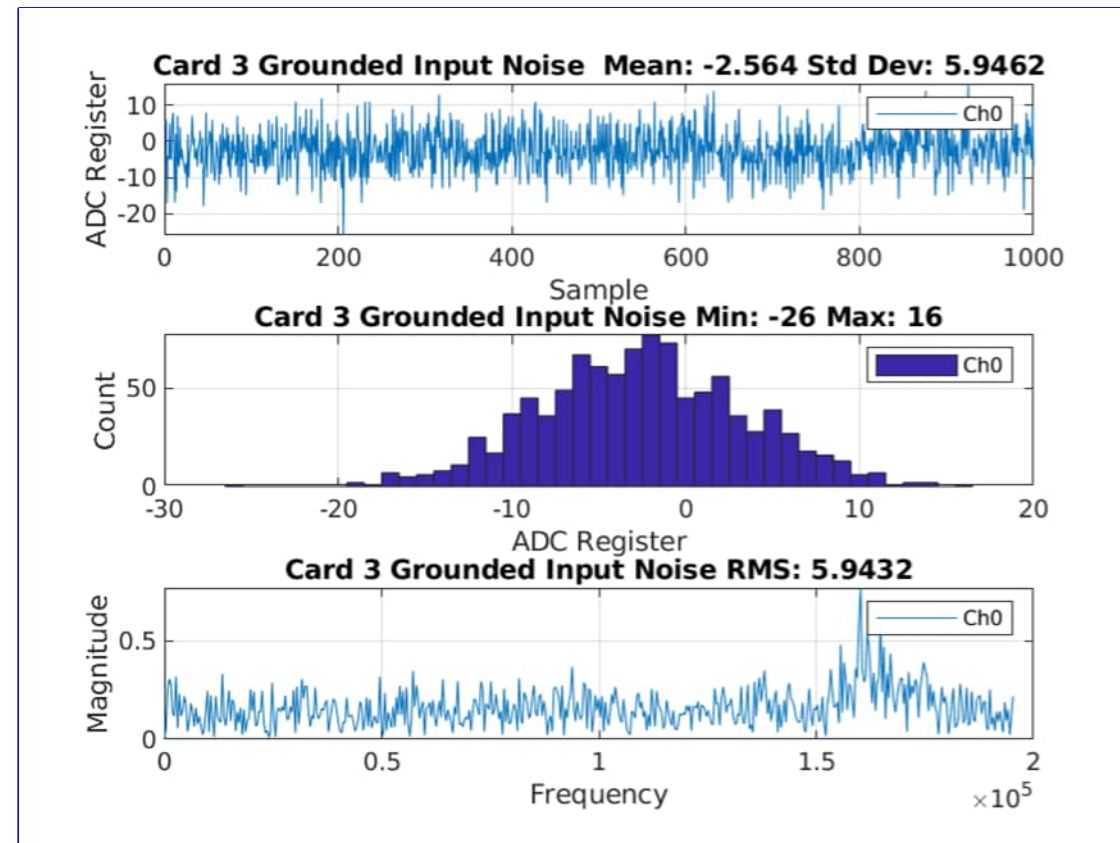AVDD20(U3) Regulator Change (No Heatsink)
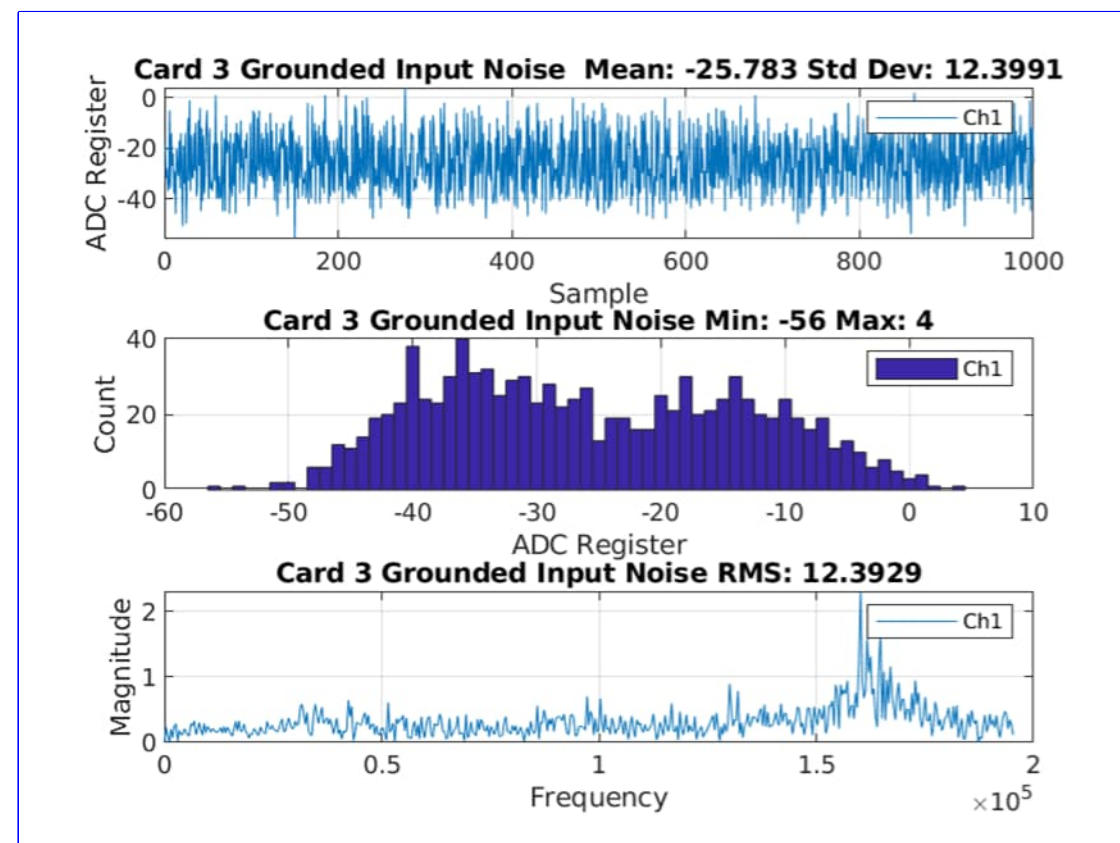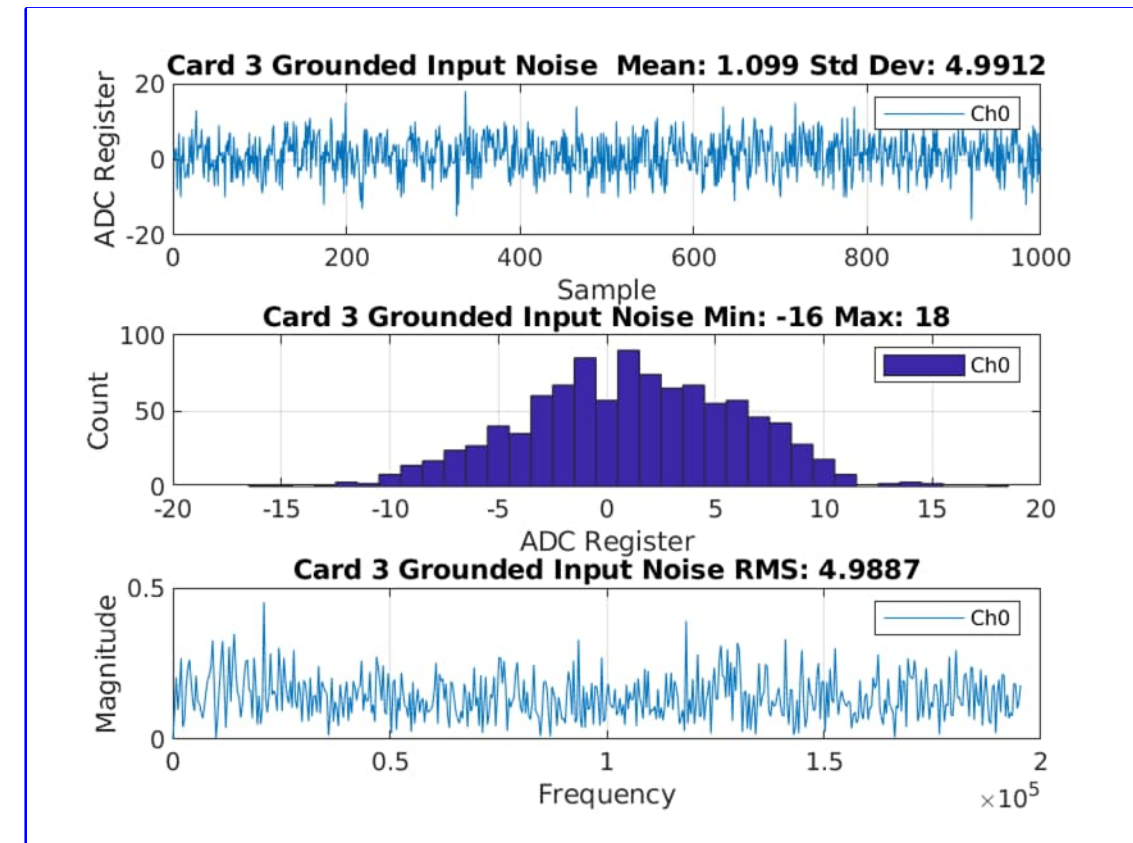
Before (AVDD21 = 4.910V)

After (AVDD21 = 4.959V)

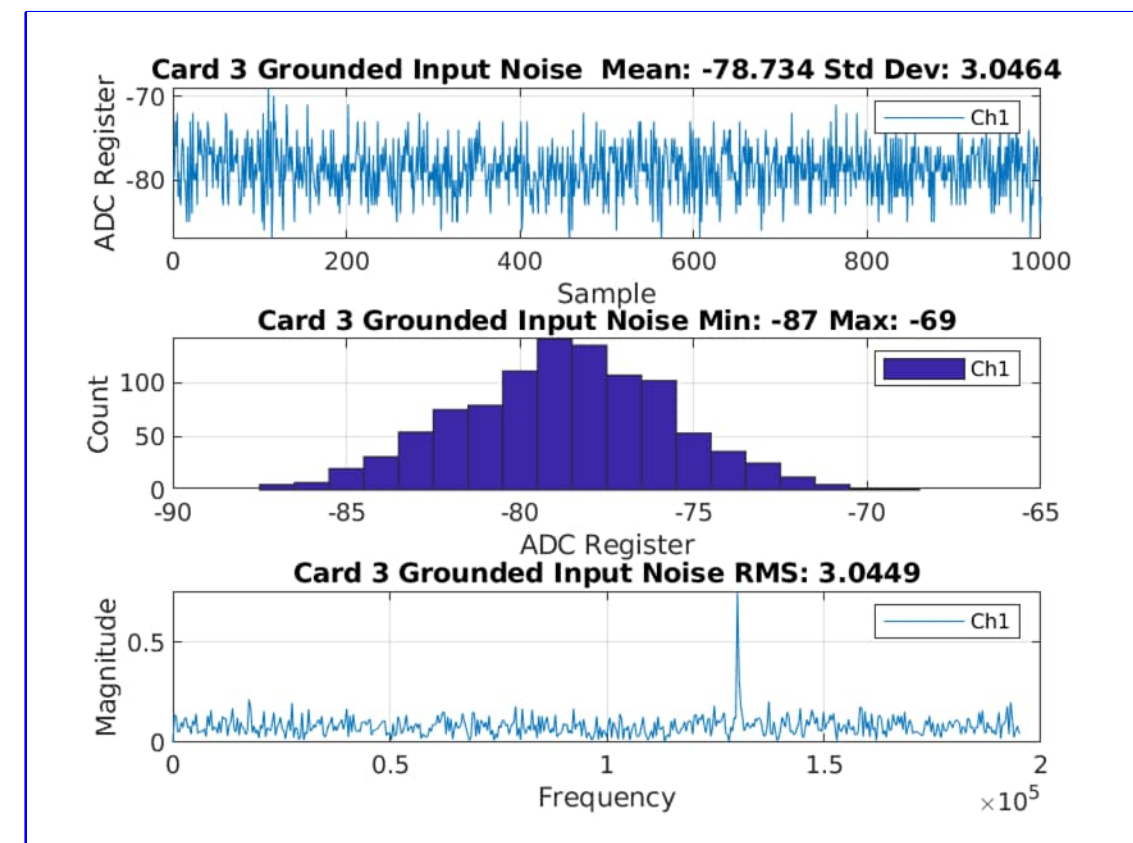AVDD21(U6) Regulator Change (No Heatsink)

Before   After

U12
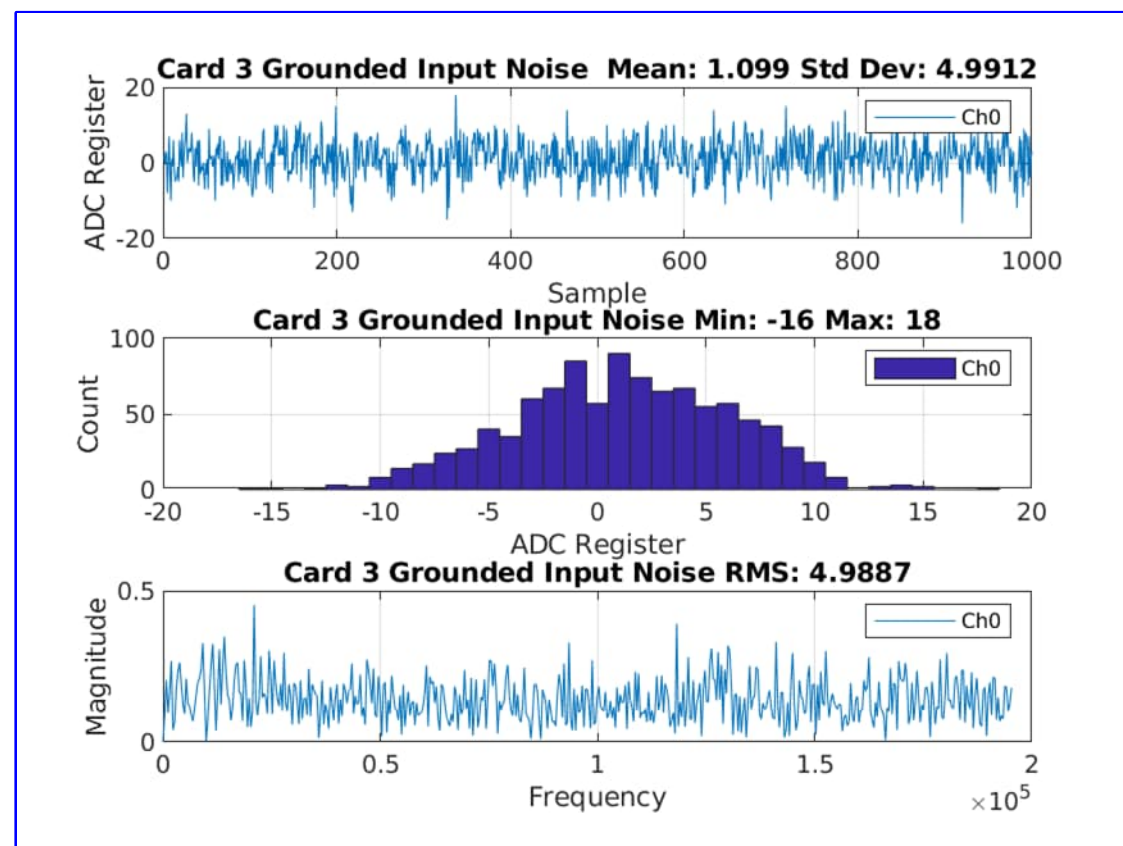
U18
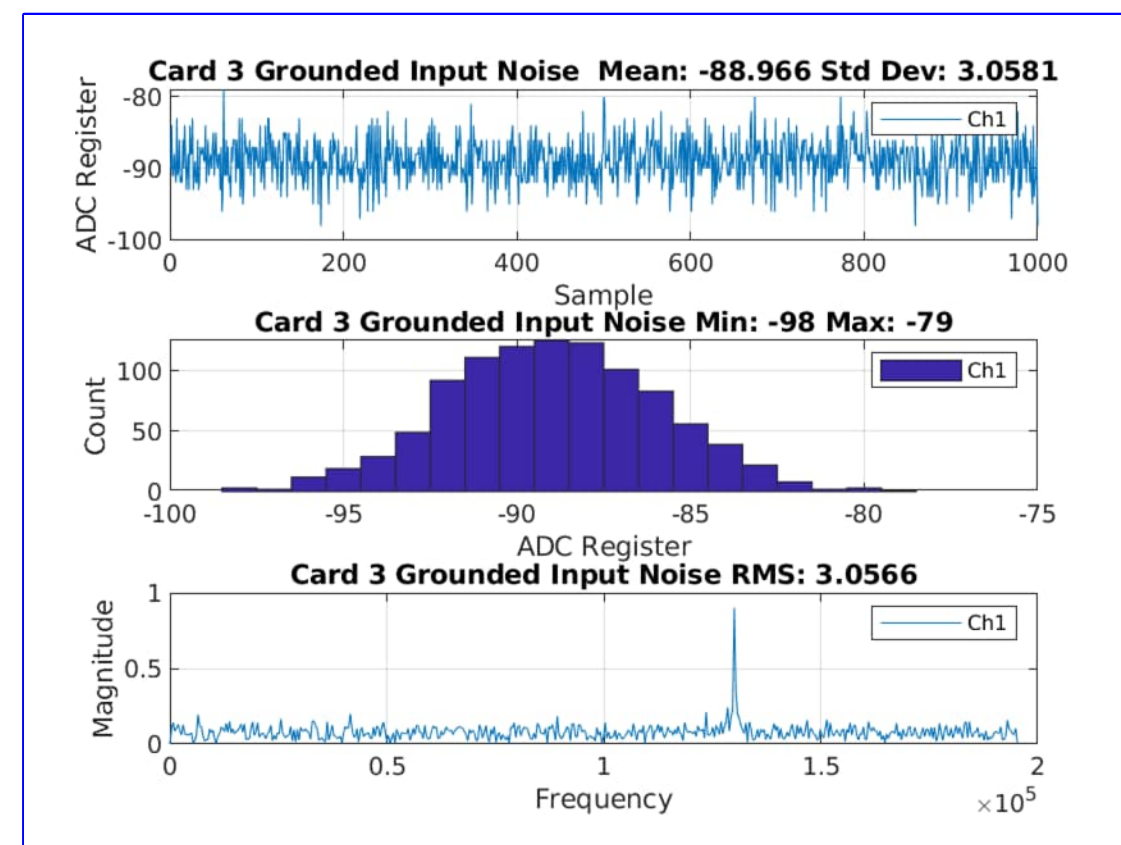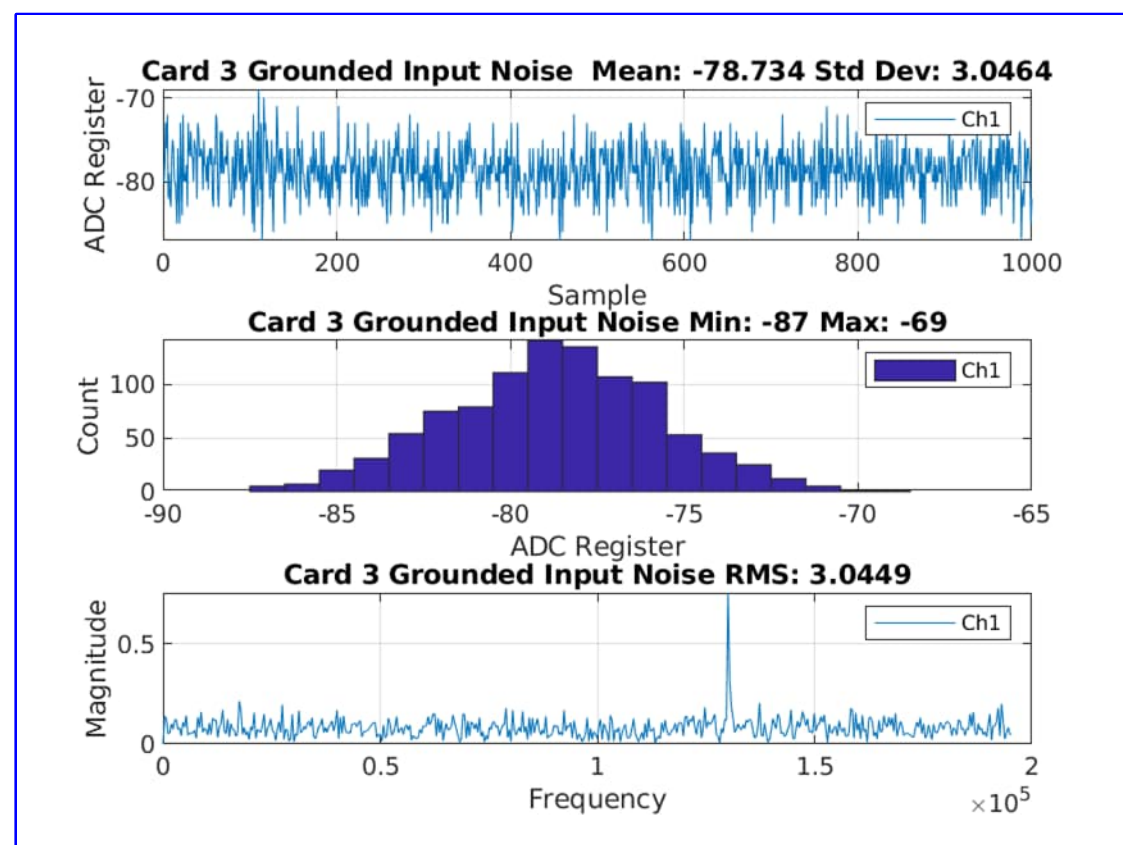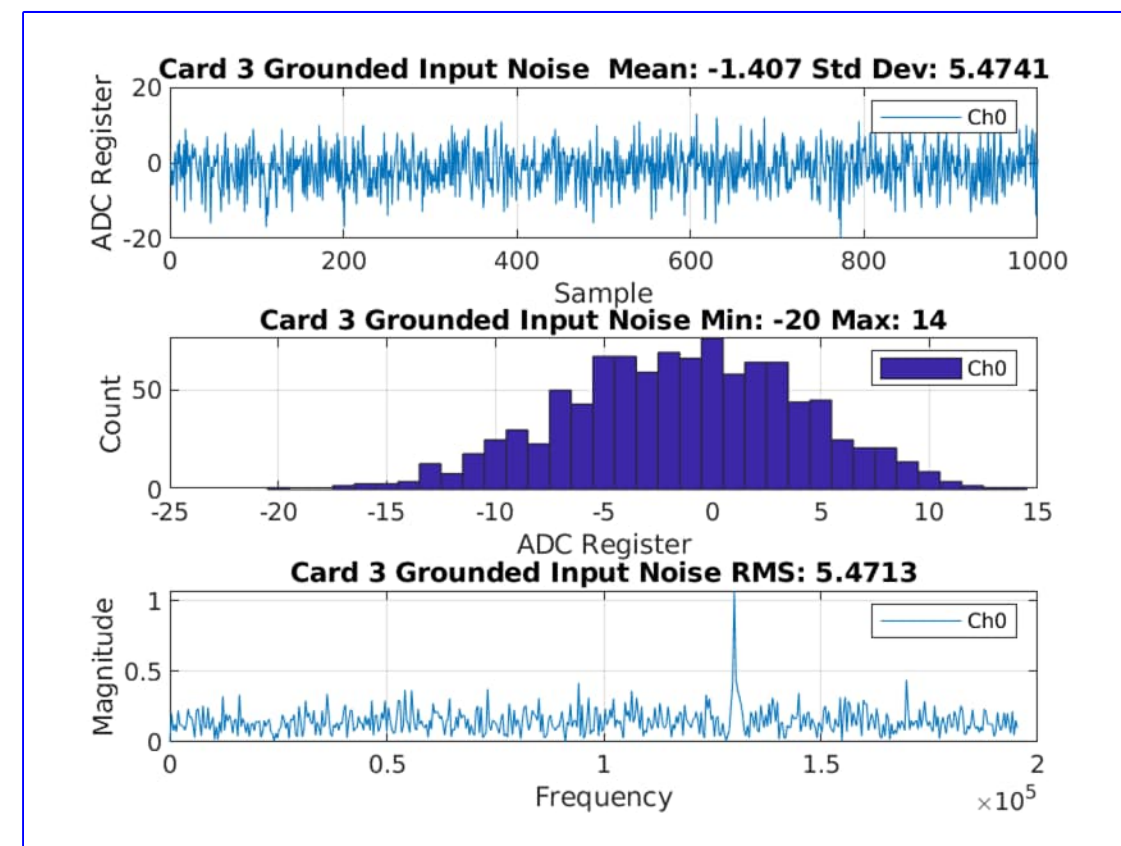
REMOVE U18 (Channel 1 Fixed Gain) & Jumper Out U18; U12 Still In

Before

After

Card 3 Grounded Input Noise Mean: 1.099 Std Dev: 4.9912

Card 3 Grounded Input Noise Mean: -1.407 Std Dev: 5.4741

Card 3 Grounded Input Noise Min: -16 Max: 18

Card 3 Grounded Input Noise Min: -20 Max: 14

Card 3 Grounded Input Noise RMS: 4.9887

Card 3 Grounded Input Noise RMS: 5.4713

Card 3 Grounded Input Noise Mean: -78.734 Std Dev: 3.0464

Card 3 Grounded Input Noise Mean: -88.966 Std Dev: 3.0581

Card 3 Grounded Input Noise Min: -87 Max: -69

Card 3 Grounded Input Noise Min: -98 Max: -79

Card 3 Grounded Input Noise RMS: 3.0449

Card 3 Grounded Input Noise RMS: 3.0566

Reinstalled Heatsink (Floating)