

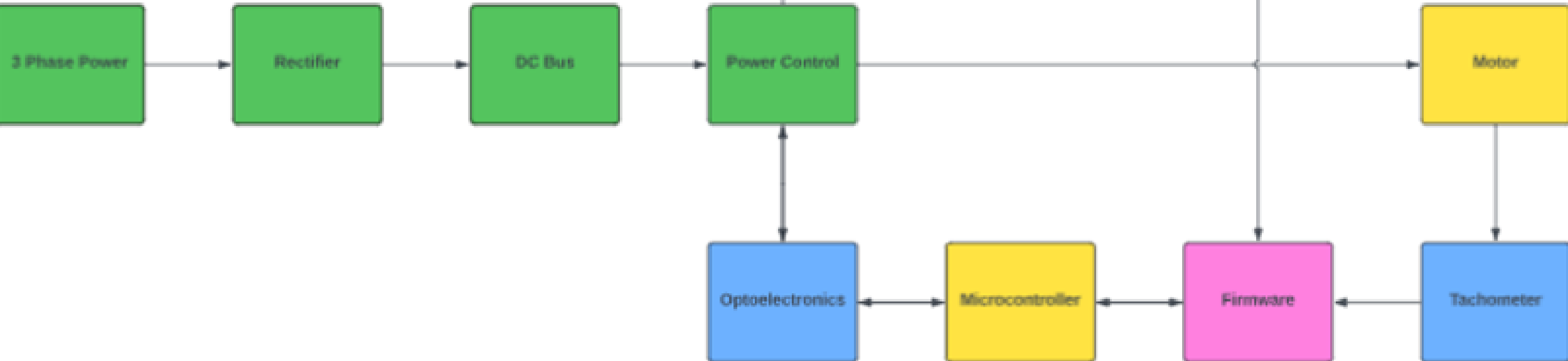
# VFD Motor Control Block Diagram

● Mackenzie Miller

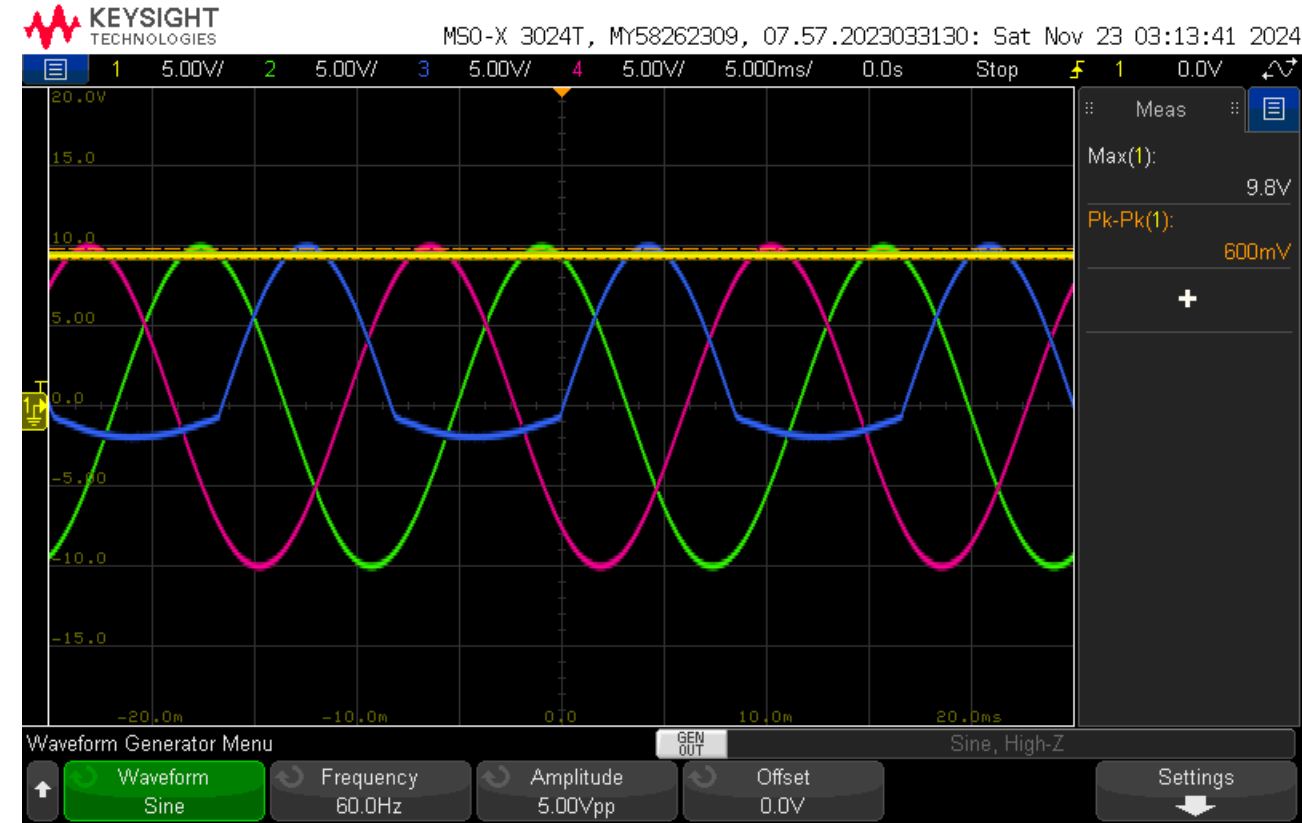
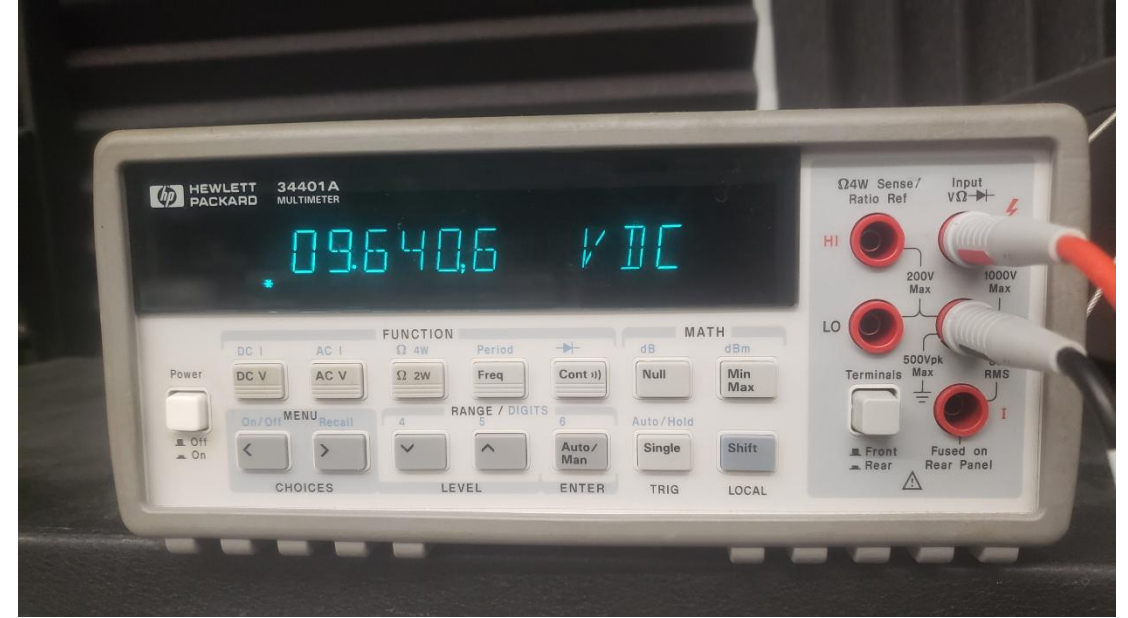
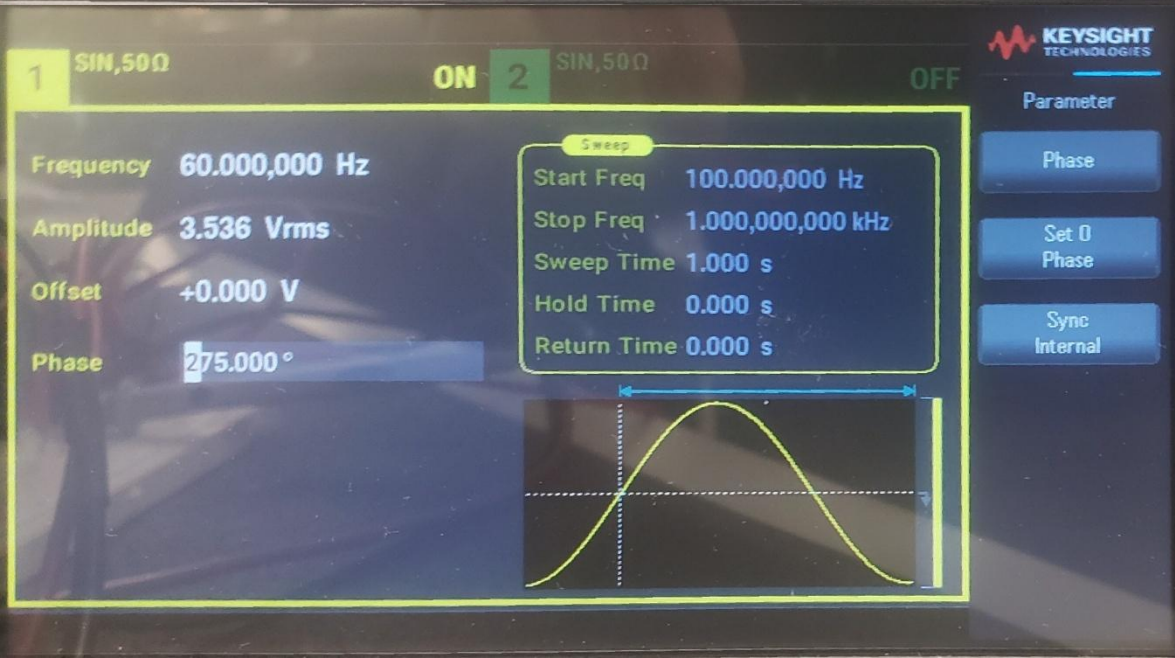
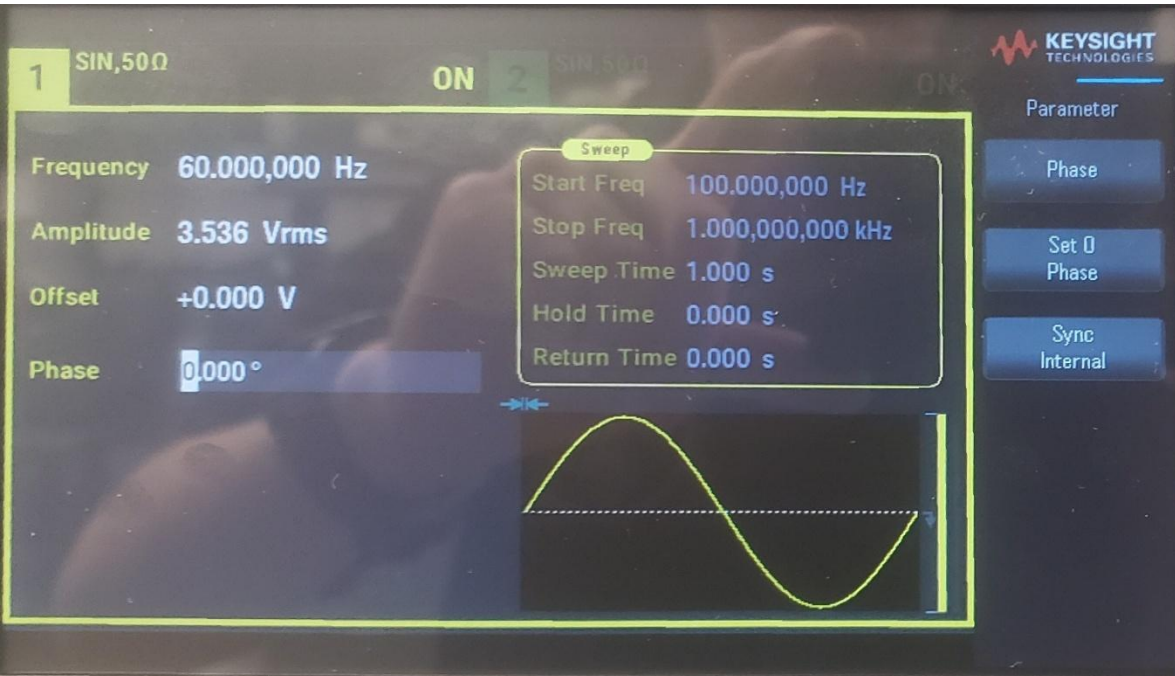
● Andrew Nguyen

● Aidan Rader

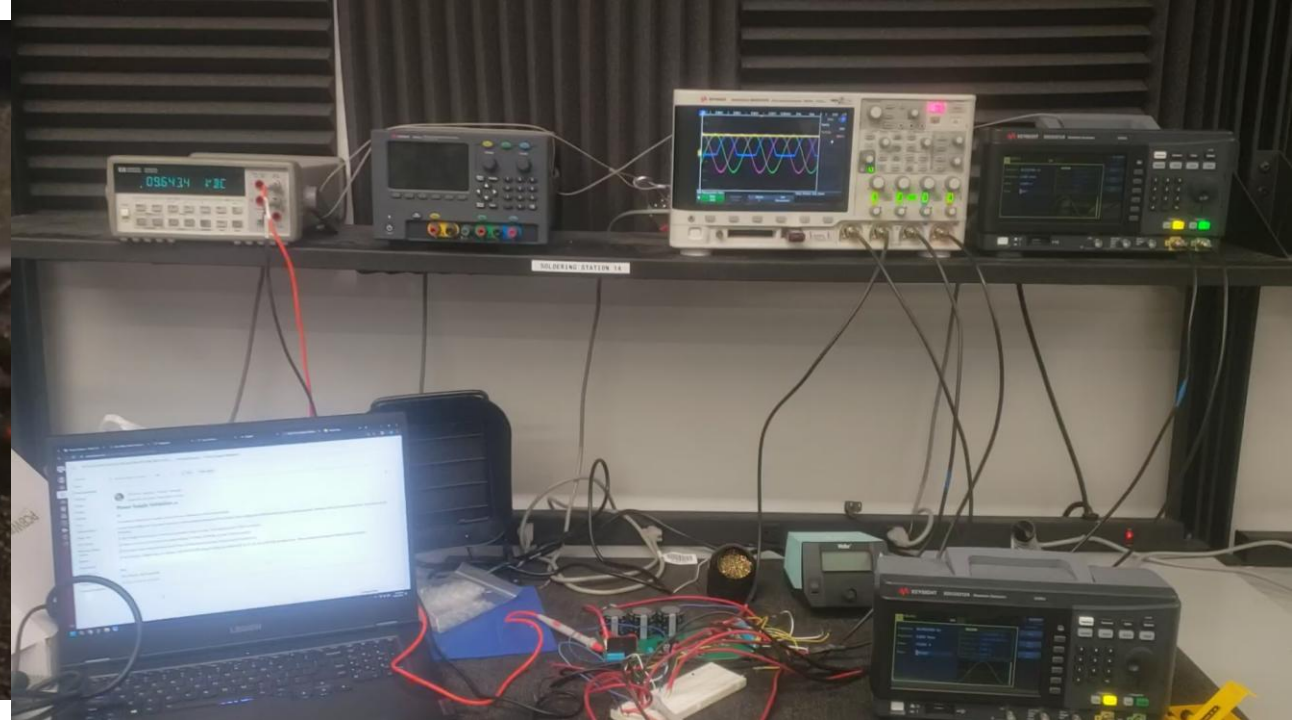
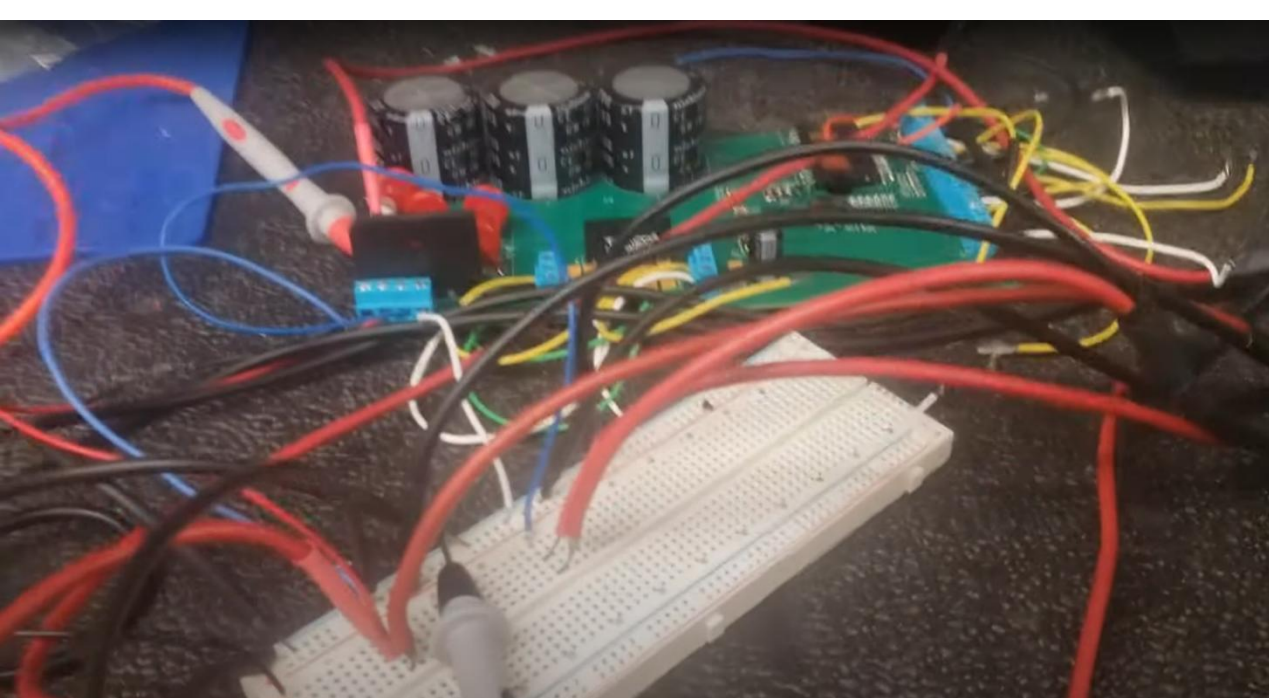
● Ryan Regan



# Rectifier + DC Link

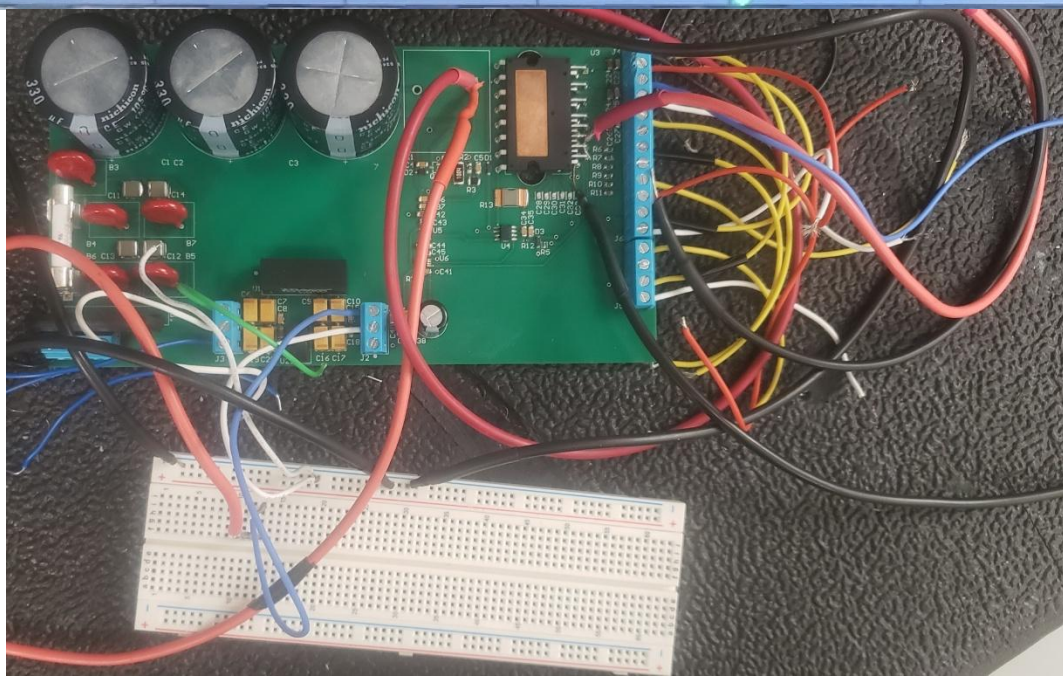
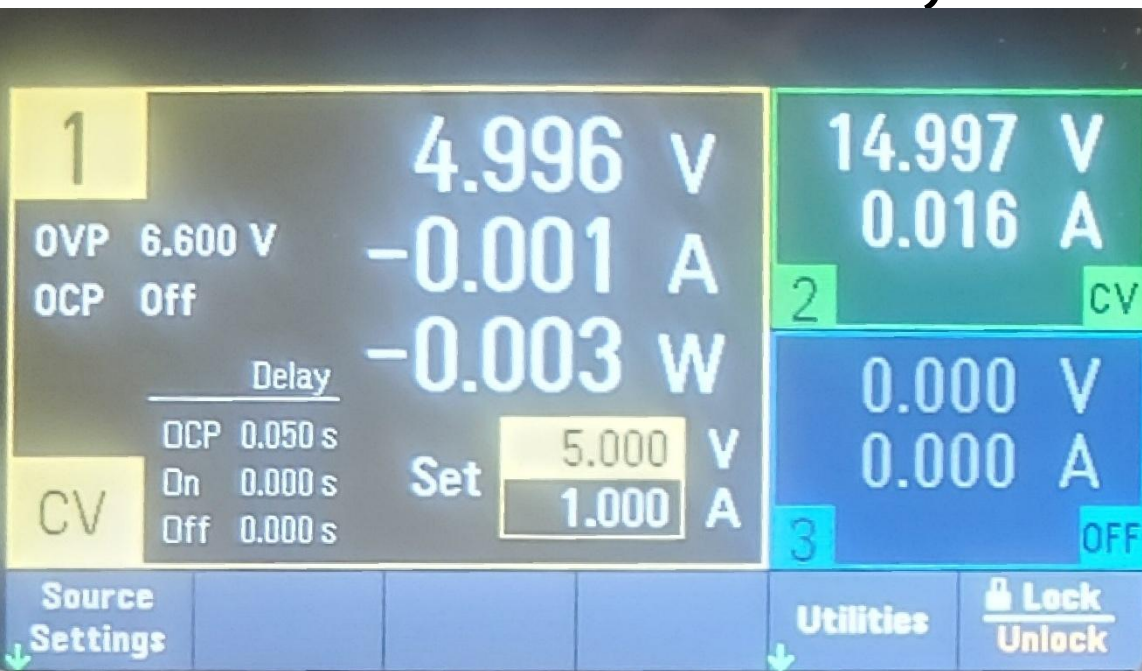


# Rectifier + DC Link



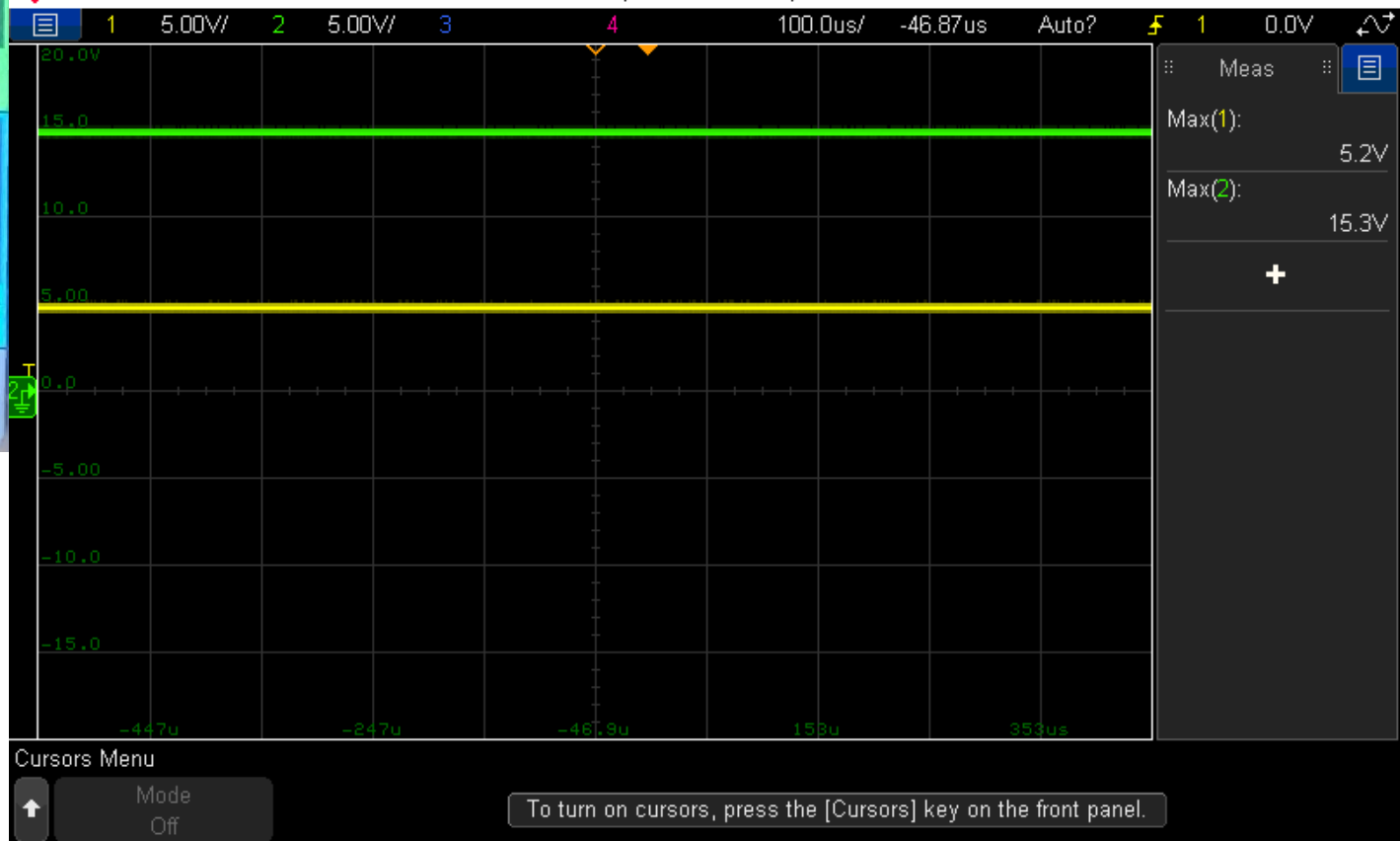


# Power Control – VDD, P

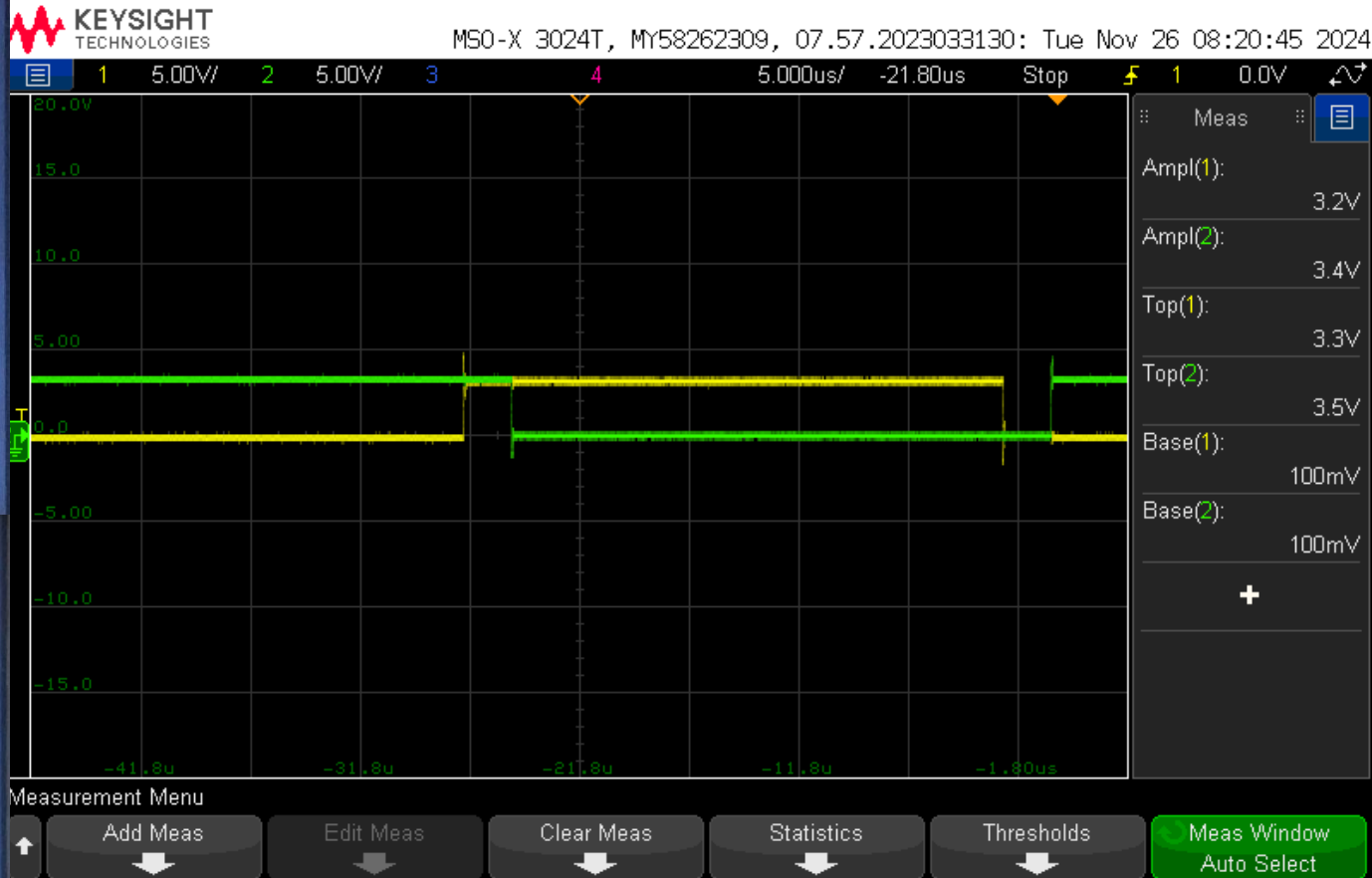
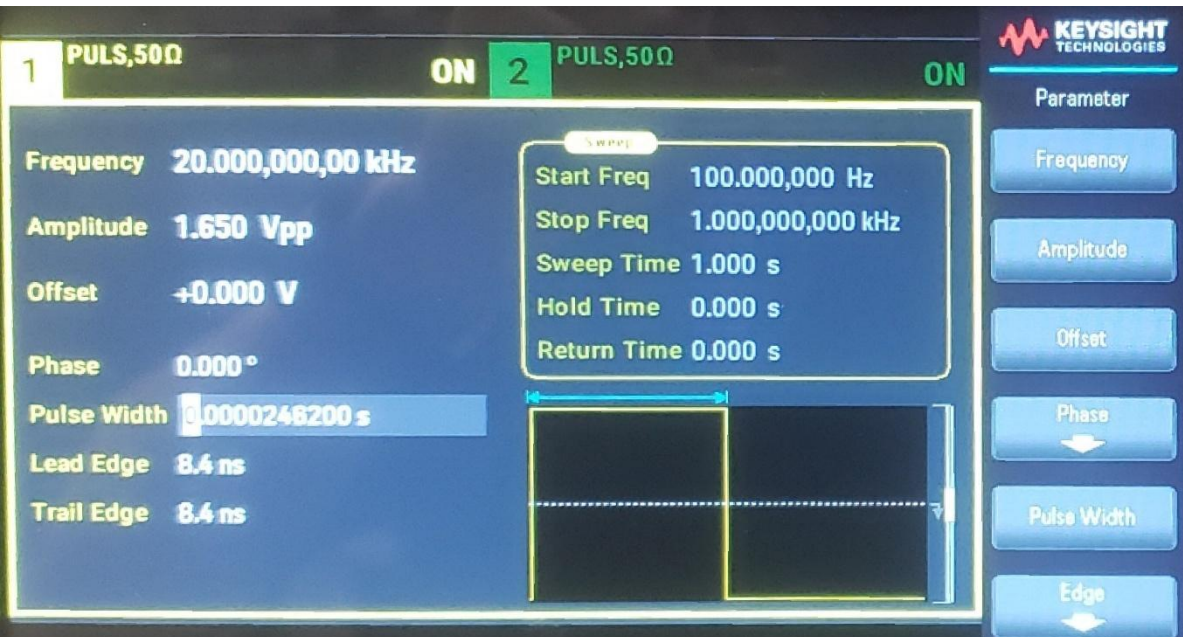


KEYSIGHT  
TECHNOLOGIES

MSO-X 3024T, MY58262309, 07.57.2023033130: Tue Nov 26 04:11:18 2024

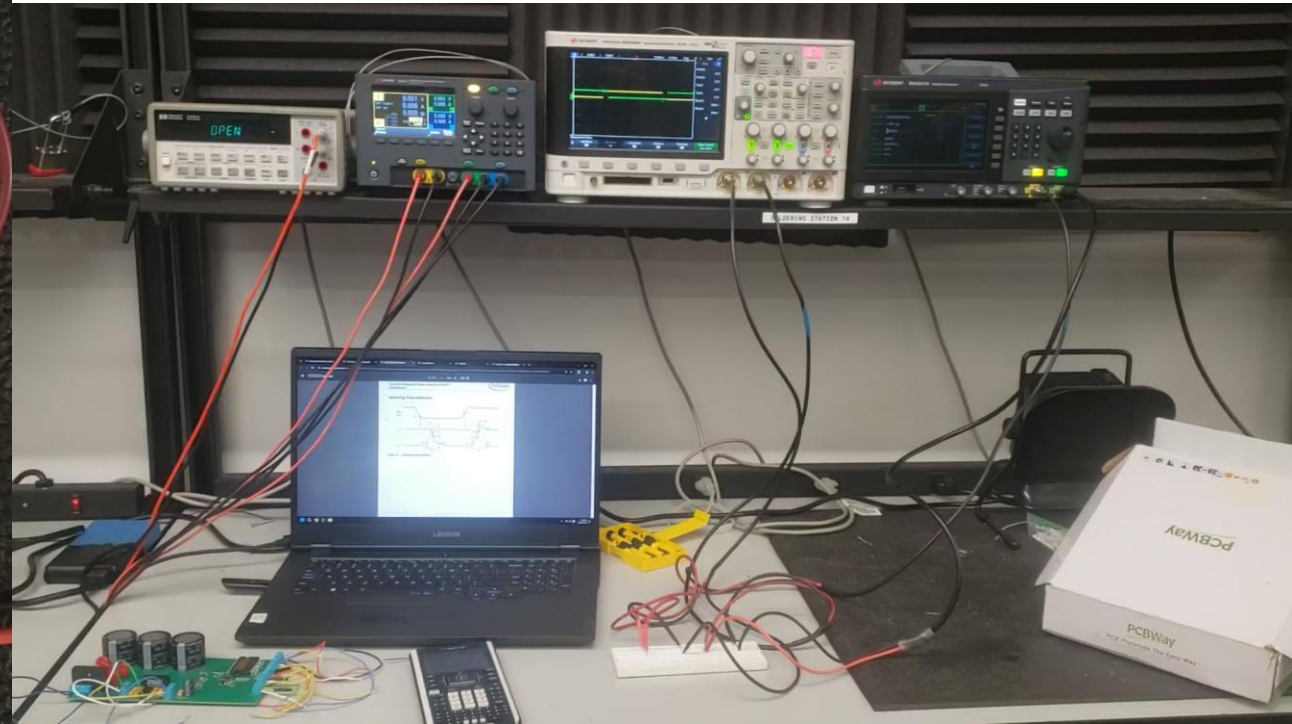
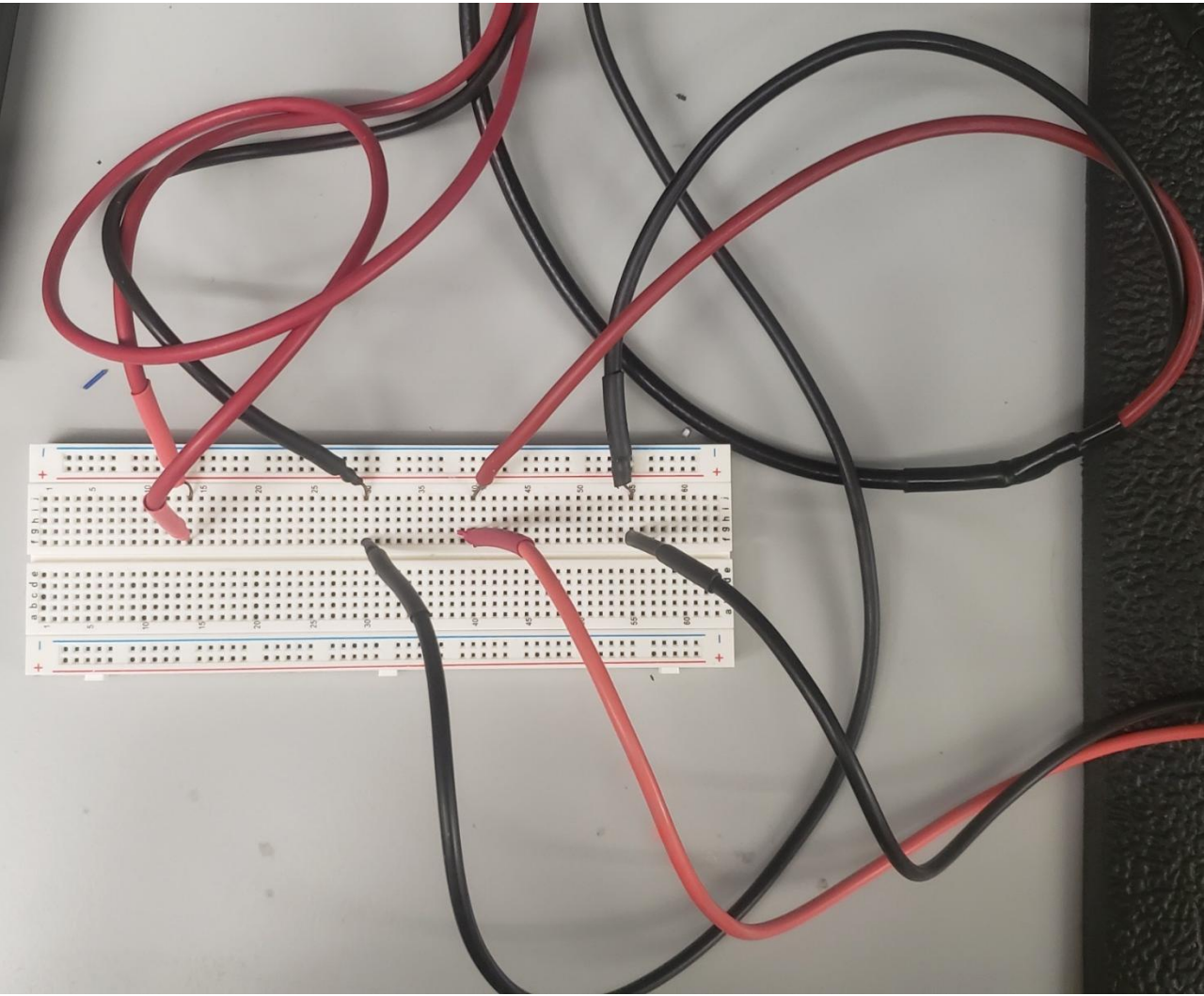


# Power Control – PWM Signal

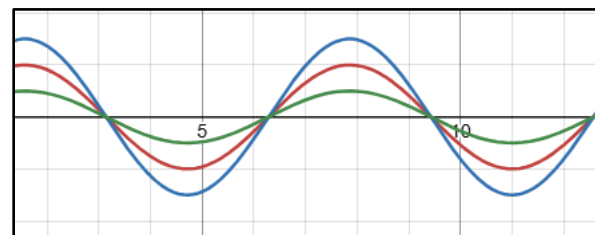
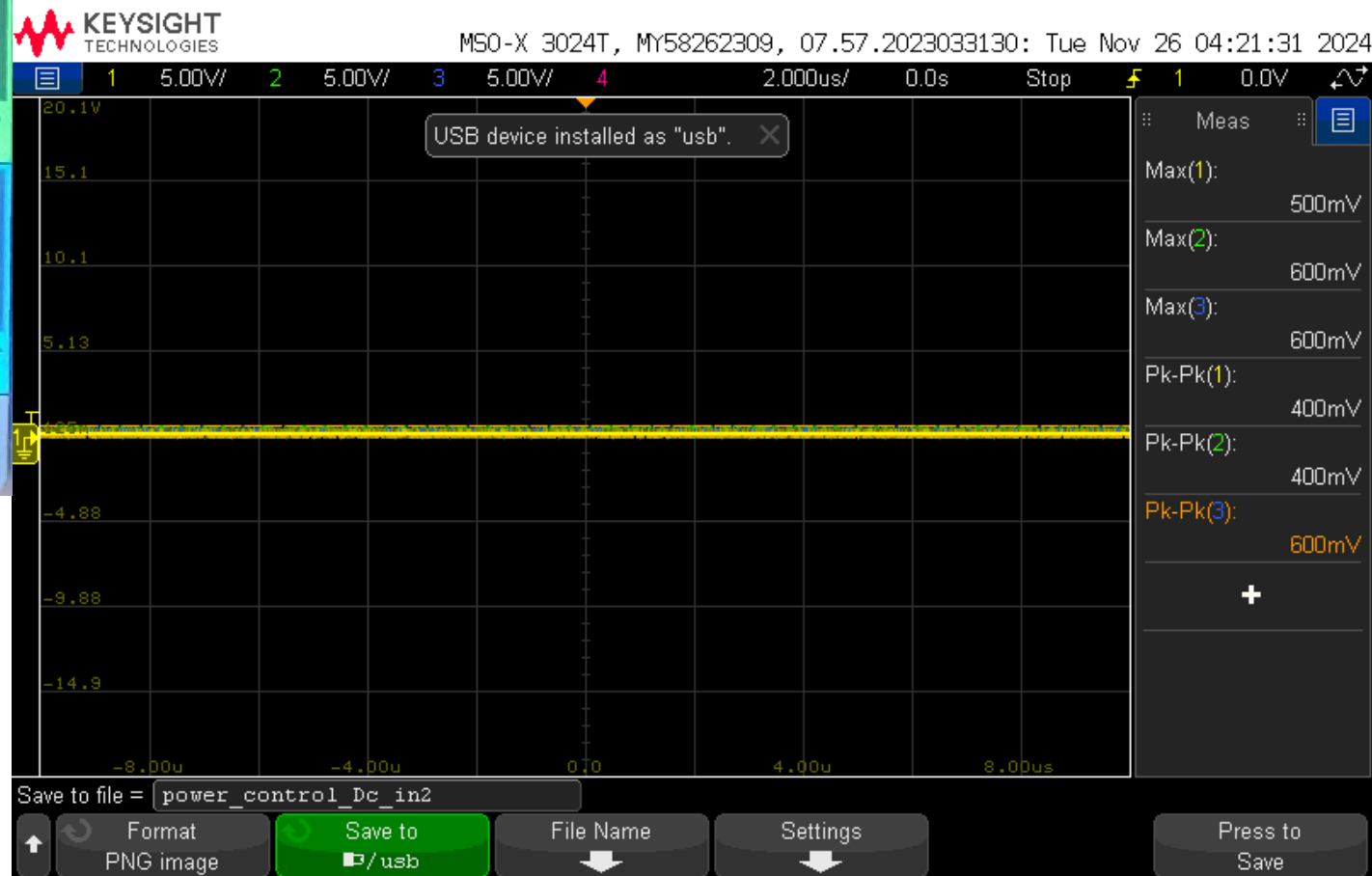
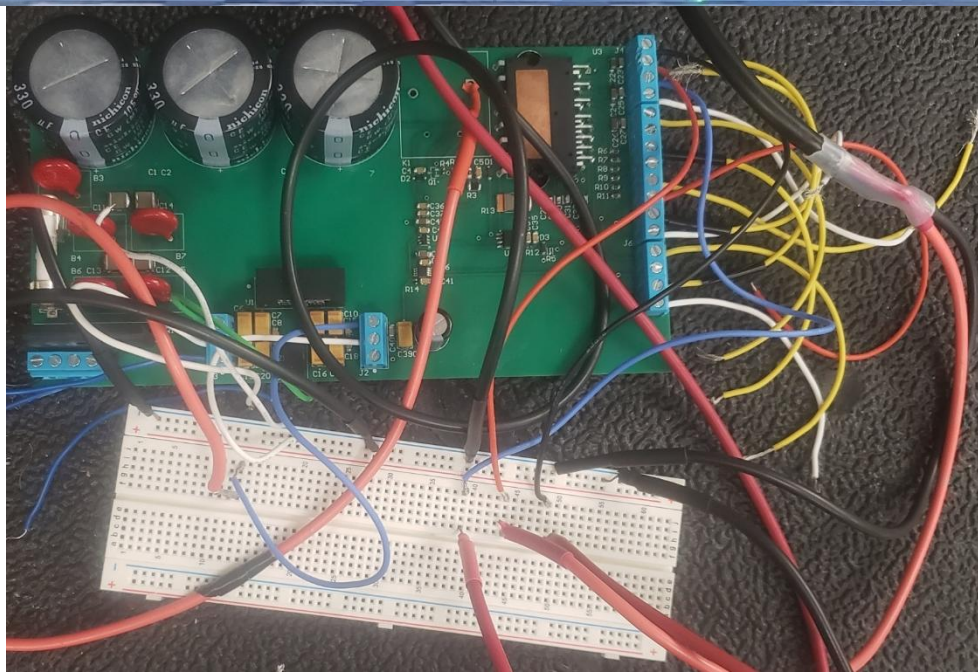




# Power Control – PWM Signal

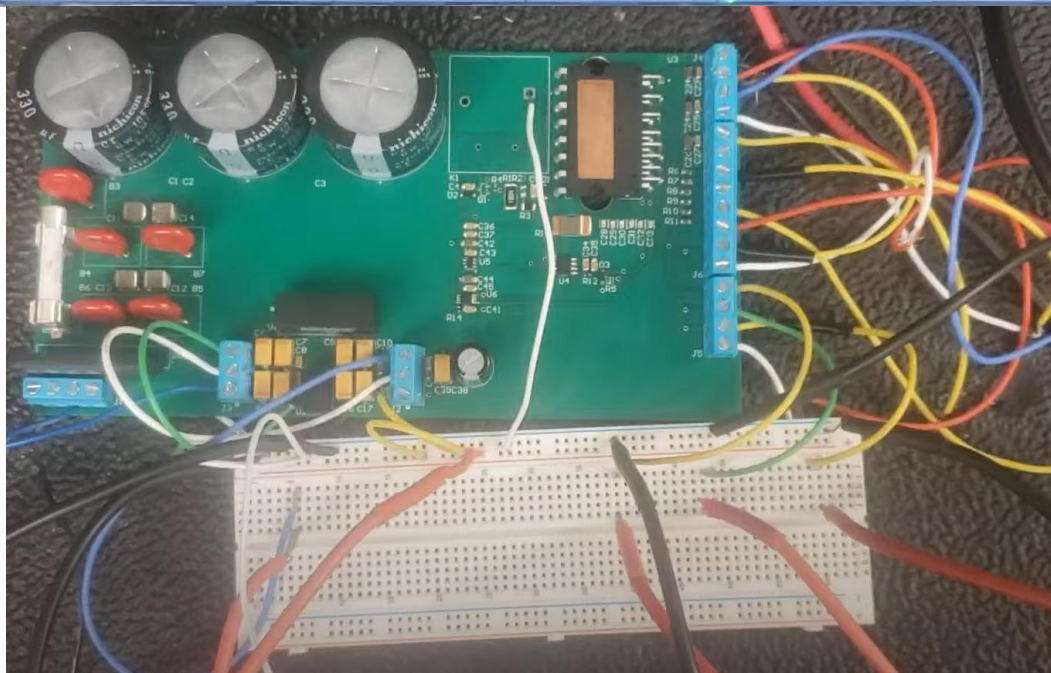
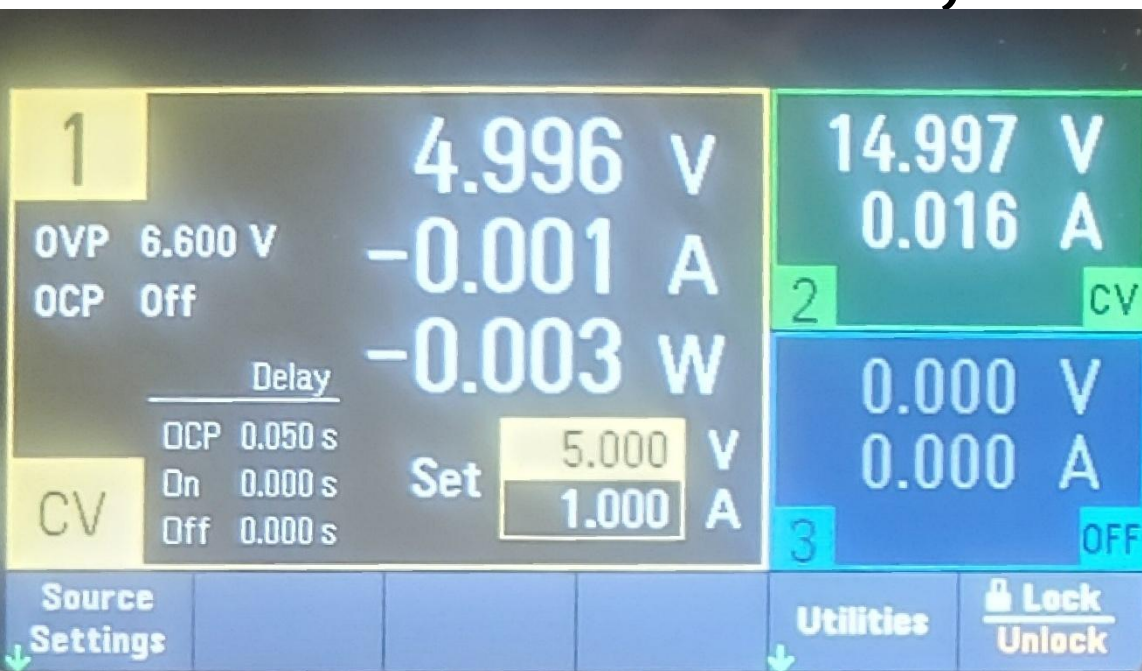


# Power Control – U, V, W



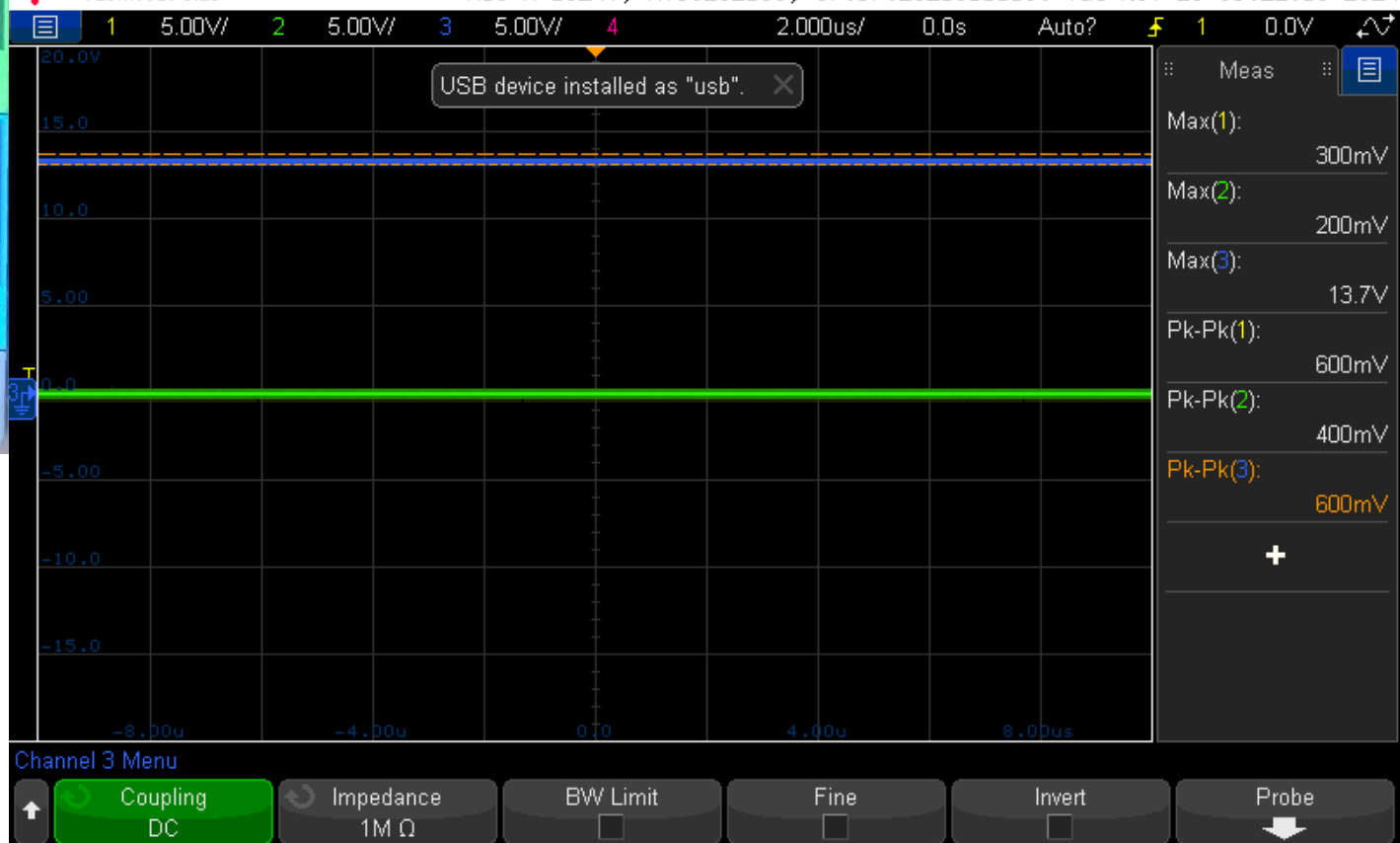


# Power Control – VIN1, VIN2, VIN3



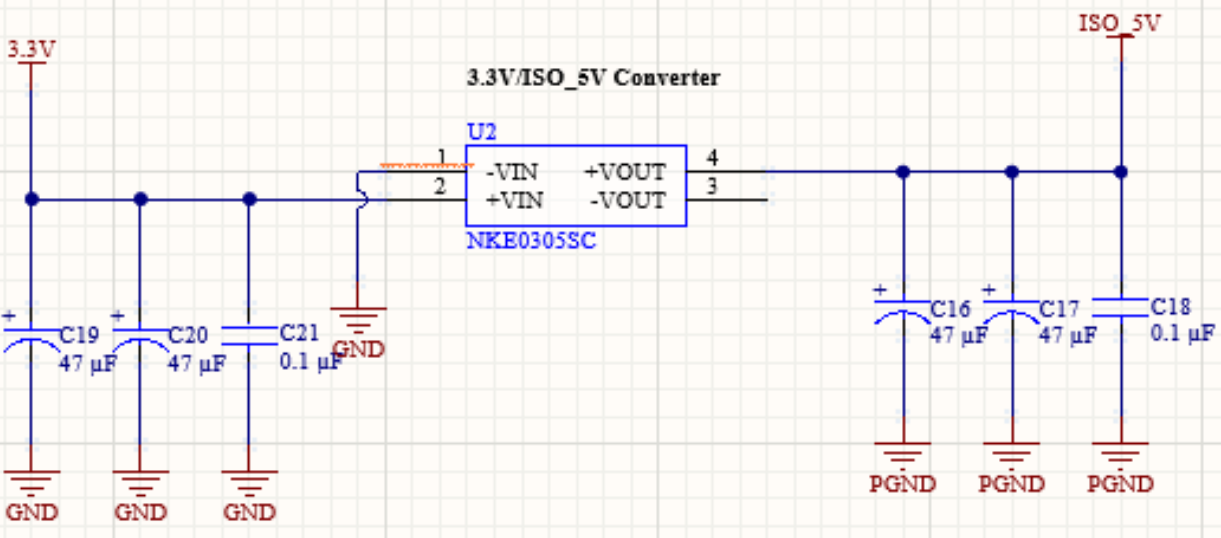
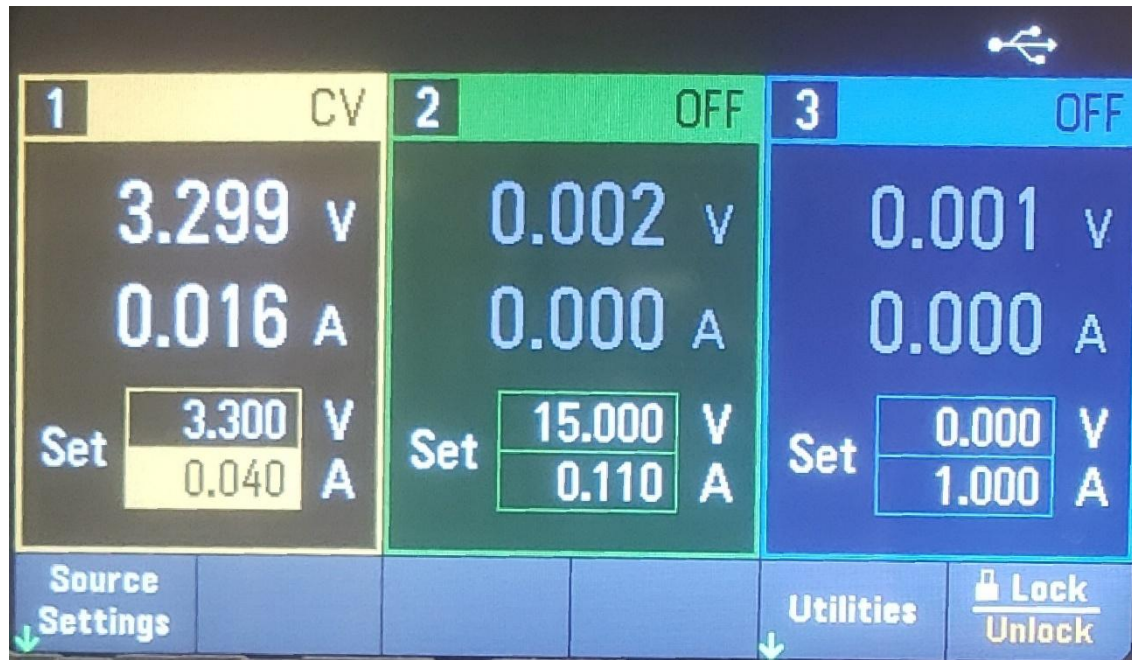
KEYSIGHT  
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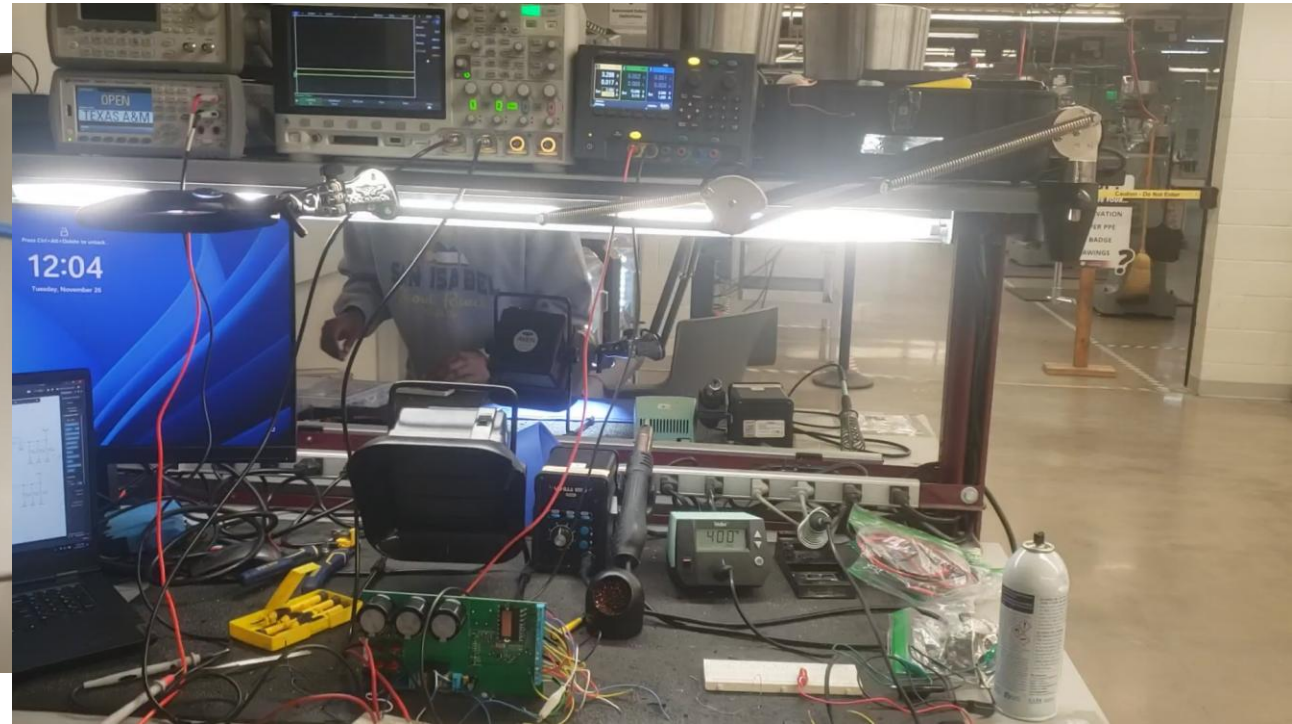
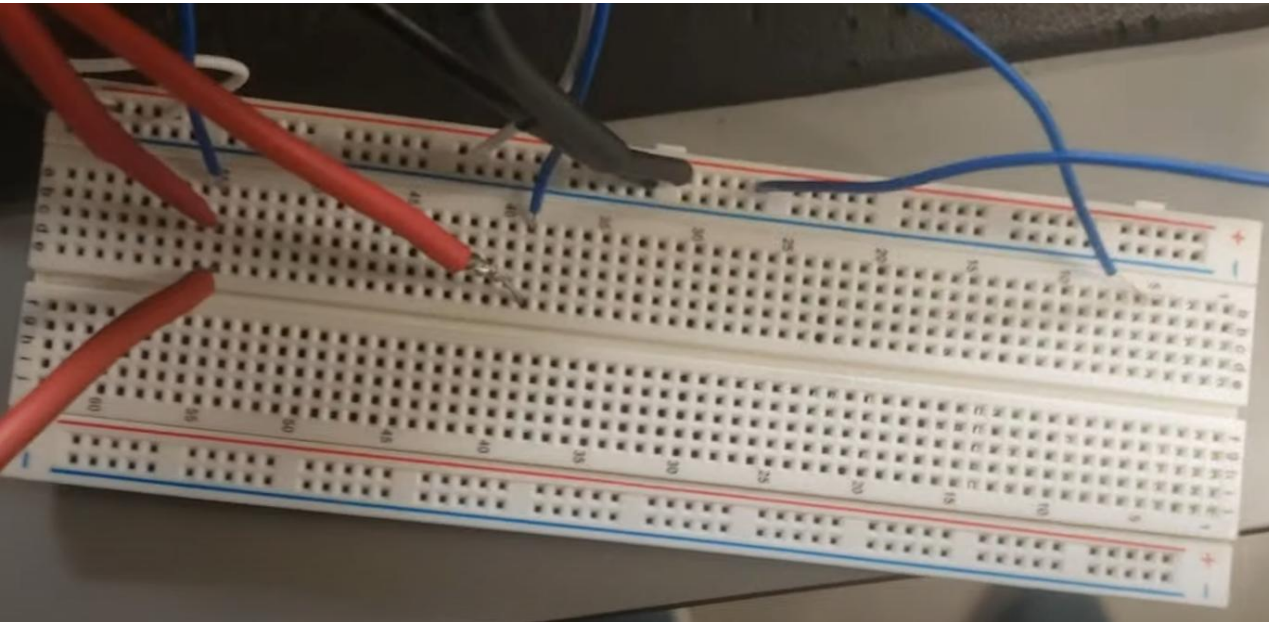




# 3.3V/iso5V

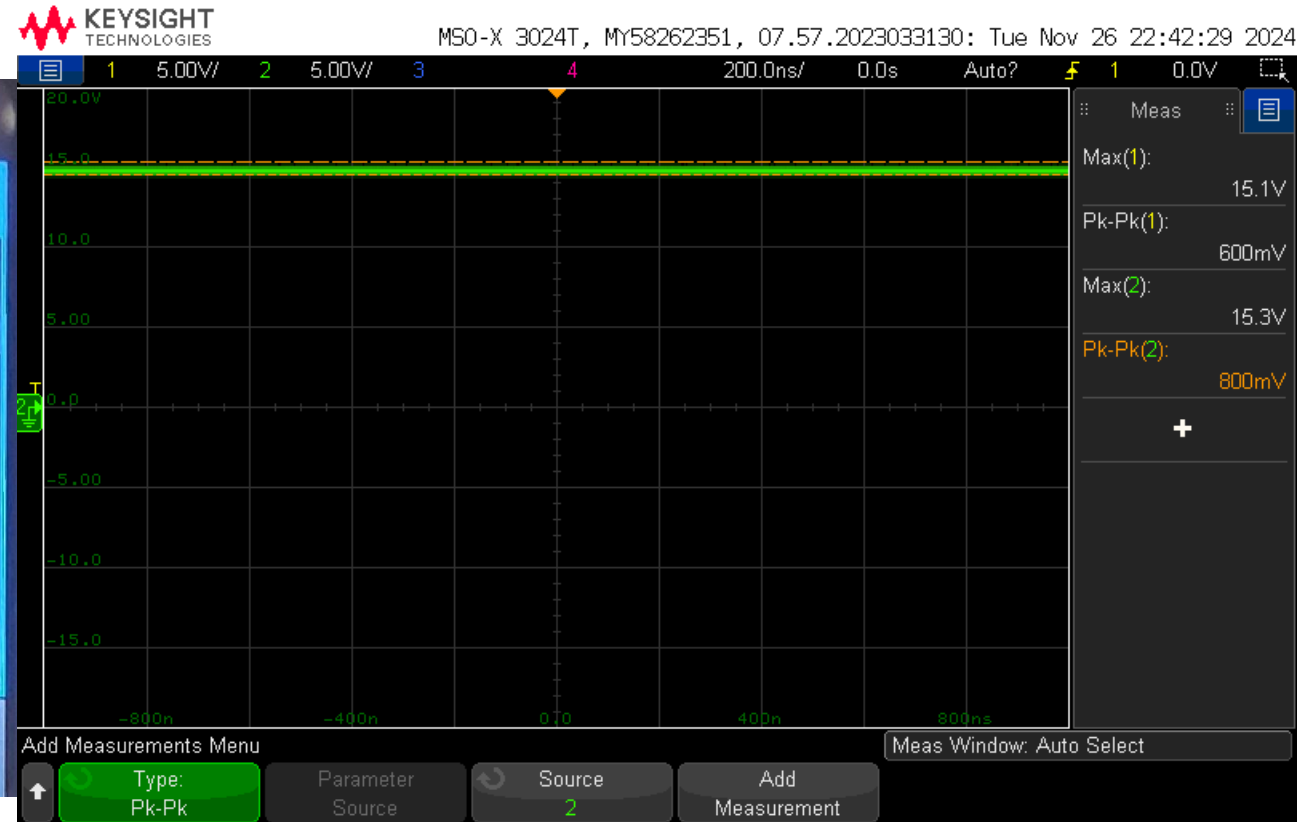
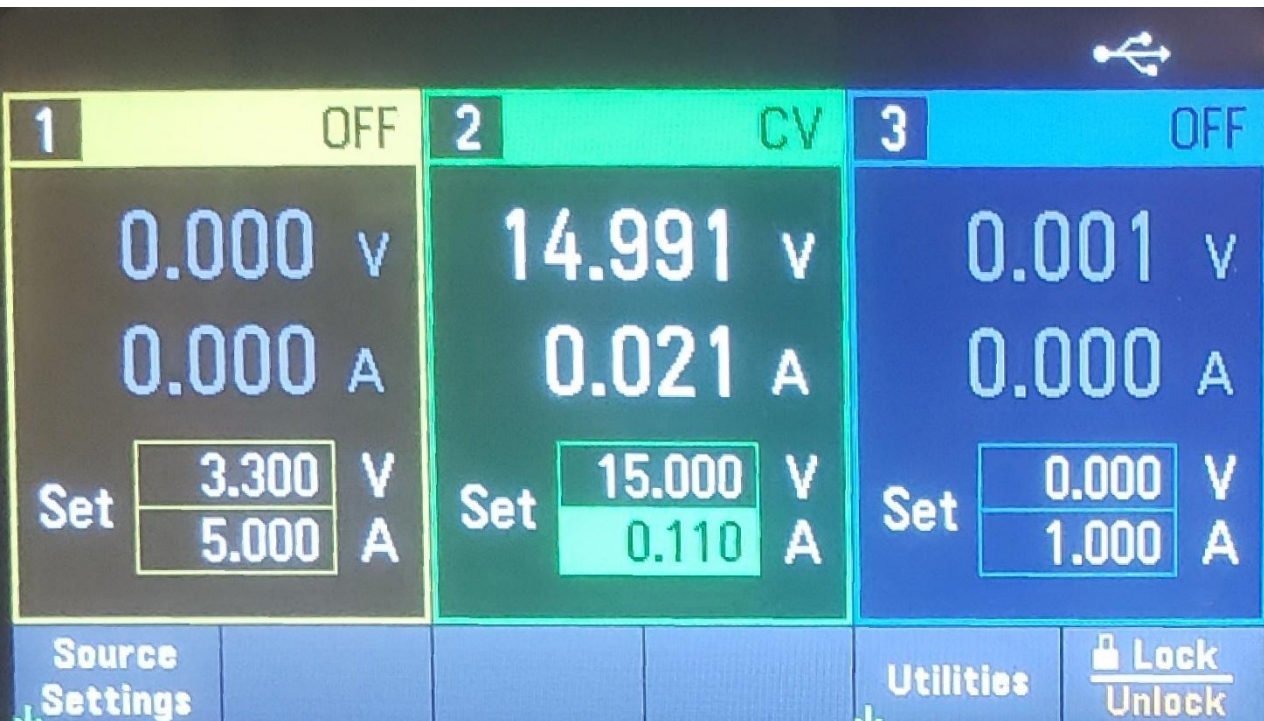


3.3V/iso5V

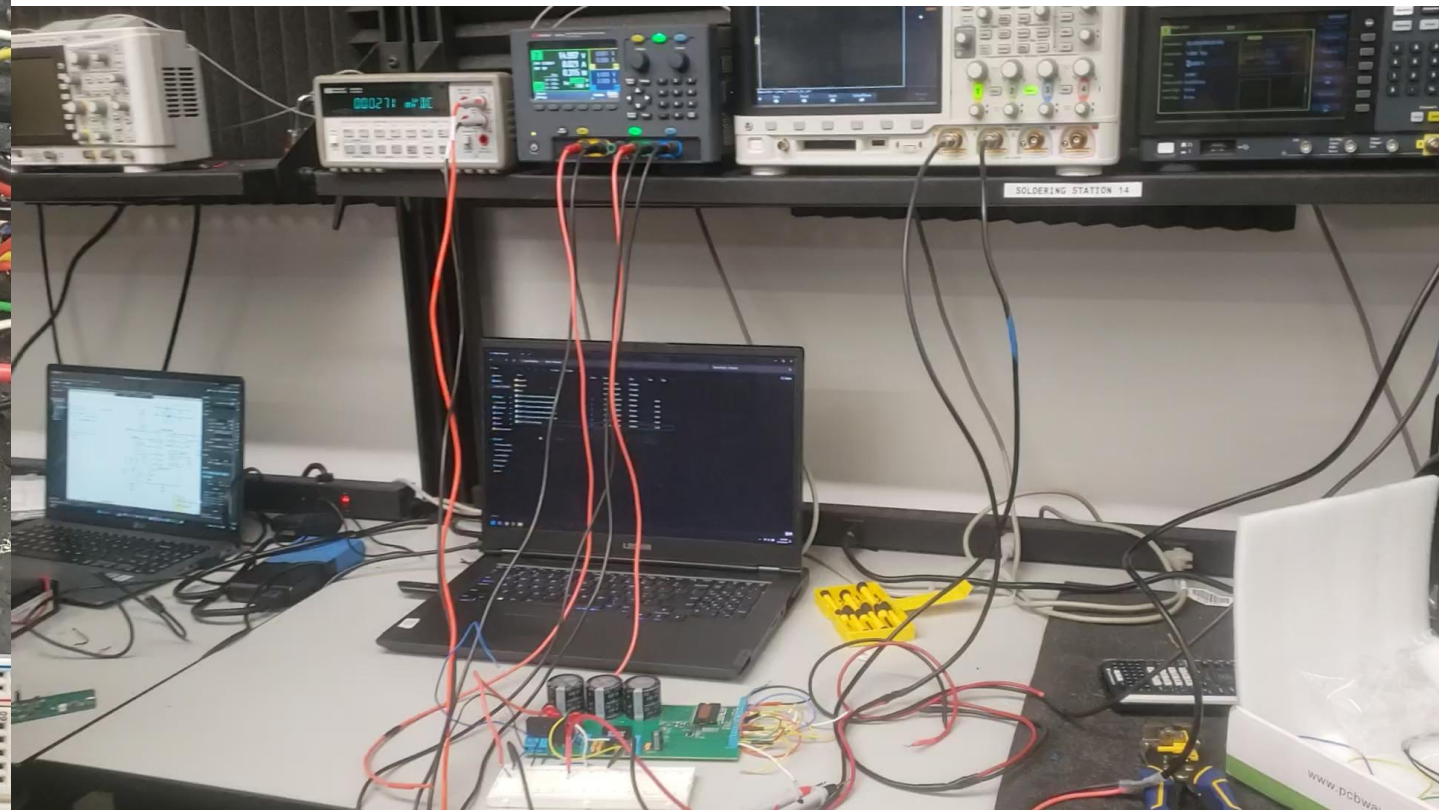
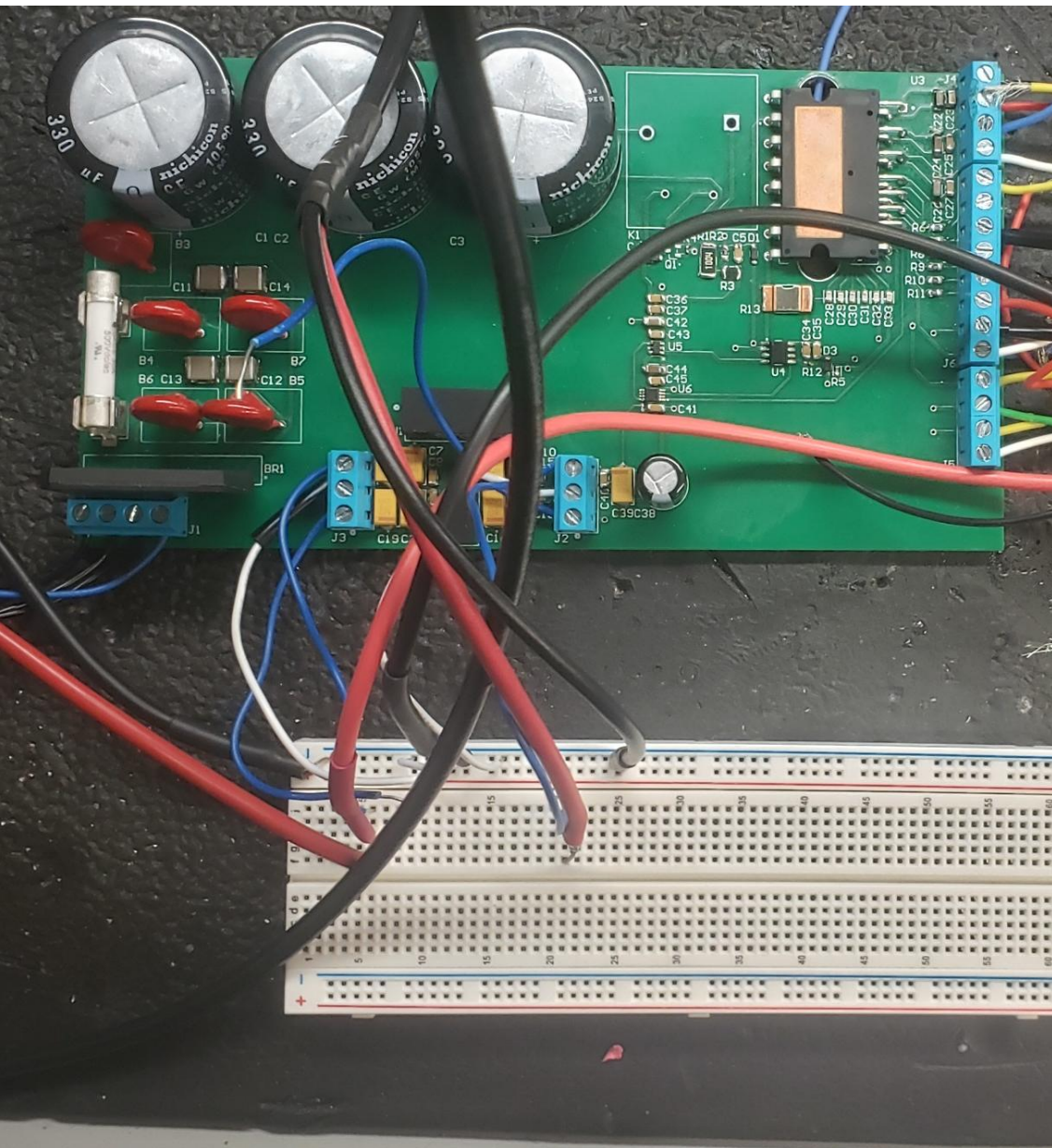




# 15V/iso15V



# 15V/iso15V





# 15V/iso15V

Input V (V)	Output V (V)	Output Noise (mV)
9.0	15.3	800
12.1	15.3	800
15.1	15.3	800
18.1	15.3	800
24.5	15.4	1000
30		
36		

Input I (mA)	Output V (V)	Output Noise (mV)
1	6	400
40	15.2	600
80	15.2	400
110	15	400
150	15	400
190	15	400
220	15	400

# Relay