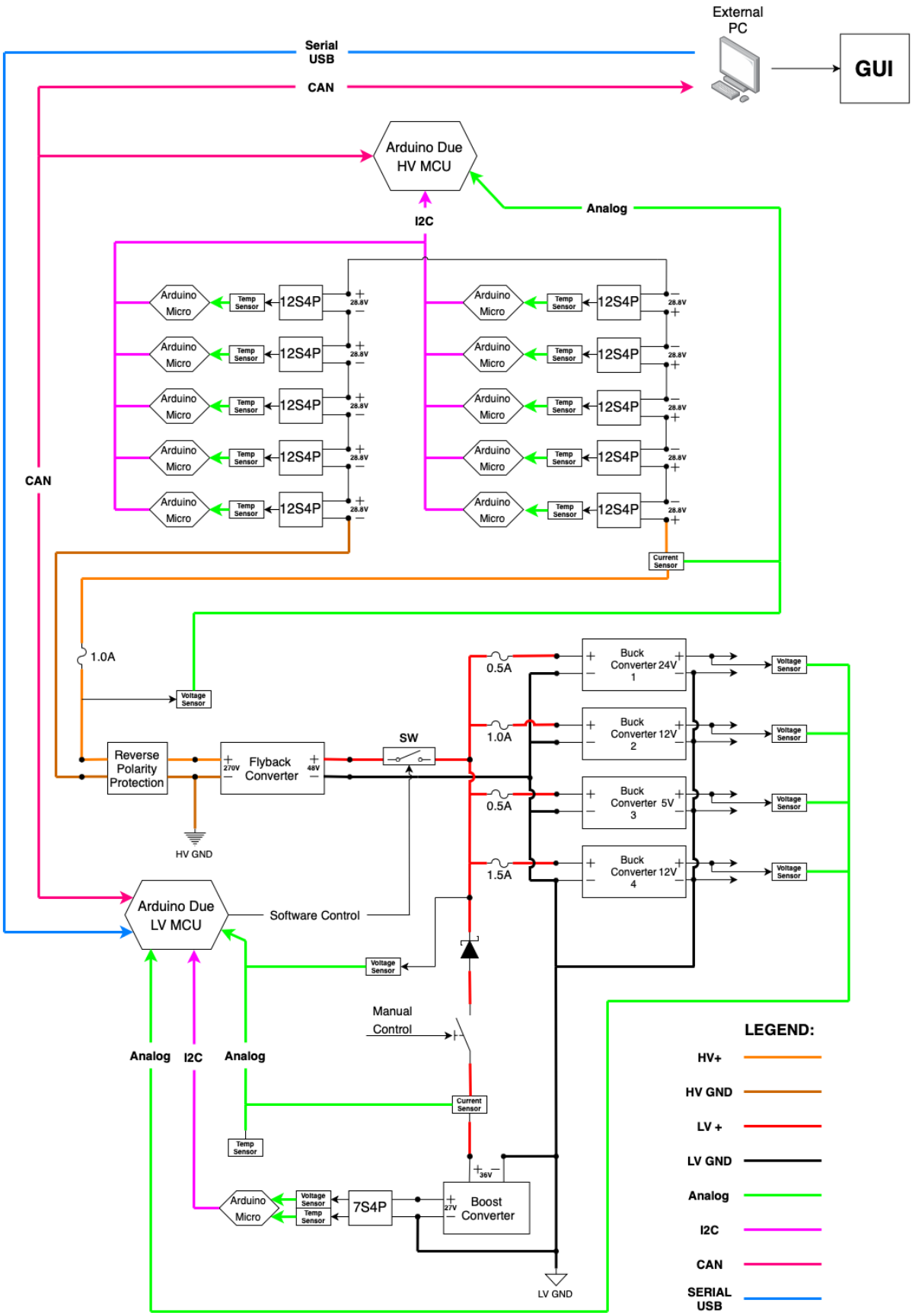
External PC
GUI
Serial USB
CAN
Arduino Due HV MCU
I2C
Analog
CAN
Arduino Micro
Temp Sensor
12S4P
28.8V
Current Sensor
1.0A
Voltage Sensor
Reverse Polarity Protection
Flyback Converter
270V
48V
SW
HV GND
0.5A
1.0A
0.5A
1.5A
Buck Converter 24V 1
Buck Converter 12V 2
Buck Converter 5V 3
Buck Converter 12V 4
Arduino Due LV MCU
Software Control
Manual Control
Analog
I2C
Analog
Temp Sensor
Arduino Micro
Voltage Sensor
Temp Sensor
7S4P
Boost Converter
27V
36V
LV GND
LEGEND:
HV+
HV GND
LV +
LV GND
Analog
I2C
CAN
SERIAL USB

Dynamic Switching

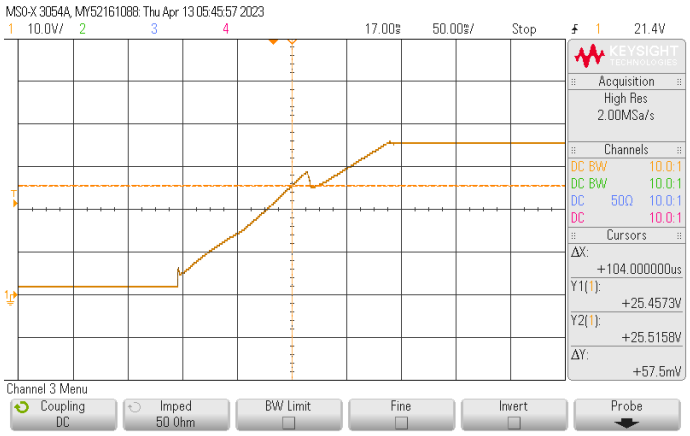

Figure 1: Turning On Low Voltage

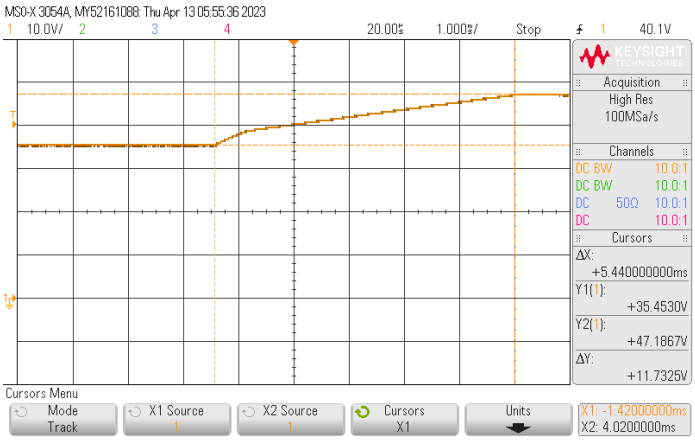

Figure 2: Engaging High Voltage

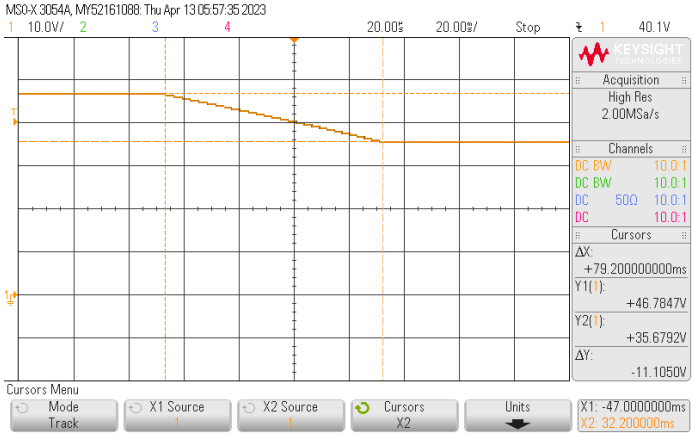

Figure 3: Disengaging High Voltage