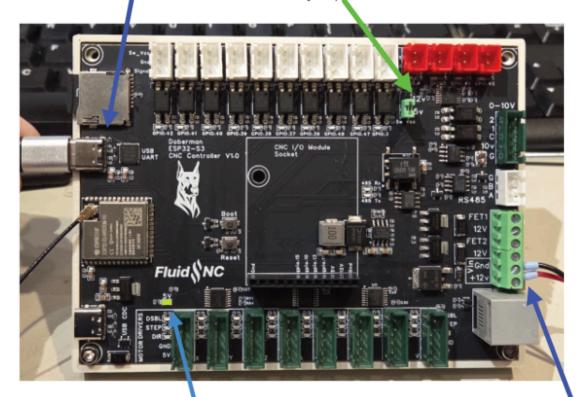
## **Doberman Firmware installation and testing**

- 1. Connect 12VDC to the Vin terminals (+ and Gnd) on the green terminal block. A green power LED near the lower left side should turn on.
- 2. Connect to a Windows computer via a USB-C cable.
- 3. Run install.bat from the doberman\_fw\_test folder.
- 4. Firmware should install without errors. Leave the terminal open
- 5. Send \$localfs/run=test.nc from the terminal.
  - a. The four LEDs below the red connectors should blink on then off in sequence.
  - b. All of the green LEDs should blink along the bottom edge. Make sure all 6 sets blink. They will blink at different times and rates
- 6. Place a green shunt jumper on the 5V (lower) side of the 3 pin header. It is located along the top edge of the controller.
- 7. Testing is now complete.

Connect USB here

Place jumper on 5V side



Connect 12V Power here

Power OK LED