



DesignNews

Scratch Building Raspberry Pi RP2040 IoT Devices

Day 1:

Building an RP2040/WizFi360 Wi-Fi IoT Node

Sponsored by



Webinar Logistics

- Turn on your system sound to hear the streaming presentation.
- If you have technical problems, click “Help” or submit a question asking for assistance.
- Participate in ‘Attendee Chat’ by maximizing the chat widget in your dock.

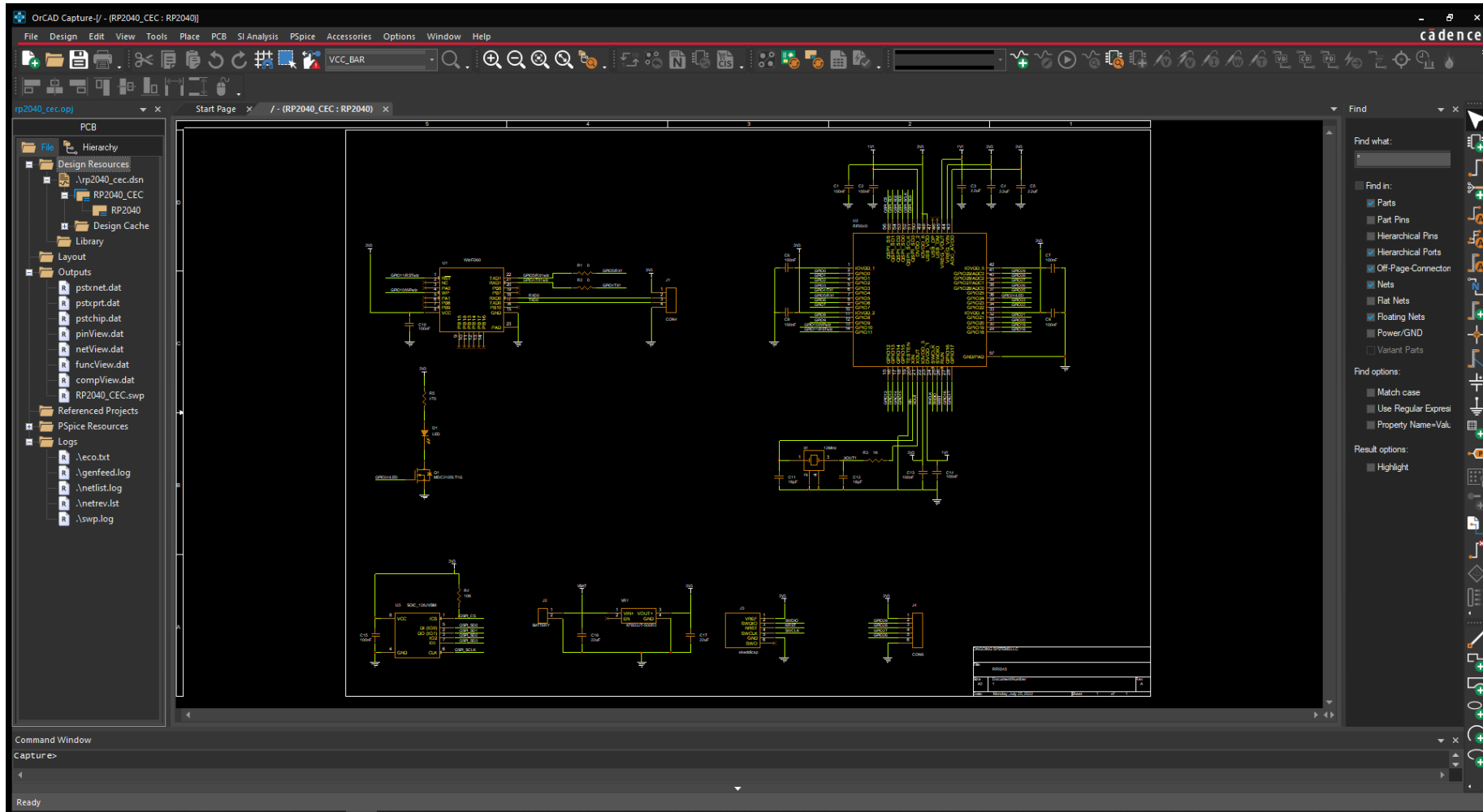


Fred Eady

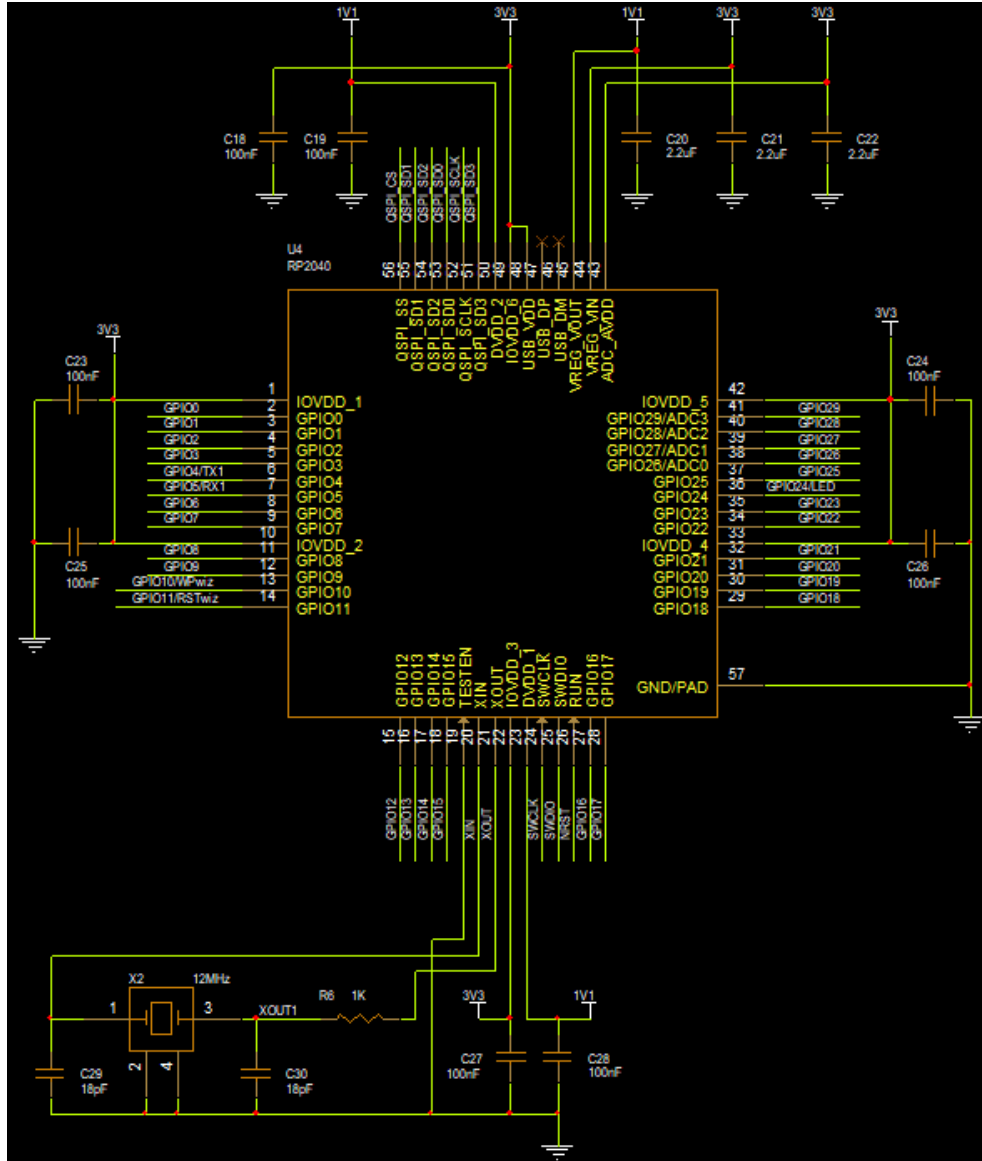
Visit 'Lecturer Profile' in your console for more details.

AGENDA

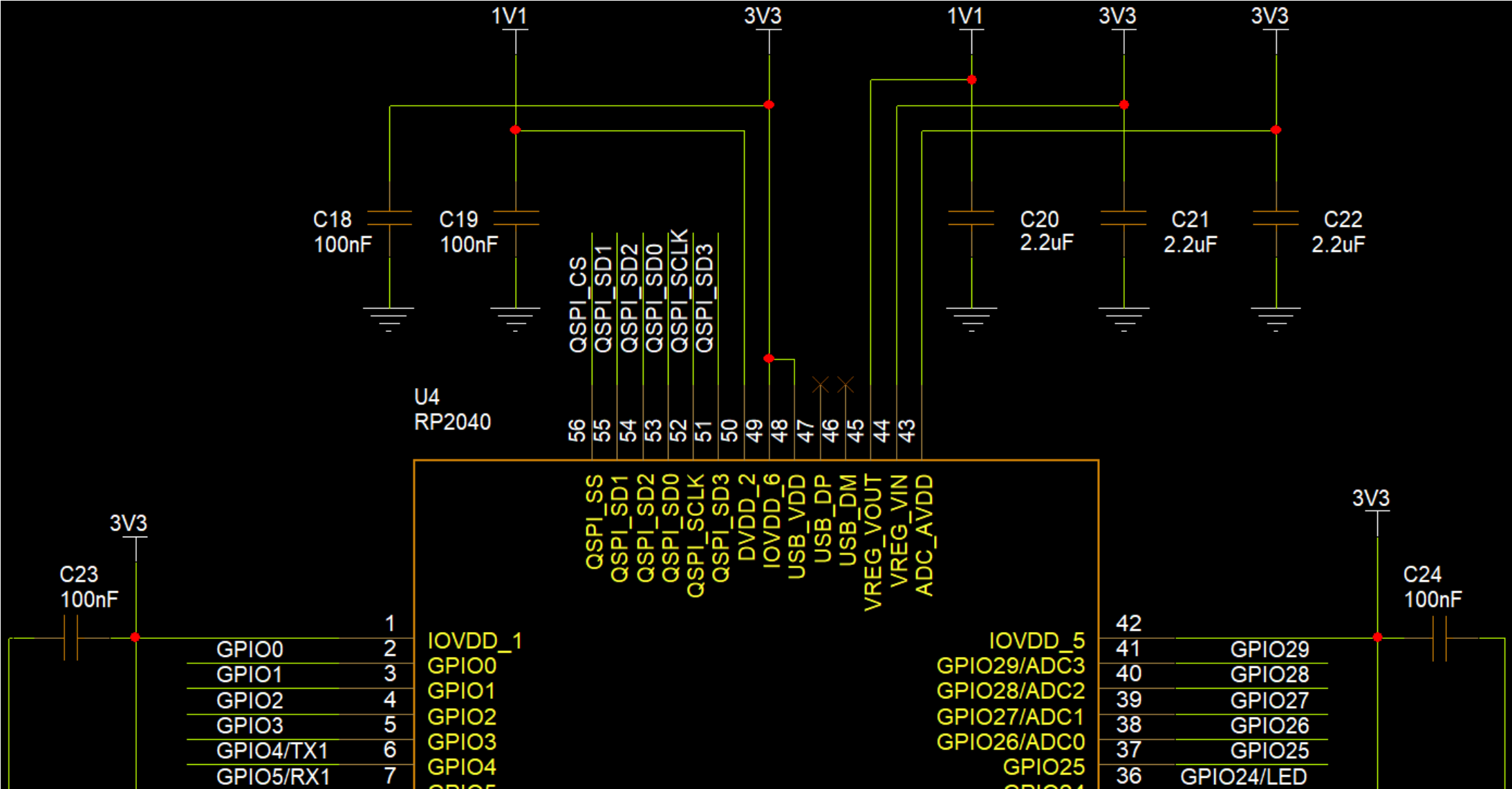
- **Designing Custom RP2040 Hardware**
- **Scratch Building Custom RP2040 Hardware**



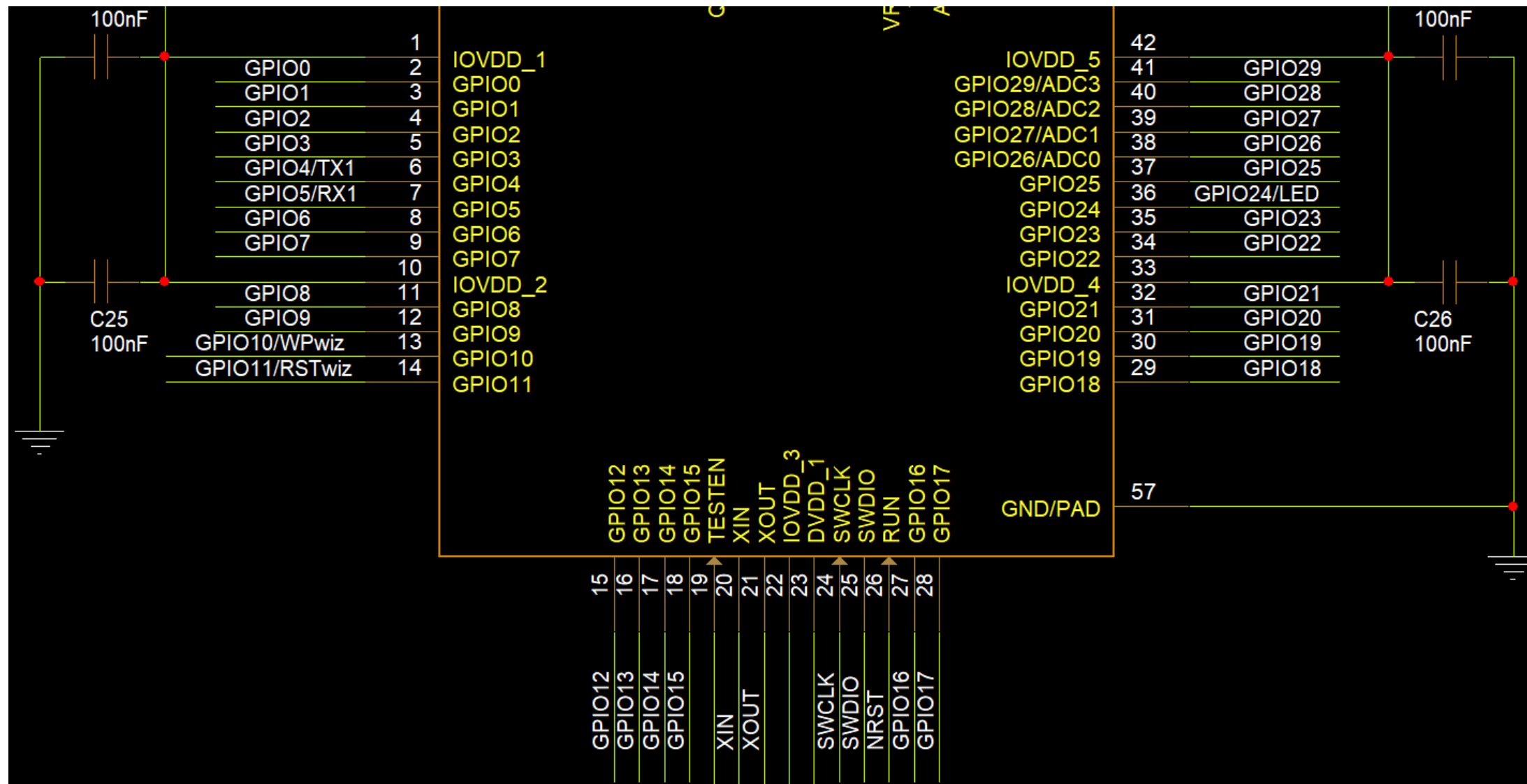
Microcontroller Subsystem Design



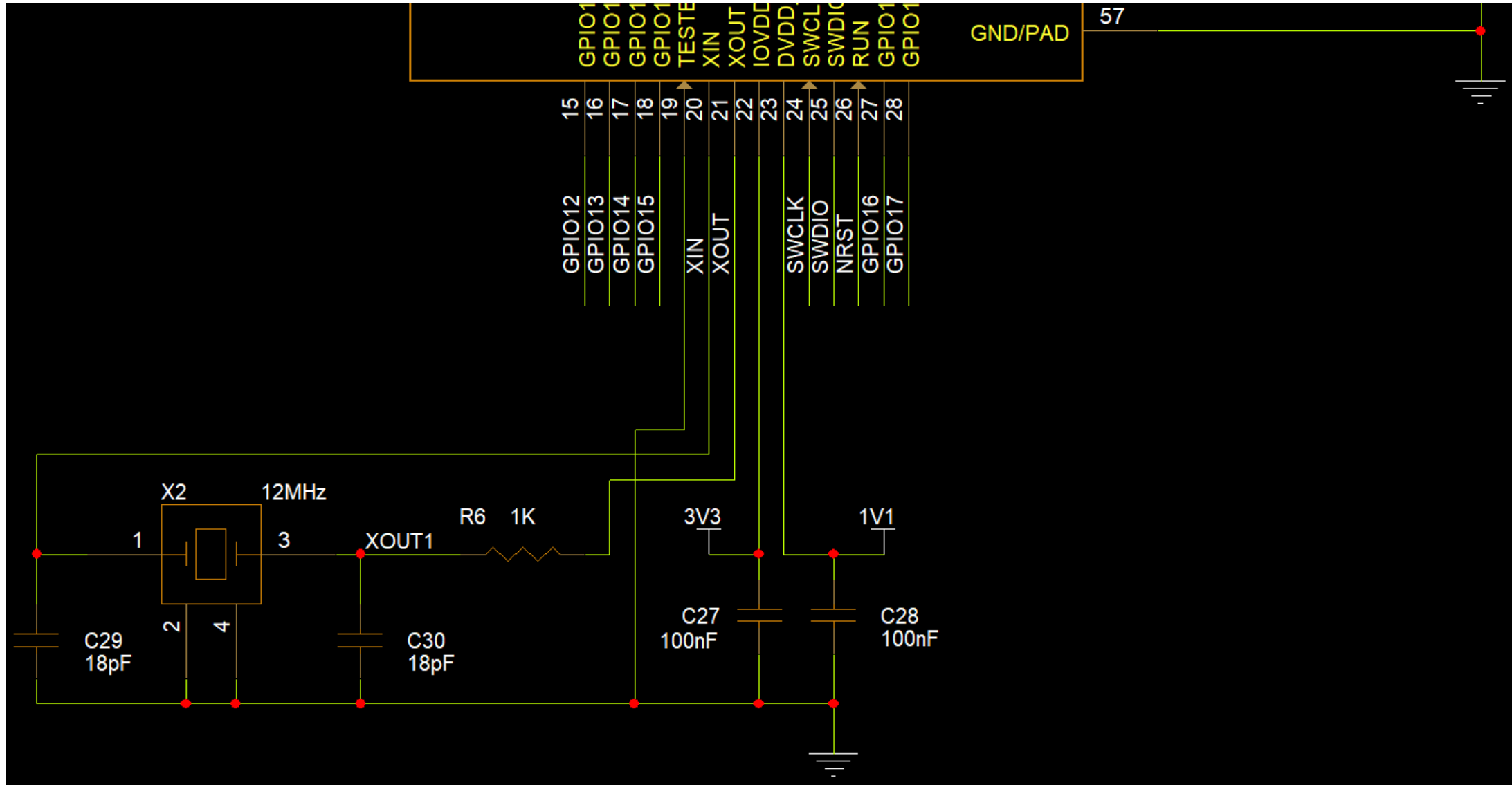
Microcontroller Subsystem Design



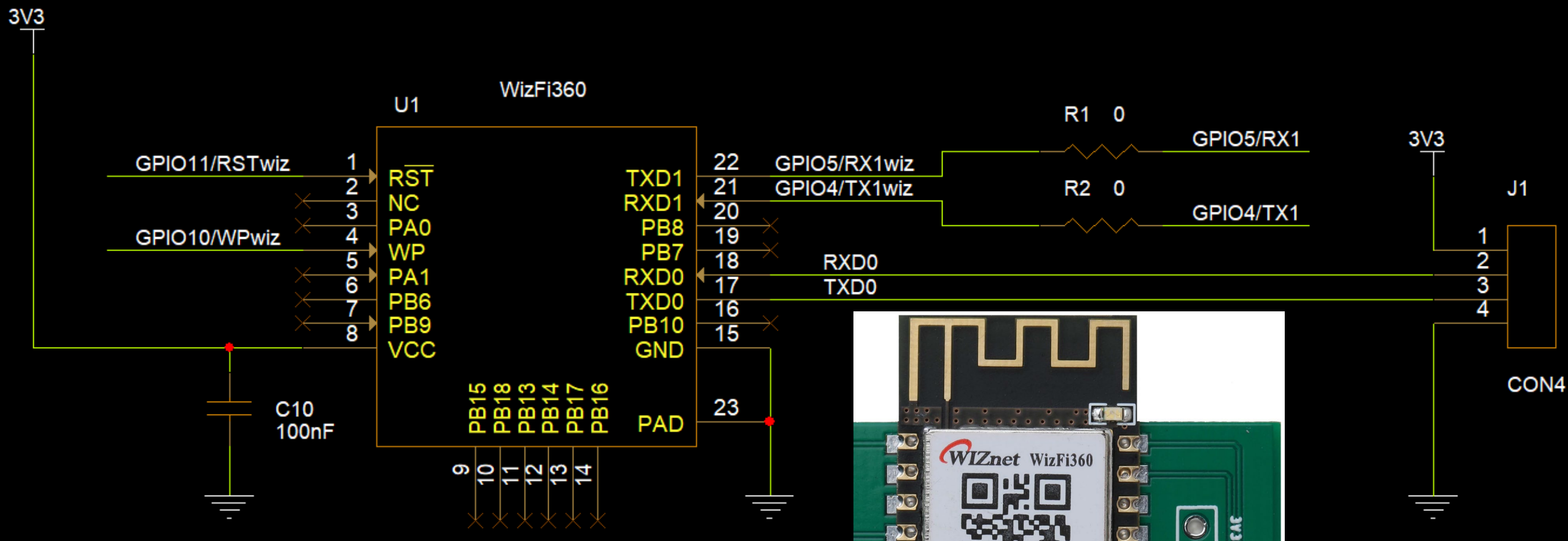
Microcontroller Subsystem Design



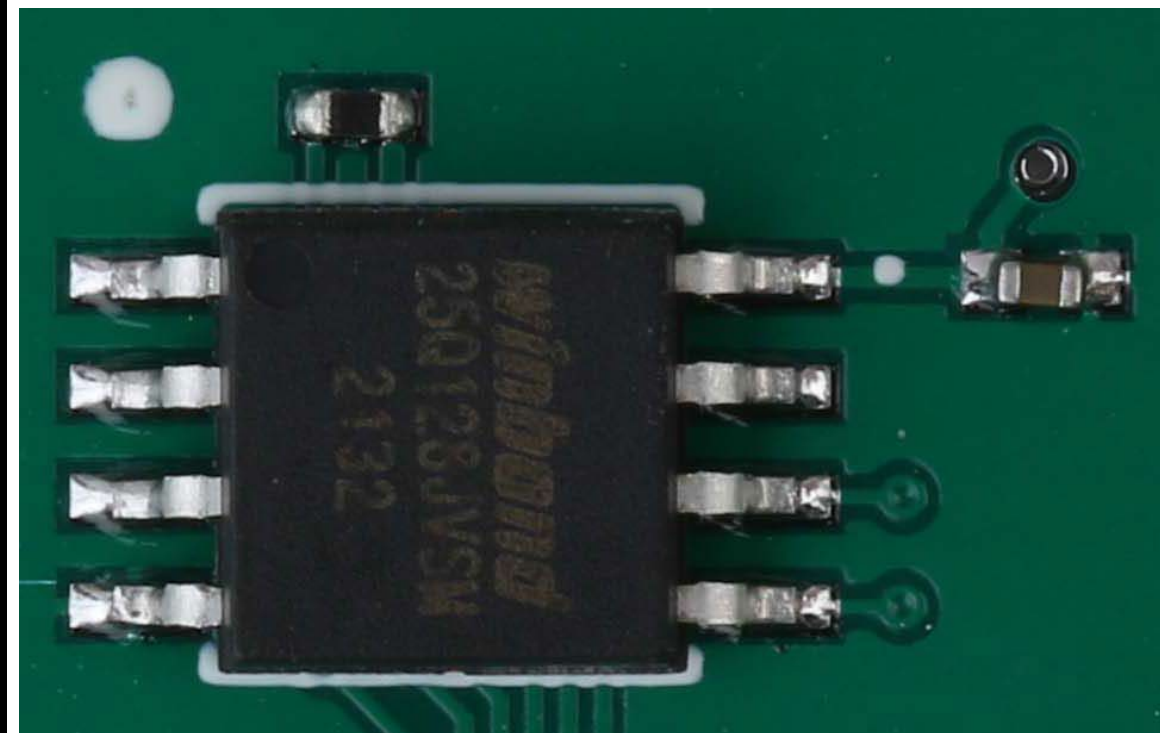
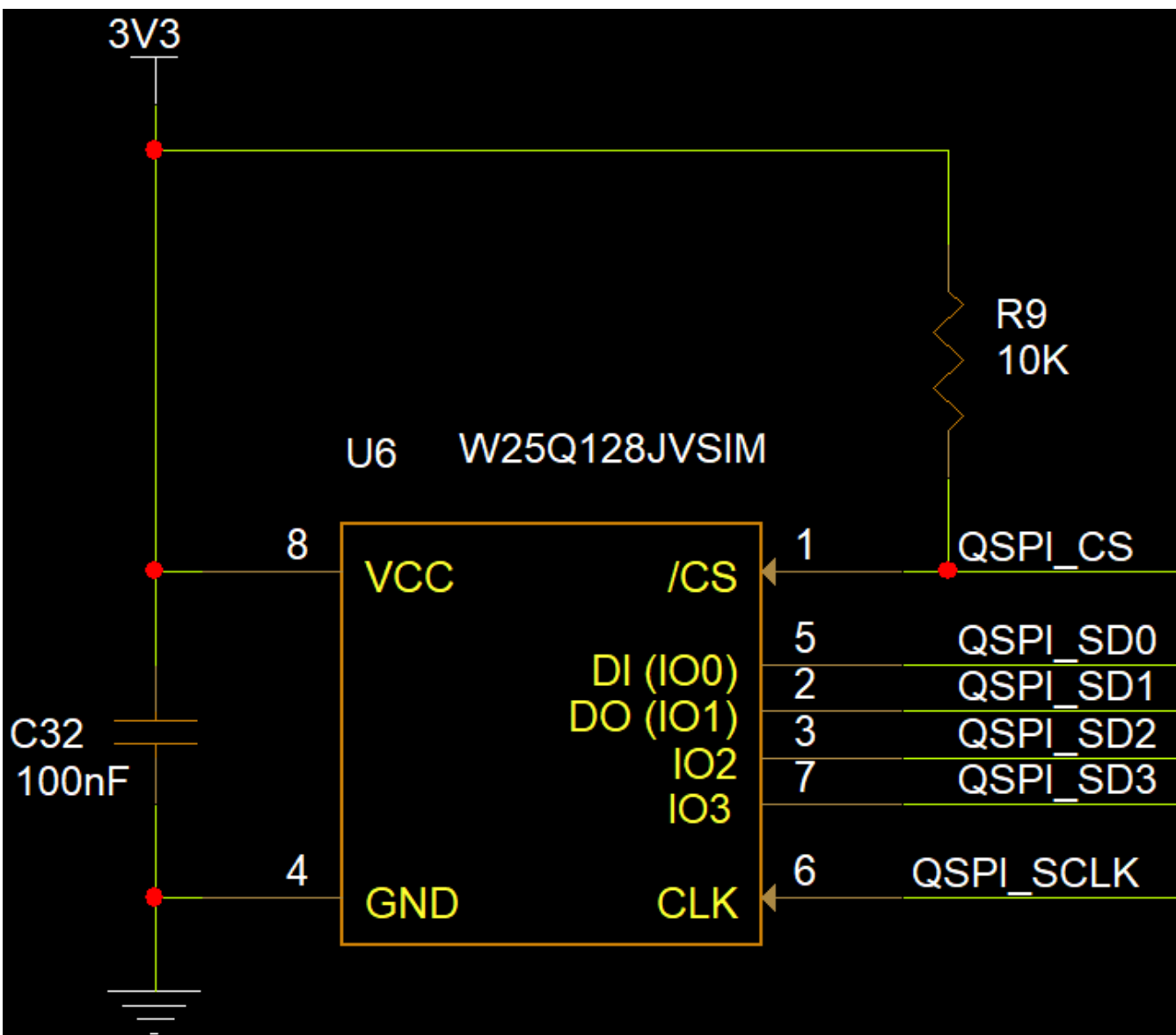
Microcontroller Subsystem Design



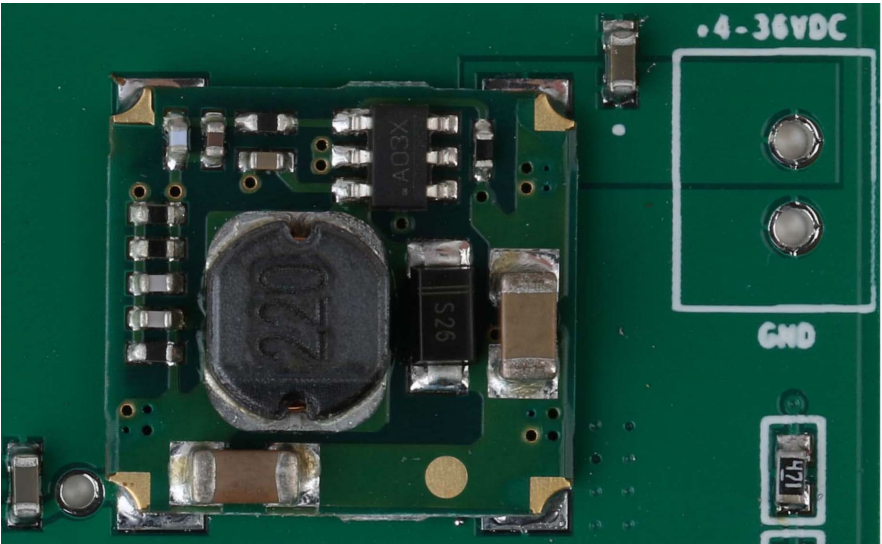
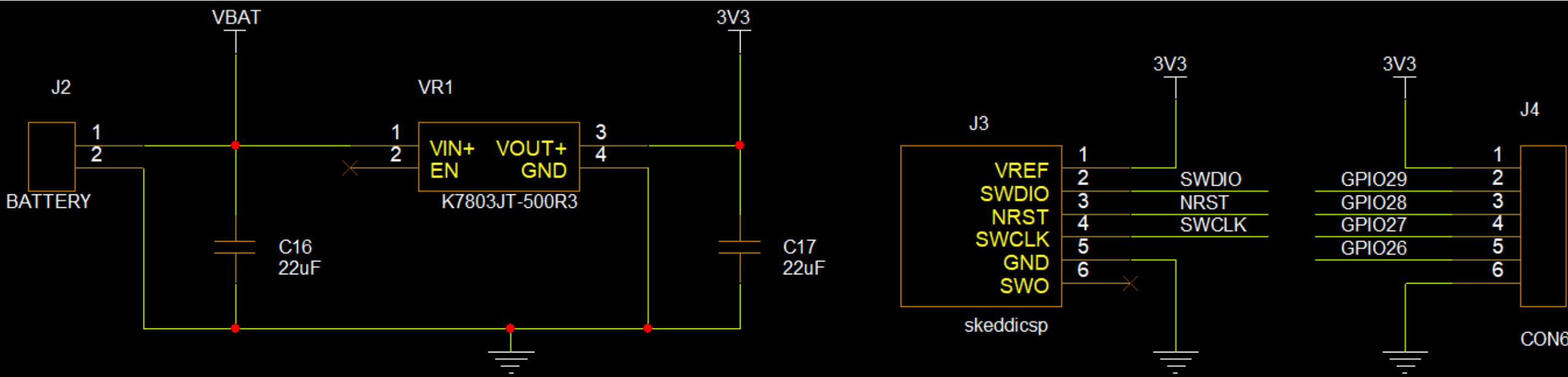
WizFi360 Subsystem Design



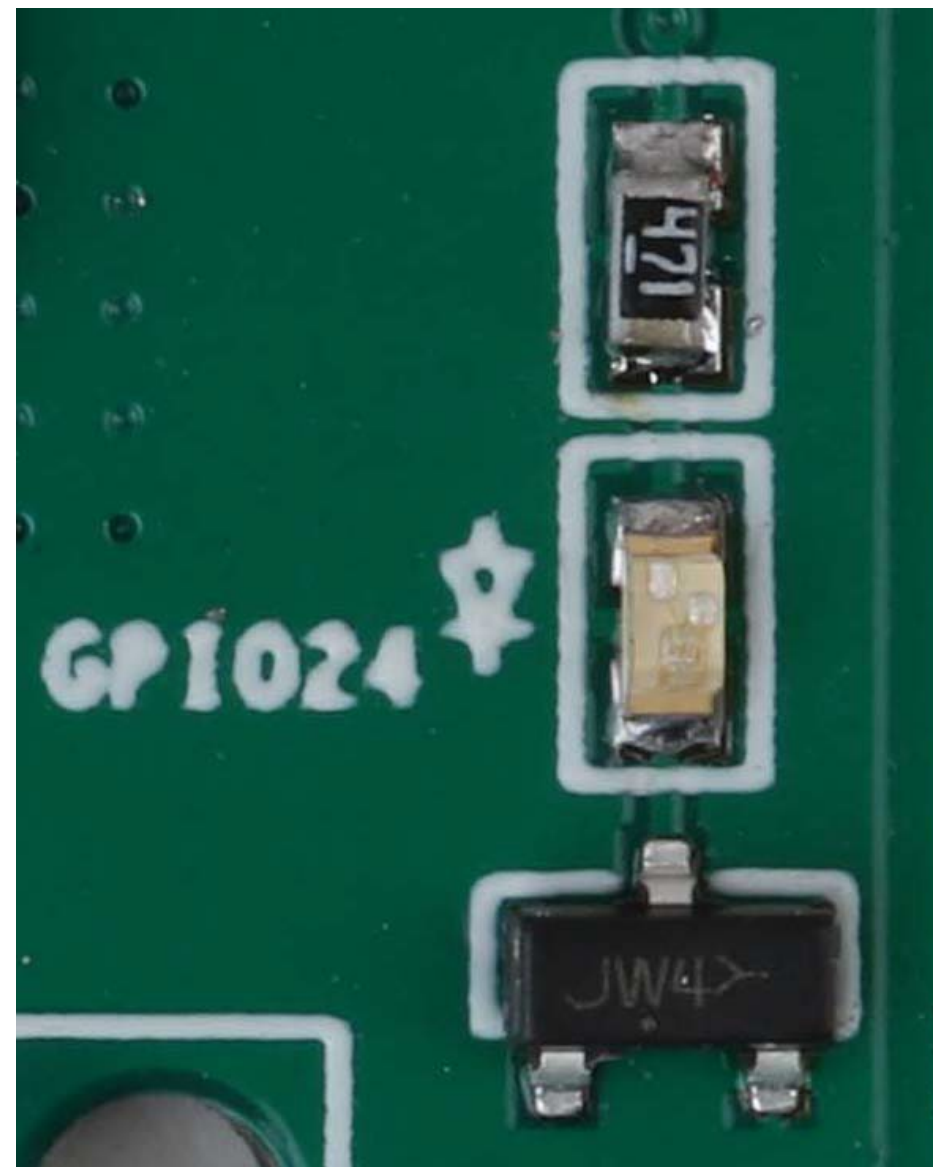
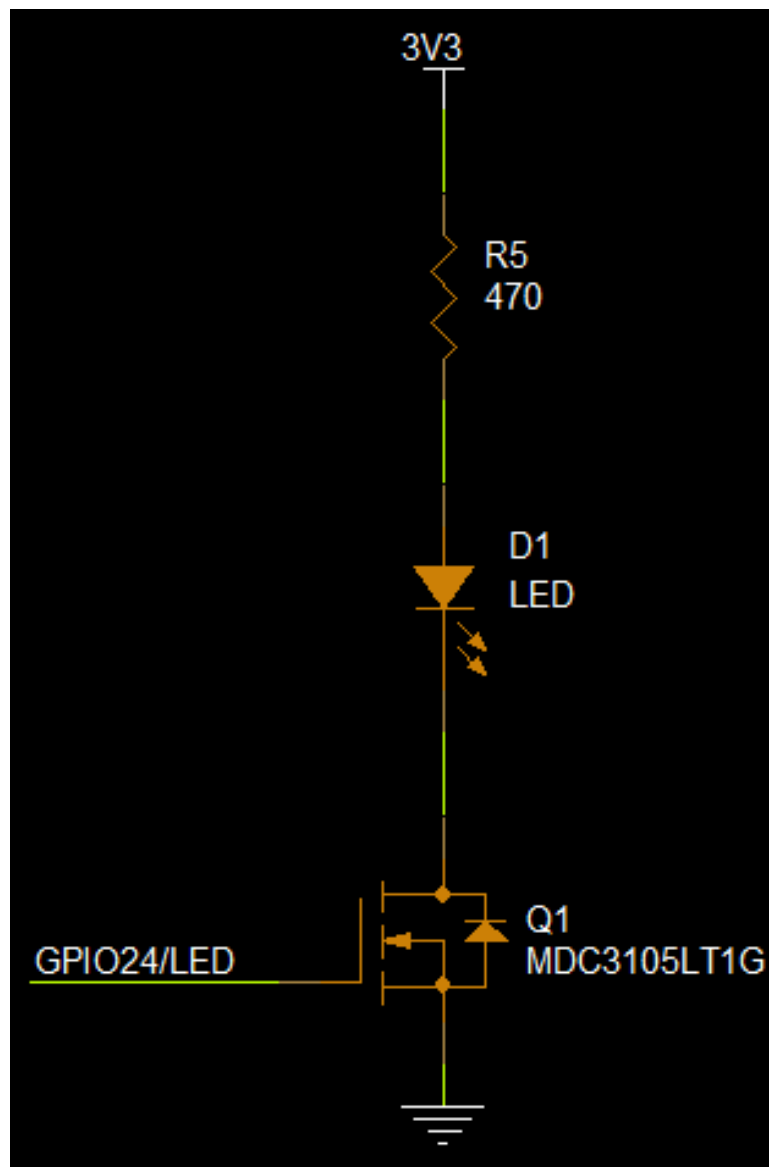
QSPI Flash Subsystem Design



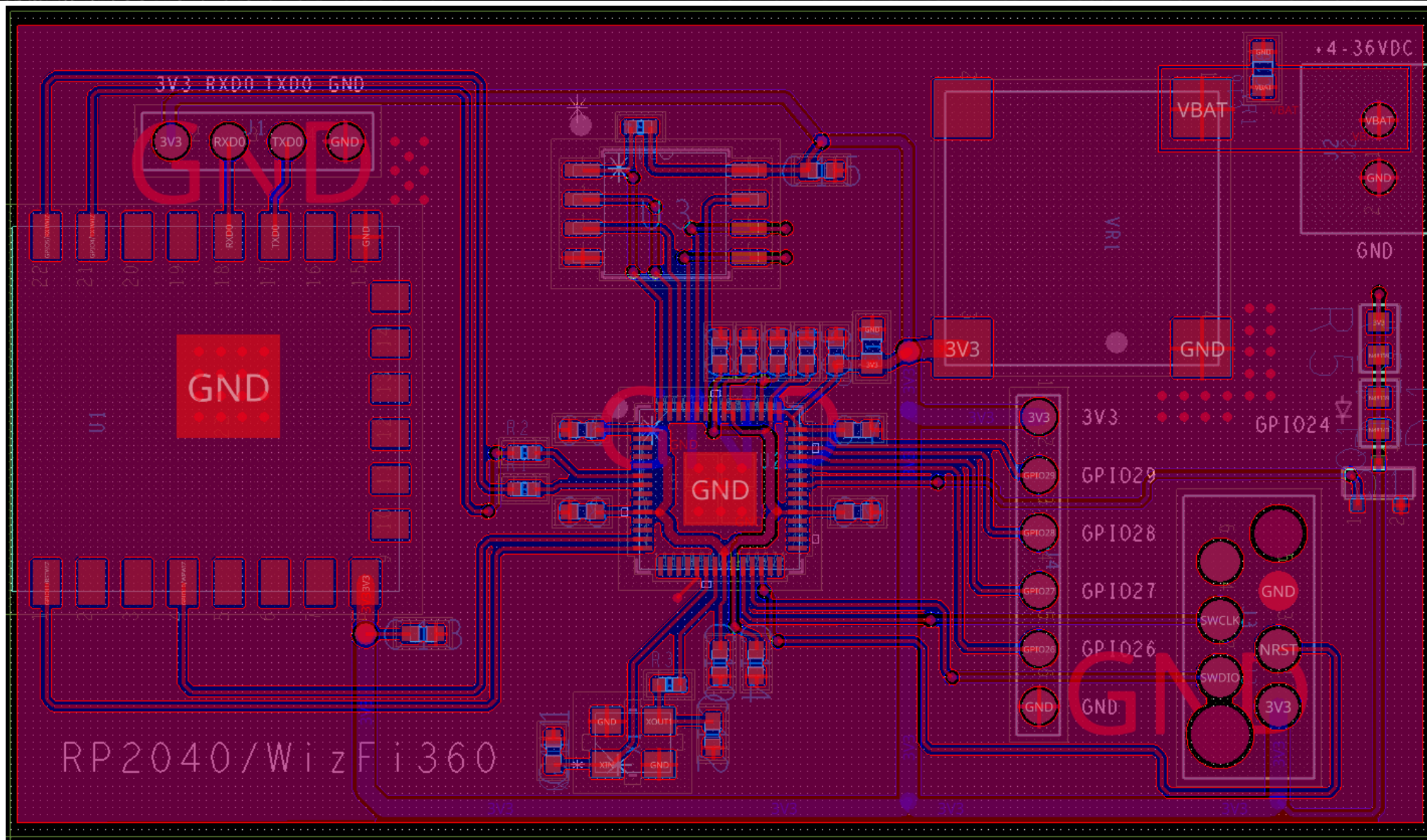
Power-ICSP-I/O Subsystem Design



Power-ICSP-I/O Subsystem Design



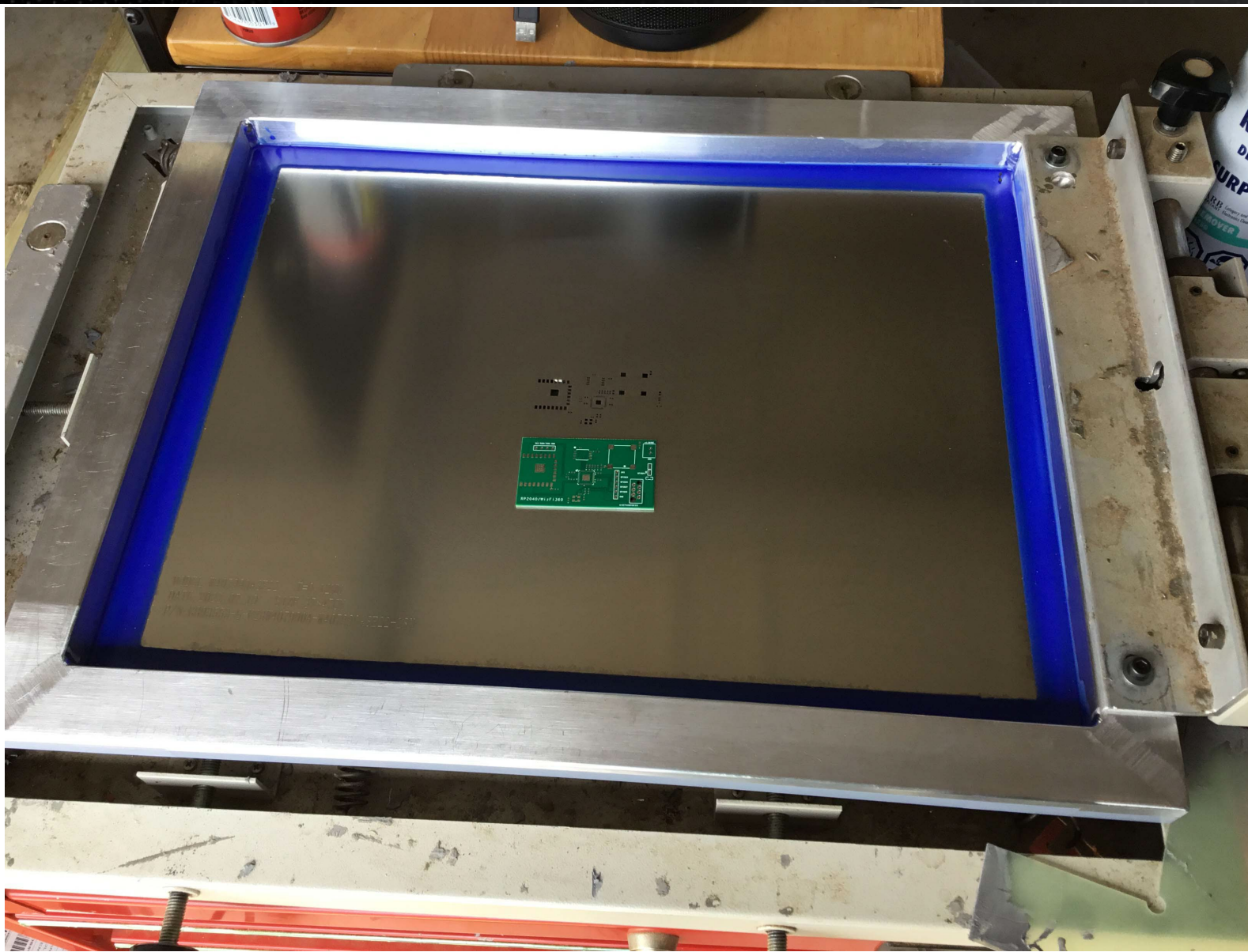
Generate the Gerbers



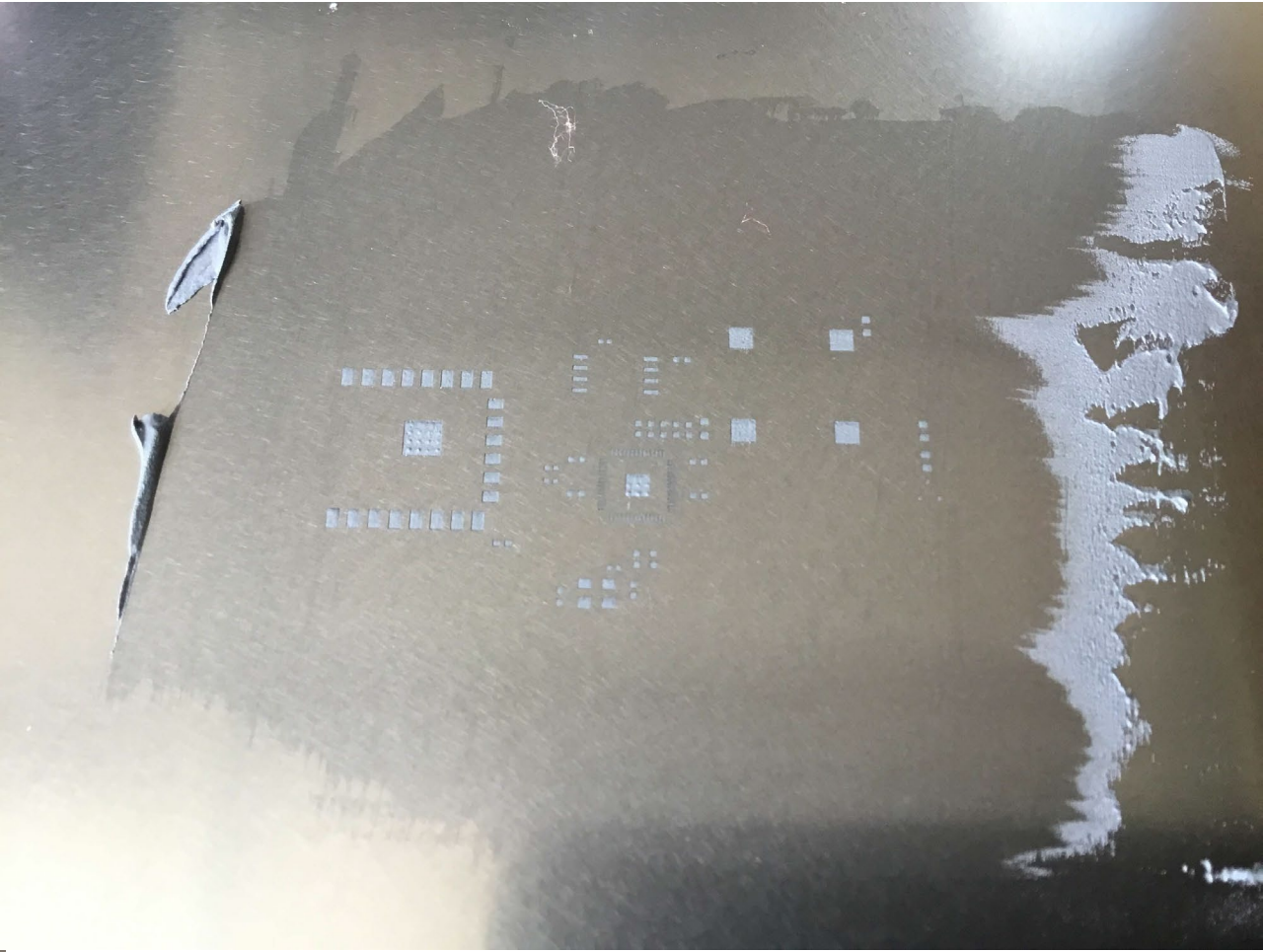
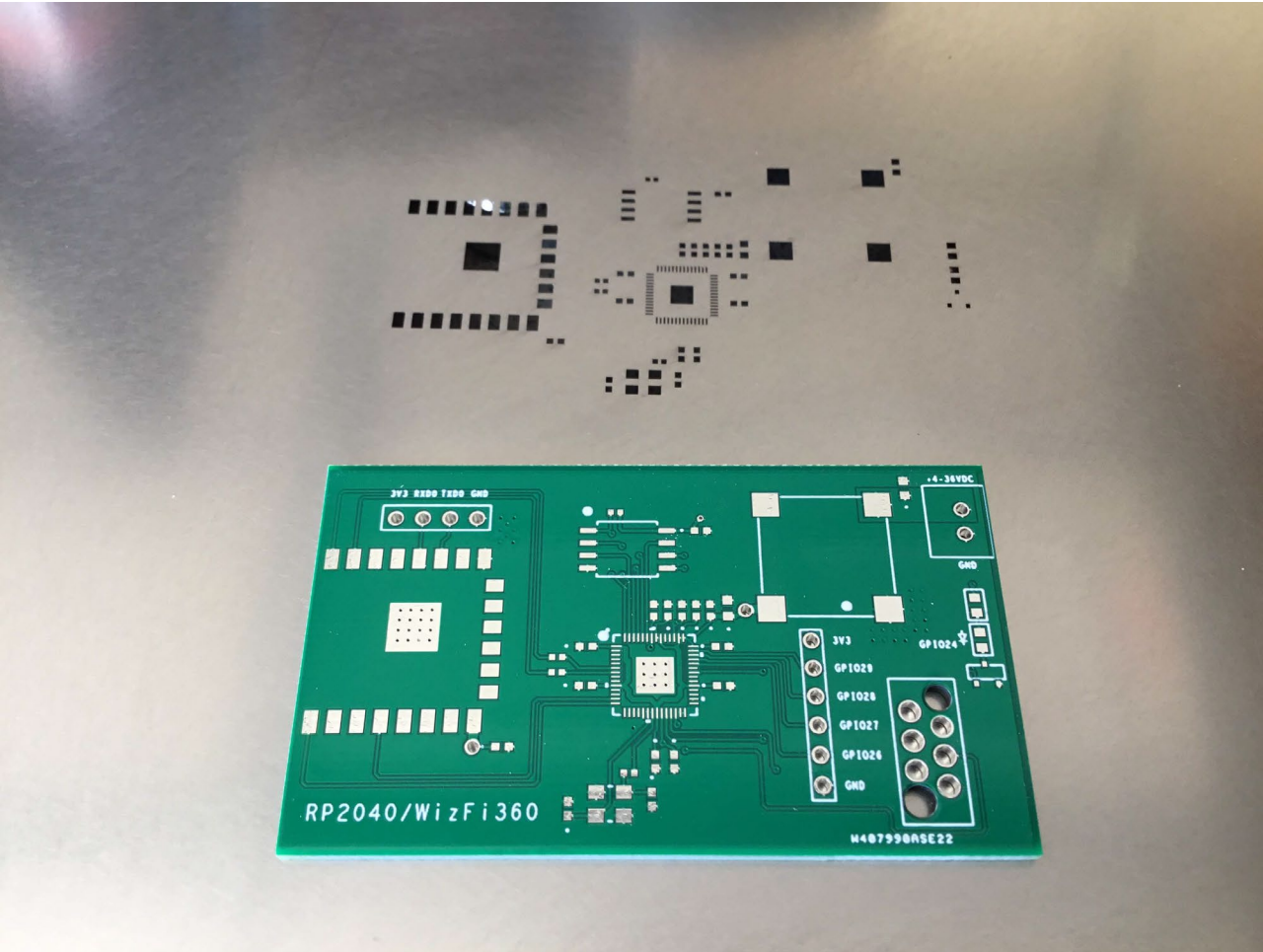
PCB Assembly



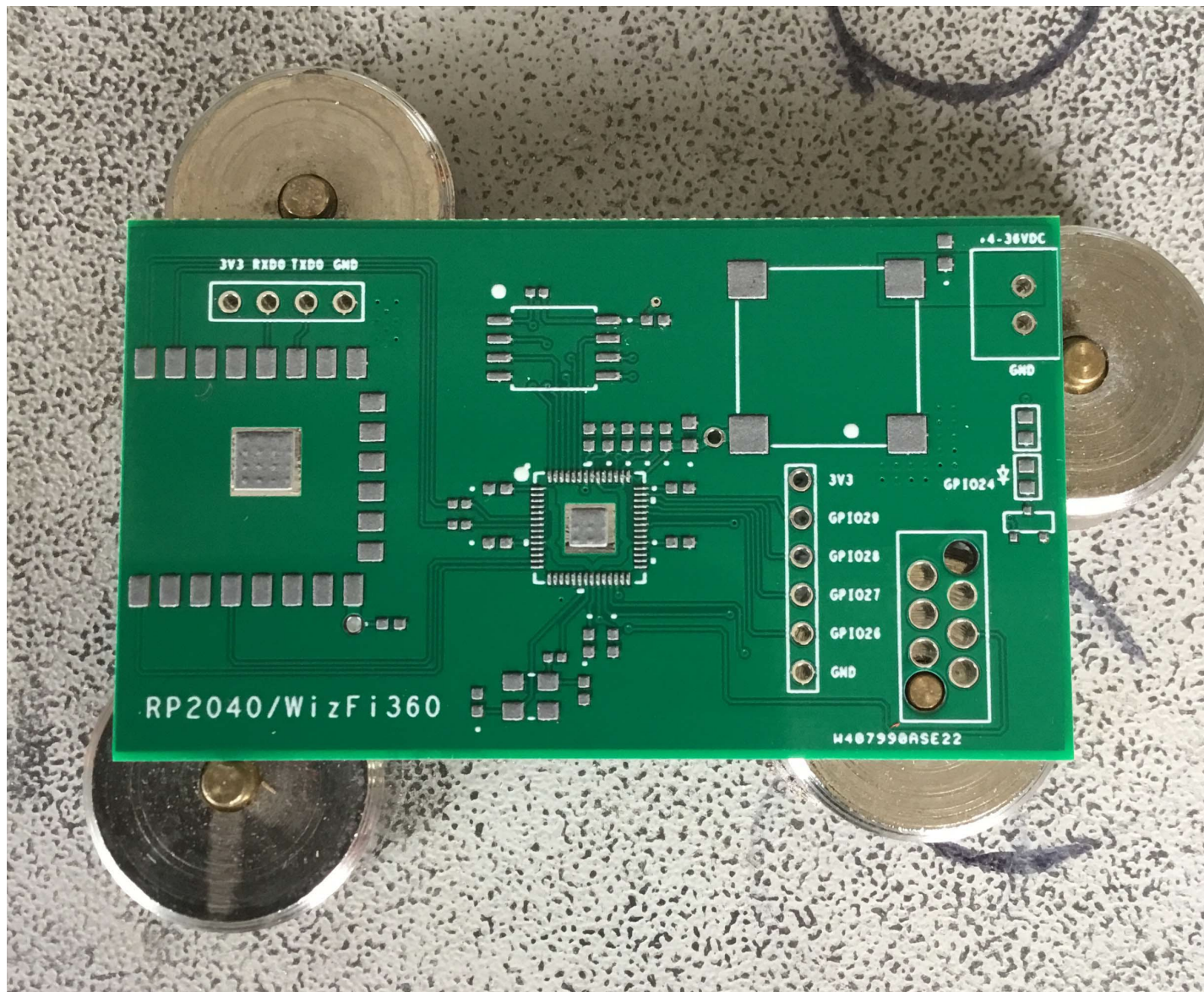
PCB Assembly – Stencil Setup



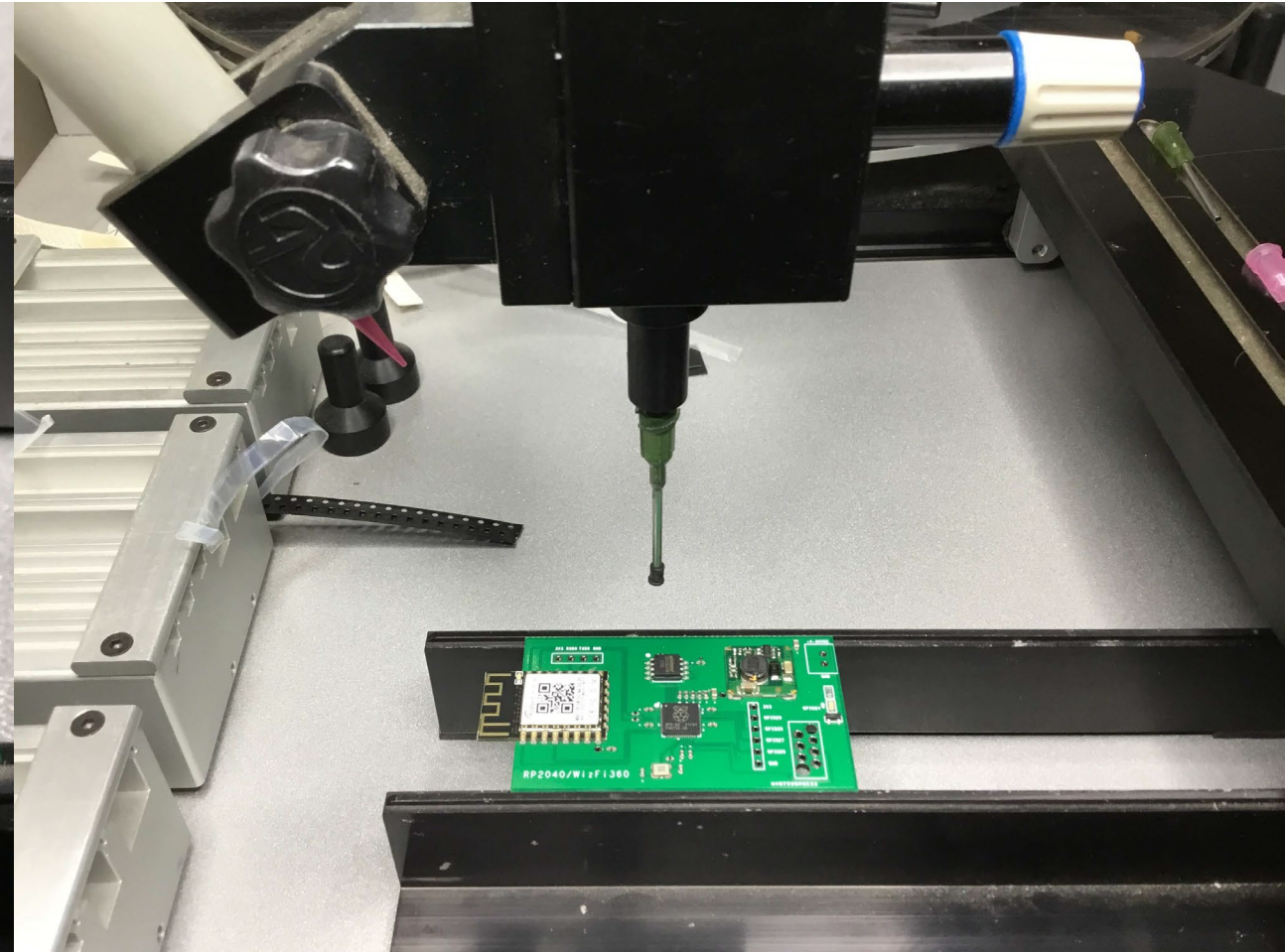
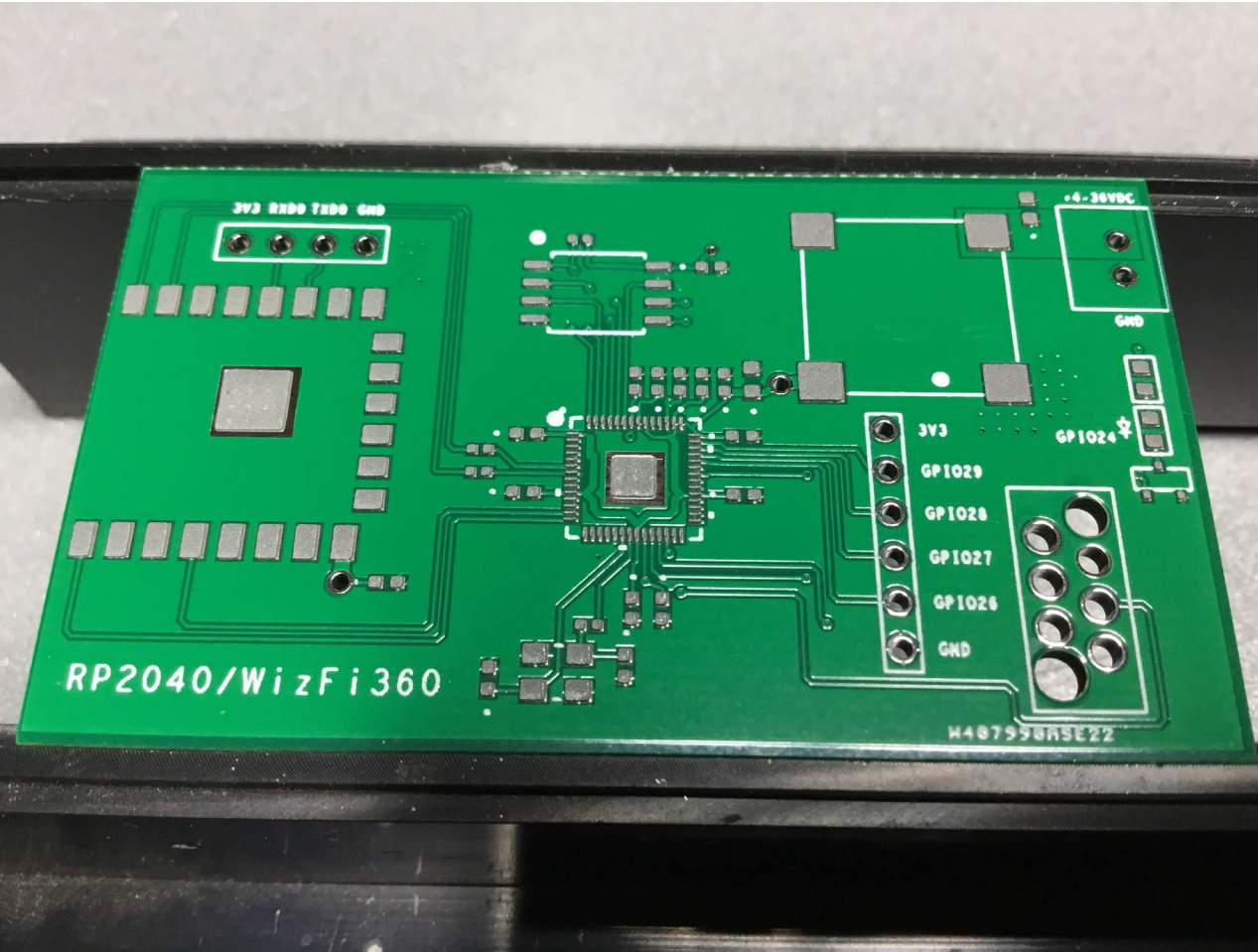
PCB Assembly – Solder Paste Application



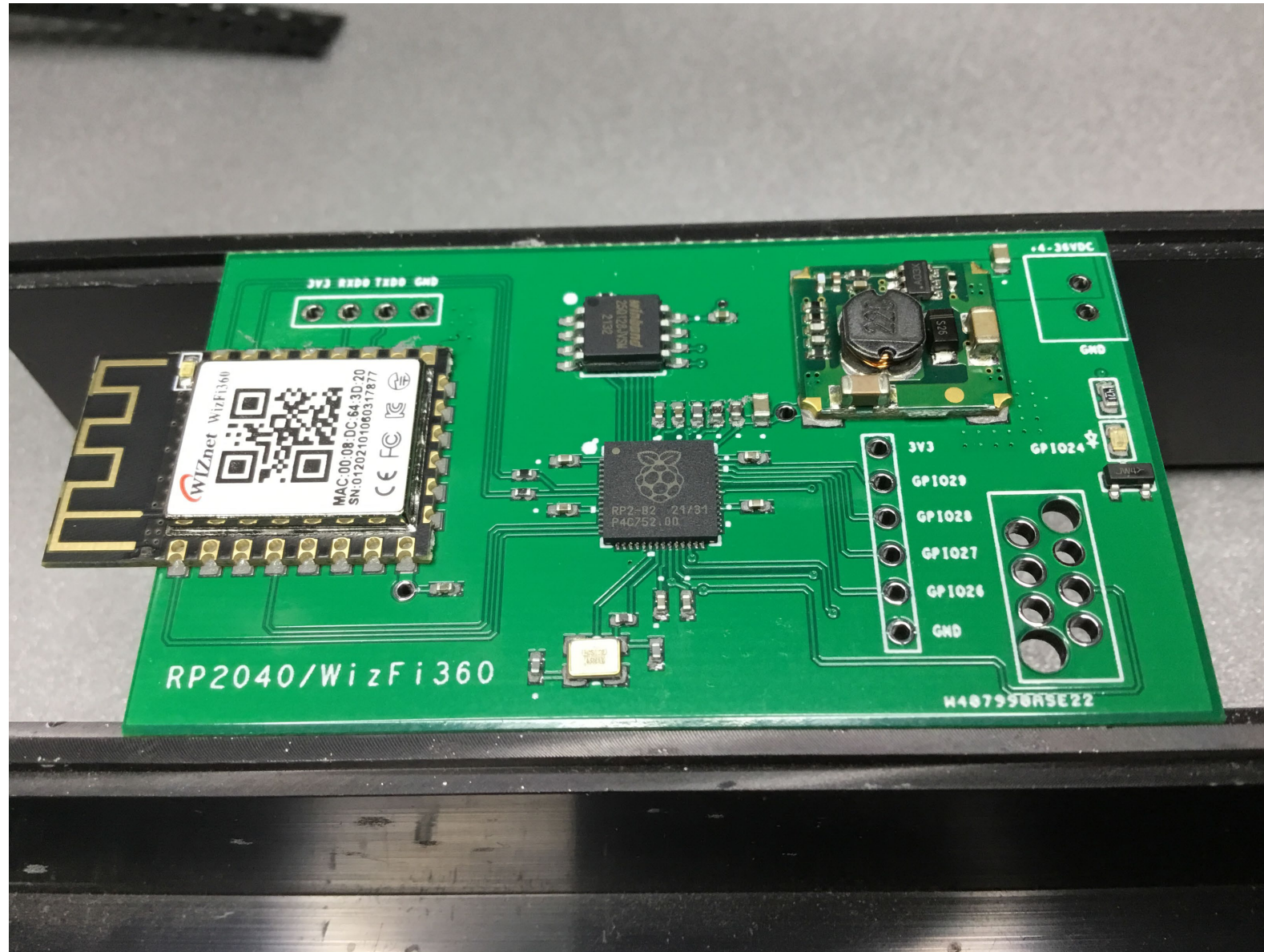
PCB Assembly – Solder Paste Application



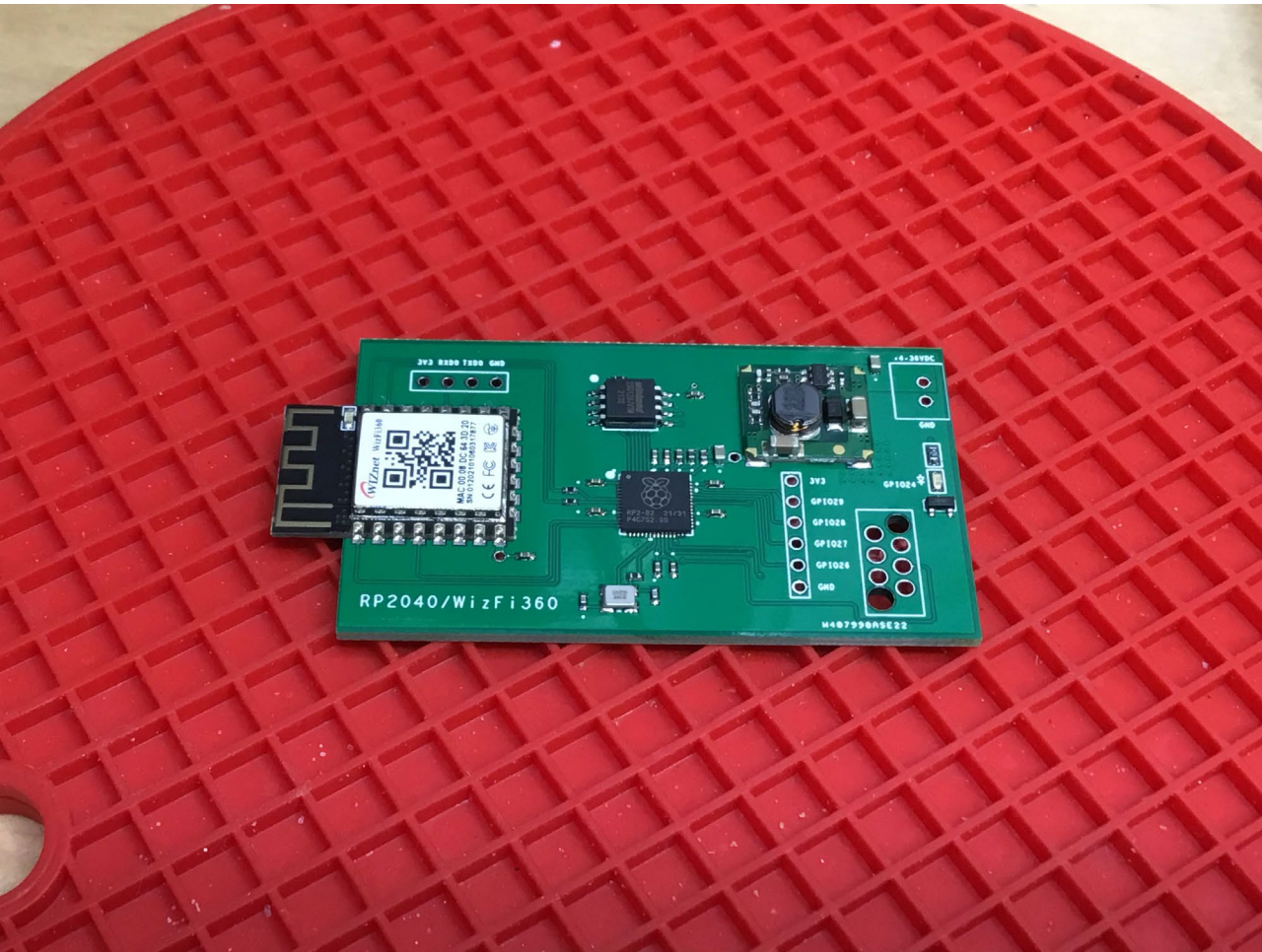
PCB Assembly – Place the Parts



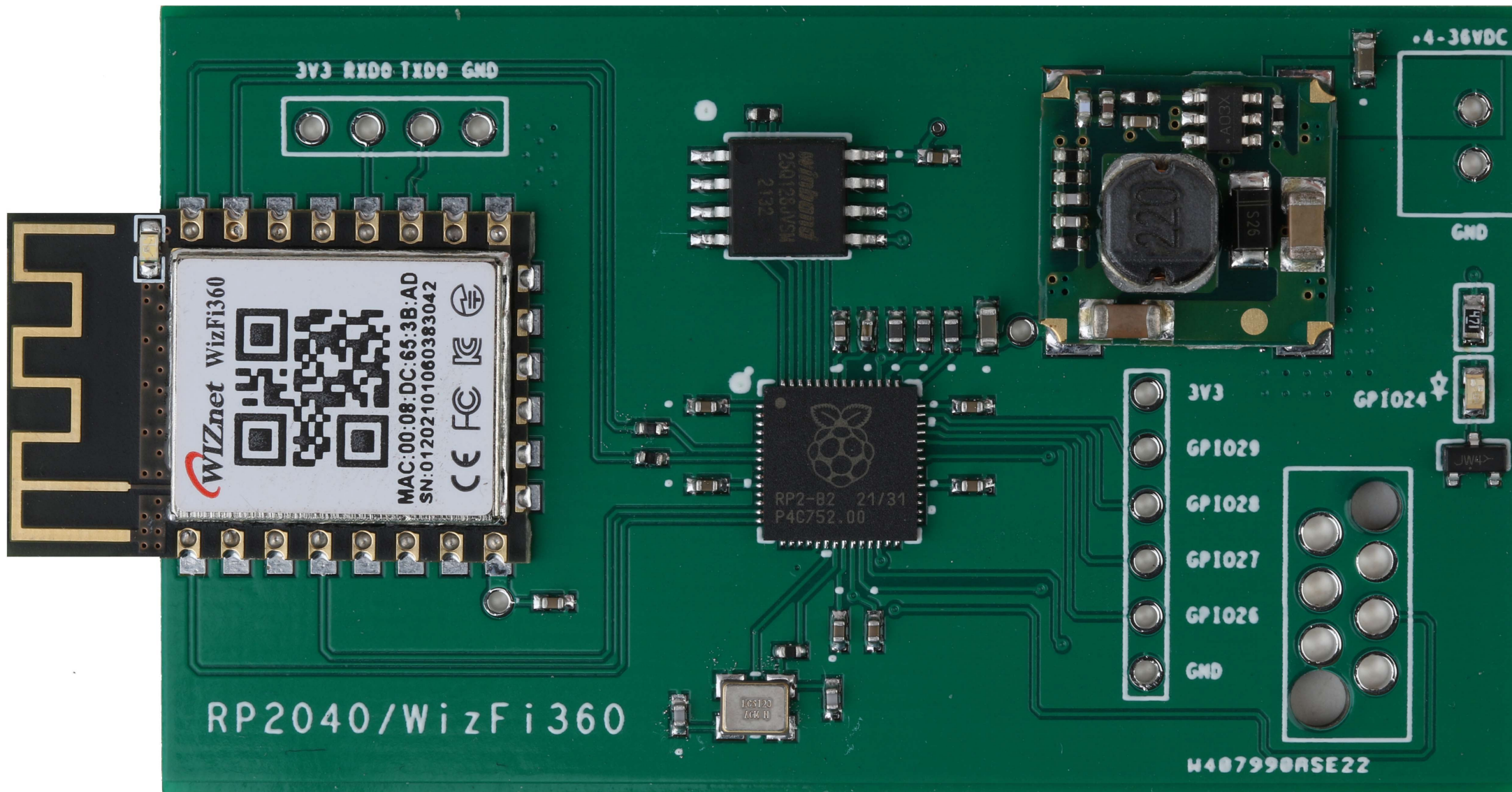
PCB Assembly – Place the Parts



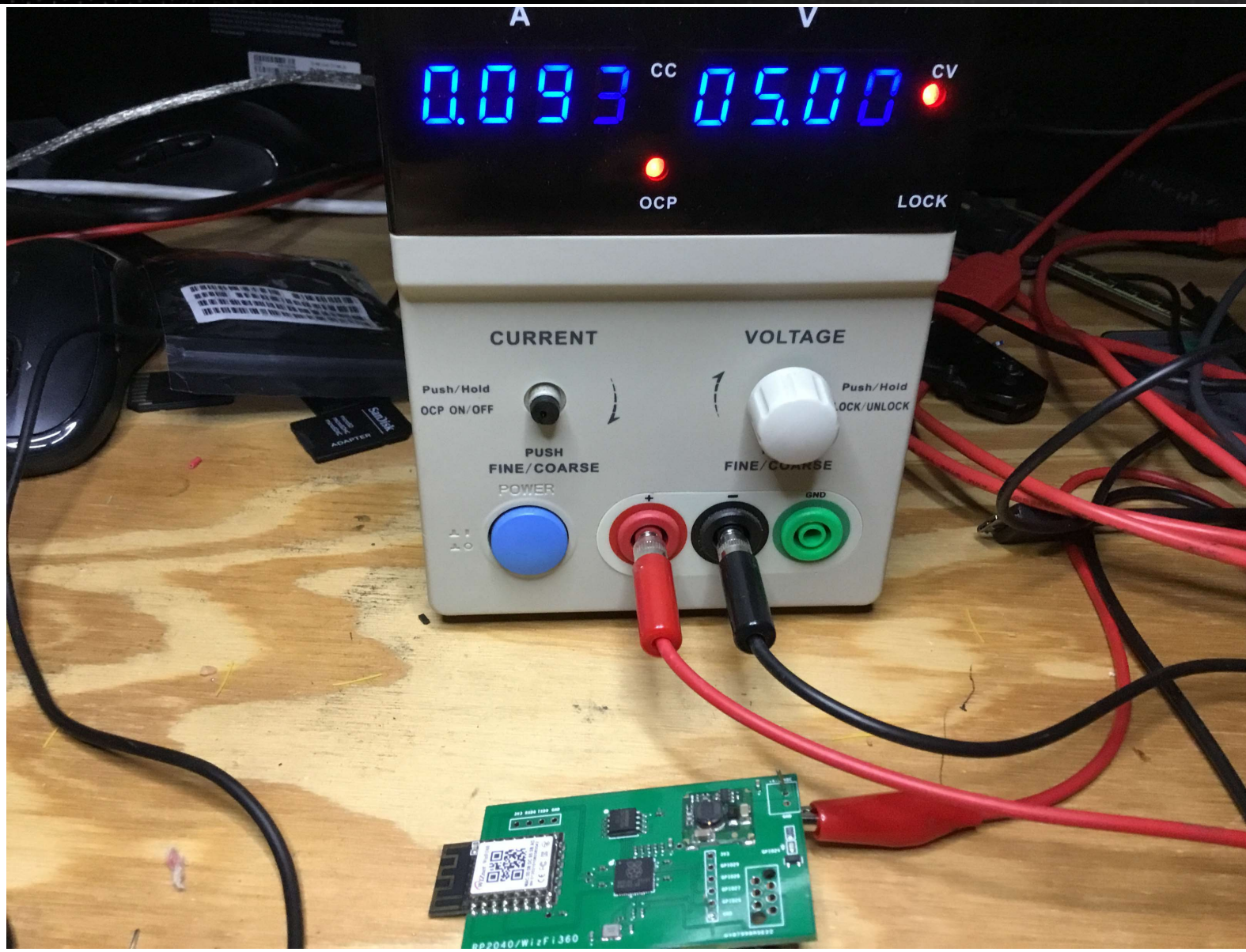
PCB Assembly – Solder the Components



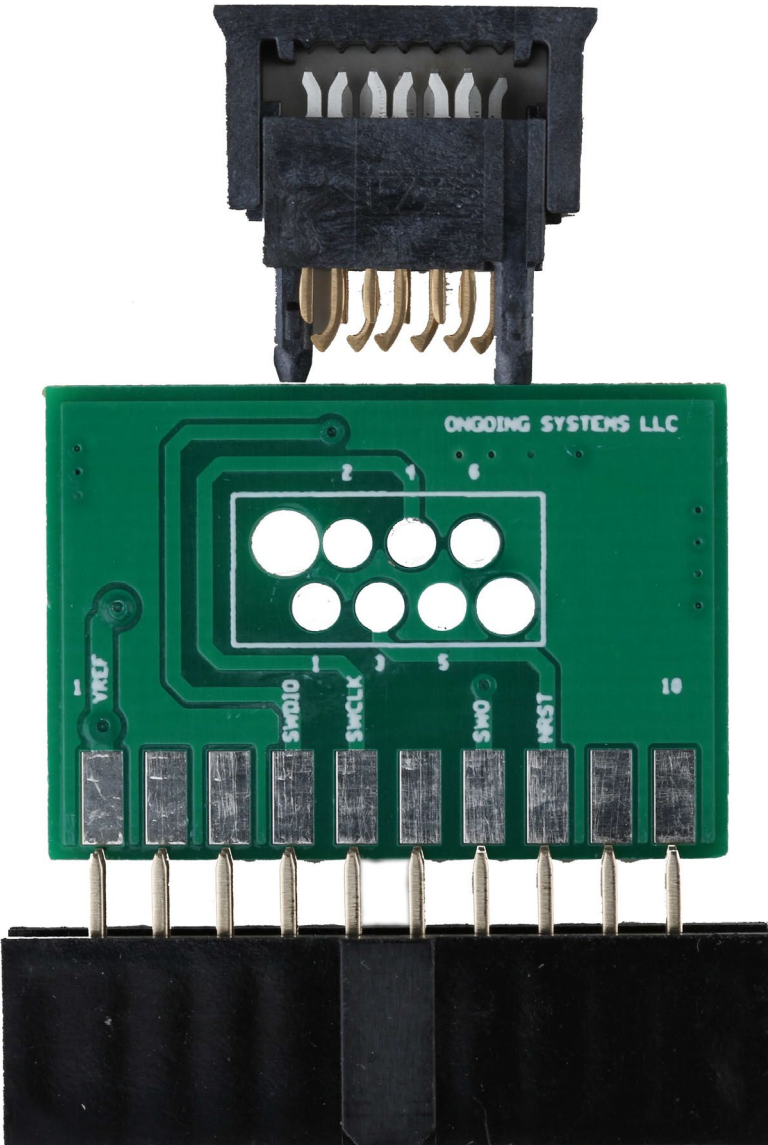
PCB Assembly – Assembled Board



PCB Assembly – Magic Smoke Test



PCB Assembly – Programmer/Debugger Interface

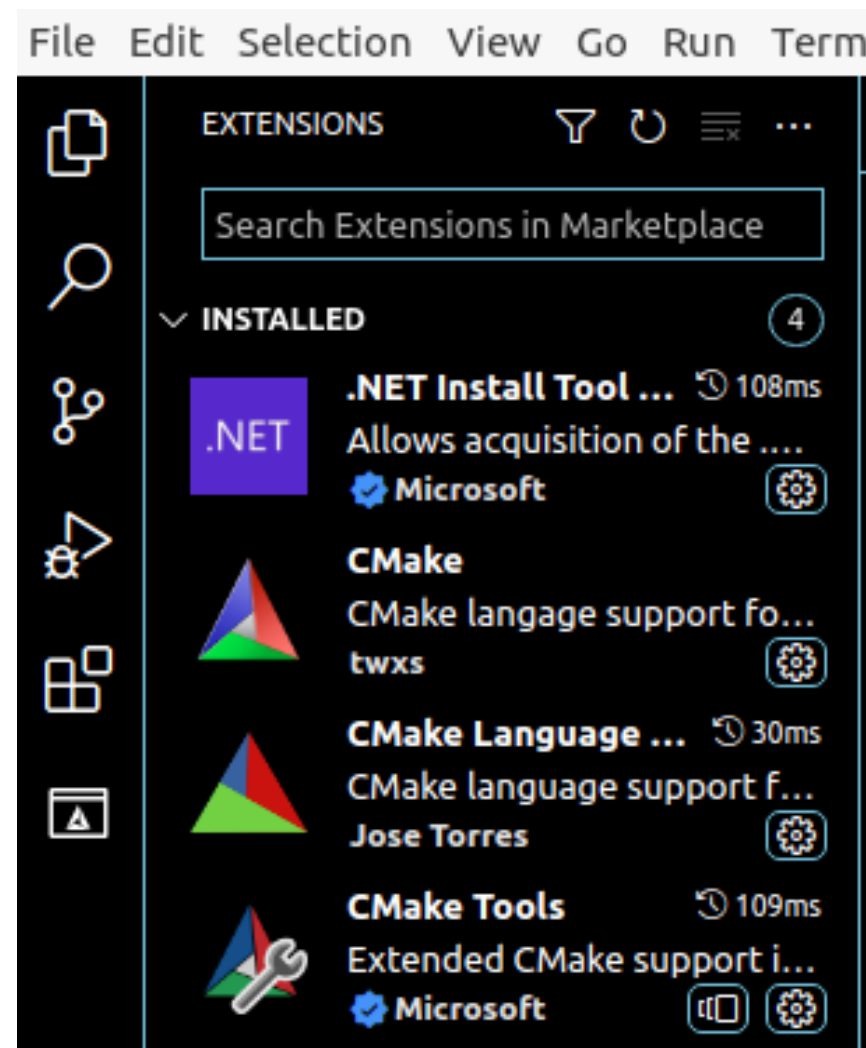


Thank you for attending!!!

Please consider the resources below:

- raspberrypi.org
- **RP2040 Datasheet**
- **Hardware Design with RP2040**

MORE TO COME..





DesignNews

Thank You

Sponsored by

