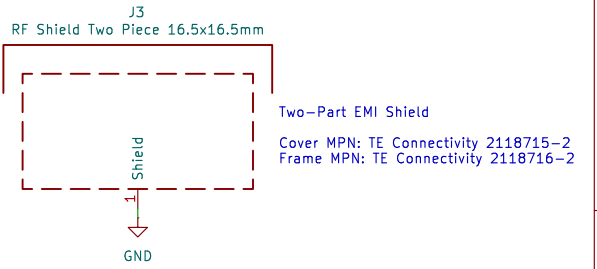
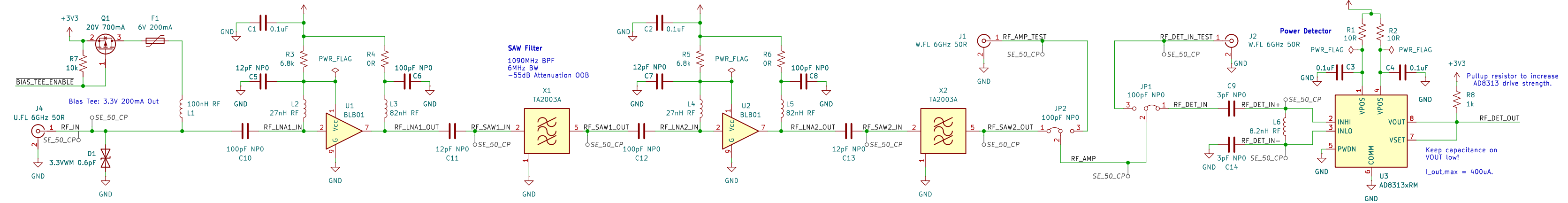
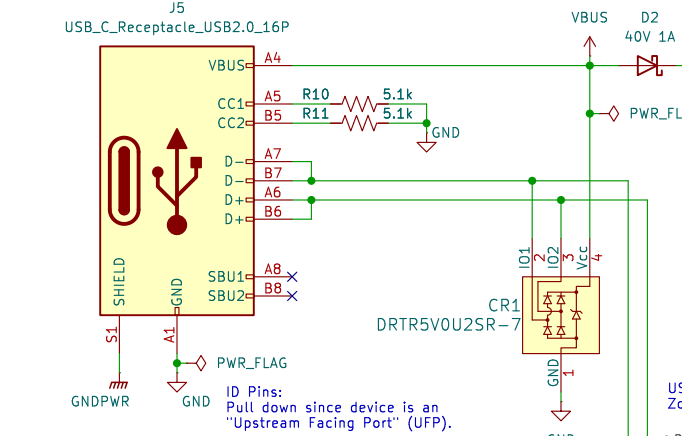


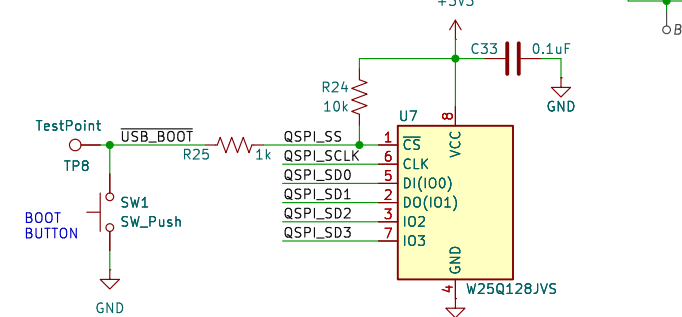
## RF Input Signal Chain



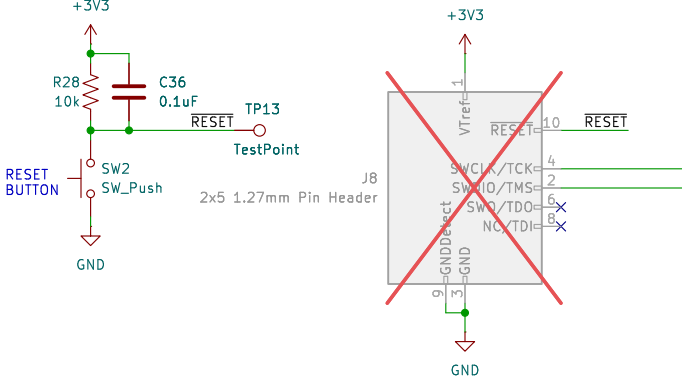
## USB C Connector



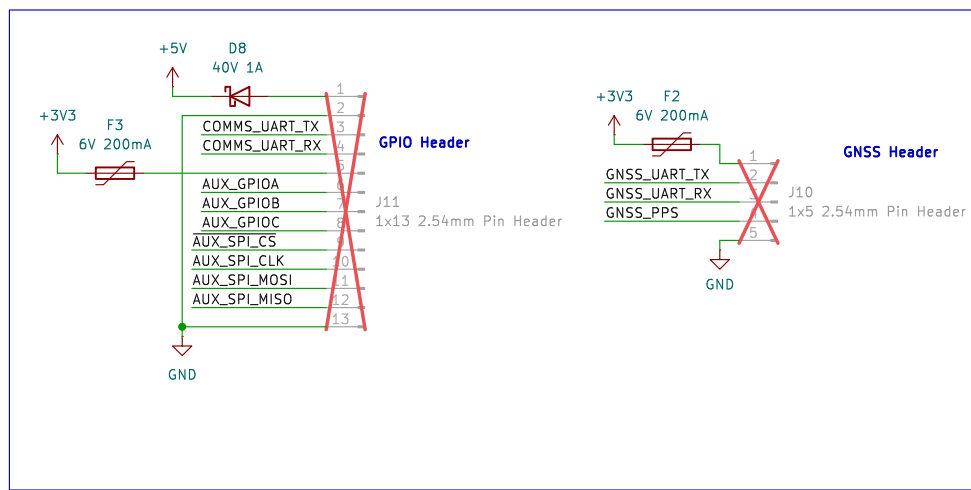
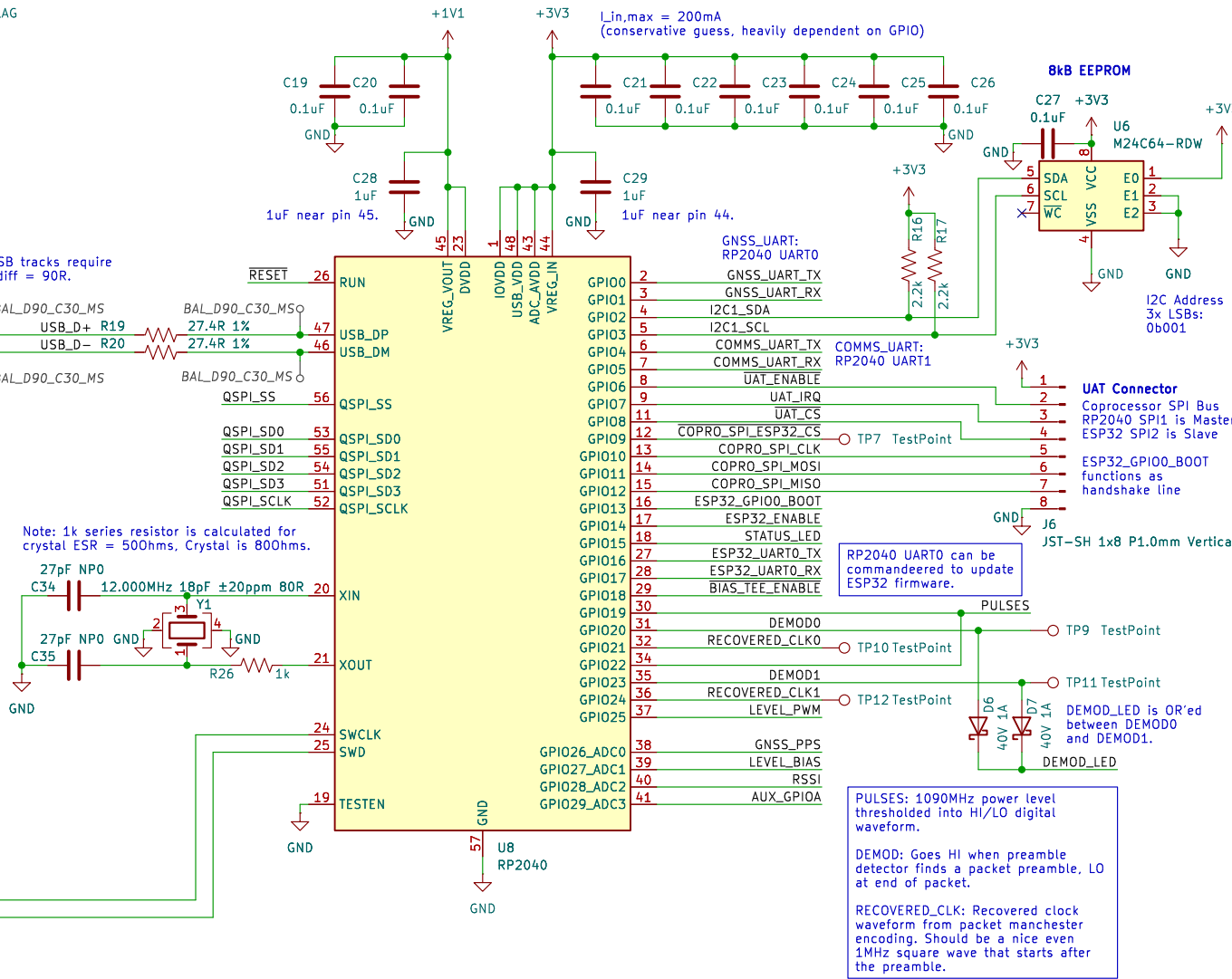
## Flash Memory



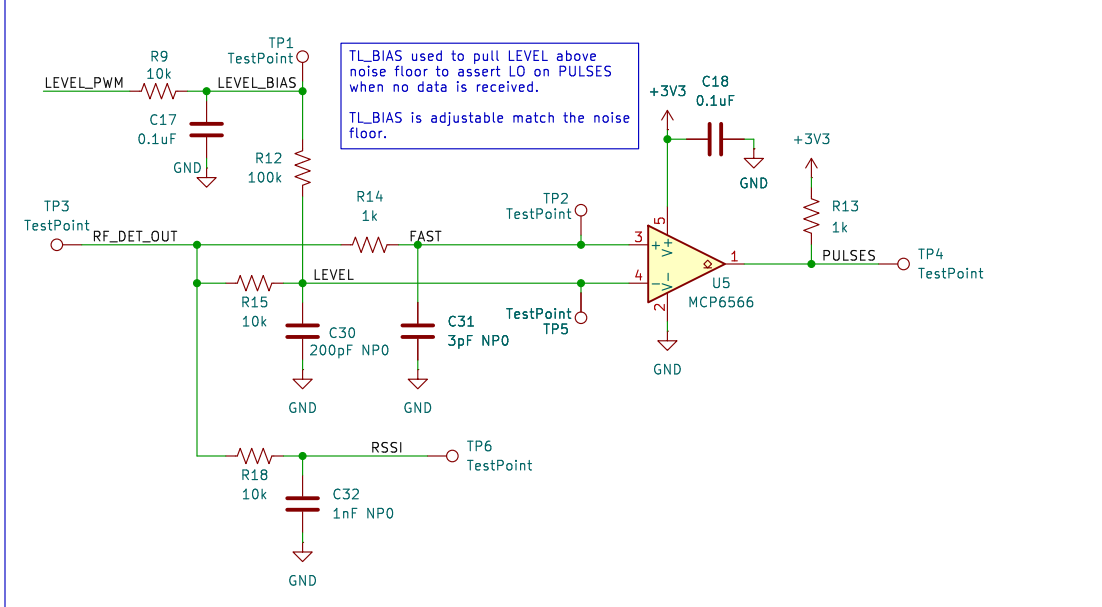
## Programming Connector



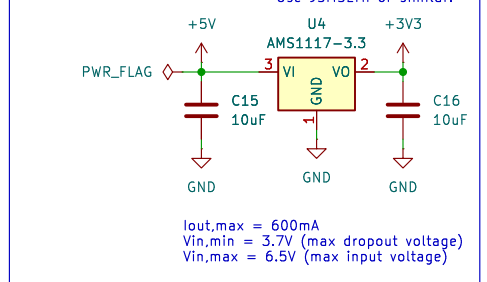
## RP2040 Microcontroller



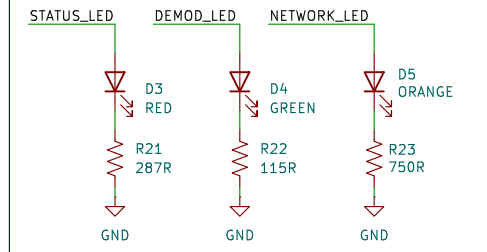
## RF Signal Comparator (Data Slicer)



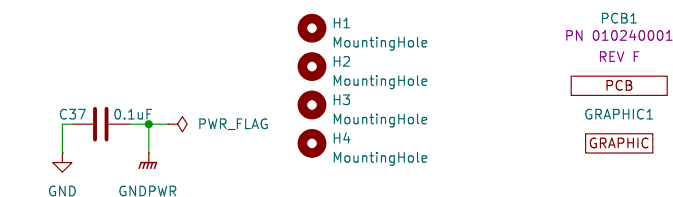
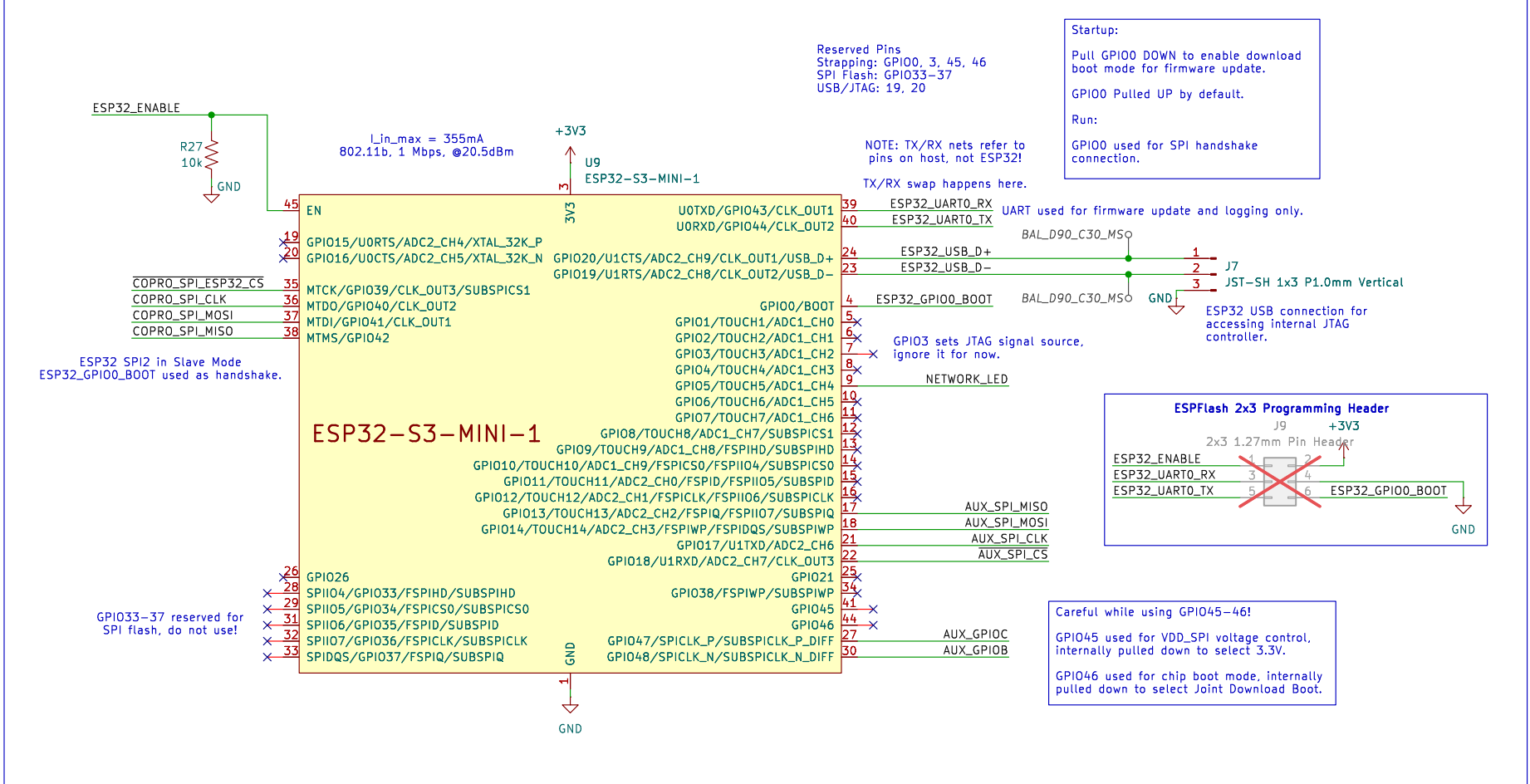
## 3.3V Regulator



## Indicator LEDs



## ESP32-S3-Mini-1/1U 802.11 and Bluetooth Module



RP2040 Hardware Design Guide:  
<https://datasheets.raspberrypi.com/rp2040/hardware-design-with-rp2040.pdf>

RP2040 Datasheet:  
<https://datasheets.raspberrypi.com/rp2040/rp2040-datasheet.pdf>

ESP32-S3 Hardware Design Guidelines  
<https://docs.espressif.com/projects/esp-hardware-design-guidelines/en/latest/esp32s3/schematic-checklist.html>

ESP32-S3 Technical Reference Manual  
[https://www.espressif.com/sites/default/files/documentation/esp32-s3\\_technical\\_reference\\_manual\\_en.pdf](https://www.espressif.com/sites/default/files/documentation/esp32-s3_technical_reference_manual_en.pdf)

ESP32-S3-MINI Devkit Schematic  
[https://dl.espressif.com/dl/schematics/SCH\\_ESP32-S3-DEVKITM-1\\_V01\\_20210310A.pdf](https://dl.espressif.com/dl/schematics/SCH_ESP32-S3-DEVKITM-1_V01_20210310A.pdf)