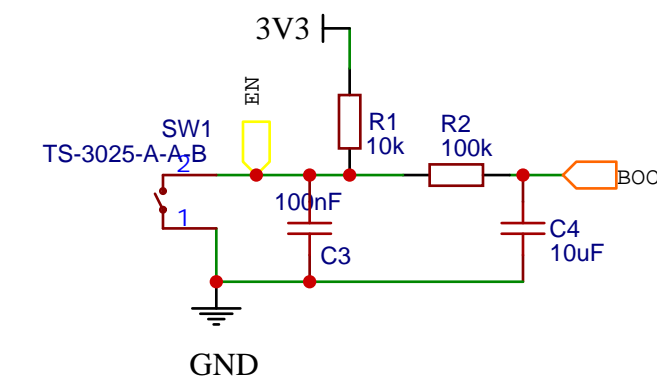


Strapping pins

The content below is excerpted from Section Strapping Pins in ESP32-S3 Series Datasheet.

ESP32-S3 has four strapping pins:

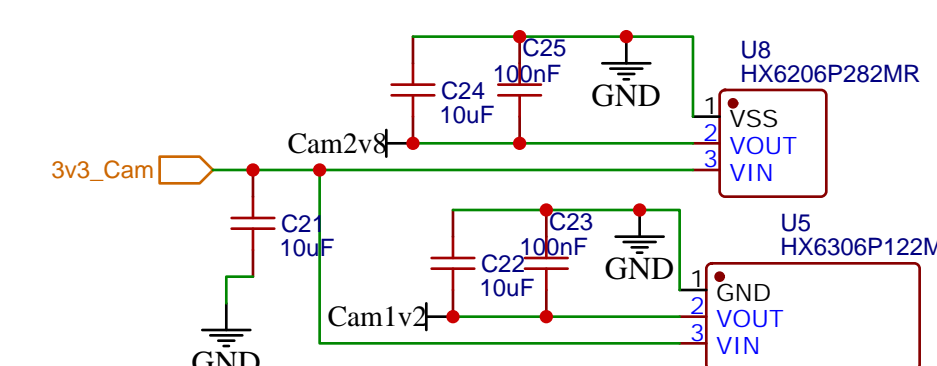
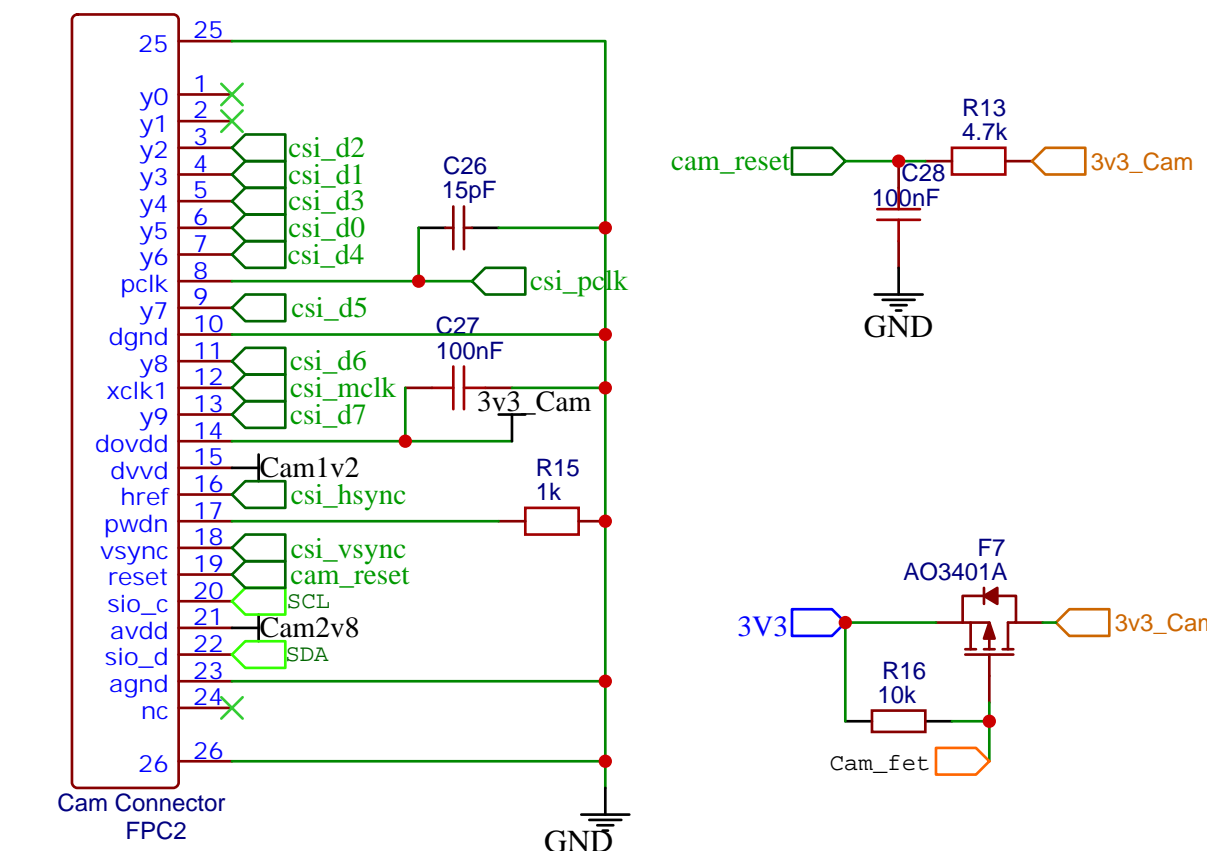
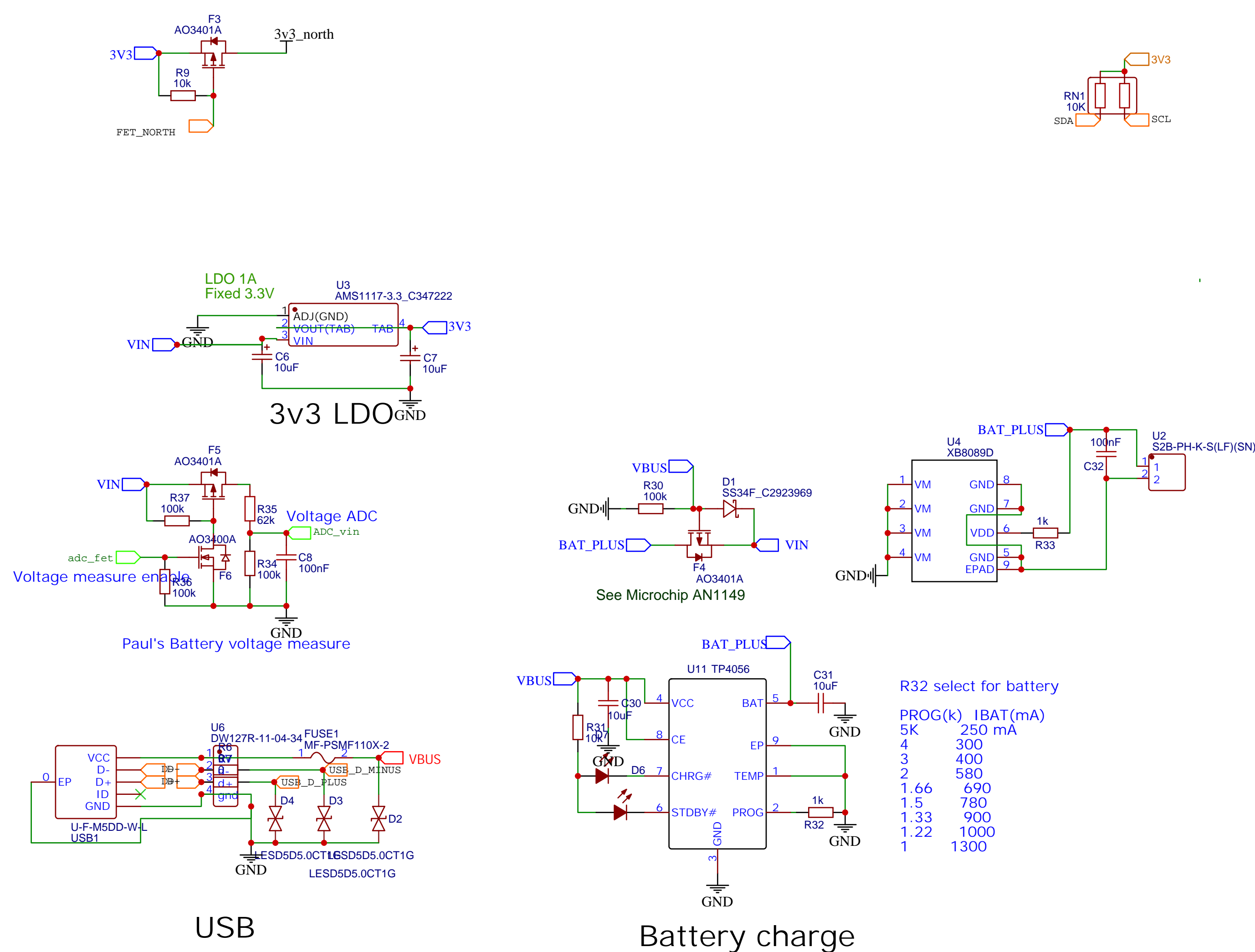
- **GPIO0 Booting Mode**
(default pullup)
1 SPI boot
0 Program load)
- **GPIO45 VDD_SPI Voltage**
(default pulldown)
0 = 3.3V
1 = 1.8V)
- **GPIO46 Enabling/Disabling ROM Messages Print During Booting**
(default puldown)
should be down for programming)
- **GPIO3 JTAG Signal Selection**
(default floating)
low = JTAG signal from on-chip JTAG pins
high = JTAG signal from USB Serial/JTAG controller)



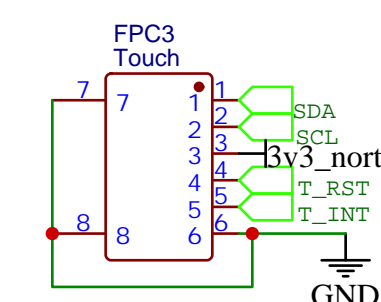
Two time constant switch

<https://www.allaboutcircuits.com/technical-articles/linear-rc-delay-model-vlsi-design/>

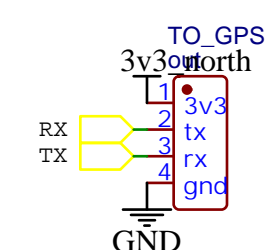
<https://www.circuitbread.com/tools/rc-calculator>



Camera



Touch



GPS