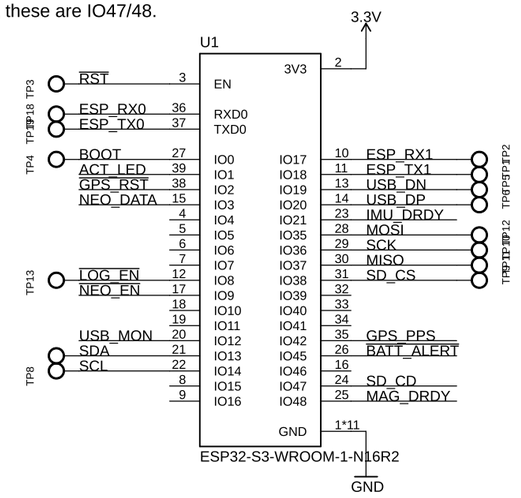
Application note:
Pinout between
ESP32-S2-SOLO-1U is
the same as
ESP-S3-WROOM
except for pins 24/25

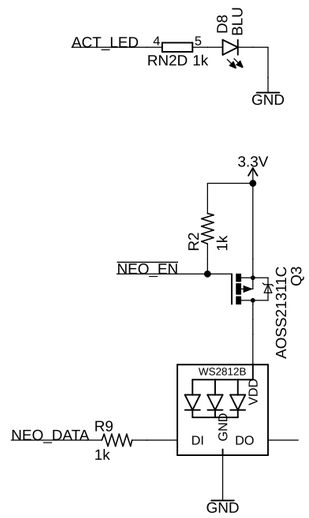
On ESP32-S2, these are IO33/34.
On ESP32-S3, these are IO47/48.

Microcontroller

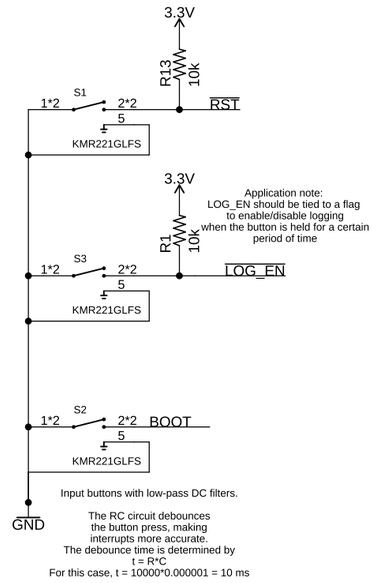


ON ESP32-S3-R8, IO pins 35-37
are used by PSRAM.
This will cause the chip to malfunction.
DO NOT USE AN ESP32-S3
MODULE WITH PSRAM

Status LEDs

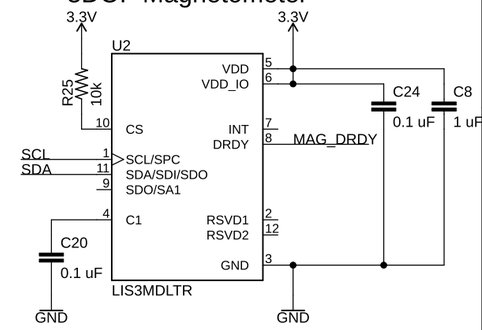


User Buttons

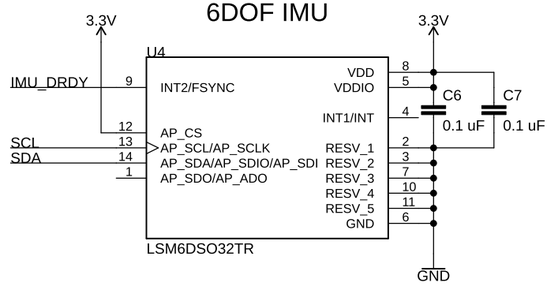


Peripherals

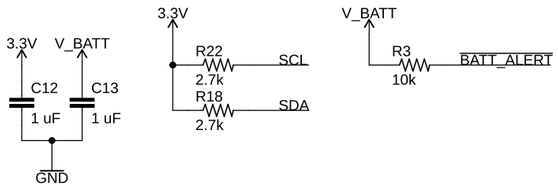
3DOF Magnetometer



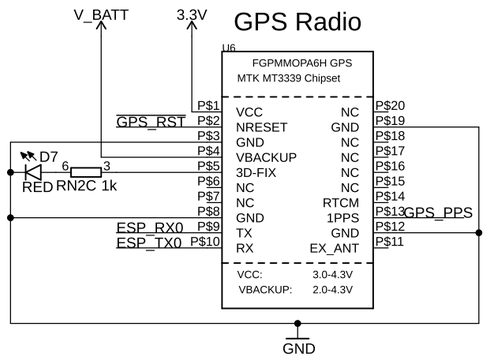
6DOF IMU



Pullups and Filtering

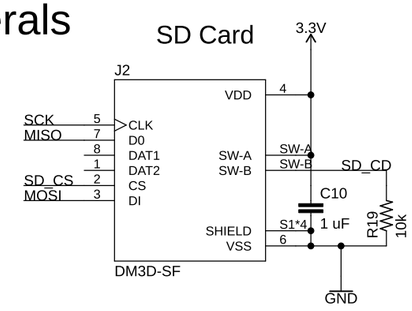


GPS Radio

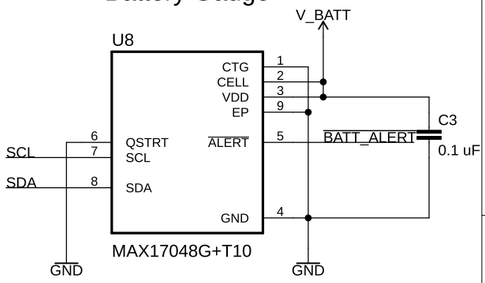


Peripherals

SD Card

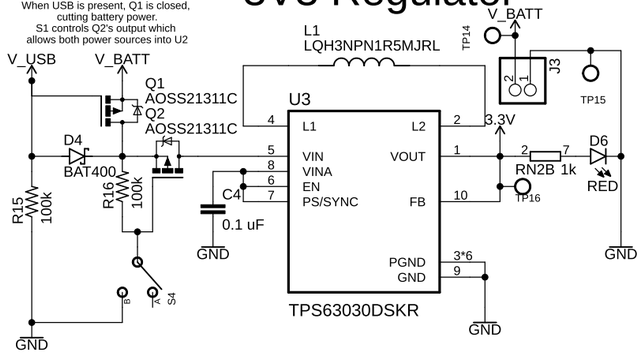


Battery Gauge



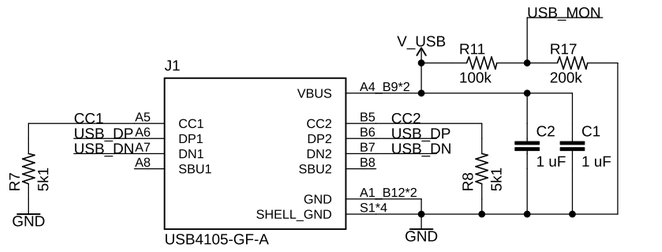
3V3 Regulator

Dynamic VIN selection: VBUS
(USB) will override VBAT (LIPO)
via D4 when both are present.
When USB is present, Q1 is closed,
cutting battery power.
S1 controls Q2's output which
allows both power sources into U2

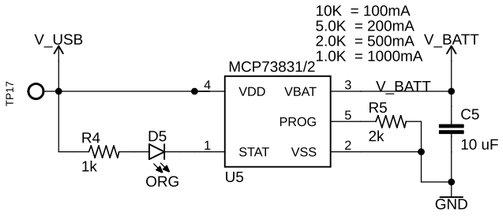


USB-C Connector

Passive detection circuit
for USB plug in. This can
be tied to a flag to
enable debugging or
USB MSC when a USB cable
is plugged in



LiPoly Charger



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Date: 10/26/2023 13:56	Sheet: 1/1