

ESP32 Radiosonde

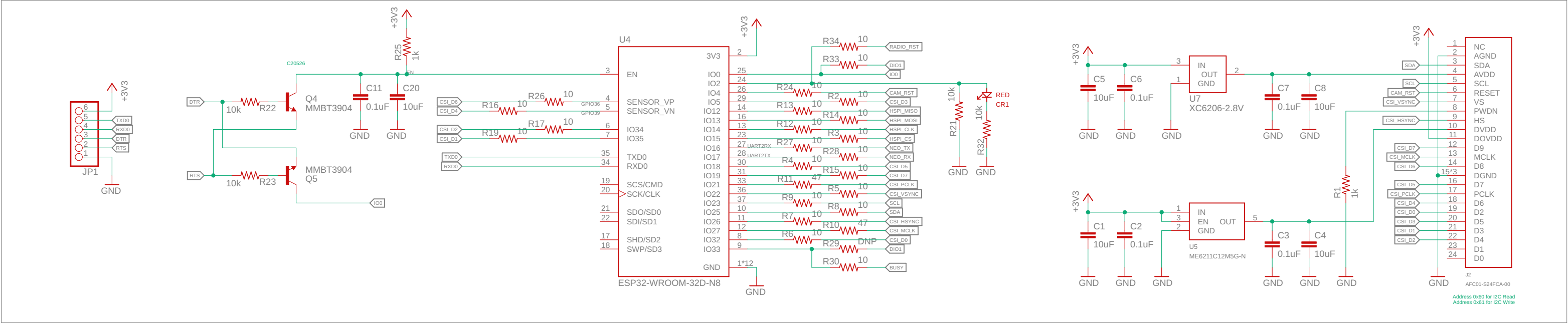
Programming Header	Programming Circuitry	ESP32WROOM
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Camera Power OV2640 FPC Connwctor

Pinout and ESP32 pin selection based on this: https://docs.m5stack.com/en/unit/unit_cam

Camera Power

Pinout and ESP32 pin selection based on this: https://docs.m5stack.com/en/unit/unit_cam



Micro USB Test Power Input CR123A Battery Holder Buck / Boost Converter

Do not plug both the battery and USB in at the same time or there will be a fire.

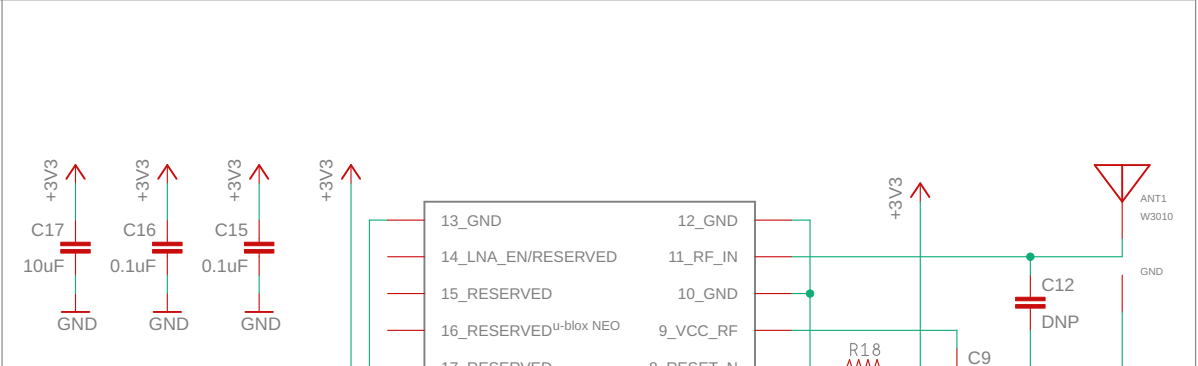
Buck / Boost Converter

NEO-M6 GPS

The schematic diagram illustrates the power supply section of the TPS63000DRCR evaluation board. It shows the connection from a USB connector (J1) through a diode (D3) and several capacitors (C23-C26) to the input of the TPS63000DRCR DC-DC converter. The converter is configured with a 2.2uH inductor (L3) and a feedback network (R41, R42) to output +3V3. Various components are labeled with their part numbers and values.

Key components and values shown in the diagram include:

- Input connector J1 (10104110-0001LF)
- Diode D3 (SM4007PL)
- Capacitors C23, C22, C21, C10, C26 (all 10uF)
- Capacitor C25 (10uF)
- Capacitor C24 (0.1uF)
- Inductor L3 (2.2uH)
- Resistor R43 (100)
- Resistor R41 (150k)
- Resistor R42 (27k)
- Resistor R40 (27k)
- Resistor R39 (100k)
- Resistor R38 (100k)
- Resistor R37 (100k)
- Resistor R36 (100k)
- Resistor R35 (100k)
- Resistor R34 (100k)
- Resistor R33 (100k)
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- Resistor R17 (100k)
- Resistor R16 (100k)
- Resistor R15 (100k)
- Resistor R14 (100k)
- Resistor R13 (100k)
- Resistor R12 (100k)
- Resistor R11 (100k)
- Resistor R10 (100k)
- Resistor R9 (100k)
- Resistor R8 (100k)
- Resistor R7 (100k)
- Resistor R6 (100k)
- Resistor R5 (100k)
- Resistor R4 (100k)
- Resistor R3 (100k)
- Resistor R2 (100k)
- Resistor R1 (100k)



The diagram shows three components connected in a horizontal line. On the left is the 'SHT40 Humidity Sensor'. In the middle is the 'BMP280 Pressure Sensor'. On the right is the '433MHz LoRa Transmitter'. All three components are connected to a common ground line at the bottom.

433MHz LoRa Transmitter

