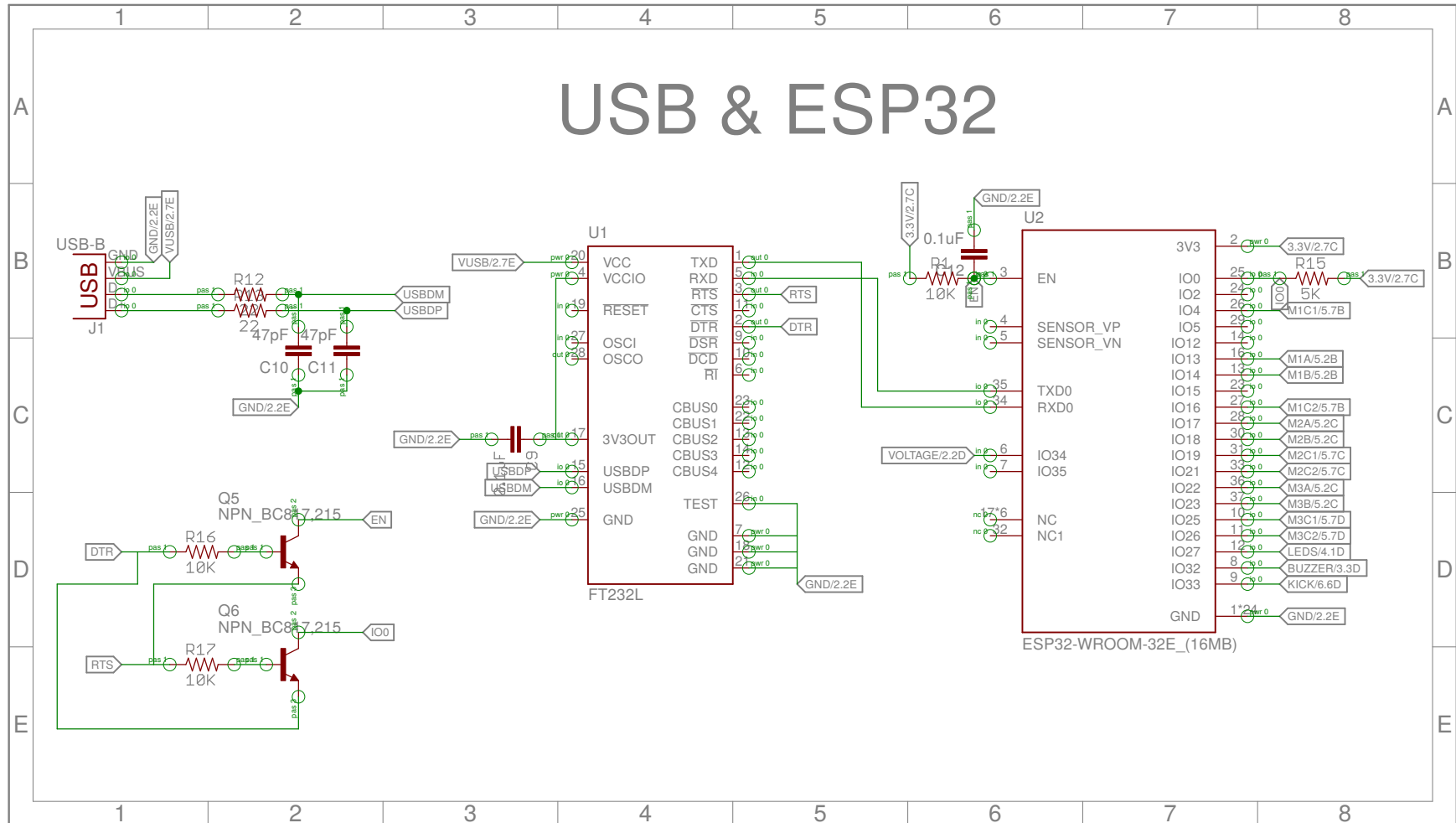


# USB & ESP32



# POWER

RD<sub>SON</sub> is ~30 mohm. So "Rsense" is 60mohm  
BMS cut at 0.2V, so ~3.3A

The diagram illustrates the power management circuit for a battery system. Key components and connections include:

- VIN/5.1D:** A voltage divider consisting of resistors R3 (20K) and R5 (10K) connected to the battery terminals (A, B, COM) to provide a 5.1V signal.
- Sense Resistor (R7):** A 470mΩ resistor used for current sensing, connected in series with the battery.
- Filter Capacitor (C7):** A 0.1μF capacitor connected across the sense resistor to filter noise.
- BMS Control:** The BMS is controlled by a MOSFET driver (Q1, Q2) which is connected to the battery terminals (A, B, COM) and the BMS control pins (DO, CO, VM).
- VCC/4.2B:** A 3.3V/1.8B voltage regulator (TS2940CW-3.3RP) connected to the battery terminals (A, B, COM) to provide a stable 4.2V supply.
- Grounding:** Various ground connections are shown, including GND\_RAW, GND/3.5E, and GND/3.5B.

# POWER

RD<sub>SON</sub> is ~30 mohm. So "Rsense" is 60mohm  
BMS cut at 0.2V, so ~3.3A

