

# ESP32 BoatPager

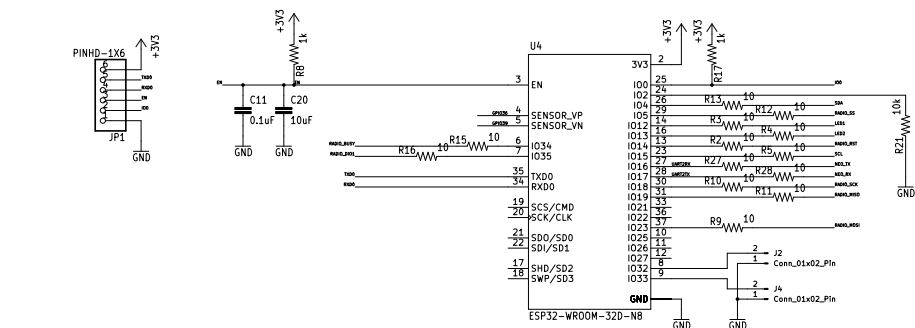
Programming  
Header

ESP32WROOM

Caps

LEDs

.. ..



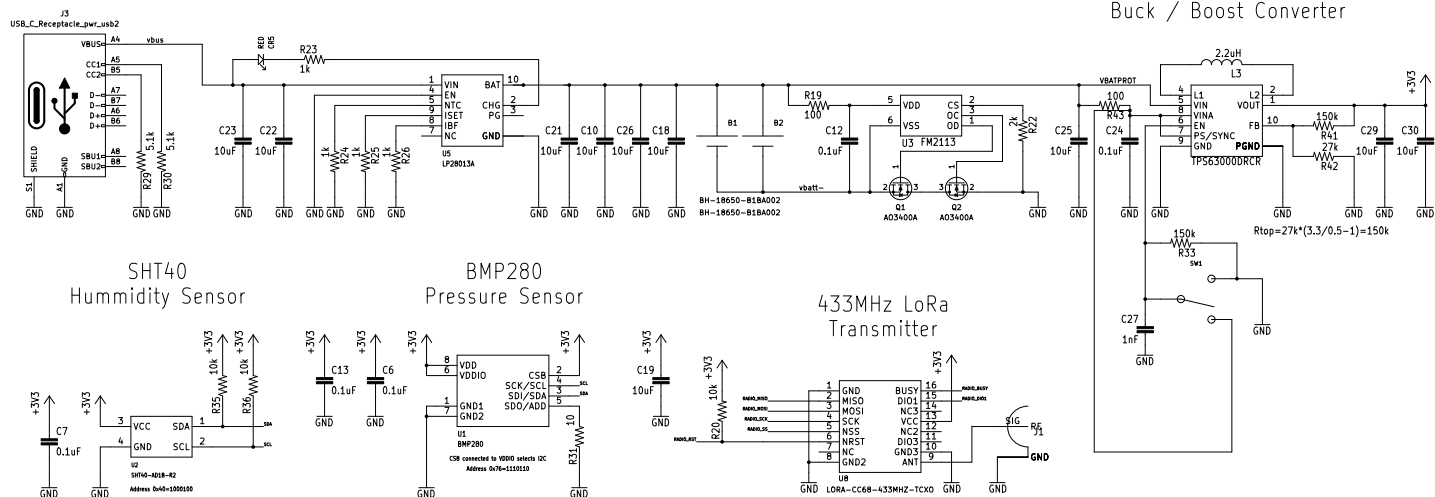
Must be low to enter flashing mode  
Must be low or floating at boot

Outputs PWM at boot  
Boot fails if pulled high

Outputs PWM at boot

Ordering Notes:  
Trace impedance assumes GCMG 7.5m gap on 0.8mm substrate per JLC calculator for 50 Ohm trace.  
Use economic order and omit ESP32  
Change LoRa radio PN to V6d795915N051 for 915 MHz  
Change GPS to ATGW332D-5N31 for Chinese knockoff.  
Change USB to C404968  
Move USB, IC1  
Change orientation of U1, U3, U6, U7  
Parts to buy on Digkey:  
ESP32  
LoRa Antenna  
GPS Antenna  
Battery holder  
Battery

Buck / Boost Converter



SHT40  
Humidity Sensor

BMP280  
Pressure Sensor

433MHz LoRa  
Transmitter

