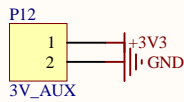
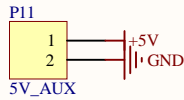
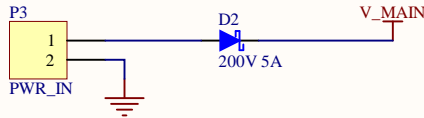
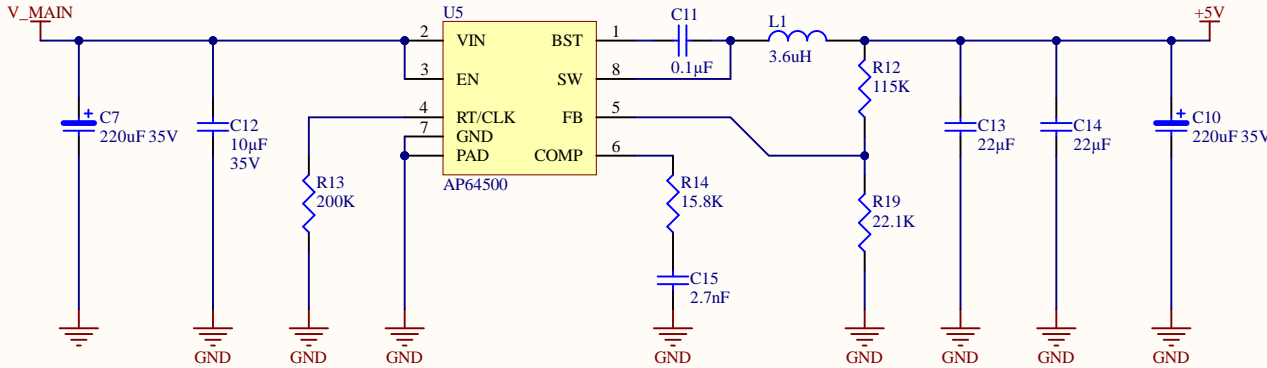


Power

Power Input



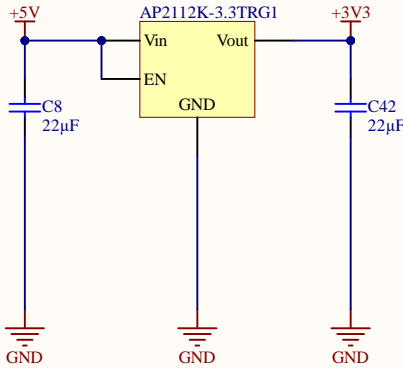
5V 4A Buck Regulator



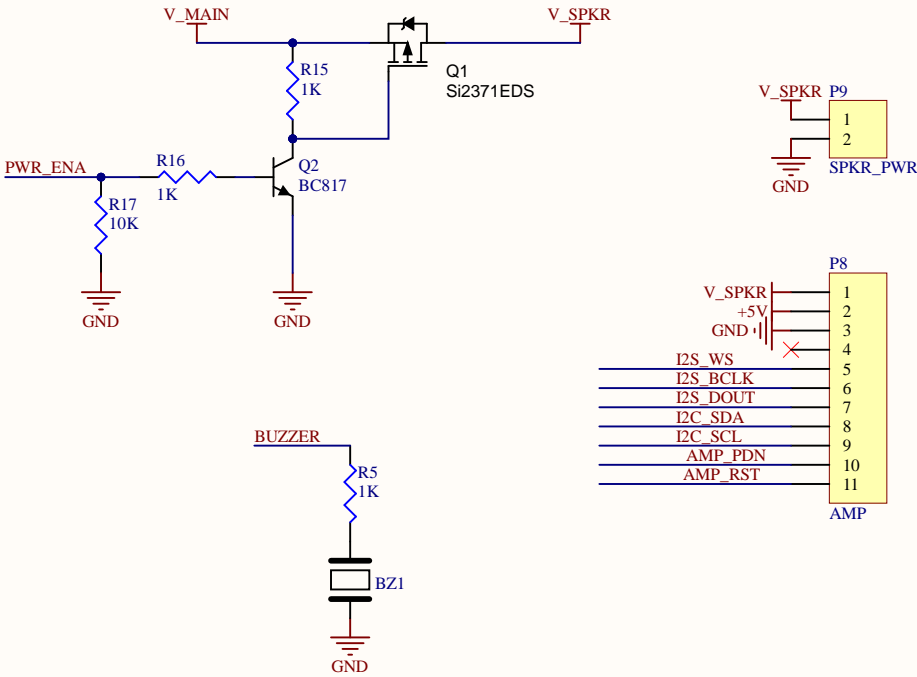
AP64500 Notes
Vout = (R1 / R2 + 1) x 0.8
R1 = 174K, R2 = 30.1K, Vout = 5.42V

AP64501 may be used as drop-in replacement.
R121 **MUST** be replaced with a 22nF ceramic capacitor in this case.

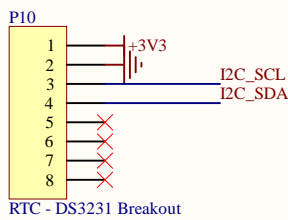
3.3V 600mA LDO Regulator



Audio

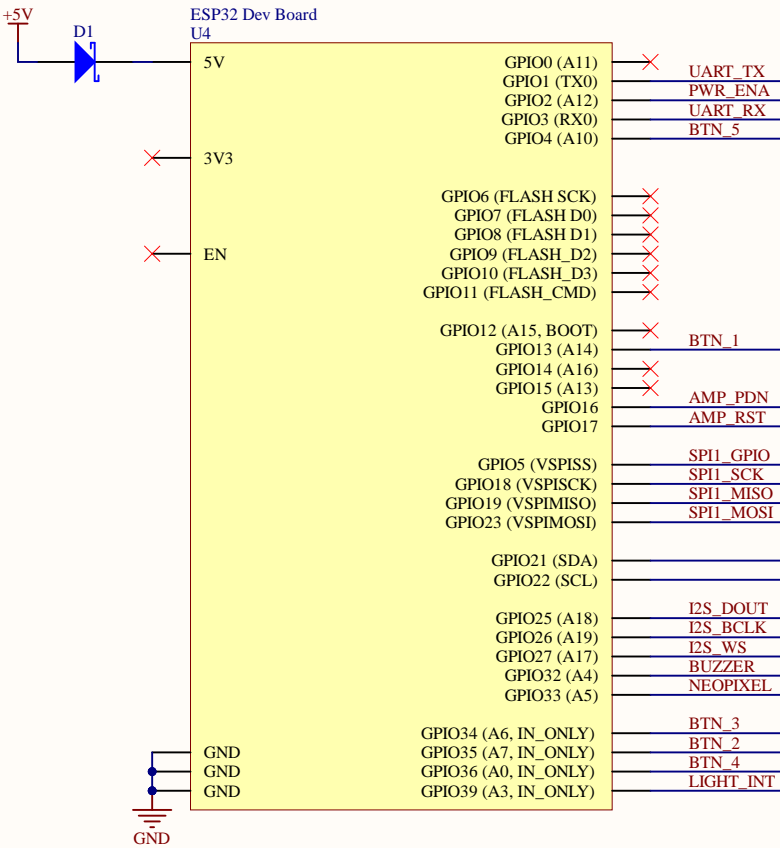


RTC Breakout

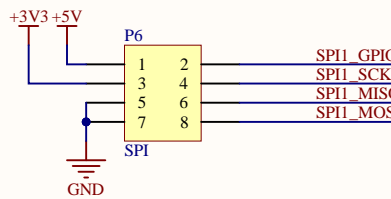
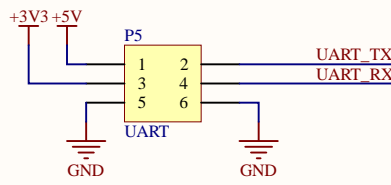
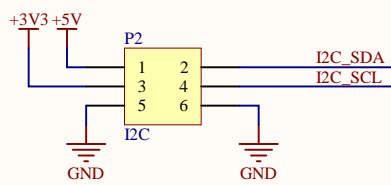


ESP32 Breakout

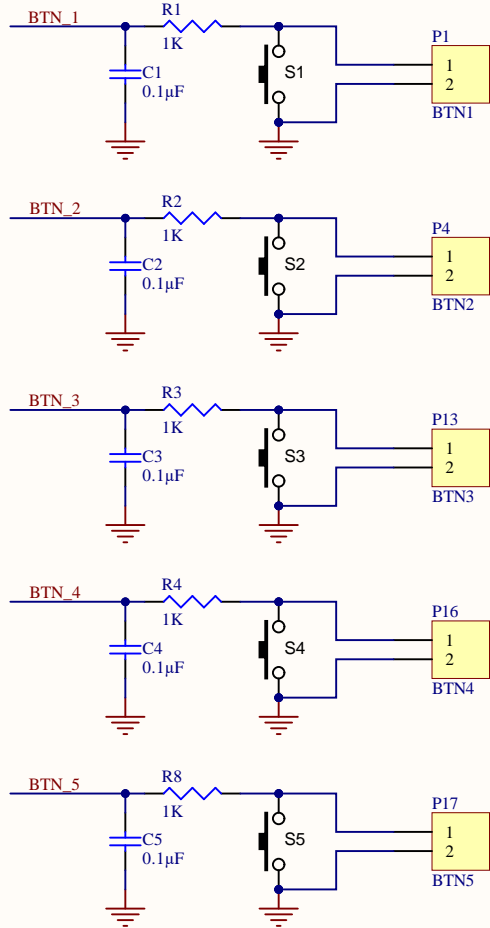
Dev board is powered from 5V rail, but may already have 5V from USB connector. D1 prevents USB power feeding back into 5V rail.



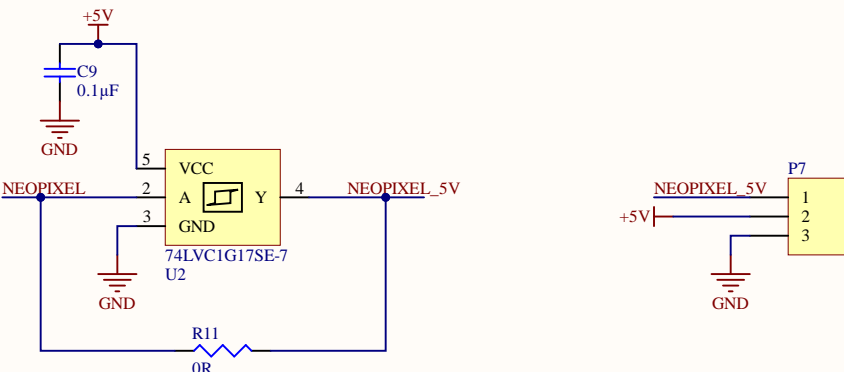
General IO



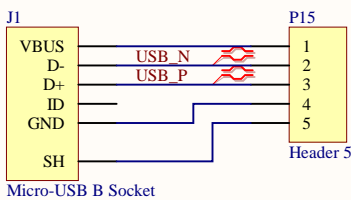
Buttons



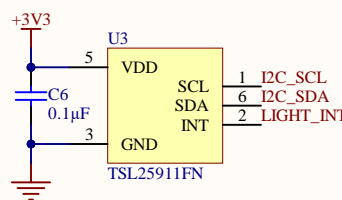
WS2812 / NeoPixel



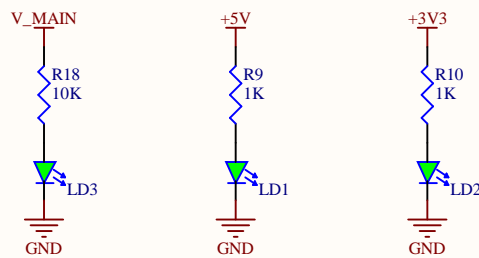
USB Passthrough



Light Sensor



LEDs



Pixel Clock Controller

Drawn: Chris Barr
Date: 06/03/2022
Rev: v1.0A

