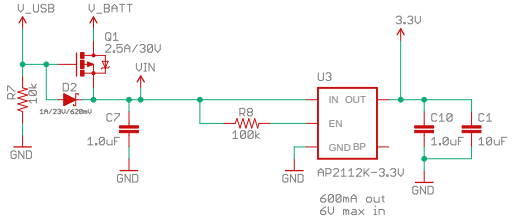
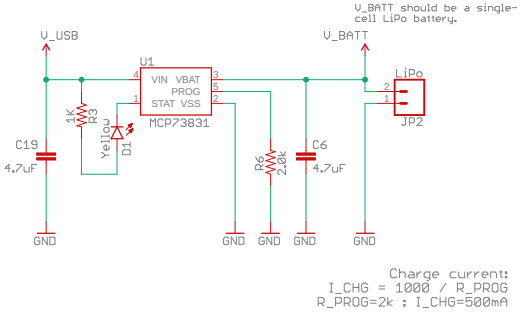
Voltage Regulator and Battery Charger

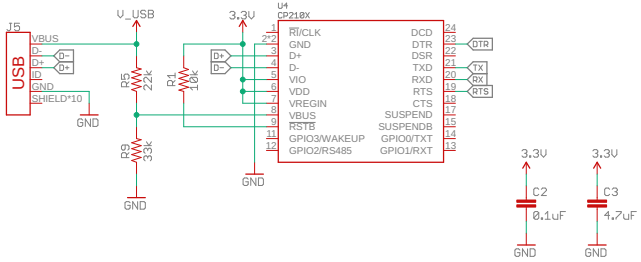
V_USB - 6V MAX
V_BATT - Single Cell (4.2V MAX)



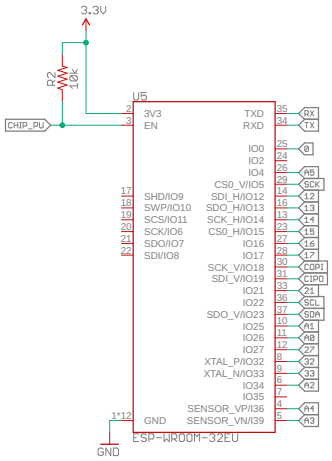
Lithium-Polymer Battery Charger (1-cell)



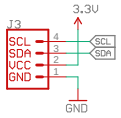
CP2104/2N (USB-to-Serial Converter)



Espressif ESP32



QWIIC Connector

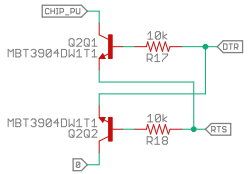


Auto-Reset

Boot Mode Configuration

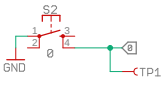
Pin	Default	Boot	Download
GPIO0	1	1	0
U0TXD	1	1	x
GPIO2	0	x	0
GPIO4	0	x	x
MTDO	1	x	x
GPIO5	1	1	x

If U0TXD, GPIO2, GPIO5 are floating, GPIO0 determines boot mode

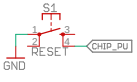


If DTR is LOW, toggling RTS from HIGH to LOW resets to run mode.
If RTS is HIGH, toggling DTR from LOW to HIGH resets to bootloader.

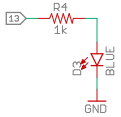
GPIO0 Button



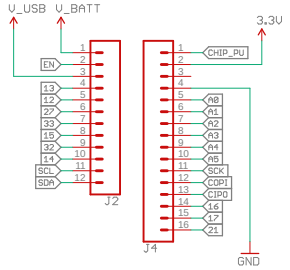
Reset Button



GPIO13 LED



Headers



THIS IS A FOUR-LAYER BOARD!

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TITLE: ESP32_Thing_Plus_UFL

Design by:Mike Hord
Revised by: Alex Wende, Pete Lewis (u.fl version)

REV: v10

Date: 9/21/2021 2:52 PM

Sheet: 1/1

Original ESP32 Thing by Jim Lindblom