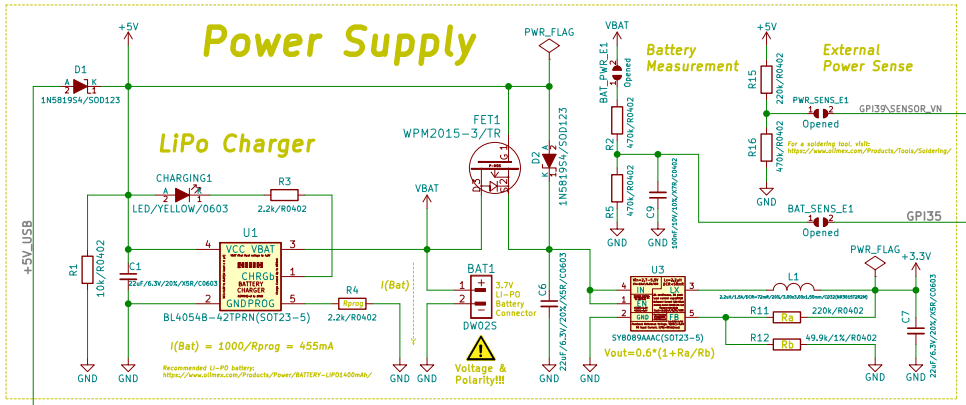

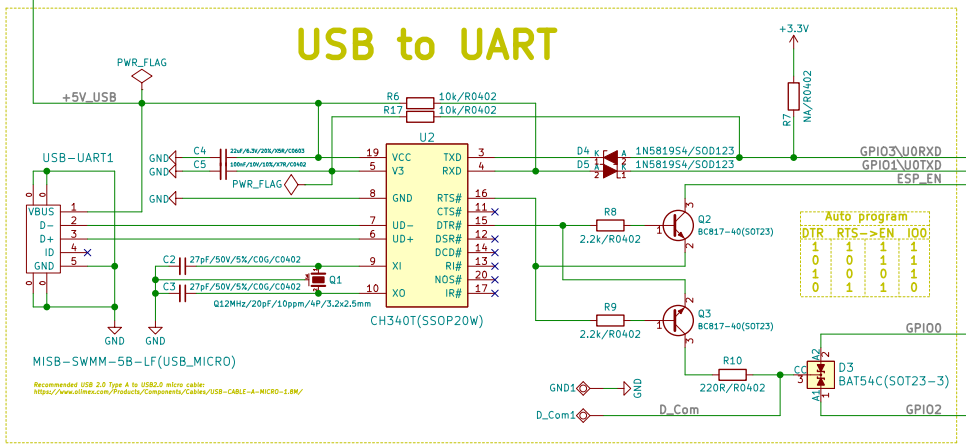

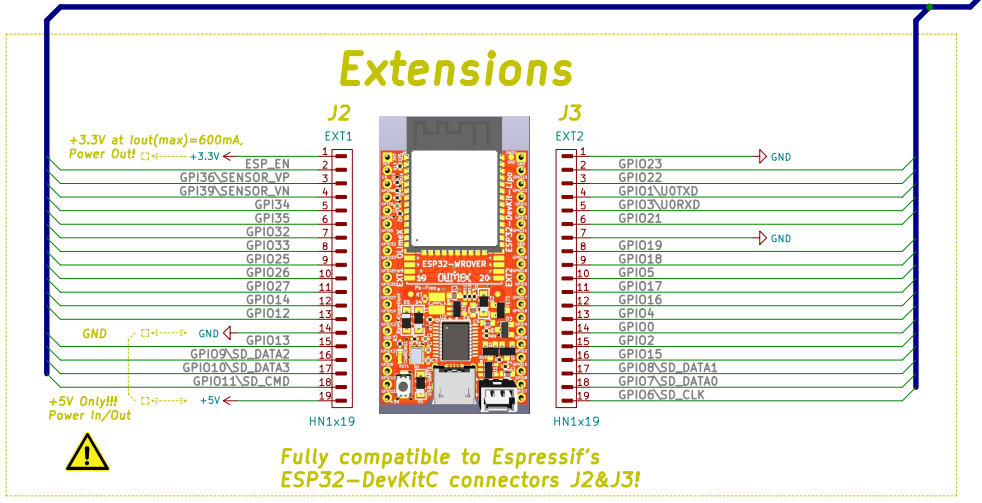

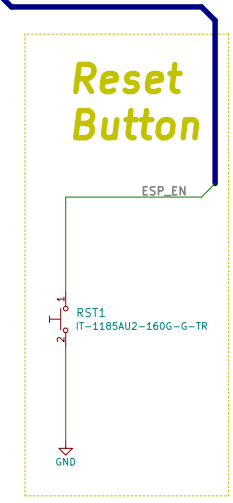

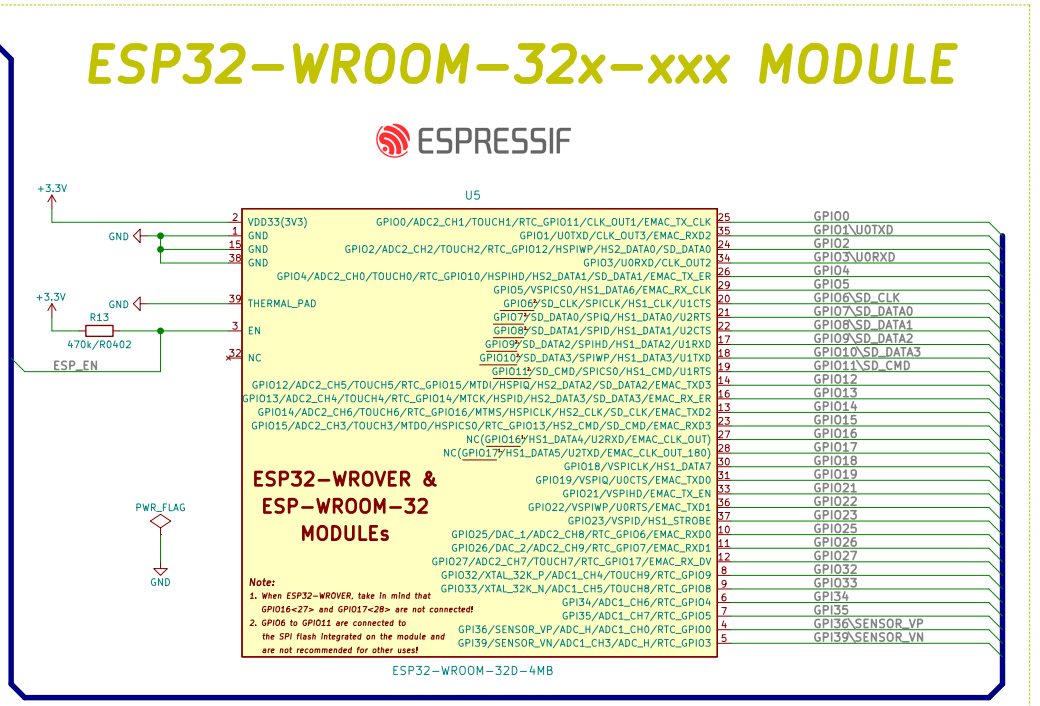

Internal Bootstrapping Resistors

MTDI/GPIO12:	Pull-Down
GPIO0:	Pull-Up
GPIO2:	Pull-Down
GPIO4:	Pull-Down
MTDO/GPIO15:	Pull-Up
GPIO5:	Pull-Up

Software Selectable Pins

Interface	Signal	Pin
EMAC	EMAC_MDC_out EMAC_MDI_in EMAC_MDO_out EMAC_CRS_out EMAC_COL_out	Any GPIO
I2C	I2CEXT0_SCL_in I2CEXT0_SDA_in I2CEXT1_SCL_in I2CEXT1_SDA_in I2CEXT0_SCL_out I2CEXT0_SDA_out I2CEXT1_SCL_out I2CEXT1_SDA_out	Any GPIO
General Purpose SPI	HSPIQ_in/_out HSPID_in/_out HSPICLK_in/_out HSPICS0_in/_out HSPICS1_out HSPICS2_out VSPIQ_in/_out VSPID_in/_out VSPICLK_in/_out VSPICS0_in/_out VSPICS1_out VSPICS2_out	Any GPIO

For more information refer to esp_wroom_32_datasheet_en.pdf.

Bootstrapping Pins Settings

Voltage of Internal LDO(VDD_SDIO)

Pin	Default	3.3V	1.8V
GPIO12/MTDI	Pull-Down	0	1

Booting Mode

Pin	Default	SPI Flash Boot	Download Boot
GPIO0	Pull-Up	1	0
GPIO2	Pull-Down	Don't-care	0

Debugging Log on U0TXD During Booting

Pin	Default	U0TXD Toggling	U0TXD Silent
GPIO15/MTDO	Pull-Up	1	0

Timing of SDIO Slave

Pin	Default	Falling-edge:Output	Falling-edge:Input Rising-edge:Output	Falling-edge:Input Falling-edge:Output	Rising-edge:Input Rising-edge:Output
GPIO15/MTDO	Pull-Up	0	0	1	1
GPIO5	Pull-Up	0	1	0	1

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Title: ESP32-DevKit-Lipo

Size: A3	Date: 2020-06-08	Rev: B
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