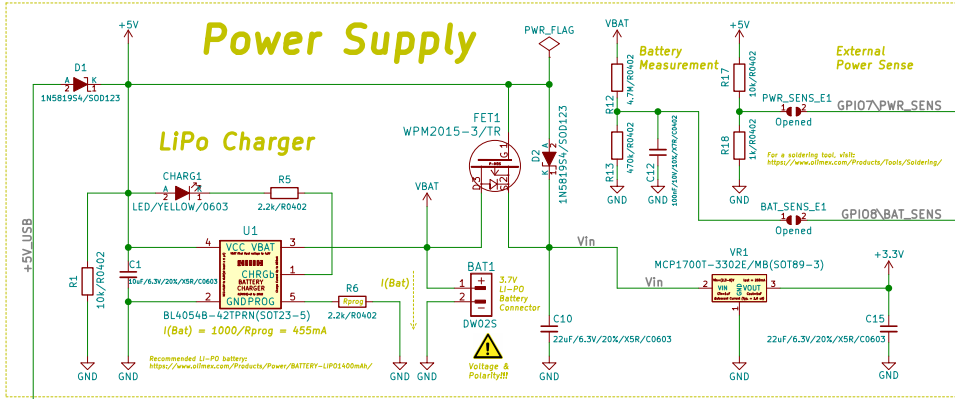
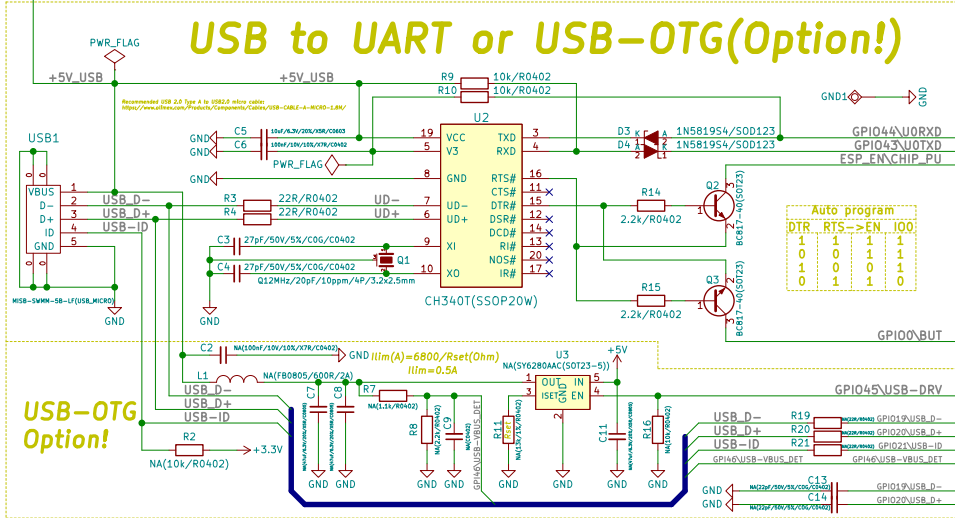


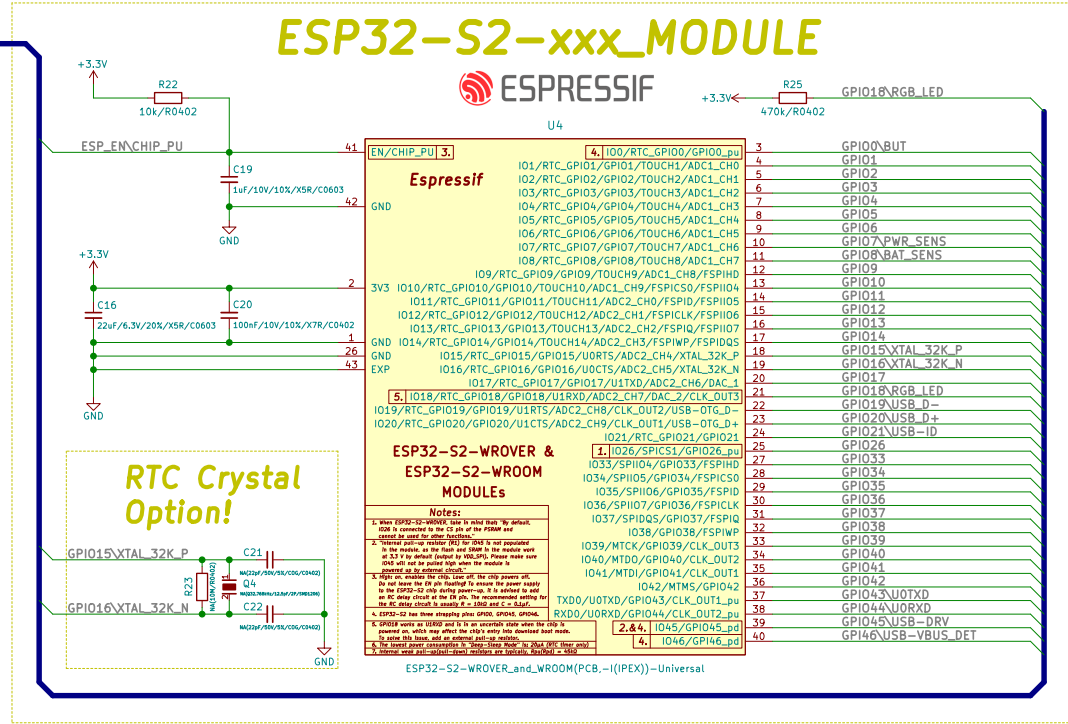
Power Supply



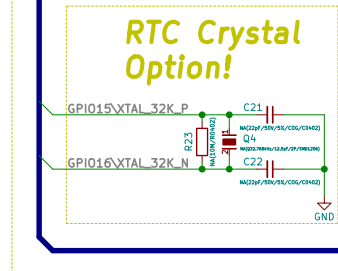
USB to UART or USB-OTG(Option!)



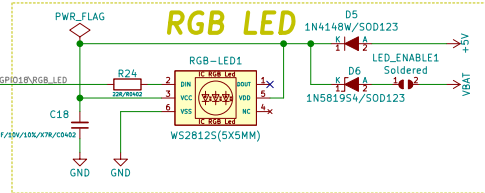
ESP32-S2-xxx_MODULE



RTC Crystal Option!



RGB LED



Fiducials:

UART_PRINT_CONTROL	GPIO46	ROM Code Printing Control
0	-	ROM code will always print information to UART during boot. GPIO46 is not used.
1	0	Print is enabled during boot
1	1	Print is disabled
2	0	Print is disabled
2	1	Print is enabled during boot
3	-	Print is always disabled during boot. GPIO46 is not used.

ESP32-S2 has three strapping pins: GPIO0, GPIO45, GPIO46

Pin	Default	3.3V	1.8V
I045/GPIO45 / Pull-Up	0	1	0
I046/GPIO46 / Pull-Up	0	1	0
I046/GPIO46 / Pull-Down	0	0	1

Bootstrapping Pins Settings

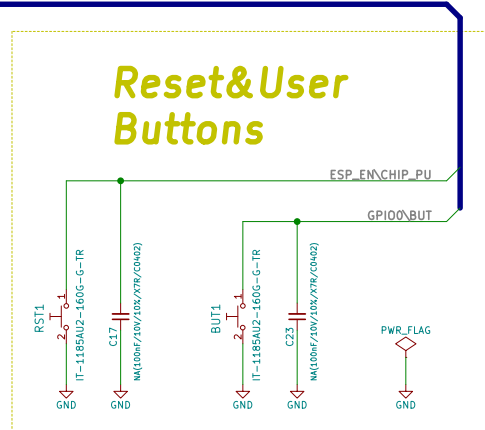
Enabling/Disabling ROM Code Print During Booting: [see here](#)

Enabling/Disabling UART Print During Booting: [see here](#)

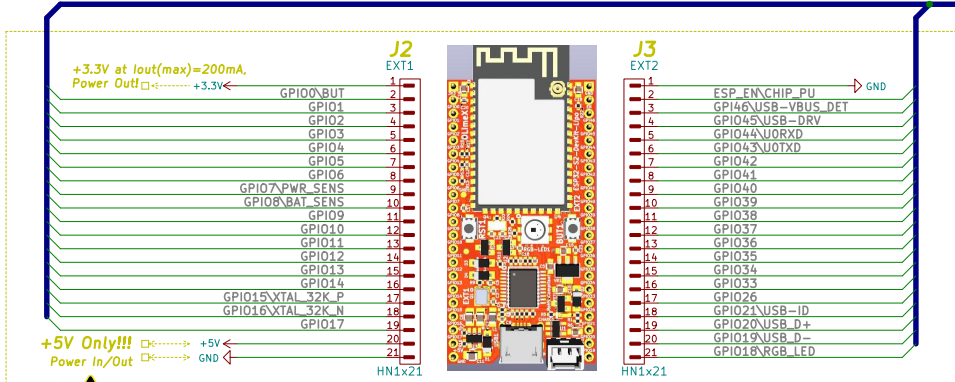
Notes:

- Firmware can configure register bits to change the settings of "VDD_SPI Voltage".
- Internal pull-up resistor (R1) for I045 is not populated in the module, as the flash and SRAM in the module is powered up by external circuit.
- ROM code can be printed over TX00 (by default) or DAC_1 (I017), depending on the eFuse bit.
- When eFuse UART_PRINT_CONTROL value is:
 - 0, print is normal during boot and not controlled by I046.
 - 1 and I046 is 0, print is normal during boot; but if I046 is 1, print is disabled.
 - 2 and I046 is 0, print is disabled; but if I046 is 1, print is normal.
 - 3, print is disabled and not controlled by I046.

Reset & User Buttons



Extensions:



OLIMEX
open source hardware

https://www.olimex.com
OLIMEX LTD.

File: ESP32-S2-DevKit-Lipo_Rev_B1.sch
Title: ESP32-S2-DevKit-Lipo

Size: A3 Date: 2020-09-24 Rev: B1
KiCad E.D.A. kicad 5.1.6-c6e7f7487ubuntu18.04.1 Id: 1/1