[2] Power

File: 02_power.kicad_sch

[3] USB

File: 03_usb.kicad_sch

[4] ESP32 S3

File: 04_esp32_s3.kicad_sch

[5] Peripherals

File: 05_peripherals.kicad_sch

Mounting Holes (M3)

- H101 MountingHole
- H102 MountingHole
- H103 MountingHole
- H104 MountingHole

Sheet: /
File: esp32_s3_weather_webserver.kicad_sch

Title:

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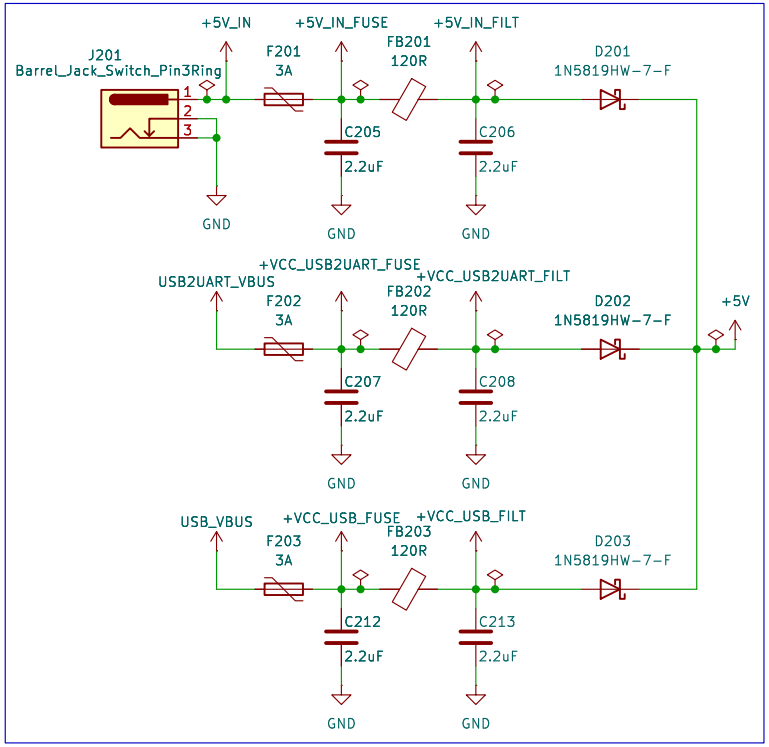
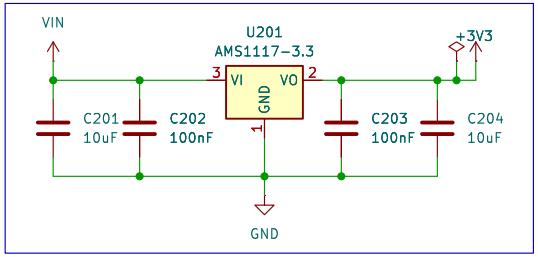
KiCad E.D.A. 9.0.4		Id: 1/5

[2] Power

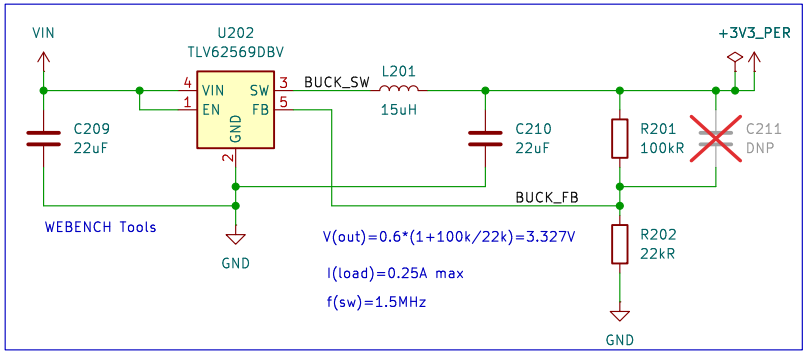
Power input



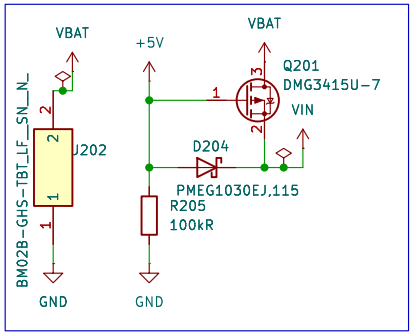
Powering ESP32



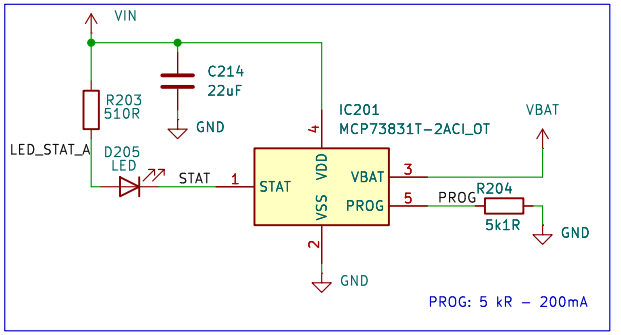
Powering Peripherals



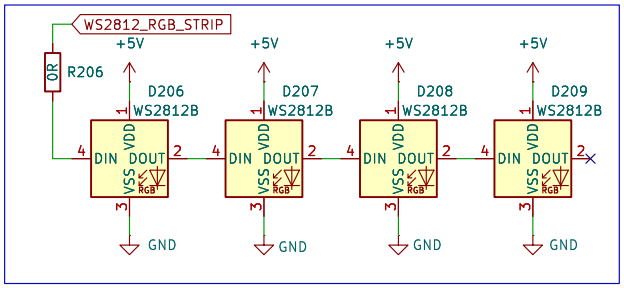
Battery connect



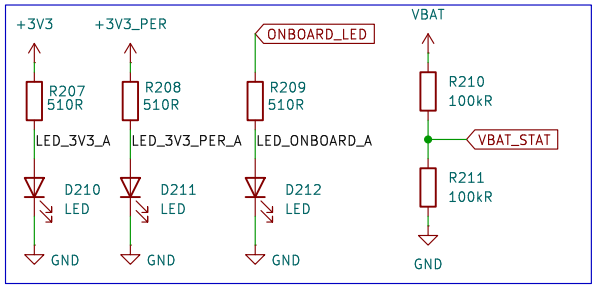
Battery charge



RGB strip



Power indication



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File: 02_power.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
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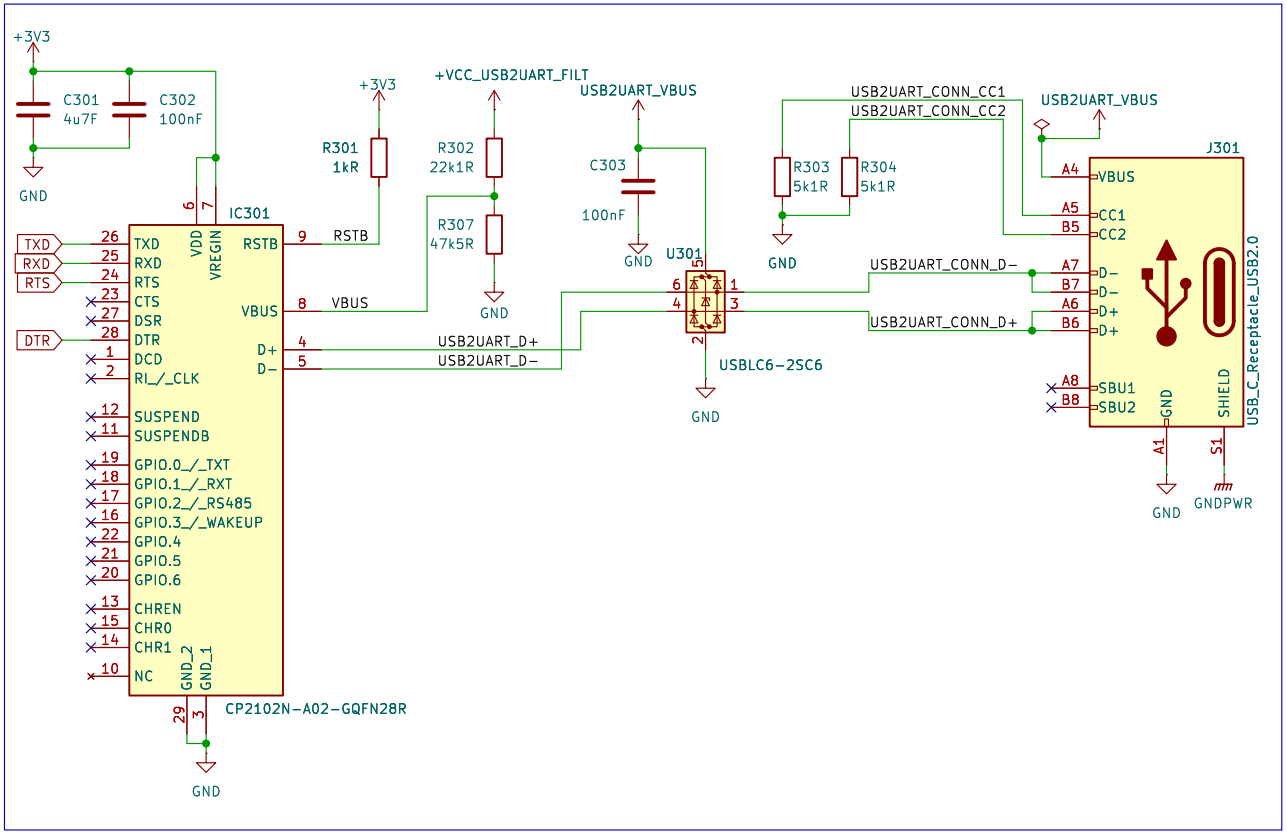
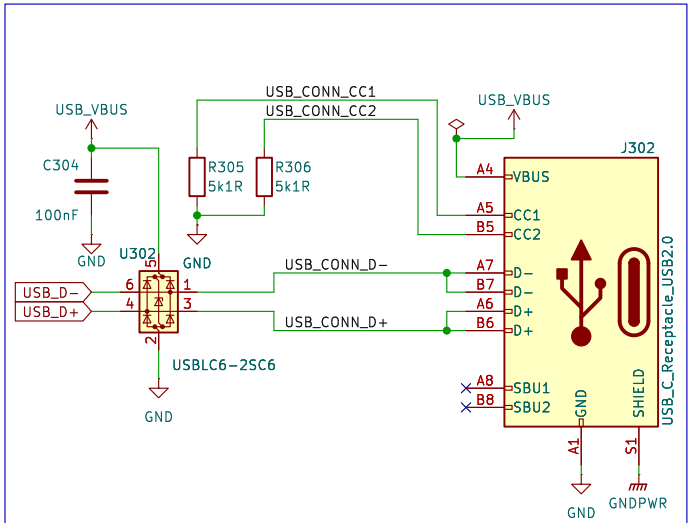
[3] USB

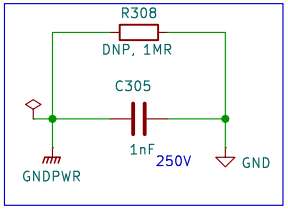
USB to UART:



USB to ESP32:



Chassis GND Connection



Sheet: /[3] USB/
File: 03_usb.kicad_sch

Title:

Size: A4 | Date: | **Rev:**

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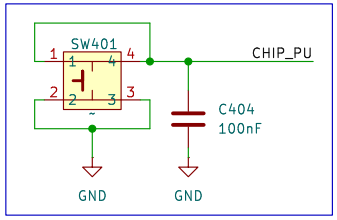
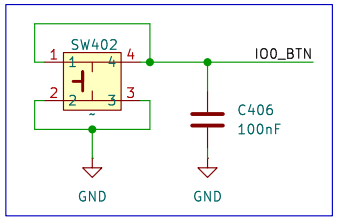
[4] ESP32 S3

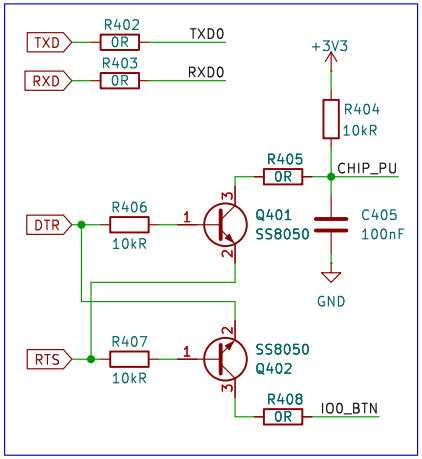
RESET BUTTON



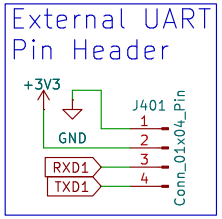
BOOT



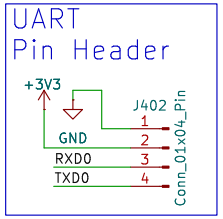
SERIAL SIGNALS HANDLING



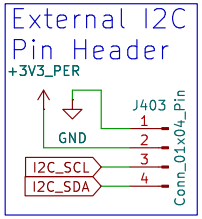
External UART Pin Header

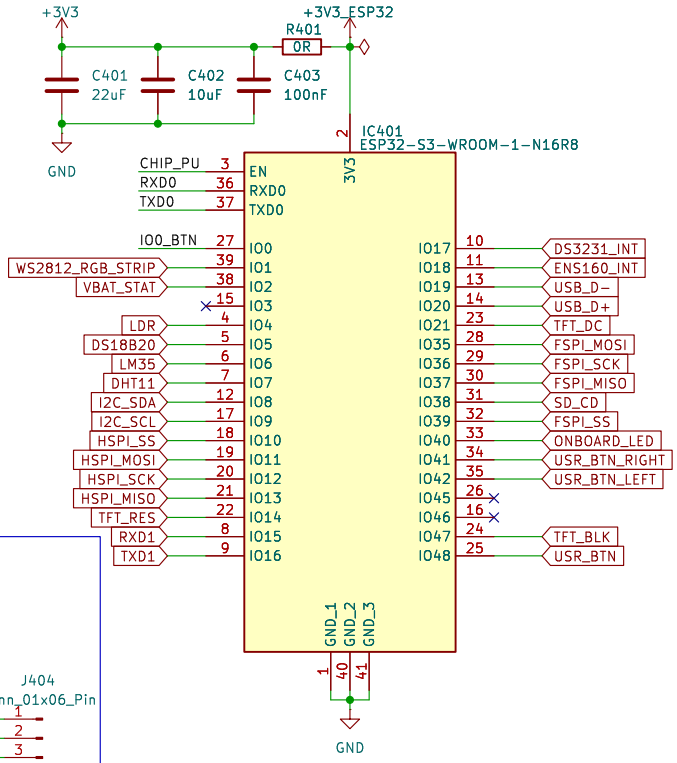


UART Pin Header



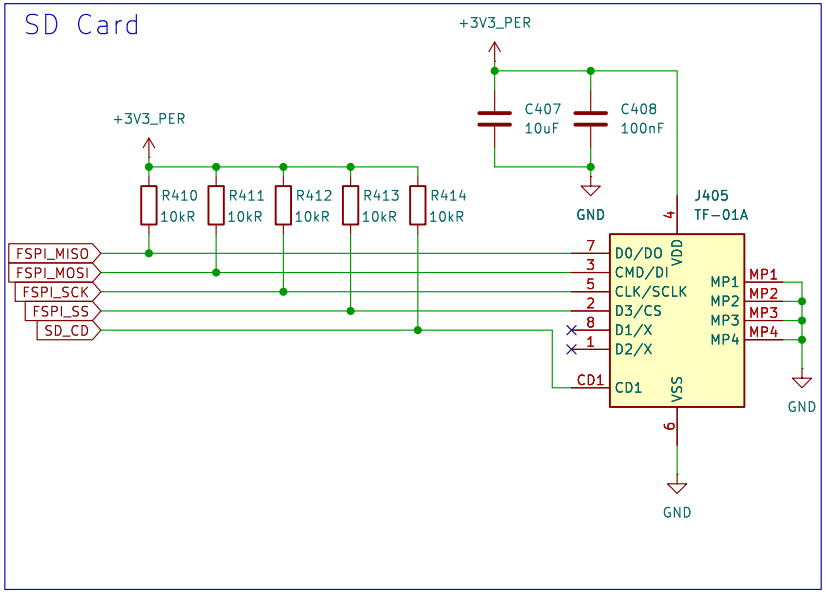
External I2C Pin Header



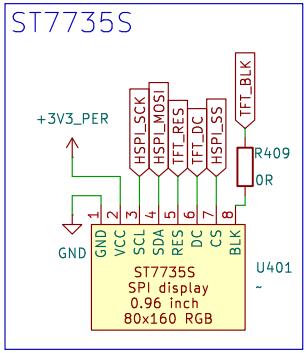


The ESP32-S3 chip has the following strapping pins:
- GPIO 0
- GPIO 3
- GPIO 45
- GPIO 46

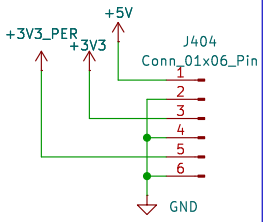
SD Card



ST7735S



Spare Pins Header




```
//-----------------------------
// TFT Display
//-----------------------------
const int TFT_SCL_PIN  = HSPI_SCK_PIN;  // SPI clock signal
const int TFT_SDA_PIN  = HSPI_MOSI_PIN; // Serial data input pin sda
const int TFT_RES_PIN  = 40; // Reset pin
const int TFT_DC_PIN   = 41; // Data selection signal
const int TFT_CS_PIN   = HSPI_SS_PIN; // LCD chip select signal, for SPI protocol
const int TFT_BLK_PIN  = -1; //
//-----------------------------
```

```
//-----------------------------
// SD SPI pins option
//-----------------------------
const int SD_SCK_PIN  = FSPI_SCK_PIN;
const int SD_MISO_PIN = FSPI_MISO_PIN;
const int SD_MOSI_PIN = FSPI_MOSI_PIN;
const int SD_CS_PIN   = FSPI_SS_PIN; /* D3 */
//-----------------------------
```

```
//-----------------------------
// SD MMC pins option
//-----------------------------
const int SD_MMC_CLK_PIN = FSPI_SCK_PIN;  // SCK OTG
const int SD_MMC_CMD_PIN = FSPI_MOSI_PIN; // MOSI OTG
const int SD_MMC_D0_PIN  = FSPI_MISO_PIN; // MISO OTG
const int SD_MMC_CD_PIN  = 21; // Card detect
//-----------------------------
```

Sheet: /[4] ESP32 S3/
File: 04_esp32_s3.kicad_sch

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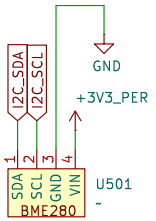
[5] Peripherals

I2C

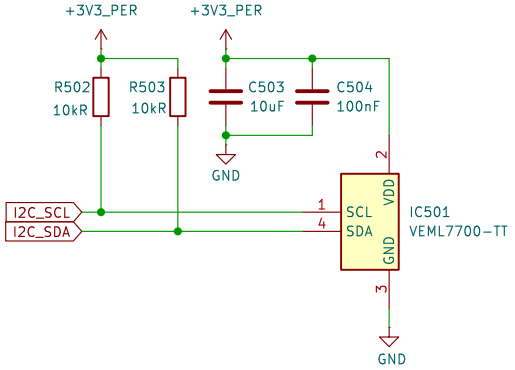
BME 280 I2C



Temperature
Humidity
Pressure
Sensor

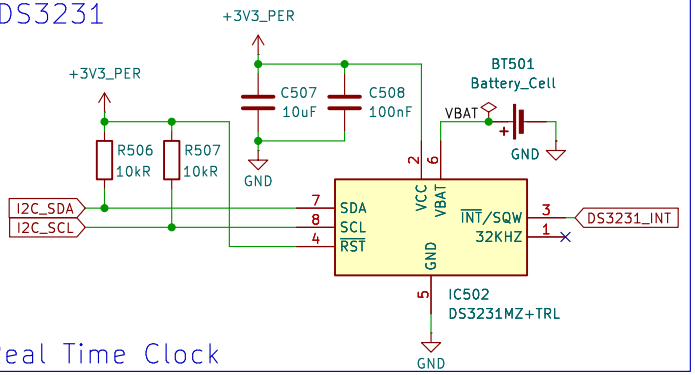
SDO: I2C address bit 0 GND: '0'; VDDIO: '1'

VEML 7700



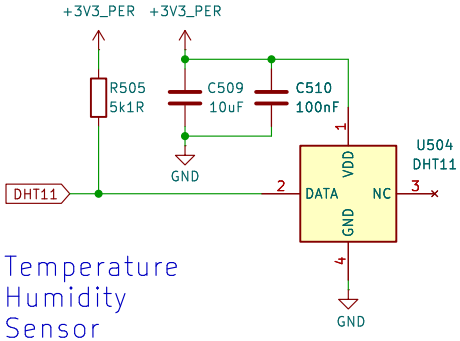
Light sensor

DS3231



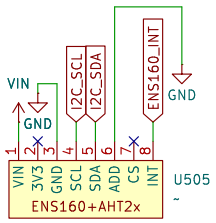
Real Time Clock

DHT11



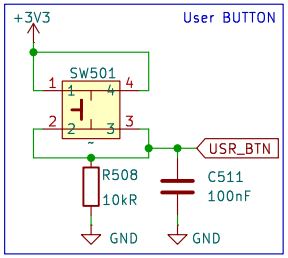
Temperature
Humidity
Sensor

ENS160+AHT2x

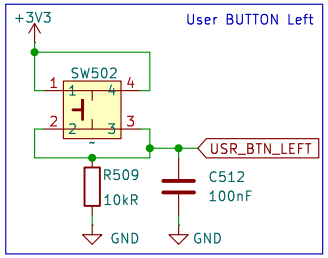


Air quality
sensor

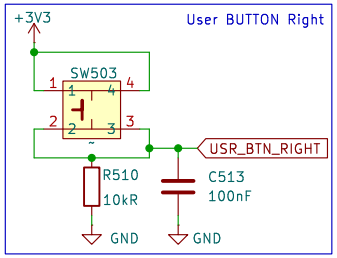
User BUTTON



User BUTTON Left

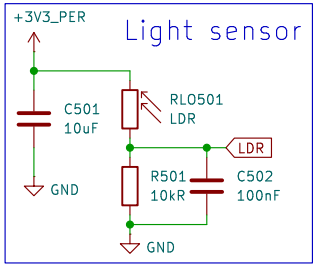


User BUTTON Right

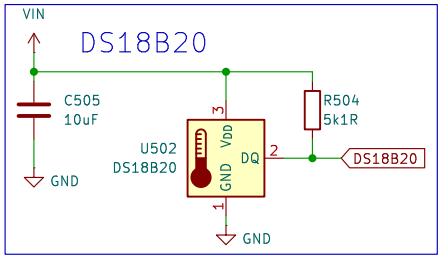


Analog

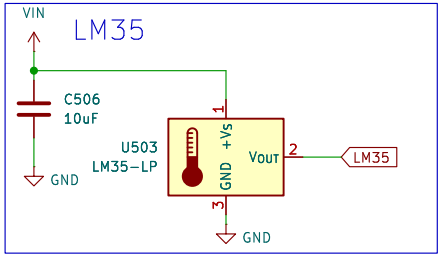
Light sensor



DS18B20



LM35



Sheet: /[5] Peripherals/
File: 05_peripherals.kicad_sch

Title:

Size: A4 | Date: | **Rev:**
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