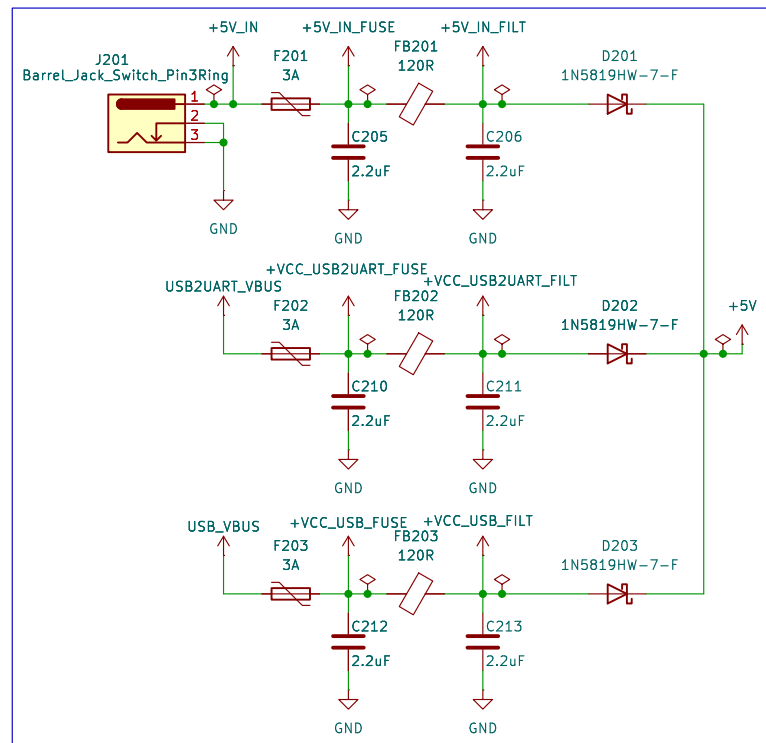


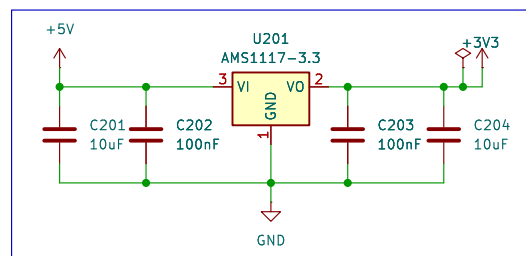
	1	2	3	4	5	6
A	<div>[2] Power</div> <div>File: 02_power.kicad_sch</div>					<div>[3] USB</div> <div>File: 03_usb.kicad_sch</div>
B						<div>[4] ESP32 S3</div> <div>File: 04_esp32_s3.kicad_sch</div>
C						<div>[5] Peripherals</div> <div>File: 05_peripherals.kicad_sch</div>
D						<div></div> <div>Sheet: / File: esp32_s3_weather_webserver.kicad_sch</div> <div><div>Title:</div><div>Size: A4Date:KiCad E.D.A. 9.0.4</div><div>Rev:Id: 1/5</div></div>
	1	2	3	4	5	6

[2] Power

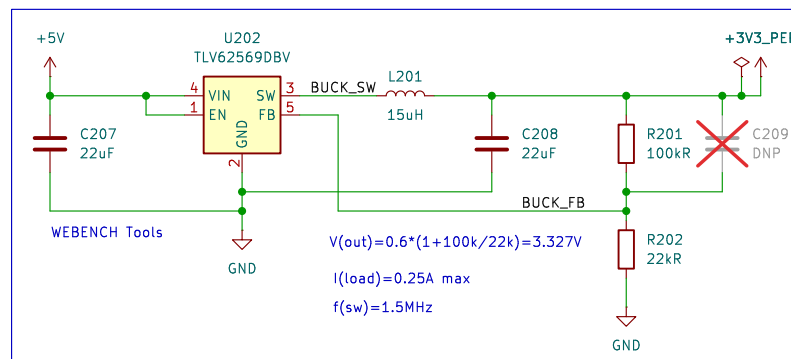
Power input



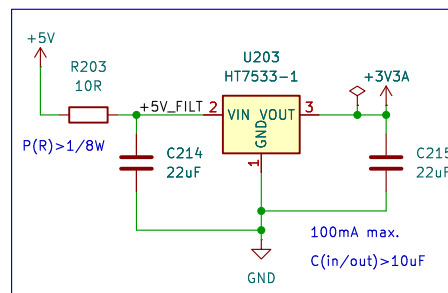
Powering ESP32



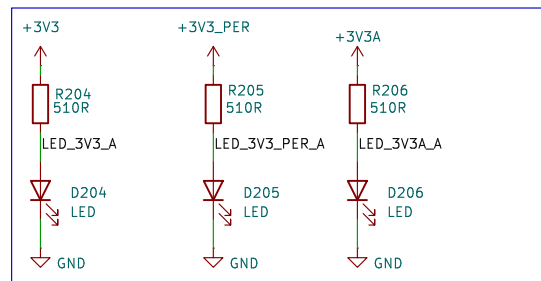
Powering Peripherals



Powering analog sensors



Power indication



Sheet: /[2] Power/
File: 02_power.kicad_sch

Title:

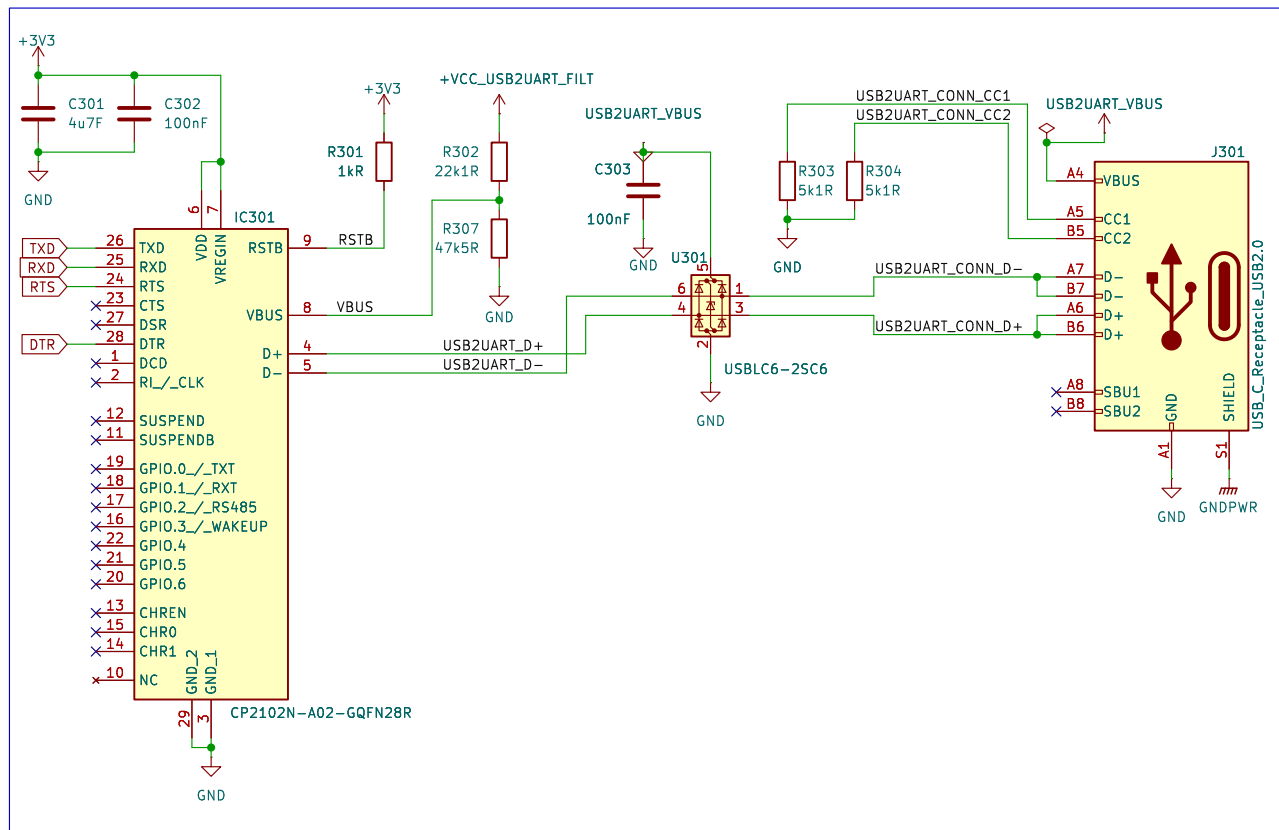
Size: A4
KiCad E.D.A. 9.0.4

Date:

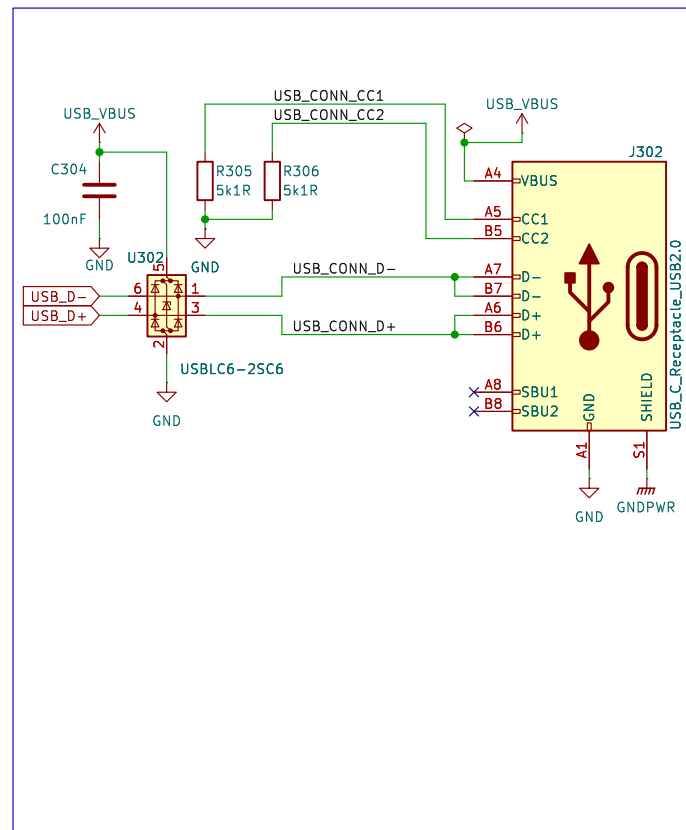
Rev:
Id: 2/5

[3] USB

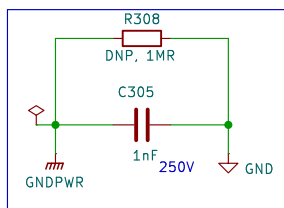
USB to UART:



USB to ESP32:



Chassis GND Connection



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

Title:

Size: A4

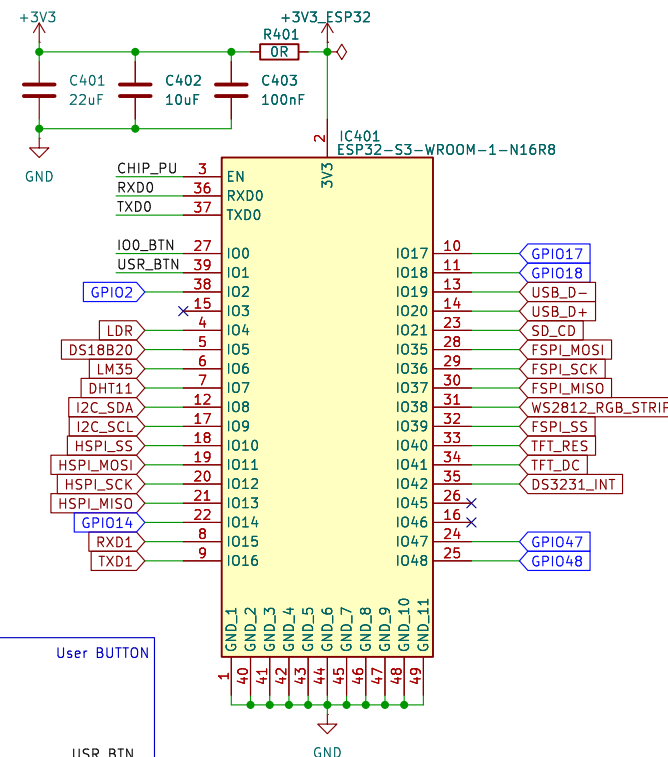
Date:

KiCad E.D.A. 9.0.4

Rev:

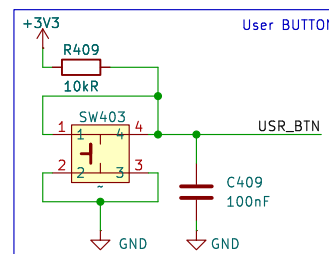
Id: 3/5

RESET BUTTON



The ESP32-S3 chip has the following strapping pins:

- GPIO 0
- GPIO 3
- GPIO 45
- GPIO 46



```

//-----
// TFT Display
const int TFT_SCK_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

Title:

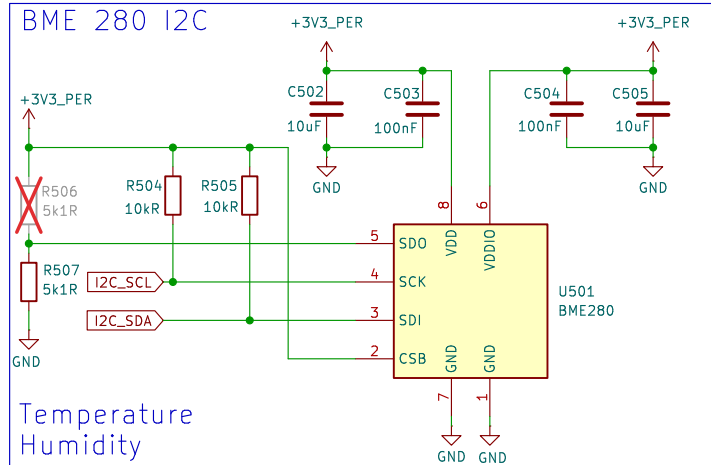
Size: A4	
KiCad E.D.A. 9.0.4	

Date:

Rev:
Id: 4/5

[5] Peripherals

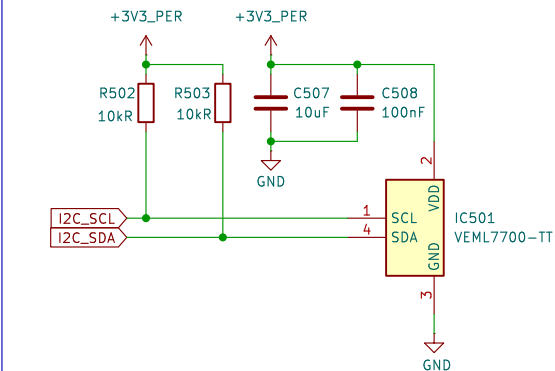
BME 280 I2C



Temperature
Humidity
Pressure
Sensor

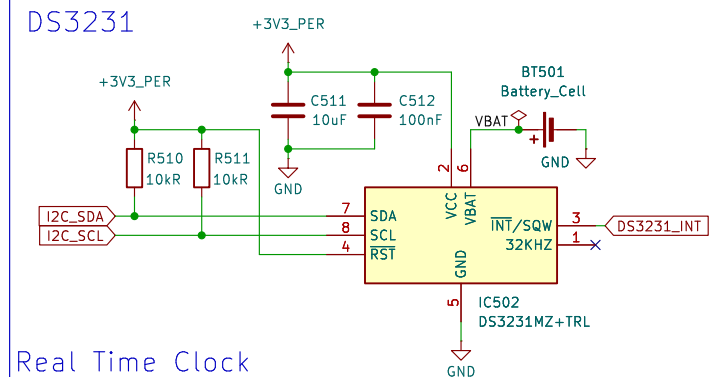
SD0: I2C address bit 0 GND: '0'; VDDIO: '1'

VEML 7700



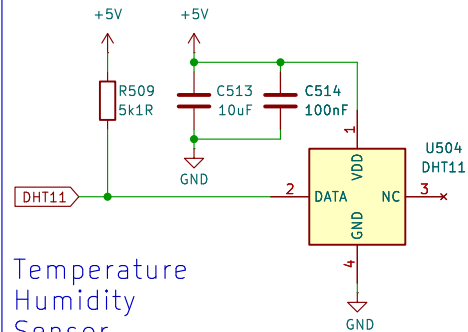
Light sensor

DS3231



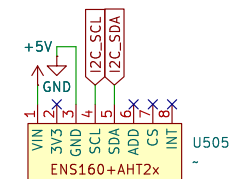
Real Time Clock

DHT11



Temperature
Humidity
Sensor

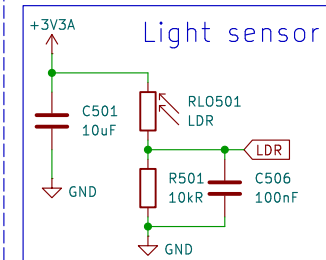
ENS160+AHT2x



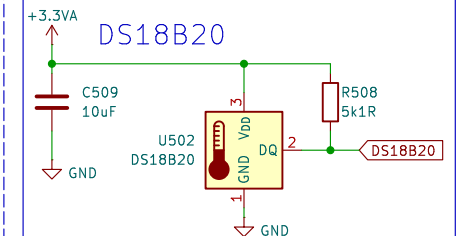
Air quality sensor

Analog

Light sensor



DS18B20



LM35

