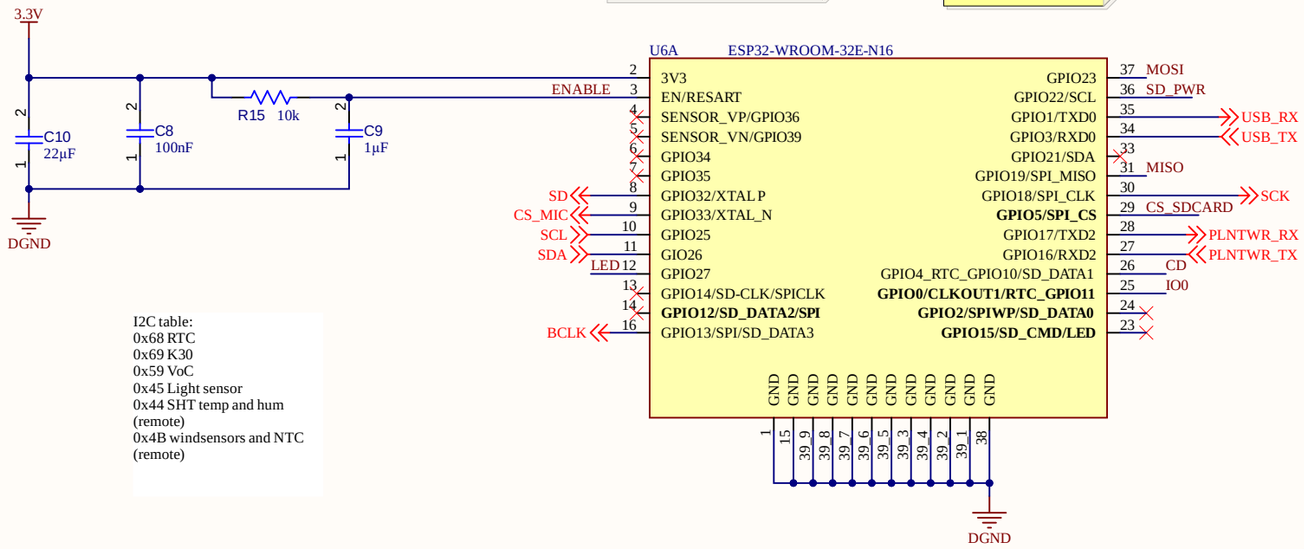
ESP32

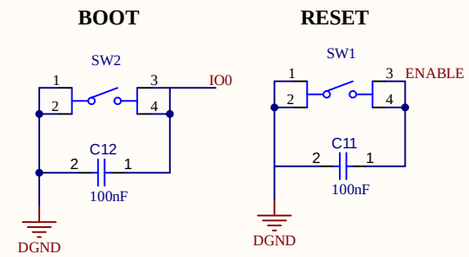
This is a ESP32, no variant

Thermal paste under

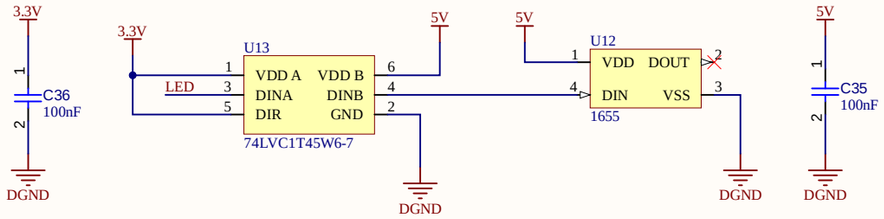


I2C table:
0x68 RTC
0x69 K30
0x59 VoC
0x45 Light sensor
0x44 SHT temp and hum (remote)
0x4B windsensors and NTC (remote)

Reset and Boot Buttons



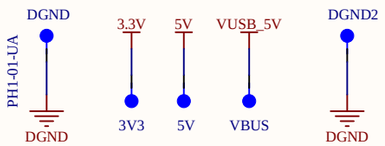
Debug LED



U6B ESP32-WROOM-32E-N16

NC
NC
NC
NC
NC
NC
NC1

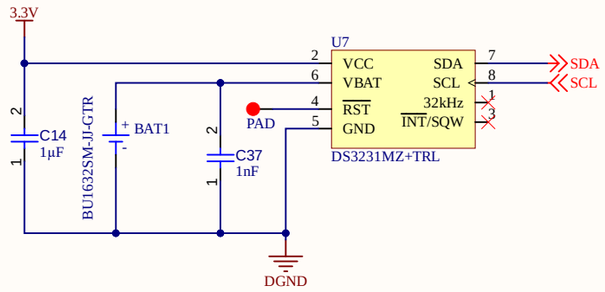
Testpoints



Break out points

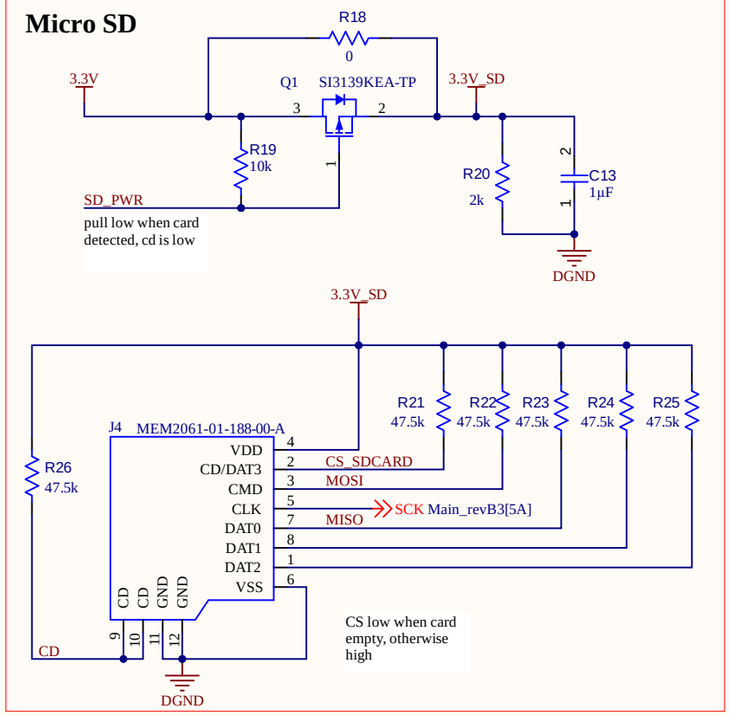
Remove pullups on breakout boards if mounting new sensors

RTC



FM1 FM2 FM3 FM4 FM5 FM6
fiducial 1mm

Micro SD

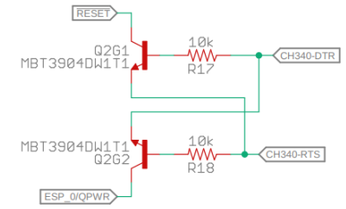


Auto-Reset

Boot Mode Configuration

Pin	Run	Bootloader	Default
IO0	1	0	1
IO2	x	0	0
IO5	1	x	1
IO12	0	0	0
IO15	x	x	1

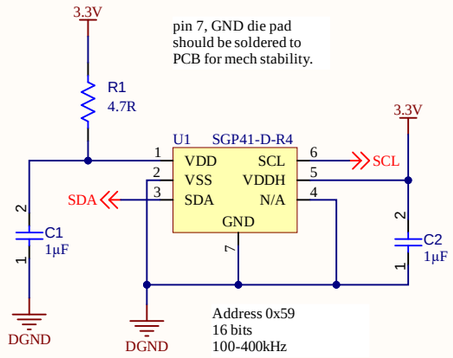
IO12 = MDTI, IO15 = MDTO



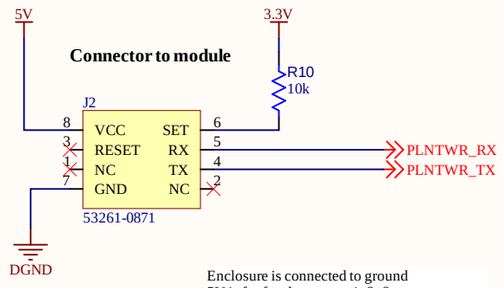
If DTR is LOW, toggling RTS from HIGH to LOW resets to run mode.
If RTS is HIGH, toggling DTR from LOW to HIGH resets to bootloader.

Title		
Size A3	Number	Revision
Date: 11-13-2024		Sheet of
File: C:\Users\..\Main_revB3.SchDoc		Drawn By:

VOC Sensor



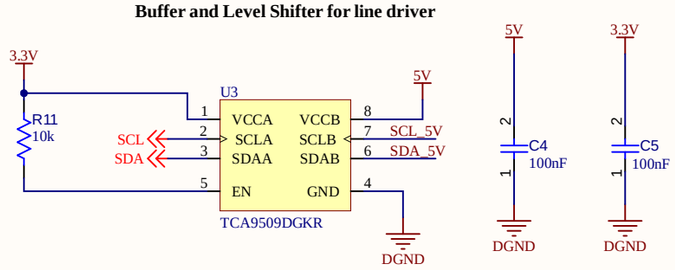
PM Sensor Plantower 5003



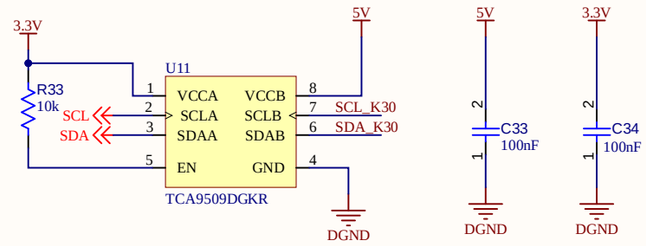
I2C Bus Management

Address items from remote board:
(0x4B) 1001011 for front windsensor and NTC
0x44 for SHT temp and humidity

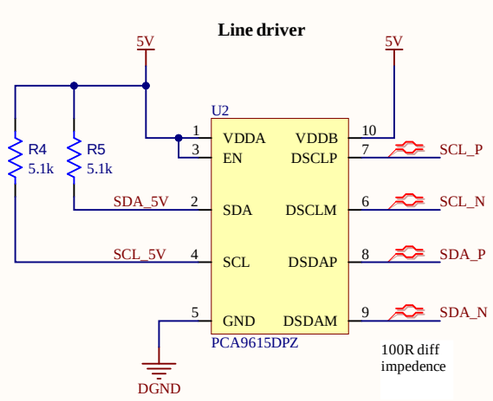
Buffer and Level Shifter for line driver



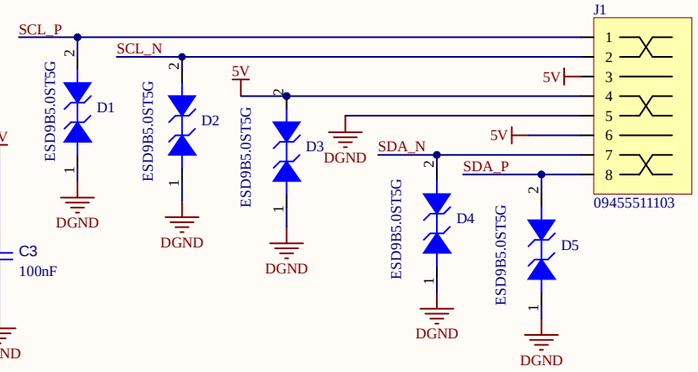
K30 level shifter



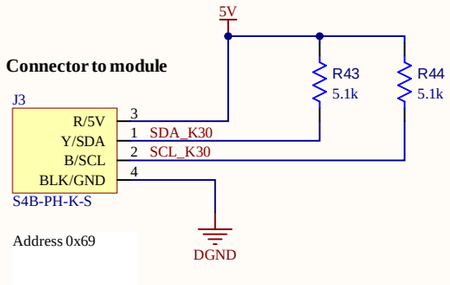
Line driver



Straight Through CAT 5

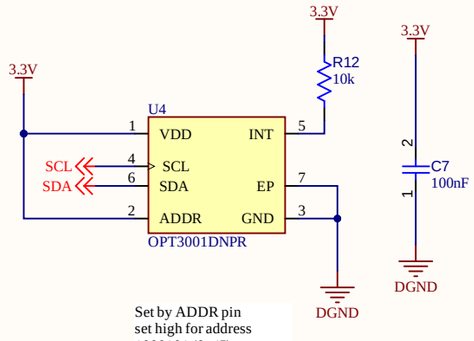


K30 - 030-8-0006



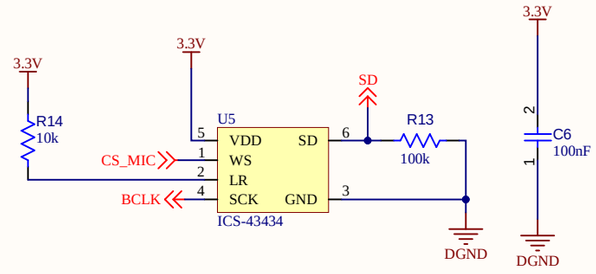
https://rmtplusstoragesenseair.blob.core.windows.net/docs/Dev/publicerat/TDE4700.pdf

Light Sensor



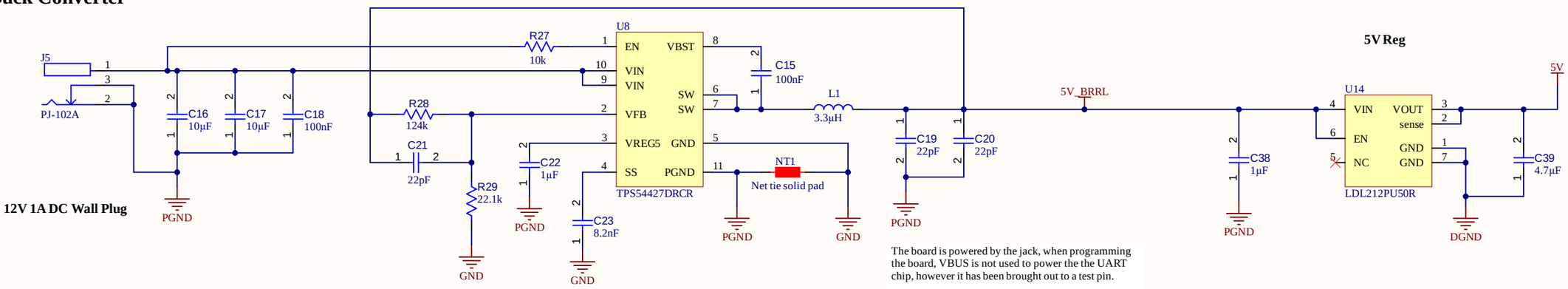
Set by ADDR pin
set high for address
1000101 (0x45)

Microphone - i2S

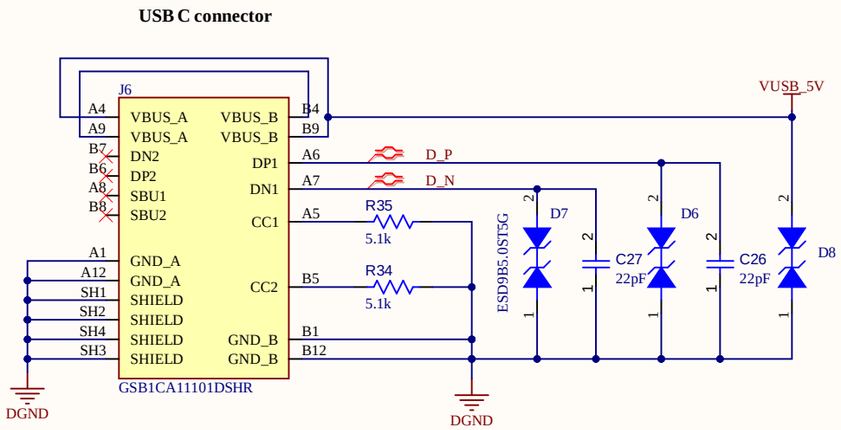


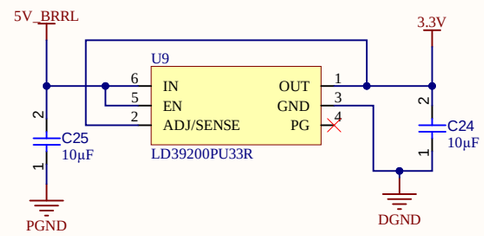
Title		
Size A3	Number	Revision
Date: 11-13-2024		Sheet of
File: C:\Users\..\Sensors_revB3.SchDoc		Drawn By:

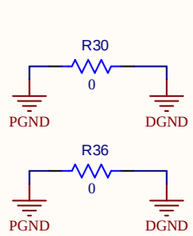
Buck Converter



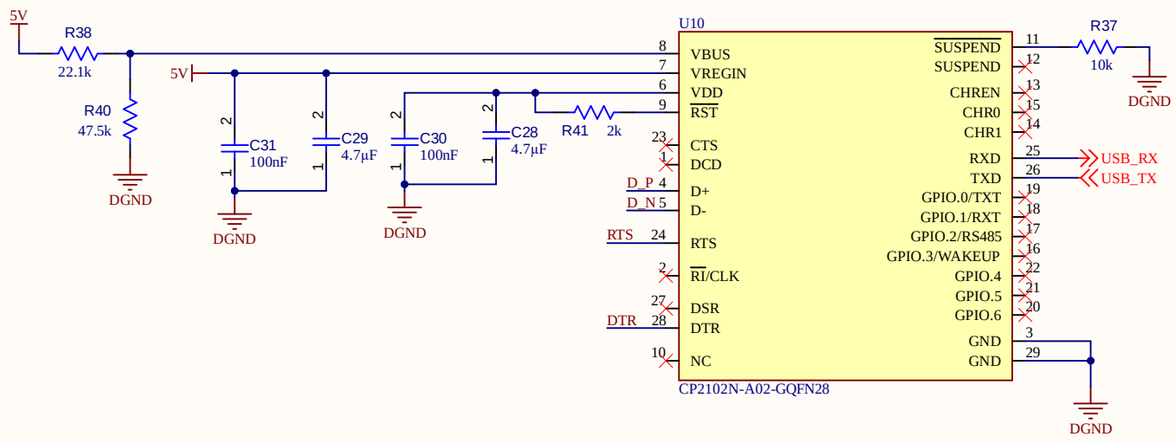
USB Power

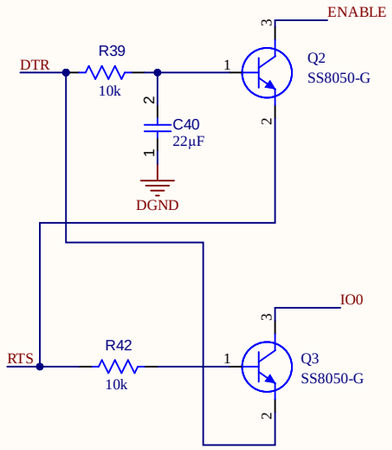


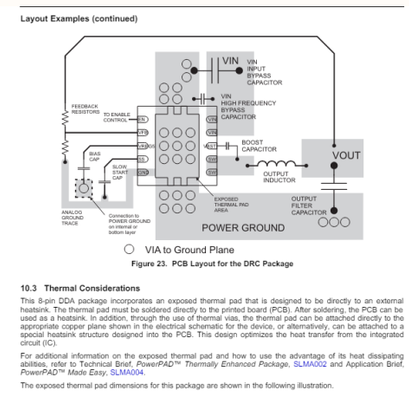




UART







Title		
Size: A3	Number	Revision
Date: 11-13-2024		Sheet of
File: C:\Users\..\Power_revB3.SchDoc		Drawn By: