

Communication

CAN & SPI  
USART  
RS485  
I2C

File: Communication.kicad\_sch

Power Supply

USB type-B ST-Link  
USB type-C  
5V to 3V3  
Power Supply Header  
Power Indication LEDs  
STM32 POWER Segment  
Power Supply selector Header  
Battery cell

File: Power Supply.kicad\_sch

STM32F401RBT6 MCU

STM32 I/O SEGMENT  
VDD and VDDA power filtering  
EEPROM  
Oscillator Circuits  
RTC  
SD Card Socket

File: STM32F401RBT6.kicad\_sch

ESP32-WROOM module

ESP32-WROOM Module  
BOOT  
ENABLE

File: ESP32-WROOM.kicad\_sch

Debugger

ST LINK Debugger  
PROGRAM MODE SELCTION

File: USB&Debugger.kicad\_sch

User Interace

LED and BUZZER  
SWITCHES  
POTENTIOMETER  
TEMPERATURE SENSOR  
16x2 LCD

File: User Interace.kicad\_sch

Port&IO Extensions

Port A/B/C Headers

File: Port&IO.kicad\_sch

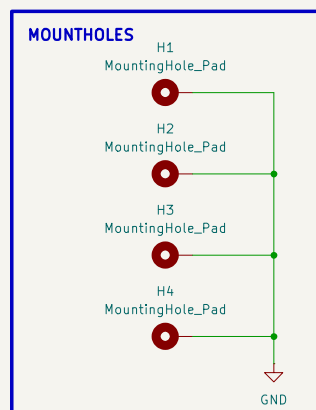
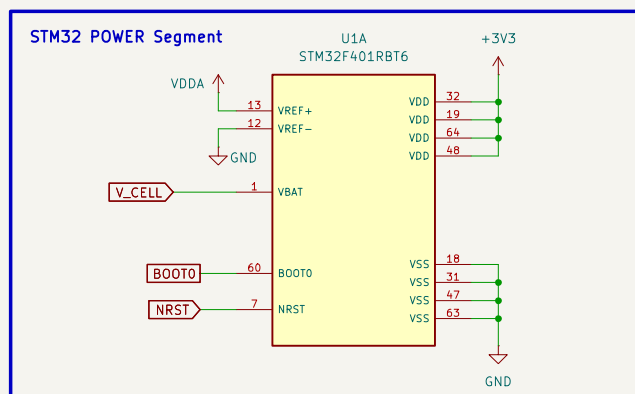
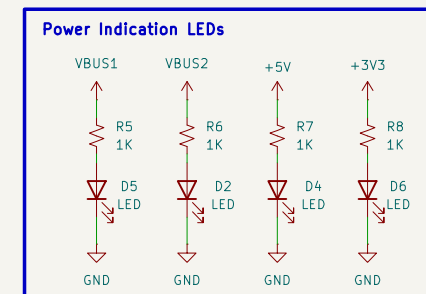
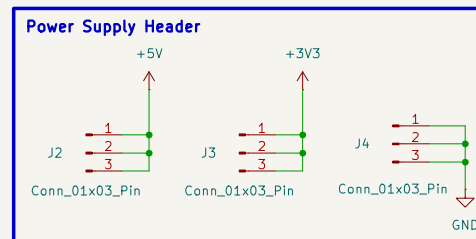
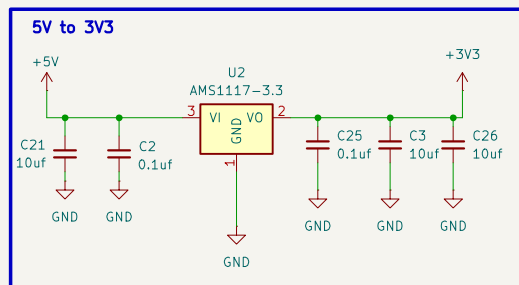
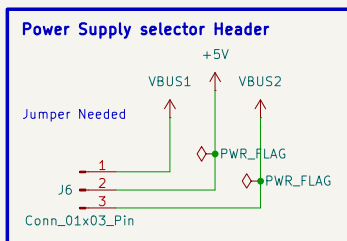
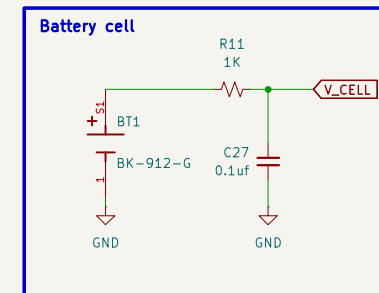
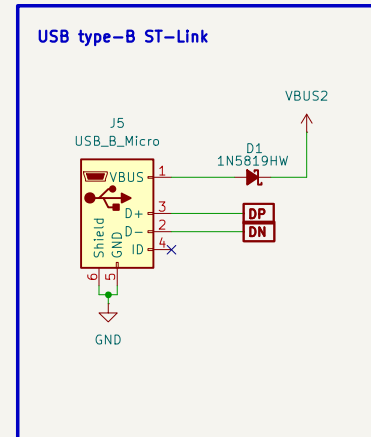
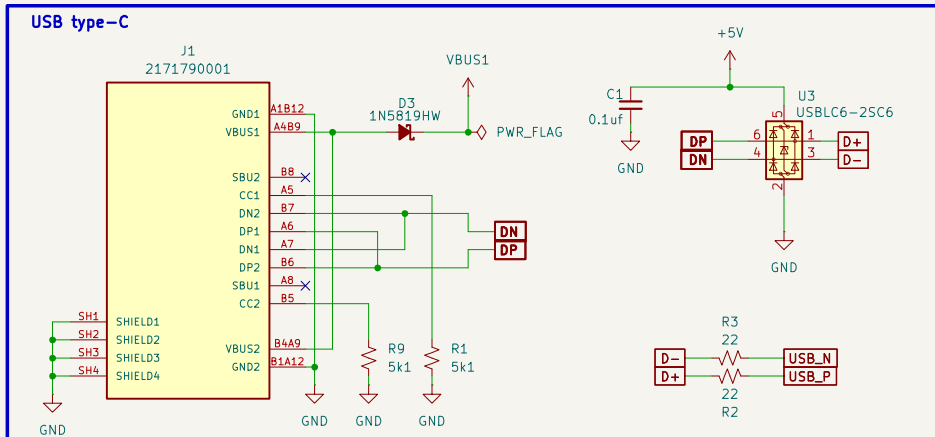
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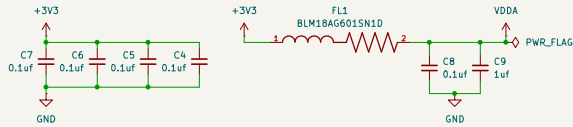
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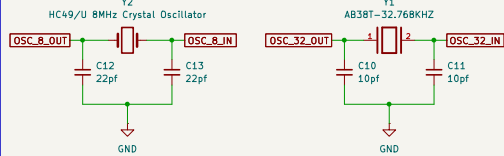
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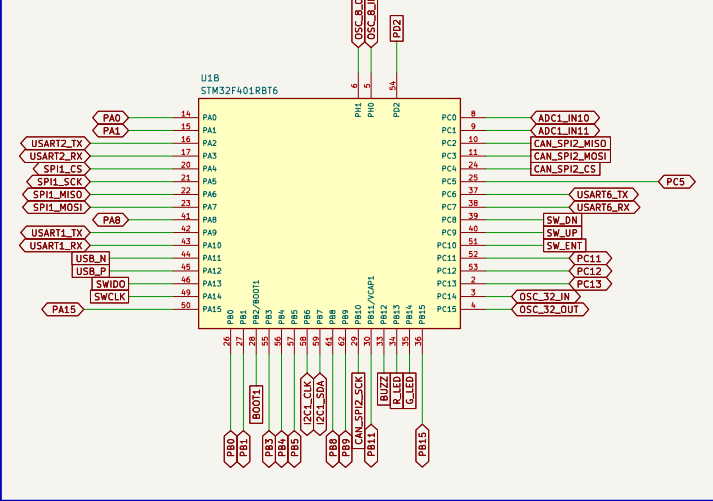
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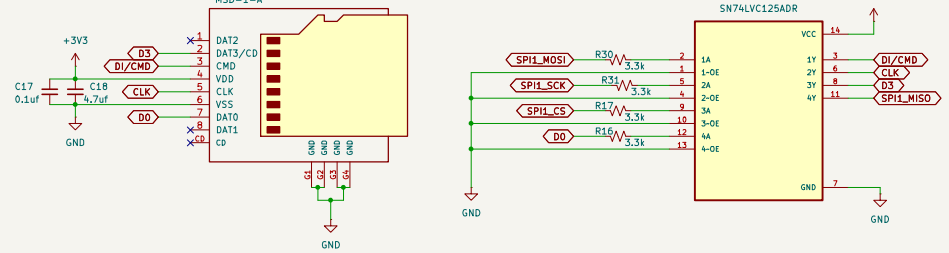
# Oscillator Circuits



# STM32 I/O Segment



# SD Card Socket



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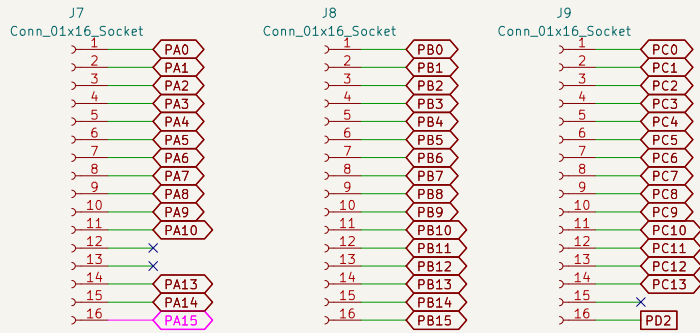
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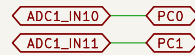


## Port A/B/C Headers

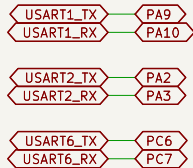


## DIFFERENTIAL

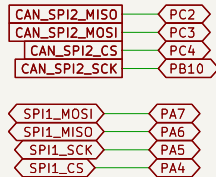
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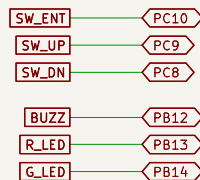
### USART



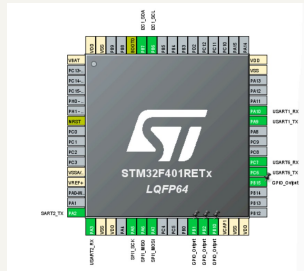
### CAN & SPI



### USER IO's



### I2C



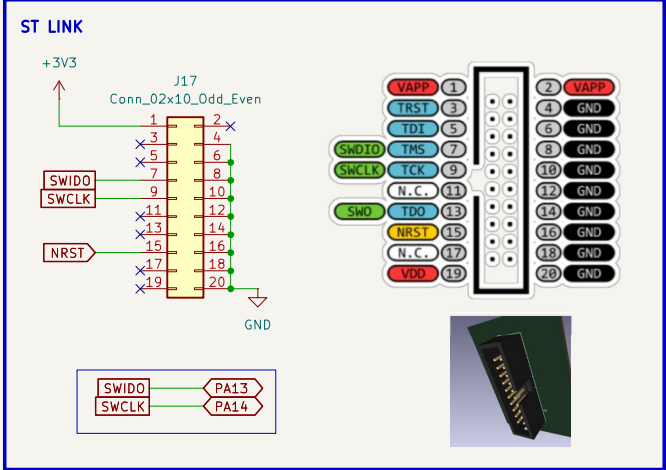
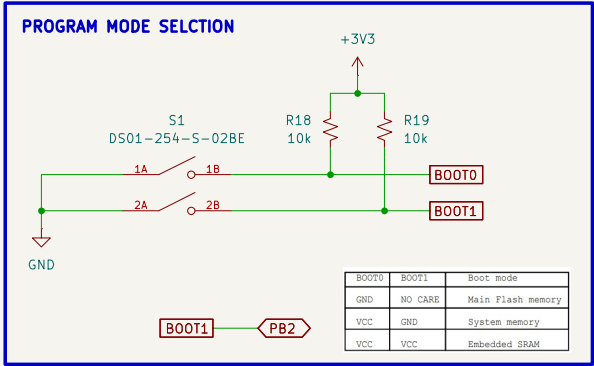
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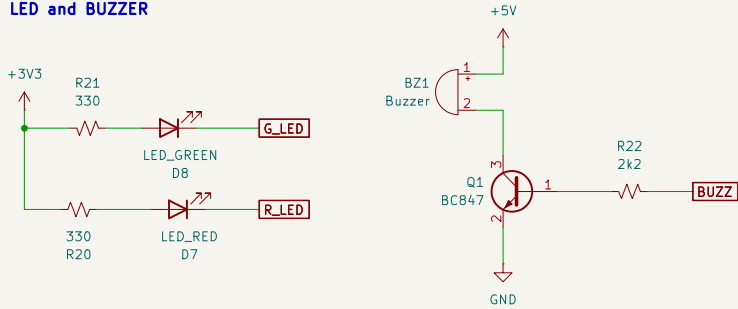
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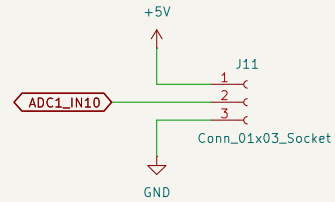
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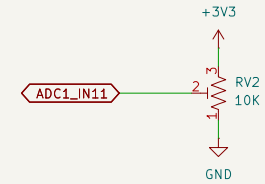
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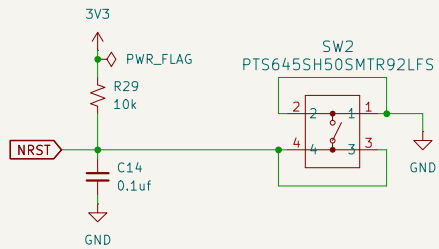
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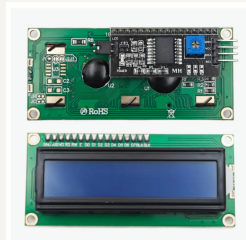
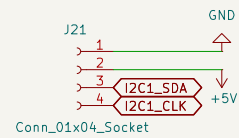
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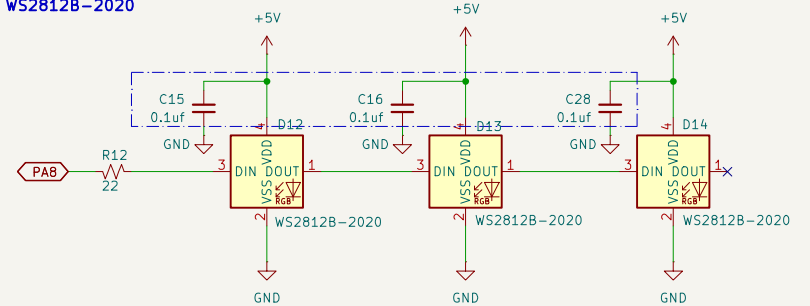
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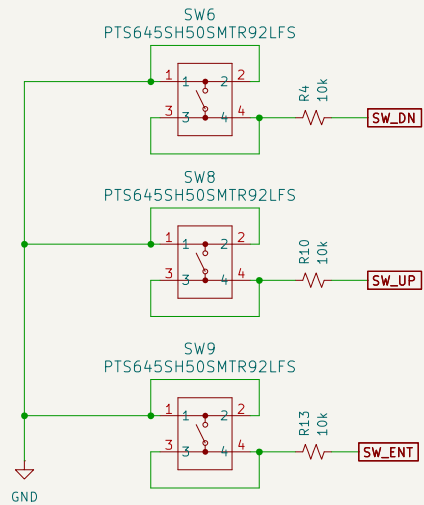
### 16x2 LCD



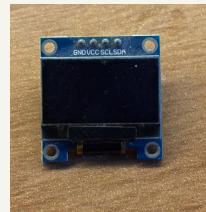
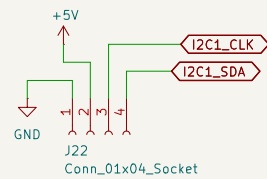
### WS2812B-2020



### SWITCHES



### .96 Inch Oled Display



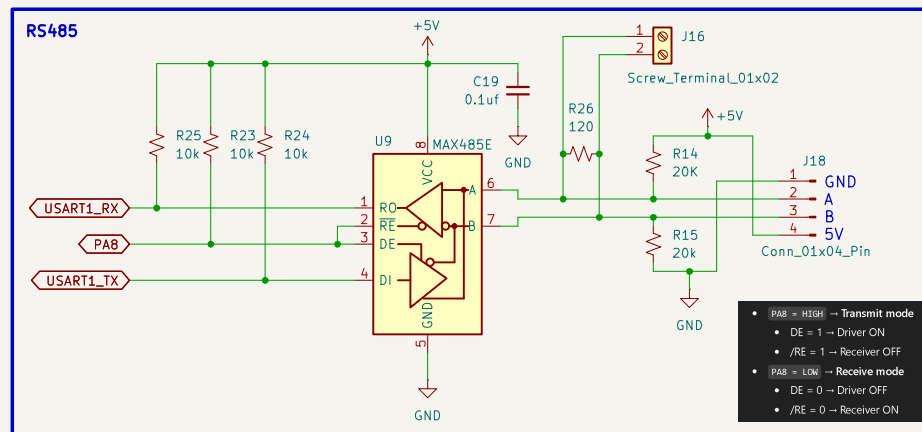
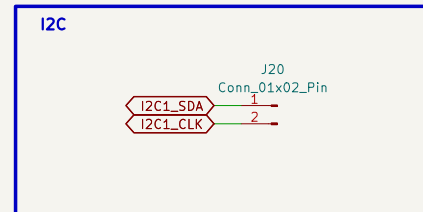
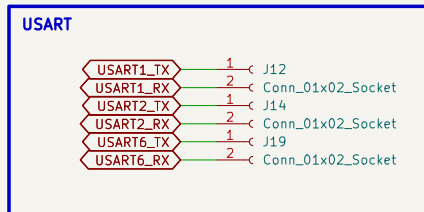
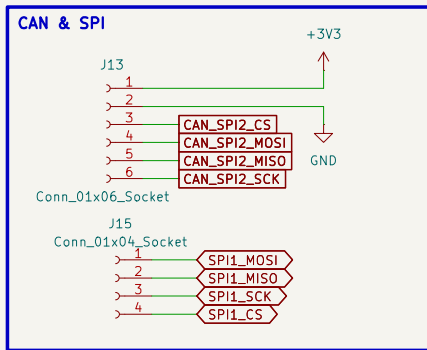
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