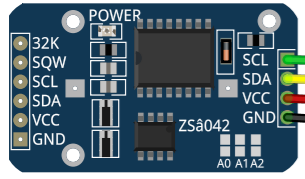


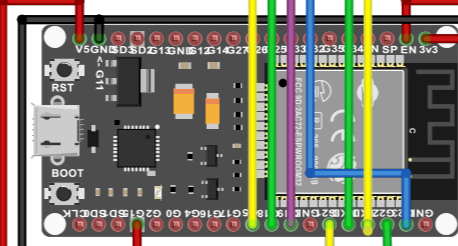
SD-Card Module, 4GB card installed, using SPI communications

GPS Route Recorder
(c) Christine Thompson 2020

DS3231 RTC using I2C communications

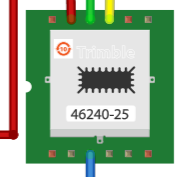


ESP32 Development Board
10uF - GND & EN
Button - D15
GPS TX - TX0
GPS RX - RX0
oLED & RTC - SCL & SDA
SD - CS, SCK, MoSi, & MiSo



10uF capacitor added so Reset Button not required each time the software is loaded

NEO-7M-0-000 GPS Module with built in GPS Aerial
RED - VCC
Black/Blue - GND
Green - TXD
Yellow - RXD



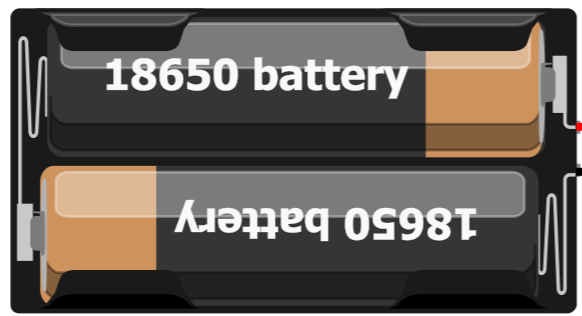
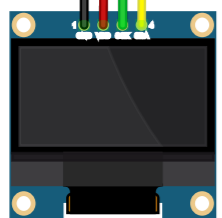
Route Start and Stop recording button, ALSO GPX or KML file format select button, ALSO File Transfer select button

10K

10K

4.7K

0.96" OLED, using I2C communications



2 x 18650 3.7v, 2000mAh batteries

Power Button

Battery 8.6V stepped down to 5V