

## Main Components

- 3.7 V, 250 mAh Battery
- PowerBoost 500C
- Switch
- OLED
- AST10411 (MAX30101 breakout)
- GY906 (MLX90614 breakout)
- AP3602
- Arduino Nano 33 IOT
- Micro USB (charging battery)

## Basic Components

- LEDs
  - Red, yellow, green
- Resistors
  - $R_1 = 75 \Omega$
  - $R_2 = 62 \Omega$
  - $R_3 = 56 \Omega$
  - $R_4 = 120 \Omega$
  - $R_5 = 300 \Omega$

D<sub>4</sub>: OUTPUT: turns PPG  
on or off

A<sub>1</sub>: SCL for OLED

D<sub>5</sub>: OUTPUT: controls green  
LED

A<sub>3</sub>: SCL for PPG

D<sub>7</sub>: OUTPUT: controls yellow  
LED

A<sub>5</sub>: SCL for Temp  
sensor

D<sub>9</sub>: OUTPUT: controls red  
LED

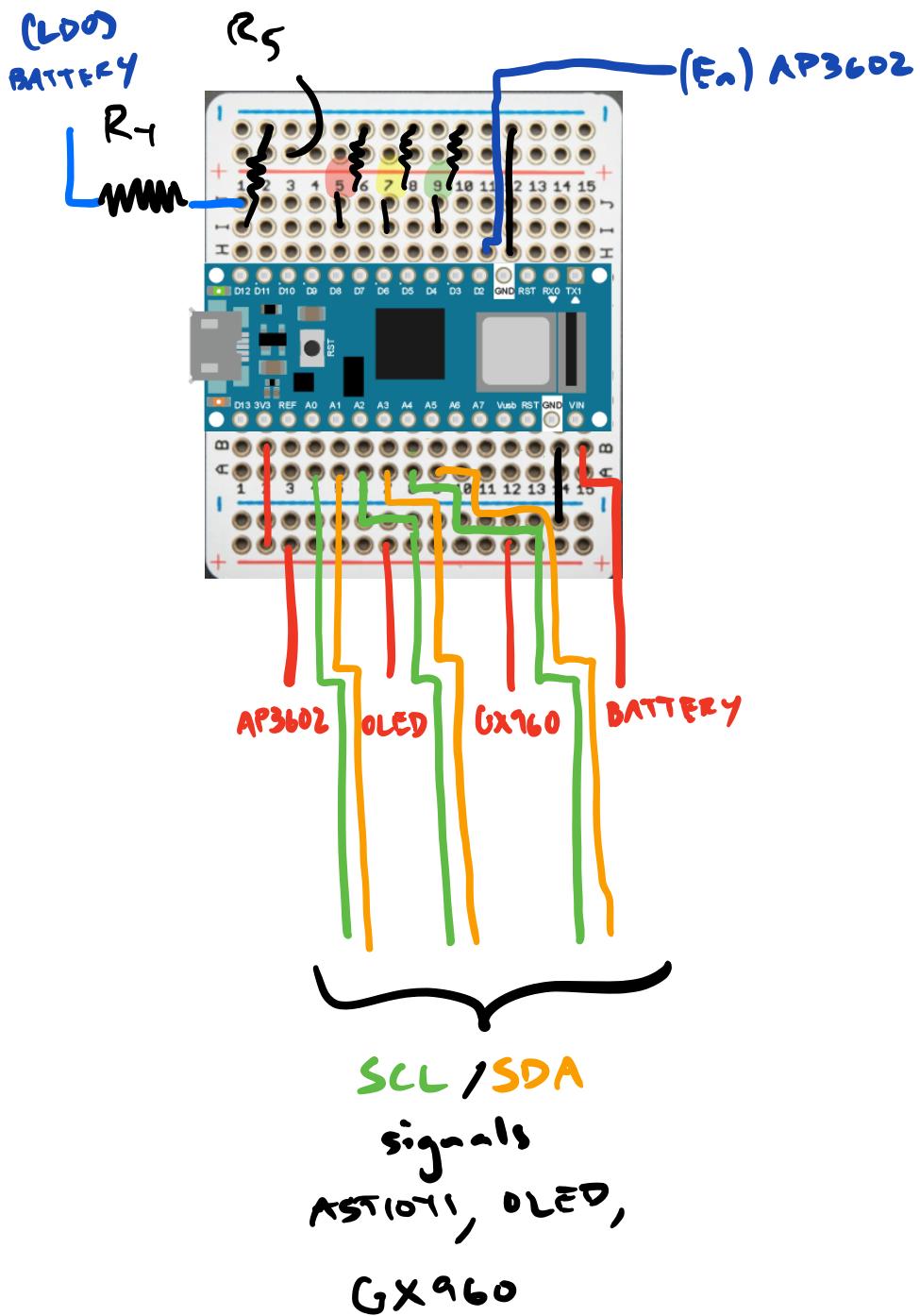
A<sub>2</sub>: SDA for OLED

D<sub>12</sub>: INPUT: alerts if  
battery is low

A<sub>7</sub>: SDA for PPG

A<sub>6</sub>: SDA for Temp  
sensor

# Nano / Protoboard Wiring Example



# Watch Stack

