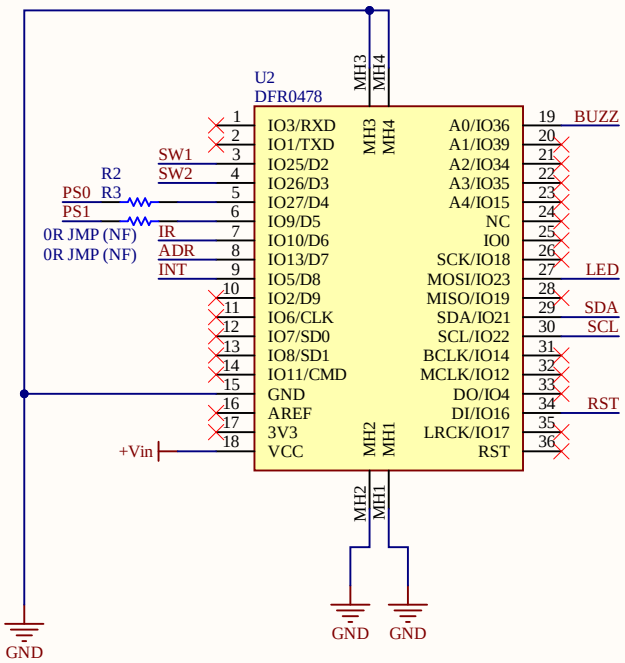
IMU Module

FireBeetle Wi-Fi / Bluetooth ESP8266/ESP32



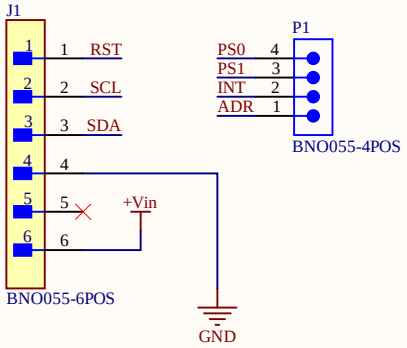
PS0, PS1 to remain floating
If needed, solder R2, R3 SMT jumpers

Mounting Holes Grounded

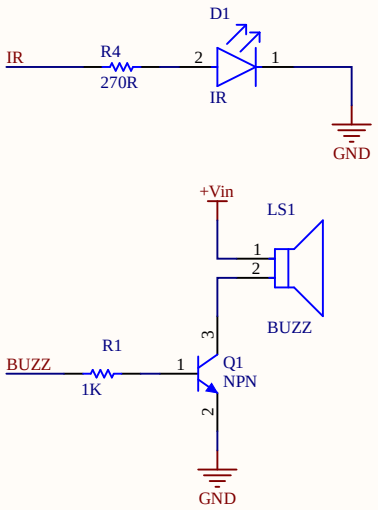
Board powered by +5 VDC USB Input
or +3.7 VDC Li-Po battery

Charging via USB automatically handled

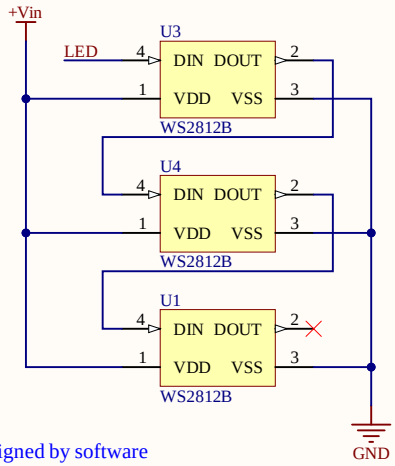
BNO055 9 Axis Abs.



IR Diode* / Buzzer*

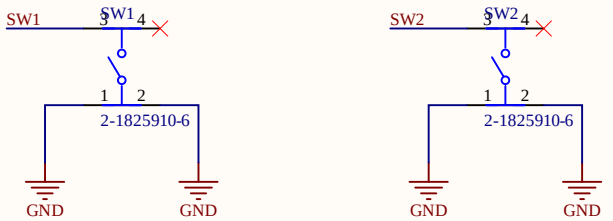


3X Intelligent Status LED (WS2812B)



Detailed use to be designed by software

2X Data Label Tactile Switch

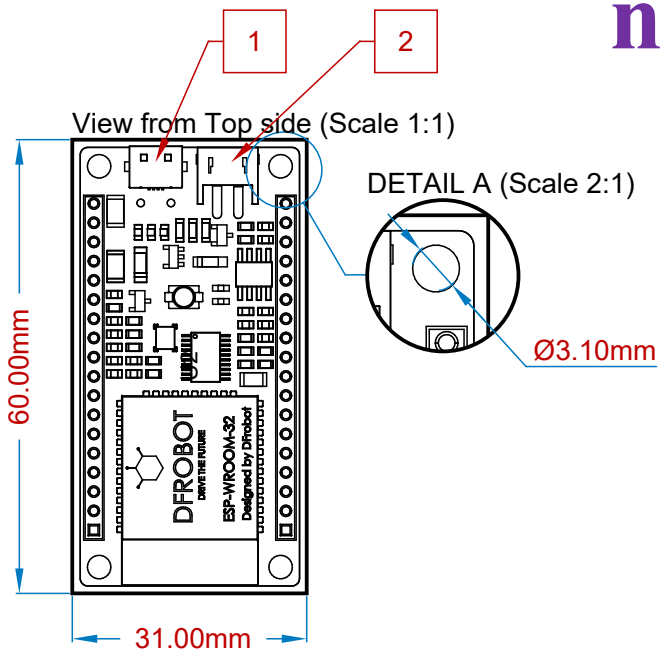


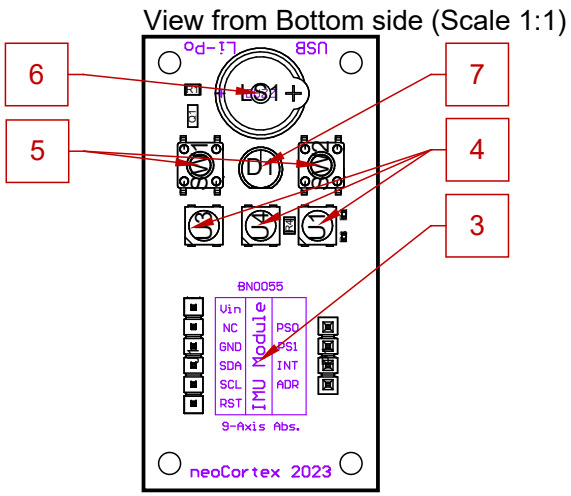
neoCortex 2023

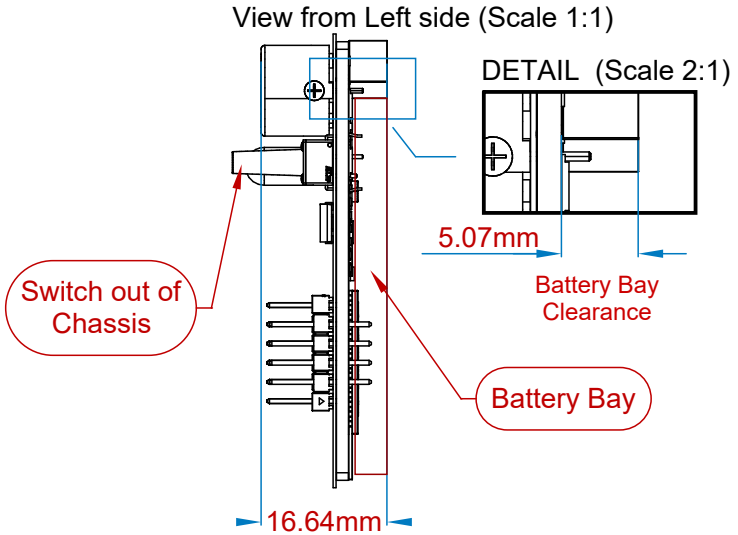
* Optional

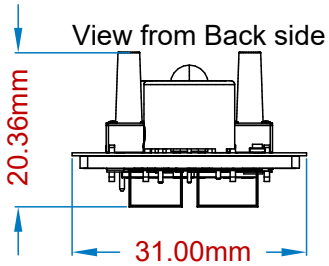
Title	IMU Module		
Size: A4	Number: 1 out of 1		Revision: 1.0
Date: 1/07/2023		Sheet of	
File: C:\Users\..\IMU.SchDoc		Drawn By:	Michal Makowka

IMU MODULE
neoCortex 2023

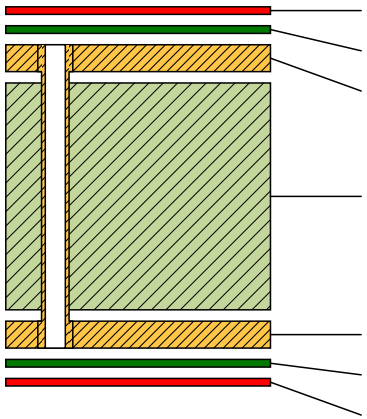








Layer Stack Legend



Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	**Top Layer**	**0.04mm**		**Signal**	**GTL**
		0.32mm	*FR-4*	*Dielectric*	
Copper	**Bottom Layer**	**0.04mm**		**Signal**	**GBL**
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 0.41mm

Notes:

1. USB (Power/Charge/Data INOUT)
2. Li-Po Battery 3.7 VDC IN
3. BNO055 9-Axis Abs. Sensor Module
4. Status RGB LED (WS2812B)
5. Data Label Tactile Switch
6. Optional Piezoelectric Buzzer
7. Optional IR LED for Motion Tracking