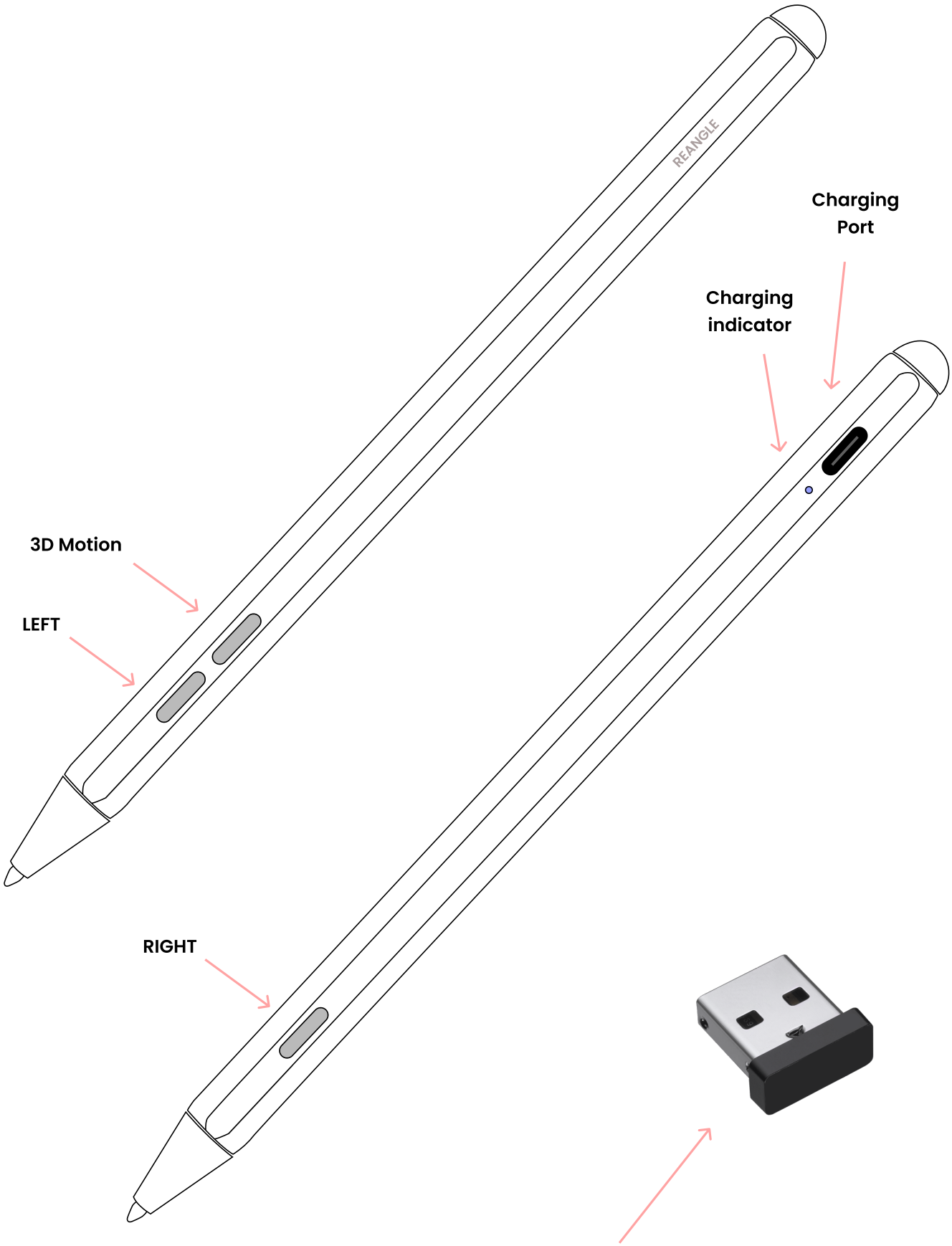
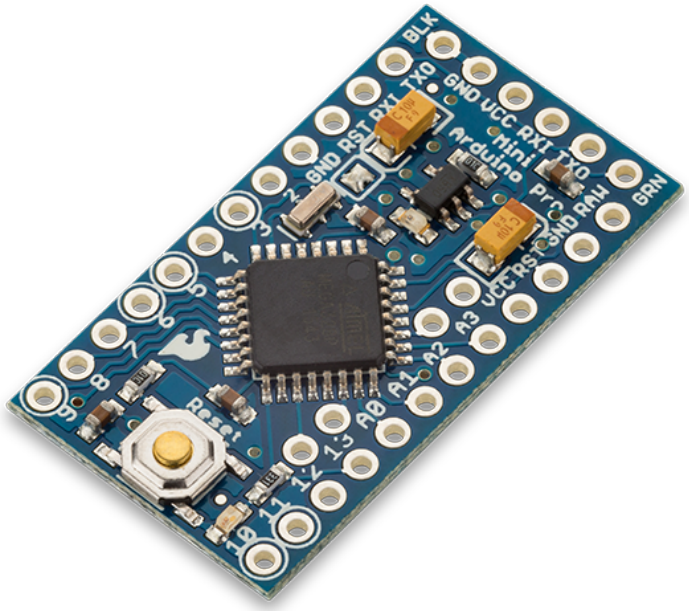
PEN DESIGN


REANGLE
Charging Port
Charging indicator
3D Motion
LEFT
RIGHT
Wireless Connector
for FASTER communication

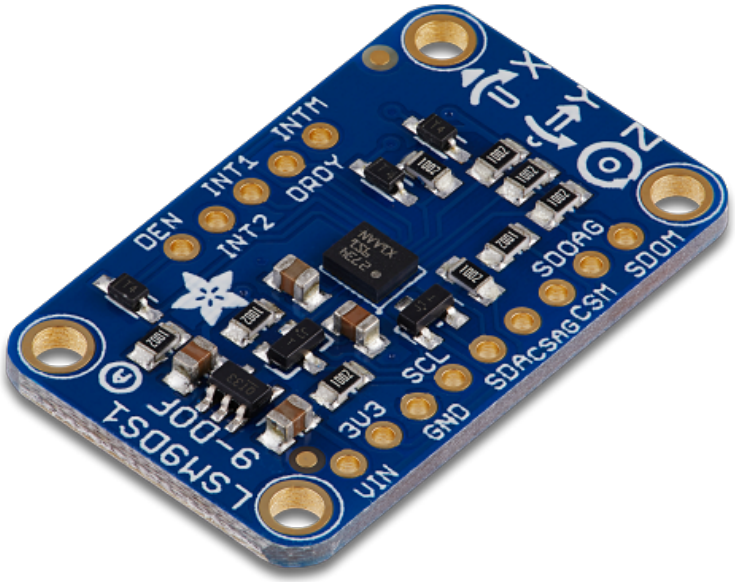
COMPONENTS USED



Arduino Pro Mini 328 - 3.3V/8MHz

- The Arduino Pro Mini is a microcontroller board based on the ATmega328.
- It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analog inputs, an on-board resonator, a reset button, and holes for mounting pin headers.
- A six pin header can be connected to an FTDI cable or Sparkfun breakout board to provide USB power and communication to the board.
- The board comes without pre-mounted headers, allowing the use of various types of connectors or direct soldering of wires. The pin layout is compatible with the Arduino Mini.
- Version of the Pro Mini used runs at 3.3V and 8 MHz

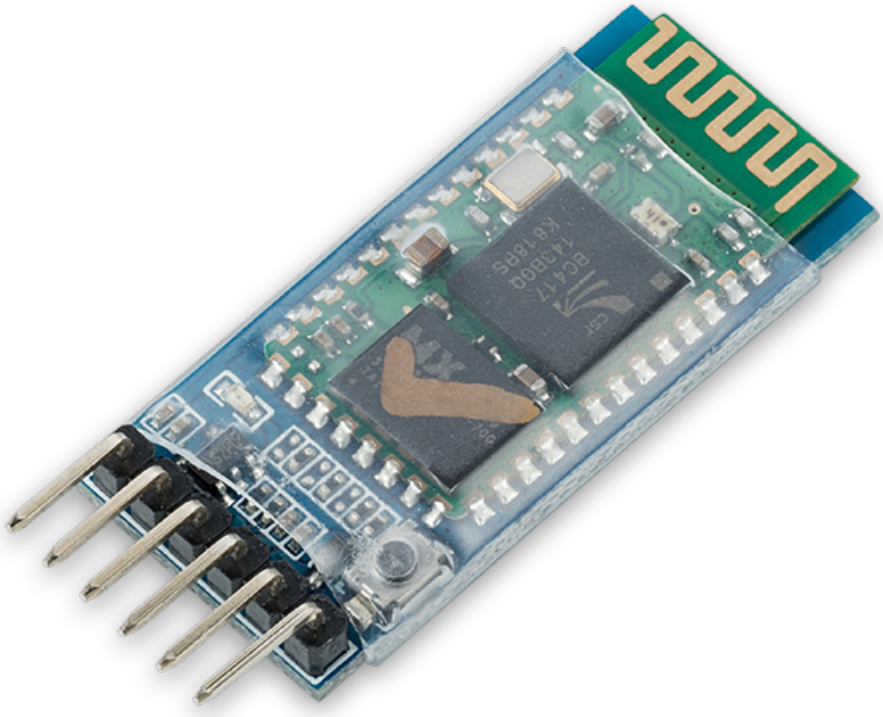
COMPONENTS USED



Accelerometer

- Accelerometer/Magnetometer/Gyroscope + Temp LSM9DS1
- This is a 9-DOF sensor, which means 3-axis accelerometer, 3-axis magnetometer and 3-axis gyroscope.
- It can be used to orient your project by measuring twist&spin, north direction and acceleration
- This helps in placing and visualising object smoothly.

COMPONENTS USED



Bluetooth Module

- HC - 05 Bluetooth Serial Module
- Acts like a bluetooth serial monitor.
- Enables the arduino to exchange data with other bluetooth devices such as PC or Android smartphone

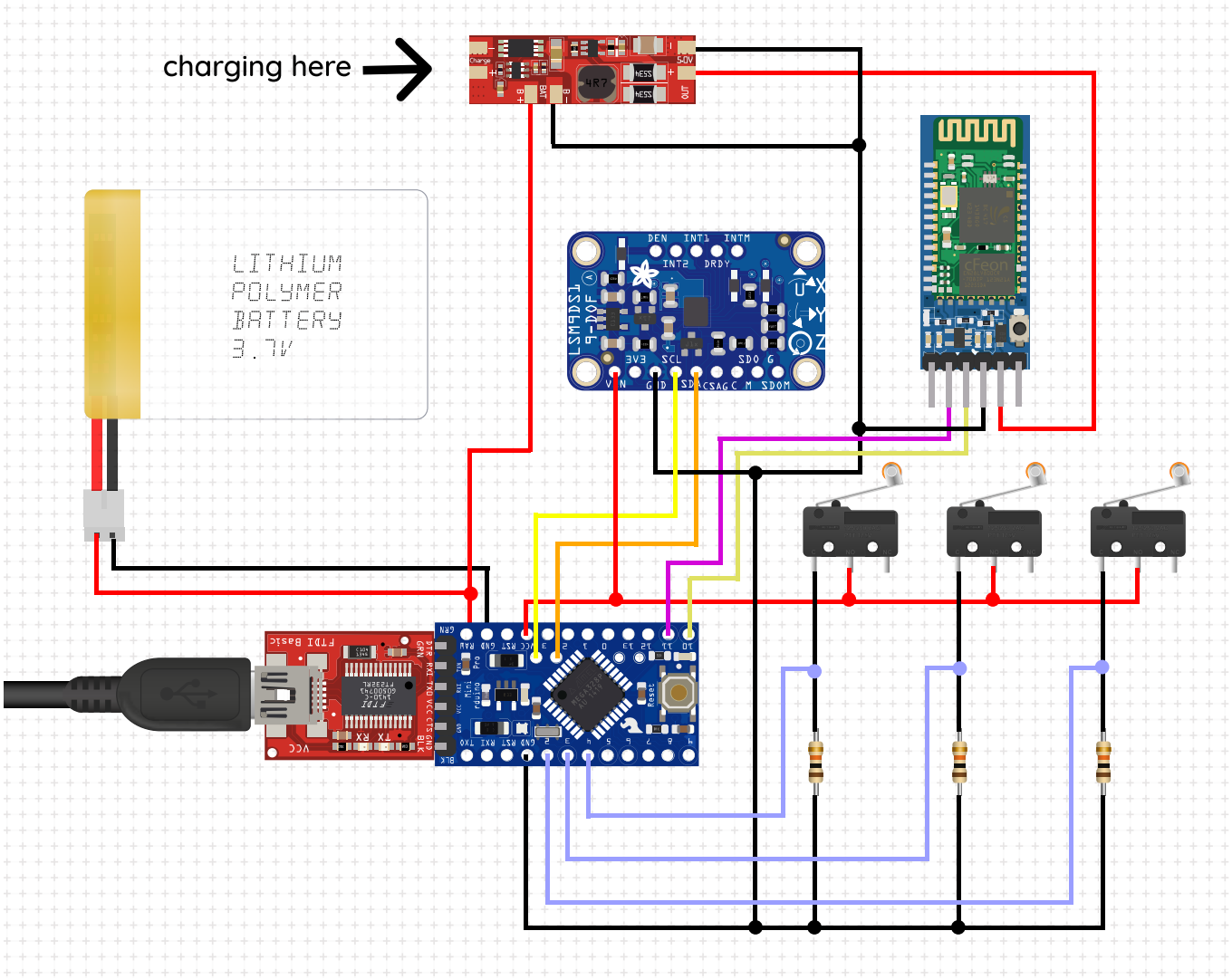
COMPONENTS USED

Micro Switch

- It actuated by very little physical force, it’s reliable, cheap, and comes in many sizes and shapes.
- It actually acts as a small push button, and have a ‘clicky’ sound and a nice tactile feel.

Lithium Polymer Battery 3.7v

Basic Circuit Diagram



Components in Circuit

- Arduino Pro Mini 328 - 3.3V/8MHz
- Accelerometer/Magnetometer/Gyroscope + Temp LSM9DS1
- Micro Switch x 3
- FTDI Driver
- Lipo battery 3.7v
- Resistor 10kΩ x 3
- Lipo Battery Charger module 3.7v step up to 5v