## Component List and Sources

## List A: The Microcontroller, the accelerometer and their wires:

All of the following are available on the Adafruit official site. Sign up on their site and simply add the following items to a wish list and then their cart, so that all of them ship together – saving time and cost

- 1. <u>The Ada-logger M0 Microcontroller board</u>. The programmable microcontroller which includes SD Card and battery operation and recharging capability
- 2. <u>A USB A to Micro B cable</u>. It will be used to connect the Microcontroller to the computer to program it and charge the battery when it connected to the board.
- 3. The LSM6DOSX Accelerometer + Gyroscope board.
- 4. 2X <u>The Stemma QT to Male headers cable.</u> One end of the cable goes into the accelerometer board (reducing connections), the other end has easy to use male headers.
- Female to Male header extension cables. These will be used to connect the pressure sensor to the breadboard and female headers may avert the need to solder the pressure sensors.
- 6. <u>Male to Male headers jumper wires</u>. These will be useful to connect components on the breadboard in the circuit.
- 7. A pack of 10K ohms Resistors. Used for pull up and voltage divider purpose.
- 8. A pack of 4.7K ohms Resistors. Used for pull up and voltage divider purpose.
- 9. 2x Latching Pushbuttons with LED
- 10. An 8 Gb MicroSD card. The microcontroller can hold SD cards but do not come with one in box.

The list B has two alternative stores. You can buy all the components in List B from any of the two sources. Both lists are identical in components. Exceptions are: Alternative 2 has a similar pressure sensor but from a (different) US based manufactures, Alternative 2 has similar breadboard but from a different manufactures.

## List B Alternative 1: the breadboards, pressure sensor and battery

Via Mouser electronics store

- 1. <u>The LIPO Battery</u>. Its compatible with the microcontroller above and connects with the board using the terminal:
- 2. The RP C18 Film pressure sensor / FSR.
- 3. Solderless breadboard
- 4. Solderable Breadboard

Note: I noticed that the stemma QT cable which is item number 04 in the List A had only few items left. If it does not get stocked by the time you order from that store, they can be bought from number 5 on this list from this store.

5. 2X Stemma QT to Male Headers cable

## List B Alternative 2: the breadboards, pressure sensor and battery

Via the Digikey electronics store

- 1. <u>The LIPO Battery.</u> Its compatible with the microcontroller above and connects with the board using the terminal:
- 2. The FSR07BE Film pressure sensor / FSR.
- 3. Solderless Bread Board
- 4. Solderable Bread Board

Note: I noticed that the stemma QT cable which is item number 04 in the List A had only few items left. If it does not get stocked by the time you order from that store, they can be bought from number 5 on this list from this store.

5. 2X Stemma QT to Male Headers cable