Bill of Materials

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| --- | --- | --- | --- |
| **Section** | **Component Name** | **Quantity** | **Buy Link (International)\*** |
| Section 1 | SparkFun  ESP32 Thing | 1 | [https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/](https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/ref=sr_1_2_sspa?keywords=sparkfun+esp32&qid=1569577929&sr=8-2-spons&psc=1&smid=A33HV3N1GS7LPU&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUFEM0E5RktDQjRMMEwmZW5jcnlwdGVkSWQ9QTAzNjQzMzZBRUxYQ0RPRUZBRE8mZW5jcnlwdGVkQWRJZD1BMDc1MjA0MDFQSlJTVVBSNTcyNUEmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl) |
|  |  |  |  |
| Section 2 | SparkFun  ESP32 Thing | 1 | [https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/](https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/ref=sr_1_2_sspa?keywords=sparkfun+esp32&qid=1569577929&sr=8-2-spons&psc=1&smid=A33HV3N1GS7LPU&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUFEM0E5RktDQjRMMEwmZW5jcnlwdGVkSWQ9QTAzNjQzMzZBRUxYQ0RPRUZBRE8mZW5jcnlwdGVkQWRJZD1BMDc1MjA0MDFQSlJTVVBSNTcyNUEmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl) |
|  | Breadboard | 1 | <https://www.amazon.com/EL-CP-003-Breadboard-Solderless-Distribution-Connecting/dp/B01EV6LJ7G/> |
|  | I2C SSD1306 OLED Display | 1 | <https://www.amazon.com/Diymall-Yellow-Arduino-Display-Raspberry/dp/B00O2LLT30/> |
|  | DHT11 | 1 | <https://www.amazon.com/FTCBlock-Temperature-Humidity-Arduino-Raspberry/dp/B079NJ64RV/> |
|  | Hook-up and Jumper Wires\*\* | 1 | <https://www.amazon.com/AUSTOR-Preformed-Breadboard-Assorted-Prototyping/dp/B07PQKNQ22/> |
|  | USB Cable | 1 | <https://www.amazon.com/AmazonBasics-Male-Micro-Cable-Black/dp/B07232M876/> |
|  |  |  |  |
| Section 3 | SparkFun  ESP32 Thing | 1 | [https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/](https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/ref=sr_1_2_sspa?keywords=sparkfun+esp32&qid=1569577929&sr=8-2-spons&psc=1&smid=A33HV3N1GS7LPU&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUFEM0E5RktDQjRMMEwmZW5jcnlwdGVkSWQ9QTAzNjQzMzZBRUxYQ0RPRUZBRE8mZW5jcnlwdGVkQWRJZD1BMDc1MjA0MDFQSlJTVVBSNTcyNUEmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl) |
|  | Breadboard | 1 | <https://www.amazon.com/EL-CP-003-Breadboard-Solderless-Distribution-Connecting/dp/B01EV6LJ7G/> |
|  | Hook-up and Jumper Wires\*\* | 1 | <https://www.amazon.com/AUSTOR-Preformed-Breadboard-Assorted-Prototyping/dp/B07PQKNQ22/> |
|  | USB Cable | 1 | <https://www.amazon.com/AmazonBasics-Male-Micro-Cable-Black/dp/B07232M876/> |
|  | Red LED\*\* | 1 | <https://www.amazon.com/Gikfun-Assorted-Arduino-100pcs-EK8437/dp/B01ER728F6/> |
|  | Green LED\*\* |
|  | Magnet | 1 | Use a fridge magnet or a speaker magnet |
|  | 1 K Resistor\*\* | 2 | <https://www.amazon.com/Elegoo-Values-Resistor-Assortment-Compliant/dp/B072BL2VX1/> |
|  |  |  |  |
| Section 4 | SparkFun  ESP32 Thing | 1 | [https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/](https://www.amazon.com/SparkFun-PID-13907-ESP32-Thing/dp/B01MG9BNEN/ref=sr_1_2_sspa?keywords=sparkfun+esp32&qid=1569577929&sr=8-2-spons&psc=1&smid=A33HV3N1GS7LPU&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUFEM0E5RktDQjRMMEwmZW5jcnlwdGVkSWQ9QTAzNjQzMzZBRUxYQ0RPRUZBRE8mZW5jcnlwdGVkQWRJZD1BMDc1MjA0MDFQSlJTVVBSNTcyNUEmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl) |
|  | Breadboard | 1 | <https://www.amazon.com/EL-CP-003-Breadboard-Solderless-Distribution-Connecting/dp/B01EV6LJ7G/> |
|  | Hook-up and Jumper Wires\*\* | 1 | <https://www.amazon.com/AUSTOR-Preformed-Breadboard-Assorted-Prototyping/dp/B07PQKNQ22/> |
|  | USB Cable | 1 | <https://www.amazon.com/AmazonBasics-Male-Micro-Cable-Black/dp/B07232M876/> |
|  | Push Buttons\*\* | 1 | <https://www.amazon.com/OCR-180PcsTactile-Momentary-Switches-Assortment/dp/B01MRP025V/> |
|  | 10 K Resistor\*\* | 2 | <https://www.amazon.com/Elegoo-Values-Resistor-Assortment-Compliant/dp/B072BL2VX1/> |
|  | 1 K Resistor\*\* | 4 |
|  | 6.4 K Resistor\*\* | 2 |
|  | I2C SSD1306 OLED Display | 1 | <https://www.amazon.com/Diymall-Yellow-Arduino-Display-Raspberry/dp/B00O2LLT30/> |
|  | 1C Lithium Ion Battery | 1 | <https://www.amazon.com/3-7V-Lithium-Ion-Battery-1000mAh/dp/B07QXM56D9/> |
|  | PCB Prototype Board | 1 | <https://www.amazon.com/ELEGOO-Prototype-Soldering-Compatible-Arduino/dp/B072Z7Y19F/> |
|  | Multimeter | 1 | <https://www.amazon.com/AstroAI-Digital-Multimeter-Voltage-Tester/dp/B01ISAMUA6> |

**\*Check with your domestic online electronic stores before ordering from global online stores. You might get the components more quickly if ordered from domestic sellers. Also, these links might render useless if the seller removes the item from the online shop.**

**\*\*These are cheaper when ordered in bulk, and you will be needing extra components for the later sections.**