

Class 1MCT5
 First Name: Tristan
 Name: Balanger
 Project Name : Mood Speaker
 Assembly Revision : 1,1
 Approval Date :
 Part Count : 2
 Total Cost : €153



| Part # | Part Name | Description | Revision | Qty | Supplier | also available from | Units | Unit Cost | Max Cost | Real Cost |
|--------------|--|--|----------|-----------|------------------------------------|---------------------|-------|-----------|-----------------|-----------------|
| 1 | Raspberry Pi 3B+ | The Raspberry Pi is the base of the project, everything runs on the Pi | 1.0 | 1 | International Electronics Kortrijk | SOS Solutions | 1 | € 39.95 | € 39.95 | € 39.95 |
| 2 | LCD display | To display the temperature and current song | 1.0 | 1 | International Electronics Kortrijk | Kiwi-Electronics | 1 | € 4.45 | € 4.45 | € 4.45 |
| 3 | DS18B20 Digital temperature sensor | Temperature sensor to display the temperature on the online dashboard and lcd | 1.1 | 1 | International Electronics Kortrijk | Adafruit | 1 | € 4.90 | € 4.90 | € 4.90 |
| 4 | MCP3008 - ADC | Analog to digital converter to read the data from the LDR and PIR | 1.0 | 1 | Kiwi-Electronics | Conrad | 1 | € 3.50 | € 3.50 | € 3.50 |
| 5 | PIR-sensor | To detect movement | 1.0 | 1 | Kiwi-Electronics | SOS Solutions | 1 | € 5.95 | € 5.95 | € 5.95 |
| 6 | LDR | To detect when the room is dark or lit up | 1.0 | 1 | Kiwi-Electronics | Conrad | 1 | € 1.95 | € 1.95 | € 1.95 |
| 7 | Speaker - 3" Diameter - 4 Ohm 3 Watt | To hear the amplified noise from your amplifier | 1.0 | 1 | Kiwi-Electronics | Conrad | 1 | € 1.95 | € 1.95 | € 1.95 |
| 8 | Adafruit I2S 3W Class D Amplifier Breakout - MAX98357A | This is the amplifier, it makes sure the media can be played through the speaker | 1.0 | 1 | Adafruit | SOS Solutions | 1 | € 5.95 | € 5.95 | € 5.95 |
| 9 | Arduino Uno Rev 3 | I use the Arduino to control the WS2812b | 1.1 | 1 | Arduino.cc | Kiwi-Electronics | 1 | € 20.00 | € 20.00 | € 20.00 |
| 10 | LevelShifter | Communication between RPi and Arduino | 1.1 | 1 | International Electronics Kortrijk | Sparkfun | 1 | € 2.95 | € 2.95 | € 2.95 |
| 11 | WS2812b | A ledstrip where the color goes with the value of the temperature | 1.1 | 1 | Ledstripkoning | Aliexpress | 1 | € 18.95 | € 18.95 | € 18.95 |
| 12 | 16GB SD card | An SD card for the image to put on the Raspberry Pi | 1.0 | 2 | Coolblue | Vandenborre | 2 | € 11.90 | € 23.80 | € 23.80 |
| 13 | Breadboard | Breadboard to connect everything | 1.1 | 1 | Conrad | Kiwi-Electronics | 1 | € 18.95 | € 18.95 | € 18.95 |
| Total | | | | 14 | | | | | € 153.25 | € 153.25 |