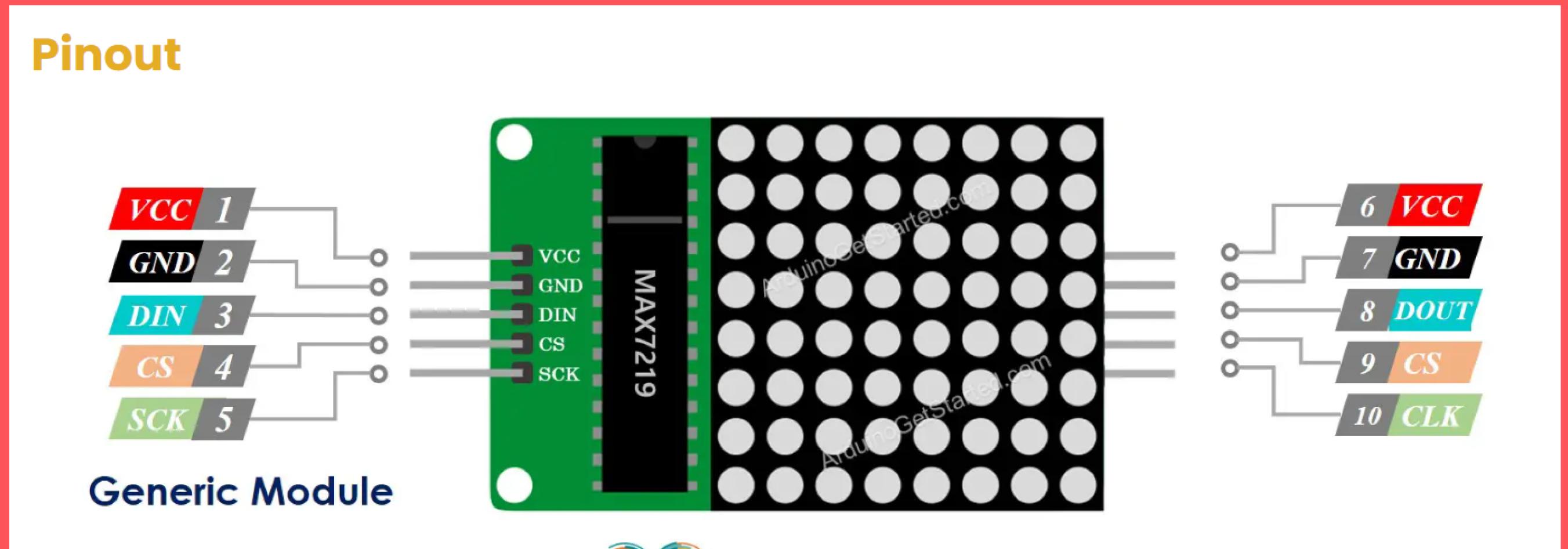




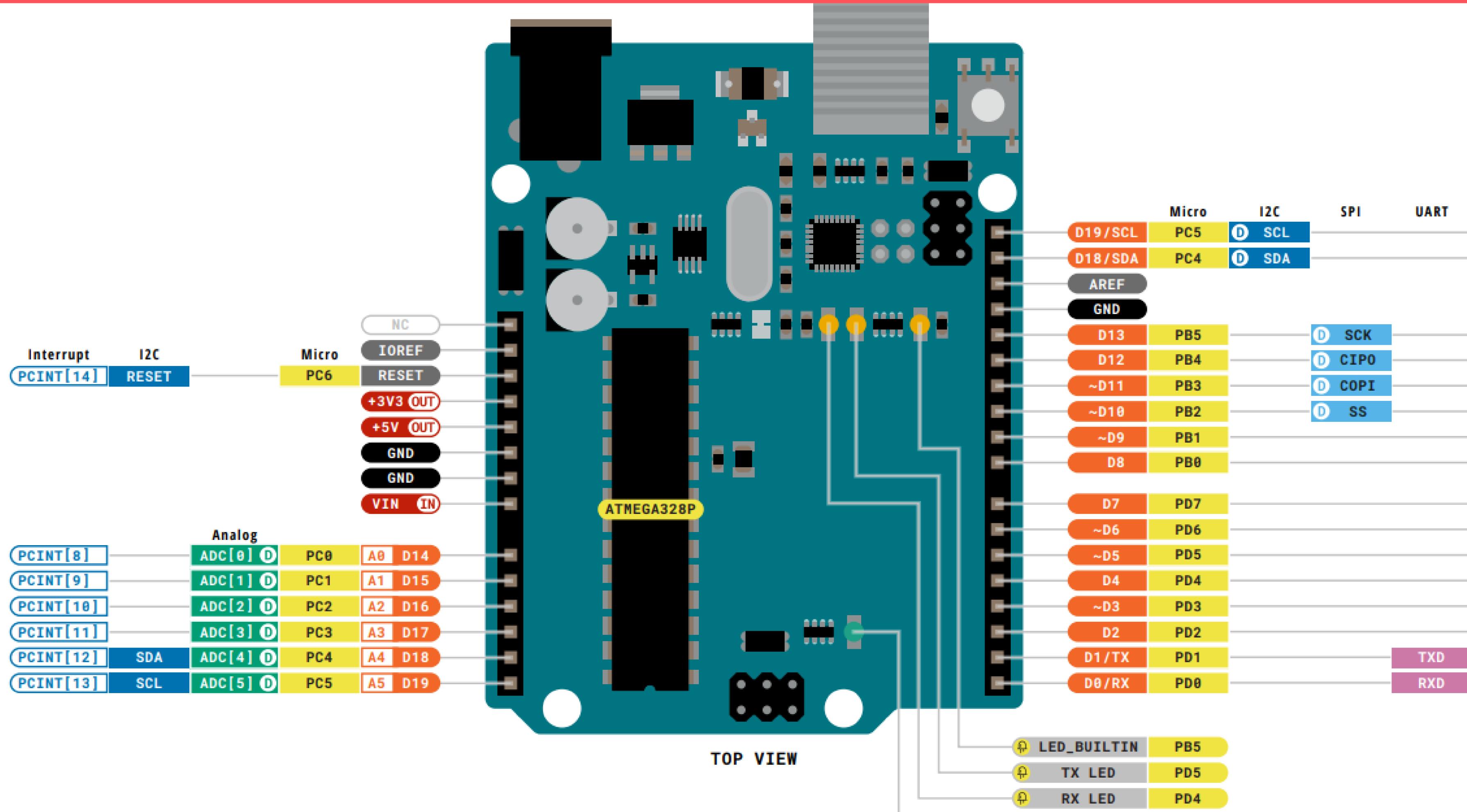
Answer #3

**Step 1. Lets Make Some
Connections**

Pinout



- ◆ Input pins group:
 - **VCC:** connected to 5V.
 - **GND:** connected to **GND**.
 - DIN is the Data pin, Connect it to SPI MOSI pin of the Arduino.
 - **CS:** Chip Select, Connect it to any digital pin of the Arduino.
 - **CLK:** Clock pin, Connect it to SPI CLK pin of the Arduino.





- 1.DO:digital output
- 2.VCC: 3.3V-5V DC
- 3.GND:ground
- 4.AO:analog output

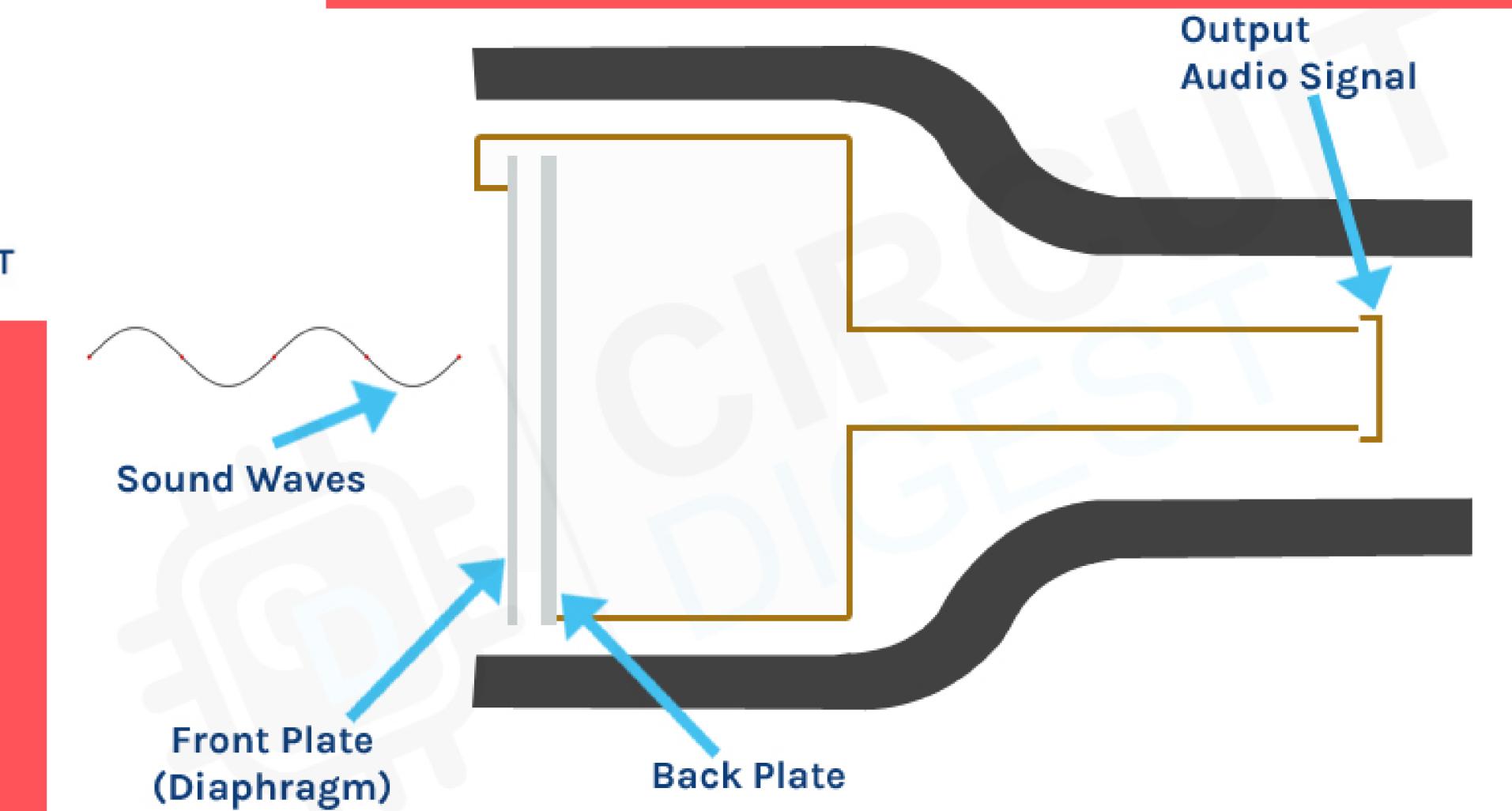
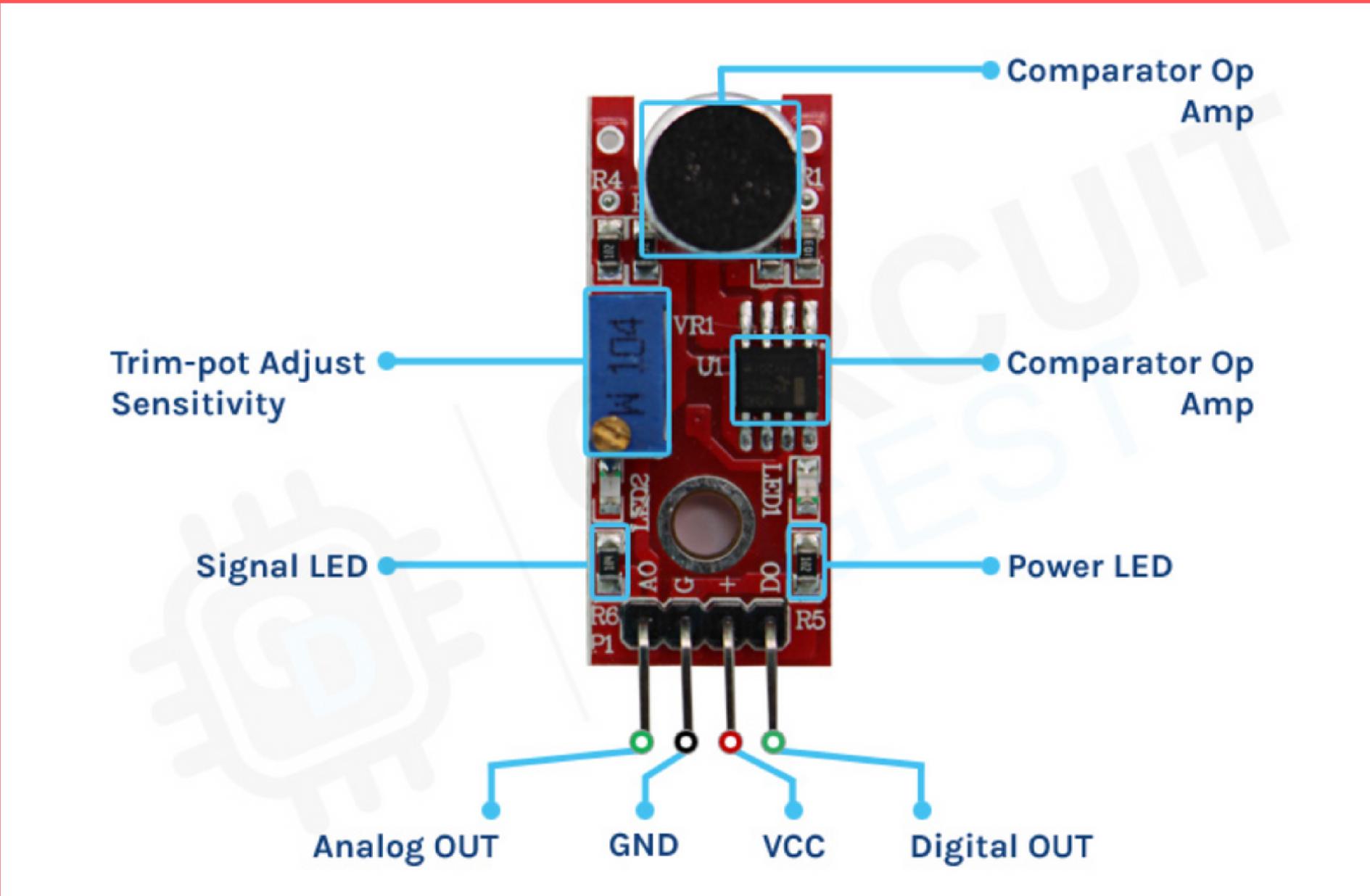
The sound sensor also has a built-in potentiometer, which can be used to adjust the sensitivity of the sensor. Further more, it has two LED indicators:

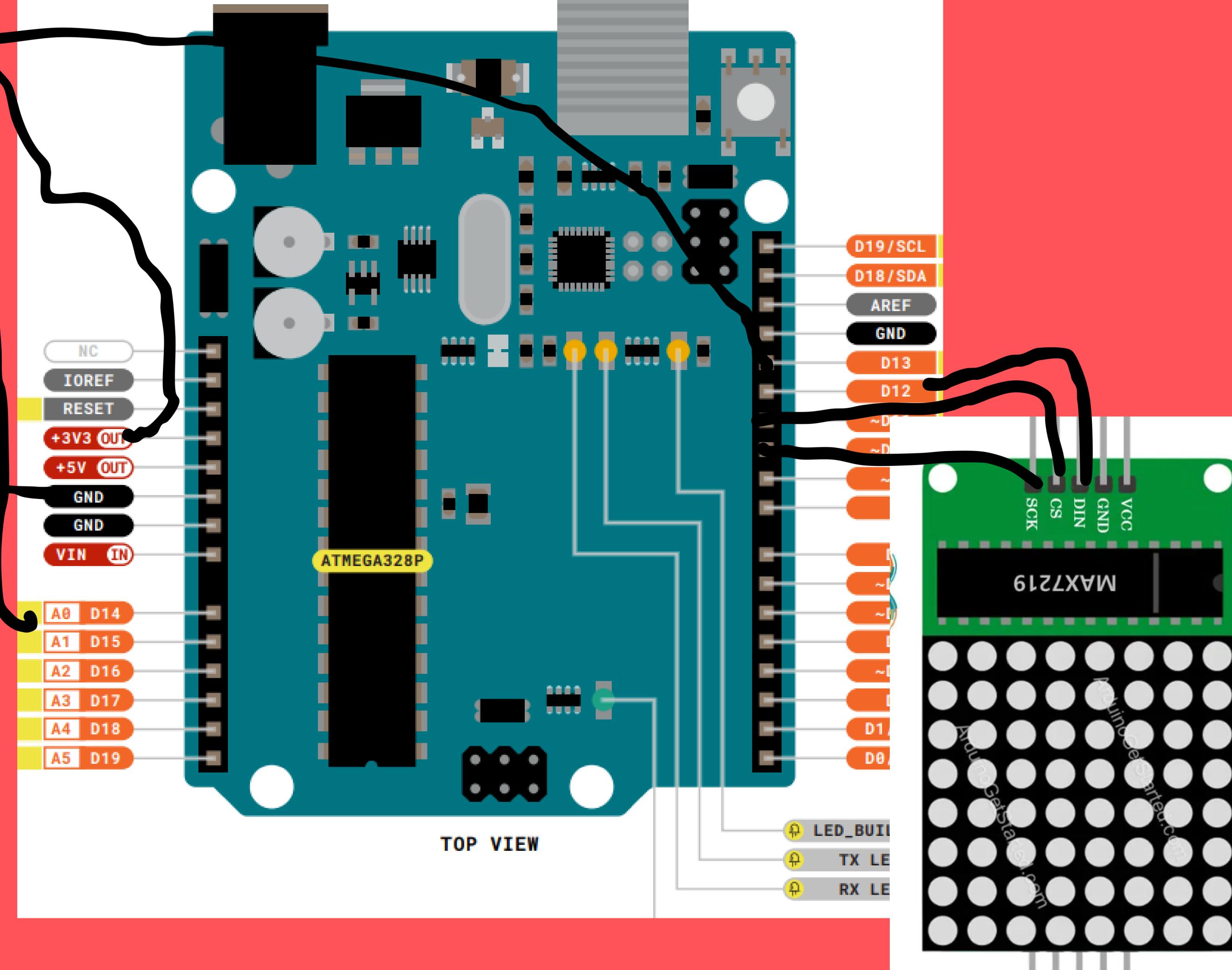
- ◆ One LED indicator for power
- ◆ One LED indicator for the sound state: on when sound is present, off when quiet

How It Works

The module has a built-in potentiometer for setting the sound sensitivity.

- ◆ When the sound is detected, the output pin of the sensor is **LOW**
- ◆ When the sound is NOT detected, the output pin of the sensor is **HIGH**







Answer #3

**Step 2. Download
Arudino IDE**

<https://www.arduino.cc/en/software>



Arduino IDE 2.3.1

The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger.

For more details, please refer to the [Arduino IDE 2.0 documentation](#).

Nightly builds with the latest bugfixes are available through the section below.

SOURCE CODE

The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).

DOWNLOAD OPTIONS

Windows Win 10 and newer, 64 bits

Windows MSI installer

Windows ZIP file

Linux AppImage 64 bits (X86-64)

Linux ZIP file 64 bits (X86-64)

macOS Intel, 10.14: "Catalina" or newer, 64 bits

macOS Apple Silicon, 11: "Big Sur" or newer, 64 bits

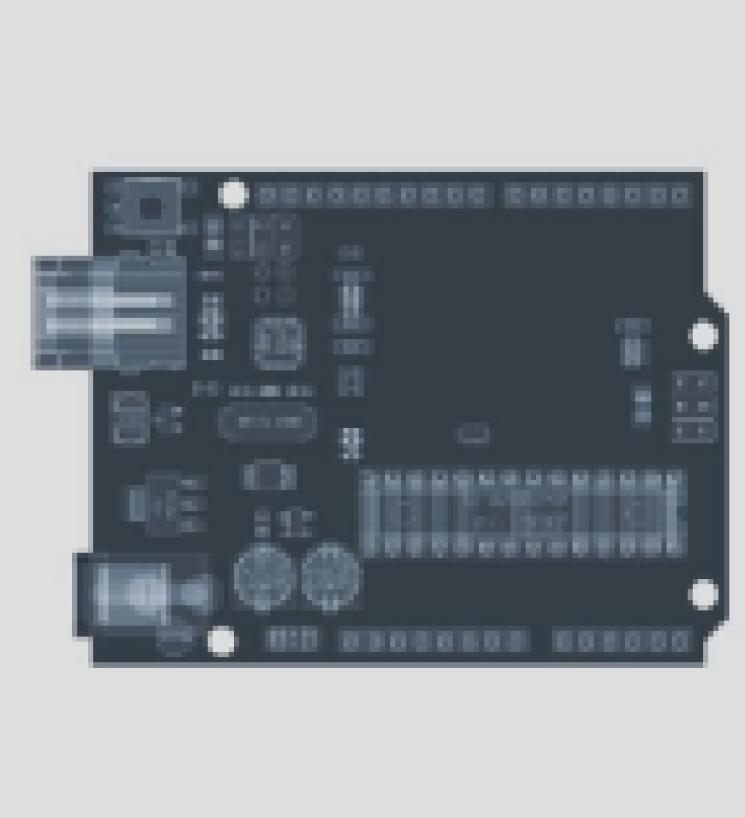
[Release Notes](#)



Answer #3

Step 3. Run the Code!

<https://github.com/CGutii>



CGutii - Overview

👋 Hi, I'm Guti 😊 I'm interested in AI, Apps, & Embedded Systems 🚗 How to reach me: - Cristiang52001@hotmail.com -...

GitHub

Make sure to follow me too <3

Sound-Visualizer

Public

Sound Visualizer for SHPE project. Made with arudino and ELEGOO Uno R3

● C++ Updated 22 minutes ago

d57bf66 · now

History



CGutii Add files via upload



SoundVisualizer.ino



Sound_Sensor_Example.ino

Free Virtual Work E...

Y startups

odin

csCareers

Leetcode Patterns

75 Grind 75 - A

SoundVisualizer | Arduino IDE 2.2.1

Edit Sketch Tools Help

SoundVis
1
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14
15
16

Auto Format Ctrl+T

Archive Sketch

Manage Libraries... Ctrl+Shift+I

Serial Monitor Ctrl+Shift+M

Serial Plotter

Firmware Updater

Upload SSL Root Certificates

Board: "Arduino Uno"

Port: "COM10"

Get Board Info

Programmer

Burn Bootloader

// Time window for sampling sound signals (50ms corresponds to a 20Hz
const int samplingWindow = 50;

e_LedControl_library

Boards Manager... Ctrl+Shift+B

• Arduino AVR Boards

✓ Arduino Uno

Arduino Uno Mini

Arduino Duemilanove or Diecimila

Arduino Nano

Arduino Mega or Mega 2560

Arduino Mega ADK

Arduino Leonardo

Arduino Leonardo ETH

Arduino Micro

Arduino Esplora

Arduino Mini

Arduino Ethernet

Arduino Fio

Arduino BT

LilyPad Arduino USB

LilyPad Arduino

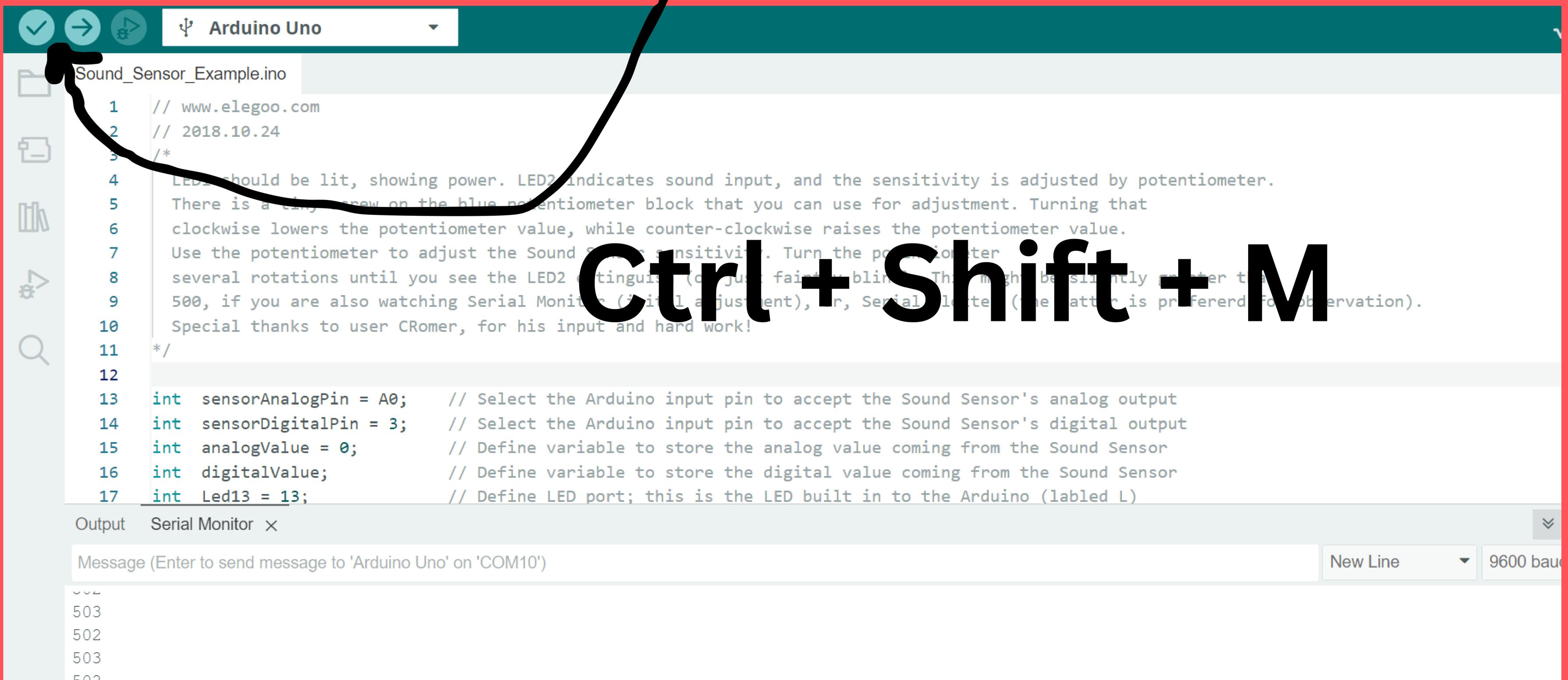
Arduino Pro or Pro Mini

Arduino NG or older

Arduino Robot Control

Arduino Pulse

Run Code With Checkmark



Ctrl + Shift + M

```
// www.elegoo.com
// 2018.10.24
/*
LED1 should be lit, showing power. LED2 indicates sound input, and the sensitivity is adjusted by potentiometer.
There is a tiny screw on the blue potentiometer block that you can use for adjustment. Turning that
clockwise lowers the potentiometer value, while counter-clockwise raises the potentiometer value.
Use the potentiometer to adjust the Sound Sensor sensitivity. Turn the potentiometer
several rotations until you see the LED2 extinguish (or faintly blink). This might be slightly harder than
500, if you are also watching Serial Monitor (initial adjustment), or, Serial Plotter (the latter is preferred for observation).
Special thanks to user CRomer, for his input and hard work!
*/
int sensorAnalogPin = A0; // Select the Arduino input pin to accept the Sound Sensor's analog output
int sensorDigitalPin = 3; // Select the Arduino input pin to accept the Sound Sensor's digital output
int analogValue = 0; // Define variable to store the analog value coming from the Sound Sensor
int digitalValue; // Define variable to store the digital value coming from the Sound Sensor
int Led13 = 13; // Define LED port; this is the LED built in to the Arduino (labeled L)
```

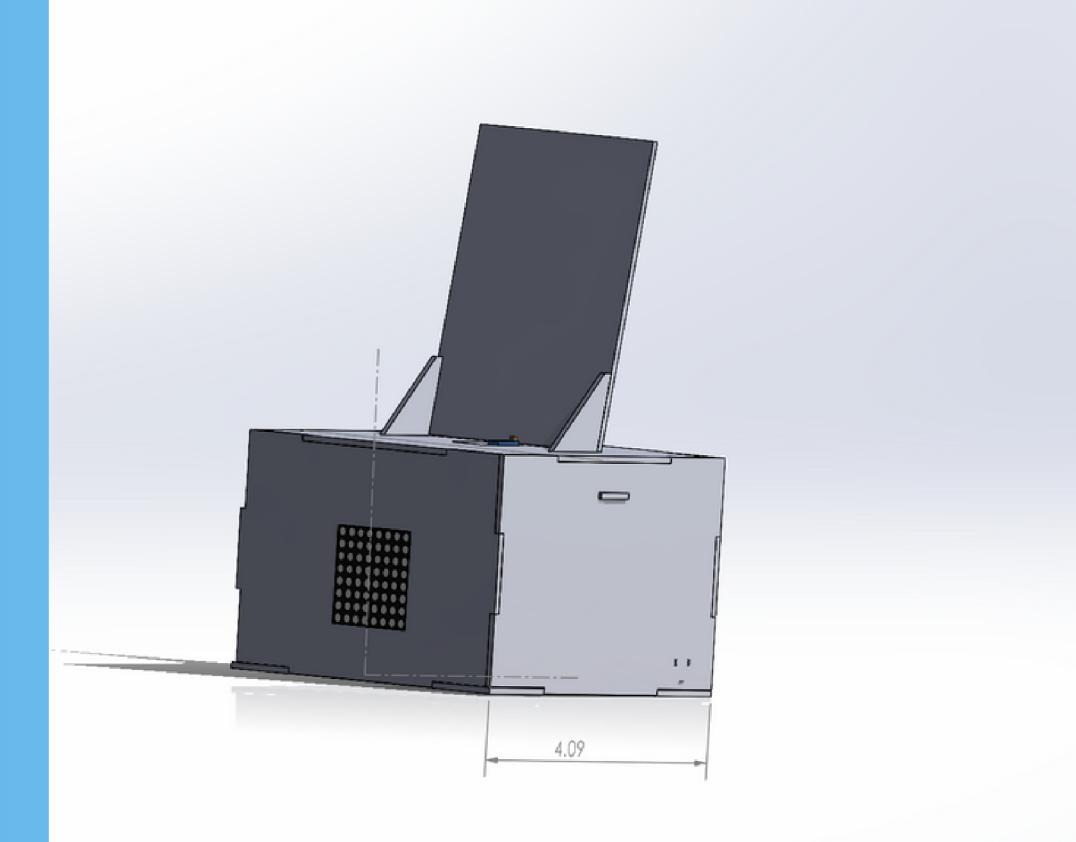
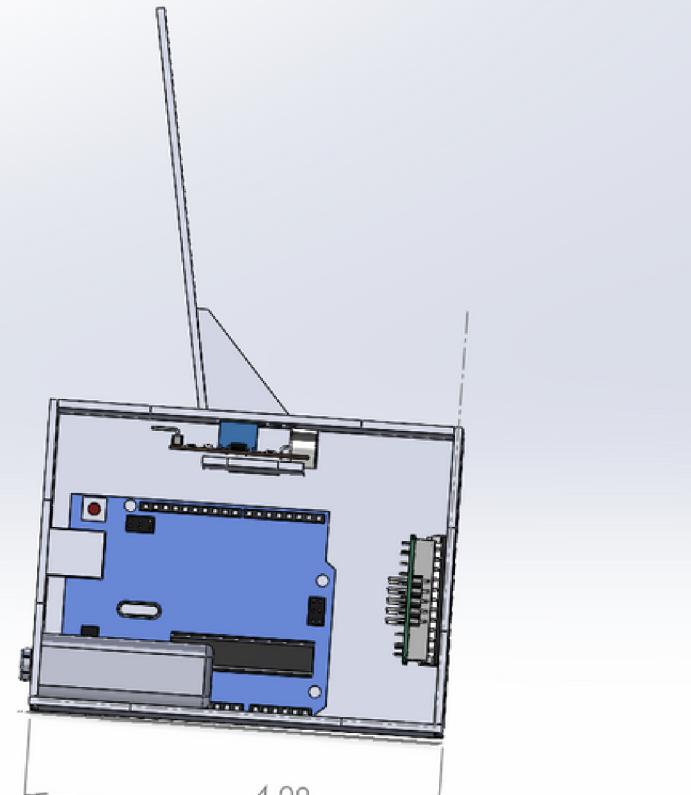
Output Serial Monitor ×

Message (Enter to send message to 'Arduino Uno' on 'COM10')
New Line 9600 baud

503
502
503
502

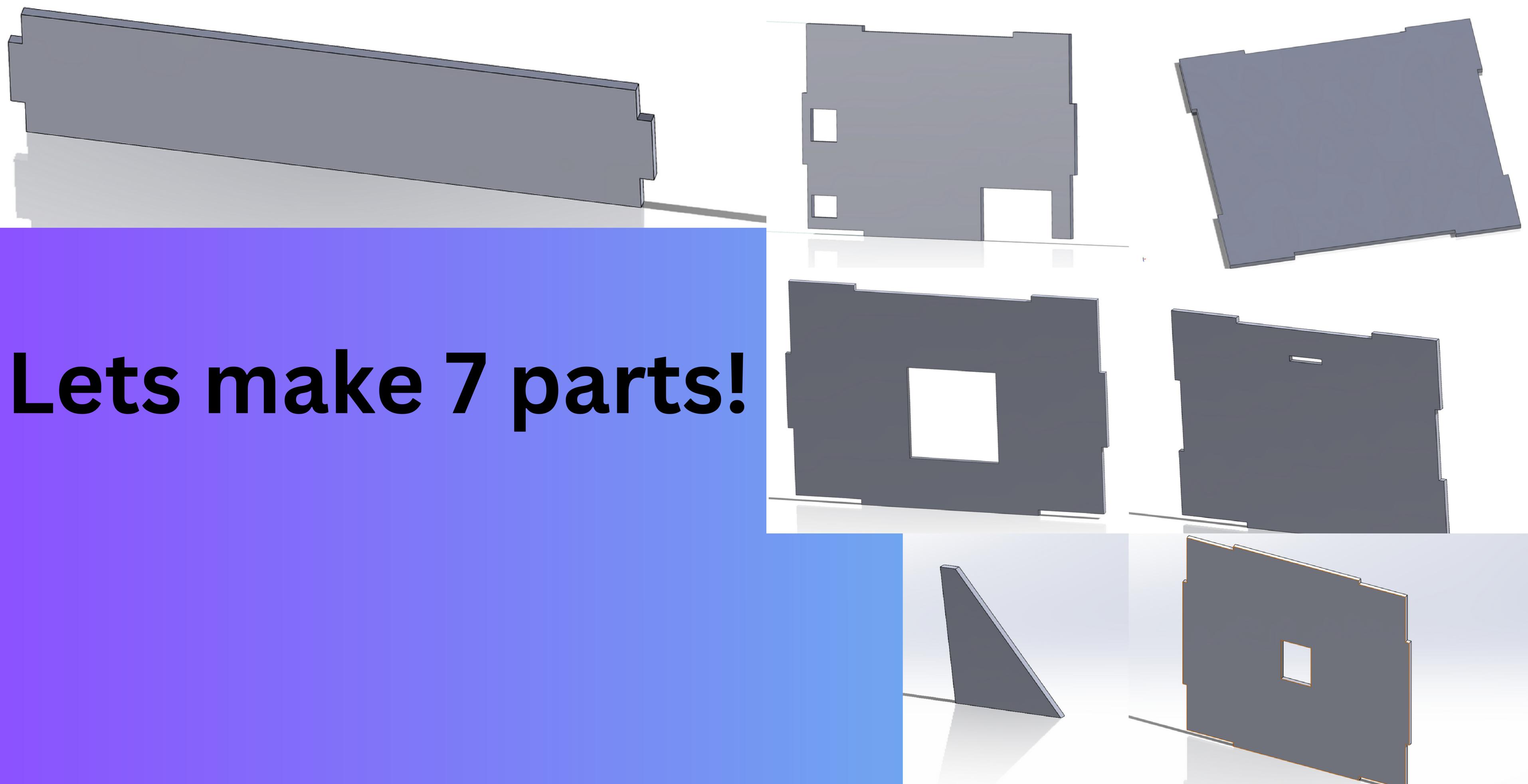
**Adjust Sound Sensor Until it
reaches 500 (or around there)**

**Then copy the other code and
run it.**

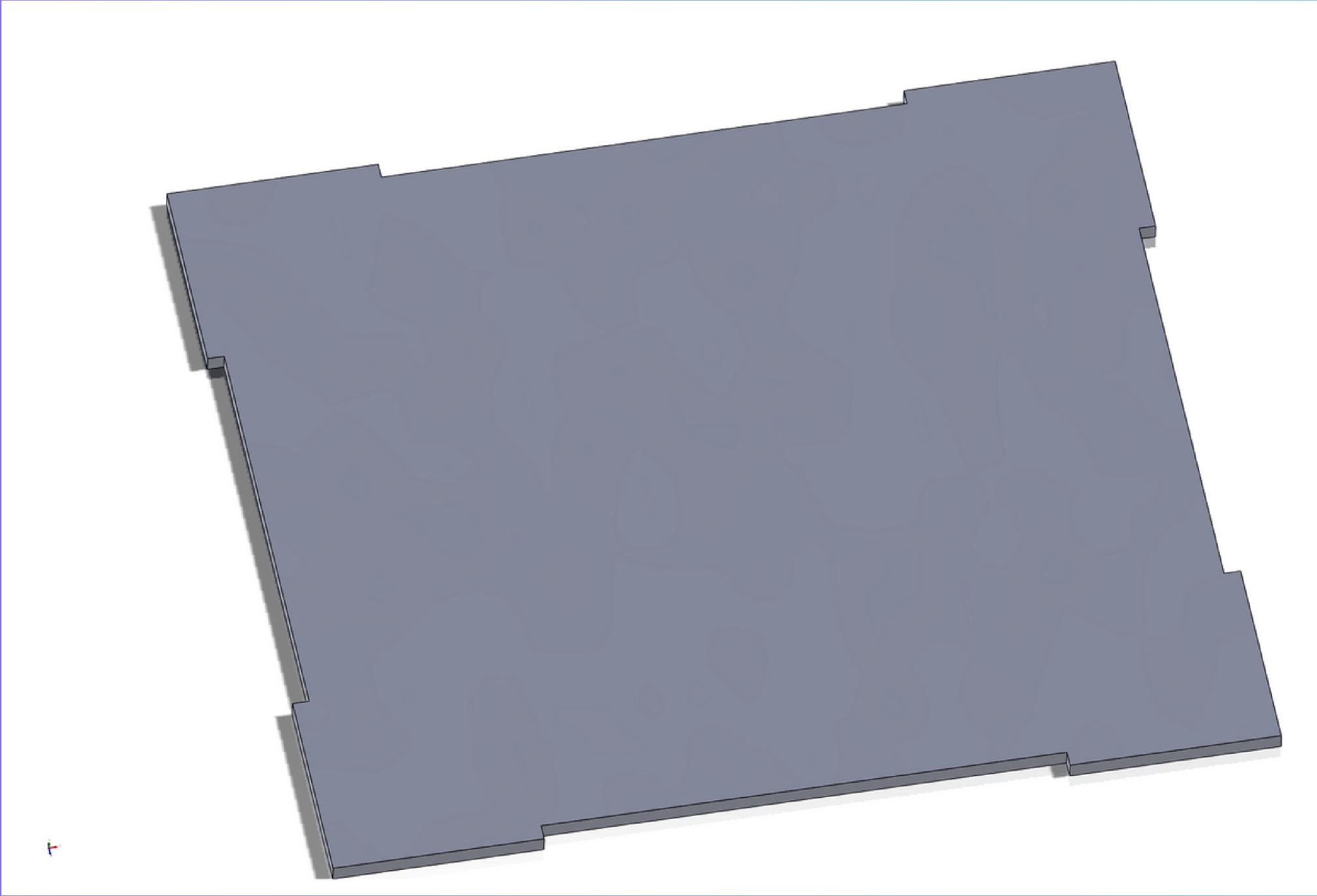


Music Visualizer Case

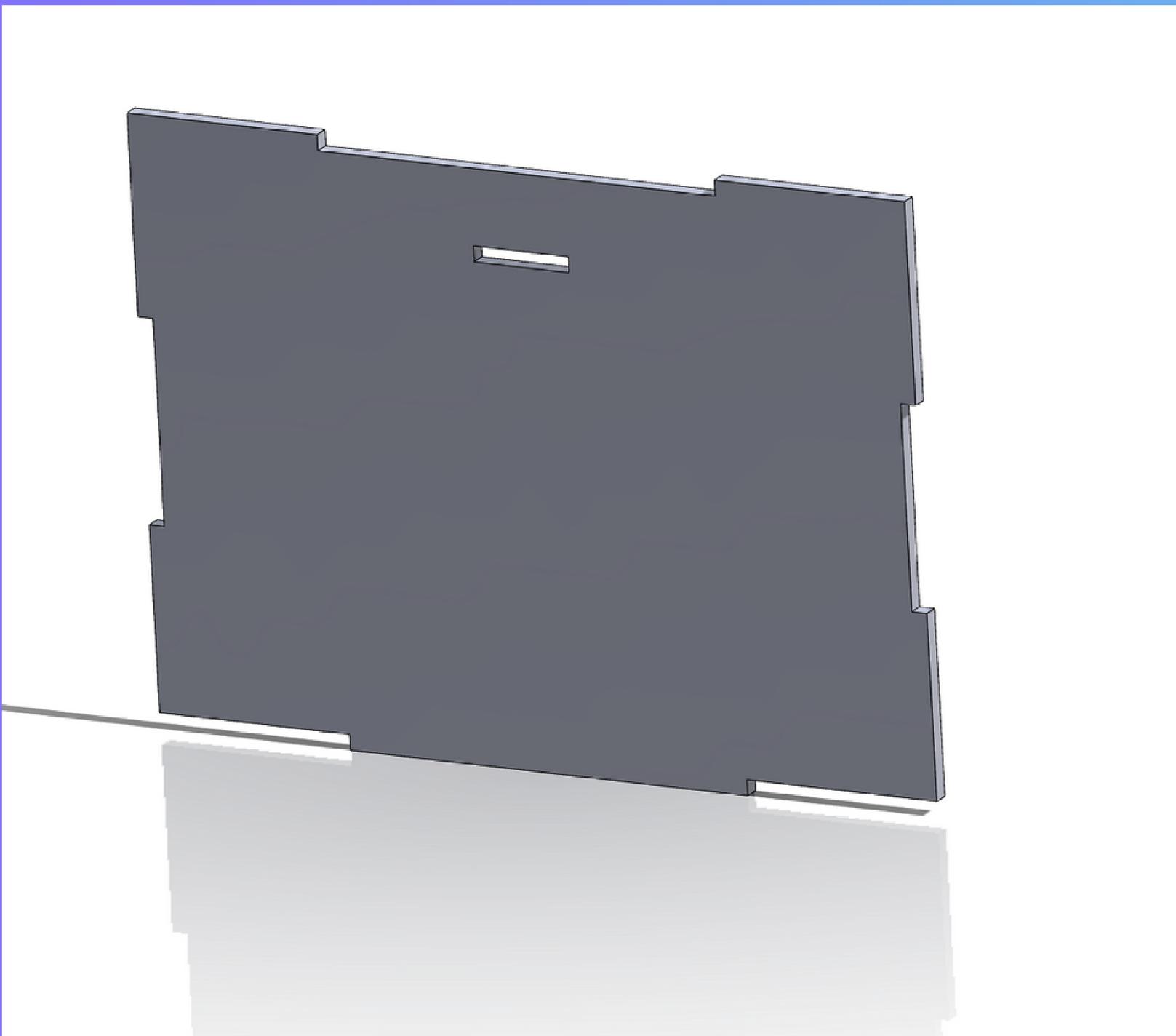




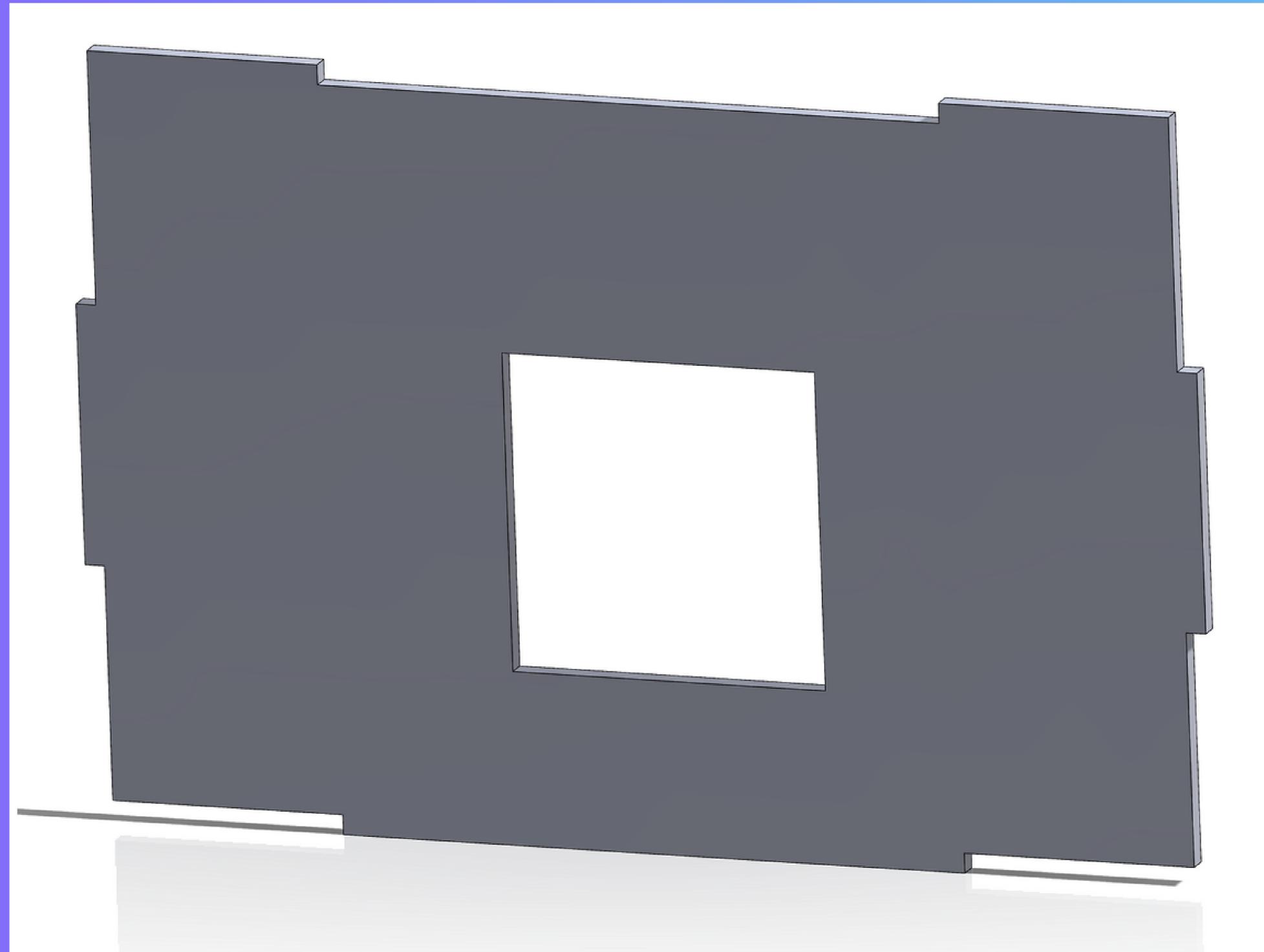
Lets make 7 parts!



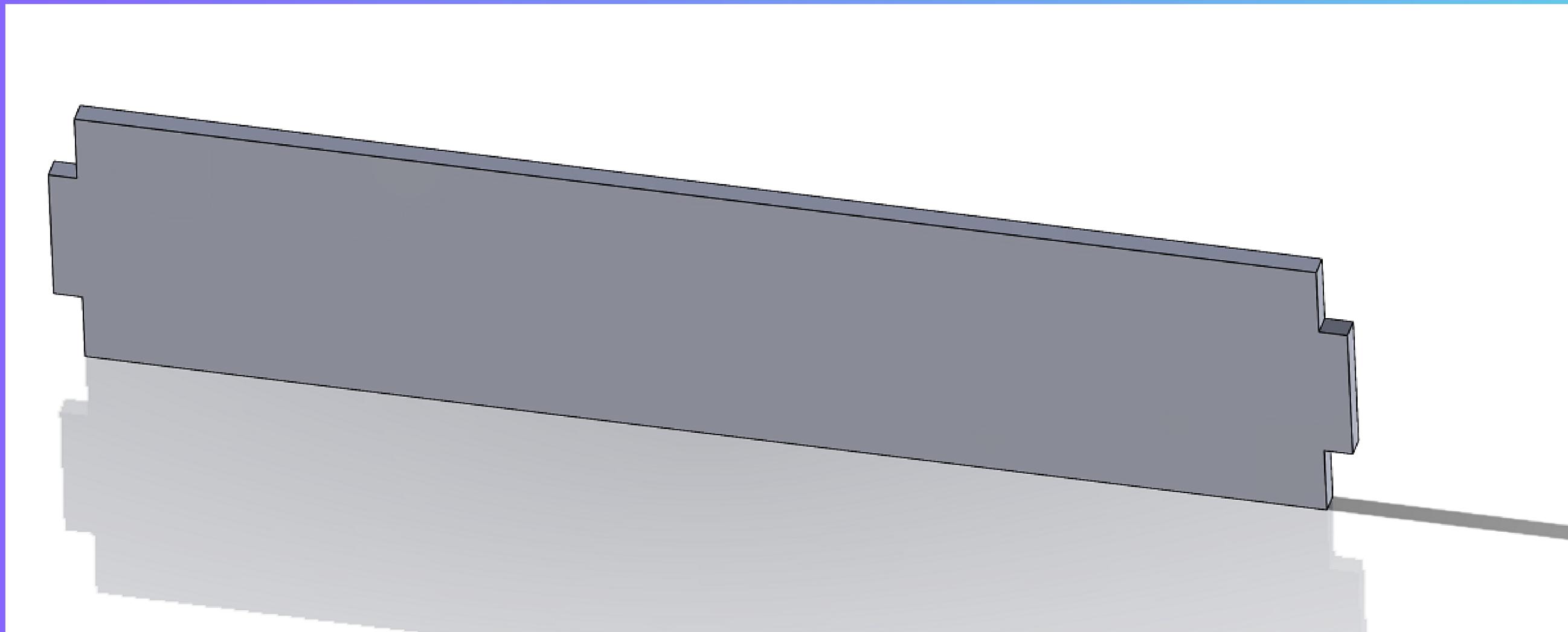
Save as “floor”



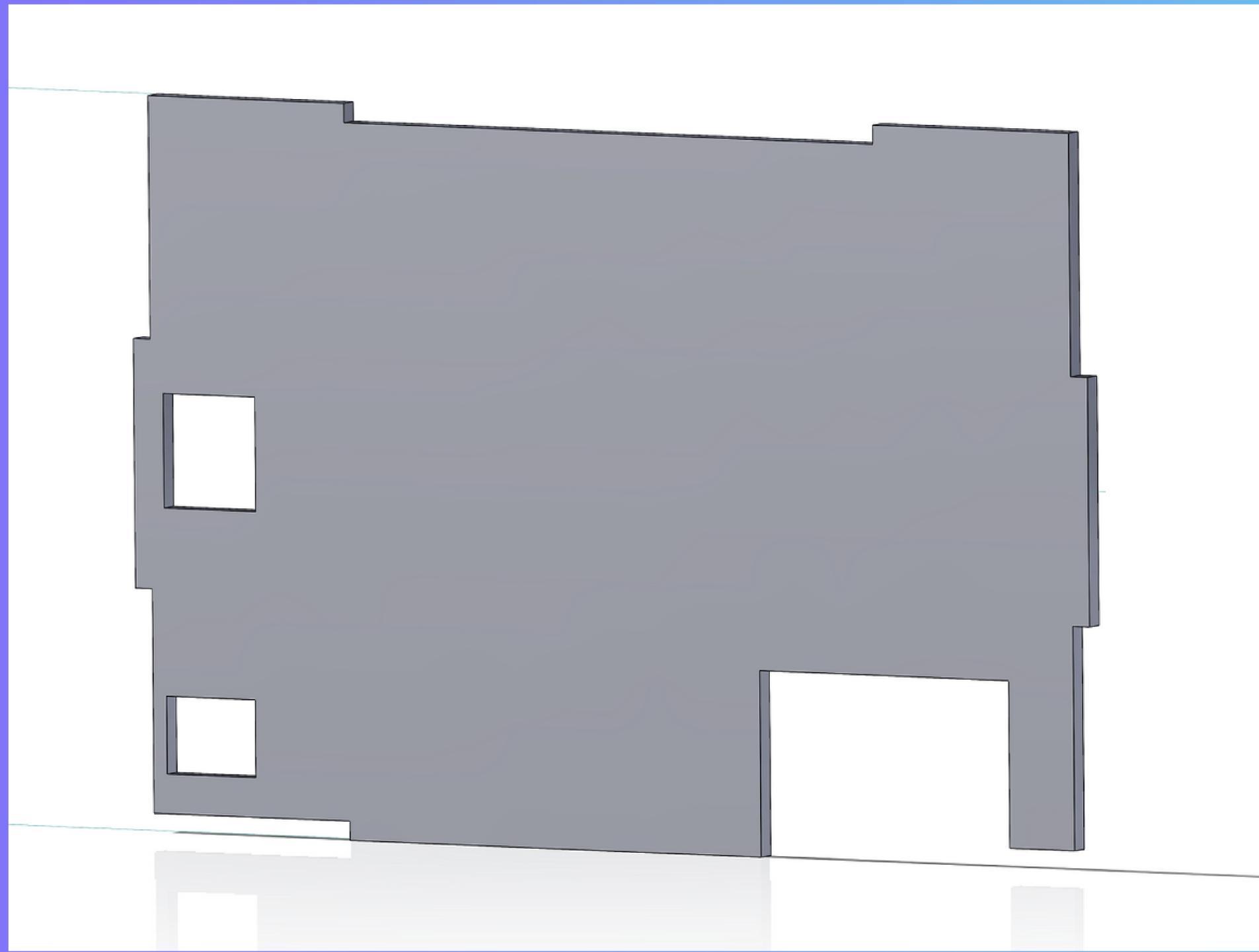
Save as “sidewall”



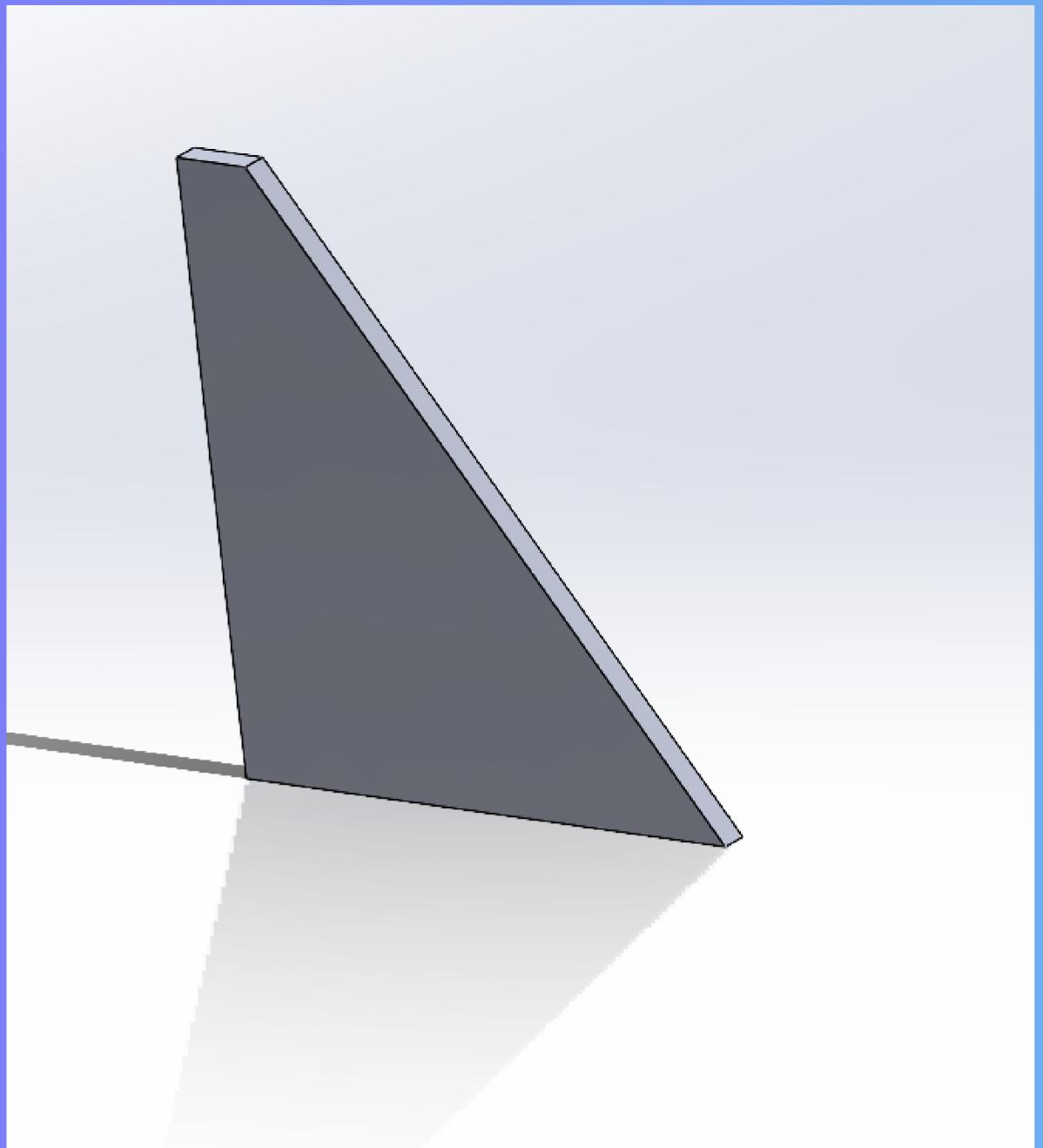
Save as “front”



Save as “micstand”

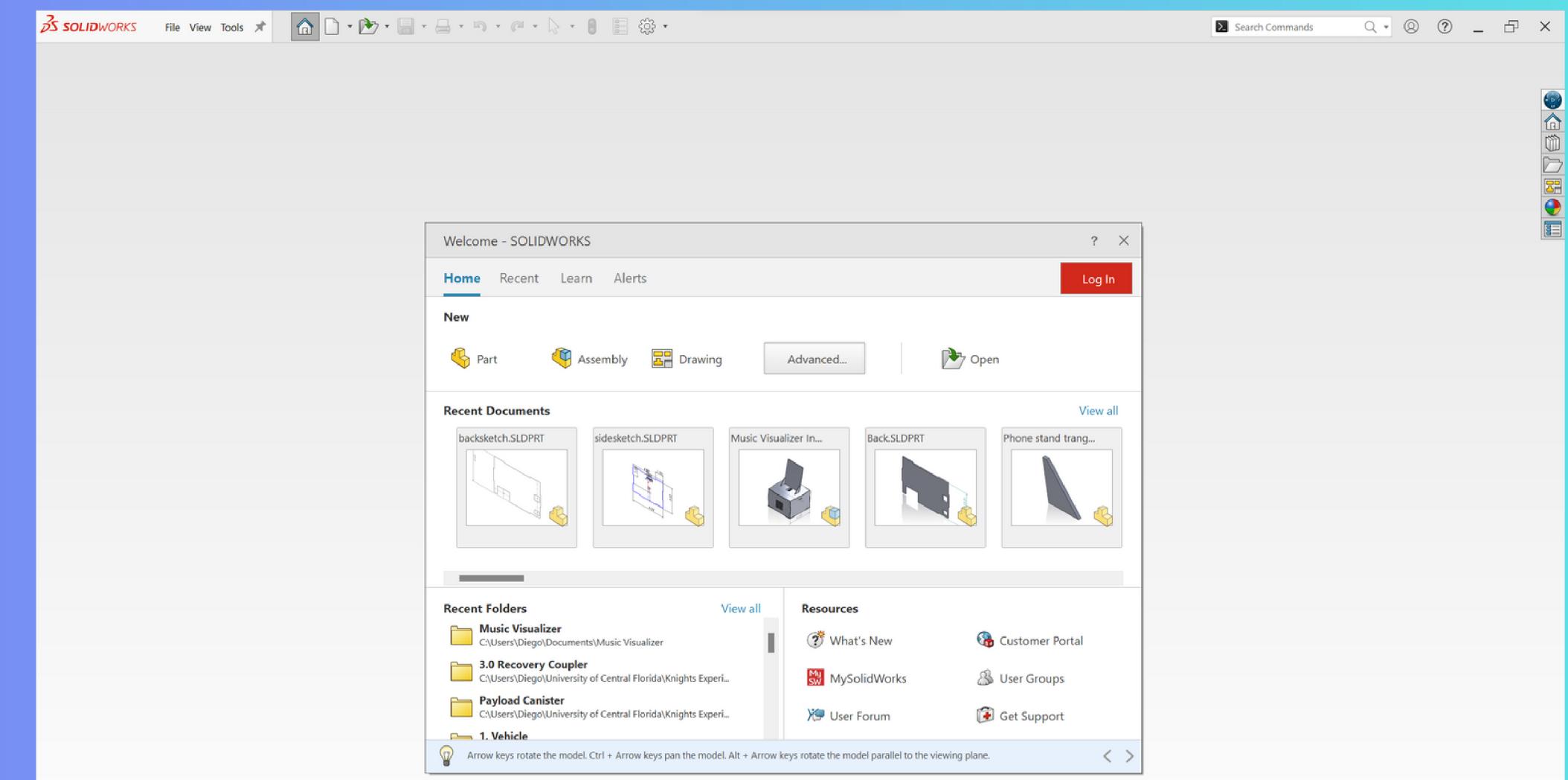
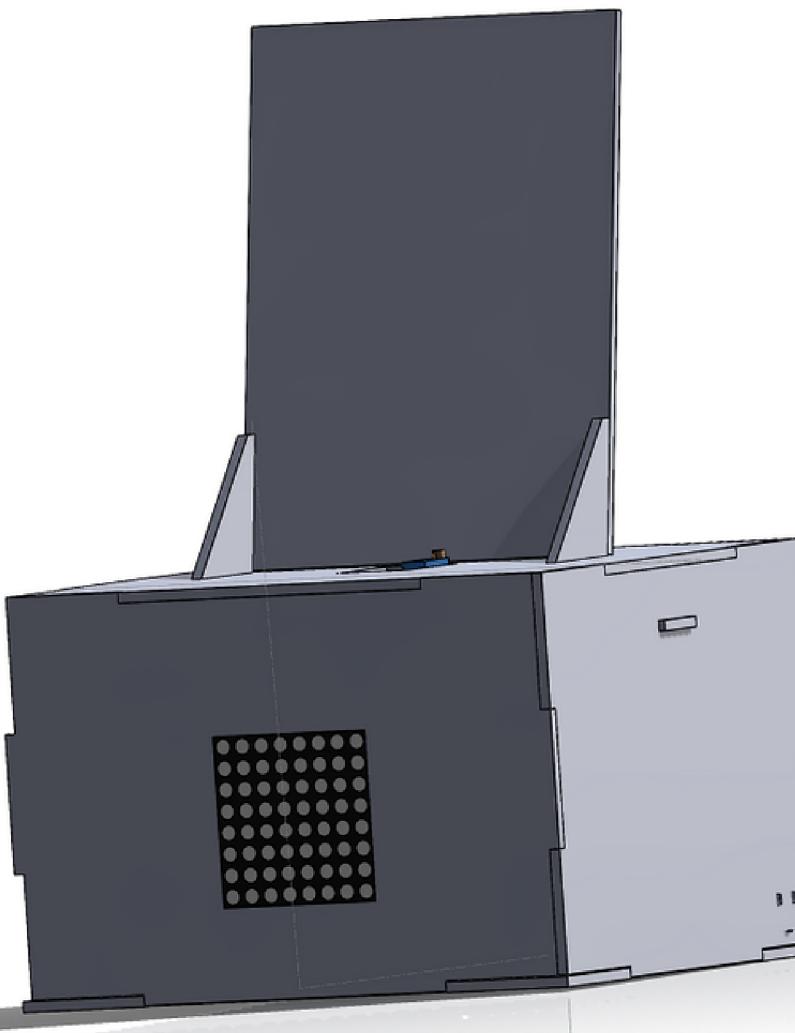


Save as “backwall”



Save as “triangle”

Assembly Time!



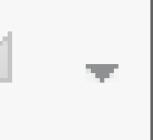
View

Insert

Tools

Simulation

Window



Component

Mate...

Mate Controller...

Component Pattern...

Mirror Components...

Smart Fasteners...

Smart Features...

Exploded View...



Existing Part/Assembly...



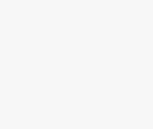
New Part...



New Assembly...



Insert Part from Block...



Assembly from [Selected] Components...



Insert from PartSupply



Copy with Mates...

Customize Menu