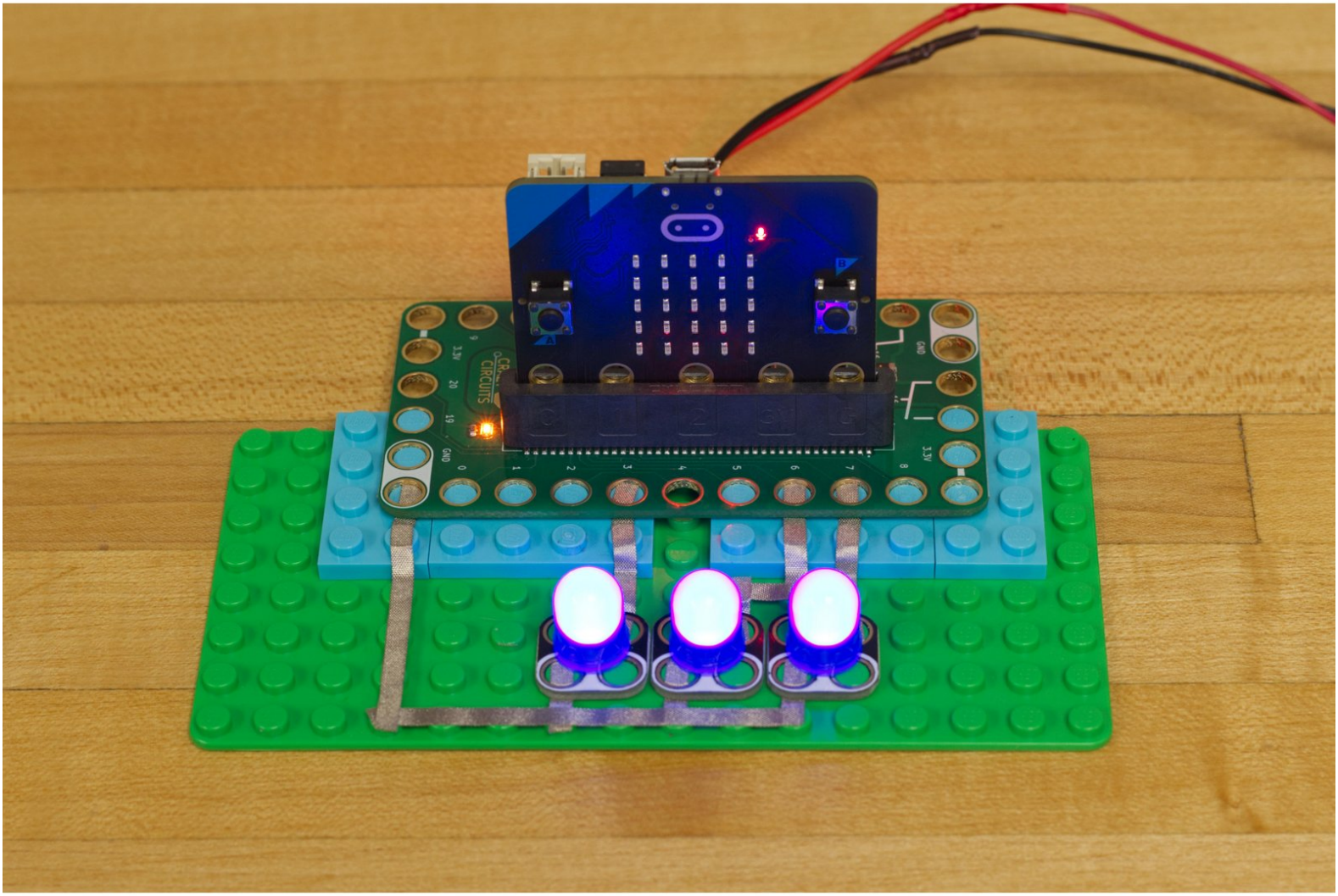
The Clapper

Written By: Pete Prodoehl



INTRODUCTION

Want to turn off some LEDs with a clap of your hands? With the micro:bit V2 it's easy!

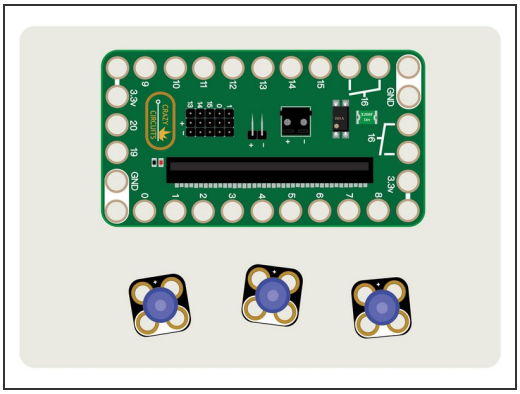
TOOLS:

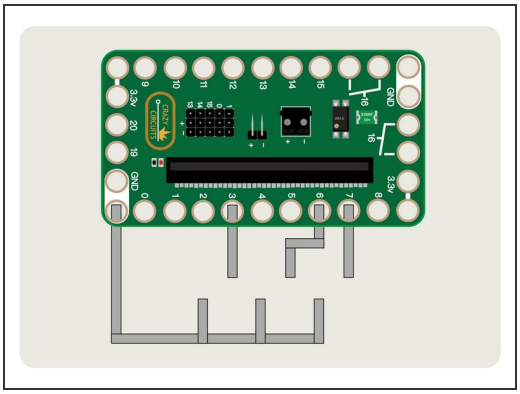
- Computer (1)
- Scissors (1)

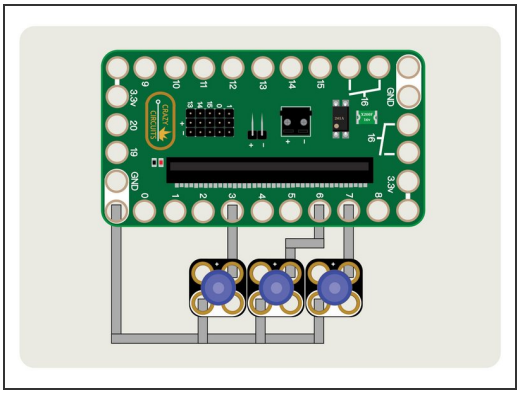
PARTS:

- Crazy Circuits Bit Board (1)
- micro:bit (1)
- Crazy Circuits LED Chip (3)
- Maker Tape (1)
  1/8"
- LEGO Baseplate (1)

Step 1 — Build your Circuit





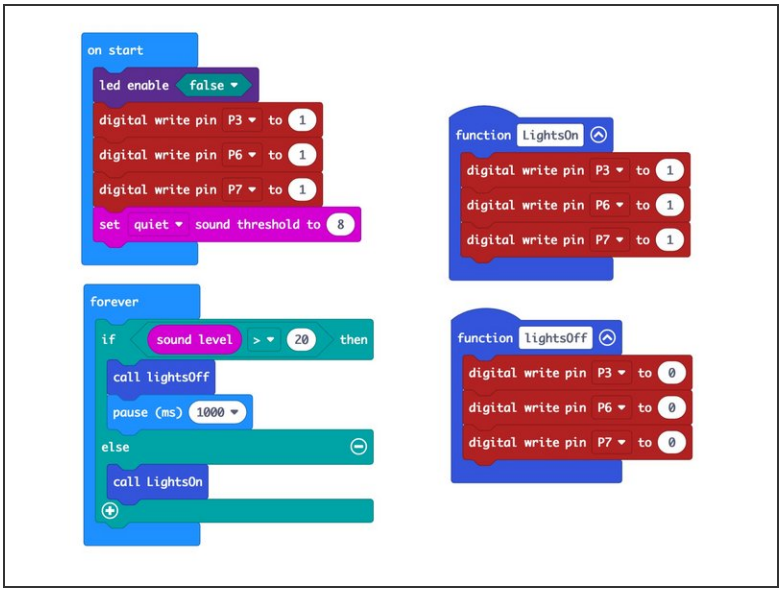


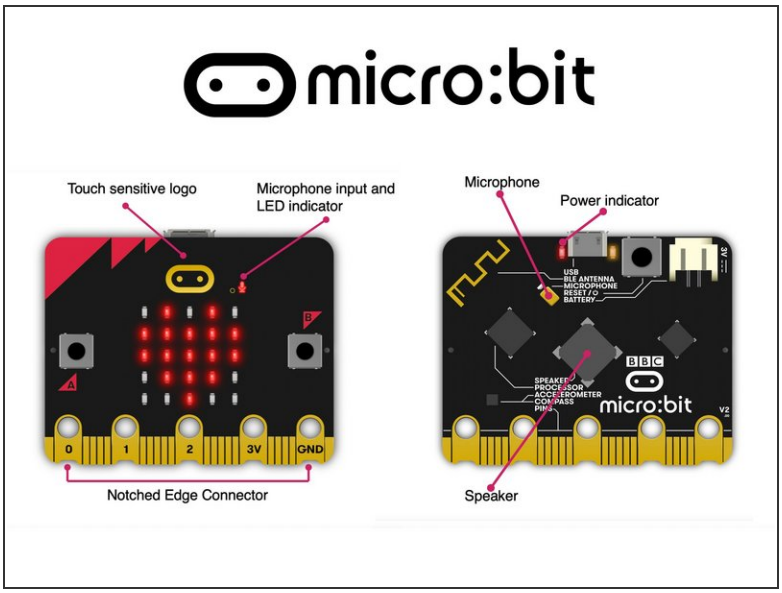
- Gather your components. You will need a micro:bit V2, a Bit Board, some Crazy Circuits LEDs, and some 1/8" Maker Tape.

⚠ You do need a V2 micro:bit as it has a built-in microphone. Previous versions will not work for this project.

- Once you have your components, assemble the parts onto a LEGO baseplate and use Maker Tape to connect the LEDs.

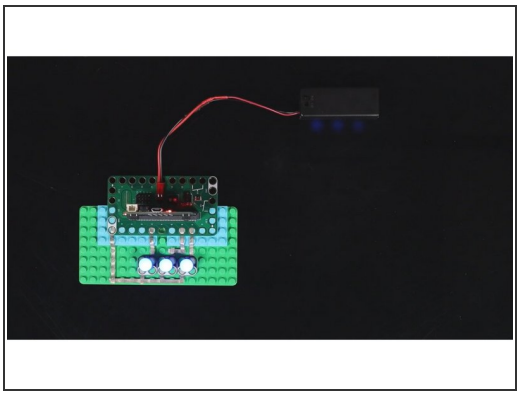
Step 2 — Load the Code

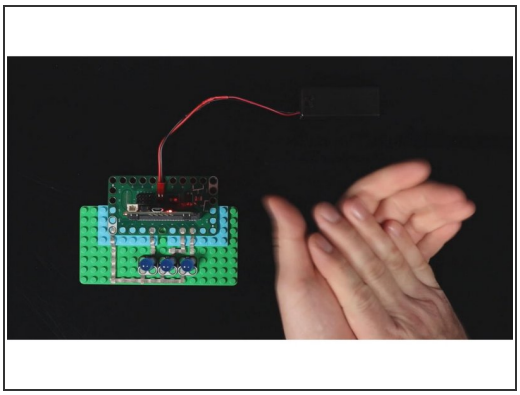




- Connect a USB cable to the micro:bit and then plug it into your computer.
- We'll be using makecode.microbit.org to program our board. It uses a simple drag and drop block interface.
- We're going to load the following code for our **The Clapper** program: https://makecode.microbit.org/_h6h1Px6Uh...

Step 3 — Test it Out!





- Once you've got your circuit built, and the code is loaded, you can test it out.
- Power up your circuit using a USB cable plugged into the micro:bit or using a two AAA battery pack plugged into the Bit Board.
- Clap your hands near the micro:bit and the LEDs should turn off!
- But wait! The LEDs turn back on after a second, so get ready to clap again!
- Keep clapping, my friend... Keep clapping.