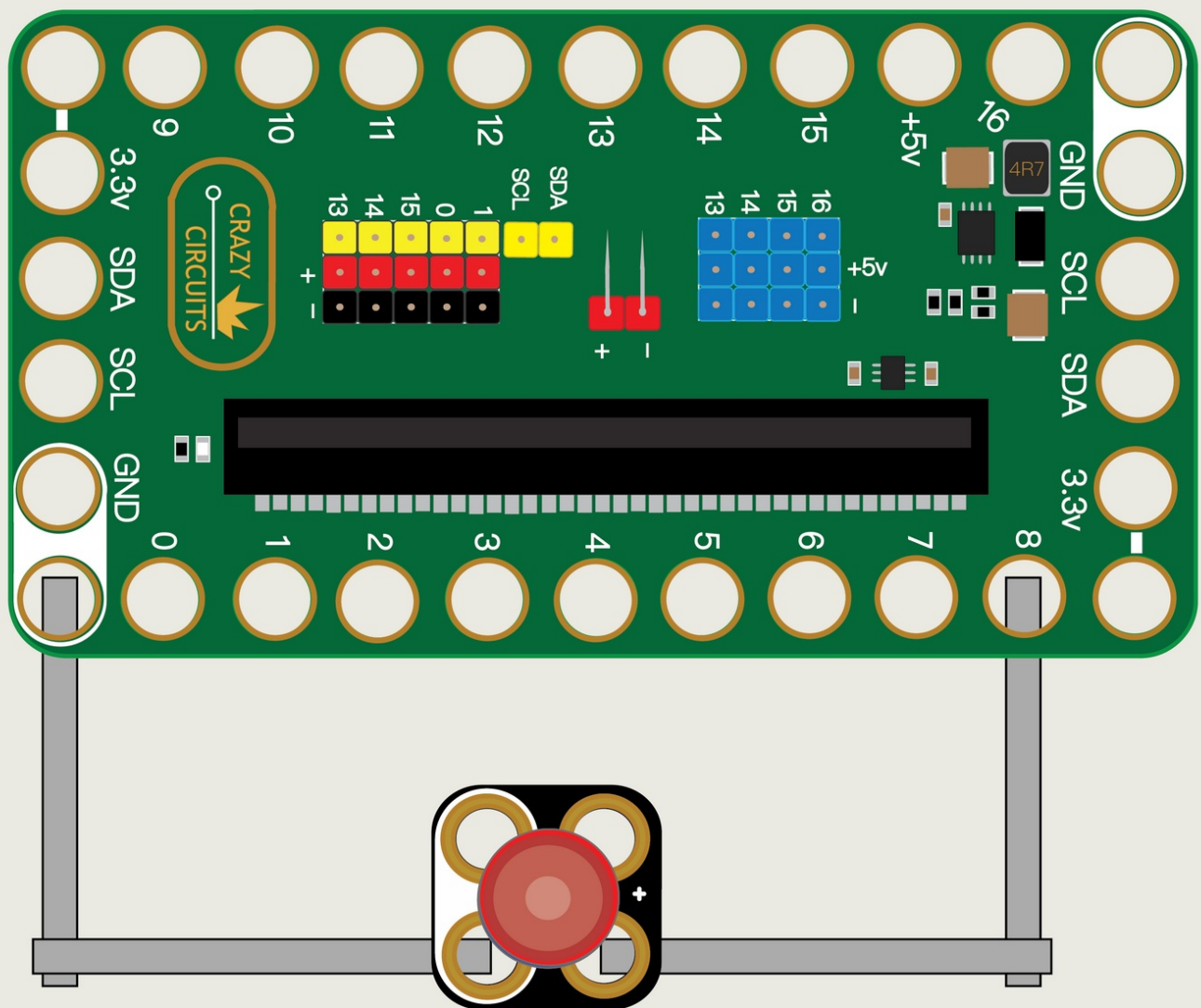




CH1-A - LED Blink

Connect an LED to a Bit Board and control it with a micro:bit

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INTRODUCTION

Connect an LED to a Bit Board and control it with a micro:bit

We'll make the LED blink on and off, one of the classic beginner projects when working with a microcontroller.



TOOLS:

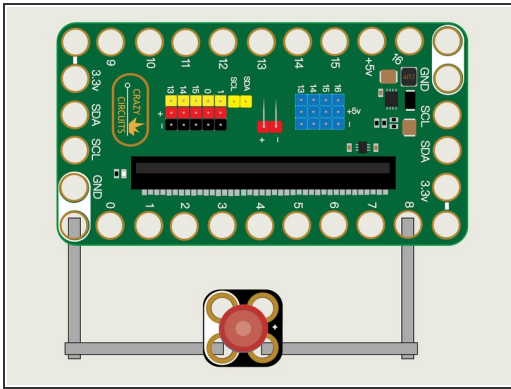
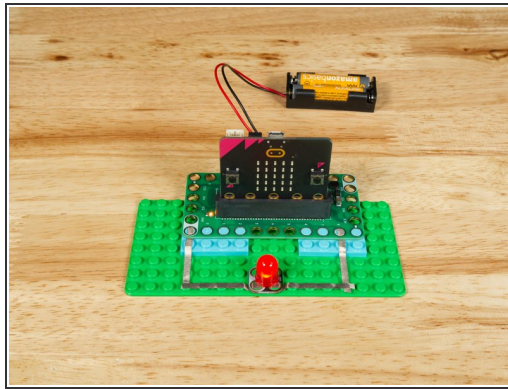
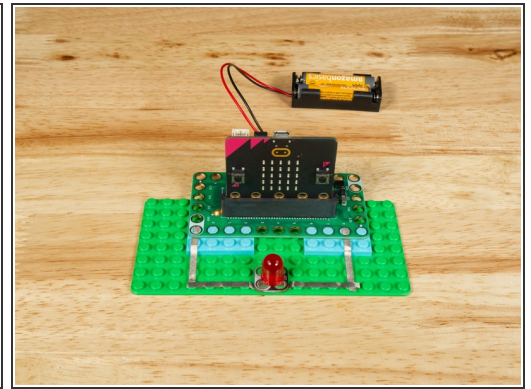
- [Computer](#) (1)
- [Scissors](#) (1)



PARTS:

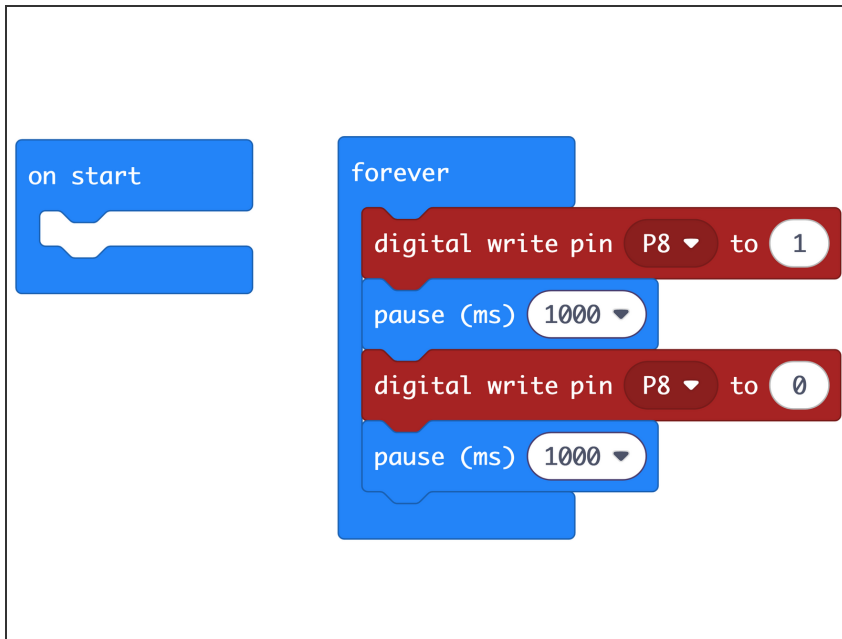
- [Crazy Circuits Bit Board](#) (1)
- [micro:bit](#) (1)
- [Maker Tape](#) (1)
1/8" Wide
- [Crazy Circuits LED Chip](#) (1)

Step 1 — Connect the LED



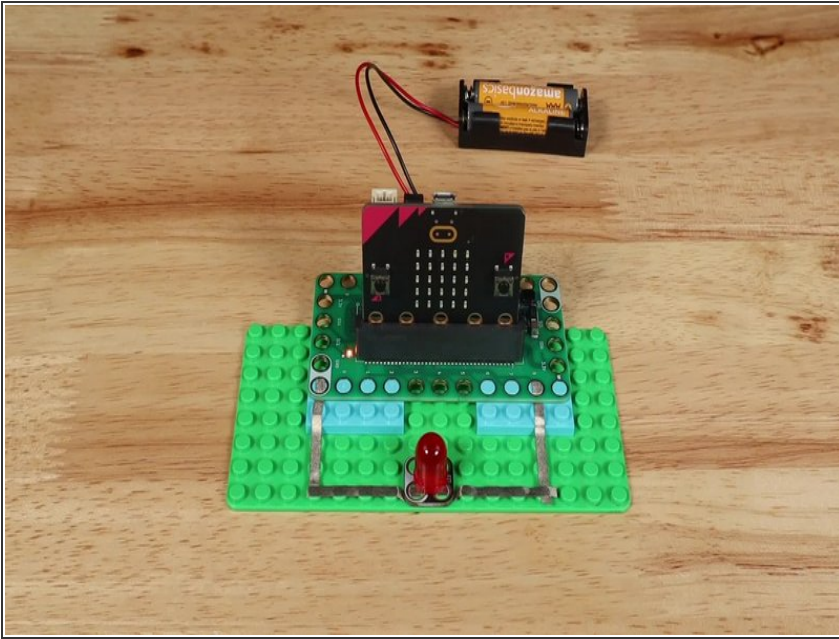
- We'll use **Maker Tape** to connect the LED to the Bit Board on a LEGO baseplate.
- Connect the **Negative** (-) side of the LED to a **Ground** (GND) hole on the Bit Board.
- Connect the **Positive** (+) side of the LED to **Pin 8** on the Bit Board.
- ☑ You'll notice the **Ground** on the Bit Board (as well as the LED and other Crazy Circuits components we'll use) is color coded **White**.

Step 2 — Load the Code



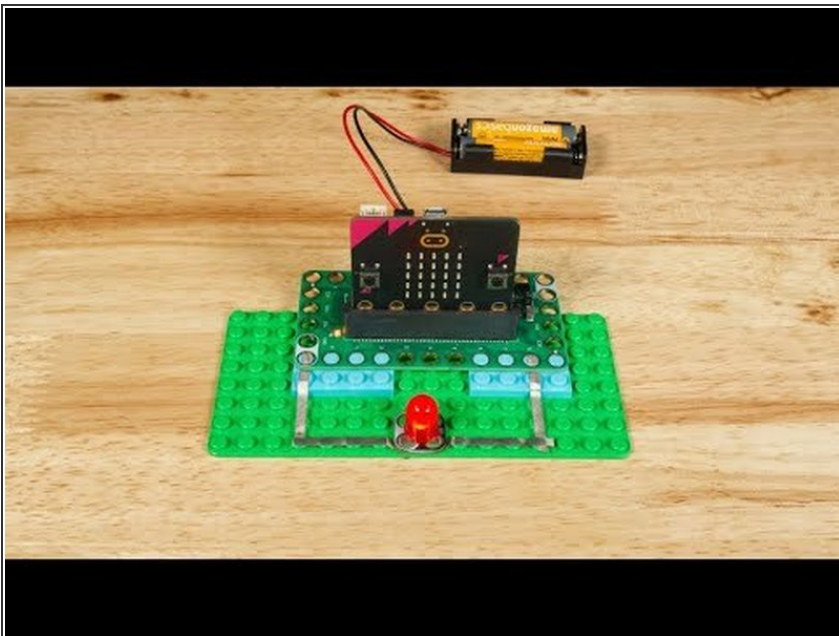
- If you've never used a micro:bit before you'll want to check out this guide: [Bit Board V2 Setup and Use](#)
- We're going to load the following code for our **LED Blink** program: https://makecode.microbit.org/_e9bEXrfRd...
- This code will make the LED turn on, wait one second, turn off, wait another second, and then repeat.
- The digital write command can be set to **1** or **0** to set a pin **high** or **low** which will turn **on** or **off** an LED in this example.
- We can choose which pin will be affected using the drop down control in the digital write command. Here it is set to **Pin 8**.

Step 3 — Test it Out!



- Once the code is loaded it should start running immediately.
- ① You can power the micro:bit via the USB cable you used to load the code or you can use a battery pack plugged into the Bit Board.
- The LED should turn on, then after one second turn off, then after another second turn on again, and repeat.

Step 4 — Follow Along



- Follow along with our recorded Live Stream!
- You can watch the full video of us walking through this project, along with explaining and exploring the code:
<https://youtube.com/live/z8ONp1Q9ZV0>