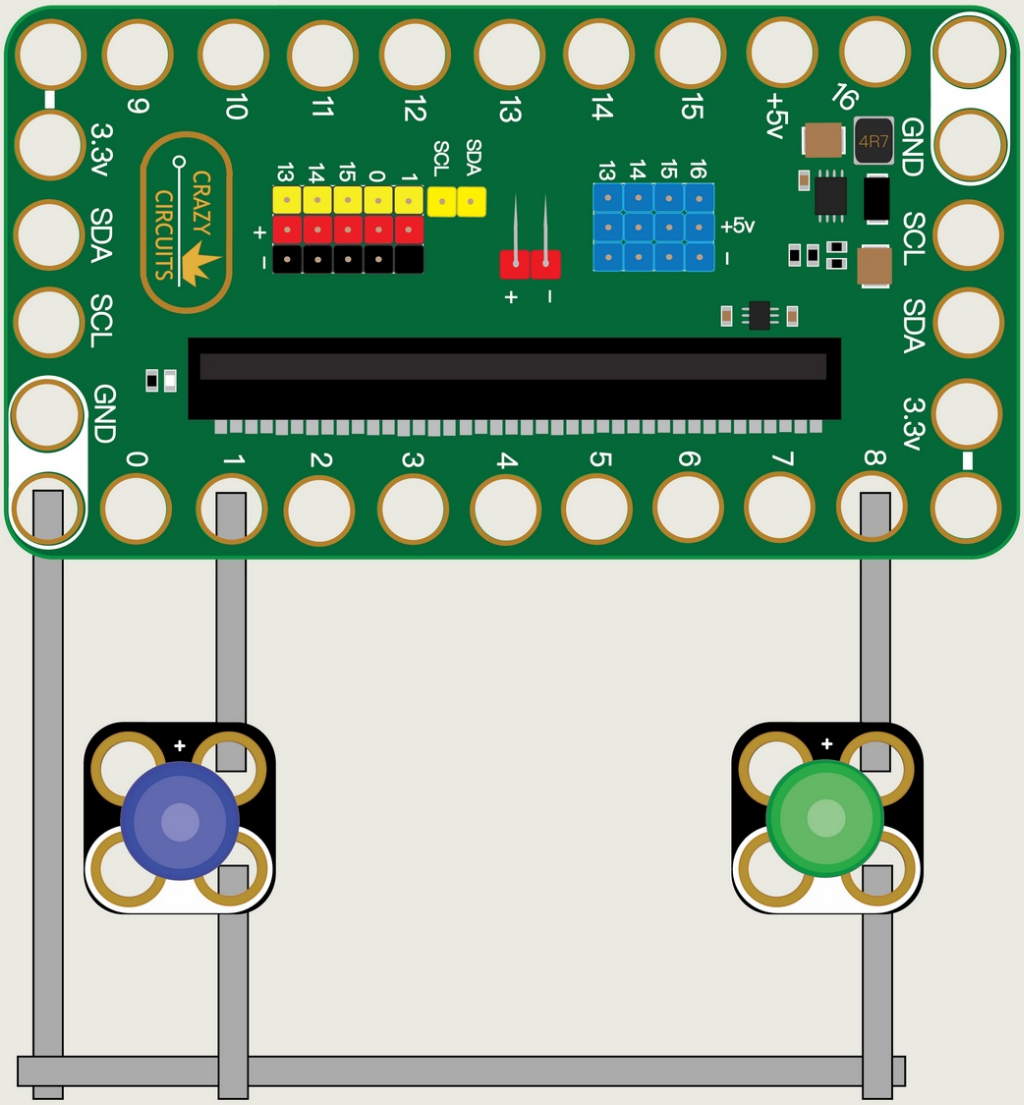
CH2-B - LED Blink Separately

Connect two LEDs to a Bit Board and control them with a micro:bit

Written By: Pete Prodoehl



INTRODUCTION

Connect two LEDs to a Bit Board and control them with a micro:bit

We'll make the LEDs blink on and off independently from each other.

TOOLS:

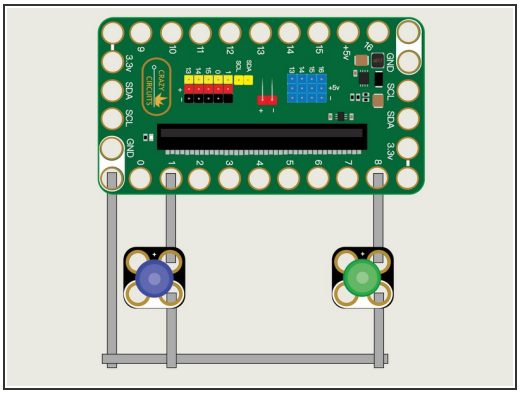
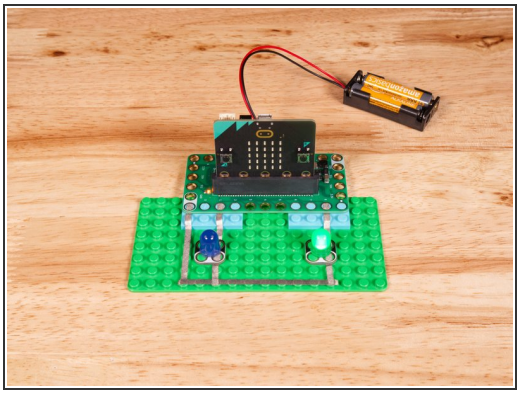
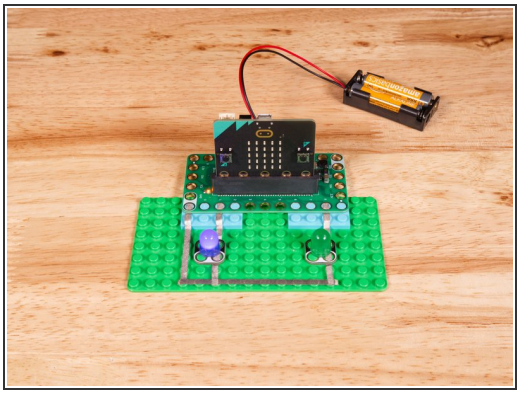
- Computer (1)
- Scissors (1)

PARTS:

- Crazy Circuits Bit Board (1)
- micro:bit (1)
- Maker Tape (1)
  1/8" Wide
- Crazy Circuits LED Chip (2)

© 2025

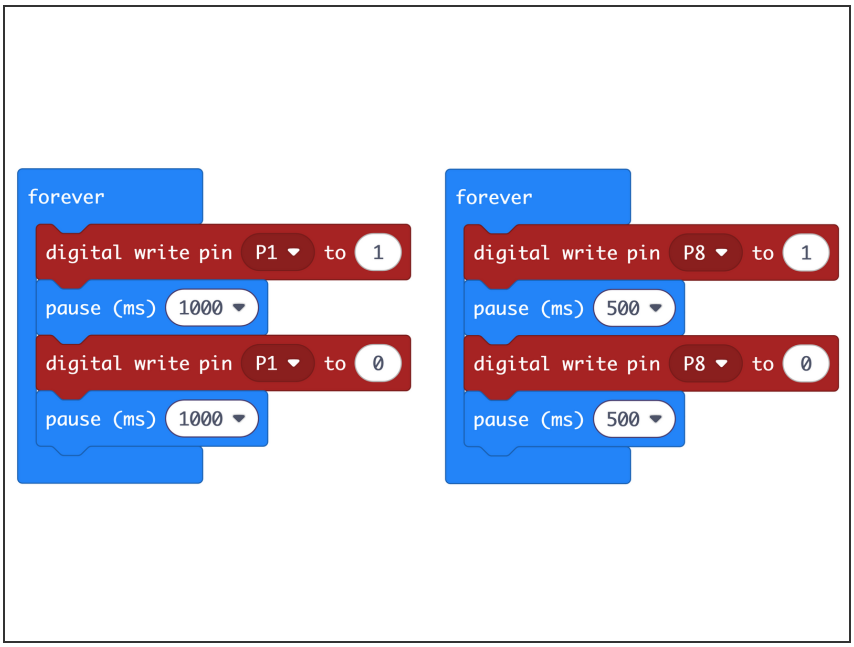
Step 1 — Connect the LEDs

- We'll use **Maker Tape** to connect the LEDs to the Bit Board on a LEGO baseplate.
- Connect the **Negative** (-) sides of the LEDs to a **Ground** (GND) hole on the Bit Board.
- Connect the **Positive** (+) side of the first LED to **Pin 1** on the Bit Board.
- Connect the **Positive** (+) side of the second 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**.

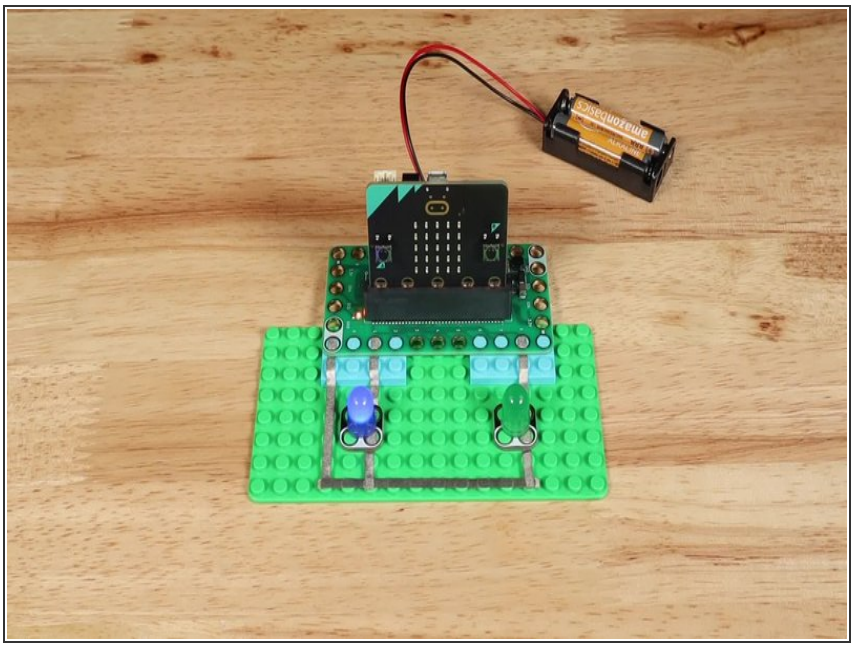
Step 2 — Load the Code



- 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 Separately** program: https://makecode.microbit.org/_WTR1APfi3...
- This code will make the LEDs blink on and off independently from each other, and at different rates.

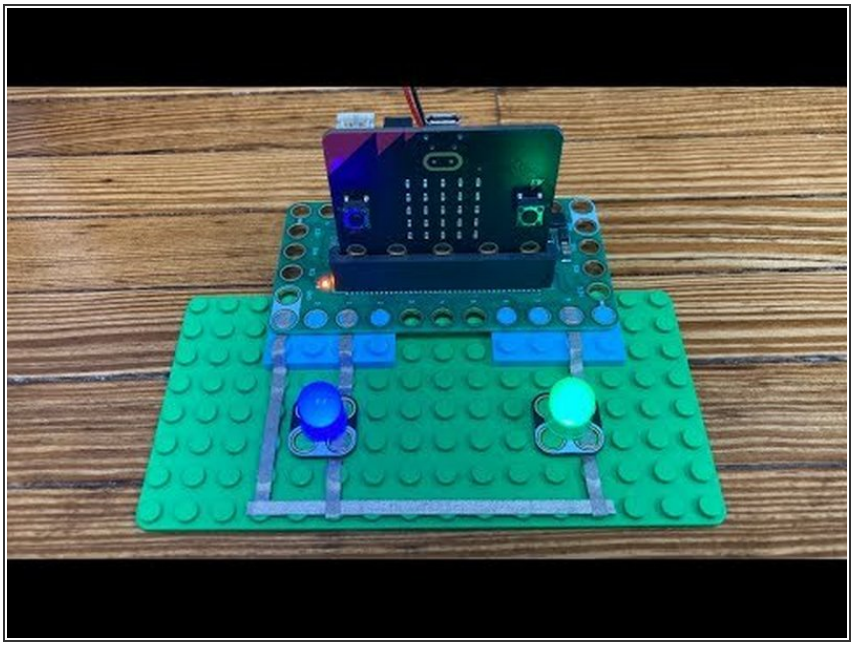
We're using two different forever blocks in this code. One of the advantages of the micro:bit over other controllers is that **it is very easy to have concurrent "forever" loops running at the same time**.

Step 3 — Test it Out!



- Once the code is loaded it should start running immediately.
- ⓘ 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 LEDs will be blinking at different rates, but you can easily change that by making changes to the code and reloading your new version onto the micro:bit

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/QZck9h1C3A8