# Updating your micro:bit firmware
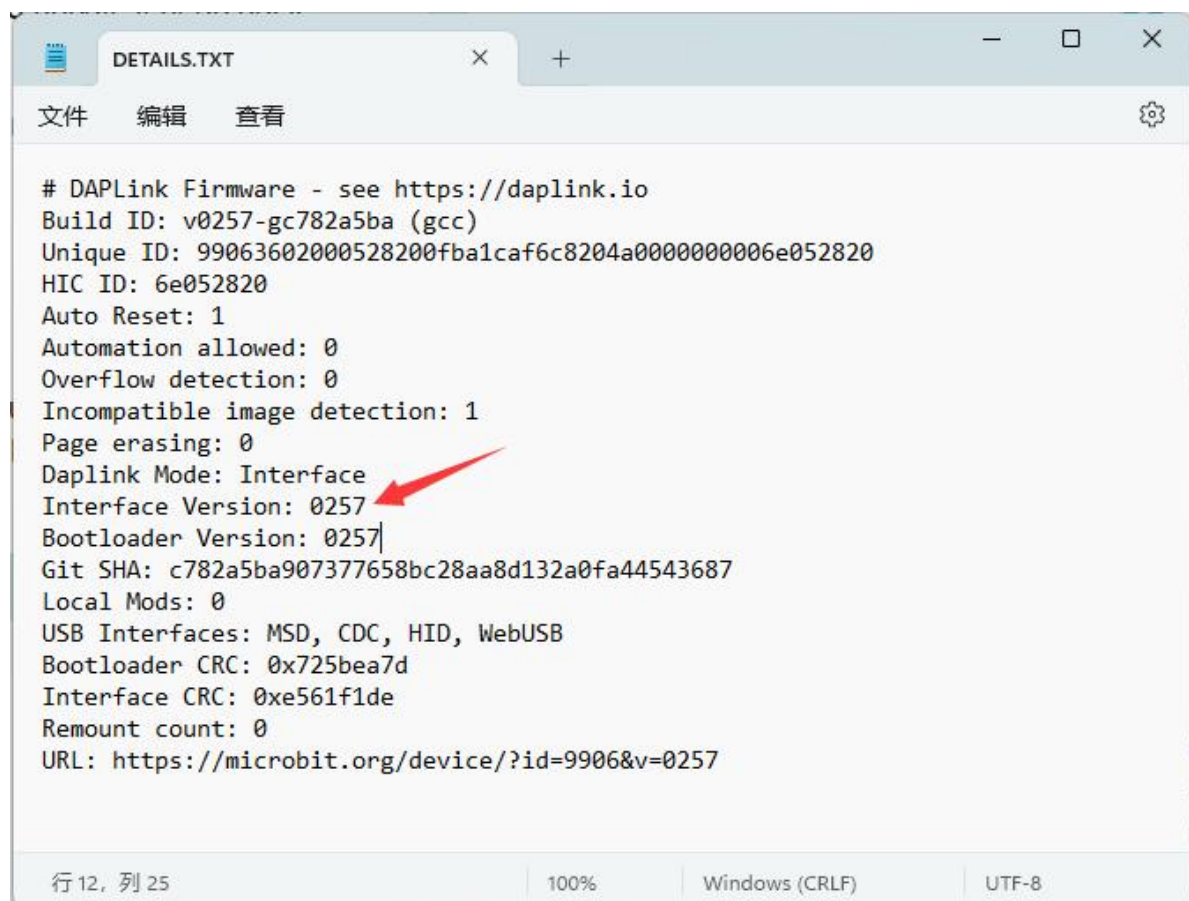
## What is the micro:bit firmware?

Firmware is a special kind of software that makes devices function properly. You can think of it as the software that makes a machine behave the way it does. The micro:bit has two chips on the back of it; one of them runs your code, while the other one runs the firmware to enable you to program the device.

The micro:bit will work with the firmware it came with, so if you don't need to update it head back to our guide to the micro:bit features.

There may be times when you may want to update the firmware to test out new software features. If that's the case, this page will show you how to do it.

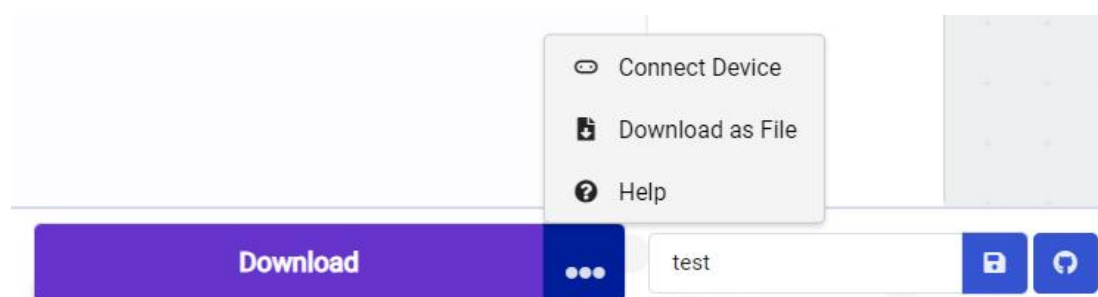## How to find out the current firmware version

Before you upgrade, you'll want to find out what version of the firmware you have on your micro:bit. **Plug it in via USB**, open up the **DETAILS.TXT** file from the **MICROBIT** drive and look for the number on the line that begins 'Interface Version'.
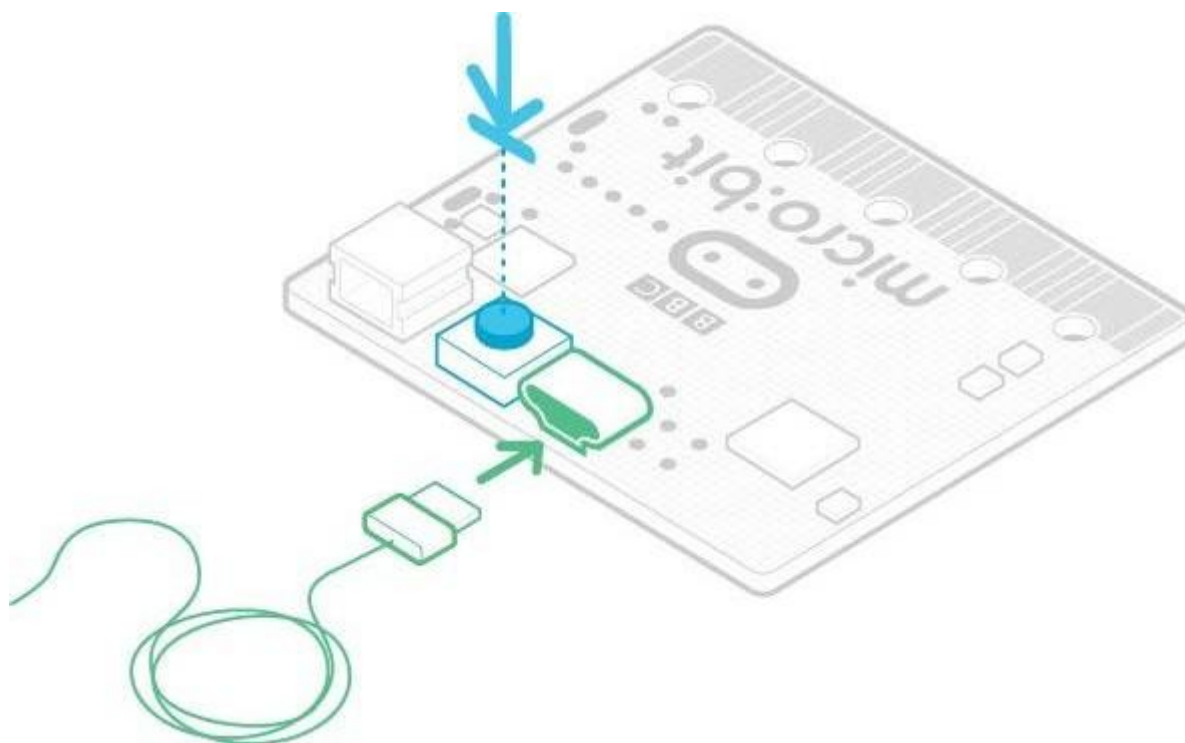
# How to update the firmware

1. Enter the online editor：https://makecode.microbit.org/#editor

2. Download the hex file from this page to your computer.



3. Then with the battery pack removed and a USB lead connected to your computer, hold the reset button at the back of the micro:bit and plug the USB lead into the device. You should see a drive appear in your file manager called **MAINTENANCE**.



4. Drag and drop the .HEX you downloaded form this page onto the micro:bit and wait for the yellow system LED on the back of the device to stop flashing. When the upgrade is completed, the micro:bit will reset, ejecting itself from the computer and re-appear in normal **MICROBIT** drive mode.

5. Finally, check the **DETAILS.TXT** file that is on the **MICROBIT** drive and make sure that it has the same version number as the .HEX firmware that you just downloaded and flashed to the interface chip.