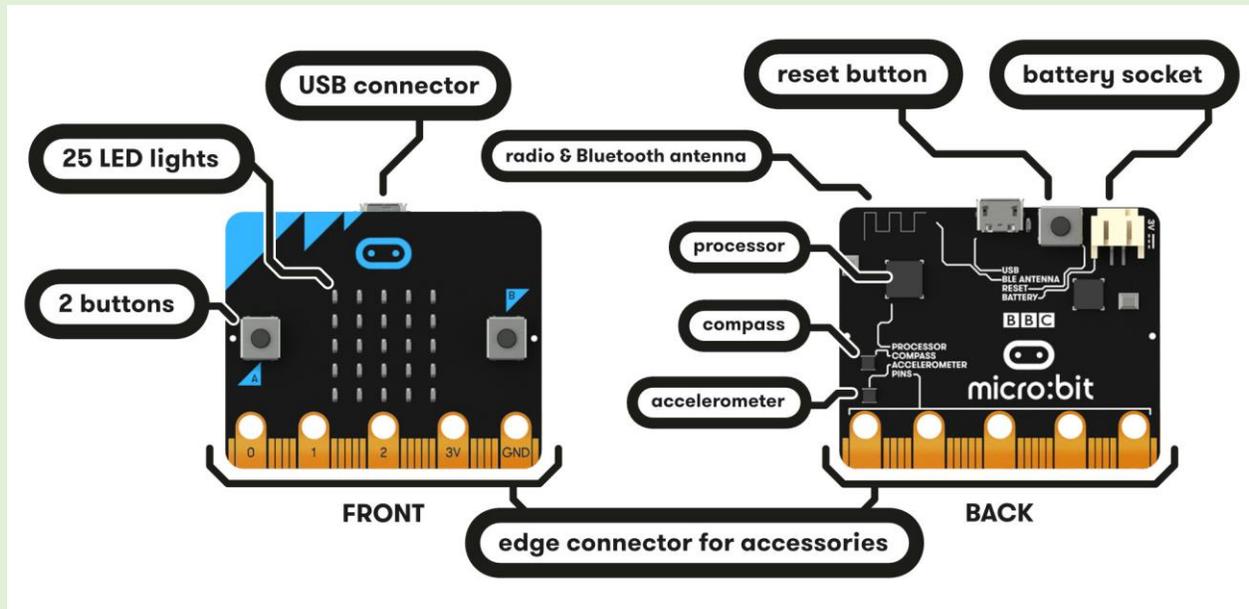
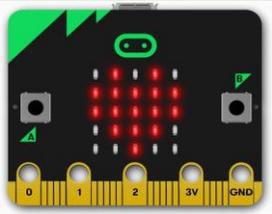


Features of the BBC Micro:bit

Objectives: Explore the features of the Micro:bit.

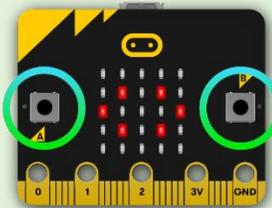


Your micro:bit has the following physical features:



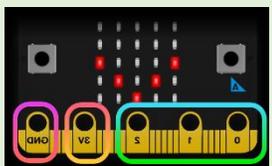
LEDs

What is it? LED stands for Light Emitting Diode. The micro:bit has 25 individually-programmable LEDs, allowing you to display text, numbers, and images.



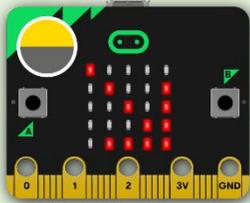
Buttons

What is it? There are two buttons on the front of the micro:bit (labeled A and B). You can detect when these buttons are pressed, allowing you to trigger code on the device.



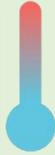
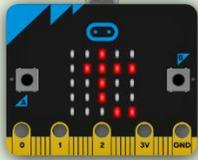
Pins

What is it? There are 25 external connectors on the edge connector of the micro:bit, which we refer to as 'pins'. Program motors, LEDs, or other electrical components with the pins, or connect extra sensors to control your code!



Light Sensor

What is it? By reversing the LEDs of the screen to become an input, the LED screen works as a basic light sensor, allowing you to detect ambient light.

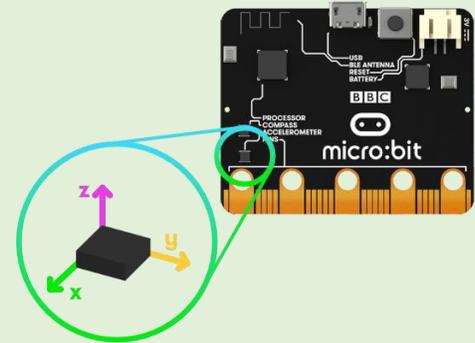


Temperature Sensor

What is it? This sensor allows the micro:bit to detect the current temperature of the device, in degrees and Celsius. Fahrenheit can be displayed through coding.

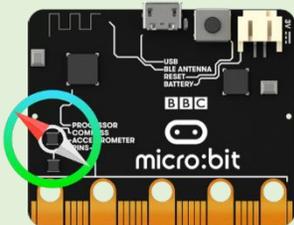
Accelerometer

What is it? An accelerometer measures the acceleration of your micro:bit; this component senses when the micro:bit is moved. It can also detect other actions, e.g. shake, tilt, and free-fall.



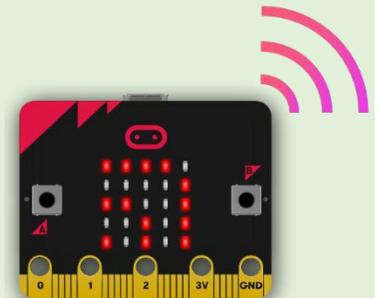
Compass

What is it? The compass detects the earth's magnetic field, allowing you to detect which direction the micro:bit is facing. The compass must be calibrated before it can be used. 'Calibrating' the compass ensures the compass results are accurate. For the MakeCode editor, use the 'calibrate compass' block. When the calibration begins, the micro:bit will scroll the instruction "Tilt to fill screen". To calibrate the compass, tilt the micro:bit to move the dot in the center of the screen around until you have filled up the whole screen.



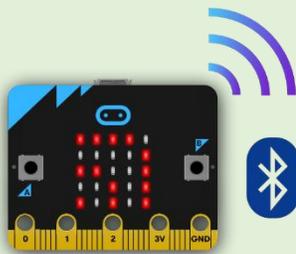
Radio

What is it? The radio feature allows you to communicate wirelessly between micro:bits. Use the radio to send messages to other micro:bits, build multiplayer games, and much more!



Bluetooth

What is it? BLE (Bluetooth Low Energy) allows the micro:bit to control phones and tablets over Bluetooth. This communication works both ways, so you can also send code to your micro:bit wirelessly from your phone. Other apps, such as Swift Playgrounds and Scratch, use Bluetooth to talk to the micro:bit.



USB Interface

What is it? The USB interface allows you to connect the micro:bit to your computer via a micro-USB cable, which will power the device and allow you to download programs onto the micro:bit.

<https://microbit.org/guide/features/>

