*Micro Bits*

CPU: Nordic Semiconductor nRF51822, 16 MHz ARM Cortex-M0 microcontroller, 256 KB Flash, 16 KB RAM.

Connectivity: BlueTooth LE,Micro USB, edge connector

https://www.youtube.com/watch?v=Wuza5WXiMkc

This microbit is a open source hardware ARM-Based embedded system designed by the BBC for use in computer education in the UK. It was first announced on the launch of BBC’s Make It Digital campaign on 12 March 2015 with the intent of delivering 1 million devices to pupils in the UK.

The Micro-bit has 25 LED’s, 2 programmable buttons, and can be powered by either a usb or external-battery pack, the device inputs and outputs are though five ring protectors that form a larger 23-pin edge connector

There are 2 official code editors when it comes to the micro-bit foundation website, which are:

-MakeCode (Formerly Microsoft PXT Editor)

-Python

Along these 2 are 3 legacy editors that are no longer updated anymore, which are:

-CodeKingdoms, using Javascript

-Microsoft Block Editor, based on blockly

-Microsoft Touch Develop.

The Python programming experience on the Micro Bit is provided byMicro Python Users are able to write Python scripts in the Micro Bit web editor which are then combined with the MicroPython firmware and uploaded to the device. Users can also access the MicroPythonREPL running directly on the device via the USB serial connection, this allows them to interact directly with the Micro Bit's peripherals.

The Micro Bit was created using the ARMmbed development kits. The run-time system and programming interface utilize the mbed cloud compiler service to compile the user's code. The compiled code is then flashed onto the device using USB or Bluetooth connections. The device will appear as a USB drive when connected to a computer and code can be flashed using drag and drop.



