

Circuit Playground Bluefruit - Bluetooth Low Energy

PRODUCT ID: 4333

OUT OF STOCK

Please enter your details below and we will send you an email when this item is back in stock. You will only be emailed about this product!

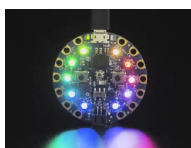
YOUR EMAIL

NOTIFY ME

ADD TO WISHLIST

[DESCRIPTION](#)

[TECHNICAL DETAILS](#)





DESCRIPTION

Circuit Playground Bluefruit is our third board in the Circuit Playground series, another step towards a perfect introduction to electronics and programming. We've taken the popular Circuit Playground Express and made it even better! Now the main chip is an nRF52840 microcontroller which is not only more powerful, but also comes with Bluetooth Low Energy support for wireless connectivity.

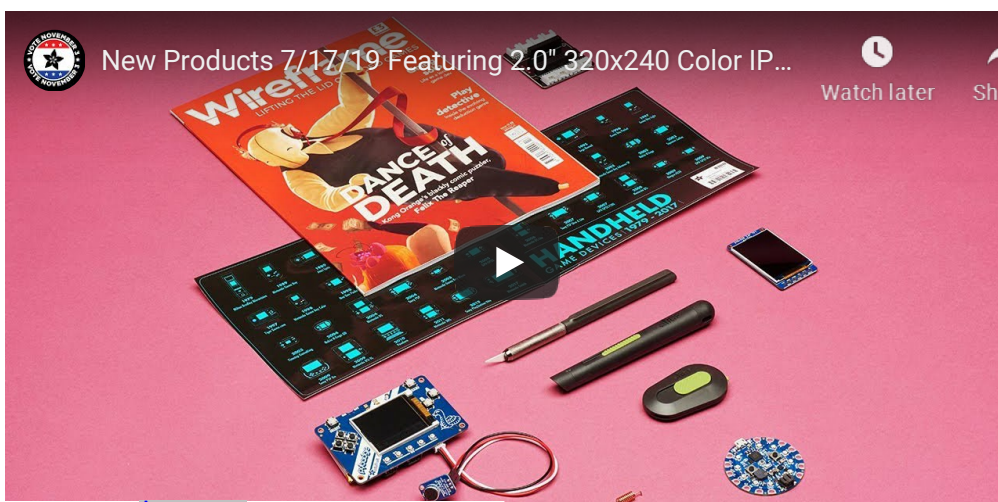
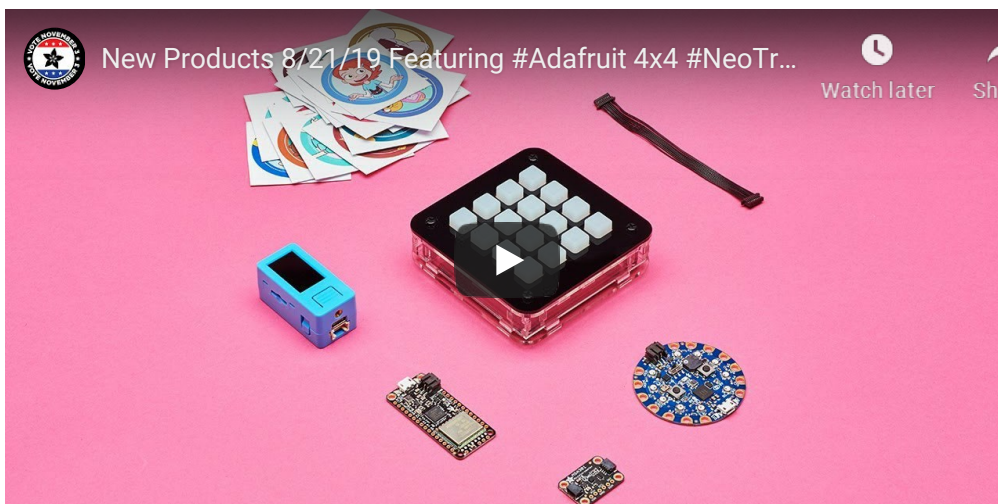
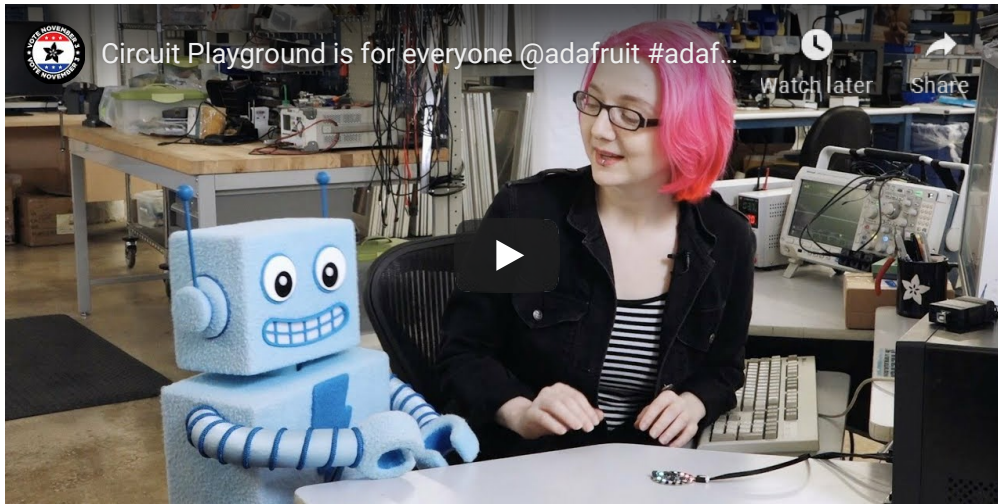
The board is round and has alligator-clip pads around it so you don't have to solder or sew to make it work. You can power it from USB, [a AAA battery pack](#), or with a Lipoly battery (for advanced users). Circuit Playground Bluefruit has built-in USB support. Built in USB means you plug it in to program it and it just shows up, no special cable or adapter required. Just program your code into the board then take it on the go!

You can use this board with **Arduino** or **CircuitPython** - It does not support MakeCode at this time (there is no ETA when it might be added)

Here's some of the great goodies baked in to each Circuit Playground Bluefruit:

- 1 x nRF52840 Cortex M4 processor with Bluetooth Low Energy support
- 10 x mini NeoPixels, each one can display any color
- 1 x Motion sensor (LIS3DH triple-axis accelerometer with tap detection, free-fall detection)
- 1 x Temperature sensor (thermistor)
- 1 x Light sensor (phototransistor). Can also act as a color sensor and pulse sensor.
- 1 x Sound sensor (MEMS microphone)
- 1 x Mini speaker with class D amplifier (7.5mm magnetic speaker/buzzer)
- 2 x Push buttons, labeled A and B
- 1 x Slide switch
- 8 x alligator-clip friendly input/output pins
- Includes I2C, UART, 6 pins that can do analog inputs, multiple PWM outputs
- Green "ON" LED so you know its powered

- Red "#13" LED for basic blinking
- Reset button
- 2 MB of SPI Flash storage, used primarily with CircuitPython to store code and libraries.
- MicroUSB port for programming and debugging
- USB port can act like serial port, keyboard, mouse, joystick or MIDI!



TECHNICAL DETAILS

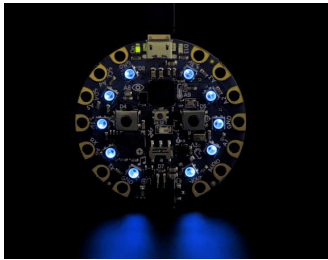
- Outer Diameter: ~50.6mm / ~2.0"
- Weight: 8.9g

Revision History:

- **As of Nov 22, 2019** we updated this design from Alpha to release. The antenna design changed slightly, and we added a pin that allows the user to [turn off power to the NeoPixels, microphone, and temperature/light sensor so only the accelerometer is active, for low power usage!](#)

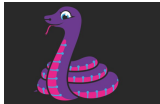


LEARN



[Primary Guide: Adafruit Circuit Playground Bluefruit](#)

Circuit Playground Bluefruit: Everything amazing about Circuit Playground, now with the power of Bluetooth!



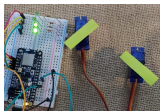
[Welcome to CircuitPython!](#)

New to CircuitPython? This is the place to start.



[Bluefruit LE Connect for iOS and Android](#)

Learn how to use your iOS or Android device to control and communicate with Bluefruit LE.



[Multi-tasking with CircuitPython](#)

Control LEDs, servos, and inputs all together with minimal contention.

[SEE ALL GUIDES](#)

MAY WE ALSO SUGGEST...



Circuit Playground Classic



Adafruit Feather 32u4



Bluefruit LE Sniffer -



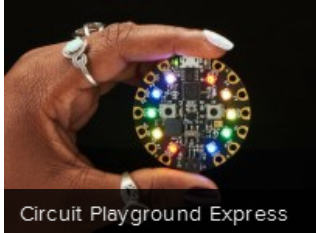
USB cable - USB A to Micro-



Adafruit METRO 328 Fully



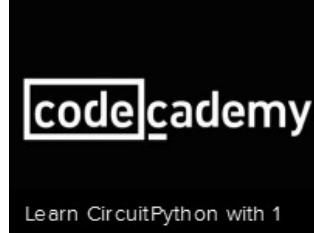
3 x AAA Battery Holder with



Circuit Playground Express



Adafruit Feather M0



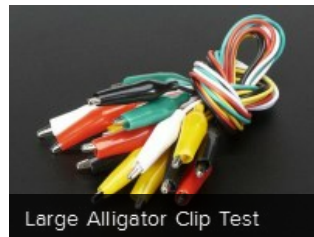
Learn CircuitPython with 1



FLORA - Wearable



Adafruit METRO M0



Large Alligator Clip Test



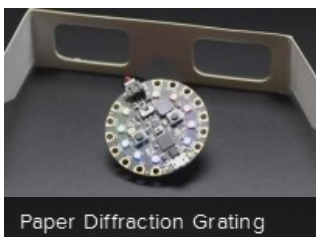
Assembled Adafruit Feather



Adafruit CLUE - nRF52840



Sony Spresense Pack -



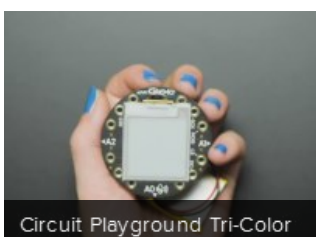
Paper Diffraction Grating



Adafruit Circuit Playground



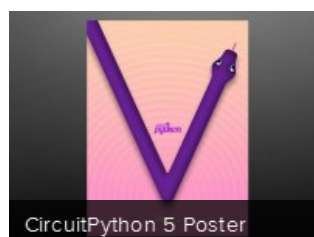
Adafruit Feather nRF52840



Circuit Playground Tri-Color



Sony Spresense Extension



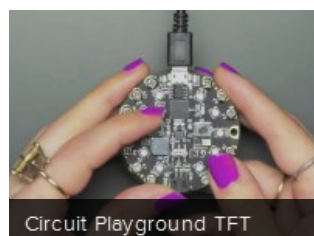
CircuitPython 5 Poster



Adafruit ItsyBitsy nRF52840



Sony Spresense Main



Circuit Playground TFT

DISTRIBUTORS [EXPAND TO SEE DISTRIBUTORS](#)

4.9 ★★★★★
Google
Customer Reviews