

Adafruit Itsy Bitsy 32u4- 5V 16MHz

PRODUCT ID:3677

Also include 1x [Adafruit Pro Trinket Lilon/L_iPoly Backpack Add-On](#)

DESCRIPTION

What's smaller than a Feather but larger than a Trinket? It's an Itsy Bitsy! Small, powerful, Arduino-compatible- this microcontroller board is perfect when you want something very compact, but still with a bunch of pins.

Itsy Bitsy is only 1.4" long by 0.7" wide, but has 6 power pins, 6 analog & digital pins and 17 digital pins. It packs much of the same capability as an Arduino UNO. So it's great once you've finished up a prototype on a bigger Arduino, and want to make the project much smaller.

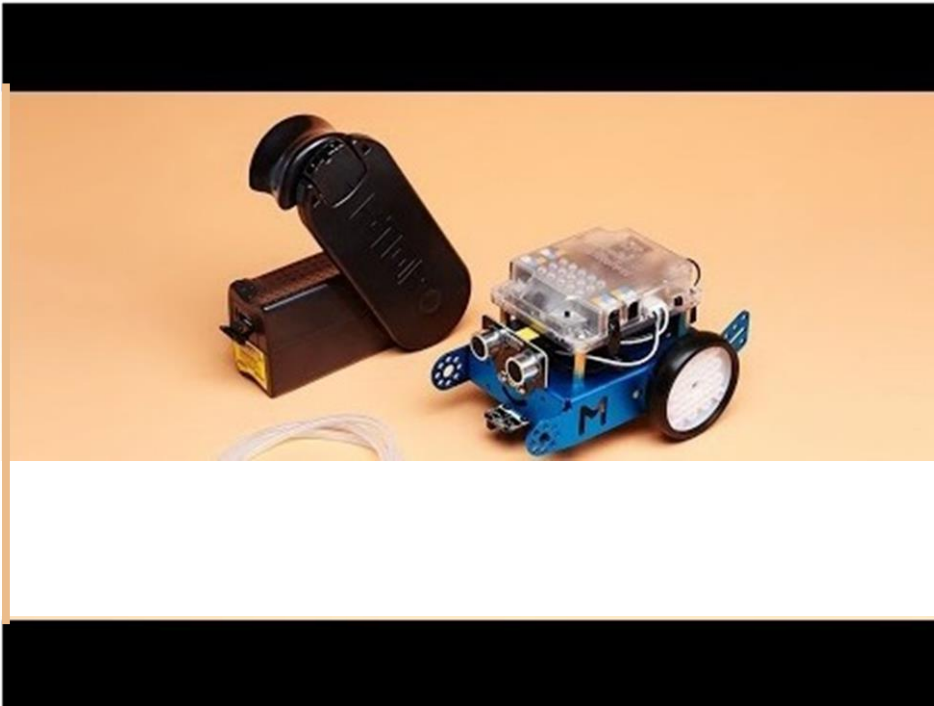
The Itsy Bitsy 32u4 5V 16MHz uses the Atmega32u4 chip, which is the same core chip in the Arduino Leonardo as well as the same chip we use in our Feather 32u4. It runs at the same speed and voltage of an Arduino UNO or Leonardo. So you'll be happy to hear that not only is Itsy Bitsy programmable using the Arduino IDE as you already set up, but a vast number of Arduino projects will work out of the box!

We recommend this as an upgrade from the [Pro Trinket SV](#) because this has native USB so it will work with all computers, USB serial debugging, and a more reliable bootloader. [You can even use the Pro Trinket LiPo backpack with this board to add rechargeable battery.](#)

Here's some handy specifications:

- ATmega32u4 onboard chip in QFN package
- 5V power and logic, 16MHz clock rate, 2KB RAM and 28K FLASH
- USB bootloader with a nice LED indicator, AVR109 compatible (same as Flora, Feather 32u4, Leonardo, etc)
 - Micro-USB jack for power, USB uploading and debugging, you can put it in a box or tape it up and use any Micro USB cable for when you want to reprogram.
- Can act as a USB HID Keyboard, Mouse, MIDI or plain USB 'CDC' serial device (default)
 - On-board 5.0V power regulator with 150mA output capability and ultra-low dropout. Up to 16V input, reverse-polarity protection, thermal and current-limit protection.

- Low current 3_3V regulator output from chip, for small sensors
 - Power with either USB or external output (such as a battery) into VBAT pin- It'll automatically switch over
- On-board red pin 113 LED
- 23 GPIO total- 6 analog in, 1x SPI port, 1x I2C port, 1x Hardware Serial port and 10 more GPIO, 4 of which have PWM
- Can drive NeoPixels, connect to sensors, servos, etc.



- Reset button for entering the bootloader or restarting the program. [Once headers are installed they can be fitted into 0.6" wide sockets](#)

