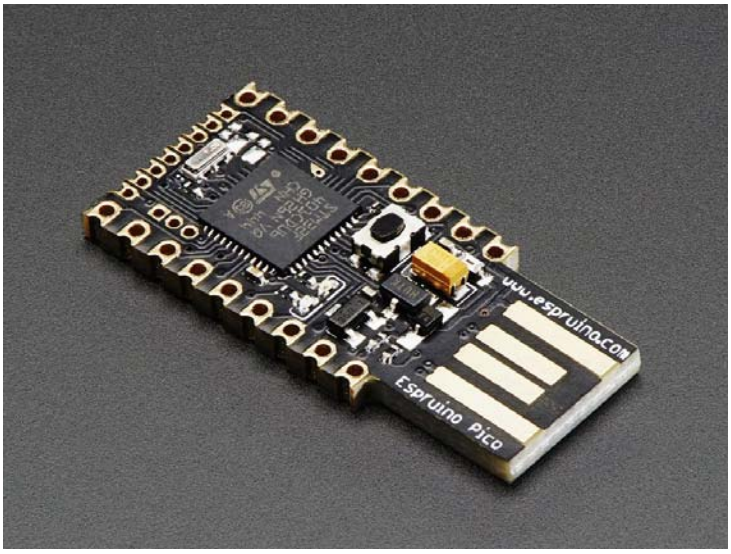
Espruino Pico

PROUCT ID: 2621



- # Description

Control Electronics quickly and easily with a tiny USB stick that runs JavaScript - introducing the **Espruino Pico**! Dig in to the JavaScript of things, with a mini version of the popular Espruino board we already carry

This little board has an STM32 microcontroller pre-programmed with Espruino all ready to go so you can start playing immediately. **Warning: if you only use Assembly and think that even embedded C/C++ is for wimps, this device might explody your head.**

Essential Features:

- 22 GPIO pins: 9 analog inputs, 21 PWM, 2 serial, 3 SPI, 3 I2C
- All GPIO is 3.3V but 5 volt tolerant
- 2 rows of 9 0.1" pins, with a third 0.05" row of 8 pins on the end
- On-board USB "PCB Type" connector, plugs right into any computer USB port
- Two on-board LEDs and one button
- STM32F401CDU6 CPU - ARM Cortex
- On-board 3.3v 250mA voltage regulator, accepts voltages from 3.5v to 16v
- Current draw in sleep: < 0.05mA - over 2.5 years on a 2500mAh battery
- On-board FET can be used to drive high-current outputs

Note: As of Friday, October 2nd, 2015 we are selling the updated Pico with both a more helpful silkscreen marking for power, an updated USB power diode, and a 500mA polyfuse added!

The Espruino Pico is a USB stick with a tiny computer and JavaScript interpreter built in, allowing for instant feedback from whatever device you're working with. Simply set up your code with the Espruino and send it to the device without having to wait for the board to 'flash.'

The Pico is also designed to be easy to include in your own designs and builds. The .01" pins are easy to fit in to sockets, and castellated edges mean that unpinned Picos can easily be surface-mounted directly to a PCB. And to make it even easier, Espruino provided a part library for Eagle CAD that includes the Pico's footprint in several different configurations.

The Espruino Pico's fast response time has a lot of advantages. It allows for quick and easy debugging and is a great way to test your project before your big reveal. In addition, you can control the Espruino from almost anything - Windows, Mac OS, Linux, RasPi, Android, anything that can talk to a USB Serial port.

The Espruino family also interacts well with our NeoPixels. For more info, check out Espruino's page on the WS2811 and WS2812.

While the main advantage of the Espruino is its instant execution, it can also be used as a traditional board through a Web-based IDE hosted on your computer. The microcontroller also uses less power than Linux Boards (although its of course a lot less powerful as well) so will run longer on battery power, it has loads of IO pins, and it can be used as an IO board for PCs, Macs, or Rasp Pis without having to program it first. Simply take the Espruino out of its packaging and get started! There's also much more info on the Espruino Pico page including tutorials, code examples, manuals, datasheets, and more!

Technical Details

- 15mm x 33mm x 3mm / 0.6" x 1.3" x 0.12"
- Weight: 2g

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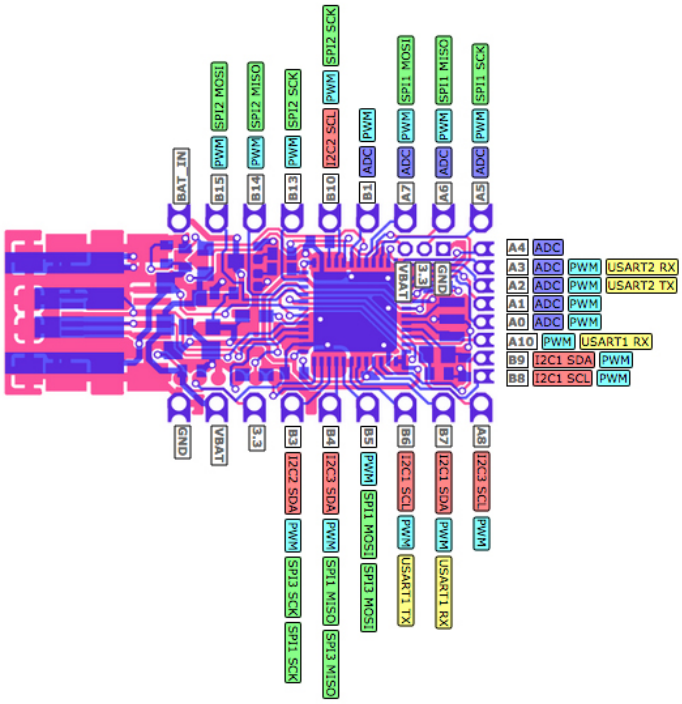
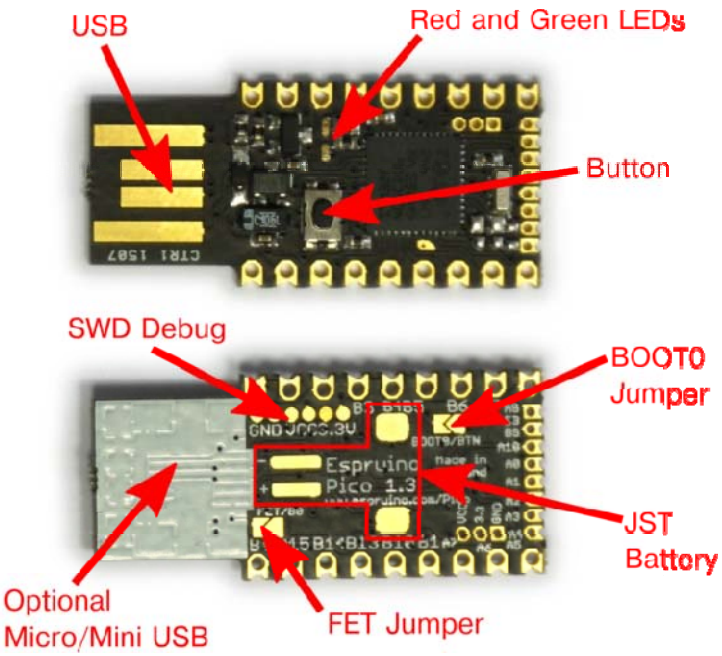
RoHS


BAT_IN
SPI2 MOSI
SPI2 MISO
SPI2 SCK
SPI2 SCK
SPI1 MOSI
SPI1 MISO
SPI1 SCK
GND
VBAT
3.3
I2C2 SDA
I2C2 SCL
SPI3 SCK
SPI3 MISO
SPI3 MOSI
USART1 TX
USART1 RX
I2C1 SDA
I2C1 SCL
A4 ADC
A3 ADC PWM USART2 RX
A2 ADC PWM USART2 TX
A1 ADC PWM
A0 ADC PWM
A10 PWM USART1 RX
B9 I2C1 SDA PWM
B8 I2C1 SCL PWM


USB
Red and Green LEDs
Button
SWD Debug
BOOT0
Jumper
JST
Battery
Optional
Micro/Mini USB
FET Jumper