

Adafruit Feather 328P - Atmega328P

3.3V @ 8 MHz

PRODUCT ID: 3458

With this Feather we're getting a little nostalgic for the ATmega328P - the classic 'Arduino' chip - with this Adafruit Feather 328P running a 3.3V and 8 MHz. Feather is the new development board from Adafruit, and like it's namesake it is thin, light, and lets you fly! We designed Feather to be a new standard for portable microcontroller cores. We have other boards in the Feather family, check'em out here.

At the Feather 328P's heart is an ATmega328P clocked at 8 MHz and at 3.3V logic, a chip setup we've had tons of experience with as it's the same as the Pro Mini and similar to the Adafruit Metro 328. This chip has 32K of flash and 2K of RAM, and we paired it with a SiLabs CP2104 to give it USB-to-Serial program & debug capability built in. Works great when you want to keep your classic Arduino code compatibility, but want to use one of our dozens of FeatherWings

To make it easy to use for portable projects, we added a connector for any of our 3.7V Lithium polymer batteries and built in battery charging. You don't need a battery, it will run just fine straight from the micro USB connector. But, if you do have a battery, you can take it on the go, then plug in the USB to recharge. The Feather will automatically switch over to USB power when its available. We also tied the battery thru a divider to an analog pin, so you can measure and monitor the battery voltage to detect when you need a recharge.

Here's some handy specs!

- Measures 2.0" x 0.9" x 0.28" (51mm x 23mm x 8mm) without headers soldered in
- Light as a (large?) feather - 4.8 grams
- ATmega328p @ 8MHz with 3.3V logic/power
- 3.3V regulator with 500mA peak current output
- USB serial converter (CP2104) for USB bootloading and serial port debugging
- You also get tons of pins - 19 GPIO pins + 2 analog-in-only pins
- Hardware I2C, hardware SPI support. For UART devices, should use SoftwareSerial
- 6 x PWM pins
- 8 x analog inputs (two are shared with I2C)
- Built in 100mA lipoly charger with charging status indicator LED
- Pin #13 red LED for general purpose blinking
- Two LEDs for serial data RX & TX
- Power/enable pin
- 4 mounting holes
- Reset button

The Feather 328P has some extra space left over, so we give you a tiny little prototyping area. If you just need to attach a button or sensor, you may be able to skip out on a breadboard and wire it directly on there.

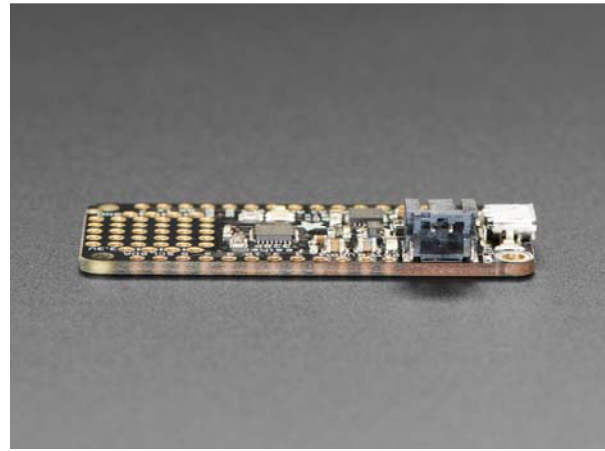
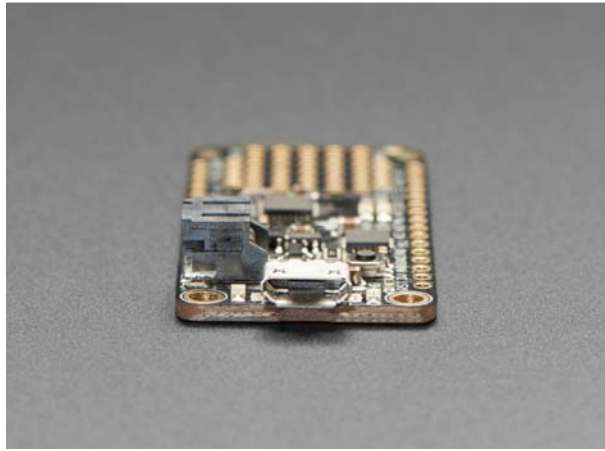
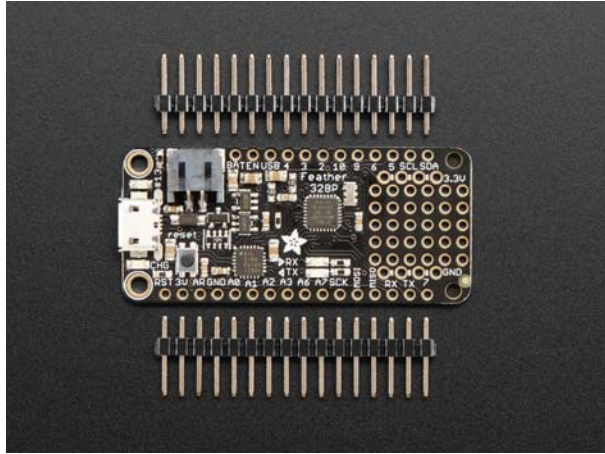
Comes fully assembled and tested, with a USB bootloader that lets you quickly use it with the Arduino IDE. We also toss in some header so you can solder it in and plug into a solderless breadboard. Lipoly battery and USB cable not included (but we do have lots of options in the shop if you'd like!)

Technical Details

Product Dimensions: 50.0mm x 22.8mm x 7.2mm / 2.0" x 0.9" x 0.3"

Product Weight: 4.6g / 0.2oz





<https://www.adafruit.com/product/3458> 1-31-18