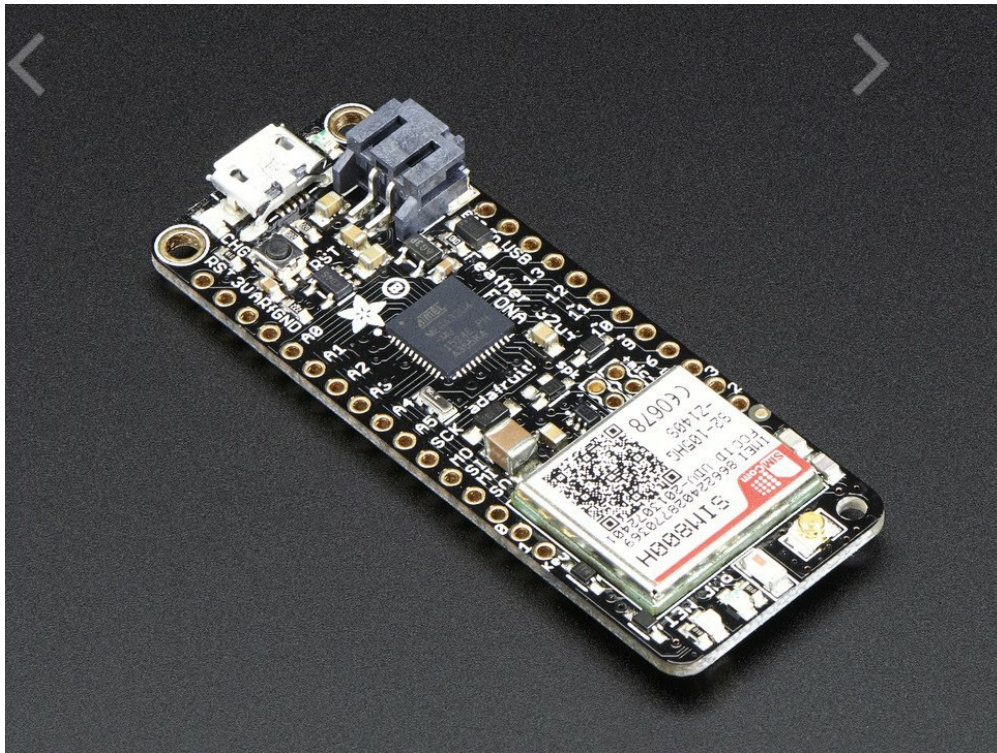




Adafruit Feather 32u4 FONA

PRODUCT ID: 3027

IN STOCK

1

ADD TO CART

- ☐ Also include 1 x [Header Kit for Feather - 12-pin and 16-pin Female Header Set](#) ()
- ☐ Also include 1 x [Stacking Headers for Feather - 12-pin and 16-pin female headers](#) ()
- ☐ Also include 1 x [Lithium Ion Polymer Battery - 3.7v 1200mAh](#) ()
- ☐ Also include 1 x [Lithium Ion Polymer Battery - 3.7v 500mAh](#) ()
- ☐ Also include 1 x [Short Headers Kit for Feather - 12-pin + 16-pin Female Headers](#) ()

1-9

10-99

100+

ADD TO WISHLIST

DESCRIPTION

TECHNICAL DETAILS



DESCRIPTION

Feather is the new development board from Adafruit, and like its namesake it is thin, light, and lets you fly! We designed Feather to be a new standard for portable microcontroller cores.

This is the **Adafruit Feather 32u4 FONA** - our take on an 'all-in-one' Arduino-compatible + audio/sms/data capable cellular with built in USB and battery charging. Its an Adafruit Feather 32u4 with a **FONA800 module**, ready to rock! [We have other boards and accessories in the Feather family, check'em out here.](#)

At the Feather 32u4's heart is at ATmega32u4 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 Flora](#). This chip has 32K of flash and 2K of RAM, with built in USB so not only does it have a USB-to-Serial program & debug capability built in with no need for an FTDI-like chip, it can also act like a mouse, keyboard, USB MIDI device, etc.

Since you'll be taking this on the road, we added a connector for any of our 3.7V Lithium polymer batteries and built in battery charging. **A 500mAh+ Lipoly battery is required for use**, it keeps the cellular module happy during the high current spikes. Plug the Feather into microUSB to charge at 500mA.

Here's some handy specs! Like all Feather 32u4's you get:

- Measures 2.4" x 0.9" x 0.28" (61mm x 23mm x 7mm) without headers soldered in
- Light as a (large?) feather - 8.2 grams
- ATmega32u4 @ 8MHz with 3.3V logic/power
- 3.3V regulator with 500mA peak current output
- USB native support, comes with USB bootloader and serial port debugging
- You also get tons of pins - 20 GPIO pins
- Hardware Serial, hardware I2C, hardware SPI support
- 7 x PWM pins
- 10 x analog inputs
- Built in 500mA lipoly charger with charging status indicator LED
- Pin #13 red LED for general purpose blinking
- Power/enable pin for the 3.3V regulator
- 4 mounting holes
- Reset button

Connect your Feather to the Internet or make phone calls with our trusted-and-tested FONA module. At the heart is a GSM cellular module (we use the latest SIM800) the size of a postage stamp. This module can do just about everything.

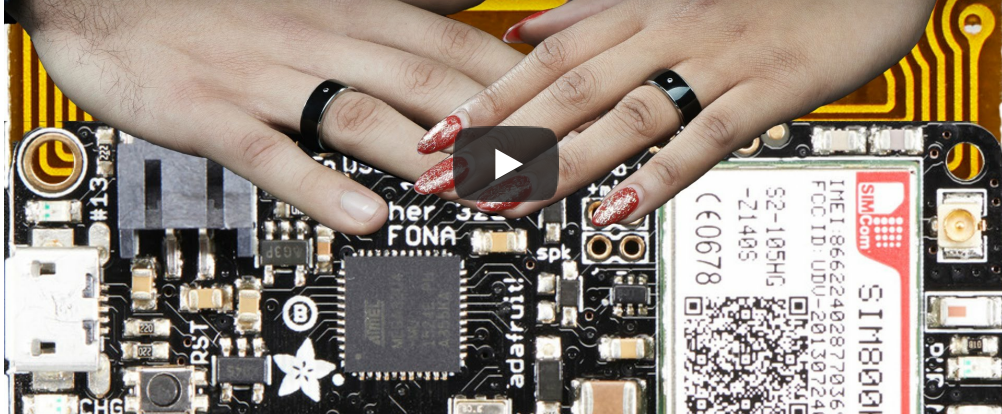
- Quad-band 850/900/1800/1900MHz - connect onto any global GSM network with any 2G SIM (in the USA, T-Mobile is suggested)
- Make and receive voice calls using an external 8Ω speaker + electret microphone
- Send and receive SMS messages
- Send and receive GPRS data (TCP/IP, HTTP, etc.)
- Scan and receive FM radio broadcasts (yeah, we don't exactly know why this was included but it works really well)
- AT command interface with "auto baud" detection
- Pair-able Bluetooth client interface with SPP (for controlling the module) as well as audio.

You will also need some required accessories to make Feather FONA work. These are not included!

- **SIM Card!** - [A 2G Mini SIM card is required to do anything on the cellular network. US AT&T no longer sells 2G SIMs and will shut off their 2G network, so for American customers we recommend any T-Mobile or reseller \(TING, SIMPLE mobile, etc\) that uses the T-Mobile network.](#)
- **Lipoly Battery** - 500mAh or larger! This [500mAh](#) battery, [or this 1200mAh](#) will work great.
- **MicroUSB cable** for charging the battery.
- **External Antenna** - [We like this slim sticker-type](#), which plugs right in and has a nice long cable to keep the RF away from the feather. Alternatively, [this straight SMA one](#) or this [right-angle SMA one will work](#) but you'll also need a [uFL to SMA adapter cable](#) so you can connect to your SMA antenna
- **External Mic & Speaker** - If you want to make phone calls, you'll also need [this electret mic](#) and [mini 8 ohm speaker](#)

[Check out our tutorial for all sorts of details, including schematics, files, IDE instructions, power management and more!](#)





TECHNICAL DETAILS

- 2.4" x 0.9" x 0.28" / 61mm x 23mm x 7mm
- Weight: 8.2g
- [Schematic](#), [Datasheets](#), [EagleCAD PCB files](#), and [Fritzing](#) available in the product tutorial



LEARN



[Adafruit Feather 32u4 FONA](#)

Take your Feather anywhere in the world



[3D Printed Star Trek](#)

[Communicator](#)

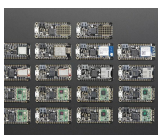
Build a real communicator with FONA feather!



[3D Printed Case for Adafruit](#)

[Feather](#)

A Multipurpose Enclosure for Adafruit Feather



[Introducing Adafruit Feather](#)

Boards of a Feather flock together!



[All the Internet of Things -](#)

[Episode Two](#)

Protocols

MAY WE ALSO SUGGEST...



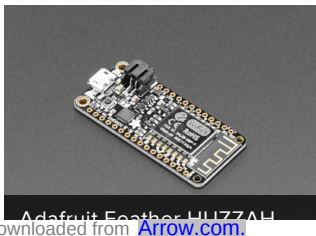
2.4GHz Mini Flexible WiFi



GSM 2G SIM Card from Ting



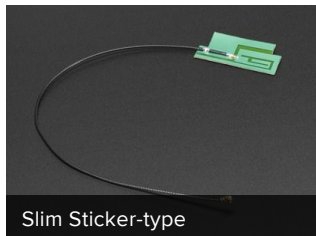
Adafruit Feather M0



Adafruit Feather HUZZAH



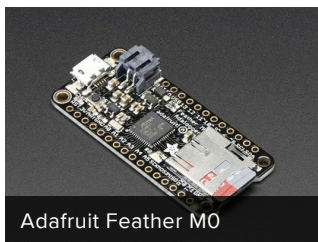
Adafruit Feather 32u4



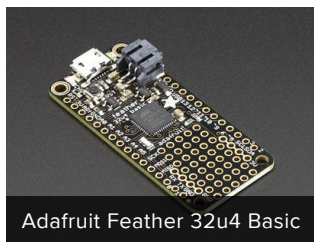
Slim Sticker-type



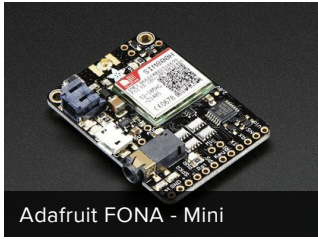
Adafruit Feather M0 WiFi -



Adafruit Feather M0



Adafruit Feather 32u4 Basic



Adafruit FONA - Mini



Adafruit Feather M0 Basic



Adafruit Feather 32u4

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"All labor that uplifts humanity has dignity and importance and should be undertaken with painstaking excellence" - [Martin Luther King, Jr.](#)



4.9 ★★★★★
Google
Customer Reviews