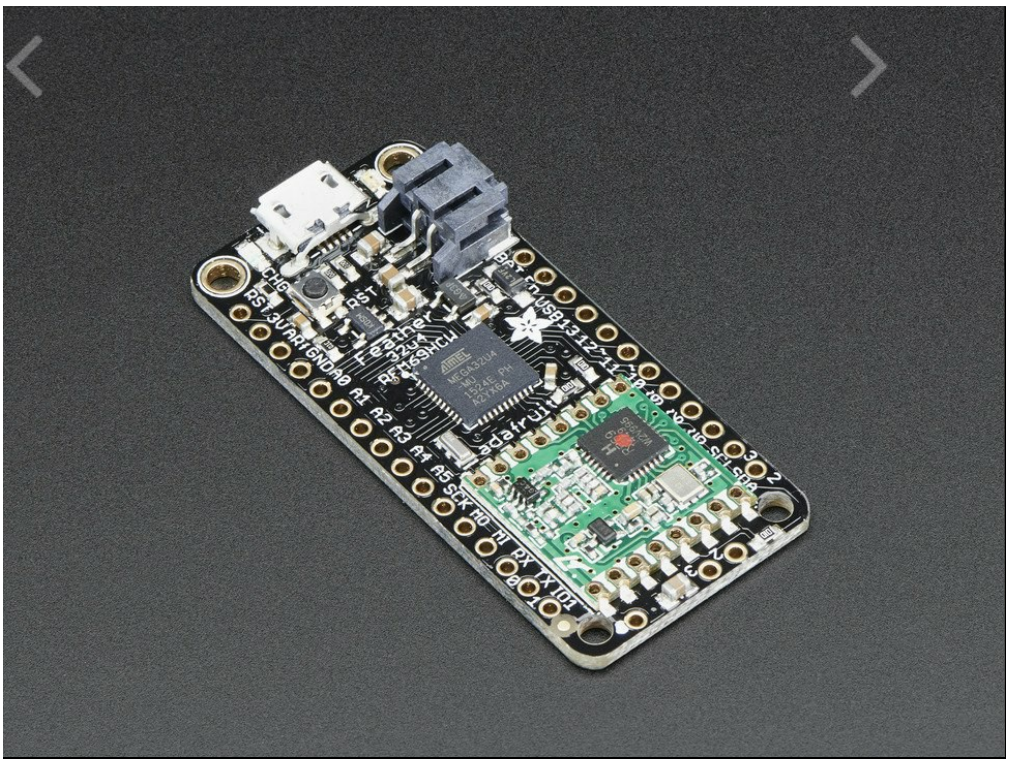
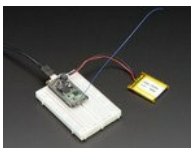




Adafruit Feather 32u4 with RFM69HCW Packet Radio - 433MHz - RadioFruit

PRODUCT ID: 3077

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 350mAh ()
- 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

This is the **Adafruit Feather 32u4 Radio (RFM69HCW) 433MHz.** We call these *RadioFruits*, our take on an microcontroller packet radio transceiver with built in USB and battery charging. Its an Adafruit Feather 32u4 with a 433 MHz radio module cooked in! Great for making wireless

networks that can go further than 2.4GHz 802.15.4 and similar, are more flexible than Bluetooth LE and without the high power requirements of WiFi. We have other boards in the Feather family, check'em out here.

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.We have other boards in the Feather family, check'em out here.

This is the 433 MHz frequency module version. We also sell a 900MHz version which can be used for either 868MHz or 915MHz transmission/reception. If you want much longer range, check out the LoRa 433MHz Feather

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.

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! Like all Feather 32u4's you get:

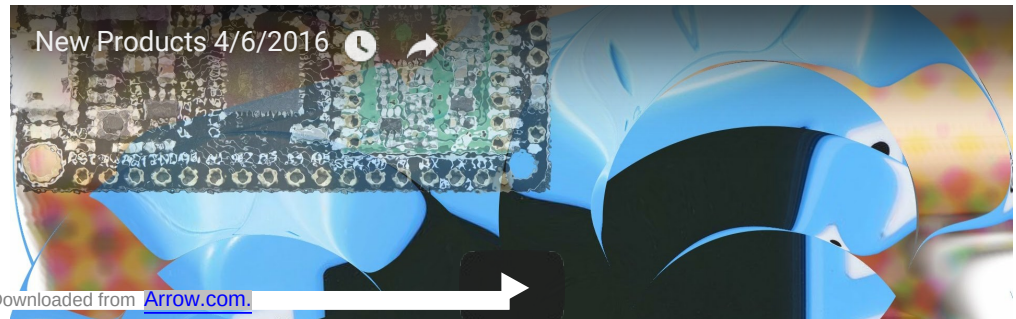
- Measures 2.0" x 0.9" x 0.28" (51mm x 23mm x 8mm) without headers soldered in
- Light as a (large?) feather - 5.5 grams
- ATmega32u4 @ 8MHz with 3.3V logic/power
- 3.3V regulator with 500mA peak current output
- USB native support, comes with USB bootloader and serial port debugging
- You also get tons of pins - 20 GPIO pins
- Hardware Serial, hardware I2C, hardware SPI support
- 8 x PWM pins
- 10 x analog inputs
- Built in 100mA lipoly charger with charging status indicator LED
- Pin #13 red LED for general purpose blinking
- Power/enable pin
- 4 mounting holes
- Reset button

This **Feather 32u4 Radio** uses the extra space left over to add a RFM69HCW 433 MHz radio module:

- SX1231 based module with SPI interface
- Packet radio with ready-to-go library
- Uses the amateur or license-free ISM band (ITU "Europe" license-free ISM or ITU "American" amateur with limitations)
- +13 to +20 dBm up to 100 mW Power Output Capability (selectable in software)
- Range of approx. 350 meters, depending on obstructions, frequency, antenna and power output
- Create multipoint networks with individual node addresses
- Encrypted packet engine with AES-128
- Simple wire antenna or spot for uFL connector

Comes fully assembled and tested, with a USB bootloader that lets you quickly use it with the Arduino IDE. We also toss in some headers so you can solder it in and plug into a solderless breadboard. You will need to cut and solder on a small piece of wire (any solid or stranded core is fine) in order to create your antenna. **Lipoly battery and USB cable not included** but we do have lots of options in the shop if you'd like!

Check out our tutorial for all sorts of details, including pinouts, power management, Arduino IDE setup, antenna options, and more!

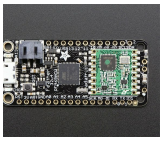


TECHNICAL DETAILS

- 51mm x 23mm x 8mm / 2.0" x 0.9" x 0.28"
- Weight: 5.5g
- EagleCAD PCB files, Fritzing objects, datasheets and more in the tutorial!

RoHS

LEARN

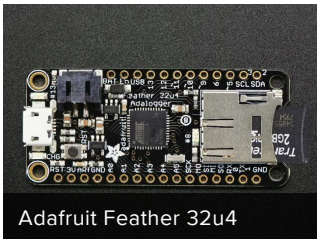


Adafruit Feather 32u4 Radio with RFM69HCW Module
Send your message far and wide

3D Printed Case for Adafruit Feather
A Multipurpose Enclosure for Adafruit Feather

Remote Effects Trigger Box
Build this powerful RF Feather-based controller to wirelessly trigger props, lights, effects, and more!

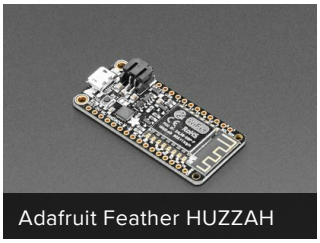
MAY WE ALSO SUGGEST...



Adafruit Feather 32u4

Adafruit WICED WiFi

Adafruit Feather M0



Adafruit Feather HUZZAH

Adafruit Feather 32u4

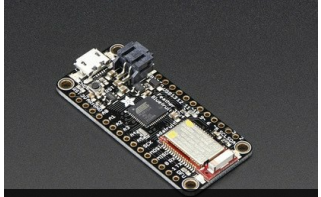
Adafruit Feather 32u4 Basic

Adafruit RFM69HCW

Adafruit Feather M0 WiFi -

Adafruit Feather M0

Adafruit Feather 32u4



Adafruit Feather 32u4

Adafruit RFM69HCW

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"Be quick, but don't hurry" - John Wooden