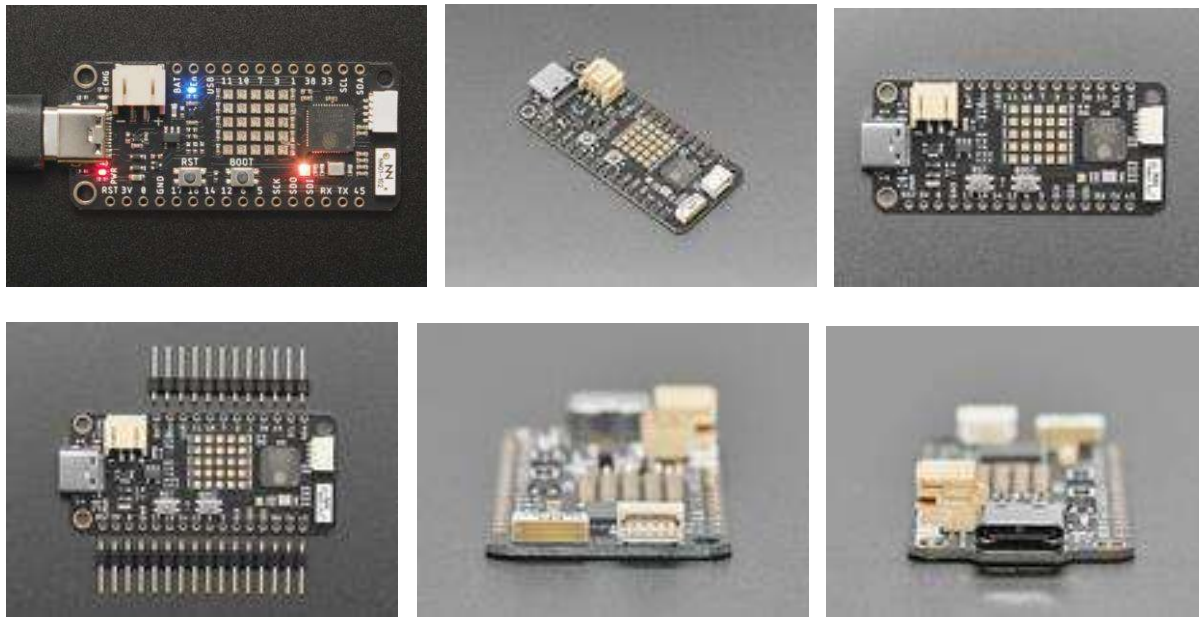




FeatherS2 Neo – Blingy RGB ESP32–S2 Feather Development Board – Unexpected Maker

Product ID: 5629



Description

Introducing the FeatherS2 Neo – The full-featured ESP32–S2-based development board in a Feather format from Unexpected Maker. The FeatherS2 Neo is a powerhouse, fully souped up with 4 MB of Flash memory (for firmware and file storage) and 2 MB of QSPI-based external PSRAM so you can have massive storage buffers.

The FeatherS2 Neo has onboard LiPo battery charging, 4MBs of flash, an on-board RGB LED that can be shut down to reduce deep sleep current and a generous 700mA output 3.3V regulator. It also comes with a 5x5 RGB LED Matrix that includes its own user-controlled LDO so display content won't affect other 3.3V functionality of the board.

FeatherS2 Neo also has 2MB of extra PSRAM on top of the 320K SRAM and 22 GPIO broken out.

This Feather also comes with our favorite connector – the STEMMA QT, a chainable I2C port that can be used with any of our STEMMA QT sensors and accessories. OLEDs! Inertial Measurement Units! Sensors a-plenty. All plug-and-play thanks to the innovative chainable

design: SparkFun Qwiic-compatible STEMMA QT connectors for the I2C bus so you don't even need to solder! Just plug in a compatible cable and attach it to your MCU of choice, and you're ready to load up some software and measure some light. Use any SparkFun Qwiic boards! Seeed Grove I2C boards will also work with this adapter cable.

FeatherS2 Neo ships with a UF2 bootloader and the latest version of CircuitPython that supports the ESP32-S2. Just plug your FeatherS2 Neo into your computer, and it will appear in your filesystem as a USB flash drive! Just copy your code over, or edit your code directly on the drive. Coding a microcontroller has never been easier!

As newer versions of CircuitPython are released, you can update as you require from circuitpython.org.

There is also early [ESP-IDF](#) and [Arduino](#) support if you prefer coding in C++.

YouTube link:

https://www.youtube.com/watch?t=382&v=LozkVvwtsa0&embeds_euri=https%3A%2F%2Fwww.adafruit.com%2F&feature=emb_imp_woyt

Technical Details

[Documentation and support available from Unexpected Maker](#)

Features & Specifications

- 32-bit 240 MHz single-core processor
- 4 MB SPI Flash
- 2 MB extra PSRAM
- 2.4 GHz Wi-Fi – 802.11b/g/n
- 3D antenna
- 700 mA 3.3 V LDO regulator
- Optimised power path for low-power battery usage
- LiPo battery management
- Power (red), Charge (orange) & IO13 (blue) LEDs
- 5x5 RGB LED matrix + User controller power
- 22x GPIO
- VBAT voltage sense on IO2
- VBUS detection on IO34
- USB-C
- RGB LED (PWR 39, DATA IO40)
- QWIIC/STEMMA connector
- Feather format
- [Pinout Diagram](#)
- [Schematic](#)