

SparkFun Artemis Module - Engineering Version

WRL-15376

The Artemis Module from SparkFun is a Cortex-M4F with BLE 5.0 running up to 96MHz and with as low power as 6uA per MHz (less than 5mW). This is the world's first module to bridge the market between hobbyists and consumer products. We've packaged all the power of a modern microcontroller into a module that is both extremely easy to use but is mass-market ready.

The flexibility of the Artemis module starts with our Arduino core. You can program and use the Artemis module just like you would an Uno or any other Arduino. Time to first blink is just 5 minutes away! We built the core from the ground up, making it fast and as light weight as possible.

Next is the module itself. Measuring 10x15mm the Artemis module has all the support circuitry you need to use the fantastic Apollo3 processor in your next project. We're proud to say the SparkFun Artemis module is the first open source hardware module with the design files freely and easily available here. We've carefully designed the module so that implementing Artemis into your design can be done with low-cost 2-layer PCBs and 8mil trace/space. Additionally, we've released three open-source-hardware example products that act as a starting point for your product.

Made in the USA at SparkFun's Boulder production line, the Artemis module is designed for consumer grade products. This truly differentiates the Artemis from its Arduino brethren. Ready to scale your product? The Artemis will grow with you beyond the Uno footprint and Arduino IDE. Additionally, the Artemis has an advanced HAL (hardware abstraction layer) allowing users to push the modern Cortex-M4F architecture to its limit.

To get you started as soon as possible this engineering version comes without an RF shield or FCC approvals. We will have tape and reel quantities on a fully certified module soon. With 1M flash and 384k RAM you'll have plenty of room for your code. The Artemis module runs at 48MHz with a 96MHz turbo mode available and with Bluetooth to boot!

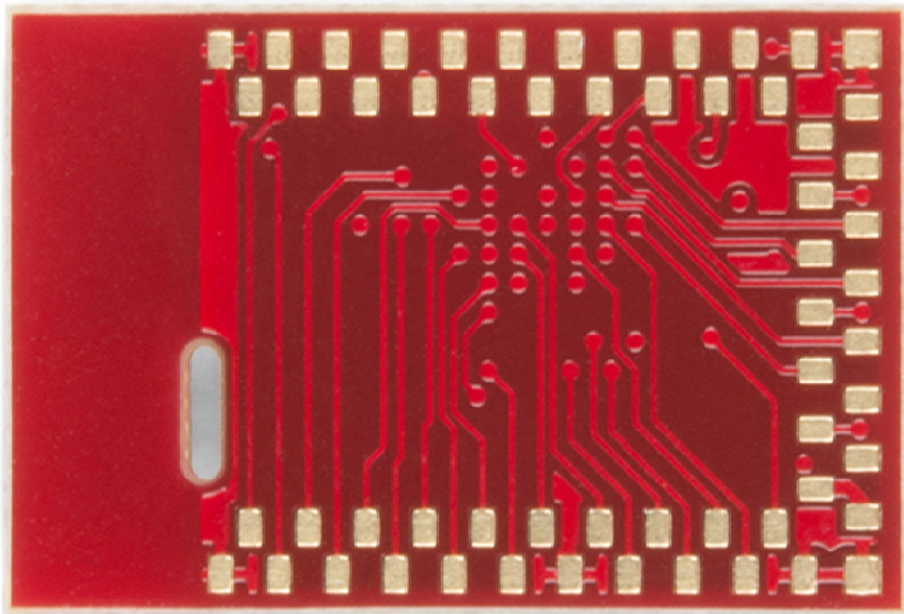
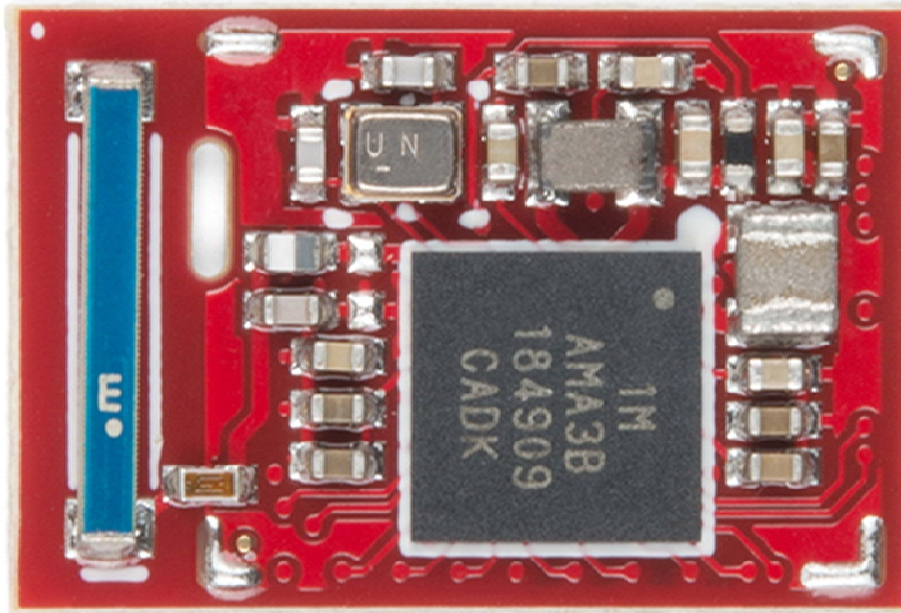
Be sure to checkout the various carrier boards we've assembled to make exploring the Artemis extremely easy. We encourage you to start from our designs and design the next amazing product!

Note: We are actively working on getting FCC and compliance certifications for the SparkFun Artemis Module. Once our certifications are complete we will be releasing a new version with the RF shield attached. *Please be aware* that this could happen as soon as a few weeks to a month so this version of the module is for those of you who can't wait and want to start using the SparkFun Artemis as soon as possible!

FEATURES

- 1M Flash / 384k RAM
- 48MHz / 96MHz turbo available
- 6uA/MHz (operates less than 5mW at full operation)
- 48 GPIO - all interrupt capable
- 31 PWM channels
- Built in BLE radio and antenna
- 10 ADC channels with 14-bit precision with up to 2.67 million samples per second effective continuous, multi-slot sampling rate
- 2 channel differential ADC
- 2 UARTs
- 6 I²C buses
- 6 SPI buses
- 2/4/8-bit SPI bus
- PDM interface
- I²S Interface
- Secure 'Smart Card' interface
- Dimensions: 10mm x 15mm





<https://www.sparkfun.com/products/15376/6-24-19>