

BlackBoard Artemis

SPX-15332

Think of the BlackBoard Artemis as just another Arduino... That has BLE. And one meg of flash. And runs at less than 1mA. Oh, and it can run TensorFlow models. Ya, that too. The BlackBoard Artemis takes the incredibly powerful Artemis module from SparkFun and wraps it up in an easy to use and familiar Uno footprint. We've written an Arduino core from scratch to make programming the Artemis as familiar as `Serial.begin(9600)`. Time-to-first-blink is less than five minutes.

The BlackBoard Artemis has the improved power conditioning and USB to serial that we've refined over the years on our BlackBoard line of products. A modern USB-C connector makes programming easy. A Qwiic connector makes I²C easy. The BlackBoard Artemis is fully compatible with SparkFun's Arduino core and can be programmed easily under the Arduino IDE. We've exposed the JTAG connector for more advanced users who prefer to use the power and speed of professional tools. We've added a digital MEMS microphone for folks wanting to experiment with always-on voice commands with TensorFlow and machine learning. We've even added a convenient jumper to measure current consumption for low power testing.

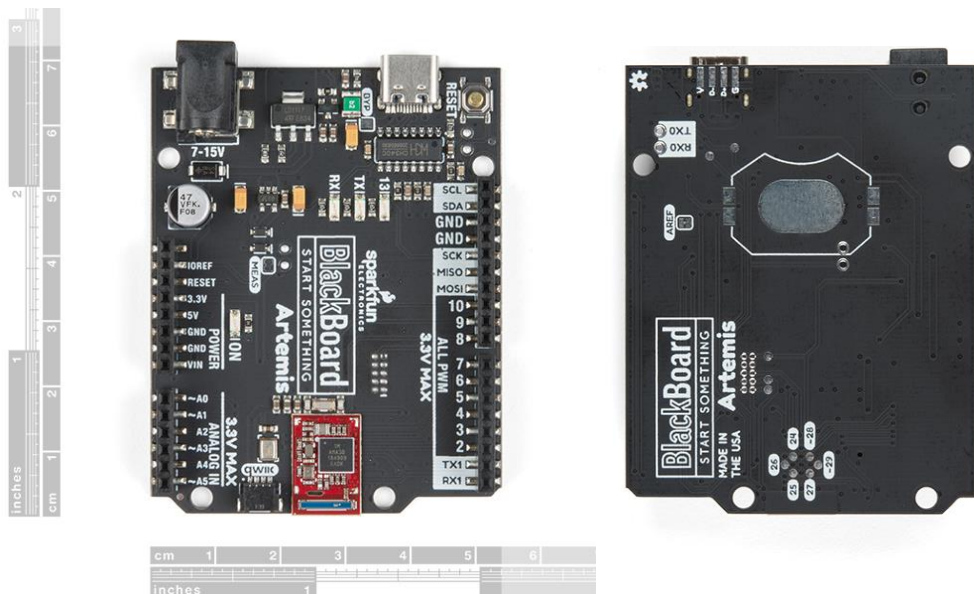
With 1M flash and 384k RAM you'll have plenty of room for your sketches. The Artemis module runs at 48MHz with a 96MHz turbo mode available and with Bluetooth to boot!

The SparkFun BlackBoard Artemis is a great platform to 'kick the tires' of this amazing module. If you're interested in testing out the full capabilities of the SparkFun Artemis module or if you're looking for more compact solution, be sure to check out our Mega and Nano versions of the Artemis line.

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

FEATURES

- Arduino Uno R3 Footprint
- 1M Flash / 384k RAM
- 48MHz / 96MHz turbo available
- 24 GPIO - all interrupt capable
- 21 PWM channels
- Built in BLE radio
- 10 ADC channels with 14-bit precision
- 2 UARTs
- 6 I²C buses
- 4 SPI buses
- PDM interface
- I²S Interface
- Qwiic Connector



<https://www.sparkfun.com/products/15332/6-24-19>