

# DEV-15442 RedBoard Artemis ATP

DEV-15442

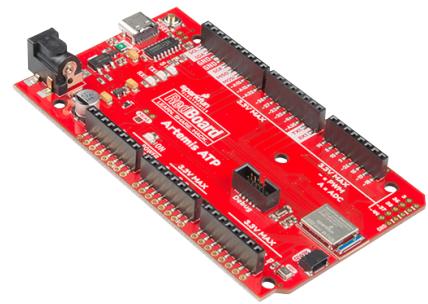
## Product Overview

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## Description

The RedBoard Artemis ATP is known as 'All the Pins' module as it offers a 48 GPIO and has a familiar mega-like form factor with Arduino mega footprint. This Artemis ATP board includes a modem USB-C connector making programming easy and a Qwiic connector to make I<sup>2</sup>C easy. The DEV-15442 RedBoard is fully compatible with SparkFun's Arduino core and can be programmed easily under the Arduino IDE. This Artemis ATP board includes a digital MEMS microphone that operates with always-on voice commands, TensorFlow, and machine learning. For low power testing, a convenient jumper is added to measure current consumption.



The RedBoard Artemis ATP module includes 1MB flash and 384k RAM and runs at 48MHz with a 96MHz turbo mode. This module comes with Bluetooth to boot and offers 10 ADC channels with 14-bit precision. The DEV-15442 module also comes with 2.67 million samples per second effective continuous, multi-slot sampling rate. This has 2 channel differential ADC, 2 UARTs, 6 I<sup>2</sup>C buses, 6 SPI buses, and operates at 6 $\mu$ A/MHz which is less than 5mW at full operation. The DEV-15442 RedBoard is designed with a built-in BLE radio and 1M Flash / 384k RAM.

## Features

- Arduino mega footprint
- 48 GPIO - all interrupt capable
- 31 PWM channels
- Built-in BLE radio
- 10 ADC channels
- 2 channel differential ADC
- 2 UARTs
- 6 I<sup>2</sup>C buses
- 6 SPI buses
- 2/4/8-bit SPI bus
- PDM interface
- I<sup>2</sup>S interface
- Secure 'Smart Card' interface
- Qwiic connector

## Specifications

- 1MB flash
- Apollo3 IC
- 384K RAM
- 48MHz turbo speed
- 96MHz burst speed

## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.in/new/sparkfun/sparkfun-dev-15442-redboard-artemis-atp/>