

## Argon Kit

The Argon is a powerful Wi-Fi enabled development kit that can act as either a standalone Wi-Fi endpoint or Wi-Fi enabled gateway for Particle Mesh networks. It is based on the Nordic nRF52840 and has built-in battery charging circuitry so it's easy to connect a Li-Po and deploy your local network in minutes.

The Argon is great for connecting existing projects to the Particle Device Cloud or as a gateway to connect an entire group of local endpoints.

All Particle Hardware is designed from the ground up to work with the Device Cloud; a powerful set of tools and infrastructure to build, connect, and manage your IoT fleet. The Device Cloud for Particle Mesh will be priced by network. All Particle customers get 10 free micro networks using a Wi-Fi or Ethernet gateway. A micro network is defined as a network with 10 total devices and a single gateway. More pricing details to be released soon. In the meantime, check out our documentation.

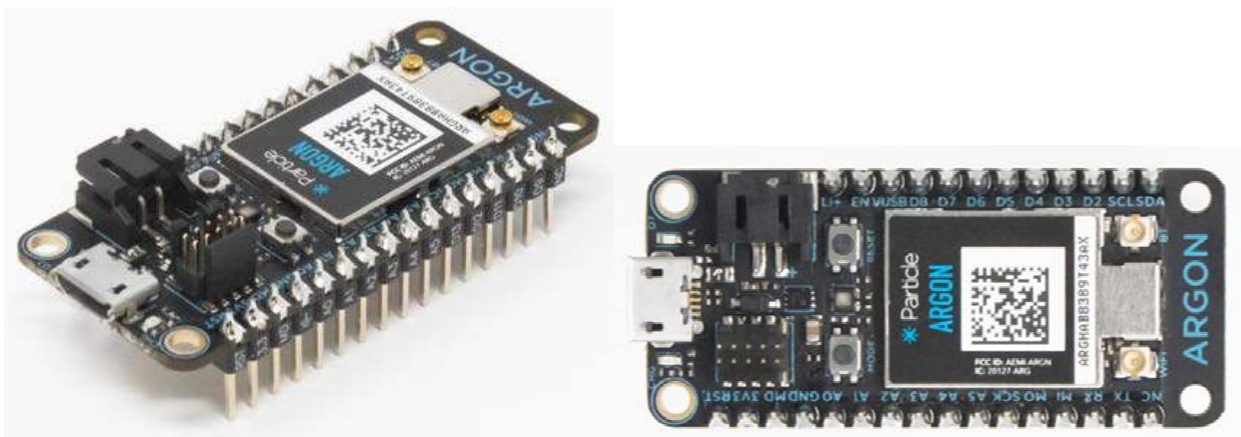
- **Contents:**

- Argon dev board
- Mini breadboard
- 2.4GHz flex antenna
- USB cable
- Starter project includes two resistors (220 ohm), one red LED, and one photodiode

- **Specs:**

- Espressif ESP32-D0WD 2.4G Wi-Fi coprocessor
  - On-board 4MB flash for ESP32
  - 802.11 b/g/n support
  - 802.11 n (2.4 GHz), up to 150 Mbps
- Nordic Semiconductor nRF52840 SoC
  - ARM Cortex-M4F 32-bit processor @ 64MHz
  - 1MB flash, 256KB RAM
  - IEEE 802.15.4-2006: 250 Kbps
  - Bluetooth 5: 2 Mbps, 1 Mbps, 500 Kbps, 125 Kbps
  - Supports DSP instructions, HW accelerated Floating Point Unit (FPU) calculations

- ARM TrustZone CryptoCell-310 Cryptographic and security module
- Up to +8 dBm TX power (down to -20 dBm in 4 dB steps)
- NFC-A tag
- On-board additional 2MB SPI flash
- 20 mixed signal GPIO (6 x Analog, 8 x PWM), UART, I2C, SPI
- Micro USB 2.0 full speed (12 Mbps)
- Integrated Li-Po charging and battery connector
- JTAG (SWD) Connector
- RGB status LED
- Reset and Mode buttons
- On-board 2.4GHz PCB antenna for Thread/BLE (does not support Wi-Fi)
- Two U.FL connectors for external antennas (one for Thread/BLE, another for Wi-Fi)
- Meets the Feather specification in dimensions and pinout
- FCC, CE, and IC certified
- RoHS compliant (lead-free)



Argon Datasheet <https://docs.particle.io/assets/pdfs/datasheets/argon-datasheet.pdf>

<https://store.particle.io/products/argon-kit> 10-22-18