# Avnet BCM4343W IoT Starter Kit

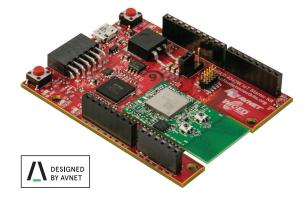
The Avnet BCM4343W IoT Starter Kit enables designers to easily prototype cloud-connected IoT designs and then rapidly move from development to production with a pre-certified wireless SoC module.

The Starter Kit features an Arduino<sup>™</sup> form-factor baseboard and pre-certified Avnet BCM4343W SoC module. This WiFi+BLE+MCU module combines an advanced Broadcom<sup>®</sup> combo 2.4GHz 802.11 b/g/n WiFi and Bluetooth<sup>®</sup> 4.1 SoC, together with 8Mb of SPI Serial Flash and an STM32F411 ARM<sup>®</sup> Cortex<sup>™</sup> M4 Microcontroller with 512KB Flash and 128KB SRAM. The baseboard includes access to the MCU's various peripherals via Arduino compatible headers as well as a 2x6 format peripheral connector, allowing connection to a range of expansion boards for sensors, motors, digital I/O and analog inputs.

Application development is supported by Broadcom's WICED<sup>™</sup> Software Development Kit (SDK), which includes connection to Amazon Web Services (AWS) through an intuitive, integrated development environment. The starter kit simplifies cloud connectivity for designers in a variety of IoT market segments, including industrial automation, building automation and smart home appliances.

## **FEATURES**

- Arduino™ form-factor baseboard
- Pre-certified Avnet BCM4343W SoC Module
  - WiFi + BLE + MCU module
  - STM32F411 ARM<sup>®</sup> Cortex<sup>™</sup> M4 MCU
  - 512KB Flash, 128KB SRAM, 8Mb SPI Serial Flash
  - Supports 802.11 b/g/n and Bluetooth 4.1 (with an upgrade path to Bluetooth 4.2)
  - Dual fractal PCB antennas supporting antenna diversity
- Arduino compatible shield expansion connectors
  - GPIO (4)
  - Analog inputs (3)
  - Two I2C ports (1 shared)
  - SPI port
  - Two UARTs (1 shared)
  - Supports 3.3V I/O only
- 2x6 Format peripheral expansion connector
  - I2C port (shared)
- USB-based JTAG debugger/programmer and serial UART port
- Reset push button switch
- User push button switch
- Two user LEDs
- UART, JTAG and WLAN activity LEDs
- Ambient light sensor
- USB Powered (5V), onboard high capacity 3.3V regulated supply



## **KIT INCLUDES**

- Avnet BCM4343W IoT Starter Board Powered by WICED and Amazon Web Services (AWS)
- Micro USB Cable
- Quick Start Card
- Downloadable WICED SDK, Getting Started Guide, and Kit Documentation

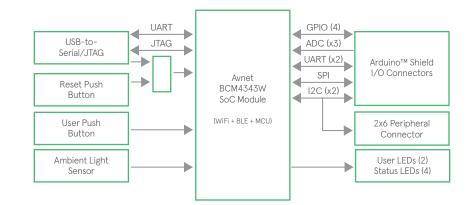
#### **TARGET APPLICATIONS**

- Industrial Automation
- Building Automation
- Smart Home Appliances
- IoT Enabled Sensors
- WiFi/BLE Gateway

To purchase this kit, visit www.cloudconnectkits.org

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## **BLOCK DIAGRAM**



## FEATURED MANUFACTURERS

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powered by

webservices

amazon





#### PARTS

| Part Number        | Description              | Resale      |
|--------------------|--------------------------|-------------|
| AES-EVB-BCM4343W-G | BCM4343W IoT Starter Kit | \$49.95 USD |

Countries Available for Purchase: Americas, EMEA, Asia, Japan

### CONTACT INFORMATION

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