

MODEL NAME

Afero Modulo-2 Secure WLAN Radio Development Board

AFERO MODEL NUMBER
Modulo-2

WLAN TYPE
802.11 b/g/n 1x1

WLAN RADIO FREQUENCIES
2.4 GHz

NUMBER OF WLAN ANTENNAS
One (1)

WLAN ANTENNA CONFIGURATION
Microstrip Monopole PCB antenna

WLAN ENCRYPTION
64-bit WEP, 128-bit WEP, WPA-PSK, WPA2-PSK

NUMBER OF BLUETOOTH ANTENNAS
One (1) shared with WLAN

BLUETOOTH ANTENNA CONFIGURATION
Shared with WLAN

MAXIMUM TRANSMIT POWER
+20dBm

RECEIVE SENSITIVITY
-85dBm

POWER CONSUMPTION
<500mW (average)

SECURITY FEATURES
Cryptographic co-processor with secure, hardware-based key storage

HOST INTERFACE
UART, SPI, 3.3V CMOS

INTERFACE PINS
Four (4) multifunction IOs

POWER (VCC)
5VDC +10/- 5%

OPERATING TEMPERATURE
0 to +85° C

STORAGE TEMPERATURE
-20 to +85° C

OPERATING HUMIDITY
10-85% RH, non-condensing

STORAGE HUMIDITY
0 to 90% RH, non-condensing

LED INDICATORS
One (1)

BUTTONS
One (1)

DIMENSIONS
61.5L x 17.8W x 11.5H mm

WEIGHT (EARTH ABL)
7g

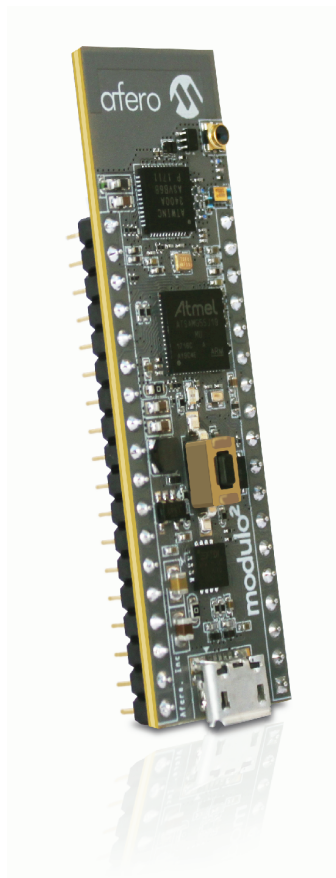
PACKAGE
600 mil DIP form factor

COMPLIANCE
FCC/IC, CE, TELEC

CERTIFICATION
Bluetooth SIG

Afero development starts here. The **Afero Modulo-2 development board** makes it easy to prototype and build connected products using the Afero IoT Platform. The Afero Platform gives your project secure Wi-Fi and Bluetooth® low energy connectivity, a mobile app, and cloud APIs in minutes.

The Heart of Modulo: Afero Secure Radio (ASR) Afero Modulo-2 contains the Afero Secure Radio reference design, with the authentication, encryption, and connection management software that ensures a secure and reliable connection to the Afero Cloud.



Flexible Form Factor Use Afero Modulo-2 standalone, or as a tool to enhance your MCU project. For hobbyists, Afero Modulo-2 attaches to a compatible Arduino® board (such as Uno) via the Afero Plinto shield, or to an Arduino Teensy development board directly.

Interface Options Afero Modulo-2 provides four GPIO lines of programmable, bidirectional, digital I/O; all four GPIOs can also be configured as analog inputs (ADC)*. To communicate with the MCU, the Afero Secure Radio Module uses the Afero Serial Protocol (afPro) over a Serial Peripheral Interface (SPI) bus or UART.

Quick & Easy Setup Use your smartphone to install the Afero mobile app, create a developer account, then scan the QR code on your Afero Modulo-2. You're ready to start your project.

Smart Devices Made Easy Once you design your project and decide what functions you want Afero Modulo-2 to control, use the Afero Profile Editor to step you through configuration and mobile app creation.

Afero builds integrated hardware, software, and cloud services for secure IoT connectivity and data analytics. The Afero Modulo-2 allows developers to take a “hands on” approach to developing with the Afero IoT Platform.

*Scheduled for release