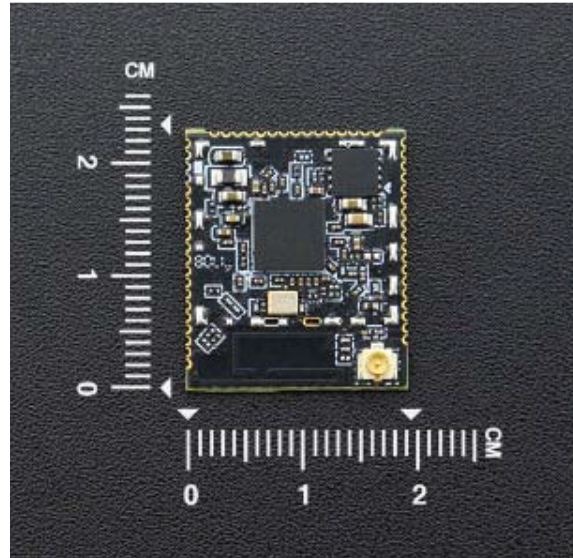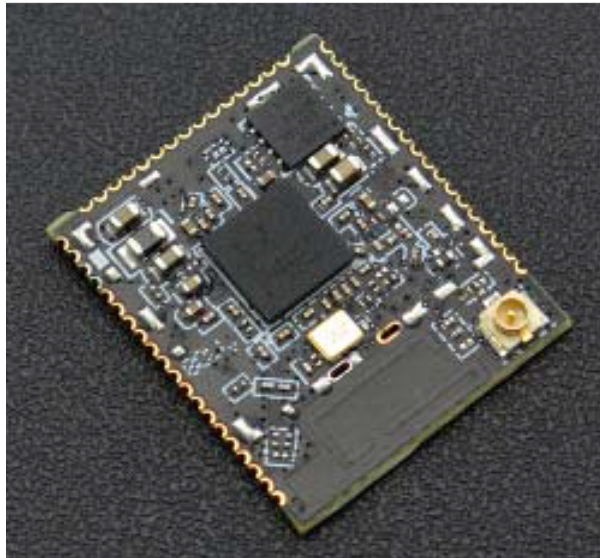# Realtek Ameba-RTL8195AM WiFi & NFC Module

SKU:DFR0477

INTRODUCTION

Ameba-RTL8195AM is an IoT (Internet of things) microcontroller developed by Realtek. It combines an ARM-Cortex M3 MCU, Wi-Fi and NFC (Near Field Communication) in a single chip. It provides high speed connectivity interface, such as USB 2.0 host, USB 2.0 device, SDMMC HS, SDIO device and MII/RMMII interfaces. It also provides a bunch of configurable GPIOs which are configured as digital peripherals for different applications and control usage. Moreover, the chip also has SPI, I2C, UART serial communication interfaces, and ADC & DAC analog interfaces.

Realtek, as one of the biggest suppliers of Wi-Fi solution, its Ameba-RTL8195AM offers trustworthy stability and reliability. Ameba-RTL8195AM, the first low power consuming IoT chip integrates Ethernet and NFC. It is a cheap and reliable choice for IoT developers.

FEATURES

- Support for Arduino and Micropython programing

- Supports 802.11 b/g/n 1x1 Wi-Fi

- Supports NFC read/write

- 10/100 Ethernet MII/ RMII/RGMII interface

- Supports USB OTG

- Supports SDIO device/SD card controller

- Hardware: SSL engine

- 30 x GPIO(Maximum)

- Supports 2 x SPI master-slave interface communication

- Supports 3 x UART interface (2x HS-UART & 1x log UART)

- Supports 2 x I2C master-slave interface communication

- Supports 2 x I2S/PCM master-slave interface communication

- Supports 4 x PWM

- Supports 2 x ADC

- Supports 1 x DAC

- Supports ultra-low power consumption

- Fast response (up to 400KHz)

SPECIFICATION

- Operating Voltage: 3.0V~3.3V

- Micro-Controller: 32-bit ARM Cortex M3（166MHz）

- Antenna Connector: U.FL

- ROM/RAM/Flash: 1MB ROM，2MB SDRAM，512KB SRAM

- Wireless Network Mode: station / softAP/ SoftAP+station

- Data rate: 802.11g 54Mbps (Max.), 802.11n 150Mbps (Max.)

- Operating Temperature range: -20℃~+85℃

- Dimensions: 19 x 24mm/0.75 x 0.94(inches)

SHIPPING LIST

Realtek Ameba-RTL8195AM WiFi & NFC Module x1