

INDUSTRIAL PRODUCT DATASHEET

EMB1082 BLE Module - Support MXMESH

EMB1082 BLE Module: Compact, powerful BLE 5.0 solution with ARM Cortex-M4F for diverse IoT applications.

SKU

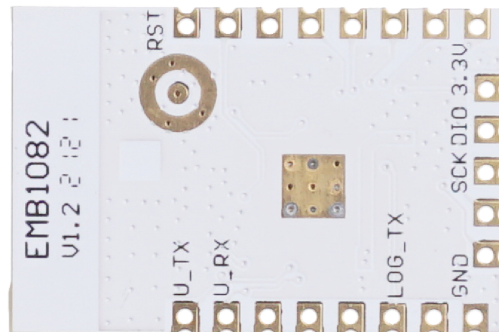
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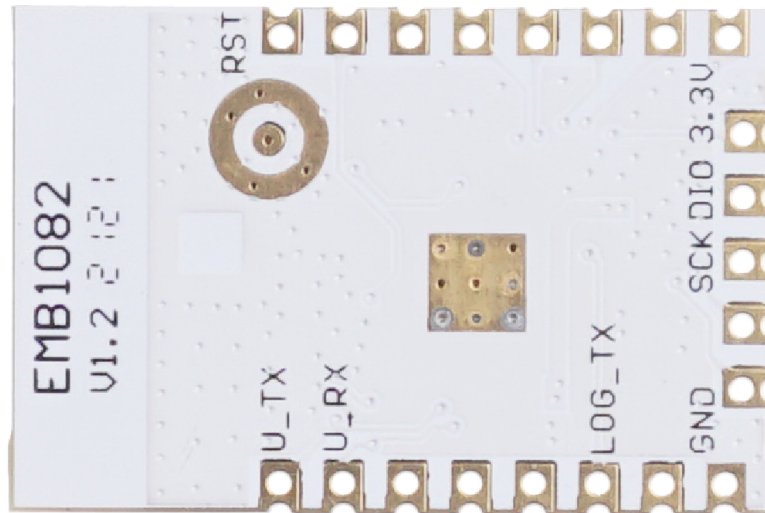
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PRICE

\$1.79(Excl. VAT)



Overview



The EMB1082 from MXCHIP is an embedded BLE 5.0 module integrating an ARM Cortex-M4F core with 160KB RAM, 512KB Flash, and support for external flash up to 8MB. Featuring half-hole/DIP packaging, PCB or IPEX antenna options, and an operating temperature range of -40°C to +105°C, it targets intelligent lighting, healthcare, household appliances, electricians, and portable devices.

Key Features

EMB1082

Description

EMB1082 is an embedded BLE module by MXCHIP. It integrates a BLE5.0 single mode SoC, including ARM Cortex-M4F Core, BLE/2.4G Radio, 160KB RAM, 512KB Flash and rich peripherals. EMB1082 uses half-hole package which is easy for soldering, and also DIP package.

Features

- **Powerful CPU** : ARM Cortex-M4F Core 20MHz with 160KB RAM and 512KB Flash in chip, and support external flash up to 8Mbyte.
- **Advanced Bluetooth** : Support Bluetooth 5.0 (BLE single mode). Support BLE Master/ Slave mode
- **Wide Working Voltage**: DC 3.0-3.6V
- Maximum transmission rate up to 72.2 Mbps with 20 MHz bandwidth.
- Wi-Fi Features

Parameter

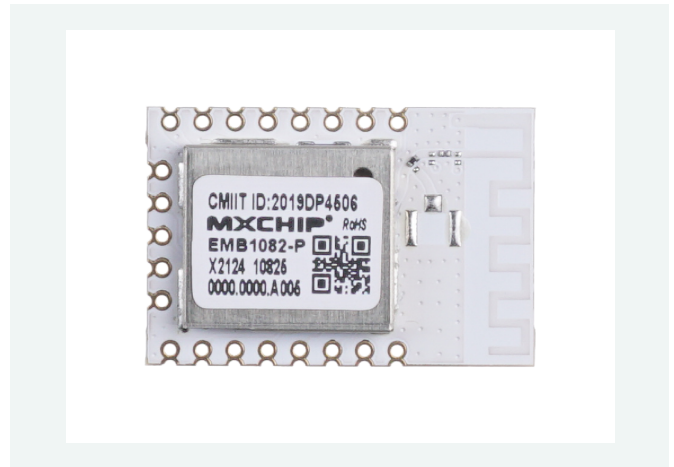
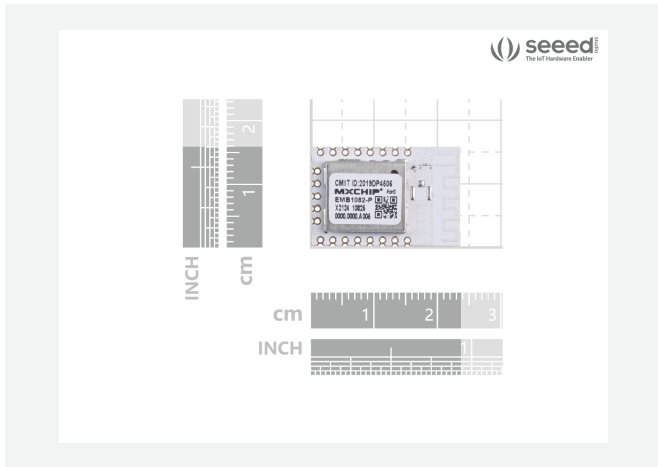
- **Operating Temperature** : -40°C to +105°C
- **Operating Voltage**: 2.7V~3.3V
- **Antenna**: PCB antenna or IPEX connector (Optional)
- **Length*Width*Height**: 2.400*2.600*0.300(cm)
- **Weight**: 0.003kgs

Application Scenario

- Intelligent Lighting
- Health Care
- Intelligent Household Appliances
- Intelligent Electricians
- Portable Devices

Hardware Definition

Product Gallery



Compliance & Logistics



HSCODE	8517709000
USHS CODE	8517620090
UPC	
EUHSCODE	8517180000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- <https://www.seeedstudio.com/EMB1082-BLE-Module-p-5015.html>
- [EMB1082 BLE Module Datasheet](#)

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