Sample Description: mCookie Module BLE Upload

Model(s): MCA021, MDA021

mCookie-BLE Upload is a BT4.0 Communication module, To achieve serial transmission function with Mobile Phone APP.

# **Specification**

- Way of Communication: Serial port transmission and the default serial port is D0(RX), D1(TX);
- Power Supply: +3.3V 50mA;
- Bluetooth Protocol: Bluetooth Specification V4.0 BLE;
- Service Support: Central & Peripheral UUID FFE0, FFE1;
- Frequency: 2.4GHz ISM band;
- Way of Modulation: GFSK(Gaussian Frequency Shift Keying);
- Transmission Rate:
  - Asynchronous: 6 kbps;
  - Synchronous: 6 kbps;

## **Development**

### **Serial Port Communication Requirements**

- Default serial configuration is:
  - o Baud rate: 57600
  - o No check
  - o Data bit 8
  - o Stop bit 1
- For Arduino IDE serial monitor:
  - Set to: "\r\n", "57600baud"
- For other serial debugging software:
  - o Baud rate 9600
  - $\circ \quad \text{No check} \\$
  - o Data bit 8
  - Stop bit

After the module named Microduino of The UUID of Mobile Phone APP connection Service is FFF0. The UUID of Characteristic is FFF6, Then can carry on the serial port to pass on and pass the function;

## **FCC Statement**

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

#### FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2AKMKMCA021 Or Contains FCC ID: 2AKMKMCA021"

When the module is installed inside another device, the user manual of the host must contain below warning statements;

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

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

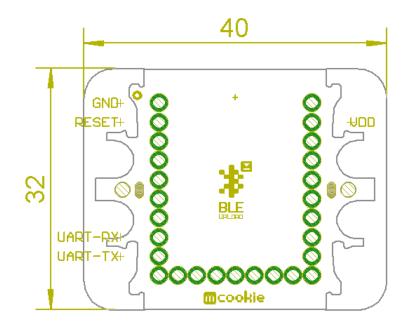
The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product

Any company of the host device which install this modular with limit modular approval should perform the test of radiated emission

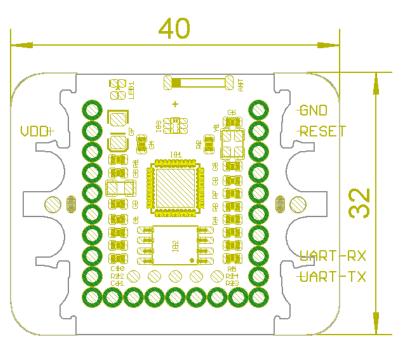
and spurious emission according to FCC part 15C : 15.247 and 15.209 requirement, Only if the test result comply with FCC part 15C : 15.247 and 15.209 requirement, then the host can be sold legally.

#### MCA021:

A side:

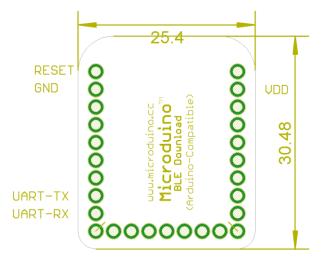


B side:



MDA021:

A side:



B side:

