

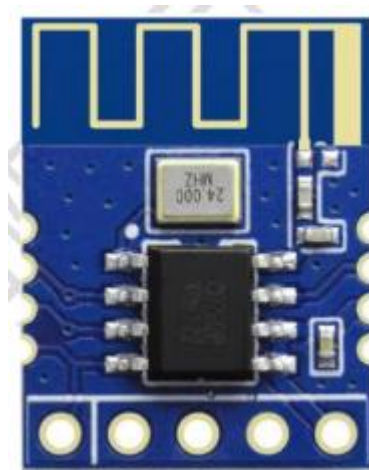
W02 Bluetooth BLE Module Datasheet

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1. Overview

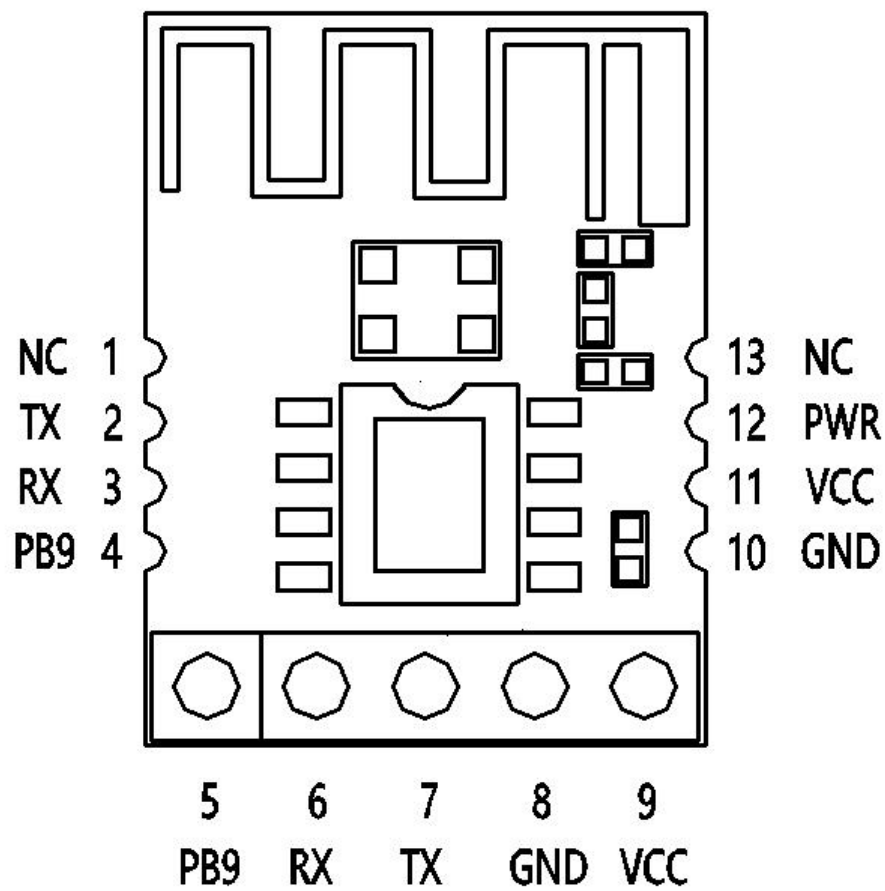
W02 is a small size Bluetooth low energy BLE module . The module supports Bluetooth BLE 5.2 protocol, with excellent stability and ultra-low power consumption. power consumption.



2. Product Features

Classification	Product features	Describe
Bluetooth	Model	W02
	Bluetooth protocol	BLE 5.2
	Working frequency	2.4GHz
	Transmit power	-20 to 8 dBm
	Receive sensitivity	-97dBm
	Modulation	GFSK modulation
	Air transfer rate	250kbps / 1Mbps / 2Mbps
	Antenna	PCB Antenna
	Communication distance	100m
Hardware	CPU	Embedded 32-bits
	Peripheral interface	UART
	Operating voltage	2V ~ 5V
	Operating temperature	-40℃ ~ +85℃
	Size	13mm X 17mm
Software	UUID service	FFE0 (Service UUID)
		FFE1 (write / notify UUID)
		FFE2 (write UUID)
	Serial port transparent transmission rate	BLE 35KB/S
	Function	BLE transparent transmission

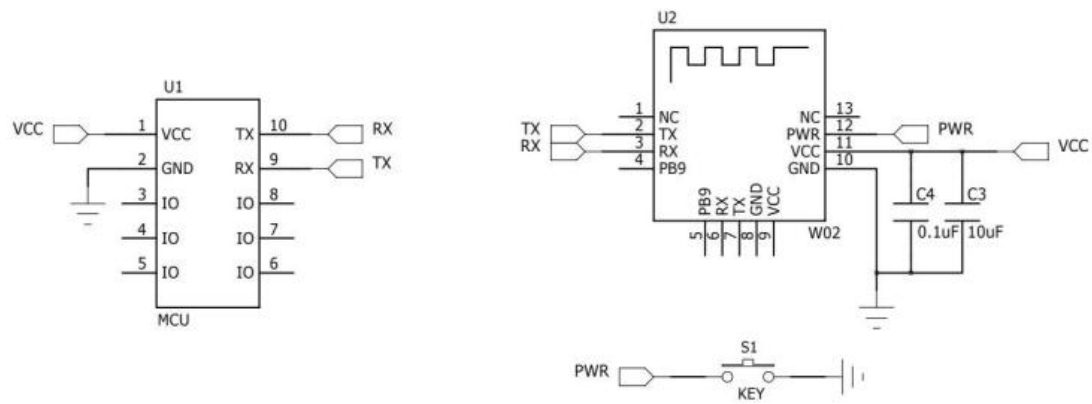
3. Pin Definition



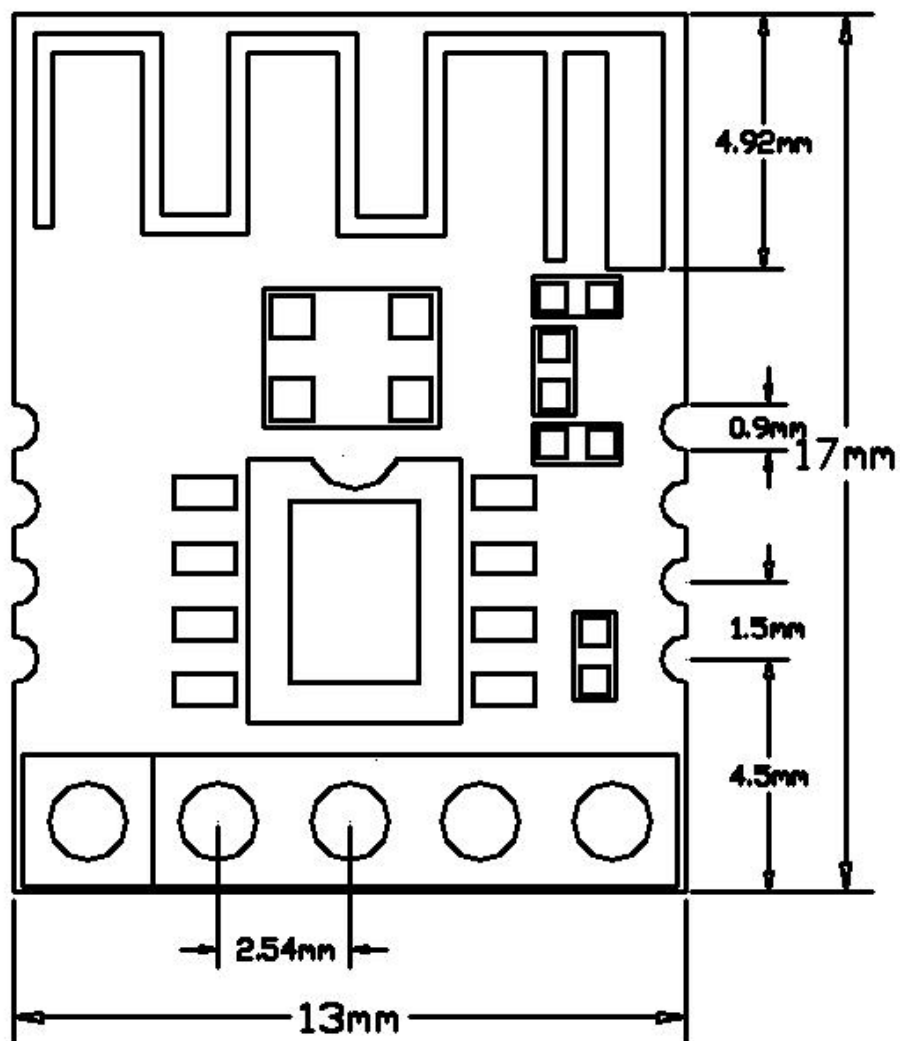
Foot layout (bottom view)

Pin	Name	Type	Function
1	NC	NC	NC
2	TX	O	TXD (2V-3.6V)
3	RX	I	RXD (2V-3.6V)
4	PB9	I/O	Programmable input and output pins
5	PB9	I/O	Programmable input and output pins
6	RX	Power	RXD (2V-3.6V)
7	TX	O	TXD (2V-3.6V)
8	GND	GND	GND
9	VCC	Power	Power (2- 5V)
10	GND	GND	GND
11	VCC	Power	Power (2- 5V)
12	PWR	I	KEY
13	NC	NC	NC

4. Application schematic diagram



5. Dimensions



FCC Warning

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.

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 and, if not installed and used in accordance with the instructions, 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.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.