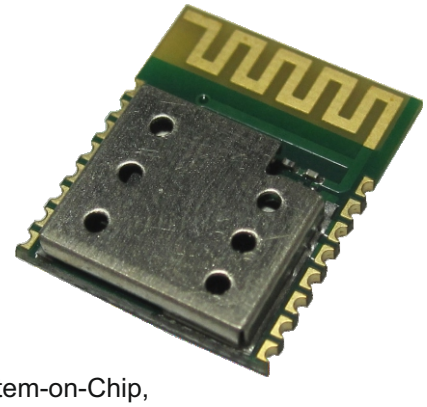
Radio Controlli
Wireless Modules



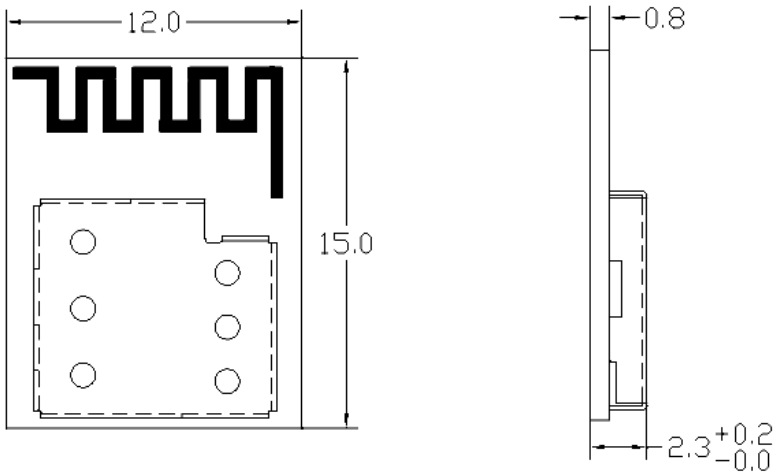
RC-CC2640-B

based on TI CC2640

IoT Bluetooth Module based on CC2640 Texas Instrument

RC-CC2640-A is designed based on CC2640F128 Bluetooth Smart (BLE4.1) System-on-Chip, fully supports the single mode Bluetooth Low Energy operation.
The module provides the ability to either put your entire application into the integrated ARM Cortex M3 microcontroller, or use the module in Network Processor mode in conjunction with the microcontroller of your choice.

Mechanical Drawing and dimensions



Unit : mm

Feature

- Bluetooth4.1, Single mode compliant-Supports master and slave modes

- Build in CC2640F128 Bluetooth Smart System-On-Chip

- RF Performance : TX Power：+5dBm RX Sensitivity：-87dBm -97dBm

-Ultra low current consumption

Transmit current(0dBm)：6.1mA
Receiving current：5.9mA

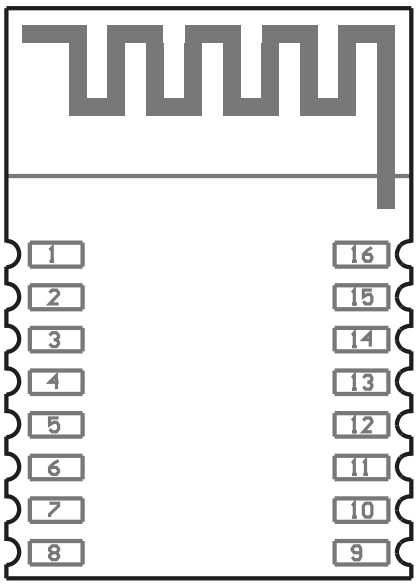
-Size: 12mm×15mm×2.5mm

1.0 Technical Specifications

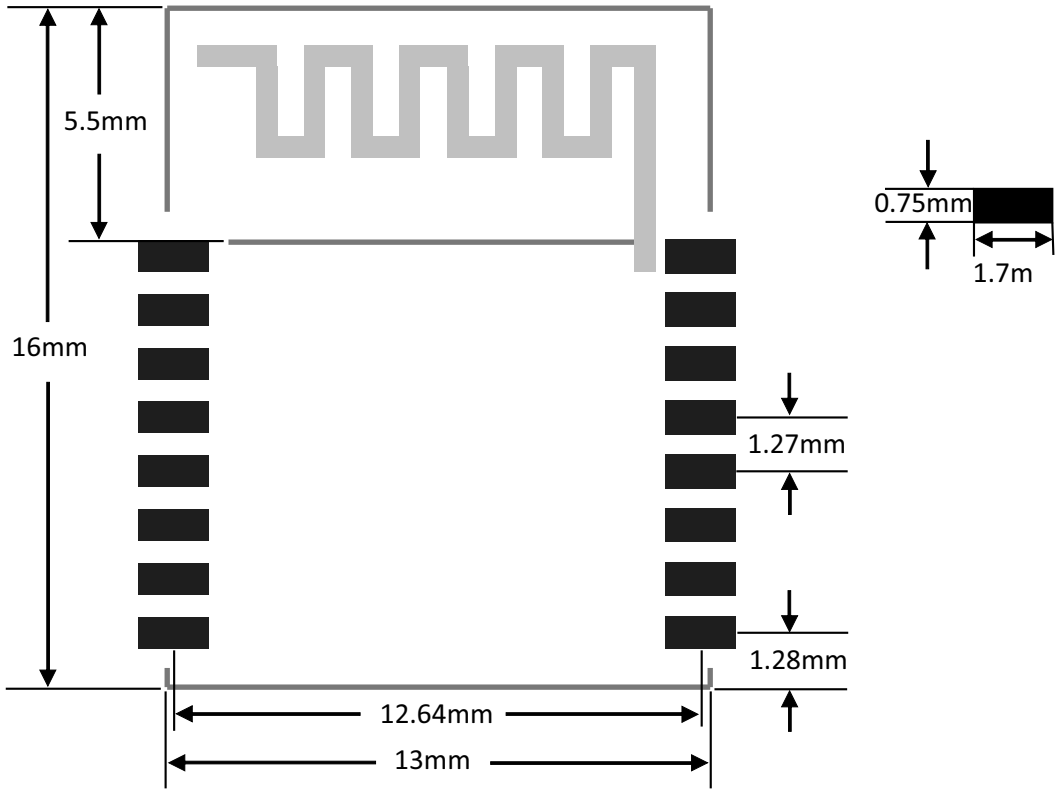
Characteristics		MIN	MAX	UNIT
Operation Voltage		1.8	3.8	VDC
Operating Temperature		-40	85	°C
Current Consumption	BLE Advertising (Interval 100mS)	0.23		mA
Current Consumption	BLE Connection (Interval 30mS)	0.35		mA
Current Consumption	BLE Connection (Interval 50mS)	0.22		mA
Current Consumption	BLE Connection (Interval 100mS)	0.12		mA
Current Consumption	BLE Connection (Interval 500mS)	0.02		mA
Current Consumption	Sleep Mode		1	µA
TX Power		- 21	5	dBm
RX Sensitivity		- 87	-97	dBm
Storage Temperature		- 40	150	°C

2.0 Terminal description

Pads	Name	Description
1	DIO 0	GPIO, Sensor Controller, High drive capability
2	DIO 1	GPIO, Sensor Controller, High drive capability
3	DIO 2	GPIO, Sensor Controller, High drive capability
4	JTAG-TMSC	JTAG TMSC
5	JTAG-TCKC	JTAG TCKC
6	DIO 3	GPIO, High drive capability, JTAG_TDO
7	DIO 4	GPIO, High drive capability, JTAG_TDI
8	VDD	1.8V to 3.8V main chip supply
9	RESET_N	Reset, active low (No internal pullup)
10	DIO 5	GPIO, Sensor Controller, Analog
11	DIO 6	GPIO, Sensor Controller, Analog
12	DIO 7	GPIO, Sensor Controller, Analog
13	GND	Ground
14	GND	Ground
15	DIO 8	GPIO, Sensor Controller, Analog
16	DIO 9	GPIO, Sensor Controller, Analog



3.0 Recommended pcb layout



4.0 Soldering reccomendations