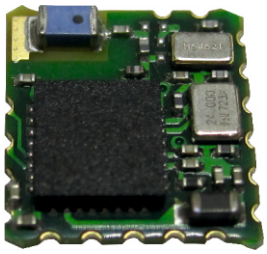
Radio Controlli
Wireless Modules



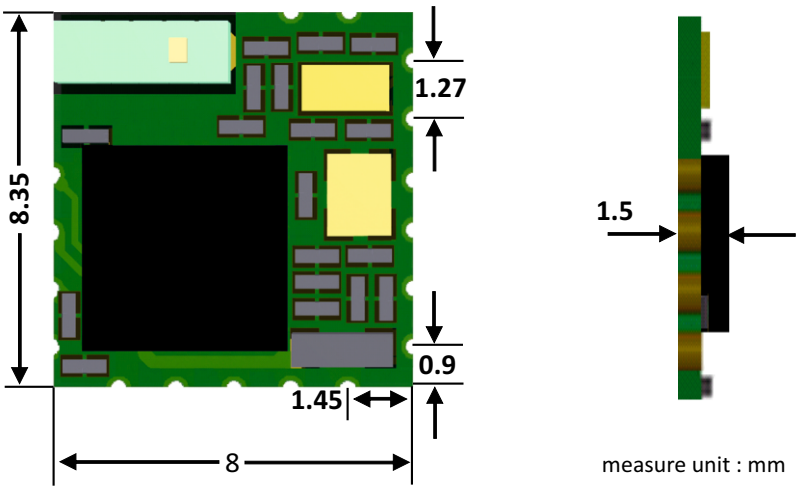
RC-CC2640-A

based on TI CC2640

IoT Bluetooth Module based on CC2640 Texas Instrument

RC-CC2640-A is designed based on CC2640R2FRSMR Bluetooth Smart (Bluetooth 4.2 and Bluetooth 5.0) 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



Feature

- Bluetooth4.2, Single mode compliant-Supports master and slave modes

- Build in CC2640R2FRSMR Bluetooth Smart System-On-Chip

- RF Performance : TX Power：+2dBm RX Sensitivity：-87 -94dBm

-Ultra low current consumption

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

-Size: 8mm×8.35mm×1.5mm

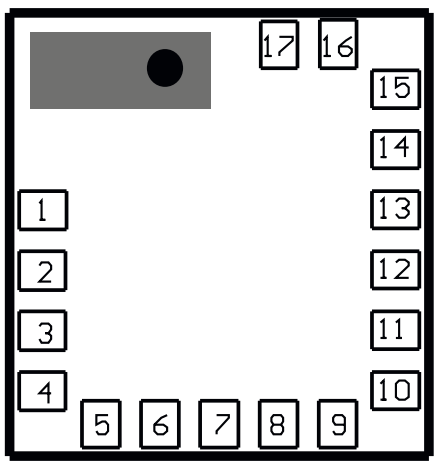
Radiocontrolli s.r.l refuses any responsibility for irregular uses of the devices and for any possible lack or inaccuracy of the data and reserves the right to change in whole or in part these information without notice.

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		- 20	2	dBm
RX Sensitivity		- 87	-94	dBm
Storage Temperature		- 40	150	°C

2.0 Terminal description

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



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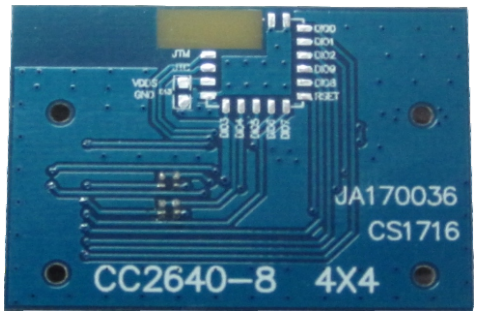
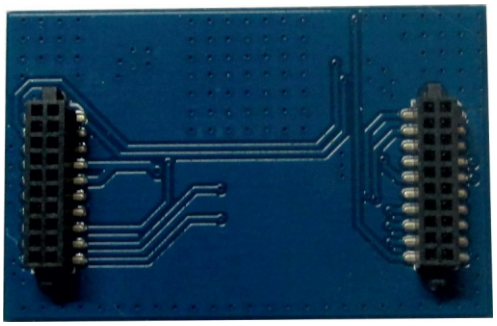
RC-CC2640-A Adapter board

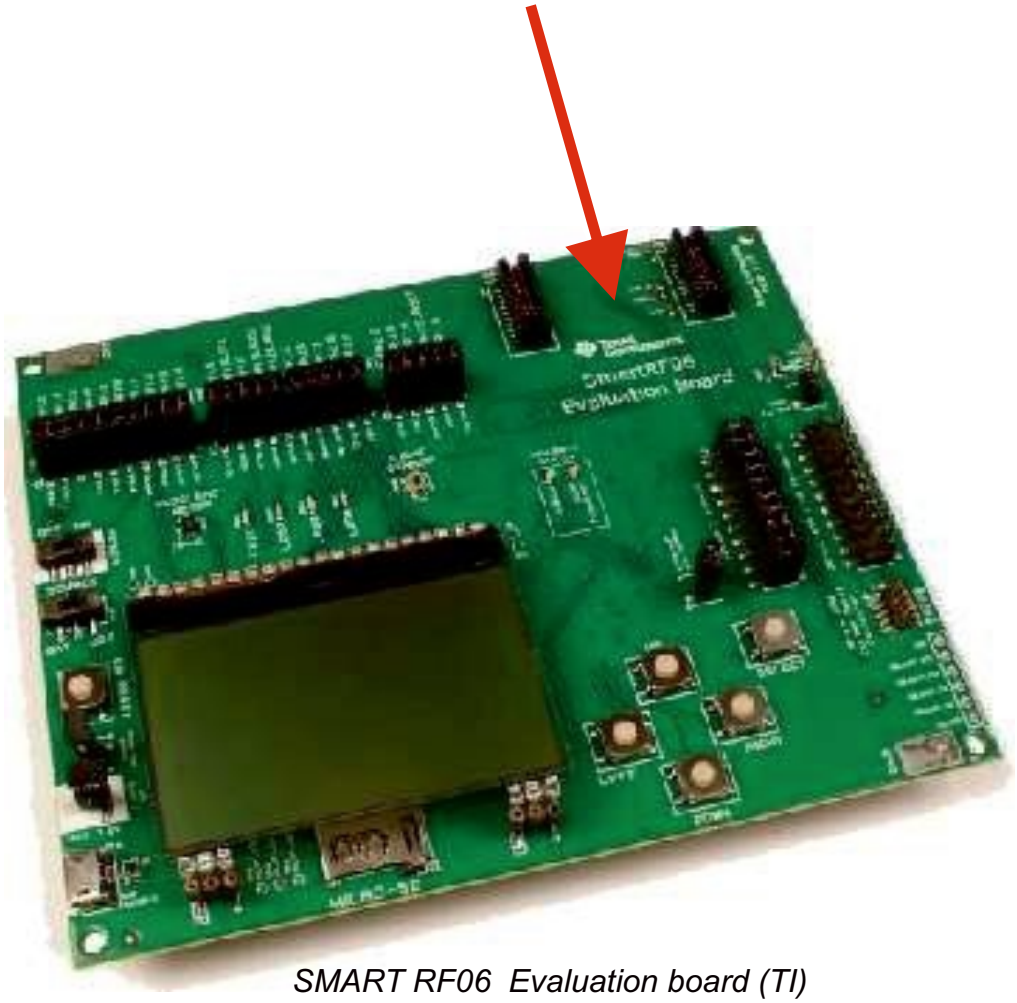
To make immediate usable the RC-CC2640-A module with TI development systems has been realized the following board adapter.



Adapter board front



Adapter board rear



SMART RF06 Evaluation board (TI)

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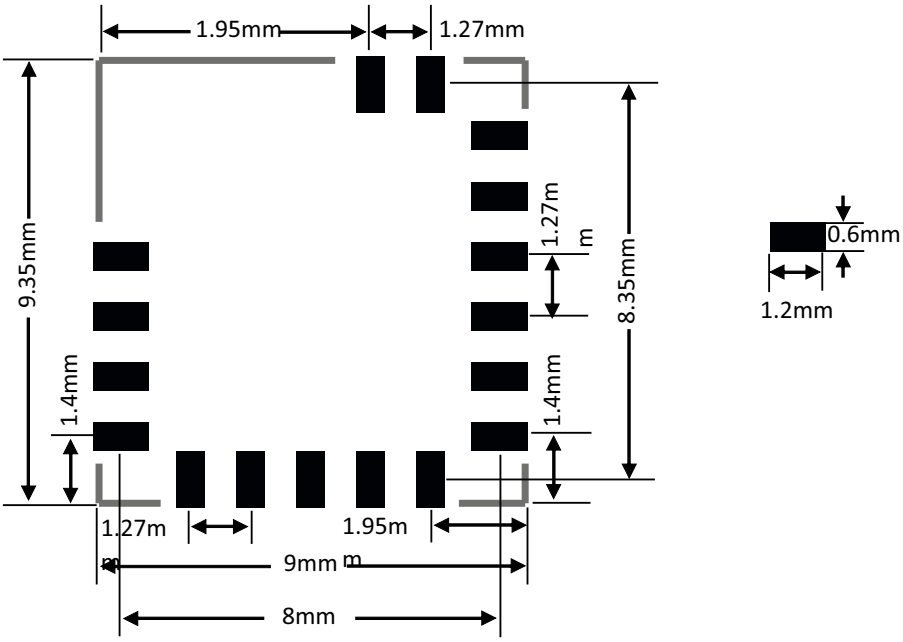
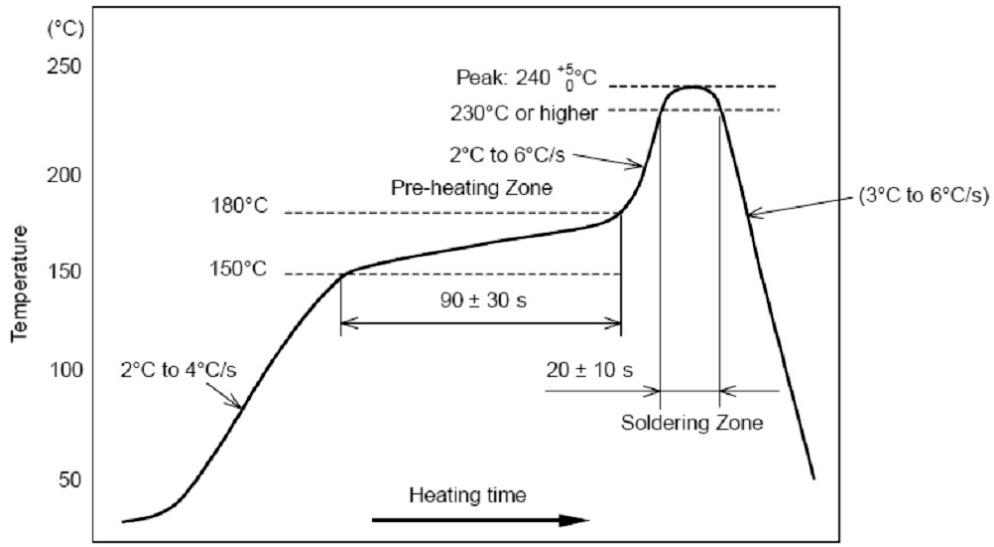
3.0 Recommended pcb layout



4.0 Soldering reccomendations



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