



AN2640R2SA-B Module Datasheet V1.0

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Description

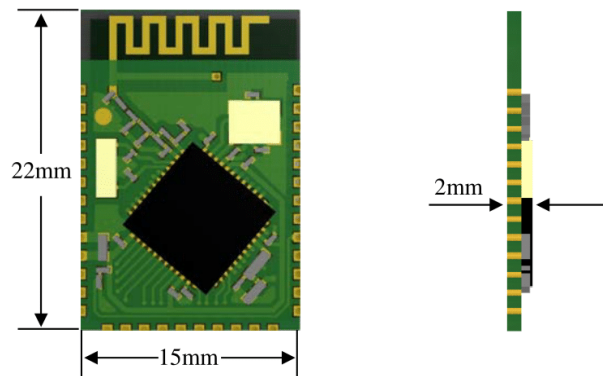
AN2640R2SA-B Module is designed based on CC2640R2F Bluetooth Smart (BLE4.2 and BLE5) System-on-Chip, fully supports the single mode Bluetooth Low Energy operation. The module contains a 32-bit ARM Cortex-M3 core that runs at 48 MHz as the main processor and a rich peripheral feature set that includes a unique ultra-low power sensor controller. The power and clock management and radio systems of the CC2640R2F wireless MCU require specific configuration and handling by software to operate correctly, which has been implemented in the TI-RTOS.



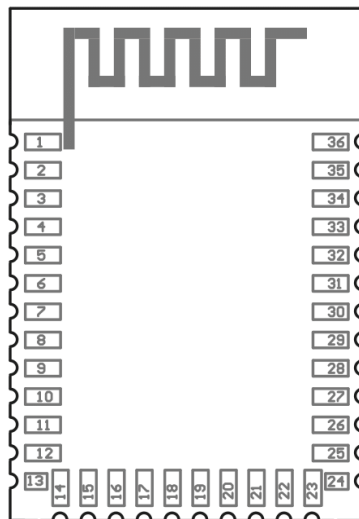
Features

1. Bluetooth4.1, Single mode compliant-Supports master and slave modes
2. Built in CC2640F128 Bluetooth Smart System-On-Chip
3. RF Performance
 - TX Power: +5dBm
 - RX Sensitivity: -87dBm ~ -96dBm
4. Ultra low current consumption
 - Transmit current(0dBm): 6.1mA
 - Receiving current: 5.9mA
5. Size: 15 mm×22 mm×2.0mm

Mechanical Drawing



Terminal Description

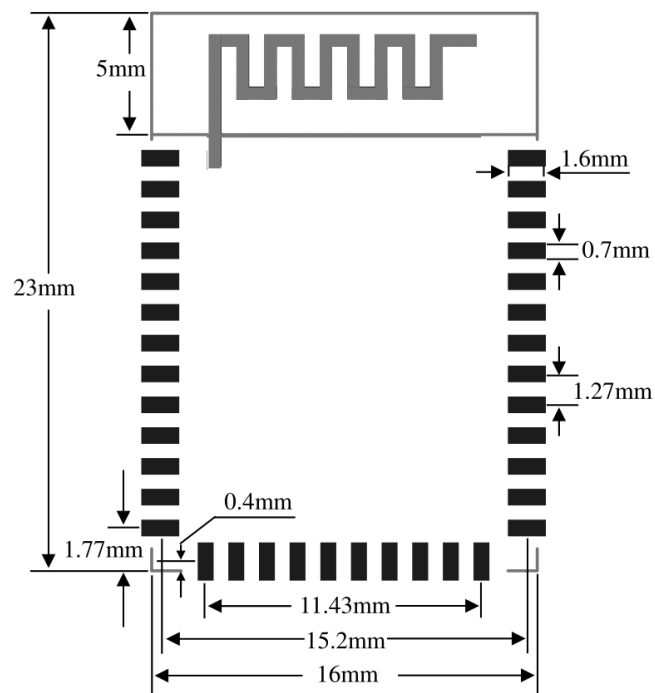


Pad Number	Name	Description	Pin Type
1	DIO0	GPIO, Sensor Controller	Digital I/O
2	DIO1	GPIO, Sensor Controller	Digital I/O
3	DIO2	GPIO, Sensor Controller	Digital I/O
4	DIO3	GPIO, Sensor Controller	Digital I/O
5	DIO4	GPIO, Sensor Controller	Digital I/O
6	DIO5	GPIO, Sensor Controller, High drive capacity	Digital I/O
7	DIO6	GPIO, Sensor Controller, High drive capacity	Digital I/O
8	DIO7	GPIO, Sensor Controller, High drive capacity	Digital I/O
9	GND	Connect to GND	Ground pin
10	VDD	1.8V to 3.8V main chip supply	Power
11	DIO8	GPIO	Digital I/O
12	DIO9	GPIO	Digital I/O
13	DIO10	GPIO	Digital I/O
14	DIO11	GPIO	Digital I/O
15	DIO12	GPIO	Digital I/O
16	DIO13	GPIO	Digital I/O
17	DIO14	GPIO	Digital I/O
18	DIO15	GPIO	Digital I/O
19	JTAG-TMSC	JTAG TMS, High drive capability	Digital I/O
20	JTAG-TCKC	JTAG TCK	Digital I/O
21	DIO16	GPIO, High drive capability, JTAG_TDO	Digital I/O
22	DIO17	GPIO, High drive capability, JTAG_TDI	Digital I/O
23	DIO18	GPIO	Digital I/O
24	DIO19	GPIO	Digital I/O
25	DIO20	GPIO	Digital I/O
26	DIO21	GPIO	Digital I/O
27	DIO22	GPIO	Digital I/O
28	RESET_N	Reset, active-low. No internal pullup	Digital input
29	DIO23	GPIO, Sensor Controller, Analog	Digital/Analog I/O
30	DIO24	GPIO, Sensor Controller, Analog	Digital/Analog I/O
31	DIO25	GPIO, Sensor Controller, Analog	Digital/Analog I/O
32	DIO26	GPIO, Sensor Controller, Analog	Digital/Analog I/O
33	DIO27	GPIO, Sensor Controller, Analog	Digital/Analog I/O
34	DIO28	GPIO, Sensor Controller, Analog	Digital/Analog I/O
35	DIO29	GPIO, Sensor Controller, Analog	Digital/Analog I/O
36	DIO30	GPIO, Sensor Controller, Analog	Digital/Analog I/O

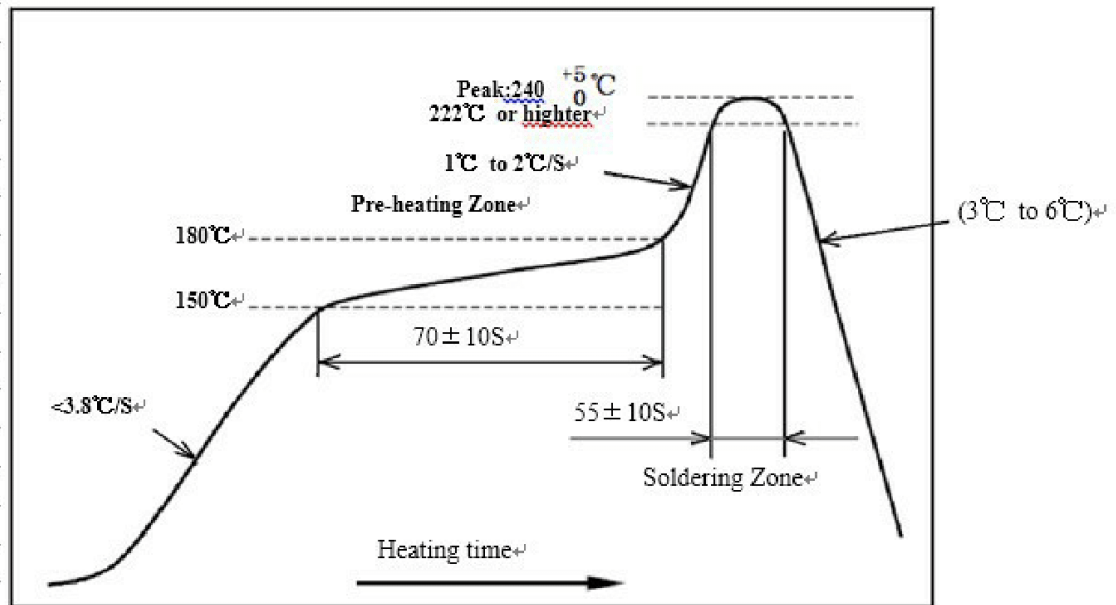
Specifications

Parameter	Min	Max	Unit
Operating Voltage	1.8	3.8	V
Operating Temperature	-40	85	°C
TX Power	-21	+5	dBm
RX Sensitivity	-87	-96	dBm

Recommended PCB Layout for Package



Soldering Recommendations



Contact details

For more information, please send email to us. Email:

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