



BLE2541-SLC Module Datasheet V1.0.1

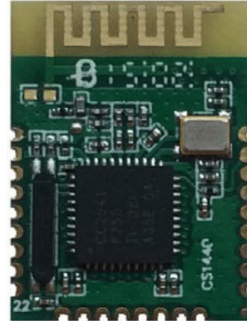
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Description

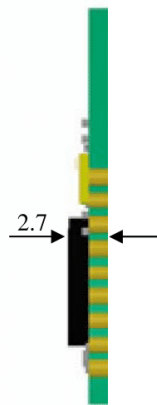
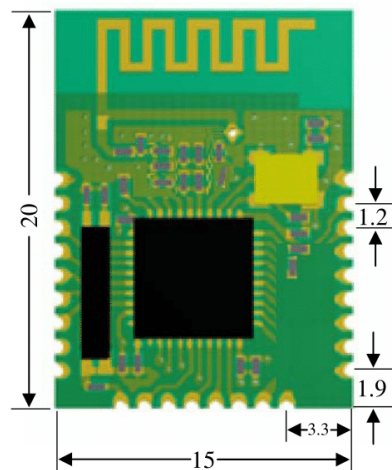
BLE2541-SLC Module is designed based on CC2541F256 Bluetooth Smart (BLE4.0) System-on-Chip, fully supports the single mode Bluetooth Low Energy operation. The module provides the ability to either put your entire application into the integrated 8051 microcontroller or use the module in Network Processor mode in conjunction with the microcontroller of your choice.



Features

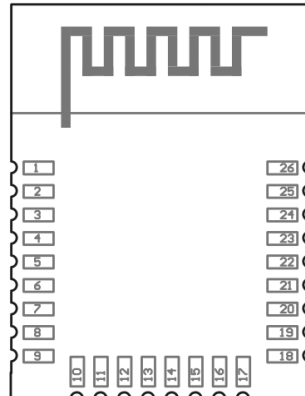
1. Bluetooth4.0, Single mode compliant-Supports master and slave modes
2. Including Bluetooth Low Energy profiles Such as BLP, HTP, HRP, PXP, etc.
3. RF Performance
 - TX Power: 0dBm
 - RX Sensitivity: -93dBm
4. Ultra low current consumption
 - Transmit current: 18.2mA
 - Receiving current: 17.9mA
5. With an industry-standard enhanced 8051 MCU, 256KB flash, 8KB RAM

Mechanical Drawing



单位: mm

Terminal Description



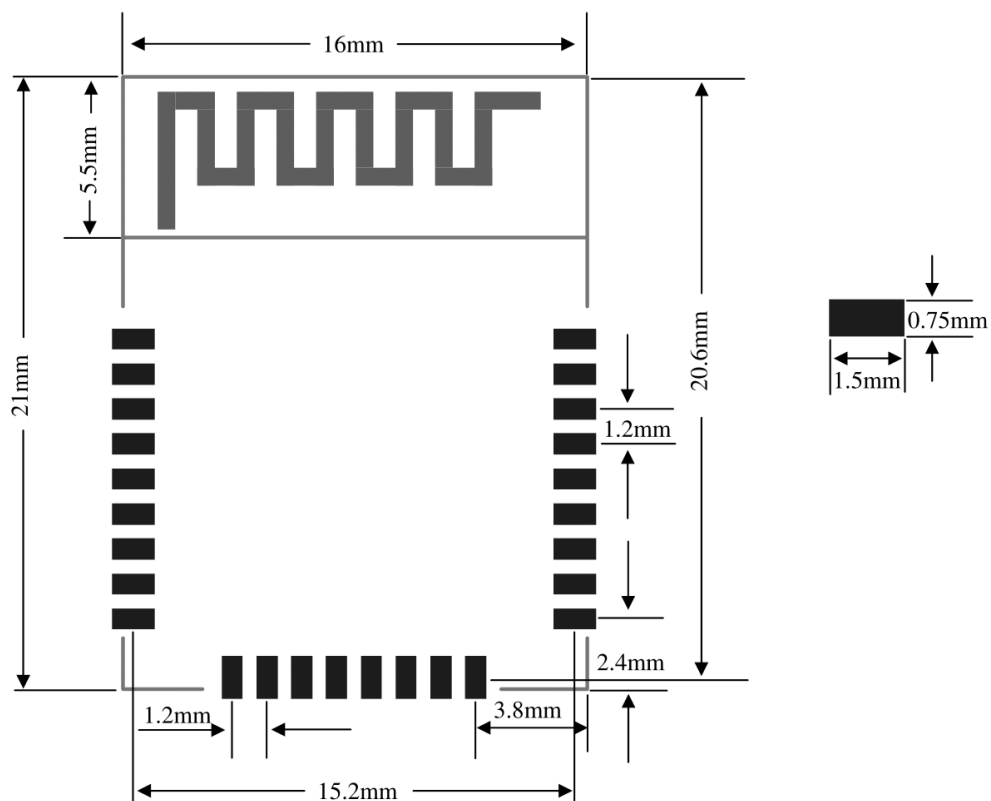
Pad Number	Name	Description	Pin Type
1	VDD	2V-3.6V analog power-supply connection	Power(analog)
2	GND	Connect to GND	Ground Pin
3	P2.2/DC	Port 2.2 / debug clock	Digital I/O
4	P2.1/DD	Port 2.1 / debug data	Digital I/O
5	P2.0	Port 2.0	Digital I/O
6	P1.7	Port 1.7	Digital I/O
7	P1.6	Port 1.6	Digital I/O
8	SCL	Can be used as I2C clock pin or digital I/O. Leave floating if not used. If grounded disable pull up.	I2C clock or digital I/O
9	SDA	Can be used as I2C data pin or digital I/O. Leave floating if not used. If grounded disable pull up.	I2C clock or digital I/O
10	NC	Not connected	Unused pins
11	P1.5	Port 1.5	Digital I/O
12	P1.4	Port 1.4	Digital I/O
13	P1.3	Port 1.3	Digital I/O
14	P1.2	Port 1.2	Digital I/O
15	P1.1	Port 1.1-20mA drive capability	Digital I/O
16	P1.0	Port 1.0-20mA drive capability	Digital I/O
17	P0.7	Port 0.7	Digital I/O
18	P0.6	Port 0.6	Digital I/O
19	P0.5	Port 0.5	Digital I/O
20	P0.4	Port 0.4	Digital I/O
21	P0.3	Port 0.3	Digital I/O
22	P0.2	Port 0.2	Digital I/O
23	P0.1	Port 0.1	Digital I/O

Pad Number	Name	Description	Pin Type
24	P0.0	Port 0.0	Digital I/O
25	nRST	Reset, active-low	Digital input
26	GND	Connect to GND	Ground Pin

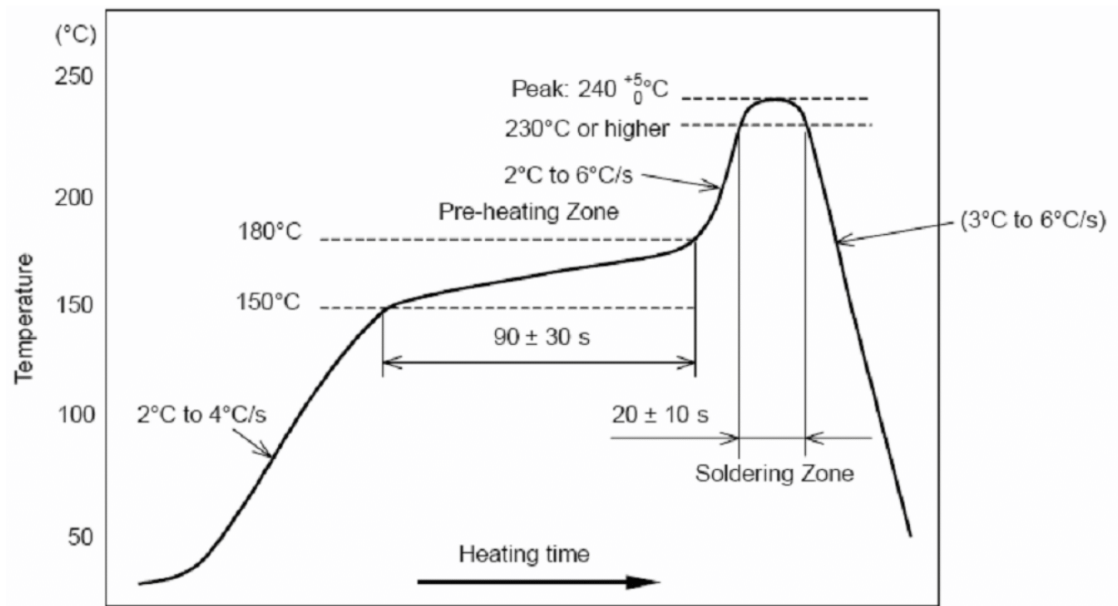
Specifications

Parameter		Min	Max	Unit
Operating Voltage		2	3.6	V
Operating Temperature		-40	85	°C
Current Consumption	BLE Advertising (Interval 100mS)	0.6	1	mA
	BLE Connection (Interval 30mS)	0.8	1	mA
	Sleep mode	-	1	µA
TX Power		-20	0	dBm
RX Sensitivity		-87	-94	dBm
Storage Temperature		-40	125	°C

Recommended PCB Layout for Package



Noted: Please make sure without any wiring or ground under the strip antenna area.

Soldering Recommendations

Contact details

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

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