Apr. 13th 2015

# TA3200R1D-SA User Manual V1.0

**BEIJING JIA AN ELECTRONIC TECHNOLOGY CO,.LTD.** 

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V1.0 http://www.rf-products.com

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Date	Revision	Description
Apr.13th 2015	V1.0	

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# Description

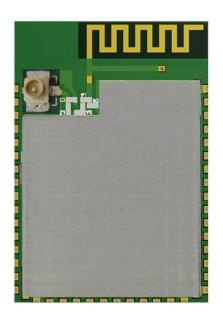
TA3200R1D-SA Module is a low-power module includes an 802.11 b/g/n radio, baseband, and MAC, which is designed for the application of wireless network communication with embedded technology. Using this module user can connect physical device to Wi-Fi Network, and then realize the control and management of the Internet of Things. The core of the module is CC3200 launched by TI. CC3200 device is a wireless MCU that integrates a high-performance ARM Cortex-M4 core running at 80MHz, includes embedded TCP/IP and TLS/SSL stacks, HTTP Server, and multiple Internet protocols, allowing customers to develop an entire application with a single IC.

# Features

- ARM Cortex -M4 Core at 80 MHz ARM Core
- includes a wide variety of peripherals
- Wi-Fi and Internet Protocols in ROM
- 802.11 b/g/n Radio, Baseband, Medium Access Control (MAC), Wi-Fi Driver, and Supplicant
- Station, AP, and Wi-Fi Direct Modes
- TX Power: 18.0 dBm @ 1 DSSS 14.5 dBm @ 54 OFDM
- RX Sensitivity:
  -95.7 dBm @ 1 DSSS
  -74.0 dBm @ 54 OFDM
- Power-Management Subsystem: V BATWide-Voltage Mode: 2.2 to 3.6 V Preregulated 1.85-V Mode
- Advanced Low-Power Modes: Hibernate: 4 µ A
   Low-Power Deep Sleep (LPDS):120 µ A
   RX Traffic:59 mA@ 54OFDM
   TX Traffic:229 mA @54 OFDM @18dBm

**~+75°**℃

• Package: 18.22mm\*26.65mm\*2.8mm



# Applications

- Cloud Connectivity
- Home Automation
- Home Appliances
- Access Control
- Security Systems
- Smart Energy
- Internet Gateway
- Industrial Control
- Smart Plug and Metering
- Wireless Audio
- IP Network Sensor Nodes

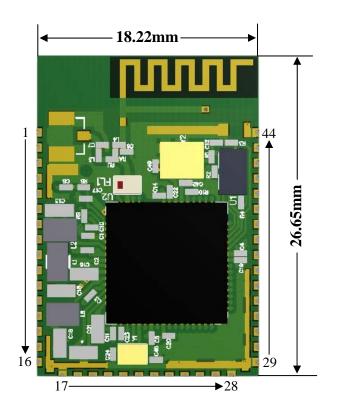
For more details about the CC3200 please visit CC3200 at <u>http://www.ti.com/product/CC3200</u>

# Contact details

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For more information, please send email to us. Email: <u>helen@alarmsources.com</u> <u>sarolyn@alarmsources.com</u>

# **Pin Description**



Pad Number	Pin Name	Description	CC3200 Pkg pin number
1	GND	Ground	65
2	ANTSEL1	Antenna Selection Control	29
3	ANTSEL2	Antenna Selection Control	30
4	nRESET	Master chip reset. Active low	32
5	SOP2	Sense On Power 2	21
6	SOP1	Sense On Power 1	34
7	SOP0	Sense On Power 0	35
8	NC		
9	NC		
10	NC		
11	GND	Ground	65
12	GND	Ground	65
13	VBT_CC	Chip Supply Voltage (VBAT)	10,37,39,44,54
14	VDD_ANA2	ANA2 DCDC O	47
15	GPIO_30	General-Purpose I/O	53

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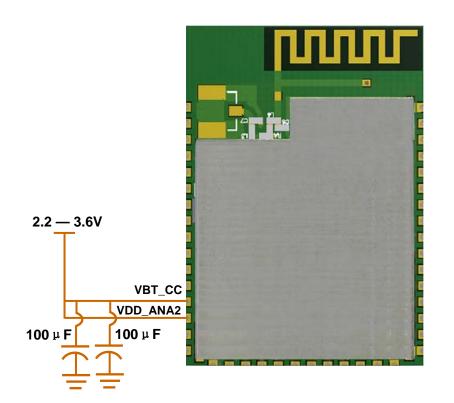
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16	GPIO_31	General-Purpose I/O	45
17	GND	Ground	65
18	GPIO_00	General-Purpose I/O	50
19	GPIO_01	General-Purpose I/O	55

Pad Number	Pin Name	Description	CC3200 Pkg pin number
20	GPIO_02	General-Purpose I/O	57
21	GPIO_03	General-Purpose I/O	58
22	GPIO_04	General-Purpose I/O	59
23	GPIO_05	General-Purpose I/O	60
24	GPIO_06	General-Purpose I/O	61
25	GPIO_07	General-Purpose I/O	62
26	GPIO_08	General-Purpose I/O	63
27	GPIO_09	General-Purpose I/O	64
28	GND	Ground	65
29	GND	Ground	65
30	GPIO_10	General-Purpose I/O	1
31	GPIO_11	General-Purpose I/O	2
32	GPIO_12	General-Purpose I/O	3
33	GPIO_13	General-Purpose I/O	4
34	GPIO_14	General-Purpose I/O	5
35	GPIO_15	General-Purpose I/O	6
36	GPIO_16	General-Purpose I/O	7
37	GPIO_17	General-Purpose I/O	8
38	GPIO_22	General-Purpose I/O	15
39	JTAG_TDI	JTAG TDI. Reset Default Pinout.	16
40	JTAG_TDO	JTAG TDO. Reset Default Pinout	17
41	GPIO_28	General-Purpose I/O	18
42	JTAG_TCK	JTAG/SWD TCK Reset Default Pinout	19
43	JTAG_TMS	JTAG/SWD TMS Reset Default Pinout	20
44	GND	Ground	65

## **Application Information**

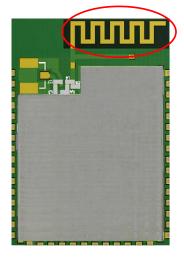
VBAT Wide-Voltage Mode 2.2 to 3.6 V



Noted: The device can draw up to 600mA for 25mS. Consider adding extra decoupling capacitors if the battery can not source the current. And please also make sure these two capacitors are closed to the port of VBT\_CC.

## **Antenna Style**

TA3200R1D-SA(PCB Strip Antenna)



The TA3200R1D-SA module is designed to comply with the FCC statement. FCC ID is VVJ-TA3200R1D-SA. The host system using TA3200R1D-SA, should have label indicated it contain modular's FCC ID VVJ-TA3200R1D-SA.

This radio module must not installed to co-locate and operating simultaneously with other radios in host system, additional testing and equipment authorization may be required to operating simultaneously with other radio.

### FCC STATEMENT

#### § 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for complia nce could void the user's authority to operate the equipment.

#### § 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B dig ital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide rea sonable 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 a ccordance with the instructions, may cause harmful interference to radio communications.

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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 i s connected.

-Consult the dealer or an experienced radio/TV technician for help.

\*RF warning for Mobile device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled e nvironment. This equipment should be installed and operated with minimum distance 20c m between the radiator & your body.

§ 15.19 Labelling requirements.

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.