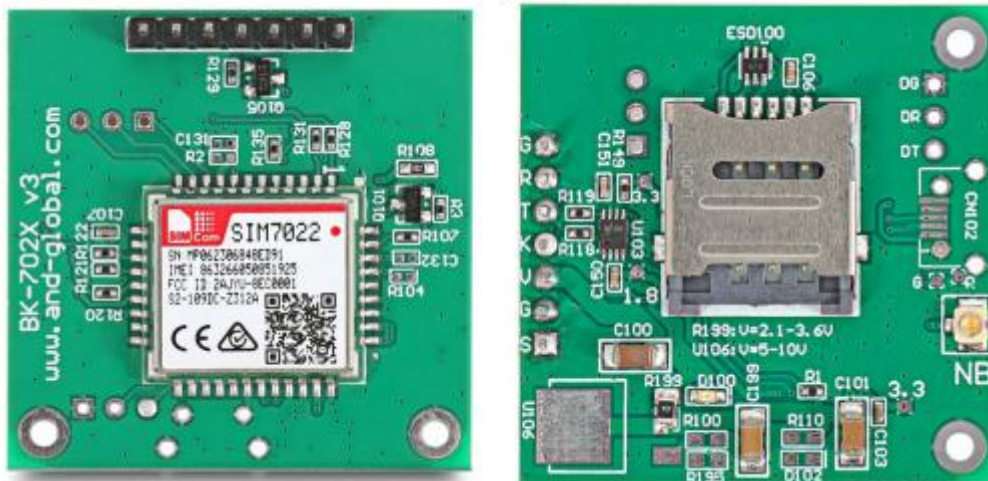




AND Technologies Co., Ltd

Breakout SIM7022 User Manual



1. Preparation:

Board	BK-SIM7022
Serial tool	sscom32E.exe

AND Wireless : <http://www.and-global.com>

OEM PCBA : <http://www.buypcba.com>

Retail Store : <http://www.aliexpress.com/store/605000>

Golden supplier on Alibaba : <http://and-global.en.alibaba.com>

Email : info@and-global.com

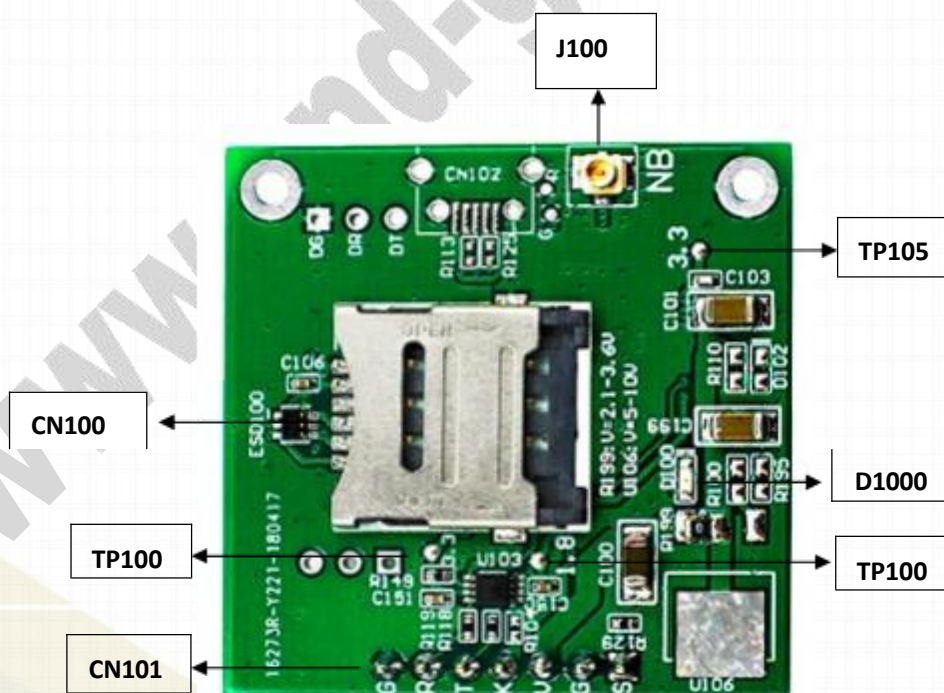
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2. Overview

2.1 Module feature

- > LTE-FDD
B1/B2/B3/B4/B5/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B66/B70/B85
- > Control Via AT Command
- > Supply voltage range: 2.2v~4.3v, Typ: 3.3V
- > Dimension: 17.6x15.7x2.3mm
- > Uplink: 159Kbps Downlink: 127Kbps
- > Operation temperature: -40°C to +85 °C
- > PSM mode Consumption : 0.8 Ua

2.2 BOARD overview



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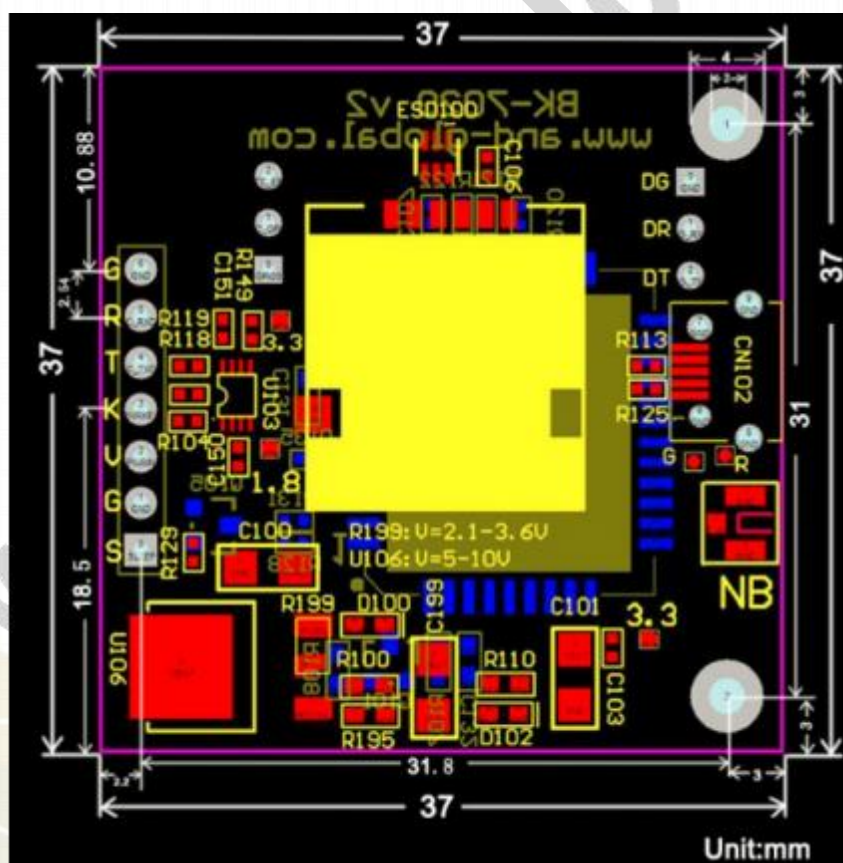
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CN100	Micro SIM card socket
CN101	7pin 2.54mm header interface
D100	NET LIGHT indicator(Green)
J100	NB-IoT ANT
TP105	2.2-4.3V
TP101	3.3V
TP100	1.8V

2.3 PCBA dimension: 37*37mm.



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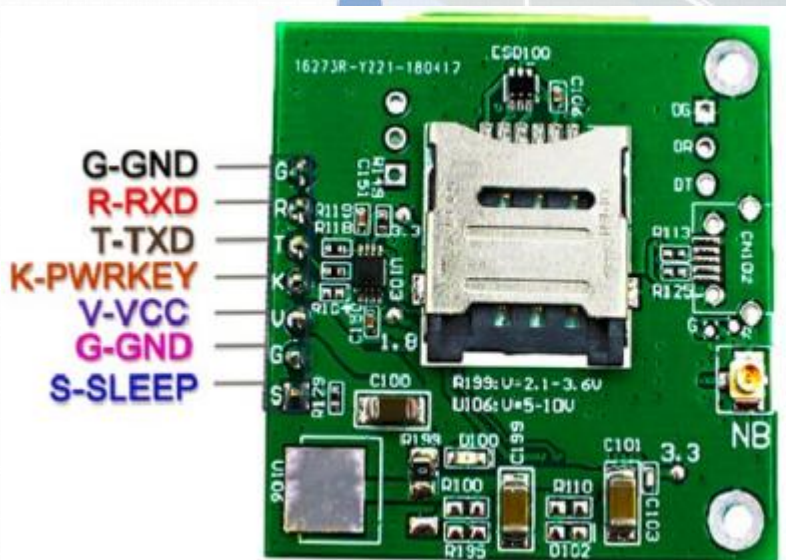
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3. Pin definition



Note: VCC range is from 2.2V to 4.3V, 3.3V is recommended. Over-voltage will damage the module permanently.

TXD /RXD are 3.3V TTL level which can be directly connected with 3.3V MCU.

3.1 Pin definition of 6pin connector

Pin name	Pin number	Mark on PCB	Description	Comment
SLEEP	0	S	NC	NO CONNECTION
GND	1,6	G	GND	
VCC	2	V	Power input for sim7022 module	2.2V-4.3V
PWRKEY	3	K	NC	NO CONNECTION, The module is automatically turned on after power on.
TXD	4	T	Transmit Data	3.3V TTL Series data Output
RXD	5	R	Receives Data	3.3V TTL Series data Input

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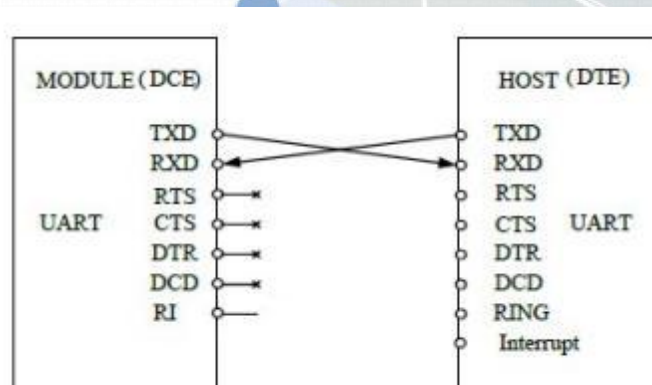
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3.2 How to use TXD and RXD (Default baud rate is 115200bps)



4. How to test the BK-SIM7022 by AT command via UART

4.1 Installing NB-IoT antenna, SIM card for BK-SIM7022 Board. (Note: Please use NB-IoT card, not normal Mobile phone card.)

4.2 Feed power supply to VCC pin. (Note: VCC range is from 2.2V to 4.3V. 3.3V is recommended.)

4.3 The module is automatically turned on after power on, without a power button. (Note: Should confirm whether correct NB-IoT SIM card is inserted)

NETLIGHT pin status	Module status
64ms ON, 800ms OFF	No registered network
64ms ON, 2000ms OFF	Registered network (PS domain registration success)
OFF	Power off or PSM mode



4.4 Open serial software and choose right serial number, Baud rate as below, please keep "SendNew" selected:

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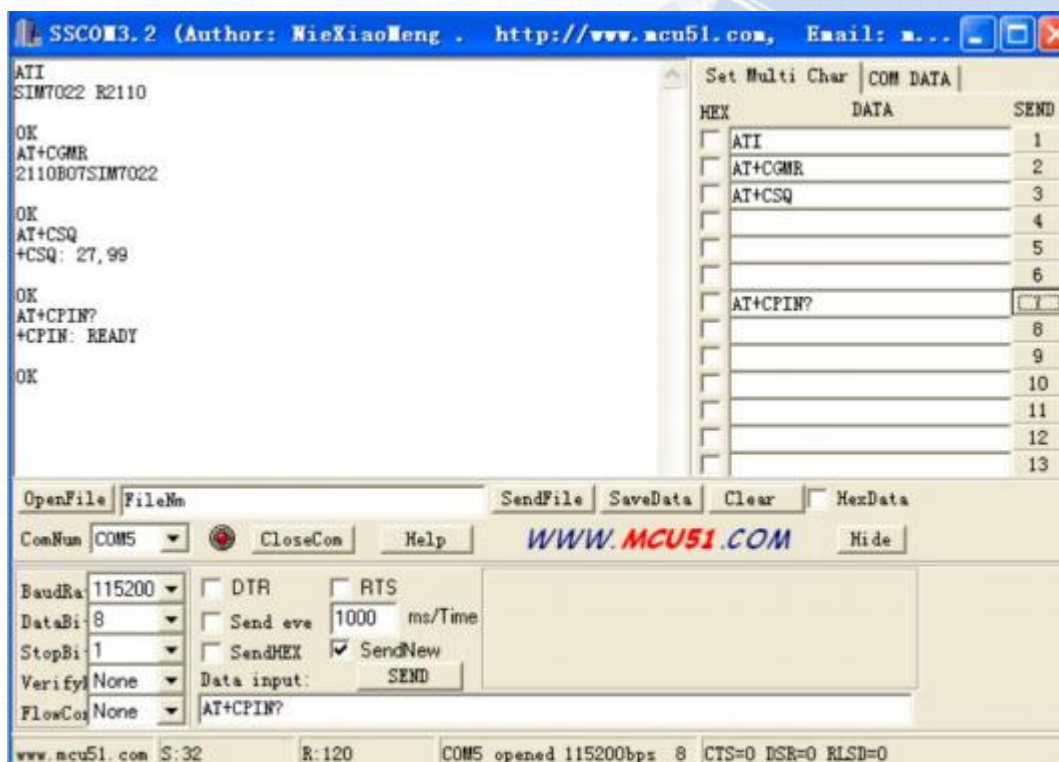
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5.Package list:

Name	Qty	Unit
BK-SIM7022	1	Pcs

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