Breakout SIM5320 User Manual
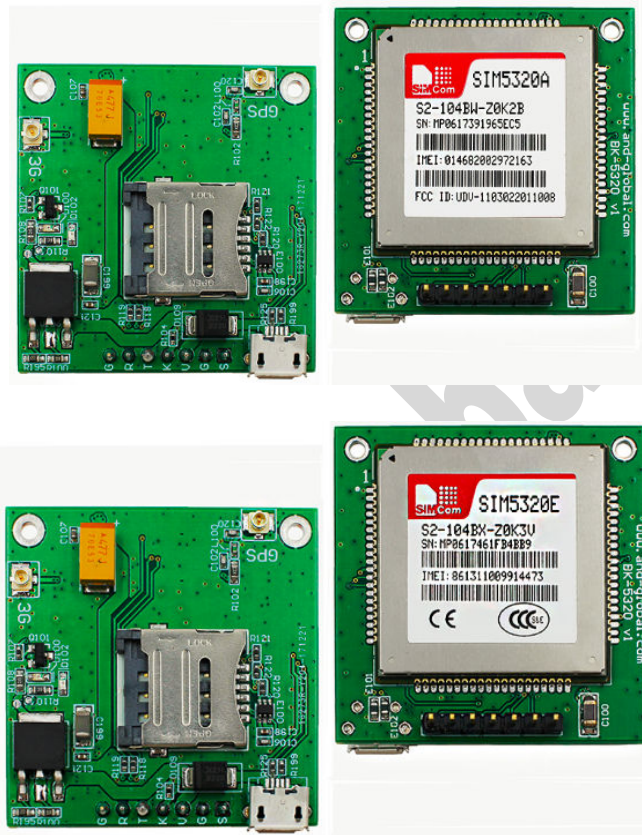
1. Preparation:

Board	BK-SIM5320
Serial tool	sscom32E.exe

2. Overview

2.1 Module feature

- Dual-Band HSDPA/WCDMA and Quad-Band GSM/GPRS/EDGE module in a SMT package which supports HSDPA up to 3.6Mbps for downlink data transfer.
- Stand-alone GPS
- Control Via AT Command, Rich interfaces including UART,USB2.0
- Supply voltage range:3.4v~4.2v, Typ:3.8V
- Dimension: 30x30x2.9mm
- Operation temperature:-40℃ to +85 ℃

2.2 BOARD overview
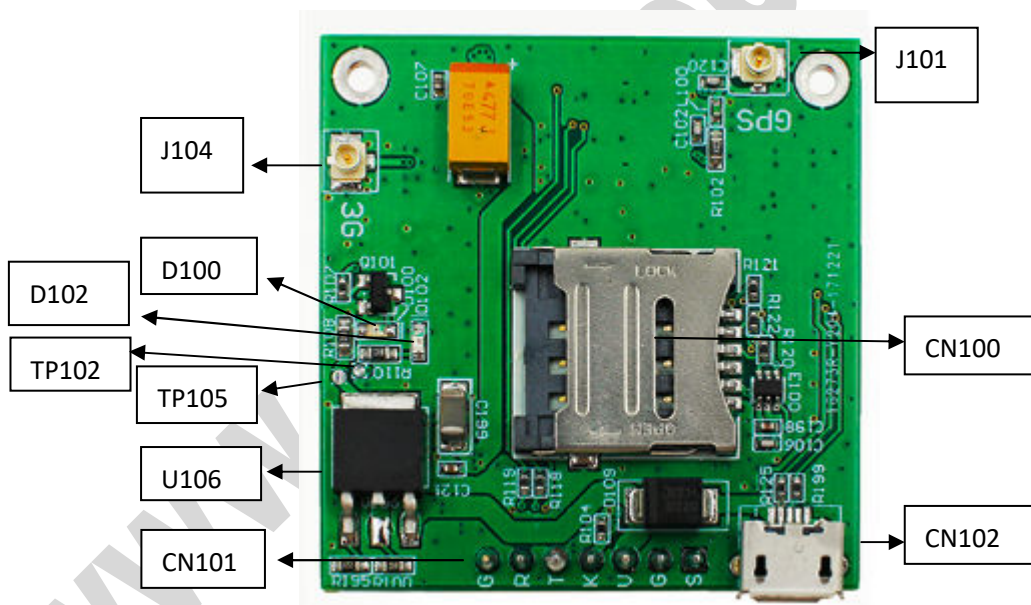
CN100	Micro SIM card socket
CN101	7pin 2.54mm header interface
CN102	USB interface

D102	Power indicator(RED)
D100	NET LIGHT indicator(Green)
U106	The power conversion chip
J104	3G ANT
J105	GPS ANT
J109	Auxiliary antenna
TP105	4.0V
TP102	2.6V

2.3 PCBA dimension: 40*40mm

3. Pin definition
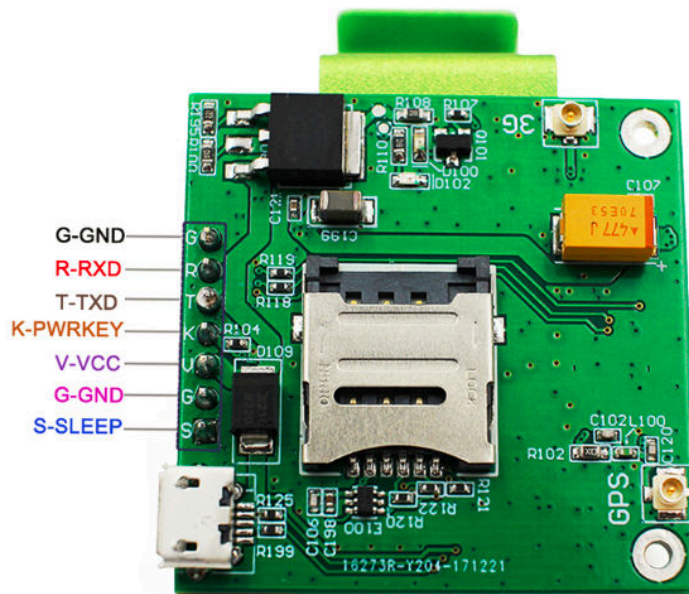
Note: VCC range is from 5.0V to 10V, 5.0V is recommended. Only USB VBUS to power up the whole board is not suggested, so It is recommended that we use VCC to power up the whole board.

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	control module into sleep mode	Connect with DTR via Q102
GND	1,6	G	GND	
VCC	2	V	The power supply	5V-10V
PWRKEY	3	K	Power down	Shorted with GND via R104 by default
TXD	4	T	Transmit Data	TTL Series data Output
RXD	5	R	Receives Data	TTL Series data Input

3.2 How to use TXD and RXD (Default baud rate is 115200bps)
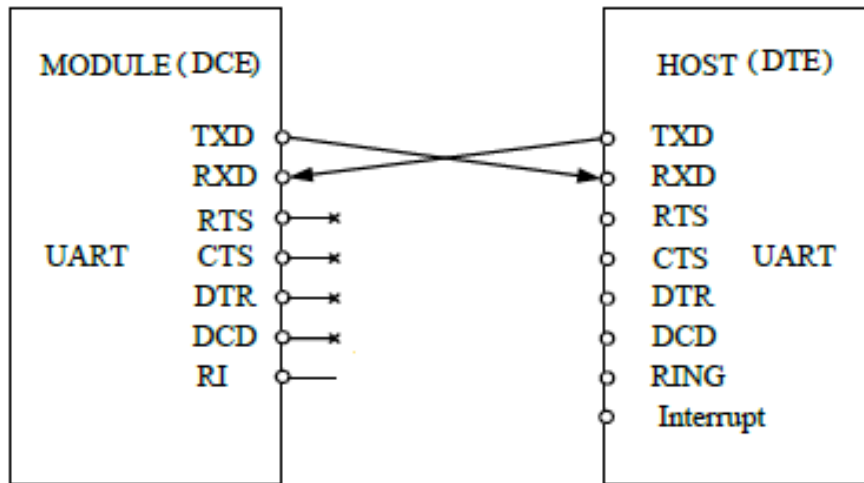
4. How to test the BK-SIM5320 by AT command via UART

4.1 Installing 3G antenna ,GPS antenna, and sim card for BK-SIM5320 Board.

4.2 Feed power supply to VCC pin, RED LED indicator will be lighted. (Note: VCC range is from 5.0V to 10V.   5.0V is recommended.)

4.3 GREEN LED indicator, Blinking shows registration successful.

LED Status	Module Status
Always On	Searching Network/Call Connect
200ms ON, 200ms OFF	Data Transmit
800ms ON, 800ms OFF	Registered network
Off	Power off / Sleep
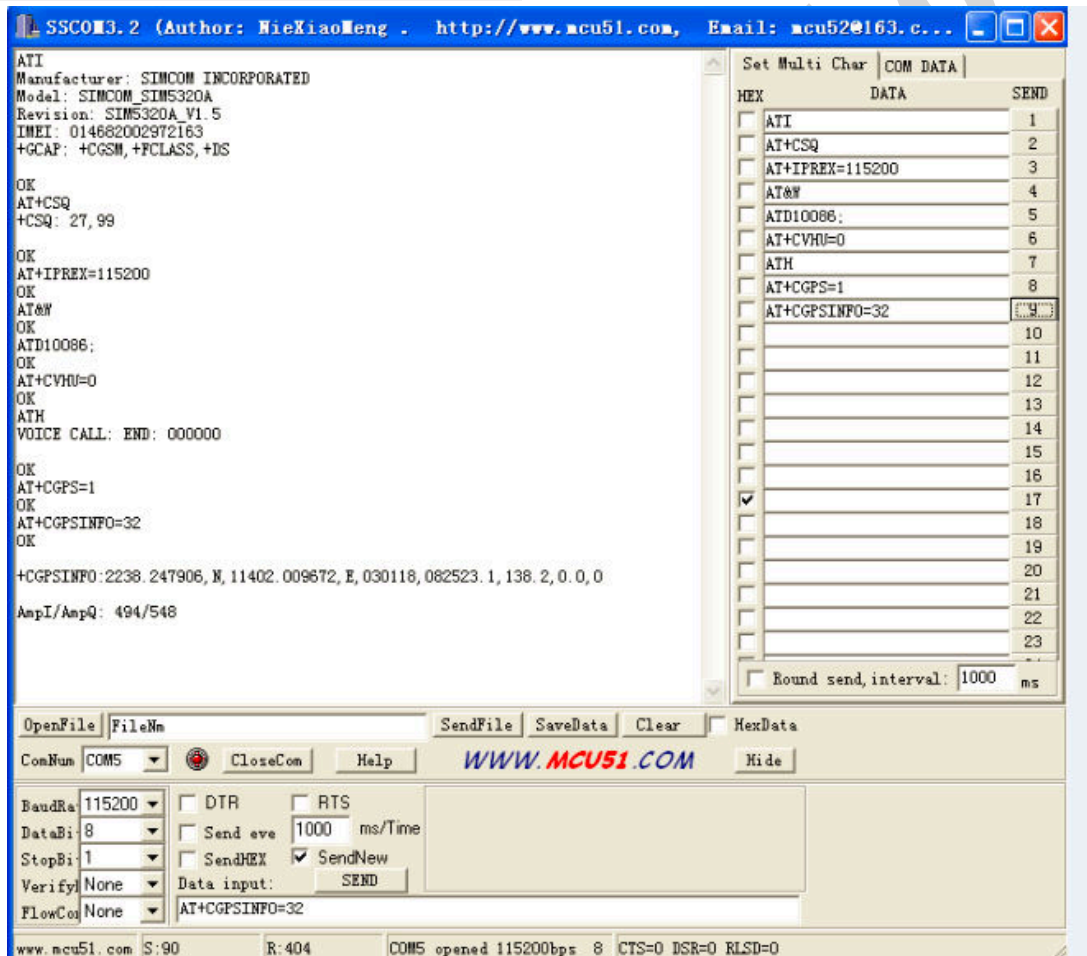
4.4 Open serial software and choose right serial number, Baud rate as below, please keep "SendNew" selected:

5. How to test the BK-SIM5320 by AT command via USB
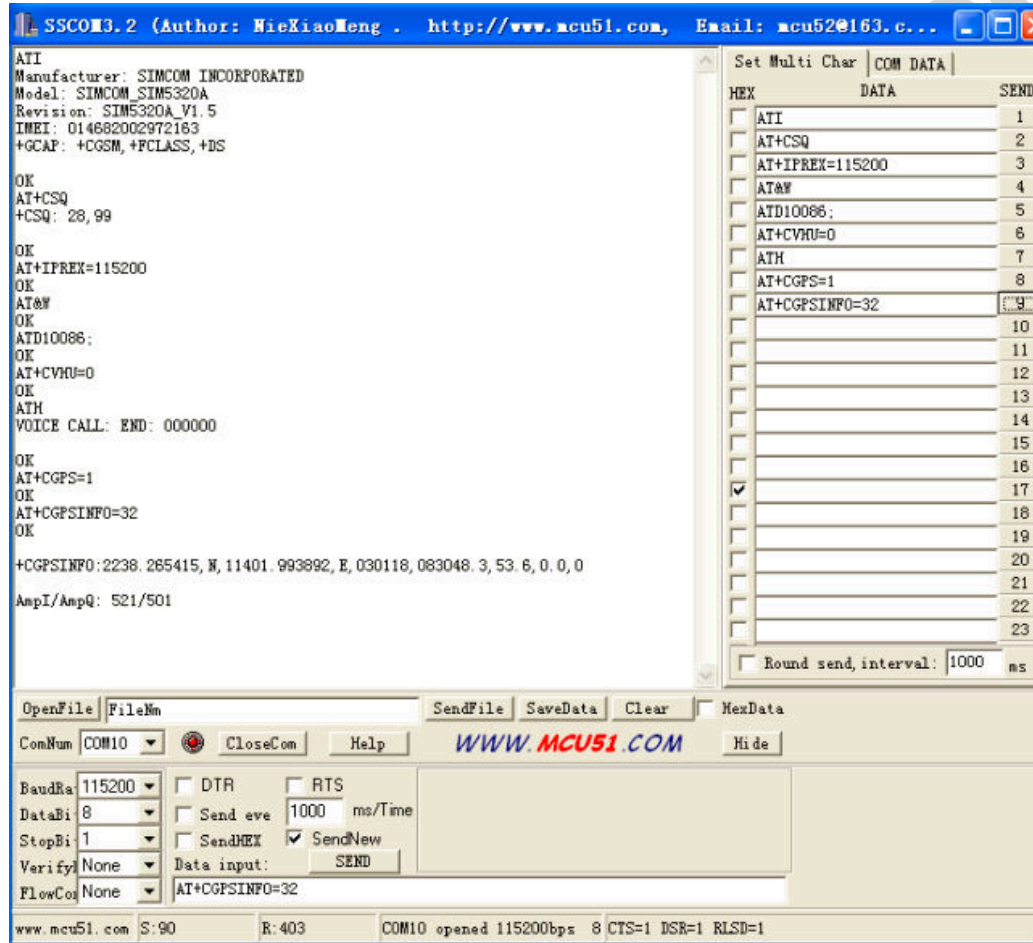
5.1   Remove all connection on CN101 7pin connector, Power up the SIM5320 Breakout board only via USB, Install WindowsDrivers_SIM5218_2.4.00.rar driver following the computer indication. The computer will show as belows, it means that the driver is installed correctly.
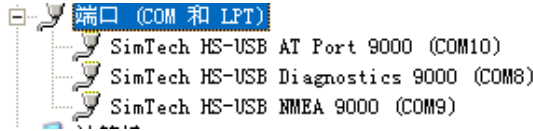
5.2 Select AT Port 9000, 115200bps and SendNew, you can repeat all command in Item4.4.

6.Package list：

Name	Qty	Unit
BK-SIM5320	1	Pcs