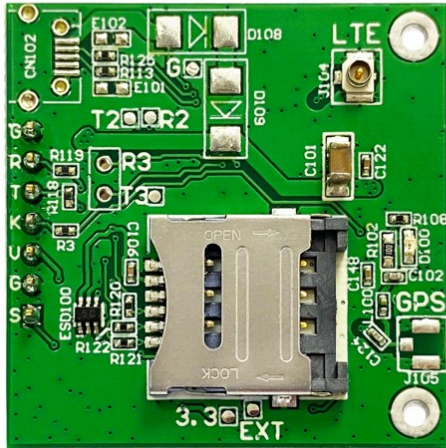


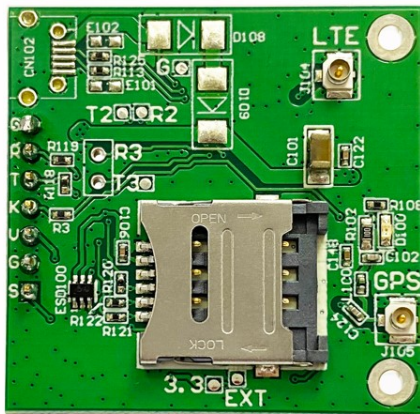


AND Technologies Co., Ltd

Breakout Y7080E User Manual



NB only



NB+GNSS

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
Tel : +86-755-28099797

1. Preparation:

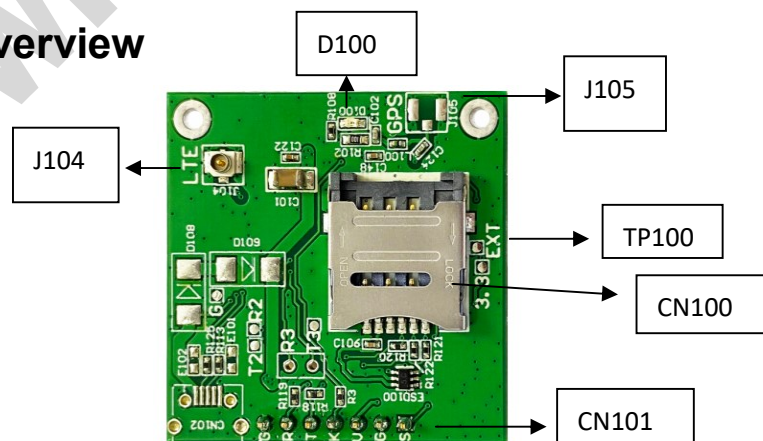
Board	BK-Y7080E
Serial tool	sscom32E.exe

2. Overview

2.1 Module feature

- Multi-Band NB-IoT module solution in a SMT type which is compatible with SIM7080G package.
- Frequency Bands: Cat-NB2 B3/B5/B8/B20/B28
- Supply voltage range: 3.0-4.2V(NB+GNSS) 2.2-4.2V(NB only)
- Current consumption: NB only 1.7uA @PSM

2.2 BOARD overview

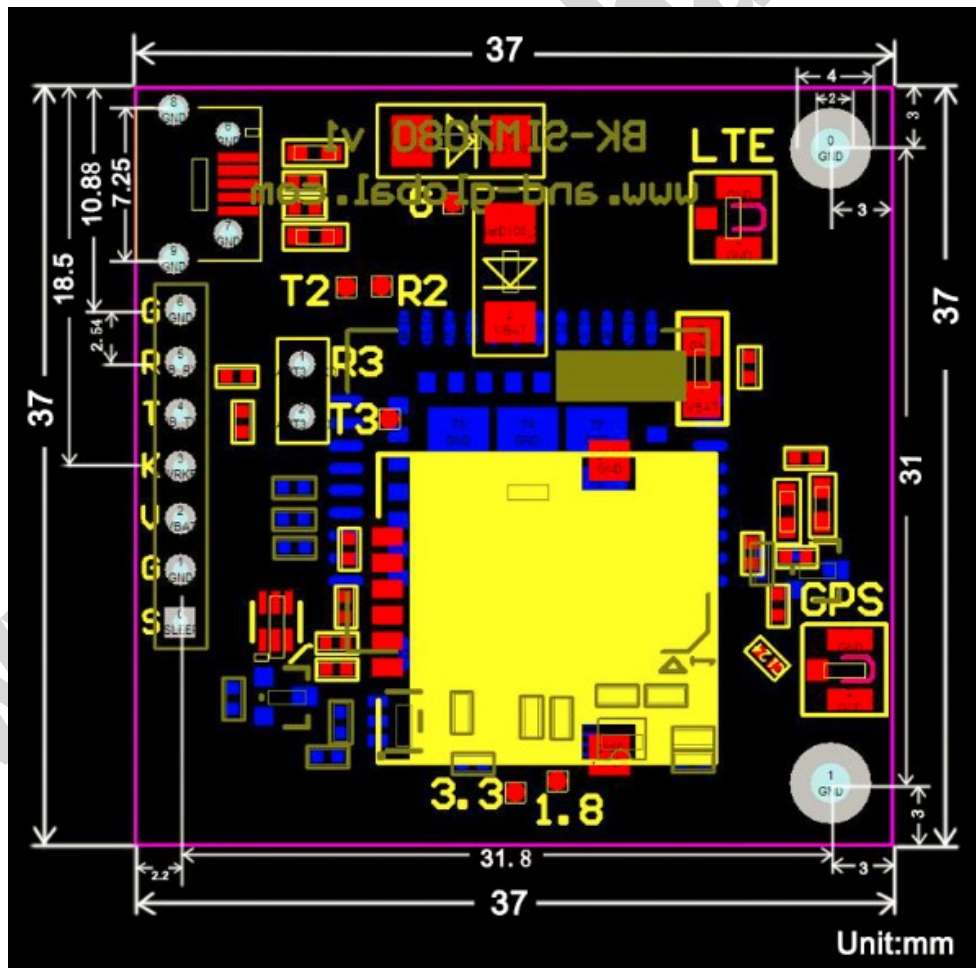


AND Wireless : <http://www.and-global.com>
 OEM PCBA : <http://www.buypcba.com>
 Retail Store : <http://www.aliexpress.com/store/605000>
 Golden supplier on Alibaba : <http://and-global.en.alibaba.com>
 Email : info@and-global.com
 Tel : +86-755-28099797



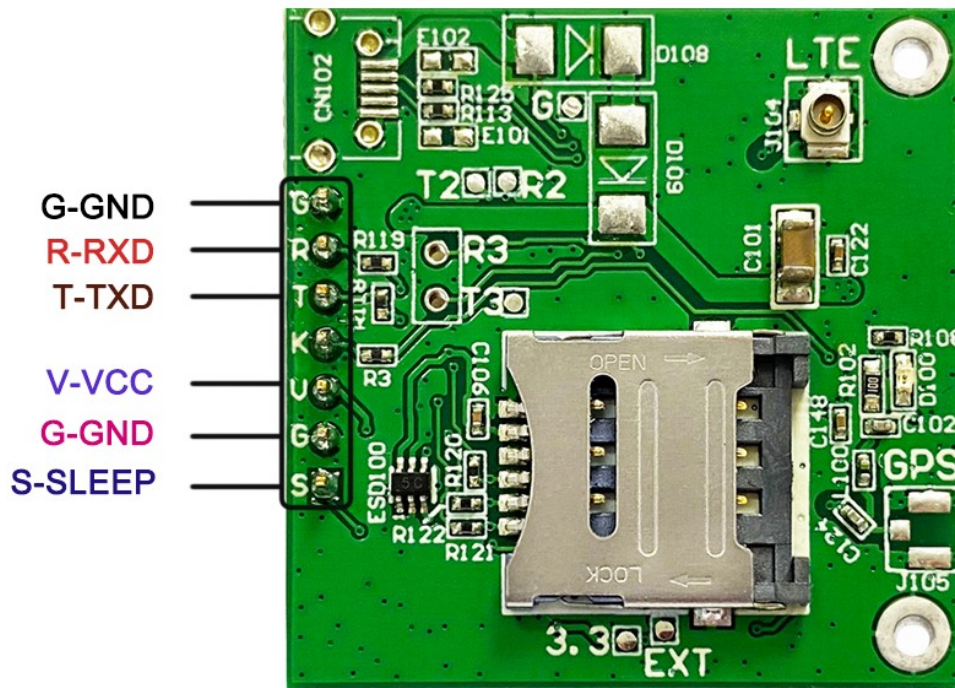
CN100	Micro SIM card socket
CN101	7pin 2.54mm header interface
D100	NET LIGHT indicator(Green)
J104	LTE ANT
J105	GPS ANT(Optional)
TP100	3.0V

2.3 PCBA dimension: 37*37mm.



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
Tel : +86-755-28099797

3. Pin definition



Note: VCC range is from 3.0V to 4.2V. 3.3V is recommended.

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	3.0-4.2V(NB+GNSS) 2.2-4.2V(NB only)
PWRKEY	3	K	NC	No connection. The module will Automatically boot when it is power on.
TXD	4	T	Transmit Data	3.3V TTL Series data Output
RXD	5	R	Receives Data	3.3V TTL Series data Input

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

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

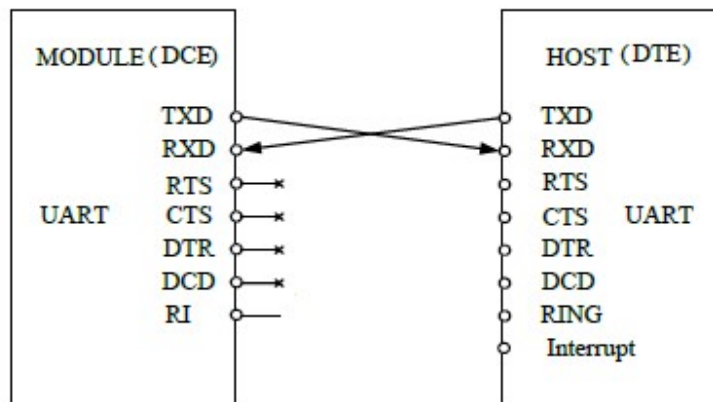
Retail Store : <http://www.aliexpress.com/store/605000>

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

Email : info@and-global.com

Tel : +86-755-28099797

3.2 How to use TXD and RXD (Default baud rate is 9600bps)



4. How to test the BK-SIM7080 by AT command via UART

4.1 Installing LTE antenna, GPS antenna (Only for NB+GNSS version) and SIM card for BK-Y7080E Board. (Note: Please use IoT card, not normal Mobile phone card.)

4.2 Feed power supply to VCC pin, The module will automatically boot when it is power on. The Green LED begin to blink.

4.3 GREEN LED indicator, Blink slowly shows registration successful. (Note: Should confirm whether correct SIM card is inserted)

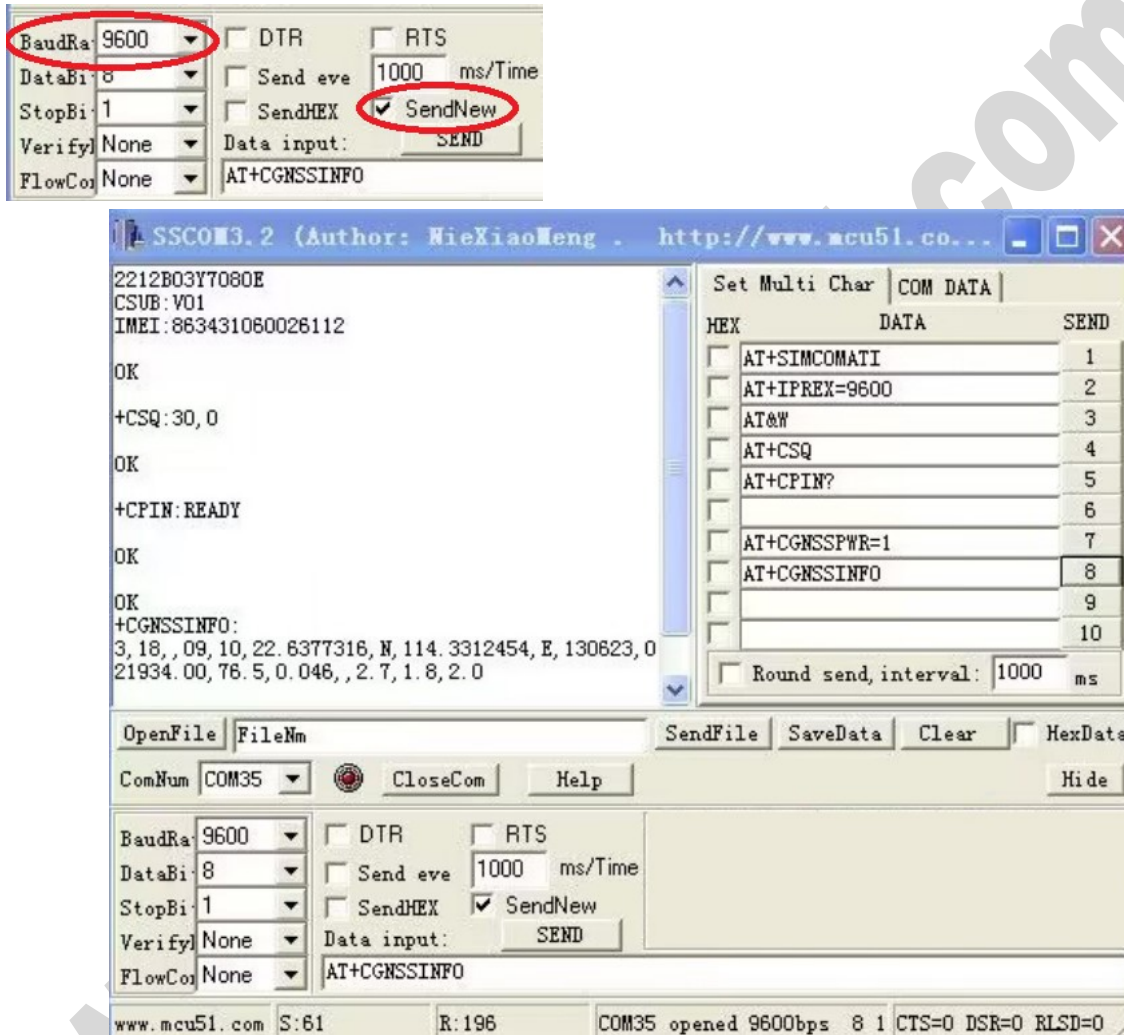
NETLIGHT pin status	Module status
64ms ON, 800ms OFF	No registered network
64ms ON, 3000ms OFF	Registered network (PS domain registration success)
64ms ON, 300ms OFF	Data transmit (PPP dial-up state and use of data services such as internal TCP/FTP/HTTP)
OFF	Power off or PSM mode

-----*****-----

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
 Tel : +86-755-28099797



4.4 Open serial software **sscom32E** and choose right serial number, Baud rate is 9600, please keep "SendNew" selected:



5.Package list:

Name	Qty	Unit
BK-Y7080E	1	Pcs

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
Tel : +86-755-28099797