

SIM7670-MINIPCIE User Manual



1. Preparation:

Board	SIM7670-MINIPCIE
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
 Tel : +86-755-28099797

2. Overview

2.1 Module feature

- > The SIM7670 Series is the LTE Cat 1bis module based on the latest QCX216 chipset that supports wireless communication modes of LTE-FDD/LTE-TDD. It supports maximum 10Mbps downlink rate and 5Mbps uplink rate
- > Control Via AT Command, Rich interfaces including UART,USB2.0
- > Operation temperature:-40°C to +85 °C
- > GNSS optional

2.2 BOARD interface

- > 3.0V~3.6V power supply (typical:3.3V)
- > USB 2.0 interface
- > USIM interface
- > LED_WWAN# LED indicator interface
- > Full function UART interface

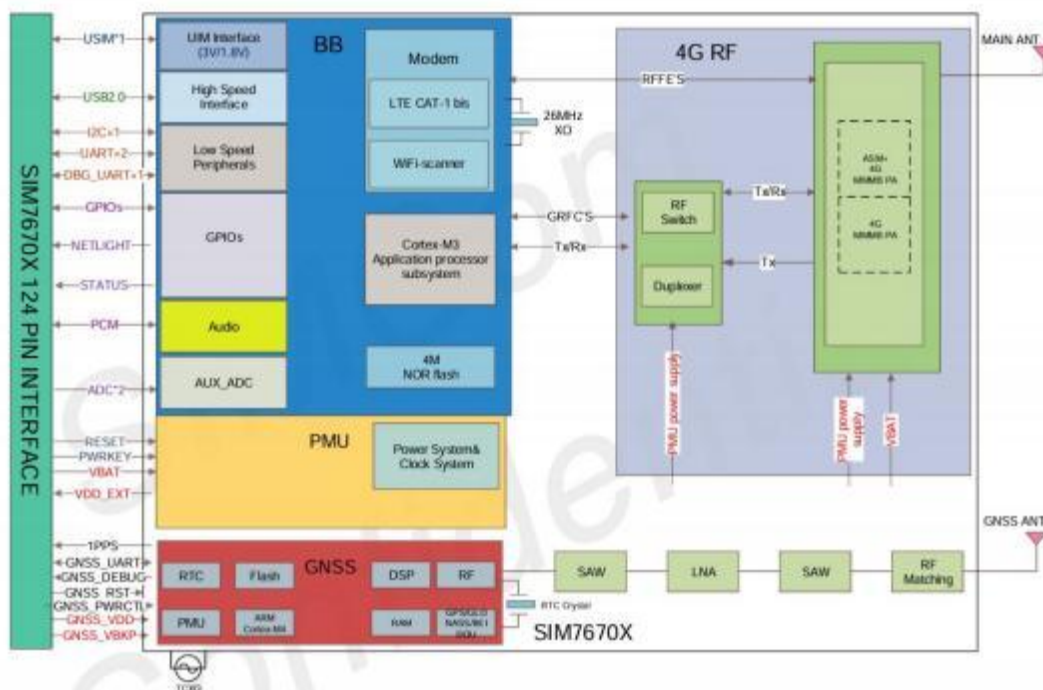
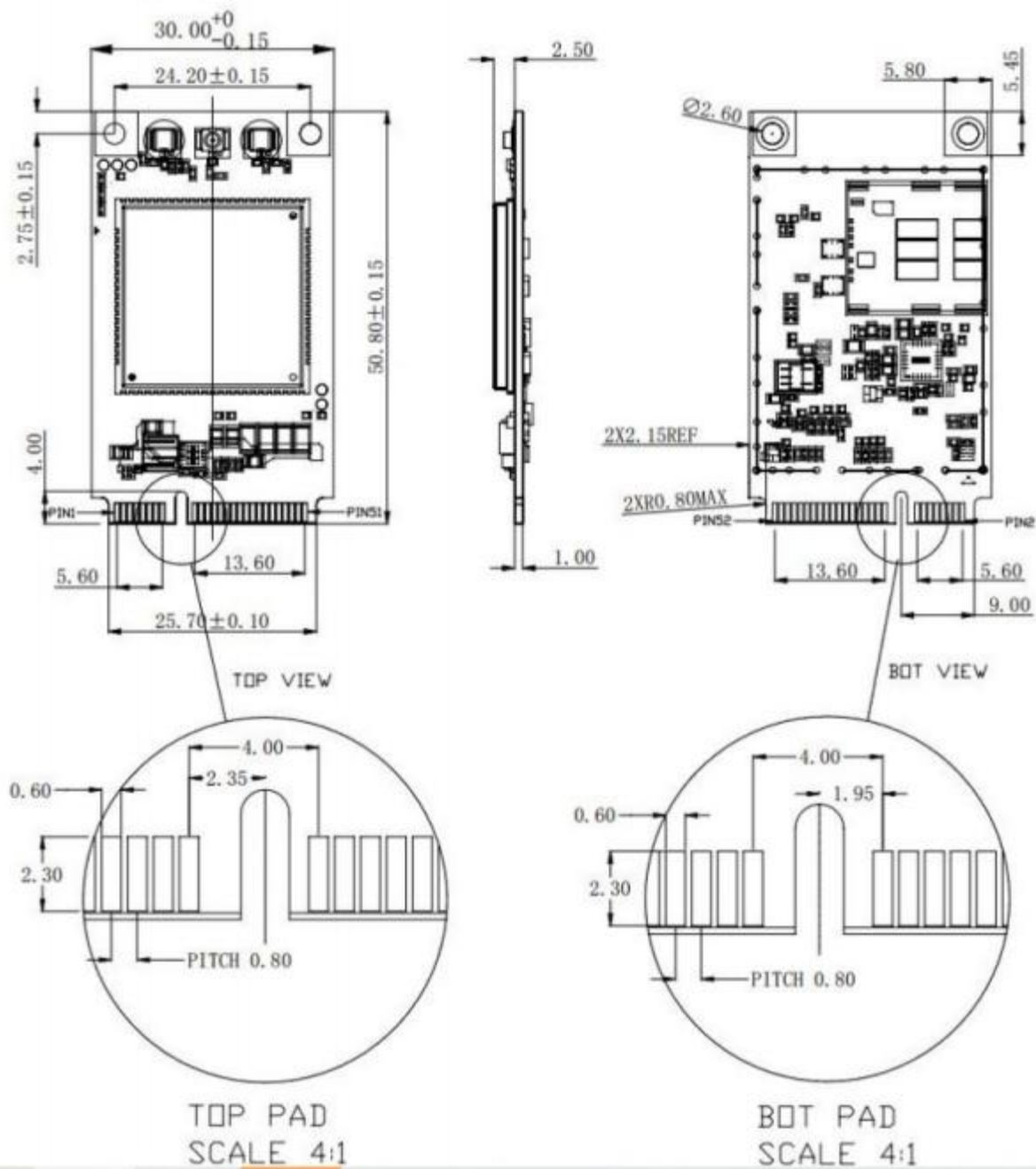


Figure 1: SIM7670X block diagram

From

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2.3 PCBA dimension



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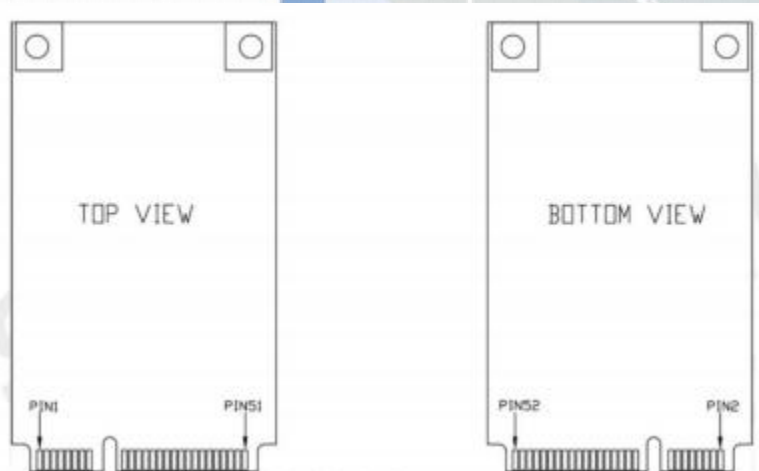
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3. Pin definition



Note: Pin2/24/39/41/52 VCC range is from 3.0V~3.6V, 3.3V is recommended.

Please ensure 1A peak current for the VCC pin. Board will automatically boot when it is power on. Full function UART interface is 1.8V TTL level.

3.1 Pin definition

Pin name	Pin number	I/O	Description	Comment
Power supply				
VCC	2,24,39,41,52	I	Power supply for module	-
VDD_EXT	33	O	1.8V power output, the max output current is 50 mA. It can provide power for level conversion circuits, but not for high-power loads.	If unused, keep it open.
GND	4,9,15,18,21,26,27,29,34,35,37,40,43,50		Ground	-
Reset				
PERST#	22	I	Reset input (Active low)	If unused, keep it open.

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USB 2.0				
USB_DP	38	I/O	USB 2.0 high speed port for data transfer, voice call, debug and FW download, etc.	If unused, keep it open.
USB_DN	36			
USIM card interface				
USIM_VDD	8	O	Power output for USIM card, its output Voltage depends on USIM card type automatically. Its output current is 50mA.	-
USIM_DATA	10	I/O	USIM Card data I/O, which has been pulled up via a 4.7K Ω resistor to USIM_VDD internally. Do not pull it up or down externally.	-
USIM_CLK	12	O	USIM clock.	Make sure the rise time and fall time of USIM_CLK less than 40ns
USIM_RST	14	O	USIM Reset.	-
USIM_DET	16	I	USIM card detect	-
UART Interface				
UART_CTS	11	O	CTS output	If unused, keep open
UART_RTS	13	I	RTS input	
UART_RXD	17	I	Receive Data	
UART_TXD	19	O	Transmit Data	
UART_DCD	31	O	Carrier detection	
UART_RI	44	O	Ring Indicator	
UART_DTR	46	I	DTE get ready	
				
LED_WWAN#	42	O	Network Status Indication output	If unused, keep it open.

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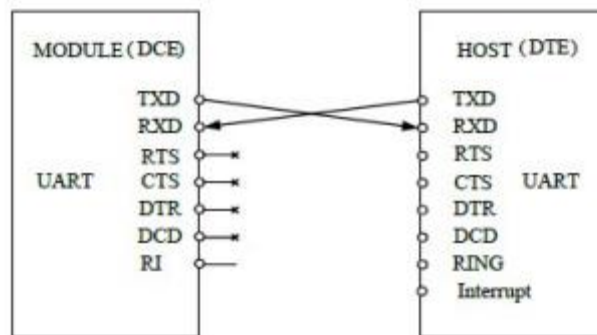
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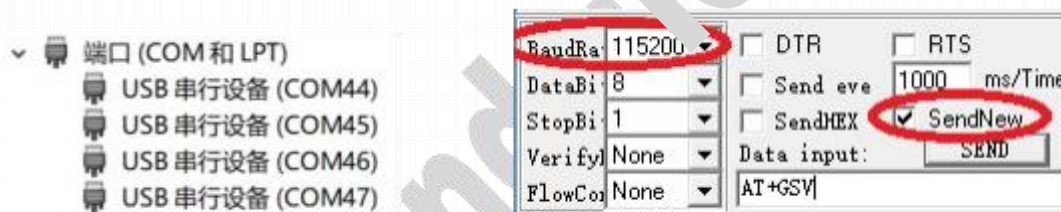
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3.2 How to use TXD and RXD (Default baud rate is 115200bps)



4. How to test the SIM7670-PCIE by AT command via USB

4.1 SIM7670G is free driver under windows 10. The computer will show as below,

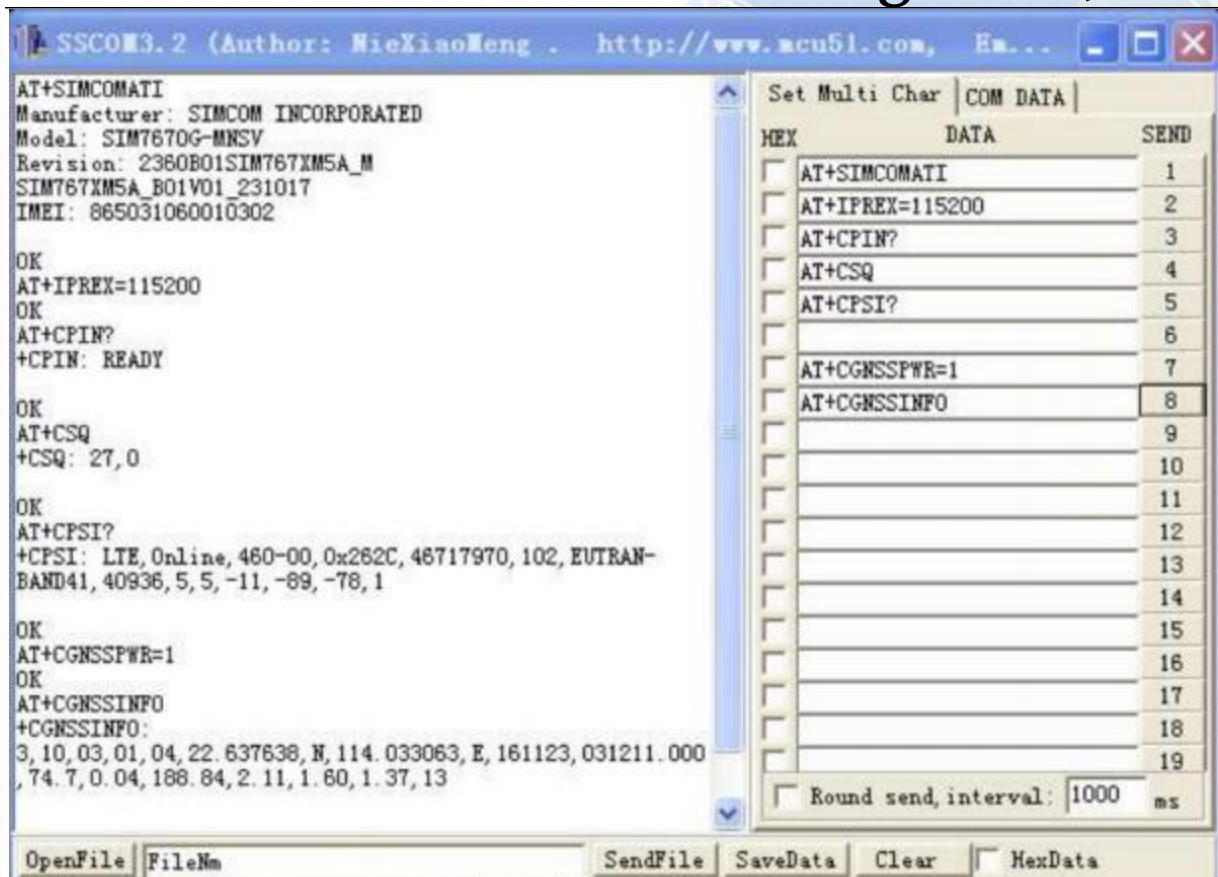


Open serial software  and choose right serial number, Baud rate as above, please keep "SendNew" selected:

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5.Package list:

Name	Qty	Unit
SIM7670-MINIPCIE	1	Pcs

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