



How to use the SIM7100 Module in Linux



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Version History

Date	Version	Description of change	Author
2014-12-30	V1.0	New version	

Scope

This document describes how to use the module of SIMCom SIM7100 module in Linux.

Introduction

This guide shows customers how to build linux driver with SIM7100 module. Here

SIMCom takes Ubuntu OS as a reference.

Connection

How to connect to the SIM7100 module with a PC.

- (1) Connect the SIM7100 by physical USB interface and power on the modem.
- (2) Open the terminal and type the shell command lsusb.

```
Bus 003 Device 002: ID 1a40:0101 Terminus Technology Inc. 4-Port HUB
Bus 006 Device 002: ID 093a:2510 Pixart Imaging, Inc. Optical Mouse
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 003 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 004 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 005 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 006 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 007 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 008 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 003 Device 003: ID 1a40:0101 Terminus Technology Inc. 4-Port HUB
Bus 003 Device 007: ID 1e0e:9001 Qualcomm / Option
```

- (3) SIM7100 module will be recognized by Ubuntu via USB interface(vid=1e0e,pid=9001).
- (4) Type the command “sudo rmmod usbserial”, some error messages may be prompted, just ignore them.
- (5) Copy GobiSerial.tar.gz to home directory and type the command “tar zxvf GobiSerial.tar.gz”
- (6) Compile the driver GobiSerial. Type the command “cd GobiSerial && make”,if no error occurs, a file named “GobiSerial.ko” will be generated.
- (7) Type the command “sudo modprobe usbserial && sudo insmod GobiSerial.ko” to install the driver.
- (8) List the ttyUSBx devices by “ls -l /dev/ttyUSB*”

```
crw-rw---- 1 root dialout 188, 0 Sep 10 10:50 /dev/ttyUSB0
crw-rw---- 1 root dialout 188, 1 Sep 10 10:52 /dev/ttyUSB1
crw-rw---- 1 root dialout 188, 2 Sep 10 10:50 /dev/ttyUSB2
crw-rw---- 1 root dialout 188, 3 Sep 10 10:50 /dev/ttyUSB3
crw-rw---- 1 root dialout 188, 4 Sep 10 10:50 /dev/ttyUSB4
crw-rw---- 1 root dialout 188, 5 Sep 10 10:50 /dev/ttyUSB5
```

If /dev/ttyUSB0~5 are available,then device driver is installed successfully!

Intercommunication

Intercommunicate with SIM7100 with AT commands by minicom.

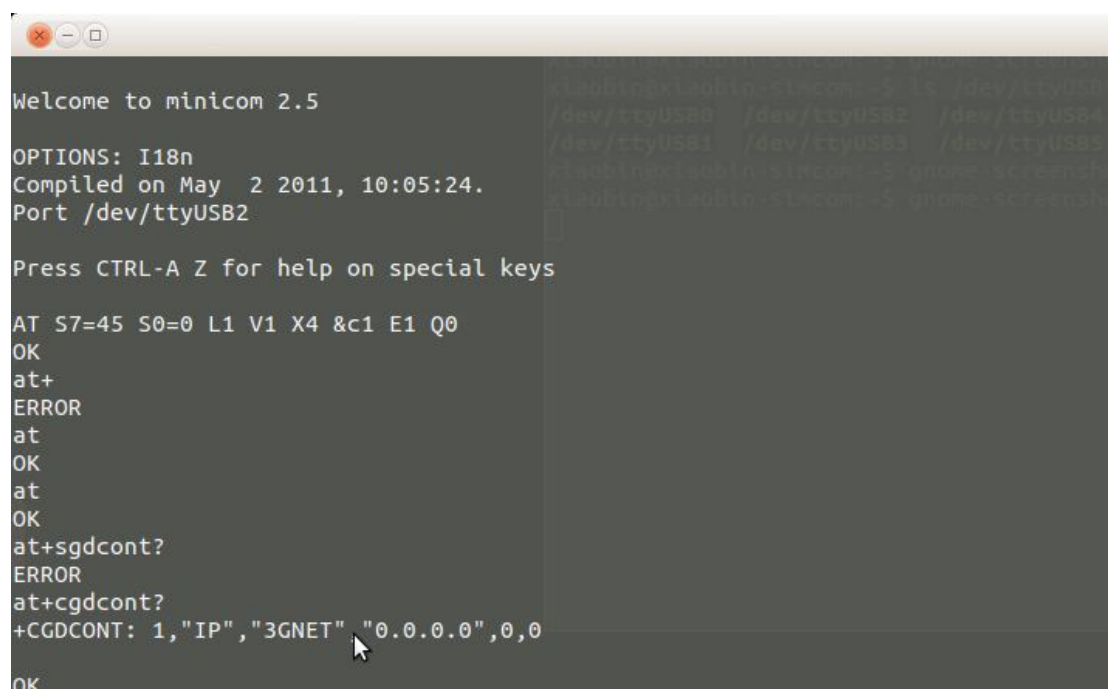
Now just the minicom case is demonstrated.

- (1) Install the package minicom in Linux host.
- (2) The USB class ttyUSB2 is the AT-port in SIM7100, so customer should configure the minicom with /dev/ttyUSB2 port.
- (3) Send AT commands in minicom.

Notes: there are 6 ports for SIM7100 modules in Linux host.

- 1) /dev/ttyUSB0-diag port for output developing messages
- 2) /dev/ttyUSB1- NMEA port for GPS NMEA data output
- 3) /dev/ttyUSB2-AT port for AT commands
- 4) /dev/ttyUSB3-Modem port for ppp-dial
- 5) /dev/ttyUSB4-audio port
- 6) /dev/ttyUSB5-Virtual Net card

Figure as below following:



```
Welcome to minicom 2.5

OPTIONS: I18n
Compiled on May  2 2011, 10:05:24.
Port /dev/ttyUSB2

Press CTRL-A Z for help on special keys

AT S7=45 S0=0 L1 V1 X4 &c1 E1 Q0
OK
at+
ERROR
at
OK
at
OK
at+sgdcont?
ERROR
at+cgdcont?
+CGDCONT: 1,"IP","3GNET" "0.0.0.0",0,0
OK
```

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