EC2X&AG35-QuecOpen ECM User Guide

LTE Module Series

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Quectel Wireless Solutions Co., Ltd.

7th Floor, Hongye Building, No.1801 Hongmei Road, Xuhui District, Shanghai 200233, China

Tel: +86 21 5108 6236

Email: info@quectel.com

Or our local office. For more information, please visit:

http://quectel.com/support/sales.htm

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About the Document

History

Revision	Date	Author	Description
1.0	2017-11-15	Gale GAO	Initial
1.1	2018-03-14	Edison YANG	Update

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1 Introduction

Android/Linux supports USB multiple network card mode, such as rndis, ecm, rmnet and so on. This document introduces Quectel Module how to configure USB as ECM mode.

Slave Terminal

2 ECM Configuration

2.1. If need configure Quectel module USB as ECM mode, just modify the usb_net_type directory in the file system path and restart it. The specific operation is as following.

For EC2X:
```
root@mdm9607-perf:~# echo ecm    > /sbin/usb/compositions/usb_net_type
root@mdm9607-perf:~# sync
root@mdm9607-perf:~# reboot
```

For AG35
```
root@mdm9607-perf:~# echo ecm    > /data/usb/usb_net_type
root@mdm9607-perf:~# sync
root@mdm9607-perf:~# reboot
```

2.2.

ECM Check

After configuration, use following command to check whether USB configuration is successful.
```
root@mdm9607-perf:~# cat /sys/class/android_usb/android0/functions
diag,serial,ecm,ffs
```

Use following command to check ecm0.
2.3.
```
root@mdm9607-perf:~# ifconfig ecm0
ecm0        Link encap:Ethernet    HWaddr 3E:60:FD:FB:5B:97
```

Test Method

After ECM is successfully established, it can't directly connect to the Internet, needs calling at first. Please refer to *Quectel_EC2X&AG35-QuecOpen_Data_Call_Application_Guide.*

3 Host Terminal

If the host is Android platform, users need to open the macro **CONFIG_USB_NET_CDCETHER** when compiling the kernel.

If the host is Ubuntu, it can be operated without adding pid vid, and please plug USB devices. Users can directly see usb0 network interface through command **ifconfig a**. If the network card corresponding to the network segment cannot be displayed, please use the command lsmod | grep "qmi_wwan*" to check whether the qmi_wwan driver is loaded. If this driver is loaded, please uninstall it. The specific commands are as following.

```
# sudo modprobe –r qmi_wwan
# sudo modprobe –r cdc_ether
# sudo modprobe –a cdc_ether
```

Then please re-plug USB cable to try.

Appendix A References

Table 1: Related Documents

SN	Document Name	Remark
[1]	Quectel_EC2X&AG35-QuecOpen_Data_Call_Application_Guide	

Table 2: Terms and Abbreviations

Abbreviation	Description
RMNET	Remote Network
ECM	Ethernet Control Mode
MBIM	Mobile Broadband Interface Model
RNDIS	Remote Network Device Interface Specification