Huawei Technologies Co., Ltd.	Product version	Confidentiality level
	V100R001B001D04SP00C03	CONFIDENTIAL
	Product name	Total 6 pages
	RIL	

Huawei WCDMA Modem Android Software

Release Notes

Prepared by   **Android Team**   **Date**   **2010-11-20**

Huawei Technologies Co., Ltd.

All rights reserved

Revision History

Date	Revision Version	Change Description	Author
2010-07-20	1.0.0	Initial	Android Team
2010-07-28	1.1.0	Add Short message、 Sim Operation	Android Team
2010-08-20	1.2.0	Support EM820U、Mobile network type	Android Team
2010-08-30	1.3.0	Can import phonebook and sms from USIM card	Android Team
2010-10-24	1.4.0	Support Read (TAIWAN)3G USIM phonebook	Android Team
2010-11-20	V100R001B0 01D04SP00C 03	1. can send long message to itself 2. obtain pc ui port by pid	Android Team

Table of Contents

1 Introduction

Huawei Android Modem Software release V100R001B001D04SP00C03 is a release for supporting Huawei 3G module EM770U、EM770W、EM820U、EM820W etc integration with Android 2.2 system.

It is designed to be compliant with the interface of Huawei module and forbidden to be used for other vendor modem.

2 Software

2.1 Main Feature

Feature Specification	Specification
RIL	Support RIL commands for data connection, SIM，SMS
Data connection	PPP data connection
	Data service always on
Power Management	Modem sleep and wakeup
	Modem wakeup Android system
Short Message	Short Message send and receive
SIM PIN	The Radio Status manager include(SIM PIN、SIM Absent)

2.2 RIL

2.2.1 Version Description

The RIL version in this release is V100R001B001D04SP00C03

2.2.2 Features and improvements

Version	Specification
V100R001B001D04SP00C03	1. Support RIL commands for data connection, SIM operation, Network operation, device management. 2. Support PPP data connection. 3. Support RIL commands for short message. 4. Support RIL commands for radio status(SIM PIN,SIMAbsent). 5. Support EM770U/EM770W/EM820U/EM820W. 6. Can import Phonebook and SMS from USIM card. 7. Resovle the issue that can not set long message to itself 8. Get pcui port by PID

2.2.3 Known issues and limitations

No	Class	Description

3 Usage

This chapter describes how to integrate to Android project.

3.1 RIL
Modify system property

The RIL shared library released is libhuawei-ril.so. In order to intergrate the new vendor RIL with Android system, system property of rild.libpath and rild.libargs should be modified to be compliant with the vendor RIL.

service ril-daemon /system/bin/rild -l libhuawei-ril.so -- -d /dev/ttyUSB2(PC UI Port name)

socket rild stream 660 root radio

socket rild-debug stream 660 radio system

user root

group radio cache inet misc audio

Modify init.rc

To enable the access right of Modem port (such as ttyUSB0) and PC UI port (such as ttyUSB2), the init.rc in root dir should be modified.Modify the init.rc(in mydroid/system/core/rootdir/init.rc),add the lines follow:

chmod 777 /dev/ttyUSB0 (Modem Port name)

chmod 777 /dev/ttyUSB2 (PC UI Port name)

3.2 PPP data connection
Modify rild root

RIld will start the pppd by calling some function. So must promise the rild have the root UID.

Modify the rild.c will get this purperse. Modify the rild.c(in mydroid/hardware/ril/rild/rild.c),get rid of

the line:

// switchUser();

Then recompile the rild, and replace the /system/bin/rild in platform by out/target/product/harmany/system/bin/rild

Add the pppd shell

Add the files supported by Huawei Company "ip-up","ip-down" to the directory /etc/ppp/ and

Add directory for PPP

Modefy the init.rc add the lines below, the pppd need the directory var in root directory to record some message.

symlink /data/var /var

symlink /system/etc /etc

Built in PPP Driver

When compile the kernel, please built in the ppp driver. You can reference to the .config in kernel root about the ppp driver configure.

# CONFIG_HIPPI is not set
CONFIG_ONFIG_PPP=y
CONFIG_PPP_MULTILINK=y
CONFIG_PPP_FILTER=y
CONFIG_PPP_ASYNC=y
CONFIG_PPP_SYNC_TTY=y
CONFIG_PPP_DEFLATE=y
CONFIG_PPP_BSDCOMP=y
CONFIG_PPP_MPPE=y
CONFIG_PPPOE=y
CONFIG_PPPOL2TP=y
#CONFIG_PPPOLAC is not set
CONFIG_PPPOPNS is not set
CONFIG_SLIP is not set