



SWI6600P_02.04.05.00
Customer Release Note

[SL809x/MC809x]



SIERRA
WIRELESS

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[R01.00]
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Important Notice

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Sierra Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.

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Consult our website for up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases: www.sierrawireless.com

Document History

Version	Date	Updates
1.0	2016-01-08	Creation



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Introduction

1.1. Document Scope

This document is for announcing that the Qualcomm PL3.5 based external formal build has been released for SL809x product of MDM6200/MDM6600 platform and elaborate what issues have been fixed and the enhancement/new feature in this formal release.

1.2. Document Audience

Customer can get related information from this external formal release note to decide if need apply this build to integrate into their products.

1.3. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
GPS reference location	Provide the longitude and latitude of registered BS as the MS location when GPS unable fixed.

2.

Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
N/A	N/A

3.

Related Documentation

Table 3. Related Documentation

Ref. #	Doc. #	Rev.	Document title
N/A	N/A	N/A	N/A

4.

Compatibility

Table 4. Hardware Compatibility

AirPrime Compatibility List
SL8090/MC8090/SL8092/MC8092

Table 5. Software Compatibility

Component	Version
Firmware	SWI6600P_02.04.05.00
Open AT OS	Not support
Location Library	N/A
eCall inband Modem Library	N/A
Security Library	N/A
Internet Library	N/A
Extended AT Application	N/A

5.

Software Release Description

5.1. Release Identification

Table 6. Release Identification

Component	Revision
Boot loader	SWI6600P_02.04.05.00BT
Application	SWI6600P_02.04.05.00AP
Date of generation	2016/01/01
Binary Size	amss.mbn (19,337,280 bytes)
Checksum	B39A2498FEADDF897DFB988E93E9B746
IMEI SV	50
Qualcomm Stack Version	M6600ASCAUTNZ35325
USB Host Version	Support USB1.1 and USB2.0

5.2. Software Tools Versions

Table 7. Software Tools

S/W Tools Name	Version	Resource file
SWIQMISetup	Build4249_Generic	\\jasmine2\projects-1\Engineering\HostSW\15 - External Release Packages\Drivers\QMI\Windows\Builds\Archived\Build4249_ALL_Embedded\Generic\Installer
FDT	4299	\\jasmine2\projects-1\Engineering\HostSW\15 - External Release Packages\FDT\Build4299
BinUpdater	R11.2.1105.0	\\jasmine2\Projects-1\Engineering\HostSW\14 - Engineering Builds\BinUpdater\Build3023\ENG1\BinUpdater-R11.2.1105.0.zip

5.3. Released Files and Download Processes

5.3.1. Download the entire necessary upgrade files

Download the files and follow any additional instructions on the download website:
Please contact your Sierra Wireless representative for access/instructions.

5.3.2. Supported Operating Systems

This software and firmware package supports the Sierra Wireless SL809x on the following Microsoft Operating Systems:

1. Windows XP SP3 (Service Pack 3 or higher)
2. Windows Vista SP1 (Service Pack 1 or higher)
3. Windows 7

5.3.3. Upgrade Instructions

Sierra Wireless firmware upgrades are provided in a One-Click tool, which contains the firmware and download tool bundled in a self-extracting executable. Before starting an upgrade, please ensure the following:

- The host computer is connected to an AC power supply, or has at least 30 minutes of battery life remaining
- The device to be upgraded is powered and operating normally
- All applications which communicate with the device, such as Watcher, Hyper-terminal, etc. are closed

Steps:

1. Contact your Sierra Wireless representative to get the 1-click file which is *.exe format.
2. Double click the 1-click file and download the firmware automatically.
3. When download finished, open AT port and input AT command ATI. Make sure the FW version is correct.

6. Software Changes Description

6.1. Validated Corrections/Improvements

This section presents all corrections or improvements integrated in SWI6600P_02.04.05.00.

Issues are sorted by alphabetical order of Impacted Domain.

Table 8. Change list

Description	Impacted Domain	Impacted Sub-Domain	Fixed in
Adding the feature of GPS reference location	GPS	GPS	SWI6600P_02.04.05.00
Adding the feature that DTMF can work during a voice call which is in connecting status	UMTS	VOICE	SWI6600P_02.04.05.00
Fix the bug that AT!AVRXAGC and AT!ACRXAGCLIST doesn't work	UMTS	VOICE	SWI6600P_02.04.05.00
Fix the bug that AT!SARBACKOFF doesn't set the GSM back off value correctly	GSM	RF	SWI6600P_02.04.05.00
Fix the bug that PPP-PDP type data call failed in CNS mode	UMTS	UMTS	SWI6600P_02.04.05.00
Enhance +CCED to report neighbor cell information	AT	N/A	SWI6600P_02.04.04.00
Modem resets when roaming between AT&T and Canadian networks along the border using the Jasper SIM	UMTS	UMTS	SWI6600P_02.04.04.00
Merge QC SBA SBA_M6600ASCAUTNZ35324_35325_SR01922729_SIERRAWIRELESS_24MAR15 to the trunk	UMTS	UMTS	SWI6600P_02.04.04.00
Add AT command +CPIN2	AT	SIM	SWI6600P_02.04.04.00
Update QC base line to 3.5.30	N/A	N/A	SWI6600P_02.04.04.00
Adding dynamic TS.25 update	UMTS	UMTS	SWI6600P_02.04.04.00
EFS reliability improvement	BSP	EFS	SWI6600P_02.04.04.00
Add LED behavior in UMTS release	BSP	LED	SWI6600P_02.04.04.00
Add QMI WDSI_CMD_SWI_PROFILE_CHANGE to set the PDP profile	QMI	WDS	SWI6600P_02.04.04.00
Add QMI API QMI_DMSI_SWI_GET_FWUPDATE_STATUS	QMI	DMS	SWI6600P_02.04.04.00
Add MT PDP support	UMTS	MT-PDP	SWI6600P_02.04.04.00
Configuration tool FACT support	BSP	N/A	SWI6600P_02.04.04.00
SPKG download support	BSP	N/A	SWI6600P_02.04.04.00
FDT download support	BSP	N/A	SWI6600P_02.04.04.00
QMI support	BSP	N/A	SWI6600P_02.04.04.00

6.2. Interface Changes

None



7. Troubleshooting

The following sections describe troubleshooting information when using the AirPrime when using in a live network and when using with a test box.

7.1. Cipherring/Integrity

If you're not attaching, check your cipherring settings. The UE needs to use the same settings as the network/test set. Generally, live networks will have cipherring/integrity enabled. Test sets may have them enabled or disabled, but it is common for test sets to leave it disabled unless explicitly testing that feature.

The AT command is noted below:

Table 9. AT commands to turn cipherring/integrity on/off

AT Command	Description
AT!GCIPHER=X	Set the card to support integrity and cipherring with the following settings: X = 0, Cipherring OFF, Integrity OFF X = 1, Cipherring ON, Integrity OFF X = 2, Cipherring ON, Integrity ON
AT!GCIPHER?	Query the GCIPHER settings.

7.2. Crash Investigation

Should the UE crash there are a number of different means to provide useful feedback to Sierra Wireless for resolution of the issue.

7.2.1. Full memory dump

This is the preferred process because it captures the most crash information.

7.2.2. Configuring the UE for crash dump capture

This must be done to enable or disable the crash capture feature on the UE. This configuration is stored in NV so it is persistent across power cycles / power removal. The UE must be reset after changing the setting before the changes take effect.

To enable crash dump capture

AT!EROPTION=0

To enable UE reset upon a crash (default behaviour)

AT!EROPTION=1

7.2.3. Capturing a crash dump

1. Wait for / cause a crash to occur

2. Close connection manager software (to release the com port)
3. Run SwiMemDebug
4. Click Start to initiate crash dump collection. If this fails, the application likely cannot open the com port (see step 2)
5. Once 100% is reached, the crash dump collection is complete. Click Reset to reset the modem (optional), and Exit to exit the program
6. Crash files will be in the same location as SwiMemDebug. Zip up the crash files and label the zip file with a unique name (date/timestamp is suggested) and send the zip to Sierra Wireless for analysis

7.2.4. Mini Dump

If a crash occurs, the summary of why the crash occurs is saved in memory. The command following command will display the crash summary:

AT!GCDUMP

Note that this crash summary is lost once power is removed from the device (or manually cleared via AT!GCCLR).

7.2.5. Error Listing

The AT!ERR command will display “points of interest” that have occurred in the UE. These are not crashes, but are often used by developers to highlight areas they wish to examine.



8.

Certification Description

This version hasn't passed any certification.



9. Restrictions and Additional Information

Table 10. Additional information

Issue ID	Description (What/When)	Impacted Domain	Impacted Sub-Domain
None	None	None	None

9.1. Vista Recommendations

For optimum performance and stability in Microsoft Vista, it is recommended that USB Selective Suspend be disabled. In order to disable Selective Suspend properly, follow both procedures (9.1 and 9.2) below:

9.1.1. Disabling Global Selective Suspend

The following procedure will disable the global selective suspend setting in Microsoft Vista.

1. Open the Control Panel
2. Select the Power Options applet
3. For whichever item is selected as the current Power Mode (ie: Maximum Battery Life), select Change plan settings
4. Select Change advanced power settings
5. Expand USB Settings
6. Expand USB Selective Suspend settings
7. Change the settings for Plugged in to DISABLED
8. Change the settings for On Battery to DISABLED
9. Close the Power Options applet

9.1.2. Disabling Device Specific Selective Suspend for Generic Sierra Wireless Drivers

The following procedure will disable the device specific selective suspend setting in Microsoft Vista when using a device configured with the generic Sierra Wireless drivers:

1. Open a notepad
2. Type the following text into notepad

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SWUMX3C\Parameters]
"IdleDetect"=dword:00000000
"UsbSelSus"=dword:00000000
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SWUMX3E\Parameters]
"IdleDetect"=dword:00000000
"UsbSelSus"=dword:00000000
```

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SWUMXA3\Parameters]

"IdleDetect"=dword:00000000

"UsbSelSus"=dword:00000000

3. Save the text file you just created with the filename disableSelSus.reg to the Desktop
4. Exit Notepad
5. Double-click the file you just created (disableSelSus.reg)
6. When prompted by Vista to allow this information to be added to the registry, select Yes.
7. Select OK
8. Reboot the PC