



Customer Release Note

Linux QMI SDK 03.03.14



SIERRA
WIRELESS®

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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

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Introduction

1.1. Document Scope

This document describes the content of the Linux QMI SDK 03.03.14 release.

1.2. Document Audience

This release note may be distributed to all direct and indirect customers.

1.3. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
Multi-Sim support	<ul style="list-style-type: none">- UIMSlotStatusChangeCallback- SLQSUIMGetSlotsStatus- SLQSUIMSwitchSlot
Firmware Update	<ul style="list-style-type: none">- Reject invalid files- API to extract valid FW/PRI combinations- Sample App<ul style="list-style-type: none">o Fix application not exit when download from boot-hold(DM port only)o Update error return codeso Auto pick sdk process path from current direction when “-s” is not definedo Improve terminal logs
Miscellaneous	<ul style="list-style-type: none">- Fix crash at ClearSLQSNasSysInfoCallback- Prebuilt binary for x86_64- Fix SMS rsend/eceive while Verizon IMS registered- Fix ramdump utility on big endian

2.

Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
MSM	Mobile Station Modem
PRI	Product Release Instructions
QMI	Qualcomm MSM Interface
SLQS	Sierra Linux QMI SDK
WP	Work Package

3.

Related Documentation

Table 3. Related Documentation

Ref. #	Doc. #	Document title
[R-1]	4110914	Linux QMI SDK Application Developer's Guide

4.

Compatibility

Table 4. Hardware Compatibility

Devices Compatibility List
AR7554/AR7554RD
EM/MC73xx
MC77xx
MC83x5
MC/SL9090
WP71xx
MC/EM74xx

Note: MC77xx devices must operate in “QMI Mode” and not in “Direct-IP” mode.

To switch device into QMI mode of operation, use the following AT commands:

- **AT!UDPID=68A2**
- **AT!RESET**

Note: MC73xx, set the device using “AT!UDPID=68C0”.

The tables below list the hexadecimal values of the Vendor ID (VID) and Product ID (PID) pairs supported by the Linux QMI SDK.

Table 5. Supported Application-Mode VID/PIDs

VID	1199	1199	1199	1199	1199	1199	1199	1199	3F0
PID	68A2	68C0	9011	9013	9015	9019	9041	9071	371D

Table 6. Supported Boot-Mode VID/PIDs

VID	1199	1199	1199	1199	1199	1199	1199	1199	3F0
PID	68A2	68C0	9010	9012	9014	9018	9040	9070	361D

To check your device’s VID/PID, issue the `lsusb` command. The output will present a list of USB devices with a column showing each device’s manufacturer. The device VID/PID can be read from the row containing the correct device manufacturer. Additionally, on MC77xx devices, you can use the `AT!UDINFO?` command to check VID/PID information. If your VID/PID does not match the any of the entries in the tables above, contact your FAE for support.

The following table enumerates the modems with their corresponding firmware that were tested with Linux QMI SDK 03.03.14.

Table 7. Modem and Firmware tested with the SDK

Modem	Firmware
MC7430	SWI9X30C_02.08.02.00

Modem	Firmware
EM/MC7455	SWI9X30C_02.08.02.00
MC7304	SWI9X15C_05.05.58.00
MC7354	SWI9X15C_05.05.66.00
MC7350	SWI9C15C_05.05.58.01
MC7355	SWI9X15C_05.05.58.00
MC7330	SWI9X15C_05.05.65.00
MC7305	SWI9X15C_05.05.61.00
MC7710	SWI9200X_03.05.29.03
MC9090	SWI6600U_02.04.05.00
EM7355	SWI9X15C_05.05.58.00
EM7330	SWI9X15C_05.05.65.00
EM7305	SWI9X15C_05.05.58.00
AR7554RD	SWI9X15A_07.04.01.00

Note: The SDK in general work across all firmware revisions. However, some new API might require a recent firmware.

5.

Software Release Description

Table 8. Release Information

Component	Content
SDK version	03.03.14
Date of generation	22/01/2016
Binary archive name	SLQS03.03.14.bin.tar.gz
MD5 checksum	66a521ecae17aa7671d26564b3b88f43
Source code archive name	SLQS03.03.14.tar.gz
MD5 checksum	8209e77a524c2de41b89785045dffa90
Processor compatibility	x86, ARM, PowerPC, MIPS
Linux kernel compatibility	2.6.32 to 4.1
USB drivers compatibility	S2.25N2.36



6. Software Changes Description

6.1. Validated Corrections/Improvements

ID	Description
ANO84014	API SLQSLOCSetOpMode() returns Malformed QMI response received
ANO84156	[Linux] [EM7455] ClearSLQSNasSysInfoCallback causes seg fault
ANO85195	prebuilt x86_64 binaries (*.a & elf) to have the support of X86_64
ANO85356	ImageIdElement and SWI_STRUCT_CarrierImage structures do not match
ANO85423	[SLQS03.03.12-rc1] [MC7455] Get SMS failed on MC7455 on Verizon LTE when IMS is registered
CUS85472	UpgradeFirmware2k downloads invalid files to the modem
CUS85713	fwldId_completion_status returned by tFNFwDIdCompletion is not correct
DEV85737	API to extract valid MDM/PRI pair from GetStoredImages
ANO86311	[SLQS03.03.12] 9x30 image switching does to go through the expected path
CUS86680	74xx ramdump fails on big endian systems
DEV86805	Firmware download application should not wait for device when used in "DM port only" mode
ANO86809	Return codes consistency in Firmware Download application
DEV86810	Firmwre Download tool "-s" option should have a convenient default value
NEW86921	UIM APIs for SDK[9x30]
ANO86958	SDK pdf document has incomplete information
ANO86987	[MC7455] [Verizon] send MO SMS over IMS failed when IMS is full service
DEV86999	Progress indication of Firmware Download tool should be done on several lines
DEV87254	QMI SDK stop responding after deregister client.
CUS87323	SDK documentation to indicate optional parameters and output parameters
ANO87446	Firmware Download Tool normal messages shouldn't be written to stderr
ANO87477	[Linux][MC7xxx_image__Management] On board image switch to orange fails
DEV87601	[Linux QMI SDK] change the reset sequence in SDK to control the modem
ANO87619	Firmware preference set incorrectly by SDK

6.2. Known Issues

ID	Description
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6.3. New API

API	Comment
SetUimSlotStatusChangeCallback	This enables/disables Slot Status Change callback function
SLQSUIGetSlotsStatus	This API Retrieves the current of the physical and logical slots
SLQSUISwitchSlot	This API Switches the binding between a logical slot and a physical slot

6.4. Minor API prototype change

Note: when updating SDK, please make sure to pull the latest headers from <SDK_ROOT>/api folder

API	Comment
SLQSSwiGetAllCarrierImages	<ul style="list-style-type: none"> - Update FW/PRI id length in struct SWI_STRUCT_CarrierImage - Update pFolderPath from wchar_t* to char*

6.5. Macro Usage

Macro	Usage
AM_API_MUTEX_TIMEOUT_IN_SEC	This is the timeout time (in seconds) for which the mutex is locked when the SDK is compiled with API_TIMEOUT flag.
API_TIMEOUT	This is a compilation flag. If this flag is defined during compilation, SDK will lock the mutex for a particular time. The locking time is defined by AM_API_MUTEX_TIMEOUT_IN_SEC. If this flag is not defined then the mutex is locked indefinitely.