



# Customer Release Note

## Linux QMI SDK 04.00.12



**SIERRA**  
WIRELESS®

4134609  
01.00  
Dec 22, 2017

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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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# Document History

Version	Date	Updates
01.00	Dec 22, 2017	Creation

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# Introduction

## 1.1. Document Scope

This document describes the content of the Linux QMI SDK 04.00.12 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
<b>QMAP Support IPV4V6</b>	Full SDK support IPV4V6 data call with QMAP
<b>Lite SDK test environment update</b>	Improve Lite SDK auto-test environment. Add manual test app (Support DMS and WDS only)
<b>Connection manager sample application for Lite SDK</b>	Add connection manager sample application for Lite SDK
<b>Firmware Upgrade support for EM7565</b>	Both lite and full SDK support firmware download for EM7565

Please refer to QMAP\_FullSDK.html and QMAP\_LiteSDK.html for QMAP test procedures.

## 1.4. Removed Features

Nil

## 1.5. Lite APIs Change

- dms\_UIMGetICCI
- dms\_GetIMSI

Both API are depreciated on WP76xx and are replaced by uim\_ReadTransparent.

## 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
[R-2]		Linux QMI SDK Sanity Test Report – 04.00.12
[R-3]		Linux QMI SDK Software Validation Test Report – 04.00.12

# 4.

## Compatibility

Table 4. Hardware Compatibility

Devices Compatibility List
AR7554/AR7554RD
EM/MC73xx
MC77xx
MC83x5
MC/SL9090
MC/EM74xx
WP8548/7502/7504
WP7601/WP7603/WP7607/WP7609
WP7702

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

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

Table 6. Supported Boot-Mode VID/PIDs

<b>VID</b>	1199	1199	1199	1199	1199	1199	1199	1199	3F0
<b>PID</b>	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 04.00.11.

**Table 7. Modem and Firmware tested with the SDK**

<b>Modem</b>	<b>Firmware</b>
MC7430	SWI9X30C_02.26.00.00
EM/MC7455	SWI9X30C_02.27.01.00
MC7304	SWI9X15C_05.05.58.00
MC7354	SWI9X15C_05.05.58.00
MC7350	SWI9C15C_05.05.58.01
MC7355	SWI9X15C_05.05.67.00
MC7330	SWI9X15C_05.05.65.00
MC7305	SWI9X15C_05.05.58.00
MC7710	SWI9200X_03.05.29.06
MC9090	SWI6600U_02.04.06.00
EM7355	SWI9X15C_05.05.67.00
EM7330	SWI9X15C_05.05.65.00
EM7305	SWI9X15C_05.05.67.00
WP7502	SWI9X15Y_07.12.09.00
WP7504	SWI9X15Y_07.12.09.00
WP8548	SWI9X15Y_07.12.09.00
WP7603	SWI9X07Y_02.13.01.00
WP7702	SWI9X06Y_02.13.01.00
EM7565	SWI9X50C_01.03.02.00

*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	04.00.12
Date of generation	22/12/2017
Binary archive name	SLQS04.00.12.bin.tar.gz
Binary archive name	SLQS04.00.12-lite.bin.tar.gz
Source code archive name	SLQS04.00.12.tar.gz
Processor compatibility	x86, ARM, PowerPC, MIPS
Linux kernel compatibility	2.6.32 to 4.8
USB drivers compatibility	S2.31N2.49



# 6. Software Changes Description

## 6.1. Validated Corrections/Improvements

ID	Description
<a href="#">LXQMISDK-1065</a>	[P2] Improve LiteSDK auto test environment
<a href="#">LXQMISDK-1064</a>	Documentation update for DMS
<a href="#">LXQMISDK-1063</a>	[P2] Add manual test application for Lite SDK
<a href="#">LXQMISDK-1060</a>	lite-fw-download does not handle OEM PRI download correctly
<a href="#">LXQMISDK-1056</a>	nas_rxInfo structure documentation is not correct
<a href="#">LXQMISDK-1055</a>	[EM7565] SLQSGetFirmwareInfo returns 0x11 when try to get firmware info
<a href="#">LXQMISDK-1054</a>	fdwdl-lite '-r' switch use needs to be more descriptive
<a href="#">LXQMISDK-1053</a>	Modem should be reset to come back ONLINE in case of host side error during FW download
<a href="#">LXQMISDK-1051</a>	FW download tool to add retry mechanisms to write() calls
<a href="#">LXQMISDK-1048</a>	[WP76xx] [FWATE] Failed to originate IPV4V6 SLQS data call in QMAP mode
<a href="#">LXQMISDK-1047</a>	Convert Windows LF of SLQS repository to Linux format
<a href="#">LXQMISDK-1046</a>	FW download times out with SDK Lite
<a href="#">LXQMISDK-1043</a>	lite-qmi missing cmd string eQMI_NAS_SWI_GET_CHANNEL_LOCK and eQMI_NAS_SWI_SET_CHANNEL_LOCK
<a href="#">LXQMISDK-1040</a>	update eQCWWAN_ERR_QMI_DISABLED comment
<a href="#">LXQMISDK-1039</a>	Failed to disconnect IPV4V6 data connection using connection manager
<a href="#">LXQMISDK-1038</a>	unpack_wds_SLQSGetProfileSettings does not handle 3GPP2 profiles
<a href="#">LXQMISDK-1037</a>	packingdemo check file handle valid on QMAP mode.
<a href="#">LXQMISDK-1027</a>	lite-qmi-demo to use correct format to print 64 bit variables

ID	Description
<a href="#">LXQMISDK-1025</a>	Failure reported when registering callbacks (error code 15)
<a href="#">LXQMISDK-1023</a>	dump_GetNetworkPreferenceSettings store incorrect value
<a href="#">LXQMISDK-1021</a>	Firmware download app shall not check for modem manager process when bundled as swiflash
<a href="#">LXQMISDK-1014</a>	Correct Klocwork issues for Lite/full SDK sample applications
<a href="#">LXQMISDK-1013</a>	Correct Klocwork issues for Lite/full SDK APIs
<a href="#">LXQMISDK-1012</a>	Correct Klocwork issues for full SDK core function
<a href="#">LXQMISDK-1005</a>	Add invalid parameter test cases for Lite SDK
<a href="#">LXQMISDK-1004</a>	Need Connection Manager for SDK Lite
<a href="#">LXQMISDK-1001</a>	Unable to enter APN to radio using SDK (SetDefaultProfileLTEV2)
<a href="#">LXQMISDK-999</a>	Linux SDK Support of EM7565 cwe+nvu firmware Download
<a href="#">LXQMISDK-998</a>	EM7565 firmware update support
<a href="#">LXQMISDK-993</a>	lite-qmi-demo sms read thread can handle CDMA encoded SMS as well
<a href="#">LXQMISDK-974</a>	Move qmuxIPTable to a generic QMAP header

## 6.2. Known Issues

ID	Description
<a href="#">QTI9X07-940</a>	Add QMI to change USB composition

## 6.3. Minor API prototype change

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

## 6.4. 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.