



Customer Release Note

Linux QMI SDK 04.00.10



SIERRA
WIRELESS®

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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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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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>> Contents

1. INTRODUCTION	7
1.1. Document Scope	7
1.2. Document Audience	7
1.3. New Features/Enhancements	7
1.4. Removed Features	7
1.5. Lite APIs Rename.....	7
2. ABBREVIATIONS AND DEFINITIONS.....	7
3. RELATED DOCUMENTATION	8
4. COMPATIBILITY	9
5. SOFTWARE RELEASE DESCRIPTION	11
6. SOFTWARE CHANGES DESCRIPTION	12
6.1. Validated Corrections/Improvements	12
6.2. Known Issues	12
6.3. New API.....	12
6.4. Minor API prototype change.....	12
6.5. Macro Usage	12



List of Tables

Table 1.	New Features/Enhancements	7
Table 2.	Abbreviations and Definitions	7
Table 3.	Related Documentation	8
Table 4.	Hardware Compatibility	9
Table 5.	Supported Application-Mode VID/PIDs	9
Table 6.	Supported Boot-Mode VID/PIDs	9
Table 7.	Modem and Firmware tested with the SDK.....	10
Table 8.	Release Information	11



Introduction

1.1. Document Scope

This document describes the content of the Linux QMI SDK 04.00.10 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-PDN QMAP Support	Updated to use IP alias instead of virtual adaptor to support QMAP, no API change involved

1.4. Removed Features

Nil

1.5. Lite APIs Rename

Nil

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 – 04.00.10
[R-3]		Linux QMI SDK Software Validation Test Report – 04.00.10

4.

Compatibility

Table 4. Hardware Compatibility

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

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 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 04.00.09.

Table 7. Modem and Firmware tested with the SDK

Modem	Firmware
MC7430	SWI9X30C_02.26.00.00
EM/MC7455	SWI9X30C_02.26.00.00
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_02.07 6.01 92.00
EM7565	SWI9X50C_00.05.03.00

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	04.00.10
Date of generation	05/09/2017
Binary archive name	SLQS04.00.10.bin.tar.gz
MD5-checksum	88e45c93873be6dddde6d57d59a76a1b
Binary archive name	SLQS04.00.10-lite.bin.tar.gz
MD5-checksum	7f5edadafa04f1b7b6b20eb7399db5d7
Source code archive name	SLQS04.00.10.tar.gz
MD5-checksum	e0ccac3a9cd3a2013e6ffdfff376fe8c
Processor compatibility	x86, ARM, PowerPC, MIPS
Linux kernel compatibility	2.6.32 to 4.8
USB drivers compatibility	S2.28N2.42



6. Software Changes Description

6.1. Validated Corrections/Improvements

ID	Description
LXQMISDK-969	[QMAP] set ip address from Lite SDK to GobiNet driver
LXQMISDK-962	FW does not show up in modem slots (at!image?) after downloading using Linux QMI SDK

6.2. Known Issues

ID	Description
LXQMISDK-951	EM7565 firmware update support

6.3. New API

API	Comment
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6.4. Minor API prototype change

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

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.