



Linux QMI SDK 04.00.21

Customer Release Note



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1. Introduction

This document describes the contents of the Linux QMI SDK **04.00.21** release.

1.1. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
Retrieve part number of firmware image	<ul style="list-style-type: none">Add new Full and Lite SDK API to retrieve firmware image part number
Documentation update	<ul style="list-style-type: none">Update RAT mask in wds.h
Add verify test cases for all QMI service	<ul style="list-style-type: none">Lite SDK auto test tool was updated to validate modem firmware QMI objects

1.2. Lite SDK APIs added

- litefw_ExtractFirmwarePartNoByPath

1.3. Lite SDK APIs updated

- Nil

1.4. Full SDK APIs added

- SLQSGetImagePartNumber

1.5. Full SDK APIs updated

- Nil

2. Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
MSM	Mobile Station Modem
PRI	Product Release Instructions

Abbreviation/Acronym	Definitions
QMI	Qualcomm MSM Interface
SLQS	Sierra Linux QMI SDK
WP	Work Package

3. Related Documentation

- [1] Linux QMI SDK Application Developer's Guide
Reference number: 4110914
- [2] Linux QMI SDK Sanity Test Report
Reference number: 41112405
- [3] Linux QMI SDK Software Validation Test Report
Reference number: 41112406

4. Compatibility

Table 3. Hardware Compatibility

Compatible Devices
AR7554/AR7554RD
EM/MC73xx
MC77xx
MC83x5
MC/SL9090
MC/EM74xx
WP8548/7502/7504
WP76xx
WP7702
EM75xx

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

To switch the 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 4. Supported Application-Mode VID/PIDs

VID	1199	1199	1199	1199	1199	1199	1199	1199	1199	3F0	1199	1199	1199
PID	68A2	68C0	9011	9013	9015	9019	9041	9071	371D	9091	90B1	90C1	

Table 5. Supported Boot-Mode VID/PIDs

VID	1199	1199	1199	1199	1199	1199	1199	1199	1199	3F0	1199	1199	1199
PID	68A2	68C0	9010	9012	9014	9018	9040	9070	361D	9090	90B0	90C0	

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.

Following table enumerates the modules with their corresponding firmware that were tested with Linux QMI SDK **04.00.21**

Table 6. Modem and Firmware tested with the SDK

Modem	Firmware
WP7603	SWI9X07Y_02.31.01.00
WP7607	SWI9X07Y_02.31.01.00
WP7608	SWI9X07Y_02.31.01.00
WP7609	SWI9X07Y_02.31.01.00
WP7702	SWI9X06Y_02.28.00.00
EM7565	SWI9X50C_01.11.00.00
EM7511	SWI9X50C_01.11.00.00
EM7455	SWI9X30C_02.33.00.00
MC7305	SWI9X15C_05.05.58.00
WP7502	SWI9X15Y_07.14.01.00

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

5. Software Release Description

Table 7. Release Information

SDK version	04.00.21
Date of generation	05/07/2019
Binary archive name	SLQS04.00.21.bin.tar.gz
Binary archive name	SLQS04.00.21-lite.bin.tar.gz
Source code archive name	SLQS04.00.21.src.tar.gz
Source code archive name	SLQS04.00.21.lite.src.tar.gz
Processor compatibility	x86, ARM, PowerPC, MIPS
Linux kernel compatibility	2.6.32 to 5.0
USB driver compatibility	S2.37N2.58

6. Software Changes

6.1. Validated Corrections/Improvements

Table 8. Validated Corrections/Improvements

ID	Description
LXQMISDK-1460	improve OEM DMS API Test csv file format
LXQMISDK-1459	improve OEM SMS and SWIOMA API Test csv file format
LXQMISDK-1458	improve OEM NAS and SWIAVMS API Test csv file format
LXQMISDK-1453	ARM64 LE SDK Change default Stack size
LXQMISDK-1452	Uninitialized pointer when calling the SLQSSetSysSelectionPref() function in the API of the SLQSSDK
LXQMISDK-1450	Implement new API to retrieve the part number of the provided firmware image
LXQMISDK-1447	Character ~ is not received/decoded correctly
LXQMISDK-1444	SMS message cannot be decoded successfully
LXQMISDK-1443	SDK Crash
LXQMISDK-1441	Factory Sequence Number and Phone Number no longer published to caller
LXQMISDK-1440	Issue decoding wcdma SMS with Verizon SIM roaming to Rogers
LXQMISDK-1439	Test case t865 does not print last digit of ICCID
LXQMISDK-1437	Linux MBIM not working for all Sample Apps
LXQMISDK-1436	SDK makefile updates
LXQMISDK-1433	RAT mask does not match documentation
LXQMISDK-1431	Add verify test cases on OEM WDS API test
LXQMISDK-1430	Add verify test cases on OEM UIM API test
LXQMISDK-1429	Add verify test cases on OEM SWIOMA API test
LXQMISDK-1428	Add verify test cases on OEM SWILOC API test
LXQMISDK-1427	Add verify test cases on OEM SWIAVMS API test
LXQMISDK-1426	Add verify test cases on OEM SMS API test
LXQMISDK-1425	Add verify test cases on OEM QOS API test
LXQMISDK-1424	Add verify test cases on OEM PDS API test
LXQMISDK-1423	Add verify test cases on OEM NAS API test
LXQMISDK-1422	Add verify test cases on OEM LOC API test
LXQMISDK-1421	Add verify test cases on OEM FMS API test
LXQMISDK-1420	Add verify test cases on OEM DMS API test
LXQMISDK-1419	Add verify test cases on OEM API test

6.2. Known Issues

Table 9. Known Issues

ID	Description

6.3. Minor API Prototype Change

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

6.4. Macro Usage

Table 10. 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.