



**Linux QMI SDK 04.00.25**

## **Customer Release Note**



**SIERRA**  
WIRELESS®

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# 1. Introduction

This document describes the contents of the Linux QMI SDK **04.00.25** release.

## 1.1. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
<b>Add VOICE API to decode USSD indication</b>	<ul style="list-style-type: none"> <li>QMI_VOICE_ORIG_USSD_NO_WAIT_IND (Notifies clients about the USSD responses received from the QMI_VOICE_ORIG_USSD_NO_WAIT request) implementation in full and lite SDK</li> </ul>
<b>Add NAS API in set 3GPP2 subscription information</b>	<ul style="list-style-type: none"> <li>QMI_NAS_SET_3GPP2_SUBSCRIPTION (Write 3GPP2 subscription-related information) implementation in full and lite SDK</li> </ul>
<b>Add SWIDMS API to get UIM slot</b>	<ul style="list-style-type: none"> <li>QMI_SWI_DMS_GET_UIM_SLOT (Query UIM slot interface) implementation in full and lite SDK</li> </ul>
<b>Add SWIDMS API to set UIM slot</b>	<ul style="list-style-type: none"> <li>QMI_SWI_DMS_SET_UIM_SLOT (Set UIM slot interface) implementation in full and lite SDK</li> </ul>
<b>Add UIM sample code</b>	<ul style="list-style-type: none"> <li>Provide UIM sample code to read LTE IMSI file.</li> </ul>
<b>Add NAS API to perform incremental network scan</b>	<ul style="list-style-type: none"> <li>QMI_NAS_PERFORM_INC_NETWORK_SCAN (Performs the network scan and give results incrementally) implementation in full and lite SDK</li> </ul>
<b>Add NAS API to decode perform incremental network scan indication</b>	<ul style="list-style-type: none"> <li>QMI_NAS_PERFORM_INC_NETWORK_SCAN_IND (Network scan status) implementation in full and lite SDK</li> </ul>
<b>Add SMS sample code</b>	<ul style="list-style-type: none"> <li>Provide SMS sample to decode Verizon CDMA sms</li> </ul>

## 1.2. Lite SDK APIs added

- pack\_nas\_SLQSSetDDTMPref
- unpack\_nas\_SLQSSetDDTMPref
- unpack\_nas\_SLQSDDTMPrefIndicationCallback\_Ind
- pack\_nas\_SLQSSet3GPP2SubscriptionInfo
- unpack\_nas\_SLQSSet3GPP2SubscriptionInfo
- pack\_nas\_SLQSPerformIncNetworkScanReq
- unpack\_nas\_SLQSPerformIncNetworkScan
- unpack\_nas\_SLQSNasPerformIncNetworkScanCallback\_Ind
- pack\_swidms\_SLQSSwiDmsGetUimSlot
- unpack\_swidms\_SLQSSwiDmsGetUimSlot
- pack\_swidms\_SLQSSwiDmsSetUimSlot
- unpack\_swidms\_SLQSSwiDmsSetUimSlot
- unpack\_voice\_USSDNoWaitIndicationCallback\_ind

### 1.3. Lite SDK APIs updated

- Nil

### 1.4. Full SDK APIs added

- SetDDTMPrefIndicationCallback
- SetSLQSNasPerformIncNetworkScanCallback
- SLQSNasSet3GPP2Subscription
- SLQSSetDDTMPref
- SLQSNasPerformIncrementalNetworkScan
- SLQSSwiDmsGetUimSlot
- SLQSSwiDmsSetUimSlot

### 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
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/EM7430 MC/EM7455
WP8548/7502/7504
WP76xx
WP7702
EM7511 EM7565
RC7611

*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

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

Table 5. Supported Boot-Mode VID/PIDs

<b>VID</b>	1199	1199	1199	1199	1199	1199	1199	1199	3F0	1199	1199	1199
<b>PID</b>	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 **04.00.25**

**Table 6. Modem and Firmware tested with the SDK**

<b>Modem</b>	<b>Firmware</b>
WP7603	SWI9X07Y_02.37.03.00
WP7607	SWI9X07Y_02.37.03.00
WP7609	SWI9X07Y_02.37.03.00
WP7610	SWI9X07Y_02.37.00.00
WP7702	SWI9X06Y_02.34.00.00
EM7565	SWI9X50C_01.12.02.00
EM7511	SWI9X50C_01.12.02.00
EM7455	SWI9X30C_02.34.01.00
MC7355	SWI9X15C_05.05.58.00
RC7611	SWI9X07H_00.03.03.00

*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

<b>SDK version</b>	04.00.25
<b>Date of generation</b>	23/04/2020
<b>Binary archive name</b>	SLQS04.00.25.bin.tar.gz
<b>Binary archive name</b>	SLQS04.00.25-lite.bin.tar.gz
<b>Source code archive name</b>	SLQS04.00.25.src.tar.gz
<b>Source code archive name</b>	SLQS04.00.25-lite.src.tar.gz
<b>Processor compatibility</b>	x86, ARM, PowerPC, MIPS
<b>Linux kernel compatibility</b>	2.6.32 to 5.6
<b>USB driver compatibility</b>	S2.42N2.62

## 6. Software Changes

### 6.1. Validated Corrections/Improvements

Table 8. Validated Corrections/Improvements

ID	Description
<a href="#">LXQMISDK-113</a>	[US_CARRIER]USSD API for origination
<a href="#">LXQMISDK-1406</a>	[AndroidRIL] Add support for NAS DDTM and SET_3GPP2_SUBSCRIPTION
<a href="#">LXQMISDK-1473</a>	QMI support to control DSSS
<a href="#">LXQMISDK-1521</a>	Add sample code to read SIM File EFAD
<a href="#">LXQMISDK-1524</a>	correct the debug print for eQMI_NAS_SWI_OTA_MESSAGE_INDICATION
<a href="#">LXQMISDK-1525</a>	correct debug print in swiavmsdemo-avc2 and add unpack_swiavms_SLQSAVMSSendSelection in OEM API test
<a href="#">LXQMISDK-1526</a>	qatestapp fail to start when device entered selective suspend mode
<a href="#">LXQMISDK-1532</a>	[AndroidRIL] Support QMI_NAS_PERFORM_INCREMENTAL_NETWORK_SCAN and QMI_NAS_PERFORM_INCREMENTAL_NETWORK_-SCAN_IND
<a href="#">LXQMISDK-1533</a>	add Verizon CDMA sms dummy test in smsdemo
<a href="#">LXQMISDK-1537</a>	ramdump to support RC7611
<a href="#">LXQMISDK-1539</a>	add command options in lite-qmi-demo application to execute invalid_unpack and dummy_unpack function
<a href="#">LXQMISDK-1540</a>	Add support to RC51xx

### 6.2. Known Issues

Table 9. Known Issues

ID	Description

### 6.3. Minor API Prototype Change

API	Comments

*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.