Customer Release Note

Linux QMI SDK 03.03.08

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

Version	Date	Updates
01.00	April, 08, 2015	Creation
01.01	April, 28, 2015	Update “Date of Generation” field for release archives

Contents

List of Tables

1. Introduction

1.1. Document Scope

This document describes the content of the Linux QMI SDK 03.03.08 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
SQF Filter Editing	Provide sample app and API library to edit SQF filter Please refer to: tools/logging/dm/filters/src/sqf.h
IMSA	API & Callback for IMSA service

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
EM73xx
MC73xx
MC77xx
MC78xx
MC83x5
MC9090
SL9090
WP71xx
EM7455

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 (VID) 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 03.03.08.

Table 7. Modem and Firmware tested with the SDK

Modem	Firmware
EM7455	SWI9X30C_00.08.03.00
EM7305	SWI9X15C_05.05.58.00
EM7330	SWI9X15C_05.05.58.00
EM7355	SWI9X15C_05.05.58.00
MC7304	SWI9X15C_05.05.58.00
MC7305	SWI9X15C_05.05.58.00
MC7330	SWI9X15C_05.05.58.00
MC7350	SWI9C15C_05.05.58.01
MC7354	SWI9X15C_05.05.58.00
MC7355	SWI9X15C_05.05.58.00
MC7710	SWI9200X_03.05.29.03
MC7750	SWI9600M_03.05.13.02
MC9090	SWI6600U_02.03.00.00 / SWI6600H_02.03.00.00

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	03.03.08
Date of generation	2015/04/09
Binary archive name	SLQS03.03.08.bin.tar.gz
MD5 checksum	b83feb96fab0fbd8b7cddd8d38a7fa9d
Source code archive name	SLQS03.03.08.tar.gz
MD5 checksum	3275108f30475c95a022034433eca7f7
Processor compatibility	x86, ARM, PowerPC, MIPS
Linux kernel compatibility	2.6.18 to 3.13
USB drivers compatibility	S2.23N2.31

6. Software Changes Description

6.1. Validated Corrections/Improvements

ID	Description
DEV77708	IMSA api
ANO77897	[AVMS]-MC7354 several data retrieved after a synchronise or a status report are displayed without label
DEV77957	QMI_PDS_SET_POSITION_METHOD_STATE api
ANO78116	Filters description needs to be a text file
ANO78119	SLQSSwiGetCrashAction/SLQSSwiSetCrashAction documentation needs to be more descriptive
DEV78391	SQF edit
DEV78410	[AVMS][Robust Test] restart writing firmware file into the modem when power on for the power lose test case
ANO78480	[Linux SDK] EM7455 firmware downloads indefinitely on SLQS03.03.07
CUS78556	[Linux QMI SDK] SLS9090 image information is not documented
CUS78705	SDK 3.3.6 fails to scan the modem both MC74xx and MC73xx.
ANO78934	[SLQS03.03.07] firmware downloader cannot download nvu files when download cwe+nvu file together for some 9x15 modules

6.2. Known Issues

ID	Description
ANO78378	[Linux QMI Driver] IPV6 address cannot be assigned to Ethernet port when tested with RawIP mode QMI driver
CUS78556	[Linux QMI SDK] SLS9090 image information is not documented

6.3. New API

API	Comment
SLQSSetIMSARegStatusCallback	IMSA Registration Status indication callback
SLQSSetIMSASvcStatusCallback	IMSA Service Status indication callback
SLQSSetIMSARatStatusCallback	IMSA RAT handover status indication callback
SLQSSetIMSAPdpStatusCallback	IMSA PDP status indication callback
SLQSRegisterIMSAIndication	Sets the registration state for different QMI_IMSA indications for the requesting control point
SLQSGetIMSASupportedMsg	Queries the set of messages implemented by the currently running software
SLQSGetIMSASupportedFields	Queries the set of fields implemented by the currently running software

API	Comment
SLQSGetIMSARegStatus	Query IMSA registration status
SLQSGetIMSAServiceStatus	Gets the service status for various IMS services for the requesting control point
SLQSSetPositionMethodState	Sets the state of positioning methods for the device

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.