



**WP76xx R16.1**

# Customer Release Notes



**SIERRA**  
WIRELESS®

41114503  
Rev. 1.0

## Important Notice

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 product are used in a normal manner with a well-constructed network, the Sierra Wireless product 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 product, or for failure of the Sierra Wireless product to transmit or receive such data.

## Safety and Hazards

Do not operate the Sierra Wireless product in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, near life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Sierra Wireless product **MUST BE POWERED OFF**. The Sierra Wireless product can transmit signals that could interfere with this equipment.

Do not operate the Sierra Wireless product in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless product **MUST BE POWERED OFF**. When operating, the Sierra Wireless product can transmit signals that could interfere with various onboard systems.

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*Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. Sierra Wireless products may be used at this time.*

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Sales information and technical support, including warranty and returns	Web: <a href="http://sierrawireless.com/company/contact-us/">sierrawireless.com/company/contact-us/</a> Global toll-free number: 1-877-687-7795 6:00 am to 5:00 pm PST
Corporate and product information	Web: <a href="http://sierrawireless.com">sierrawireless.com</a>

## Revision History

Revision number	Release date	Changes
1.0	June 2022	Creation

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# >> 1: About This Document

This document describes WP76xx firmware releases. These release notes may be distributed to all direct and indirect customers.

## Compatibility

### Hardware Compatibility

Product compatibility list
WP7605 – LTE Cat-4, LTE bands 1/3/8/11/18/19/21, WCDMA bands 1,6,19
WP7605-1 – LTE Cat-1, LTE bands 1/3/8/11/18/19/21, WCDMA bands 1,6,19
WP7607 - LTE Cat-4, LTE bands 1/3/7/8/20/28, WCDMA bands 1/8, GSM900/1800
WP7607-1 - LTE Cat-1, LTE bands 1/3/7/8/20/28, WCDMA bands 1/8, GSM900/1800
WP7608 - LTE Cat-4, LTE bands 1/3/5/8/40/41(partial) WCDMA bands 1/8, GSM900/1800
WP7608-1 - LTE Cat-1, LTE bands 1/3/5/8/40/41(partial) WCDMA bands 1/8, GSM900/1800
WP7609 - LTE Cat-4, LTE bands 1/3/5/7/8/28, WCDMA bands 1/5/8, GSM900/1800
WP7610 - LTE Cat-4, LTE bands 2/4/5/12/13/14/17/66, WCDMA bands 2/4/5
WP7611 – LTE Cat-4 LTE bands 2/4/5/12/13/14/25/26/66/71, WCDMA bands 2/4/5
WP7611-1 – LTE Cat-1, LTE bands 2/4/5/12/13/14/25/26/66/71, WCDMA bands 2/4/5

## >> 2: SWI9X07Y Release 16.1

Release 16.1 is a minor release from Release 16.0.1.

Release 16.1 includes some new features and minor bug corrections. It is targeted for WP7605, WP7607, WP7607-1, WP7608, WP7608-1, WP7609, WP7610, WP7611 and WP7611-1.

## Software Release Description

### Release Identification

Component	Revision
Modem Firmware	SWI9X07Y_02.37.03.05 52ddef jenkins 2021/12/22 04:24:24
Linux Firmware	SWI9X07Y_02.37.10.02
MCU Firmware	002.015 (embedded as a binary in the Linux image, not applicable for modules without embedded MCU)
Legato Application Framework	19.11.6_225ac9b7882467c5c7f9e0bf4cdb5523
Binary Size	61 MB (compressed one-click Generic exe)
IMEI SV	16
Qualcomm Stack Version	MDM9607.LE.2.0-00182-STD.PROD-1.264397.2
Linux Kernel Version	Linux version 3.18.140 (oe-user@oe-host) (gcc version 7.3.0 (GCC) ) #1 PREEMPT Tue Aug 3 08:17:34 UTC 2021
Supported H/W	WP7605, WP7607, WP7607-1, WP7608, WP7608-1, WP7609, WP7610, WP7611, WP7611-1

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## Software Tools Version

S/W Tools Name	Version
Windows Driver Package	B4956
Windows SDK	None
Skylight	None
Linux Drivers	S2.42N2.63
Linux SDK	SLQS04.00.26

\*Available in <https://source.sierrawireless.com>

## Released Files

File	Carrier	Modem Firmware	Config	Linux Distribution	Base Legato System	Comment
<b>WP7605 Approved Packages</b>						
WP76xx_Release16.1_DOCOMO.exe	DOCOMO	SWI9X07Y_02.28.03.05	001.024_001	SWI9X07Y_02.37.10.02	19.11.6	DOCOMO Approved
WP76xx_Release16.1_SOFTBANK.exe	SoftBank	SWI9X07Y_02.28.03.05	001.028_001	SWI9X07Y_02.37.10.02	19.11.6	SoftBank Approved
WP76xx_Release16.1_KDDI.exe	KDDI	SWI9X07Y_02.28.03.05	001.026_002	SWI9X07Y_02.37.10.02	19.11.6	KDDI Approved
<b>WP7607, WP7607-1 Approved Packages</b>						
WP76xx_Release16.1_GENERIC.exe	GENERIC	SWI9X07Y_02.37.03.05	002.115_002	SWI9X07Y_02.37.10.02	19.11.6	GCF Approved
<b>WP7608, WP7608-1 Approved Packages</b>						
WP76xx_Release16.1_GENERIC.exe	GENERIC	SWI9X07Y_02.37.03.05	002.115_002	SWI9X07Y_02.37.10.02	19.11.6	GCF Approved
<b>WP7609 Approved Packages</b>						
WP76xx_Release16.1_TELSTRA.exe	TELSTRA	SWI9X07Y_02.28.03.05	001.058_001	SWI9X07Y_02.37.10.02	19.11.6	Telstra Approved
WP76xx_Release16.1_GENERIC.exe	GENERIC	SWI9X07Y_02.37.03.05	002.115_002	SWI9X07Y_02.37.10.02	19.11.6	GCF Approved
WP76xx_Release16.1_LGU.exe	LGU	SWI9X07Y_02.32.03.01	001.026_001	SWI9X07Y_02.37.10.02	19.11.6	LGU Approved
<b>WP7610 Approved Packages</b>						
WP76xx_Release16.1_ATT.exe	ATT	SWI9X07Y_02.37.03.05	002.126_000	SWI9X07Y_02.37.10.02	19.11.6	AT&T Approved
WP76xx_Release16.1_VERIZON.exe	Verizon	SWI9X07Y_02.37.06.00	002.107_003	SWI9X07Y_02.37.10.02	19.11.6	Verizon Approved
WP76xx_Release16.1_GENERIC.exe	GENERIC	SWI9X07Y_02.37.03.05	002.115_002	SWI9X07Y_02.37.10.02	19.11.6	PTCRB Approved
<b>WP7611, WP7611-1 Approved Packages</b>						
WP76xx_Release16.1_ATT.exe	ATT	SWI9X07Y_02.37.03.05	002.126_000	SWI9X07Y_02.37.10.02	19.11.6	AT&T Approved
WP76xx_Release16.1_GENERIC.exe	GENERIC	SWI9X07Y_02.37.03.05	002.115_002	SWI9X07Y_02.37.10.02	19.11.6	PTCRB Approved
WP76xx_Release16.1_VERIZON.exe	Verizon	SWI9X07Y_02.37.06.00	002.107_003	SWI9X07Y_02.37.10.02	19.11.6	Verizon Approved
WP76xx_Release16.1_TMO.exe	TMO	SWI9X07Y_02.35.02.00	001.017_001	SWI9X07Y_02.37.10.02	19.11.6	TMO Approved

Function	Files
Firmware components	9999999_9907152_SWI9X07Y_02.37.03.05_00_GENERIC_002.115_002.spk 9999999_9909268_SWI9X07Y_02.35.02.00_00_TMO_001.017_001.spk 9999999_9907255_SWI9X07Y_02.37.06.00_00_VERIZON_002.107_003.spk 9999999_9908843_SWI9X07Y_02.28.03.05_00_DOCOMO_001.024_001.spk 9999999_9909287_SWI9X07Y_02.32.03.01_00_LGU_001.026_001.spk 9999999_9907256_SWI9X07Y_02.37.03.05_00_ATT_002.126_000.spk 9999999_9908844_SWI9X07Y_02.28.03.05_00_SOFTBANK_001.028_001.spk 9999999_9908043_SWI9X07Y_02.28.03.05_00_TELSTRA_001.058_001.spk 9999999_9908845_SWI9X07Y_02.28.03.05_00_KDDI_001.026_002.spk  linux-SWI9X07Y_02.37.10.02.cwe legato-19.11.6.cwe
Available in <a href="https://source.sierrawireless.com">https://source.sierrawireless.com</a>	

## Available Memory

### Flash

Name	Partition	Allocation (kb)	Image Size (kb)	Usage
Linux Kernel	mtd12 (boot)	14336	9523	66%
Linux Rootfs	mtd13 (system)	60416	23552	38%
Legato Framework	mtd14 (lefwkro)	17664	6400	36%
SWIRW	mtd15 (swirw)	15872		
USERAPP	mtd16 (userapp)	133120		

## RAM

76700 kB\*

\*Value is read from the MemAvailable parameter in /proc/meminfo after boot.

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*Note: Memory availability in Flash and RAM are for reference only and may vary depending on when it is measured and on the configurations made by the customer.*

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## Boot Time

The following table lists the different service ready times since the first boot message.

The result was measured from WP7611-1 loaded with the Generic package. The boot time is for reference only and may vary depending on the configuration made by the customer.

Service ready	Time since first boot message	Description
Legato service ready	21 seconds	Legato framework and services have been fully initialized.
AT & QMI service ready	28 seconds	External host processor is now able to communicate with modules through AT commands (USB and UART) and/or QMI messages.
Legato application start	32 seconds	Customer Legato application starts running.

## Software Changes Description

The following are changes in Release 16.1 since Release 16.0.1

**Table 2-1: New Features**

ID	Description
FORE-356	Configurable MTU size (AT&T FirstNet S1U encryption)
FORE-352	Dynamic Update of TS.25 PLMN list
QT19X07-5590	Update AUTO-SIM to work with AT&T SIM ICCID starting with 8901280

**Table 2-2: Major Bug Fixes**

ID	Description	Impacted Domain
QT19X07-5598	The Tx Rx channel numbers of B66 is incorrectly displayed in <code>unpack_nas_SLQSNasSwiModemStatus_t</code>	Legato AF
QT19X07-5592	The Legato conflict of auto updating APNs through <code>apps-full-cof.ison</code> with that of modem	Legato AF

## Known Issues

The following table presents the known issues in this release.

ID	Description	Impacted Domain
QT19X07-3655	<p>Firmware update using xmodem protocol over USB modem interface is not successful. Firmware installation eventually failed after the firmware is successfully downloaded.</p> <p>This issue has been fixed in modem firmware SW19X07Y_02.37.07.00, but this modem firmware is not included in any firmware release packages.</p>	System
QT19X07-4942	On Linux Android platform, while data call is active, USB connection disconnects momentarily with USB suspend/resume enabled.	USB
QT19X07-4912	With R2C SIM V5.x, EF_OPLMNwAct has not been taken into account after SIM REFRES.	R2C
QT19X07-4928	Customers' le_mrc API calls for any operations, regarding preferred cellular operator (like getting, adding and removing), would fail and shows the "unsupported" error.	Legato
LE-8872	The value of object /7/0/0 (SMS Tx counter) is not updated when using AT Command to send SMS.	Legato

# >> A: Appendix

## Abbreviations

Abbreviation /Acronym	Definitions
AT	Access Terminal, Attention
CS	Circuit Switched
EDL	Emergency Download
FDT	Firmware Download Tool
GCF	Global Certification Forum
LK	Little Kernel Linux bootloader
MCU	Microcontroller Unit – An onboard MCU enables Ultra Low Power modes of operation
MR	Maintenance Release
PSM	Power Saving Mode
QMI	Qualcomm Messaging Interface
SDP	Software Download Protocol
ULPM	Ultra Low Power Mode

## Reference Documents

- WP76xx - Product Technical Specification  
Reference number: 4119652
- WPx5xx-76xx-77xx AT Command Reference  
Reference number: 4118047
- WP Series - Preparing Your Devices for Deployment  
Reference number: 41110380
- WPX5-76-77 Scalability Guide  
Reference number: 41110866
- WP Series - Secure Boot  
Reference number: 41112164