



WP76xx R12.0.1

Customer Release Notes



SIERRA
WIRELESS®

41114345
Rev. 1.0

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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 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.

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Contact Information

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

Revision History

Revision number	Release date	Changes
1.0	December 2021	Creation

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>> 1: Introduction

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

Compatibility

Hardware Compatibility

Product compatibility list
WP7601 - LTE Cat-4, LTE bands 4/13
WP7601-1 - LTE Cat-1, LTE bands 4/13
WP7603 - LTE Cat-4, LTE bands 2/4/5/12, WCDMA bands 2/4/5
WP7603-1 - LTE Cat-1, LTE bands 2/4/5/12, WCDMA bands 2/4/5
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 12.0.1

Release 12.0.1 is a point release to Release 12 with minor updates of alternate memory drivers for:

- WP7601 / WP7601-1
- WP7603 / WP7603-1
- WP7607 / WP7607-1
- WP7608 / WP7608-1
- WP7609

Software Release Description

Release Identification

Component	Revision
Modem Firmware	SWI9X07Y_02.25.02.01 000000 jenkins 2019/01/30 08:13:05
Linux Firmware	SWI9X07Y_02.25.04.00 2021-08-11_07:48:48
MCU Firmware	002.011 (embedded as a binary in the Linux image, not distributed as a separate component)
Legato Application Framework	18.10.3_0b50331a9f4d0ecc0fd816c2a1300436
Binary Size	58 MB (compressed one-click .exe file)
IMEI SV	6
Qualcomm Stack Version	MDM9607.LE.2.0-00150-STD.PROD-2
Linux Kernel Version	Linux version 3.18.122 (jenkins@jenkins) (gcc version 6.2.0 (GCC)) #2 PREEMPT Wed Aug 11 07:49:22 UTC 2021
Supported H/W	WP7601 / WP7601-1 WP7603 / WP7603-1 WP7607 / WP7607-1 WP7608 / WP7608-1 WP7609

Software Tools Version

S/W Tools Name	Version
Windows Driver Package	B4836
Windows SDK	None
Skylight	None
Linux Drivers	S2.36N2.55
Linux SDK	SLQS04.00.18

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

Released Files

File	Carrier	Modem Firmware	Config	Linux Distribution	Base Legato System	Comment
WP7601/WP7601-1 Approved						
WP76xx_Release-12.0.1_GENERIC_GCF.exe	GENERIC (GCF)	SWI9X07Y_02.25.02.01	002.056_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP76xx_Release-12.0.1_SIERRA_GCF.exe	SIERRA (GCF)	SWI9X07Y_02.25.02.01	001.014_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP76xx_Release-12.0.1_VERIZON.exe	VERIZON	SWI9X07Y_02.18.05.00	002.041_003	SWI9X07Y_02.25.04.00	18.10.3	Verizon Approved
WP7603/WP7603-1 Approved						
WP76xx_Release-12.0.1_GENERIC_PTCRB.exe	GENERIC (PTCRB)	SWI9X07Y_02.18.05.00	002.041_005	SWI9X07Y_02.25.04.00	18.10.3	PTCRB Approved
WP76xx_Release-12.0.1_SIERRA_PTCRB.exe	SIERRA (PTCRB)	SWI9X07Y_02.18.05.00	001.002_004	SWI9X07Y_02.25.04.00	18.10.3	PTCRB Approved
WP76xx_Release-12.0.1_ATT.exe	ATT	SWI9X07Y_02.18.05.00	002.040_003	SWI9X07Y_02.25.04.00	18.10.3	AT&T Approved
WP7607 / WP7607-1 Approved						
WP76xx_Release-12.0.1_GENERIC_GCF.exe	GENERIC (GCF)	SWI9X07Y_02.25.02.01	002.056_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP76xx_Release-12.0.1_SIERRA_GCF.exe	SIERRA (GCF)	SWI9X07Y_02.25.02.01	001.014_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP7608 / WP7608-1 Approved						
WP76xx_Release-12.0.1_GENERIC_GCF.exe	GENERIC (GCF)	SWI9X07Y_02.25.02.01	002.056_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP76xx_Release-12.0.1_SIERRA_GCF.exe	SIERRA (GCF)	SWI9X07Y_02.25.02.01	001.014_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP7609 Approved						
WP76xx_Release-12.0.1_GENERIC_GCF.exe	GENERIC (GCF)	SWI9X07Y_02.25.02.01	002.056_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved
WP76xx_Release-12.0.1_SIERRA_GCF.exe	SIERRA (GCF)	SWI9X07Y_02.25.02.01	001.014_002	SWI9X07Y_02.25.04.00	18.10.3	GCF Approved

Function	Files
Firmware components	9999999_9907152_SWI9X07Y_02.25.02.01_00_GENERIC_002.056_002.spk (GCF) 9999999_9907152_SWI9X07Y_02.18.05.00_00_GENERIC_002.041_005.spk (PTCRB) 9999999_9908787_SWI9X07Y_02.25.02.01_00_SIERRA_001.014_002.spk (GCF) 9999999_9908787_SWI9X07Y_02.18.05.00_00_SIERRA_001.002_004.spk (PTCRB) 9999999_9907256_SWI9X07Y_02.18.05.00_00_ATT_002.040_003.spk (ATT) 9999999_9907255_SWI9X07Y_02.18.05.00_00_VERIZON_002.041_003.spk (VZW) linux-SWI9X07Y_02.25.04.00.cwe legato-18.10.3.cwe
Available in https://source.sierrawireless.com .	

Software Changes Description

The second memory source changes are included in Release 12.0.1, built from Release 12.

Table 2-1: Software Changes Description for WP76xx Release 12.0.1

ID	Description	Impacted Domain
QT19X07-5444	Add the IDs of these alternate memory sources: New Micron/ESMT/JSC	System
QT19X07-5464	Exclude the legato.cwe from ant-rollback fw download	
QT19X07-5524	Implement the anti-rollback mechanism to prevent from downgrading to the firmwares in which alternate memory sources (New Micron/ESMT/JSC) are not supported	

Known Issues

The following table presents the known issues in this release.

Table 2-2: Known Issues for WP76xx Release 12.0.1

ID	Description	Impacted Domain
QT19X07-3200	The WiFi-LTE coexistence feature does not seem to work and it would impact the performance when using some RF bands.	SFS
QT19X07-3199	Truncated SecStore writes without the Legato API reporting an error.	SFS
QT19X07-2946	QMI_SWI_SFS_OPEN returns success even though operation has failed and a null pointer to file is returned	SFS
QT19X07-3134	Unable to mount a USB flash memory device onto the module.	Application
QT19X07-3073	Device may crash when disabled server registers again.	LWM2M
QT19X07-3043	Operator "MNSHub" is missing from TS.25 list	GCF
QT19X07-3023	Failure to visit some web pages through dial-up connection over CMUX DLC ports.	CMUX
QT19X07-2988	SIM PIN has to be re-entered after being woken up from PSM.	PSM
QT19X07-2955	ULPM wakeup timer is not saved persistently after waking up UPLM.	PSM
QT19X07-2950	Without fixing and restoring the PSM/ULPM Fallback mode, the mode is just in ULPM mode.	ULPM
QT19X07-2887	GSM modulation spectrum failures at - 30C	GSM
QT19X07-2691	PSLOCI file not updated after GSM registration when used with Smart SIM v4.4.1.	SIM
QT19X07-2482	Hardware failure (overheating) when using I2S audio with MAX98357 external codec.	Audio
QT19X07-2387	With Legato, failed to establish a data session when authentication is enabled.	Data
QT19X07-2272	Periodic high current draw when testing EDRX/DRX with HSIC enabled	PSM
QT19X07-2195	Unlike the WPx5, the WP76 Sntp client must open a new connection, which is more visible and could have undesirable consequences. Therefore, for WP76, the feature is turned off by default. The user would need to enable it via QMI/Legato, but because it is an AT!CUSTOM feature, it requires a level 2 password.	Linux

Table 2-2: Known Issues for WP76xx Release 12.0.1 (Continued)

ID	Description	Impacted Domain
QT19X07-2186	With the SINGLEAPNSWITCH feature enabled, Legato cm data connect always fails on LTE with Legato 18.05.1 or older	Legato
QT19X07-2106	Periodic high current spike, every 20s, is disabled when using EDRX and HSIC.	PSM
QT19X07-1653	At temperature below -20, units in sleep mode may lose LTE network synchronization. A workaround that inhibits sleep mode at low temperature has been placed (QT19X07-2478) to mitigate this problem.	Protocol

>> A: Appendix

List of 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

List of References

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