



AirPrime HL7648

Firmware 04.02.A10 Customer Release Note



SIERRA
WIRELESS®

41112208
1.0
March 05, 2018

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 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.

Safety and Hazards

Do not operate the Sierra Wireless modem in areas where cellular modems are not advised without proper device certifications. These areas include environments where cellular radio can interfere such as explosive atmospheres, medical equipment, or any other equipment which may be susceptible to any form of radio interference. The Sierra Wireless modem can transmit signals that could interfere with this equipment. Do not operate the Sierra Wireless modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless modem **MUST BE POWERED OFF**. When operating, the Sierra Wireless modem can transmit signals that could interfere with various onboard systems.

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

The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

Limitations of Liability

This manual is provided "as is". Sierra Wireless makes no warranties of any kind, either expressed or implied, including any implied warranties of merchantability, fitness for a particular purpose, or noninfringement. The recipient of the manual shall endorse all risks arising from its use.

The information in this manual is subject to change without notice and does not represent a commitment on the part of Sierra Wireless. SIERRA WIRELESS AND ITS AFFILIATES SPECIFICALLY DISCLAIM LIABILITY FOR ANY AND ALL DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE OR ANTICIPATED PROFITS OR REVENUE ARISING OUT OF THE USE OR INABILITY TO USE ANY SIERRA WIRELESS PRODUCT, EVEN IF SIERRA WIRELESS AND/OR ITS AFFILIATES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY ARE FORESEEABLE OR FOR CLAIMS BY ANY THIRD PARTY.

Notwithstanding the foregoing, in no event shall Sierra Wireless and/or its affiliates aggregate liability arising under or in connection with the Sierra Wireless product, regardless of the number of events, occurrences, or claims giving rise to liability, be in excess of the price paid by the purchaser for the Sierra Wireless product.

Patents

This product may contain technology developed by or for Sierra Wireless Inc.

This product is manufactured or sold by Sierra Wireless Inc. or its affiliates under one or more patents licensed from MMP Portfolio Licensing.

Copyright

© 2018 Sierra Wireless. All rights reserved.

Trademarks

Sierra Wireless®, AirPrime®, AirLink®, AirVantage®, WISMO®, ALEOS® and the Sierra Wireless and Open AT logos are registered trademarks of Sierra Wireless, Inc. or one of its subsidiaries.

Watcher® is a registered trademark of NETGEAR, Inc., used under license.

Windows® and Windows Vista® are registered trademarks of Microsoft Corporation.

Macintosh® and Mac OS X® are registered trademarks of Apple Inc., registered in the U.S. and other countries.

QUALCOMM® is a registered trademark of QUALCOMM Incorporated. Used under license.

Other trademarks are the property of their respective owners.

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 |

Document History

| Version | Date | Updates |
|---------|----------------|----------|
| 1.0 | March 05, 2018 | Creation |



Contents

| | |
|---|-----------|
| 1. INTRODUCTION | 7 |
| 2. ABBREVIATIONS AND DEFINITIONS..... | 8 |
| 3. RELATED DOCUMENTATION | 9 |
| 4. COMPATIBILITY | 10 |
| 5. SOFTWARE RELEASE DESCRIPTION | 11 |
| 5.1. Release Identification | 11 |
| 5.2. Software Tools Versions..... | 11 |
| 5.3. Released Files and Download Processes..... | 12 |
| 6. SOFTWARE CHANGES DESCRIPTION | 13 |
| 7. TROUBLESHOOTING | 14 |



List of Tables

| | | |
|----------|--|----|
| Table 1. | Abbreviations and Definitions..... | 8 |
| Table 2. | Firmware Information | 11 |
| Table 3. | Software Tools Versions | 11 |
| Table 4. | Released Files and Download Processes..... | 12 |
| Table 5. | Compatibility Matrix | 12 |
| Table 6. | Validated Corrections/Improvements | 13 |



1. Introduction

This document is the Firmware 04.02.A10 customer release note of the AirPrime HL7648 module.



2. Abbreviations and Definitions

Table 1. Abbreviations and Definitions

| Abbreviation/Acronym | Definitions |
|----------------------|---|
| ADC | Analog Digital Converter |
| GPIO | General Purpose Input Output |
| PCM | Pulse Code Modulation |
| PWM | Pulse Width Modulation |
| SIM | Subscriber Identity Module |
| UART | Universal Asynchronous Receiver Transmitter |
| UICC | Universal Integrated Circuit Card |
| USB | Universal Serial Bus |



3. Related Documentation

- [1] AirPrime HL7648 Product Technical Specification
Reference number: 4119069
- [2] AirPrime HL76xx AT Commands Interface Guide
Reference number: 4118395
- [3] AirPrime HL7 Series Firmware Download User Guide
Reference number: 4116153

4. Compatibility

This firmware is compatible with HL7648 modules.



5. Software Release Description

5.1. Release Identification

Table 2. Firmware Information

| | |
|--|---|
| Maturity / Maturity ID | Beta / B |
| Date of generation | Oct 23 2017 09:03 GMT+8 |
| IMEI SV | 2 |
| Baseline version | 164804 |
| Modem Firmware Identification (ATI3) | SWIMCB71XX-AIM1.04.02.A10.164804.201710230903.01 |
| Full Firmware Identification (ATI10) | Modem-Firmware: SWIMCB71XX-AIM1.04.02.A10.164804.201710230903.01 Primary-Boot: SWIMCB71XX.04.02.A10.0307170717.201710230903.01 Secondary-Boot: SWIMCB71XX.04.02.A10.0307170717.201710230903.01 Update-Agent: SWIMCB71XX.04.02.A10.0302170712.201710230903.01 4G-Firmware: 7160.S3.561.46.4.743.05.2636.18265 3G-Firmware: 202.639.406.43-54.35 |
| ALL-IN-ONE Firmware FLS Image | Filename: SWIMCB71XX-AIM1.04.02.A10.164804.201710230903.01_signed.flis File size in bytes: 22695235 Checksum (CRC32): 0x86101CEA Checksum (MD5): CAEA8848D1FB9236E7F179301906368B |
| ALL-IN-ONE Firmware Image, Windows one-click Downloader | Filename: SWIMCB71XX-AIM1.04.02.A10.164804.201710230903.01_signed.exe File size in bytes: 9614034 Checksum (CRC32): 0xEFBCAAFC Checksum (MD5): 7094A6362F2B10FE24043CA38562A61C |

5.2. Software Tools Versions

Table 3. Software Tools Versions

| S/W Tools Name | Version | Resource File |
|---|---|----------------------|
| USB Flash Driver | v.4.140.3.66 DLL=v.4.140,0.0 | N/A |
| Command Line FlashTool (DownloadTool.exe, dll) | v.1.37 DLL=v.4.140,0.0 | N/A |
| USB Host Driver | WMC_comneon8_v4.32.0 WMC_imc1_v4.44.0_cust | N/A |

5.3. Released Files and Download Processes

Table 4. Released Files and Download Processes

| Download Option | Released Files and Download Processes |
|------------------|--|
| Released Files | Refer to 5.1 Release Identification |
| Download Process | <p>ALL-IN-ONE Firmware image, Windows one-click downloader: Double click the file and then reboot or re-power on the device. The download tool embedded in the executable will then download the firmware to the device. The one-click file includes the command line FlashTool.</p> <p>ALL-IN-ONE Firmware FLS image: Run command line <code>DownloadTool -c USB1 <All-In-One-FLS-Image></code> and then reboot or re-power on the device. The download tool will then download the firmware to the device.</p> |

Prior to performing a firmware download, the USB cable must be connected to the HS-USB port of the device, and the USB Flash Driver must be installed. Refer to document [3] AirPrime HL7 Series Firmware Download User Guide for more information on the download process.

Compatibility between the one-click file and module type should be taken into consideration, especially with regards to security.

Table 5. Compatibility Matrix

| Firmware | Non-Fused Module | | Fused Module | |
|------------------|------------------|-------|--------------|-------|
| | One-Click | +WSDS | One-Click | +WSDS |
| 04.02.A1x signed | N/A | N/A | OK | OK |

Refer to document [2] AirPrime HL76xx AT Commands Interface Guide for more information regarding +WSDS (*.dwl).



6. Software Changes Description

This section lists all corrections or improvements integrated in Firmware 04.02.A10. Issues are sorted alphabetically by Impacted Functionality.

Table 6. Validated Corrections/Improvements

| ID | Description | Impacted Functionality (Main/Sub) |
|------------------|--|-----------------------------------|
| INT71XXMCBL-1968 | AT+KCELL=0 only return KCELL:0 when AT+KSRAT or AT*PSRDBS are not set. | AT/Other |
| INT71XXMCBL-1975 | A space is displayed when the test command AT+CFUN=? is executed | AT/Other |
| INT71XXMCBL-1576 | While trying data call connection on Linux OS, Remote IP and Local IP wasn't identical. Anyhow, it is only used for system information to print out only. | OTHER/Other |
| INT71XXMCBL-2059 | [0402A] Integrate XMM71XX_MAINT_HL7648_1740.00_00 | OTHER/Other |
| INT71XXMCBL-2065 | [0402A][HL7648][ATT] TC LTE-BTR-5-5543 failed | OTHER/Other |
| INT71XXMCBL-2066 | [0402A][HL7648][ATT] TC LTE-BTR-5-5588 failed | OTHER/Other |
| INT71XXMCBL-2067 | [0402A][HL7648][ATT] TC LTE-BTR-5-5589 failed | OTHER/Other |
| INT71XXMCBL-2081 | [0402A] Integrate XMM71XX_MAINT_HL7648_1742.00_00 | OTHER/Other |
| INT71XXMCBL-2082 | [0402A] Integrate release SWIMCB71XX.04.02.A10.164804 | OTHER/Other |
| INT71XXMCBL-1973 | If the module registers to 4G network, reading the IOT SIM config file records by AT+CSIM with <command>=178 (READ RECORD), the response always return "6986" (no current EF). | SIM/Other |

7. Troubleshooting

Please contact customer service for support and debugging information.