



AirPrime HL7650

Firmware 26.00.A01 Customer Release Note



SIERRA
WIRELESS®

41112336
1.0
November 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.

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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 modems may be used at this time.

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Document History

Version	Date	Updates
1.0	November 05, 2018	Creation



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1. Introduction

This document is the Firmware 26.00.A01 customer release note of the AirPrime HL7650.
Firmware 26.00.A01 is a maintenance release based on Firmware 26.00.



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 HL7650 Product Technical Specification
Reference number: 41110363
- [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 the following products:

- AirPrime HL7650
- EWM400
- EWM401



5. Software Release Description

5.1. Release Identification

Table 2. Firmware Release Information

Maturity / Maturity ID	HL7650: Release Candidate / RC
Date of generation	Apr 05 2018 02:15 GMT+8
IMEI SV	04
Baseline version	173700
Firmware image set/prefix	Total=1 ID Files prefix UE-Cat : Carrier : Supported products 3 SWIMCB71XX-TIM3 CAT1 : Telstra,Vodafone : HL7650, VIC14_EWM400, VIC13RD2_EWM401
Modem Firmware Identification (ATi3)	SWIMCB71XX-TIM3.26.00.A01.173700.201804050215.01
Full Firmware Identification (ATi10)	Modem-Firmware: SWIMCB71XX-TIM3.26.00.A01.173700.201804050215.01 Primary-Boot: SWIMCB71XX.26.00.A01.0307170717.201804050215.01 Secondary-Boot: SWIMCB71XX.26.00.A01.0307170717.201804050215.01 Update-Agent: SWIMCB71XX.26.00.A01.0303170706.201804050215.01 4G-Firmware: 7160.S3.561.33.4.737.06.8915.18265 3G-Firmware: 202.999.903.43-54.35
ALL-IN-ONE Firmware FLS image	Filename: SWIMCB71XX-TIM3.26.00.A01.173700.201804050215.01_signed.flx File size in bytes: 19543731 Checksum (CRC32): 0xC29840BF Checksum (MD5): 26664C61CDBD9CE3D87812151E6AA720
ALL-IN-ONE Firmware image, Windows one-click downloader	Filename: SWIMCB71XX-TIM3.26.00.A01.173700.201804050215.01_signed.exe File size in bytes: 8174198 Checksum (CRC32): 0x3E8E1DF1 Checksum (MD5): A5D42C358A3D2D092DF62DC317032045

5.2. Software Tools Versions

Table 3. Software Tools Versions

Software Tools Name	Version	Resource File
USB Flash Driver	v.4.140.3.66 DLL=v.4.140,0.0	Not applicable
Command Line FlashTool (DownloadTool.exe, dll)	v.1.37 DLL=v.4.140,0.0	Not applicable
USB Host Driver version	WMC_comneon8_v4.32.0 WMC_imc1_v4.44.0_cust	Not applicable

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 start downloading the firmware to the device.</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 start downloading the firmware to the device.</p>

Prior to performing 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.



6. Software Changes Description

This section lists all corrections or improvements integrated since Firmware 26.00.

Table 5. Validated Corrections/Improvements

ID	Description	Impacted Domain / Sub-Domain
INT71XXMCBL-2253	In rare cases, the module may not be able to attach to an LTE cell in a particular network condition because of being unable to decode some SIB messages and skip additional information elements introduced in higher than 3GPP versions 9.13.0. The module will fall back to 3G if a corresponding cell is available.	LTE/Other



7. Restrictions and Additional Information

This section lists additional information or restrictions that must be considered. Issues are sorted by alphabetical order of Impacted Domain.

Table 6. Restrictions and Additional Information

ID	Description (What/When)	Impacted Domain
INT71XXMCBL-1936	When +XDATACHANNEL is configured with NCM and <connect_flag> = 2, the CONNECT URC in the AT port control channel has a pair of extra CRLFs around it.	AT/Data
INT71XXMCBL-1948	[MBIM mode] The device does not reestablish connection after manual disconnection	AT/GPRS
INT71XXMCBL-330 INT71XXMCBL-356 INT71XXMCBL-383 INT71XXMCBL-388 INT71XXMCBL-397 INT71XXMCBL-891 INT71XXMCBL-932 INT71XXMCBL-948 INT71XXMCBL-1391 INT71XXMCBL-1818 INT71XXMCBL-1876 INT71XXMCBL-1881 INT71XXMCBL-1901	CME and CEER error codes are, in some cases, not in line with the documentation	AT/Other
INT71XXMCBL-490	PLMN, LAC and CI information for the serving cell are not displayed by +KCELL while communications is active	AT/Other
INT71XXMCBL-934	While sending "EOFPattern", the sent text may be interrupted but "CONNECT" is still returned instead of NO CARRIER / KTCP_NOTIF: <session id>,4	AT/Other
INT71XXMCBL-1208	RI is never ON even if network state changes is activated with AT+CMER=1,0,0,1,0	AT/Other
INT71XXMCBL-1410	+CGEV: ME PDN ACT 5 is not displayed after data transfer with <mode>=2 on the USB port when AT+CGACT=1,5 is set on the modem port.	AT/Other
INT71XXMCBL-1595	Redundant +XDNS response for CID 1 is returned when checking requested dynamic DNS with AT+XDNS?	AT/Other
INT71XXMCBL-1666	CGCLASS is changed from "B" to "A" after entering CPIN	AT/Other
INT71XXMCBL-1667	VIC14 LED is immediately powered OFF instead of remaining active until the mobile is shut down.	AT/Other
INT71XXMCBL-1923	Expected result is +IFC: 2,2 from documentation guide. Actual result in FW is +IFC: 0,0 after FW upgrade on HL7650 Generic.	AT/Other
INT71XXMCBL-2046	Lastgasp UDP sending could fail, with the error message +CME ERROR: 148 being displayed.	AT/Other
INT71XXMCBL-2050	Response of basic AT commands (ATE, ATV, ATO) executed separately is different from the response of multiple basic AT commands (ATIE, ATIV, ATIO) given on the same command line.	AT/Other

ID	Description (What/When)	Impacted Domain
INT71XXMCBL-2051	With AT&D2, after +KUDPRCV is aborted by DTR, AT+KUDPCLOSE does not trigger the PDP/KCNX disconnection.	AT/Other
INT71XXMCBL-94	CTS didn't drop when sleep mode enabled under CMUX DLC port	AT/Other
INT71XXMCBL-567	TCP session for CID 1 when closed (+KTCPCLOSE) reply's indication +KTCP_IND: 1,0,0 instead of +KTCP_IND:1,3 for non-LTE connection.	AT/Other
INT71XXMCBL-1879	With AT+KFTPSND, some data is lost (file truncated) when sending a big file (5MBbytes) to FTP server	AT/Other
INT71XXMCBL-2047	While closing a TCP session with KTCPCLOSE, "NO CARRIER" is displayed after indication +KCNX_IND: 2,5,30	AT/Other
INT71XXMCBL-1888	With some SIM cards Short Message Storage (SMS) Service #10 is not present (based on based on EF_UST [6F38]), it is normal that MT SMS fails with +CMS ERROR: 321.	AT/SMS
INT71XXMCBL-1918	No valid result code provided by +CGLA response in case of invalid parameter.	AT/SMS
INT71XXMCBL-2054	The device crashes when trying to execute AT+CMGD write command on ME memory with an index which has no message stored.	AT/SMS
INT71XXMCBL-1894	No audio can be heard when a MT call is established with AMR-WB audio codec	ATD, Audio/Other
INT71XXMCBL-707	TCP connection fails using AT+KTCPCNX command	ATIP
INT71XXMCBL-708	Device fails to send data to FTP server using +KFTPSND command	ATIP
INT71XXMCBL-2086	For FTP session in active mode, +KTCPCV may lead to firmware assertion crash when the transfer file size is small (e.g. 10 bytes of file).	ATIP
INT71XXMCBL-2095	During AVMS monitoring, device may crash due to firmware assertion (with very low reproducibility).	AVMS
INT71XXMCBL-1412	+KUDP_DATA: 1,1020 is displayed even on sending data size greater than 1020 in +KUDPSND.	DATA/Other
INT71XXMCBL-1604	In TCP connection, "inconsistent" or "expired" cert does not return +KTCP_NOTIF: 1,5	DATA/Other
INT71XXMCBL-1883	[REG][IPV6]: With TLS version 1.0, <cipher_suite>=1, 2 fails to connect to the https server	DATA/Other
INT71XXMCBL-2023	Datagram which is larger than the MTU cannot be sent through	DATA/Other
INT71XXMCBL-2029	The device may crash when multiple FTP sessions (26 sessions) are created with +KFTPCFG	DATA/Other
INT71XXMCBL-2061	When performing data call with ATD but PDP activation fails, AT port hangs instead of returning an ERROR response	DATA/Other
INT71XXMCBL-2021	Failed to ping the device after it has been configured as TCP server	DATA/TCP
INT71XXMCBL-1462	Temperature measurement value reported by +KTEMPMEAS at -40 degrees Celsius exceeds error margin	DEVICE/Other
INT71XXMCBL-1890	USB COM ports are not enumerated during stress test of power reset during firmware FOTA update	DEVICE/Other
INT71XXMCBL-840	Unknown device shows up on USB after reboot. VID/PID=8087/0716 does not show up	DEVICE/USB
INT71XXMCBL-1225	CDC NCM is not created on LINUX platform after active data channel from the module	DEVICE/USB

ID	Description (What/When)	Impacted Domain
INT71XXMCBL-936	On the physical UART port, when AT&D1 is configured, IP AT commands (e.g. AT+KUDPRCV or AT+KTCPRCV) cannot suspend sending data to the terminal in the middle of transfer. On the physical UART port, for IP AT commands, default value of <wait time> in slow BAUD rate is too small causing data received from terminal being sent to the network immediately.	DEVICE/V24
INT71XXMCBL-1665	On the physical UART port, when AT&D0 is configured, AT+KUDPRCV or AT+KTCPRCV or DUN cannot send all received data before switching back to AT mode. In DUN, data frames are corrupted/truncated when DTR is toggled, even if DTR is not configured for dropping call.	DEVICE/V24
INT71XXMCBL-812	[ATE] Echo is automatically turned on when the module is running at around -25 degrees Celsius	Embedded
INT71XXMCBL-1804	The temperature error is high when using AT+KADC command to read THERM and RF TEMP	Embedded
INT71XXMCBL-2072	Device does not follow +KSRAT setting for network registration at power up	GSM/Other
INT71XXMCBL-2071	After power up, the DUT selects the network with the strongest signal level instead of the last registered PLMN (VPLMN/RPLMN) before switching DUT.	OTHER/Other
INT71XXMCBL-1544	After AT+CGCLASS="CG", IMSI changes when module registers to a GPRS network	SIMV4.1
INT71XXMCBL-1748	Device resets during FTP throughput stress tests through NCM connection in Linux environment	USB/Other

8. Troubleshooting

Please contact customer service for support and debugging information.

9. Certification Description

This firmware has passed certifications for the following:

- GCF (Version: 3.66.0)
- Telstra