



AirPrime HL7650

Firmware 26.00.173700 Customer Release Note



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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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1. Introduction

This document is the Firmware 26.00.173700 customer release note of the AirPrime HL7650.



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	Sep 21 2017 00:15 GMT+8
IMEI SV	HL7650: 2 VIC13RD2_EWM401: 2 VIC14_EWM400: 2
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-TIM3.26.00.173700.201709210015.01
Full Firmware Identification (ATi10)	Modem-Firmware: SWIMCB71XX-TIM3.26.00.173700.201709210015.01 Primary-Boot: SWIMCB71XX.26.00.0307170717.201709210015.01 Secondary-Boot: SWIMCB71XX.26.00.0307170717.201709210015.01 Update-Agent: SWIMCB71XX.26.00.0303170706.201709210015.01 4G-Firmware: 7160.S3.561.33.4.739.01.9924.18265 3G-Firmware: 202.999.903.43-54.35
ALL-IN-ONE Firmware FLS image	Filename: SWIMCB71XX-TIM3.26.00.173700.201709210015.01_signed.flx File size in bytes: 19543159 Checksum (CRC32): 0xEF225A22 Checksum (MD5): 0F78ACFB46DA05924FB33854CB73BF77
ALL-IN-ONE Firmware image, Windows one-click downloader	Filename: SWIMCB71XX-TIM3.26.00.173700.201709210015.01_signed.exe File size in bytes: 8173731 Checksum (CRC32): 0x5C7F44BF Checksum (MD5): 4D303557AEB7D75E94F6B0DAB149D7FF

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 preform 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 SWIMCB71XX.23.01. Issues are sorted by alphabetical order of Impacted Domain and fixed version.

Table 5. Validated Corrections/Improvements

ID	Description	Impacted Domain / Sub-Domain	Fixed in
INT71XXMCBL-2009	Customer would see unexpected APN entry when the device was first delivered from the factory	AT/GPRS	FW26.00
INT71XXMCBL-1868	Some unsupported AT commands are displayed in the response of AT+CLAC set command.	AT/Other	FW26.00
INT71XXMCBL-1922	With AT+COPS=2, when device boots, AT+CREG? response shows <stat> as 2 (searching) instead 0 (not registered).	AT/Other	FW26.00
INT71XXMCBL-1980	[Vodafone] Issue #61 - PDU mode - DCS support (Message classes) -> SMS Class 3 (TE specific) stored in inbox	AT/SMS	FW26.00
INT71XXMCBL-1981	Vodafone SoR_OtA based _003_ Refresh TriggerExecution failed	AT/STK	FW26.00
INT71XXMCBL-1940	After PS detach, module takes long time to attach to the network again	GPRS/Other	FW26.00
INT71XXMCBL-1919	Device takes too much time to attach to the network	NAS/REG	FW26.00
INT71XXMCBL-1873	When <mem1> of +CPMS is configured as "SM", AT+CMGR write command returns OK instead of +CMS ERROR: 321 when <index> is invalid (no SMS is stored).	SIM/Other	FW26.00
INT71XXMCBL-1413	FTP upload failed when module connects to multi protocols	N/A	FW26.00
INT71XXMCBL-1949	In some case, AT+COPN could not list out all operator names	AT/Other	FW25.00
INT71XXMCBL-1925	With some SIM cards, MO SMS fails with +CMS ERROR: 314, MT SMS fails as well	AT/SMS	FW25.00
INT71XXMCBL-1762	When executing AT+CMGD?, AT+CMGD, AT+CMGD=, AT+CPMS, ERROR is returned instead of +CME ERROR: 3 that is a non-generic behavior of the 3GPP AT command implementation.	OTHER/Other	FW25.00
INT71XXMCBL-1958	An extra space is displayed after (in the response of AT+CFUN=? test command	OTHER/Other	FW25.00
INT71XXMCBL-1982	When "SC" lock is disabled and incorrect PIN is entered to AT+CLCK, incorrect error code is returned (CME Error 3 instead of 16 / "operation not allowed" instead of "incorrect password")	SIM/Other	FW25.00
INT71XXMCBL-1567	Internal fix to enable new product customizations, e.g. EWM300RD	SYS/Other	FW25.00
INT71XXMCBL-1230	When HTTP server does not respond to HTTP request (due to delay or no response, in server side), +KHTTSPPOST/+KHTTPOST cannot be aborted immediately (exiting from data mode) by inputting EOF pattern.	OTHER/Other	FW25.00

ID	Description	Impacted Domain / Sub-Domain	Fixed in
INT71XXMCBL-1932	CME Error: 100 is displayed instead of CME ERROR: 4 for VTS set command when no parameter is passed(AT+VTS=).	AT/Other	FW24.00
INT71XXMCBL-1577	Subsequent dialup connection fails	PPP	FW24.00



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 AT port control channel has a pair of extra CRLF around it.	AT/Data
INT71XXMCBL-1948	[MBIM mode] The device does not reestablish connection after manual disconnect	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 code 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 command while a communication 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	Even if network state changes is activated with AT+CMER=1,0,0,1,0 RI never ON.	AT/Other
INT71XXMCBL-1222	The led flashing is not the one specified into the AT commands manual (and expected by customer)	AT/Other
INT71XXMCBL-1410	+CGEV: ME PDN ACT 5 is not displayed after the data transfer with <mode>=2 on the USB port when we set AT+CGACT=1,5 on the modem port.	AT/Other
INT71XXMCBL-1595	Redundant +XDNS response for CID 1 is returned when checking requested dynamic DNS with AT+XDNS? read command	AT/Other
INT71XXMCBL-1666	CGCLASS is changed from "B" to "A" after entering CPIN	AT/Other
INT71XXMCBL-1667	VIC14 LED 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

ID	Description (What/When)	Impacted Domain
INT71XXMCBL-2050	Response of basic AT commands (ATE, ATV, ATO) executed separately is different from the response of multiple basic AT command (ATIE, ATIV, ATIO) given on same command line.	AT/Other
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, +KTCPCRCV 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, Fail to connect to https server (*) (*) Description will be updated in a future document release	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 write command	DATA/Other
INT71XXMCBL-2061	When performing a data call with ATD but PDP activation fails, AT port hangs instead of returning ERROR response	DATA/Other
INT71XXMCBL-2021	Fail to ping the device after it has been configured as TCP server	DATA/TCP
INT71XXMCBL-1462	Temperature measurement value reported by +KTEMPMEAS command 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 is showed up on USB after reboot. VID/PID=8087/0716 does not show up	DEVICE/USB

ID	Description (What/When)	Impacted Domain
INT71XXMCBL-1225	CDC NCM is not created on LINUX platform after active data channel from module	DEVICE/USB
INT71XXMCBL-936	On physical UART port, when AT&D1 is configured, IP AT commands (e.g. AT+KUDPRCV or AT+KTCPRCV) cannot suspend sending data to terminal in the middle of the transfer. On 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 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 around -25 Celsius degrees	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 strongest signal level instead of the last registered PLMN (VPLMN/RPLMN) before switching of DUT.	OTHER/Other
INT71XXMCBL-518	The DUT is not switched off automatically after unexpected power supply fails during module is lost network (COPS=2, unplug SIM) to give the maximum chances to the module to transmit the SMS or UDP if the network is back.	OTHER/Other
INT71XXMCBL-1544	After AT+CGCLASS="CG", IMSI changes when module registers 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

The following table summarizes the certifications passed for this release.

Table 7. Certifications Passed

AirPrime Module	Certification
HL7650	GCF – FW26.00
HL7650	Vodafone – FW26.00
HL7650	Telstra – FW26.00