



Customer Release Note

AirPrime HL6528RDx Firmware 1.10.0



SIERRA
WIRELESS®

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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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Consult our website for up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases: www.sierrawireless.com

Document History

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1. Introduction

1.1. Document Scope

The scope of this document is the Firmware 1.10.0 firmware release description of the AirPrime HL6528RDx embedded module.

The HL6528RDx includes the following variants:

- HL6528RD
- HL6528RD-G
- HL6528RD-2.8V
- HL6528RD-G2.8V

1.2. Document Audience

This release note may be distributed to all direct and indirect customers.

1.3. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
+CSIM	Generic SIM access



2. Abbreviations and Definitions

Table 2. 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
USB	Universal Serial Bus
NVM	Non-Volatile Memory



3. Related Documentation

- [1] AirPrime HL6528RD Product Technical Specification
Reference: 4117701
- [2] AirPrime HL6528RDx AT Commands Interface Guide
Reference: 4117743

>> 4. Compatibility

Table 3. Hardware Compatibility

AirPrime Compatibility List
HL6528RDx DV2.1 or newer

Table 4. Software Compatibility

Component	Version
Firmware	1.5.0 or newer

Warning: *Firmware upgrade from earlier versions would result in the module being blocked.*



5. Software Release Description

5.1. Release Identification

Table 5. HL6528RDx Firmware Release Information

Component	Revision
Identification	BHL6528RD.1.10.0.11CV10F29.201512241523.m6261a_1
Date of generation	2015/11/24
IMEI SV	01
Stack version	MAUI_11C_W14_18_SP_V10_F29
USB driver version	1.1032.1

5.2. Software Tools Versions

Table 6. Software Tools

Software Tools Name	Version
Flash tool	v5.1504.00

5.3. Released Files and Download Processes

Table 7. Release Files

Download Option	Files
All in one download executable	BHL6528RD.1.10.0.11CV10F29.201512241523.m6261a_1.exe



6. Software Changes Description

6.1. Validated Corrections/Improvements

ID	Description
DEV87192	[HL6528RD] Integrate patch_1512210_V10_F29_GCF_PLMN_scan
ANO84449	[HL6528RD][+WMTXPOWER] Reset has been observed when module emits TX burst
DEV87090	[HL6528RD] Improve FlashDownloadTool by embedding Microsoft DLL
DEV86895	[HL6528RD][WIP] Increase max socket number from 6 to 20
DEV87087	[HL6528RD] Integrate patch_1512210_V10_F28_PCM_Unstable
ANO87163	[HL6528RD][GCF] 3GPP 51.010-1 TC 26.8.1.4.1.1 failed due to MSG_ID_L4CCSM_CC_STOP_DTMF_REQ send too fast
ANO87109	[HL6528RD][GCF] NI-8.1.1 and NI-8.1.2 test failures
ANO87107	[HL6528RD][GCF] CPBR does not report '+' for international numbers
ANO87103	[HL6528RD][GCF] TC 27.22.2 fail due to incorrect Terminal Profile
ANO87023	[HL6528RD][+KUDPCFG] +KUDP_IND: 3,1 response is not returned when set UDP configuration
ANO86834	[HL6528RD][KUDPCLOSE][KUDP_NOTIF]: Cannot close created UDP client session.
ANO87068	[HL6528RD][V25ter][ATV] Extra header characters <CR><LF> with information responses in ATV0 command
CUS87034	Missing OK after +++
ANO87018	AT+CBST not accepting parameters
DEV86830	[HL6528RD] Integrate patch_1512150_V10_F26_P1_ATI_No_Response
DEV87019	[HL6528RD] Integrate patch_1512180_V10_F27_CGREG_Status_Returned
ANO84912	[HL6528RD][NS][some AT command] : "OK" returned with Write command "at+XXXX="
ANO85419	[HL6528RD][MECS][CCWE] Wrong response of CCWE command
ANO83546	[HL6528RD][GPRS] - Reporting ERROR is not exactly for GPRS command
ANO86134	[HL6528RD][SMS] <alpha> format is inconsistency between CMT and CMGR/CMGL response
ANO86091	[HL6528RD][V25Ter] Wrong response of IFC: extra space, wrong error code, strange character
ANO85341	[HL6528RD][GEN][+CSCS]- Wrong response is returned when check syntax of +CSCS command
ANO86687	[HL6528RD][CMEC] - The +CME ERROR: 3 or +CME ERROR: 4 should be returned when entering invalid syntax or value is not supported and special character
ANO85335	[HL6528RD][GEN][CC]- +CME ERROR: 10 or +CME ERROR: 11 should be returned when check syntax some commands
ANO86896	[HL6528RD][CLCK] - The +CME ERROR: 10 and +CME ERROR: 11 should be returned when no SIM card or pin code is not entered yet
ANO86792	[HL6528RD] Roaming indicator is shown when using PCCW 4G SIM card on live network
ANO83817	[HL6528RD][STK][*PSSTKI] - The +CME ERROR: 10 should be returned when SIM card is not inserted
ANO82015	[HL6528RD][SMS][CSCA] Error 3 should be returned if phone number does not match with phone number type.
ANO86206	[HL6528RD][KGPIOCFG] - GPIO3 configuration is not saved in non-volatile memory

ID	Description
ANO86701	[HL6528RD][NS][CNUM]: Response is NOT expected and Symbol "+" should be displayed precede <number> corresponding with <type>=145
ANO83127	[HL6528RD][NS][CREG] - Wrong response for Read command when <n> = 2
ANO86770	[HL6528RD] Firmware unable to boot when using USB only mode
ANO86275	[HL6528RD][AVMS][WDSS] +WDSI: 7 is returned before OK when the connection cancellation by the user
ANO82259	[HL6528RD][CREG] Wrong response of CI and AcT on CREG command with enable network registration and location information unsolicited result code
ANO86309	[HL6528RD][NS][+COPS] : Response of syntax (at+cops=?) returned wrongly
ANO86591	[HL6528RD][AVMS][WPPP] Wrong response of WPPP command
ANO86597	[HL6528RD][AVMS][WPPP] The parameters of WPPP command are not stored in non-volatile memory if PIN code is not entered
ANO86360	[HL6528RD][GPRS][CGSMS] - Default value is not returned when re-setting module
ANO84879	[HL6528RD][MECS][CFUN] - Unsolicited response is returned when resetting module
ANO86341	[HL6528RD][NS][+COPS]: <format>=2 returned after registration when set <mode> =0
DEV86760	[HL6528RD] Integrate patch_1512120_V10_F26_TC_27.14.4
ANO86331	[HL6528RD][MECS][CPAS] - The +CME ERROR: 3 or +CME ERROR: 4 should be returned when entering invalid syntax or value is not supported
ANO85134	[HL6528RD][V25ter][ATS2] Module accepted some out of range parameters of ATS2 command
ANO83284	[HL6528RD][V25ter][ATE] Wrong response of Enable Echo ATE command
ANO83240	[HL6528RD][V25ter][ATV] Extra "\n" in ATV1 and ATV0 response
ANO81807	[HL6528RD][SMS] index of SMS in ME is not start from zero
ANO86683	[HL6528RD][GCF] 3GPP 51.010-1 TC 26.8.1.4.1.1 failed because can't input DTMF by AT+VTS, return error 100
ANO86684	[HL6528RD][PTCRB][GCF] TC 27.22.4.15.1/5 Failed due to missing TERMINAL RESPONSE
ANO83810	[HL6528RD][&C][&D][&S] Wrong response of &C, &D, &S command

6.2. Interface Changes

None



7. Troubleshooting

Please contact Sierra Wireless customer service for support and debugging information.

8. Certification Description

This firmware is not certified.



9. Restrictions and Additional Information

The following table lists out important known issues.

Table 8. Restrictions/Known Issues

Issue ID	Description
ANO87566	ATH command returns ERROR and cannot disconnect an incoming call accepted with modem auto answer function
ANO87335	Cannot hear audio in MO and MT voice calls when the SW1100 switch on the development kit is set to ANALOG
ANO87542	When UART autobaud is used, AT port hangs after restoring UART baud rate setting to factory configuration
ANO87504	Response to +CSIM write command is not correctly displayed
DEV87328	During data call, using +++ to escape to online-command mode, after using ATH to hangup the data call there is no more OK response to AT command received by the device

Note that the following features will be available in future releases:

- Audio (tuning and configuration)
- DTMF (decoding and duration)
- Phonebook
- AVMS system monitoring
- X-modem
- Cell scan and network scan
- Jamming detection
- Antenna detection
- Temperature monitoring
- Bearer Independent Protocol (BIP)
- Network Personalization
- GNSS and A-GPS
- TCP, FTP and HTTP AT commands
- HTTPS AT commands
- POP3 and SMTP AT commands
- CMUX Multiplexer protocol (full basic option)



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