



Customer Release Note

AirPrime HL6528x Firmware 8.00



SIERRA
WIRELESS®

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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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Document History

Version	Date	Updates
1.0	July, 25 2016	Creation
1.1	Sept, 2 2016	Update
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1. Introduction

1.1. Document Scope

The scope of this document is the Firmware 8.00 release description for the AirPrime HL6528x embedded module.

1.2. Document Audience

This customer release note may be distributed to all direct and indirect customers, and will be posted on the corporate web site under the Support/Private area.

1.3. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
Connectivity	This version supports Sierra SIM with applet v4



2. Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
AEC	Acoustic Echo Cancellation
AT	Attention
AVMS	Air Vantage Management Services
DCE	Data Circuit Equipment
DTE	Data Terminal Equipment
DTMF	Dual-tone multi-frequency signaling
DTR	Data Terminal Ready
FTP	File Transfer Protocol
GPIO	Global Purpose Input Output
GPRS	Global Packet Radio Service
IMEI	International Mobile Equipment Identity
NR	Noise Reduction
LCP	Link Control Protocol
ME	Mobile Equipment
MS	Mobile Station
PDP	Packet Data Protocol
PLMN	Public Land Mobile Networks
PPP	Point-to-Point Protocol
SIM	Subscriber Information Module
STK	SIM Application Toolkit
TCP	Transmission Control Protocol
UART	Universal Asynchronous Receiver Transmitter
UDP	User Datagram Protocol



3. Related Documentation

- [1] AirPrime HL6 and HL8 Series AT Commands Interface Guide Rev14.1
Reference: 4114680
- [2] HiloUpgrader User Guide
Reference: 2174015
- [3] AirPrime HL6 and HL8 Series Development Kit User Guide
Reference: 4114877
- [4] Air Prime HL6528x Dual SIM Dual Standby Application Note
Reference: 2174048
- [5] AirPrime HL6 and HL8 Series Dual SIM Single Standby Application Note
Reference: 2174034



4. Compatibility

Table 3. Hardware Compatibility

AirPrime Compatibility List
HL6528
HL6528-2.8V
HL6528-G
HL6528-G2.8V



5. Software Release Description

5.1. Release Identification

Table 4. Firmware Release Information

	Services (AT13)	Comments
Identification	HL6N_008_00_20CF	DSDS (Dual Sim Dual Standby)
Date of generation	2016/08/04	
Binary Size	Total RO Size (Code + RO Data) 5243308 (5120.42kB) Total RW Size (RW Data + ZI Data) 2385920 (2330.00kB) Total ROM Size (Code + RO Data + RW Data) 5293812 (5169.74kB)	

5.2. Software Tools Version

Table 5. Software Tools Version

S/W Tools Name	Version
HiloUpgrader	6.0.0.2
SpyTracerV2	3.1.0
Hilo Starter Dev Tools	1.9.5 or higher

The upgrading tool and procedure are described in document [2] HiloUpgrader User Guide.



6. Software Changes Description

6.1. Validated Corrections/Improvements

ID	Description
STG4849-512	GNSS: In cold start, a constant 400-500 meters error position is observed during several minutes before converging to real position
STG4849-588	HL6528: at the power ON, when staying on same network, EFLOCI file never updated with UPDATE BINARY
STG4849-596	+CCID should return ERROR if no SIM is inserted
STG4849-597	Reading EF_LOCIGPRS on a USIM should return ERROR : FILE NOT FOUND
STG4849-600	Not able to perform any IP/TCP frame exchange after 24 hours
STG4849-601	KTCPSTART: Data note more displayed if not read before switching to transparent mode
STG4849-606	[HL6528] AT+CNUM command: with some SIM, last digit of MSISDN is missing
STG4849-613	[SWI SIM] module can't register anymore after loss/retrieval of network coverage
STG4849-615	[HL6528] Getting +CME ERROR:11, even after initializing with SIM pin.
STG4849-619	[HL6528] IMSI not available for SIM 2 after FW upgrade
STG4849-620	[HL6528] Reboot when updating FPLMN with +CRSM in SIM2
STG4849-623	[GNSS] improvement of stability with GPS AT+GPSSTART=2 and NMEA traces on I2C
STG4849-627	Sometimes, +GPSAID: xxxx is answered to AT+GPSNMEA=1,1 or AT+GPSCONF?
STG4849-628	[SWI SIM] rarely after +CFUN=4 then fill FPLMN then +CFUN=1 doesn't register anymore to network
STG4849-633	[SWI SIM v4] sometimes COPS returns TIM operator
STG4849-636	[GNSS] Not able to perform warm and cold start as second GNSS start
STG4849-637	[SWI SIM v4] often after loss/recovery of network, IMSI doesn't change but PLMN changes
STG4849-639	Not able to attach to the Vodafone Brazil network
STG4849-642	[AVMS] Sometimes 0x00 character is sent during local download

6.2. Interface Changes

For changes to AT commands, refer to document [1] AirPrime HL6 and HL8 Series AT Commands Interface Guide Rev14.1



7. Certification Description

7.1. GCF-CC & PTCRB

The following table summarizes the certifications inherited from previous release.

Module	GCF-CC (Lab Conformance only)	PTCRB
AirPrime HL6528x	Release 3.52.1	NAPRD.03 v5.18



8. Restrictions and Additional Information

This section lists out important known issues or limitations.

Issue ID	Description (What/When)	Impacted Domain	Impacted Sub-Domain
79547 / STG4849-418	[HTTPS] if server request client certificate, module answers with ALERT NO CERTIFICAT (then session is closed)	PROTOCOL	HTTPS
76890/76873/STG4849-293/STG4849-291	Jamming detection feature (+KJAM)	NETWORK	CONTROL
81578/81721/STG4849-441	+CPAS URC notifications	ME	STATUS
90235 / STG4849-593	SIM not more properly detected after inserting and taking it out multiple times	SIM	SIM
92321 / STG4849-638	Rarely, instability of the module when activating GPS AT+GPSSTART=2 and NMEA traces on I2C	GNSS	GNSS
89365 / STG4849-580	Echo cancellation is not working in PCM on demoboard, PCM parameters not fined tuned	AUDIO	PCM
92035 / STG4849-618	Sometimes, a click is heard on remote side when at commands is sent	AUDIO	AT
91284 / STG4849-610	With some SIM card, AT+COPS? returns half of the network provider name instead of full name	SIM	AT
90235 / STG4849-593	When removed and inserted multiple times (about 10), SIM is no more properly detected	SIM	SIM