



Customer Release Note for Firmware R2.2.0.201807121327

AirPrime BX310x



SIERRA
WIRELESS

41112615
2.0
25 July 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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Document History

Version	Date	Updates
1.0	July 12, 2018	New Release Candidate 2.2.0
2.0	July 25, 2018	Correction to table 3, Tools addition in Section 5.2, Update to Table 4 software compatibility



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1. Introduction

1.1. Document Scope

This document describes AirPrime BX310x firmware release R2.2.0.20180712132710.BX310x.1

1.2. Document Audience

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

2. Abbreviations and Definitions

Table 1. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
AP	Access Point
BT	Bluetooth®
BLE	Bluetooth® Low Energy
BR	Basic Rate
EDR	Enhanced Data Rate
FOTA	Firmware Over The Air
GAP	General Access Profile
GATT	Generic Attribute Profile
GPIO	Generic Programmable Input / Output
HTTP	HyperText Transfer Protocol
I/O	Input / Output
L2CAP	Logical Link Control and Adaptation Protocol
LWM2M	Light Weight Machine to Machine
LMP	Link Management Protocol
MQTT	Message Queue Telemetry Transport
RF	Radio Frequency
RFCOMM	Radio Frequency Communications
SDP	Service Discovery Protocol
SMP	Security Manage Protocol
SPP	Serial Port Profile
STA	Station
TCP	Transmission Control Protocol
UART	Universal Asynchronous Receiver Transmitter
UDP	User Datagram Protocol
Wi-Fi	Wireless Fidelity

3. Related Documentation

Table 2. Related Documentation

Ref. #	Doc. #	Rev.	Document title
[1]	41111444	1.0	AirPrime BX3100-5 Product Technical Specification
[2]	41111445	1.0	AirPrime BX3100-5 AT Command Reference Guide



4. Compatibility

Table 3. Hardware Compatibility

AirPrime Compatibility List	
BX3100	: PV1 and onwards
BX3105	: PV1 and onwards

Table 4. Software Compatibility

Component	Version
FW	R1.3.1 and greater. Note: HW built with R1.3.1 requires UART Updater tool to update to P1.x and beyond. FOTA does not work on R1.3.1 to update to P1.x and later versions.



5. Software Release Description

5.1. Release Identification

Table 5. Firmware Release Information

Component	Version
Maturity / Maturity ID	BX310x Release Candidate 2.2.0
Date of generation	July 12, 2018
IMEI SV	NA
Baseline version	R2.2.0.20180712132710.BX310x.1
Firmware images - file and identification information	R2.2.0.20180712132710.BX310x.1

5.2. Software Tools Versions

Table 6. Software Tool Version Compatibility

S/W Tools Name	Version	Resource file
UART FW Updater Tool	06.18	Euler Updater-0618.zip

6. Software Changes Description

6.1. Improvements

Table 7. List of improvements

ID	Description	Impacted Domain/Sub-Domain	Fixed in
BX310X-735	Make BT on/off setting persistent	Common SW Features	2.2
BX310X-734	Configure hw iface selection GPIO as input on boot	Common SW Features	2.2
BX310X-722	[HTTP] [HEADERS] : Not fully compliant with RFC 7230 (HTTP/1.1)	WiFi	2.2
BX310X-708	[AirVantage] +WDSI: 13 instead of +WDSI: 11 when disconnecting from WiFi during download	AirVantage Cloud Platform	2.2
BX310X-701	Deinit the dev kit audio codec using AT commands	Audio	2.2
BX310X-686	[BTC] AT+SRBTCRSSI does not return OK	BT Classic	2.2
BX310X-685	[BTC] Typo in new BTC Pairing commands	BT Classic	2.2
BX310X-665	[BTC/SPP] Missing CR/LF after +SRSP_DATA notification	BT Classic	2.2
BX310X-660	Remove AT+KPWM=? Test Command		2.2
BX310X-617	Voltage Sense commands (ADC)	Common SW Features	2.2
BX310X-605	Add source identification to the HTTP web server features	WiFi	2.2
BX310X-604	Fix PWM AT command empty arguments		2.2
BX310X-592	AT command over SPI	SPI Interface	2.2
BX310X-590	Support for REST API	WiFi	2.2
BX310X-589	Support Web server file system	WiFi	2.2
BX310X-575	[BLE] Cannot preset a descriptor value	Bluetooth Low Energy	2.2
BX310X-574	[BTC] A2DP/AVRCP notifications contain extra spaces	BT Classic	2.2
BX310X-573	[BTC] SPP session partially reseted when setting BT off/on	BT Classic	2.2
BX310X-568	The parse_write_cmd_args function does not save all the arguments in one particular case	Common SW Features	2.2
BX310X-558	AT&F does not restore +IPR and &K settings to factory default	Common SW Features	2.2
BX310X-554	[WiFi/HTTPS] Support cipher suite and tls version choices	WiFi	2.2
BX310X-553	UART Terminal initial text message implementation	Common SW Features	2.2
BX310X-549	[WiFi] [esp-idf] 0.0.0.0 IP read when 8 stations are connected to AP	WiFi	2.2
BX310X-536	[BTC/GAP] [esp-idf] Device discoverable mode should support limited and general	BT Classic	2.2
BX310X-535	[BTC/GAP] [esp-idf] Device modes should be independent	BT Classic	2.2
BX310X-525	Can not change country parameter with SRWCFG command	WiFi	2.2

ID	Description	Impacted Domain/Sub-Domain	Fixed in
BX310X-511	Default BT Name and AP SSID	Common SW Features	2.2
BX310X-510	Support up to 7 simultaneous Bluetooth connections	BT Classic	2.2
BX310X-450	Add the end_handle support of the included services	Bluetooth Low Energy	2.2



7. Troubleshooting

Please contact customer service for support and debugging information.



8. Certification Description

The following table summarizes the certifications passed for this release.

Table 8. Relevant Certifications for Release

Product	Version
None	NA



9. Restrictions and Additional Information

This section presents additional information or restrictions that must be taken into account. Issues are sorted by order of ID.

Table 9. Restrictions and additional information

ID	Description (What/When)	Impacted Domain/Sub-Domain
NA	BT Classic is not fully supported in this release	BT Classic
BX310x-251	AT+KTCPCLOSE does not close the connection	Wi-Fi
BX310x-345	The BLE connection will automatically dis-connect after a timeout period. If two BX modules connected via BLE, after the connection established successfully, if both of them stays in the IDLE state, after a timeout period the connection will be closed. A timeout event will be sent back.	BLE