



Customer Release Note

Android Marshmallow 6.0 ARM RIL



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

Document History

Version	Date	Updates
1.0	May 27, 2016	Creation
1.1	July 29, 2016	Update for V6.0.8.0
1.2	Aug 12, 2016	Update for V6.0.10.0
1.3	Sep 15, 2016	Update for V6.0.12.0



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1. Introduction

1.1. Document Scope

This document describes the Sierra Wireless Android Marshmallow 6.0 ARM RIL release.

1.2. Supported Configurations and Modules

1.2.1. Supported Release Configuration

This release note is applicable to release configuration:

AndroidRIL_V6.0.12_ARM64_6.0_V1.0_bin

Android RIL version 6.0.12.0

ARM based processors for Android Marshmallow (6.0) 64-bit user space

Binary only release

1.2.2. Supported AirPrime Modules

The following table lists supported AirPrime modules and corresponding firmware versions.

Table 1. Supported AirPrime Modules and Firmware Versions

AirPrime Module	Firmware Version
AR7552	Firmware version SWI9X15A_07.10.08.00 r32399 (or newer)
EM7305	Firmware version SWI9X15C_05.05.16 (or newer)
EM7330	Firmware version SWI9X15C_05.05.22 (or newer)
EM8805	Firmware version SWI9X15C_05.05.16 (or newer)
HL7518	Firmware version HL75xx.2.13 (or newer)
HL7528	Firmware version AHL7528.2.6.151000 (or newer)
HL7538	Firmware version AHL7538.1.0.152100 (or newer)
HL7539	Firmware version AHL7539.1.0.152101 (or newer)
HL7548	Firmware version HL75xx.A.2.13 (or newer)
HL7549	Firmware version BHL7549.1.3.15200 (or newer)
HL7588	Firmware version AHL75xx.A2.6.151600 (or newer)
HL7618	Firmware version RHL7618.4.2.151600.201607210015.x7120_1 (or newer)
HL7648	Firmware version AHL7648.A.1.3.161601.201608091650.x7120m_1 (or newer)
HL7688	Firmware version AHL75xx.A2.6.151600 (or newer)
HL7690	Firmware version AHL769x_TEST.0.0.154401 (or newer)
HL8518	Firmware version AHL85xx.5.13.2.3 (or newer)
HL8528	Firmware version AHL85xx.5.13.2.3 (or newer)
HL8529	Firmware version AHL85xx.5.13.2.3 (or newer)

AirPrime Module	Firmware Version
HL8548	Firmware version RHL85xx.5.5.12.0 (or newer)
HL8549	Firmware version RHL85xx.5.5.12.0 (or newer)
MC/EM7355	Firmware version SWI9X15C_05.05.16 (or newer)
MC/EM7455	Firmware version SWI9X30C_02.02.00.00 (or newer)
MC7304	Firmware version SWI9X15C_05.04.02 (or newer)
MC7354	Firmware version SWI9X15C_05.04.02 (or newer)
MC7700	Firmware version SWI9200X_03.05.16.01 (or newer)
MC7710	Firmware version SWI9200X_03.05.16.01 (or newer)
MC7750	Firmware version SWI9600M_03.05.10.05 (or newer)
MC8305 (G3K)	Firmware version 1580 and 3.3
MC8355 (G3K)	Firmware version 1580 and 3.3
SL8092	Firmware version SWI6600P_02.00.01.01 (or newer)
SL909x	Firmware version 331403 (or newer)

Note that:

- MC7700 and MC7710 modules can be configured to operate in either “QMI mode” or “Direct-IP” mode; the MC7700 and MC7710 modules must be in “QMI mode” for the Android RIL to operate properly.
- MC73xx, MC7750, MC8305, MC8355 and SL909x modules only support QMI mode and so will work by default.
- MC73xx supports multi-PDN by default; it must be switched back to single PDN to work with the Android RIL.



2. Change Summary

2.1. Version 6.0.12.0

- Add support to AR7552, HL7618, HL7648, HL7688

2.2. Version 6.0.10.0

- Add support to HL7690

2.3. Version 6.0.8.0

- Fix GPS doesn't work on AT RIL.
- Fix signal strength doesn't correct with Verizon roaming to UMTS network.
- Improve USB driver release routine.
- Improve debug log inside GobiNet driver.
- Add QMI notification filter to GobiNet driver.
- Add support CTS for RIL related feature.
- Add support UTC time callback in GPS library.
- Add support ADB via Ethernet.
- Add support GDB debug in Android.

2.4. Version 6.0.5.0

- Add Sierra USB driver supported on Hikey Android 6.0 ARM64 platform.
- Add Sierra RIL supported on Hikey Android 6.0 ARM64 platform.



3. Known Limitations

Known issues in the Android 6.0 RIL.

- HL7618 NCM data call may cause modem crash
- HL7648/HL7688 MO/MT SMS fail on AT&T network

4. Planned Future Enhancements

The following features are planned to be supported in a future release of the Android RIL:

- OTASP/OMADM support for MC73xx