



Customer Release Note

Android Pie 9.0.4.0 ARM 64 RIL



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	Oct 19, 2018	Creation
1.1	Nov 30, 2018	Update for V9.0.2.0
1.2	Jan 31, 2019	Update for V9.0.3.0
1.3	Feb 22, 2019	Update for V9.0.4.0



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1. Introduction

1.1. Document Scope

This document describes the Sierra Wireless Android Pie 9.0 ARM RIL release.

1.2. Supported Configurations and Modules

1.2.1. Supported Release Configuration

This release note is applicable to release configuration:

AndroidRIL_V9.0.4.0_ARM_64_bin

Android RIL version 9.0.4.0

ARM based processors for Android Pie (9.0) 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	RIL Type
AR7552	SWI9X15A_07.10.08.00 r32399 (or newer)	AR
EM7305	SWI9X15C_05.05.16 (or newer)	QMI
EM7330	SWI9X15C_05.05.22 (or newer)	QMI
EM8805	SWI9X15C_05.05.16 (or newer)	QMI
EM7565	SWI9X50C_00.06.00.00 (or newer)	QMI
HL7518	HL75xx.2.13 (or newer)	HL
HL7528	AHL7528.2.6.151000 (or newer)	HL
HL7538	AHL7538.1.0.152100 (or newer)	HL
HL7539	AHL7539.1.0.152101 (or newer)	HL
HL7548	HL75xx.A.2.13 (or newer)	HL
HL7549	BHL7549.1.3.15200 (or newer)	HL
HL7588	AHL75xx.A2.6.151600 (or newer)	HL
HL7618	RHL7618.4.2.151600.201607210015.x7120_1 (or newer)	HL
HL7648	AHL7648.A.1.3.161601.201608091650.x7120m_1 (or newer)	HL
HL7688	AHL75xx.A2.6.151600 (or newer)	HL
HL7690	AHL769x_TEST.0.0.154401 (or newer)	HL
HL7692	HL769x.2.24.173100.201709051100.x7120m_1(or newer)	HL

AirPrime Module	Firmware Version	RIL Type
HL8518	AHL85xx.5.13.2.3 (or newer)	HL
HL8528	AHL85xx.5.13.2.3 (or newer)	HL
HL8529	AHL85xx.5.13.2.3 (or newer)	HL
HL8548	RHL85xx.5.5.12.0 (or newer)	HL
HL8549	RHL85xx.5.5.12.0 (or newer)	HL
MC/EM7355	SWI9X15C_05.05.16 (or newer)	QMI
MC/EM7455	SWI9X30C_02.02.00.00 (or newer)	QMI
MC/EM7430	SWI9X30C_02.24.03.00 (or newer)	QMI
EM7430C	SWI9X30C_02.24.05.06 (or newer)	QMI
EM7511	SWI9X50C_01.06.01.00 (or newer)	QMI
MC7304	SWI9X15C_05.04.02 (or newer)	QMI
MC7354	SWI9X15C_05.04.02 (or newer)	QMI
MC7700	SWI9200X_03.05.16.01 (or newer)	QMI
MC7710	SWI9200X_03.05.16.01 (or newer)	QMI
MC7750	SWI9600M_03.05.10.05 (or newer)	QMI
MC8305 (G3K)	1580 and 3.3	QMI
MC8355 (G3K)	1580 and 3.3	QMI
SL8092	SWI6600P_02.00.01.01 (or newer)	AT
SL909x	331403 (or newer)	QMI
WP7504	SWI9X15Y_07.12.09.00 (or newer)	QMI
WP7603	SWI9X07Y_02.00.01.00(or newer)	QMI
WP7607	SWI9X07Y_02.21.01.00 (or newer)	QMI
WP7608	SWI9X07Y_02.00.01.00 (or newer)	QMI
WP7609	SWI9X07Y_02.00.01.00 (or newer)	QMI
WP7702	SWI9X06Y_02.12.01.00 (or newer)	QMI

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.

1.3. Terminology and Acronyms

Term/Acronym	Definition
API	Application Programming Interface
OEM	Original Equipment Manufacturer
QMI	Qualcomm Modem Interface; Qualcomm MSM Interface
RIL	Radio Interface Layer

1.4. Related document

- [AirPrime - Android RIL Integration Guide.pdf](#)



2. Change Summary

2.1. Version 9.0.4.0

- Fix SELinux issue of data session on HL RIL.
- Resolved compile warning in RIL.

2.2. Version 9.0.3.0

- Add support to ARM 32 Hikey platform

2.3. Version 9.0.2.0

- Fix data connection auto disconnect on HL RIL.
- Resolved compile warning in swigps, swirl and swirlat.
- Complete carrier test on China Unicom network.

2.4. Version 9.0.1.0

- Add Sierra USB driver supported on Hikey Android 9.0 ARM64 platform.
- Add Sierra RIL supported on Hikey Android 9.0 ARM64 platform.



3. Known Limitations

Known issues in the Android 9.0 RIL.

- [ANDROIDRIL-731][CTS] CtsLocationTestCases partial failed.
- [ANDROIDRIL-730][CTS] testSubscriptionPlansOverrideCongested and testSubscriptionPlansOverrideUnmetered test cases failed
- [ANDROIDRIL-729][CTS] testCellInfoTest case failed.
- [ANDROIDRIL-728][CTS] testGetForbiddenPlmns test case failed.

4. Planned Future Enhancements

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

- Upgrade the RIL Version to 13.