



# Migration Guide

## AirPrime MC8704 and MC8705



**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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Do not operate the Sierra Wireless modem in areas where cellular modems are not advised without proper device certifications. These areas include environments where cellular radio can interfere such as explosive atmospheres, medical equipment, or any other equipment which may be susceptible to any form of radio interference. The Sierra Wireless modem can transmit signals that could interfere with this equipment. Do not operate the Sierra Wireless modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless modem **MUST BE POWERED OFF**. When operating, the Sierra Wireless modem can transmit signals that could interfere with various onboard systems.

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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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The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

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## Contact Information

Sales Desk:	Phone:	1-604-232-1488
	Hours:	8:00 AM to 5:00 PM Pacific Time
	Contact:	<a href="http://www.sierrawireless.com/sales">http://www.sierrawireless.com/sales</a>
Post:	Sierra Wireless 13811 Wireless Way Richmond, BC Canada V6V 3A4	
Technical Support:	<a href="mailto:support@sierrawireless.com">support@sierrawireless.com</a>	
RMA Support:	<a href="mailto:repairs@sierrawireless.com">repairs@sierrawireless.com</a>	
Fax:	1-604-231-1109	
Web:	<a href="http://www.sierrawireless.com/">http://www.sierrawireless.com/</a>	

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

# Document History

Version	Date	Updates
1.0	September 17, 2014	Creation
1.1	September 22, 2014	Updated section 1 Introduction



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# 1. Introduction

Re-spin versions of the MC8704 and MC8705 were created to replace EOL components.

This document aims to provide information with migrating applications to the re-spin modules and only focuses on certification changes since re-spin modules will have the same pin-outs and hardware features as legacy modules, and will also be completely firmware compatible.

## 2. Certification

The AirPrimeMC8704 and MC8075 re-spin versions will be certified for the following standards.

Table 1. AirPrime MC8704 and MC8705 Re-spin Certifications

Standard	MC8704	MC8705
FCC, IC	✓	✓
CE	✓	✓
PTCRB	✓	✓
GCF	✓	✓
GCF FT	✓	✓
NCC	✓	✓
AT&T		✓
Rogers		✓
Bell	✓	✓
Telus		✓
Telstra	✓	✓

The following table specifies the impact of the MC8704 and MC8705 re-spin modules on customer applications and provides guidance on updating approvals.

Table 2. Impact and Recommendations for Integrating MC8704 and MC8705 Re-spin Modules

Approval	Impact
FCC and IC	<ul style="list-style-type: none"> <li>New FCC ID and IC number are needed</li> <li>Retesting for EIRP, RSE is required</li> <li>Retesting for SAR, HAC is required if the end device is portable</li> </ul>
CE	<ul style="list-style-type: none"> <li>Full retesting of EIRP, RSE, SAR is required for 3G; spot check is required for 2G</li> <li>EMC spot check is required for EMS test items</li> </ul>
PTCRB	<ul style="list-style-type: none"> <li>OTA retesting requires if the customer device has a fixed antenna or if the antenna is less than 20cm long</li> <li>IMEISV check is required (test duration is 2 minutes)</li> <li>RSE will be spot checked <ul style="list-style-type: none"> <li>No full span testing</li> <li>2G will be spot checked, while 3G will be fully retested</li> </ul> </li> <li>SIM Electric No SIM Electric will not be required if there are no modifications to the customer application design</li> </ul>
GCF	<ul style="list-style-type: none"> <li>30% of the GCF integration scope will be checked</li> <li>RSE will be spot checked <ul style="list-style-type: none"> <li>No full span testing</li> <li>2G will be spot checked, while 3G will be fully retested</li> </ul> </li> <li>SIM Electric No SIM Electric will not be required if there are no modifications to the customer application design</li> </ul>
NCC	EMI regression will be required

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Approval	Impact
AT&T	A new AT&T integration process will be required
Rogers	A new Rogers integration process will be required
Bell	A new BELL integration process will be required
Telus	A new Telus integration process will be required
Telstra	A new Telstra integration process will be required

## >> 3. References

### 3.1. Reference Documents

- [1] AirPrime MC8704 with Audio PCI Express Mini Card Product Specification  
Reference: 4111998
- [2] AirPrime MC8705 PCI Express Mini Card Product Specification  
Reference: 4111996
- [3] AirCard/AirPrime UMTS Supported AT Command Reference  
Reference: 2130617

### 3.2. List of Abbreviations

Abbreviation	Definition
AMSS	Automatic Message Switching System
API	Application Programming Interface
CnS	Control and Status – Sierra Wireless' proprietary hot interface protocol
EOL	End of life
NDIS	Network Driver Interface Specification
PPP	Point-to-Point Protocol
QMI	Qualcomm MSM Interface
RIL	Radio Interface Layer
SDK	Software Development Kit



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