



**MiniCard**  
**SW Release Package 1130**

**Software Release Notes &  
Upgrading Instructions**

<b>Revision:</b>	<b>1130</b>
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## 1 General

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### 1.1 Purpose

This document is intended to capture technical changes to the MiniCard release package. The document covers changes in the host software components.

These release notes are NOT intended for the end user.

A new revision of this document will be issued when any of the software components of the product are updated.

### 1.2 Scope

This document covers issues that affect carriers and end users.

### 1.3 Revision History

Rev	Date	Author	Summary of changes
0.1	March 22 <sup>nd</sup> , 2006	Iulian Mocanu	Initial release of device drivers, USB descriptor and firmware. Based on a 8755/65 device hardware and firmware.
0.2	April 13 <sup>th</sup> , 2006	Iulian Mocanu	WHQL-ed drivers for 32 bit platforms, updated driver installer, Power API sample and project memo.
0.3	April 26 <sup>th</sup> , 2006	Iulian Mocanu, Steve Vuong	Updated 3G SDK 4.4.1.11 with support for all Minicards
0.6	June 15 <sup>th</sup>	Iulian Mocanu, Steve Vuong	Build 964 – Driver Installer and SDK software release
0.7	June 27 <sup>th</sup>	Iulian Mocanu	Build 979 – Driver Installer MSI and SDK update
0.8	July 14 <sup>th</sup> , 2006	P. Nikic	New 3G Watcher
0.9	July 21, 2006	Bon Lee	New 3G Watcher 1001
1.0	September 15 <sup>th</sup> , 2006	P.Nikic	New 3G Watcher 1054
1.1	September 22 <sup>nd</sup> , 2006	Iulian Mocanu	New DriverInstallerMsi package, new GSM and CDMA SDKs, 3G Watcher, etc.
1123	Sept 29 <sup>th</sup> , 2006	P.Nikic	Rev 1.1 renamed to 1123 Corrected release notes
<a href="#">1130</a>	<a href="#">Oct 10, 2006</a>	<a href="#">Colin Chow</a>	<a href="#">New 3G Watcher 1115</a>

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**Changes between this version and the previous one are highlighted in blue.**

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## 2 Component Descriptions

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### 2.1 General

The Build number is a Sierra Wireless assigned number that uniquely identifies all external releases of software and firmware. It is not specific to a product or software revision. It is an internal reference only.

### 2.2 The directory names mentioned in the following sections are referenced from the build folder

Includes all aspects of the MiniCard module including baseband functionality, RF performance, purpose of units (FTA, prototype, pilot production etc). Please see the MC User Guide for assembly instructions.

### 2.3 Software

#### 2.3.1 Custom Device Driver/SDK MSI installer

Directory Name: Software/DriverInstallerMSI

MSI installer package provides an automated device driver and various Sierra Wireless API installer. This would be used by OEMs that utilize custom Connection Manager client applications.

#### 2.3.2 Development SDK

Directory Name: Software/SDK

The SDK is required to develop applications to interface with the MiniCard Modem.

It provides sample applications, DLL binaries and header files, device drivers and supporting documentation.

#### 2.3.3 Watcher

Directory: Software/Watcher

Sierra Wireless Connection Manager that supports MiniCards. Supports data connection management, SMS and optionally voice. (where supported)

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### 3 Installing and Upgrading the Release

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#### 3.1 Download the entire Build Folder

It is recommended that the entire build folder specified in the email notification is downloaded to your local hard drive, e.g.:

**From:** ftp:\\ Build725 (MC8775 Generic)

**To:** c:\SierraWireless\MC8775-v2.5

This will be referenced throughout the document as the “Build Folder”

#### 3.2 Supported Operating Systems

This software and firmware package supports the Sierra Wireless MiniCard series on the following Microsoft Operating Systems:

1. Windows XP SP2 (Service Pack 2) or higher
2. Windows 2000 SP4 (Service Pack 4)
3. Windows Vista build 5600

#### 3.3 Installing or upgrading Watcher for the MiniCard on Notebooks

- If you have a previous version of Watcher you should uninstall it first
  - o Go to Control Panel and select “Add or Remove Programs”
  - o Select “3G Watcher” and click on “Remove”
- Launch the Watcher installation package located in the software\watcher folder.
- Follow the onscreen installation instructions.
- Please note the following
  - o Watcher does not upgrade the MiniCard firmware.

This Watcher package also supports the AirCard 8xx and 7xx Wireless Network Cards (PC Cards), and does install the drivers for these modems.

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## 4 Revision History

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### 4.1 Build 1130

#### 4.1.1 Software Component Revision Levels

Component		Revision	Compatibility
<a href="#">Software Release Package</a>		<a href="#">Build 1130</a>	
Host Software			
	GSM SDK	4.4.2.3	
	CDMA SDK	6.23	
	Power API	1.0.1.2	
	Power API Service	1.0.0.3	
	Welcome Module API	1.1.0.4	
	<a href="#">3G Watcher</a>	<a href="#">Build 1.5.8.1115</a>	

#### 4.1.2 Host Software Changes

##### 4.1.2.1 *3G Watcher*

- [Reduced logging levels](#)
- [Updated default profiles list](#)
- [Updated default TCP values](#)

## 4.2 Build 1123

### 4.2.1 Software Component Revision Levels

Component		Revision	Compatibility
Software Release Package		Build 1123	
Host Software			
	GSM SDK	4.4.2.3	
	CDMA SDK	6.23	
	Power API	1.0.1.2	
	Power API Service	1.0.0.3	
	Welcome Module API	1.1.0.4	
	3G Watcher	Build 1.5.6.1074	

### 4.2.2 Host Software Changes

#### 4.2.2.1 SDK 4.4.2.3

- Updated SWI\_NOTIFY\_power and SWI\_NOTIFY\_Reset to not implicitly enable firmware heart beat notifications.

#### 4.2.2.2 Power API and Power API Service

- Power API DLL now uses a Power API service to communicate with the system WMI services. Power API interface definitions remain the same.

#### 4.2.2.3 3G Watcher

- Cumulative fixes to support new devices, device classes, carriers

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### 4.3 Version 1.0

#### 4.3.1 Software Component Revision Levels

Component		Revision	Compatibility
Software Release Package		Version 1.0	
Host Software			
	SDK	4.4.2.2 (updated header files)	
	Power API	1.0.0.4	
	Welcome Module API	1.1.0.4	
	3G Watcher	Build 1.5.1.1054	

#### 4.3.2 Host Software Changes

##### 4.3.2.1 3G Watcher

- Fixed an issue where installation completion required a laptop reset prior to modem insertion on certain laptops
- Fixed a Watcher Crash when connecting to a WWAN profile after switching to Data tab
- Fix an issue where profiles lock up if WWAN Profile created after DUN Profile
- Added AC860 WHQL'd drivers for Vista
- Added support for get/set global TCP window size
- Added preliminary CE support
- Fixed a Watcher crash resulting from closing Watcher while certain options dialogs were open.
- Clearing data counters no longer clear both lifetime and session

### 4.4 Version 0.9

#### 4.4.1 Software Component Revision Levels

Component		Revision	Compatibility
Software Release Package		Version 0.9	
Host Software			
	SDK	4.4.2.2 (updated header files)	
	Power API	1.0.0.4	
	Welcome Module API	1.1.0.4	
	3G Watcher	Build 1.5.1.1001	

**4.4.2 Host Software Changes**

*4.4.2.1 3G Watcher*

- Updated logo on 3G Watcher main skin
- Updated default profile list and PAN names

**4.5 Version 0.8**

**4.5.1 Software Component Revision Levels**

Component		Revision	Compatibility
Software Release Package		Version 0.8	
Host Software			
	SDK	4.4.2.2 (updated header files)	
	Power API	1.0.0.4	
	Welcome Module API	1.1.0.4	
	3G Watcher	Build 1.5.0.995	

**4.5.2 Host Software Changes**

*4.5.2.1 3G Watcher*

- B5666 – Updated CD Icon
- B5668 - Cannot proceed if Europe is selected in non-English OS
- Added support for the GSM profile scanning feature
- Included latest predefined\_profiles.xml
- B4813 Fixed incorrect radio on error message
- B5672 Added support for new TCP settings
- Pre-defined Profiles updated for various German carriers
- Disabled Mini Card-specific text for card not found
- Fixed hardcoded strings in Options.xml
- Implemented support for read-only profiles
- Added parental control warning msg support (XML configurable URL, user option to toggle, autolaunch URL)
- Updated strings for outgoing voice calls error codes
- B5628 "No device detected" when autoconnect with default profile
- B5542 Fixed multiple FDN entries windows
- B5657 Multiple concat MO-SMS not sent correctly
- Set unread SMS as read SMS on "Open", "Reply", and "Forward" commands.
- B5655 Opening a message via right-click leaves it as unread.
- B5662 Re-selecting an unread message marks it as read

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- B5710 Fixed Call ID # being converted incorrectly for international #'s
- B5709 Missed Call Icon stops working

## 4.6 Version 0.7

### 4.6.1 Software Component Revision Levels

Component		Revision	Compatibility
Software Release Package		Version 0.7	
Host Software			
	SDK	4.4.2.2 (updated header files)	
	Power API	1.0.0.4	
	Welcome Module API	1.1.0.4	
	3G Watcher	Build 838	

### 4.6.2 Host Software Changes

#### 4.6.2.1 3G SDK(HSDPA) Changes

- Updated .h files that include definitions for new device types that were undefined in 4.4.1.11
- Same binaries as in previous build. (964)
- Symbol files are now included.

#### 4.6.2.2 Welcome Module changes

- SwixxWm will now load all required modules (modem SDK and SwixxAux) as long as they are in the same directory. SwixxWm.dll does not have to be in the same directory as the main application.

## 4.7 Version 0.6

### 4.7.1 Software Component Revision Levels

Component		Revision	Compatibility
Software Release Package		Version 0.6	
Host Software			
	SDK	4.4.2.2	
	Power API	1.0.0.4	
	Welcome Module API	1.1.0.3	
	3G Watcher	Build 838	

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**4.7.2 Host Software Changes**

*4.7.2.1 3G SDK(HSDPA) Changes*

- Added x64 support (native 64 bit binaries)
- AirCard 850/860 Vista drivers (not WHQL-ed) are provided
- Support for the new AirCard 875 devices – including device drivers
- Fix in the PLMN parsing algorithm. In Manual PLMN search the Forbidden and Weak bits were read in the wrong order.
- Visual Studio 2005 workspace for sample applications

*4.7.2.2 Power API changes*

- Added x64 support (native 64 bit binaries)
- OutputDebugString only available in debug builds

*4.7.2.3 Welcome Module changes*

- Added x64 support
- Added support for R4 API and SWIAPIMX

**4.8 Version 0.3**

**4.8.1 Software Component Revision Levels**

Note: This is an interim release and is intended for testing platform integration. The hardware and firmware are identical to the MC8755 device except the USB descriptor.

Component		Revision	Compatibility
Software Release Package		Version 0.3	
Host Software			
	SDK	4.4.1.11	
	Power API	1.0.0.1	
	3G Watcher	Build 838	

**4.8.2 Host Software Changes**

*4.8.2.1 3G SDK changes*

- o Added support for device ID/driver search.
- o Calling SwiApiOpenEx with MC device type will also look for registry over-rides.

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## 4.9 Version 0.2

### 4.9.1 Software Component Revision Levels

Note: This is an interim release and is intended for testing platform integration. The hardware and firmware are identical to the MC8755 device except the USB descriptor.

Component		Revision	Compatibility
Software Release Package		Version 0.2	
Host Software			
	SDK	4.4.1.1	
	Power API	1.0.0.1	
	3G Watcher	Build 838	

### 4.9.2 Host Software Changes

#### 4.9.2.1 3G Watcher

- Updated translated strings (Watcher and MSI Installer)
- Integrated latest audio volume control library (2.1) from FCS-Japan
- Prevent system from suspending if voice call is active
- Now display "No Service" when attempting non-emergency calls with no service (e.g. disabled SIM)
- B4812 - Dial support now triggered via double click as well
- Missed Calls now displayed
- Spaces no longer stripped from Destination #. Will report error instead.
- Incoming international messages are now properly prefixed with '+'
- B5010 – Fixed Watcher from stealing focus if minimized and connected
- Fixed Roam indicator display

#### 4.9.2.2 Power API

- Power API library and a sample application is provided
- Updated design and implementation guideline memo:
  - o memo033 (SWI Power Management Interface)v1.2.pdf

## 4.10 Version 0.1

### 4.10.1 Software/Firmware Component Revision Levels

Note: This is an interim release is intended for testing platform integration. The hardware and firmware are identical to the MC8755 device except the USB descriptor.

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Component		Revision	Compatibility
Software Release Package		Version 0.1	
Host Software			
	SDK	n/a	
	Watcher	4.4.3.0	

### 4.10.2 Host Software Changes

#### 4.10.2.1 *Watcher changes*

- reg file has to be run prior to launching Watcher. This registry key provide watcher the HID device name of new supported devices.
- Includes latest AirCard drivers 2.0.0.21 (VSP support)
- Watcher supports Windows Vista. However, there is known problem with the msi installer. As a temporary workaround you can install watcher on a Windows XP machine and copy the entire watcher installation folder on a Vista machine.
- The target folder can be typically found at:
  - o C:\Program Files\Sierra Wireless Inc\AirCard 800 Series\AirCard Watcher

## **A. Miscellaneous info**

### **A.1 Troubleshooting**

The following sections describe troubleshooting information when using the MiniCard when using in a live network and when using with a test box.

#### **A.1.1 MiniCard with Test Box**

1. If you're not attaching, check to see if the test box has ciphering on or off. The AirCard needs to be set the same. The AT command is noted below:

<b>AT Command</b>	<b>Description</b>
AT!GCIPHER=X	Set the card to support integrity and ciphering with the following settings: X = 0, Ciphering OFF, Integrity OFF X = 1, Ciphering ON, Integrity OFF X = 2, Ciphering ON, Integrity ON
AT!GCIPHER?	Query the GCIPHER settings.

#### **A.1.2 MiniCard in a Live Network**

1. If you're not attaching, check to see if the live network has ciphering on or off. Generally live 3G network will have ciphering on (from the table below, X = 2). The AirCard needs to be set the same. The AT command is noted below:

<b>AT Command</b>	<b>Description</b>
AT!GCIPHER=X	Set the card to support integrity and ciphering with the following settings: X = 0, Ciphering OFF, Integrity OFF X = 1, Ciphering ON, Integrity OFF X = 2, Ciphering ON, Integrity ON
AT!GCIPHER?	Query the GCIPHER settings.