

HUAWEI Module

Firmware Upgrade Guide on Windows

lssue 01 Date 2013-07-27 Huawei Technologies Co., Ltd. provides customers with comprehensive technical support and service. For any assistance, please contact our local office or company headquarters.

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About This Document

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This document describes how to upgrade Huawei modules on Windows XP, Windows 7, Windows 8/8.1 and Windows CE.

The following rules must be observed for upgrading modules.

- Passwords are not required for upgrading from general versions to general versions.
- Passwords are not required for upgrading from general versions to customized versions.
- Passwords are required for upgrading from customized versions to general versions.
- Passwords are required for upgrading between different customized versions.

If passwords are required for upgrading modules, please provide password management personnel with the International Mobile Equipment Identities (IMEIs) to obtain the passwords.



2 One-Click Upgrade on Windows XP/7

This chapter use Huawei ME906J module (a LTE module) as an example to describe how to upgrade the module and verify whether the upgrade is successful on Windows 7. And the upgrade progress on Windows XP is the same as on Windows 7.

1.1 Deliverable

The following figure shows one upgrade tool of the ME906J module on Windows 7.

📥 ME906 JUp date_11. 234. 27. 02. 00. exe

1.2 Upgrade Procedures

Step 1 Connect the ME906J module to one of the USB ports on a PC by the adapter board (or the ME906J module embedded in the PC/Laptop). Right-click **My Computer**. Choose **Manage** to access **Computer Management**. The ME906J module's USB ports are displayed as High Speed device in **Device Manager**.

The ports may be different between different Huawei modules.





- Step 2 Double-click the one-click upgrade tool (.exe), such as
 - 🛄 ΝΟΤΕ

Do not run any applications that occupy the module's ports, such as HyperTerminal.





Step 3 Click **Start**. The wizard will search for the module, as shown in the following two figures.

🛃 Update Wizard	- M9615M	
	Search Device	
2	Begin searching device	
		Next Cancel

🐣 Update Wizard	- M9615M
	Search Device
2	Finding port
	Next Cancel

Step 4 After the module is found, the upgrade progress will be displayed as the following two figures.



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🕘 Update Wizard -	M9615M
	Updating
3	Ready to download programs. Pay attention to the following during the upgrade: 1.Make sure that the PC is running on full power. 2.Do not remove the data card. 3.Do not run other programs. 4.Do not shut down,sleep,hibernate,log off,switch user or restart the PC.
	Next Cancel

🍝 Update Wizard - N	M9615M
	Updating
3	Downloading programs Pay attention to the following during the upgrade: 1.Make sure that the PC is running on full power. 2.Do not remove the data card. 3.Do not run other programs. 4.Do not shut down,sleep,hibernate,log off,switch user or restart the PC
	Next Cancel

During the upgrade progress, the ports for the module that can be found in **Device Manager** are **HUAWEI Mobile Connect – 3G Application Interface** and **HUAWEI Mobile Connect – 3G PC UI Interface**, as shown in the following figure.



Computer Ma We System Tc Computer Ma We System Tc Computer Ma Event' Solution Computer Ma Perfore Device Storage Disk M Services at	Microsoft Windows Management Interface for ACP1 PCI bus PCI bus PCI bus PCI bus PCI bus Intel(R) 6 Series/C200 Series Chipset Family PCI Express Root Port 1 - 1C10 Intel(R) 6 Series/C200 Series Chipset Family PCI Express Root Port 1 - 1C10 Intel(R) 6 Series/C200 Series Chipset Family PCI Express Root Port 1 - 1C16 Intel(R) 6 Series/C200 Series Chipset Family PCI Express Root Port 1 - 1C10 Intel(R) 6 Series/C200 Series Chipset Family PCI Express Root Port 1 - 1C20 Intel(R) 6 Series/C200 Series Chipset Family VIE Express Root Port 5 - 1C18 Intel(R) 6 Series/C200 Series Chipset Family VIE Express Root Port 5 - 1C18 Intel(R) 6 Series/C200 Series Chipset Family VIE Enhanced Host Controller - 1C22 Intel(R) 6 Series/C200 Series Chipset Family USB Enhanced Host Controller - 1C20 Intel(R) 6 Series/C200 Series Chipset Family USB Enhanced Host Controller - 1C20 Intel(R) 6 Series/C200 Series Chipset Family USB Enhanced Host Controller - 1C20 Intel(R) 6 Series/C200 Series Chipset Family USB Enhanced Host Controller - 1C26 USB Root Hub Generic USB Hub Intel(R) 6 Series/C200 Series Management Engine Interface (COM9) Intel(R) 6 Series/C200 Series Management Engine Interface - 1C3A Intel(R) S2579LM Gigabit Network Connection Intel(R) Mobile Express Chipset SATA AHCI Controller Intel(R) Trusted Platform Module Microsoft ACPI-Compliant Embedded Controller Mumeric data processor Mumeric data processor Numeric data processor	E	Actions Device Ma. More .

Step 5 After the upgrade is completed, a dialog box indicating the new firmware version is displayed. Verify if the new version is correct, and click **Finish** to complete the upgrade, as shown in the following figure.

🐣 Update Wizard -	M9615M	
	Finish	
Ī	Update successfully	<u>.</u>
Ĭ	Current Firmware Ver 11.234.27.02.00	
9	<	٨
		Finish



2.2 Simple Verification

To check whether the upgrade is successful after it is completed, you can run he **ATI** command from the serial port tool (the serial port tool should be connected to the PC UI interface of the module) to check the current firmware version of the module. If the firmware version is the same as the version in the Release Notes, it means that the upgrade is successful.

The following is an example:

ATI

Manufacturer: Huawei Technologies Co., Ltd.

Model: ME906J

Revision: 11.234.27.02.00

IMEI: 866714010022548

+GCAP: +CGSM

OK



3 One-Click Upgrade on Windows 8/8.1

This chapter use Huawei ME906J module (a LTE module) as an example to describe how to upgrade the module and verify whether the upgrade is successful on Windows 8. And the upgrade progress on Windows 8.1 is the same as on Windows 8.

3.1 Deliverable

The following figure shows one upgrade tool of the ME906J module on Windows 8.

📥 ME906JUpdate_11.234.27.02.00. exe

3.2 Upgrade Procedures

Step 1 Connect the ME906J module to one of the USB ports on a PC by the adapter board (or the ME906J module embedded in the PC/Laptop). Right-click **My Computer**. Choose **Manage** to access **Computer Management**. The ME906J module's USB ports are displayed as High Speed device in **Device Manage**.





Step 2 Double-click the one-click upgrade tool (.exe), such as

Do not run any applications that occupy the module's ports.



HUAWEI Module Firmware Upgrade Guide on Windows



Step 3 Click **Start**. The wizard will search for the module, as shown in the following figure.

	Update Wizard - M9615M 🛛 🗕 🗆 🗙
	Search Device
2	Begin searching device
	Next Cancel

Step 4 After the module is found, the upgrade progress will be displayed as the following two figures.



HUAWEI Module Firmware Upgrade Guide on Windows

4	Update Wizard - M9615M - 🗆 🗙
	Updating
f	Ready to download programs.
3	Pay attention to the following during the upgrade: 1.Make sure that the PC is running on full power. 2.Do not remove the data card. 3.Do not run other programs. 4.Do not shut down,sleep,hibernate,log off,switch user or restart the PC.
	Next Cancel

•	Update Wizard - M9615M - 🗆 🗙
	Updating
I	Downloading programs
3	Pay attention to the following during the upgrade: 1.Make sure that the PC is running on full power. 2.Do not remove the data card. 3.Do not run other programs. 4.Do not shut down,sleep,hibernate,log off,switch user or restart the PC.
	Next Cancel

During the upgrade progress, the ports for the module that can be found in **Device Manager** are **HUAWEI Mobile Connect – 3G Application Interface** and **HUAWEI Mobile Connect – 3G PC UI Interface**, as shown in the following figure.





Step 5 After the upgrade is completed, a dialog box indicating the new firmware version is displayed. Verify if the new firmware version is correct, and click **Finish** to complete the upgrade, as shown in the following figure.

	Update Wizard - M9615M 🛛 🗕 🗆 💌
	Finish
Ī	Update successfully.
4	Current Firmware Ver 11.234.27.02.00
	Finish



3.3 Simple Verification

To check whether the upgrade is successful after it is completed, you can select **Wireless** in **PC settings**, then click **HUAWEI Technology** to check the current firmware version of the module. If the firmware version is the same as the version in the Release Notes, it means that the upgrade is successful.

HUAWEI Technology hardware info Manufacturer: HUAWEI Technology HUAWEI Mobile Broadband Module Model: Firmware: 11.234.27.02.00 Cellular class: GSM LTE, 1xRTT, 1xEVDO, 1xEVDO-A, 1xEVDO-B Data class: IMEI: 990002440002127 Mobile number: SIM ICC ID: Copy



4 One-Click Upgrade on Windows CE

This chapter use Huawei MU509 module as an example to describe how to upgrade the module and verify whether the upgrade is successful on Windows CE.

4.1 Deliverable

The **MU509-UpdateWizard tool** upgrades the MU509 module on Windows CE, providing the following upgrade tool.

Upgrade tool: MU509.exe (the upgrade tool only runs on Windows CE 6.0)

The **MU509-UpdateWizard tool** is a folder containing only the upgrade tool **MU509.exe**, which is dedicated for the MU509's firmware upgrade. Do not attempt to use this tool to upgrade other products because it is only compatible with Huawei MU509 module.

4.2 Upgrade Procedures

After the Windows CE system restarts, data in its system drive will be restored. Therefore, the MU509's driver will be deleted after the system restarts. So you should back up the driver's installation package before you install it.

Step 1 Install the MU509's driver on a device running Windows CE.

After the installation is complete, connect the MU509 to the device. The **Key** item under the registry **HKEY_LOCAL_MACHINE\Drivers\Active** shows the port information as follows:

Drivers\USB\ClientDrivers\HUAWEI_MODEM_PORT (modem port)



Drivers\USB\ClientDrivers\HUAWEI_DIAG_PORT (diag port)

Drivers\USB\ClientDrivers\HUAWEI_PCUI_PORT (pcui port)

Step 2 Prepare the upgrade tool and **.bin** file. And ensure that only one upgrade **.bin** file is saved into the same folder as the upgrade tool.



Step 3 Double-click 🖁 MU509. exe

During the upgrade, the **MU509.exe** generates a **hwupgradewizard.log** file that records the upgrade process.

A simulate command line interface is displayed to output the upgrade information, including the upgrade phase, board information, download progress, error code, and upgrade time used. There is a note on the interface, listing terms that you must pay attention to, as shown in the following figure.

```
Note: During updating
        _____
        * Ensure that the device has enough power
        *
           Do not remove the data card
           Do not run other applications
           Do not standby, hibernate or turn off
Updatewizard version:
MU509 updatewizard start
Search device...
Check device information ...
Authority ID:
Current firmware version:
Backup NV ...
Switch port ...
Begin download
Percents:
Resume NV...
Current firmware version:
Error code:
Time cost in seconds:
MU509 updatewizard exit
```

The following table lists the errors codes that are used to report errors during the upgrade.



Error code	Desciption
Error: 0	Success
Error: 1	Cancel
Error: 10	Can not find the port
Error: 11	Open port failed
Error: 12	Query version failed
Error: 13	Authentication failed
Error: 14	User information backup failed
Error: 16	Failed to switch the download mode
Error: 17	Different board class cannot update
Error: 18	Verification of the .bin file failed
Error: 19	Download failed
Error: 20	Failed to restart the board
Error: 21	Failed to restore user information
Error: 22	Query version failed after download update file
Error: 23	SPC verify failed
Error: 24	Version verify failed
Error: 25	Driver can not support
Error: 26	Close port failed
Error: 27	Switch to diag mode failed
Error: 28	Handshake failed
Error: 29	Another update wizard is running
Error: 255	Unknown error

4.3 Simple Verification

To check whether the upgrade is successful after it is completed, you can run he **ATI** command from the serial port tool (the serial port tool should be connected to the module, and the module should be connected by a USB cable to a computer on which the MU509's driver is installed) to check the current firmware version of the module. If the firmware version is the same as the upgrade tool, it means that the upgrade is successful.

The following is an example:



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ATI

Manufacturer:Huawei Model:MU509 Revision: 11.815.00.58.00 IMEI: 357784040009704

OK