



HUAWEI Module

# **Firmware Upgrade Guide on Windows**

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## About This Document

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### Revision History

Document Version	Date	Chapter	Descriptions
01	2013-07-27		Creation



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# 1 Overview

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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.

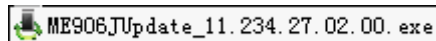
If passwords are required for upgrading modules, please provide password management personnel with the International Mobile Equipment Identities (IMEIs) to obtain the passwords.

# 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.



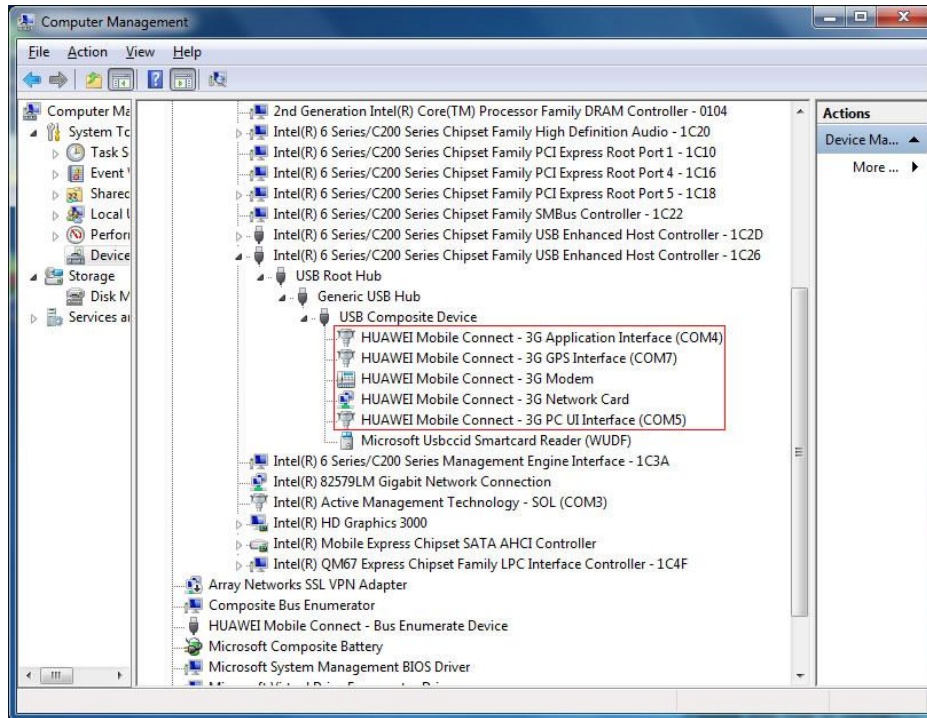
## 1.2 Upgrade Procedures


- 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**.



### NOTE

The ports may be different between different Huawei modules.



Step 2 Double-click the one-click upgrade tool (.exe), such as  ME906JUUpdate\_11.234.27.02.00.exe, as shown in the following figure.

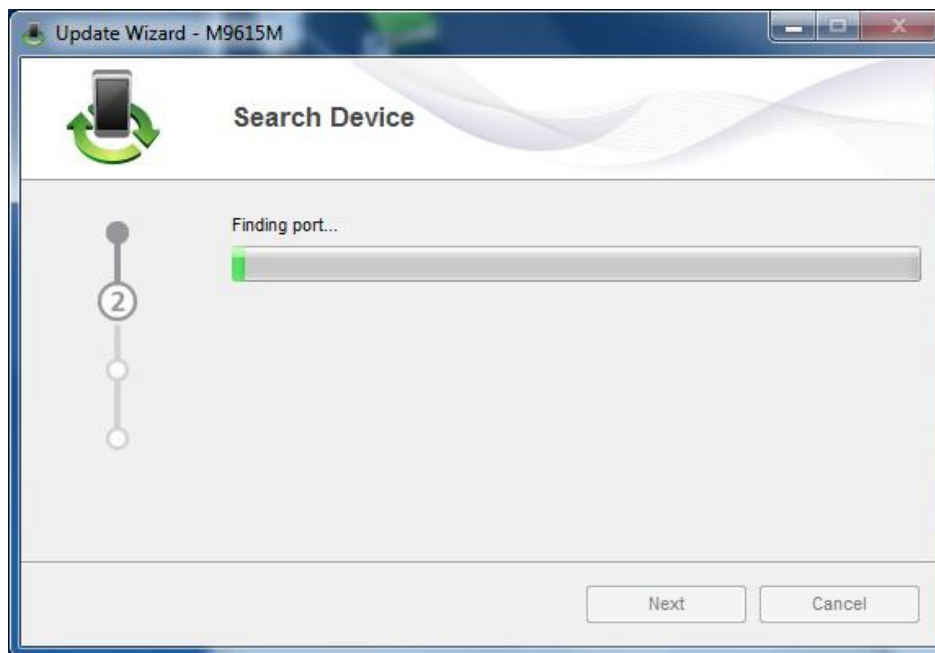


**NOTE**

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

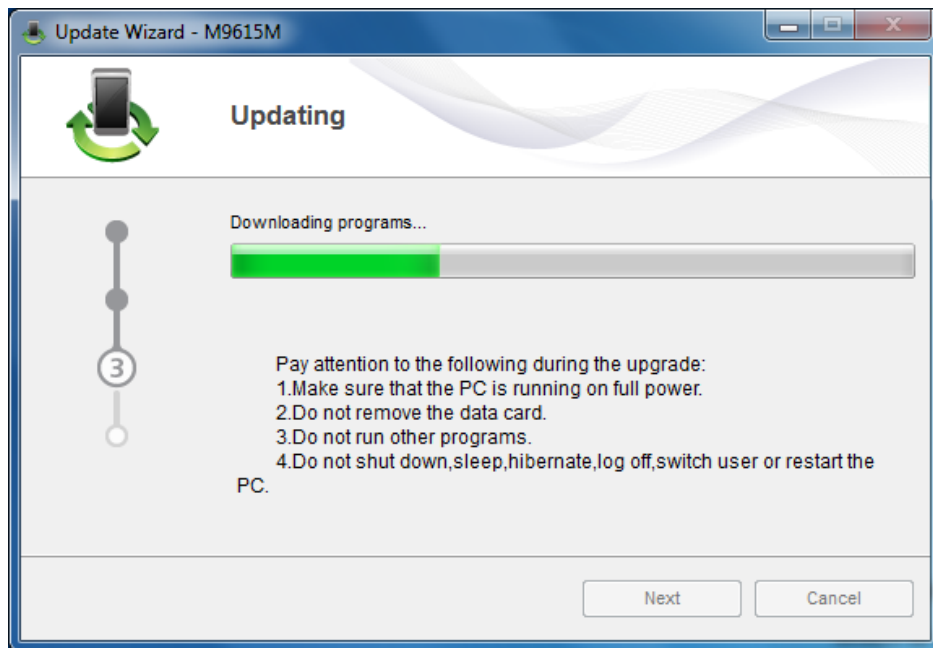
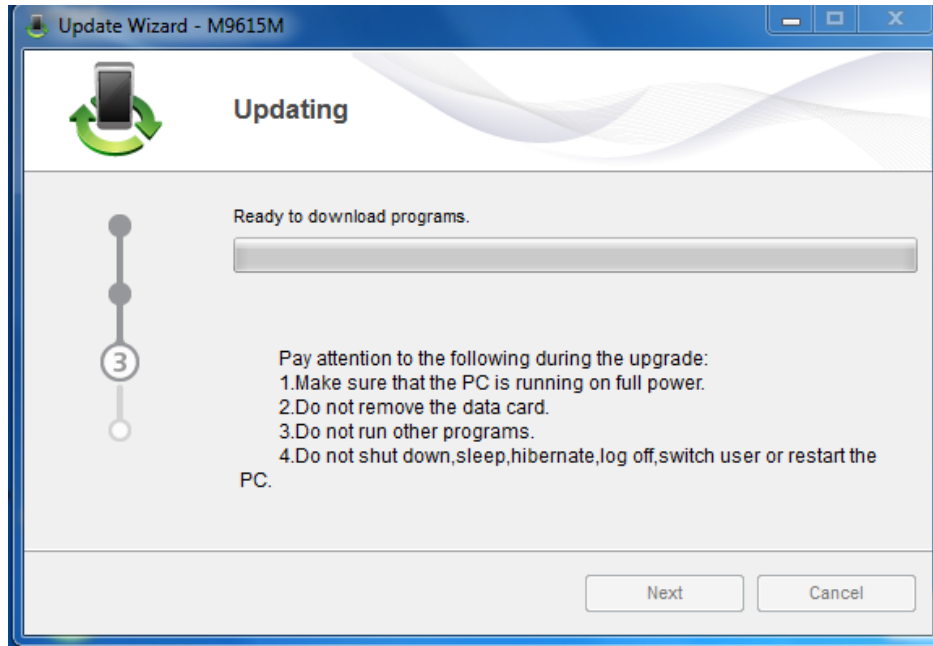


Step 3 Click **Start**. The wizard will search for the module, as shown in the following two figures.

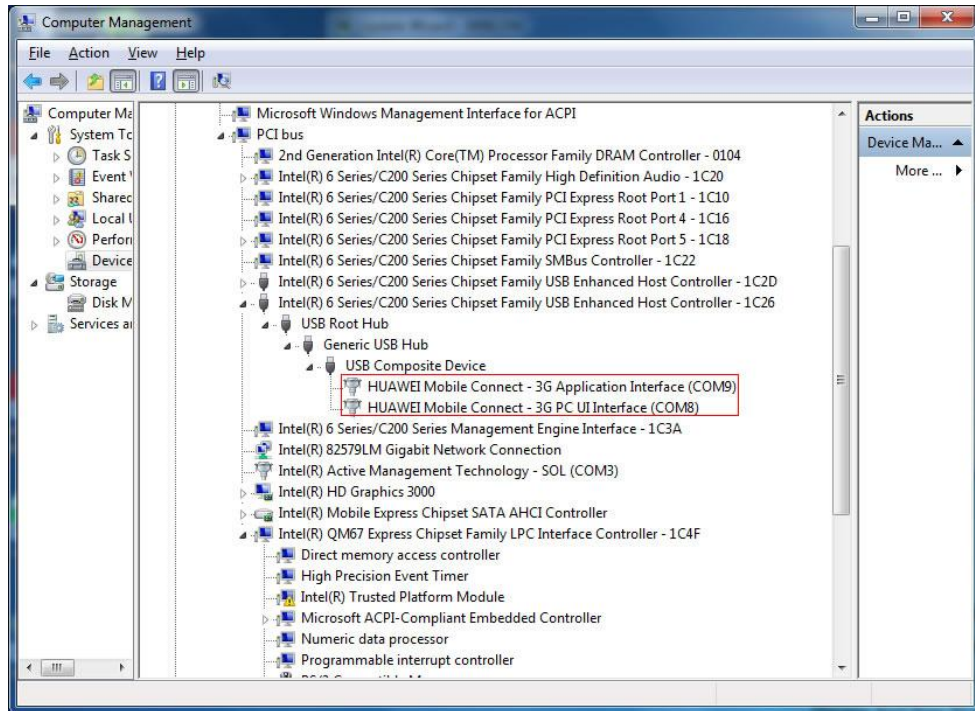


Step 4 After the module is found, the upgrade progress will be displayed as the following two figures.

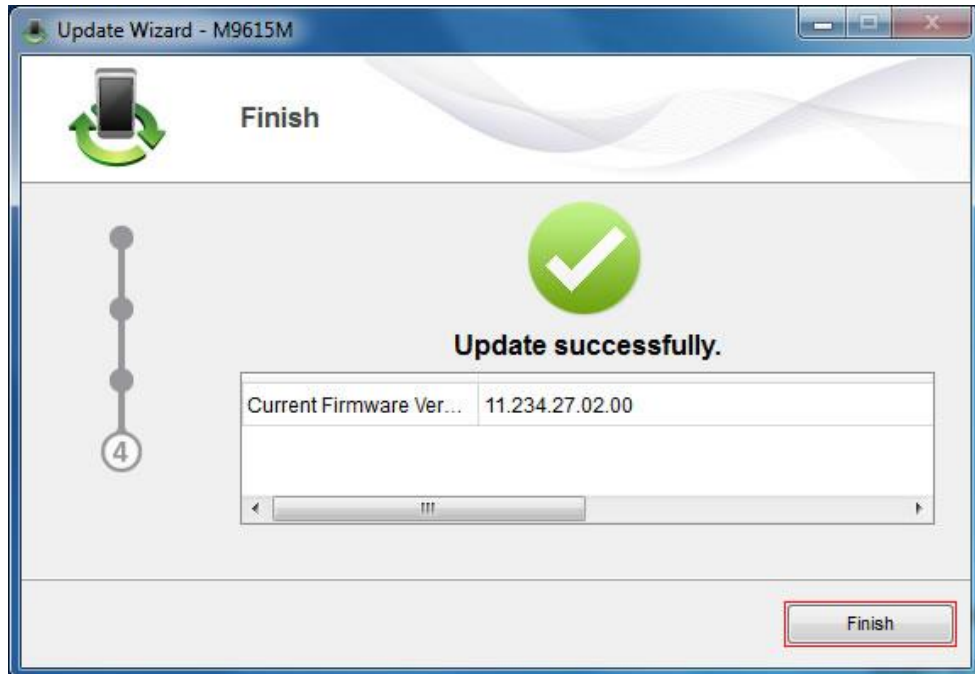




During the upgrade progress, the ports for the module that can be found in **Device Manager** are **HUAWEI Mobile Connect – 3G Application Interface** and **HUAWEI Mobile Connect – 3G PC UI Interface**, as shown in the following figure.



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





## 2.2 Simple Verification

To check whether the upgrade is successful after it is completed, you can run the **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

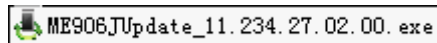
# 3 One-Click Upgrade on Windows 8/8.1

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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.

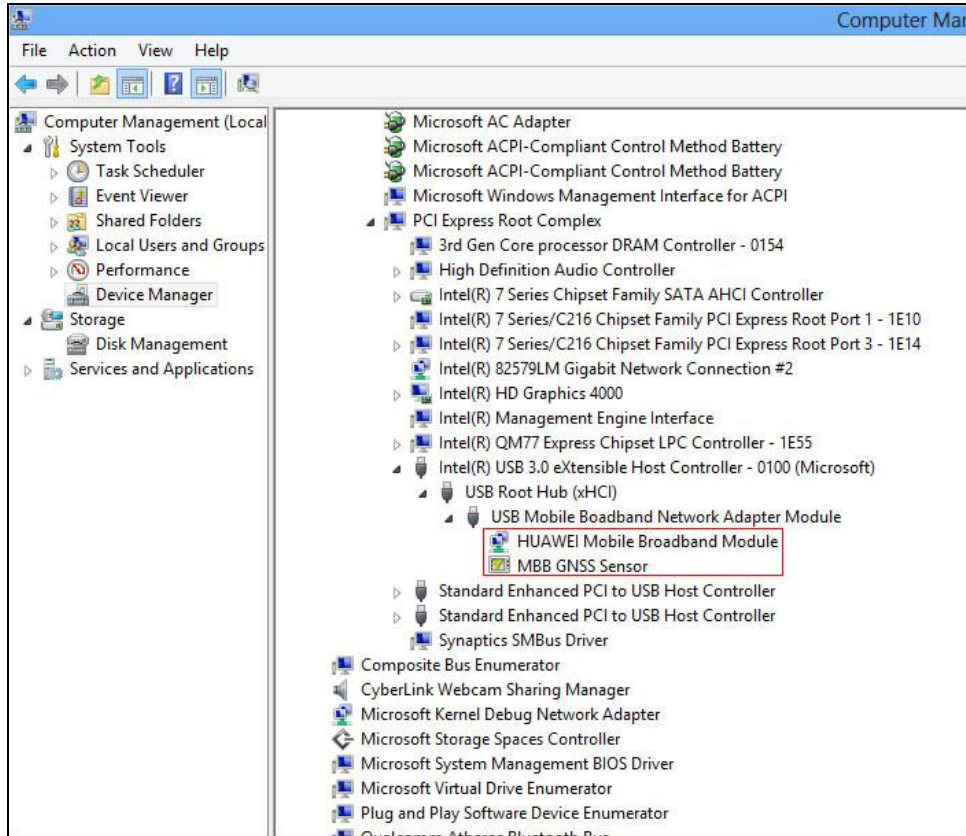
## 3.1 Deliverable

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




## 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 Manager**.



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

 ME906\_TJupdate\_11.234.27.02.00.exe, as shown in the following figure.

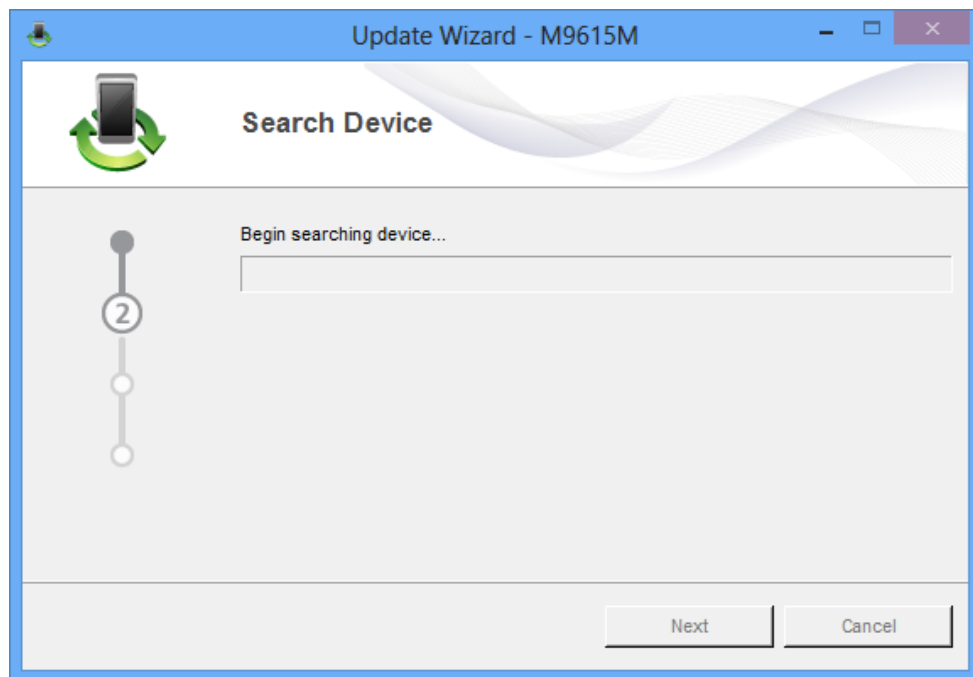


**NOTE**

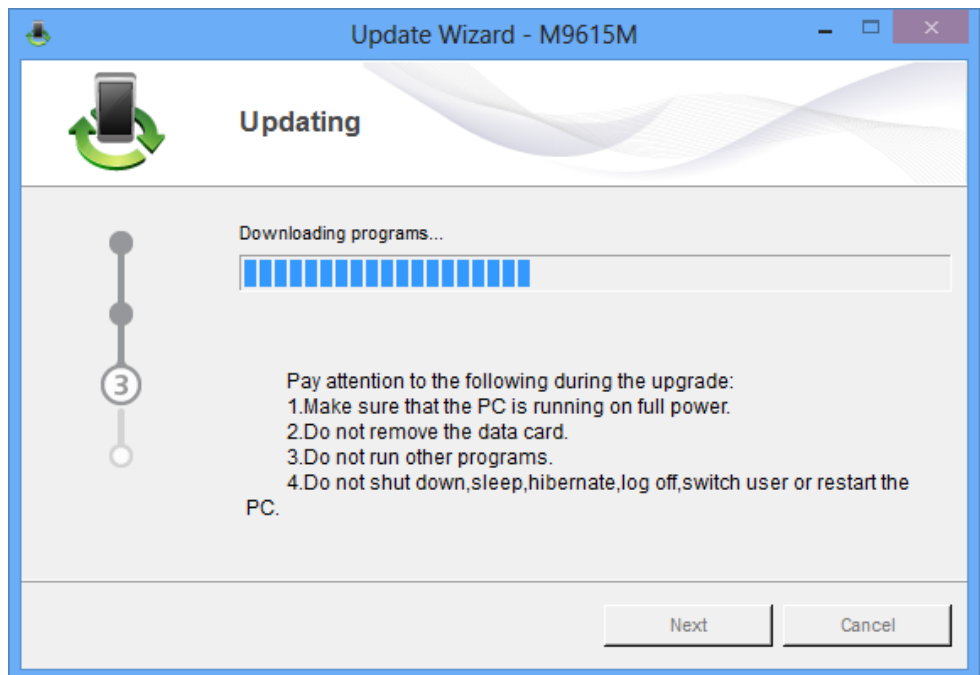
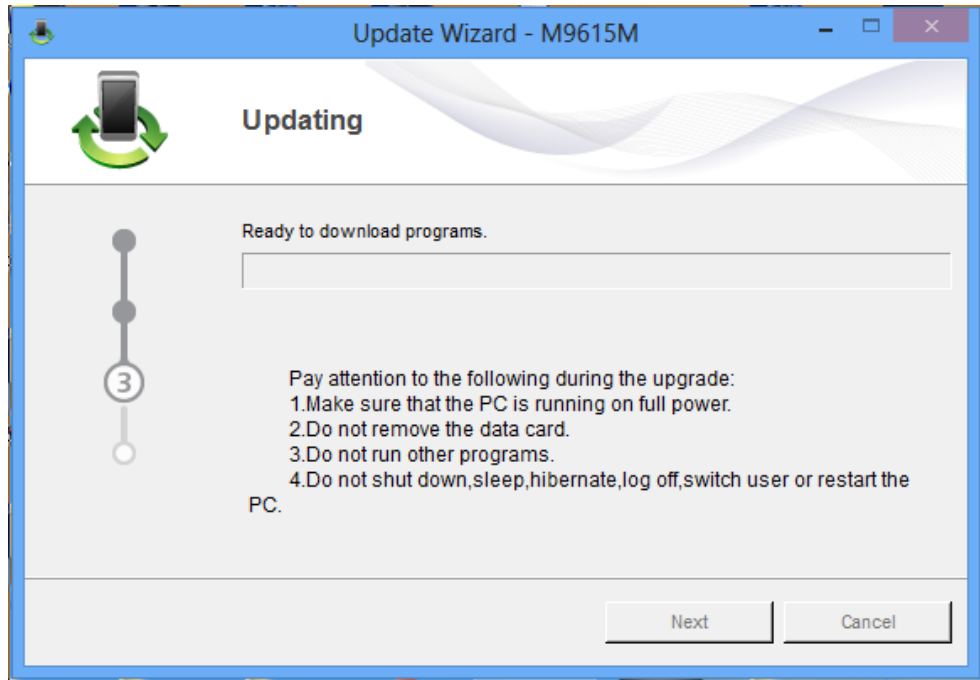
Do not run any applications that occupy the module's ports.



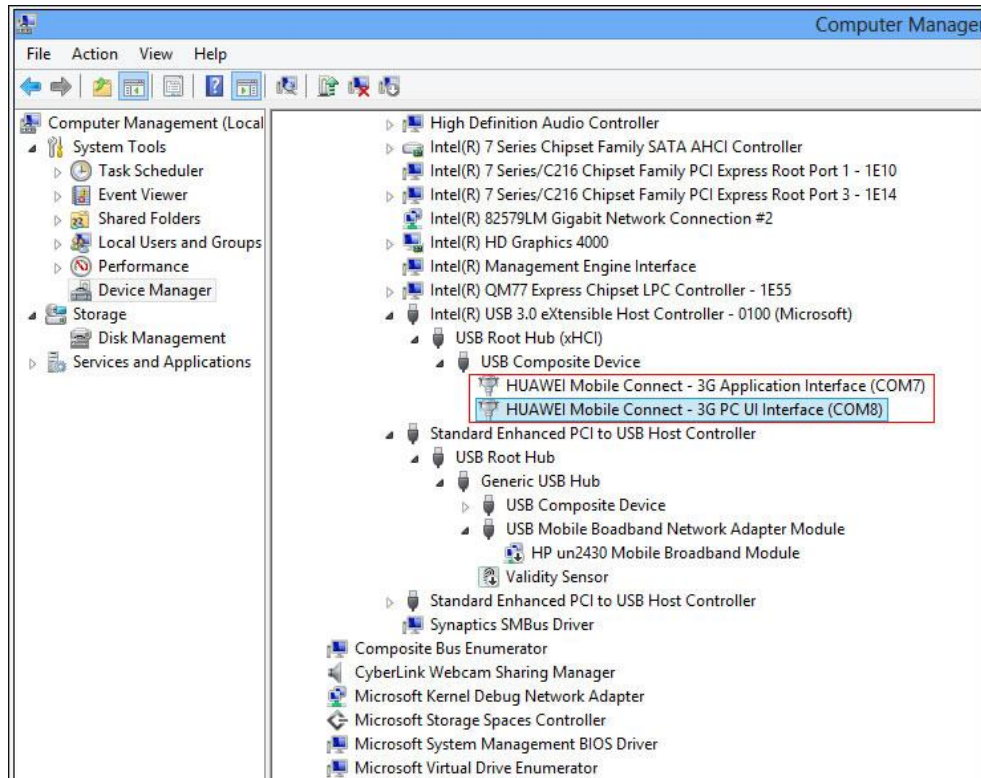
Step 3 Click **Start**. The wizard will search for the module, as shown in the following figure.



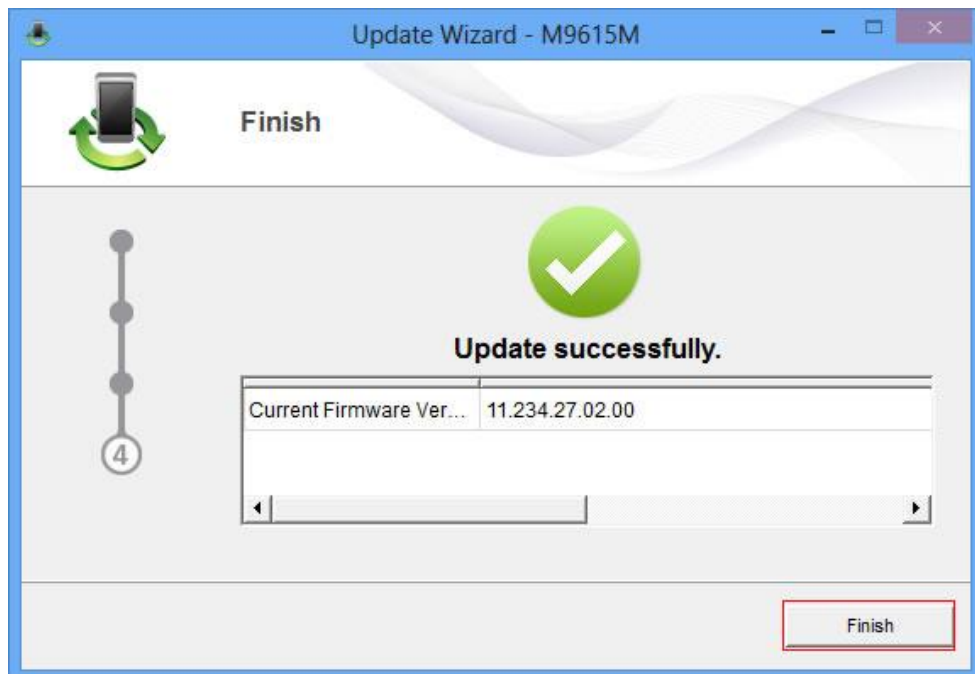
Step 4 After the module is found, the upgrade progress will be displayed as the following two figures.



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.





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

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# 4 One-Click Upgrade on Windows CE

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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)



### NOTE

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



### CAUTION

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.

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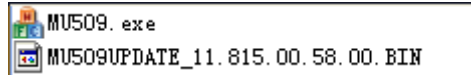
Step 1 Install the MU509's driver on a device running Windows CE.

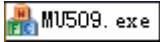
After the installation is complete, connect the MU509 to the device. The **Key** item under the registry **HKEY\_LOCAL\_MACHINE\Drivers\Active** shows the port information as follows:

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 .

**NOTE**

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	Description
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 the **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:



ATI

Manufacturer:Huawei

Model:MU509

Revision: 11.815.00.58.00

IMEI: 357784040009704

OK