MorphoTablet™ Firmware Upgrade User Guide

Version 1.3

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Revision History

Revision	Date	Document revision history
1.1	June 2014	Creation
1.2	August 2014	Update on firmware version supporting firmware update using internal memory and ADB tool methods
1.3	January 2015	Update on firmware version supporting firmware update using MediaTek Flash tool method

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1   Scope

This document is the MorphoTablet Firmware Upgrade guide.

It describes the methods to upgrade firmware of the MorphoTablet.

There are 3 different methods for MorphoTablet firmware upgrade:

- 1st method: Firmware upgrade using MorphoTablet internal memory

- 2nd method: Firmware upgrade using Android ADB tool

- 3rd method: Full firmware upgrade using MediaTek Flash tool

The 1st and 2nd firmware upgrade methods will keep personal data and parameters unchanged. However, these methods cannot be used on MorphoTablet having a firmware version equal or prior to version MONOS 01.00.102

The 3rd method using MediaTek Flash tool will erase all user data and parameters.

All methods require prior installation of MorphoTablet USB drivers.

2 Prerequisites

2.1 HOST COMPUTER OPERATING SYSTEM

A computer running **Windows Seven** is needed for the firmware update process. Windows Seven 32 Bits or Windows Seven 64 bits can be used.

2.2 MORPHOTABLET USB DRIVER INSTALLATION

This section describes how to install MorphoTablet USB drivers

2.2.1 MorphoTablet USB Driver

The archive file "**Driver_Auto_Installer_v1.1236.00.zip**" is required.

It contains USB driver for:
- USB Mass storage
- Android ADB interface
- MediaTek preloader mode (Flash tool)
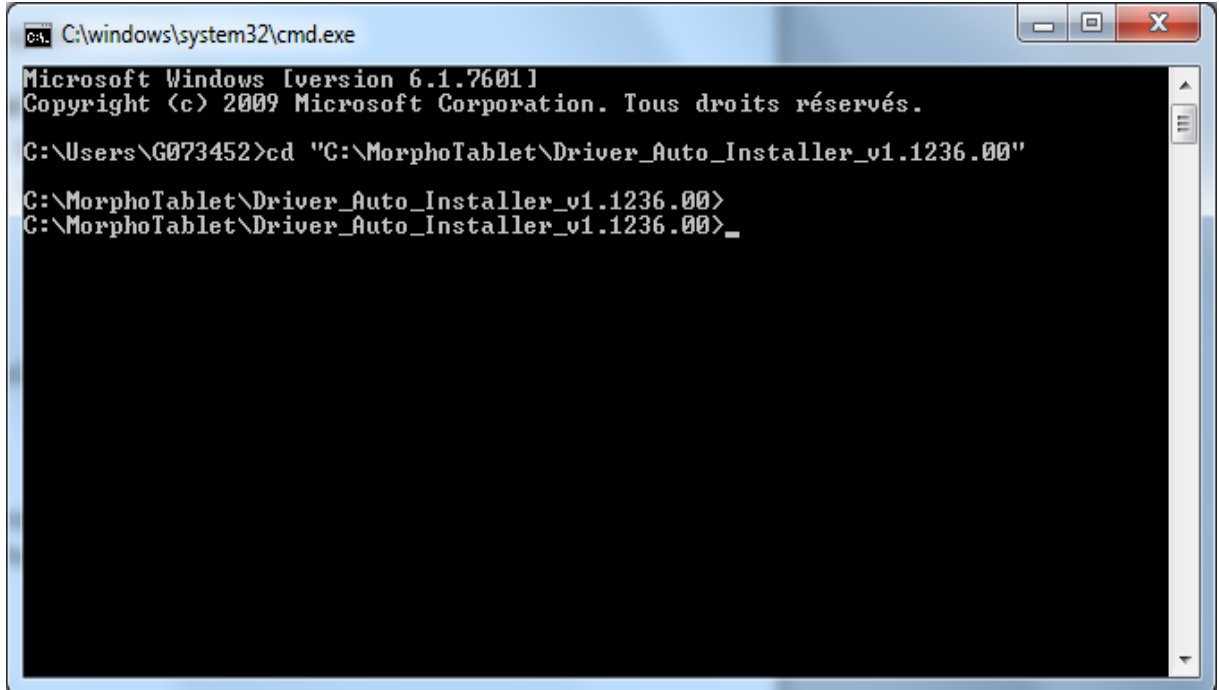
2.2.2 MorphoTablet USB Driver Installation

Decompress on a Windows Seven computer, the driver archive file "**Driver_Auto_Installer_v1.1236.00.zip**" in a folder without special characters such as:

"c:\MorphoTablet\"

Open prompt command (MS-DOS) and go to driver folder:
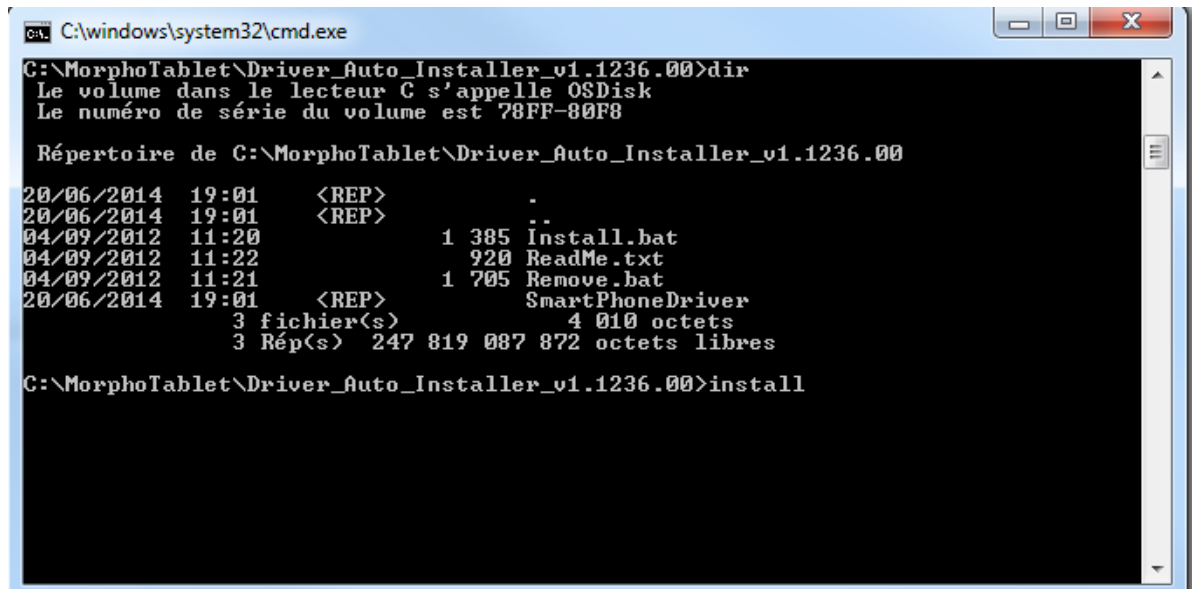
cd "C:\MorphoTablet\Driver_Auto_Installer_v1.1236.00"

Launch install.bat:

And accept or confirm all the installation windows.

"Install complete!" message should be displayed.

3 Firmware upgrade using MorphoTablet internal memory

This section describes how to load MorphoTablet using MorphoTablet internal storage.
Only MorphoTablet USB driver installation is required to upgrade firmware with this method
This Firmware upgrade method will keep personal data and parameters unchanged.

3.1 USE CAUTION

This method cannot be used on a MorphoTablet having a firmware version equal or prior to version MONOS_01.00.102

Firmware version is mentioned as BUILD NUMBER in the "Settings/About tablet" menu

In case the upgrade fails, full firmware upgrade using MediaTek Flash tool (cf. §6) shall be performed

3.2 FIRMWARE PACKAGE

A firmware package to be loaded in MorphoTablet is required.

This firmware package is a file named "**morpho-MONOS_xx.xx.xxx-ota-user.zip**" where xx.xx.xxx is the Firmware version.

3.3 FIRMWARE UPGRADE USING MORPHOTABLET INTERNAL MEMORY

Start the MorphoTablet.

Once android is started, connect USB cable to Host computer and to MorphoTablet mini-USB connector.

Configure MorphoTablet for USB mass storage Mode: Click on "USB connected" message in Android notification bar, then click on "**Turn on USB storage**"
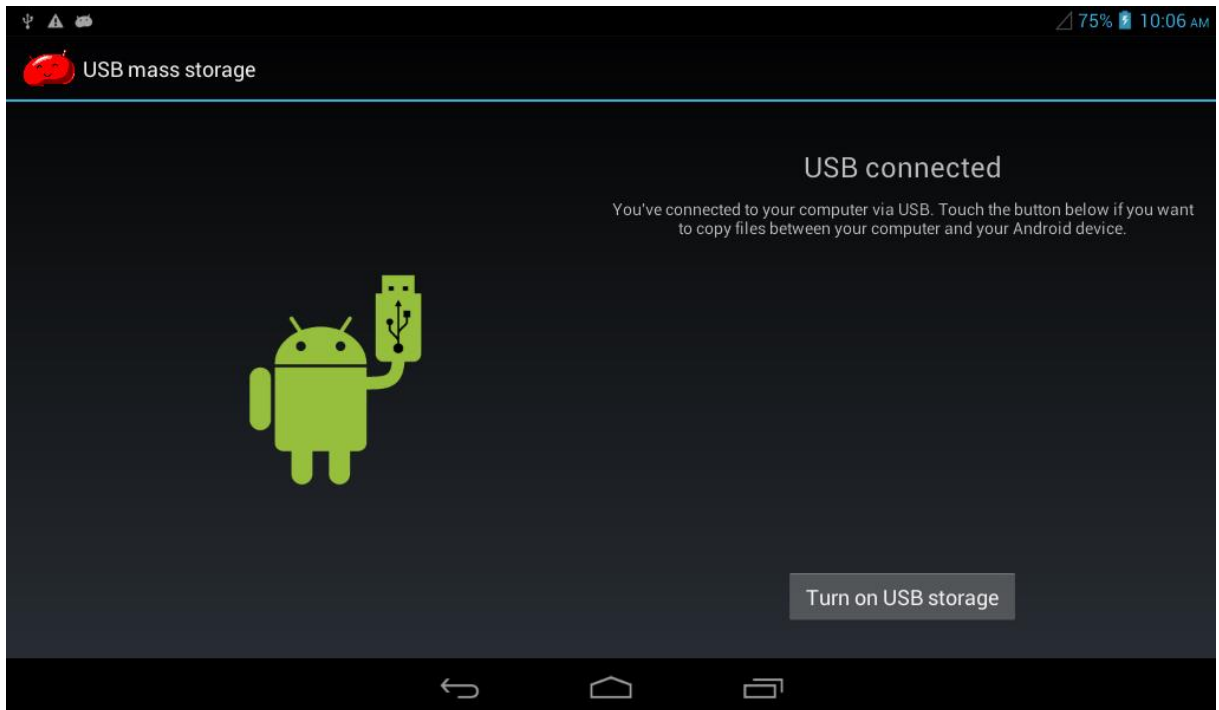
A new drive should appear in Windows.

Copy "**morpho-MONOS_xx.xx.xxx-ota-user.zip**" file into Download folder of the MorphoTablet

Power off MorphoTablet: press the power button more than 2 seconds, and then click on "Power off" on the screen.

Restart in recovery mode: Press Volume Up + Power on buttons until boot menu appears:

> [Recovery Mode]
>
> [Normal Mode]

Select with volume Up "**Recovery Mode**" and validate with "volume down"

Android recovery menu should appear:
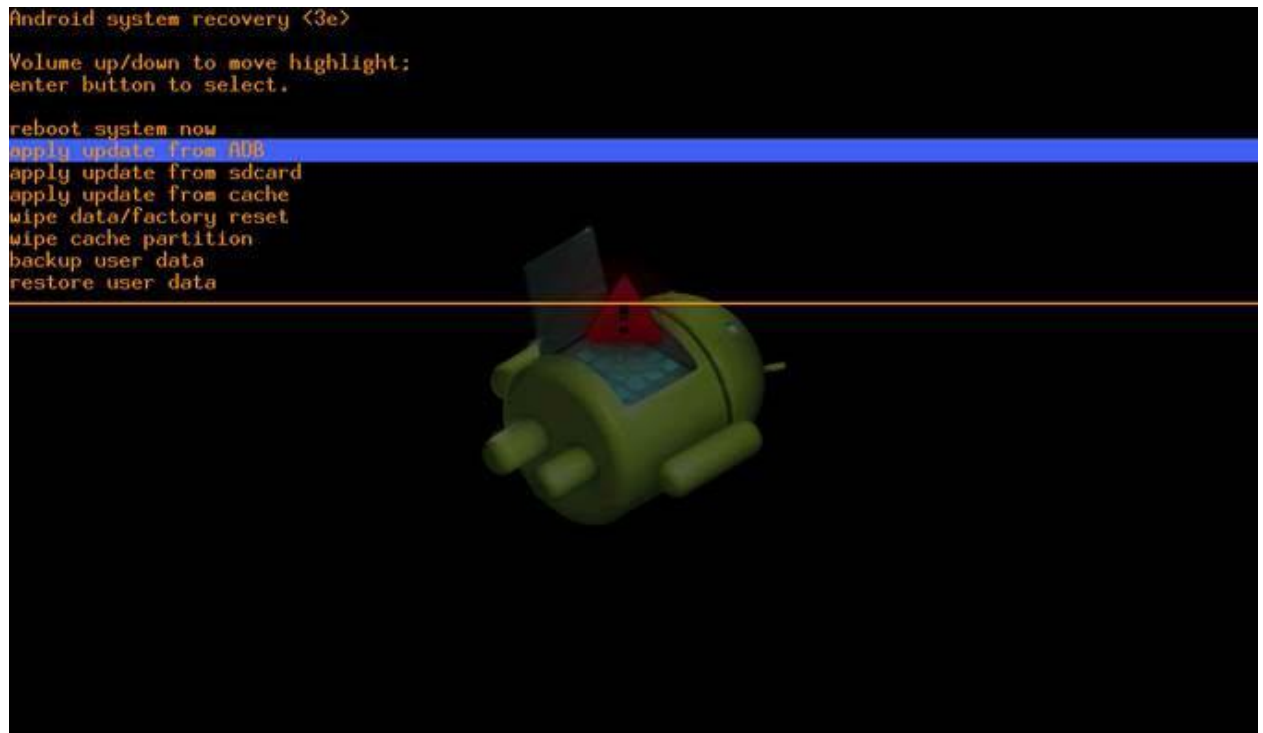
In The Android system recovery menu, select "**apply update from sdcard**".

Then select "Download/" directory, and "morpho-MONOS_xx.xx.xxx-ota-user.zip" file.

Validate with power button

Following message should appear:

> Install /sdcard/Download
>
> Installing update….

Wait until message "Install from sdcard complete" appears.

Reboot with power button. System should start with new firmware version.

4 Firmware upgrade using Android ADB tool

This section describes how to load MorphoTablet using MorphoTablet using Android ADB tool.

MorphoTablet USB driver installation and ADT bundle are required to upgrade firmware with this method.

This Firmware upgrade method will keep personal data and parameters unchanged.

4.1 USE CAUTION

⚠️ **This method cannot be used on a MorphoTablet having a firmware version equal or prior to version MONOS_01.00.102**

Firmware version is mentioned as BUILD NUMBER in the "Settings/About tablet" menu

⚠️ **In case the upgrade fails, full firmware upgrade using MediaTek Flash tool (cf. §6) shall be performed**

4.2 ANDROID ADT BUNDLE

Android **ADT bundle** is required to upgrade firmware with this method.

Android ADT bundle can be downloaded at address:

http://developer.android.com/sdk/index.html#win-bundle

4.3 ANDROID ADT BUNDLE INSTALLATION

Decompress Android ADT bundle into your C:\ local drive, for example into folder:

C:\adt-bundle-windows-x86_64-20131030

4.4 FIRMWARE PACKAGE

A firmware package to be loaded in MorphoTablet is required.

This firmware package is a file named "**morpho-MONOS_xx.xx.xxx-ota-user.zip**" where xx.xx.xxx is the Firmware version.

4.5 FIRMWARE UPGRADE USING ANDROID ADB TOOL

Power off MorphoTablet: press the power button more than 2 seconds, and then click on "Power off" on the screen.
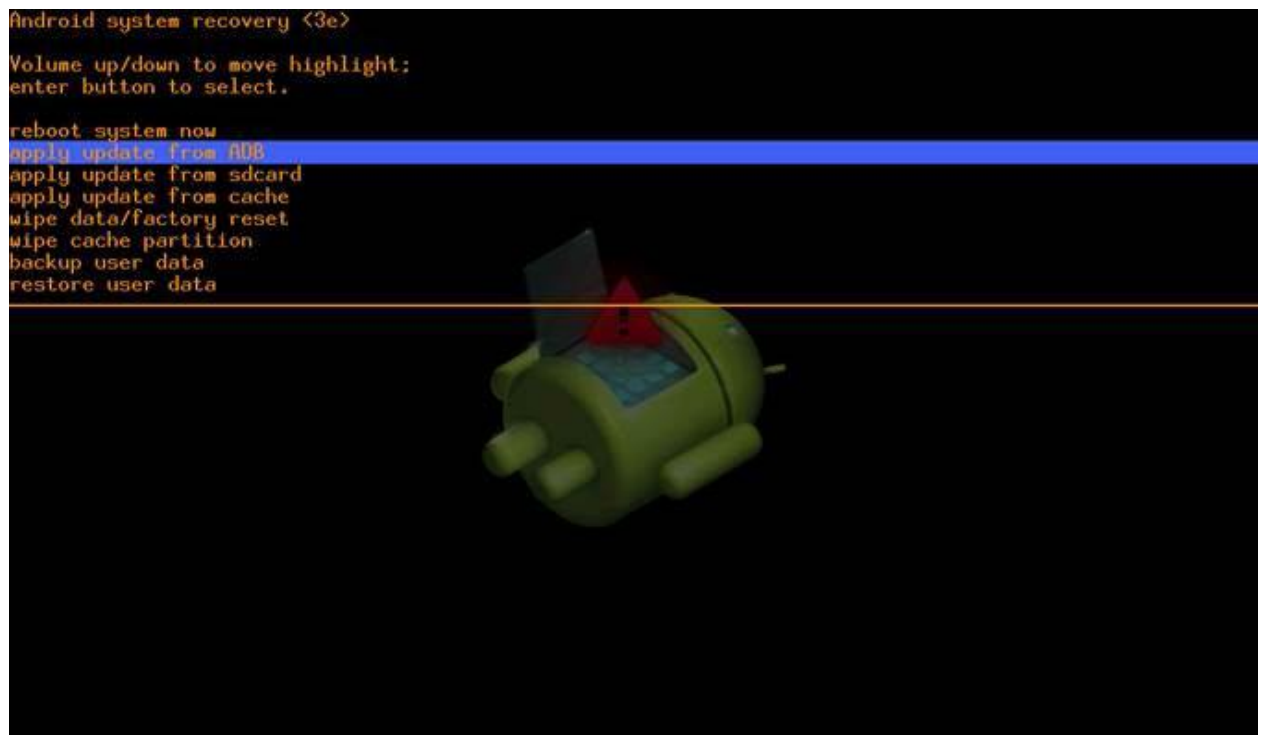
Restart in recovery mode: Press Volume Up + Power on buttons until boot menu appears:

>[Recovery Mode]

>[Normal Mode]

Select with volume Up "**Recovery Mode**" and validate with "volume down"

Android recovery menu should appear:

In The Android system recovery menu, select "apply update from ADB".

Open a Windows DOS command shell and go to android platform tools folder.

>cd "C:\adt-bundle-windows-x86_64-20131030\sdk\platform-tools"

Run android adb command:

>adb.exe sideload "C:**xyz**\morpho-MONOS_xx.xx.xxx-ota-eng.zip"

where "xyz" is the path to the file. See below for example.

Wait for Message "Install from ADB complete" on MorphoTablet screen.

Select "Reboot system now"
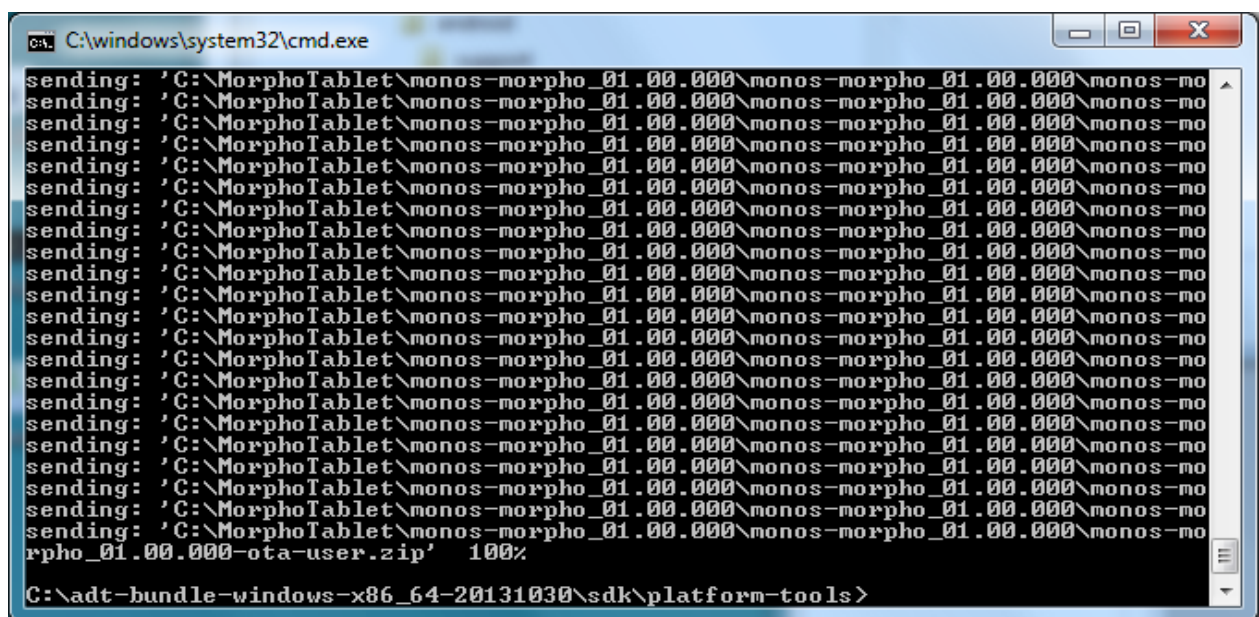
MorphoTablet should now reboot to new firmware.

5 Full firmware upgrade using MediaTek Flash tool

This section describes how to load MorphoTablet using MorphoTablet using MediaTek Flash tool.

MorphoTablet USB driver installation and MediaTek Flash tool are required to upgrade firmware with this method.

5.1 USE CAUTION

⚠ **Full firmware load method will erase all user data and parameters**

5.2 MEDIATEK FLASH TOOL

The archive file "**SP_Flash_Tool_v3.1244.0.sn85.rar**" is required for updating firmware thru "*Full firmware load*" method.

It contains MediaTek Flash tool.

5.3 MEDIATEK FLASH TOOL INSTALLATION

Decompress, on a Windows Seven computer, the Flash tool archive file "**SP_Flash_Tool_v3.1244.0.sn85.rar** " in a folder without special characters such as:

"C:\MorphoTablet\"

The "Flash_tool.exe" tool should be available in "C:\MorphoTablet\SP_Flash_Tool_v3.1244.0.sn85" folder.

5.4 FIRMWARE PACKAGE

A firmware package to be loaded in MorphoTablet is required.

This firmware package is a file named "**spflashimage-MONOS_xx.xx.xxx.tar.gz**" or named "**Morphotablet_MPH_xx.xx.xxx.tar.gz**"

For example, for Firmware version 01.03.003, package required for upgrade is the file "**Morphotablet_MPH_01.03.003.tar.gz**"
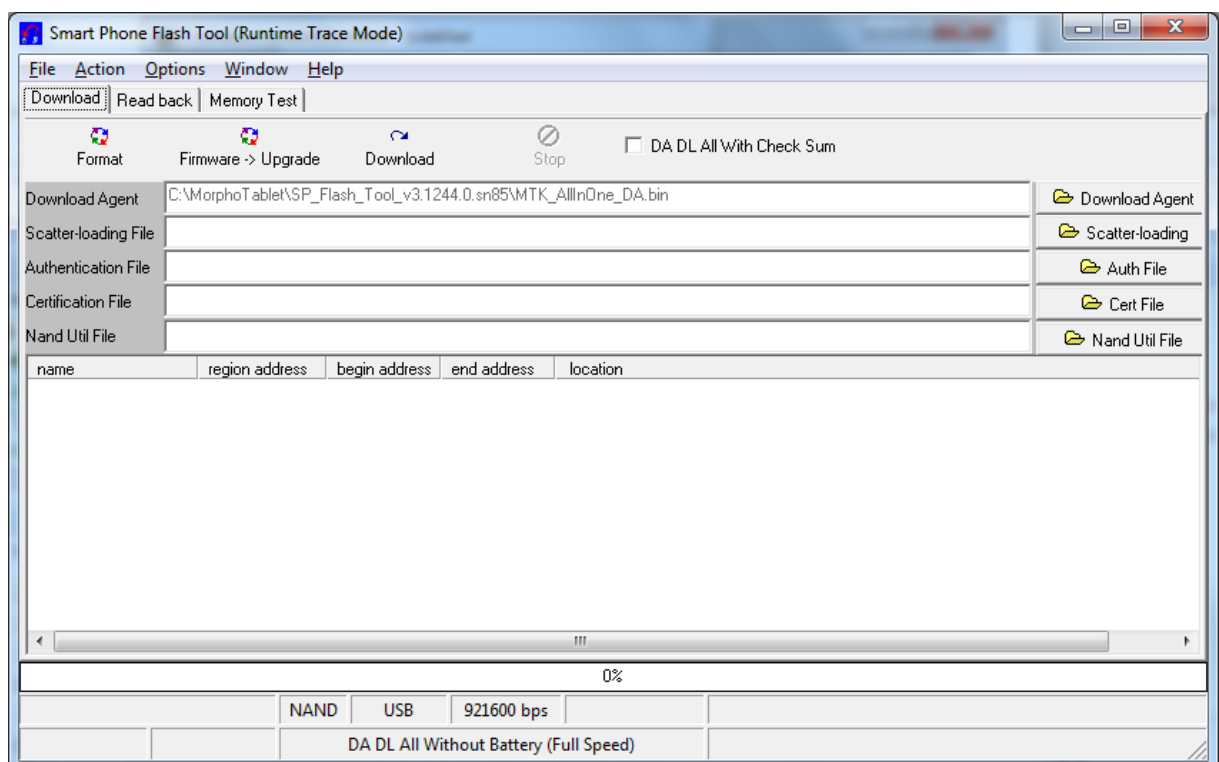
5.5 FULL FIRMWARE UPGRADE USING MEDIATEK FLASH TOOL

Power on MorphoTablet

In "Settings", in the "Backup & reset" section, perform a "Factory data reset" and select the "Erase storage" option.

Wait until completion before continuing.

Launch Flash_tool.exe tool from extracted SP_Flash_Tool_v3.1244.0.sn85 folder.

Click on **Scatter-loading** button and select the file **MT6577_Android_scatter_emmc.txt** file in the Firmware release which you want to load. For the release version 01.00.102, the file is located into:

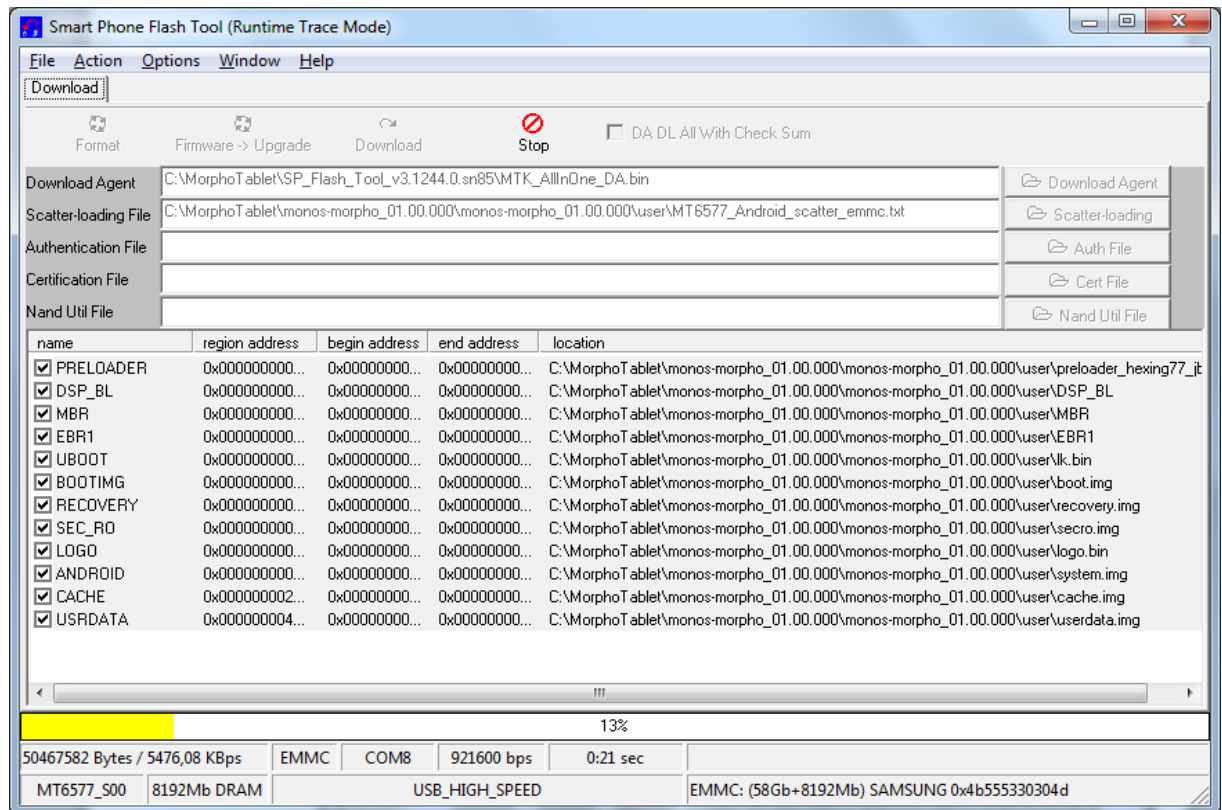"**spflashimage_MONOS_01.00.102_user\MT6577_Android_scatter_emmc.txt**"
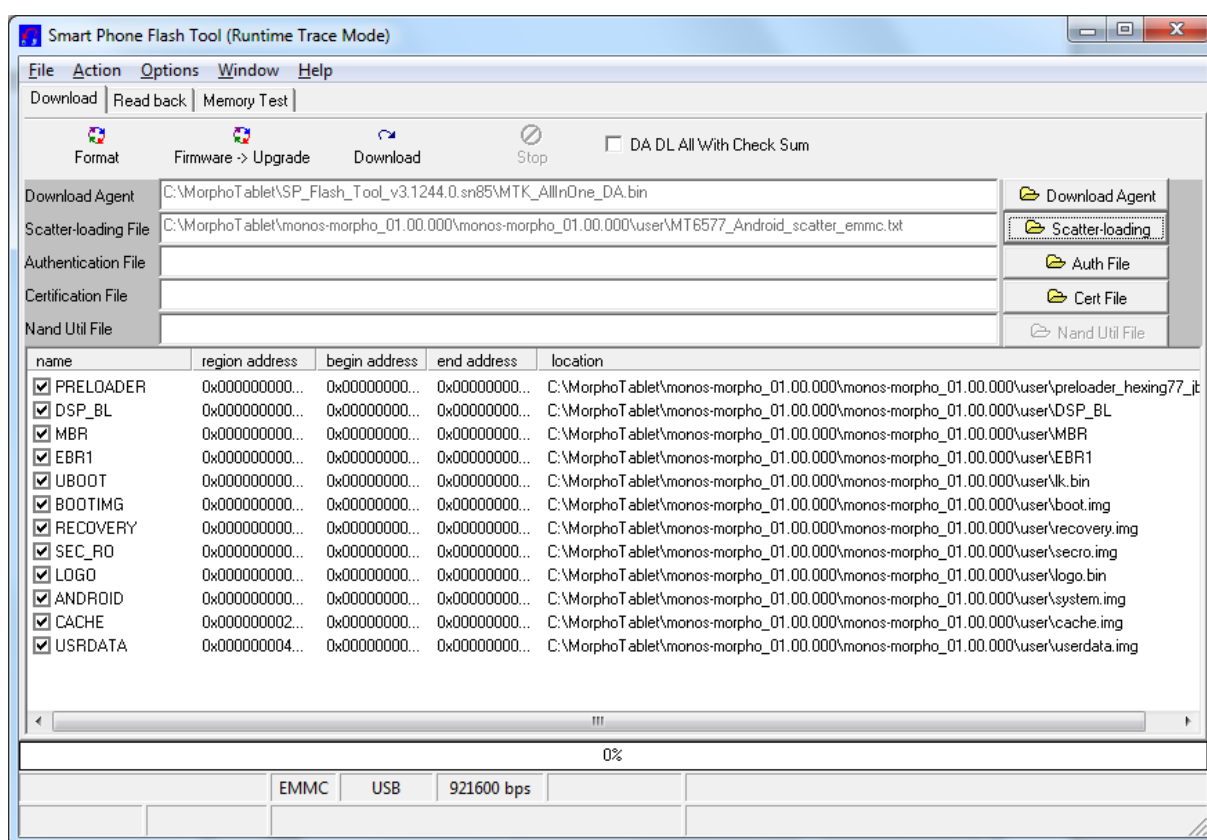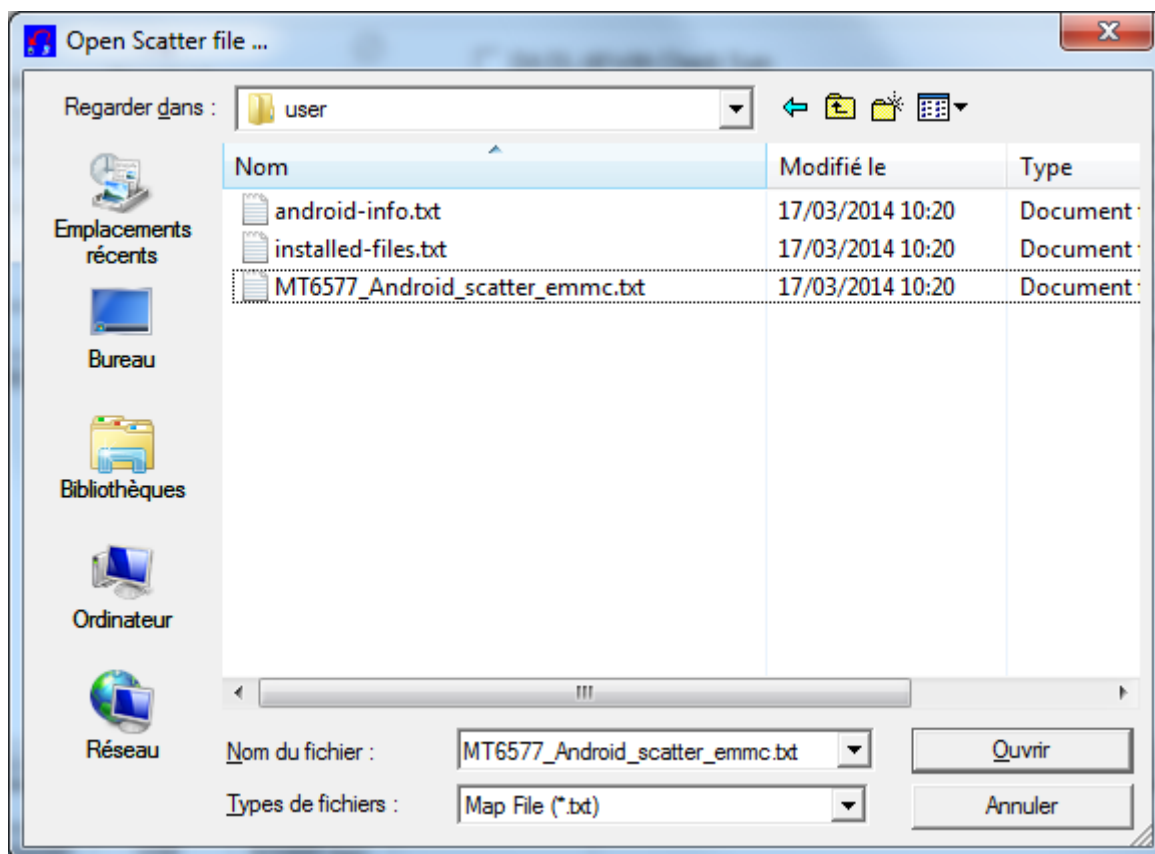
Power off the MorphoTablet: press the power button more than 2 seconds, and then click on "Power off" on the screen.
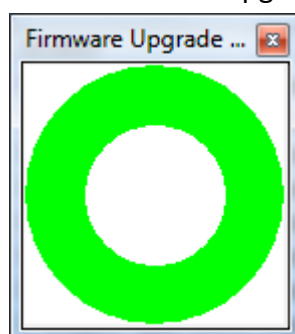
Ensure USB cable is not plugged to MorphoTablet.

From Flash_Tool application, click on "**Firmware->Upgrade**" button

Connect USB cable to Host computer and to MorphoTablet mini-USB connector.

Firmware upgrade should start.

When firmware Upgrade is finished this window should appear on computer.

Unplug USB cable, and close Flash_Tool windows.

Press on MorphoTablet Power Up button. New firmware version should start on MorphoTablet.

6 Contacts

6.1 CUSTOMER SERVICE

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6.2 HOTLINE AND CUSTOMER ASSISTANCE

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Phone: + 33 1 58 11 39 19

(9H00am to 6H00pm French Time, Monday to Friday)

http://www.biometric-terminals.com/

(Login and password are required to access to the private area of the web site).

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