UPGRADING OMNII FIRMWARE

Overview

This article describes the procedure for field upgrading the firmware on Omnii hand-held computers. There are two methods for upgrading the firmware:

- Method 1—Using a USB Memory Stick
- Method 2—Using a microSD Card

After the upgrade on Windows Embedded Hand-Held 6.5-based systems, you must install the add-on CAB. You may have to obtain a new Intermec imager driver from the Help Desk.

Update date: 29 March 2012.

Affected Omnii Versions

- All production models of Omnii.

Checking the Firmware Version Of Omnii

On Windows Embedded CE 6.0-based systems

1. In the **Control Panel** select **System Properties**.
2. Expand **System Software**.
3. Locate the current firmware version of the following on the list:
   - Power Micro
   - FPGA
   - Syscon
   - Boot code
   - OS

On Windows Embedded Hand-Held 6.5-based systems

1. On the desktop select **Settings**.
2. Select **System**.
3. Select **System Properties**.
4. Expand **System Software**.
5. Locate the current firmware version of the following on the list:
   - Power Micro
   - FPGA
   - Syscon
   - Boot code
   - OS

Method 1—Using a USB Memory Stick

Equipment Required

- USB memory stick
- One of the following accessories:
  - Omnii snap module, model number ST4001
  - Omnii docking station, model number ST4002 or ST4003
  - Omnii vehicle mount cradle, model number ST1002 with an interface cable attached (model number CA3001)

Procedure

Prepare the Memory Stick

1. Obtain the file containing the firmware upgrade.

   On Omnii, Power Micro, FPGA, Syscon, Boot Code (BooSt), and the OS are all upgraded simultaneously from one file.

   The filename is similar to 7545_..._MULTI_nnnn.img.

2. Ensure that the memory stick is formatted as a FAT32 volume.

3. Load the file containing the firmware upgrade in the root directory of the memory stick. The file must be renamed **7545os.img**.

> ⚠ *Warning: **This should be the only file in the root directory of the memory stick, so as to prevent interference from other IMG files.***

Prepare the accessory

1. Ensure that the accessory is using an external power source.

2. Insert the memory stick into the USB type A port on the accessory.

   ST1002 using a CA3001 interface cable: Use either of the two USB ports.

3. Insert Omnii into the powered accessory.

Upgrade the firmware

1. On Omnii, open the BooSt menu as follows:

   - **On Windows Embedded CE 6.0-based systems:** Press and hold down the [FN] key, the [ENTER/Power] key, and the [SCAN] key, simultaneously for a minimum of six seconds.
   - **On Windows Embedded Hand-Held 6.5-based systems:** Press and hold down the [FN] key, the [Power] key, and the [SCAN] key, simultaneously for a minimum of six seconds.

2. The firmware upgrade starts immediately.

3. Several messages showing the progress of the firmware upgrade are displayed on the Omnii screen.

   If the upgrade seems to happen very quickly and several messages similar to this appear:

   Load skipped, image in primary storage appears to match this image

   the upgrade firmware is identical to the existing firmware.

4. When the update is complete, Omnii reboots to the main operating system, and the desktop is displayed.

⚠️ *Warning: **Do not remove Omnii from the accessory until the update is complete.***

Complete the upgrade

1. Verify that the firmware version on Omnii is the one that should be there after this upgrade.

2. When you have completed the upgrade, remove the memory stick from the accessory.

Method 2—Using a microSD Card

Equipment Required

- MicroSD card.
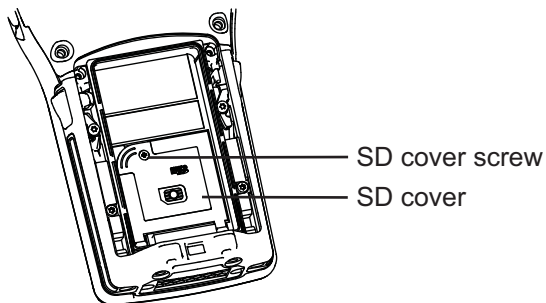
Procedure

Prepare the microSD card

1. Obtain the file containing the firmware upgrade.

   On Omnii, Power Micro, FPGA, Syscon, Boot Code (BooSt), and the OS are all upgraded simultaneously from one file.

   The filename is similar to 7545_..._MULTI_nnnn.img.

2. Ensure that the microSD card is formatted as a FAT32 volume.

3. Load the file containing the firmware upgrade onto the microSD card.

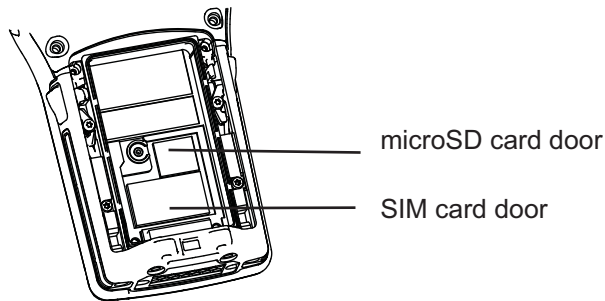   The file must be renamed **7545os.img**.

⚠️ *Warning: **This should be the only file on the microSD card, so as to prevent interference from other IMG files.***

Insert the microSD card into Omnii
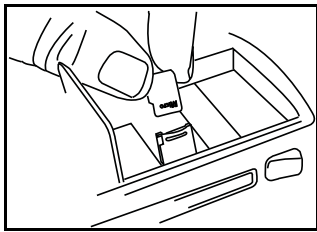
1. Press the battery release buttons to remove the battery.

2. Use a Phillips screwdriver to remove the screw securing the SD cover.

SD cover screw
SD cover

3. Flip the SD cover open.

microSD card door

SIM card door

4. Slide the microSD door to the left to unlock it.
5. Flip the microSD door open.
6. Slide the microSD card onto the guides on the SD card door.

7. Close the microSD door and slide it to the right to lock it.
8. Re-install the battery in Omnii.

Upgrade the firmware

1. On Omnii, open the BooSt menu as follows:
   - **On Windows Embedded CE 6.0-based systems:** Press and hold down the [FN] key, the [ENTER/Power] key, and the [SCAN] key, simultaneously for a minimum of six seconds.
   - **On Windows Embedded Hand-Held 6.5-based systems:** Press and hold down the [FN] key, the [Power] key, and the [SCAN] key, simultaneously for a minimum of six seconds.
2. The firmware upgrade starts immediately.
3. Several messages showing the progress of the firmware upgrade are displayed on the Omnii screen.

   If the upgrade seems to happen very quickly and several messages similar to this appear:

   Load skipped, image in primary storage appears to match this image

   the upgrade firmware is identical to the existing firmware.
4. When the update is complete, Omnii reboots to the main operating system, and the desktop is displayed.

Complete the upgrade

1. Verify that the firmware version on Omnii is the one that should be there after this upgrade.
2. When you have completed the upgrade, do one of the following:
   - Remove the microSD card from Omnii.
   - Rename, or delete, 7545os.img so as to prevent the upgrade from running if Omnii is placed in BooSt.

After the Firmware Upgrade

On Windows Embedded Hand-Held 6.5-based systems

1. Download the add-on CAB file from *Ingenuity Working* to your Omnii.

2. Double-click the add-on CAB filename to install the CAB file.

   Omnii does an automatic restart to complete the installation.

On Omniis with Imagers

After a firmware update, you need to update the Imager Control Service (ICS). You can download ICS CAB files from *Ingenuity Working* for most imagers. If your Omnii has an Intermec imager, you must contact the Psion Help Desk to obtain the ICS CAB file.