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## Tech Info TI02\_065

### Pocket PC e740 ROM image upgrade WWE (World Wide English) version

- The new ROM image for Pocket PC e740 WWE (World Wide English) version was upgraded to a newer version. The version number and changes are all stated in the list.

Model Name	Old ROM image version	New ROM image version	Changes
Pocket PC e740	1.0203.0409  1.0503.0409  ( Please refer to section 2 ROM image upgrade procedure on how to identify ROM image version )	1.0503.0409  1.0513.0409	The following changes were made: <b>Bootloader:</b> 1. Shadow RAM was changed to 2 MB.  <b>OS :</b> 1. Enhancement has been made to WiFi network management module. 2. Internet Explorer High Encryption Software has been included. 3. Server Synchronization issue was reported. This has been fixed. 4. Enhancement has been made to video display function. 5. The Pocket PC was not shut down before the battery pack was removed. This leads to a data loss. This has been fixed. 6. Enhancement has been made to Battery management module. 7. The Chat function using Bluetooth SD Card may not begin without installing the registry patch. 8. When the WiFi antenna switch is on, accessing the 340 MB IBM MicroDrive will result in corrupted data. This has been accepted as a technical restriction, an addendum has been placed in the e740 shipping carton. 9. CF 10/100 Ethernet card will function if it is use with the driver from vendor. However it may not function using the Pocket PC 2002 native LAN driver. 10. Enhancement has been made to Media Player and a new skin was added. 11. Enhancement has been made to Today theme. 12. Enhancement has been made to the overall system performance. 13. Tab key is supported in Pocket Internet Explorer.

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**2. The following illustrate on the procedure for upgrading the Pocket PC e740 ROM image.**

**2.1 Overview**

There are 2 methods to upgrade the ROM image.

- Update via CF memory card
- Update via USB Flash Utility ( USB Flash Utility is under development )

**2.2 How to identify the ROM image version**

1. Power on the e740.
2. Push the reset button with stylus. The e740 will re-start automatically and the ROM image version will display on the top of the screen as showed in Fig 1.

<p><b>Legend :</b></p> <p>X.XXYY.ZZZZ</p> <p>X.XX: the version of Bootloader YY : the version of OS ZZZZ: Language of OS</p> <p>0409 : WWE (World Wide English) 0407 : German 040C: French 0410 : Italian 0C0A: Spanish 0411 : Japanese</p>
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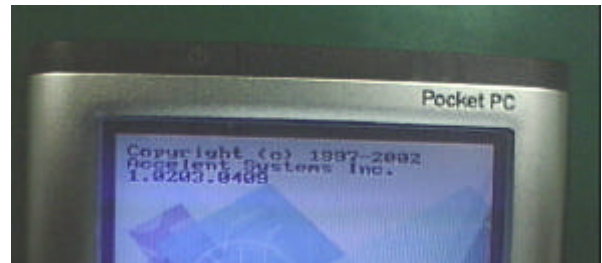


Fig 1: ROM version display

**2.3 General information on Bootloader and OS**

Bootloader and OS are distributed as binary files.

The same Bootloader is used irregardless of the type of language the OS used.

**2.4 Procedure to upgrade ROM image via CF memory card**

Points to be noted for Rom image upgrading.

- The CF card is needed for this process.
- The Bootloader (boot.bin) and OS (KERNEL.nb0) files are to be upgraded **separately**.
- The Bootloader or the OS files are copied to the e740 automatically by means of the CF card.
- There should be about 25MB and above of free disk space available on the CF card.
- Please ensure the e740 external power is plugged on before performing the ROM image upgrade.
- When both the Bootloader (boot.bin) and OS (KERNEL.nb0) files are on the root folder of the CF card, OS (KERNEL.nb0) has a first priority to be loaded.
- Please upgrade the Bootloader (boot.bin) to the e740 **FIRST** before the OS (KERNEL.nb0).
- When upgrade the Bootloader (boot.bin), please ensure the OS (KERNEL.nb0) file is **NOT** on the root folder of the CF card.

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## 2.5 Procedure :

Please follow procedure 1 and 2 **in sequence**. Failing so may cause e740 ROM image to be damaged.

### 1. Upgrading the Bootloader (boot.bin)

- 1.1 Copy **ONLY** the boot.bin to the root folder of the CF card. Ensure that KERNEL.nb0 is not on the root folder of the CF card.
- 1.2 Insert the CF card to the CF card slot of e740.
- 1.3 Press and hold the Task (program button2) and Home (program button3) buttons at the same time.
- 1.4 While holding on to the two buttons, push the reset button with stylus once. This will re-start the e740.
- 1.5 When the screen display the progress bar and message, release the two buttons (Task & Home Buttons). The e740 will now write the Bootloader binary to its ROM.
- 1.6 When the e740 displays the message "Done, reboot", remove the CF card.
- 1.7 The e740 will re-start automatically. You do not have to setup the Pocket PC.

### 2. Upgrading the OS (KERNEL.nb0)

- 2.1 Copy **ONLY** the KERNEL.nb0 to the root folder of the CF card.
- 2.2 Insert the CF card to the CF card slot of e740.
- 2.3 Press and hold the Task (program button2) and Home (program button3) buttons at the same time.
- 2.4 While holding on to the two buttons, push the reset button with stylus once. This will re-start the e740.
- 2.5 When the screen display the progress bar and message, release the two buttons (Task & Home Buttons).
- 2.6 The e740 will display "Load Image (ATA)", and start to load the image file to the memory. This process will take about 5 minutes.
- 2.7 After loading the image, the e740 will display "Programming Flash". The e740 will now program the OS image to its ROM. The process will take some time
- 2.8 When the e740 displays the message "Done, reboot", remove the CF card.
- 2.9 The e740 will re-start automatically.
- 2.10 Switch off the e740 by sliding the Main Battery Switch at the bottom to off position. Switch on the e740 again by sliding the Main Battery Switch to on position again to initialize the e740.

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### 3. Example of screen displays for upgrading ROM image from 1.0203.0409(WWE) to 1.0513.0409(WWE).

3.1 Upgrade the **Bootloader** from 1.02 to 1.05 first.

3.2 Before upgrading the Bootloader, the display is as shown in Fig 2.

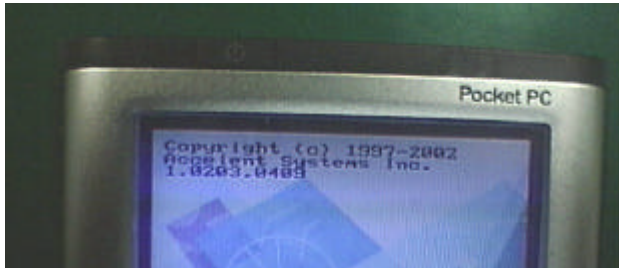


Fig 2: Display before Bootloader upgrade.

3.3 During the Bootloader upgrade, you should be able message at the bottom of the display. This is shown in Fig 3. Fig 4 shows the display when Bootloader programming is done.



Fig 3 : Display while programming Bootloader.

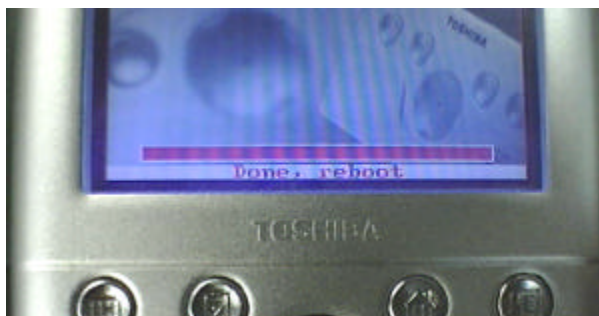


Fig 4: Display when Bootloader is done.

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3.4 After upgrading the Bootloader, the display is as shown in Fig 5. Take note the ROM image version changes from 1.0203.0409 -> 1.0503.0409.

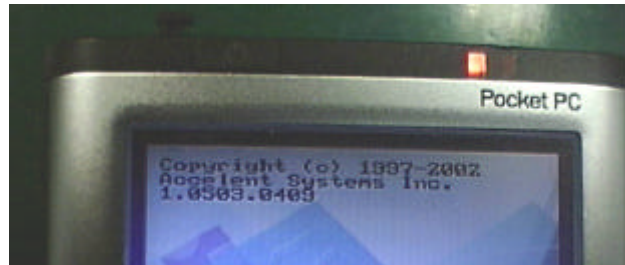


Fig 5 : Display after Bootloader upgraded.

3.5 Upgrade the OS from x.xx03.0409 to x.xx13.0409.

3.6 While the OS is upgrading, the display is as shown in Fig 6. Please take of the message at the bottom of the display. Fig 7 shows the display when OS programming is done.



Fig 6: Display while OS is programming



Fig 7: Display when OS programming is done.

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3.7 After the e740 reboots itself, the ROM image should change from 1.0503.0409 -> 1.0513.0409, This is shown in Fig 8.

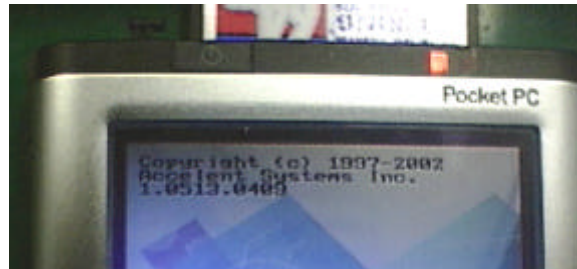


Fig 8: Display after e740 reboot.

3.8 When the OS starts up, the new screen should be seen. This is shown in Fig 9.



Fig 9 : Display showing the new OS.

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