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Update the BootLoader

May 21, 2004

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Revision History:

Revision	Date	Comment
1.0	June 18, 2003	Initial Version
1.1	Sep 26, 2003	Release09292003, add updater.axf
1.2	May 21, 2004	Update for POS-TAX Demo Board

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1 Method 1 - Upgrade to a new bootloader by updater.bin

1. Press 'Esc' on booting to enter bootloader mode

```
Press ESC to enter debug mode ...[Press 'ESC']
bootloader >
```

2. Download the 'updater.bin' to 0x8000 by 'mt' or 'mx' (For more detail, please reference to *Winbond Boot Loader User's Manual*).

```
bootloader > mx 0x8000
waiting for download
Press Ctrl-x to cancel ...
CCCCCCCCCCCCCCCC
Download succeeded!
```

3. Execute the image by 'g 0x8000' command.

```
bootloader > g 0x8000
```

4. The following messages would be shown on terminal screen. Please confirm the information shown and press any key to continue if it is ok.

```

Sep 04 2003
*****
w90N740 Updater Version 1.0 $Revision: 4 $
Copyright (c) 2003 windond Electronics Corp.
*****

The ROM code versionxv4 this update image :
    w90N740 Boot Loader - Version 1.1
    w90N740 Boot ROM    - Version 1.1

w90N740 board is Found
WARNING: w90N740 Boot Loader will be updated!

-- Press any key to continue --
```

5. The following messages would be shown on the terminal screen when the updater start to update the WBL. Please don't power-off the system before the programming finished.

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```
Flash Detecting ...  
Flash type is: w28j160tt  
Flash programming . OK!  
Verifying OK!  
Programming finished!!  
ROM code update succeeded!
```

```
-- Press any key to reboot --
```

6. After programming finished, please press any key to reboot the system. If the system doesn't reboot, please use hardware reset to reboot it.

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2 Method 2 - Upgrade to a new bootloader

1. Press 'Esc' on booting to enter bootloader mode
2. Download the 'xmodem.bin' to 0x8000 by 'mt' or 'mx'
3. There are 'CCC..' string displayed on the Terminal Emulator.
4. Use the 'Transfer->Send file..' to send the new bootloader.bin by XMODEM protocol.
5. Transfe complete.
6. Enter the flash programming address to 0x7F000000.
7. Waiting for the flash programming complete.
8. Reboot.

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3 Burn a bootloader to a new flash

1. Connect the JTAG-ICE to W90N740
2. Load the init.axf into the W90N740 to execute
3. Load the updater.axf into the W90N740 to execute
4. When the updater.axf executed, the updater information would be shown on the terminal screen through the serial port. If it doesn't show anything on the terminal screen, please check if the init.axf is executed correctly and the hardware environment.
5. If the updater.axf is executed correctly, please reference the step 4 ~ 6 of Method 1 to update the bootloader.