

1 DOWNLOAD WINCE6.0 IMAGE

1.1 Download image need files

IROM_Fusing_Tool.exe: the program is used to fuse the Bootloader into the SD-card (only for XP)

DNW.exe: the serial debug program is used to show the board details on the computer

USB_Driver: the USB drivers of the PC is used to download the files on the base board from computer (only for XP).

IROM_SD_EBOOT.nb0: the SD-card Bootloader is used to boot the WINCE kernel or load it into NAND flash

STEPLDR.bin: the first NAND flash Bootloader is used to boot the EBOOT.bin

EBOOT.bin: the second NAND flash Bootloader is used to boot the WINCE kernel

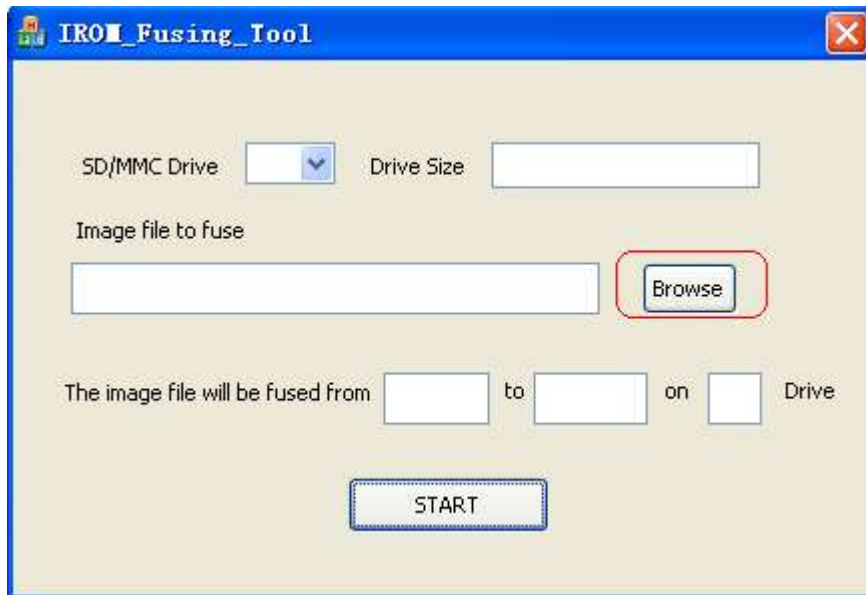
xip.bin: the WINCE kernel image

Notice: Please use Windows XP(32bit) system to burn images, other Windows system may be not support to burn.

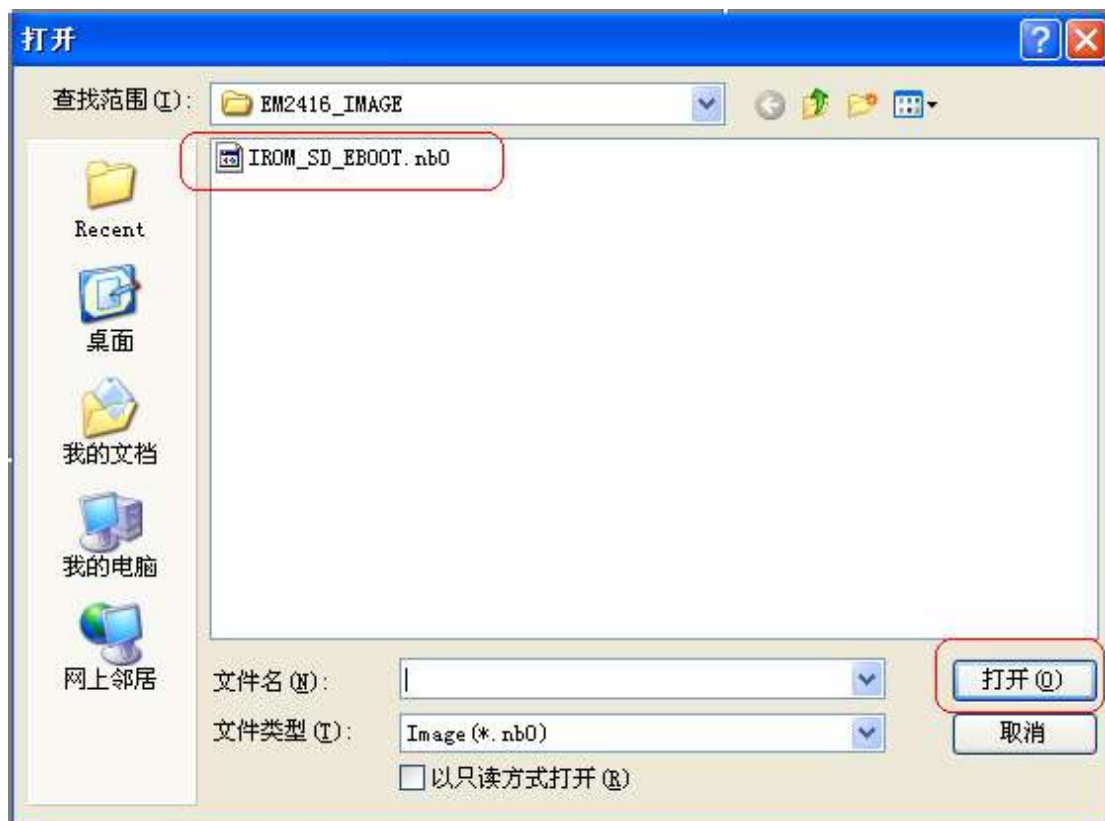
1.2 Download boot image into SD card

Preparing a **2GB** SD-card and plug it with an adapter into your computer. Make sure your SD-card adapter can be normally used in your computer and select the removable disk as your device; you could format it with FAT32 file-system.

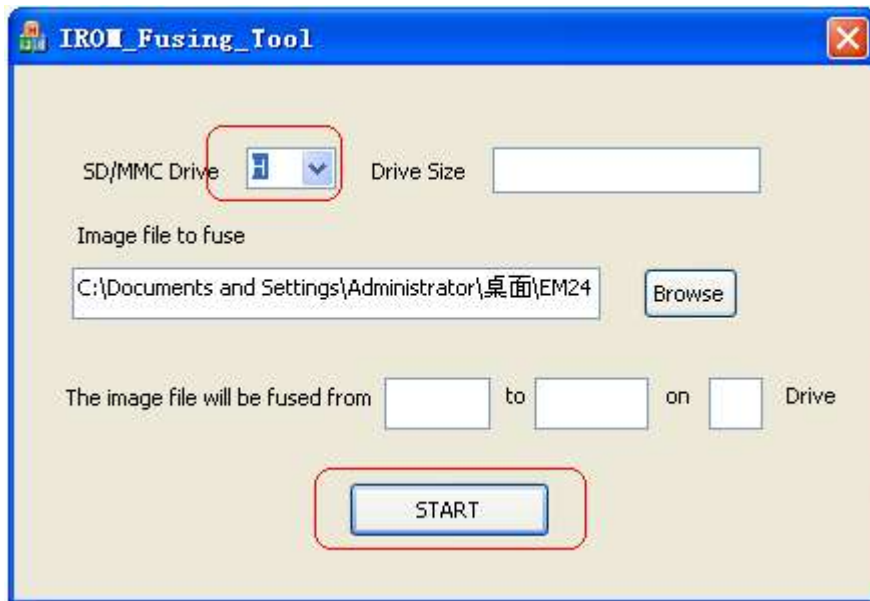
Double-click the **IROM_Fusing_Tool.exe** as follows:



Click 'Browse' button and select the IROM_SD_EBOOT.nb0 file in the WINCE images folder as follows:



Click 'SD/MMC Drive' and select the Removable Disk letter on your computer, for example: **H**



Click 'START' button to fuse the IROM_SD_EBOOT.nb0 into the SD-card until the windows message box pops-up.



Unplug the SD-card from the SD-card adapter and insert it into the connector on the baseboard.

1.3 Download image into KIT2416 board

If KIT2416 board have not burn STEPLDR.BIN and EBOOT.bin:

You need to use SD card to guide your board start, then use DNW burn STEPLDR.bin and EBOOT.bin.(SD card start mode)

If KIT2416 board have burn STEPLDR.BIN and EBOOT.bin:

You only want to update the STEPLDR.bin or EBOOT.bin, you can only power on KIT2416 board and use DNW to burn them.(Nand flash start mode)

When burn xip.bin, only power on kit2416 board and use DNW burn it.

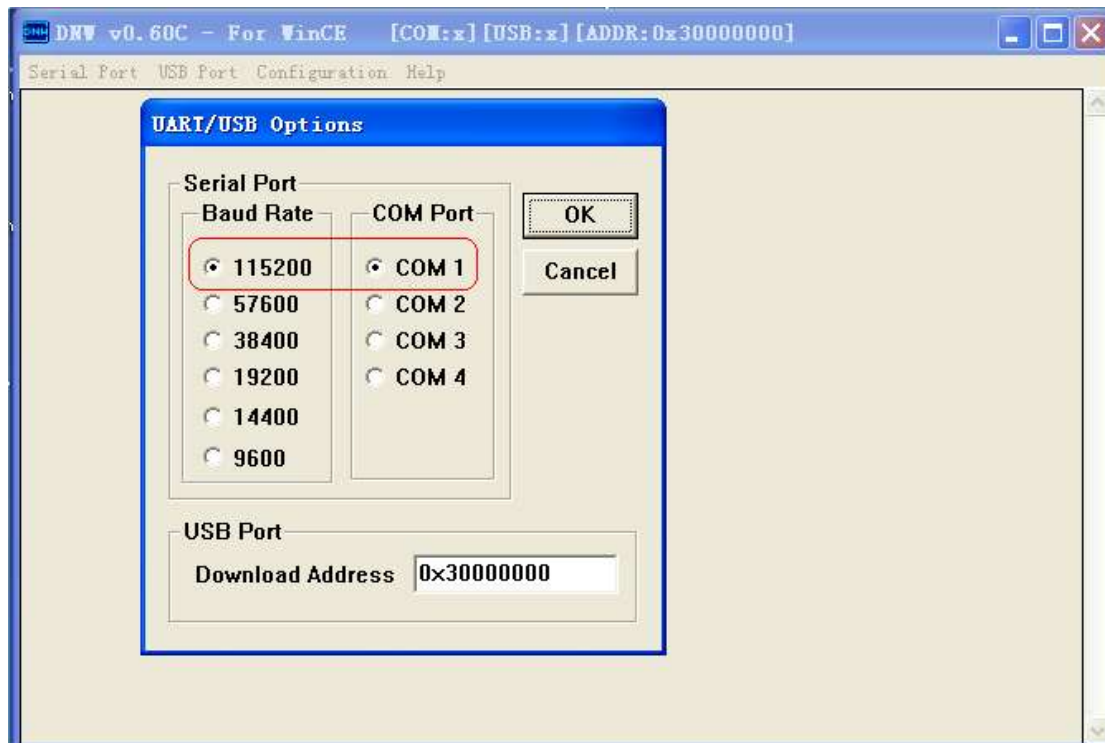
Open the DNW.exe program and set its configuration as follows:

(The board use COM1 as the debug port)

[DNW->Configuration->Options]

BaudRate:115200

COMport:COM1(your computer serial number)



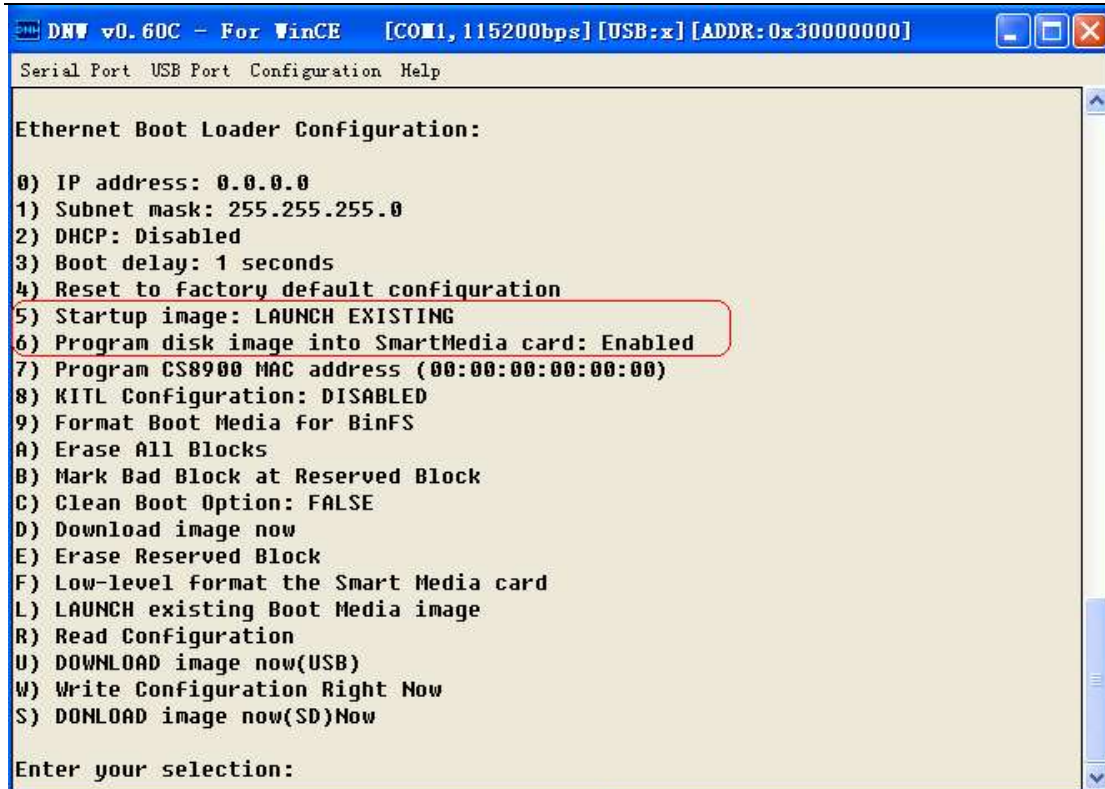
Click 'OK' to save the configuration and exit. In the menu,click [Serial Port->Connect] to open the serial port.

Set your board start from SD card mode:



Jump S2/S3 Boot from SD/MMC

and click your PC "**SPACE**" bar you will see:



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DNW v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0x30000000]
Serial Port USB Port Configuration Help

Ethernet Boot Loader Configuration:

0) IP address: 0.0.0.0
1) Subnet mask: 255.255.255.0
2) DHCP: Disabled
3) Boot delay: 1 seconds
4) Reset to factory default configuration
5) Startup image: LAUNCH EXISTING
6) Program disk image into SmartMedia card: Enabled
7) Program CS8900 MAC address (00:00:00:00:00:00)
8) KITL Configuration: DISABLED
9) Format Boot Media for BinFS
A) Erase All Blocks
B) Mark Bad Block at Reserved Block
C) Clean Boot Option: FALSE
D) Download image now
E) Erase Reserved Block
F) Low-level format the Smart Media card
L) LAUNCH existing Boot Media image
R) Read Configuration
U) DOWNLOAD image now(USB)
W) Write Configuration Right Now
S) DONLOAD image now(SD)Now

Enter your selection:
  
```

(If your board is linux system,you want to burn wince system, so you need to select "A) Erase All Blocks" first)

We need to select "5" and "6", make sure there are:

- 5) Startup image: LAUNCH EXISTING**
- 6) Program disk image into SmartMedia card: Enabled**

Then, select "b" -> "9" -> "u":

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Enter your selection: b
Reserving Blocks [0x0 - 0x5] ...
...reserve complete.

Ethernet Boot Loader Configuration:
  
```

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Enter your selection: 9
Enter LowLevelFormat [0x6, 0x7ff].
Erasing flash block(s) [0x6, 0x7ff] (please wait): ##### SECC1 Uncorrectable
error(0x4b40) #####
##### NAND_LB_ReadSectorInfo ECC_Correct_Spare1 Error
EraseBlocks: found a bad block (0x12d) - skipping...
##### SECC1 Uncorrectable error(0x170c0) #####
##### NAND_LB_ReadSectorInfo ECC_Correct_Spare1 Error
EraseBlocks: found a bad block (0x5c3) - skipping...
##### SECC1 Uncorrectable error(0x1cfc0) #####
##### NAND_LB_ReadSectorInfo ECC_Correct_Spare1 Error
EraseBlocks: found a bad block (0x73f) - skipping...
Done.
WriteMBR: MBR block = 0x6.
Done.

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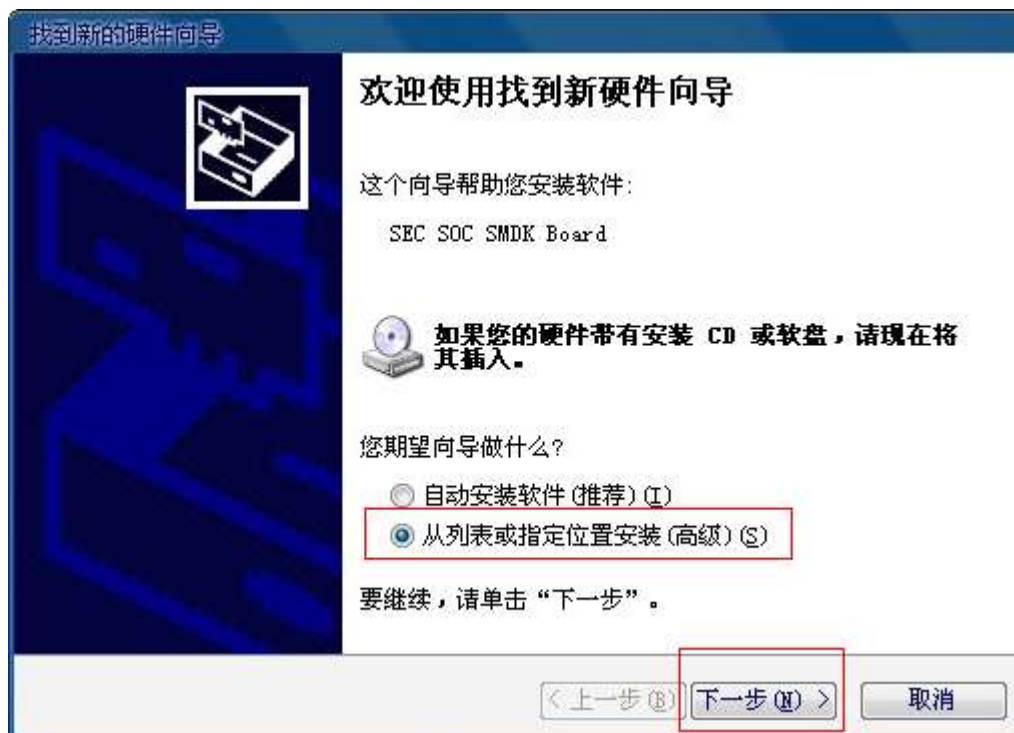
Ethernet Boot Loader Configuration:

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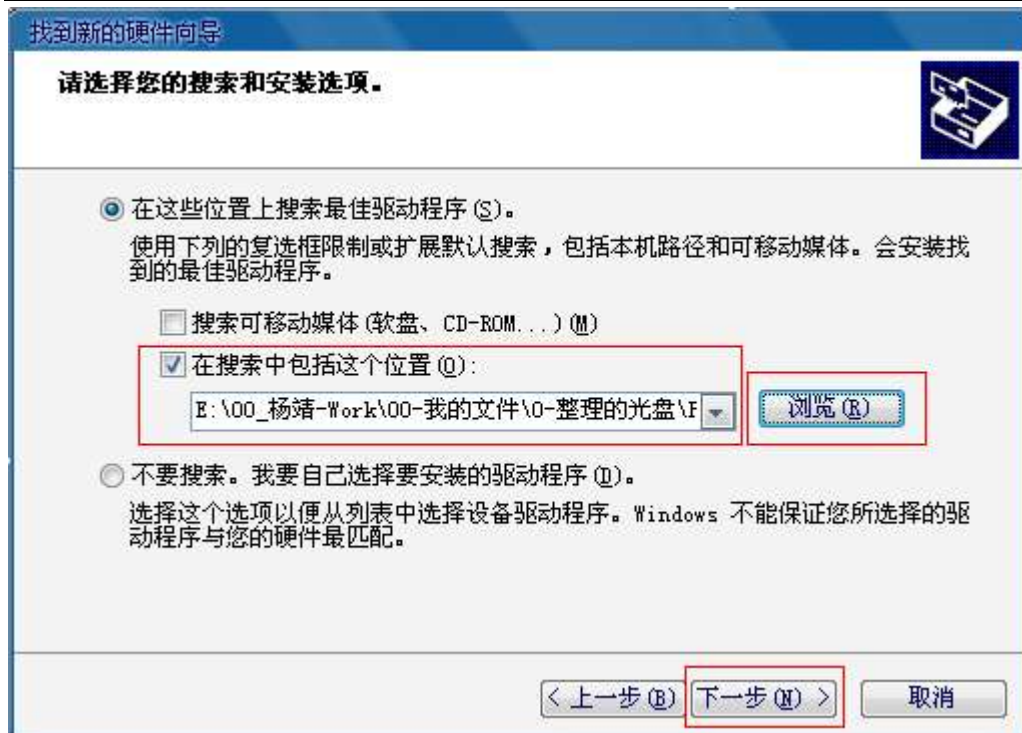
Enter your selection: u
System ready!
Preparing for download..... g_bAutoDownload:
0 a
INFO: *** Device Name 'EM2416_0' ***
Please send the Image through USB.

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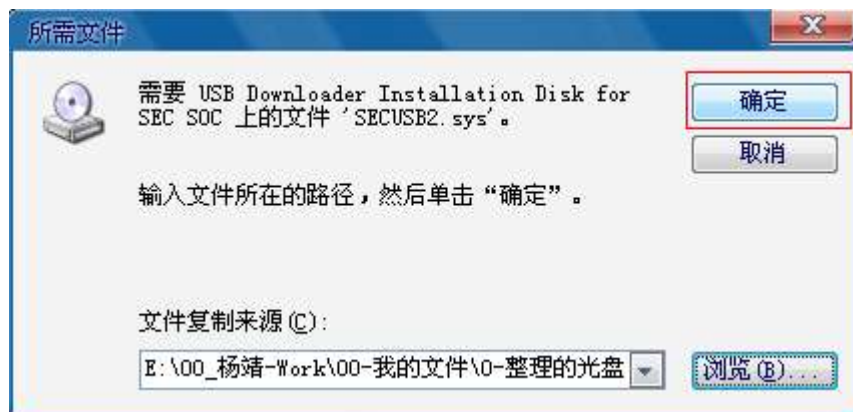
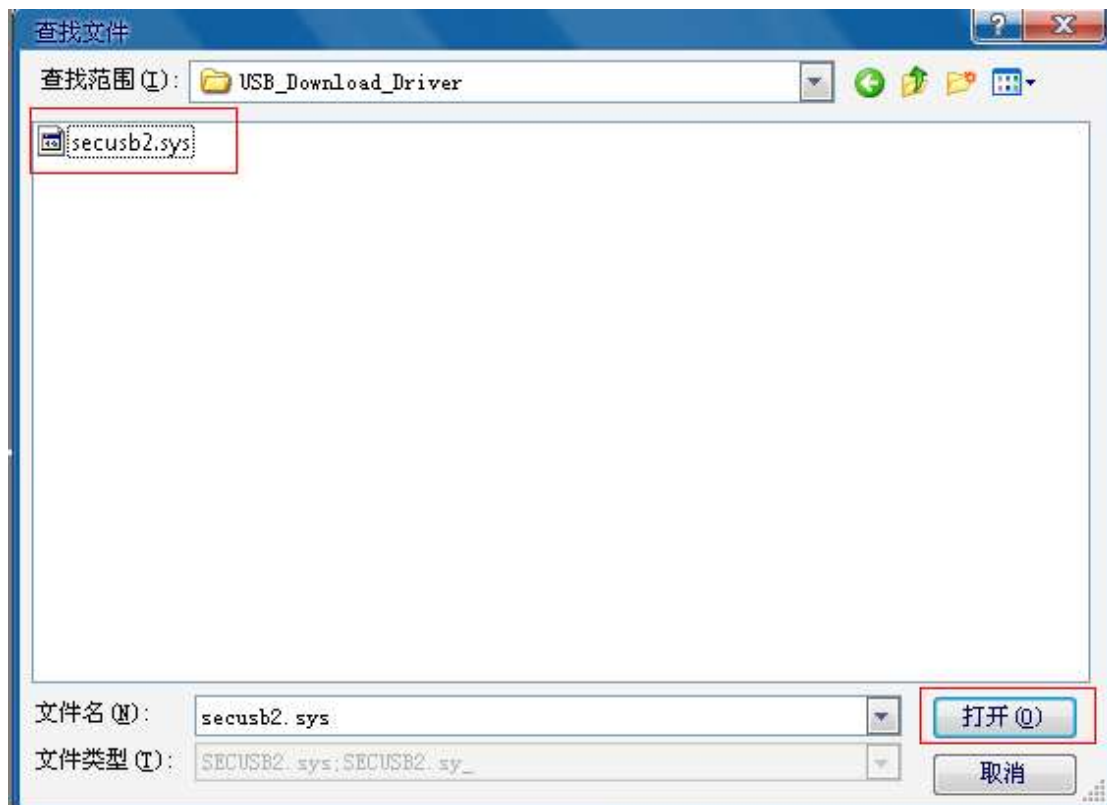
Next, if we is first to burn image, we need to install the USB download driver, in the install dialog box, we need to assigned to the USB_Driver directory: **secusb2.inf and secusb2.sys**.



Then, set your usb download driver directory:

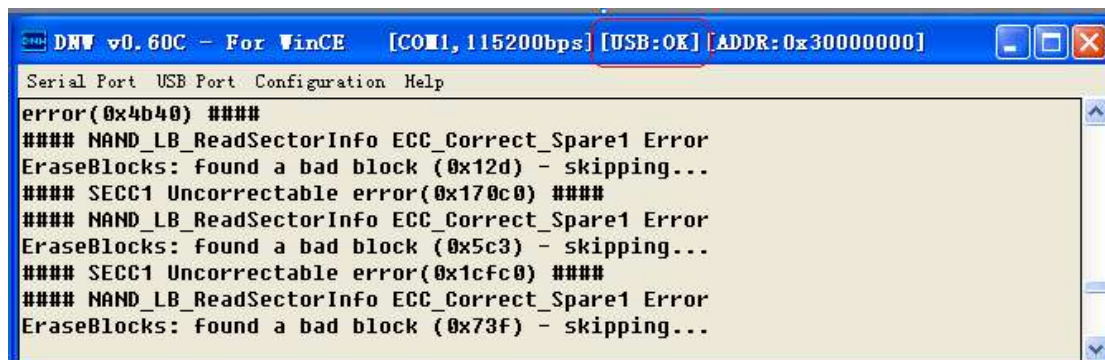




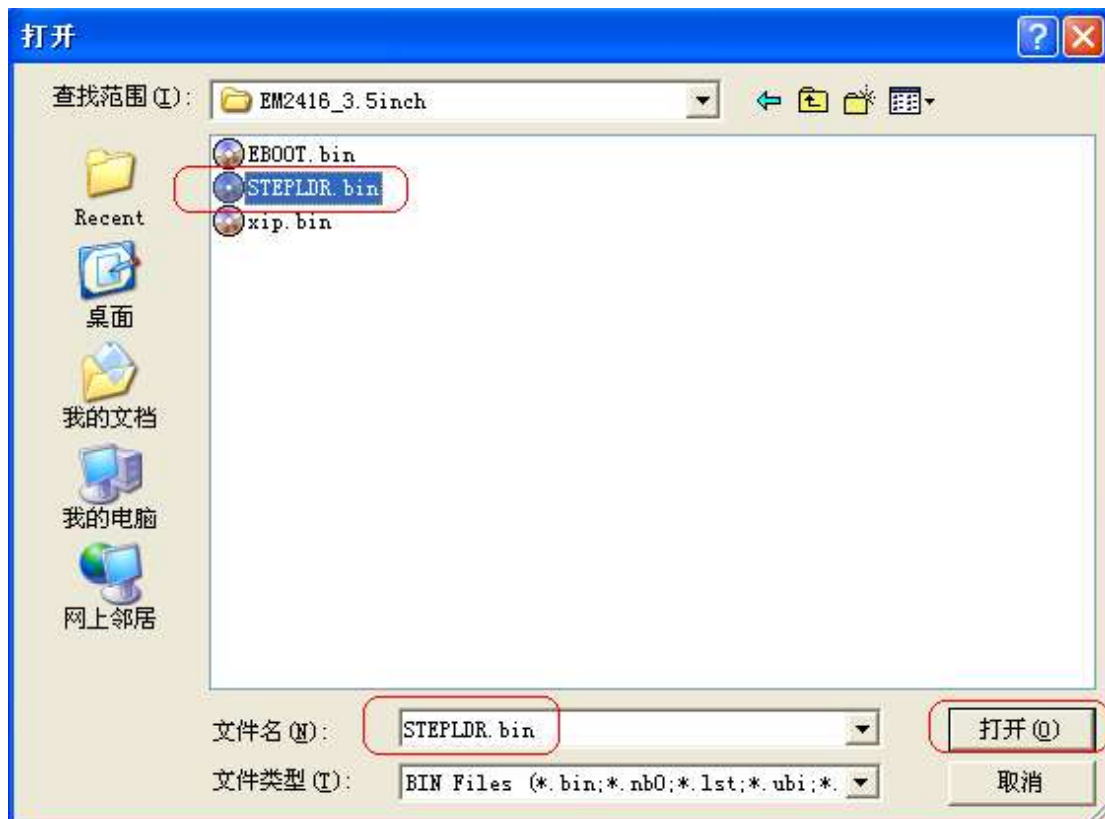
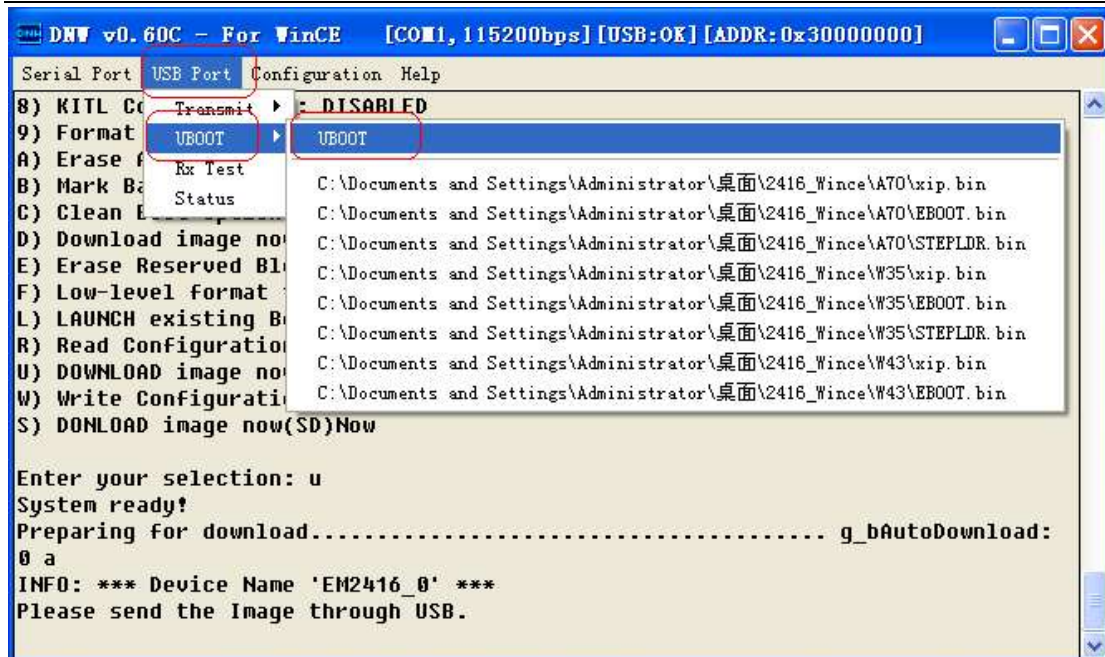




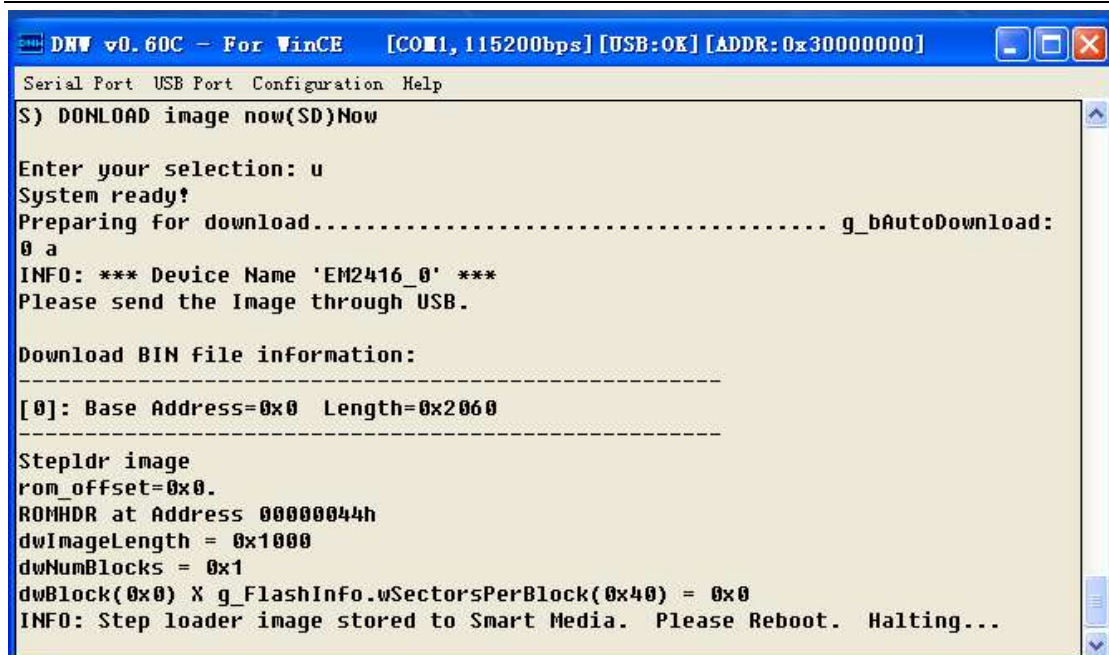
After install the usb download driver, you will see:



Then, we start burn image:



Select "STEPLDR.bin" and burn it into your board.

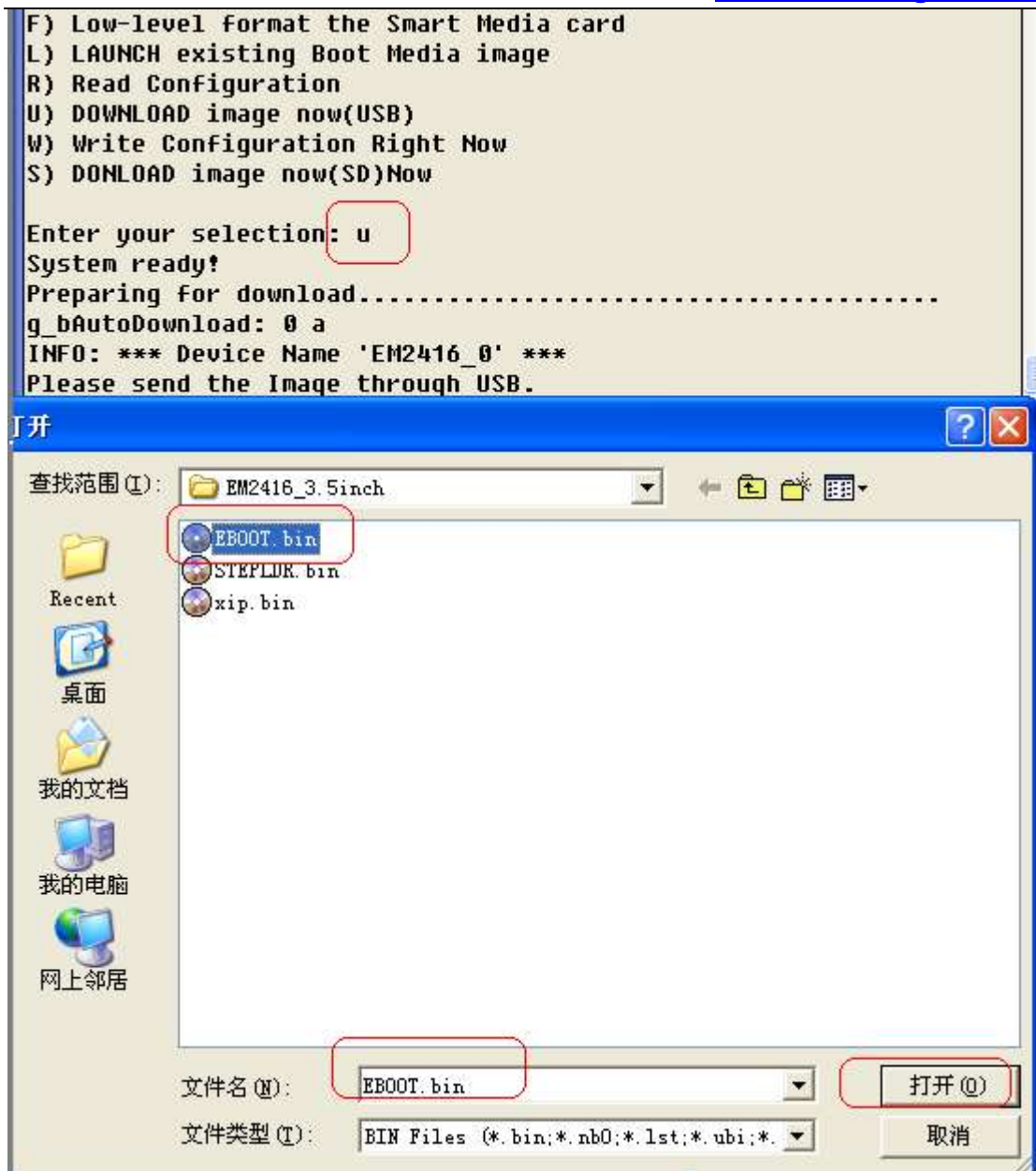


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DHW v0.60C - For WinCE [COM1, 115200bps] [USB:OK] [ADDR: 0x30000000]
Serial Port USB Port Configuration Help
S) DOWNLOAD image now(SD)Now
Enter your selection: u
System ready!
Preparing for download..... g_bAutoDownload:
0 a
INFO: *** Device Name 'EM2416_0' ***
Please send the Image through USB.

Download BIN file information:
-----
[0]: Base Address=0x0 Length=0x2060
-----

Stepldr image
rom_offset=0x0.
ROMHDR at Address 00000044h
dwImageLength = 0x1000
dwNumBlocks = 0x1
dwBlock(0x0) X g_FlashInfo.wSectorsPerBlock(0x40) = 0x0
INFO: Step loader image stored to Smart Media. Please Reboot. Halting...
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Power off your board, then power on your board, also click your PC "SPACE" bar, the board into command line, then select "u" to burn the "EBOOT.bin" as the same burn "STEPLDR.bin"



Finally ,set your board start from nand flash:

S2 S3

1	1
2	2
3	3

Jump S2/S3 Boot From Nandflash



Power on your board,in the console,select 'u' to burn "xip.bin" as the same burn "STEPLDR.bin",after that the WINCE system will start up:

