How to upgrade OS image of Wincon-8000

Prefix   There are two ways for users to upgrade OS image of WinCON-8000.   The simplest method is to use the "version update" function in WinCon Utility 1. But in some abnormal occasion, the system in WinCon-8000 has crashed , then user must use platform builder to upgrade the OS image.

1   In an operational OS environment:

1-1   Power on Wincon-8000 and execute "Wincon Utility 1" and then select "Version Update"
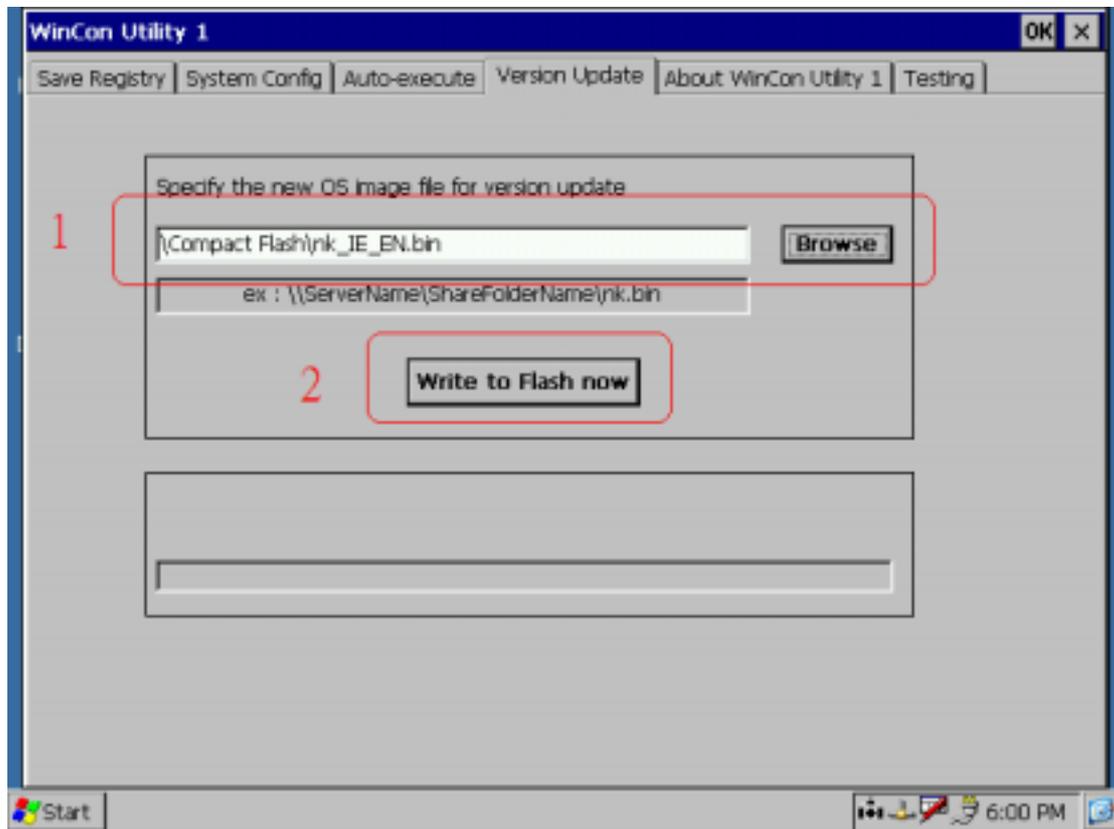
1-2   Fill in the location and filename of OS image in "1" area.

1-3   Click "Write to Flash Now" button to execute OS image upload.(Depending on the size of image file, it will take 10~25min to complete the OS image upload)
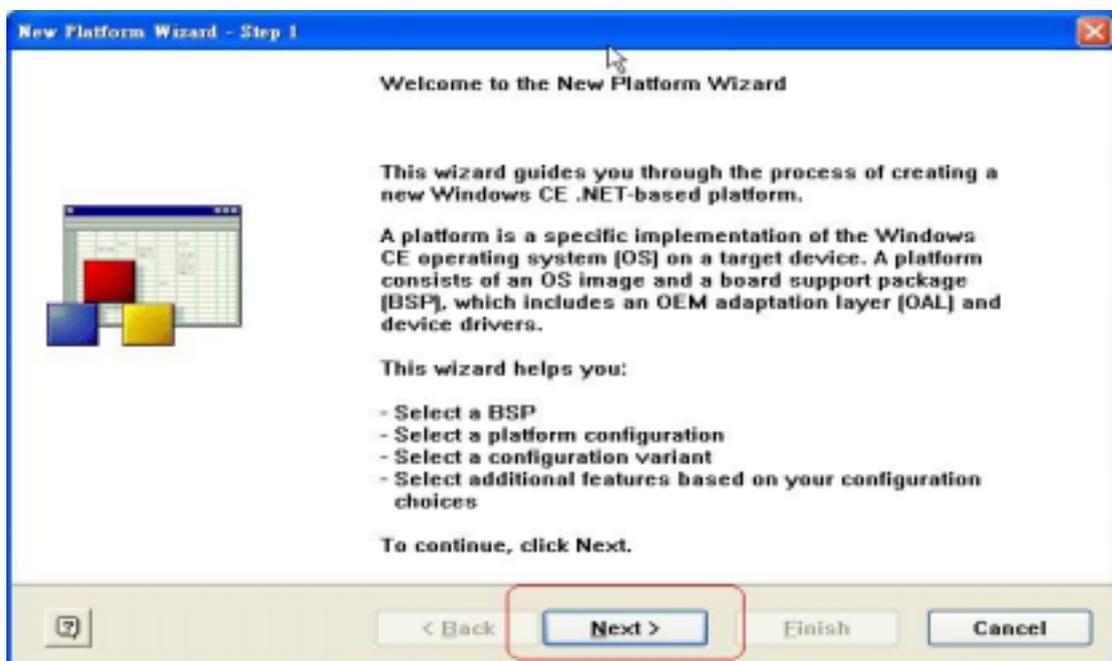
2   In a crashed or abnormal OS environment:

For this case, since the OS can't boot up the WinCon-8000, the only way to upload the OS image is via Platform builder (4.0 or newer version).

2-1   Please install PLATFORM BUILDER 4.0 (or newer version) first. For detail, please refer to <u>Appendix A</u>.

2-2   Execute Platform builder and create a New Platform   File / New Platform   then click "Next>"
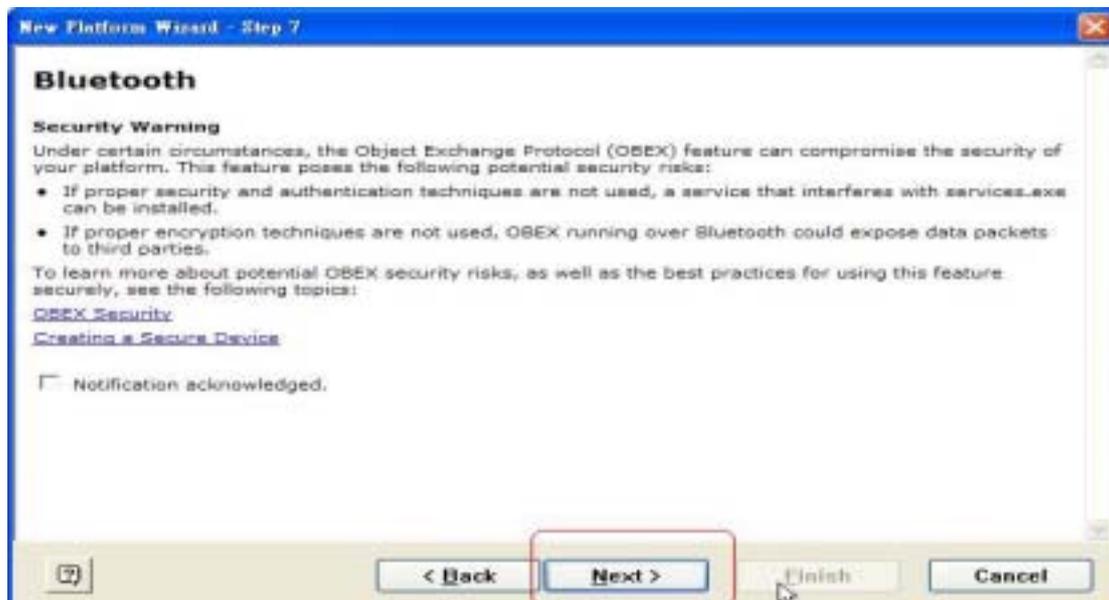

2-3   Choose "INTEL SA1110-SA1111 DEV KIT   ARMV4" as BSP   then press "Next>".

2-4 Select "Internet Appliance" as platform configuration and then fill in Platform name eq SA_TEST and its location and press "Finish".
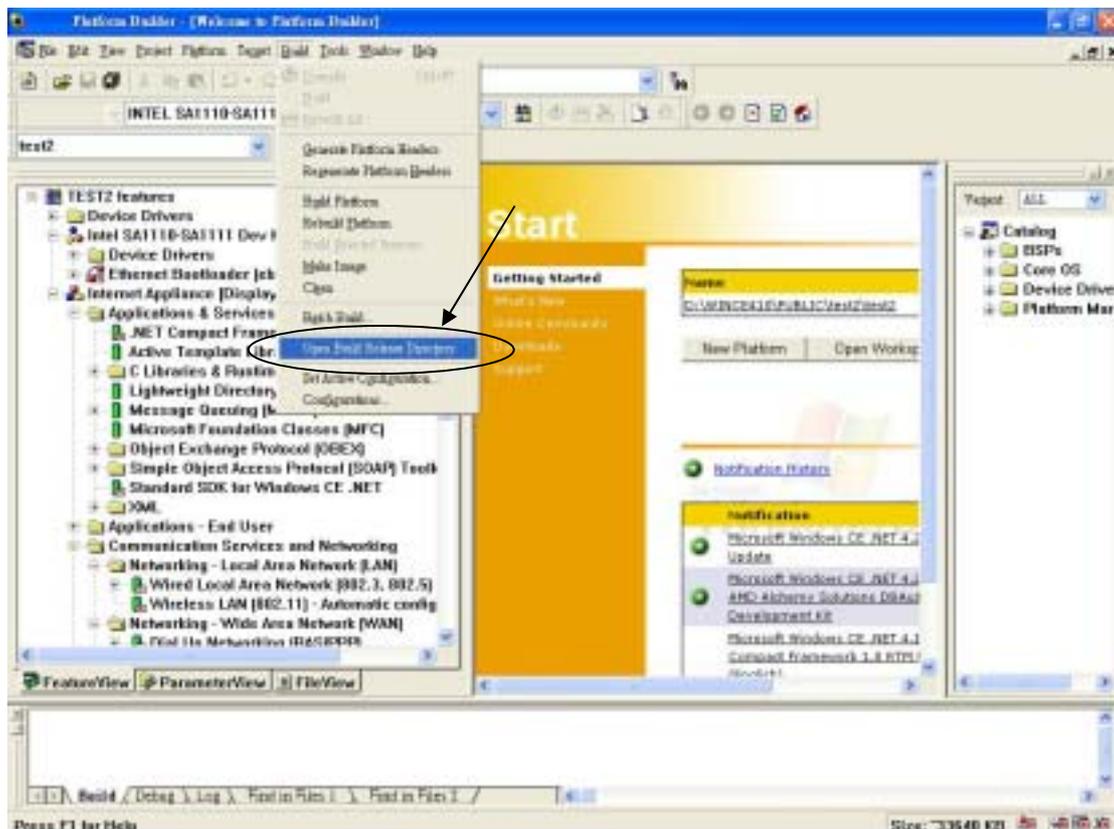

2-5 In the page ,press "Next>".

**2-6 Press "Done" to complete the configuration setup of new platform .**

2-7 In this case, we will create a new platform project named SA_TEST under the path C:\WINCE410\PUBLIC\SA_TEST   If you adopt platform builder 4.1(4.2), WINCE410(WINCE420) will be created . Select Build>Open build release directory
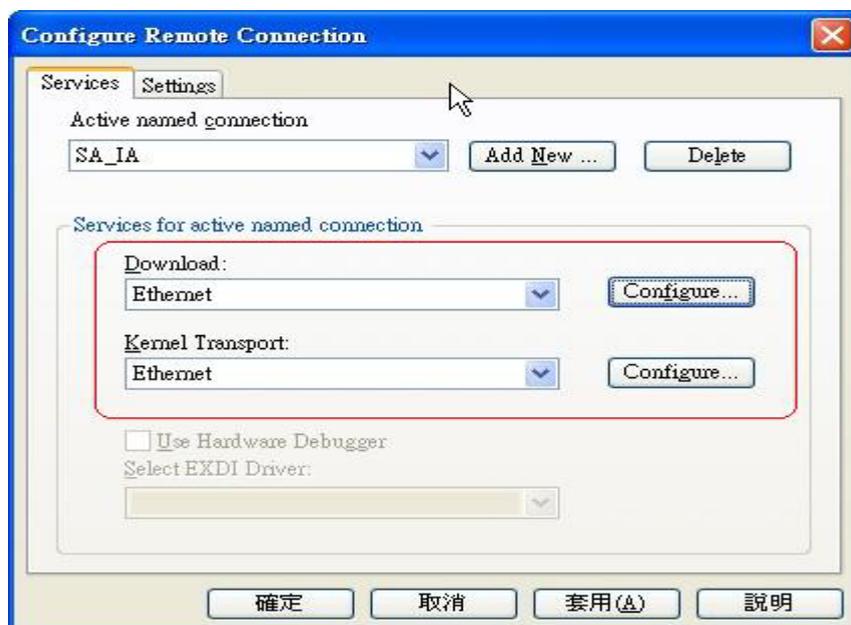
3-8. There will pop-up a new window. Please rename your new OS image to nk.bin and copy it to that directory.

Copy NK.BIN to this directory
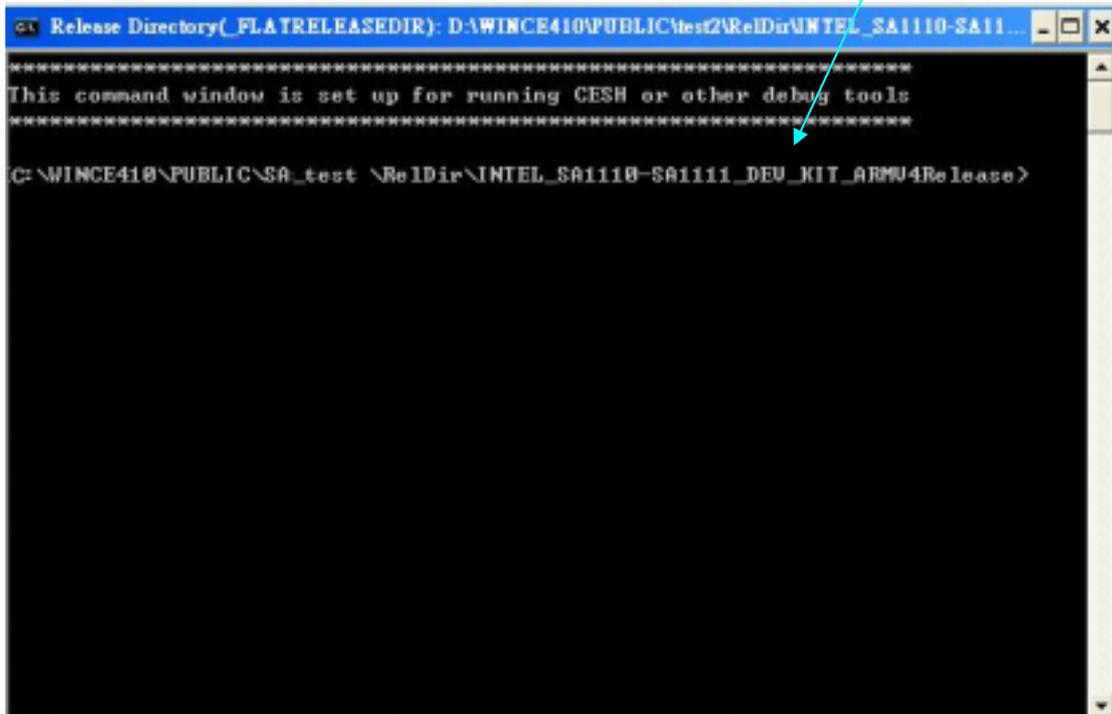
3-9. Select Target>Configure Remote Connection, assign "Ethernet" as your connection style of download and Kernal transport.
(P/S: The boot-loader of WInCon-8000 only support DHCP upgrade.)
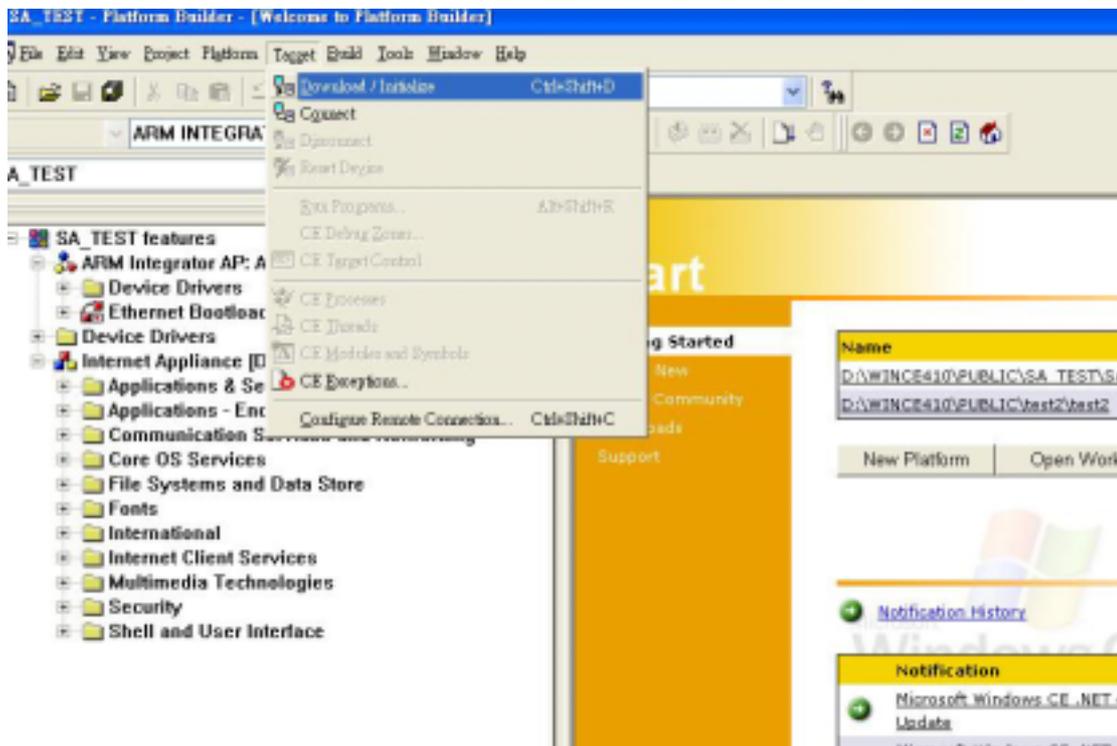
**3-10.Choose the device which is needed for data upgrade.**

(P/S   When there are some devices which issue a "BOOT ME" request in your local network, user can see a number of available devices in this window. To enable WinCon-8000 to boot mode, please refer to the Appendix B)

3-11. Select Target>Download/Initialize to perform OS image upgrade.

Appendix A: Instruction to install Platform Builder 4.2
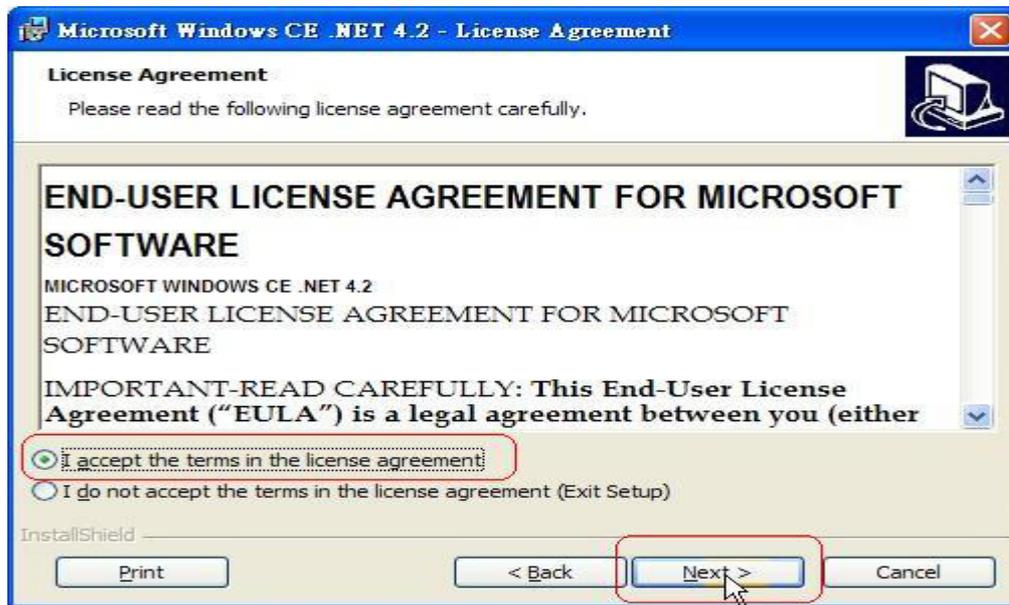
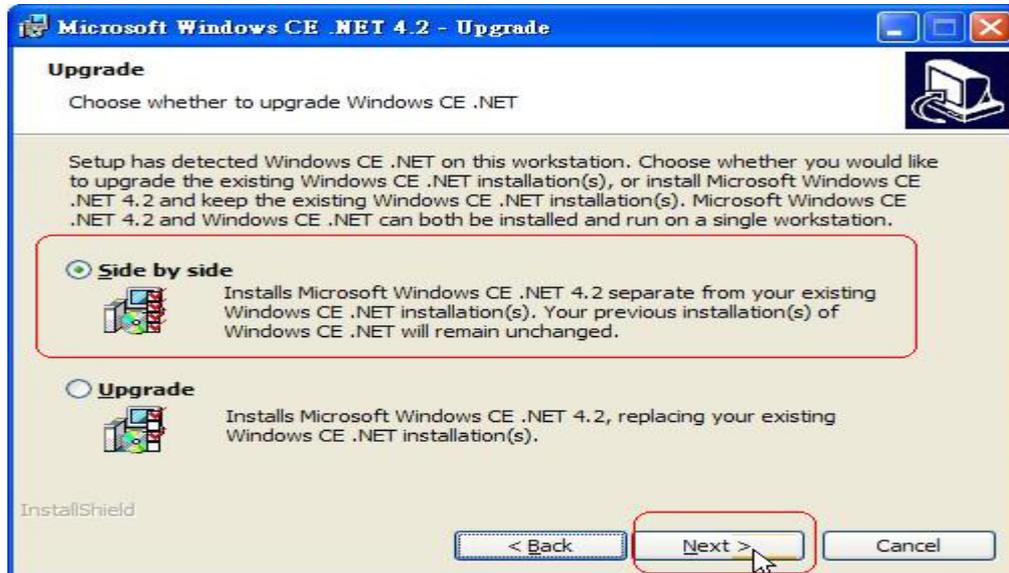   **1   Execute setup and choose "Install".**
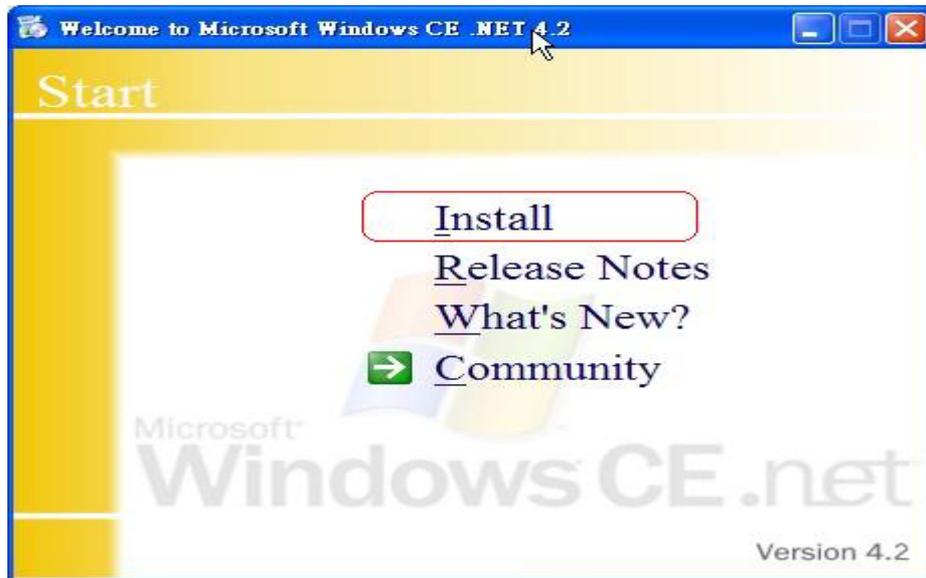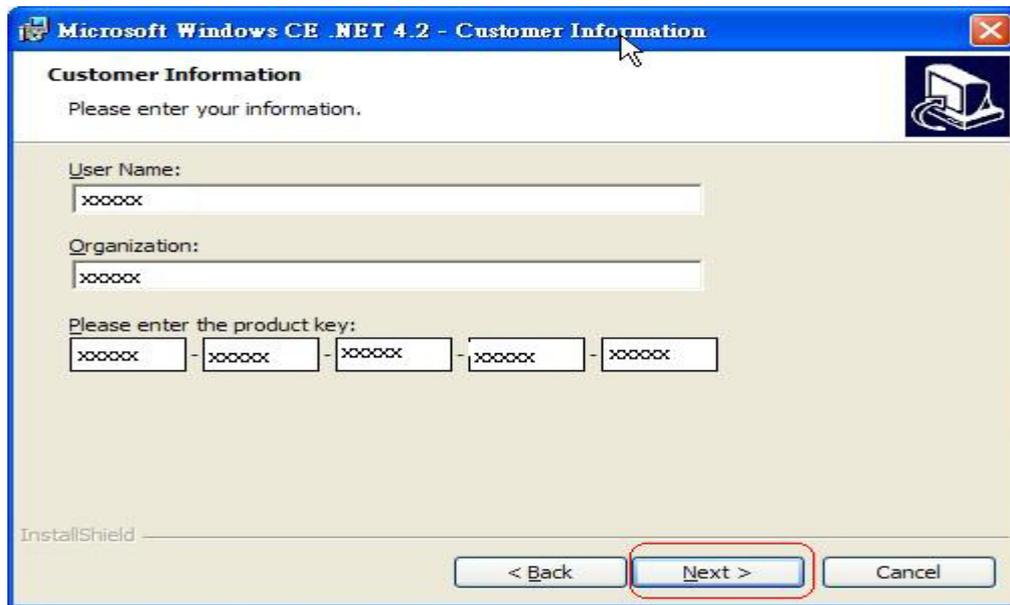

    2   Press "Next>".

3. In License Agreement page, choose "I accept the terms in the license agreement" to continue the platform builder installation.
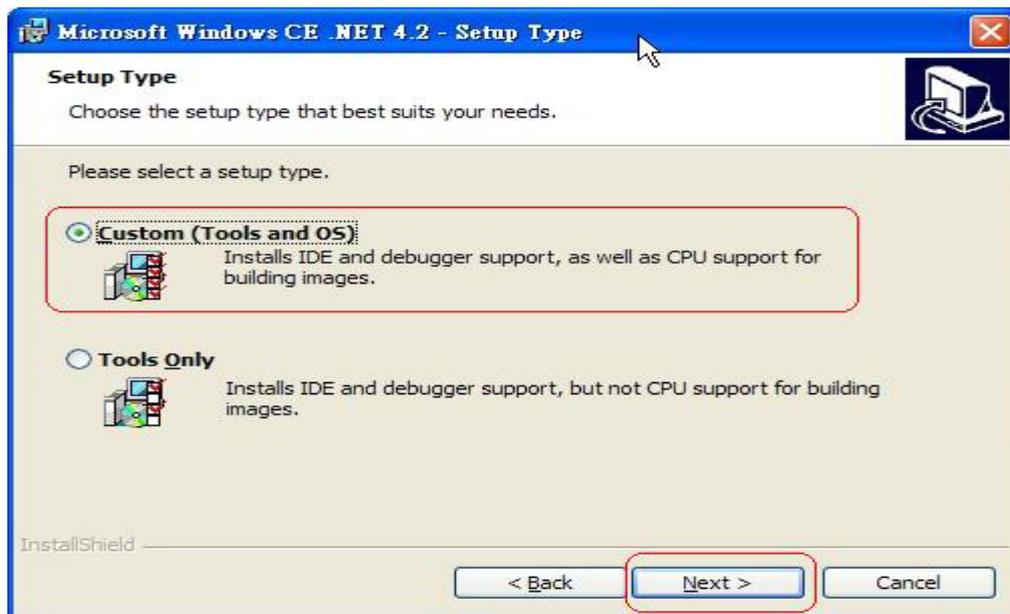

4. Select "Side by side" to keep your existing platform builder unchanged . If you want to replace your existing platform builder , select "Upgrade". Press "Next>" again.
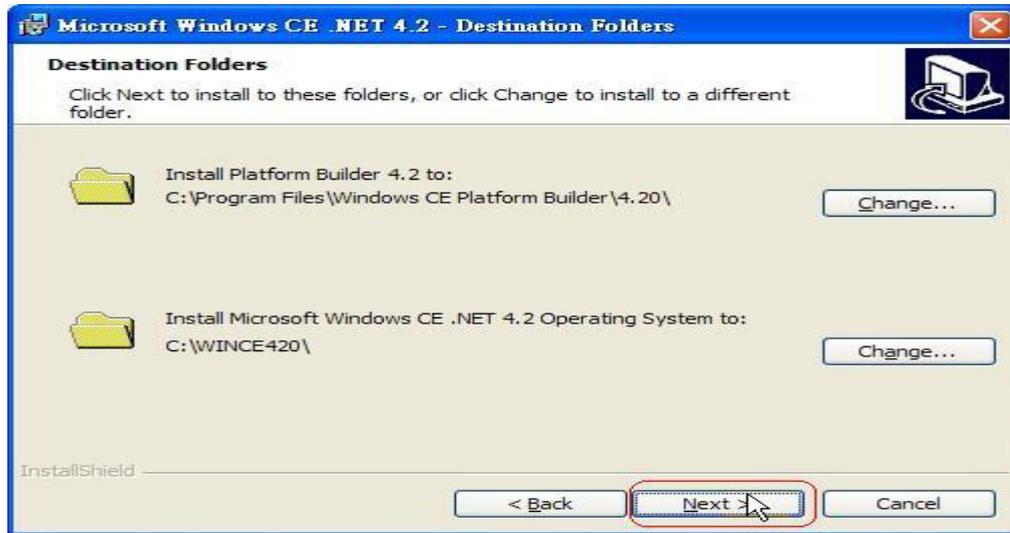
5. Fill in User name, Organization and Product key then press "Next>".

6. Choose "Custom(Tools and OS ＂ and then press "Next>".
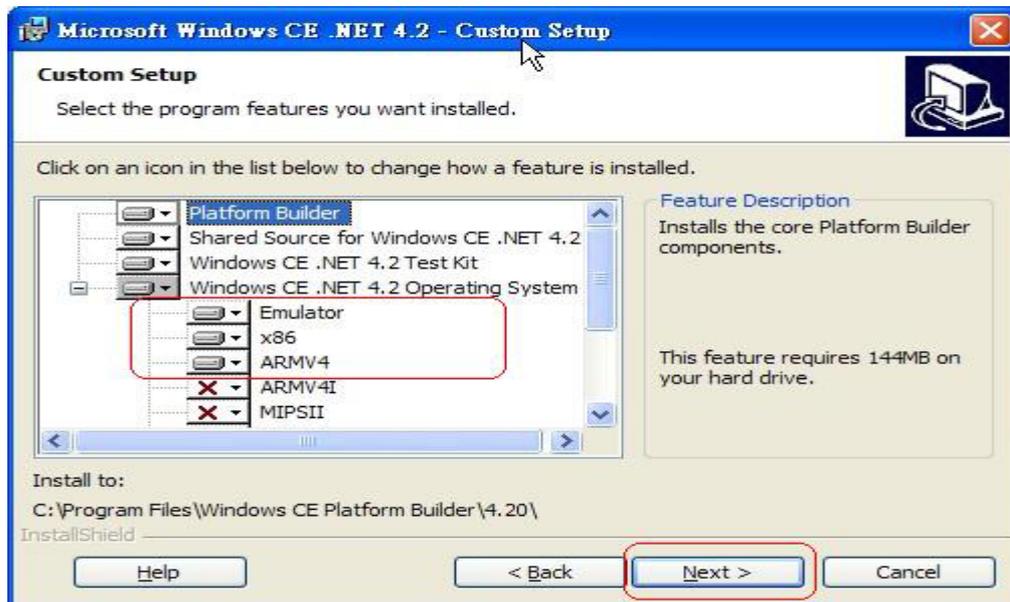
**7. Choose your desired path for platform builder and OS, then press "Next>".**

8   In this page, select "ARMV4" as core CPU of your platform builder then click "Next>" to continue.
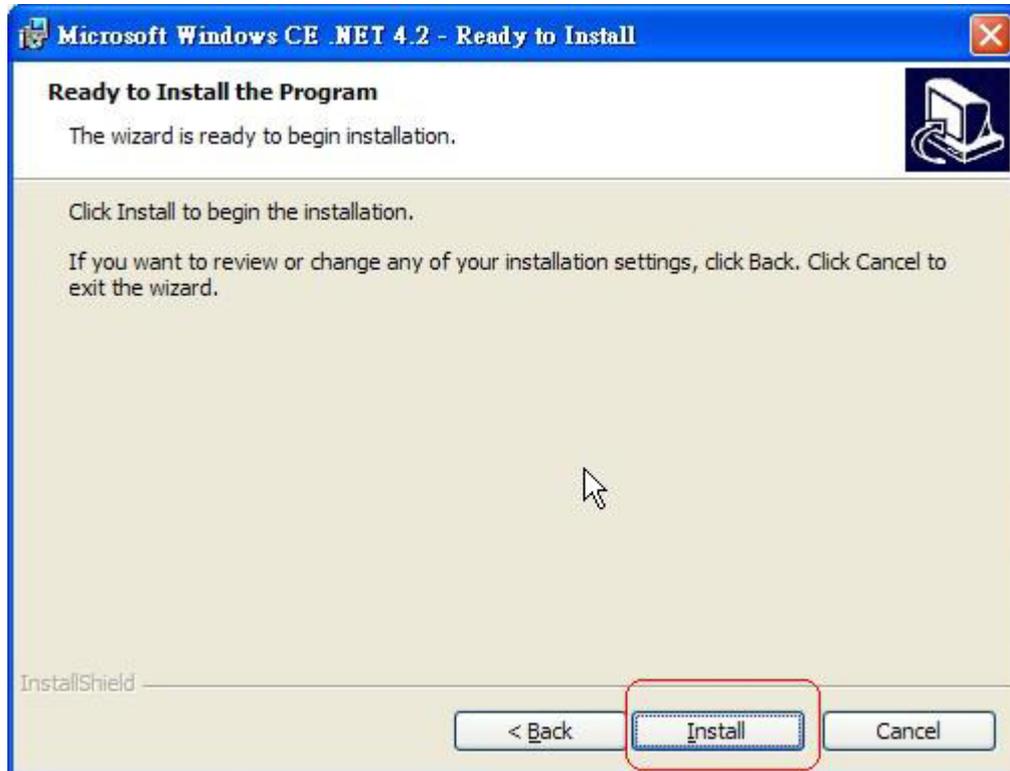
(Remark: Wincon-8000 adopts StrongARM as its core CPU)

9. Skip shared source installation if you don't want to install it.

10. If you want to install shared source, please select "I accept the terms in the license agreement" to continue shared source installation.
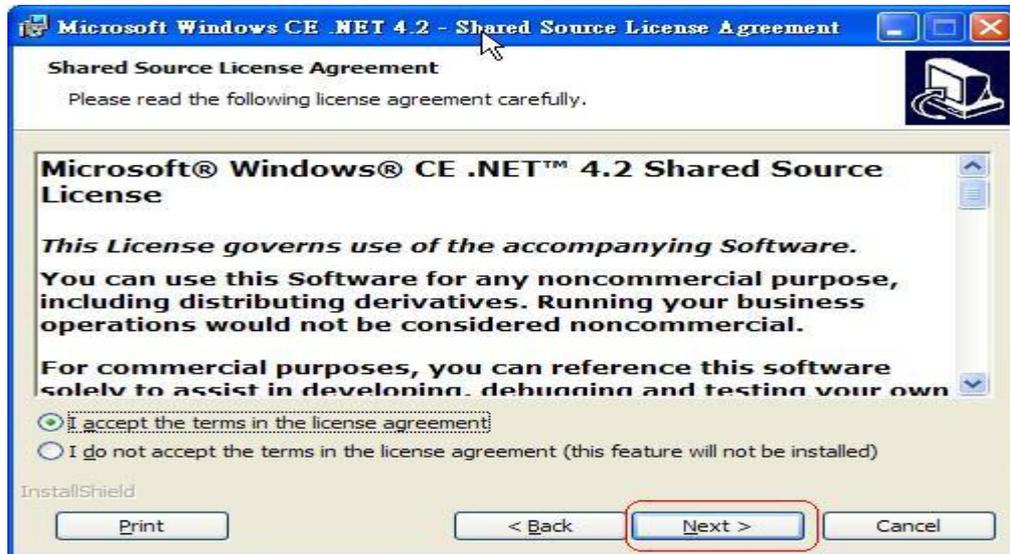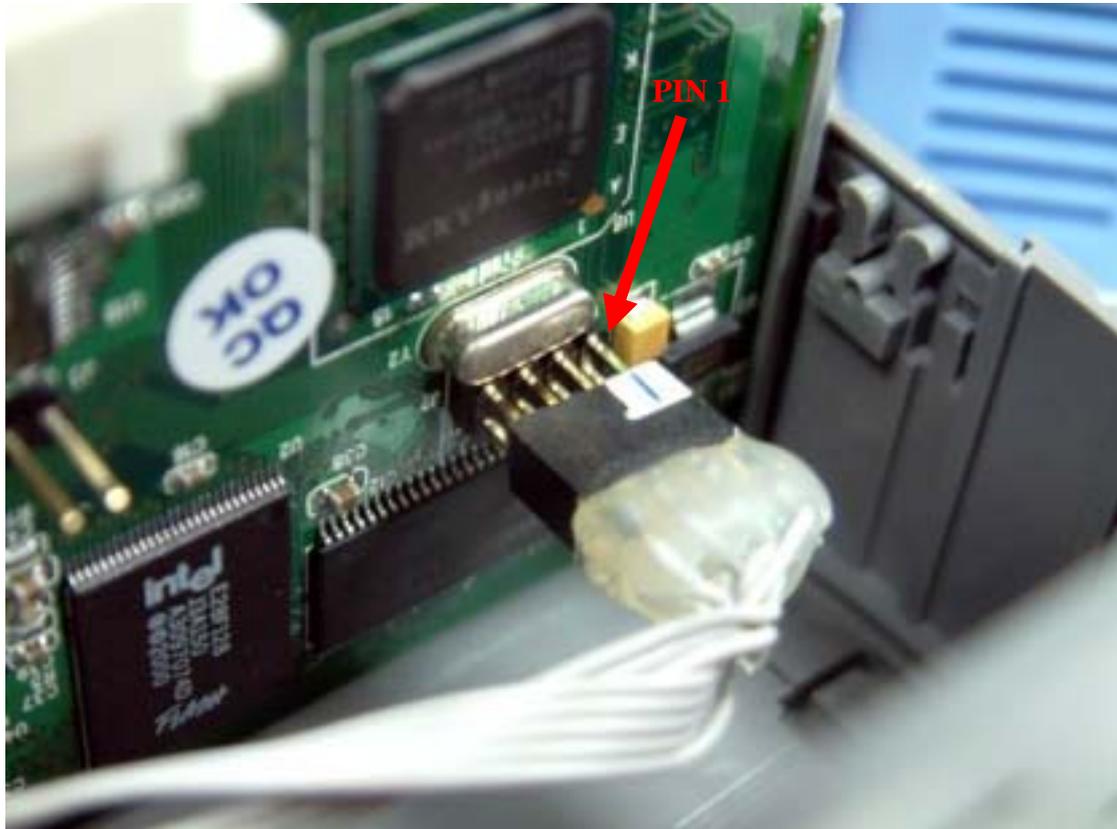

**10. Press "Install" to complete the setup.**

Appendix B: Set WinCon-8000 to Boot mode

1. **First, open the case of MCU of WinCon-8000 and connect special adapter to COM 1. On the other end of the adapter, please connect to serial port of your PC/Laptop.**

2. **Power off WinCon-8000 and short B1 to B5 on any one of un-occupied slot connector in WinCon-8000.   Power on again ,once WinCon-8000 detect B1 pin and B5 pin short together, boot-loader will search the OS image from the Ethernet port (instead of the flash memory) and issue a boot-me message.**
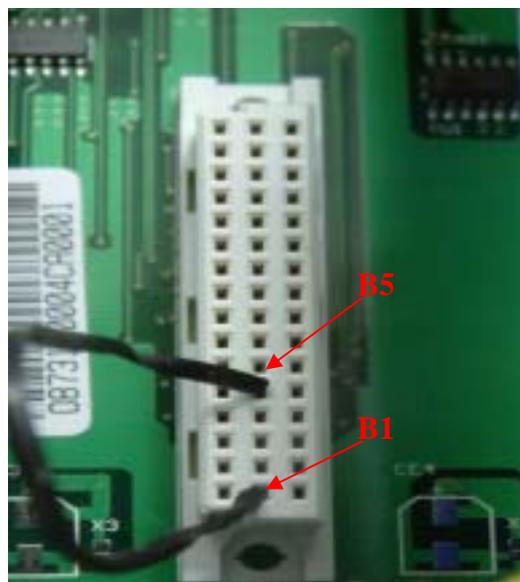
2. At PC, please execute Hyper terminal and check the debug message from WinCon-8000.(Baud rate: 38400bps, Data bit: 8, Parity :None, Stop bit: 1, Flow control: No) Once you see "Boot Me" message released from WinCon-8000, then you can start OS image upgrade via Platform builder.

```
SMC Ethernet Address: 00:0D:E0:F0:00:C8
SMC Ethernet card Config_Reg=2031
SMC Ethernet card Config_Base=1867
SMC Ethernet card Switch=3F
SMC config reg val: 00003231
SMC Reset complete2
-SMCInit
InitClock
Hit ENTER within 3 seconds to enter static IP address!InitDHCP():: Calling Proce
ssDHCP()
ProcessDHCP()::DHCP_INIT
Got Response from DHCP server, IP address: 192.168.100.36

ProcessDHCP()::DHCP IP Address Resolved as 192.168.100.36, netmask: 255.255.255.
0
Lease time: 10800 seconds
Got Response from DHCP server, IP address: 192.168.100.36
No ARP response in 2 seconds, assuming ownership of 192.168.100.36
+EbootSendBootmeAndWaitForTftp
Sent BOOTME to 255.255.255.255
Sent BOOTME to 255.255.255.255
Sent BOOTME to 255.255.255.255
Sent BOOTME to 255.255.255.255
```

Ask Ethernet to boot WinCon-8000