

Real6410 WinCE 6.0 Development manual

Ver 1.0

Date: 2010-05-20

Change History

Rev	Date	Description
V1.0	2010-5-20	The initial released Version

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Chapter 1 WinCE Overview

- Version : Wince6.0
- Source code:
 - stepldr, EBOOT Souce code, support usb download.
 - Wince 6.0 BSP
- Drivers in CD.
 - RTC driver
 - BINFS file system support
 - Hive register support
 - 256MB memory manager
 - 4 serial ports driver
 - network card driver.
 - Audio driver
 - LCD/touchscreen driver
 - Camera driver
 - TV-OUT driver
 - Power manager, SLEEP driver
 - SD card driver
 - USB HOST driver
 - USB OTG driver
 - Keypad/LED driver
 - WIFI driver
 - GPS driver
 - GPRS driver
- System characteristic
 - Windows Media Player 9.0 (supports MP3, MPEG2, MPEG4, WMV, WAV and so on).
 - - Picture explorer, wordpad.
 - - IE6 explorer.

Chapter 2 Install VS2005 and WinCE 6.0

Whether VS2005 and WinCE6.0 proper installed is very important to the product development. So when install the development environment please kindly follow our user manual, step by step.

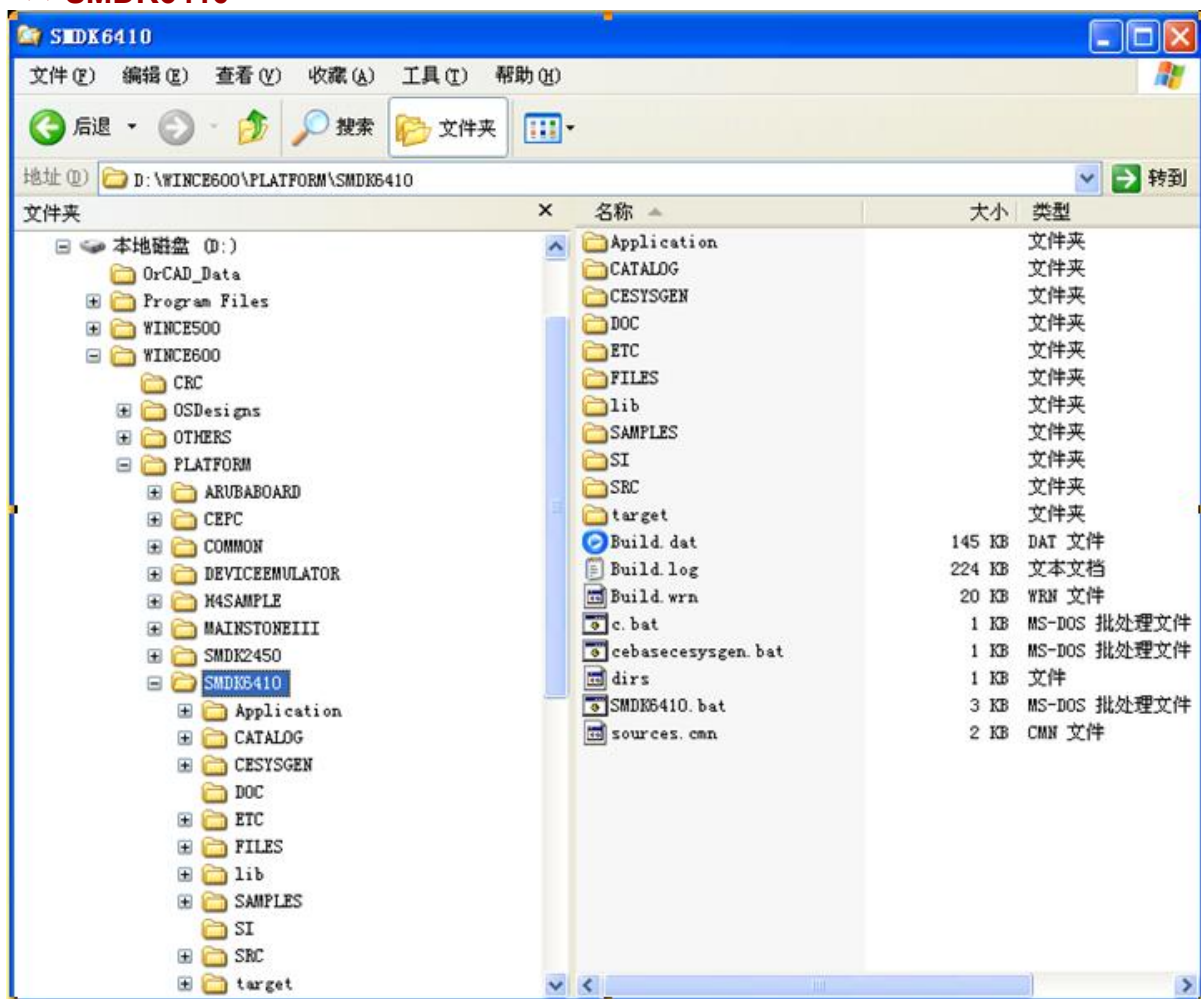
Real6410 development board support WinCE6.0 version, please refer to **CDROM\ User manual\ VS2005_WINCE6.0 installation guidance**.

Chapter 3 Install the BSP

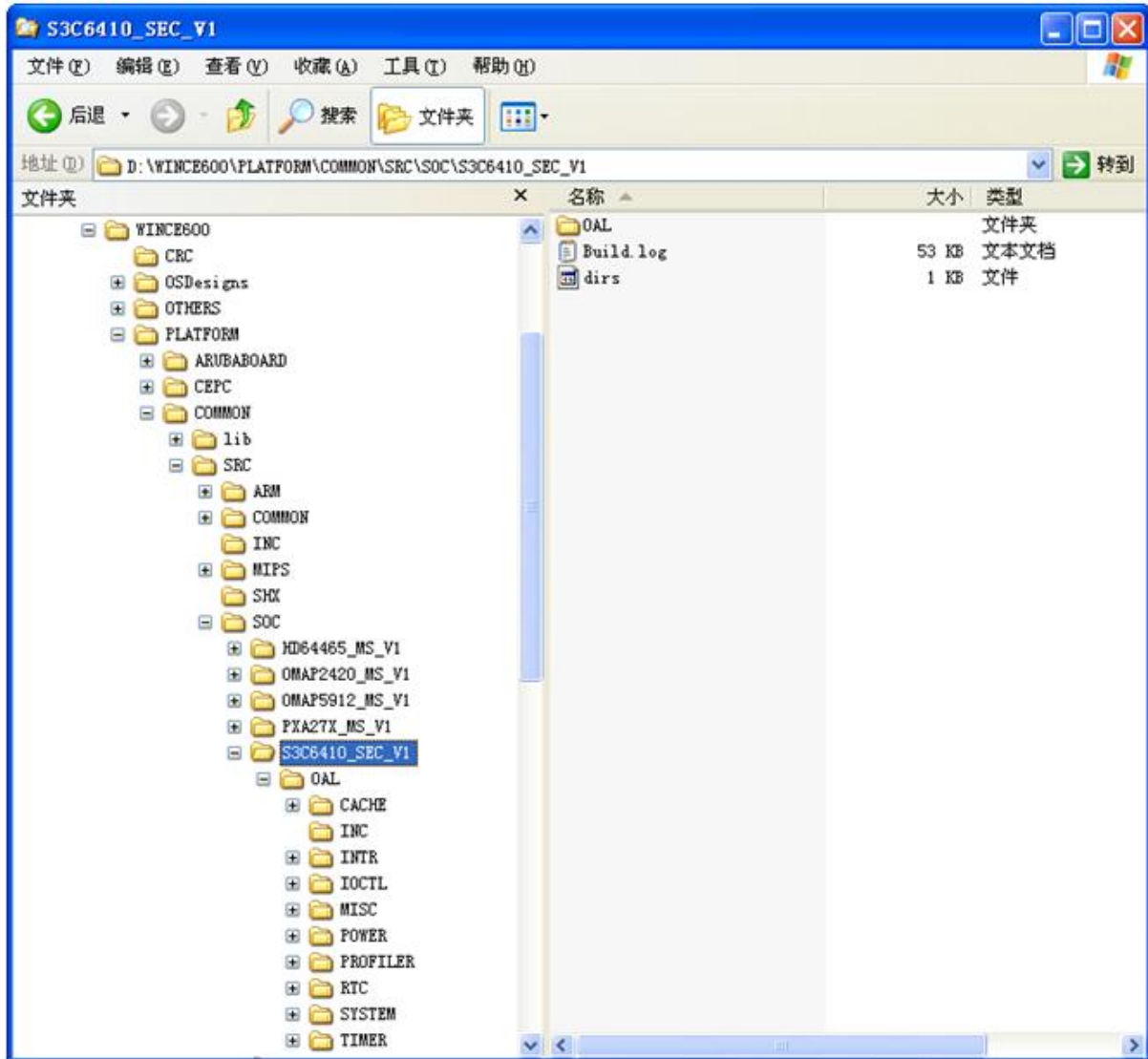
Real6410 development board WinCE6.0 BSP include two part: **S3C6410_SEC_V1** and **SMDK6410**

1. Copy **WinCE6.0\BSP\SMDK6410** to **D:\WINCE600\PLATFORM**
2. Copy **WinCE6.0\BSP\S3C6410_SEC_V1** to **D:\WINCE600\PLATFORM\COMMON\SRC\SOC**
3. Remove **S3C6410_SEC_V1** and **SMDK6410** read-only properties.
4. Please confirm **SMDK6410**, **S3C6410_SEC_V1** file has been copy to correct directory

-->>**SMDK6410**



-->>S3C6410_SEC_V1



Chapter 4 Customize the BSP

4.1 Compiling the example projects in CD-ROM

Step 1. Find the “**6410V2**” project folder under the directory “**WinCE6.0\project**” in CD-ROM. Copy this folder to the directory “**D:\WINCE600\OSDesigns**” and remove the read-only property (if there is no **OSDesigns** directory, you can create one.).

Step 2. Run “**VS2005**”, select “**File->open->Project/solution**” In the VS2005 menu, then load the file “**D:\WINCE600\OSDesigns\6410V2\6410V2.sln**” :

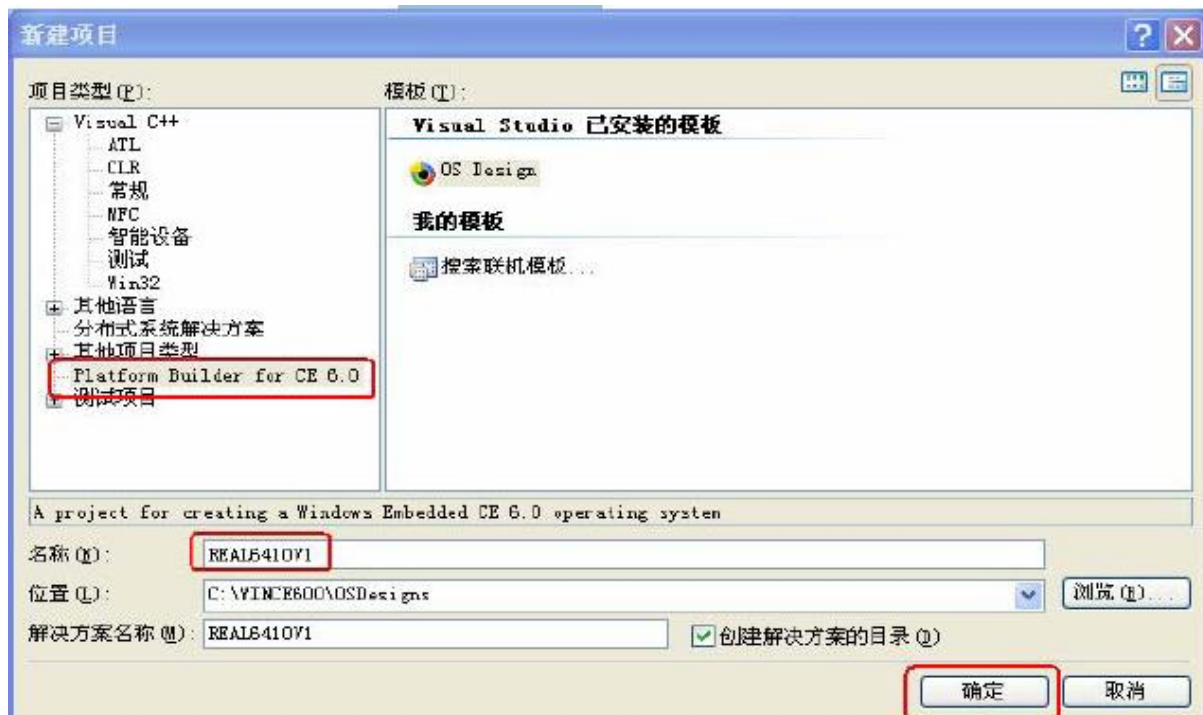
Step 3. Select Menu “**Build**”-> “**Advanced Build Commands**”-> “**Build and system**” (If this is the first time to create project, we suggest you to select “**Build**”-> “**Advanced Build Commands**” -> “**Clean Sysgen**”)

Step 4. After compiling, NK.bin has been generated under project directory:
“**D:\WINCE600\OSDesigns\6410V2\6410V2\ReIDir\Samsung_SMDK6410_Release**”.

4.2 make user project files

The following contents introduce how to customize the user project files:

1. Open **VS2005**
2. Create new project, Select **"File" -> "New" -> "Project"**
 - **"Project Types"** select **"Platform Builder for CE 6.0"**
 - **"Template"** select **"OS Design"**
 - **"Name:"** input Project name **"REAL6410V1"**
 - **"Location:"** Set default name **"D:\WICNE600\OSDesigns"**
 - **"Solution Name:"** input solution name **"REAL6410V1"**
 - Click **"OK"**

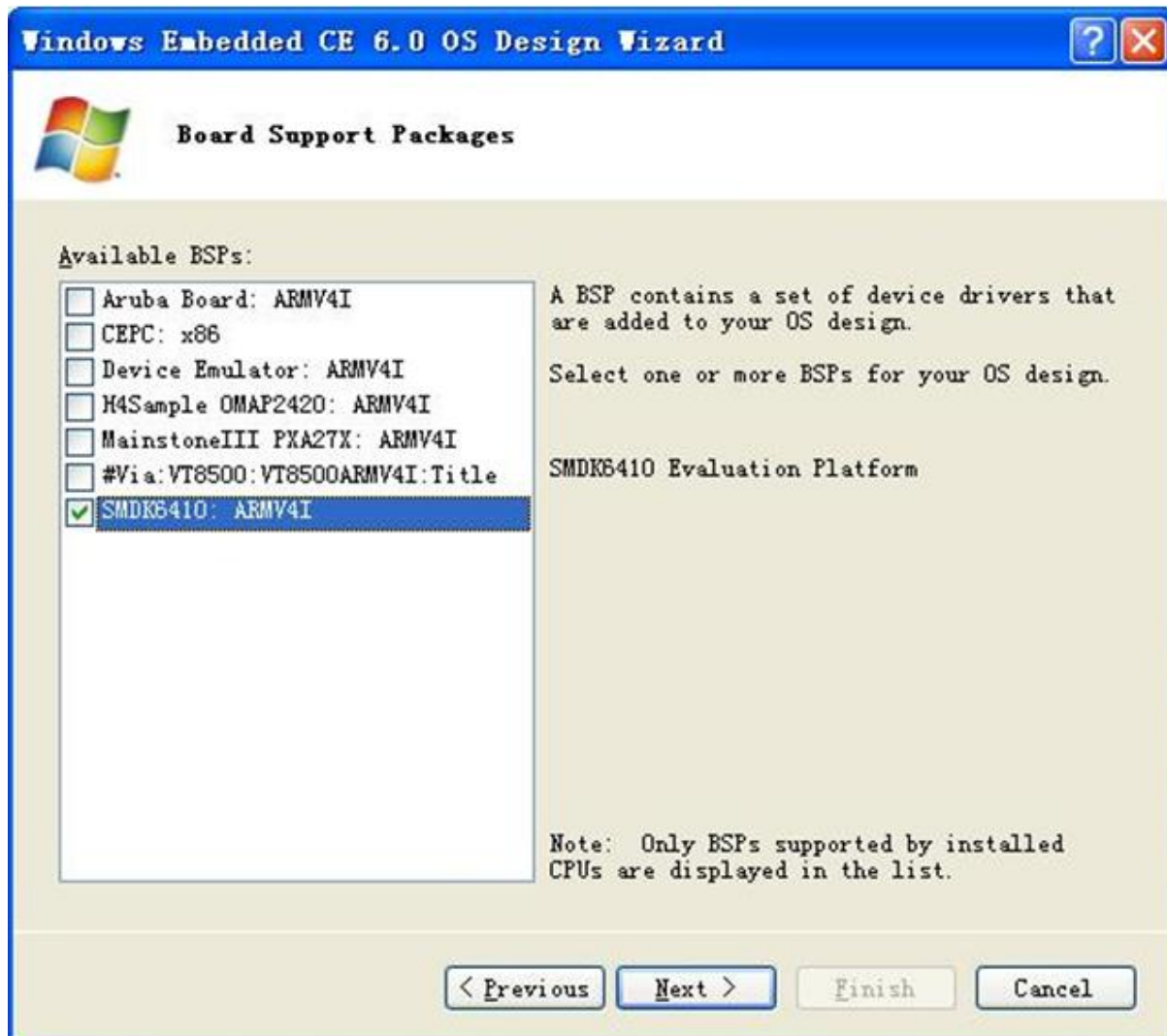


3. Click Next



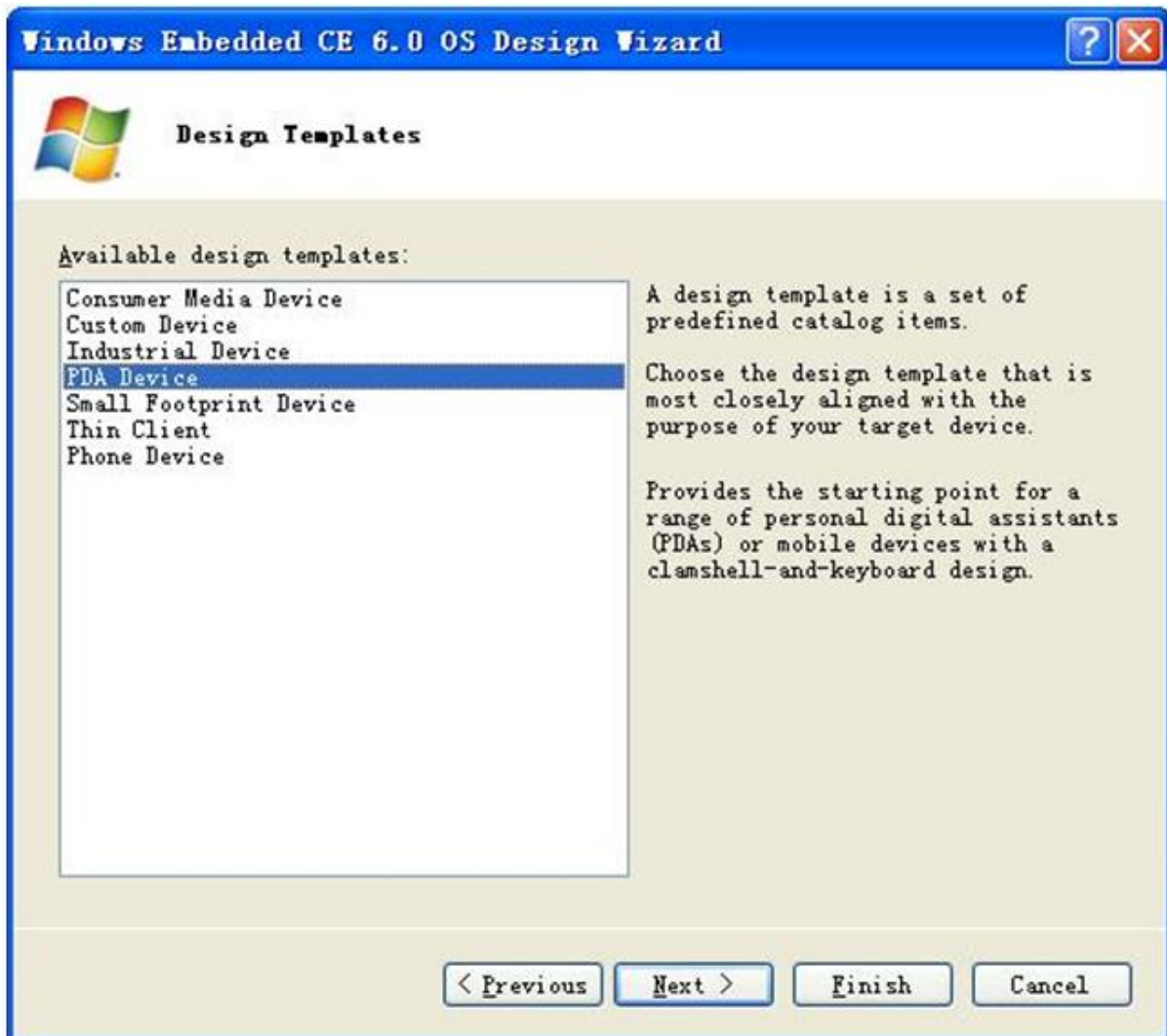
4. Select project BSP

- “Available BSPs:” select “SMDK6410: ARMV4I”
- Click “Next”

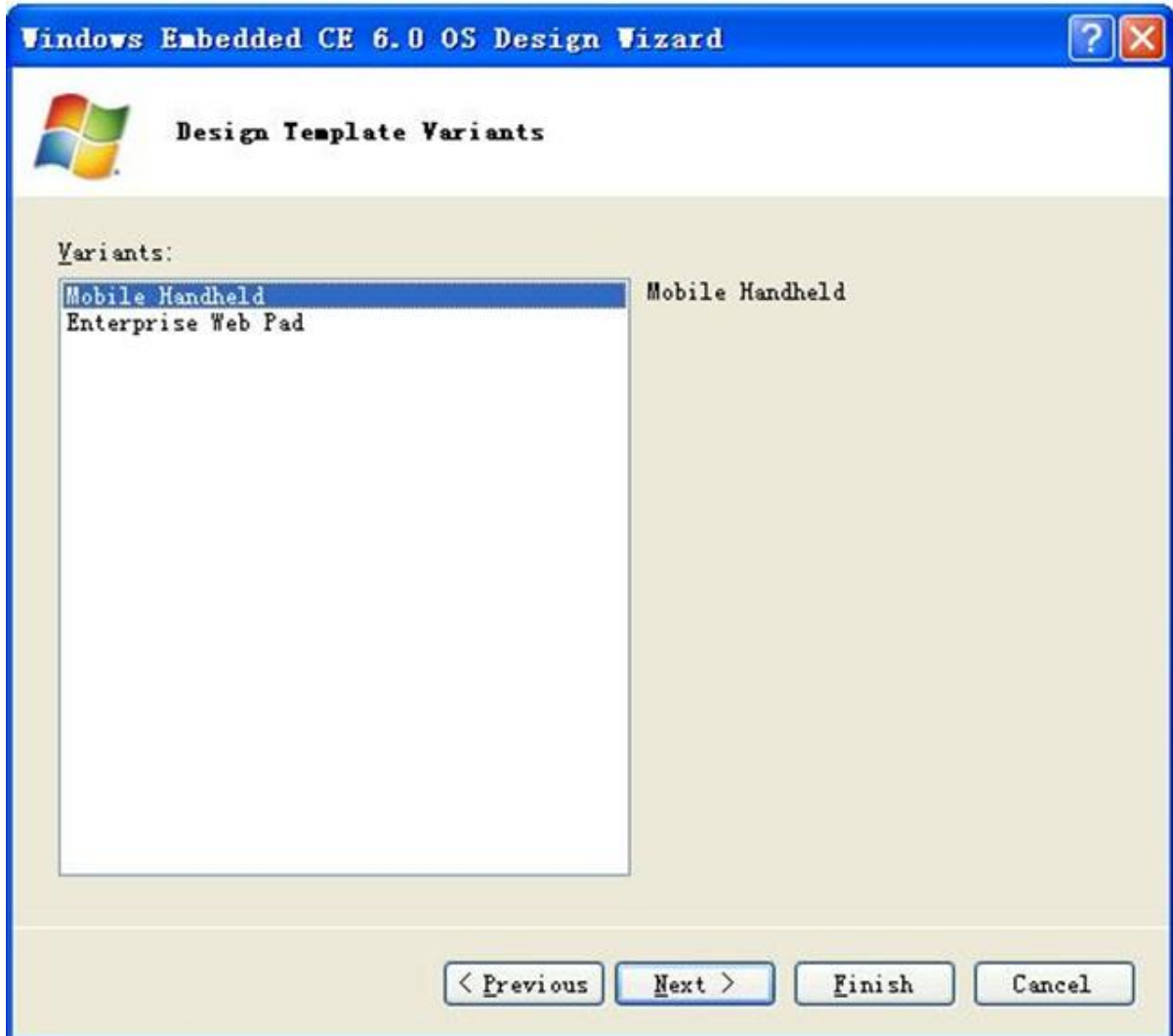


5. Select project template

- “ Available design templates:” Select “ PDA Device”
- Click “ Next”

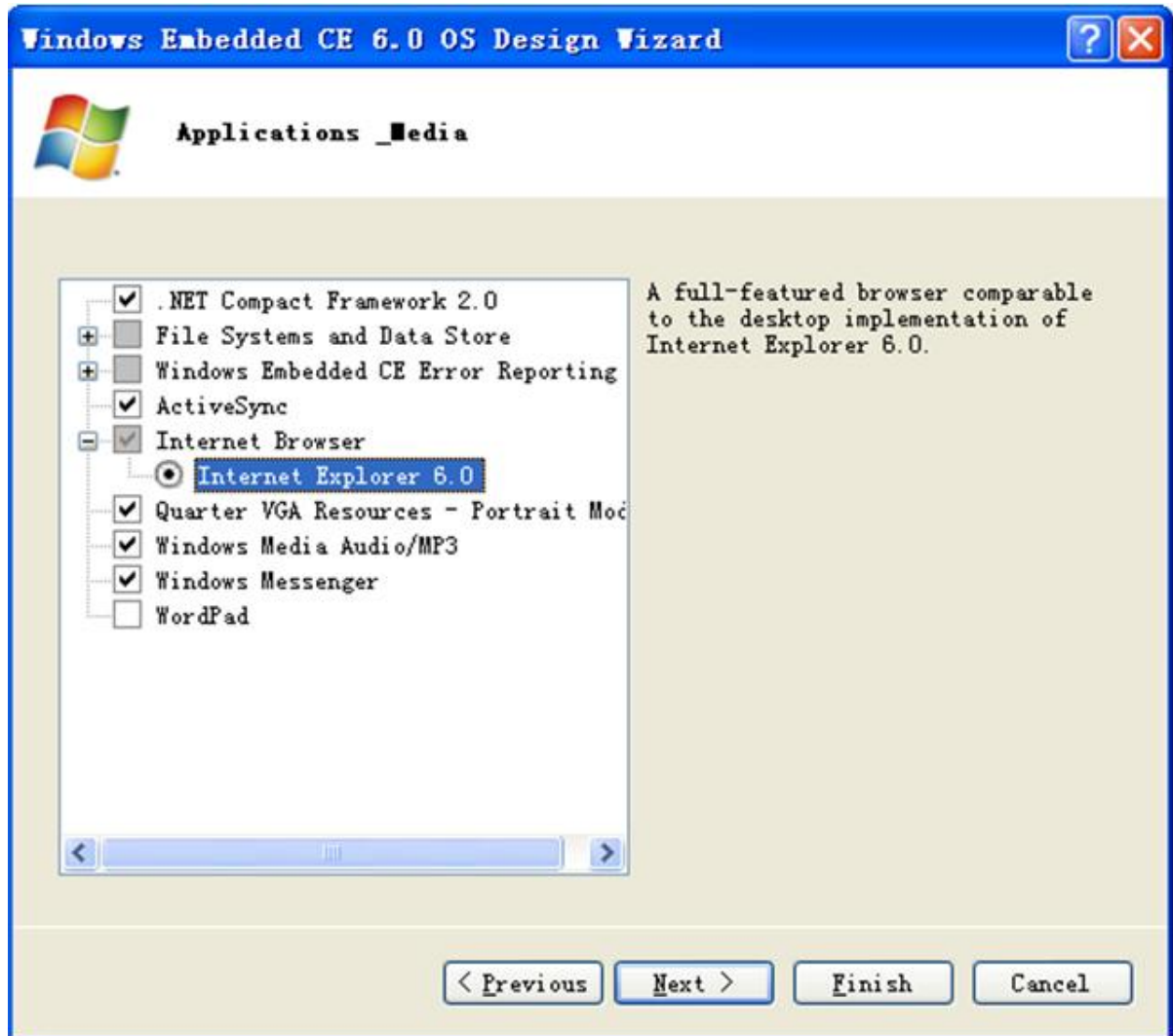


6. Select template type
- “**Variants:**” Select “**Mobile Handheld**”
 - Click “**Next**”

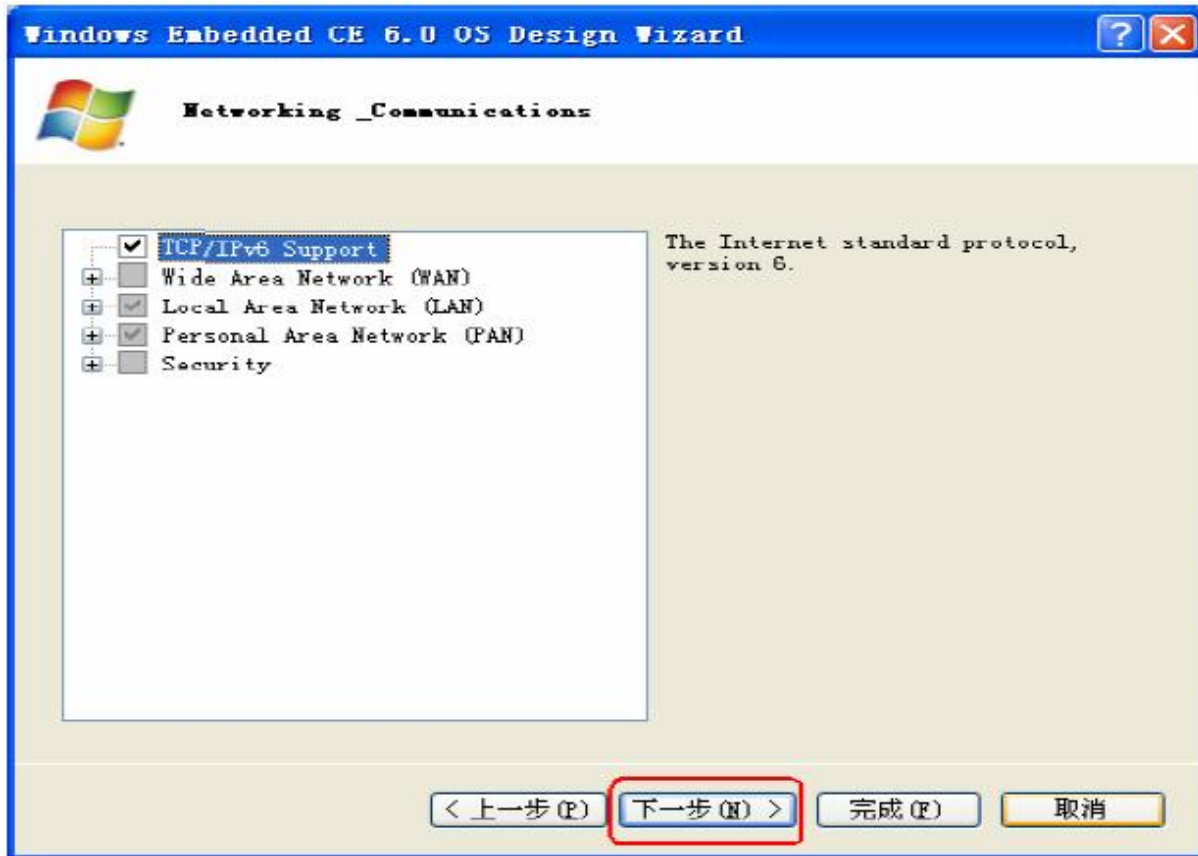


7. Add the application which is requirement by the user, below is the default application

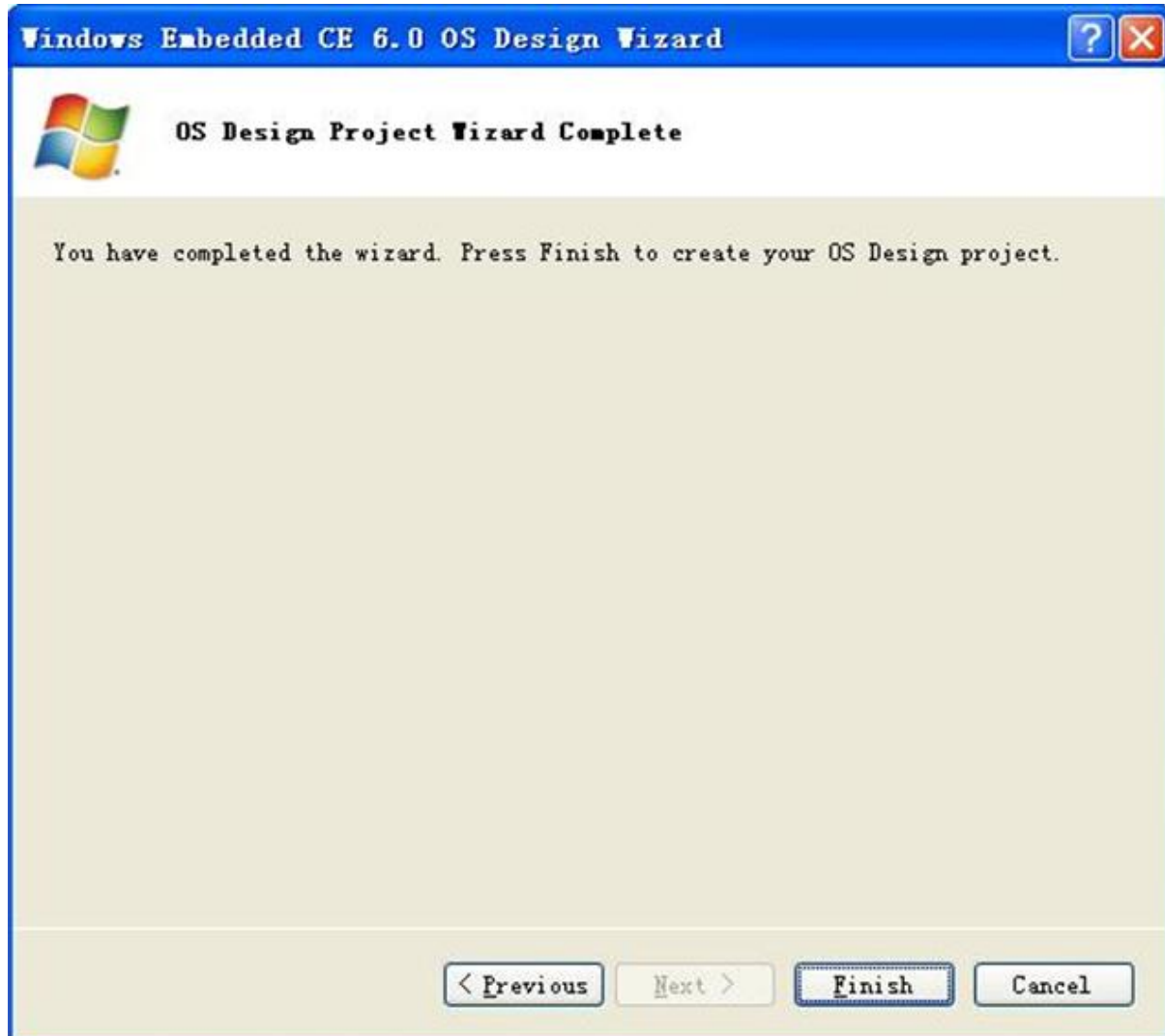
- "ActiveSync"
- "Internet Explorer 6.0"
- "Windows Media Audio/MP3"
- "Windows Messenger"
- "WordPad"
- Click "Next"



8. Add network application
- Customer can defaults
 - Click “Next”



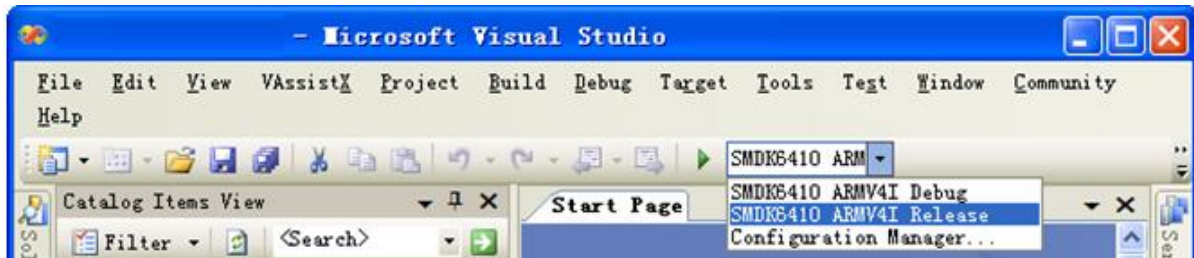
9. Click “**Finish**”



4.3 WinCE6.0 customization

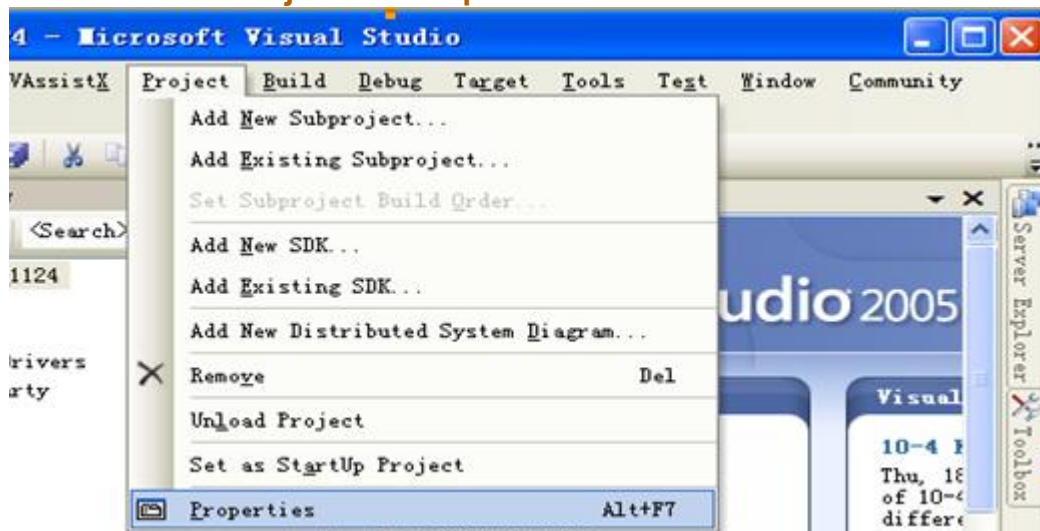
1. Set target kernel type

- Select “**SMDK6410 ARMV4I Release**”

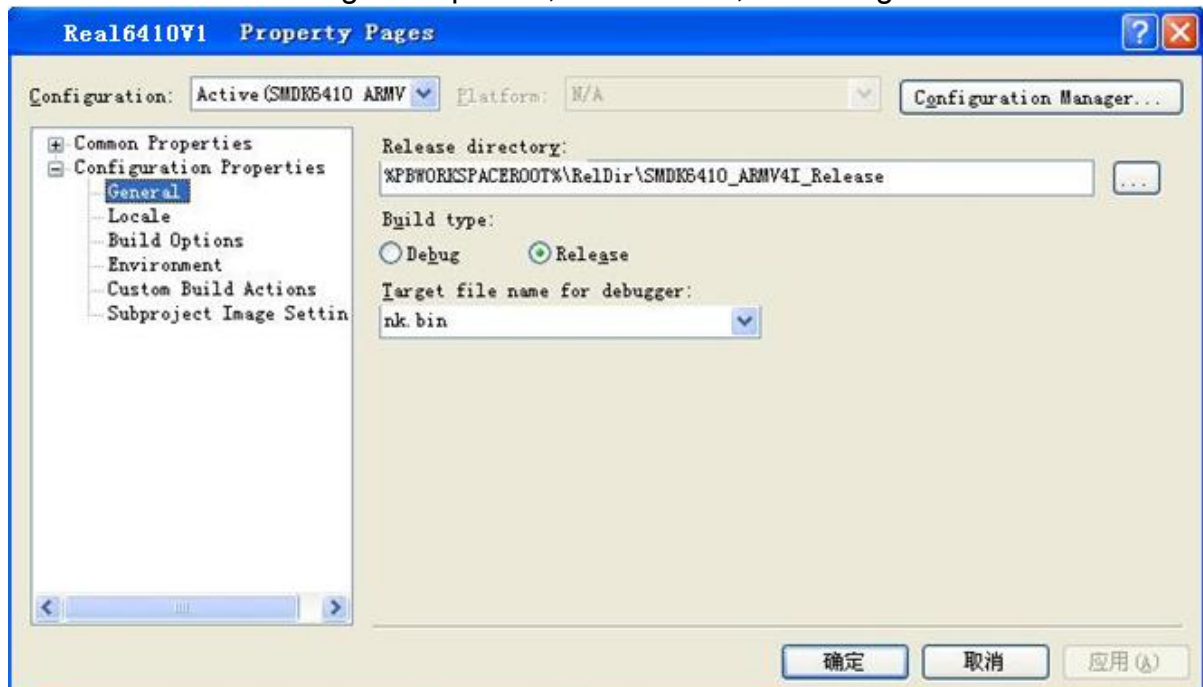


2. Set project properties

- Select menu **“Project”** -> **“Properties”**



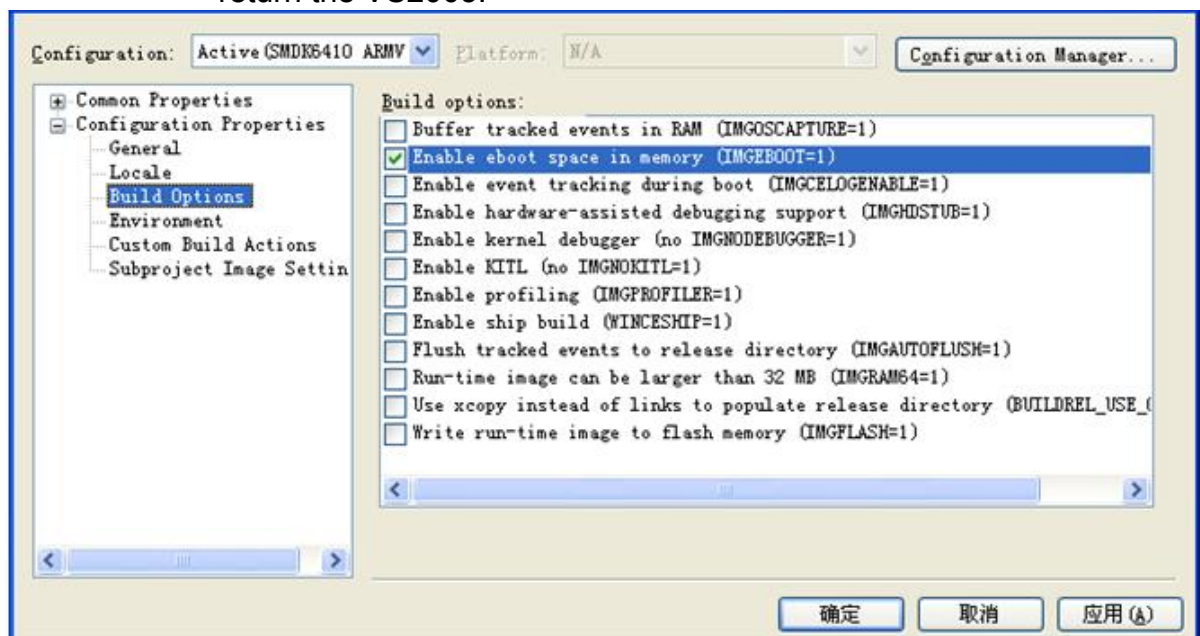
- **“General”** setting in Properties, default is ok, not change it.



- “**Locale**” setting set the system language here.
 - “**Clear All**” then select system language
 - Click “**English (American)**”
 - Click “**Chinese**” (Chinese)
 - Default locale: select “**English (American)**”

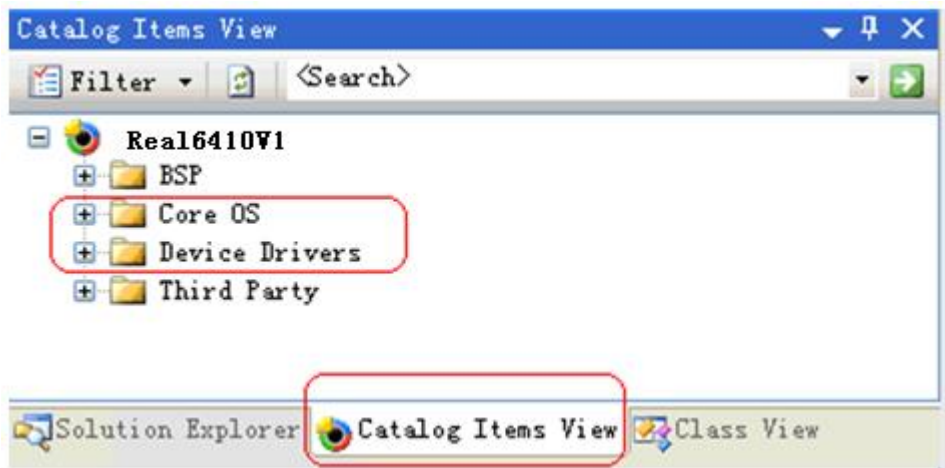


- “**Build Options**” setting
 - Select option according to below picture. Click “**Apply**” and “**OK**” to return the VS2005.

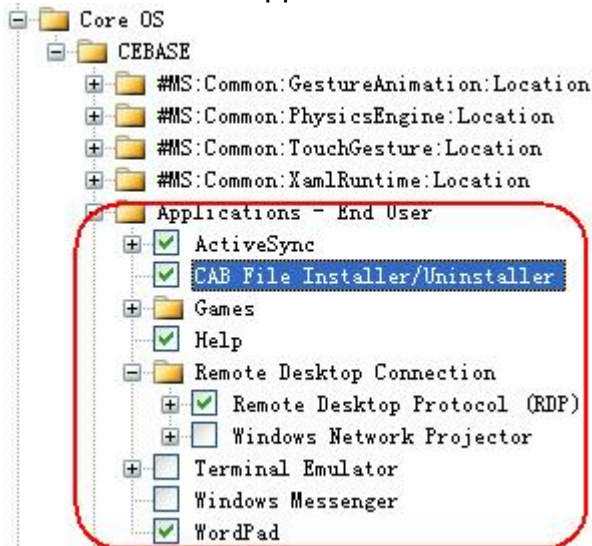


3. Add User Application-End

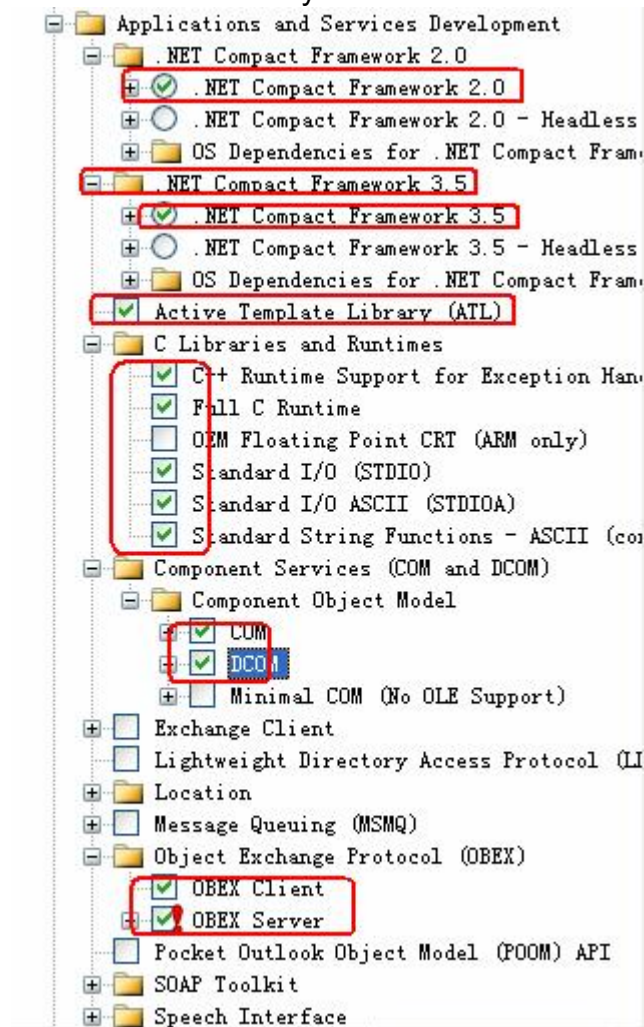
- Open “**Catalog Items View**” Windows



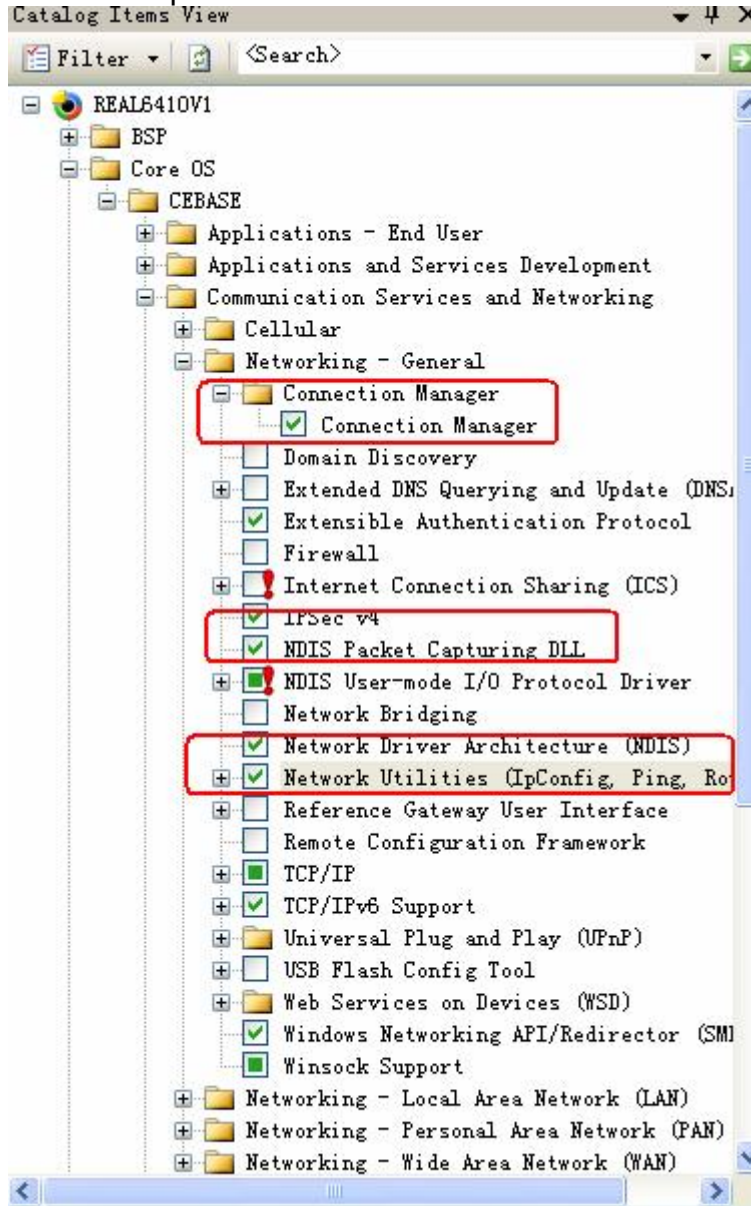
- Add user application as follow:

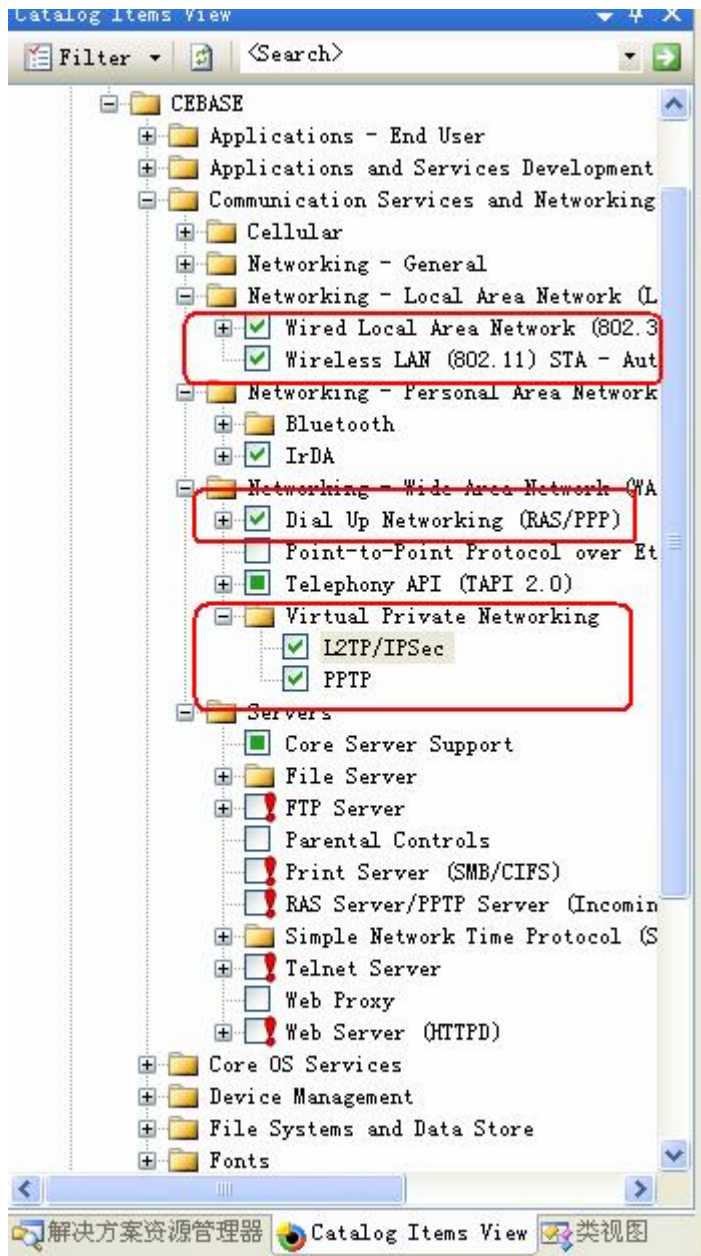


4. Add base class library for Application&ServiceS Development You can choose it by needs

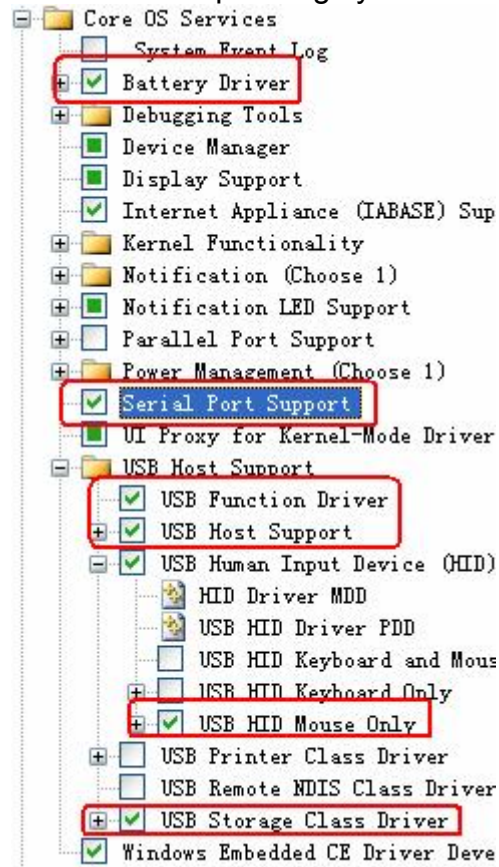


5. Net Component Selection



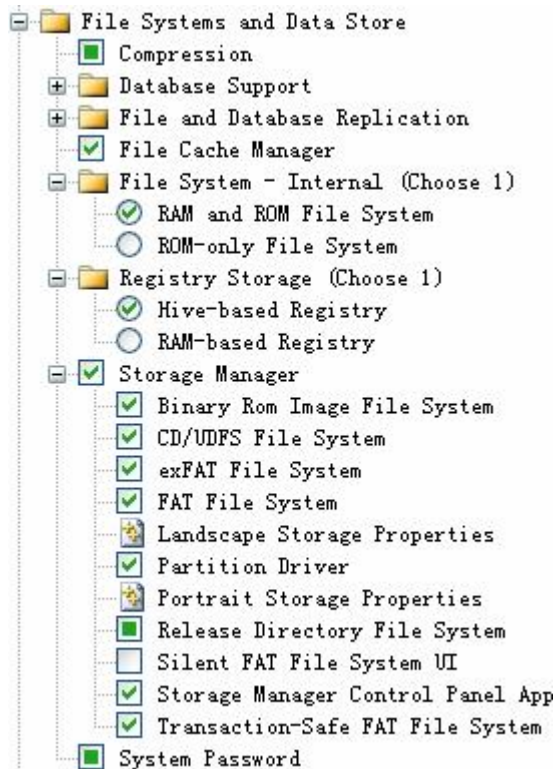


6. Select the operating system core service components

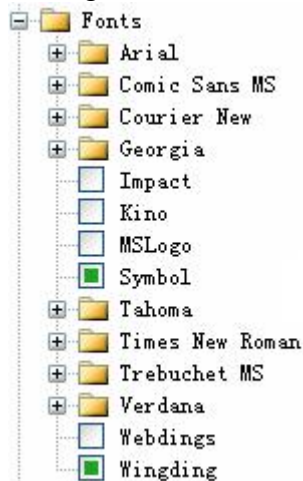


7. File System Component Selection

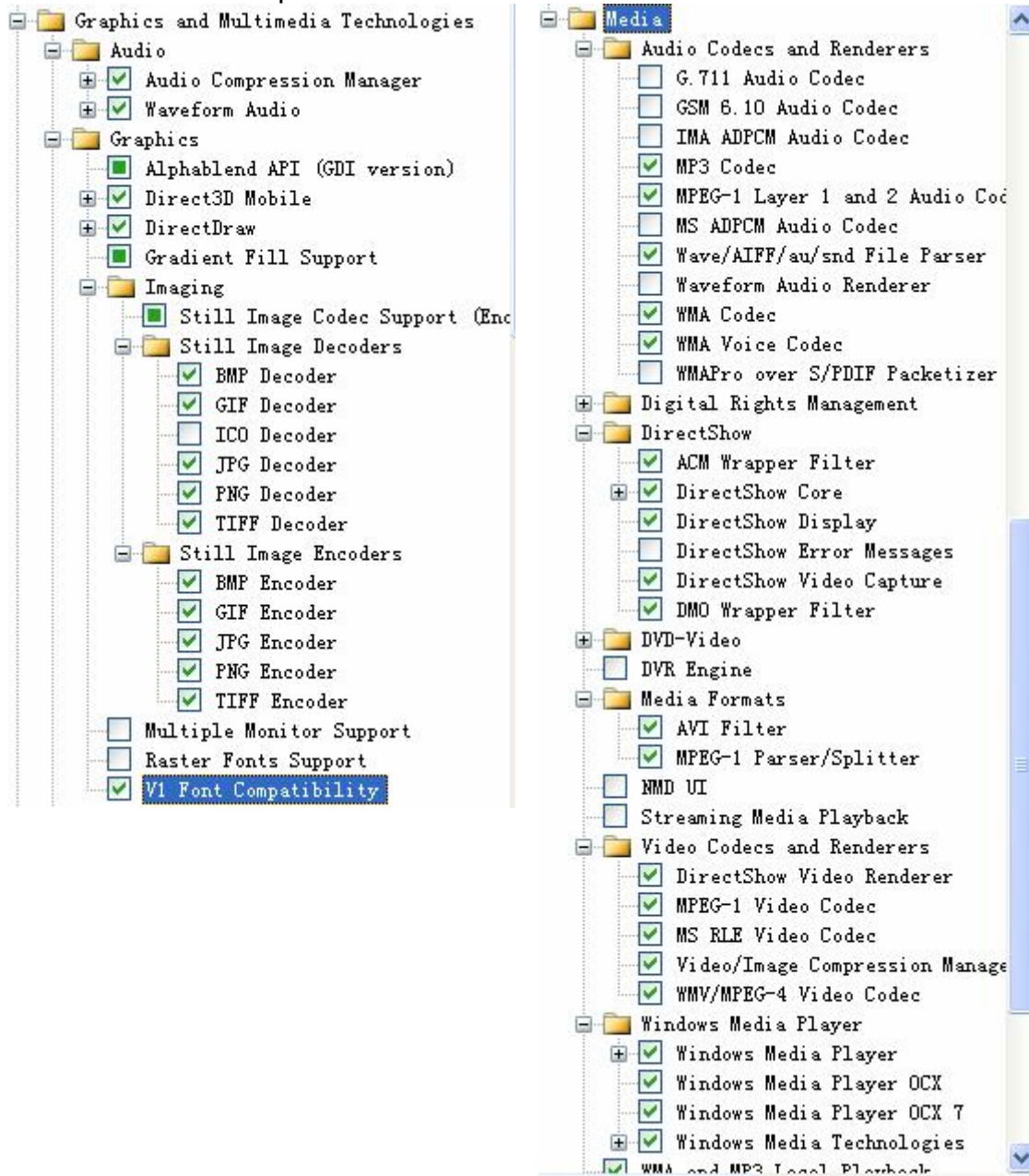
- based on RAM and ROM file system
- HIVE-based registry of its in ROM, power-down is not lost
- supported BINFS, CD / UDFS File System, ExFAT, FAT file system



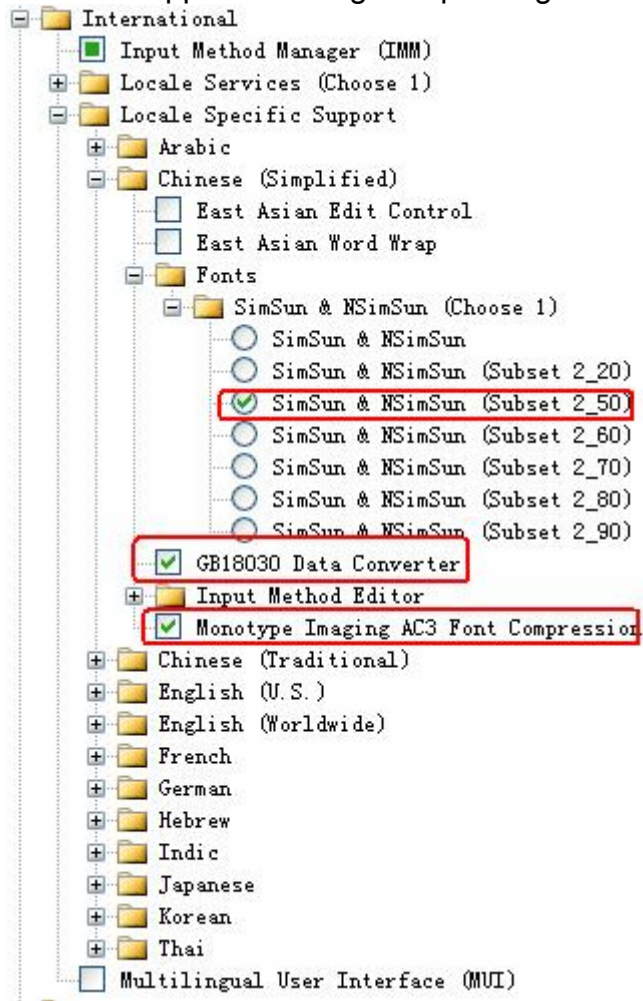
8. English font selection system, default it ok.



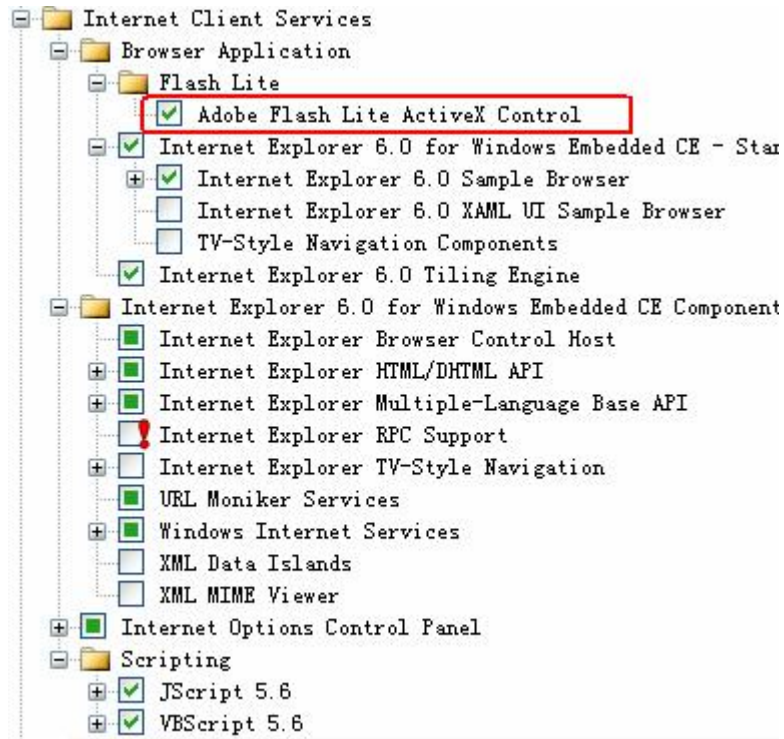
9. Add multimedia components



10. Font support non-English speaking countries



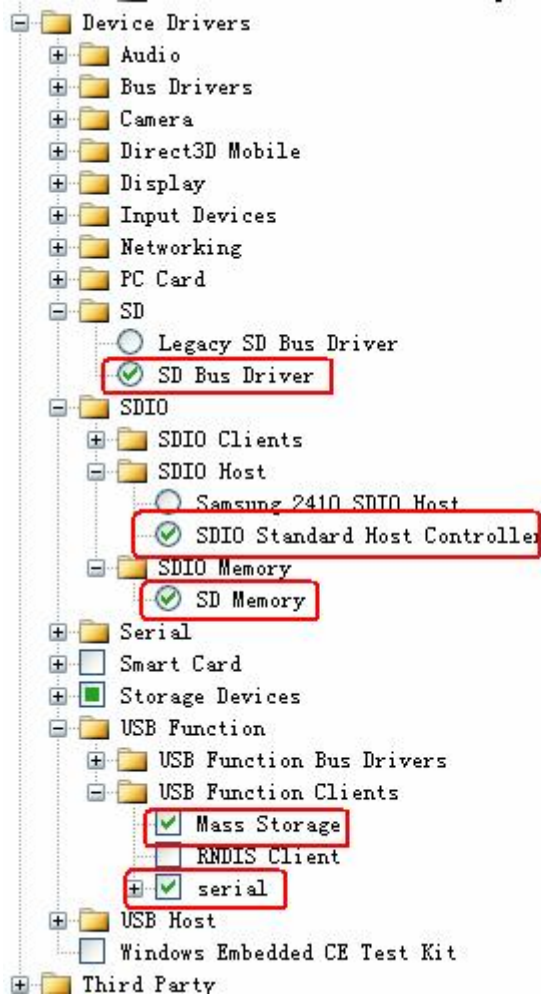
11. Select Internet Services



12. Shell and User Interface options

- Shell and User Interface
 - Graphics, Windowing and Events
 - Shell
 - User Interface
 - Accessibility
 - Common Controls
 - Common Dialog Support
 - Control Panel Applets
 - Controls Option B
 - Customizable UI
 - Windows XP-like Sample Skin
 - Gesture
 - Gesture Animation Support
 - Gesture Support for Win32 Controls
 - Single-Touch Gesture Recognition
 - Menu Tool Tip
 - Mouse
 - Network User Interface
 - Overlapping Menus
 - Quarter VGA Resources - Portrait Mode
 - Silverlight for Windows Embedded
 - Software Input Panel
 - Touch Screen (Stylus)

13. General-purpose-driven selection



14. In VS2005 menu, Select Menu **“Build”-> “Advanced Build Commands”->“Build and system”**

(If this is the first time to create project, we suggest you to select **“Build”-> “Advanced Build Commands” -> “ Clean Sysgen”**)

After compiling, NK.bin has been generated under project directory:

"D:\WINCE600\OSDesigns\6410V2\6410V2\ReIDir\Samsung_SMDK6410_Release".

Chapter 5 Burning the Image to Flash

5.1 File introduce

IROM_SD_EBoot.nb0 : The tools to create SD boot card

Block0.nb0 : Firstly Bootloader

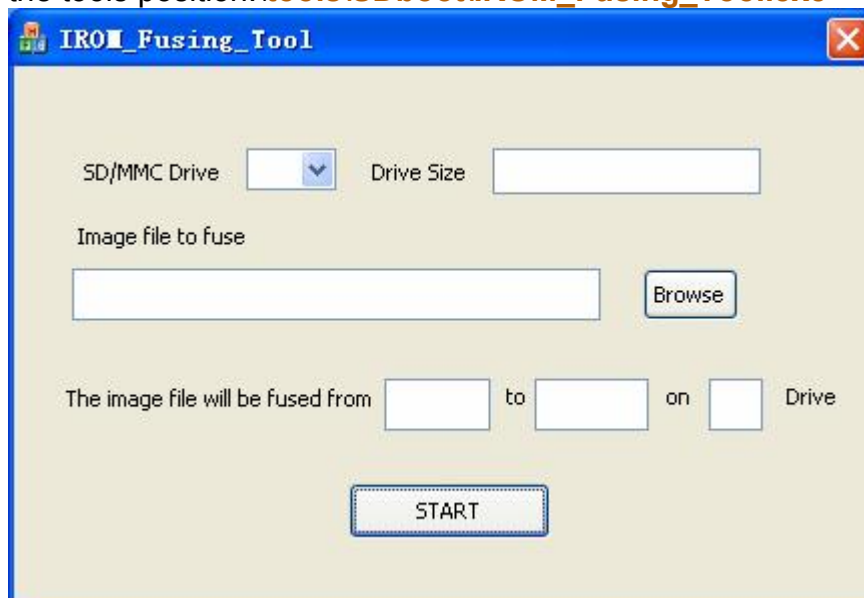
eboot.bin : Secondly Bootloader, booting NK

NK.bin : WinCE Image file

5.2 Create SD boot card

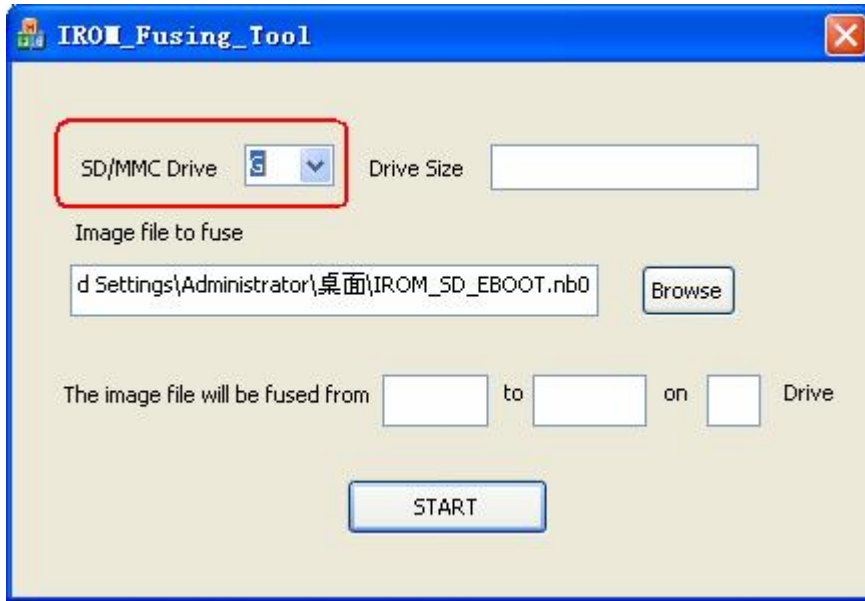
(1) Insert the SD card to USB reader under WinXP, and format the SD card to FAT32 format.

(2) Run the **IROM_Fusing_Tool.exe** tools,
the tools position: **\tools\SDboot\IROM_Fusing_Tool.exe**



3) burn bootloader

- Click "**Browse**", add the file **IROM_SD_EBOOT.nb0**,
The file position: **\tools\SDboot\IROM_SD_EBOOT.nb0**
- select SD card in **SD/MMC Drive** under tools.
- Click "START"



After burning the image successfully, there will be a pop-up windows “Fusing image done”, Click “Ok” to finish creating the SD card.

4) Copy file

- Copy block0.nb0 to SD card root folder
- Copy eboot.bin and NK.bin to SD card root folder

The Image Position: CD:\WinCE6.0\Image

5.3 Burning the image into flash by SD card

1) Insert the SD card to the Real6410.

2) Set the board for SD boot mode

- set the digital switch to boot from SD mode as follow:

boot mode / Pin	1	2	3	4	5	6	7	8
SD card boot	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Nand flash boot mode	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF

3) Connect the development board and PC via serial cable

4) Open the DNW software, and configure it(refer to the [Appendix A DNW software configuration](#))

5) Power on the board, then the DNW will print the message,


```

DHV v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0x50500000]
Serial Port USB Port Configuration Help
[INFO] FTL_INFO_SECTION_SIZE = 10
[INFO] LOG_SECTION_SIZE = 7
[INFO] FREE_SECTION_START = 426
[INFO] FREE_SECTION_SIZE = 17
[INFO] FREE_LIST_SIZE = 3
[INFO] DATA_SECTION_START = 443
[INFO] DATA_SECTION_SIZE = 1595
[INFO] FTL_AREA_START = 416
[INFO] FTL_AREA_SIZE = 1622
[FTL:MSG] FIL_Init [OK]
[FTL:MSG] BUF_Init [OK]
[VFL:INF] Init VFL (27-JULY-2009) : V1.00
[VFL:INF] CPUID(0x36410101)
[FTL:MSG] VFL_Init [OK]
[INFO] ++NAND_GetPlatformInfo
[INFO] --NAND_GetPlatformInfo
[FTL:MSG] VFL_Open [OK]
wNUM_BLOCKS : 2048(0x800)
TOC_Read
-TOC_Read
Press [ENTER] to launch image stored on boot media, or [SPACE] to enter boot
monitor.

Initiating image launch in 3 seconds.
  
```

6) Then within 3 second, press “Space” Key on PC keyboard, enter BOOT command line.

```

DHV v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0x50500000]
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: 5 seconds
4) Reset to factory default configuration
5) Startup image: DOWNLOAD NEW
6) Program disk image into SmartMedia card: Disabled
7) Program CS8900 MAC address (00:00:00:00:00:00)
8) KITL Configuration: ENABLED
A) Format FIL (Erase All Blocks)
B) Format VFL (Format FIL + VFL Format)
C) Format FTL (Erase FTL Area + FTL Format)
E) Erase Physical Block 0
F) Make Initial Bad Block Information (Warning)
T) MLC Low level test
D) Download image now
L) LAUNCH existing Boot Media image
R) Read Configuration
S) DOWNLOAD image now(SDMMC card)
W) Write Configuration Right Now

Enter your selection:
  
```

7) input A) B) C) to format the flash.
Please confirm the option 5), 6) is proper set as follow picture

```

DNW v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0xc000000]
Serial Port USB Port Configuration Help

0) IP address: 0.0.0.0
1) Subnet mask: 255.255.255.0
2) DHCP: Disabled
3) Boot delay: 5 seconds
4) Reset to factory default configuration
5) Startup image: LAUNCH EXISTING
6) Program disk image into SmartMedia card: Enabled
7) Program DM9000 MAC address (00:00:00:00:00:00)
8) KITL Configuration: ENABLED
A) Format FIL (Erase All Blocks)
B) Format UFL (Format FIL + UFL Format)
C) Format FTL (Erase FTL Area + FTL Format)
E) Erase Physical Block 0
F) Make Initial Bad Block Information (Warning)
T) MLC Low level test
D) Download image now(DM9000)
L) LAUNCH existing Boot Media image
R) Read Configuration
U) DOWNLOAD image now(USB)
W) Write Configuration Right Now
G) LCD type select

Enter your selection:
  
```

8) Download block0.nb0
• Press "s" , it will show as that:

```

DNW v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0x50500000]
Serial Port USB Port Configuration Help

B) Format UFL (Format FIL + UFL Format)
C) Format FTL (Erase FTL Area + FTL Format)
E) Erase Physical Block 0
F) Make Initial Bad Block Information (Warning)
T) MLC Low level test
D) Download image now
L) LAUNCH existing Boot Media image
R) Read Configuration
S) DOWNLOAD image now(SDMMC card)
W) Write Configuration Right Now

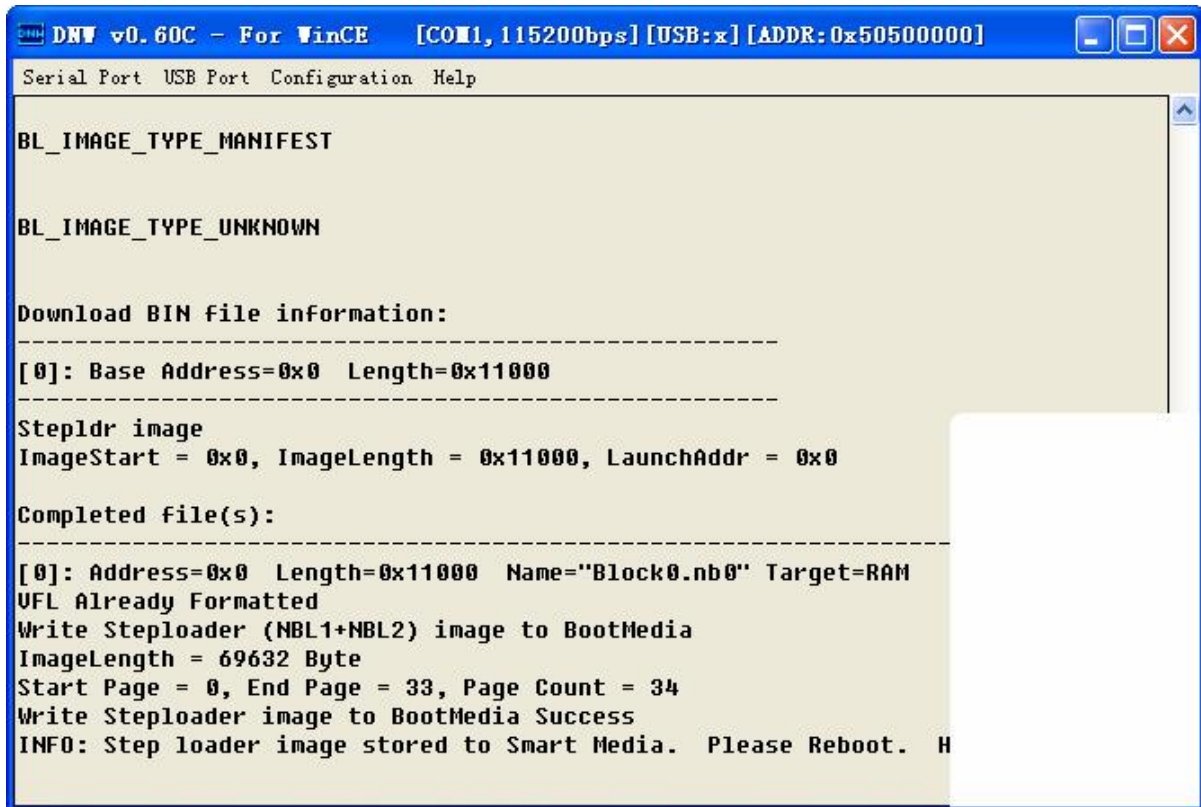
Enter your selection: s
System ready!
Preparing for download...
Please choose the Image on SD.

Choose Download Image:

0) block0.nb0
1) EBOOT.BIN
2) nk.bin
3) chain.lst

Enter your selection:
  
```

- Press "0" to download block0.nb0 in to flash.



9) Download eboot.bin

- Reset the board, and press space key to enter the boot command again.
- press "s" -> "1" to download the eboot into flash

10) Download nk.bin

- Reset the board, and press space key to enter the boot command again.
- press "s" -> "2" to download the Nk.bin into flash

11) then set the board boot from Nand flash, and boot it, it will boot into the wince system

- set the digital switch to boot from Nand boot mode as follow:

boot mode / Pin	1	2	3	4	5	6	7	8
SD card boot	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Nand flash boot	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF

Note: The board can support the USB and Net update mode, if you need the method, please contact us.

5.4 configure the LCD type for the board

The board can support more LCD type, you can choose it by boot command.

- Boot the board, and press space key to enter the boot command again,

```

DHW v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0xc000000]
Serial Port USB Port Configuration Help

0) IP address: 192.168.1.120
1) Subnet mask: 255.255.255.0
2) DHCP: Disabled
3) Boot delay: 5 seconds
4) Reset to factory default configuration
5) Startup image: LAUNCH EXISTING
6) Program disk image into SmartMedia card: Enabled
7) Program DM9000 MAC address (12:34:54:AB:DE:BC)
8) KITL Configuration: DISABLED
A) Format FIL (Erase All Blocks)
B) Format VFL (Format FIL + VFL Format)
C) Format FTL (Erase FTL Area + FTL Format)
E) Erase Physical Block 0
F) Make Initial Bad Block Information (Warning)
T) MLC Low level test
D) Download image now(DM9000)
L) LAUNCH existing Boot Media image
R) Read Configuration
U) DOWNLOAD image now(USB)
W) Write Configuration Right Now
G) LCD type select

Enter your selection:
  
```

- Press "G" , it will show as that

```

DHW v0.60C - For WinCE [COM1,115200bps] [USB:x] [ADDR:0xc000000]
Serial Port USB Port Configuration Help

5) Startup image: LAUNCH EXISTING
6) Program disk image into SmartMedia card: Enabled
7) Program DM9000 MAC address (12:34:54:AB:DE:BC)
8) KITL Configuration: DISABLED
A) Format FIL (Erase All Blocks)
B) Format VFL (Format FIL + VFL Format)
C) Format FTL (Erase FTL Area + FTL Format)
E) Erase Physical Block 0
F) Make Initial Bad Block Information (Warning)
T) MLC Low level test
D) Download image now(DM9000)
L) LAUNCH existing Boot Media image
R) Read Configuration
U) DOWNLOAD image now(USB)
W) Write Configuration Right Now
G) LCD type select

Enter your selection: g

1. WanXin WXCAT43
2. HannStar HSD050
3. INNOLUX AT070U83U.1
4. UGA Moudle

Enter LCD Select:
  
```

- Then choose the LCD type you used, such as press "1" to choose the 4.3"LCD. Then press "enter" and "W" to save the configure, reset the board again, you will see the LCD is ok.

```
4.3"LCD ---- 1. WanXin WXCAT43
5"LCD----- --2. HannStar HSD050
7"LCD-----3. INNOLUX AT070V83V.1
VGA -----4 VGA Moudle
```

Chapter 6 Wince application program test

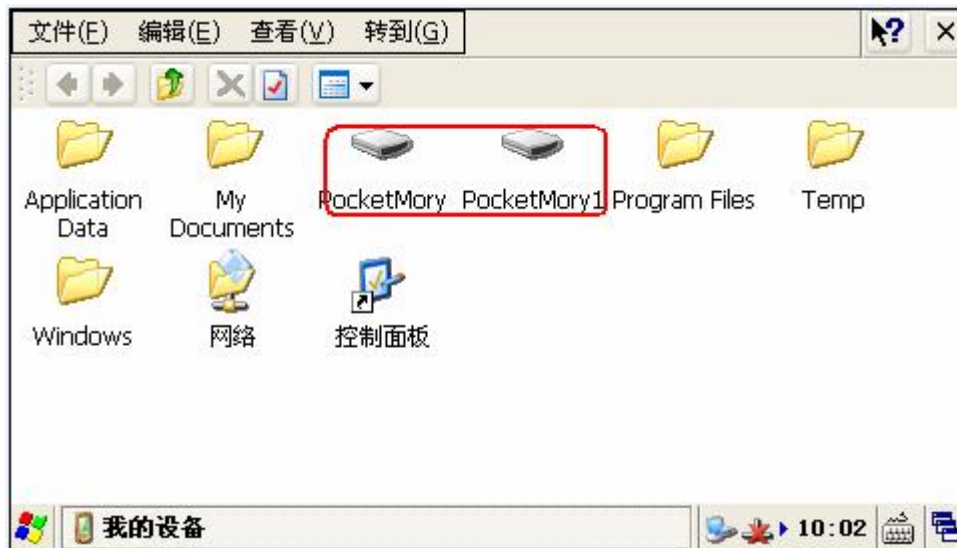
6.1 TouchScreen Calibration

Test Program position: **My Device-> control panel -> Stylus**

Enter **My Device-> control panel**, and click **Stylus** to run the Stylus properties tools, and click **calibration** to Recalibrate it.

6.2 ResidentFlash Flash use method

The board have two ResidentFlash, you can enter the MyDevice to use it, these size is 31.7MB and 763.9MB.



6.3 use ActiveSync software

ActiveSync is a software to sync the data between PC to the board.

1) install ActiveSync

- Click the ActiveSync software in the **/tools/ActiveSync/ActiveSync.exe**, then click **Next -Next** to install it.

2) Connect the USB data cable with the development board and the PC, after power on enters the system, WinCE will create synchronous connection automatically.

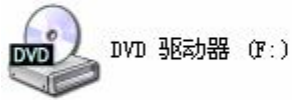
If you don't install the ActiveSync driver, you can find it in the folder: **/ tools/ ActiveSync/usb driver**, When find the new device, install it.

3) Then you will find the My device in the computer

硬盘



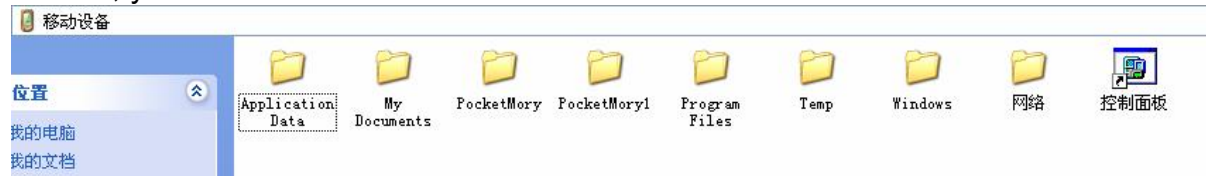
有可移动存储的设备



其他



Enter it, you will find that:



6.4 Record Function Test

There is the MIC in the board, We can use it for Recording Test.

Test Program position: **My Device-> Windows -> Record.exe**

This program was provided by Samsung, so we don't provide the program.

Double-click the **Record.exe**,

Then click follow button to begin Recording.



Then click follow button to stop Recording:



You can find the Record0.wav file in the program as follow:



This file Record0.wav will be saved in the folder: **My Device**
Then we can click the follow button to play it:



6.5 Ethernet port test

Test Program positon: **My Device-> control panel-> Network and Dial-up Co...**



Doble click it, and it will show:



The device "**DM9CE1**" is the net device, double click it and configure it as PC. Then you can surf the net by IE explore.

6.6 WIFI test

The WIFI module is the option module, when you buy it, you can test it as follow: When you boot the board, it will show the dialog automatic, then you can choose the configure WIFI param, and input the password, it will link the net automatic by WIFI.



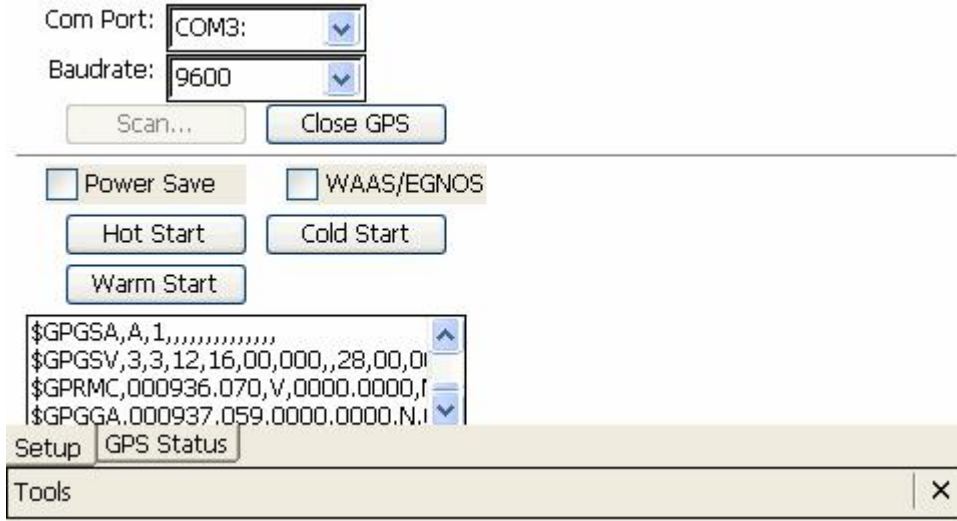
6.7 GPS module test

The GPS module is the option module, when you buy it, you can test it as follow: Link the GPS antenna to GPS module, and put the antenna on the place that can find the positioning signal.

Test Program positon: **My Device-> Windows-> GPScmd.exe**

This test software is the third-party software, the company did not source code

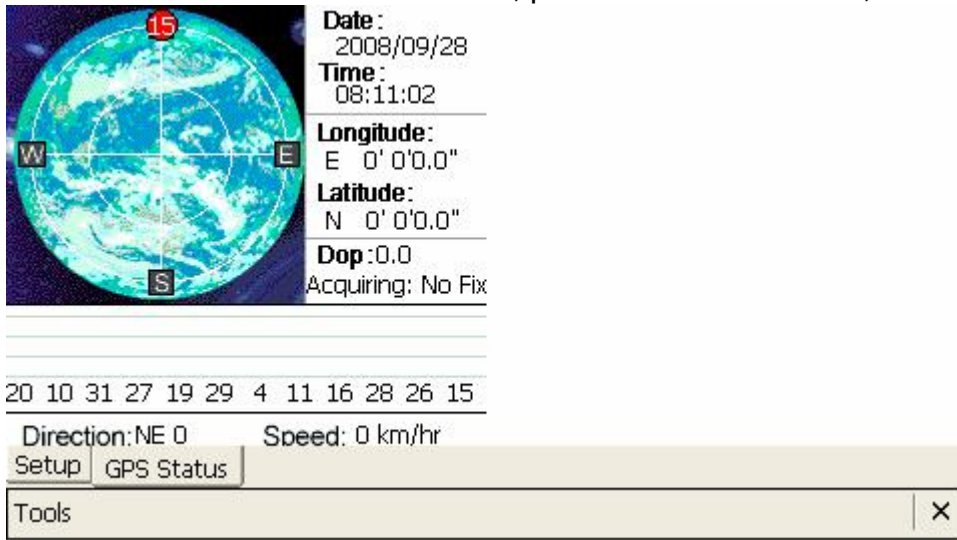
Click the GPScmd.exe, then it will show:



The GPS module was linked by COM3, and the baud rate is 9600 , So choose it:

- Com Port: **COM3**
- Baudrate: **9600**

And then click the cold start to run it, please wait some times, it will show:



6.7 Camera Test

This test software is the third-party software, the company did not source code.

And the software was base on the DirectDraw, you should add the DirectDraw to project when you build the system.

Insert the Camera module into the board, note the Pin Order and the camera in the board will face the LCD direction.

Test Program positon: **My Device-> Windows->CameraDshowApp.exe**

Run the **CameraDshowApp.exe**, and it will show :



Choose **CAM1**, and then click **OK**, it will show:



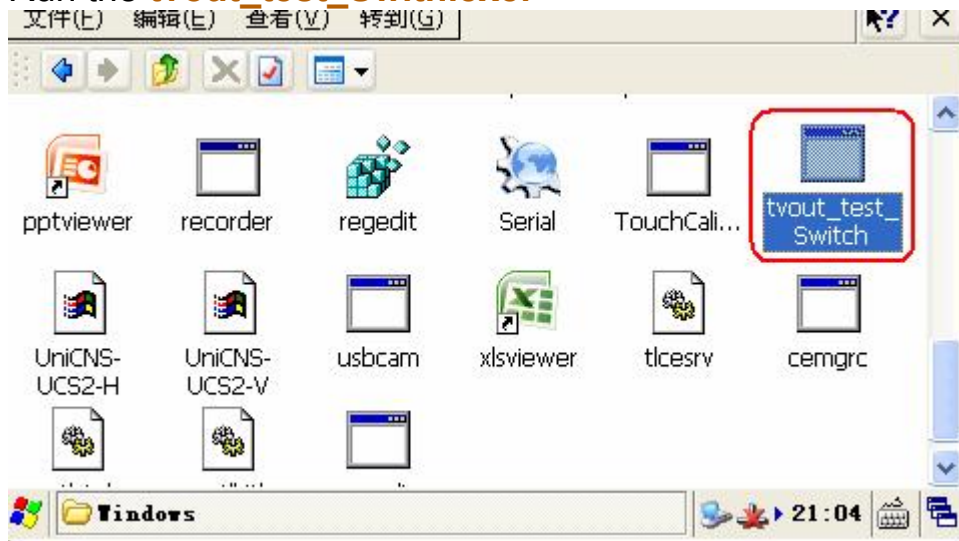
6.7 GSM phone Test



6.7 TV-OUT Test

The board have two interface: S interface and AV interface, please link one to your TV.

Test Program positon: **My Device-> Windows->tvout_test_Swith.exe**
Run the **tvout_test_Swith.exe**.



And it will show the system in TV, but note that it can't be exit from the TV display except reboot the board.

Chapter 7 WinCE Memory mapping table

7.1 Virtual memory mapping table

SMDK6410 virtual address to physical address mapping table as shown below:

From this table, we can know the memory, net, other cs, IO mapping address, the format for the table is :

virtual address	physical address	Size
-----------------	------------------	------

g_oalAddressTable

```

; mDDR 128 MB
; DCD 0x80000000, 0x50000000, 64 ; 64 MB DRAM
[ SMDK6410_XSD
DCD 0x80000000, 0x60000000, 64 ; 64 MB DRAM
]
DCD 0x80000000, 0x50000000, 256 ; 256 MB DRAM
]
DCD 0x90000000, 0x70000000, 4 ; SROM SFR
; DCD 0x90100000, 0x70100000, 1 ; OneNAND SFR
; DCD 0x90200000, 0x70200000, 1 ; NFCOM SFR
; DCD 0x90300000, 0x70300000, 1 ; CFCOM SFR
DCD 0x90400000, 0x71000000, 4 ; TZIC0
; DCD 0x90500000, 0x71100000, 1 ; TZIC1
; DCD 0x90600000, 0x71200000, 1 ; INTC0
; DCD 0x90700000, 0x71300000, 1 ; INTC1
DCD 0x90800000, 0x72000000, 1 ; FIMG-3DSE SFR
; DCD 0x90800000, 0x73000000, 2 ; ETB Memory
; DCD 0x90900000, 0x73100000, 1 ; ETB Registers
DCD 0x90A00000, 0x74000000, 2 ; Indirect Host I/F
; DCD 0x90B00000, 0x74100000, 1 ; Direct Host I/F (MODEM)
DCD 0x90C00000, 0x74300000, 2 ; USB Host
; DCD 0x90D00000, 0x74400000, 1 ; MDP I/F
DCD 0x90E00000, 0x75000000, 2 ; DMA0
; DCD 0x90F00000, 0x75100000, 1 ; DMA1
DCD 0x91000000, 0x76100000, 3 ; 2D Graphics
; DCD 0x91100000, 0x76200000, 1 ; TV Encoder
; DCD 0x91200000, 0x76300000, 1 ; TV Scaler
DCD 0x91300000, 0x77000000, 3 ; Post Processor
; DCD 0x91400000, 0x77100000, 1 ; LCD Controller
; DCD 0x91500000, 0x77200000, 1 ; Rotator
DCD 0x91600000, 0x78000000, 1 ; Camera I/F
DCD 0x91700000, 0x78800000, 1 ; JPEG
DCD 0x91800000, 0x7C000000, 5 ; USB OTG LINK
; DCD 0x91900000, 0x7C100000, 1 ; USB OTG PHY SFR
DCD 0x91A00000, 0x7C200000, 1 ; SD-MMC Controller 0
DCD 0x91B00000, 0x7C300000, 1 ; SD-MMC Controller 1
; DCD 0x91C00000, 0x7C400000, 1 ; SD-MMC Controller 2
DCD 0x91D00000, 0x7D000000, 13 ; D&I (Security Subsystem Config) SFR
; DCD 0x91E00000, 0x7D100000, 1 ; AES_RX
; DCD 0x91F00000, 0x7D200000, 1 ; DES_RX
; DCD 0x92000000, 0x7D300000, 1 ; HASH (SHA/PRNG)_RX

```

256MB memory

```

;DCD 0x92100000, 0x7D400000, 1 ; RX_FIFO SFR
;DCD 0x92200000, 0x7D500000, 1 ; AES_TX
;DCD 0x92300000, 0x7D600000, 1 ; DES_TX
;DCD 0x92400000, 0x7D700000, 1 ; HASH(SHA/PRNG)_TX
;DCD 0x92500000, 0x7D800000, 1 ; TX_FIFO SFR
;DCD 0x92600000, 0x7D900000, 1 ; RX_FIFO
;DCD 0x92700000, 0x7DA00000, 1 ; TX_FIFO
;DCD 0x92800000, 0x7DB00000, 1 ; SDMA0
;DCD 0x92900000, 0x7DC00000, 1 ; SDMA1
DCD 0x92A00000, 0x7E000000, 1 ; DMC, MFC, WDT, RTC, HSI TX/RX, Keypad,
DCD 0x92B00000, 0x7F000000, 1 ; TZPC, AC97, I2S, I2C, UART, PWM, IrDA,

DCD 0x93000000, 0x00000000, 16 ; 32 MB SROM(SRAM/ROM) BANK 0

; nCS1~nCS5, nCS0
;DCD 0x94000000, 0x18000000, 32 ; 32 MB SROM(SRAM/ROM) BANK 1 = DM9000
;DCD 0x96000000, 0x20000000, 32 ; 32 MB SROM(SRAM/ROM) BANK 2
;DCD 0x98000000, 0x28000000, 32 ; 32 MB SROM(SRAM/ROM) BANK 3
;DCD 0x9A000000, 0x30000000, 32 ; 32 MB SROM(SRAM/ROM) BANK 4
;DCD 0x9C000000, 0x38000000, 32 ; 32 MB SROM(SRAM/ROM) BANK 5
;DCD 0x9E000000, 0x00000000, 32 ; 32 MB SROM(SRAM/ROM) BANK 0

DCD 0x00000000, 0x00000000, 0 ; end of table

```

This table position:

X:\WINCE600\PLATFORM\SMDK6410\SRC\INC\oemaddrtab_cfg.inc

7.2 WINCE distributed memory

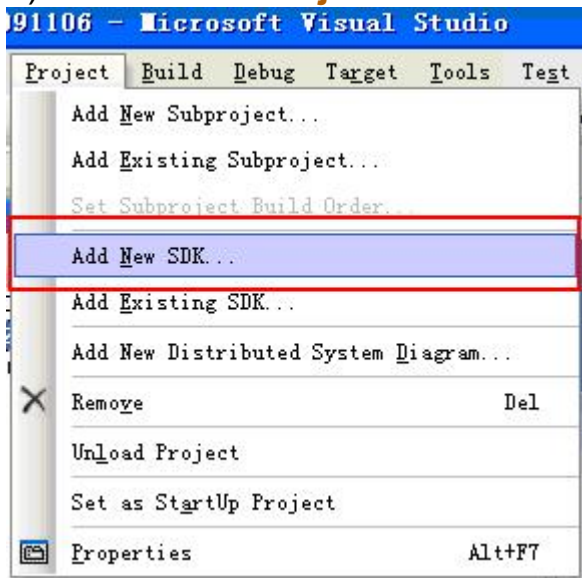
Region	Address	Size (B)	Details
AUD_DMA	80002000	2000	Audio DMA
TEMPS	80010000	10000	TEMP data
ARGS	80020800	800	boot param
DBGSER_DMA	80022000	2000	Debug serial DMA
SER_DMA	80024000	2000	Serial DMA
IR_DMA	80026000	2000	IR DMA
SLEEP	80028000	2000	Sleep data save
EDBG	80030000	20000	Debug using
NK	80100000	128M	NK using
CMM	86500000	300000	CMM Using
DISPLAY	86800000	00C00000	Display using
MFC_JPEG	87400000	00C00000	MPEG decode using

Chapter 8 Export SDK and remote link

8.1 Export the SDK

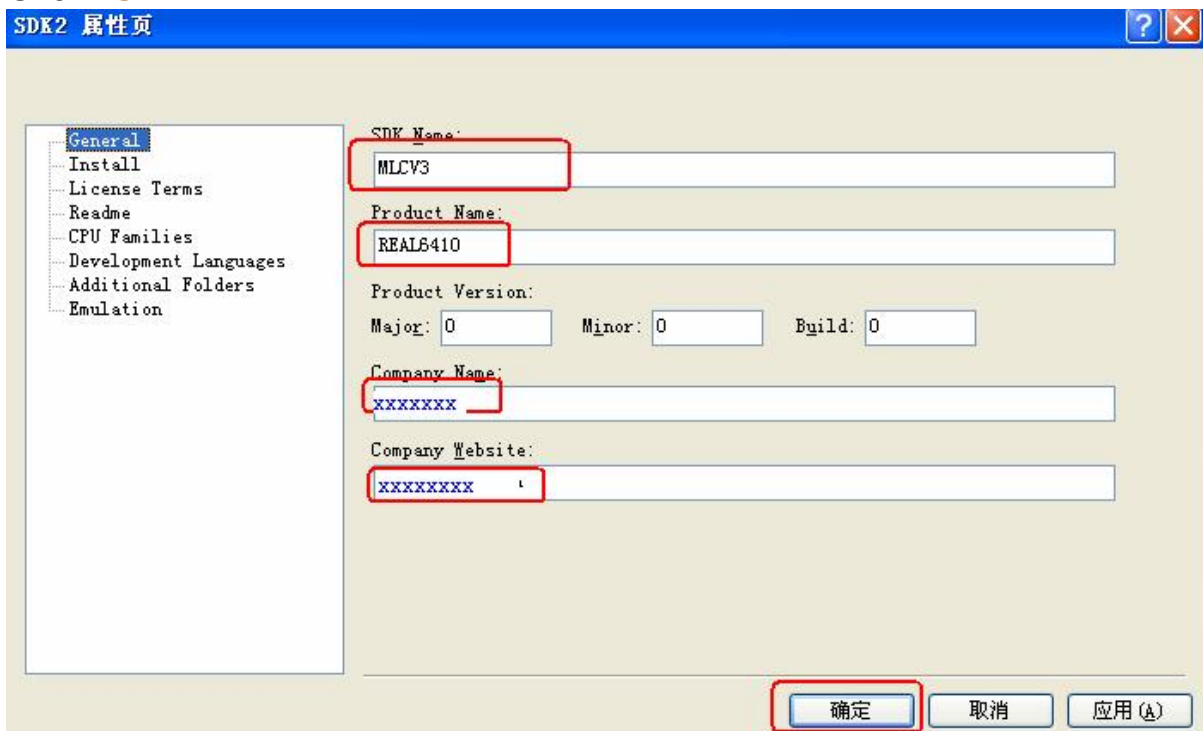
When you finished to build the your project, you can export the SDK.

1) Click Menu “**Project**” à “**Add New SDK...**”

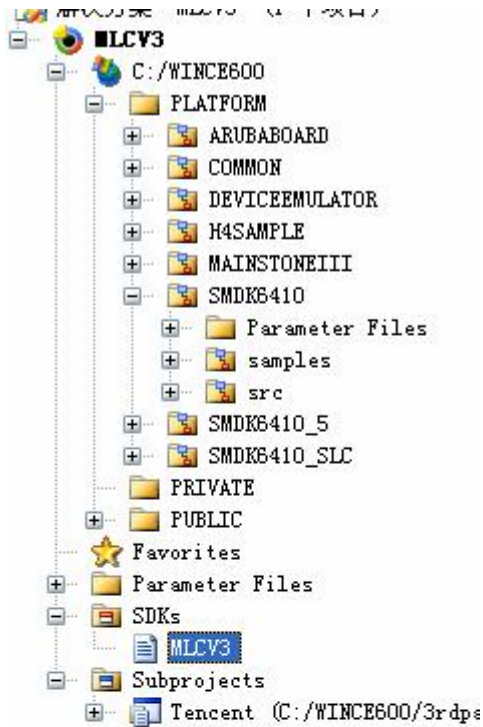


3) Select and inout the proper item according below picture

Click “**OK**”



4) On below project table there will be a MLCV3 generated



5) Compile the SDK

Click "build"-> "Build all SDKs...", Then wait a moment, i will create the SDK in the position:



Notice: the MLCV3 is the project name.

8.2 VS2005 Remote to the board

We use the ActiveSync to link the board to the PC.

We need to create a folder "armv4" in the position:

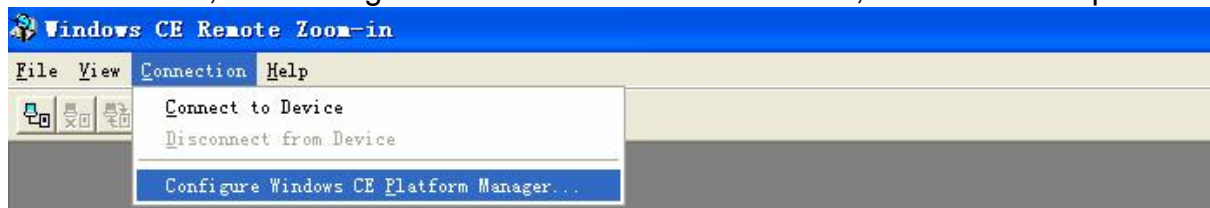
" X:\Program Files\Common Files\Microsoft Shared\Windows CE Tools\Platman\target\wce600"

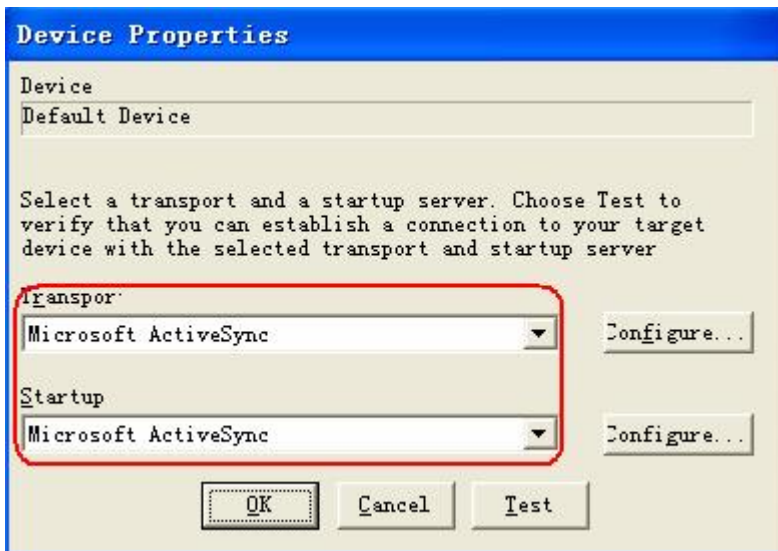
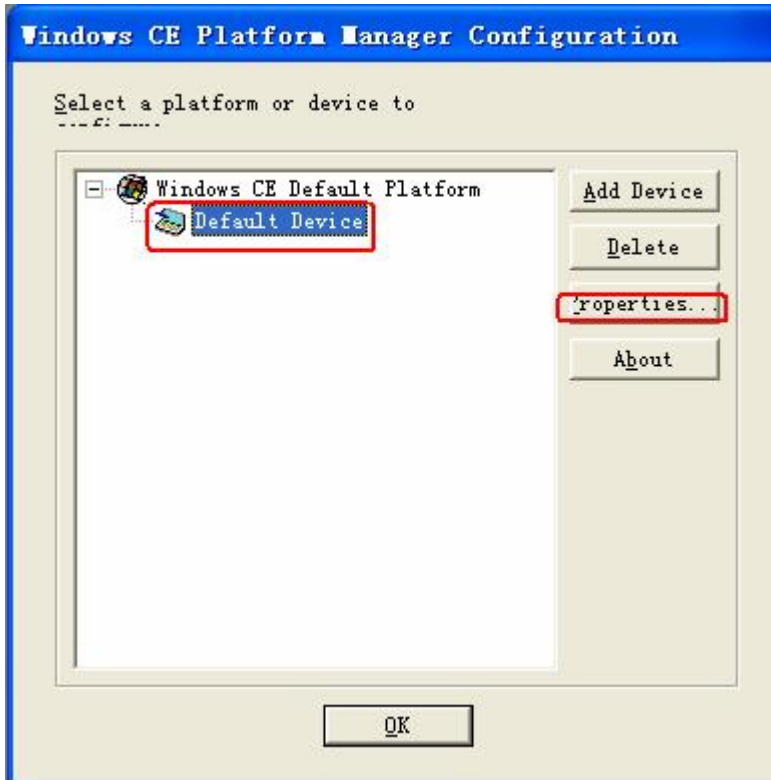
And then copy all the content from armv4i to armv4.

Then Click the "**Target-> Remote Tools -> Zoom**" in the VS2005 menu, it will show as follow:

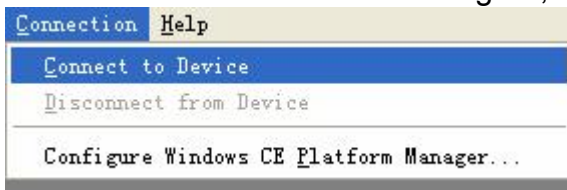


Click "Cancel", then configure the link as ActiveSYNC mode, refer the follow pic:

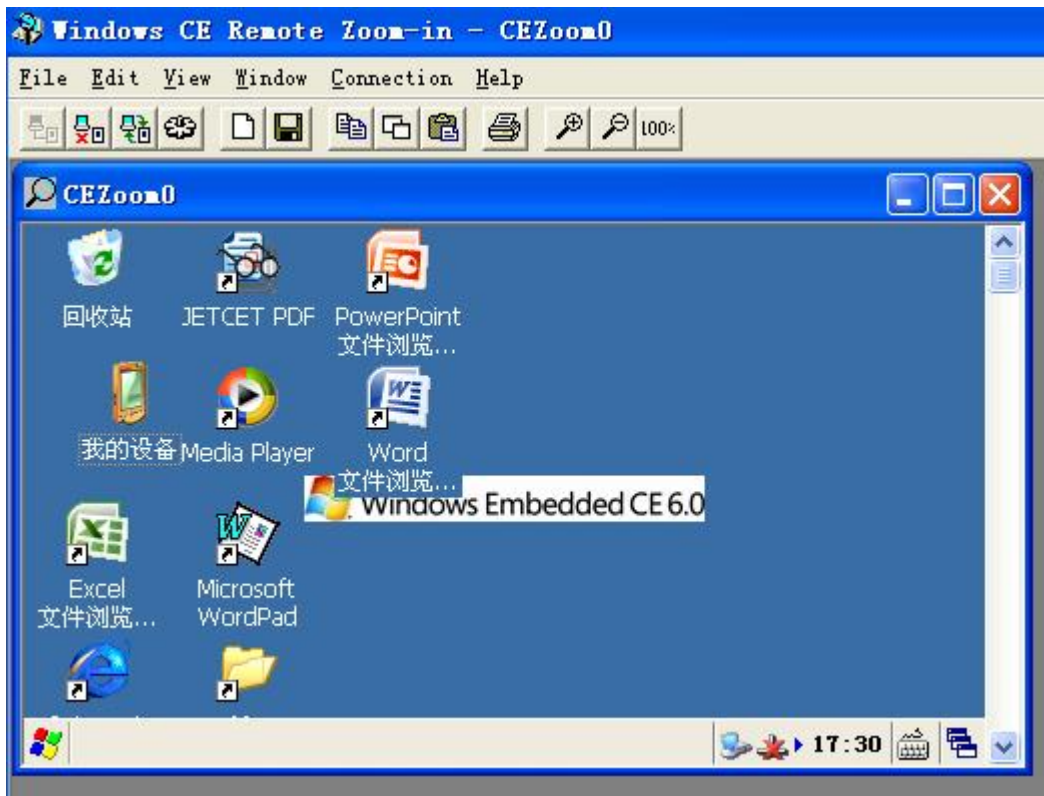




Then Click "OK" to finished configure, click "Connection -> connect to Device".

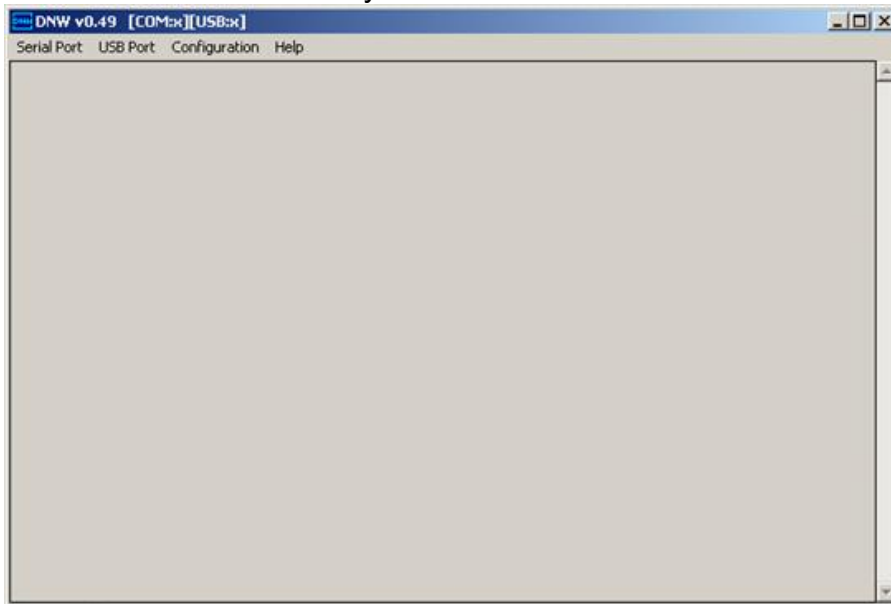


Then it will shows as that:



Appendix A DNW software configuration

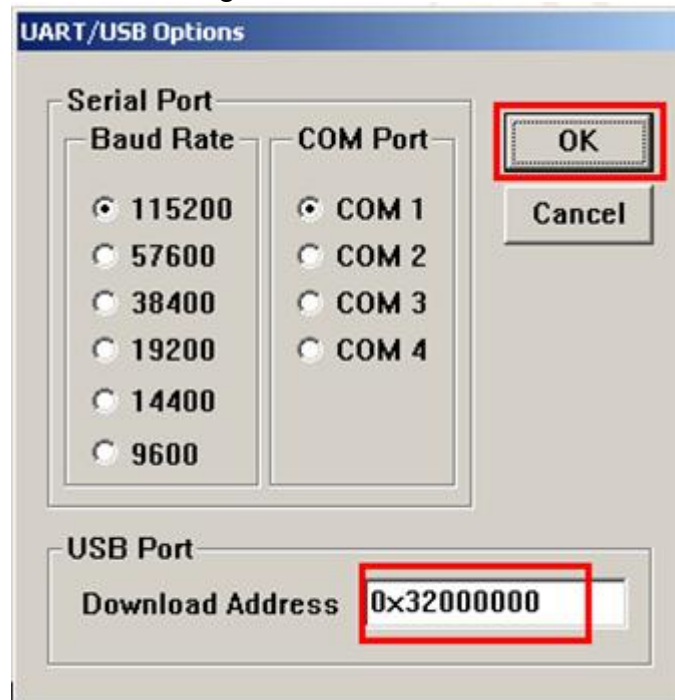
1. Find DNW software under directory **CD:\Tools\DNW.exe**. Double-click to open it:



2. Click "**Configuration -> Options**", it will open the "UART/USB Options" dialog.

- choose '**115200**' in '**Baud Rate**'
- choose '**COM1**' in '**COM Port**' (the COM1 means the serial number in PC)

click '**OK**' to finish the DNW configuration:



3. Then Click 'Serial Port->connect' to enable the DNW serial link.