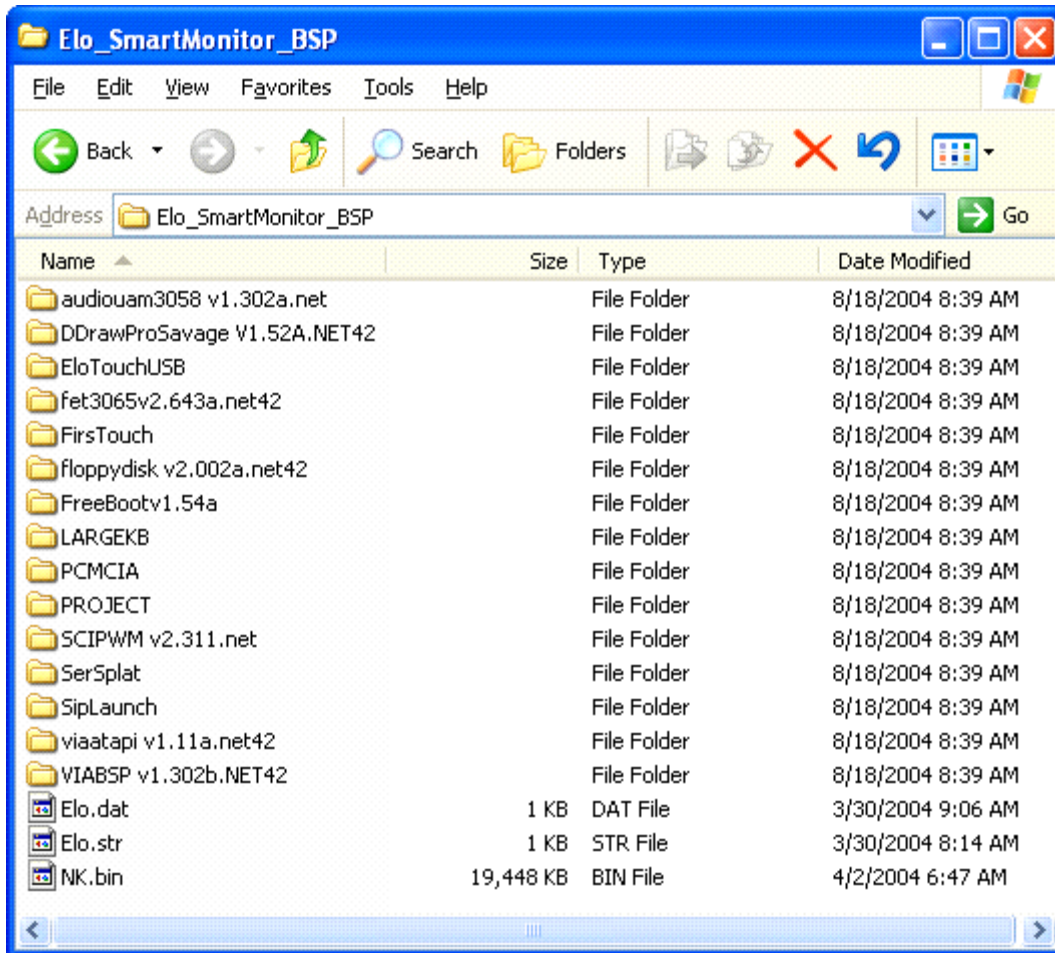


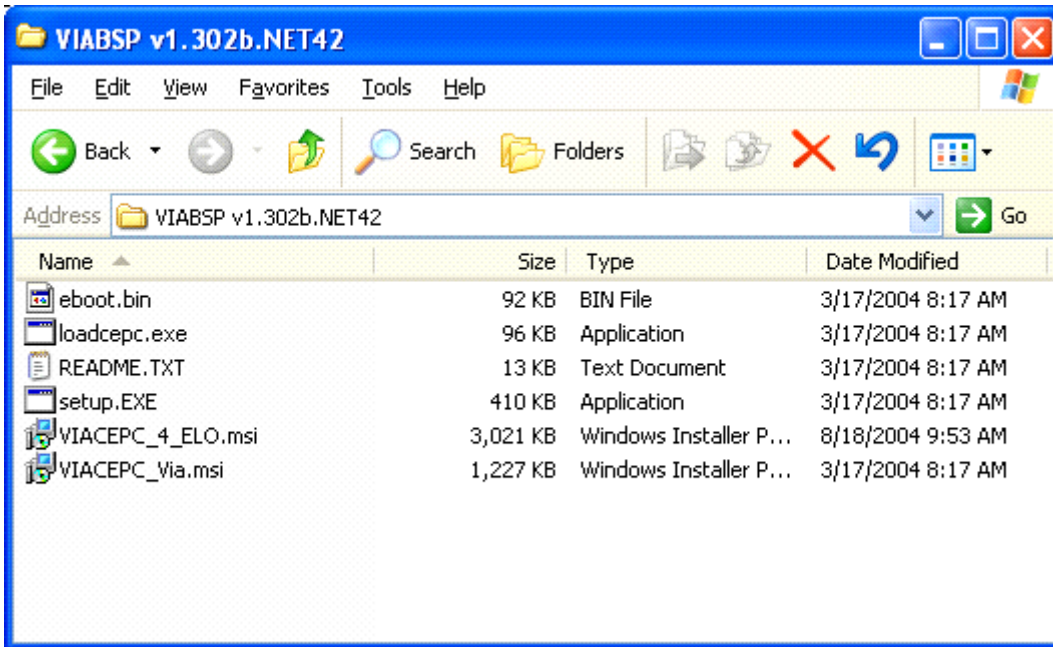
Elo Touch Systems ©copyright 2004
Windows CE Smart Monitor Setup Version 3.3

Step 1. If you haven't already installed Platform Builder 4.2 do so now.
Install x86 processor support.
If you need help see PlatformBuilder_Help.rtf on this CD

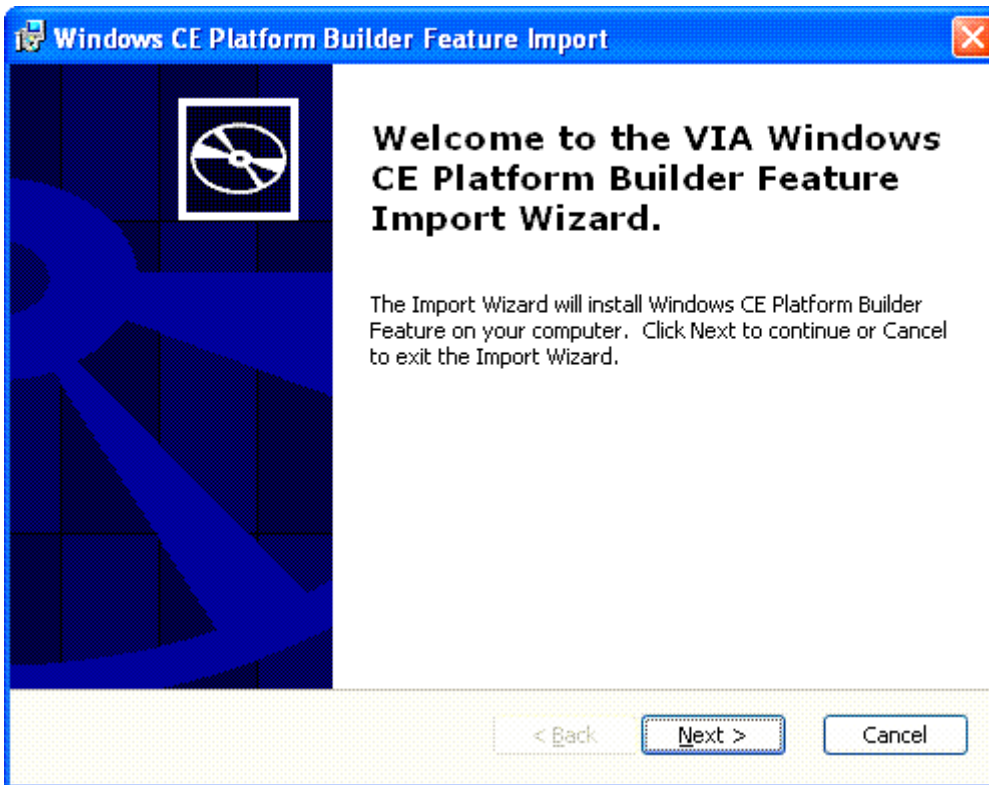
Step 2. Copy from the CD the directory Elo_SmartMonitor_BSP into the WINCE420 directory.
Install the drivers indicated below.



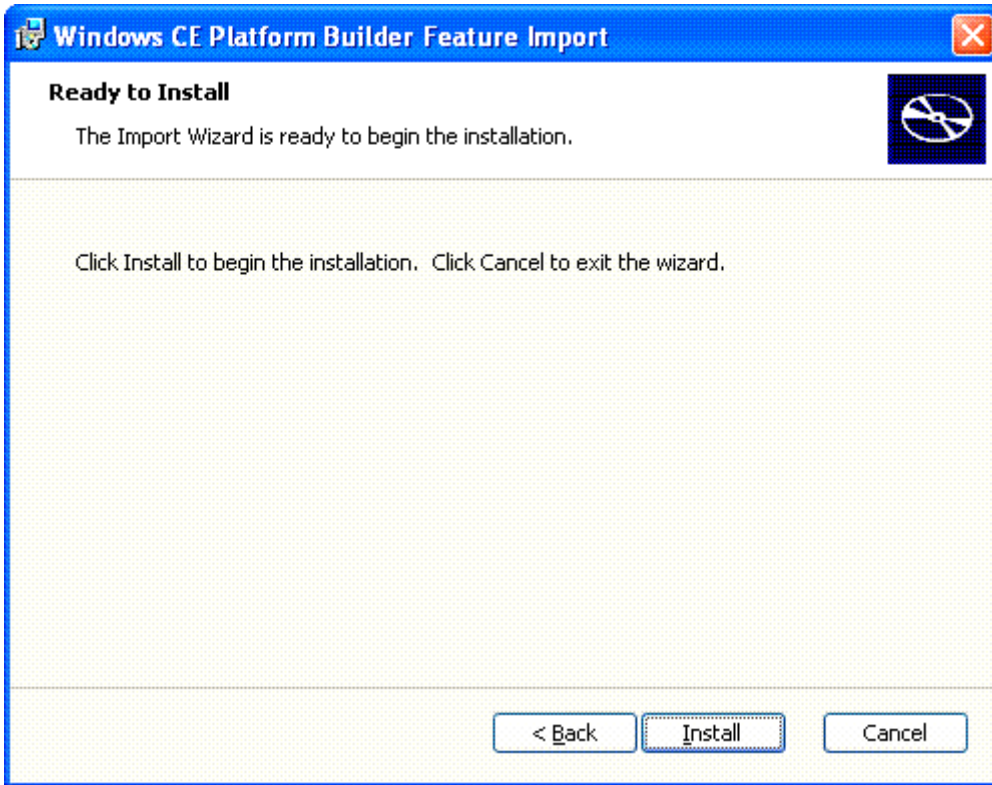
Open the folder named VIABSP v1,302a.NET42



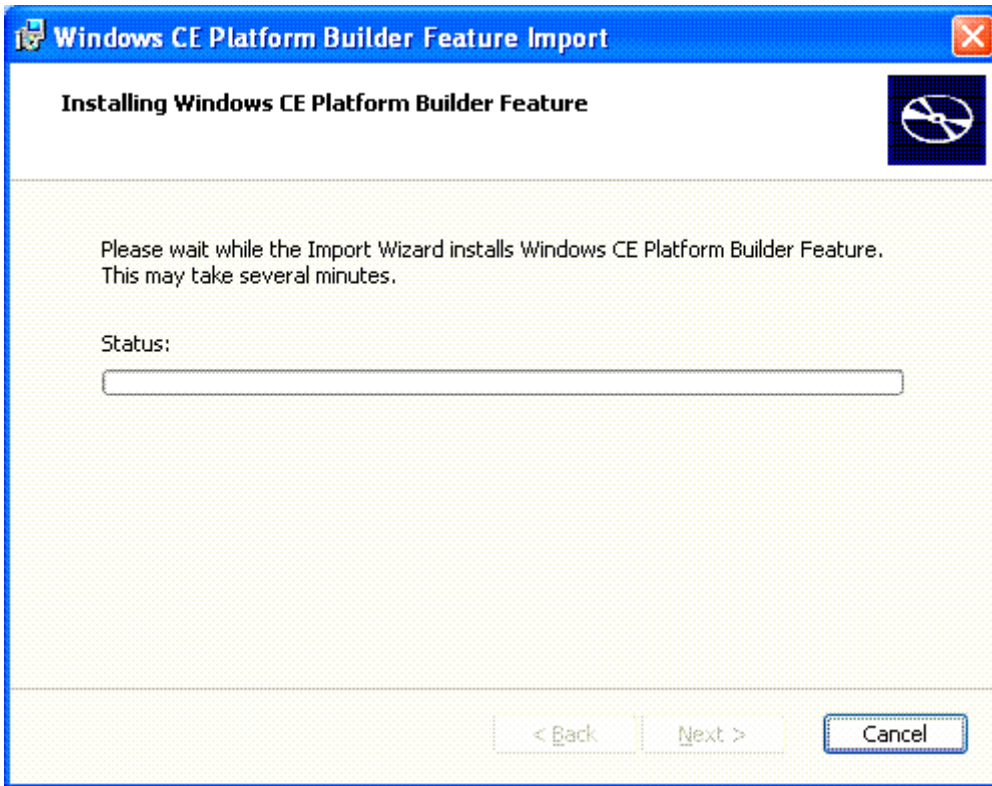
Double click on VIACEPC_4_ELO.msi

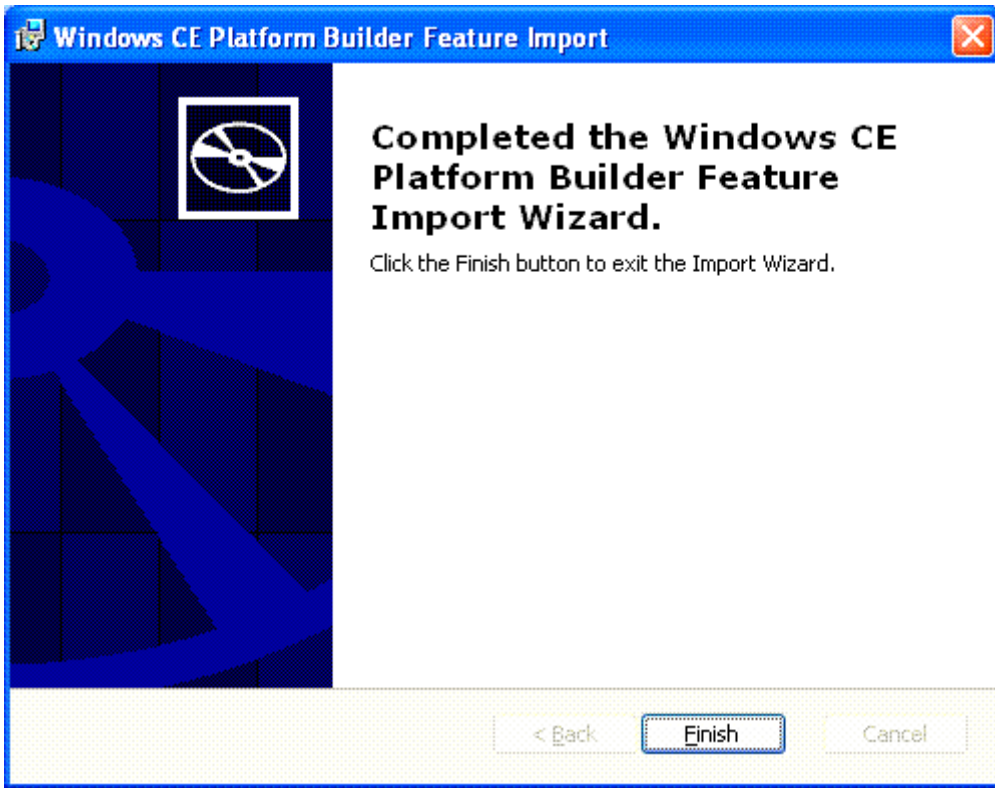


Click on Next



Click on Install



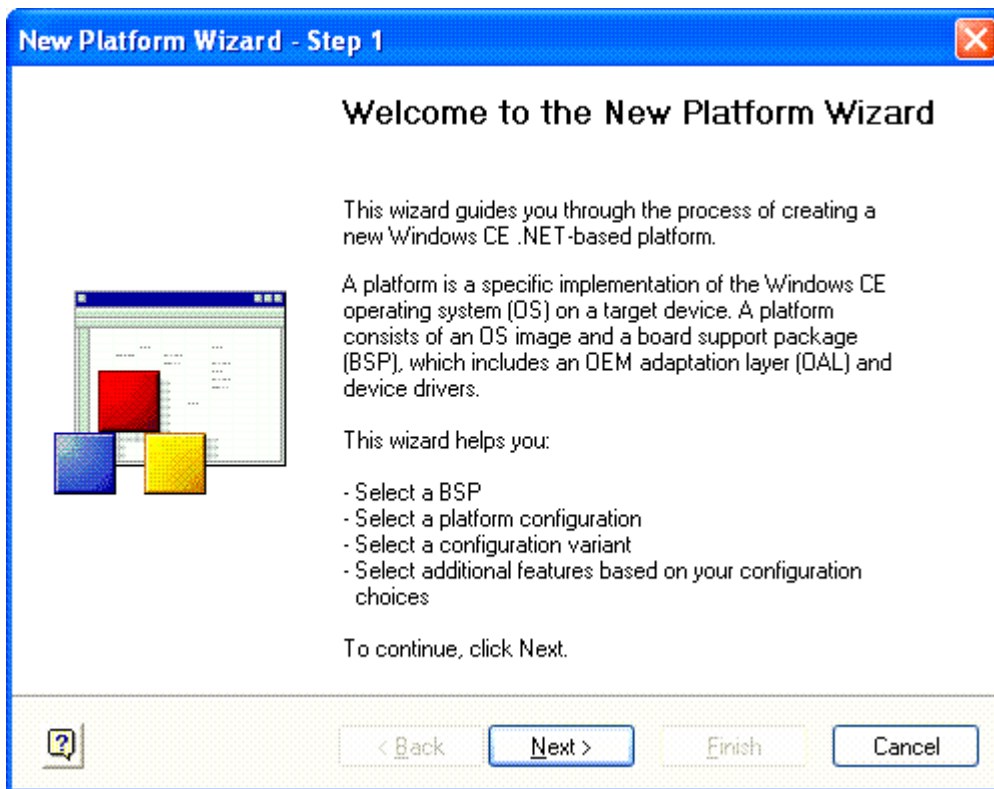


Click on Finish.

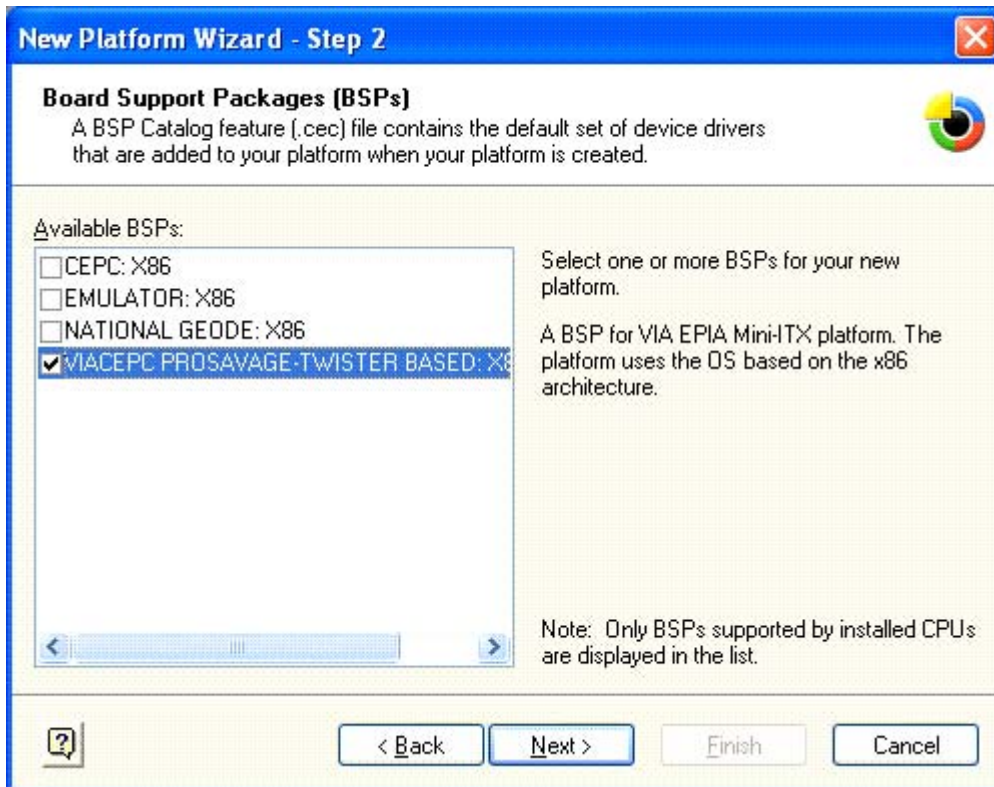
Start Platform Builder.

From the start screen select New Platform or

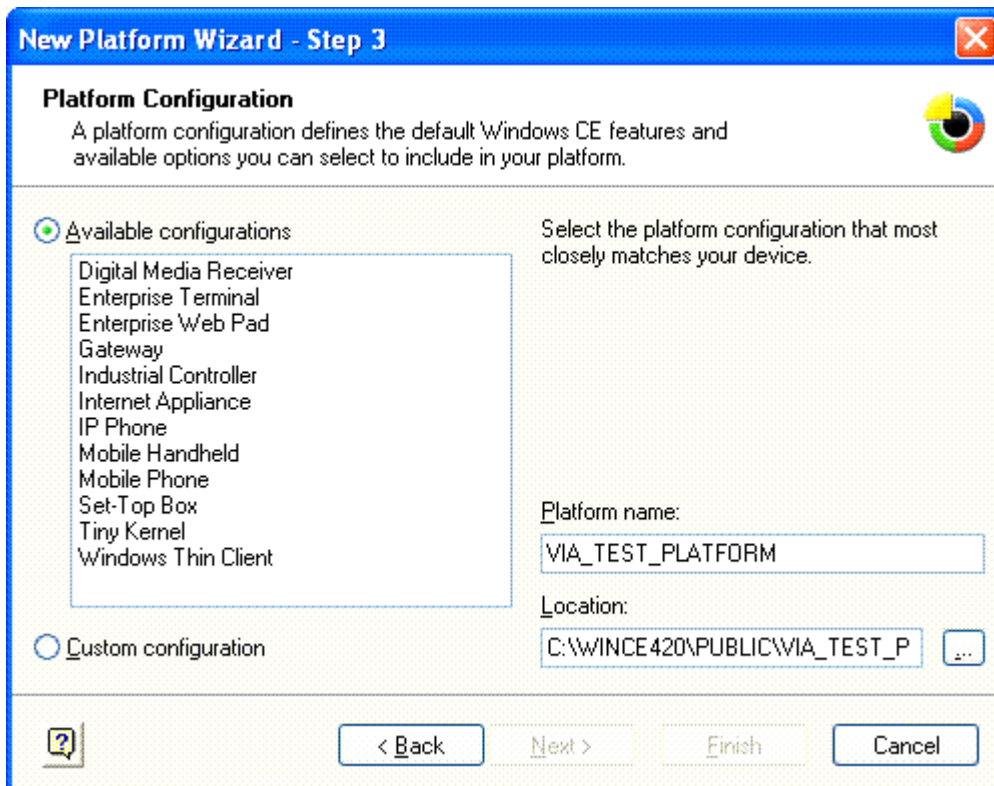
Close the start screen and then select from the File menu New Platform.



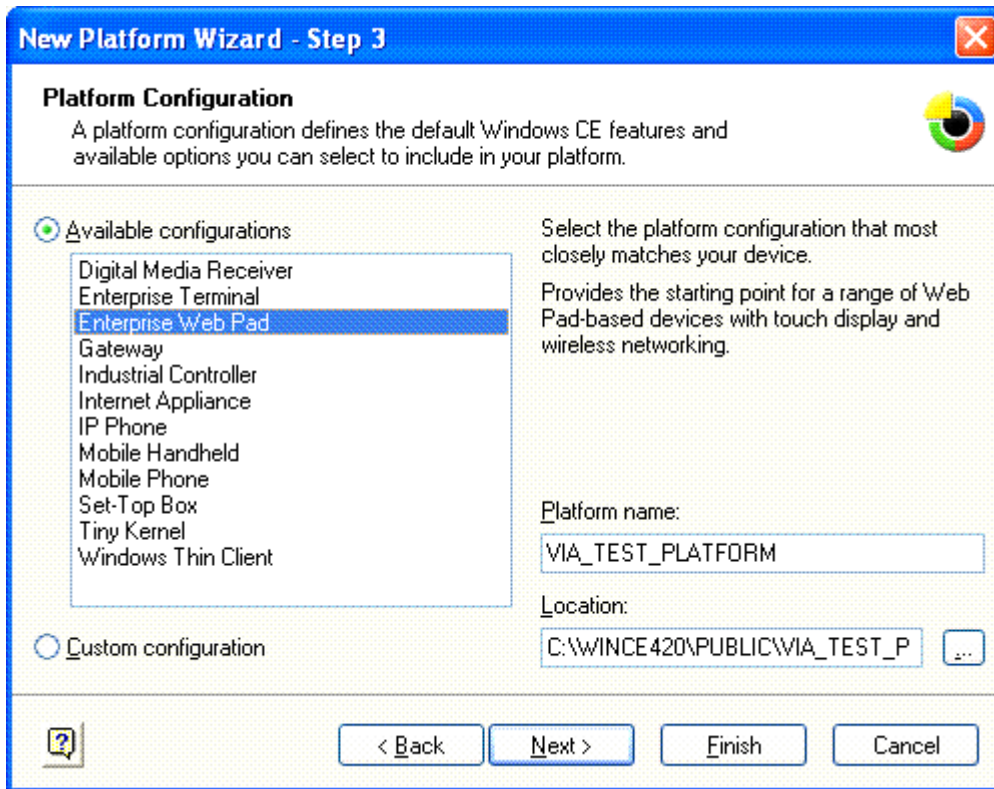
Click next



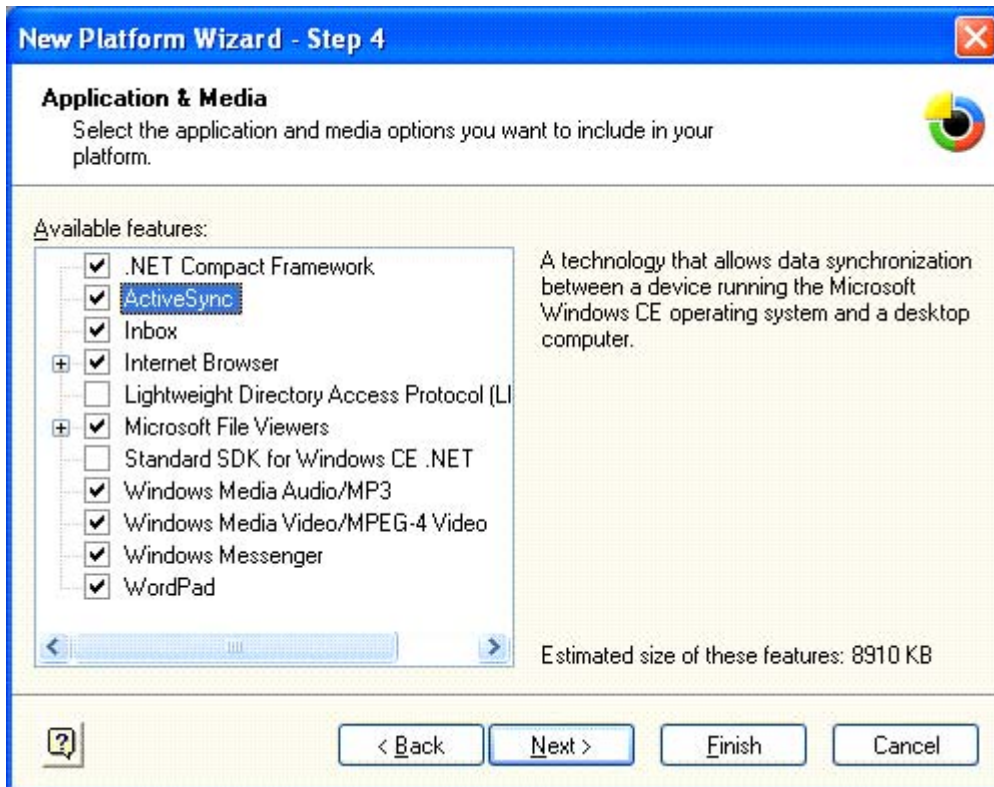
Select VIACEPC PROSAVAGE-TWISTER BASED: X86



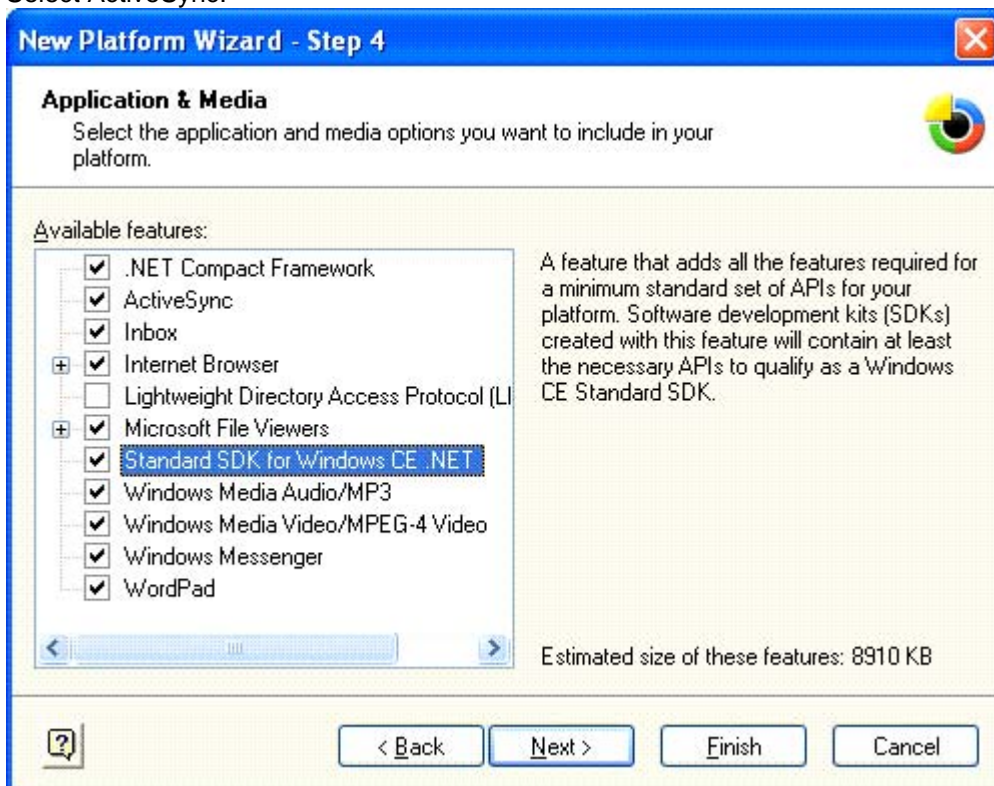
Make "your " Selection from Available Configurations or Custom configuration and create a Platform Name for your Platform. This Example used VIA_TEST_PLATFORM.



Click on next

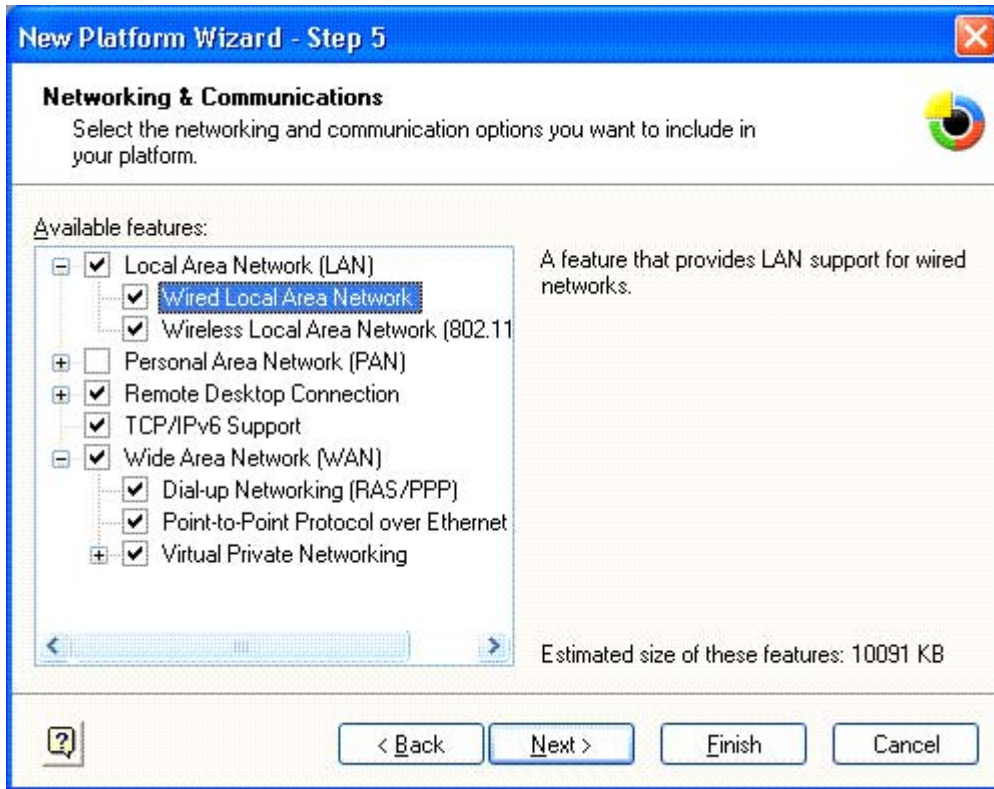


Select ActiveSync.



Select Standard SDK for Windows CE.Net if you want to be able to use Embedded Visual C++ for application development.

Make your selection based on your platform needs.
Click Next.



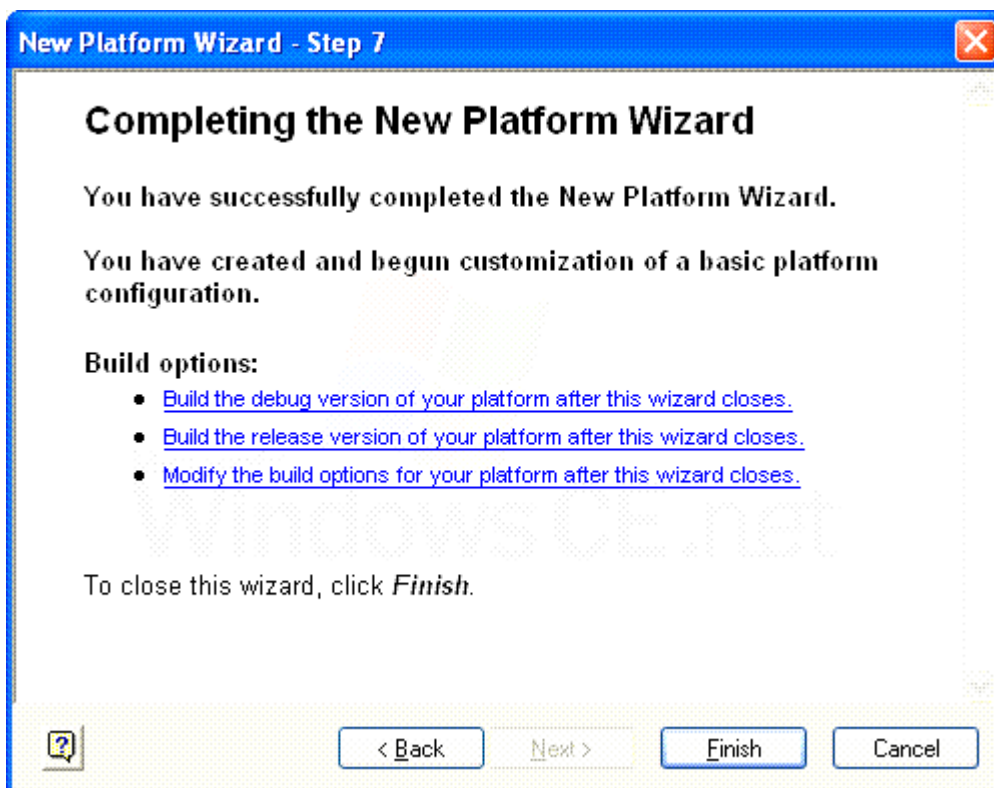
Make your Network & Communication selections.
NOTE: Some selections shown above may not be available for all configurations.



Some of the Communication Methods selected require you to acknowledge that the selection may have compromised security. Click on check box for all the feature's you want.



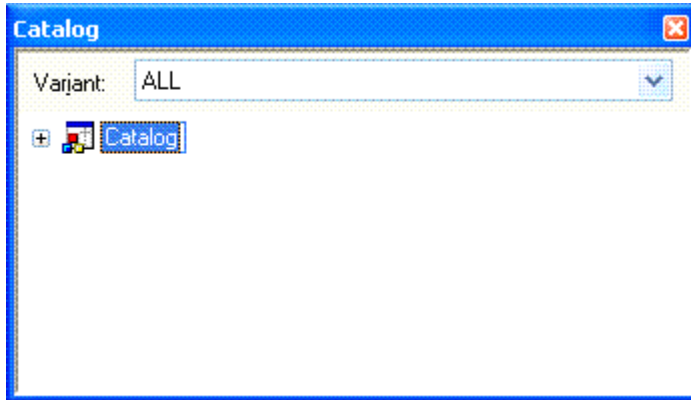
Click Next.



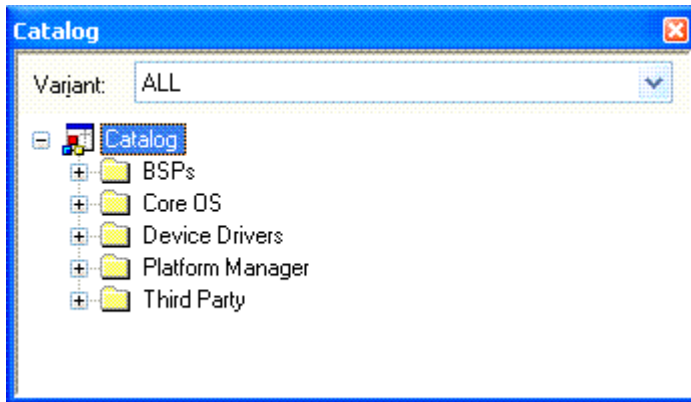
Click on finish

In this part of the installation process you will select the features needed for your platform.

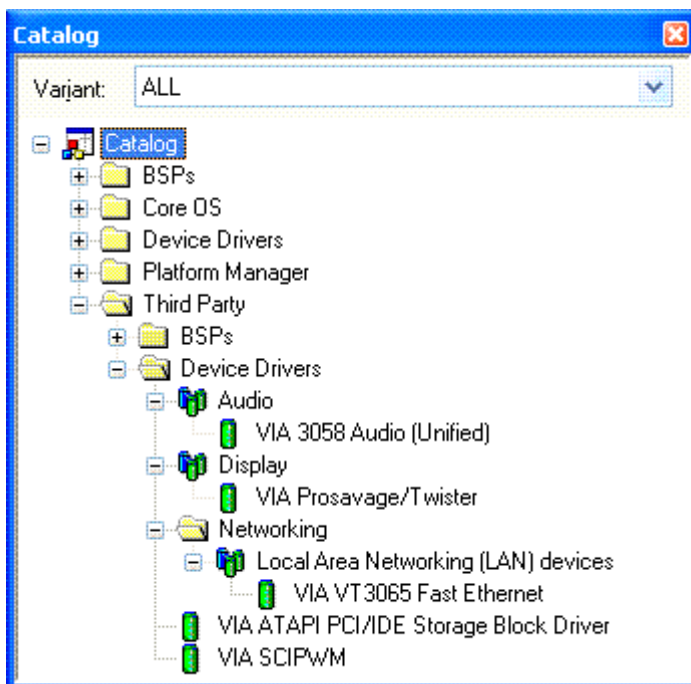
From the Catalog select the + sign next to Catalog to expand the Catalog



Right Click on Catalog. Then Left Click on Refresh Catalog.
Then select the + sign next to Third Party to expand that section



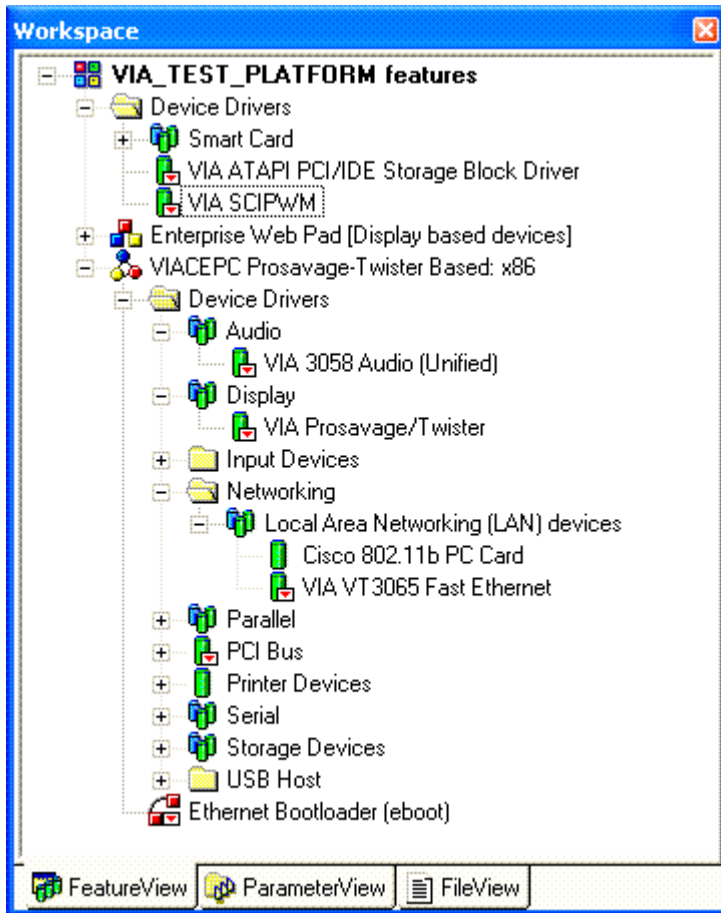
Click on + next to Third Party
 Click on + next to Device Drivers
 Then the + next to Audio
 Then the + next to Display
 Then the + next to Networking
 Then the + next to Local Area Networking(LAN) devices



Right Click on VIA ATAPI PCI/IDE Storage Block Driver .
 A dialog box will appear, Select Add to Platform

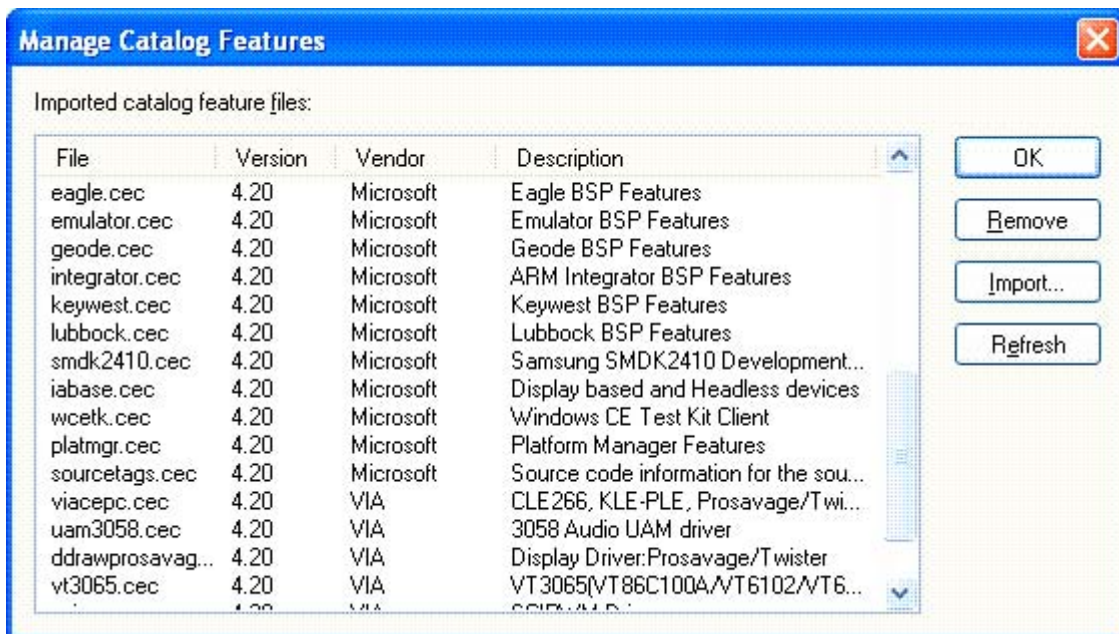
Right Click on VIA SCIPWM Add to Platform
 A dialog box will appear, Select Add to Platform

The Work Space for your platform should look like this -



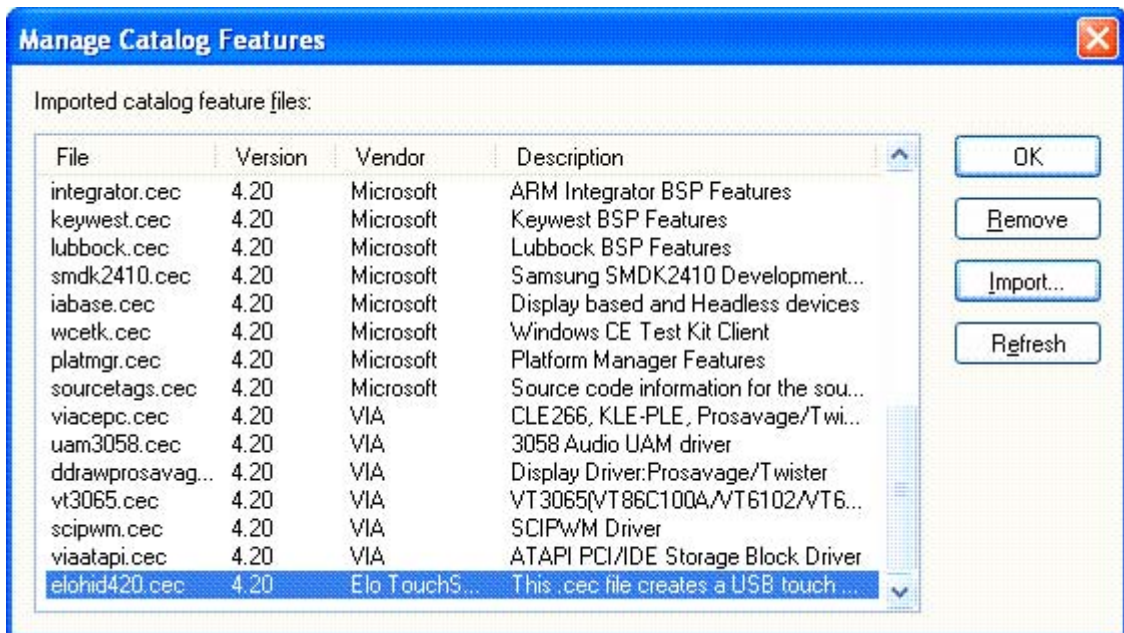
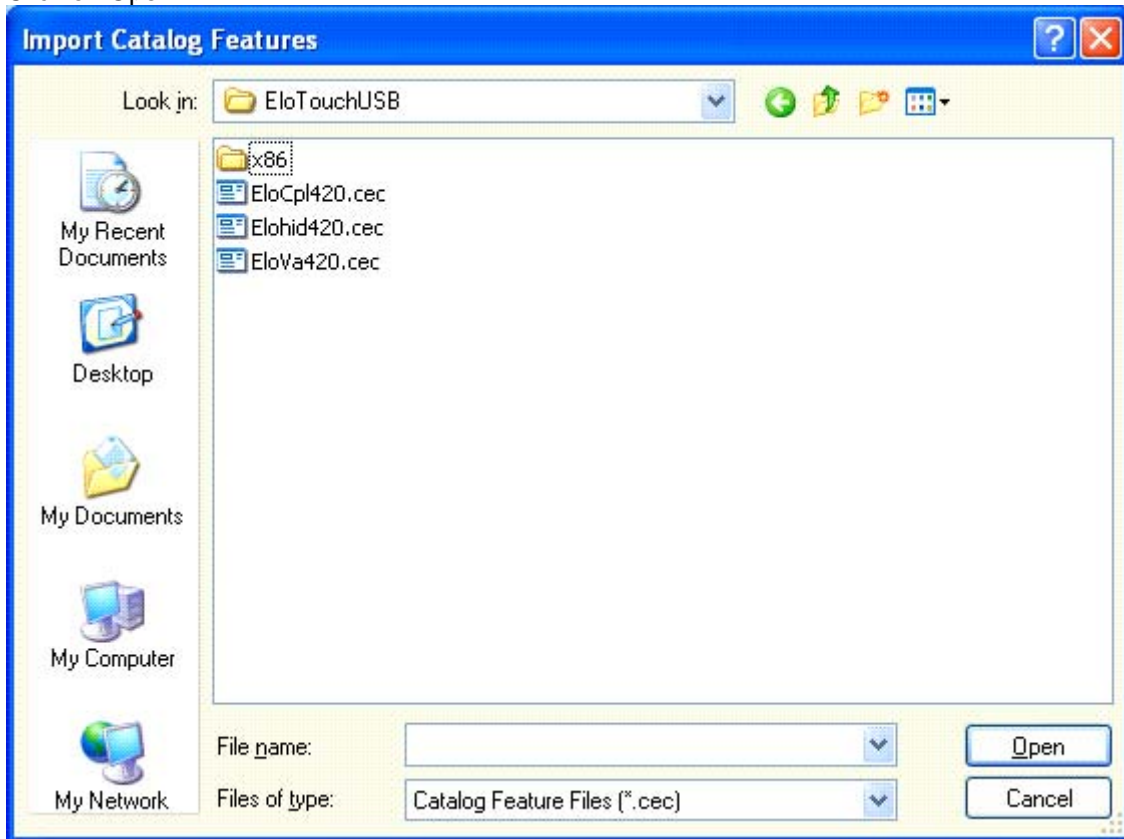
Copy from the Elo_SmartMonitor_BSP directory the EloTouchUSB directory to the WINCE420 directory.

To Install the Elo touch Driver & the Video Alignment tool.
Select from the file menu "Manage Catalog Features..."

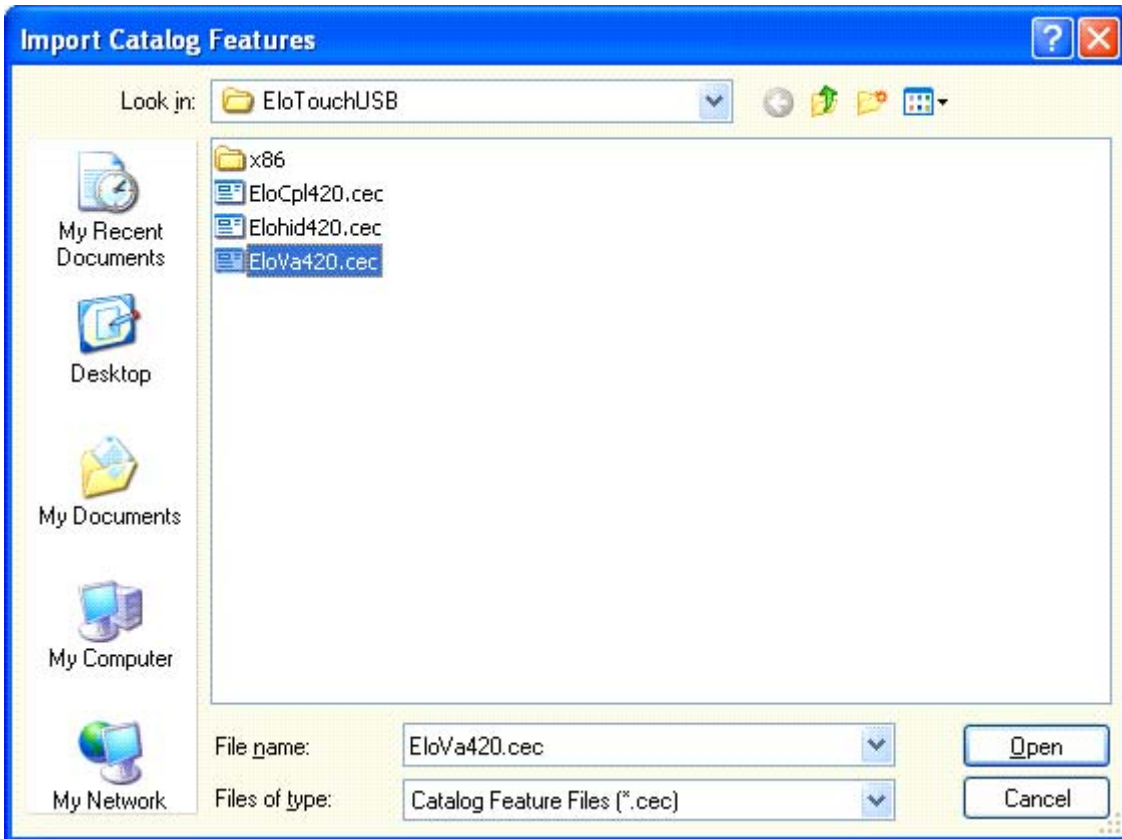


Click on Import...
Find theC:\WINCE420 directory

Select EloTouchUSB Directory
 Then click on Elohid420.cec
 Click on Open

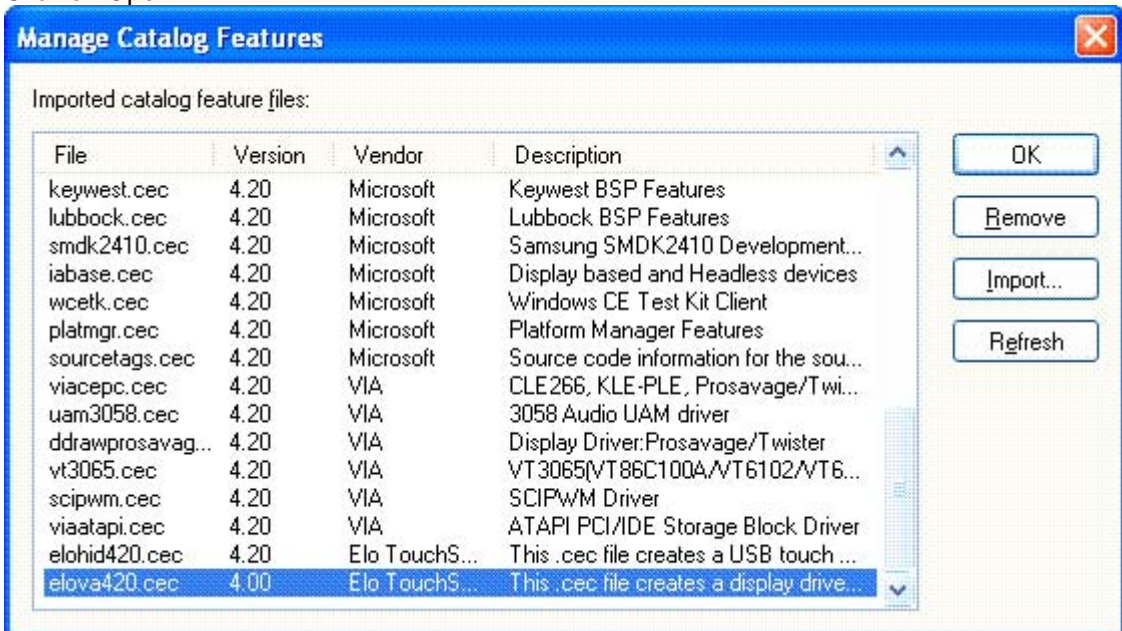


Select Import

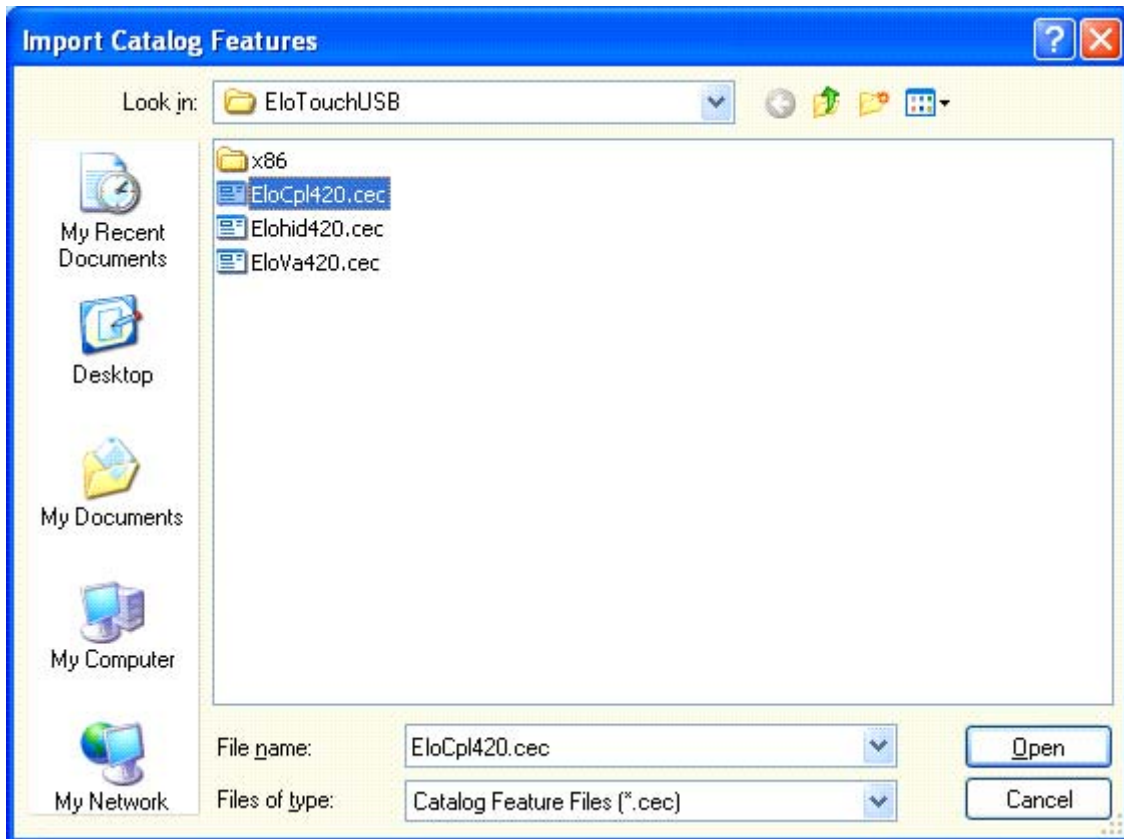


Click on EloVa420.cec

Click on Open

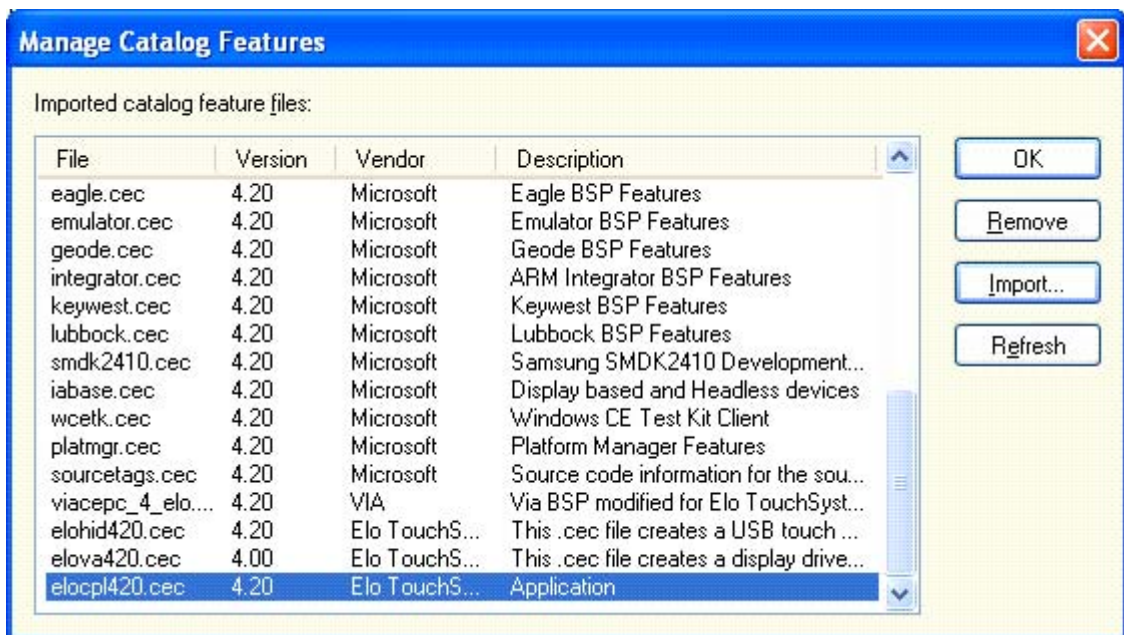


Select Import



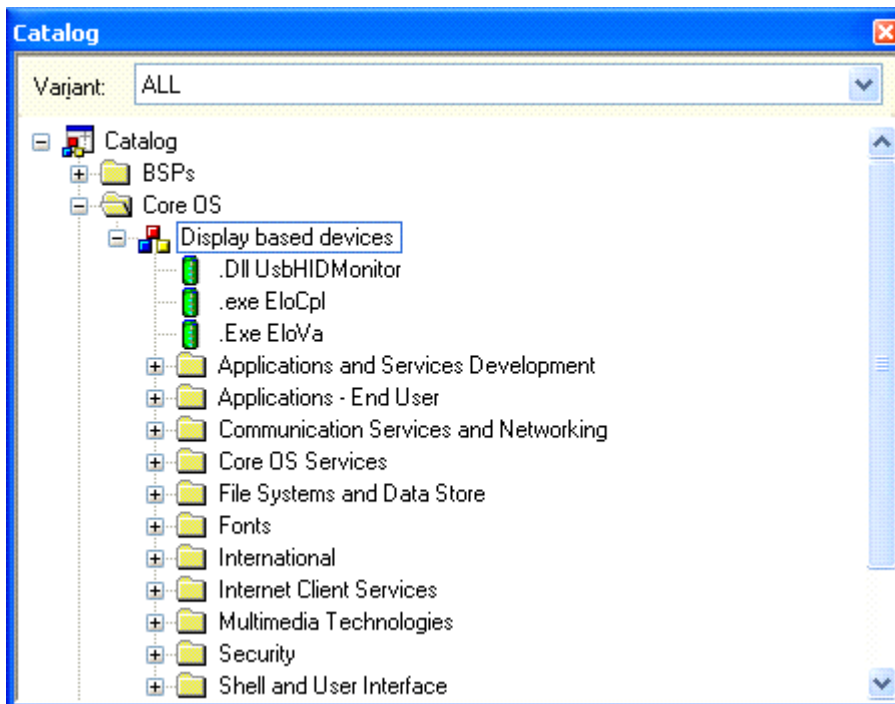
Click on EloCpl420.cec

Click on Open



Click on OK.

Under Catalog click on the + before Core OS to expand the selection
It should look like this



Right Click on .Dll UsbHIDMonitor
A dialog box will appear, Select Add to Platform

Right Click on .Exe EloVa
A dialog box will appear, Select Add to Platform

Right Click on .exe EloCpl
A dialog box will appear, Select Add to Platform

To Add Serial Support

From The Catalog Window

Click on the Device Drivers just under Core OS

Then click on the + in front of Serial

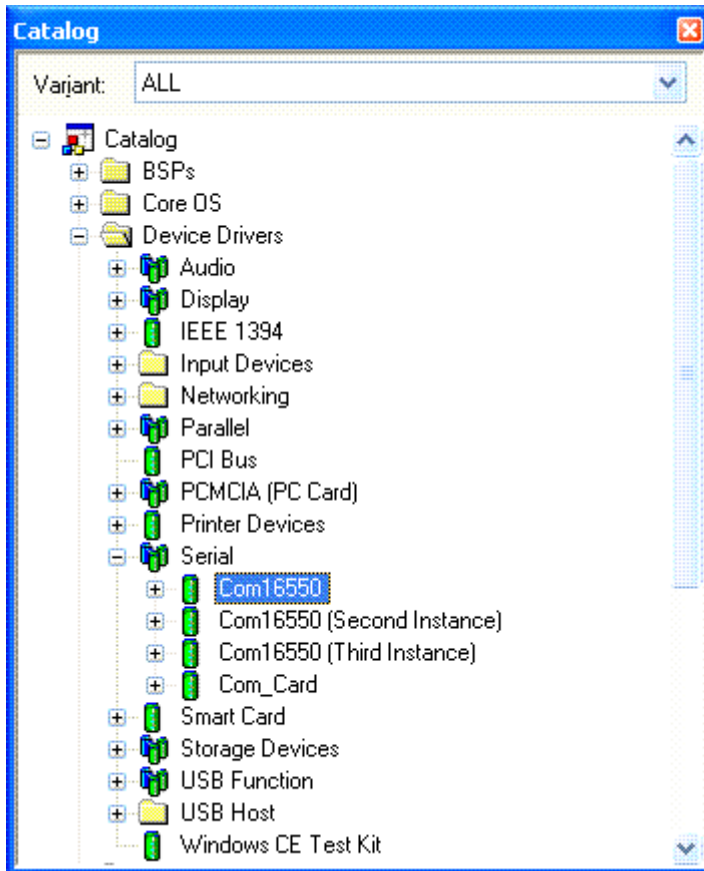
Right click on "Com16550" and select Add to Platform.

Right click on "Com16550 (Second Instance)" and select Add to Platform.

Right click on "Com16550 (Third Instance)" and select Add to Platform.

If You Plan to use PCMCIA devices

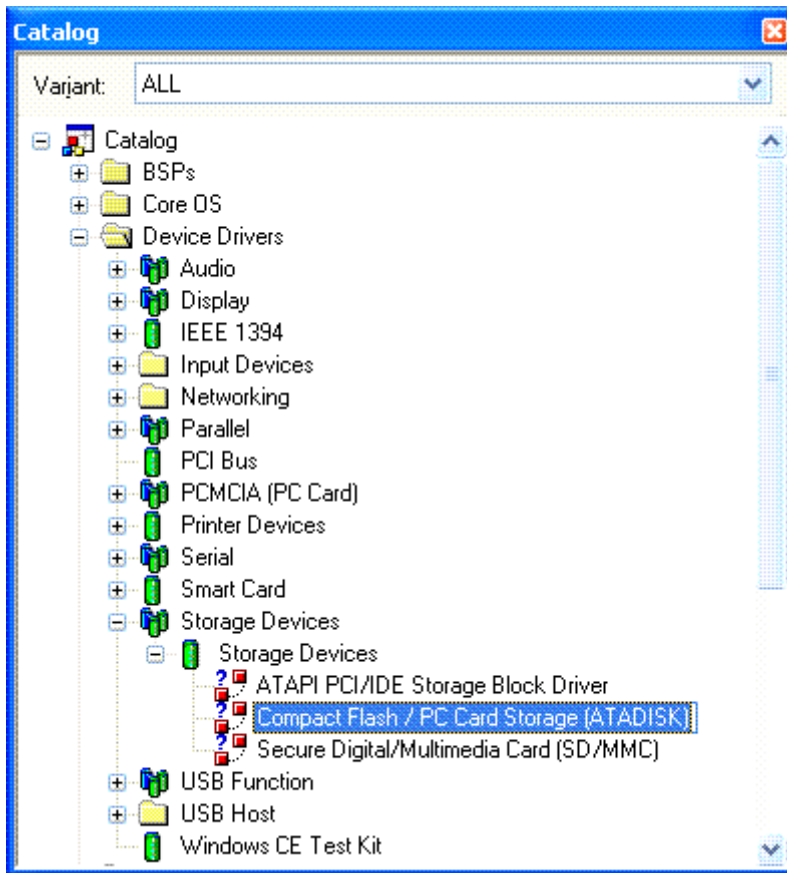
Right click on "Com_Card" and select Add to Platform.



To Add Storage device Support

Click on the + in front of Storage Devices

Right Click on "Compact Flash / PC Card Storage (ATADISK)" and select Add to Platform.



To Add USB Support to your platform:

In the Catalog under Device Drivers

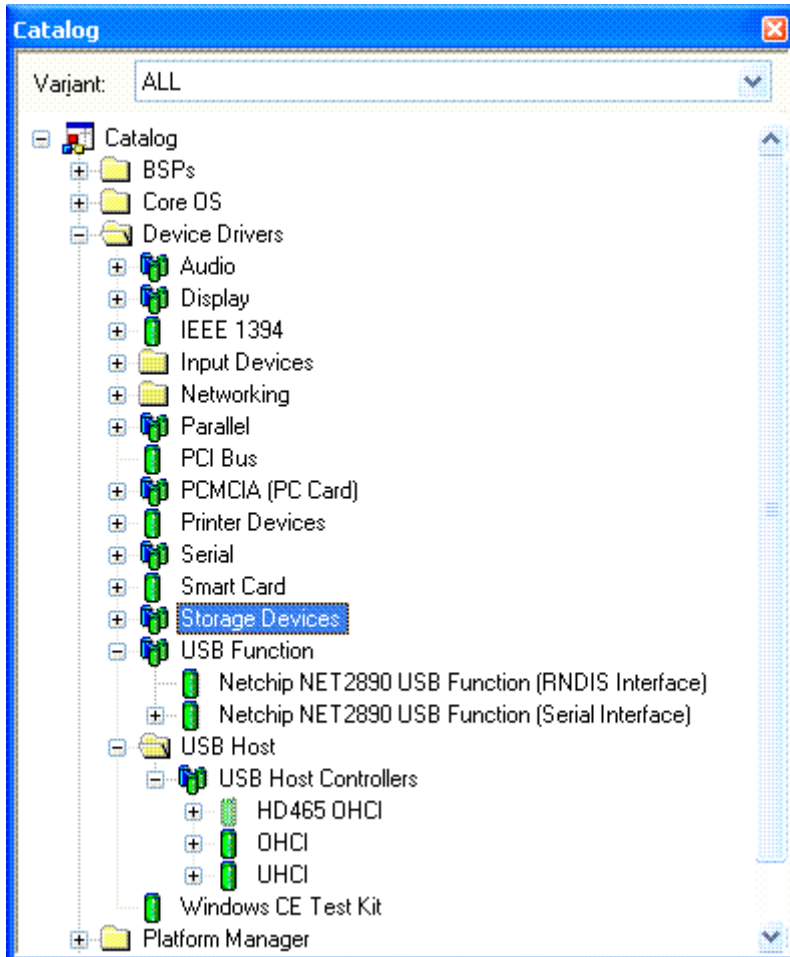
Click on the + in front of "USB Function"

Right click on Netchip NET2890 USB Function (Serial interface) and add to Platform

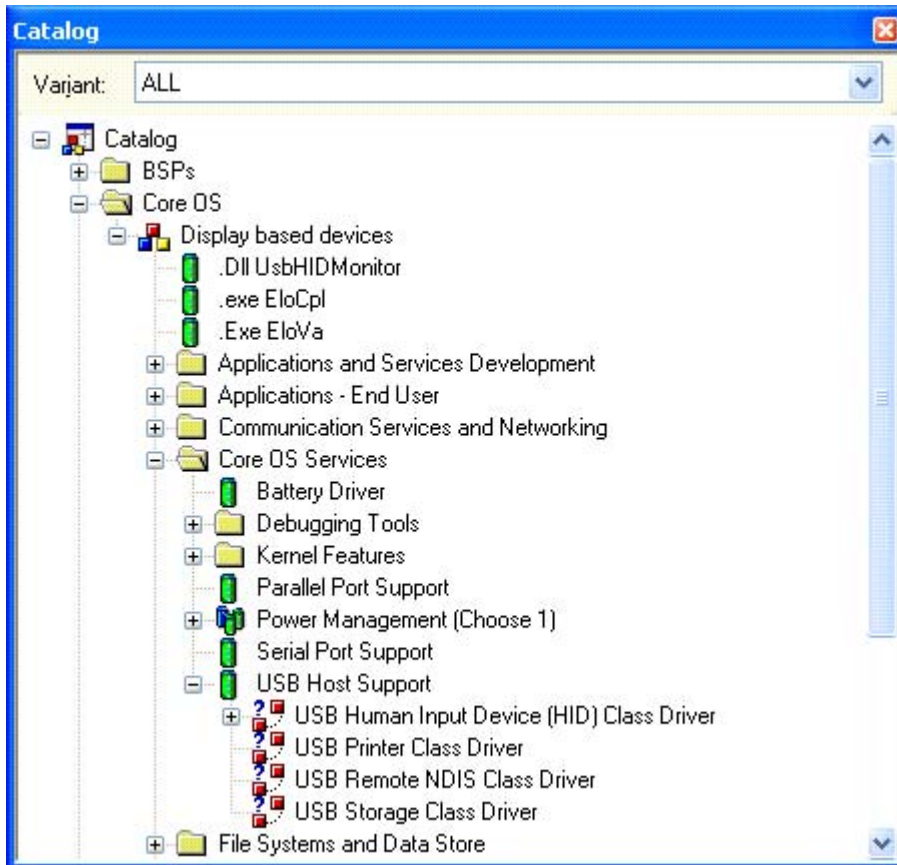
Then click on the + in front of USB Host

Then click on the + in front of USB Host Controllers

Right click on UHCI and Add to Platform



- Then Select Core OS
- Select Display based devices
- Select Core OS Services
- Click on the + in front of "USB Host Support"
- Right click on USB Human Input Device (HID) Class Driver and Add to Platform
- Right Click on USB Storage Class Driver and Add to Platform



Save Workspace:

From the Platform Builder File menu select Save Workspace.

To Add PCMCIA Support to your platform:

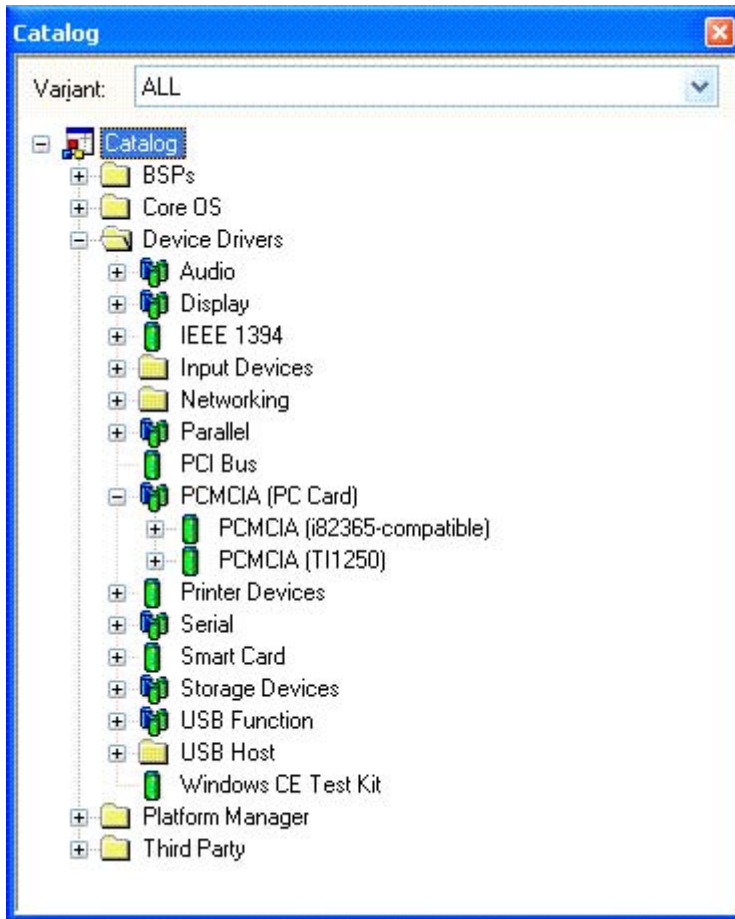
Note: This feature is not currently compatible with Down loading an image for test.

This feature works fine with the image loaded from Compact Flash.

From the Catalog select Device Drivers

Click on the + in front of PCMCIA

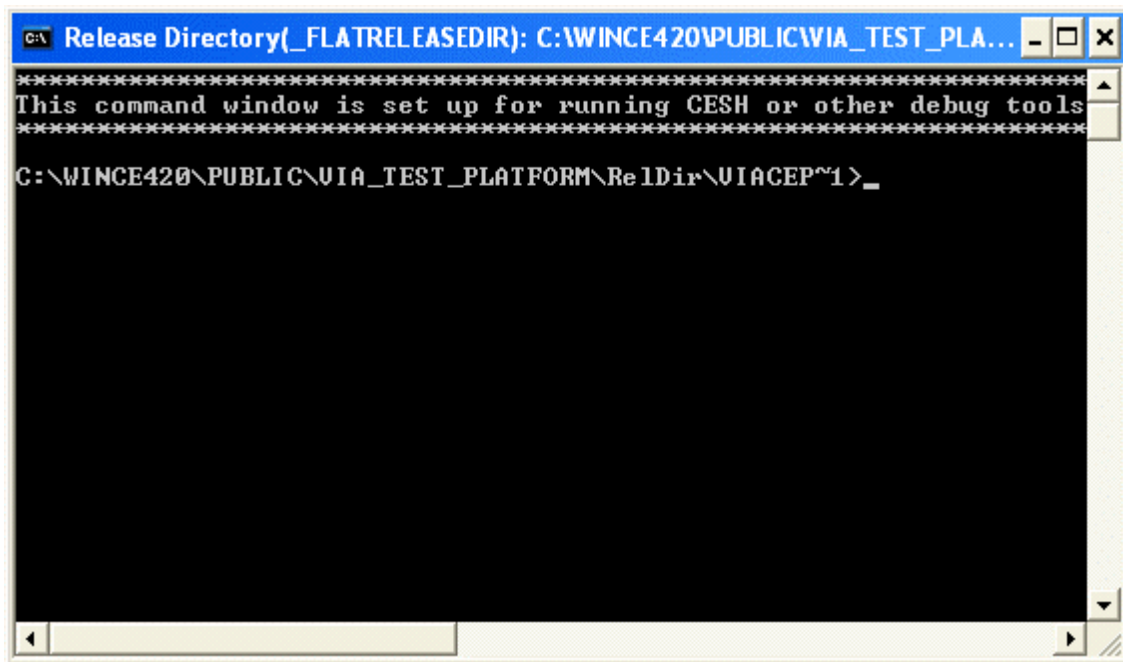
Right click on PCMCIA (i82365-compatible) and Add to Platform



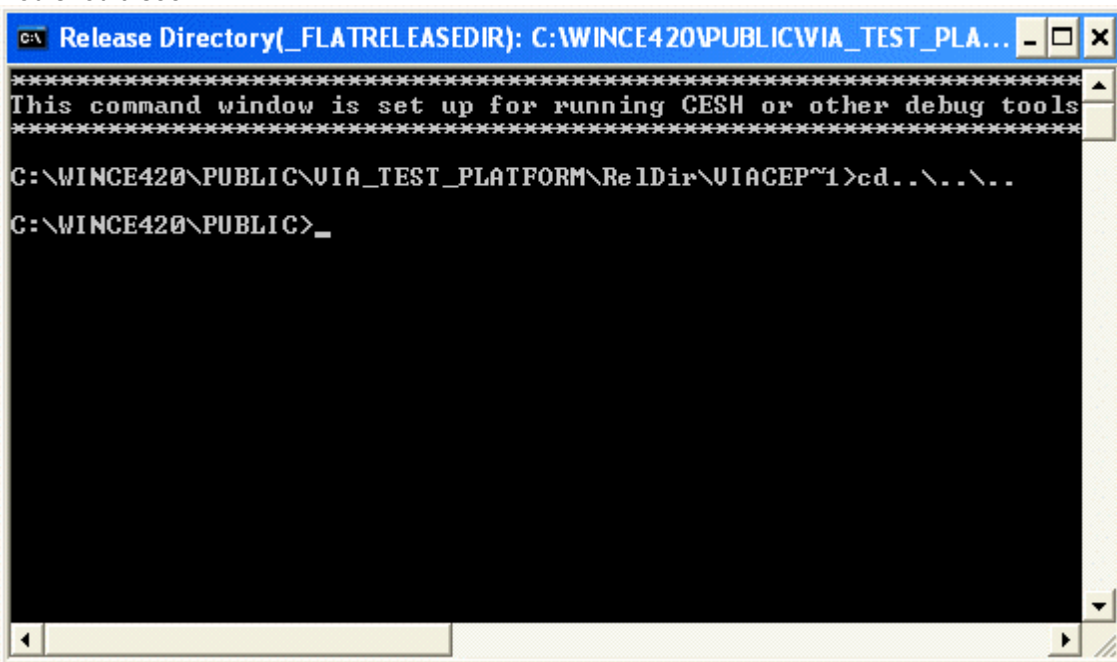
To support PCMCIA you will need to replace the files in 2 directories under \WINCE420\PUBLIC\COMMON\OAK\DRIVERS\PCMCIA. It would be advisable to create a Back-Up directory under PCMCIA and cut the original I82365 and MDD and paste them into the Back-Up Directory. In the WINCE420\Elo_SmartMonitor_BSP\PCMCIA Directory there is a zip file, PCMCIA.zip. Unzip the contents to the same directory.

Then copy from the WINCE420\Elo_SmartMonitor_BSP \PCMCIA directory the I82365 and MDD into the \WINCE420\PUBLIC\COMMON\OAK\DRIVERS\PCMCIA Directory.

Select from the Build menu "Open Build Release Directory" a command window will open.



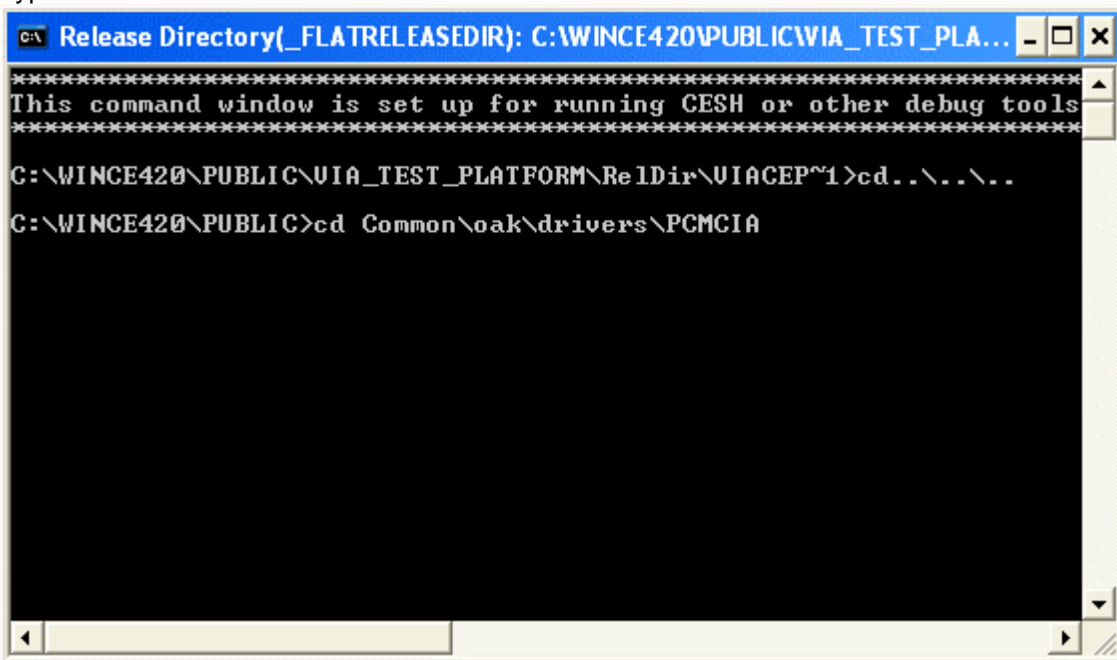
Type `cd..l.l.`
You should see-



```
C:\ Release Directory(_FLATRELEASEDIR): C:\WINCE420\PUBLIC\UIA_TEST_PLA... - □ ×
*****
This command window is set up for running CESH or other debug tools
*****

C:\WINCE420\PUBLIC\UIA_TEST_PLATFORM\ReIDir\UIACEP~1>cd..l.l.l.
C:\WINCE420\PUBLIC>_
```

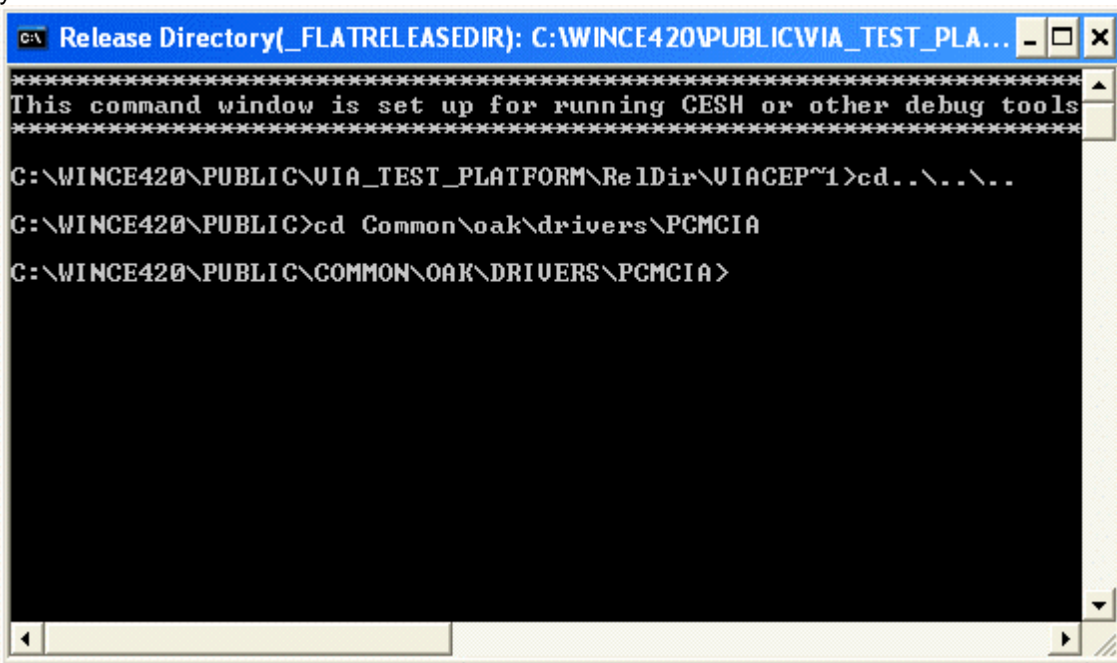
Type `cd common\oak\drivers\PCMCIA`



```
C:\ Release Directory(_FLATRELEASEDIR): C:\WINCE420\PUBLIC\UIA_TEST_PLA... - □ ×
*****
This command window is set up for running CESH or other debug tools
*****

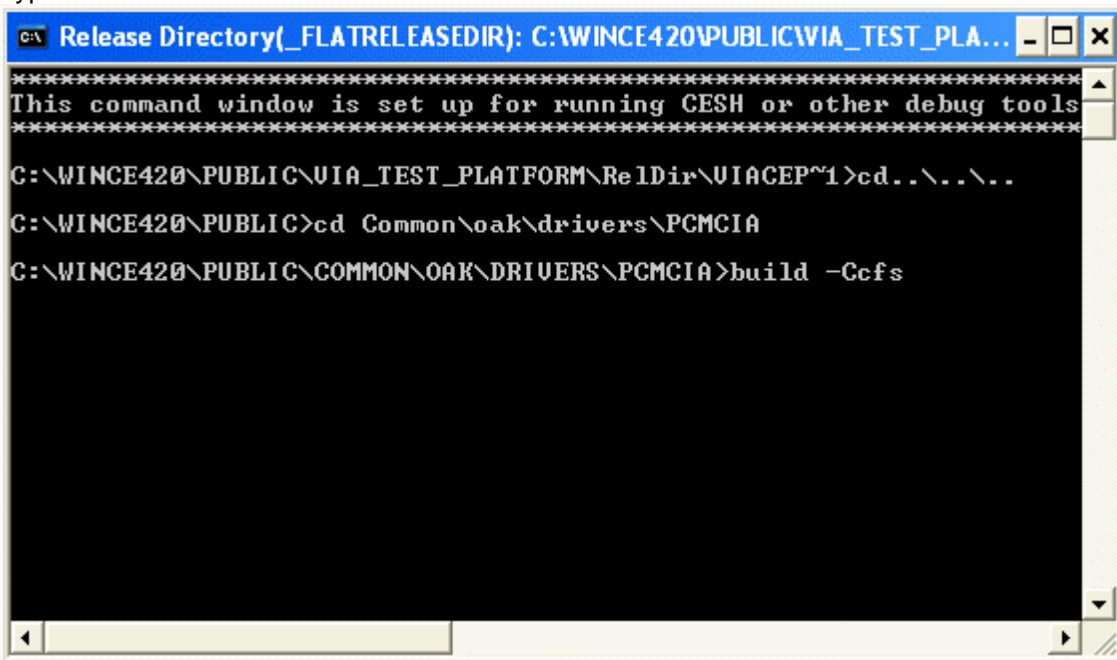
C:\WINCE420\PUBLIC\UIA_TEST_PLATFORM\ReIDir\UIACEP~1>cd..l.l.l.
C:\WINCE420\PUBLIC>cd Common\oak\drivers\PCMCIA
```

you should see-



A screenshot of a Windows command prompt window. The title bar reads "Release Directory(_FLATRELEASEDIR): C:\WINCE420\PUBLIC\UIA_TEST_PLA...". The window contains the following text: "***** This command window is set up for running CESH or other debug tools *****", followed by three directory change commands: "C:\WINCE420\PUBLIC\UIA_TEST_PLATFORM\ReLDir\UIACEP~1>cd..\..\..", "C:\WINCE420\PUBLIC>cd Common\oak\drivers\PCMCIA", and "C:\WINCE420\PUBLIC\COMMON\OAK\DRIVERS\PCMCIA>".

C:\WINCE420\PUBLIC\COMMON\OAK\DRIVERS\PCMCIA>
Type **Build -Ccfs**



A screenshot of a Windows command prompt window, similar to the one above. The title bar is the same. The window contains the same directory change commands as the previous screenshot, followed by the command "C:\WINCE420\PUBLIC\COMMON\OAK\DRIVERS\PCMCIA>build -Ccfs".

```
C:\ Release Directory(_FLATRELEASEDIR): C:\WINCE420\PUBLIC\WIA_TEST_PLA... - [ ] X
Compiling - c:\wince420\public\common\oak\drivers\pcmcia\mdd\.\wind
Files: 11
BUILD: c:\wince420\public\common\build.dat(12): corrupt database (F
BUILD: Computing Include file dependencies:
BUILD: Examining c:\wince420\public\common\oak\drivers\pcmcia direc
c:\wince420\public\common\oak\drivers\pcmcia\mdd - 15 source fi
Master db name is: C:\WINCE420\PUBLIC\COMMON\Build.dat
BUILD: Saving C:\WINCE420\PUBLIC\COMMON\Build.dat...
BUILD: Building generated files in c:\wince420\public\common\oak\dr
BUILD: Building generated files in c:\wince420\public\common\oak\dr
BUILD: Building generated files in c:\wince420\public\common\oak\dr
BUILD: Examining c:\wince420\public\common\oak\drivers\pcmcia direc
c:\wince420\public\common\oak\drivers\pcmcia\mdd - 15 source fi
c:\wince420\public\common\oak\drivers\pcmcia\i82365 - 4 source
c:\wince420\public\common\oak\drivers\pcmcia\ti1250 - 5 source
c:\wince420\public\common\oak\drivers\pcmcia\ti1250\isr - 1 sour
Master db name is: C:\WINCE420\PUBLIC\COMMON\Build.dat
BUILD: Saving C:\WINCE420\PUBLIC\COMMON\Build.dat...
Total of 25 source files (15,513 lines) to compile in 4 directories

BUILD: Compiling c:\wince420\public\common\oak\drivers\pcmcia\mdd d
-
```

After the build completes.

Type *exit*

```
C:\ Release Directory(_FLATRELEASEDIR): C:\WINCE420\PUBLIC\X86SMARTMON... - [ ] X
srcgen C:\WINCE420\PUBLIC\COMMON winceos C:\WINCE420\public\common
BUILD: Compile and Link for x86.
Master db name is: C:\WINCE420\PUBLIC\COMMON\Build.dat
BUILD: Loading C:\WINCE420\PUBLIC\COMMON\Build.dat...
BUILD: Computing Include file dependencies:
BUILD: Examining c:\wince420\public\common\oak\drivers\pcmcia direct
c:\wince420\public\common\oak\drivers\pcmcia\mdd - 15 source fil
Master db name is: C:\WINCE420\PUBLIC\COMMON\Build.dat
BUILD: Saving C:\WINCE420\PUBLIC\COMMON\Build.dat...
BUILD: Building generated files in c:\wince420\public\common\oak\dri
BUILD: Building generated files in c:\wince420\public\common\oak\dri
BUILD: Building generated files in c:\wince420\public\common\oak\dri
BUILD: Examining c:\wince420\public\common\oak\drivers\pcmcia direct
c:\wince420\public\common\oak\drivers\pcmcia\mdd - 15 source fil
c:\wince420\public\common\oak\drivers\pcmcia\i82365 - 4 source f
c:\wince420\public\common\oak\drivers\pcmcia\ti1250 - 5 source f
c:\wince420\public\common\oak\drivers\pcmcia\ti1250\isr - 1 sourc
Master db name is: C:\WINCE420\PUBLIC\COMMON\Build.dat
BUILD: Saving C:\WINCE420\PUBLIC\COMMON\Build.dat...
Total of 25 source files (15,459 lines) to compile in 4 directories

BUILD: Compiling c:\wince420\public\common\oak\drivers\pcmcia\mdd di
BUILD: Compiling c:\wince420\public\common\oak\drivers\pcmcia\i82365
BUILD: Compiling c:\wince420\public\common\oak\drivers\pcmcia\ti1250
BUILD: Compiling c:\wince420\public\common\oak\drivers\pcmcia\ti1250
BUILD: Linking c:\wince420\public\common\oak\drivers\pcmcia\i82365 d
BUILD: Linking c:\wince420\public\common\oak\drivers\pcmcia\mdd dire
BUILD: Linking c:\wince420\public\common\oak\drivers\pcmcia\ti1250 d
BUILD: Linking c:\wince420\public\common\oak\drivers\pcmcia\ti1250is
BUILD: Done

25 files compiled

C:\WINCE420\PUBLIC\COMMON\OAK\DRIVERS\PCMCIA>exit
```

The command window will close.

Save Workspace:
From the Platform Builder File menu select Save Workspace.

//=====

This is a good place to Build an Initial image.
From the Menu select Build
Rebuild Platform
This may take 10 minutes to a couple hours
You should see the following message
 VIA_TEST_Platform - 0 error(s), 0 warning(s)

//=====

To add Persistent registry storage:
In the Catalog under Core OS

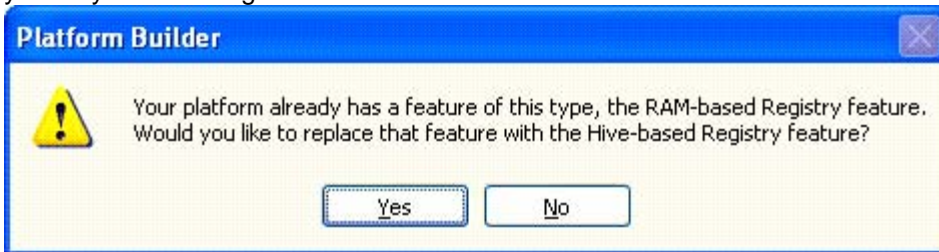
Click on the + in front of "File Systems and Data Store"

Click on the + in front of "File and Database Replication (Choose 1)"
Right click on Bit-based and Add to Platform

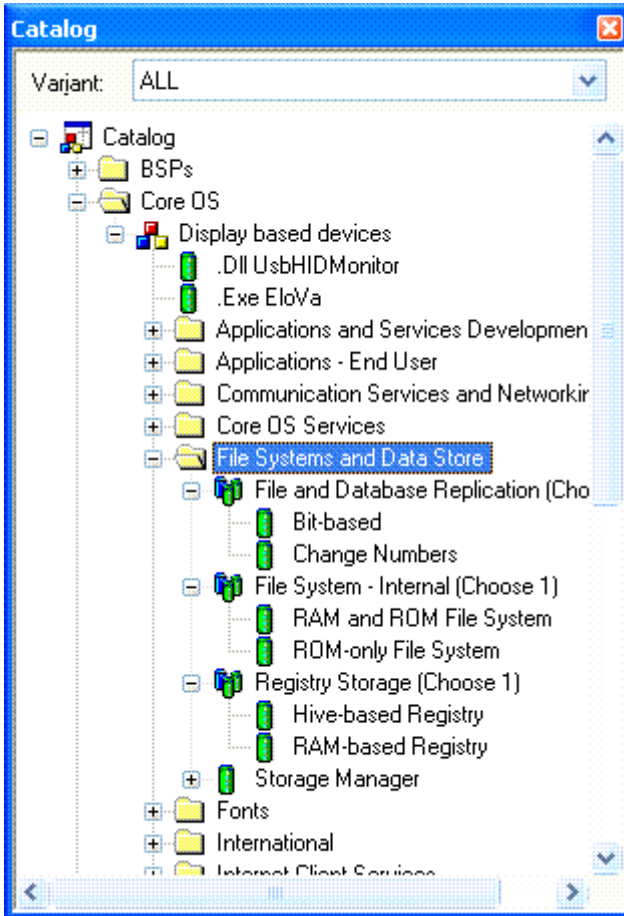
Click on the + in front of "File System - Internal (Choose 1)"
Right click on "RAM and ROM File System" and Add to Platform

Click on the + in front of "Registry Storage (Choose 1)"
Right click on "Hive-based Registry" and Add to Platform

you may see a dialog box



Click on Yes.



To Add A Software Input Panel (On screen Keyboard)

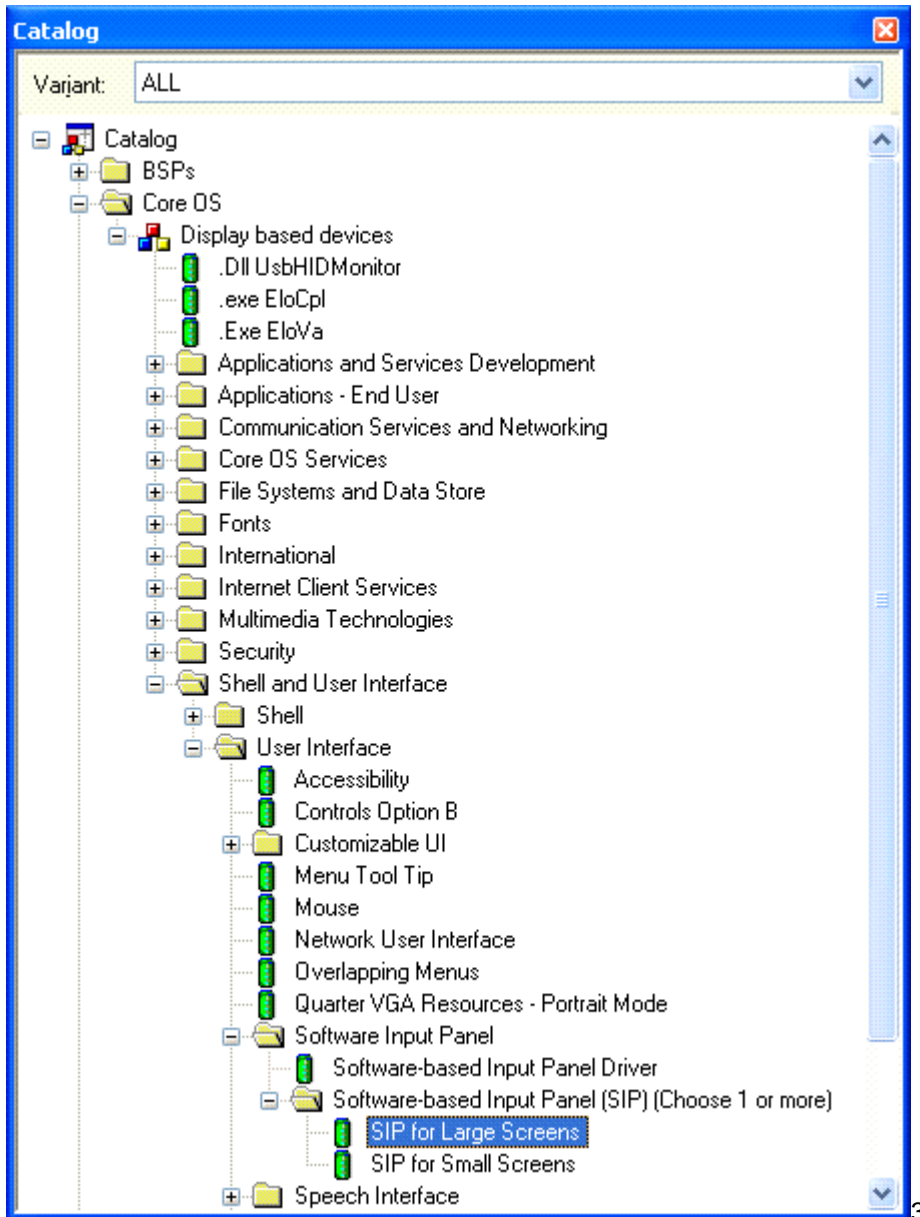
Under Core OS Click on the + in front of "Shell and User Interface"

Click on the + in front of "User Interface"

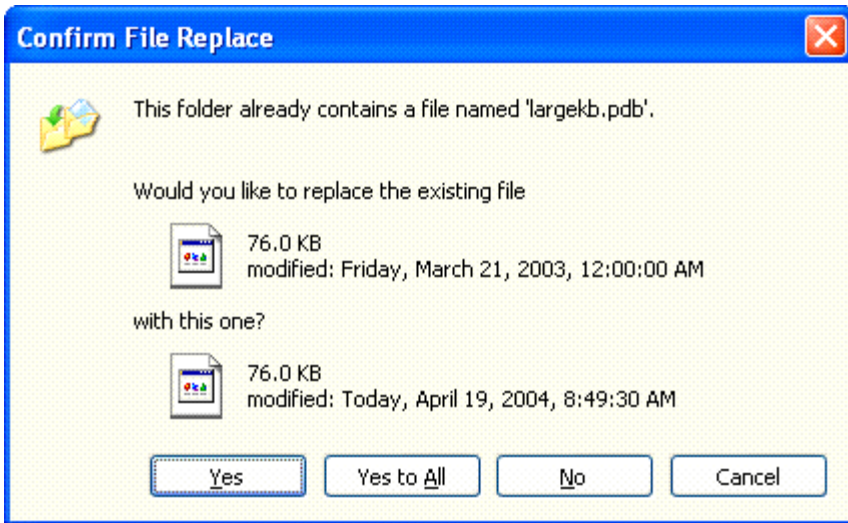
Click on the + in front of "Software Input Panel"

Click on the + in front of "Software Input Panel(SIP)(Chose one or more)

Right Click on "SIP for Large Screens" Select Add to Platform

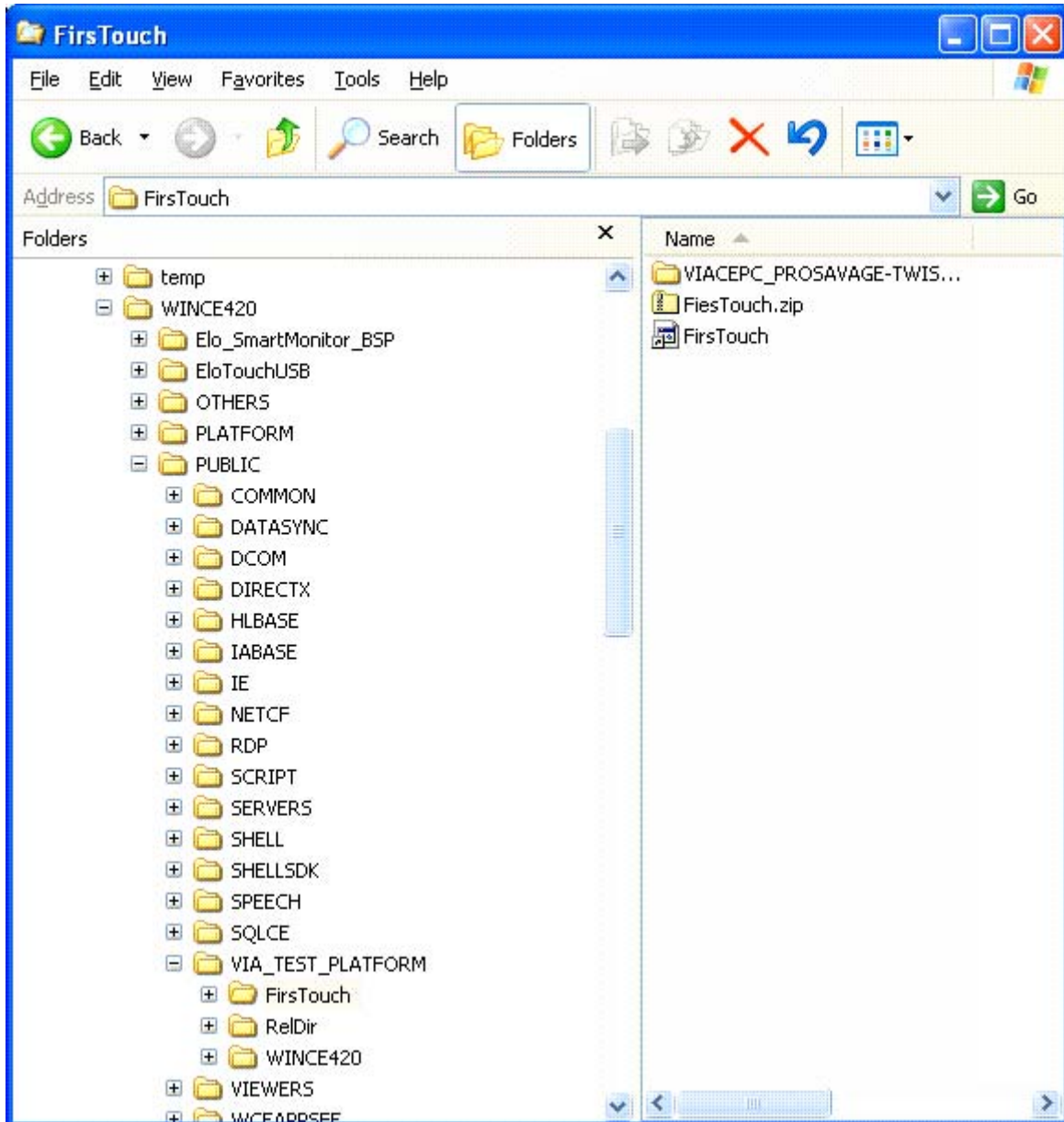


Copy from WINCE420\Elo_SmartMonitor_BSP\LARGEKB\Lib directory
largekb.def ,largekb.res,largekb.pdb,Largekb.lib
into \WINCE420\PUBLIC\COMMON\OAK\LIB\X86\RETAIL



Click on Yes to All

To launch the Calibration Program on first time the system is powered up.
Copy from the WINCE420\Elo_SmartMonitor_BSP\FirsTouch directory
Paste into Directory C:\WINCE420\PUBLIC\VIA_TEST_PLATFORM
If you named your Platform something other than VIA_TEST_PLATFORM ,Replace
VIA_TEST_PLATFORM in the Directory path above with the name of your workspace.



Then copy all the files in directory to WINCE420\Elo_SmartMonitor_BSP\PROJECTfiles

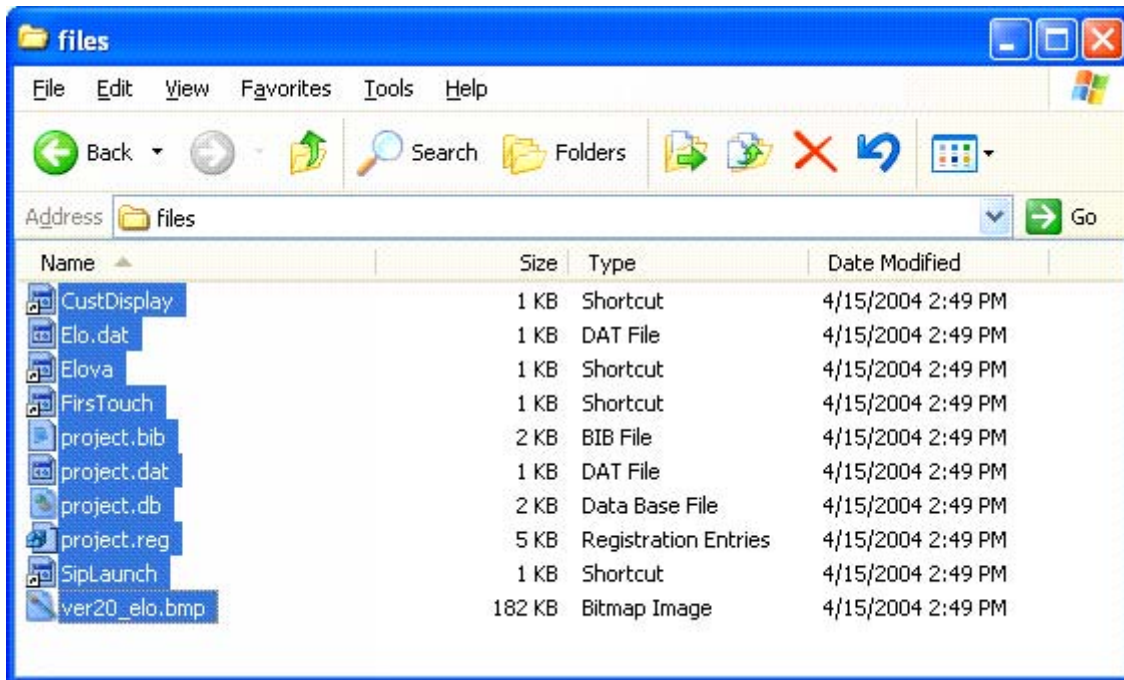
This installs the following features these are optional.

Custdisplay test program

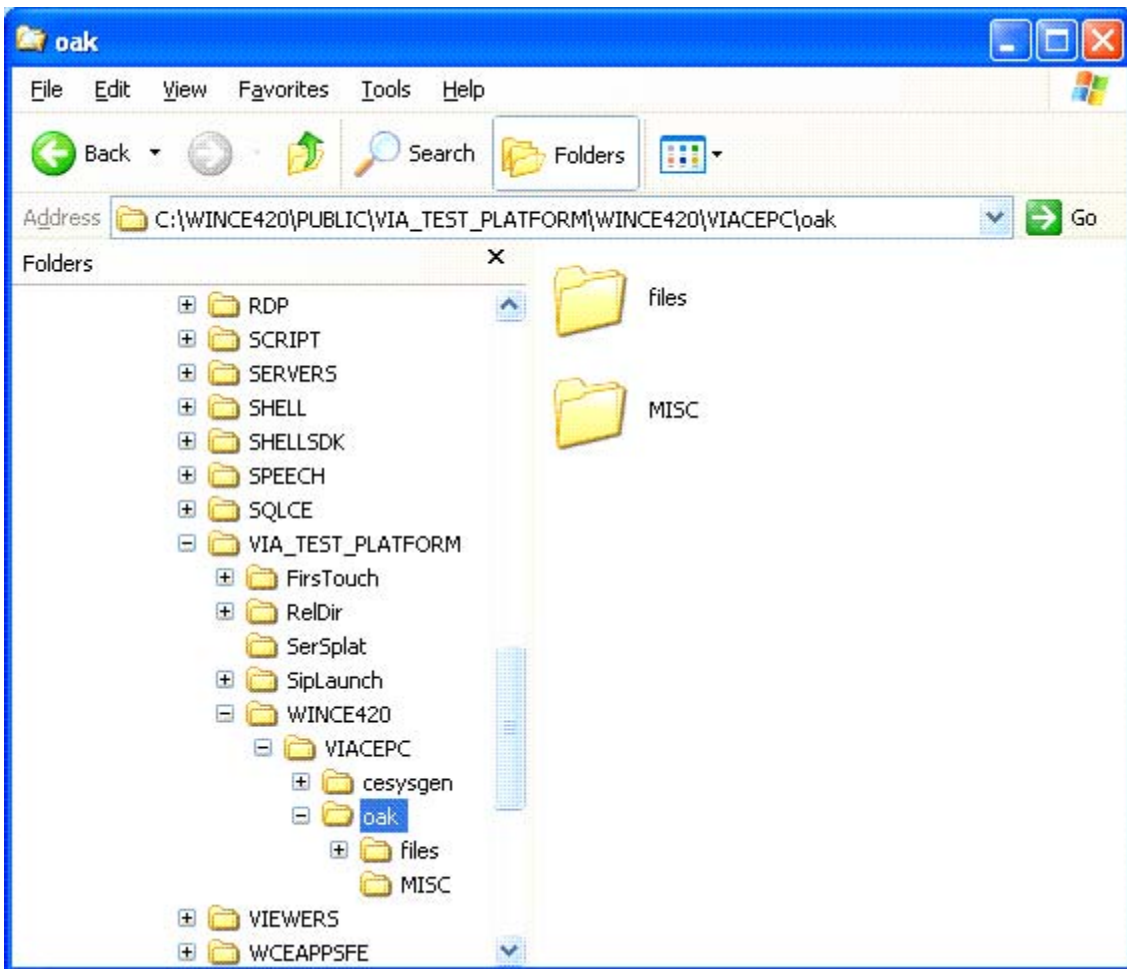
Elova calibration program

FirsTouch calibration on first power up

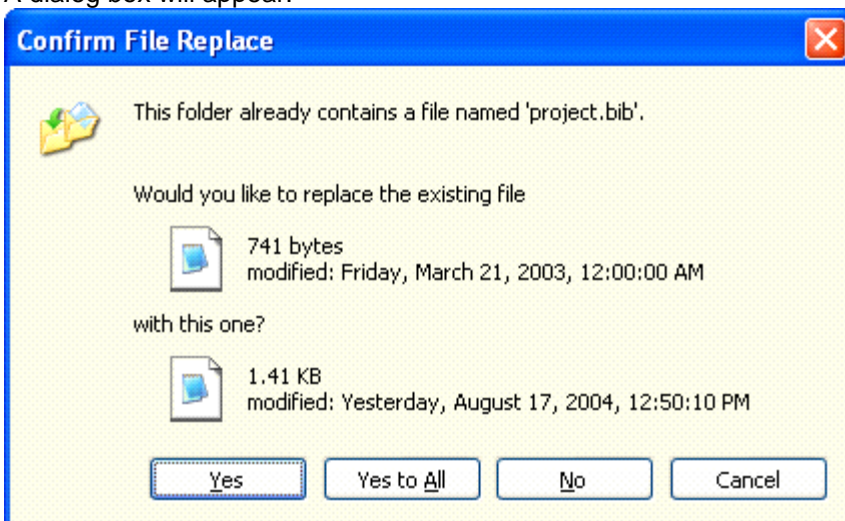
SipLaunch toggles on screen keyboard



to the Directory C:\WINCE420\PUBLIC\VIA_TEST_PLATFORM\WINCE420\VIACEPC\oak\files
If you named your Platform something other than VIA_TEST_PLATFORM Replace
VIA_TEST_PLATFORM in the Directory path above with the name of your workspace.

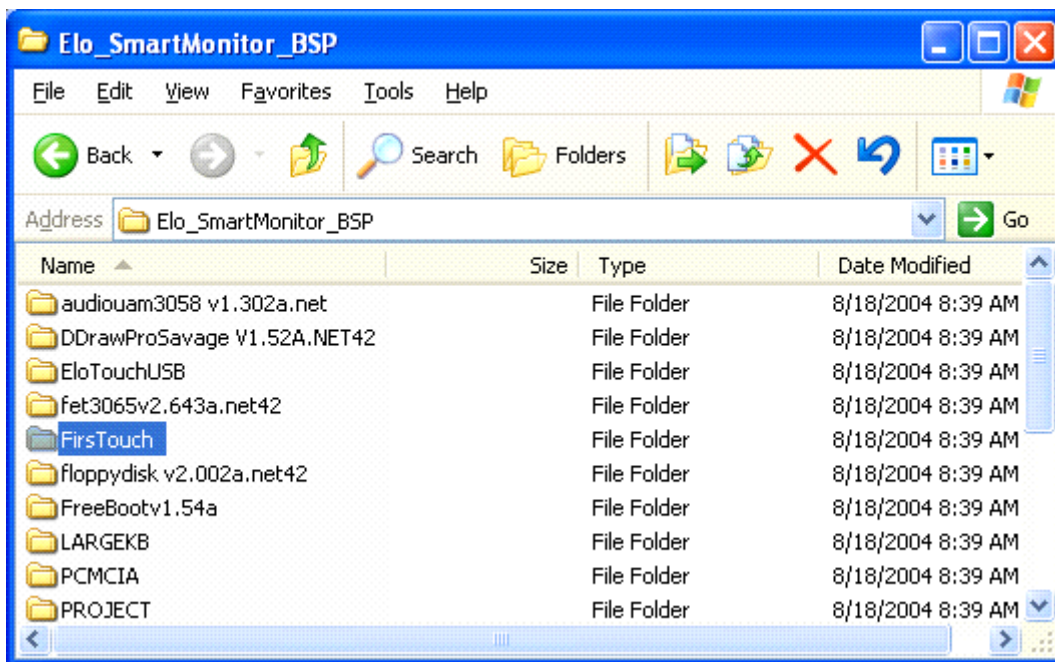


A dialog box will appear.

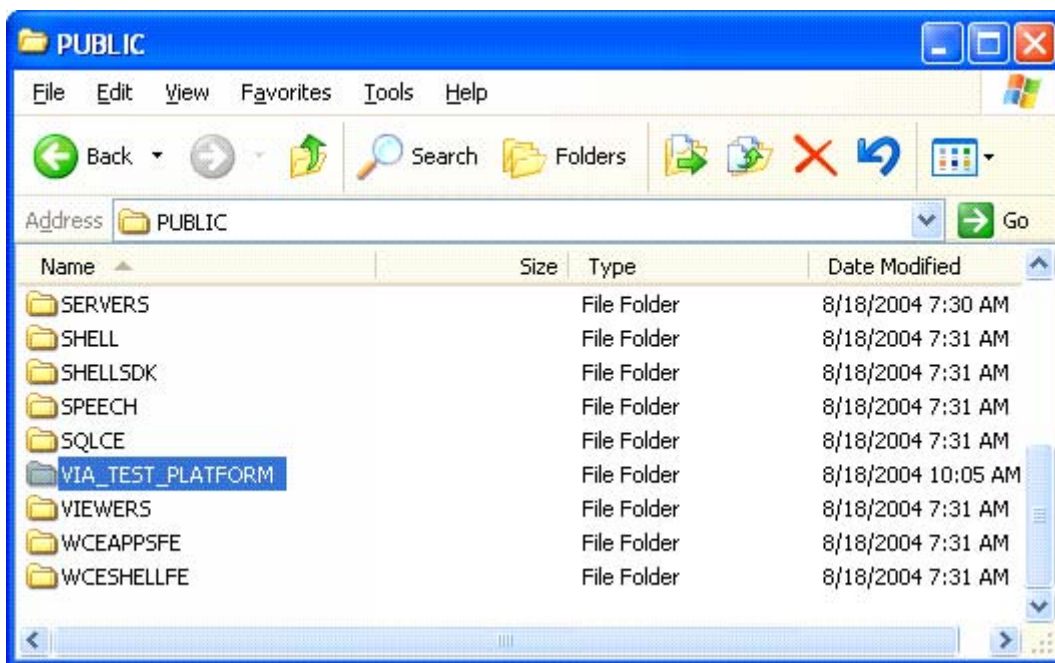


Click on Yes to All.

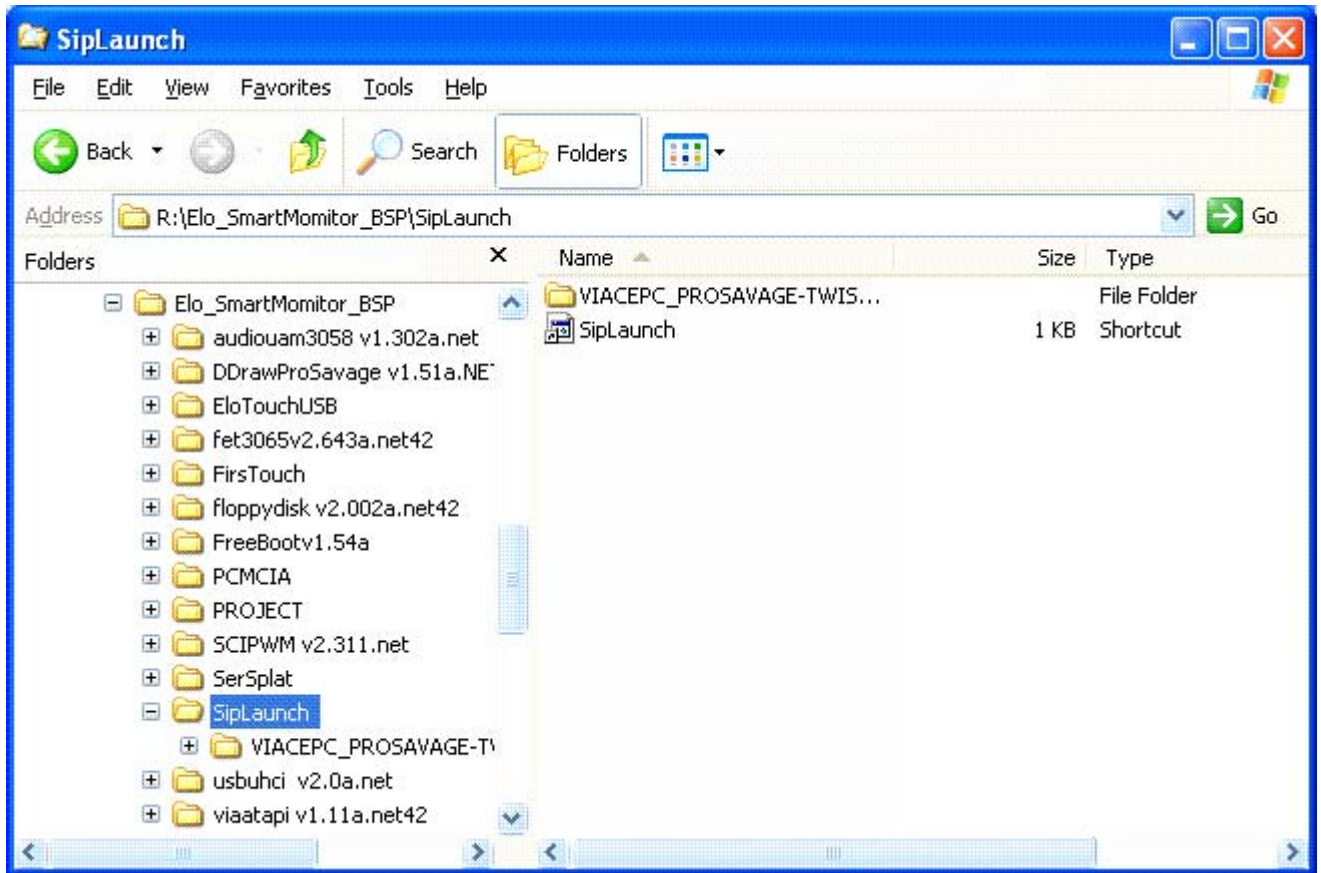
To add FirstTouch
Copy the directory Firsttouch from \Elo_SmartMonitor_BSP\Firsttouch



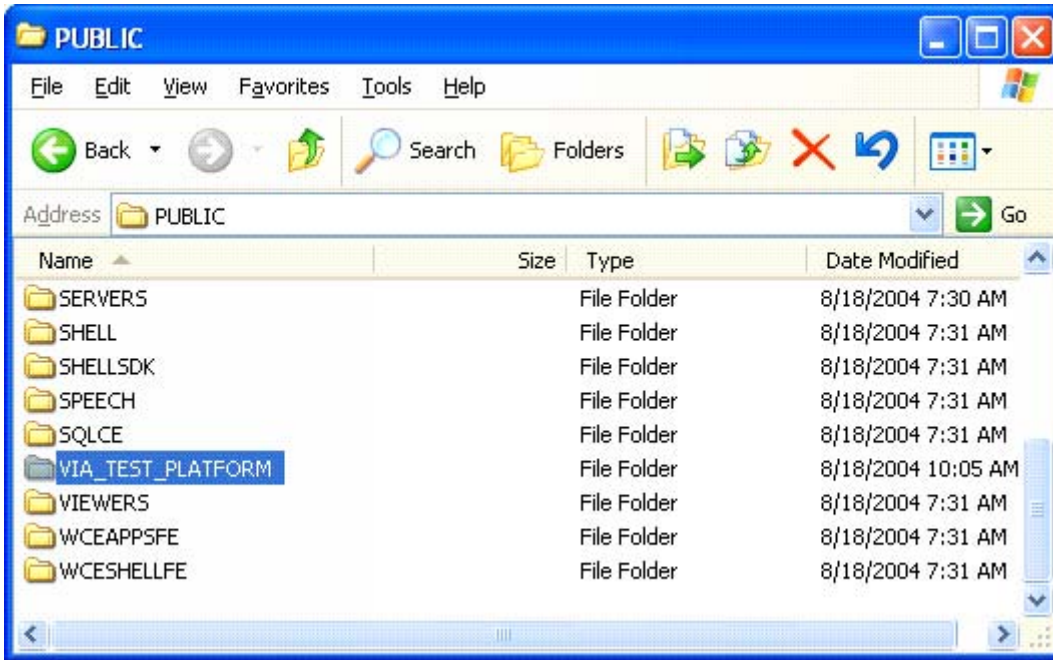
to Your Project Root directory. In this example \\WINCE420\PUBLIC\VIA_TEST_PLATFORM
Replace **VIA_TEST_PLATFORM** with the name of your workspace.



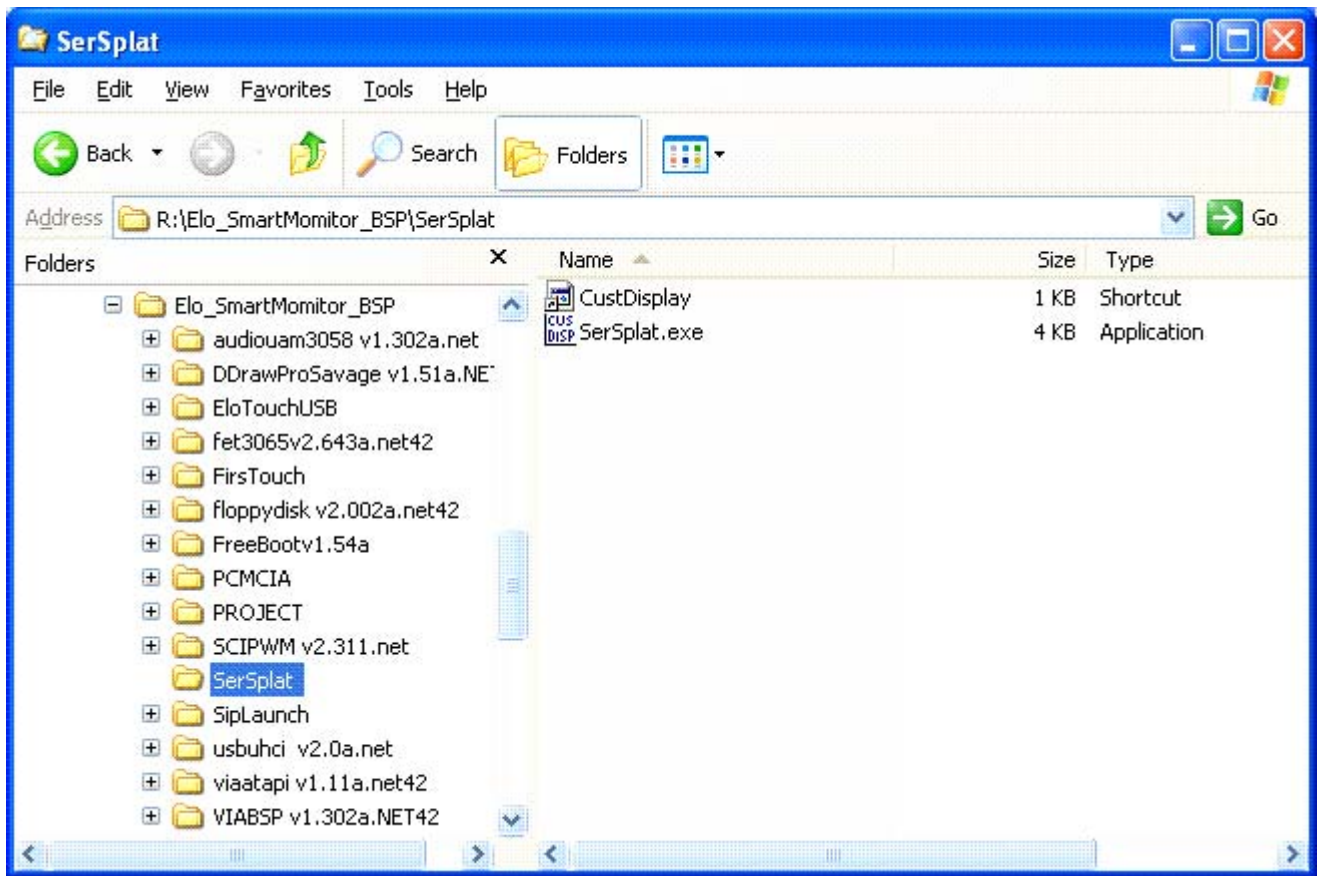
If you want to launch the Large Soft Input Panel (keyboard) Program on From an Desk top Icon
Copy the SipLaunch directory from \Elo_SmartMonitor_BSP\SipLaunch



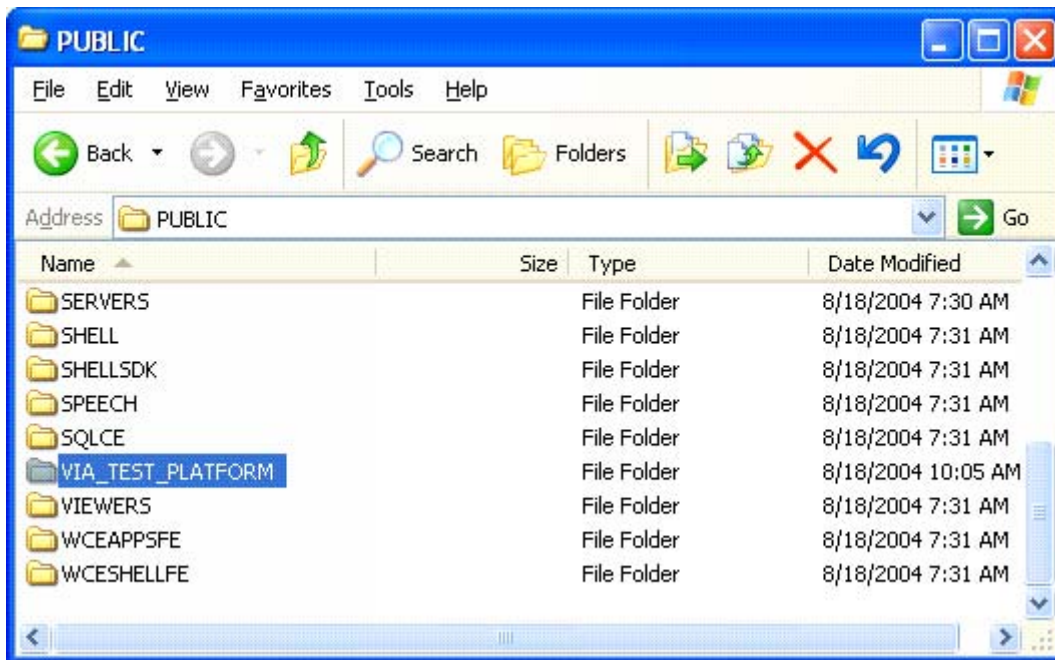
to Your Project Root directory. In this example \\WINCE420\PUBLIC\VIA_TEST_PLATFORM
Replace **VIA_TEST_PLATFORM** with the name of your workspace.



SerSplat is a simple test program for the Customer Display. If you want to include it in you build copy the directory SerSplat from the CD

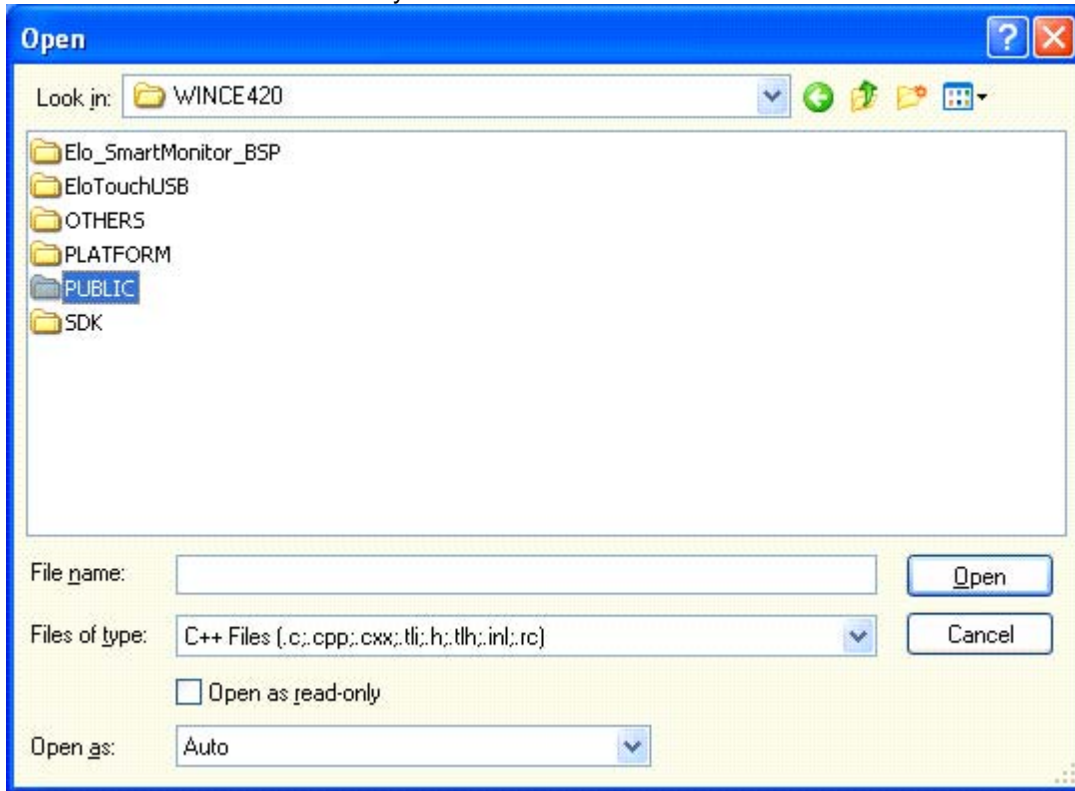


to Your Project Root directory .In this example VIA_TEST_PLATFORM
Replace **VIA_TEST_PLATFORM** with the name of your workspace.

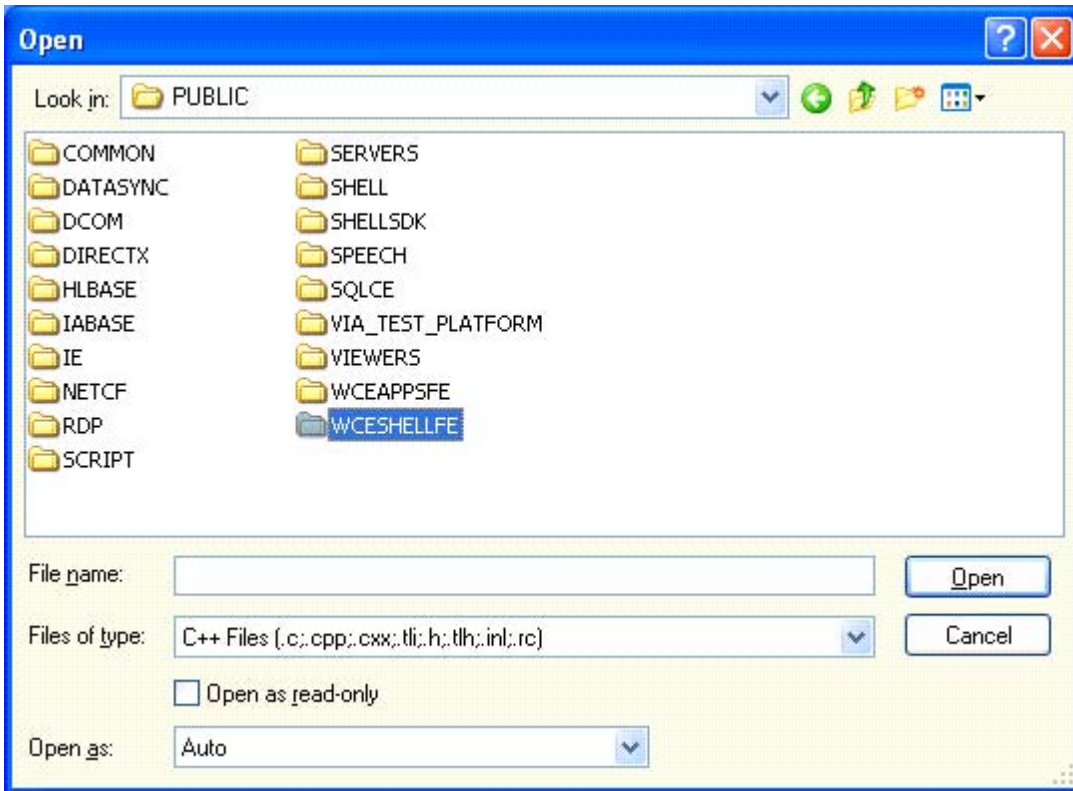


To Place Logo on the desktop

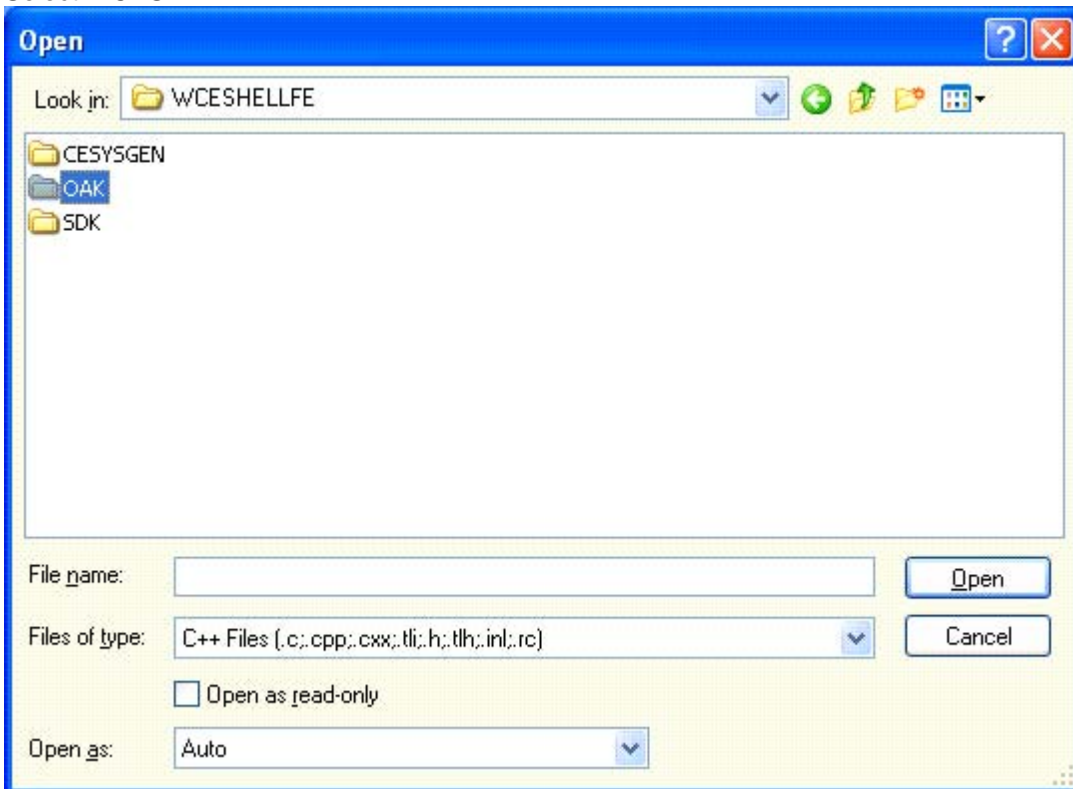
From the Platform Builder Menu select **files** and from the dropdown menu select **open**
Find the root WINCE420 directory.



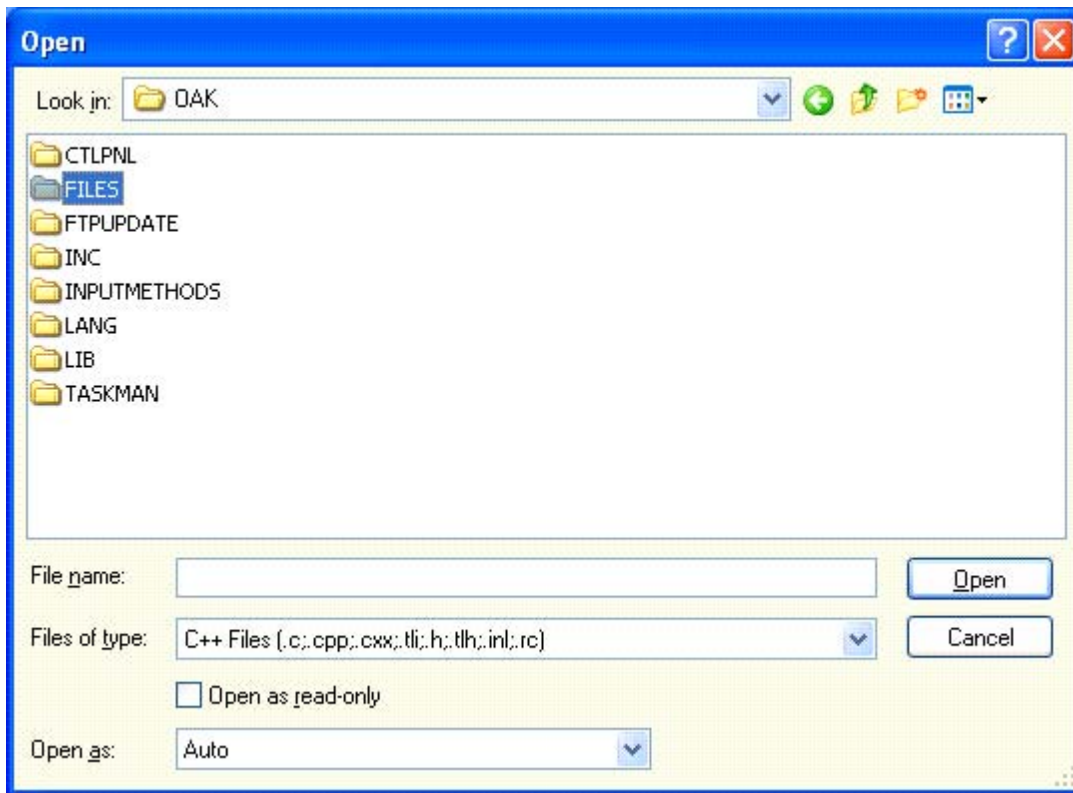
Select PUBLIC directory.



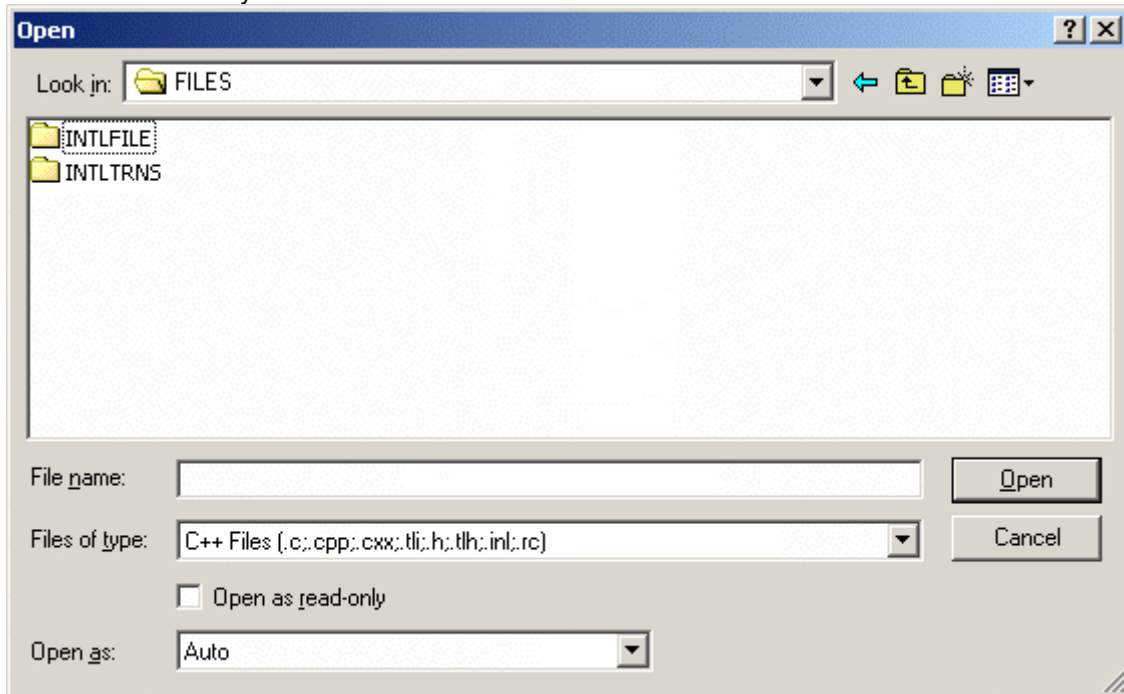
Select WCESHELLFE



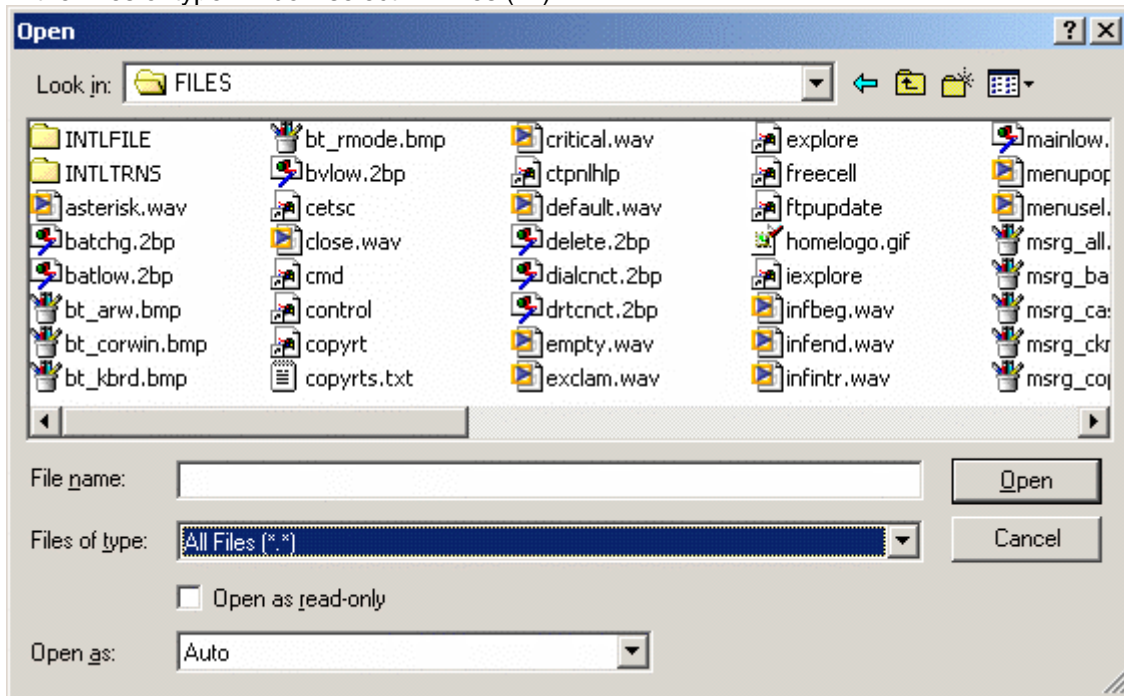
Select OAK directory.



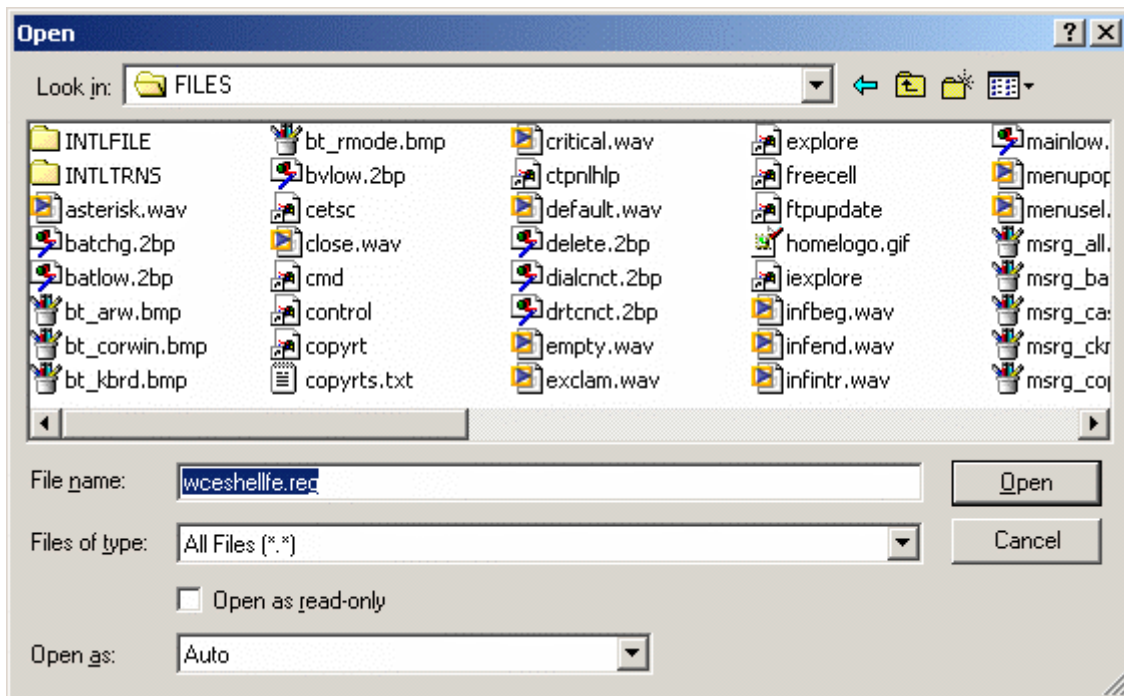
Select Files directory



In the Files of type window select All Files (*.*)



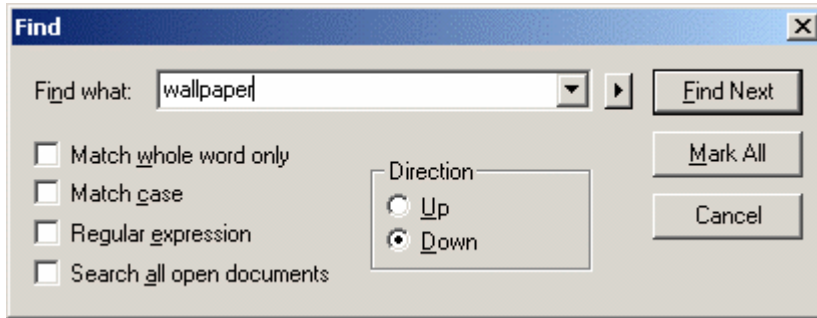
Type in the File name window **wcshellfe.reg**



Click Open.

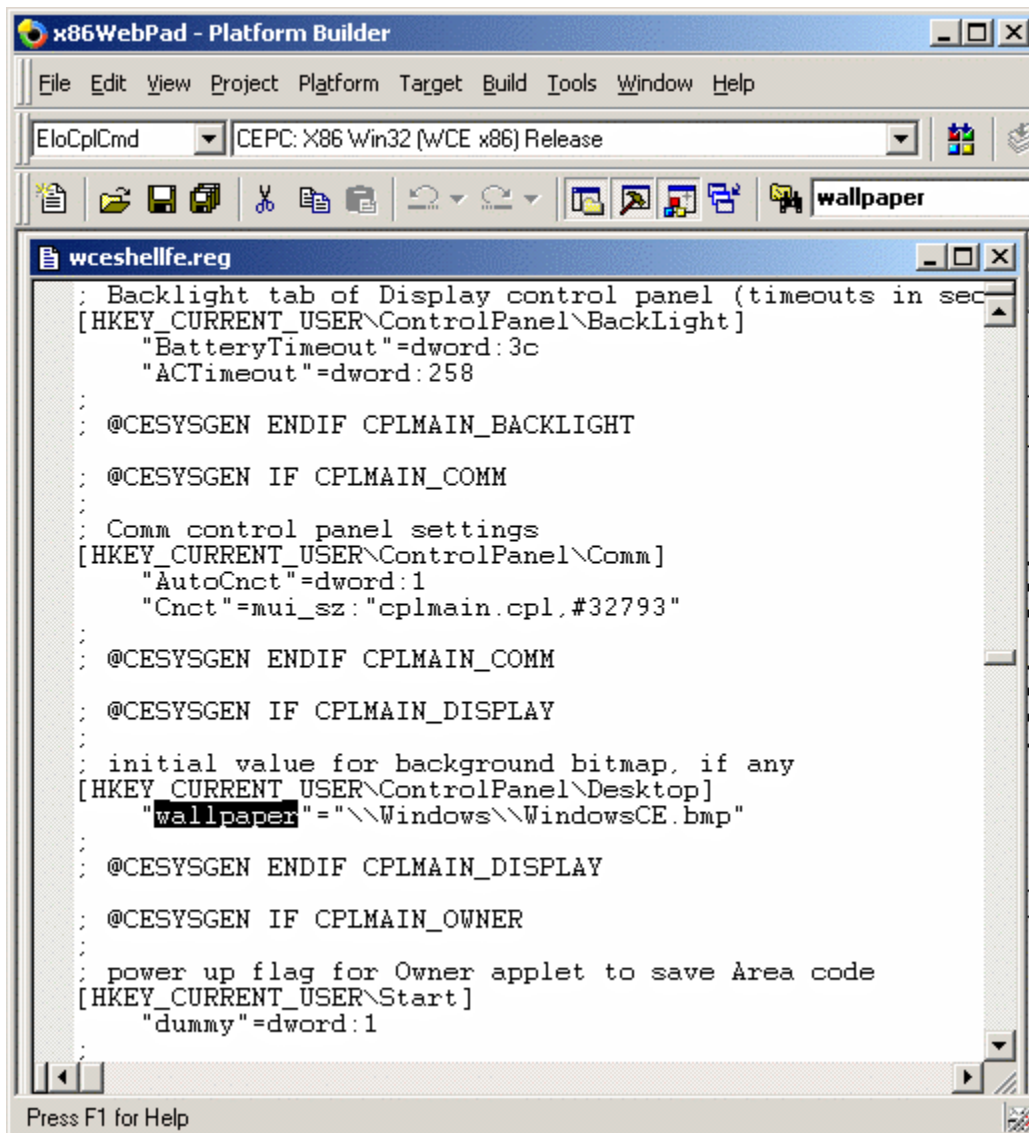
Select Platform Builder's Edit menu.
From the drop down list select find.

In the Find Dialog box Type **wallpaper**



Click on Find Next.

You will see:



```
[HKEY_CURRENT_USER\ControlPanel\Desktop]
    "wallpaper"=\\Windows\\WindowsCE.bmp
```

place the cursor on the next line.

Type **"wallpaper"=\\Windows\\ver3.3_elo.bmp**

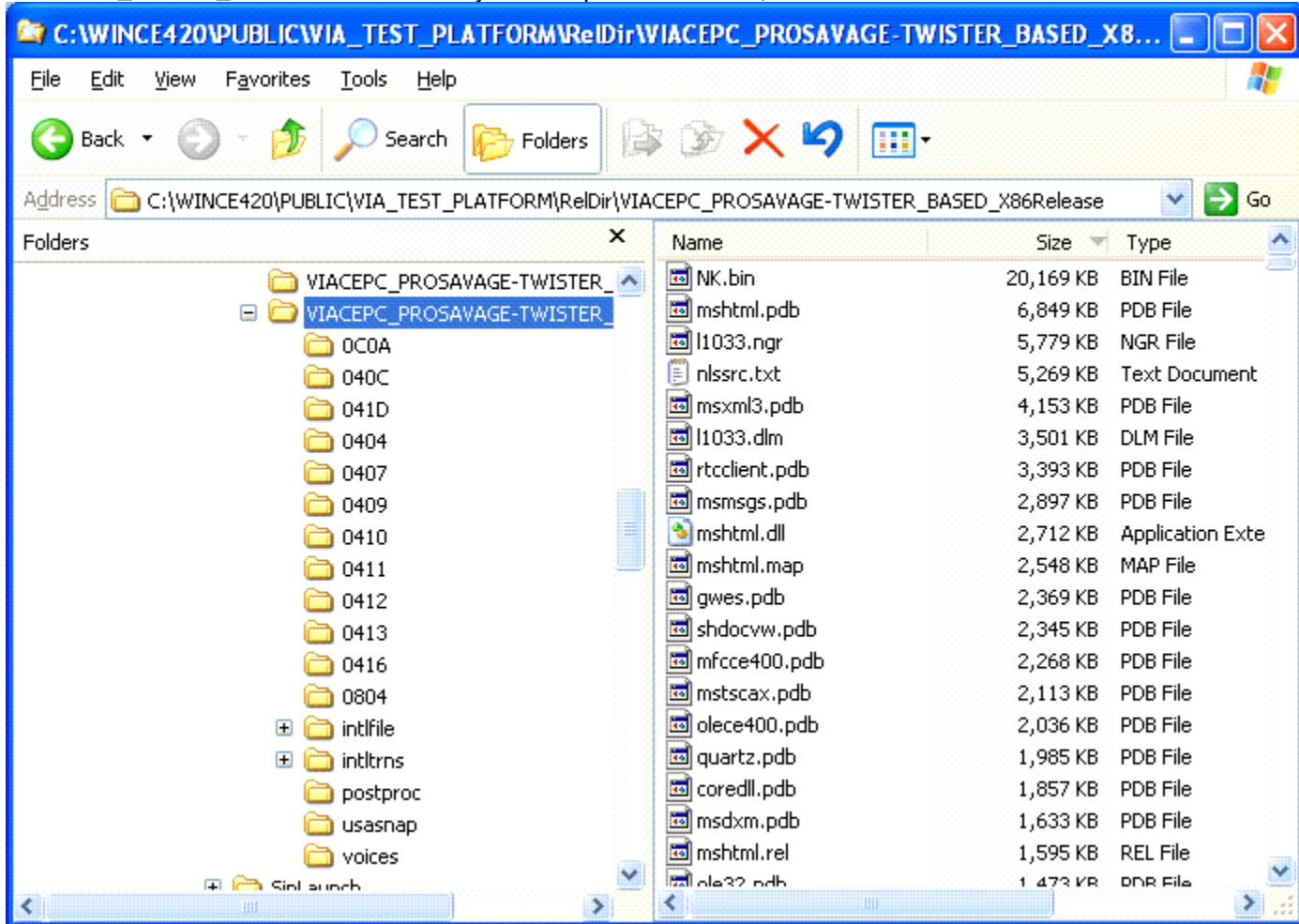
just below

```
[HKEY_CURRENT_USER\ControlPanel\Desktop]
```

and put a ; in front of "wallpaper"=\\Windows\\WindowsCE.bmp

From the Menu select Build
Rebuild Platform

Copy the C:\WINCE420\PUBLIC\VIA_TEST_PLATFORM\ReDir\VIACEPC_PROSAVAGE-TWISTER_BASED_X86Release nk.bin to your Compact Flash Card, or boot device.



Creating a Bootable Compact Flash Card.

There are a number of ways to create a bootable compact Flash card or hard drive for the Smart monitor.

Creating a dos bootable partition using dos 5.0 or higher using fdisk & format.

Also provided on the CD under the directory \Elo_SmartMonitor_BSP\FreeBootv1.54a is the free boot utility which creates a boot loader on a bios accessible boot device.

Caution: Do not execute freeboot on your Desktop Computer. It can **Destroy the Primary Boot Partition of your hard drive.**

Copy nk.bin, Bootload.bin, Bootarg.dat and vialogo.bmp to the Boot device (compact flash or hard drive).

In most cases you will use a compact flash with the Elo System.

Copy the entire root directory of FreeBootv1.54a to a bootable floppy.

Then put the compact flash with the added files into the SmartMonitor.

Plug a USB floppy into the smart monitor.

Enter bios settings and select to boot off the USB floppy

execute EloBoot.bat Type **eloboot**

this will create a non-dos bootloader for Windows CE.

It replaces the dos boot record with the CE Loader.

KNOWN Issues:

1.

If you use the Ethernet to Download an NK.bin image to your target:

a.

And you have installed PCMCIA support the system will hang .

If you disable PCMCIA support & rebuild the image.

Ethernet Download should work.

b.

You will need to have a Compact Flash card installed or

Ethernet Download will fail.

2.

If you boot system with a PCMCIA Card installed & or a USB Floppy Drive & or a USB CD ROM it may take in excess of 1 minute for the system to see the device(s).

If you hot plug in any to of the same devices ROM it may take in excess of 1 minute for the system to see the device (s).

3.

When the system is first powered up from a newly created Compact Flash or a new NK.bin file.

the cursor may not track touch. Restart the system by the power button or by selecting Suspend from the Start menu.