

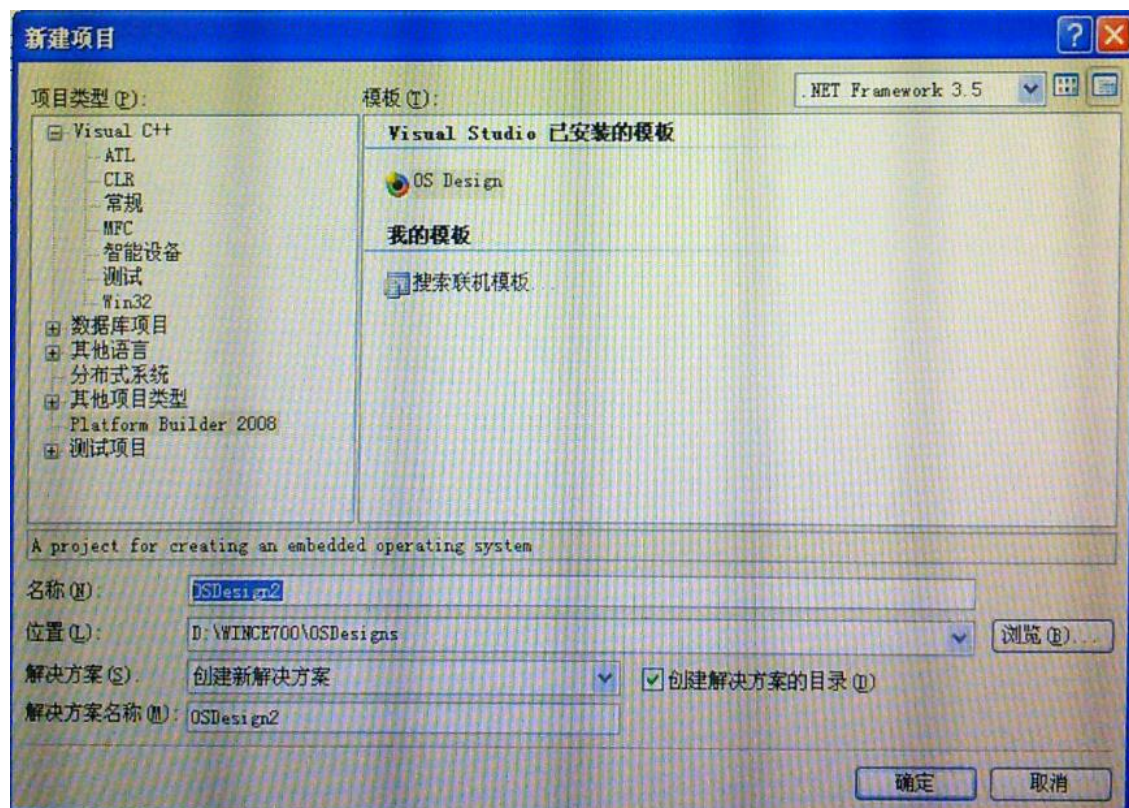
## Windows CE .NET Lynx Express driver information (Internal use)

### Introduction

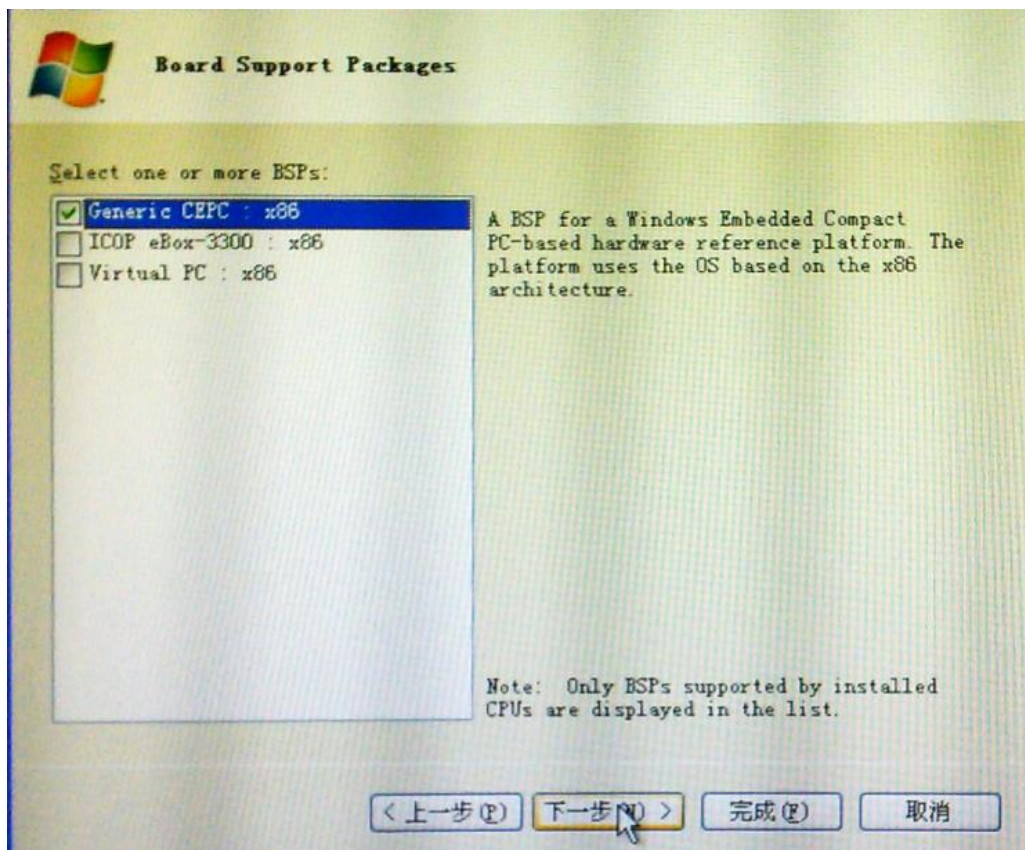
Silicon Motion, Inc. Lynx Express Driver is architected from the beginning to support variety of features and extension of Windows CE .NET, such as DirectDraw feature, Dynamic Rotation feature, Multimon feature, SMI Multimon Emulation feature (using single Lynx Express chip to drive two independent displays), WCEfA (Windows CE for Automotive) feature, and more.

### Prepare

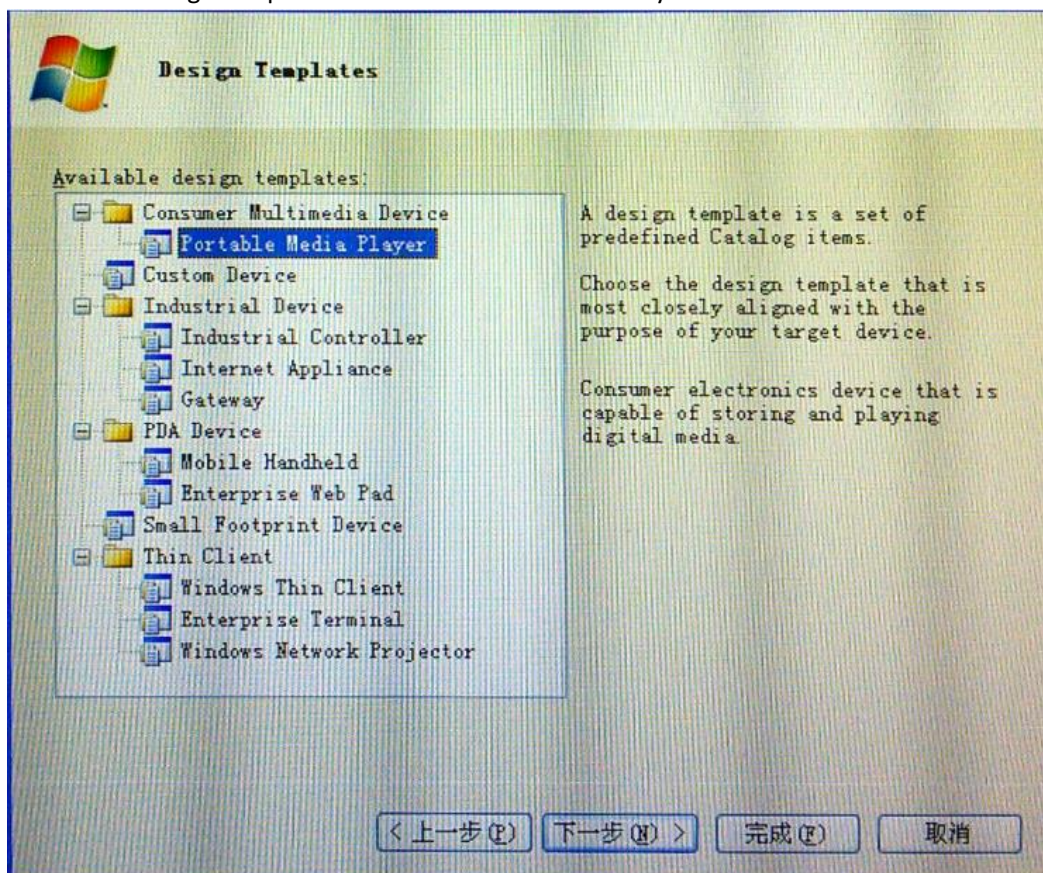
1. OS : Windows XP SP2 (server pack 2)
2. Install ".NET framework 3.5 "
3. Install Microsoft Visual Studio 2008
4. Install Microsoft Visual Studio 2008 SP 1
5. Install WinCE700(Windows Embedded Compact 7.exe)
- \* Choose "Platform Builder" "Compact Test Kit" "Windows Embedded Silverlight Tools" "Documentation" and "x86 Architecture" for x86 platform.
6. Open VS2008 and **new** a project. Choose "Platform Builder 2008" and use "OS Design" template.



7. Select "Generic CEPC: x86" BSPs.

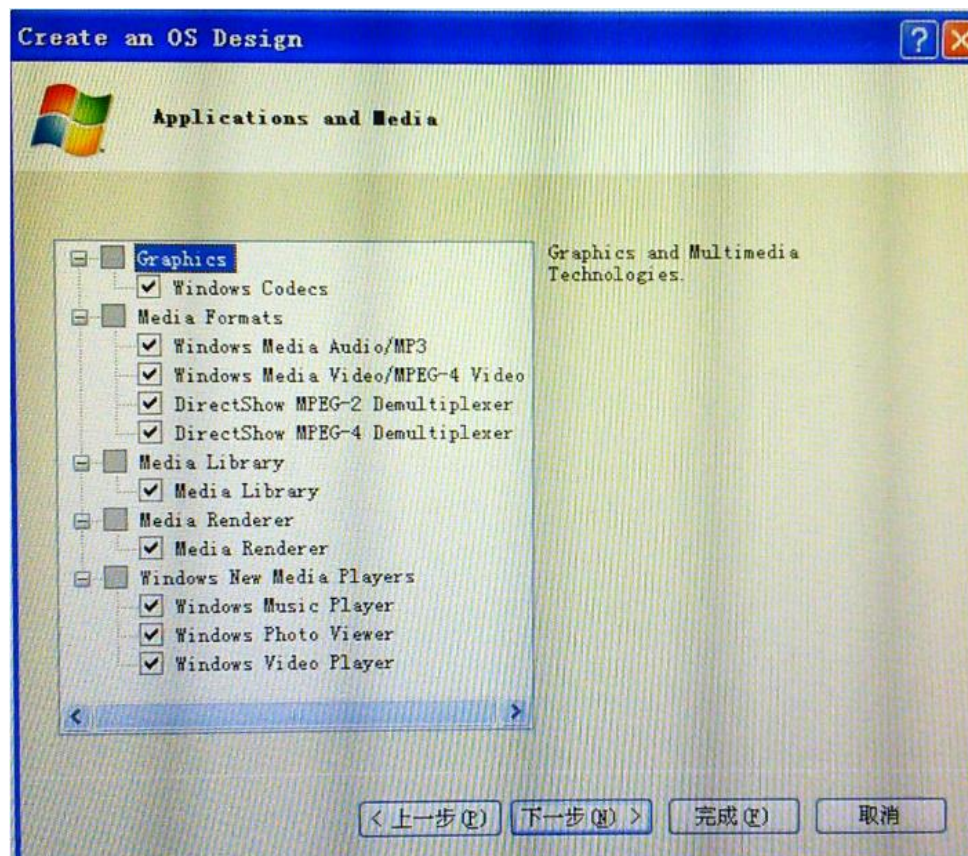


8. Available design templates choose "Portable Media Player"

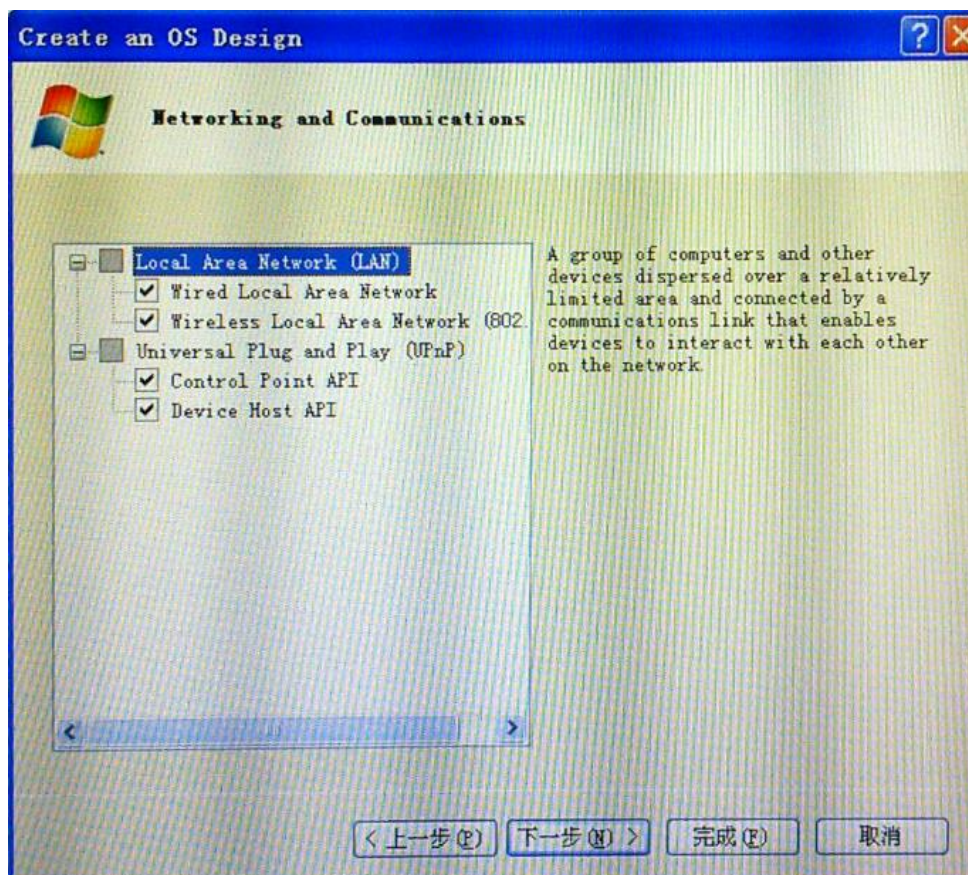




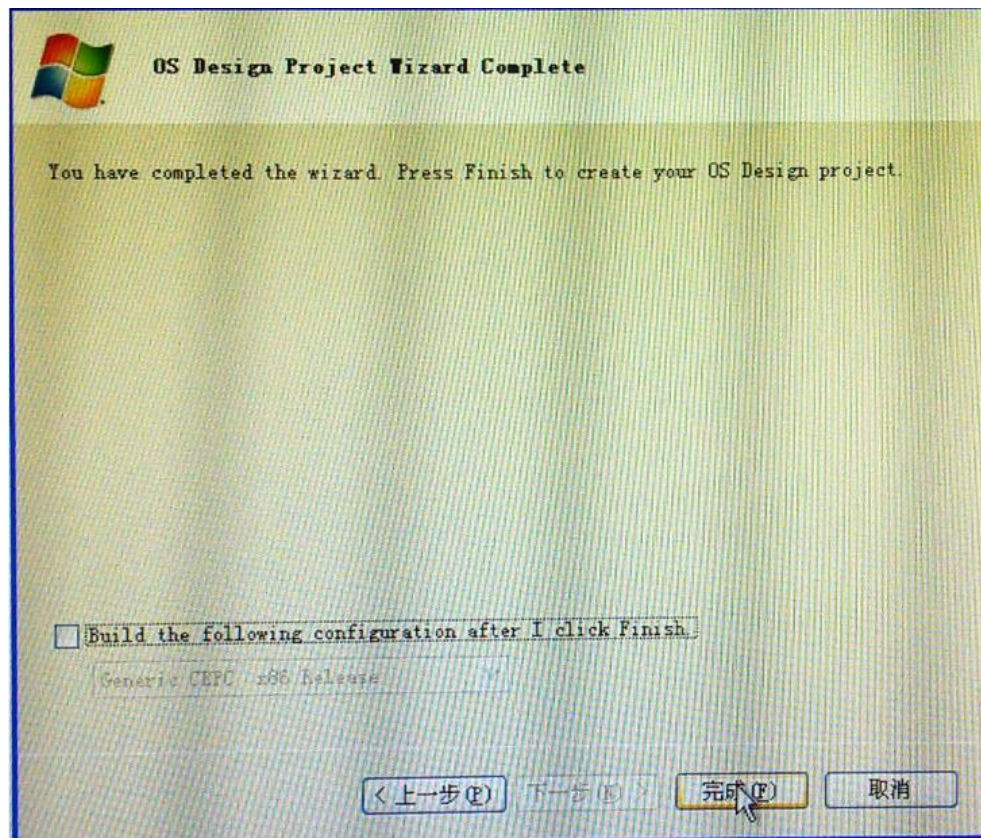
9. Use default configuration



10. Use default configuration



## 11. Finish the configuration



## Setup

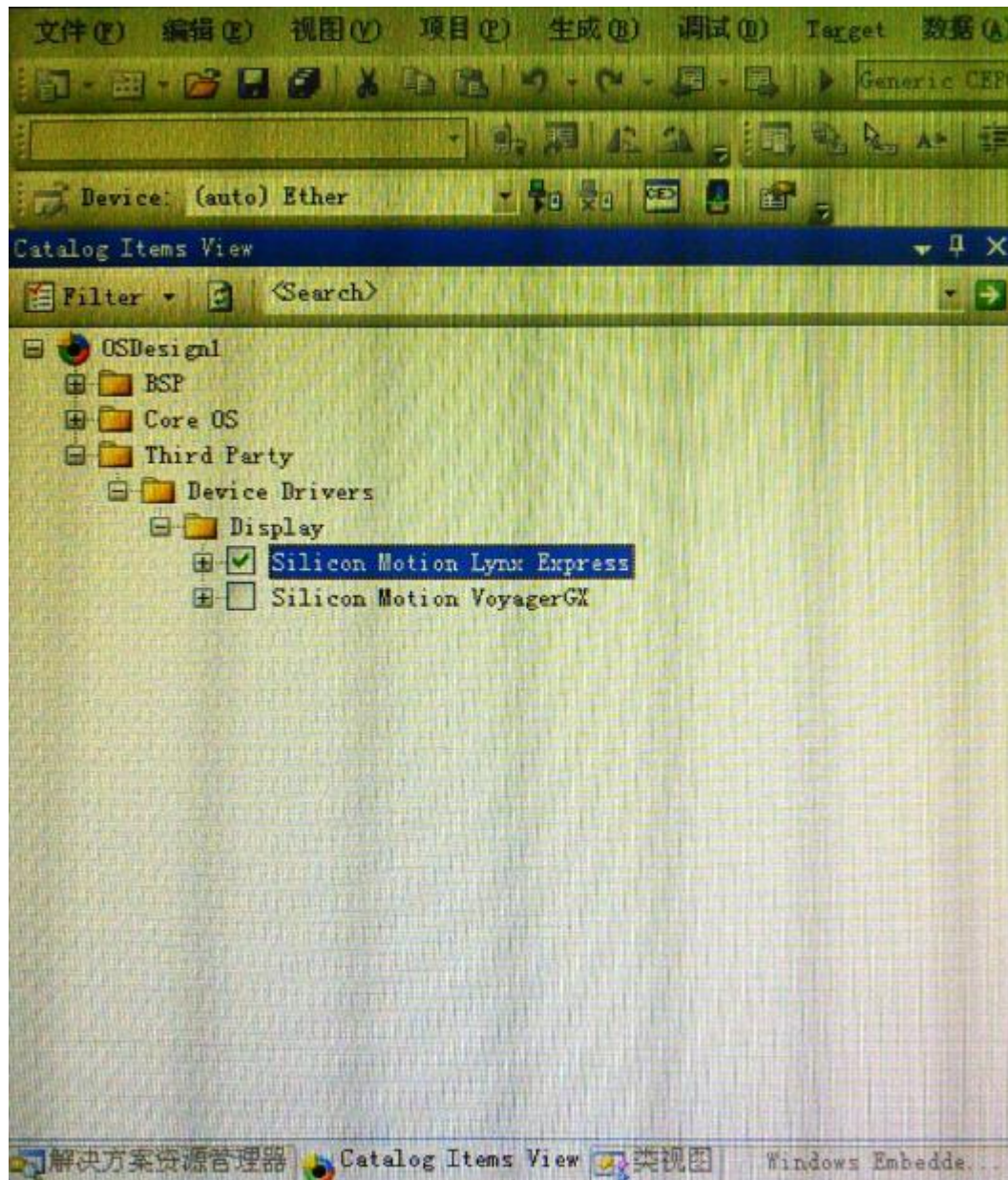
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+ Lynx Express display driver setup information for Windows CE 6.0/7.0

1. copy the source files to "\$(\_WINCEROOT)\3rdparty\Silicon\_motion\SMILynxEx\"
2. copy the smi\_LynxEX\_6.pbcxml to "\$(\_WINCEROOT)\PUBLIC\COMMON\CATALOG".
3. Then Silicon Motion Lynx Express driver option will be in the Platform Builder Catalog Items View.

\* Select the Lynx Express display driver to the current platform.





\* WinCE 7.0 desktop image enable setting in Catalog View

Core OS->Windows Embedded Compact->Shell and User Interface->Shell->Graphics Shell  
->"enable standard Shell"

\* Also enable USB function to support USB keyboard/mouse OR use PS2 keyboard/mouse

Core OS->Windows Embedded Compact->Device Drivers->USB->USB Function\*\*\*

\* Change the Lynx Express Windows CE registry settings

- The registry is used to specify the special modes and panels
  - Edit smi\_LynxEX.reg (or any .reg files, as preferred)
  - Add the following lines, and specify the registry options (See Registry Settings section):
- ```
IF BSP_DISPLAY_SMI
[HKEY_LOCAL_MACHINE\System\GDI\Drivers]
    "Display"="ddi_smi.dll"
[HKEY_LOCAL_MACHINE\Drivers\Display\SMI]
```

; Specify Lynx Express registry options below here

Change the modes please modify "Cxpanel" and "CyPanel"

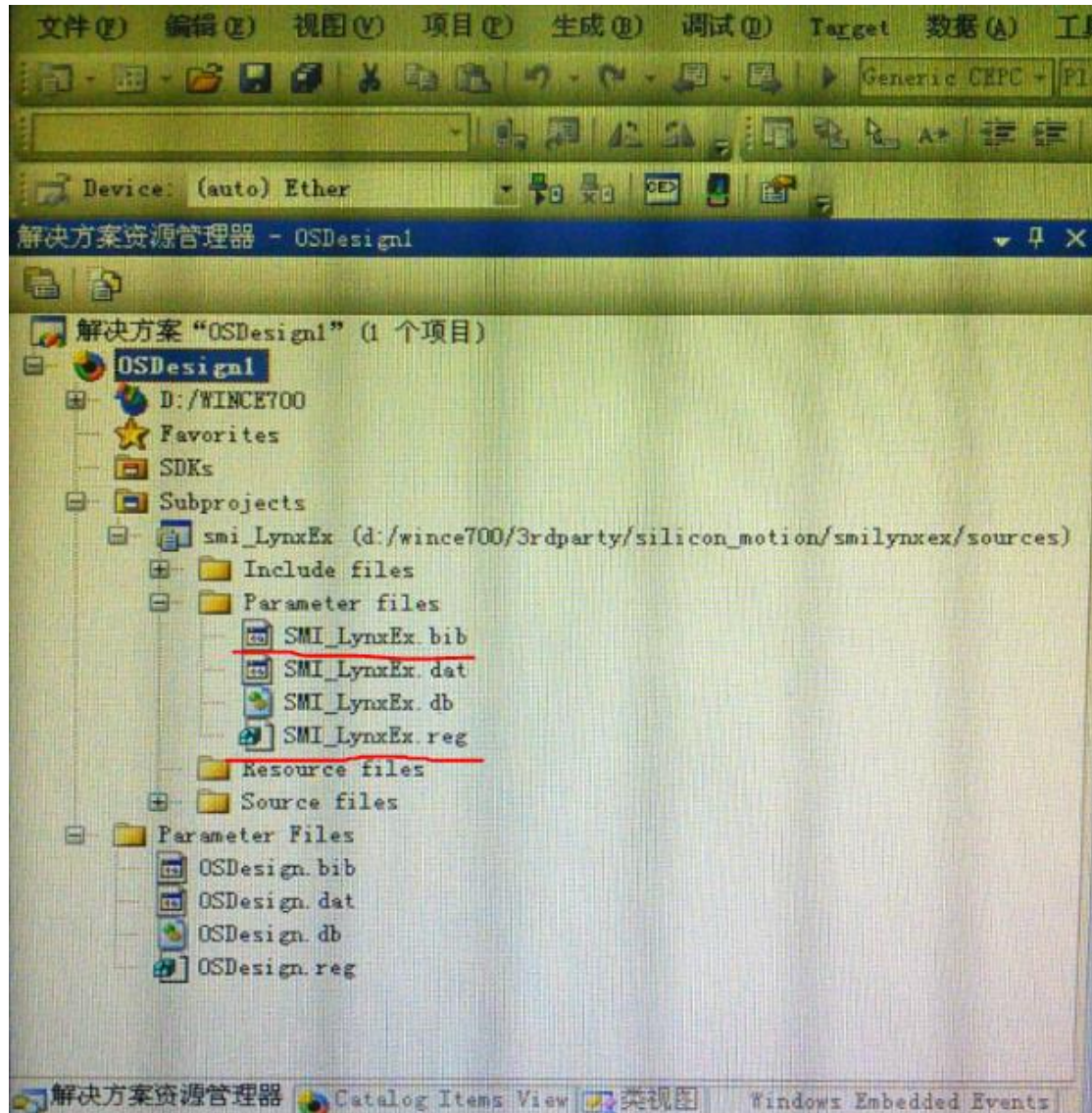
ENDIF

\*Add ddi\_smi.dll module info to smi\_LynxEx.BIB files, as shown below:

ddi\_smi.dll

\$(\_FLATRELEASEDIR)\ddi\_smi.dll

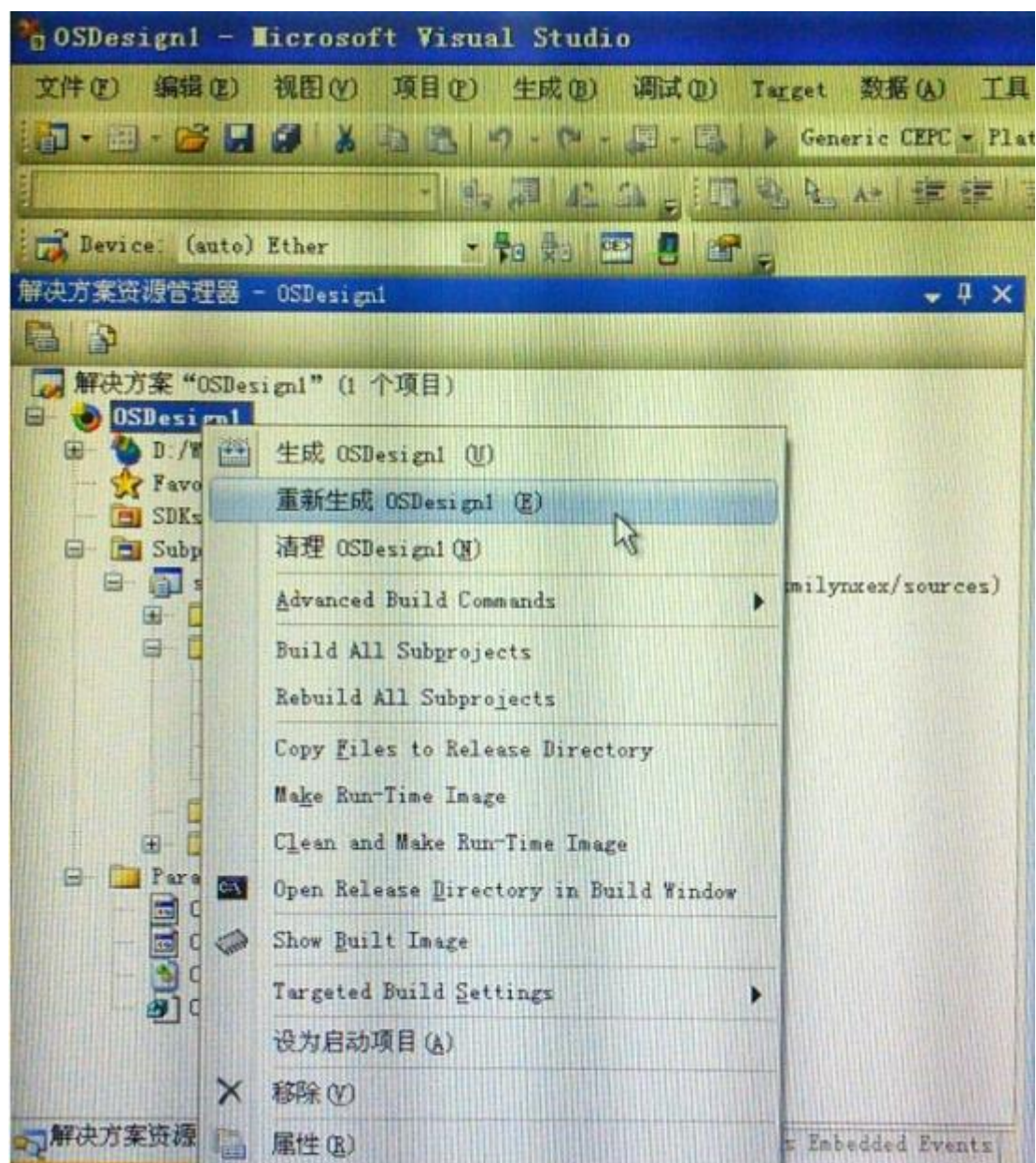
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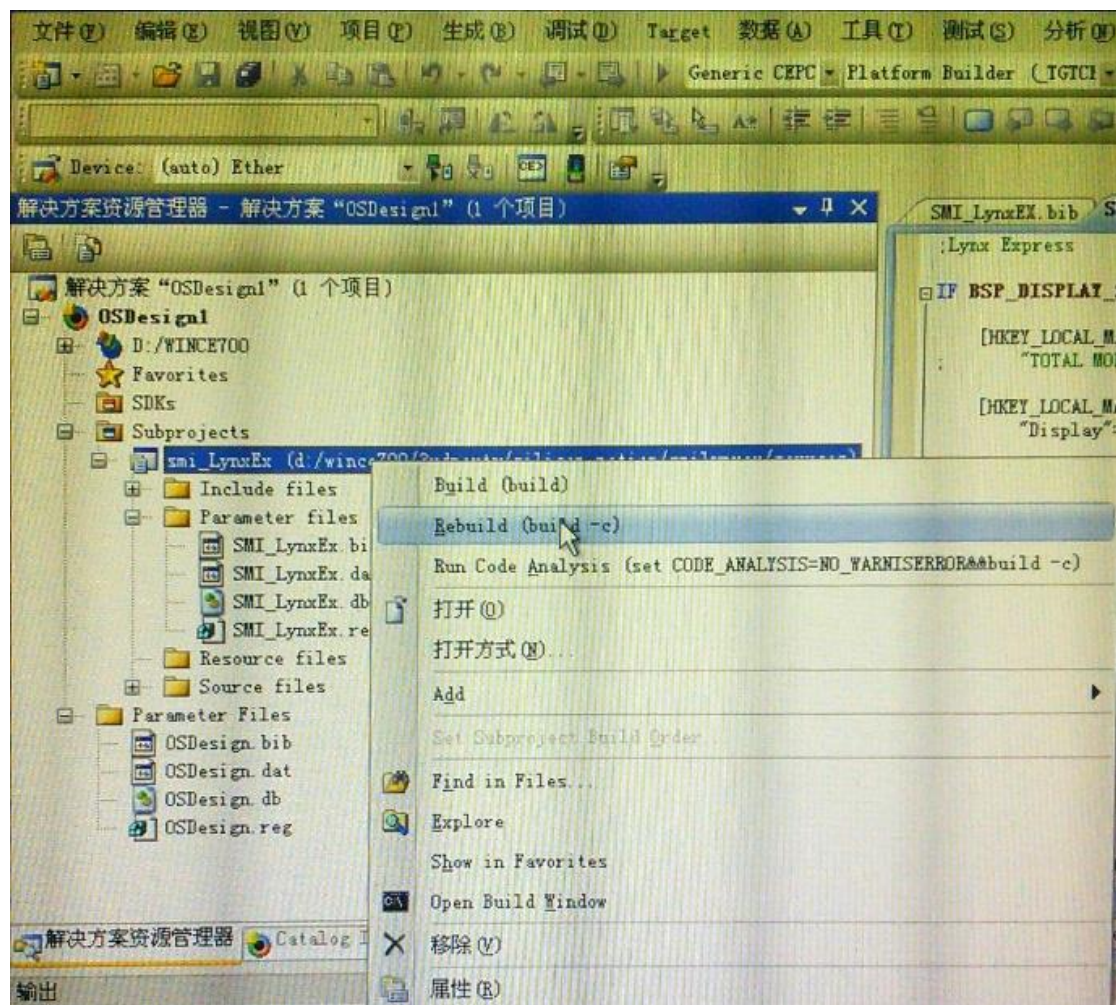


\* Build the Lynx Express driver

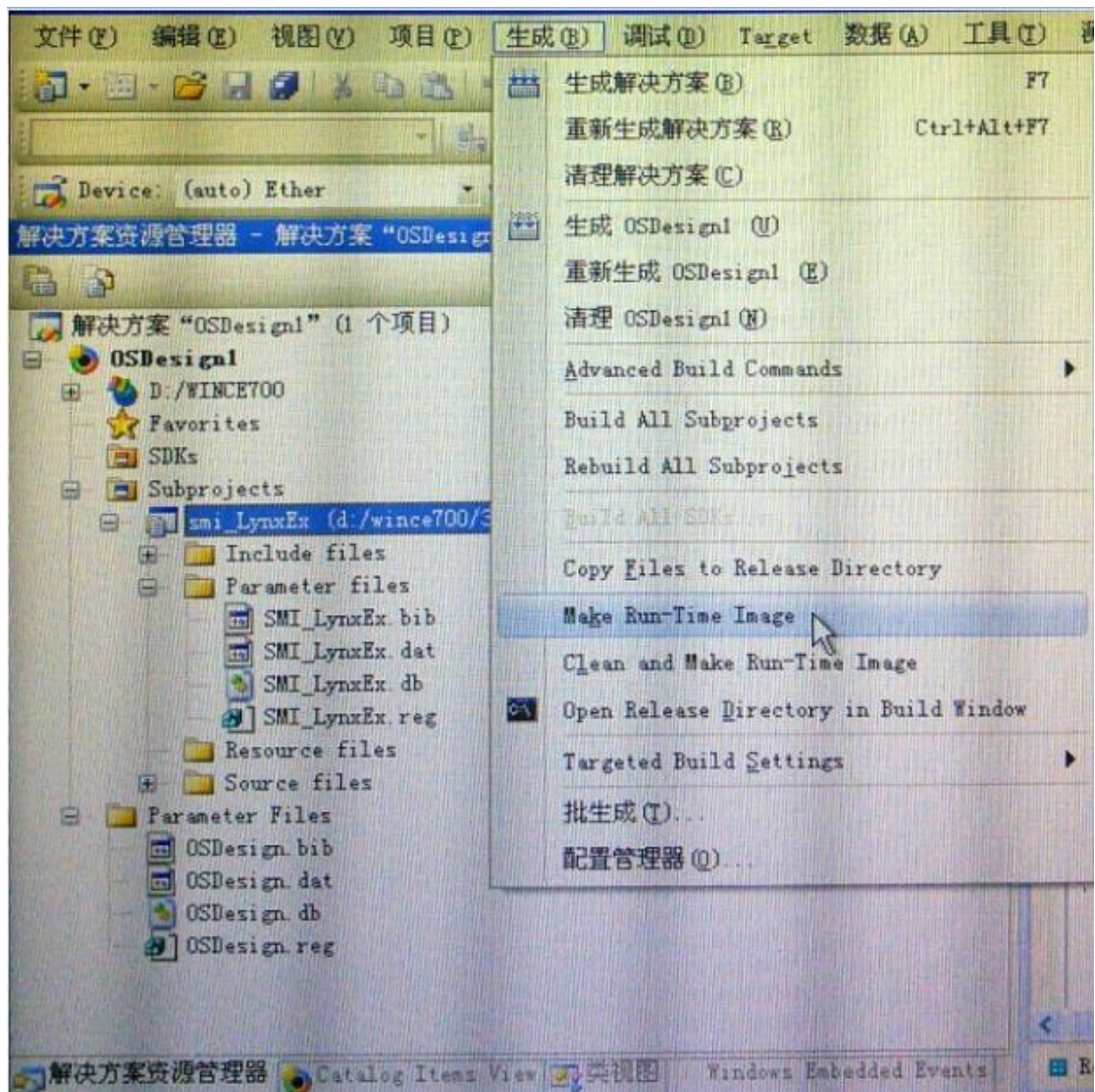
- To build the whole platform, click Build\Build solution or Build\Rebuild solution
- To rebuild the driver separately, right click on Lynx Express and select "Build" or "Rebuild" and then click Build\Make run\_time image







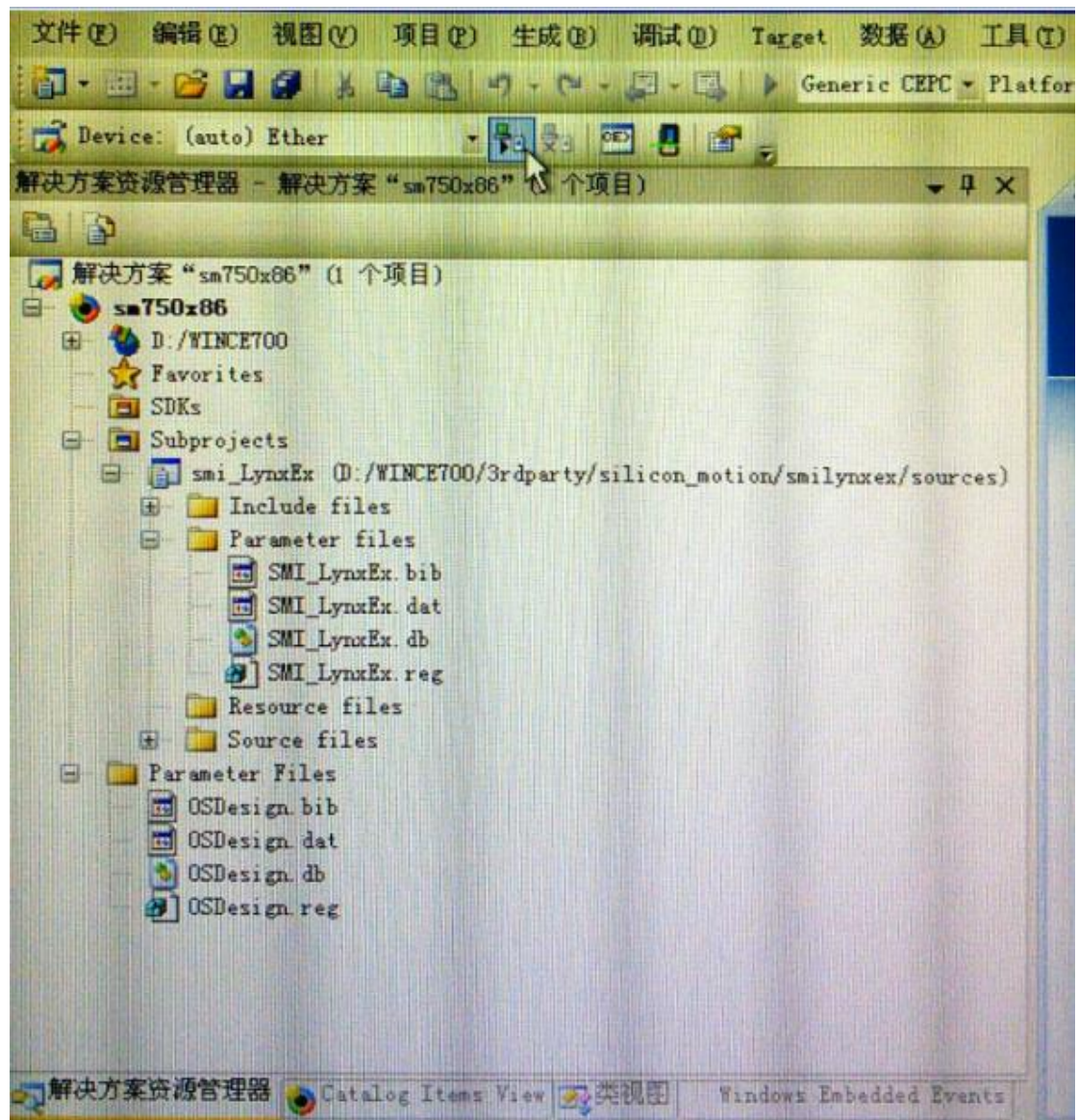




## Bootup

1. Set up WinCE 700 client in DOS environment
  - \* make a DOS in UDisk
  - \* copy all files in "http://pan.baidu.com/s/1i4N6itZ" to UDisk
  - \* Edit file "autoexec.bat" in UDisk, and "set NET\_IP=\*\*\*\*" ("\*\*\*\*" is a useful IP address in LAN network)
2. Bootup WinCE 700
  - \* run "attach Device" and boot up DOS, WinCE will boot up automatically.

**Notes:** Not all LANs are supported, the older the better, like Linksys LNEPCI2T, Model LNE 2000, RealTek 8139, DEC 21140, DP83815-based cards, Netgear FA-312, and any PCI/ISA-based, NE2000-compatible network adapter.



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