

SUNIX ISA Card With IRQ Sharing Driver Installation Guide

For Windows CE 4.2

A. Driver installation

A.1 Driver installation

Step 1. Please double click "SUNIX WinCE 4.2 Driver Vx.x.x.x.msi"

Step 2. Driver will install in C:\PLATFORM\Sunix_WinCE42\

Step 3. Finish driver install wizard

A.2 Add driver into Platform Design

step 1. Create a new platform design

step 2. Select a BSP

step 3. Select a design templates

step 4. In Platform Builder, select "Tools" and then select "CEC Editor"

step 5. In CEC Editor, select "File" and select "Open" to open cec file in
C:\PLATFORM\Sunix_WinCE42\

if OS design build in debug mode, please open "sunixdbg.cec"

if OS design build in release mode, please open "sunixrtl.cec"

step 6. After "sunixrtl.cec" opened, select "Catalog" and then select "Add to Catalog"

step 7. In Platform Builder, select "View" and then select "Catalog"

step 8. In Catalog window, click mouse right button and select "Refresh Catalog"

step 9. "sunix driver rtl" will show in \Third Party\SUNIX\, please click mouse right
button and select "Add to Platform"

step 10. Prepare a hardware target platform (please follow [**Prepare a hardware target platform**] step)

step 11. Modify snxcard.reg (please follow [**Modify snxcard.reg**] step).

step 12. Use "Build Platform" to build OS image.

(1). Prepare a hardware target platform

The platform setting must meet the following requirements.

1. If your motherboards have the standard serial port,

Please don't have a conflict with standard serial port (IoBase or IRQ) in target device.

(Serial Card jump setting don't like this example: 02F8, 03E8, ... IRQ3, IRQ4...)

2. In the motherboard BIOS setting, you must be to preserve IRQ for each serial card.

Example step (AwardBIOS) (please reference your motherboard menu):

BIOS --> PNP/PCI Configuration --> Resources Controlled By --> change setting to "Manual".

BIOS --> PNP/PCI Configuration --> IRQ Resources --> **IRQ-7** assigned to --> change setting to "Legacy ISA".

BIOS --> INTEGRATED PERIPHERALS --> Onboard Parallel Port --> change setting to disabled.

(2) Modify snxcard.reg

1. Edit C:\Platform\Sunix_WinCE42\snxcard.reg file to modify parameters for each serial port

Example: IRQ: 7

Port 1: IOBase -> 0x0250

Port 2: IOBase -> 0x0258

Port 3: IOBase -> 0x0260

Port 4: IOBase -> 0x0268

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort1]

"Prefix"="COM"

"Index"=dword:2

"DeviceArrayIndex"=dword:0

"Dll"="snxport.dll"

"IsrDll"="snxintr.dll"

"IsrHandler"="ISRHandler"

"IoBase"=dword:0250

"BoardType"=dword:3

"IoLen"=dword:8

"Irq"=dword:7

"SysIntr"=dword:0

"Flags"=dword:0

"ChipID"=dword:4

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort1\Unimodem]

"Tsp"="Unimodem.dll"

"DeviceType"=dword:0

"DevConfig"=hex: 10,00, 00,00, 05,00,00,00, 10,01,00,00, 00,4B,00,00, 00,00, 08, 00, 00, 00,00,00,00

"FriendlyName"="SUNIX Port 1"

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort2]

"Prefix"="COM"

"Index"=dword:3

"DeviceArrayIndex"=dword:1

"Dll"="snxport.dll"

"IsrDll"="snxintr.dll"

"IsrHandler"="ISRHandler"

"IoBase"=dword:0258

"BoardType"=dword:3

"IoLen"=dword:8

"Irq"=dword:7

"SysIntr"=dword:0

"Flags"=dword:0

"ChipID"=dword:4
[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort2\Unimodem]
"Tsp"="Unimodem.dll"
"DeviceType"=dword:0
"DevConfig"=hex: 10,00, 00,00, 05,00,00,00, 10,01,00,00, 00,4B,00,00, 00,00, 08, 00, 00, 00,00,00,00
"FriendlyName"="SUNIX Port 2"

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort3]

"Prefix"="COM"
"Index"=dword:4
"DeviceArrayIndex"=dword:2
"Dll"="snxport.dll"
"IsrDll"="snxintr.dll"
"IsrHandler"="ISRHandler"
"IoBase"=dword:0260
"BoardType"=dword:3

"IoLen"=dword:8

"Irq"=dword:7

"SysIntr"=dword:0

"Flags"=dword:0

"ChipID"=dword:4

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort3\Unimodem]
"Tsp"="Unimodem.dll"
"DeviceType"=dword:0
"DevConfig"=hex: 10,00, 00,00, 05,00,00,00, 10,01,00,00, 00,4B,00,00, 00,00, 08, 00, 00, 00,00,00,00
"FriendlyName"="SUNIX Port 3"

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort4]

"Prefix"="COM"
"Index"=dword:5
"DeviceArrayIndex"=dword:3
"Dll"="snxport.dll"
"IsrDll"="snxintr.dll"
"IsrHandler"="ISRHandler"
"IoBase"=dword:0268
"BoardType"=dword:3

"IoLen"=dword:8

"Irq"=dword: 7

"SysIntr"=dword:0

"Flags"=dword:0

"ChipID"=dword:4

[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\SnxPort4\Unimodem]
"Tsp"="Unimodem.dll"
"DeviceType"=dword:0
"DevConfig"=hex: 10,00, 00,00, 05,00,00,00, 10,01,00,00, 00,4B,00,00, 00,00, 08, 00, 00, 00,00,00,00
"FriendlyName"="SUNIX Port 4"
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