User’s Manual

XPOS75R-2B-2930
XPOS75R-2B-1900

Copyrights

Liability Disclaimer

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

Regulatory Information

FCC Notices

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Increase the separation between the equipment and the receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio or television technician for help.

This device complies with Part 15 (A) of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference and

2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS DEVICE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE DEVICE.

CE Notice

This device complies with **EMC Directive 2004/108/EC** issued by the Commission of the European Community.

WEEE Notice

The **WEEE** mark applies only to countries within the European Union (EU) and Norway.
This appliance is labeled in accordance with **European Directive 2002/96/EC** concerning **waste electrical and electronic equipment** (**WEEE**). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

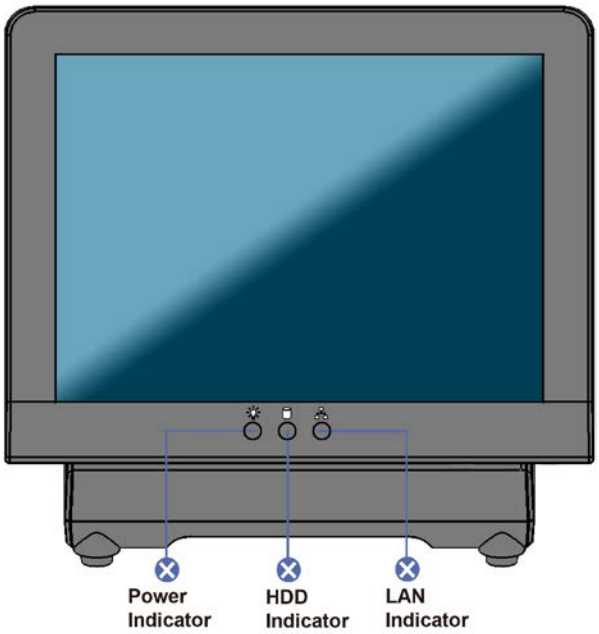
Contents

1.

Hardware Setup

1.1. Quick Tour

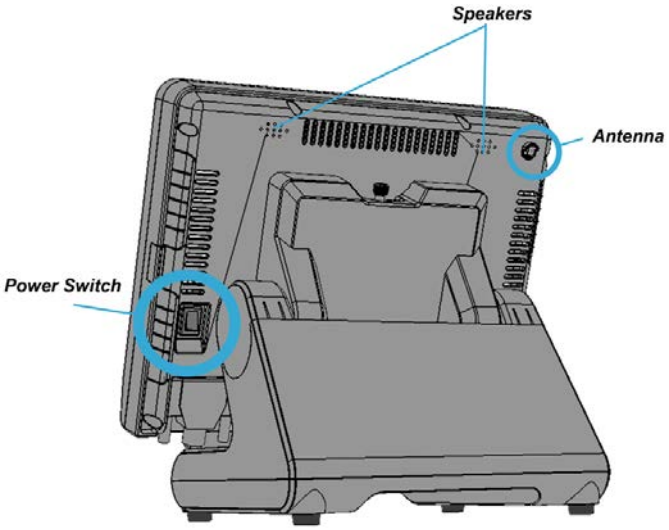
Front View



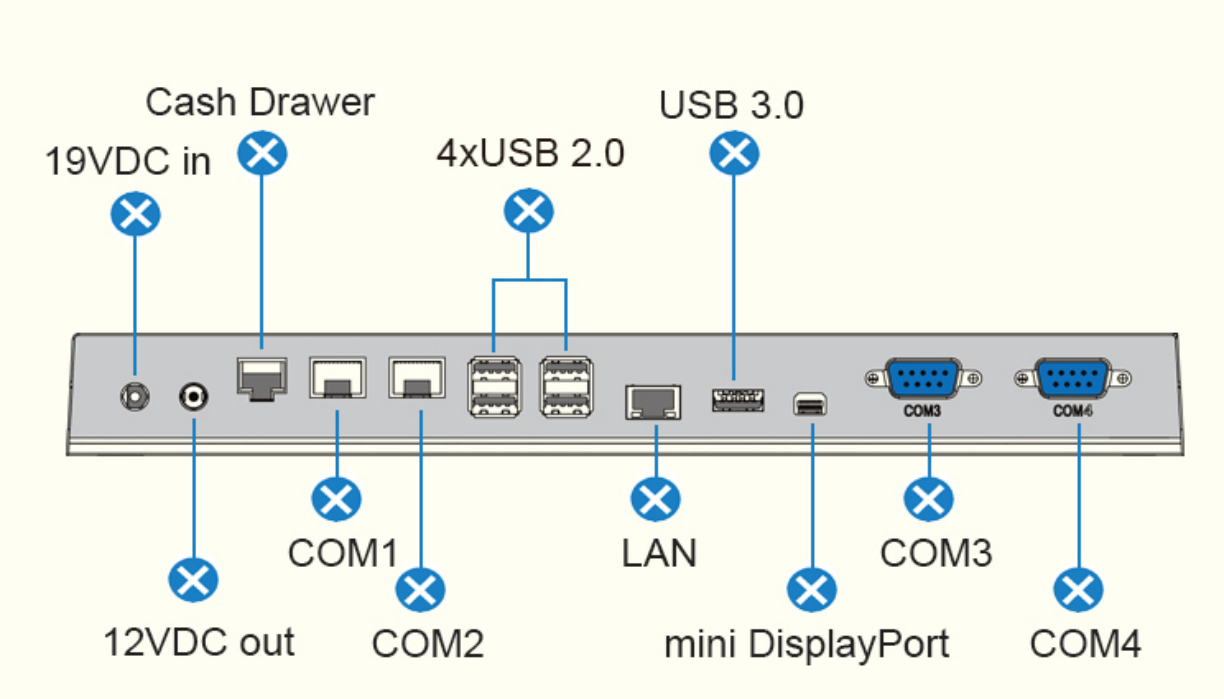
LED Indicator

	The **Power** indicator will glow green when power is on.
	The **HDD** indicator will blink green when the HDD is accessed.
	The **LAN** indicator will blink green when transferring data though the LAN.

Back View

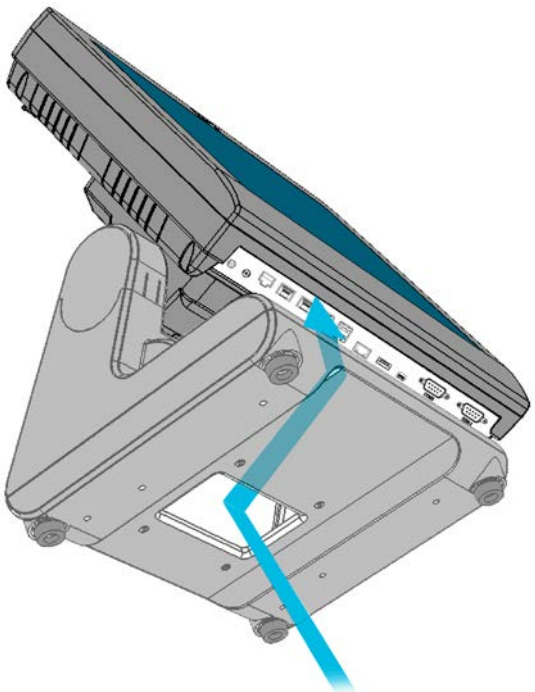


Back Panel I/O



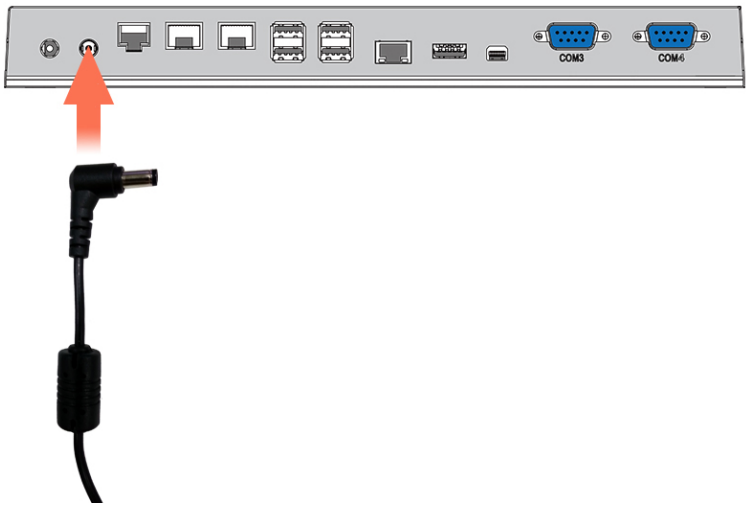
1.2. Basic Peripherals Installation

All cables and wires from peripherals to the POS device are recommended to connected as the direction as shown below.



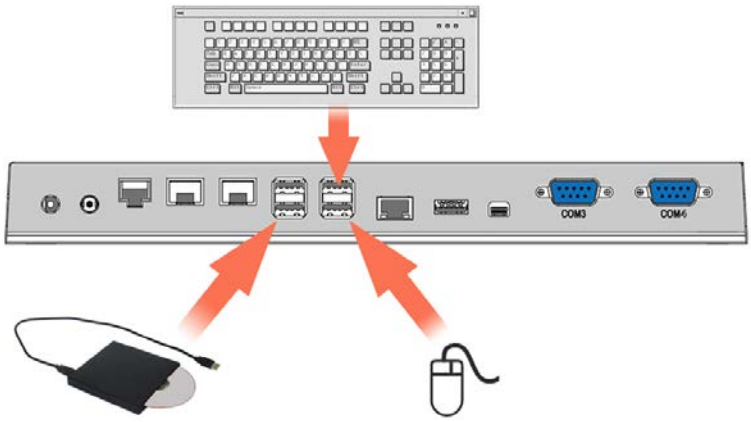
Power Adapter

Connect the 2-pin output jack of the adapter to the **DC 12V** jack on the back panel of the device.



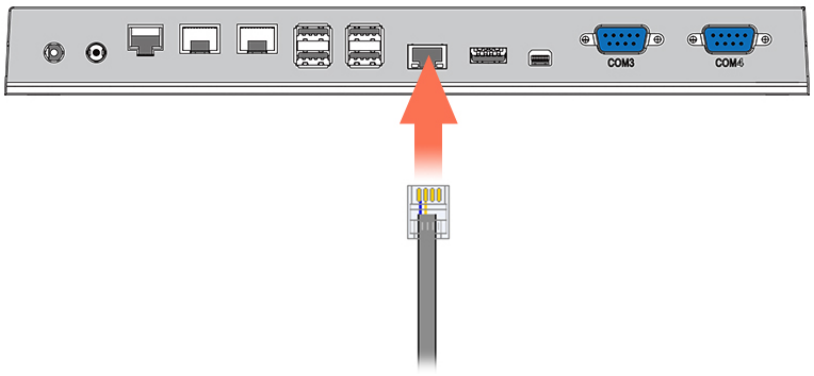
USB Mouse, USB Keyboard and USB ODD

Connect your USB Mouse, USB Keyboard and USB ODD to **USB** ports on the back panel of the device.



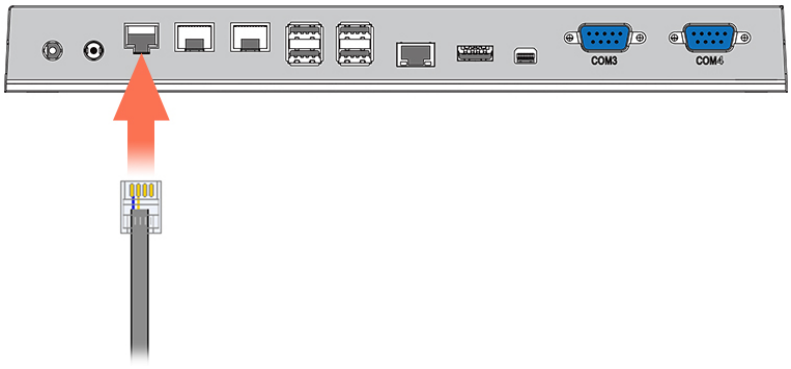
LAN Cable

Connect one end of RJ-45 LAN cable to the **LAN** port on the back panel of the device, another end to your internet device.

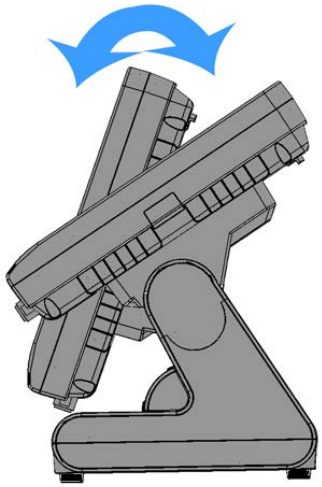


Cash Drawer

Connect one end of RJ-11 cable to the **Cash Drawer** port on the back panel of the device, another end to your cash drawer.

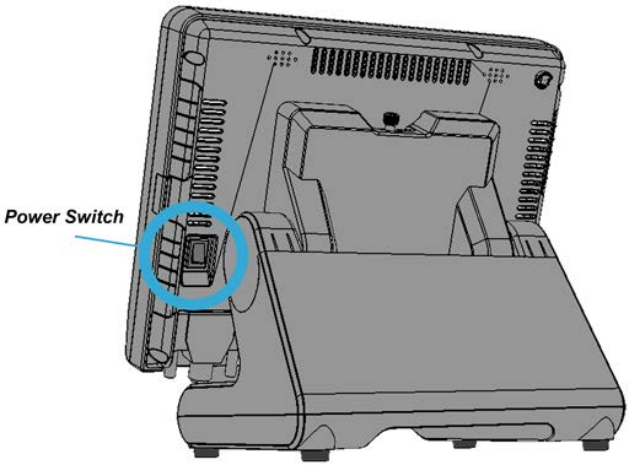


1.3. Adjust Angle



1.4. Turn on the device

1. Make sure all peripherals are connected properly.
2. Press and hold the power switch until the power indicator on the front panel glow green.



2.

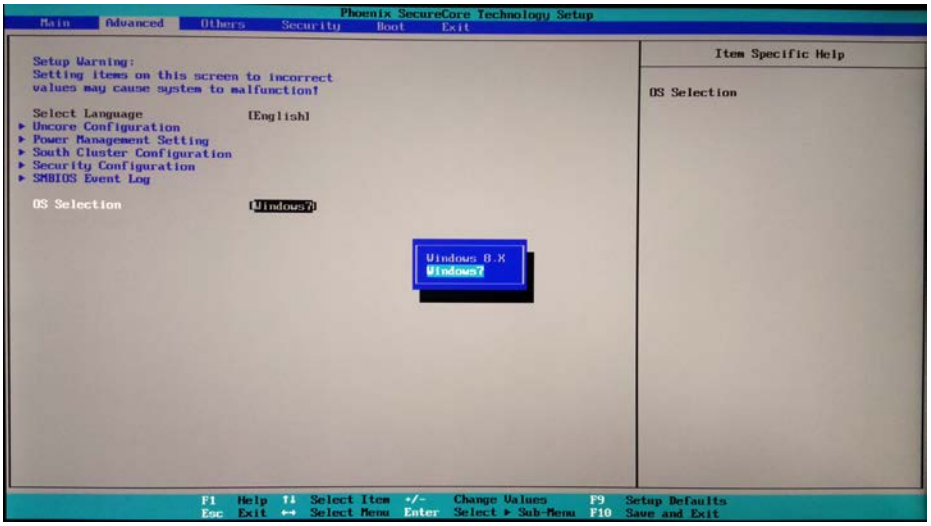
Basic Driver Installation

2.1. Before the installation

1. Connect an external USB CDROM to the USB power and insert the driver CD and turn on the device. The program auto runs and displays the **DRIVER BANK** screen.
2. Follow the on-screen instructions.

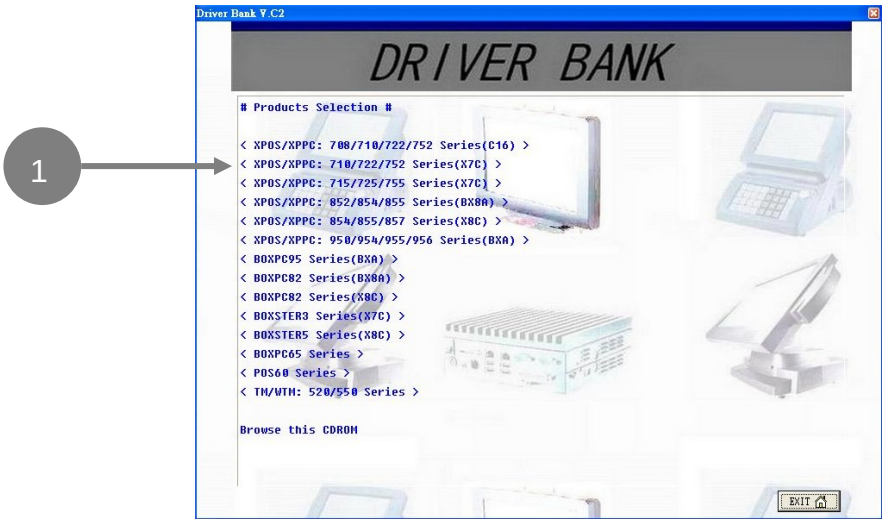
Before install OS, enter BIOS setup menu and change setting as following:

System default is for Windows 7, if your system is installed Windows 8 OS, BIOS setup must select "**Windows 8.X**"



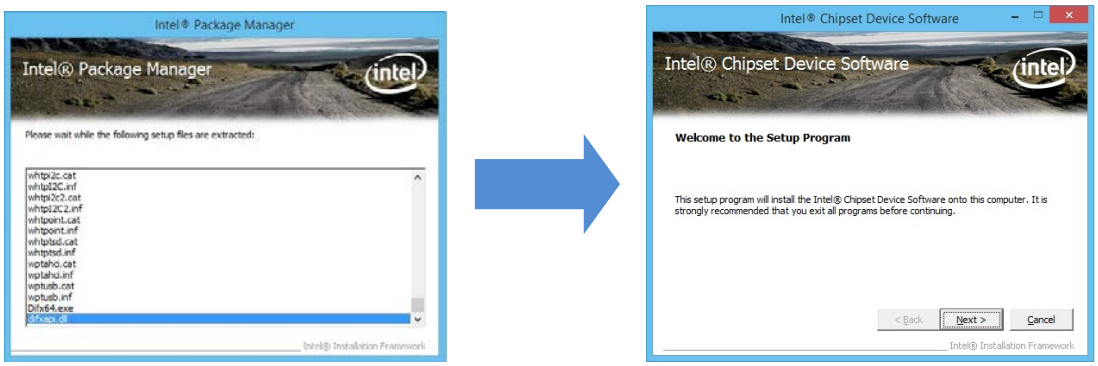
2.2. Chipset Software Installation

1. On the main screen, click “**XPOS 722 Series(X7C)**”.



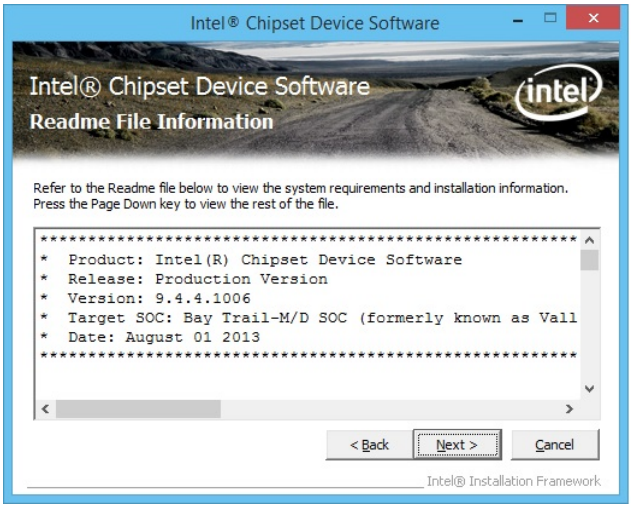
2. Click **INTEL Chipset Driver**.

3. Click **Next**.



4. Read the License Agreement carefully and click **Yes**.

5. Click **Next**.

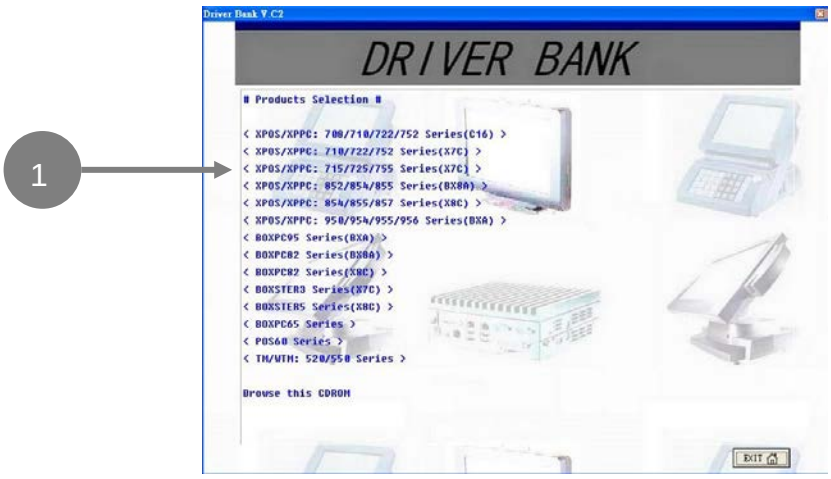


6. Click **Finish**.

7. Please Restart.

2.3. VGA Driver Installation

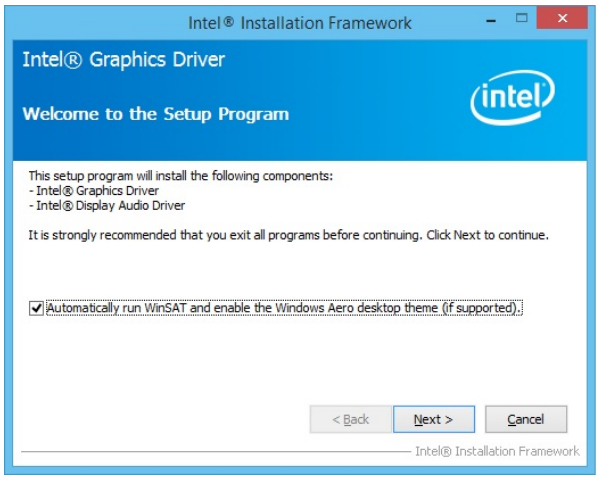
1. On the main screen, click “**XPOS 725 Series(X7C)**”.



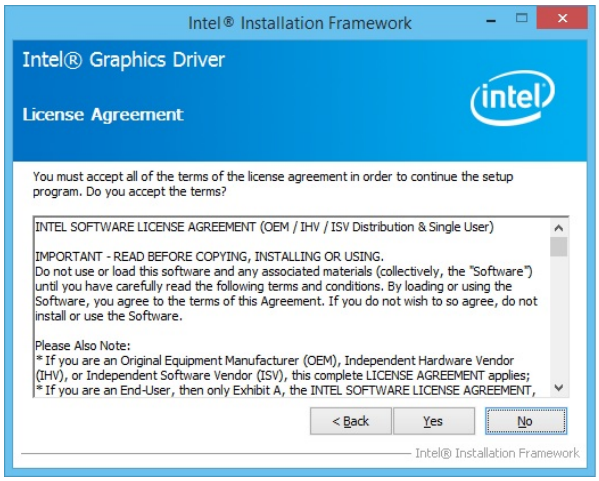
2. Click **VGA Driver**.

3. Click **VGA Driver for WIN8/WIN7**.

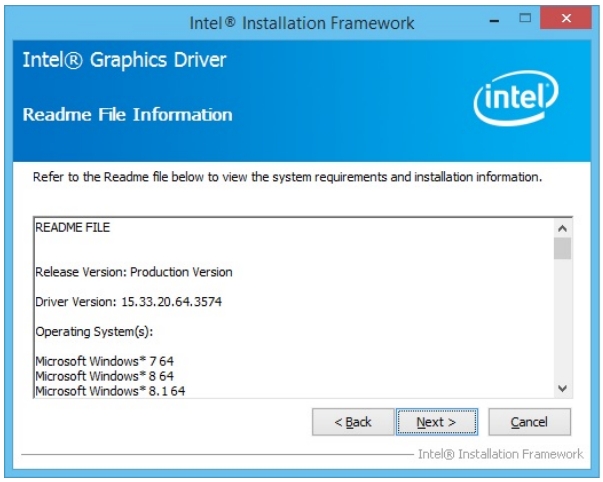
4. Click **Next**.



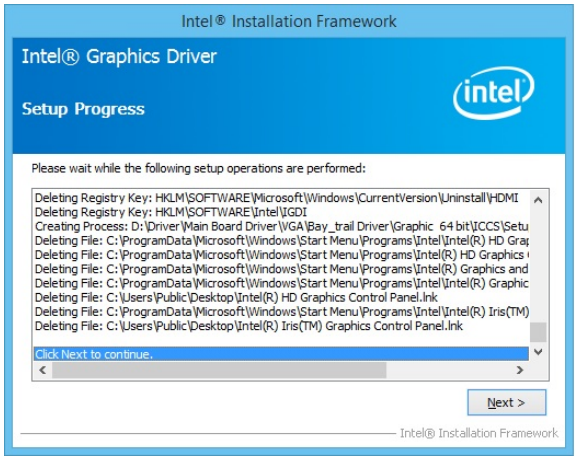
5. Read the License Agreement carefully and click **Yes**.



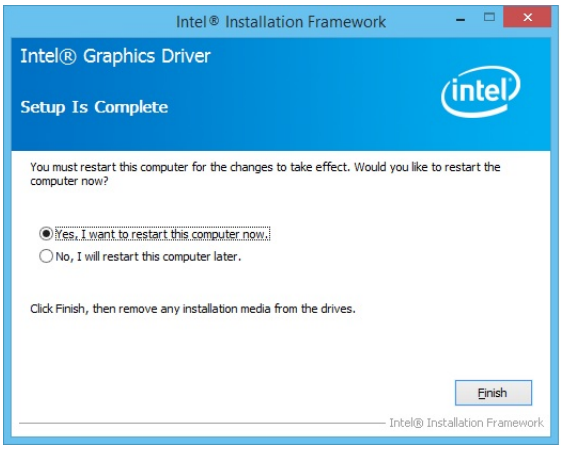
6. Click **Next**.



7. Click **Next**.



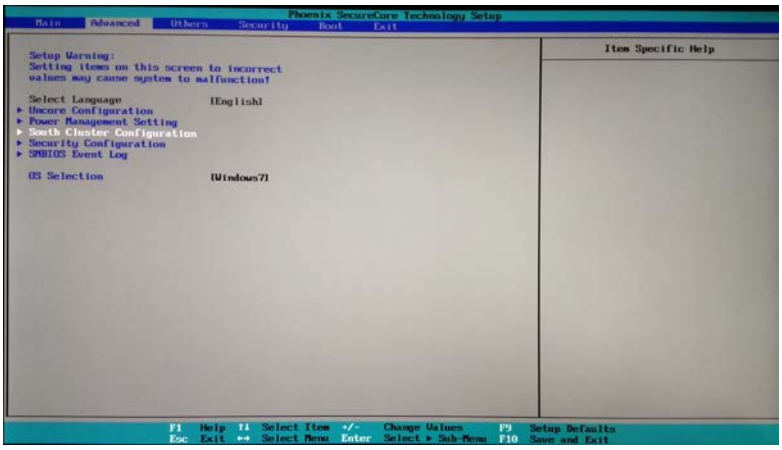
8. Select restart your computer right now or later, and then lick **Finish**.



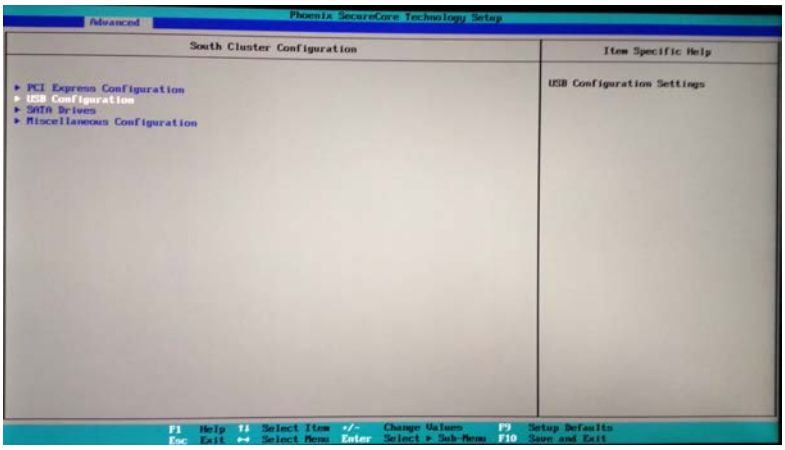
2.4. Install USB 3.0 Driver should do step.

Follow below steps to setting USB Configuration, EHCI enable, XHCI Smart Auto.

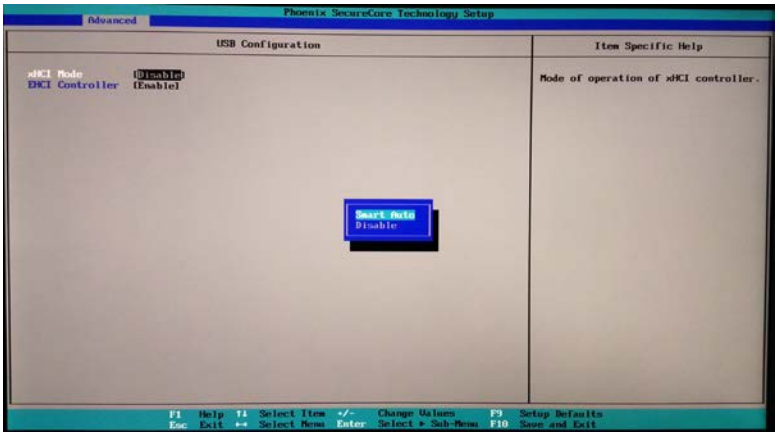
Step 1. Enter "**Advanced**" Tab.
Select "**South Cluster Configuration**".



Step 2. Select "**USB Configuration**".



Step 3. Setting **xHCI Mode → Smart Auto**

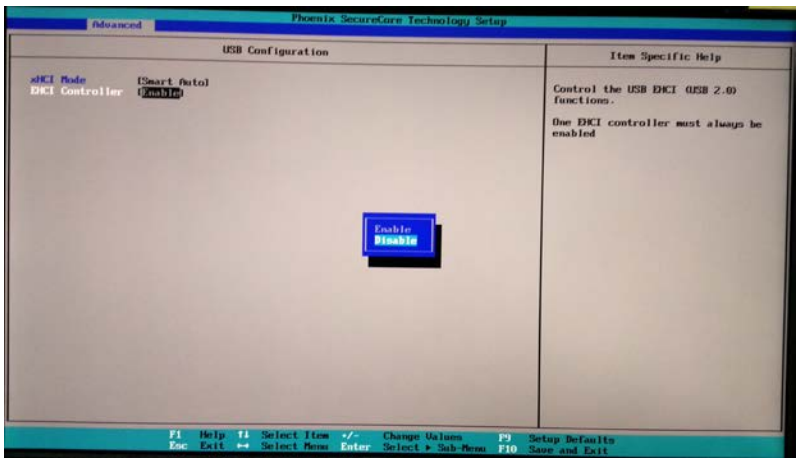


Step 4. To install USB 3.0 driver at Windows 7.

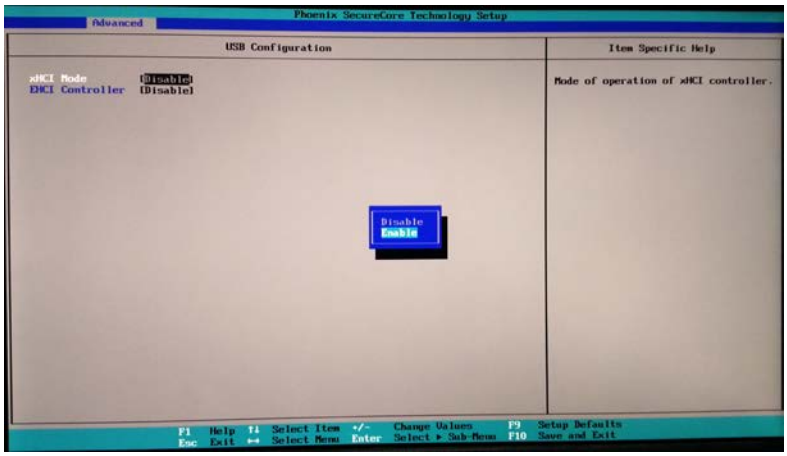
After installation of Windows 7 USB 3.0 driver, reboot and enter BIOS setup menu to change following setting to make USB 3.0 driver with xHCI Mode effect.

Enter "**Advanced**" Tab, select "**South Cluster Configuration**", select "**USB Configuration**".

Step 5. Setting **EHCI Controller → Disable**



Step 6. Setting **xHCI Mode → Enable**



2.5. Install USB 3.0 Driver at POS Ready 7 or Windows 7 BIOS setting.

Install Windows OPK.

Install USB 3.0 driver at POSReady 7 DVD “sources” folder boot.wim.

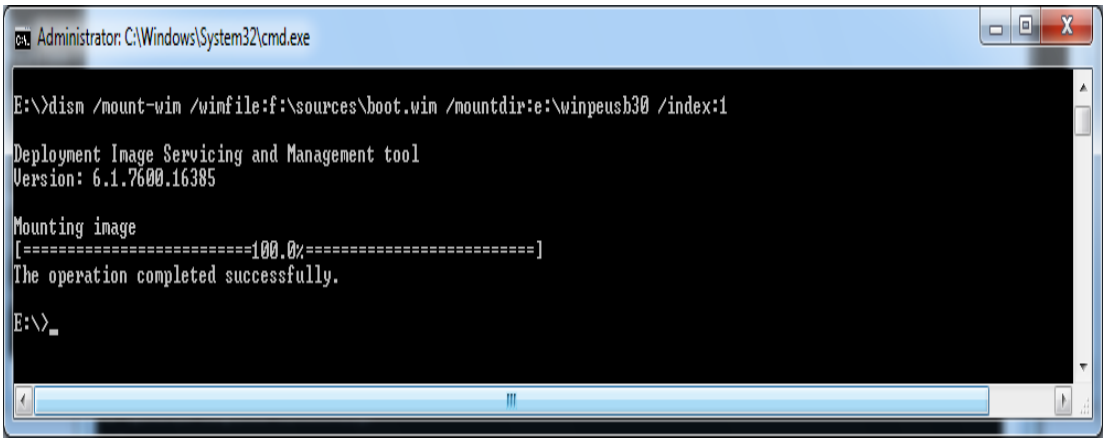
Dism /mount-wim /wimfile:f:\sources\boot.wim /mountdir:e:\winpeusb30 /index:1

Tips:

/wimfile:f:\sources\boot.wim -> this is the POSReady 7 DVD “sources” folder file name “boot.wim”

/mountdir:e:\winpeusb30 -> this the temporarily folder. It could be drive c, or drive d, as you create and naming it.

/index:1 ->this always be 1.

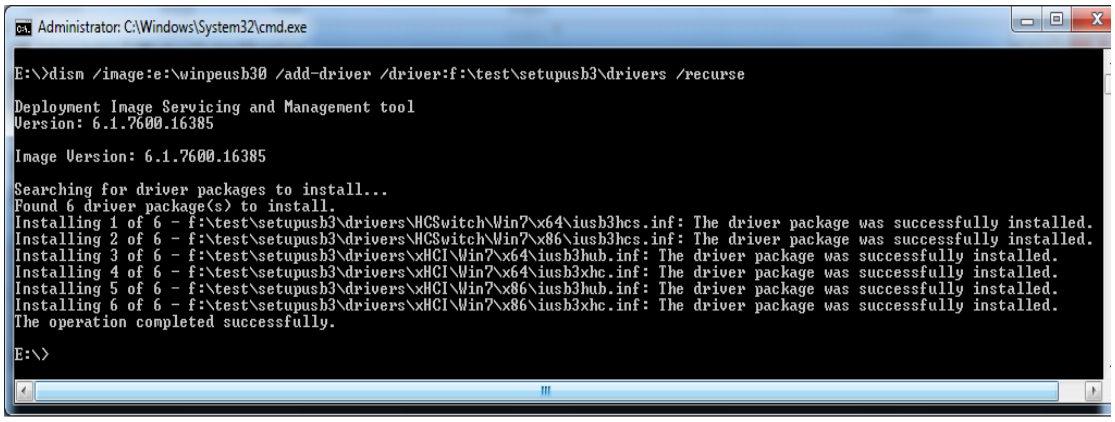


Dism /image:e:\winpeusb30 /add-driver /driver:f:\test\setupusb3\drivers /recurse

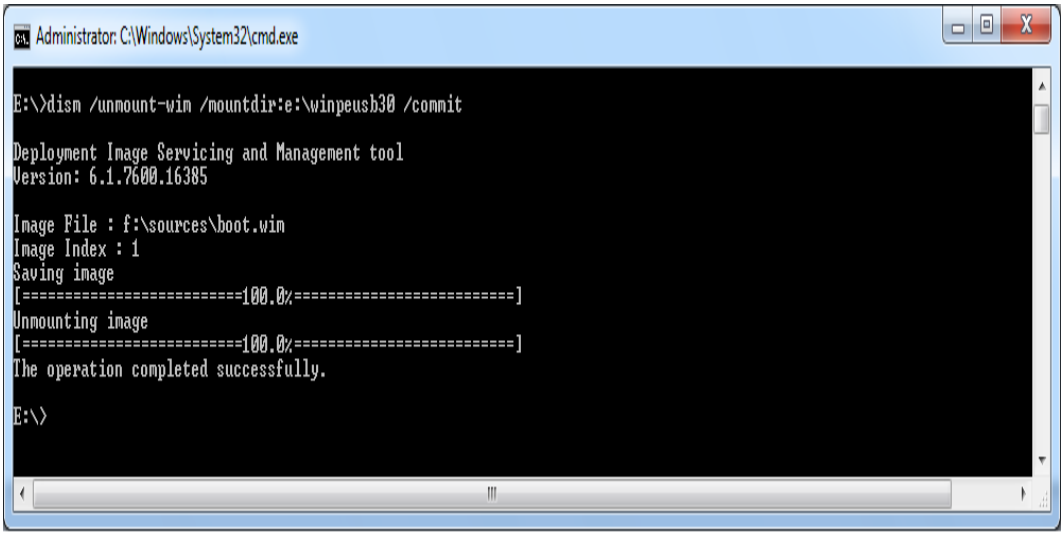
Tips:

/image:e:\winpeusb30 -> this the temporarily folder. You create it.

/driver:f:\test\setupusb3\drivers ->this is the USB 3.0 driver folder



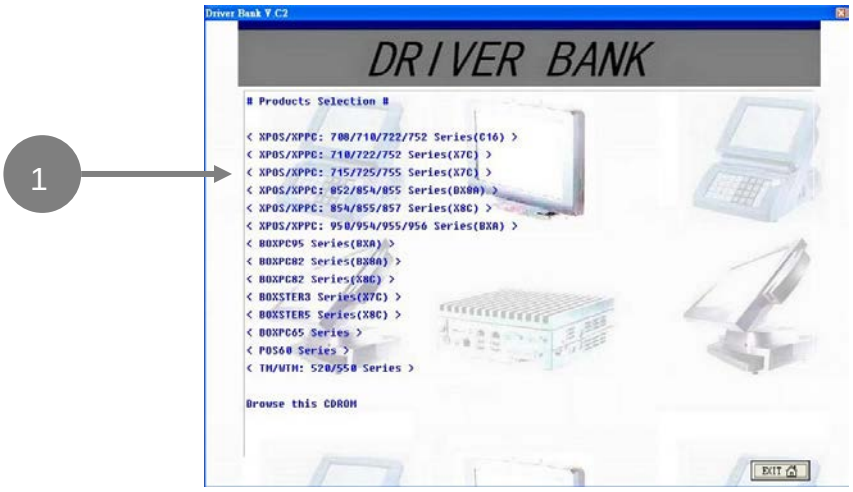
Dism /unmount-wim /mountdir:e:\winpeusb30 /commit /mountdir:e:\winpeusb30 ->/image:e:\winpeusb30 -> this the temporarily folder. You create it.



During install the POSReady 7, there will have a install additional driver option.
Please select it and install additional USB 3.0 driver.
Or follow the above step to install USB 3.0 at POSReady 7 DVD “sources” folder file name “install.wim”.

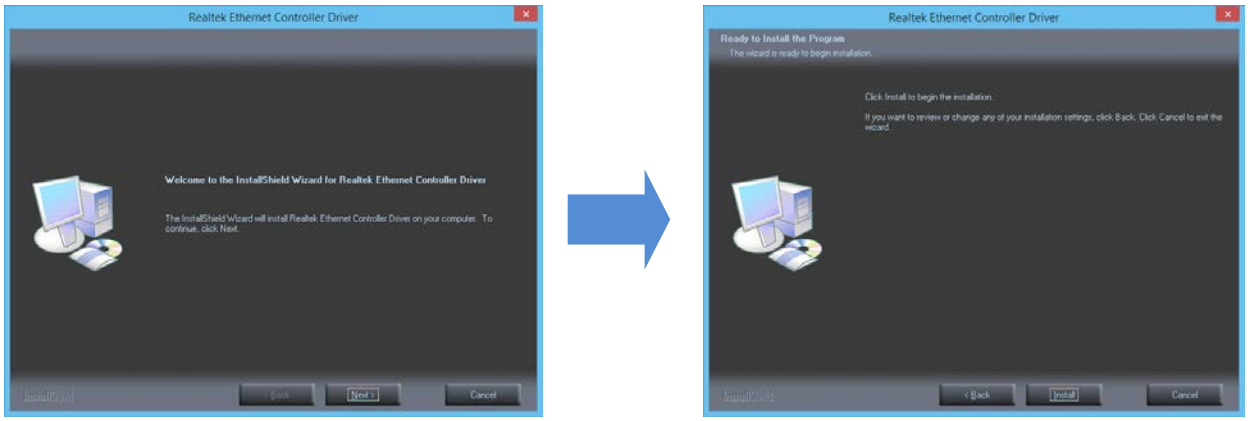
2.6. LAN Driver Installation

1. On the main screen, click “**XPOS 725 Series(X7C)**”.

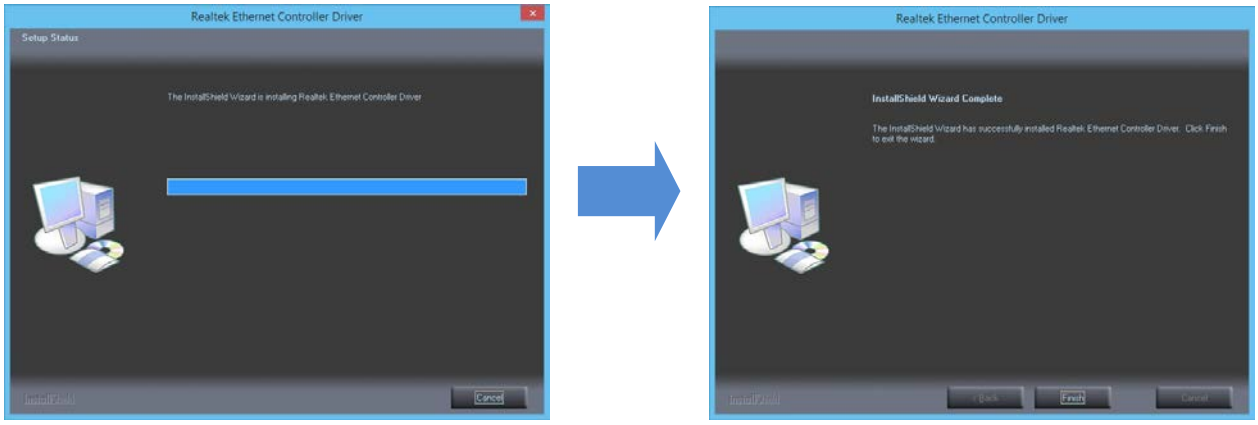


2. On the welcome screen, click Next.

3. Click Install to begin the installation.



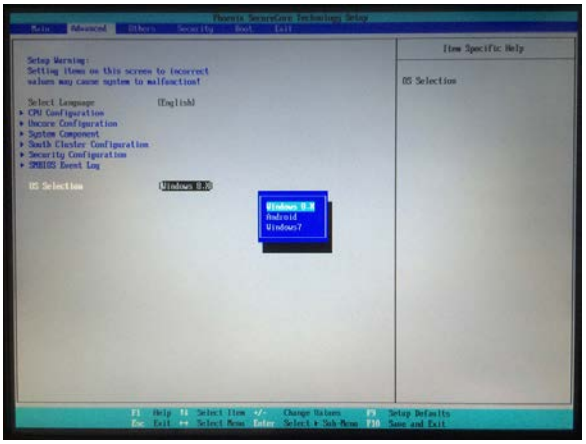
4. Click Finish.



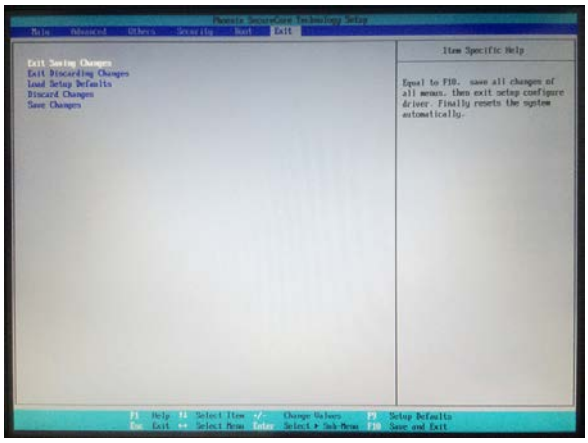
2.7. GPIO Driver Installation for Win 8.1 64bit

If you want to GPIO Function, BIOS must set "**Windows 8.X**" work and o.s. must "**Win 8.1**"

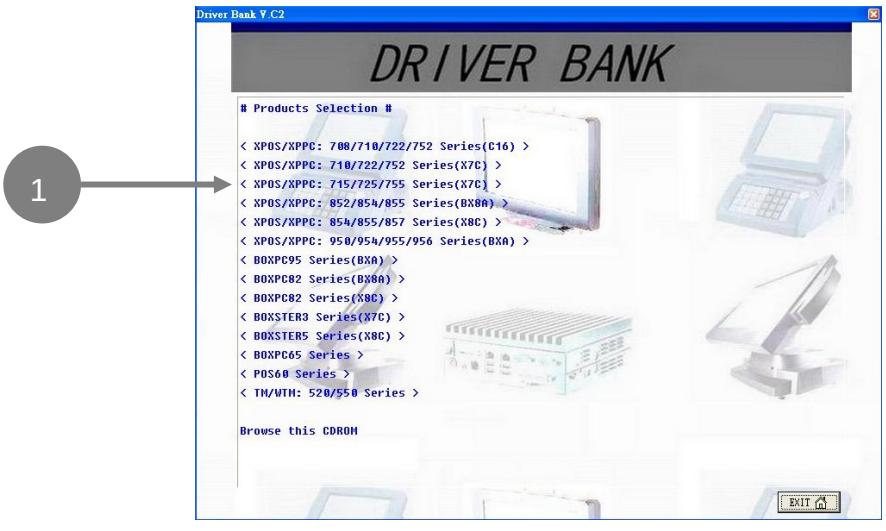
1. BIOS must set “**Windows 8.X**”.



2. Select “**Exit Saving Changes**” and **Restart.**

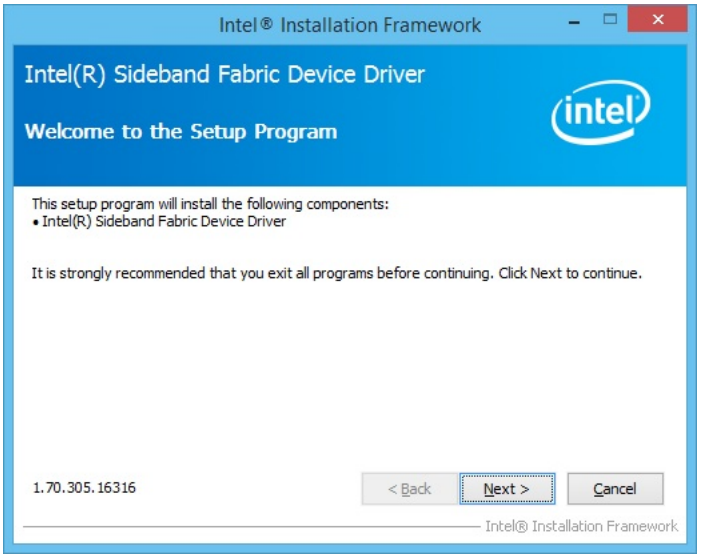


3. On the main screen, click “**XPOS 725 Series(X7C)**”.

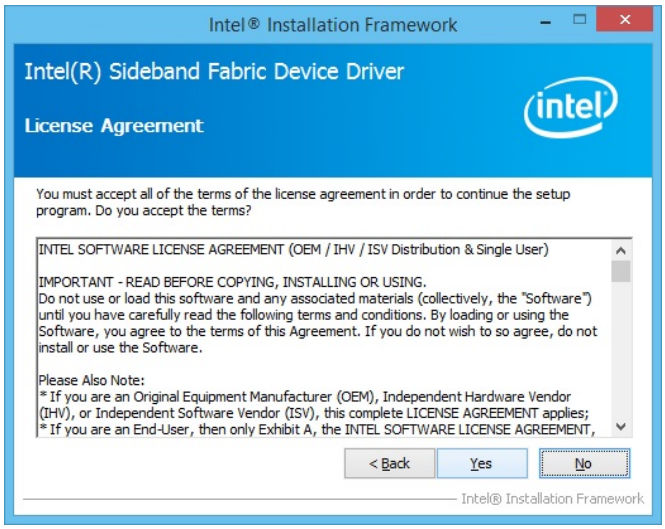


4. Click GPIO Driver. (There are two installation steps)

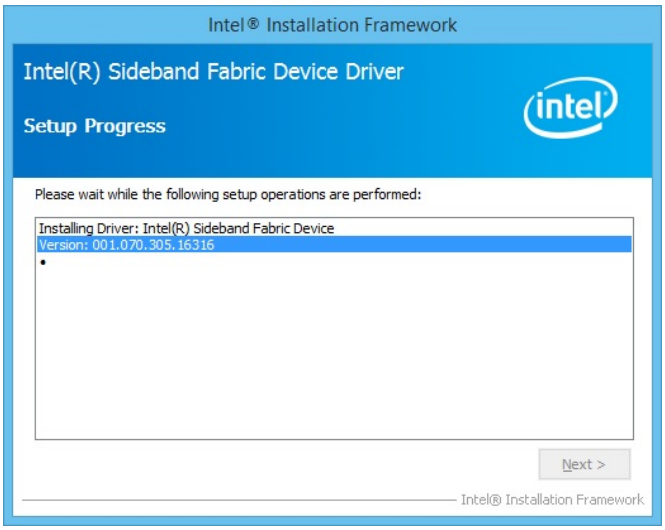
3. Setup1: Click **Next**.



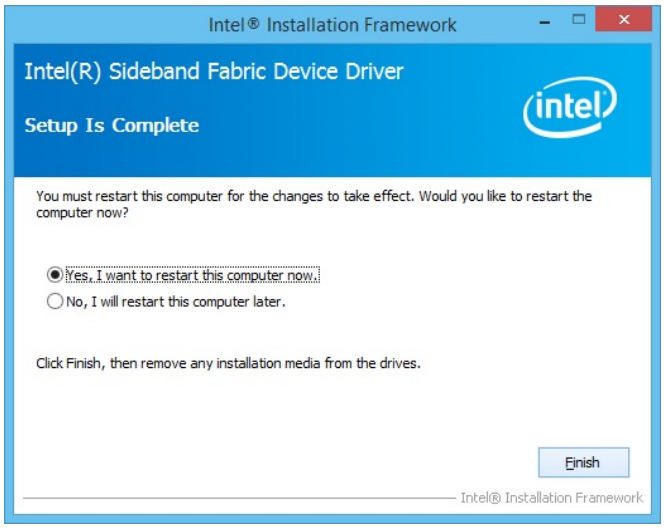
4. Click **Yes**.



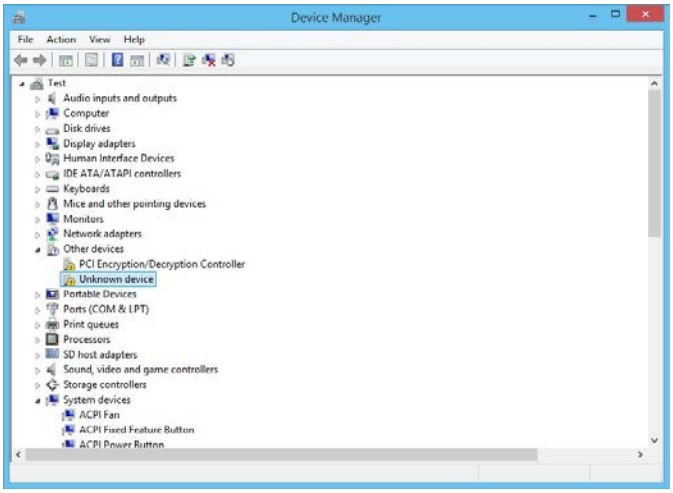
5. Click **Next**



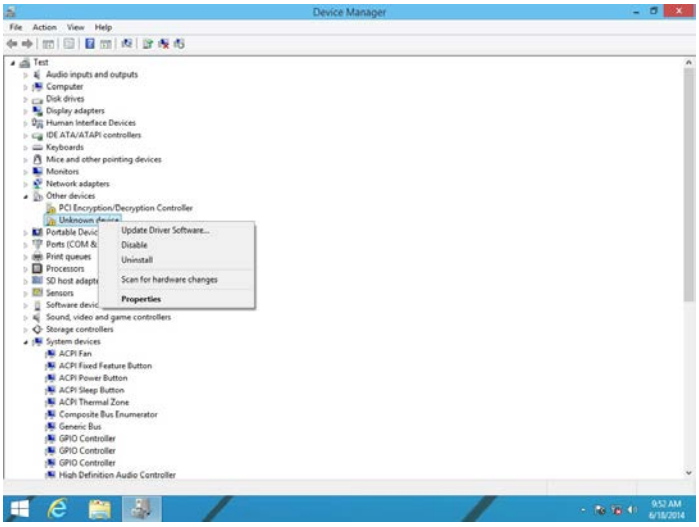
6. Click **Finish**.



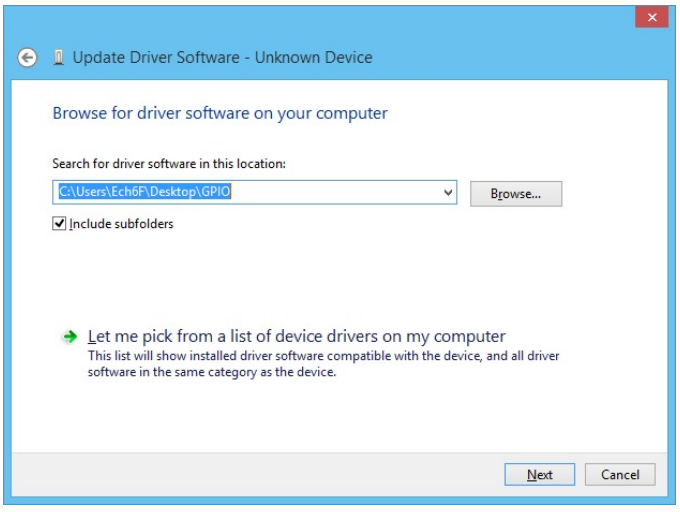
7. Setup2: Open The Device Manager screen, select Unknown device.



8. Select Properties

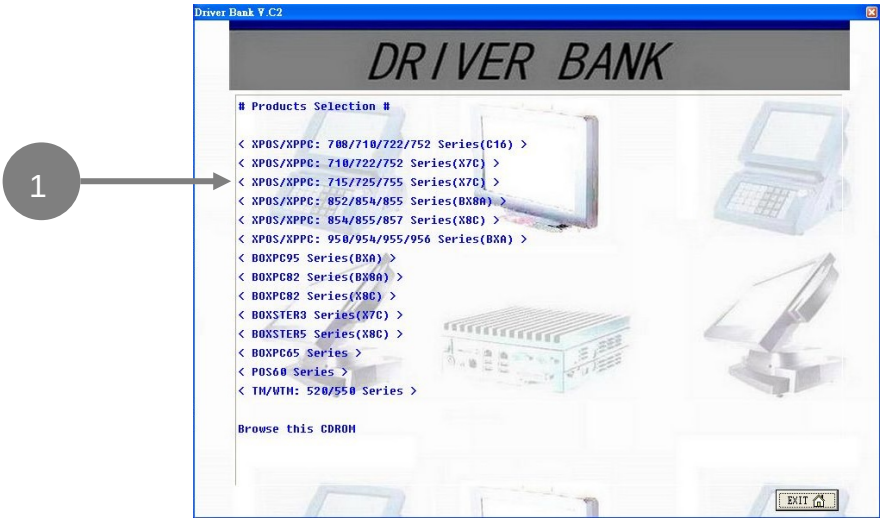


9. Click **Next**



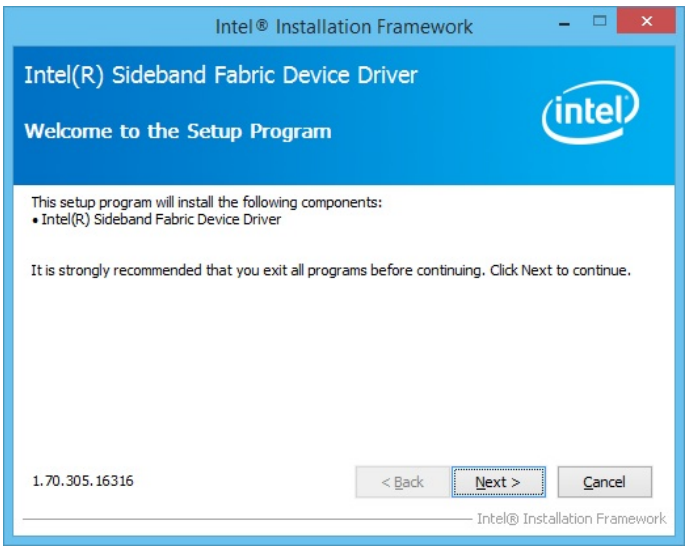
2.8. GPIO Driver Installation for Win 8.1 32bit

1. On the main screen, click "**XPOS 725 Series(X7C)**".

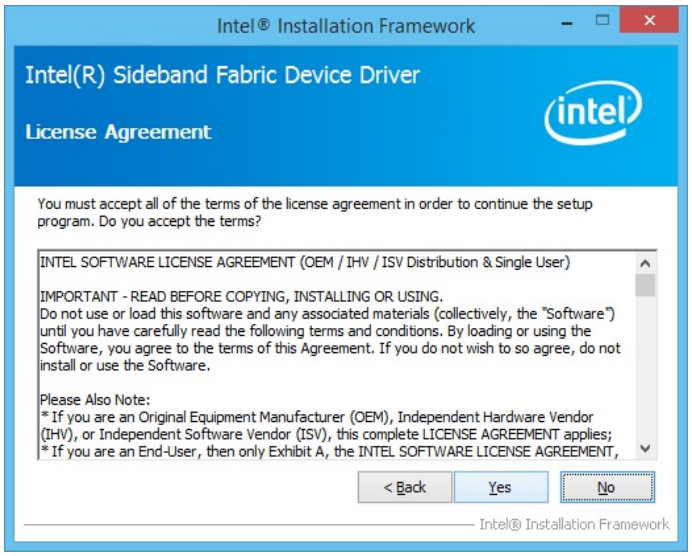


2. Click **GPIO Driver**.

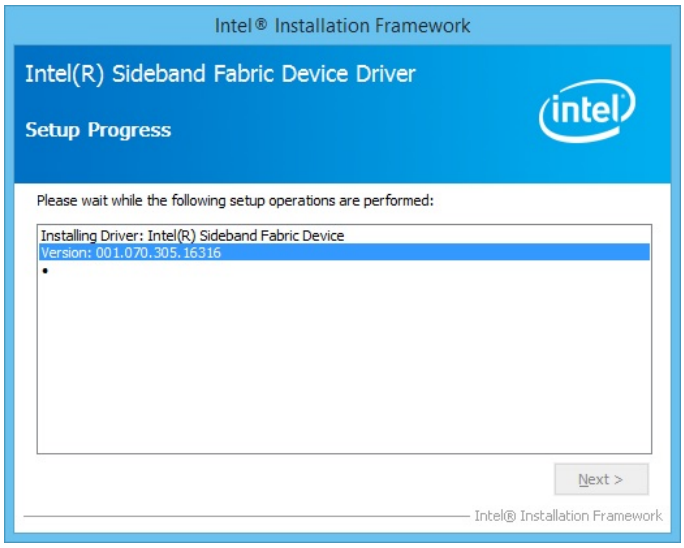
3. Click **Next**.



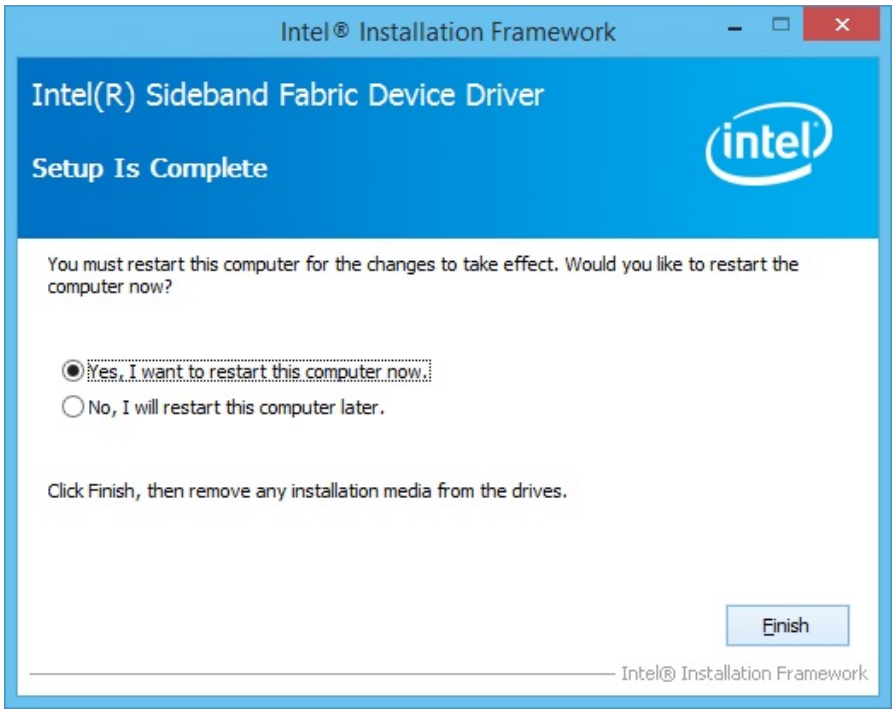
4. Click **Yes**.



5. Click **Next**.

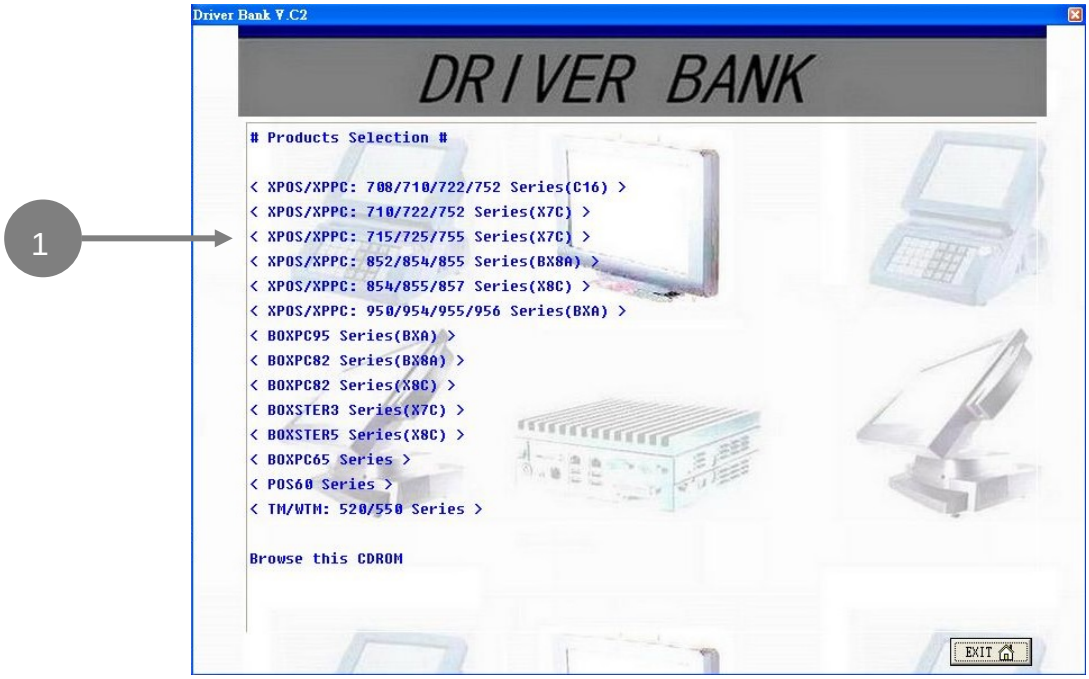


6. Click **Finish**.

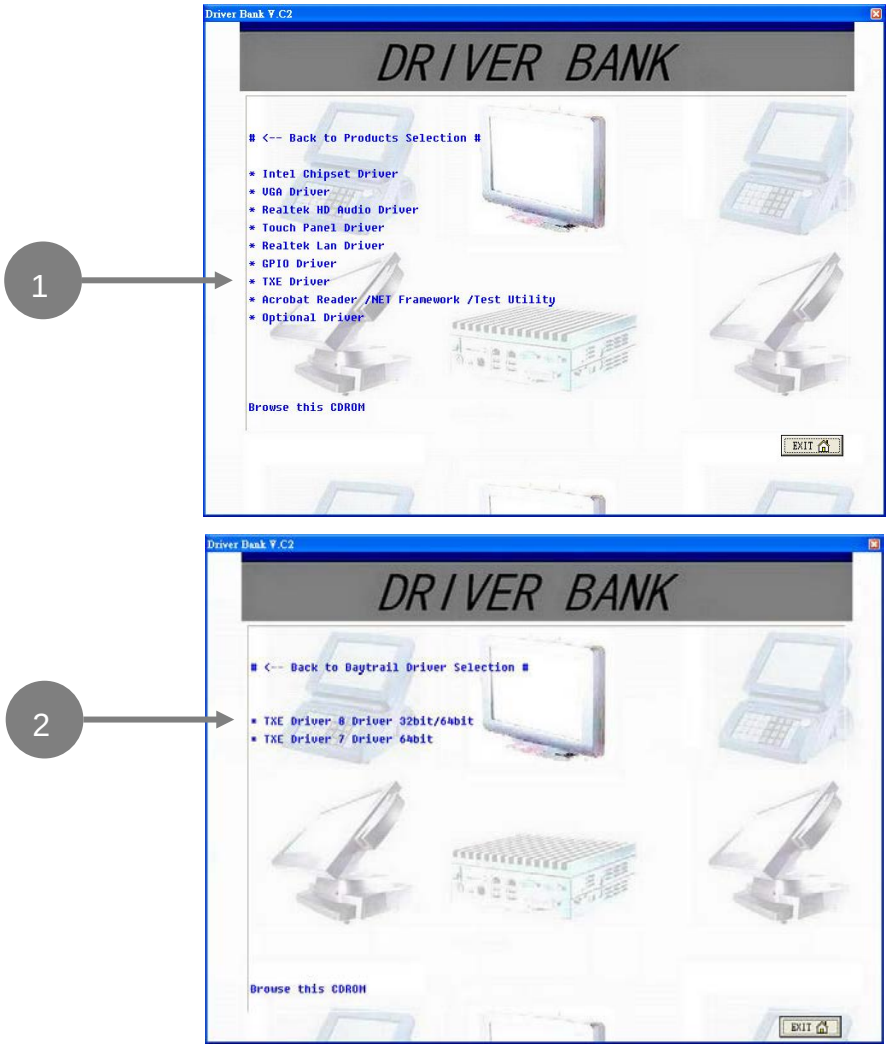


2.9. TXE Driver Installation

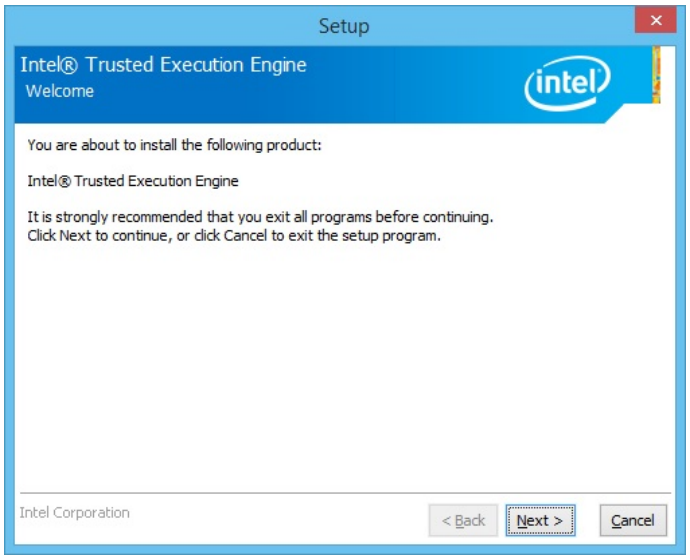
1. On the main screen, click "**XPOS 725 Series(X7C)**".



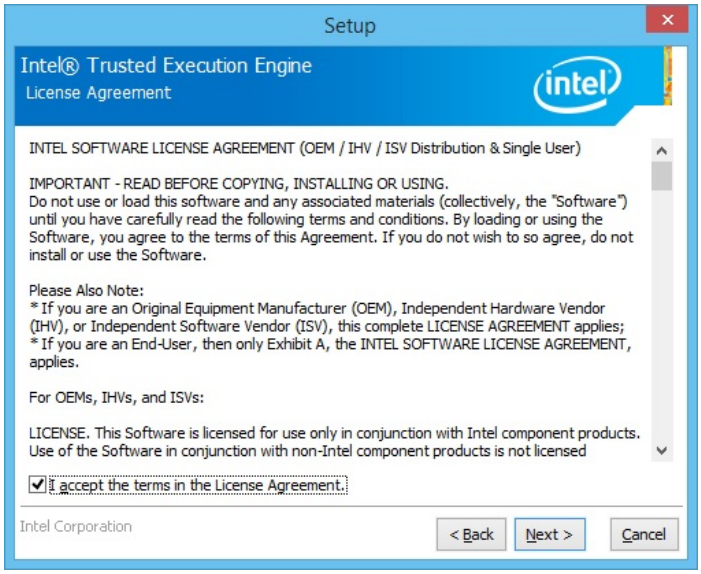
2. Click **TXE Driver**.



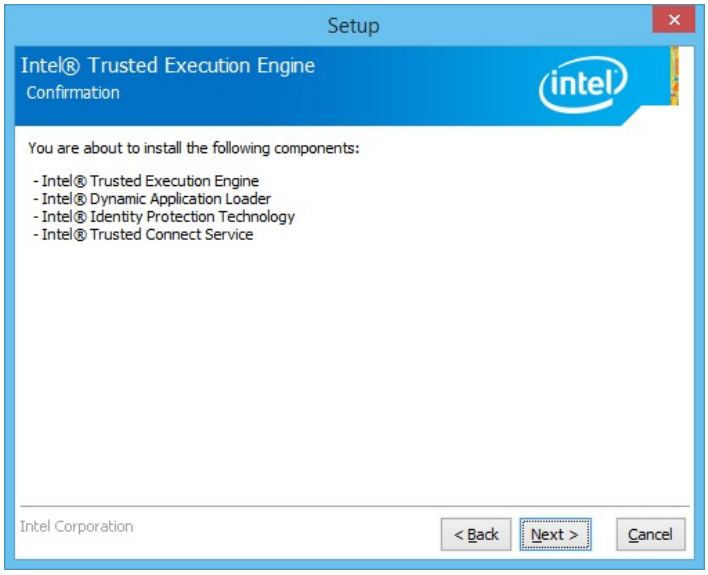
3. Click **Next**.

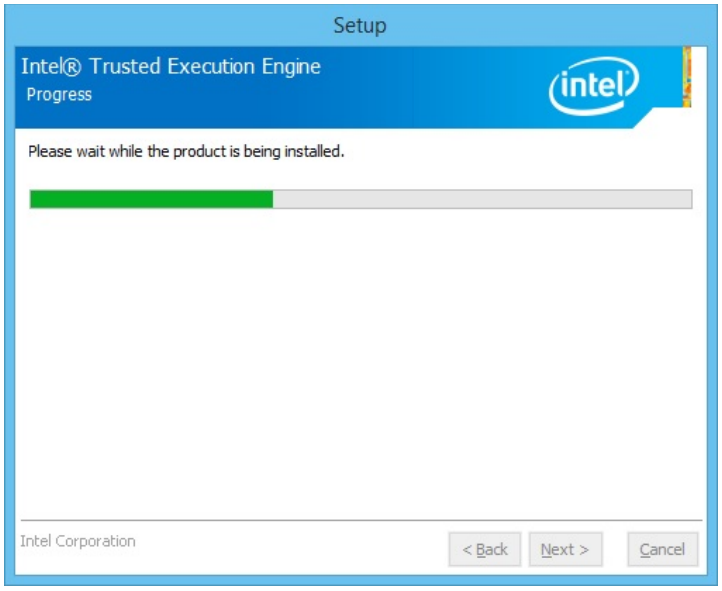


4. Click **Next**.

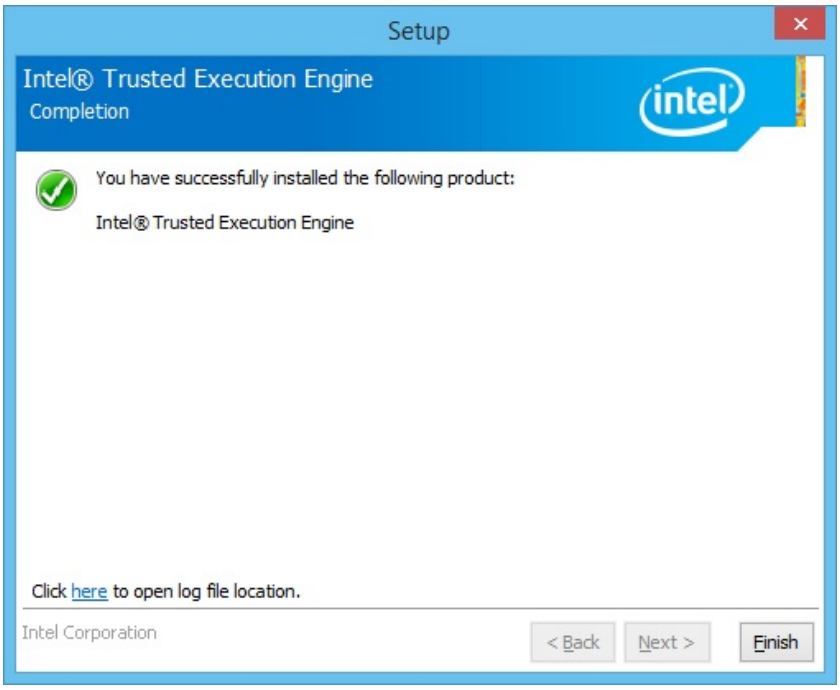


5. Click **Next** to begin the installation.





6. Click **Finish.**



3.

TouchKit Utility Quick Guide

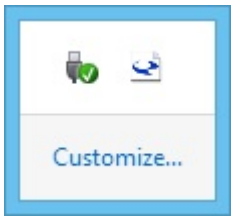
3.1. Launch TouchKit Utility

There are two alternatives to launch **TouchKit**.

Option 1:

Under Microsoft Windows 7, click “**start**” menu and select “**Programs**”, under ”**TouchKit**” menu, click “**Configure Utility**”.

Option 2:
Click icon on the task bar to launch **TouchKit** utility.



3.2. General

The **General** tab in **Touchkit utility** shows all of **TouchKit** touchscreen controllers installed as below, including RS232, USB and PS2 interfaces.

Add

The function button is used for serial RS232 controllers only. Press this button to search the **TouchKit** serial controllers connected with the COM ports of the device. Whenever it finds a new **TouchKit** serial controller, a new serial controller icon object will be shown in the controller list window automatically.

USB **TouchKit** device supports plug and play, the icon object for USB controller will be shown in the controller list window automatically when the USB controller is connected with the USB port of the device. And, the icon object for the USB controller will disappear automatically as soon as the device was removed from the USB port of the device.

TouchKit PS2 driver support PS2 mouse and **TouchKit** touchscreen controller. It can works with both PS2 mouse and **TouchKit** touchscreen PS2 controller. After the **TouchKit** PS2 driver was installed, this utility assumes the PS2 touchscreen controller exists and is always shown in the controller list window.

Remove

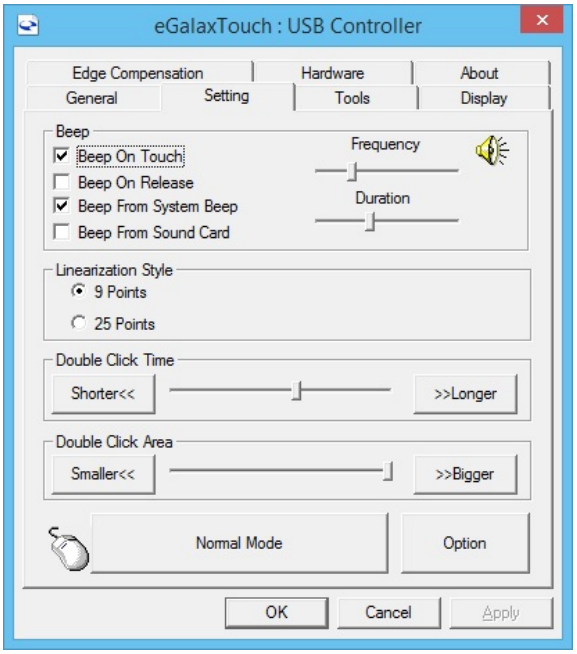
This function button is used for serial RS232 controllers only. This button will be grayed and disabled automatically when the selected controller in the controller list window is not RS232 type. Press to remove and uninstall the selected serial RS232 controller from the device. Then, this serial RS232 icon object in controller list window disappears automatically.

USB TouchKit device supports plug and play, the icon object for USB controller will be shown in the controller list window automatically when the USB controller is connected with the USB port of the device. And, the icon object for the USB controller will disappear automatically as soon as the device was removed from the system USB port.

TouchKit utility does not allow you to remove/uninstall the PS2 device driver dynamically. To uninstall the **TouchKit** PS2 driver, You needs to go to Windows Device Manager to do un-installation. In addition, after PS2 un-installation, it needs to reboot the device to complete un-installation.

3.3. Settings

There are function buttons and check boxes in the **Settings** tab.



Beep

Beep On Touch

Check this check box to enable driver to generate a beep sound when touch touchscreen state is switched from untouched to touched state.

Beep On Release

Check this check box to enable driver to generate a beep sound when touchecreen state is switched from touched state to untouched state.

Frequency

Drag the slider to adjust this frequency to control the beep sound frequency generated by the driver.

Duration

Drag the slider to adjust this duration to control the beep sound duration.

Linearization Style

TouchKit utility provides you with both 9 points and 25 points calibration for linearization. You can select the suitable linearization type.

Double Click Time

Double Click Time is used to set double click time. Change this value will affects the double click behavior for all of the mouse devices connected to the device. Two continuous clicks at the same area within this specified time period will be recognized as a double click event.

Double Click Area

Double click area is used to set the double click area. Change this value will affects the double click behavior for all of the mouse devices connected to the device. Two continuous clicks with this specified area in the specified double click time will be recognized as a double click event.

Mouse Emulation Mode

Change the emulation mode by pressing on this button.

Normal Mode

Normal mode behaves mouse button down and mouse move. You can select this mode to select object, and dragging the object.

Click On Touch

With this **Click On Touch** mode, the driver emulates a mouse click event when the touchscreen state was switched from un-touched state

to touched state. Then, the driver always generate mouse move event and is tracking the touch position until the touchscreen state switched to un-touch state.

Click On Release

With this **Click On Release** mode, the driver emulates a mouse click event when the touchscreen state was switched from touched state to un-touched state.

Click On Touch without moving cursor

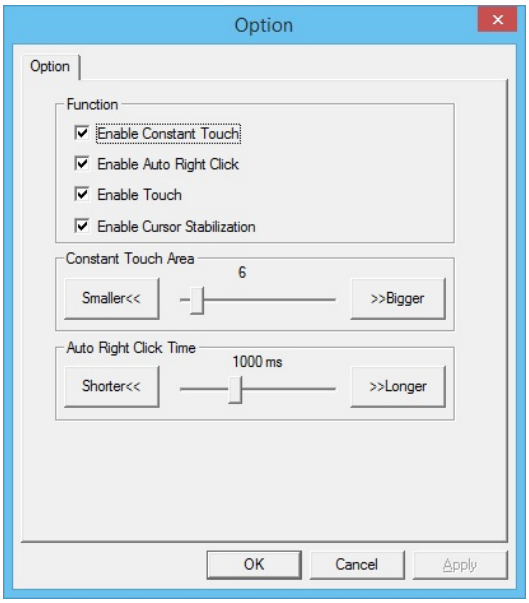
With this mode, the driver behaves similar as **Click On Touch** mode. The cursor does not move to the touch position except the first touch point.

Click On Release without moving cursor

With this mode, the driver behaves similar as **Click On Release** mode. The cursor does not move to the touch position except the lift-off point.

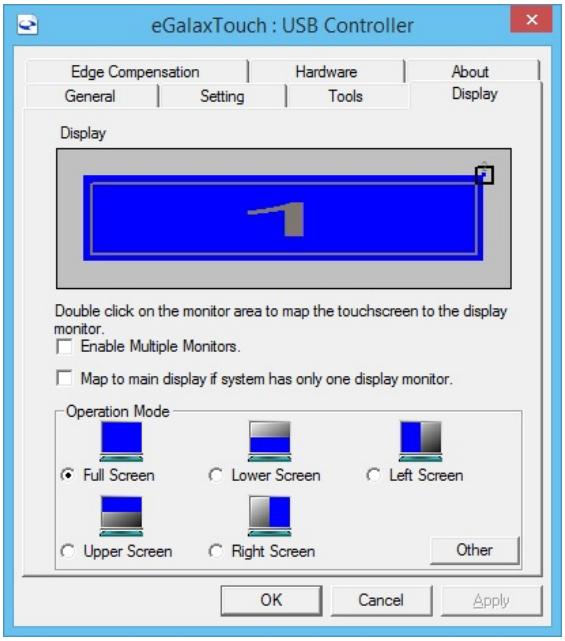
Option

You can set configuration for some advanced functions with this option button. Press this button, a pop up property sheet window will be popped up and shown as below.



3.4. Display

TouchKit driver utility supports multiple monitor and display system. To work with multiple monitor system, you need to do proper configuration to map the touchscreen working area to the correct system display area. You can do such configuration with this property page shown as below,



Please follow below instructions to do the configuration:

Enable multiple monitor

Check this check box to enable multiple monitor support and uncheck it to disable multiple monitor support. When this function is disabled, the touchscreen will be mapped to the primary monitor automatically.

When this function is enabled, user can double click on the monitor area in the monitor geometry window to assign the monitor area where the touchscreen will be mapped. In other word, the touchscreen will work with the selected monitor. Then, the selected monitor area rectangle line will be changed to be white and the other monitor rectangles line will be grey.

Map to main monitor when the system has only one monitor

When the multiple monitor function was enabled, and the system has only one monitor.

Driver allows user to generate the mouse event for the primary monitor or not when the touchscreen which were not mapped to primary monitor. Check the check box to enable this function, then, the driver will generate the mouse event for the primary monitor even through the touchscreen was configured as other monitor mapping and multiple monitor function enabled.

Operation Mode

TouchKit driver support split display mode for those applications which do not map the touchscreen to the full screen of the monitor.

Full screen

The touchscreen will be mapped to the full screen of the specified monitor.

Right screen

The touchscreen will be mapped to the right half screen of the specified monitor.

Left screen

The touchscreen will be mapped to the left half screen of the specified monitor.

Upper screen

The touchscreen will be mapped to the upper half screen of the specified monitor.

Lower screen

The touchscreen will be mapped to the lower half screen of the specified monitor.

Other operation mode

Quarter 1

The touchscreen will be mapped to the first quarter area of the specified monitor display.

Quarter 2

The touchscreen will be mapped to the 2nd quarter area of the specified monitor display.

Quarter 3

The touchscreen will be mapped to the 3rd quarter area of the specified monitor display.

Quarter 4

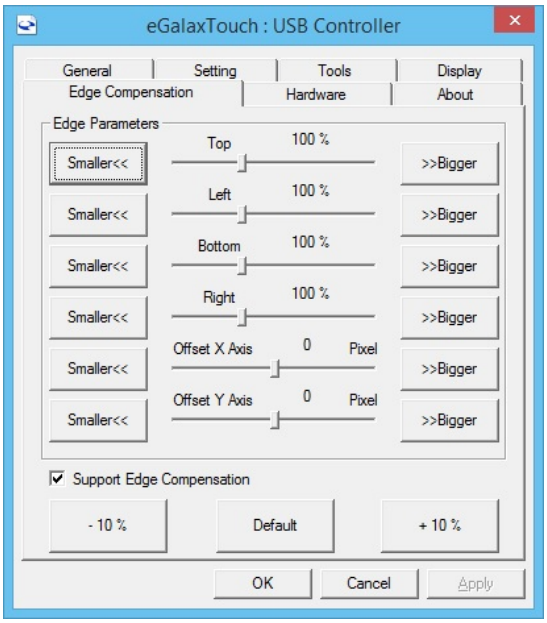
The touchscreen will be mapped to the 4th quarter area of the specified monitor display.

Customized

If the touchscreen needs to be mapped the area other than the above area, user can define the mapping area for application. With this mode, the driver does not correct the mapping area when the display resolution changed. It needs to do configuration setting again whenever the display resolution changed.

3.5. Edge Compensation

Edge Compensation property page contains functions of **Edge Compensation** for Top, Bottom, Left, Right, X Axis and Y Axis.



In some cases, if it is difficult to touch items at the edges of the touch

panel, you can set adjustment to reach the edges of the screen image.

Top

If you set the Edge to "Smaller", **TouchKit** will reduce the horizontal position of the top edge. If you set the Edge to "Larger", **TouchKit** will extend the horizontal position of the top edge.

Bottom

If you set the Edge to "Smaller", **TouchKit** will reduce the horizontal position of the bottom edge. If you set the Edge to "Larger", **TouchKit** will extend the horizontal position of the bottom edge.

Left

If you set the Edge to "Smaller", **TouchKit** will reduce the vertical position of the right edge. If you set the Edge to "Larger", **TouchKit** will extend the vertical position of the left edge.

Right

If you set the Edge to "Smaller", **TouchKit** will reduce the vertical position of the right edge. If you set the Edge to "Larger", **TouchKit** will extend the vertical position of the right edge.

In some cases, cursor will be behind the finger when you touch the panel. If you can not see the cursor when you touch down the panel, you can set **X Axis** or **Y Axis** to move the cursor.

Offset X Axis

If you set the Offset X Axis to Smaller, cursor will be moved a pixel of X Axis to left.

If you set the Offset X Axis to Larger, cursor will be moved a pixel of X Axis to right.

Offset Y Axis

If you set the Offset Y Axis to Smaller, cursor will be moved a pixel of Y Axis to top.

If you set the Offset Y Axis to Larger, cursor will be moved a pixel of X Axis to bottom.

Edge Compensation Switch

You can check **Support Edge Compensation** check box to enable/disable this function from left corner.

Edge Compensation Button

Click **+10%** or **-10%** button to adjust the smaller or larger of edge. If you click **+10%** button, the top, bottom, left and right edges will extend 10% of orientation to touch screen, and cursor will be moved 10 pixel of X and Y Axis to right and top.

If you click **-10%** button, the top, bottom , left and right edges will contract 10% of orientation to touch screen, and cursor will be moved 10 pixel of X and Y Axis to left and bottom.

Click **Default** button to resume to the default value.

3.6. How to Use Event Selector

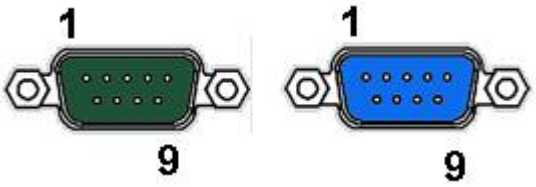
1. On the desktop of Windows, click  icon.
2.  icon change to  .
3. Now the tapping is simulating right mouse button clicking.
4. After one tap on the screen,  icon change to  .
5. The tapping resumes to left mouse button clicking.

4.

I/O Definition

Please refer the detailed technical information about all I/O ports as followings.

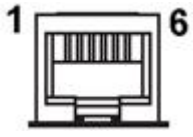
4.1. Serial Port



COM Port			
PIN	Description	PIN	Description
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI / 5V /12V
5	GND	10	NC

PIN	R232	RS422	RS485
1	DCD	TX-	D-
2	RXD	TX+	D+
3	TXD	RX+	
4	DTR	RX-	

4.2. Cash Drawer



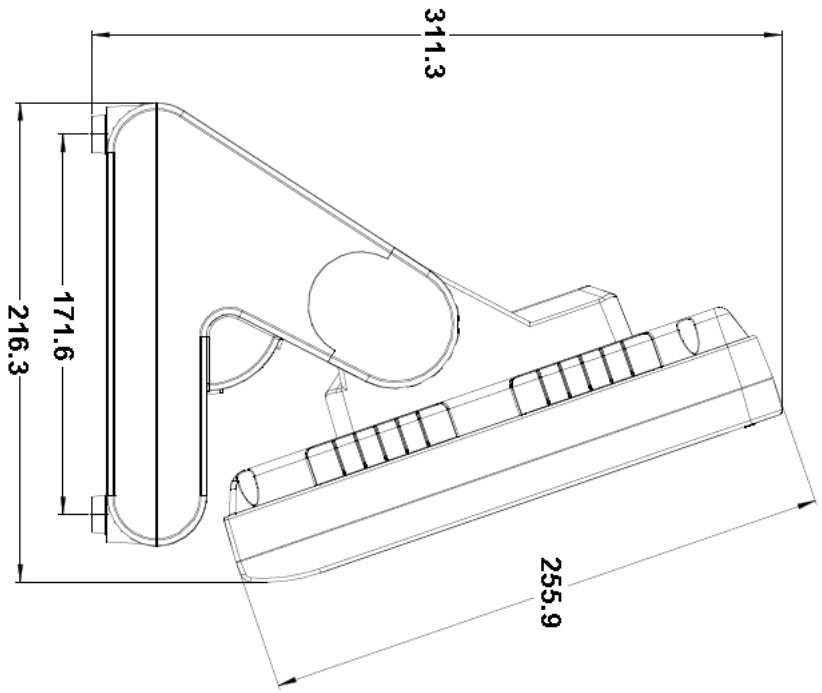
RJ12

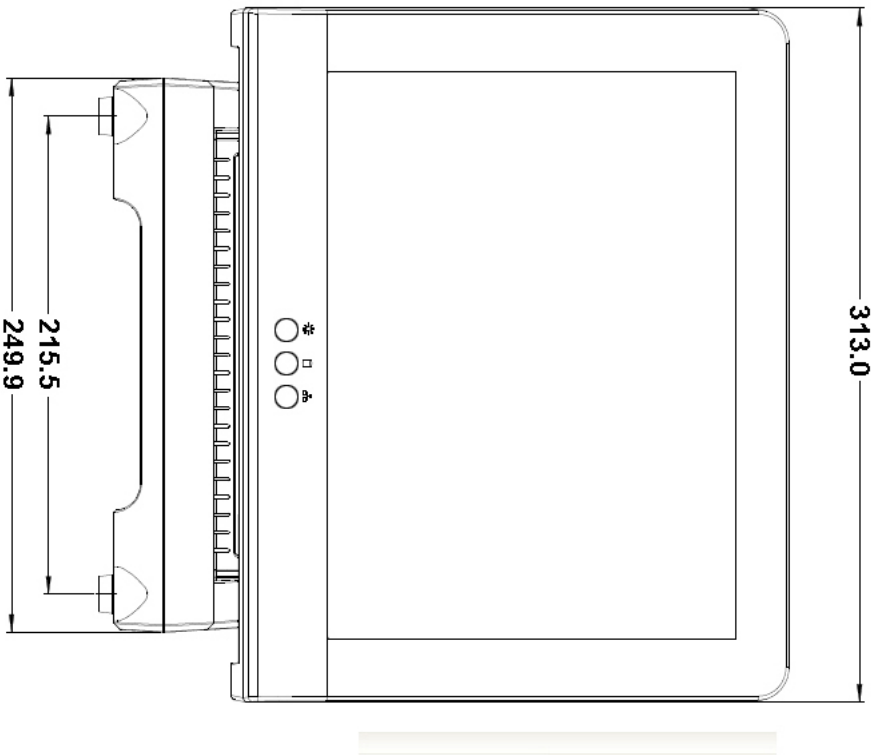
PIN	Description	PIN	Description
1	GND	4	24V/12V
2	D_OUT0	5	N/C
3	D_IN	6	GND

Status	Address	Value
Open	280H	Bit 4 = 0
Close	280H	Bit 4 = 1
Read Status	280H	Bit 0 = 0/1

5.

Specification





UNIT	mm
RANGE	TOLERANCES
0 – 10	± 0.10
10 – 50	± 0.15
50 – 100	± 0.20
100 –	± 0.25

Main Board	
CPU	Intel® Bay Trail-Mobile/Desktop SoC Processor: Celeron® N2930 (4 cores, up to 2.16 GHz, max TDP 7.5 Watt) Celeron® J1900 (4 cores, up to 2.42 GHz, max TDP 10 Watt)
Chipset	Intel® HD Graphics
System Memory	1 x SO-DIMM DDR3L 1067/1333MHz, Max. 8GB
Thermal Solution	Fan-less
BIOS	Phoenix uEFI BIOS
OS	Windows 7, WES 7, POSReady 7 Windows 8, Windows Embedded 8 Standard/Industry Retail
Display	
LCD size	12" TFT LCD Panel (LED Backlight)
Brightness	500 nits
Resolution	1024*768
Panel backlight type	LED
Tilt Angle	17°~67°
Touch Screen	5 wire resistive type
Storage Device	
Interface	2 x SATA (3.0Gb/S)
HDD / SSD	1 x 2.5" SATA HDD / SSD 1 x mSATA slot
I/O Ports	
Serial	4 x RS-232, pin9 with RI/5V/12V selectable by BIOS COM 1 / 2 : RS232, RJ50 COM 3 : RS232/422/485, DB9 COM 4 : RS232, DB9
USB	4x USB 2.0 1x USB 3.0
LAN	1 x Gigabit Ethernet by RJ-45, support Wake on LAN
Cash Drawer	1x RJ12, support 12V / 24V DC cash drawer
Audio	2 Watt Speaker x 2
VGA	1 x DB15 optional for replace COM4
DP / HDMI	1x mini Display Port (supporting active converter cable to VGA, DVI, HDMI)
DC-in	1x 19VDC input, 2pins jack
DC-out	1x 12VDC/1A output
Others	
Expansion Slot	1 x half size Mini PCIe
Communication	Wireless LAN module, half size mini PCIe type (Optional)
Wall mount	Support VESA Mount
Power Supply	External adapter, 19V DC input, 65Watt/ 90Watt optional
Color	Black

Material	Plastic / Aluminum
EMC & Safety Compliance	CE / FCC / WEEE / RoHS
Dimension	313 mm x 216 mm x 311 mm (W x D x H)
Weight	5.5 kg
Environmental	
Operating Temperature	0 to 40°C
Storage Temperature	-20~ 60°C
Humidity	20% to 85% RH (non condensing)