

# cPCI-SBC02

## User Manual

Version 1.0



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## 1. cPCI-SBC02 Introduction

### 1-1 Features

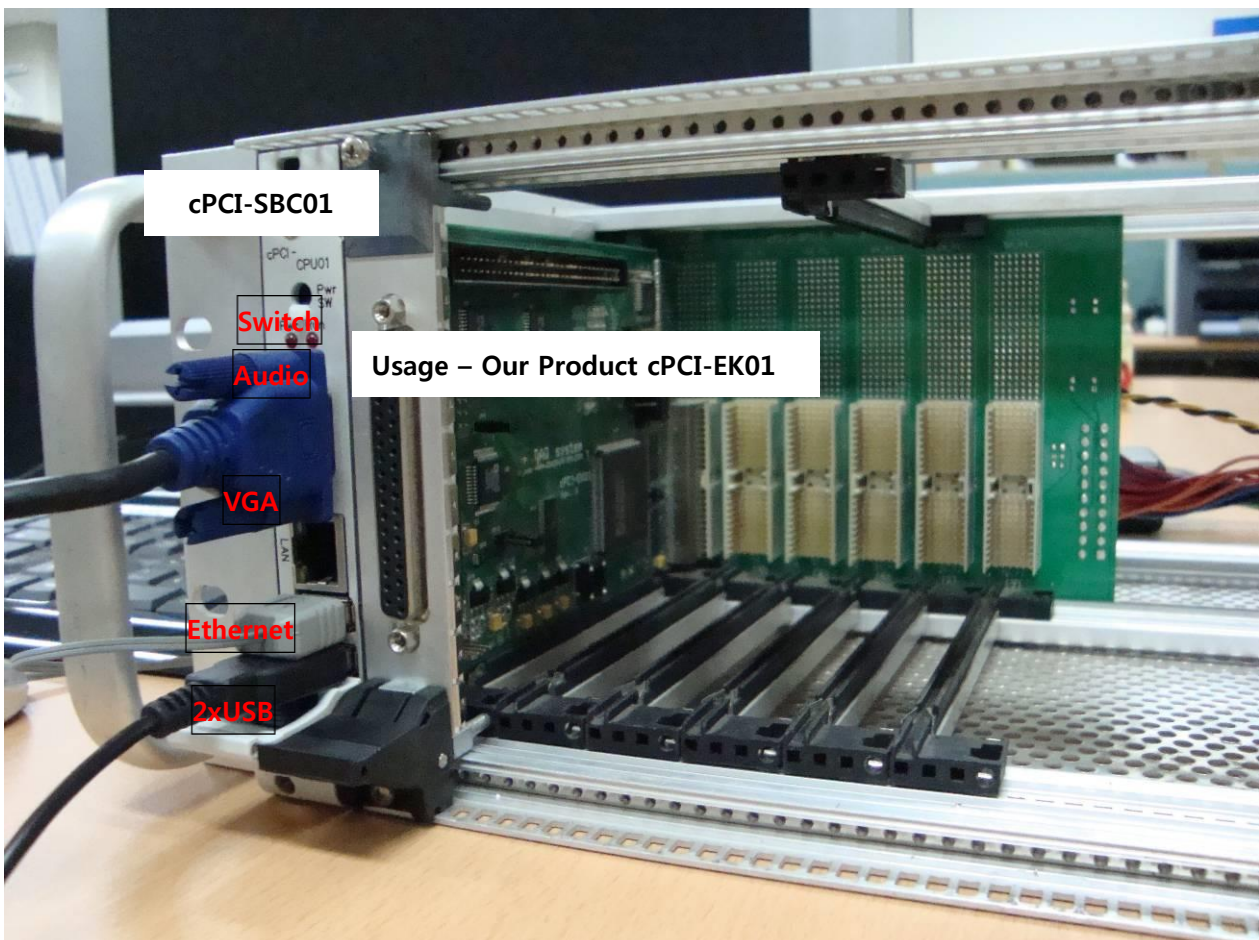
- Intel Atom Processor Z520PT(Z510PT, Z530P)
- Intel system controller hub US15WPT chipset
- Intel GMA500 graphics driver (VGA, LVDS)
- Single Power(+9V to +15V) operation
- Compact small size 160 x 100mm
- Supports industrial Temperature range (-40 - +85)
- [Operating Systems](#) : Windows XP

### 1-2 Specifications

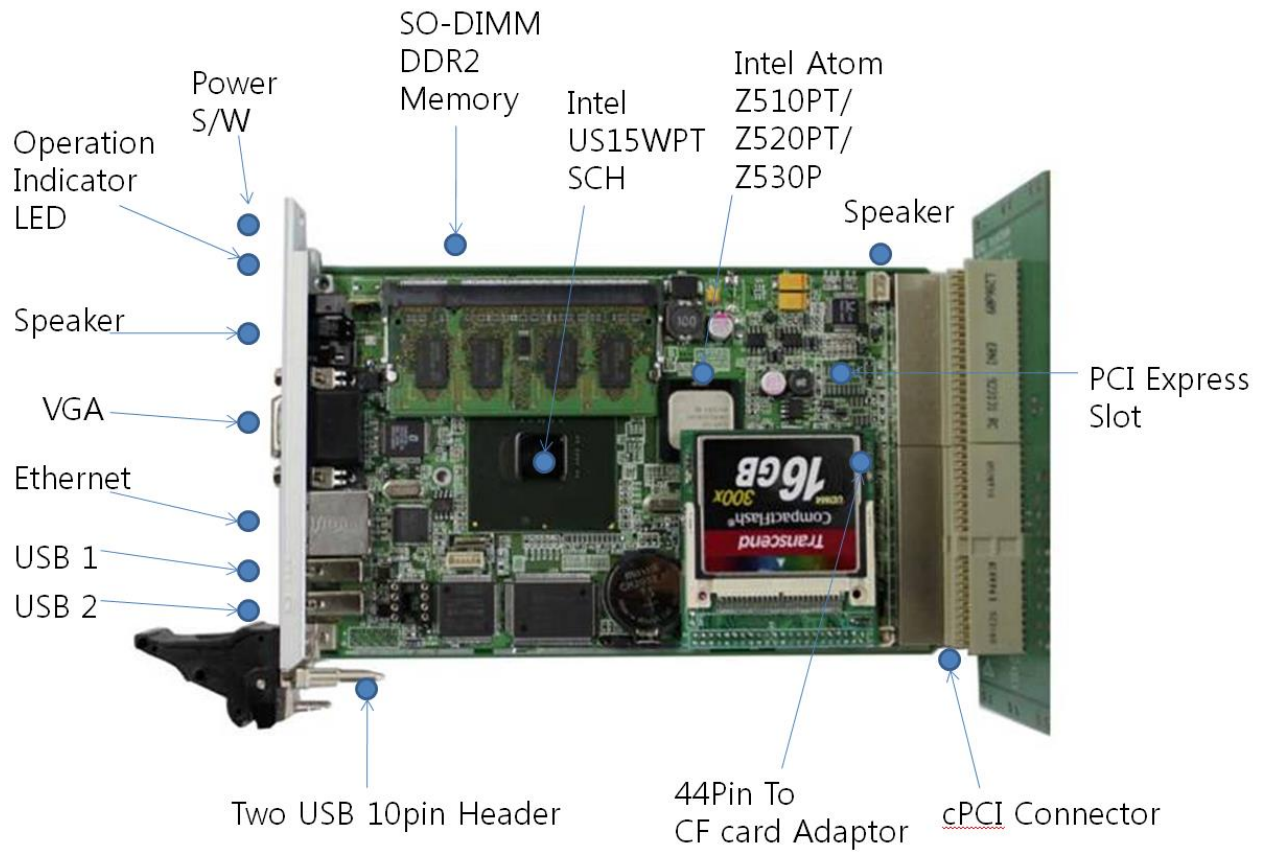
<b>Form Factor</b>	<b>160 x 100mm</b>
<b>Processor</b>	<b>Intel Atom Z520PT(512K cache, 1.33GHz, 533MHz FSB)</b>
<b>System Chipset</b>	<b>Intel System Controller Hub US15WPT</b>
<b>Bios</b>	<b>AMI bios</b>
<b>Memory</b>	<b>1 x 200 pin DDR2-400/533 SODIMM max up to 2GB</b>
<b>Extension Slot</b>	
<b>Compact Flash slots</b>	<b>44pin IDE to Compact Flash type-2 adaptor</b>
<b>PC card slots</b>	
<b>NVRAMs</b>	
<b>Display</b>	<b>Support LVDS, VGA Dual Display</b>
<b>Ethernet</b>	<b>one 10/100/1000 Mbps Ethernet port</b>
<b>EIDE</b>	<b>2mm pitch 44pin EIDE connector</b>
<b>Audio</b>	<b>HD Codec audio with mono speaker AMP</b>
<b>Serial I/O</b>	<b>Two serial ports , one can be used as touch input</b>

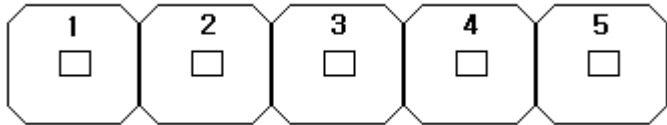
Parallel Port	
USB	Two USB A connector, Two with 10pin header
Watch dog timer	
Status LEDs	Indication for Ready and operation
Power Input	Single +9 to + 15V range power max current is 1.5A
Debug Connector	
Operating Temperature Rating	-40 to 50(without FAN and Heat-sink), -40 to +85 (with Heat-sink)
Power Consumption	Max 15W
Regulator compliance	

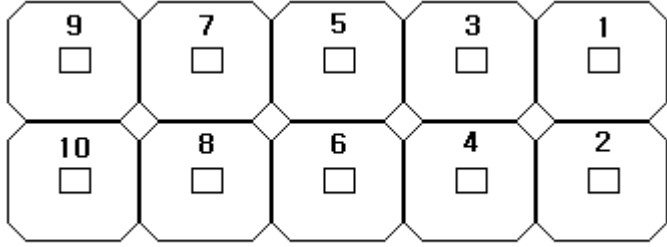
Ex) Control of peripheral devices through Compact PCI interface (back-plane connection)



## 2. cPCI-SBC02 Appearance



<b>POWER S/W</b>	<b>Main power switch of cPCI-SBC02</b>
<b>SO-DIMMDDR2 MEMORY</b>	<b>256M ~ 2GB Memory</b>
<b>Intel US15WPTSCH</b>	
<b>Intel Atom</b>	
<b>PCI Express Slot</b>	<b>You can use it by installing a PCI Express slot connector.</b>
<b>COM1 (J17)</b>	<p><b>PIN Connector for Serial Communication</b></p>  <p>1. PIN : RX1                  2. PIN : TX1                  3. PIN : Touch screen                  4. PIN : Touch screen                  5. PIN : GND</p>

<b>Speaker</b>	<b>SPK connector</b>
<b>USB 1/2</b>	<b>USB connector</b>
<b>IDE 2.0mm 44 PIN</b>	<b>Flash memory connector</b>
<b>Two USB 10pin Header (J10)</b>	 <p> <b>1.PIN , 2.PIN : +5 V</b>  <b>3.PIN : 1D-</b>  <b>4.PIN : 2D-</b>  <b>5.PIN : 1D+</b>  <b>6.PIN : 2D+</b>  <b>7.PIN , 8.PIN : GND</b>  <b>9.PIN ,10.PIN : No Connect</b> </p>
<b>Ethernet</b>	<b>one 10/100/1000 Mbps Ethernet port</b>

## 3. Driver Installation

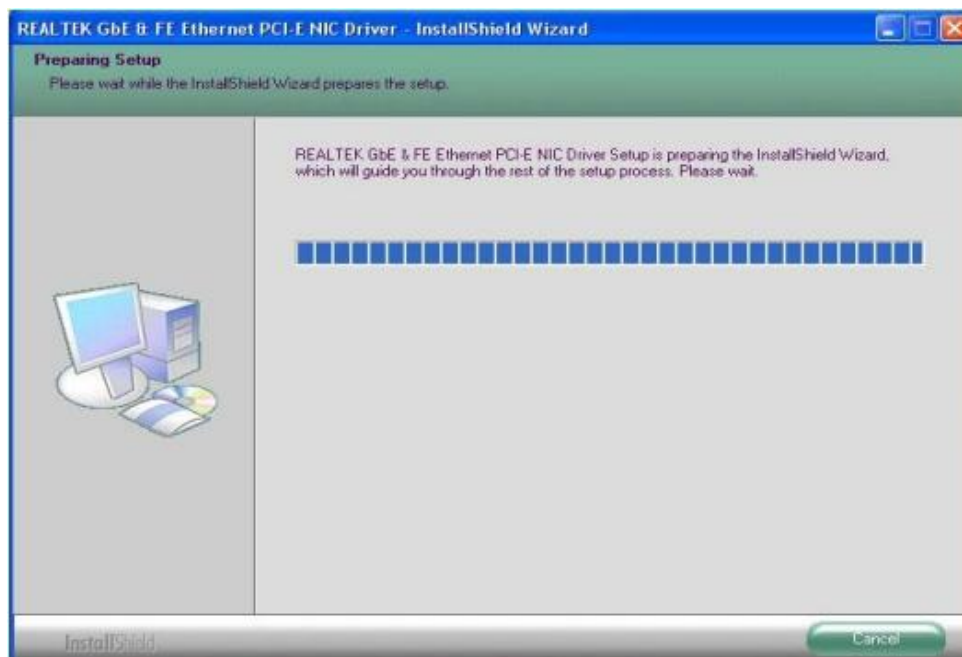
### 3-1 Sound Driver

- Install the sound driver by executing the CDROM:\Driver\audio\audio\_WDM\_R241\setup.exe file.



### 3-2 LAN Driver

- Install the LAN driver by executing the CDROM:\Driver\Lan\AsusSetup.exe file.

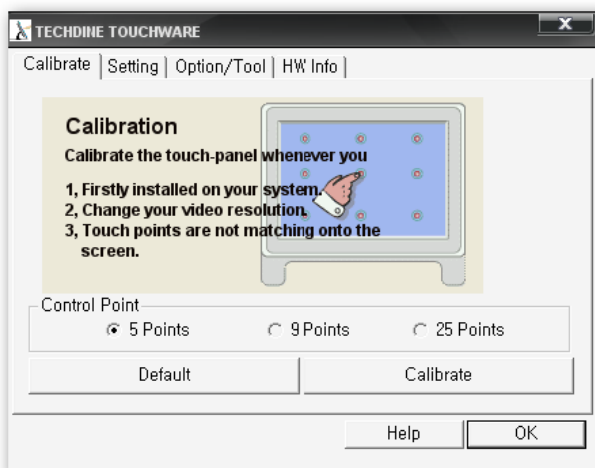


### 3-3 Touch Driver

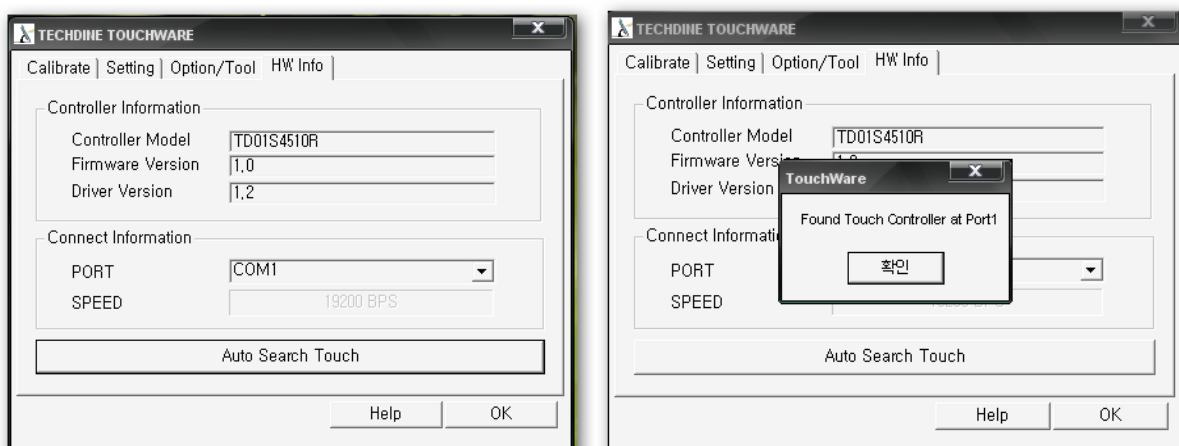
- Install the Touch driver by executing the CDROM:WDriver\Touch\SetupVista32-RS232.exe file.



- If you double-click the execution screen, the following screen appears.
- Click "HW Info" in the picture below.

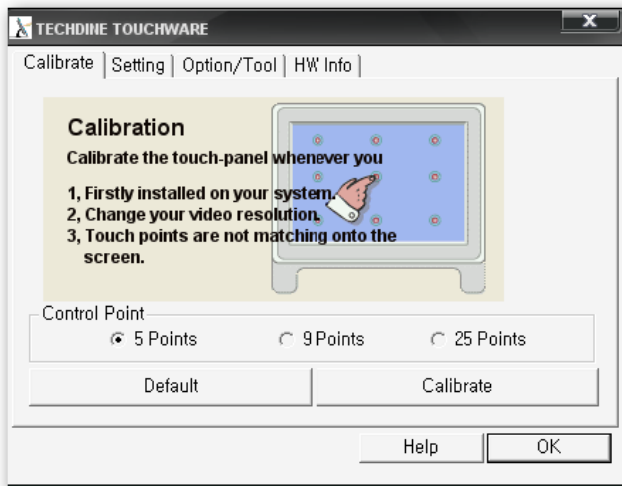


- Click the 'Auto Search Touch' button in "HW Info" to check the connection port.

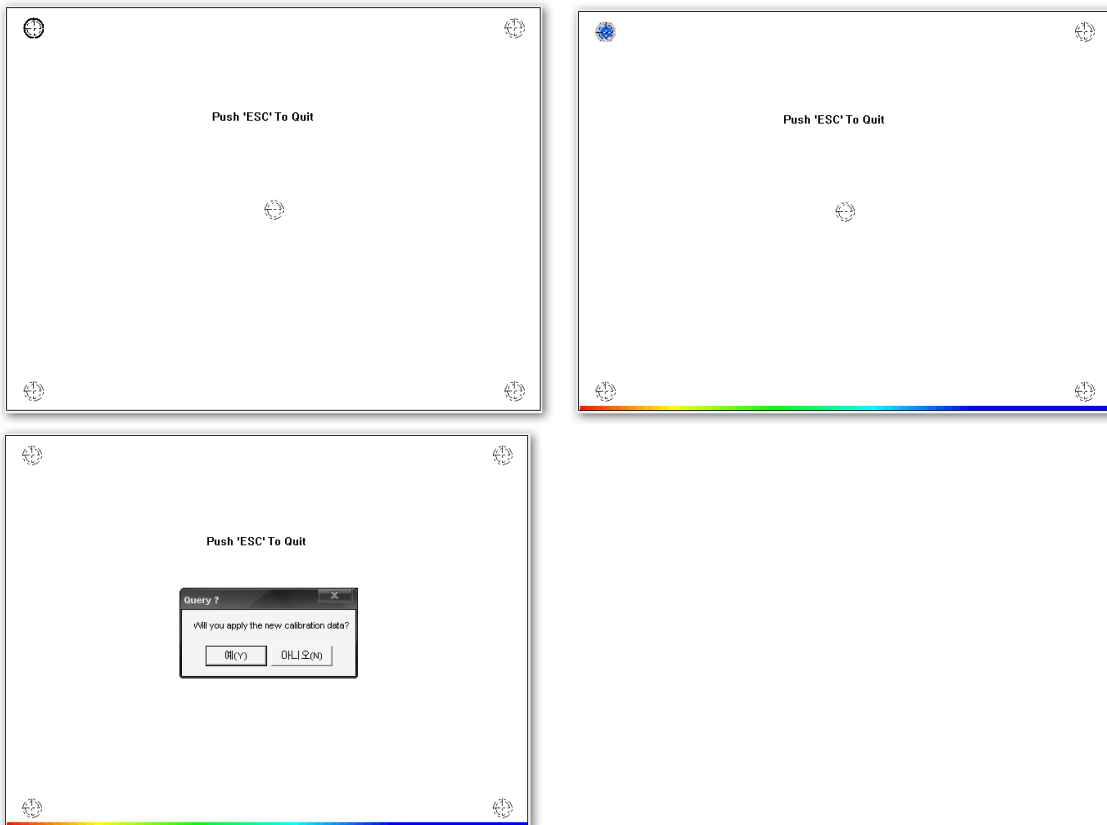


- After finding the port to which the Touch Controller is connected, press the OK button.
- Select "Calibrate" and press the 'Calibrate' button on the screen below.





- When the screen below appears, press and hold the blinking point. (Make sure to keep holding until the progress bar at the bottom is done.)



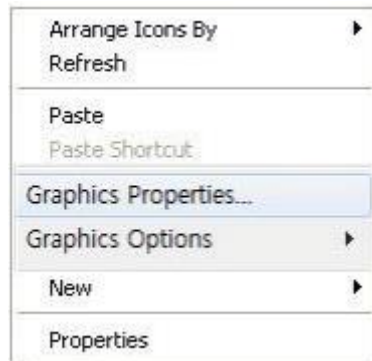
- If you press all the way down in the correct order, the above screen appears. Click "Yes" to exit and you are done.

### 3-4 Graphic Driver

Execute CDROM:\WDriver\WDriver\Graphic\XP\Wsetup.exe to install Graphic Driver and then reboot.

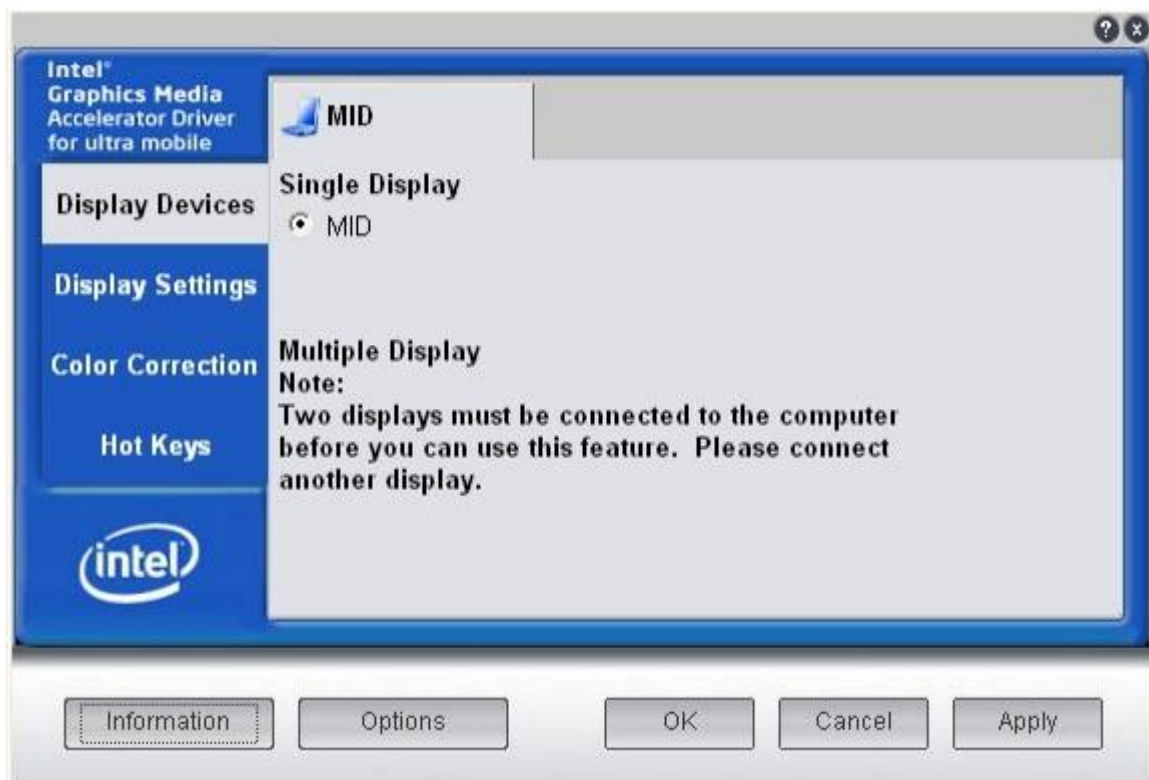
## 4. Display Setup

### 4-1 Installation with LCD



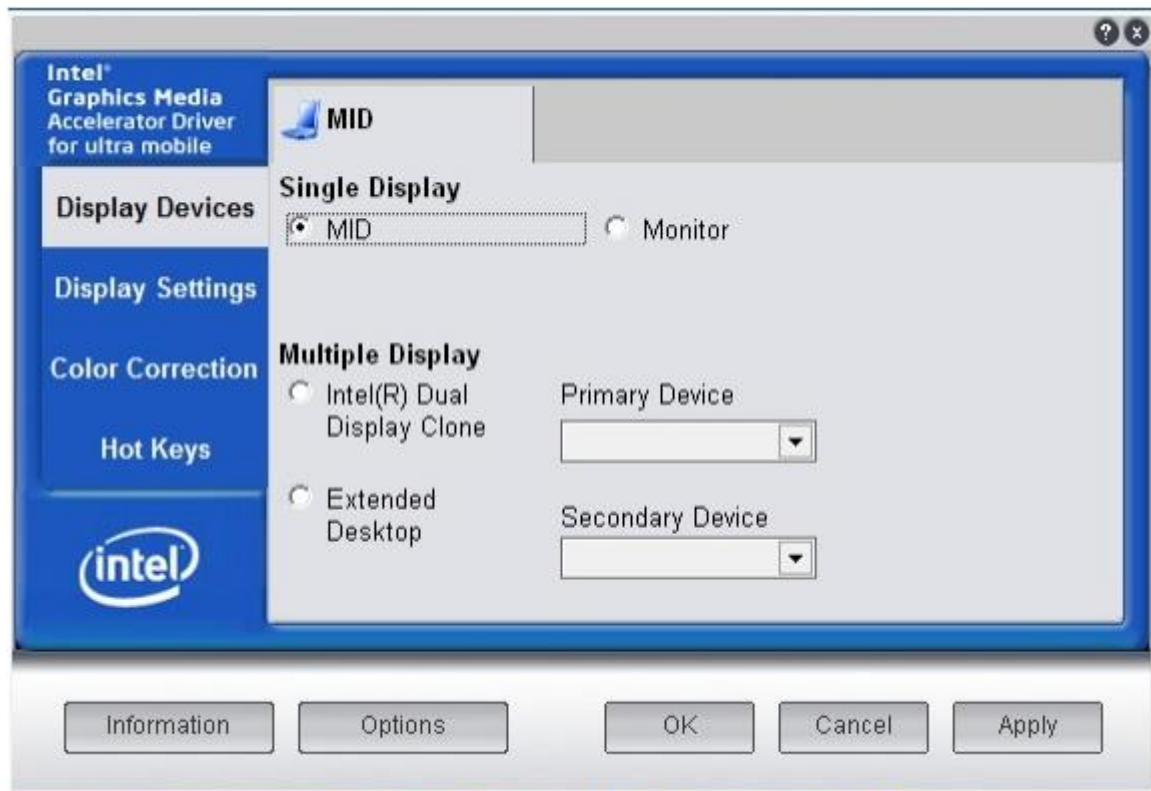
Right-click on the desktop and select "Graphics Properties... Select".

#### 1) MID Monitor Single Output



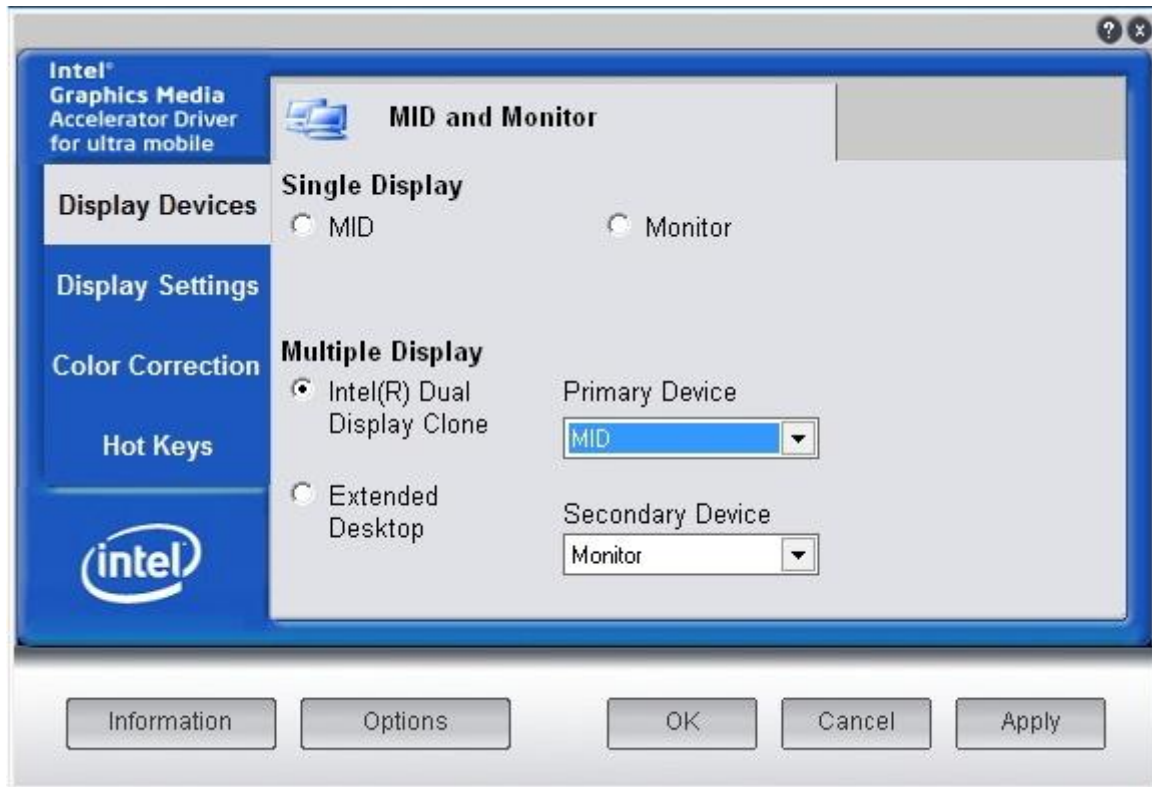
- When only MID Monitor is connected, only single display setting is possible.  
(Single screen output to MID Monitor)

## 2) MID Monitor AND Desk Top Monitor Single Output



- When both MID Monitor and Desk Top Monitor (VGA Connector) are connected, "Graphic Properties..." This is the setting screen.
- In the "Single Display" setting, you can choose between MID Monitor or Desk Top Monitor for output. (MID Monitor or Desk Top Monitor single output)

### 3) MID Monitor AND Desk Top Monitor Multiple Output



- When "Intel(R) Dual Display Clone" is set in "Multi-Display" setting, the same screen output is possible on MID Monitor and Desk Top Monitor. (same screen output)
- When setting "Expanded Desktop", one of MID Monitor and Desk Top Monitor can be used as an extended monitor. (extended monitor output)

## 4-2 Installation method when connecting only Desk Top Monitor without LCD

After installing the Graphic Driver and rebooting, the Windows logo screen is displayed on the Desk Top Monitor as follows.



When the logo screen is finished, the graphic driver outputs the screen to the initial setting LCD, so no image is displayed on the Desk Top Monitor.

After a minute or so after the logon screen disappears, press [Ctrl] + [Art] + [F1] to display the screen on the monitor. The above settings require one setting when installing Windows.

## Appendix

### A-1 Repair Regulations

Thank you for purchasing DAQ SYSTEM's product. Please refer to the following regarding Customer Service stipulated by DAQ SYSTEM.

- (1) Please read the user's manual and follow the instructions before using the DAQ SYSTEM product.
- (2) When returning the product to be repaired, please send it to the head office with the symptoms of the malfunction as well.
- (3) All DAQSYSTEM products have a one-year warranty.
  - The warranty period is counted from the date the product is shipped from DAQ SYSTEM.
  - Peripherals and third-party products not manufactured by DAQ SYSTEM are covered by the manufacturer's warranty.
  - If repair is required, please contact the contact points below.
- (4) Even during the free repair warranty period, paid repairs are made in the following cases.
  - ① Failure or damage caused by not following the user's manual
  - ② Failure or damage caused by customer negligence during product transportation after purchase
  - ③ Natural phenomena such as fire, earthquake, flood, lightning, pollution, etc. or power supply exceeding the recommended range malfunction or damage
  - ④ Failures caused by inappropriate storage environment (eg, high temperature, high humidity, volatile chemicals, etc.) damaged
  - ⑤ Failure or damage due to unreasonable repair or modification
  - ⑥ Products whose serial number has been changed or intentionally removed
  - ⑦ In the event that DAQ SYSTEM determines that it is the customer's negligence for other reasons
- (5) The customer must bear the shipping cost of returning the repaired product to DAQ SYSTEM.
- (6) The manufacturer is not responsible for any problems caused by incorrect use regardless of our warranty provisions.

# MEMO

## Contact Point

Web sit : <https://www.daqsystem.com>

Email : [postmaster@daqsystem.com](mailto:postmaster@daqsystem.com)

