Lucid Virtu Installation Guide
1 Introduction

Lucid VIRTU solution is designed for Intel Sandy Bridge platform with Intel Processor Graphics enabled. VIRTU dynamically assigns tasks to best available graphics resource based on power, performance and features. There is no need for HW or HW changes.

VIRTU allows user to fully utilize the unique capabilities of the Intel’s advanced media features on Sandy Bridge along with the high end 3D rendering performance provided by the discrete GPU installed in the system.

When no high end graphics is used and display is connected to integrated GPU, the discrete GPU is put in idle mode thus GPU utilization, heat, fan speed and power are down to near zero, turning the system to an environment friendly platform.

* Currently, Lucid VIRTU solution is supported under Windows 7 / 7 64-bit OS only.

2 Hardware and software specifications

2.1 Hardware specifications

In order to run the Lucid VIRTU solution, the following hardware is required:

<table>
<thead>
<tr>
<th>Item</th>
<th>Configuration/features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motherboard</td>
<td>Any Intel Sandy Bridge based platform with integrated onboard display output</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Sandy Bridge Dual/Quad Core CPU</td>
</tr>
<tr>
<td>Chipset</td>
<td>Intel Sandy Bridge H67/H61/Z68</td>
</tr>
<tr>
<td>Discrete GPU</td>
<td>Any AMD GPU (HD 4xxx and up)</td>
</tr>
<tr>
<td></td>
<td>Any Nvidia GPU (GF 2xx and up)</td>
</tr>
<tr>
<td>RAM</td>
<td>At least 2GB</td>
</tr>
</tbody>
</table>

2.2 Software specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Configuration/features</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>Windows 7 32 bit</td>
</tr>
<tr>
<td></td>
<td>Windows 7 64 bit</td>
</tr>
<tr>
<td>APIs</td>
<td>DirectX 9</td>
</tr>
<tr>
<td></td>
<td>DirectX 10/10.1</td>
</tr>
<tr>
<td></td>
<td>DirectX 11</td>
</tr>
<tr>
<td>GPU drivers</td>
<td>Intel – any WHQL driver</td>
</tr>
<tr>
<td></td>
<td>Nvidia – any WHQL driver</td>
</tr>
<tr>
<td></td>
<td>AMD – any WHQL driver</td>
</tr>
</tbody>
</table>
3 Hardware installation

3.1 i-Mode

i-Mode provides user with Intel Sandy special features and power saving options when no 3D gaming is used.

To use Lucid VIRTU solution in i-Mode, display must be always connected to Sandy Bridge motherboard video output.

Note: Display can be also connected to IPG VGA output instead of IPG DVI output.

3.2 d-Mode

d-Mode is provided for demanding 3D gamers to achieve uncompromised 3D performance of discrete GPU installed in the system. In this mode, Virtu allows user to utilize Intel special features such as transcoding, while display is connected to discrete GPU.

Note: We recommend you use d-Mode for better 3D performance unless you use Intel Insider feature or the power saving i-Mode.

To use Lucid VIRTU solution in d-Mode, display must be connected to discrete GPU installed in the system.
4 Software installation

Notes
a. Lucid VIRTU solution is designed for Intel Sandy Bridge based platforms only
b. GPU drivers and Lucid VIRTU solution should be installed before running any graphic application
c. GPU drivers must be installed prior to Lucid VIRTU installation
d. It is recommended to restart the system after every driver installation
e. All examples relate to 32 bit installation

1. Manually install Lucid VIRTU from our support CD.
   Lucid VIRTU is located in the following path of our support CD: ..\Lucidlogix VIRTU Setup_32Bit.exe
   Double-click this file to start installation.

2. The VIRTU Setup Wizard window is displayed.

3. Click Next. The End User License Agreement window is displayed.

4. Read the license agreement and select **I accept the agreement**.
5. Click **Next**.
   Then Select Destination Location dialog box is displayed.

6. Click **Next** to accept the default location.
   Select Start Menu Folder window is displayed.

7. Click **Next** to accept the default Start Menu folder.
   An information page is displayed – please read it.
8. Click **Next**. The Ready to Install dialog box is displayed.

9. Click **Install** to begin installation.
   The Installation window is displayed, indicating the installation. This step may take a few minutes to complete.

10. When the installation is complete, "Completing the VIRTU Setup Wizard" window is displayed.

Select "Yes, restart the computer now" option and click **Finish**. The VIRTU installation process is completed.
5 VIRTU Operation

After the installation process completed, VIRTU is activated. Once activated, the Lucid logo shows on system tray (the right bottom corner of the screen). Mouse right click at the icon, will display the following screen.

Clicking on the “Open control panel” option will open a new window with VIRTU control panel.

Clicking on “Disable” option, allows the user to stop VIRTU function. When VIRTU is disabled, the system will use the Sandy Bridge IPG for graphics activities.

Invisible or grey logo means VIRTU is not activated.

In case no logo is shown on the system tray, it is possible to activate the driver and the control panel manually by using the following instructions:

1. Click “Start”, “Programs” and “VIRTU”.
2. Click using the right mouse button on “VIRTU Control Panel”.

In case logo icon is grey, use mouse right click while pointing at the logo to get the following screen:

Clicking on the “Enable” option, will activate the VIRTU.

Typical application of VIRTU in can look like this:
5.1 VIRTU Control Panel

5.1.1 Main Tab

When activating the VIRTU control panel (either from the start menu or from the system tray icon), the following window is displayed:

By pressing a big “On” button VIRTU solution is activated. If “Show in System Tray” is selected, a small control panel icon will be displayed on the system tray together with the rest of the current running applications. “In-Game icon” selection is used to enable/disable in game VIRTU logo indication. The following options are available:

1. **Show** – The logo will be constantly displayed in the selected corner of the screen
2. **Show for a few seconds** - The logo will be shown for a few second and then will disappear
3. **Hide** – No logo will be shown

“Chose a Corner” – is a control to select a corner of the screen in which VIRTU logo will be displayed.

“Performance optimization” – optimize the performance of the virtualization by using special techniques. Test on each application in support list. In case of new application some issues may rarely happen it using full performance setting. In this case it is recommended to change the setting to Quality.
5.1.2 Games Tab

If the Games tab is selected, the following screen is displayed:

This screen shows the applications that VIRTU supports with the available graphic cards. The application list is changed according to the graphic cards available in the system and the current configuration. The list includes the applications that meet functionality and performance tests done by Lucid quality assurance.

VIRTU allows users to add new applications using the "Add", "Edit" and "Remove" buttons. Lucid cannot guarantee the functionality and performance of applications that were not part of the Lucid qualified application list provided with the product.

**Note:** Adding and editing of the applications list is disabled in evaluation versions of the product.

When selecting the “Add” option, the following window is displayed:

Place the desired application full “exe” file path in the “exe name” box. Clicking on the “….” button next to the “exe name” box allows using a standard Windows browser to find the location of the desired application “exe” file.

The “Friendly name” box allows the user to give the desired application a name that best describes the application. This is a free text box.

Press “OK” after filling the required information. This will automatically add and application to the supported game list. Once the desired application will activate, VIRTU will be applied to this application.

**Note** - adding manually an application that was not originally part of the game list means that the application did not pass Lucid QA tests. Lucid cannot guarantee the functionality and performance of applications that were not part of the Lucid qualified application list provided with the driver.
5.1.3 About Tab

If the “About” tab is selected, the following screen is displayed:

This screen provides VIRTU version installed.