

# User's Guide

# **NVIDIA SLI**

How to Set-Up an NVIDIA SLI-Powered PC



**NVIDIA SLI** is a revolutionary technology that allows two NVIDIA SLI graphics cards to work together to deliver incredible 3D graphics performance.

To assist the do-it-yourself community, NVIDIA is providing the following guide on how to set-up an NVIDIA SLI system.

**Note:** this guide assumes basic knowledge of how to build or upgrade a PC. If you do not feel comfortable with this level of know how, please refer to our list of <u>where to buy pre-built NVIDIA SLI systems</u>, or refer to other resources on how to build or upgrade a PC.

### **STEP ONE**

#### Determine your NVIDIA SLI component and operating system needs:

The following components are required:

- 1. An NVIDIA SLI-certified motherboard with NVIDIA SLI Connector
- 2. Two NVIDIA SLI-certified add-in cards
- 3. Windows XP operating system

Check here for a list of <u>NVIDIA SLI-certified motherboards and add-in-cards</u>, for the best gaming and application experiences.

## **STEP TWO**

#### Determine your power needs:

Based on testing at NVIDIA's SLI Validation lab, the following power supply suggestions should be followed.

NVIDIA SLI System Type	Minimum Recommended PCI Express Power Supply
High-End: GeForce 6800 Ultra	500W–550W, +12V @ 30A
Mid-Range: GeForce 6800 GT or 6800	420W-480W, +12V @ 25A
Entry-Level: GeForce 6600 GT	350W-420W, +12V @ 20A

If the power supply specifies two 12V windings (i.e. 12V1 and 12V2), then these current numbers can be added together to check against the specifications described above.

For systems with the 6800 Ultra or 6800 GT, please make sure the power supply also contains a PCI Express auxiliary power supply connector:



If your power supply does not have a PCI Express auxiliary connector, please contact your graphics board partner for a HDD to PCI Express power adaptor.

Note: NVIDIA SLI power supply recommendations are based on the following test configurations:

#### High-End NVIDIA SLI Configuration:

Dual GeForce 6800 Ultra Graphics cards Athlon 64 939-pin CPU or Intel Xeon Two or more HDD, including RAID 0,1, 0+1 or 5 configurations Two optical drives PCI sound card

#### Mid-Range NVIDIA SLI Configuration:

Dual GeForce 6800 or GeForce 6800 GT Graphics cards Athlon 64 939-pin CPU Single HDD Two optical drives PCI sound card

#### Entry-Level NVIDIA SLI configuration:

Dual GeForce 6600 GT Graphics cards Athlon 64 939-pin CPU Single HDD One optical drive

# **STEP THREE**

### Installing your NVIDIA SLI-Certified Components:

Now that you have obtained the necessary NVIDIA SLI Certified parts and confirmed your power supply needs its time to configure the system.

1. Install the NVIDIA SLI Certified Motherboard (per instructions in the accompanying manual):



2. Install both of the NVIDIA SLI Certified graphics cards (per instructions in the accompanying manual):



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- 3. Connect the PCI Express supplementary power connectors to each of the graphic cards:

4. Install the NVIDIA SLI connector to connect the two graphics cards:



Once the new NVIDIA SLI-certified components have been installed in the system, they will be recognized by the operating system upon Windows boot-up.

A Found New Hardware message will be displayed:



You must now install the NVIDIA SLI software in order for the system to recognize the new hardware. Go on to Step Four for software installation.

### **STEP FOUR** Installing the NVIDIA SLI Software:

As part of the NVIDIA Unified Driver Architecture, NVIDIA drivers include a full set of controls for SLI systems.

Once you have installed the NVIDIA SLI components and booted up your system, do the following:

- 1. Install the nForce drivers (provided with the motherboard)
- 2. Reboot the system
- 3. Uninstall any old NVIDIA graphics drivers from the system and reboot the computer. If there are no NVIDIA drivers installed, go to step 4.
- 4. Install the latest NVIDIA graphics drivers (provided with the add-in cards or from http://www.nzone.com/object/nzone\_downloads\_betadrivers.html).
- 5. Reboot the system.

After reboot of the system to the Windows desktop, you will see an **SLI capable system** message.



### STEP FIVE Enabling NVIDIA SLI:

- 1. Click on the SLI capable system message (noted above) to open the following window.
- 2. Select the checkbox **Enable SLI multi-GPU**, then click **Apply** and **OK** to save the settings.

You can also access these settings by opening the **Display Properties**, clicking on the **Settings** tab and the **Advanced** button. Click the tab associated with your graphics card, then select **NVIDIA SLI** from the left-hand menu options.

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	SLI CON RVIDIA.		
Γ	SLI multi-GPU		
Enable SLI multi-GPU			
	Your graphics cards features NVIDIA Scalable Link Interface (SLI) technology for significant improvements in rendering performance.		
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	To learn more, click here.		
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	OK Cancel App	ly 🛛	

The system will automatically reboot, and you will be greeted with the **SLI has been enabled** message:



You now have an NVIDIA SLI-enabled system and are ready to take advantage of scalable games and applications!