



AMD Radeon™ HD 6750/6770

User Guide

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Important Safety Instructions

Note: This product is for use only with compatible UL-listed personal computers that have installation instructions detailing user installation of this class of product.

Read all instructions before beginning installation. All safety and installation instructions should be read before the product is installed or operated.

Retain all instructions. Safety, installation, and operating instructions should be retained for future reference.

Heed all warnings. All warnings regarding the product and its operating instructions should be obeyed.

Use appropriate grounding.

Caution:

For continued protection against the risk of electric shock and fire, install this accessory only in products equipped with a three-wire grounding plug, a plug having a third (grounding) pin. This is a safety feature. Do not remove the grounding pin of a three-pin plug.

Attach product securely. All product-securing screws or fasteners should be completely tightened in order to provide continuous bonding between the product and the PC chassis, as appropriate.

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Chapter 1

Hardware Installation

This chapter details how to install the AMD Radeon HD 6750/6770 graphics card in your system.

1.1 Installation Overview

The installation of the card has slightly different procedures depending on whether you are replacing an existing card or installing a graphics card in a PC for the first time. This section briefly describes the high-level steps for both cases.

1.1.1 Replacing an Existing Card

If you are replacing an existing graphics card, you need to:

1. Start the computer and then uninstall the old graphics driver.
2. Turn off the computer and then remove the old card.
3. Install the new card and then connect the monitor.
4. Start the computer and then install the new drivers and software.
5. Restart the computer.

1.1.2 Installing the First Card for this PC

If this is the first graphics card for this PC, you need to:

1. With the computer off, install the new card and then connect the monitor.
2. Start the computer and then install the new drivers and software.
3. Restart the computer.

1.2 Recording the Serial and Part Numbers

Write down the serial number and part number before installing. The serial number and 102 part number on the graphics card are required for registration and free support. They are located on a sticker on the back of the card.

The emphasized numbers in bold are required for registration and free support.

Figure 1–1 Sample Serial and Part Numbers



1.3 Uninstalling the Old Driver (Windows® XP)

Follow these steps to uninstall the existing graphics card driver in preparation for installation of a new card.

1. With the current graphics card still in the computer, close all open applications.
2. On the Windows® taskbar, click **Start ▶ Control Panel** and then double-click **Add or Remove Programs**.
3. Select the current graphics card driver and then click **Change/Remove**.
Use the wizard that appears to remove the current display driver.
4. Turn off the system after the driver has been removed.

Note: If the previously installed graphics card has any additional software installed, this software may also need to be removed before restarting the computer. For example, DVD Player or Multimedia applications.

1.4 Uninstalling the Old Driver (Windows Vista®/Windows® 7)

Follow these steps to uninstall the existing graphics card driver in preparation for installation of a new card.

1. With the current graphics card still in the computer, close all open applications.
2. Click **Start ▶ Control Panel**.

3. Click **Device Manager**. If you are using the Category View of the Control Panel, do one of the following:
 - For Windows Vista®, click **System and Maintenance** and then **Device Manager**.
 - For Windows® 7, click **System and Security** and then **Device Manager** under the **System** group.
4. Expand **Display Adapter** and then right-click the driver for the graphics card you are replacing.
5. In the shortcut menu that appears, click **Uninstall**.
The driver for the old graphics card is uninstalled.
6. Turn off the system.

1.5 Installing the Graphics Card

1. Turn off the computer, monitor(s), and other peripheral devices.
2. Unplug the computer's power cord, and then disconnect all cables from the back of the computer.

Caution:

Wait approximately 20 seconds after unplugging the power cord before disconnecting a peripheral cable or removing a component from the motherboard to avoid possible damage to the motherboard.

3. Remove the cover to the computer's case.

Note: If necessary, consult the computer manual for help in removing the cover.

Caution:

Static electricity can seriously damage computer components. Discharge your body's static electricity by touching the power supply or the metal surface of the computer chassis before you touch any components inside the computer's case to avoid damaging them.

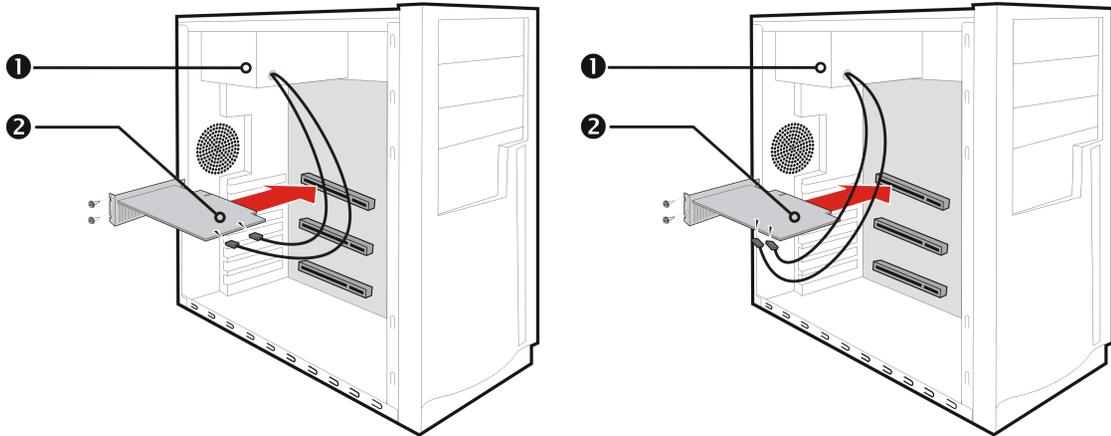
4. Unscrew or unfasten and remove any existing graphics card from the computer, if necessary.
5. Locate the appropriate bus slot and, if necessary, remove the corresponding metal backplate cover(s). Make sure all internal cables are clear of the slot.
Note: If you cannot find a bus slot to match the card, you need a graphics card with the correct bus to match the motherboard.
6. Align the graphics card with the slot and press it in firmly until the card is fully seated.
7. If your card requires supplementary power and must be connected directly to the power supply, locate the appropriate power connector cable(s) from the

power supply and connect it (or them) to the graphics card's supplementary power connector(s).

Note: If applicable, before installing a card that requires a supplementary power connection, make sure your existing power supply has such a connection available.

Tip: The location of power connections may vary between models. They can be located on either the side or back of the card.

Figure 1-2 Possible Power Connection Locations on the Graphics Card



1	Power supply
2	Graphics card

8. Fasten the graphics card securely to the back panel.
9. Make sure no internal cables are interfering with components inside the computer (for example, a cooling fan), and then replace the computer cover.
10. Reconnect any cables you have disconnected during installation, and then plug in the computer's power cord.
11. Turn on the monitor, and then the computer.

If you have properly installed the graphics card, the computer should start normally. Proceed to install the software and drivers for your AMD Radeon HD 6750/6770 graphics card.

1.6 Installing the AMD Catalyst™ Software Suite (Windows® OS)

To install or remove software, you must have administrator rights or be logged on as a user with administrator rights.

Note: The installation dialog displays in English if the operating system's language is not supported.

Software is provided to both operate and take advantage of all the features of the graphics card. Software includes:

- The graphics card drivers.
- The Control Center software application.
- HydraVision™ software (included in the custom install).
- SurroundView™ software (included in the custom install).
- AMD Video Converter software (included in the custom install).

1. Insert the Software and Documentation CD.

Note: If the install wizard does not start, navigate to the CD drive and double-click ATISETUP.exe.

2. From the menu that appears, click **Software Install**.

3. Follow the on-screen instructions. When prompted, select either **Express** or **Custom**.

Not all software components are installed using the Express installation. Custom installation allows you to select individual software components for installation.

Tip: If the installer fails to install the driver, or you have a software conflict, you can download the latest software from support.amd.com/us/gpudownload/Pages/index.aspx and then install it.

Chapter 2

Display Configuration

This section describes how to configure displays and lists available display connections for your graphics card.

2.1 Configuring the Display (Optional)

To change the display configuration or if you are experiencing an issue with the display, do the following:

Note: If you are not experiencing any troubles with the display, no adjustments are necessary.

1. Right-click on the desktop and, in the shortcut that appears, click **Properties**.
The Display Properties dialog appears.
2. Click the **Settings** tab and then select the screen resolution and color depth that best suit your requirements and the display's performance.
3. Click **Advanced** and then select the **Monitor** tab.
4. Choose a refresh rate from the drop-down list.

Caution:

Choosing a refresh rate unsupported by the display may damage it. Consult the display's documentation if necessary.

5. Click **OK**.
Once you have configured the main display you can configure any other displays that are connected.
6. To configure another display, do the following:
 - a. Right-click on the desktop and, in the shortcut that appears, click **Properties**.
Note: The Control Center software application can also enable and configure multiple monitors.
 - b. To access the basic multi-monitor configuration settings, click the **Settings** tab.
 - c. Select the monitor icon identified by the number 2.

Note: When using multiple monitors with the graphics card, one monitor will always be the primary display, additional monitors will be designated as secondary.

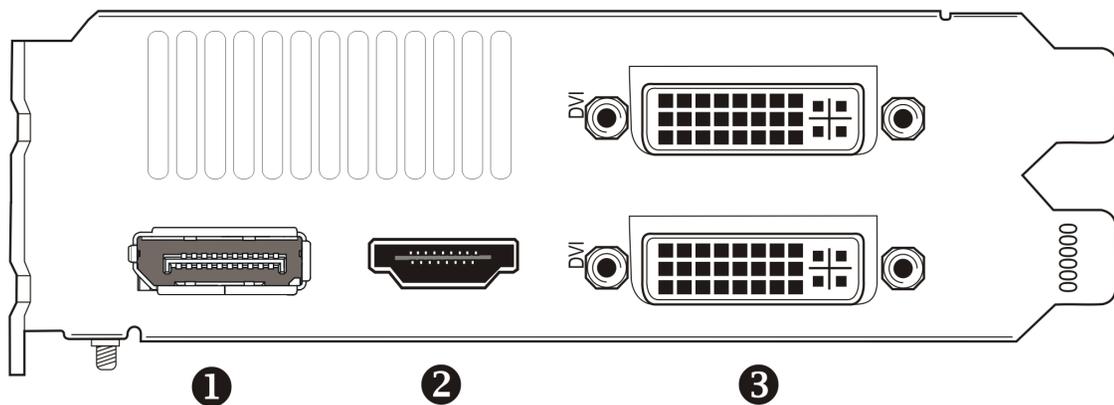
- d. Click **Extend my Windows desktop onto this monitor**.
- e. Set the Screen Resolution and Color Quality as appropriate for the second monitor.
- f. Click **OK**.

2.2 AMD Radeon HD 6750/6770 Connections

The following figure shows the display connections available on your AMD Radeon HD 6750/6770 graphics card.

Note: The baseplate may not appear exactly as depicted.

Figure 2-1 AMD Radeon HD 6750/6770 Display Connections



1	DisplayPort connection (DP only). Carries video and audio signals to DisplayPort-compliant devices.
2	HDMI™ connection. Carries video and audio signals to HDMI-compliant devices.
3	Two DVI-I Dual Link connections. Provides video digital signals and HDMI output that is compatible with most HDMI-compliant devices.

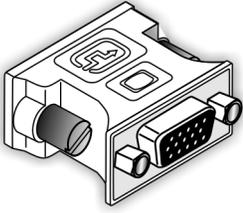
2.3 Display Configurations

The following table lists options for connecting displays that are indirectly supported by the connection types available on the graphics card.

For best graphics performance and quality, always use native connections, if available, when connecting displays.

Note: Only display configurations using the DVI-to-VGA adapter included with your graphics card are mentioned here.

Table 2–1 Display Configurations

Display Configuration	Connection Options	Adapter
DFP (digital flat-panel) display	DVI-I connection with DVI-to-VGA adapter (pictured)	
CRT (VGA) display	DVI-I connection with DVI-to-VGA adapter	(See illustration above)

2.4 Multi-Display Support

Your AMD Radeon HD 6750/6770 graphics card provides multi-display functionality through its various display connections. The graphics card can output to a maximum of three displays using the following set of connections:

- Two DVI-I Dual Link connections and one DisplayPort connection.
- One DVI-I Dual Link connection, one HDMI connection, and one DisplayPort connection.
- One DVI-I Dual Link connection, one VGA connection (via a DVI-I Dual Link connection and DVI-to-VGA adapter), and one DisplayPort connection.
- One VGA connection (via a DVI-I Dual Link connection and DVI-to-VGA adapter), one HDMI connection, and one DisplayPort connection.

For a list of all possible display configuration combinations, visit www.amd.com/eyefinity.

Chapter 3

AMD CrossFireX™ Technology

Note: These features are only available for AMD Radeon HD 6750/6770 graphics cards with AMD CrossFireX™ connections.

3.1 AMD CrossFireX™ Introduction

AMD CrossFireX is a multi-GPU (graphics processing unit) performance gaming platform. It enables two graphics processors installed in a single computer to work together to improve system performance, creating a high-performance gaming platform. AMD CrossFireX setup involves two graphics cards and works with all 3D games and applications.

Once your graphics cards have been installed, you can enable and configure AMD CrossFireX support using the AMD CrossFireX user interface contained within the Catalyst™ Control Center software.

3.2 Installing Additional AMD CrossFireX™-capable Graphics Cards

These instructions assume that a PCIe® graphics card has already been successfully installed in the secondary slot (slot one), and that the primary slot (slot zero) is empty.

Note: Consult your system builder or OEM to ensure that your system has an adequate power supply.

For an up-to-date listing of AMD CrossFireX certified motherboards and power supplies, see support.amd.com/us/certified/Pages/certified-components.aspx.

1. Make sure the computer, monitor, and other peripheral devices are off.
2. Unplug the computer power cord and disconnect the monitor cable from the back panel of the computer.

Caution:

To avoid possible damage to the motherboard, wait approximately 20 seconds after unplugging the power cord before disconnecting a peripheral or removing a component from the motherboard.

3. Remove the computer cover.

If necessary, consult the computer manual for help removing the cover.

Caution:

Remember to discharge your body's static electricity by touching the power supply case or the metal surface of the computer chassis.

4. Remove any unneeded graphics cards from the computer.

Warning:

Some graphics cards can get hot while operating. Wait approximately five minutes after turning off the computer before touching the card.

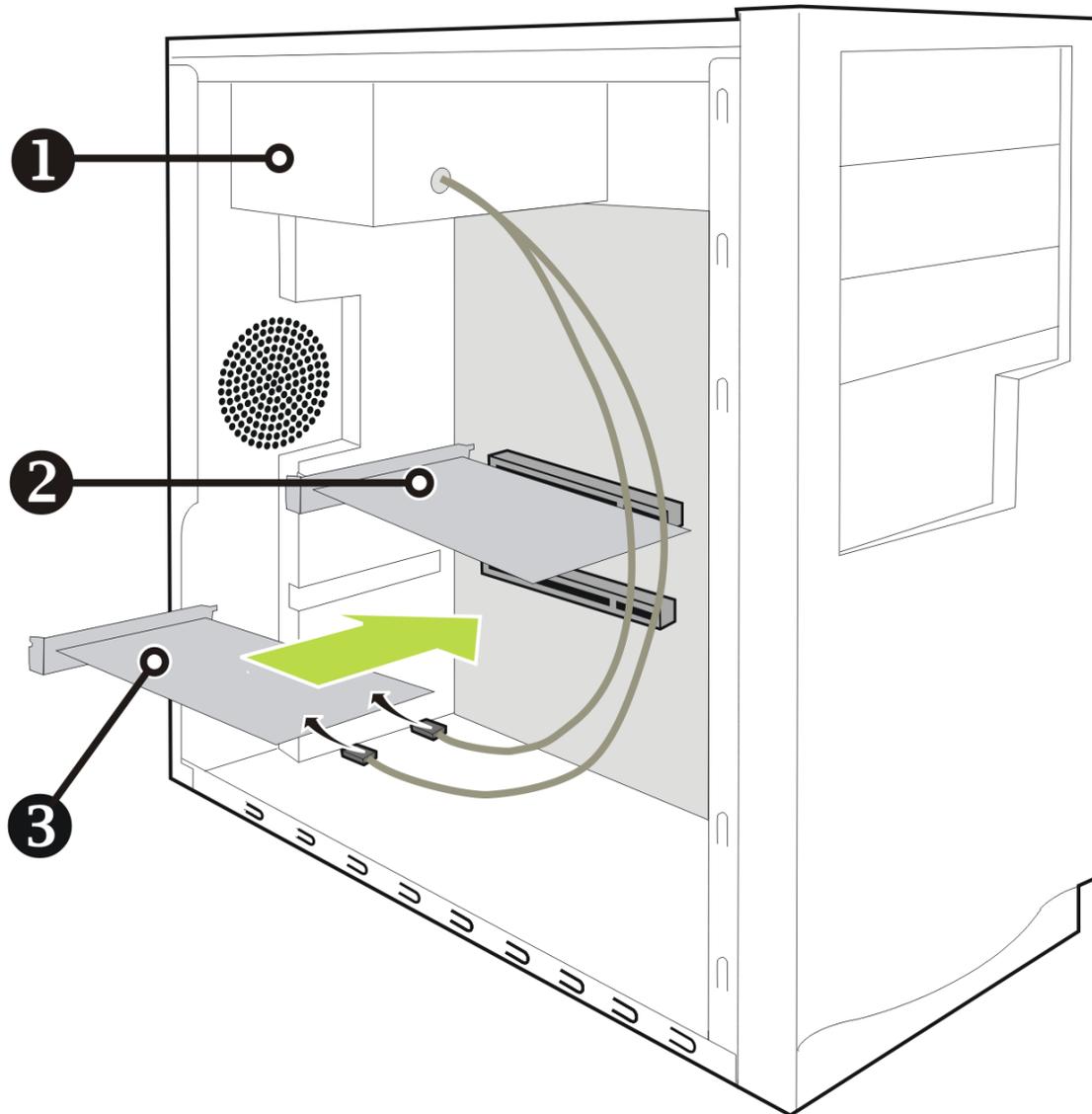
5. Locate the PCIe slots on the motherboard. If necessary, also remove the corresponding back panel cover.
6. Align the new graphics card in the secondary PCIe slot next to the existing graphics card and press firmly until the card is fully seated.

Tip: For optimal performance in a dual-GPU AMD CrossFireX configuration, make sure that each AMD Radeon HD 6750/6770 graphics card is separated by at least one empty expansion slot.

7. Connect the power supply to the cards.

Tip: The location of power connections may vary between models. They can be located on either the side or back of the card.

Figure 3-1 Connecting the Power Cables



1	Power supply
2	Existing card
3	New card

8. Remove protection tags from the ends of the AMD CrossFireX interconnect and connect the cards.

Caution:

Always handle the AMD CrossFireX bridge interconnect by the connector only. Do not push or pull on the flexible cable.

Figure 3-2 AMD CrossFireX™ Bridge Interconnect Protection Tag

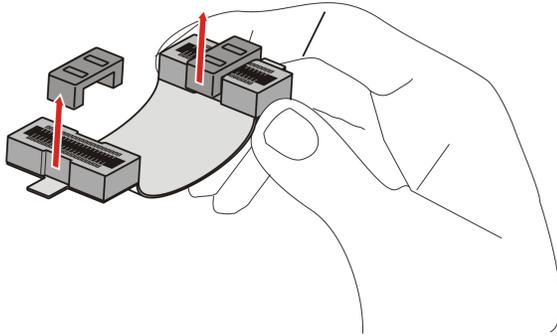
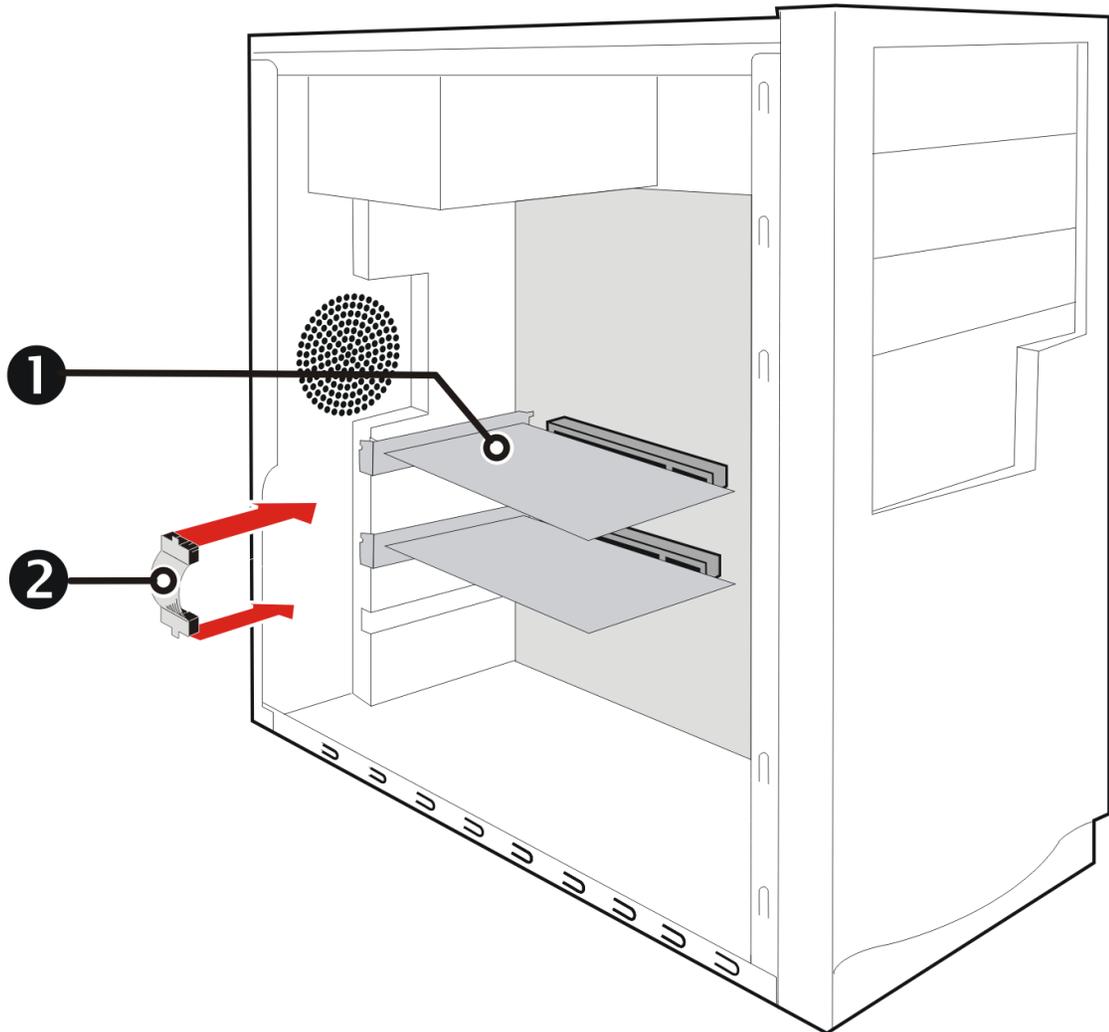


Figure 3-3 AMD CrossFireX™ Installation



1	AMD CrossFireX graphics cards
2	Interconnect

9. Fasten the graphics cards securely to the back panel.
10. Make sure the cables are not interfering with anything inside the computer (for example, a cooling fan) and then replace the computer cover.
11. Reconnect any cables you have disconnected and plug in the computer power cord.
12. Turn on the monitor and then the computer.

You can now enable and configure AMD CrossFireX support using the Control Center software application. For more information, see [Using the Control Center Software \(p. 18\)](#).

3.3 Enabling AMD CrossFireX™

When AMD CrossFireX support is enabled, the best possible GPU combination is selected based on the current hardware configuration. If necessary, you can change the existing AMD CrossFireX configuration using the following procedure.

AMD dual-GPU graphics cards are designed based on AMD CrossFireX technology. As a result, AMD CrossFireX support is always enabled for these types of cards.

1. Based on the navigation layout of the Control Center application window, do one of the following:
 - Navigation menu—On the **Graphics** menu, click **CrossFireX™**.
 - Navigation tree—From the tree in the **Graphics Settings** tab, click **CrossFireX™**.
2. Click **Configure**.
3. From the **Graphics Adapter** list, select the graphics card to act as the display GPU.
4. Select **Enable CrossFireX™**.

Note: The **Choose from the following Rendered GPU combinations** drop-down list automatically populates with all available render GPUs based on the selected display GPU. The list displays only GPUs that can be enabled for AMD CrossFireX. Other combinations are not listed here but may be listed on the **CrossFire™ ▶ Diagnostics** page.

5. From the list, select the appropriate combination.

Note: If the selected combination is not the most optimal choice for your system, a message appears at the bottom of the page notifying you of this.

6. Click **Apply**.

In some configurations, when AMD CrossFire™ is enabled, GPU Accelerated Physics is automatically disabled for all cards in the configuration as are all displays except the one used by AMD CrossFire.

Chapter 4

Reference

The following section offers troubleshooting tips and provides customer care, warranty, and compliance information.

4.1 System Requirements

4.1.1 Hardware

Minimum requirements are:

- Motherboard with one PCIe® ×16 lane graphics slot.
- AMD Athlon™ or Intel Pentium® 4 CPU.
- 1 GB RAM.
- CD-ROM or DVD-ROM drive for installing software.
- A 600 watt or better power supply with one 2×3 and one 2×4 PCIe power connector.
- Certified power supplies are strongly recommended; for a list of certified power supplies, see ati.amd.com/certifiedpsu.

4.1.2 AMD CrossFire™ Requirements

Minimum requirements for AMD CrossFire™ configuration using the AMD Radeon HD 6750/6770 graphics card:

- AMD CrossFire-certified motherboard. For an up-to-date listing of AMD CrossFire certified motherboards, see ati.amd.com/products/certification.
- A second AMD CrossFire graphics card compatible with the AMD Radeon HD 6750/6770 graphics card.
- One AMD CrossFire internal bridge interconnect per additional board (included).
- A 900 watt or better power supply with two 2×3 and two 2×4 PCIe power connectors.

- For an up-to-date listing of certified power supplies, see ati.amd.com/certifiedpsu.
- Certified system cases with good airflow and cooling are recommended. For list of certified cases, see ati.amd.com/certifiedcases.

4.2 Using the Control Center Software

4.2.1 Control Center Overview

The Control Center software application contains settings for configuring and fine-tuning your AMD product. Use it to manage desktops and displays, optimize your graphics processor for enhanced 3D application and video quality, and configure your CPU for improved power savings or system performance. You can also use the performance tools in the application to monitor and manage clock speed and memory use for your graphics card to ensure that your AMD product is configured and running as efficiently as possible.

The application provides a Standard View for guided configuration and an Advanced View for quick and easy access to all available features and settings. It also provides a search feature for finding specific pages, as well as the ability to bookmark pages by pinning them within the application.

The following is a list of common configuration tasks that can be completed using the application:

- Adding and removing displays
- Rotating displays
- Setting the main (primary) display
- Duplicating and extending desktops
- Arranging desktops
- Enabling and disabling 3D application and video settings

More information on the application and its available features are provided through the comprehensive Control Center help system. For information on accessing the help system, see [Using the Control Center Help System \(p. 19\)](#).

Note: Feature availability varies between AMD products and operating systems.

4.2.2 Starting the Control Center Software

You can use any of the following methods to start the Control Center software application.

Table 4–1 Control Center Access Routes

Access Route	Instructions
Windows® Desktop	<ol style="list-style-type: none"> 1. Right-click anywhere on the desktop. 2. From the shortcut menu that appears, click the Control Center option.
Windows Start Menu	<ol style="list-style-type: none"> 1. Click Start on the Windows task bar. 2. Click All Programs followed by the Control Center option.
Windows Notification Area	<ol style="list-style-type: none"> 1. Right-click the Control Center icon in the Windows Notification Area. 2. From the shortcut menu, click the Control Center option.
Desktop Shortcut	If you chose to create a desktop shortcut to the Control Center application during the driver installation, double-click the shortcut.

4.2.3 Using the Control Center Help System

The help system that is available with the Control Center software application provides detailed usage information and tips for configuring your AMD product. The help system also provides conceptual information on the technologies that are available for your product.

Use the following steps to access the help system.

1. Open the Control Center application.
2. Choose one of the following options:
 - Set the mouse focus to the application window (by clicking the window) and press F1 on your keyboard.
 - Click the Help button (shown as a question mark) located in the titlebar of each page within the application.
 - Right-click the Control Center icon in the Windows taskbar notification area (system tray), and click **Help**.

The help system opens to provide context-sensitive help for the current page or general usage information.

4.3 Troubleshooting

Note: Some troubleshooting tips may not be applicable depending on the display options supported by and configured for your card.

4.3.1 Graphics Card Installation Troubleshooting

For more advanced troubleshooting information, contact AMD Customer Care at amd.com.

4.3.1.1 The graphics card doesn't fit any of the motherboard slots.

The graphics card needs to be exchanged for one with a bus that matches the motherboard.

4.3.1.2 The computer beeps and the boot process stops.

Make certain that the graphics card is properly connected to the internal power supply and the motherboard.

4.3.1.3 No display on power up.

This may be an SBIOS issue. Replace the old card and then try these possible solutions:

1. Check the motherboard manufacturer's Web site for an SBIOS update.
2. Turn off the on-board video.

4.3.1.4 The computer does not boot up properly.

Verify that the installation instructions were followed correctly.

Make certain that the graphics card is properly connected to the power supply and the motherboard.

If using Windows operating system, restart your computer in Safe Mode. For information on Safe Mode, consult the Windows documentation.

Check the system configuration utility for interrupt assignments.

4.3.1.5 The computer boots up but there is no display.

Verify that the monitor is connected properly to the computer and a power supply.

If a DisplayPort adapter, passive dongle, or active dongle is used, visit www.amd.com/eyefinity and make sure it appears on AMD's listing of AMD Eyefinity Multi-Display Ready or AMD Eyefinity Multi-Display Verified adapters/dongles.

If your motherboard has on-board graphics capabilities, you may need to disable them. Consult your motherboard documentation for more information.

Note: Some manufacturers do not allow the on-board graphics to be disabled or to become the secondary display.

4.3.1.6 During software installation on a PC with the Windows Vista® OS, the screen goes blank

The software is still installing. Wait 20–30 minutes to make sure the software has finished installing and then restart the computer.

4.3.2 Troubleshooting AMD CrossFireX™

The following are suggested solutions for common AMD CrossFireX™ troubleshooting issues.

4.3.2.1 Change Motherboard BIOS Settings

Some motherboards may have a system BIOS option to switch between single and dual PCIe slot support. The default setting may be single slot support. Refer to the motherboard's manual for information to enable dual PCIe slot support.

For more information see the AMD CrossFireX Web page at sites.amd.com/us/game/technology/Pages/crossfirex.aspx.

4.3.2.2 Use Graphics Cards with Different Amounts of Memory

In some AMD CrossFireX configurations, graphics cards with different amounts of memory can be used; however, restarting your computer is required after enabling AMD CrossFireX. This will cause AMD CrossFireX to reduce the amount of memory on the card with the most amount of memory to match the memory size of the graphics card with the least amount of memory.

Clicking **OK** to the memory mismatch error message will restart your computer.

Note: When disabling AMD CrossFireX you will be given the option to restart your computer to restore the original graphics memory size or continue with the reduced memory size.

4.3.2.3 Card Reversal Recommended

A recommendation message to reverse the graphics card positions may appear if the primary graphics card is not installed into the primary PCIe slot. Although AMD CrossFireX can be enabled, performance may be improved by reversing the graphics cards in the computer.

See your motherboard's manual to determine which is the primary PCIe slot.

4.3.2.4 3D Client is Active

You will not be able to start AMD CrossFireX if a 3D application, game, or video playback, such as a DVD movie, is running.

Close all open 3D applications, games, and movie player applications, and then enable AMD CrossFireX.

4.3.2.5 AMD CrossFireX™ is Currently Unavailable

This error has occurred because AMD CrossFireX did not correctly detect your graphics hardware or there is a problem with the software.

- Check that the graphics cards are installed correctly.
- Check that the interconnect cable, if applicable, is installed correctly.
- Close all running 3D applications.
- Check that the AMD CrossFireX mode is set to Software in the Control Center application. (The AMD Radeon HD 6750/6770 can only use AMD CrossFireX technology in software mode.)
- Reinstall the Control Center software application and drivers.

4.3.2.6 Screen Rotation is Unavailable or Does Not Work

Screen rotation is not an available feature on AMD CrossFireX systems.

4.3.2.7 Video Displays Flicker During System Startup

This is normal during AMD CrossFireX startup.

4.3.2.8 AMD CrossFireX™ Disabled After Swapping/Moving Cards

If you change the AMD CrossFireX configuration by moving the graphics cards to different slots on the motherboard, disable AMD CrossFireX and restore factory default settings in the Control Center software application first. Once the cards have been swapped, enable AMD CrossFireX. This ensures the new configuration is detected by the computer.

4.3.3 HDTV/HDTV Adapter Troubleshooting

The following troubleshooting tips may help if you experience problems with HDTV. More troubleshooting information can be found on the AMD Web site. Please visit amd.com and select **Customer Care**.

4.3.3.1 The colors on the TV display are incorrect.

Ensure that the connections between the component video adapter and the HDTV are correct.

4.3.3.2 There is no display on the TV.

The TV will not display anything until Windows starts; this may take several minutes. Make sure the TV is set to YPbPr input. Also, make sure that the HDTV component video adapter is properly connected.

4.3.3.3 DVDs will not play in high-quality modes.

For displays connected using an analog connection, playback of CSS-protected DVDs may be restricted to certain modes.

For displays connected using a digital connection, playback on certain DVD players may also be restricted if HDCP (high-bandwidth content protection) cannot be enabled. This restriction also applies to displays connected using active DisplayPort adapters.

4.3.3.4 The entire display is not visible.

If the component input device supports it, try 720p mode.

4.3.3.5 The display appears tilted.

Consult the HDTV documentation.

4.3.3.6 The CRT display is green.

The system is in component output mode. Restart the computer with only the CRT monitor connected.

4.3.3.7 TVs/monitors connected cannot be enabled.

If TVs and/or monitors connected using DisplayPort adapters, passive dongles, or active dongles cannot be enabled, visit amd.com/eyefinity to check the connectivity options available for your graphics card and that your chosen configuration is supported.

Check individual connections to the TVs/monitors.

4.4 Customer Care

For detailed instructions on how to use your product, refer to the documentation included on the installation CD.

To activate Customer Care, you must register your product at amd.com.

If you require further assistance with your product, the following Customer Care options are available:

Service	Availability	Language	Access
Online or mail	24 hours a day	English, French, Spanish	support.amd.com/us/Pages/AMDSupportHub.aspx or Attention: Customer Care Advanced Micro Devices, Inc., 1 Commerce Valley Drive East, Markham, Ontario, Canada L3T 7X6
Telephone US & Canada	Monday to Thursday: 9:00 a.m. to 5:30 p.m. Friday: 9:00 a.m. to 3:00 p.m. Note: AMD reserves the right to change hours of support.	English	1-877-284-1566 (toll-free) or 1-905-882-2626 (Canada) (International and/or local toll charges to Canada will apply).

AMD Customer Care for Graphics Products will work to resolve your issue and help you to get your product up and running. If your issue is not resolved, our technicians will determine whether the difficulty you are experiencing is the result of the product,

whether your product contains a defect, and whether your product is under warranty.

- AMD Customer Care is unable to assist with refunds, returns, or exchange-specific inquiries. If resolving the problem being experienced is critical to your decision to keep the product, it is your responsibility to ensure that you know and are within the period of time your reseller will allow for refunds, returns, or exchange.
- AMD is not responsible for any expense incurred accessing Customer Care. It is expected that customers will review the expense associated with the available support options and will choose the method that best meets their needs and budget.
- AMD Customer Care reserves the right to limit support options for products that are not registered or are reaching end of life.

4.5 International Compliance Information

This section details the worldwide compliance information for this product, which is manufactured to be compliant in the regions where it is sold.

AMD products are either Class A or Class B compliant and are indicated accordingly on the compliance label for each product. The following regulatory information applies to Class A and Class B products.

4.5.1 FCC Compliance Information (USA)

Class A

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are design to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case, the user will be required to correct the interference at his own expense.

Warning:

Changes or modifications to this device not expressly approved by Advanced Micro Devices, Inc. could void the user's authority to operate the equipment.

FCC Part 15, Subpart B, Class A

Class B

This product complies with FCC Rules Part 15. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits 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 manufacturer's 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:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The use of shielded cables for connection of the monitor to the graphics card is required to ensure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC 15, Subpart B, Class B

For further compliance information:

Advanced Micro Devices, Inc.
1 AMD Place
P.O. Box 3453
Sunnyvale, CA 94088-3453
USA Tel: 408-749-4000

4.5.2 Industry Canada Compliance Statement (Canada)

Class A

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

Class B

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

4.5.3 CE Compliance Information (European Union)

Class A

Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

EMC Directive 2004/108/EC

CISPR 22/EN 55022–Class A: Limits and methods of measurement of radio disturbance characteristics of Information Technology Equipment.

CISPR 24/EN 55024–Information Technology Equipment–Immunity Characteristics—Limits and Methods of Measurements

Class B

EMC Directive 2004/108/EC

CISPR 22/EN 55022—Class B: Limits and methods of measurement of radio disturbance characteristics of Information Technology Equipment.

CISPR 24/EN 55024—Information Technology Equipment—Immunity Characteristics—Limits and Methods of Measurements

4.5.4 Electrical Safety

Europe: The Low Voltage Directive–2006/95/EC

- EN 60950-1–Safety of Information Technology Equipment

USA/Canada:

- UL 60950-1 (Information Technology Equipment–Safety—Part 1: General Requirements)
- CSA C22.2 No. 60950-1 (Information Technology Equipment—Safety–Part 1: General Requirements)

International:

- IEC 60950-1 (Information Technology Equipment–Safety-Part 1: General Requirements)

To meet UL safety requirements, the computer's maximum room temperature should not exceed 40 °C.

This product complies with the PCI Express 300W Electromechanical Specification — please refer to the manufacturer for additional information. Other relevant input power data will also be available.



4.5.5 VCCI ITE Compliance Information (Japan)

Class A

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

Translation:

This is a Class A product based on the standard of the VCCI Council. If this equipment is used in a domestic environment, radio interference may occur, in which case, the user may be required to take corrective actions.

VCCI V-3

Class B



この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

Translation:

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

VCCI V-3

4.5.6 KC Certification Information (Korea)



Class A

A급 기기 (업무용 정보통신기기)

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약 잘못판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

Translation:

"Class A" Equipment (Business purpose info/telecommunications equipment)

As this equipment has undergone EMC registration for business purpose, the seller and/or buyer is asked to beware of this point and in case a wrongful sale or purchase has been made, it is asked that a change to household use be made.

KN22 and KN24

Class B

B급기기(가정용 방송통신기기)

이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Translation:

"Class B" Equipment (Household purpose info/telecommunications equipment)

As this equipment has undergone EMC registration for household purpose, this product can be used in any area including residential area.

KN22 and KN24

4.5.7 BSMI Certification Information (Taiwan)

Class A

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Translation:

This is a Class A Information Product, when used in residential environment, it may cause radio frequency interference, under such circumstances, the user may be requested to take appropriate countermeasures.



CNS13438

Class B



CNS13438

4.5.8 C-Tick (Australia and New Zealand)



ACMA — Australian Communications and Media Authority

- Radiocommunications Act 1992 (Australia)—per notices of section 182
- AS/ NZS CISPR 22

4.5.9 Product Environmental Compliance

This product may carry a marking similar to those below that indicates its level of compliance with China RoHS standards.



For information on China RoHS, EU RoHS, or EU REACH compliance, please refer to [Product Environmental Compliance](#) on the AMD Web site.

4.5.10 Waste Electrical and Electronic Equipment (WEEE) Directive Compliance (European Union)

This product was manufactured by Advanced Micro Devices, Inc.

