

CrossFire™ Operation Guide

This motherboard supports CrossFire™ feature. CrossFire™ technology offers the most advantageous means available of combining multiple high performance Graphics Processing Units (GPU) in a single PC. Combining a range of different operating modes with intelligent software design and an innovative interconnect mechanism, CrossFire™ enables the highest possible level of performance and image quality in any 3D application. Currently CrossFire™ feature is supported with Windows® XP with Service Pack 2 and Vista™ OS. Please check AMD website for ATI™ CrossFire™ driver updates.



What graphics cards work with CrossFire™?

A complete CrossFire™ system requires a CrossFire™ Ready motherboard, a CrossFire™ Edition graphics card and a compatible standard Radeon (CrossFire™ Ready) graphics card from the same series, or two CrossFire™ Ready cards. This applies to cards from ATI™ or any of its partners.

Cards For AGI Express Slot	Cards For PCIE2 Slot
Radeon X2600Pro Series	Radeon X2600Pro Series
Radeon X2600XT Series	Radeon X2600XT Series
Radeon X1950Pro Series	Radeon X1950Pro Series
Radeon X1950XTX Series	Radeon X1950XTX CrossFire™ Edition
Radeon X1800 Series	Radeon X1800 CrossFire™ Edition



1. If a customer incorrectly configures their system they will not see the performance benefits of CrossFire™. All three CrossFire™ components, a CrossFire™ Ready graphics card, a CrossFire™ Ready motherboard and a CrossFire™ Edition co-processor graphics card, must be installed correctly to benefit from the CrossFire™ multi-GPU platform.
2. If you pair a 12-pipe CrossFire™ Edition card with a 16-pipe card, both cards will operate as 12-pipe cards while in CrossFire™ mode.

Enjoy the benefit of CrossFire™



Currently, ATI™ has released Radeon X2600Pro, X2600XT, X1950Pro, X1950XTX and X1800 CrossFire™ cards, which require different methods to enable CrossFire™ feature. In below procedures, we use Radeon X2600XT as the example graphics card. For other CrossFire™ cards that ATI™ has released or will release in the future, please refer to ATI™ graphics card manuals for detailed installation guide.

- Step 1. Connect to the system power supply. Please connect a hard disk power connector to SLI/XFIRE Power connector on this motherboard.



It is recommended to use 500-Watt power supply or greater to perform the benefit of CrossFire™ feature.



- Step 2. Install one Radeon graphics card to PCIE2 slot. For the proper installation procedures, please refer to section “Expansion Slots”.



- Step 3. Install the other Radeon graphics card to AGI Express slot (PCI Express x4). For the proper installation procedures, please refer to section “Expansion Slots”.



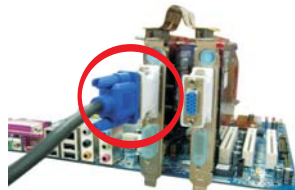
- Step 4. Connect two Radeon graphics cards by installing two CrossFire™ Bridge on CrossFire™ Bridge Interconnects on the top of Radeon graphics cards. (CrossFire™ Bridge is provided with the graphics card you purchase, not bundled with this motherboard. Please refer to your graphics card vendor for details.)



CrossFire™ Bridge



- Step 5. Connect the DVI monitor cable to the DVI connector on the Radeon graphics card on PCIE2 slot. (You may use the DVI to D-Sub adapter to convert the DVI connector to D-Sub interface, and then connect the D-Sub monitor cable to the DVI to D-Sub adapter.)



- Step 6. Power on your computer and boot into OS.
Step 7. Remove the ATI™ driver if you have any VGA driver installed in your system.



The Catalyst Uninstaller is an optional download. We recommend using this utility to uninstall any previously installed Catalyst drivers prior to installation. Please check AMD website for ATI™ driver updates.

- Step 8. Install the required drivers to your system.

For Windows® XP OS:

- A. ATI™ recommends Windows® XP Service Pack 2 or higher to be installed (If you have Windows® XP Service Pack 2 or higher installed in your system, there is no need to download it again):

<http://www.microsoft.com/windowsxp/sp2/default.mspx>

- B. You must have Microsoft .NET Framework installed prior to downloading and installing the CATALYST Control Center. Please check Microsoft website for details.

For Windows® Vista™ OS:

Install the CATALYST Control Center. Please check Microsoft website for details.

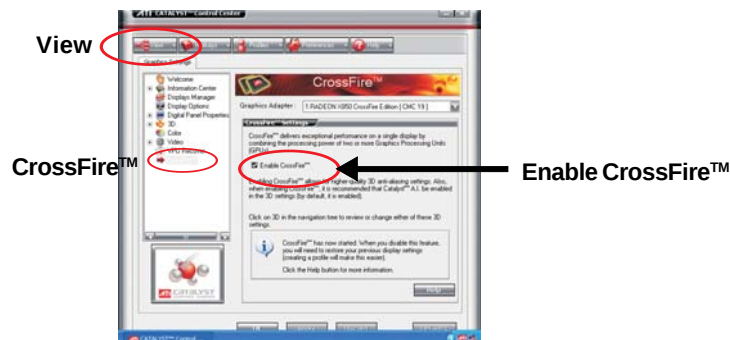
- Step 9. Restart your computer.

- Step 10. Install the VGA card drivers to your system, and restart your computer. Then you will find “ATI Catalyst Control Center” on your Windows® taskbar.



ATI Catalyst Control Center

- Step 11. Double-click “ATI Catalyst Control Center”. Click “View”, and select “Advanced View”. Click “CrossFire™”, and then set the option “Enable CrossFire™” to “Yes”.





Although you have selected the option "Enable CrossFire™", the CrossFire™ function may not work actually. Your computer will automatically reboot. After restarting your computer, please confirm whether the option "Enable CrossFire™" in "ATI Catalyst Control Center" is selected or not; if not, please select it again, and then you are able to enjoy the benefit of CrossFire™ feature.

Step 12. You can freely enjoy the benefit of CrossFire™ feature.

- * CrossFire™ appearing here is a registered trademark of ATI™ Technologies Inc., and is used only for identification or explanation and to the owners' benefit, without intent to infringe.
- * For further information of ATI™ CrossFire™ technology, please check AMD website for updates and details.