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MSI Features 5

Installing MSI Live Update

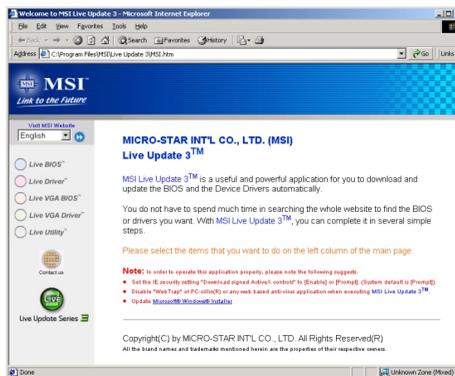
MSI Live Update offers you with brand-new update service experience, which can significantly save your time while searching files. MSI Live Update is capable to automatically analyze and list drivers, BIOS, and utilities you need. With the easy-to-use updating approaches, you can increase the performance of your system easily and quickly. Follow the instructions below, with a few mouse clicks, you can acquire the related files for the system updating.

Installing from the Disk

1. Insert the supplied disk into the CD-ROM drive, and start the **Setup** program.
2. Click the **Utility** tab on the setup screen.
3. Click the **MSI Live Update**. Follow the on-screen instructions to complete the installation.

Installing from the MSI Web Site

1. Link to MSI's website at <http://www.msi.com.tw>
2. Find and click **Live Update Online** on the left side of the web page to enter MSI Download Center.
3. Click **Start to Check** to download the Live Update application.
4. Click **Install** the continue.
5. Follow the on-screen instructions to complete the installation.
6. Launch MSI Live Update and to enter the main page of this utility as shown here.



MSI Features 6

Using MSI Live VGA Driver Update

This service enables you to update the latest VGA driver for your VGA card.

1. To update the MSI™ Live VGA Driver™, click Live VGA Driver™ item on the left column of the main page.
2. This utility will start checking your platform and the information on the VGA card, and display the information in a list.
3. Click the graph button on the bottom to connect MSI Live Update Series Server. Then, it will automatically connect the Internet and compare the version of the driver in the database.
4. It may take several minutes to detect the required drivers. Please wait while proceeding detection.
5. Click the **InstallShield Wizard** button on the right side of the table to download and update the driver. All actions will proceed automatically.
6. Follow the on-screen instructions to complete the updating procedure.

Using MSI Live VGA BIOS Update

This service enables you to update the latest VGABIOS for your VGA card.

1. To update your VGABIOS, click Live VGA BIOS™ item on the left column of the main page.
2. If your VGA card does not support the Live VGA BIOS™ function, you will receive a warning message on the screen.
3. If your VGA card do support the Live VGABIOS™ function, please pay attention to the message shown on the screen telling you that in what circumstance flashing BIOS may fail to reboot.
4. Click Yes if you would like to try it at your own risk or No to return to the main page with everything unchanged.
5. If you click Yes to continue, it will check the information and BIOS version of your VGA card, and list them in a table.
6. Click the graph button at the bottom to connect the MSI™ Live Update 3™ Server.
7. The MSI™ Live VGA BIOS™ will automatically connect the Internet and search the supported BIOS in the database of MSI™.
8. If it has found one (or several) supported BIOS for your VGA card, click the InstallShield Wizard button on the right side of the table to have the new BIOS downloaded and updated automatically.
9. Follow the on-screen instructions to complete the updating procedure.

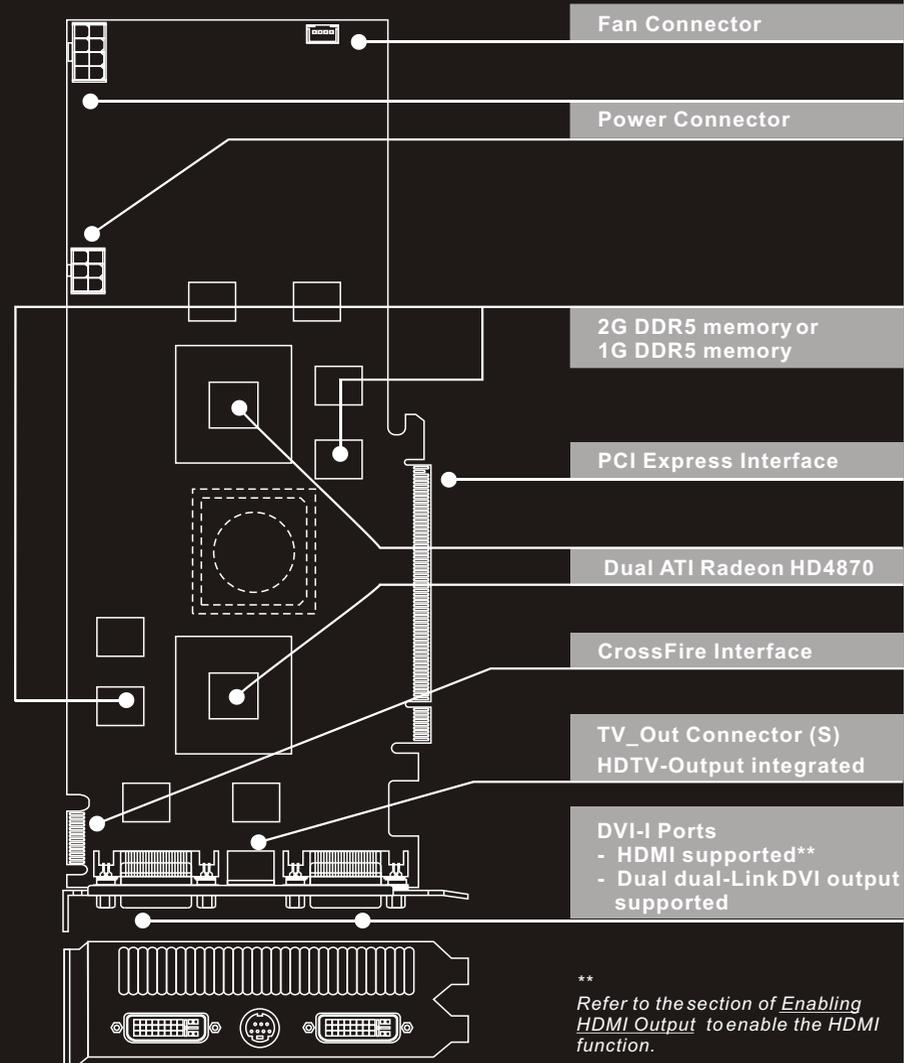
Note that the SDK of OD5 or OD5+ is not available for BIOS live updating currently. The latest news and Live Update function will be released on MSI web site.

Quick User's Guide



R4870X2 series





** Refer to the section of *Enabling HDMI Output* to enable the HDMI function.

Note: The VGA card shown here may vary from the actual card. For further information, please visit MSI website at www.msi.com.tw

Unpacking

Please check out the following items to make sure that you get the complete product:

- VGA card
- Disk: Drivers, documentation, and applications
- ★ Consult your dealer immediately if anything is missing or damaged.

System Requirements

To install the VGA card, your computer system needs to meet the following requirements:

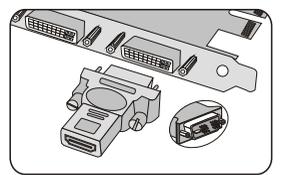
- PCI Express® based PC is required with one X16 lane graphics slot available on the motherboard
- 650 Watt or greater power supply with one 2x3-pin PCIe® power connector and one 2x4-pin PCIe® power connector is required (1K Watt with two 2x3-pin and two 2x4-pin connectors for ATI CrossFireX™ technology in dual mode)
- Certified power supplies are recommended. Refer to <http://ati.amd.com/certifiedPSU> for a list of Certified products
- Certified system cases with good airflow and cooling are recommended. Refer to <http://ati.amd.com/certifiedcases> for a list of Certified products
- Minimum 1GB of system memory.
- Installation software requires CD-ROM drive.
- DVD playback requires DVD drive.
- Blu-ray™ playback requires Blu-ray drive and full 1080p display requires a 1080p-capable monitor.
- For a complete ATI CrossFireX™ system, a second ATI Radeon™ HD 4870 X2 graphics card, an ATI CrossFireX Ready motherboard and one ATI CrossFireX Bridge Interconnect cable per graphics card (included) are required.
- Visiting MSI website for further information of operating system support.

Card Features For reference only

- **2 GB of GDDR5 memory**
With 2GB of GDDR5, the fastest and most advanced memory technology available today, the ATI Radeon HD 4870 X2 delivers almost two times the memory bandwidth of the previous generation.
- **2.4 teraFLOPS of GPU power**
This is the most powerful graphics card available today with nearly two billion transistors and 1600 stream processors.
- **Extreme DirectX® 10.1 Performance**
Play today while preparing for tomorrow with state-of-the-art DirectX 10.1 graphics capabilities.
- **1600 stream processing units**
1600 stream processors and 230GB/sec of memory bandwidth provide the brute power needed to tackle the most intense 3D games, even those with artificial intelligence, physics operations and tessellation.
- **24x custom filter anti-aliasing (CFAA) and high performance anisotropic filtering**
High performance anisotropic filtering and 24x custom filter anti-aliasing (CFAA) smooth jagged edges and create true-to-life graphics, for everything from grass to facial features.

- **2 x 256-bit memory interface**
- **Dual mode ATI CrossFireX™ multi-GPU support for highly scalable performance**
ATI CrossFireX™ technology with multi-GPU support in dual mode offers superior scalability so you can take your game to new heights.
- **PCI Express® 2.0 support**
- **Dynamic Power Management**
The ATI Radeon™ HD 4870 X2 graphics cards feature ATI PowerPlay™ technology and provide the best of both worlds, delivering high performance when needed and conserving power when the demand on the graphics processor is low.
- **Game physics processing capability**
- **Energy Efficient Manufacturing Process**
Second generation 55nm chip uses the industry's most energy efficient manufacturing process.
- **Best Performance Per Watt**
The ATI Radeon™ HD 4870 X2 graphics cards deliver up to 2x the performance per watt of the previous generation.
- **ATI Avivo™ HD video and display technology**
- **Unified Video Decoder 2 (UVD 2) for Blu-ray™ and HD Video**
UVD 2 frees up your CPU for the most processing-intensive content, including VC-1, H.264 and MPEG-2. Take full advantage of Blu-ray functionality with dual-stream, picture in picture (PIP) capabilities.
- **Accelerated Video Transcoding (AVT)**
AVT allows you to convert videos to H.264 and MPEG-2 formats up to 19x faster than when using a just CPU. Full 1080p files can be converted to H.264 and MPEG-2 up to 1.8x faster than real-time.
- **Upscale Beyond 1080p**
Watch the hottest Blu-ray movies or other HD content at full 1080p display resolution and beyond.
- **Dynamic Contrast**
Dynamic Contrast automatically adjusts the contrast and brightness during scenes to consistently deliver a crisp, vibrant picture.
- **Built-in HDMI with 7.1 surround sound support**
Enjoy the latest audio technologies using HDMI with 7.1 digital surround sound supports. Also, HDMI with xvYCC support allows the user to enjoy a wider range of color when connected to a capable HDTV.
- **Integrated Display Port**

Enabling HDMI Output



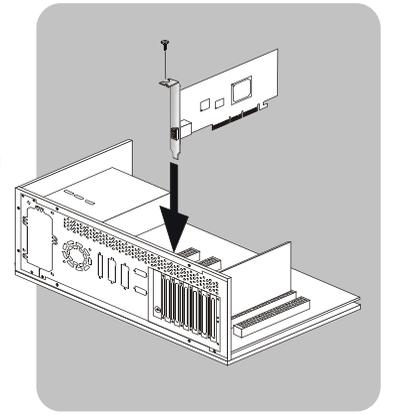
Follow the steps below to enable HDMI Output function:

1. Find the DVI-to-HDMI adapter that comes with the package, if provided. Consult your dealer to purchase the adapter if it is not provided.
2. Attach the DVI-to-HDMI adapter to the DVI connector.
3. Ensure that the adapter is firmly installed.

Hardware

Follow the steps below to install the VGA card:

1. Remove the computer case.
2. Locate the expansion slot on your motherboard.
Warning: Inserting the VGA card into a wrong slot may damage your card (refer to your motherboard manual for more information).
3. Put the card directly over the expansion slot and press one end of the card into the slot first. Gently but firmly press the other end until the card is fully seated in the slot.
4. Secure the card with a bracket screw.
5. Install all other cards and devices and connect all the cables, and then install the case.
6. Connect the monitor. Now, you are ready to install the software on your computer.



Software

To install the driver of the VGA card to your computer, please follow the steps below:

1. Turn on the computer.
2. Insert the CD into the CD-ROM drive. The Autorun program will start the Setup program, and show the setup screen as follows:



Tip : If, on your computer, the Autorun program does not execute automatically, please 1) enable the CD-ROM drive Auto-detect function from Control Panel; or 2) find and run the setup.exe file manually from the CD.

3. Click **ATI VGA Drivers**. Follow the on-screen instructions to complete the installation.
4. After finishing the installation, restart the computer as instructed.