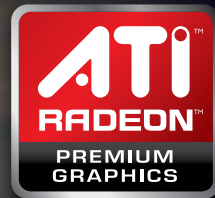


Catalog

Spring 2010





Editorial: A top to bottom line up of DirectX® 11- capable graphics cards including the new ATI Radeon™ HD 5870 Eyefinity 6 Edition!

Since my last editorial a lot has happened at AMD's Graphics group. We launched 6 new graphics cards to complete the world's most technologically advanced line up of DirectX® 11-capable graphics cards. Now, we offer full DirectX® 11, ATI Eyefinity technology and ATI Stream technology support at virtually every performance and price point. From entry level cards to dual-GPU, earth-shattering monsters, there is the right card at the right price waiting for you.

We are also proud to present yet another World's first with the recently released ATI Radeon™ HD 5870 Eyefinity 6 Edition; the first graphics card with the capacity and performance to drive up to 6 full HD displays via six active mini display ports - this card is like no other.

Look deeper into this catalogue and you will find all you need to know about ATI Radeon™ Premium graphics cards. You will find clear specifications on all our currently shipping cards, as well as technology articles on Microsoft DirectX® 11, and on ATI Eyefinity, ATI Stream and ATI CrossFireX™ technologies.

But never forget, it's our partners who create so much extra value with overclocked and specially cooled versions of our GPUs. Look at the inside cover of this catalogue for a complete list of our partners. Finally, remember to check out AMD.com for more information.

David Cummings
Director, Desktop GPU Product Management
AMD Products Group

Spotlight:ATI Radeon™ HD 5870 Eyefinity 6 Edition



One graphics card, 6 displays and a mind-blowing HD gaming experience. With so many great titles ready to play on the ATI Radeon™ HD 5870 Eyefinity 6 Edition, this is the new card to have for true enthusiasts. Using ATI Eyefinity technology, drive up to 6 displays independently or as a single large surface for the maximum immersion with the latest games.³ These cards are built with 2 GB of advanced GDDR5 memory for great HD gaming performance. With new features regularly being added to the ATI Catalyst Control Center™, this maturing technology allows for a truly seamless experience on up to 6 displays. And remember, the ATI Radeon™ HD 5870 Eyefinity 6 Edition fully supports DirectX® 11 and ATI Stream technology!⁴





Spotlight: ATI Radeon™ HD 5970 Graphics

Not only is the ATI Radeon™ HD 5970 the fastest graphics card on the planet, this beauty has huge overclocking headroom at both stock and increased voltages.^{1,6} Over 12 inches long, the ATI Radeon™ HD 5970 features two specially screened, low leakage ASICs, a massive vapor chamber, fully vented exhaust, 2GB of GDDR5 memory along with high quality capacitors and regulators, making this the best

performing card that AMD has ever produced. The ATI Radeon™ HD 5970 also runs under 50 watts in idle mode, and enables unrivalled performance for DirectX® 11 games. It supports up to 3 monitors with ATI Eyefinity technology.³ It also features support for ATI Stream technology, including DirectCompute 11 and Open CL for accelerating non-gaming applications.^{4,8} ATI Radeon™ HD 5970 graphics card, engineered for speed.



Spotlight: ATI Radeon™ HD 5800 Series Graphics



AMD has done it again with this impressive performance GPU, ATI Radeon™ HD 5870 and ATI Radeon™ HD 5850 single GPU graphics cards have recently been joined by the new ATI Radeon™ HD 5830 at an even more competitive price point. With cutting edge technology

and all the latest features in a small, modern, power efficient package, these graphics cards are available at attractive price points. Together, they set the gold standard for “need to have” performance, new technologies and features. Hook up 3 monitors and expand your horizons with

ATI Eyefinity technology.³ Dominate your games with Microsoft DirectX® 11 and accelerate non-gaming applications with ATI Stream technology.⁴ ATI Radeon™ HD 5870, ATI Radeon™ HD 5850 and ATI Radeon™ HD 5830 graphics cards, our fastest and most feature rich single GPU graphics cards, made better by AMD for all your PC gaming needs.





Technology Insights: ATI Eyefinity™ technology

Looking for a more immersive gaming experience? Want to help boost your productivity and get more done?

ATI Eyefinity technology's extreme multi-monitor support allows you to play or work on up to six monitors for a totally immersive, super high-resolution gaming environment or an ultra-productive desktop workspace.³ Using the new DisplayPort interface, AMD has enabled an advanced multiple monitor set-up which until recently was only available to professionals in oil, gas and medical industries. All ATI Radeon™ HD 5970, HD 5800, HD 5700, HD 5670, HD 5500

Series and HD 5450 GPUs support up to three monitors using ATI Eyefinity technology. Now, our recently launched ATI Radeon™ HD 5870 Eyefinity 6 Edition support to up to six monitors!

- Flight Simulators - increase your field of view
- Shooter - see them before they see you
- Racing - no more blind spots, see the whole road ahead
- Real time strategy - see more, control more, win more

This modular solution gives you the freedom to add more displays when you need them and with regular driver updates, new features are being added to enhance the ATI Eyefinity experience. To learn more about the new "bezel compensation" feature in ATI Catalyst Control Center™ go to:

www.amd.com/eyefinity and see the difference!

Shane Parfitt

Product Manager AMD



BATTLEFIELD
BAD COMPANY 2

Technology Insights: Microsoft DirectX® 11



AMD's latest graphics hardware fully supports Microsoft's recently launched DirectX® 11 technology. DirectX® is the technology that controls how a game displays on your computer and it helps the game code communicate with PC hardware - especially the GPU and the CPU.

What does this mean for gaming and non-gaming applications? The three key improvements in DirectX® 11 over its predecessors relate to speed, visual quality and general purpose GPU (GPGPU) computing (using the graphics chip for more than gaming applications).

Speed: DirectX® 11 has been re-written to work more efficiently with new GPUs and the newer multi-core CPUs.

Quality: With features such as tessellation, objects look more realistic by reducing the 'blockiness' that haunts most games. Mountains, trees, faces and bodies appear smoother and more true-to-life.

GPGPU: Using DirectCompute 11 helps accelerate video transcoding, in-game physics, and Artificial Intelligence. These changes help ensure that many new games coming out in 2010 and beyond will run seamlessly and look better on the latest generation of our ATI Radeon™ Premium graphics products.

Richard Huddy

Worldwide Developer Relations Manager





Technology Insights: ATI CrossFireX™ technology, AMD's performance gaming solution

ATI CrossFireX™ technology is the ultimate multi-GPU performance gaming solution. Gain an insane level of performance with two, three or four compatible discrete graphics processors working together.⁵

To enable ATI CrossFireX™ in your system, be sure to select an ATI CrossFireX™ ready motherboard and an adequate powerful power supply. ATI CrossFireX™ technology gives you the power to expand your system's graphics capabilities when you want, even with budget and mid-range graphics cards.⁵ Put the ATI Radeon™ Premium graphics card of choice in your system today and add one or more later when you need it, increasing your performance and getting you more for your money. ATI CrossFireX™ technology is also fully compatible with ATI Eyefinity technology so you can get a performance boost driving multiple displays.³

Check out **AMD.com** for specific information on combinations of graphics cards that work together and on the maximum supported number for each.

Terry Makedon

**Manager – Software Product Management
Graphics Product Group AMD**





Technology Insights: ATI Stream technology

Times are changing. With ATI Stream technology you can now tap into the insanely powerful GPU, together with the CPU, to do much more than just in-game 3D graphics.⁴ ATI Stream technology is a set of advanced hardware and software technologies that enable AMD GPU, working in concert with the system's CPU, to accelerate applications beyond traditional graphics and video processing. This enables PCs to run computationally intensive tasks efficiently, providing a better experience to the end user. Many applications are now ATI Stream technology enabled and the list continues to grow. Here

are some examples of how ATI Stream technology will change your computing experience today:

- CyberLink Media Show Espresso and Power Director 8.1 for video conversion/transcoding and editing effects
- Adobe Photoshop CS4 Extended, Acrobat Reader and many other Adobe products
- ArcSoft TotalMedia Theatre (video upscaling)
- Roxio Creator 2010 and 2010 Pro

ATI Stream technology is available on all ATI Radeon™ HD 4000 and ATI Radeon™ 5000 series graphics cards. The best part is that if you keep your PC up to date with ATI graphics drivers, using ATI Stream technology is seamless.



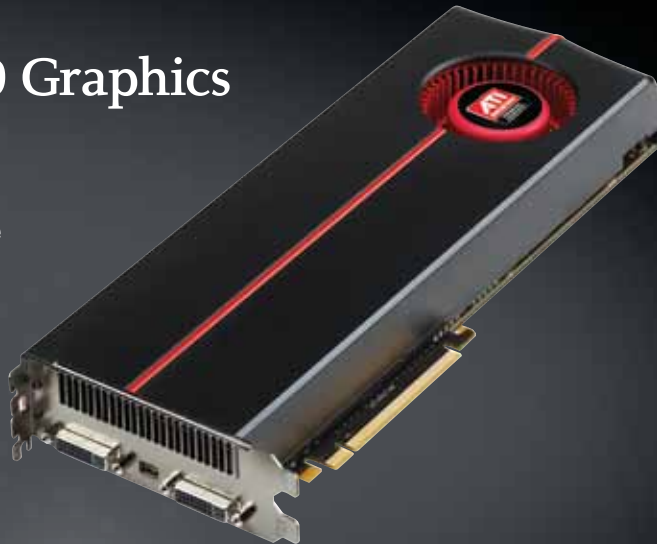
Terry Makedon

**Manager – Software Product Management
Graphics Product Group AMD**



ATI Radeon™ HD 5970 Graphics

The ATI Radeon™ HD 5970 graphics card is the fastest graphics card on the planet.¹ The raw performance numbers are just astounding. The comprehensive maturity of ATI CrossFireX™ technology and the ATI Catalyst™ driver suite ensures that this graphics card doesn't disappoint!³



Specifications

ATI Radeon™ HD 5970

Max Board Power 294 watt

Stream processing units 3200

Memory Type GDDR5

Memory Bandwidth (max.) 256 GB/sec

Memory Size 2 GB

Idle board power 42 watt



Extreme
Gaming



Power Efficiency



ATI CrossFireX™
2x Card Max



DirectX® 11
Support



ATI Eyefinity™
3X Technology



GDDR5
Gaming Memory



Built-in HDMI pass
through 7.1 audio



ATI Catalyst™
Driver Stability

ATI Radeon™ HD 5870 Eyefinity 6 Edition



The game has changed. The ATI Radeon™ HD 5870 Eyefinity 6 Edition creates the ultimate immersive experience with up to 6 high-definition displays connected to one graphics card.³ Perfect for HD gaming on 3 or 6 displays, each card packs our fastest GPU and 2 GB of advanced GDDR5 memory. These cards also include full support for DirectX® 11 and for ATI Stream technology.⁴

| Specifications | ATI Radeon™ HD 5870 |
|-------------------------|---------------------|
| Max Board Power | 228 watt |
| Stream processing units | 1600 |
| Memory Type | GDDR5 |
| Memory Bandwidth (max.) | 153.6 GB/sec |
| Memory Size (max.) | 2 GB |
| Idle board power | 34 watt |



Extreme Gaming



Power Efficiency



ATI CrossFireX™
4x Card Max



DirectX® 11
Support



ATI Eyefinity™
X6 Technology



Built-in HDMI pass
through 7.1 audio



GDDR5
Gaming Memory



ATI Catalyst™
Driver Stability



ATI Radeon™ HD 5870 Graphics

ATI Radeon™ HD 5850 Graphics

ATI Radeon™ HD 5830 Graphics

ATI Radeon™ HD 5800 Series graphics cards are the most advanced, feature rich single GPU cards AMD has ever created. With the recent introduction of the ATI Radeon™ HD 5830, this is all available at an even better price point. Dominate new games with full DirectX® 11 support, expand your visual real estate with ATI Eyefinity technology and accelerate non-gaming tasks with ATI Stream technology.^{3,4} Using ATI CrossFire™ technology, you can string up to 4 cards together for even more performance!



| Specifications | ATI Radeon™ HD 5870 | ATI Radeon™ HD 5850 | ATI Radeon™ HD 5830 |
|-------------------------|---------------------|---------------------|---------------------|
| Max Board Power | 188 watt | 151 watt | 175 watt |
| Stream processing units | 1600 | 1440 | 1120 |
| Memory Type | GDDR5 | GDDR5 | GDDR5 |
| Memory Bandwidth (max.) | 153.6 GB/sec | 128 GB/sec | 128 GB/sec |
| Memory Size (max.) | 1 GB | 1 GB | 1 GB |
| Idle board power | 27 watt | 27 watt | 25 watt |



Extreme Gaming



Power Efficiency



ATI CrossFire™
4x Card Max



DirectX® 11
Support



ATI Eyefinity™
3X Technology



GDDR5
Gaming Memory



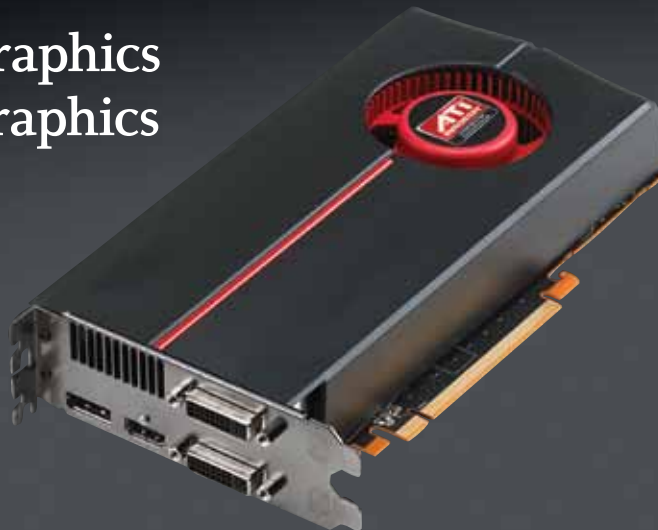
Built-in HDMI pass
through 7.1 audio



ATI Catalyst™
Driver Stability

ATI Radeon™ HD 5770 Graphics

ATI Radeon™ HD 5750 Graphics



These aggressively priced performance gaming cards bring you everything you need with high frames per second (FPS) and high quality settings for more immersive game play. Onboard you will find all AMD's latest technologies. Expand your horizons with ATI Eyefinity technology, dominate your games with DirectX® 11 and accelerate non-gaming tasks with ATI Stream technology.^{3,4}

| Specifications | ATI Radeon™ HD 5770 | ATI Radeon™ HD 5750 |
|-------------------------|---------------------|---------------------|
| Max Board Power | 108 watt | 86 watt |
| Stream processing units | 800 | 720 |
| Memory Type | GDDR5 | GDDR5 |
| Memory Bandwidth (max.) | 78.8 GB/sec | 73.6 GB/sec |
| Memory Size | 1 GB | 1 GB |
| Idle board power | 18 watt | 16 watt |



Advanced Gaming



HD Playback Video



ATI CrossFire™ 2x Card Max



DirectX® 11 Support



ATI Eyefinity™ Technology



Power Efficiency



Built-in HDMI pass through 7.1 audio



GDDR5 Gaming Memory



ATI Radeon™ HD 5670 Graphics

Newly launched, this aggressively priced mainstream HD gaming card brings playable, with high FPS (frames per second) gaming on 1080p HD resolution monitors – at a great price point. With all the latest generation ATI Radeon™ premium graphics features, let the ATI Radeon™ HD 5670 expand your horizons with ATI Eyefinity™ technology, dominate your games with DirectX® 11 and accelerate non-gaming tasks with ATI Stream technology.^{3,4}



Specifications

ATI Radeon™ HD 5670

Max Board Power 70 watt

Stream processing units 400

Memory Type GDDR5

Memory Bandwidth (max.) 64 GB/sec

Memory Size 512Mb/1 GB

Idle board power 15 watt



Mainstream Gaming



Power Efficiency



ATI CrossFireX™
2x Card Max



DirectX® 11
Support



ATI Eyefinity™
3X Technology



HD Playback
Video



Built-in HDMI pass
through 7.1 audio



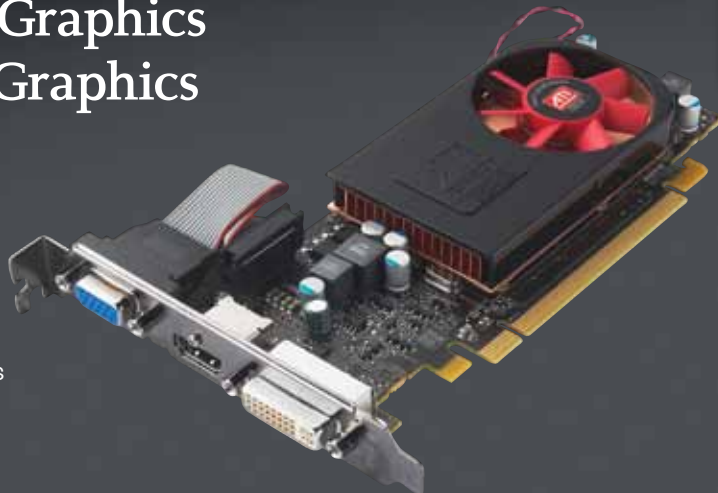
GDDR5
Gaming Memory

*up to 3 displays at launch

ATI Radeon™ HD 5570 Graphics

ATI Radeon™ HD 5550 Graphics

These two graphics cards deliver tremendous performance at under 45 watts. Based on the same GPU as the ATI Radeon™ HD 5670, these two lower priced graphics cards can expand your view across up to 3 monitors using ATI Eyefinity technology, dominate your games with DirectX® 11 and accelerate non-gaming tasks with ATI Stream technology.^{3,4}



Specifications

| | ATI Radeon™ HD 5570 | ATI Radeon™ HD 5550 |
|-------------------------|------------------------|------------------------|
| Max Board Power | 43 watt | 45 watt |
| Stream processing units | 400 | 320 |
| Memory Type | DDR3 | DDR3 |
| Memory Bandwidth (max.) | 28.8 GB/sec | 25.6 GB/sec |
| Memory Size (max.) | 512Mb/1 GB | 1 GB |
| Idle board power | 9.7 watt | 10 watt |



Mainstream Gaming



Power Efficiency



ATI CrossFireX™
2x Card Max



DirectX® 11
Support



ATI Eyefinity™
3X Technology



HD Playback
Video



Built-in HDMI pass
through 7.1 audio

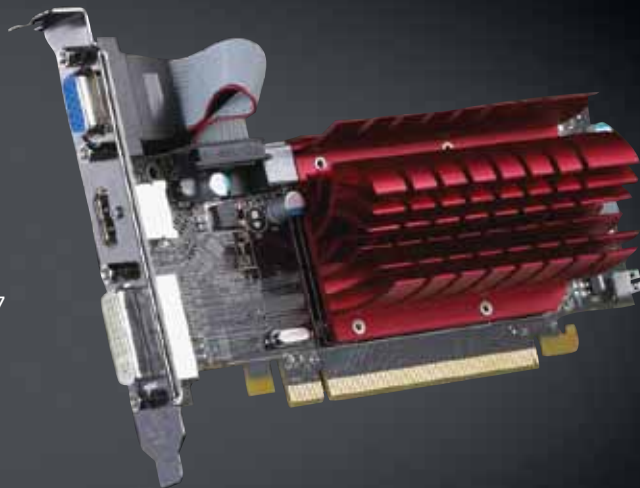


UVD 2



ATI Radeon™ HD 5450 Graphics

With very low power draw, this sub 20 watt dynamo is perfect for those who demand more from their PC. As a simple step up from integrated graphics, the ATI Radeon™ HD 5450 brings all the latest technologies from AMD in a low priced, low power, low profile and low noise package. Includes ATI Eyefinity technology, DirectX® 11 and ATI Stream technology; enabling a full Windows® 7 experience.^{3,4}



Specifications

ATI Radeon™ HD 5450

| | |
|-------------------------|-------------|
| Max Board Power | 19 watt |
| Stream processing units | 80 |
| Memory Type | DDR3/DDR2 |
| Memory Bandwidth (max.) | 12.8 GB/sec |
| Memory Size | 512Mb/ 1 GB |
| Idle board power | 6.4 watt |



Value
Gaming



Power Efficiency



ATI CrossFire™
2x Card Max



DirectX® 11
Support



ATI Eyefinity™
3X Technology



UVD 2

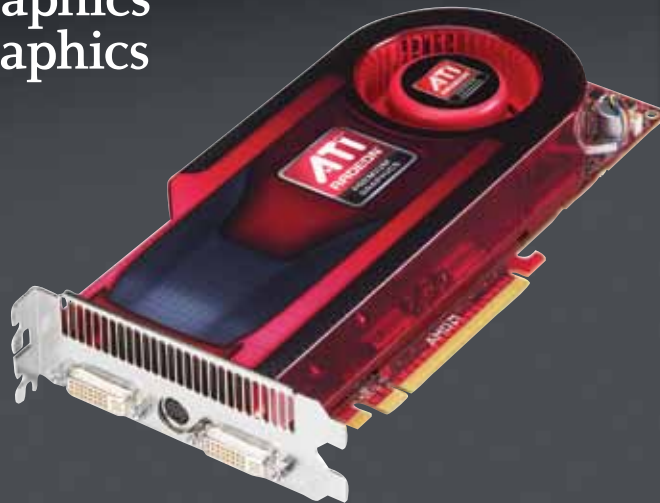


Built-in HDMI pass
through 7.1 audio



HD Playback
Video

ATI Radeon™ HD 4870 Graphics ATI Radeon™ HD 4850 Graphics



Exhilarating game play is a given with either of these two advanced gaming cards. The ATI Radeon™ HD 4870 and ATI Radeon™ HD 4850 GPUs feature DirectX® 10.1 so you can play today's games flawlessly at high resolutions. Everything you need from a single GPU card, perfect for gamers on a budget. Look out for single slot solutions for smaller PCs too!

| Specifications | ATI Radeon™ HD 4870 | ATI Radeon™ HD 4850* |
|-------------------------|---------------------|----------------------|
| Max Board Power | 160 watt | 110 watt |
| Stream processing units | 800 | 800 |
| Memory Type | GDDR3 | GDDR3 |
| Memory Bandwidth (max.) | 115 GB/sec | 64 GB/sec |
| Memory Size | 1 GB | 1 GB |
| Slot | Dual | Single* |



Advanced Gaming



HD video playback



ATI CrossFire™ 4x Card Max



ATI Catalyst™ Driver Stability



DirectX® 10.1 Support



UVD 2



Built-in HDMI pass through 7.1 audio



GDDR3 Gaming Memory

* Some board designs may be dual slot



ATI Radeon™ HD 4770 Graphics

The ATI Radeon™ HD 4770 uses fast GDDR5 memory and efficient 40nm process technology for fast, cool game play. A true gamer's card at an unbelievable price, it's the smart way to play today's games at high frame rates with high quality settings on medium sized monitors.



Specifications

ATI Radeon™ HD 4770

| | |
|-------------------------|-------------|
| Max Board Power | 80 watt |
| Stream processing units | 640 |
| Memory Type | GDDR5 |
| Memory Bandwidth (max.) | 51.2 GB/sec |
| Memory Size | Max. 1 GB |
| Slot | Dual |



Mainstream Gaming



HD video playback



ATI CrossFire™
2x Card Max



GDDR5
Gaming Memory



DirectX® 10.1
Support



UVD 2



Built-in HDMI pass
through 7.1 audio

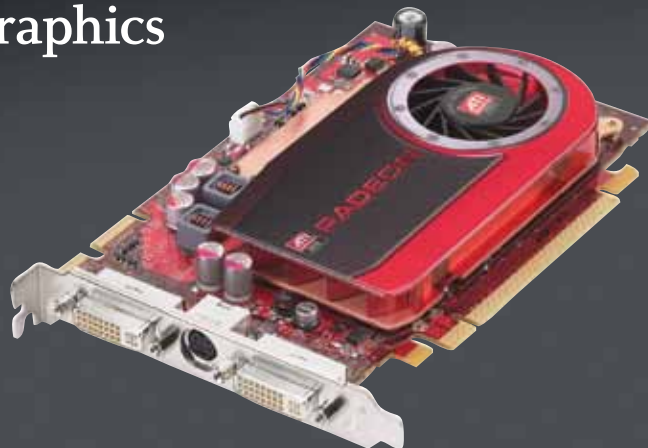


Power Efficiency

*These product descriptions, features and performance results are based on AMD's standard reference design for the ATI Radeon™ HD 4770 with GDDR5 memory.

ATI Radeon™ HD 4670 Graphics

ATI Radeon™ HD 4650 Graphics



This pair of value priced graphics cards deliver tremendous performance under 60 watts for mainstream gaming on a tight budget. Based on the same architecture as the award winning ATI Radeon™ HD 4800 series, the ATI Radeon™ HD 4600 series brings full DirectX® 10.1 gaming and formidable video technologies in a smaller form factor.

| Specifications | ATI Radeon™ HD 4670 | ATI Radeon™ HD 4650 |
|-------------------------|---------------------|---------------------|
| Max Board Power | 59 watt | 48 watt |
| Stream processing units | 320 | 320 |
| Memory Type | GDDR3/DDR3 | DDR2 |
| Memory Bandwidth (max.) | 32 GB/sec | 16 GB/sec |
| Memory Size | 1 GB | 1 GB |
| Slot | Single | Single |





ATI Radeon™ HD 4550 Graphics

ATI Radeon™ HD 4350 Graphics

With ultra low power draw, these sub 20 watt dynamos are perfect for those who demand more from their PC or Windows® 7 experience. The first steps up from integrated graphics, these cards are tremendous value and both are media center stars with HDMI enabled, 7.1 channel surround sound and picture perfect 1080p video.²



| Specifications | ATI Radeon™ HD 4550 | ATI Radeon™ HD 4350 |
|-------------------------|---------------------|---------------------|
| Max Board Power | 20 watt | 20 watt |
| Stream processing units | 80 | 80 |
| Memory Type | DDR3 | DDR2 |
| Memory Bandwidth (max.) | 12.8 GB/sec | 8 GB/sec |
| Memory Size | 512 MB | Max. 512 MB |
| Slot | Single | Single |



Basic Gaming



HD video playback



ATI CrossFire™ 2x Card Max



DDR2 / DDR3 Gaming Memory



DirectX® 10.1 Support



UVD 2



Built-in HDMI pass through 7.1 audio



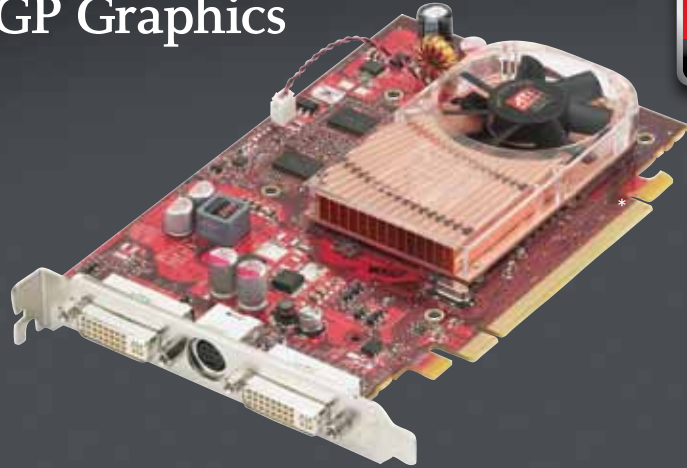
Power Efficiency

²These product descriptions, features and performance results are based on AMD's standard reference design for the ATI Radeon™ HD 4550 with DDR3 memory, 800MHz memory speed and 600MHz engine speed.

ATI Radeon™ HD 4650 AGP Graphics



To serve the market for upgrading older PCs with AGP graphics slots, some of our partners supply the ATI Radeon™ 4650 AGP graphics card. With full DirectX® 10.1 gaming and formidable video technologies in a smaller and less power hungry form factor, this is a great option to extend the life of an older AGP graphics slot equipped PC.



Specifications

ATI Radeon™ HD 4650

| | |
|-------------------------|-----------|
| Bus Type | AGP |
| Stream processing units | 320 |
| Memory Type | DDR2 |
| Memory Bandwidth (max.) | 16 GB/sec |
| Memory Size | 1 GB |
| Slot | Single |



Mainstream Gaming



HD video
playback



ATI Catalyst™
Driver Stability



AGP Slot



DirectX® 10.1
Support



UVD 2



2560x1600
Gaming Resolution



Power Efficiency

* Picture above is of ATI Radeon HD 4650 PCI-e board



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1-



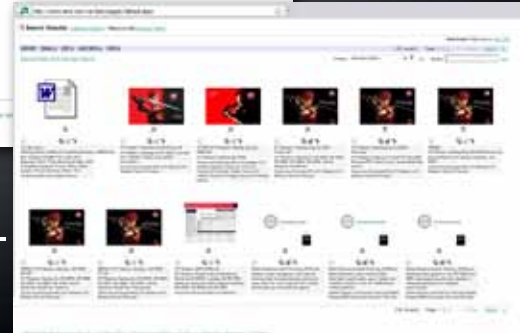
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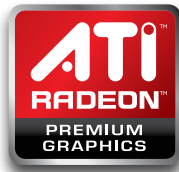


4-



AMD's great business partners

Look for graphics cards using AMD's great GPU technology from all these graphics card vendors.



Technical support: support.amd.com

Footnotes:

1 As of April 6th, 2010 , the ATI Radeon™ HD 5970 scores X13780 in 3DMark Vantage v.1.0.1.1, the highest single graphics card score achieved to date.

2 HD capable monitor required.

3 ATI Eyefinity Technology can support multiple displays using a single enabled ATI Radeon™ graphics card – the number of displays may vary by board design and you should confirm exact specifications with the applicable manufacturer before purchase. To enable more than two displays, additional panels with native DisplayPort™ connectors, and/or certified DisplayPort™ adapters to convert your monitor's native input to your cards DisplayPort™ or Mini-DisplayPort™ connector(s), are required

4 Requires application support for ATI Stream technology.

5 ATI CrossFireX™ technology requires an ATI CrossFireX Ready motherboard, an ATI CrossFireX™ Bridge Interconnect (for each additional graphics card) and may require a specialized power supply. Check out AMD.com for specific information on combinations of graphics cards that work together and on the maximum supported number for each.

6 AMD's product warranty does not cover damages caused by overclocking, even when overclocking is enabled via AMD OverDrive™ or ATI OverDrive™ software.

7 Subject to monitor resolution.

8 Driver support for Open CL scheduled for release in 2010.

9 Digital rights management restrictions may apply.

Product advisory:

This catalog contains product descriptions and performance results for graphics cards based on AMD's standard reference designs. Third party manufacturers may modify these reference designs, which can result in product descriptions and/or performance results different from those described in this document. Confirm exact specifications of third party graphics cards before purchase. Features, pricing, availability and specifications may vary by product model and are subject to change without notice. Products may not be exactly as shown.



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