AMD Reveals the New ATI Radeon HD 5800 Series

World's most advanced graphics processor allows consumers to expand, accelerate and dominate their PC experience with first full support for Microsoft DirectX 11

September 23, 2009 - 12:01

AMD launched the most powerful processor ever created, found in its next-generation graphics cards, the ATI Radeon™ HD 5800 series graphics cards, and the world's first and only to fully support Microsoft DirectX® 11, the new gaming and compute standard shipping shortly with Microsoft Windows® 7 operating system. Boasting up to 2.72 TeraFLOPS of compute power, the ATI Radeon™ HD 5800 series effectively doubles the value consumers can expect of their graphics purchases, delivering twice the performance-per-dollar of previous generations of graphics products.3 AMD will initially release two cards: the ATI Radeon HD 5870 and the ATI Radeon HD 5850, each with 1GB GDDR5 memory. With the ATI Radeon™ HD 5800 series of graphics cards, PC users can expand their computing experience with ATI Eyefinity multi-display technology, accelerate their computing experience with ATI Stream technology, and dominate the competition with superior gaming performance and full support of Microsoft DirectX® 11, making it a "must-have" consumer purchase just in time for Microsoft Windows® 7 operating system.

"With the ATI Radeon HD 5800 series of graphics cars driven by the most powerful processor on the planet, AMD is changing the game, both in terms of performance and the experience," said Rick Bergman, senior vice president and general manager, Products Group, AMD. "As the first to market with full DirectX 11 support, an unmatched experience made possible with ATI Eyefinity technology, and ATI Stream technology harnessing open standards designed to help make Windows 7 that much better, I can say with confidence that AMD is the undisputed leader in graphics once more."

Dominate your competition with Microsoft DirectX® 11 support

With the ATI Radeon™ HD 5800 series of graphics cards, gamers will enjoy gaming supremacy and the ultimate advantage, realizing incredible HD gaming performance and the most engaging experience possible with DirectX® 11 gaming done right:

Designed and built for purpose: Modeled on the full DirectX 11 specifications, the ATI Radeon HD 5800 series of graphics cards delivers up to 2.72 TeraFLOPS of compute power in a single card, translating to superior performance in the latest DirectX 11 games, as well as in DirectX 9, DirectX 10, DirectX 10.1 and OpenGL titles in single card configurations or multi-card configurations using ATI CrossFireX™ technology. When measured in terms of game performance experienced in some of today's most popular games, the ATI Radeon HD 5800 series is up to twice as fast as the closest competing product in its class.5 allowing gamers to enjoy incredible new DirectX 11 games including the forthcoming DiRT™2 from Codemasters, and Aliens vs. Predator™ from Rebellion, and updated version of The Lord of the Rings Online™ and Dungeons and Dragons Online® Eberron Unlimited™ from Turbine all in stunning detail with incredible frame rates.

Generations ahead of the competition: Building on the success of the ATI Radeon™ HD 4000 series products, the ATI Radeon HD 5800 series of graphics cards is two generations ahead of DirectX 10.0 support, and features 6th generation evolved AMD tessellation technology, 3rd generation evolved GDDR5 support, 2nd generation evolved 40nm process technology, and a feature-rich compute shader, all geared towards delivering the best gaming experience money can buy.

The ultimate in game compatibility: The DirectX 11 API was developed on AMD graphics hardware and represents the cornerstone of DirectX 11 gaming. All initial DirectX 11 games were developed and/or continue to be developed on AMD's DirectX 11 hardware. With more than 20 DirectX 11 games currently in development, this innate optimization for ATI Radeon graphics cards, in combination with monthly ATI Catalyst™ driver releases, help ensure a stable, reliable and high-performance experience for the latest games.

Accelerate with ATI Stream technology

With the ATI Radeon HD 5800 series of graphics card, PC users can unleash Windows 7 and realize the potential of a better computing experience to help do more with their PC:

Harness the home supercomputer: One ATI Radeon HD 5870 graphics card would have been one of the top 10 supercomputers in the world just six years ago today that same processing power can be found in your home PC, working with high-performance CPUs to deliver a superior experience. 7

Windows® 7 done right: Windows 7 is the first compute-capable operating system and the ATI Radeon HD 5800 series of graphics cards with ATI Stream technology accelerate it like nothing else, being the first and only card to support DirectCompute 11.

Create and do more, faster than ever before with ATI Stream technology: Enjoy new features, functionality and improved performance in top media, entertainment and productivity applications made possible by ATI Stream technology.

Most expansive support of industry standards: The ATI Radeon HD 5800 of graphics cards fully support both DirectX 11 and OpenCL, ensuring broad application support now and the future.

Expand the PC experience with ATI Eyefinity multi-display technology

Enjoy multi-monitor computing with seamless enablement of the biggest game environments ever seen:

The ultimate in seamless flexibility: Arrange one to three displays using the ATI Radeon™ HD 5870 and ATI Radeon™ HD 5850 graphics cards, or up to six displays using the forthcoming ATI Radeon™ HD 5870 Eyefinity graphics card, in a variety of configurations any mix of portrait, or landscape.

See them before they see you: Unlock the potential of multi-monitor gaming at up to 12 x full HD resolution, the largest game environments ever displayed.10 Experience more visual detail and expanded battlefields that your gaming competitors may lack.

Enjoy visual computing in eye-definition: Virtually obsolete scrolling by taking advantage of vast desktop real estate to put more information at your fingertips. Enjoy the best of today's latest visually-enhanced online applications social networking, video conferencing, video entertainment, and satellite imagery all in stunning detail.

Ecosystem support

The ATI Radeon™ HD 5800 series of graphics cards is supported by a dozen add-in-board companies, including ASUS, Club 3D, Diamond Multimedia, Force3D, GIGABYTE, HIS (Hightech Information Systems), MSI, Multimedia, PowerColor, SAPPHIRE Technology, VisionTek and XFX.

Supporting Quotes

"By incorporating the ATI Radeon™ HD 5870 graphics processor's revolutionary DirectX 11 and ATI Eyefinity multi-monitor capabilities into the Alienware desktop gaming system, Dell Gaming continues to lead the industry in delivering performance, immersion and visual experience levels that shatter all previous limitations," said Arthur Lewis, head of Dell gaming group.

"I had high expectations of AMD's new DirectX 11 GPUs, but nothing really prepared me for the breathtaking experience that I'm now enjoying," said Dirk Ringe, vice president, EA Phenomic. "Frame rates are so silky-smooth at ultra high-resolutions, even with all effects turned to max, that the new hardware makes previous hardware look like a quaint antique! The quality of the rendering in BattleForge is something that I used to dream about only a year ago, and the flexibility and power of DirectCompute 11 opens our eyes to a multitude of new possibilities. We applaud AMD's and Microsoft's vision in creating the DirectX 11 API and this amazing new hardware and we can say without hesitation that it represents the future of gaming."

"We were simply astonished by the performance of the DirectCompute 11 hardware in AMD's DirectX 11 GPUs," said Ruslan Didenko, project lead, GSC Gameworld. "By meeting the full DirectX 11 hardware spec AMD has created a beast of a GPU that is light years ahead of its DirectX 10.1 and DirectX 10 predecessors. We strongly recommend a full-on DirectX 11 GPU from AMD as very simply the best way to experience our stunning new game, S.T.A.L.K.E.R.: Call of Pripyat. A vision of loveliness, in every gut-wrenching detail!"

"Trinigy remains committed to supporting the game development industry with top-notch game engine technology that combines efficiency, creative freedom and performance," said Dag Frommhold, managing director at Trinigy. "We're extremely excited to be working with AMD to support their DirectX 11 graphics processors. AMD's quality drivers and hardware complement our commitment to game developers perfectly by empowering them to produce higher-level in-game graphics than ever before.

More Information at www.amd.com. Image Courtesy of Advanced Micro Devices Inc.