

# AMD Introduces Cutting-Edge PC Platform

The powerful combination of an AMD Phenom processor and an ATI Radeon HD 3850 graphics processor in a quad ATI CrossFireX configuration on an AMD 790FX Chipset-based motherboard unleashes the gaming power of DirectX 10 and 10.1.



**Rewriting the rules for enthusiast computing, AMD today unveiled its new platform codenamed “Spider”, with the first true quad-core processor supporting scalable graphics for The Ultimate Visual Experience. The AMD Spider platform combines the introduction of AMD Phenom quad-core processors, ATI Radeon HD 3800 Series graphics processors with Microsoft DirectX 10.1 support, AMD 7-Series chipsets with CrossFireX and AMD OverDrive software. The AMD Spider platform is a major milestone on the path to Accelerated Computing, AMD’s vision for platform-level acceleration through co-processing.**

“AMD is the only company committed to delivering The Ultimate Visual Experience across all the screens of your life,” said Dirk Meyer, president and COO, AMD. “The AMD Spider platform embodies our approach to platform-level innovation and delivers a highly-advanced, feature-rich enthusiast computing experience. Our commitment to energy-efficient design and manufacturing excellence drives an unprecedented performance-per-watt at an amazing price point, putting enthusiast-class platforms in reach for more users than ever before.”

AMD’s Spider platform advances enthusiast computing by delivering the most sophisticated multi-GPU enthusiast platform ever with ATI CrossFireX technology. The combination of the energy-efficient 55nm ATI Radeon HD 3800 Series of graphics processors and the increased system bandwidth of PCI Express Generation 2.0 and HyperTransport 3.0 technology, provide optimal processing power for a scalable HD multi-GPU experience. AMD design and manufacturing innovation has enabled the AMD Spider platform to easily scale to three or four graphics processors and deliver a true gaming supercomputer.

“Falcon Northwest is particularly impressed with the quad ATI CrossFireX potential of the new AMD Spider platform,” said Kelt Reeves, president of Falcon Northwest. “Running four graphics boards in one system has been a dream of gamers, but could be a nightmare for a system builder to get all those graphics cards proper airflow. The cohesive nature of the Spider platform design allows the AMD 7-Series chipset, high-performing AMD Phenom quad-core processor, and the already cool and quiet ATI Radeon HD 3800 graphics cards to all be placed for maximum airflow and cooling. AMD has made massive multi-GPU performance easy to build, and affordable.”

AMD is delivering the only platform that boasts major next-generation, industry-standard technologies to provide unparalleled bandwidth and balance in the delivery of next-generation HD content. With HyperTransport 3.0 technology, AMD Phenom processors have more system bandwidth than ever before with up to 14.4 GB/second of high bandwidth I/O. When combined with the additional bandwidth of AMD PCI Express 2.0 chipsets and graphics processors, the AMD Spider platform enjoys maximum bandwidth to support smooth 1080P video playback, enhanced multi-GPU and high-speed disk and network interfaces.

With the only true quad-core processor and infrastructure flexibility with AM2+ socket, AMD processors are designed to be compatible with future 65nm and 45nm AMD Phenom processors to deliver key performance gains.

Video enthusiasts can enjoy best-in-class HD entertainment on AMD Spider platforms with the addition of the powerful visual processing capabilities of the ATI Radeon HD 3800 Series. Striking image quality and power-efficient playback are made possible through the ATI Avivo HD video engine and the Unified Video Decoder (UVD). The addition of UVD ensures exceptional platform efficiency and image quality in HD-DVD and Blu-ray decoding for both H.264 and VC-1 specifications. Big screen gaming and entertainment is also made easy with enhanced HDMI connectivity with integrated HDCP and audio for HDMI video.

AMD's Spider platform offers a new class of enthusiast platform scalability, with multiple upgrade options to increase performance and boost compatibility with configurations that can deliver an estimated two teraflops of desktop processing power by harnessing four graphics processors. The multi-core design of AMD Phenom quad-core processors, based on Direct Connect Architecture, features an integrated memory controller designed to support memory speeds up to DDR2 1066, 128-bit floating point units and AMD's Balanced Smart Cache for rapid access to memory, with a shared L3 cache for leading-edge performance on multi-threaded software.

The AMD 7-Series chipsets introduce the world to the latest ATI CrossFireX technology, a new class of scalable multi-GPU performance, supporting three or four ATI Radeon HD 3800 Series graphics processors for unparalleled upgradeability and DirectX 10.1 performance with the industry's only tri- and quad-GPU solution for Microsoft Windows Vista. AMD 7-Series chipsets support up to four graphics processors and 42 PCI Express lanes, enabling maximum performance and upgradeability for gamers and PC enthusiasts. AMD 7-Series chipsets can deliver the ultimate in personalized enthusiast platform performance with AMD OverDrive software, the industry's most powerful and intuitive Windows operating system-based performance tuning utility. Through a simple Windows operating system-based interface, AMD OverDrive software can satisfy the needs of a wide range of performance-oriented users from enthusiast overclockers to mainstream gamers. In addition, AMD AutoXpress settings can increase your system performance when combined with enthusiast memory modules, ATI Radeon graphics, as well as AMD Phenom quad-core processors.

"AMD has a long history of delivering compelling hardware innovations so that consumers and enthusiasts can enjoy new experiences and take full advantage of the capabilities that our products including Windows Vista deliver," said John Schappert, corporate vice president of LIVE Software and Services at Microsoft. "The AMD Spider platform adds a new dimension to AMD's excellence in driving platform robustness and scalability, designed to deliver the utmost in upgradeability and performance with the new tri- and quad-GPU solution for Windows Vista."

High-performing, energy-efficient AMD Spider platforms provide industry leading platform performance-per-watt, combining energy-efficient AMD Phenom quad-core processors for an improved computing experience, low power 65nm enthusiast AMD 7-Series chipsets, and low-power, high-performance 55nm ATI Radeon HD 3800 graphics. The AMD Spider platform also includes an unprecedented list of computing technology firsts and focus on power consumption, including: ATI PowerPlay, Cool'n'Quiet 2.0 technology, Microsoft DirectX 10.1 support, HyperTransport 3.0 technology and PCI Express 2.0.

In a new initiative to measure real-world processor power consumption, AMD surveyed consumer and commercial users to understand precise usage patterns. AMD measured power consumption for these usage

patterns and has found that AMD Phenom processors with Cool'n'Quiet 2.0 technology rated at 95W TDP can consume an average power of 32W for consumers and 29W for commercial users.

Enhanced features include AMD CoolCore technology, support for split power plane motherboard designs and the ability to set independent core frequencies. The AMD 7-Series chipsets are designed using 65nm process technology, a first for chipsets. With a TDP of approximately 10-12 watts, the 7-Series chipset offers world-class energy efficiency, allowing users to focus resources on processing performance. With a flawless transition to 55nm process technology, the ATI Radeon HD 3800 Series can deliver more than two times the performance-per-watt over the previous generation of AMD graphics products. In addition, ATI PowerPlay for the desktop allows for automatic power state adjustments for increased GPU efficiency when under moderate load or idle. All of these features contribute to better power optimization by enabling more efficient performance, lower power consumption, and quiet operation.

“In today's PC market there is escalating consumer demand for multi-core performance and enriching HD media experiences,” said Toni Duboise, senior analyst with Current Analysis West. “Platforms with enhanced performance features and improvements in performance-per-watt and energy efficiency, such as AMD's Spider platform, are a big benefit to customers.”

AMD Phenom processors 9600 (2.3GHz) and 9500 (2.2GHz) are now available for \$283 and \$251 respectively in 1,000-unit pricing. The ATI Radeon HD 3850 with 256MB of GDDR3 memory begins at US \$179 MSRP and the ATI Radeon HD 3870 with 512MB GDDR4 memory from US \$219 MSRP, available from AMD's selected graphics products partners.

Source: AMD

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