

# Newest AMD FireStream(TM) GPU Compute Accelerators Deliver Almost 2x1 Single and Double Precision Peak Performance and Performance Per Watt Over Last Generation

AMD FireStream(TM) 9370 Offers Third Generation Double Precision Support; AMD FireStream(TM) 9350 is Industry's Only Single-Slot PCIe(R) Accelerator

SUNNYVALE, Calif.--(BUSINESS WIRE)-- AMD (NYSE: AMD) today announced the launch of the AMD FireStream(TM) 9350 and 9370 GPU compute accelerators, delivering industry leading performance and power efficiency to the commercial, scientific and academic research markets.<sup>2</sup> With up to 2.64 TFLOPS of compute power, the new AMD FireStream accelerators are ideal for HPC, cloud and enterprise-scale deployments that require advanced performance for handling today's highly parallel, compute-intensive workloads. Several AMD technology partners and OEMs plan to offer rack mounted servers and expansion systems featuring AMD FireStream 9350 and 9370 accelerators, including One Stop Systems and Supermicro.

"Heterogeneous systems in which high-performance GPU and x86 CPU technologies work in tandem can deliver enormous computational power," said Patricia Harrell, director, Stream Computing, AMD. "Industry standards like OpenCL(TM) are driving rapid adoption of heterogeneous architectures, and commercial customers deploying systems with AMD FireStream accelerators and AMD Opteron(TM) processors can immediately experience the benefits of the combined technologies."

The new solutions are designed to deliver optimal compute performance and power efficiency. The AMD FireStream 9350 delivers 2.0 TFLOPS of single precision performance and 400 GFLOPS of double precision floating point performance in a single-slot, 150W solution with 2GB of GDDR5 memory, enabling breakthrough compute density. The AMD FireStream 9370 delivers up to 2.64 TFLOPS of single precision performance and 528 GFLOPS of double-precision performance, and includes 4GB of high-speed GDDR5 memory, at a maximum board power of 225 watts. In addition, the AMD FireStream 9350 and 9370 both support leading industry standard application interfaces<sup>3</sup>, including OpenCL(TM), DirectX<sup>(R)</sup> 11 and OpenGL<sup>(R)</sup>.

The OpenCL industry standard programming language allows developers to preserve their source code investments and easily target multi-core CPUs, GPUs, and will be supported on the upcoming AMD Fusion APUs. With the <u>ATI Stream</u> Software Development Kit v2.1, the developer community can harness the combined compute power of ATI FireStream GPU compute accelerators and AMD Opteron(TM) processor-based platforms such as the AMD

Opteron(TM) 4000 Series platforms <u>announced today</u>, and allocate workloads among both processors to achieve optimal application performance.

The AMD FireStream 9350 and 9370 GPU compute accelerators are scheduled to be available for purchase from AMD and its technology partners, including One Stop Systems and Supermicro, beginning in Q3 2010.

# Supporting Quotes

"Rendering 3D video game graphics by way of a cloud model makes sense on so many levels, completely removing the issue of platform compatibility by potentially turning every device that can access the cloud into a gaming client," said Jules Urbach, founder of OTOY. "The rendering power of AMD GPU compute accelerators is phenomenal, and I believe it delivers the compute density and performance needed to make the OTOY business model a success."

"OSS has worked closely with AMD to provide our PCIe-based, GPU appliances with AMD FireStream compute accelerators, and we have found AMD extremely easy to work with and its GPU products to be outstanding," said Steve Cooper, chief executive officer, One Stop Systems. "We anticipate these new AMD FireStream accelerators will provide the configurability and performance required by high-end HPC applications."

"Our customers face increasingly demanding enterprise data center requirements for power consumption, cooling, and floor space, and at Supermicro our goal is to deliver solutions that offer maximum performance per watt, per square foot and per dollar," said Don Clegg, vice president of Marketing at Supermicro. "By offering GPU compute accelerators in combination with powerful multi-core CPUs, we are keeping pace with our customers' demands. The AMD FireStream 9350 and 9370 compute accelerators are a natural fit for our industry-leading server solutions."

### Resources

- -- Download ATI Stream SDK v2.1
- -- Check out OpenCL Zone for more information on ATI Stream and OpenCL
- -- Follow ATI Stream updates on Twitter at @ATIStream
- -- Visit the ATI Stream technology homepage for additional information

## About AMD

Advanced Micro Devices (NYSE: AMD) is an innovative technology company dedicated to collaborating with customers and technology partners to ignite the next generation of computing and graphics solutions at work, home and play. For more information, visit <a href="http://www.amd.com">http://www.amd.com</a>.

# **Cautionary Statement**

This release contains forward-looking statements, which are made pursuant to the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally preceded by words such as "plans," "expects," "believes," "anticipates" or "intends." Investors are cautioned that all forward-looking statements in this release involve risks and uncertainty that could cause actual results to differ materially from current expectations. The forward-looking statements relate to, among other things, the timing of new product releases and their features and functionality and the availability of

systems that include our products. Material factors that could cause actual results to differ materially from current expectations, include, without limitation the following: that the AMD products described herein will not be available in the mix required by the market and at mature yields on a timely basis; AMD's technology partners will not offer these AMD products as described herein, or in sufficient quantities to address market demand; NVIDIA Corporation's pricing, marketing and rebating programs, product bundling, standard setting, new product introductions or other activities targeting AMD's business will prevent attainment of AMD's current plans; there will be unexpected variations in market growth and demand for these AMD products; and AMD will be unable to obtain sufficient manufacturing capacity or components to meet demand for these products. We urge investors to review in detail the risks and uncertainties in AMD's filings with the United States Securities Exchange Commission, including but not limited to the Quarterly Report on Form 10-Q for the fiscal quarter ended March 27, 2010.

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Source: Advanced Micro Devices

<sup>&</sup>lt;sup>1</sup> Based on comparison of AMD FireStream 9250 with 1 TFLOPS single precision performance, 200 GFLOPS double precision, max board power of 120W and performance per watt of 8 GFLOPS performance per watt to the AMD FireStream 9350 with 2.0 TFLOPS of single precision, 400 GFLOPS double precision, max board power of 150W and 13 GFLOPS single precision performance per watt. Based on comparison of AMD FireStream 9270 with 1.2 TFLOPS single precision, 240 FLOPS double precision, max board power of 200W and 6 GFLOPS single precision performance per watt to the AMD FireStream 9370 with 2.6 TFLOPS single precision, 528 GFLOPS double precision, max board power of 225W and 11.5 GFLOPS of single precision performance per watt.

<sup>&</sup>lt;sup>2</sup> Based on comparison of AMD FireStream 9370 with 2.6 TFLOPS single precision performance, 528 GFLOPS double precision, max board power of 225W and 11.5 GFLOPS of single precision performance per watt to Nvidia Tesla C/M20X0 with 1 TFLOPS single precision, 515 GFLOPS double precision, max board power of 225 and 4 GFLOPS of single precision performance per watt.

<sup>&</sup>lt;sup>3</sup> AMD FireStream OpenCL compliant driver and SDK release scheduled for later in 2010.