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AMD Details Future Technical Roadmap for Its Award Winning Fusion Architecture at Industry Developer Summit

AMD Corporate Fellow, Phil Rogers, Outlines Features Planned for APUs and PC Platforms to Dramatically Improve Future Computing Experiences

BELLEVUE, WA -- (MARKET WIRE) -- 06/14/11 -- AMD (NYSE: AMD) today detailed to more than 700 developers and PC industry executives the roadmap for its Fusion System Architecture (FSA). The specific design features planned for future AMD products were presented in the opening keynote of the AMD Fusion Developer Summit. FSA describes AMD's overarching design for having combinations of CPU and GPU processor cores operate as a unified processing engine that is both higher performance and much lower power than previous architectures. Many of the specific FSA enhancements discussed will be leveraged by newer programming languages, and interfaces like OpenCL™ and DirectCompute, making it easier for the software developer to fully exploit the unique capabilities of the AMD Accelerated Processing Unit (APU).

"The first APUs from AMD dramatically increase processing performance while consuming less power, and now we are building upon that achievement with our next generation of products," said Phil Rogers, AMD Corporate Fellow. "Future innovations are intended to make the different processor cores more transparent to programmers. They can then seamlessly tap into the gigaflops of power-efficient performance available on the APU and design even faster, more visually stunning applications on a wide range of form factors."

Today's APUs
Available since January of this year, AMD's line-up of APUs is the first to integrate x86 CPU cores and DirectX® 11-capable Radeon™ GPU cores on a single die and have been widely adopted by computing OEMs worldwide. Being on the same chip reduces the system power and bill-of-materials, speeds the flow of data between the CPU and GPU through shared memory, and allows the GPU to function as both a graphics engine and an application accelerator in highly efficient compute platforms.

APUs of Tomorrow
Building on the success of the integration of CPU and GPU processing cores on the same chip, AMD is now focused on evolving the architecture to make it appear as a unified processing element to the software programmer. That includes a number of evolutionary steps expected to continue through 2014 such as:

- Support for C++ features that more fully leverage the GPU as a parallel processor
- User-mode scheduling for lower latency task dispatch between CPUs and GPUs
- Unified memory address space and fully coherent memory shared by the CPU and GPU so they operate seamlessly together

AMD also announced plans to publish a detailed specification on the features and functionality required to meet the requirements of the architecture.

Supporting Resources

- A webcast replay of Phil Roger's keynote will be available for 10 days
- Access AMD's Developer Central site for the latest tools and tutorials
- Information on the AMD Fusion Family of APU processors

About AMD
AMD (NYSE: AMD) is a semiconductor design innovator leading the next era of vivid digital experiences with its groundbreaking AMD Fusion Accelerated Processing Units (APUs) that power a wide range of computing devices. AMD's server computing products are focused on driving industry-leading cloud computing and virtualization environments. AMD's superior graphics technologies are found in a variety of solutions ranging from game consoles, PCs to supercomputers. For more information, visit http://www.amd.com.

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