Backgrounder

AMD FireStream™ 9270 Stream Processor

Overview

The AMD FireStream™ 9270 stream processor is ATI Stream's flagship datacenter-class hardware solution, offering twice the double-precision floating point performance of competing offerings.[1] It is ideally suited for use in upcoming server and workstation platforms featuring the next-generation Quad-Core AMD Opteron™ processor code-named "Shanghai".

The AMD FireStream 9270 stream processor delivers supercomputing-class performance, deployable practically anywhere. It was designed and tuned for professional environments and includes:

- Two gigabytes of Graphics Double Data Rate, version 5 memory (GDDR5), the most advanced graphics memory on the planet
- AMD's latest graphics architecture delivering 1.2 teraFLOPS of processing power, the most available in any standalone accelerator product today
- Optimal performance-per-watt capabilities
- A limited three-year enterprise-class warranty (some conditions apply, please check http://www.amd.com/stream for more information)

Meeting Customer Needs

High-performance enterprise data centers are unlike any other, with customers demanding the best performance-per-watt and performance-per-dollar they can buy, and the ability to process ever larger data sets generating results faster than ever before. The AMD FireStream 9270 was designed to address all of these concerns.

Partnering for Success

Demonstrating the potential for the AMD FireStream 9270's processing power in the datacenter, AMD is working closely with HP and server interconnects company, Aprius, to provide customers with innovative hardware solutions to today's toughest compute and data center challenges.

AMD and Aprius are bringing to market a 4RU chassis housing up to eight AMD FireStream 9270 stream processors, for up to a whopping 9.6 teraFLOPS of processing horsepower, and 16GB of high speed GDDR5 memory. Dubbed the Aprius Computational Acceleration System, the chassis provides:

- Easy, in-rack installation and maintenance
- Transparent support for all OS environments
- New innovations in PCIe optical cable that allows connections up to 50m in length

AMD is also working closely with HP and HP's HPC Accelerator Program to ensure ATI Stream technologies are validated for use in a selection of HP ProLiant servers and optimized to run on HP platforms. AMD and HP plan to demonstrate the unique benefits ATI Stream technology and HP servers offer high performance computing customers at Supercomputing 2008 in Austin, TX.

For more information about AMD FireStream please visit http://www.amd.com/stream.

1. Based on comparison of the AMD FireStream 9270 stream processor vs. the Nvidia Tesla C1060 Computing Processor. The AMD FireStream 9270 delivers upwards of 240 GFLOPS double precision floating point peak performance while the Tesla C1060 claims 78 GFLOPS double precision floating point peak performance based on published information.

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