Rice University Selects Dual-Core AMD Opteron Processors To Power New Research Cluster

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AMD announced that Rice University has selected the Dual-Core AMD Opteron processor to power its new, large-scale, Linux-based supercomputer. Rice's Cray XD1 supercomputer features Dual-Core AMD Opteron processors, which offer the best performance per watt available in the market and allow for significant increase in computing performance, without the increase in power consumption.

"Rice's research community is rapidly growing and the users have demanded a system that can provide the processing performance required to support a diverse set of compute-intensive research challenges across science and engineering," said Jan Odegard, executive director of Rice's Computer and Information Technology Institute (CITI). "After performing extensive application benchmarks, we chose the Dual-Core AMD Opteron processor because it significantly boosted performance on many applications and substantially reduces our operating costs. With SuSE Linux and the industry-standard x86 architecture that AMD64 processors are built on, we can easily and efficiently tie in our existing infrastructure with the new cluster."

The Rice research cluster will support an expanding community of researchers in fields as diverse as biotechnology, nanotechnology, psychology, earth sciences, fluid dynamics, and computer science. Designed to eventually support hundreds of users, the cluster will be used to manage a variety of memory-intensive applications, including

those that can help develop new pharmaceuticals and medical technologies such as functional brain imaging; deepen the science community's understanding of changes and movement in the earth's surface and underground fluid flow; and further advances in compute-intensive software.

"Dual-Core AMD Opteron processors were designed to help customers realize more computing performance and more efficiency in the data center or research environment," said Ben Williams, vice president, commercial business, AMD. "From superior academic institutions like Rice to Fortune 500 industries and governments worldwide, AMD64 technology with Direct Connect Architecture and true dual-core computing offers customers an option for lower power and cooling costs, a unified computing platform throughout their organization, and industry-leading innovation and performance."

"The true litmus test for high-performance computing systems is how well they handle real-world applications." said Peter Ungaro, president of Cray. "After a rigorous benchmark process, the Cray XD1 system based on the Dual-Core AMD Opteron processor has clearly demonstrated its value to the Rice research community and we look forward to seeing the results of their work."