

Microsoft, Nvidia Team On GPU

The companies are collaborating to promote NVIDIA Tesla graphics processing units to operate with Windows HPC Server 2008.

Microsoft and Nvidia engineers have teamed up to promote Nvidia Tesla graphics processing units to operate with the software firm's Windows HPC Server 2008 operating system.

The collaborative effort, announced Monday, is expected to aid in research and development work based on CPUs and GPUs in fields ranging from data mining and business intelligence to molecular dynamics and seismic processing. "The coupling of GPUs and CPUs illustrates the enormous power and opportunity of multicore co-processing," said Dan Reed, corporate VP of Microsoft's extreme computing unit, in a statement.

Nvidia has increasingly been moving into mainstream computing with its Tesla GPUs, which support Windows XP and Windows Vista in data center applications using workstations, Windows Server 2003, and Windows Server 2008. Data center workstations are increasingly utilizing Microsoft Visual Studio because of its dropping price and its growing ease-of-use, according to Nvidia.

"The scientific community was one of the first to realize the potential of the GPU to transform its work, observing speedups ranging from 20 to 200 times while using a range of compute-intensive applications," said Andy Keane, general manager of Nvidia's Tesla business.

The collaborative arrangement between Microsoft and Nvidia enables users to take advantage of the massively parallel CUDA architecture used by Nvidia's GPUs.

John Stone, who uses Nvidia processors with Windows, said his Visual Molecular Dynamics application at the University of Illinois Urbana-Champaign, has benefited greatly from the Nvidia-Microsoft partnership because of the benefits it brings to advanced molecular visualization and analysis.