ScaleMP™ Creating the Power of One

The High-end Virtualization Company

ScaleMP Executive Summary

Manufacturers, designers, life science researchers, financial institutions, federal and military organizations demand faster and larger systems for high-performance and computational-intensive applications. Solutions such as shared memory, symmetric multi-processors (SMP) systems are easy to deploy, manage and program, but are fully proprietary and expensive. The more affordable, distributed memory cluster systems provide performance, but are complex to deploy and difficult to manage. Some applications work with SMP, while others require cluster resources.

ScaleMP™ has developed a breakthrough approach to solve HPC issues through virtualization for aggregation.

Virtualization for Aggregation: software replaces expensive custom hardware

Server virtualization is not a new concept: it enables one physical server to function as multiple logical (virtual) servers. ScaleMP has developed a new virtualization paradigm where multiple, commodity x86 systems are aggregated into a single virtual x86 system. ScaleMP uses unique virtualization technology for its vSMP Foundation™ solutions, enabling the creation of low-cost, industry-standard, software-based SMP systems with the computational horsepower needed for the most demanding applications and workloads, and the streamlined, single-point management for cluster environments.

Features	Benefits
Aggregates up to 128, x86 servers into a single virtual machine, with up to 1,024 processors (16,384 cpus) and 64 TB of main memory;	Runs any type of HPC application, delivering best-of-breed performance for SMP applications;
Supports the latest Intel® Xeon® and AMD Opteron ™ processors;	Leverages cluster cost benefits, minimizing the need for custom hardware and components;
Provides the largest system memory available in the industry;	Creates SMP on demand, using a single management point, lowering OPEX;
Includes RAS features: • Seamless InfiniBand fail-over; • Optional “partitioning” to create completely isolated OS instances; • Fault isolation and automatic system recovery.	Uses the latest generation of chips and interconnects for best performance at volume pricing.

Need additional technical information, system requirements or want to know about testing and implementing vSMP Foundation? Visit our site www.ScaleMP.com or mail sales@ScaleMP.com. Rev. 12/2011