

## PRESS RELEASE

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## Symmetric Computing Awarded Patent For Large Shared Memory Supercomputing

Patent represents a major price/performance breakthrough to shrink research, design and production cycles for Big Data/large memory applications.

**November 18, 2014 Boston, MA** - <u>Symmetric Computing, Inc.</u>, a leading vendor of large shared memory/high core count high performance supercomputers, today announced that the company received a patent (US Patent Number 8,607,004) on for its large shared memory supercomputing architecture. Designed for software applications requiring large shared memories and high core counts, these applications are often hosted on very expensive mainframes and supercomputers or are poorly served by high performance commodity computer clusters. At \$200k- \$1million++ each these systems are far beyond what is affordable by many engineering departments or research labs. This architecture combines new operating system extensions with a high speed interconnect to achieve a global distributed shared memory with an average latency of 5 to 10 microseconds at a very economical cost (systems start under \$85,000).

The patent covers a method of performing symmetric multiprocessing, using a cluster of compute nodes (servers) with the memory in each node divided into local and global partitions, where the global partitions of each node combine together to form a single global shared memory. The patent allows for hundreds, if not thousands of nodes to work on a single problem at once using shared memory.

The supercomputers built around this patent are scalable, shared memory computer systems ideal for solving big problems using big data. Large shared memory computers provided by Symmetric Computing offer the simpler programming methods of mainframes and high end shared memory supercomputers with the lower cost economics of traditional commodity computer clusters. Symmetric Computing's large shared memory computers are much better at analyzing data that can't be broken up into smaller chunks, making them ideal for many applications in: life sciences/bioinformatics, engineering modeling and simulation, and Big Data. While shared memory systems are usually limited in how many processors can get hooked up into one computer, Symmetric Computing's patent allows hundreds, if not thousands of processors to work on a single problem --at once-- using shared memory.

According to Richard Anderson, President and CTO of Symmetric Computing, "We've achieved what many have said is not possible, which is to deliver a large shared memory/high core count HPC supercomputer which a department budget is able to afford. With our product, the time to market and economic viability is a game changer for Bioinformatics, Engineering Modeling/Simulation and Big Data applications."

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For more information, please visit our website at <u>www.symmetriccomputing.com</u> or contact us at <u>info@symmetriccomputing.com</u>.

## **About Symmetric Computing**

Symmetric Computing provides large shared memory/high cluster count High Performance Computing (HPC) at an affordable, department level price. Comparable HPC solution are either outside the financial resources of all but the largest government supported supercomputer organizations and current on-demand HPC-like services are either not capable of large shared memory support or are unaffordable for those needing large shared memory HPC capacity for ongoing engagements. By providing massive computational power at an affordable price, Symmetric Computing supercomputers are driving advancements in research, simulations and modeling activities for industries ranging from Bioinformatics to Energy to Financial Services and Big Data applications.