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## **SICORTEX INTRODUCES ULTRA LOW POWER COMPUTERS FOR TERAFLOPS-SCALE LINUX APPLICATIONS**

*Breakthrough in Cluster Design to Make Teraflop Computing Ubiquitous*

Maynard, Mass., November 8, 2006 -- SiCortex, the first company to engineer a cluster computer from the silicon up, today introduced its family of ultra low power high performance Linux systems. SiCortex's new design represents a sea change in cluster computing, enabling the proliferation of multi-teraflop computing to a wider range of users. SiCortex will exhibit at the SC '06 supercomputing trade show in Tampa November 13 – 17.

When SiCortex's founders began the company several years ago, teraflop computers were only found in a handful of large research institutions. However, they foresaw that tens of thousands of organizations could benefit from teraflop computing. Today, although cluster computing is the fastest growing segment of the IT market, daunting energy and cooling issues continue to limit adoption and delivered application performance.

“The conventional approach to higher performance has been to use increasing numbers of merchant chips, inevitably leading to more heat imposed bottlenecks,” said John Mucci, SiCortex CEO. “Starting with a clean sheet of silicon, we have placed all of the essential elements of a node on a chip and demonstrated that low power equals higher

performance, enabling teraflop computers to become commonplace in an increasing number of computing environments.”

SiCortex's breakthrough is to implement a complete cluster node on a chip, including six 64-bit processor cores, multiple memory controllers, a high performance cluster interconnect and a PCIexpress connection to storage and internetworking. A complete SiCortex cluster node with DDR-2 memory consumes 15 watts of power, an order of magnitude less than the 250 watts used in a conventional cluster node.

SiCortex computers are open source Linux platforms, the predominant operating environment for high performance computing. Current Linux application software will operate on SiCortex systems without modification. Users can expect a SiCortex computer to be operating the same day it arrives on the loading dock.

“Power and cooling have in recent years become critical issues for operators of high performance computing facilities,” said Jonathan Koomey, Ph.D., who is a consulting Professor at Stanford University and is one of the world’s experts on electricity used by computer equipment. “Any computing technology yielding large reductions in power use will save money in both infrastructure and operations, and will ultimately result in more reliable and available computing”.

SiCortex will initially introduce two models. The SC5832 is an enterprise class computer featuring 5832 processors, eight terabytes of memory and 2.1 terabits per second of IO capacity. The SC5832 provides 5.8 teraflops of 64-bit floating point performance, in a compact low power cabinet.

The SC648 is designed for departmental users and offers 648 gigaflops of 64-bit performance, 864 gigabytes of memory and 240 gigabits per second of IO capacity, while fitting in less than half of a single standard 19-inch rack. It generates so little heat it can be powered by plugging into a 110 volt U.S. wall outlet or international equivalent.

**About SiCortex**

SiCortex, the first company to engineer a Linux cluster from the silicon up, is dedicated to the spread of open teraflop computing to a wide variety of users by providing "Teraflops from Milliwatts." Founded in 2003 by a respected team of computer industry executives, the company has received a total of \$42 million in funding from Chevron Technology Ventures, Flagship Ventures, JK&B Capital, Polaris Venture Partners and Prism VentureWorks. For more information visit <http://www.sicortex.com/>.