

**Contact:** Cheri Winterberg  
Owen Media for ClearSpeed  
[cheriw@owenmedia.com](mailto:cheriw@owenmedia.com)  
978-660-6405

## **ClearSpeed Announces Introductory Price for Advance™ X620 Developer Bundle**

*Discounted bundle lowers barrier to entry and extends the reach of ClearSpeed Acceleration for the software developer community targeting heterogeneous multi-core systems*

### **International Supercomputing Conference (ISC'07) – Dresden, Germany – June 26, 2007 –**

ClearSpeed Technology (LSE:CSD), the world leader in acceleration technology for high performance computing (HPC), today announced a new specially priced, limited-time offer of a bundled solution for software developers ready to take advantage of ClearSpeed's industry-leading performance per watt by accelerating their applications by 10x or more. Consisting of a ClearSpeed Advance X620 Accelerator, the 2.50 release of the ClearSpeed Software Development Kit (SDK) and 12 months support, the Developer Bundle is designed to extend the reach of ClearSpeed Acceleration as the initial step in developing software that fully exploits the potential of heterogeneous multi-core architectures.

"Multi-core and heterogeneous architectures are creating a sea change in high performance computing," said John Gustafson, ClearSpeed CTO for HPC. "To achieve the full potential of these new approaches, software must be developed or modified to exploit both data parallelism and thread parallelism. ClearSpeed's architecture and tools allow developers to take the easier path of data parallelism first by using well-established vector operations initially, then dealing with the additional complexity of thread-level parallelism as the second stage of the journey."

ClearSpeed acceleration can be achieved through a 'plug and play' approach with BLAS and LAPACK standard libraries or by adapting or developing application code with the help of the ClearSpeed SDK. Applications that have already been shown to benefit from ClearSpeed acceleration range from molecular modeling codes such as Amber 9 and the Bristol University Docking Engine (Bude) to financial applications based on Monte Carlo simulation. Standard toolkits supporting ClearSpeed acceleration include NAG, Wolfram Mathematica®, and Interactive Supercomputing Corporation's Star-P.

Performance comparisons based on Monte Carlo benchmark code for European Option pricing provided by a major international bank showed up to 20 times performance speedup using a ClearSpeed Advance accelerator compared with an industry server. The use of multiple Advance accelerators in the system delivered up to 100 times performance speedup.

The SDK package consists of CSXL, ClearSpeed's acceleration libraries that provide core linear algebra routines for matrix multiplication, ClearSpeed Vector Math Library and Random Number Generator Library, which support additional functionality such as Monte Carlo simulation for option pricing in the financial services industry. Additionally the SDK contains the ClearSpeed Visual Profiler toolset which provides insight at every level of the system, including the interactions between multiple host processors and one or more ClearSpeed Advance™ accelerator boards. By delivering a consistent visual representation across the entire system, it provides the easiest path to develop code that will perform optimally in today's multi-core and heterogeneous accelerated systems.

Developers creating or adapting applications to efficiently exploit the inevitable heterogeneous multi-core future can start today on the ClearSpeed hardware and software platform. At ISC'07, developers will be able to view live demonstrations of ClearSpeed software and the acceleration of financial and scientific applications at ClearSpeed's booth, #C32, on Wednesday, June 27 from 9 a.m. – 6.45 p.m. and on Thursday, June 28 from 9 a.m. – 7 p.m. Additionally, developers are invited to ClearSpeed speaker sessions about ClearSpeed's software:

- Tuesday, June 26, 3:30 – 4 p.m. – Simon McIntosh-Smith, vice president of applications, and James Irwin, engineering manager, will present on "Delivering Aggregate Performance for High Performance Math Libraries in Accelerated Systems"
- Thursday, June 28, 10 – 11 a.m. – John Gustafson, CTO of HPC, and Simon McIntosh-Smith will present on "Using Accelerators to Escape the Shackles of 20th Century Software"

### **About the ClearSpeed Developer Bundle**

The Developer Bundle is being offered on a one-time basis at a price of \$4,995 and is only available to developers. It consists of one Advance X620, 2.50 release of the SDK, 12 month support including single-user login to support.clearspeed.com, access to customer support hotline for up to two cases, and standard documentation. Only one bundle may be purchased per project or department and standard ClearSpeed terms and conditions apply. For more information, visit [www.clearspeed.com](http://www.clearspeed.com).

### **About ClearSpeed**

ClearSpeed Technology is a semiconductor company that develops massively parallel coprocessors and accelerator boards delivering unmatched performance per watt for high performance computing applications on industry-standard systems. ClearSpeed has offices in

San Jose, California and Bristol, UK and has 84 patents granted and pending. For more information, visit [www.clearspeed.com](http://www.clearspeed.com).