

Quotes



The Planet

"Web hosting is the foundation of the hosting market. Our customers demand the best performance on standard application stacks such as the Apache web server. In our benchmarks, we found the new Nehalem series processors drive more than twice the page loads of previous generations under the identical power, space footprint and timeframe."

Urvish Vashi , General Manager for Dedicated Hosting, The Planet



ANSYS, INC.

"The performance improvements we've seen with our software on the Intel® Xeon® processor 5500 series are very exciting for ANSYS customers, who benefit directly from faster turnaround for engineering simulation," said Barbara Hutchings, director of strategic partnerships at ANSYS, Inc. "We have benchmarked speedup of more than 2 times relative to the previous generation processors for ANSYS® Mechanical™ and ANSYS® FLUENT® software, and roughly 1.5 times for ANSYS® CFX®. This kind of speed and scaling is critical to customers who want to consider higher-fidelity multiphysics simulations and improve the productivity of their engineering process."

Barbara Hutchings, Director of Strategic Partnerships, ANSYS, Inc.



Weizmann Institute

"In the chemistry faculty we want to introduce a computing facility that will allow us to run programmes serially and also within a high-performance computing context. Some of the tasks require low memory bandwidth while others demand substantially more memory bandwidth. We benchmarked the Intel® Xeon® processor 5500 series and found that both its high processing speed and scaling ability over a number of cores would be greatly beneficial for the varied number of tasks we had in mind. Its intelligent performance enabled varying degrees of bandwidth and as a result, we felt completely justified in deferring our final decision and waiting until Intel® Xeon® processor 5500 series became commercially available before developing further our computing resources."

Peter Stern, Ph.D, Senior Staff Scientist, Chemical Physics Department, Weizmann Institute of Science, Israel



Philips Healthcare

"Our Brilliance Workspace workstations show 50% improvement in performance when running on the latest Nehalem based workstation. Delivering enterprise-class real-time image processing is a CPU intensive task. The Intel® Xeon® processor 5500 enables us to further enhance our market leadership position"

Baruch Sabbah, Workstation Program Manager, CT Engineering, Philips Healthcare



London Stock Exchange

"The London Stock Exchange recognises the importance of both low latency and latency consistency in the operation of efficient markets. We make extensive ongoing use of the Intel fasterLAB in order to evolve our core business applications and to test the effect of processor-level innovation. We have been able to see the immediate impact of the move to 45nm and scaling to the multi-core Intel® Xeon® processor 5500 series and beyond. The fasterlab – being equipped with advanced testing facilities and Intel engineering expertise – is a significant asset to our ongoing software development programs."

Robin Paine, Chief Technology Officer, London Stock Exchange



RWTH Aachen University

"The next-generation Intel® Xeon® processor 5500 series will add a clearly improved memory bandwidth to the well-known cache friendliness of the Intel® Xeon® processor family. This is a critical asset for technical computing and will enable further advances in scientific discoveries and engineering achievements at RWTH Aachen University."

Dieter an Mey, HPC Team Lead, Center for Computing and Communication, RWTH Aachen University



KL

"We're planning a new data centre design based on blade servers and with this in mind tested the Intel® Xeon® processor 5500 series. It automatically and intelligently adjusts server performance according to application performance, which in turn delivers great energy savings. Energy-efficiency is critical to KL operations and the Intel® Xeon® processor 5500 series would certainly help us meet our stringent energy targets. Furthermore, its virtualisation capacity enables best-in-class performance, great scalability and enhanced flexibility.

Based on this, we will not hesitate to recommend the Intel® Xeon® processor 5500 series to organizations that we provide IT services for and who want to minimize energy consumption, while still having the best performance in the marketplace for DP servers."

Thomas Fænø, Chief Information Officer, KL



Jülich

"Application performance is critical to the work we carry out at the Forschungszentrum Jülich. This ranges from understanding atmospheric chemical processes, which is the basis of climate models, to further insight into fusion-energy, neurosciences, biophysics, nanosystems, and even elementary particles. Clearly, the greater application performance we can achieve the greater understanding we receive. And ultimately, this hopefully leads to new developments with far-reaching and beneficial implications.

Crucial for application performance in HPC is memory bandwidth and IO performance. The Intel® Xeon® processor 5500 series definitely is a leap ahead in both respects. Therefore JSC decided to base the next-generation general-purpose supercomputer JuRoPA on this processor."

Dr. Norbert Eicker, Forschungszentrum Jülich



Capgemini Netherlands

The new Intel® Xeon® processor 5500 series, an evolution in green and sustainable IT

"As one of the world's largest business and IT consultancy firms, Capgemini is asked by its clients to consult on improving their business performance while reducing costs. One of their primary concerns is the power consumption in the data centre. Capgemini evaluated the new Intel® Xeon® processor 5500 series because the promised performance per Watt could help our clients reduce their concerns. Capgemini noticed an enormous performance increase up to 500%, while the power usage dropped a staggering 65%. As an example queries to a Microsoft SQL* database took just ten seconds, compared to three minutes on a previous generation Intel® Xeon® processor. Even older applications, not designed for multi-core processors are no challenge for this processor. The time for login sequences, went back from 40 seconds to just five. For Capgemini it is without doubt that this processor provides customers with increased performance while reducing energy costs."

Arnold Verhoeven, Managing Consultant, Capgemini, Netherlands



Business and Decision Group

"The pure performance gains and lower energy consumption helps us deliver new solutions for our customers and will lead to a return on investment in less than one year."

Johann Locatelli, Chief Technology Officer, Business & Decision Group

TANDBERG See: **performance**

TANDBERG

"TANDBERG works closely with leaders such as Intel to provide the highest performing telepresence, video conferencing and related solutions to our customers. Our long-standing relationship enables us to rapidly adopt the latest Intel® technology to bring to market innovative solutions to meet our customers' business needs.

The soon to be released TANDBERG Compliance Appliance*, a content recording and compliance device, uses the Intel® Xeon® processor 5500 series to ensure the reliability and scalability our customers need for massive recording capability. For the performance-critical portions of our core IP, we see that the Intel Xeon processor 5500 series out performs the Intel® Xeon® processor 5400 series with the same clock speed by a factor of up to two."

Hakon Dahle, Chief Technologist, TANDBERG



KU Leuven - Centre for Plasma Astrophysics

"At the K.U.Leuven we selected the latest Intel® Xeon® processor for its excellent sustained performance. The superior performance of the Intel® Xeon® processor 5500 series is expected to provide our scientists with the efficient and stable HPC tool they need for the application and validation of their innovative models and codes.

We use several in-house developed innovative parallel simulation codes. The off-chip bandwidth is often the performance-limiting factor for these applications. The class-leading memory subsystem and QuickPath interconnect of the Intel® Xeon® processor 5500 series will result in a serious performance boost and offer a much better price-performance ratio for many of our users' applications."

Stefaan Poedts, Professor, Centre for Plasma Astrophysics



PLAY

"NeuString's faster preparation of data extracts using the Intel® Xeon® processor 5500 series allows us to utilise the NeuString Optimizer much more quickly, thereby managing our roaming business in a near real-time."

Robert Kondraciuk, International Roaming Manager, PLAY



CERN

"Based on our benchmarks of the Intel® Xeon® processor 5500 series, we expect an increase in performance-per-Watt of about 30% or more, compared to the already very power-efficient combination of the previous generation Intel® Xeon®

processors and the Intel 5100 (San Clemente) chipset. The new CPU is a strong candidate for highly demanding Physics applications."

Helge Meinhard, Coordinator for Server and Storage Procurement, CERN-IT

"In addition to the performance reported with the new server platform in 32-bit mode, we were pleased by the increased performance we obtained when running our benchmarks in 64-bit mode on one hand and using simultaneous multithreading feature of the Intel® Xeon® processor 5500 series on the other, giving us a combined speed-up of almost 50%."

Sverre Jarp, Chief Technology Officer, CERN openlab



University of Zurich

University of Zurich

"The University of Zurich is one of the leading research universities in Europe. And to deliver top research we need a top infrastructure. This is especially true for areas with high demands on compute power like nanotechnology, biochemistry, bioinformatics, particle physics, astrophysics and cosmology and physical chemistry. However, areas such as banking, finance and economics also require complex simulations that can no longer be computed on a standard workstation within a reasonable time.

In late summer 2009, the faculty of mathematics and natural science (MNF), together with IT services, will install a new supercomputer based on 576 Sun blade servers powered by 4,608 Intel® Xeon® processor 5500 series cores. At 51 Tera-Flops it will be among the 100 fastest supercomputers in the world.

The high performance capabilities of the platform will empower us to make new discoveries across our research portfolio. For example, we will be able to calculate the behaviour of complete molecular systems instead of just single molecules. We'll also be able to uncover new aspects of the development and make-up of the solar system, and will play an instrumental role in evaluating results from the Large Hadron Collider at CERN."

Daniel Wyler, former Dean MNF, University of Zürich



University of Zurich

University of Zurich

"It is a challenge to build a high performance computer that suits the different demands of our many research groups. Our new Sun* blade cluster powered by Intel® Xeon® processors 5500 series is a very well balanced system, tuned to highest performance. With 12 TB memory, a quad data rate Infiniband network and 160 TB fast parallel file system, we will be able to satisfy most of our users' demands for the next three to four years.

"The Sun* blades with Intel® Xeon® processor 5500 series also satisfied our energy consumption and TCO demands. Compared to our five-year-old cluster, the new

platform provides more than 10 times the compute power for less than three times the energy consumption."

Alexander Godknecht, Chief Technology Officer IT Services, University of Zürich



Technical University of Munich

"The increased memory bandwidth and performance improvement opens up a wide number of new possibilities for underpinning the development of new computer architectures."

Carsten Trinitis, Senior Scientist, Technical University of Munich



Avio

"Avio's Great Lab is developing innovative technologies for the next generation of eco-friendly aeronautical engines.

"The researchers and engineers of the R&D centre are supported by the newest Intel® Xeon® processor 5500 series, which allows them to conduct highly sophisticated numerical investigation on complex systems with high execution speeds, superior calculating capabilities and strongly reduced energy consumption."

Leonardo Franco, Chief Information Officer, Avio, Italy



CICA

"After long and exhaustive tests we can certify that Intel's new processor micro architecture, Intel® Xeon® processor 5500 series is an excellent solution for any supercomputing cluster, where high parallelism and high memory bandwidth and not only high throughput are demanded. The Intel® Xeon® processor 5500 series performance is superior to any current x86 based architecture, over 4x more performance. The new micro architecture improves not only the performance but also substantially improves memory access bandwidth, bottleneck experimented by past Intel micro architectures, putting Intel's new microprocessors ahead of the competition in strongly parallel and high memory demanding applications. The results obtained not only from standard benchmarking applications but also from real life customer developed and most commonly used applications prove the incredible performance and standing of the new Intel offering. The next-generation Intel Xeon processor 5500 series and system technology will deliver a monumental increase in computing power."

Claudio R. Arjona, Chief Information Officer, CICA



Onkosh.com

"Thanks to Intel's new platforms and technologies, Onkosh.com is able to achieve performance levels beyond our expectations, even at high peak times. We are very excited about testing with Intel's great support the Tylersburg platform with the new Intel® Xeon® processor 5500 series. It is helping us take advantage of the features of this platform and improve our services, in preparation to adding these platforms in our server farms."

Hany Abdelkawi, Project Manager, Onkosh.com



European Space Agency

"The European Space Agency (ESA) has recently been testing brand new systems based on the innovative new Intel® Xeon® processor 5500 series. Its unrivalled performance enables ESRIN, the ESA establishment in Frascati, Italy, to analyse and share large volumes of data collected by its satellites more quickly and efficiently via its Grid computing infrastructure. Early tests revealed that the new processor technology has reduced critical computational time, for example as requested for mapping of large flooded areas, by 50 percent."

Luigi Fusco, Senior Advisor of Earth Observation Applications and GENESI-DR Project Coordinator, ESA



Capgemini UK plc

"The superior virtualisation performance of the Intel® Xeon® processor 5500 series will enable our development team to be more productive, strengthening our customer offering and improving our competitiveness."

Steve Boulding, Technical Architect, Capgemini UK plc

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