



SPECcpu Benchmark Result for System x3950 X6

Performance Benchmark Result (withdrawn product)

Lenovo System x3950 X6 delivers world-record eight-processor rack server performance for compute-intensive applications.

February 7, 2017 ... Lenovo has published two top SPEC CPU2006 benchmark scores for the Lenovo System x3950 X6 8U rack server, using eight high-performance Intel Xeon Processor E7-8891 v4 with 10 cores.

The x3950 X6 achieved two leadership SPECint_base2006 and SPECfp_base2006 scores using eight Intel Xeon E7-8891 v4 processors (2.8 GHz, 60 MB L3 cache per processor, 8 processors with a total of 80 cores, 10 cores per processor (160 total threads), 1024 GB of TruDDR4 memory, and SUSE Linux Enterprise Server 12 SP1 (x86_64).

The SPECint_base2006 and SPECfp_base2006 scores are ideal for measuring single-threaded compute-intensive applications, such as High Frequency Trading (HFT) and other financial industry workloads.

The scores in the following table are the top SPEC CPU2006 results published (SPEC CPU, SPECint, SPECfp) for the System x3950 X6 with eight E7-8891 v4 processors.

Table 1. SPEC CPU2006 result

SPEC CPU2006 Benchmark	Intel Xeon Processor E7-8891 v4 – 2.8GHz (10 cores)
SPECint_base2006	71.1
SPECfp_base2006	129

The System x3950 X6 is an 8U, 8-socket rack server that delivers maximum performance and availability for business-critical applications and databases.

With system support for up to 192 processor cores and 12TB of system memory, the x3950 X6 is known not only for its leadership performance, but also for its ability to scale in order to power traditional databases as well as new in-memory database and analytics solutions. Now customers can achieve leadership solution performance by virtualizing high performance databases and applications on the same server.

X6 platforms are the sixth generation of Enterprise X Architecture (EXA) technology and represent more than 15 years of investment and innovation to exceed industry standards.

Results referenced are current as of February 7, 2017. To view all SPECcpu2006 results, visit <http://www.spec.org/cpu2006/results/>.

Related product families

Product families related to this document are the following:

- [8-Socket Rack Servers](#)
- [Large Memory Capacity Servers](#)
- [SPECcpu Benchmark Results](#)



Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service. Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

Lenovo (United States), Inc.
8001 Development Drive
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk. Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

© Copyright Lenovo 2025. All rights reserved.

This document, LP0622, was created or updated on February 23, 2017.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at:
<https://lenovopress.lenovo.com/LP0622>
- Send your comments in an e-mail to:
comments@lenovopress.com

This document is available online at <https://lenovopress.lenovo.com/LP0622>.

Trademarks

Lenovo and the Lenovo logo are trademarks or registered trademarks of Lenovo in the United States, other countries, or both. A current list of Lenovo trademarks is available on the Web at <https://www.lenovo.com/us/en/legal/copytrade/>.

The following terms are trademarks of Lenovo in the United States, other countries, or both:
Lenovo®

The following terms are trademarks of other companies:

Intel® and Xeon® are trademarks of Intel Corporation or its subsidiaries.

Linux® is the trademark of Linus Torvalds in the U.S. and other countries.

SPEC®, SPEC CPU®, SPECfp®, and SPECint® are trademarks of the Standard Performance Evaluation Corporation (SPEC).

Other company, product, or service names may be trademarks or service marks of others.