Frequently Asked Questions Oracle Server X7-8 Eight-Socket Configuration

Overview

Oracle Server X7-8 is a powerful and advanced eight-socket x86 server with leading performance, outstanding scalability, and unmatched reliability, availability, and serviceability (RAS). The Oracle Server X7-8 eight-socket configuration is ideal for very large memory-optimized databases, scale-up applications, and enterprise workloads requiring extreme I/O bandwidth, memory, and core count.

Frequently Asked Questions

- **Q:** Where can I find the data sheet for the Oracle Server X7-8 eight-socket configuration?
- A: Oracle Server X7-8 Eight-Socket Configuration Data Sheet
- **Q:** How does the Oracle Server X7-8 eight-socket configuration compare with Oracle Server X5-8?
- A: Oracle Server X7-8 is based on the Platinum or Gold Intel® Xeon® Processor Scalable Family processors, while Oracle Server X5-8 is based on the Intel® Xeon® E7-8895 v3 processor. The memory subsystem of Oracle Server X7-8 is organized into six DDR4 channels, each operating at 2,666 megatransfers per second (MT/sec), and it can be populated with up to two dual inline memory modules (DIMMs) per channel. The memory subsystem on Oracle Server X5-8 is a three-DDR3 channel design operating at up to 1,600 MT/sec with one and two DIMMs per channel. The total NVMe flash capacity of Oracle Server X7-8 increases to 51.2 TB.
- Q: What kind of applications and workloads is the Oracle Server X7-8 eight-socket configuration best suited to run?

- A: With a 6 TB memory capacity, leading processing power, and exceptional I/O expandability, the Oracle Server X7-8 eight-socket configuration is ideal for very large databases and scale-up enterprise workloads requiring extreme I/O bandwidth, memory, and core count. This server excels in data warehousing applications and real-time financial data reporting.
- **Q:** What is included in the Oracle Server X7-8 eight-socket configuration base chassis?
- A: The chassis includes two system modules (SMODs), each consisting of one HBA, four 2.5-inch SAS3 drive bays, four 10GBase-T ports, an embedded Oracle Integrated Lights Out Manager (Oracle ILOM) service processor, one management Ethernet and one management serial port, Trusted Platform Module (TPM) version 1.2, and two USB 3.0 ports (one rear, one internal). In addition, this chassis includes 16 low-profile PCIe 3.0 slots (eight with 16 lanes and eight with 8 lanes), four 3,000 watt platinum-plus rated power supplies with up to 91 percent efficiency, and eight fans. Each Oracle Server X7-8 ships with one tool-less static rack mounting rail kit.
- **Q:** What flash storage options are available on Oracle Server X7-8?
- A: Oracle Server X7-8 supports two flash storage options: up to eight Oracle Flash Accelerator F640 NVMe PCIe cards and up to eight 800 GB 2.5-inch SAS solid-state drives (SSDs).
- **Q:** What memory, internal storage, and expansion options are supported on Oracle Server X7-8?
- A: The Oracle Server X7-8 eight-socket configuration supports up to 96 DDR4 DIMMs (16 GB, 32 GB, or 64 GB), eight hard disk drives (HDDs) or SSDs, eight Oracle Flash Accelerator F640 NVMe PCIe cards, and 16 low-profile PCIe slots. This results in up to 6 TB of memory, up to 9.6 TB of HDD storage, and up to 51.2 TB of NVMe flash capacity.



- Q: Can I mix and match HDDs and SSDs in the same server?
- A: Yes. Oracle Server X7-8 does not support NVMe flash in SSD form factor.
- **Q:** What operating systems and virtualization software are certified to run on Oracle Server X7-8?
- A: Oracle Server X7-8 is certified to run Oracle Linux, Oracle Solaris, and Oracle VM.

For a complete list, go to Oracle Server X7-8 OS Support.

- **Q:** What system management options are available for Oracle Server X7-8?
- A: Oracle Server X7-8 includes an embedded service processor, known as Oracle ILOM. Oracle ILOM helps to simplify data center management, system configuration, and lifecycle management by providing a rich set of management interfaces for monitoring the health of the server and for remote management.

Oracle Hardware Management Pack is a set of command-line tools and agents that assist with automating server configuration through the host operating system. These tools provide a means for scripting RAID, BIOS, and Oracle ILOM configuration as well as updating all embedded firmware. In addition, Oracle Hardware Management Pack provides agents that monitor the health of the storage subsystem and provide remote SNMP monitoring.

- Q: Can the server configuration options be customized?
- A: Through the Oracle factory's assemble-to-order (ATO) process, Oracle Server X7-8 can be customized to the configuration you specify.
- **Q:** What high-availability features are available in Oracle Server X7-8?

- A: This enterprise-class x86 server is designed with reliability, availability, and serviceability (RAS) in mind. All PCIe slots are hot-pluggable by way of eight dual PCIe card carriers (DPCCs). In addition, this system features RAID-enabled disks, cooling fans, and power supply units that are hot-swappable and redundant. Combining these RAS capabilities with Oracle ILOM, Oracle Server X7-8 is designed to maximize uptime, simplify system management, and reduce administration costs.
- Q: What are the power requirements for Oracle Server X7-8?
- A: The online power calculator provides an estimate of the idle and operating power level of the server: <u>Oracle Server</u> <u>X7-8 power calculator</u>.
- **Q:** What automated service request support is provided for Oracle Premier Support customers?
- A: Oracle Auto Service Request, one of the features available in all of Oracle's x86 servers, detects and reports potential issues to the Oracle support center without user intervention, ensuring maximum service levels and simplifying support.
- **Q:** What is included with Oracle Premier Support for Systems?
- A: For more information, please see <u>Oracle Premier Support</u> for Systems.
- **Q:** Where can I find more information about Oracle Server X7-8?
- A: Contact an Oracle sales representative directly, call 1-800-Oracle1, or contact an Oracle authorized reseller.

For more information visit Oracle Server X7-8.

Please go to <u>oracle.com/goto/x86</u> to see all of Oracle's x86 rack servers.



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