

## Frequently Asked Questions

### Oracle Server X8-2

#### Overview

Oracle Server X8-2 is a two-socket x86 server designed for maximum security, reliability, and performance for Oracle Database and it is an ideal building block for running Oracle software in the cloud. Oracle Server X8-2, in a compact 1U enclosure, is powered by two Platinum, or Gold Second Generation Intel® Xeon® Scalable Processors and 24 memory slots.

#### Frequently Asked Questions

- Q:** Where can I find the Oracle Server X8-2 data sheet?
- A:** [Oracle Server X8-2 data sheet](#)
- Q:** How does Oracle Server X8-2 compare with Oracle Server X7-2?
- A:** Oracle Server X8-2 is based on the Platinum, or Gold Second Generation Intel® Xeon® Scalable Processors, while Oracle Server X7-2 is based on the first generation Intel® Xeon® Scalable Processors. The second generation processors contain in-silicon patches for Spectre and Meltdown. Prior generation processors required microcode patches that resulted in performance degradation.
- Q:** What kind of applications and workloads is Oracle Server X8-2 best suited to run?
- A:** Oracle's x86 systems are the best x86 platforms to run Oracle software. With an optimal balance of compute power, memory capacity, and I/O capability in a compact and energy-efficient 1U enclosure, the versatility of Oracle Server X8-2 makes it ideal for the following:
- A building block for private cloud infrastructure
  - Oracle Database clusters including Real Application Clusters (Oracle RAC) deployments
  - Enterprise-class applications in virtualized environments
  - Environments requiring highly secure and reliable x86-based infrastructure
- Q:** Does Oracle Server X8-2 take advantage of processor stock-keeping units (SKUs) capable of three Intel® Ultra Path Interconnect (UPI) links?
- A:** Yes. The motherboard design of Oracle Server X8-2 connects three UPI links between the two processors, maximizing the bandwidth of interprocessor communication.
- Q:** What is included in the Oracle Server X8-2 base chassis?
- A:** The Oracle Server X8-2 1U base chassis includes the motherboard, four low-profile PCIe 3.0 slots (two with 16 lanes and two with 8 lanes; one of the internal 8-lane slots may be occupied only by the optional SAS HBA), two 10/25 GbE SFP28 or two 10 Gigabit Ethernet ports, Oracle Integrated Lights Out Manager (Oracle ILOM) service processor, Trusted Platform Module (TPM) version 1.2, two USB 3.0 ports (one rear, one internal), two 1,200 watt platinum-rated power supplies with up to 91 percent efficiency, one tool-less rack mounting slide rail kit, and one cable management arm.
- Q:** What flash storage options are available on Oracle Server X8-2?
- A:** Oracle Server X8-2 supports up to eight 6.4 TB small form factor high-bandwidth NVMe drives, for a total capacity of 51.2 TB. Oracle Server X8-2 supports 800 GB SAS-3 solid-state drives (SSDs), for a total internal flash capacity of up to 6.4 TB using SAS SSDs. Oracle Server X8-2 supports up to two 480 GB M.2 Serial ATA (SATA) SSDs, for a total of 960 GB of M.2 capacity.
- Q:** What memory and I/O expansion features are supported on Oracle Server X8-2?
- A:** Oracle Server X8-2 includes 24 DDR4 DIMM slots, and it can be configured with 16 GB RDIMMs single rank, 32 GB RDIMMs dual rank, or 64 GB LRDIMMs dual rank. Two 10GBase-T Ethernet ports or two 25 GbE SFP28 ports are included with the server, and three low-profile

PCIe 3.0 slots are available for configuring a number of Ethernet, InfiniBand, and Fibre Channel option cards. The fourth low-profile PCIe 3.0 slot is internal to the server and can only be populated with optional SAS HBAs. For more information on supported PCIe cards, visit [the Oracle Server X8-2 option card support page](#).

**Q:** Does the memory for Oracle Server X8-2 support error-correcting code (ECC)?

**A:** Yes.

**Q:** Can I mix and match hard disk drives (HDDs), SSDs, and NVMe drives in the same server?

**A:** Yes.

**NOTE:** For support of NVMe drives, systems must be factory configured with NVMe cables. These cables cannot be installed in the field.

**Q:** What operating systems are certified to run on Oracle Server X8-2?

**A:** Oracle Server X8-2 is certified to run Oracle Linux, Oracle Solaris, and Oracle VM.

To see a list of supported operating system versions, visit [the Oracle Server X8-2 operating system support page](#).

**Q:** What system management options are available for Oracle Server X8-2?

**A:** Oracle Server X8-2 includes an embedded service processor: Oracle ILOM. Oracle ILOM helps to simplify data center management, system configuration, and server lifecycle management by providing a rich set of management interfaces for monitoring the health of the system and for remote server management.

Oracle Hardware Management Pack is a set of command-line tools and agents that assists with automating server configuration through tools running on the host operating system. These tools provide a means for scripting RAID, BIOS, and Oracle ILOM configuration as well as for 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:** Oracle Server X8-2 can be customized to the configuration you specify through the Oracle factory's assemble-to-order (ATO) process.

**Q:** What high-availability features are available in Oracle Server X8-2?

**A:** Oracle Server X8-2 offers hot-swappable and redundant cooling fans, RAID-enabled disks, and power supply units. Combining these enterprise-class reliability, availability, and serviceability (RAS) capabilities with the fault isolation and management features of Oracle ILOM, Oracle Solaris, or Oracle Linux enables Oracle Server X8-2 to maximize uptime, simplify system management, and reduce operational expenses.

**Q:** What are the power requirements for Oracle Server X8-2?

**A:** The online power calculator provides an estimate of the idle and operating power level of the server.

[Oracle Server X8-2 Power Calculator](#)

**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?

**A:** For more information, please see [Oracle Premier Support for Systems](#).

**Q:** What is the difference between Oracle Server X8-2 and Oracle Server X8-2 TAA?

**A:** Oracle Server X8-2 TAA (7600466) is the part number to be ordered for all customers requiring TAA compliance.

**Q:** Where can I find more information about Oracle Server X8-2?

**A:** Contact an Oracle sales representative directly or call 1-800-Oracle1, or contact an Oracle authorized reseller. For more information, visit [Oracle Server X8-2](#).







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