ORACLE

Frequently Asked Questions Oracle Server X9-2 and Oracle Server X9-2L

Oracle Server X9-2

Oracle Server X9-2L

Oracle Server X9-2 and Oracle Server X9-2L are two-socket X86 servers designed for maximum security, reliability, and performance for Oracle Database. The servers are powered by Platinum, Gold or Silver Third Generation Intel® Xeon® Scalable Processors and 32 memory slots. Oracle Server X9-2 is an ideal building block for running Oracle software in the cloud. While Oracle Server X9-2L server is designed for databases, enterprise storage, and big data solutions.

Customer Benefits

Oracle Server X9-2 is designed to be the most secure database server for clustered databases and virtualized environments. It has been optimized for relational database with existing SAN/NAS. The server accelerates Oracle RAC with hot-swappable flash using Oracle's unique NVMe design. Maximizes I/O bandwidth for virtual machine (VM) consolidation of enterprise applications. Oracle X9-2 has been designed from the ground up to be the most secure and reliable 1U server.

Oracle Server X9-2L is designed for maximum storage IOPs. Optimized for maximum storage capacity with up to 216 TB conventional storage or 132.8 TB high bandwidth flash. It reduces OpEX with in-depth management engineered into Oracle ILOM. It also maximizes I/O bandwidth and expandability offering flexibility to the customer.

Frequently Asked Questions

Q: Where can I find the Oracle Server X9-2 and X9-2L data sheets?

A: Oracle x86 Servers- Datasheets

Q: How does Oracle Server X9 generation compare with Oracle Server X8 generation?

ORACLE

A: Oracle Server X9 is based on the Platinum, Gold and Silver Third Generation Intel® Xeon® Scalable Processors Ice Lake SP, while Oracle Server X8 was based on the second-generation Intel® Xeon® Scalable Processors.

Q: What kind of applications and workloads are Oracle Server X9-2 and Oracle Server X9-2L 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 X9-2 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

A: With superior scalability in compute performance, memory capacity, I/O bandwidth, and expandability, as well as flexibility in storage configurations, Oracle Server X9-2L is ideal for the following:

- Single-node Oracle Database environments

- Storage server for big data and cloud storage solutions

Q: Does Oracle Server X9-2 and Oracle Server X9-2L 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 X9-2 and Oracle Server X9-2L connects three UPI links between the two processors, maximizing the bandwidth of interprocessor communication.

Q: What is included in the Oracle Server X9 base chassis?

A: The Oracle Server X9-2 1U base chassis includes the motherboard, three 16 lane low-profile PCIe 4.0 slots, 1000BASE-T Ethernet network and host management ports, one serial RJ-45 management port, Oracle Integrated Lights Out Manager (Oracle ILOM) service processor, Trusted Platform Module (TPM) version 2.0, one rear USB 3.0 port, 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.

A: The Oracle Server X9-2L base chassis includes the motherboard, 10 low-profile PCIe 4.0 slots (two with 16 lanes and eight with 8 lanes), 1000BASE-T Ethernet network and host management ports, one serial RJ-45 management port, Oracle Integrated Lights Out Manager (Oracle ILOM) service processor, Trusted Platform Module (TPM) version 2.0, one rear USB 3.0 port, two 1,200-watt platinum rated power supplies with up to 91 percent efficiency, one tool-less slide rail kit, and one cable management arm.

Q: What flash storage options are available on Oracle Server X9?

A: Oracle Server X9-2 supports up to four 6.8 TB or 3.84 TB high-bandwidth NVMe SSDs, for a total capacity of up to 27.2 TB. Oracle Server X9-2 also supports two 240 GB M.2 Serial ATA (SATA) SSDs.

A: Oracle Server X9-2L supports up to twelve 6.8 TB or 3.84 TB high-bandwidth NVMe drives, plus an additional eight Oracle Flash Accelerator F640 PCIe Card v3 for a total capacity of 132.8 TB. Oracle Server X9-2L also supports up to two 240 GB M.2 SATA SSDs.

Q: What memory and I/O expansion features are supported on Oracle Server X9?

A: Oracle Server X9-2 includes 32 DDR4 DIMM slots, and it can be configured with 32 GB RDIMMs dual rank, or 64 GB RDIMMs dual rank. Oracle Server X9-2 has an optional 100 Gb/sec Ethernet adapter (mezzanine) card on MB with two QSFP ports, and

ORACLE

three 16 lane low-profile PCIe 4.0 expansion slots For more information on supported PCIe cards, visit the Oracle Server X9-2 option card support page.

A: Oracle Server X9-2L includes 32 DDR4 DIMM slots, and it can be configured with 32 GB RDIMMs dual rank, or 64 GB LRDIMMs dual rank. There are 10 low-profile PCIe 4.0 expansion slots are available for configuring a number of Ethernet and Fiber Channel option cards. For more information on supported PCIe cards, visit the Oracle Server X9-2L option card support page.

Q: Does the memory for Oracle Server X9 support error-correcting code (ECC)?

A: Yes.

Q: What operating systems are certified to run on Oracle Server X9?

A: Oracle Server X9-2 and Oracle Server X9-2L are certified to run Oracle Linux, Oracle Solaris, and Oracle KVM.

To see a list of supported operating system versions, visit the Oracle Server X9-2 and X9-2L operating system support page.

Q: What system management options are available for Oracle Server X9 systems?

A: Oracle Server X9 systems include 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 X9 can be customized to the configuration you specify through the Oracle's factory assemble-to-order (ATO) process.

Q: What high-availability features are available in Oracle Server X9-2 and Oracle Server X9-2L?

A: Oracle Server X9 systems offer hot-swappable and redundant cooling fans, 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 X9 systems to maximize uptime, simplify system management, and reduce operational expenses.

Q: What are the power requirements for Oracle Server X9-2 and Oracle Server X9-2L?

A: The online power calculators provide an estimate of the idle and operating power level of the server.

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: Can I mix and match SAS and NVMe drives in the same server?

A: No. Oracle Server X9-2 only support NVMe drives in its four drive bays.

A: No. The drives in the twelve drive bays in Oracle Server X9-2L must be populated as all NVMe or all SAS.

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 X9 and Oracle Server X9 TAA?

A: Oracle Server X9-2 TAA (7602915) and Oracle Server X9-2L TAA (7602918) are the part numbers to be ordered for all customers requiring TAA compliance. The potential difference to the non-TAA is only the location of manufacturing. The physical product is the same in both cases.

ORACLE

Q: How to setup a software RAID for boot of X9?

A: Software RAID is created, configured, and managed by the OS on the system. You can choose if you wan to boot off the software RAID volume or boot from one device and add the software RAID on different devices. For details refer to the instructions in your operating system documentation.

- For Oracle Linux, please refer to Install to A RAID-1 Disk mirror (MOS Doc ID 2326689.1) and How to install Linux OS on RAID Partition (MOS Doc ID 2231802.1)

- For Oracle Solaris 11.4, it is strongly recommended to use mirrored ZFS pools. Kindly refer to Installing and Booting Oracle Solaris for more information regarding installation of the operating system.

Q: Where can I find more information about Oracle Server X9-2 and Oracle Server X9-2L?

A. Contact an Oracle sales representative directly or call
1-800-Oracle1 or contact an Oracle authorized reseller. For more information, visit the Oracle x86 servers page.

Connect with us

Call **+1.800.ORACLE1** or visit **oracle.com**. Outside North America, find your local office at: **oracle.com/contact**.

B blogs.oracle.com   f facebook.com/oracle   twitter.com/oracle

ORACLE