

NETRA BLADE X3-2B SERVER MODULE

IDEAL BLADE FOR BUILDING
YOUR NETWORK AND CLOUD
INFRASTRUCTURE

KEY FEATURES

- NEBS™ Level 3 certification and ETSI compliance
- Two Intel Xeon processor E5-2600 product family CPUs
- Twenty-four DIMM slots supporting two low-voltage DDR3 1,600-MHz DIMMs per channel
- PCIe ExpressModules for networking I/O
- Oracle ILOM, Oracle System Assistant and Oracle Hardware Management Pack

KEY BENEFITS

- Reliable operation in severe environmental conditions
- Extreme performance and availability with up to 10 Netra Blade X3-2B server modules in the carrier-grade Sun Netra 6000 modular system
- High application performance and power savings with low-voltage DIMMs running at true 1,600 MHz
- Fast blade server deployment and I/O upgrades without downtime due to each blade server's unique I/O configuration
- Simplified systems and cloud-ready lifecycle management



Oracle's Netra Blade X3-2B server module, with an industry-leading number of dual inline memory modules (DIMMs) and unmatched memory bandwidth, is the ideal blade to meet the increasing demands of network

infrastructure workloads and cloud-based deployments. When combined with the unique I/O architecture of Oracle's Sun Netra 6000 chassis, the Netra Blade X3-2B is easy to deploy, manage, and upgrade.

Netra Blade X3-2B Server Module

Two Intel Xeon processor E5-2600 Series-based Platform for Intelligent Systems power the Netra Blade X3-2B. This well-featured blade leverages the unique I/O architecture of the Sun Netra 6000 chassis, making it an easy blade to deploy and upgrade. When combined with advanced networking options, the Netra Blade X3-2B, with its large memory capacity and unmatched memory bandwidth, is ideal for high performance communication workloads and cloud infrastructure deployments.

Supported in the Sun Netra 6000 chassis, the Netra Blade X3-2B server module provides a safe network infrastructure solution with carrier-grade reliability that leverages chassis-based redundant, hot-swappable components, such as fan modules, high-efficiency AC or DC power supply modules, and PCIe ExpressModules.

All Oracle servers ship with full-function server management tools at no additional cost. Oracle Integrated Lights Out Manager (Oracle ILOM) utilizes industry-standard protocols to provide secure and comprehensive local and remote management. Oracle ILOM features include power management and monitoring, fault detection, and notification. The integrated Oracle System Assistant guides system administrators through rapid server deployment, firmware updates, hardware configuration, and operating system installation with Oracle-certified hardware drivers.

Oracle's Premier Support customers have access to My Oracle Support and multiserver management tools in Oracle Enterprise Manager Ops Center. Oracle Enterprise Manager Ops Center, a critical component of Oracle's application-to-disk system management tool, coordinates servers, storage, and networking for building a complete cloud infrastructure. Oracle Enterprise Manager Ops Center features an automated service request capability, which detects and reports potential issues to Oracle's support center without user intervention, assuring the maximum service levels and simplified support.

The Netra Blade X3-2B server module helps cut costs and lower risk with comprehensive virtualization, a choice of world-class Oracle operating systems, and a complete cloud-optimized infrastructure, all built in, at no extra charge. Proven effective across a wide range

of applications and under the most demanding conditions, Oracle's Netra Blade X3-2B, combined with the carrier-grade availability of the Sun Netra 6000 chassis, provides a platform designed to meet the most demanding telecommunication workloads.

Netra Blade X3-2B Server Module Specifications

Architecture
Processor
<ul style="list-style-type: none"> Two processors from the Intel Xeon processor E5-2600 product family
Cache
<ul style="list-style-type: none"> Level 1: 32 KB instruction and 32 KB data L1 cache per core Level 2: 256 KB shared instruction/data L2 cache per core Level 3: Up to 20 MB shared inclusive L3 cache per processor
Main Memory
<ul style="list-style-type: none"> Twenty-four DIMM slots provide up to 384 GB of DDR3 registered (RDIMM) memory LV RDIMM options: 8 GB at up to 1,600 MHz, 16 GB at up to 1,600 MHz
Interfaces
Network
<ul style="list-style-type: none"> Two 10/100/1000Base-T Ethernet ports One dedicated 10/100Base-T Ethernet port for the management network
Storage
<ul style="list-style-type: none"> Four SAS-2 interfaces to the midplane, two to each Network Express Module slot Four 2.5-inch front-accessible and hot-swappable disk bays <p>Note: RAID Expansion Module is required for SAS support</p>
Graphics
<ul style="list-style-type: none"> 2D graphics controller with 8 MB video memory embedded inside service processor Supports resolutions up to 1,600 x 1,200 x 16 bits @60 Hz (1,024 x 768 when viewed remotely via Oracle ILOM RKVMS)
Midplane I/O
<ul style="list-style-type: none"> Four (x8) PCIe 2.0 busses, two to the Express Module slots and two to the Network Express Module slots Four 6 Gb/sec SAS interfaces, two to each Network Express Module slot Two 10/100/1000Base-T Ethernet interfaces, one interface to each Network Express Module slot One 10/100 Ethernet management port to the chassis monitoring module
Front Panel I/O
<ul style="list-style-type: none"> Four hot-swappable SSF drive bays, supporting SAS hard disk drives Available via dongle cable: <ul style="list-style-type: none"> VGA graphics (DB-15 connector) Oracle ILOM serial console Dual USB ports for keyboard, mouse, or storage
Software
Operating Systems
<ul style="list-style-type: none"> Oracle Linux (pre-installed option) Oracle Solaris (pre-installed option) Red Hat Enterprise Linux SUSE Linux Enterprise Server Microsoft Windows Server

Virtualization
<ul style="list-style-type: none"> • Oracle VM (pre-installed option) • VMware
Systems Management
Interfaces
<ul style="list-style-type: none"> • Dedicated 10/100Base-T Ethernet network management port • In-band, out-of-band and sideband network management access via any one of the four main ports of the server or the dedicated port • RJ-45 serial management port
Service Processor
<p>Oracle Integrated Lights Out Manager (ILOM) provides:</p> <ul style="list-style-type: none"> • Remote keyboard, video, mouse redirection • Full remote management through command-line, IPMI, and browser interfaces • Remote media capability (DVD, CD, ISO image, floppy) • Advanced power management and monitoring • Active Directory, LDAP, RADIUS support
Installation
<ul style="list-style-type: none"> • Oracle System Assistant provides: <ul style="list-style-type: none"> • Task-driven hardware updating and configuration • OS installation • Simple download of latest Oracle firmware, drivers, tools, and documentation • Cross-OS command-line tools for RAID, BIOS, and ILOM configuration • Cross-OS firmware updating tool
Monitoring
<ul style="list-style-type: none"> • Comprehensive fault detection and notification • In-band and out-of-band SNMP monitoring V1, V2c, V3 • Syslog and SMTP alerts, WS-MAN • Automatically create a service request for key hardware faults with Oracle's automated service request (ASR)
Oracle Enterprise Manager Ops Center
<ul style="list-style-type: none"> • Deployment and provisioning of server bare metal • Cloud and virtualization management for Oracle and third-party hardware • Inventory control and patch management • OS observability for performance monitoring and tuning • Automated service request generation • Connects to Oracle Enterprise Manager Cloud Control application management • Enables control of native Oracle Solaris and Oracle Linux concurrently, as well as Red Hat Enterprise Linux and Microsoft Windows, when running in Oracle virtual machines
I/O Modules
<p>Supported I/O module form factors:</p> <ul style="list-style-type: none"> • Up to two (blade unique) PCIe ExpressModules per Netra Blade X3-2B • Up to two (shared) Network Express Modules per Sun Netra 6000 chassis
Dimensions and Weight

Mounted vertically:

- Height: 327.2 mm (12.9 in)
- Width: 44.5 mm (1.8 in)
- Depth: 511.7 mm (20.1 in)
- Weight: 9.1 kg (20.2 lbs) fully populated

Warranty

Visit oracle.com/sun/warranty for Oracle's global support warranty information on Sun products.

Services

Only Oracle offers single point of accountability and complete, integrated support for the entire Oracle stack including 24/7 hardware service, expert technical support, proactive tools, and software updates. In addition to award-winning system support, Oracle also offers a portfolio of services that help install, configure, monitor and support your new Oracle Sun Netra servers utilizing Oracle best practices for higher availability and optimized system performance.

Visit oracle.com/support for information on Oracle's service program offerings for Sun products.

Contact Us

For more information about Netra Blade X3-2B, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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