

Dual-Core AMD Opteron™ or Intel® EM64T Xeon® Embedded, Blade, and Cluster Computing



Deploy in the field with a rugged chassis and multiple A/C power sourcing options



Access the system with attached or wireless controllers via the built-in KVM switch

Lower your energy requirements with redundant cooling fans and optimized power management

Get the best performance-per-watt in a small, rack-mount footprint

Leverage the open standards architecture: multi-OS support, and PCI expansion

Administer independent blade computing with 10GbE aggregate transfer



Command industry-best processing density, throughput computing, and flexibility



NEXTSERVER



Base System

- 4U (19") rack-mount chassis
- (8) server blade slots
- (2) Ethernet switch blade slots
- (4) built-in, hot-swappable fans
- Built-in KVM switch blade and chassis management blade
- Redundant, hot-swappable power modules
- 400Hz 100V~230V or 50/60Hz 110/220V power input
- Built-in inter-chassis daisy chain port

Processor Blade Configurations

Opteron: (1) or (2) single- or dual-core 64-bit AMD Opteron™. Up to 8GB DDR SDRAM

Xeon: Single or dual 64-bit Intel® EM64T Xeon® to 3.8GHz (800MHz FSB). Up to 16GB DDR SDRAM

Both blade configurations feature:

- (2) 184-pin DIMM sockets
- Onboard single or dual 2.5" ATA100 IDE HDD 40/60/80/100/120GB or PXE boot
- (2) Gigabit Ethernet ports
- 3rd 10/100Mbps management port
- PCI-X 64-bit/66MHz half-length card slot
- Internal SVGA Graphics
- Keyboard, mouse, KVM accessibility
- (1) USB port



Optional dual-wide blades with (1) half-length and (1) full-length PCI-X slots and high-speed HDDs to 300GB are available in either configuration.

Both Xeon and Opteron blades, as well as multiple operating systems, can be integrated within the same NextServer chassis.

Management Blade Features

- Hot-swappable server blades and chassis share Keyboard/VGA/Mouse/Serial console
- (2) inter-chassis daisy chain ports
- Up to (14) chassis can be chained together to share KVM devices and external management facilities
- (2) KVM select buttons for inter-blade and inter-chassis select
- (1) rear access serial console port
- (1) rear access management software command port with Fast Ethernet interface (auto-detect server blades)
- Report system status, log events, and send alerts
- Control main power or individual power module / blade ON/OFF, restart, or KVM Select
- Optional MS-Windows based NextCare software

Ethernet Feed-Thru Blade Features

- Interchangeable with Ethernet Switch Blades
- Enables Gigabit Ethernet from backplane to rear panel FEEDTHRU
- (8) GigE Ports total per FEEDTHRU Blade; up to (2) blades per system for a total of (16) GigE ports

Ethernet Switch Blade Features

- Interchangeable with Ethernet Feedthru Blades
- Up to (2) SWITCH Blades for max of (16) 10/100/1000GigE internal ports
- Built-in Layer 2 GigE from backplane to rear panel
- Daisy chain cable connection allows up to 10GB aggregate throughput
- (2) uplink GbE ports per SWITCH Blade and 10GbE HiGIG switch to switch interconnect port External ports: two RJ-45 and two SFP Fibre connectors

System LRUs

- FAN TRAY: (4) hot swappable blowers (3+1 config.)
- POWER SUPPLY: Hot swappable, auto load sharing, 3+1 to 6+1 redundant modules up to 2100w
- 100~230VAC input, auto range, (3) AC inlet
- Soft On/Off, power fault indicator

Network Attached Storage Options

NextSnap4100: Optional NAS, up to one Terabyte 10/100/1000Mbps, is available with RAID and JBOD options in 1U/2U secondary chassis.

Software Operating Environments

- Solaris 10 x86
- SUSE Linux WS/ES/AS
- 32- & 64-bit Enterprise Linux
- Red Hat Linux
- 32- and 64-bit Windows XP Professional, 2003 Server, and Advanced Server
- MOSIX SMP Linux configurations
- WinUX (Concurrent use Linux and Windows)
- Clustering and Dual Boot configurations

Deployable System Options

For deployable applications, including Homeland Security, Mil-Aero, and other government applications, NextServers are optionally preconfigured in rugged and MIL-STD810F cases for transport use. With quick disconnect front and rear covers, the system can be operated in the transit case for additional shock/vibration protection.



DAS and Secondary Switch Fabric Options

- SCSI and Infiniband direct attached storage controller options
- Secondary switch fabric options including Infiniband and Myranet
- Other customer specific application solutions via PCI-X half length slot, i.e. data acquisition, test & measurement, WAN gateways, bridges, and routers

Additional PCI Expansion Chassis

Additional 4U expansion chassis for (7) PCI 64-bit/66MHz slots on a single bus segment, using a single bridge chip, attached to a processor blade via 5Gb full-duplex link.

Physical and Environmental

- *Dimensions:* 16.78" (W) x 6.97" (H) x 26.40" (D) [42.6cm (W) x 17.7cm (H) x 67cm (D)]
- *Operating temperatures:* 5°C to 35°C [41°F to 95°F]
- *Storage temperatures:* -20°C to 80°C [-4°F to 176°F]
- *Relative humidity:* 10% to 90% (Non-condensing)
- Optional rack-mount slides and rugged transit and operational cases for deployable applications
- FCC Class A, CE, UL, TUV