



## Extron Performance Server NetSystem 7510

### A Family of rack-optimized integrated server systems designed for Flexible, High-density Server Solutions

The 4th generation Extron NetServer 7500 series provides flexibility and serviceability in a Tower/ 5U and 1U or 2U rack-optimized server. It gives businesses the ability to maximize server performance while keeping space and energy needs down. Designed to support most any type of enterprise application, including database, email and network infrastructure, the Extron NetServer 7500 series has the flexibility that modern businesses require. The Extron NetCluster 7500 series accommodate for 1U and 2U form factor, while NetSystem 7500 comes in pedestal tower with conversion option to 5U rackmount. All combines powerful Xeon processing power with Serial Attached SCSI (SAS), PCI-Express, and robust remote management capability for the most complete ultra dense server platform.

Optimized for energy efficiency, the NetServer System 7500 also supports up to two Intel® Xeon® 5500 series processors, offers highly scalable DDR3 memory (12 DIMMs up to 144GB), high-speed PCI Express\* 2.0 I/O (up to five slots), and a redundant power option. The server system, which includes Intel® Server Chipset S5520 and ESAA certified energy efficient platforms, is ideal for high-performance computing. ExtronPC is a leading local manufacturer for business servers and corporate desktops. Increase your uptime with Pro-Active solution from award-winning Bhinneka Care.

- **Supports up to two Intel® Xeon® Processors on Intel® Microarchitecture, codenamed Nehalem** Increase server performance with no increase in power consumption
- **Highly scalable, energy-efficient memory** 12 DIMMs of registered or unbuffered DDR3 ensure ample capacity and energy-efficient performance for any application
- **Highly expandable I/O architecture** 24 lanes of fast PCI Express\* 2.0 x16 combined with PCI Express\* 2.0 x8 expansion modules and optional PCI-X slots provide unmatched expansion flexibility
- **Power efficient architecture with highly efficient power supplies** Reduced power and cooling requirements, lower operating costs
- **Server Power Capping via Intel® Intelligent Power Node Manager** Reduce power and cooling costs while increasing rack density with policy-based power and thermal management
- **Intel® Enabled Server Acceleration Alliance (Intel® ESAA) Certified** Pre-tested and certified configuration guides (“recipes”) over a range of applications
- **Server Management Software** Get your Intel® servers up and running with Intel® Deployment Toolkit and maintain them with the provided Intel® Active System Console, a lightweight management solution for small business or with the optional full IT management solution using Intel® Management Packs with Microsoft\* System Center Essentials

*SERVER*



Extron NetManager  
Software included  
(based on Intel Server Deployment  
& Microsoft System Center Essential)

# Introducing a new generation of intelligent server and workstation platforms

## Comparison with Previous-Generation Processors

	<b>NEW!</b> Intel® Xeon® Processor 5500 Series	<b>NEW!</b> Intel® Xeon® Processor 3500 Series	<i>Currently Shipping</i> Intel® Xeon® Processor 5400 Series
Maximum Processors per System	2	1	2
Number of Cores	Up to 4	4	4
Integrated Memory Controller	Yes	Yes	No
Interconnect / Bus	Intel® QuickPath Interconnect	Intel® QuickPath Interconnect	Front Side Bus
Memory Support	3 channels, DDR3	3 channels, DDR3	2 channels, FBDIMM
Intel® Turbo Boost Technology <sup>4</sup>	Yes <sup>a</sup>	Yes <sup>a</sup>	No
Intel® Hyper-Threading Technology <sup>5</sup>	Yes <sup>a</sup>	Yes <sup>a</sup>	No
Socket	LGA1366	LGA1366	LGA771
Process Technology	45nm	45nm	45nm
Boxed Heatsink	Sold Separately	Included	Included

## Faster and Smarter

The next generation of server/workstation processors from Intel adapts to application behavior by automatically adjusting processing power to deliver maximum performance, scaling energy usage to the workload, and offering best-in-class virtualization—all while allowing manual configuration for greater IT control.

## Intelligent Performance

The Intel® Xeon® processor 5500 and 3500 series, based on next-generation Intel® microarchitecture, deliver better performance and power efficiency by intelligently adapting to the application. Intel® Turbo Boost Technology<sup>4</sup> enables an automatic increase in frequency when conditions allow. Intel® Hyper-Threading Technology<sup>5</sup> increases performance for multi-threaded applications or multitasking scenarios. A three-channel integrated DDR3 memory controller and Intel® QuickPath Technology offer best-in-class system bandwidth and memory performance.

## Automated Energy Efficiency

With Intel® Intelligent Power Technology and Integrated Power Gates, the Intel® Xeon® processor 5500 and 3500 series monitor the needs of currently running applications, adapt to deliver the performance needed, and automatically scale back individual cores to near-zero power when performance is not needed. The Intel Xeon processor 5500 and 3500 series can also lower energy costs by automatically putting processors and memory into the lowest available power states to meet the current workload needs while minimizing impact on performance.

## Flexible Virtualization

Next-Generation Intel® Virtualization Technology allows the use of different generations of Intel Xeon processors within the same virtualization pool, delivering peak performance during high-use periods; improving flexibility for failover, load balancing, and disaster recovery; and enabling the reduction of energy cost during low-use periods.

## Breakthrough Workstation Performance

In workstations, the Intel Xeon processor 5500 and 3500 series move from an idea to a product faster than ever before.

### INTEL® XEON® PROCESSOR 5500 SERIES FOR SERVER/WORKSTATION SYSTEMS FEATURING TWO LGA1366 SOCKETS

PROCESSOR NAME	CLOCK SPEED	INTEL® QPI <sup>1</sup> SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES/ THREADS	INTEL® HYPER-THREADING TECHNOLOGY <sup>2</sup>	INTEL® TURBO BOOST TECHNOLOGY <sup>3</sup>	POWER
Intel® Xeon® Processor W5580	3.20 GHz	6.40 GT/s	8 MB	1333 MHz	4 / 8	▪	▪	130 W
Intel Xeon Processor X5570	2.93 GHz	6.40 GT/s	8 MB	1333 MHz	4 / 8	▪	▪	95 W
Intel Xeon Processor X5560	2.80 GHz	6.40 GT/s	8 MB	1333 MHz	4 / 8	▪	▪	95 W
Intel Xeon Processor X5550	2.66 GHz	6.40 GT/s	8 MB	1333 MHz	4 / 8	▪	▪	95 W
Intel Xeon Processor E5540	2.53 GHz	5.86 GT/s	8 MB	1066 MHz	4 / 8	▪	▪	80 W
Intel Xeon Processor E5530	2.40 GHz	5.86 GT/s	8 MB	1066 MHz	4 / 8	▪	▪	80 W
Intel Xeon Processor E5520	2.26 GHz	5.86 GT/s	8 MB	1066 MHz	4 / 8	▪	▪	80 W
Intel Xeon Processor L5520	2.26 GHz	5.86 GT/s	8 MB	1066 MHz	4 / 8	▪	▪	60 W
Intel Xeon Processor E5506	2.13 GHz	4.80 GT/s	4 MB	800 MHz	4 / 4			80 W
Intel Xeon Processor L5506	2.13 GHz	4.80 GT/s	4 MB	800 MHz	4 / 4			60 W
Intel Xeon Processor E5504	2 GHz	4.80 GT/s	4 MB	800 MHz	4 / 4			80 W
Intel Xeon Processor E5502	1.86 GHz	4.80 GT/s	4 MB	800 MHz	2 / 2			80 W



<b>Processor Support</b>	Two Dual-Core or Quad-Core Intel® Xeon® E5500 processor with Cache up to 8MB Intel® Quick Path Interconnect 4.8 GT/s, 5.86 GT/s, 6.4 GT/s
<b>Chipset</b>	Intel® 5520 server chipset with Intel® ICH10R
<b>Memory</b>	Twelve DIMM sockets with DDR-3 SDRAM, max. 96GB (six channel native) Supports Enhanced Memory (Scrubbing, Sparing, Mirroring) Capabilities
<b>Controller</b>	NC7510AX: 6x SAS /SATA ports capable RAID 0, 1, 10 with Passive Midplane Optional Extron NetRAID up to RAID 5 and Extron IntelliRAID up to RAID 6 for SAS or SATA
<b>Optical Drives</b>	Slim DVD-RW Rewritable, Slot Loading, SATA mode
<b>Expansion Slots</b>	One full-height PCI Express 2.0 riser x16 bus speed
<b>Network</b>	Dual Redundant Intel® PRO/1000EB Server Gigabit Ethernet with Intel® I/O Acceleration Technology and Intel® Virtualization Technology
<b>Built-in I/O</b>	3x USB 2.0 (front/back), additional I/O requires management module
<b>Drive Bays</b>	Up to 8x SFF 2.5" SAS /SATA Hot-Plug Drive Bays for Best Expansion
<b>Chassis</b>	Industry standard 1U rack-mountable chassis (43.3 mm x 430 mm x 690.6 mm) Manageable System Fans for components and add-in cards
<b>Power Supply</b>	One Hot-Plug EPS 100-240VAC 650W with PFC, 1+0 high efficiency Optional additional power supply for full redundancy
<b>Security</b>	Optional Mechanical Locking Front Bezel (require LCP)
<b>Compatibility</b>	Microsoft® Windows® 2003 / 2008 Server, Red Hat® Linux, SuSE® Linux, Novell® NetWare
<b>Manageability</b>	Intel® System Management v2.0 onboard platform instrumentation
<b>Optional Accessories</b>	Mezzanine Option: Dual Gigabit Ethernet based on Intel® 82571EB chip Mezzanine Option: Quad Gigabit Ethernet based on Intel® 82576EB chip Mezzanine Option: Dual 10-Gigabit Ethernet based on Intel® 82599EB chip Mezzanine Option: Single port InfiniBand based on Mellanox® SDR chip Additional external USB Floppy drive kit Extron Tool-less Standard Rail Kit Extron Cable Management Arm (require Extron Tool-less Standard Rail Kit) Extron Local Control Panel (unit contains LCD, buttons, navigation buttons, USB) Extron Remote Management Module (Graphic Management, KVM over LAN, and more) Extron EPS 650W dual-line redundant power supply kit

### Fast Setup with Intel® Server Deployment Toolkit

Each Extron server ships with the Intel® Server Deployment Toolkit CD, which streamlines server setup and configuration. This toolkit includes the Intel® Deployment Assistant and additional configuration utilities.

### Intel® Deployment Assistant

Help reduces the complexity and time associated with setting up Extron servers. Server deployment time is often cut by an hour or more per system, and even more time can be saved when using the cloning feature to deploy identical servers.

### Intel® Active System Console

This console will provide basic monitoring capabilities including server health and BMC configuration. If for any reason your server hardware should experience a warning or critical event, the application will send you an immediate e-mail and provide an event viewer with a full explanation of the problem. This console also runs under a web server which means you can access the server from anywhere on your network to check hardware health or perform BMC configuration.



# Extron<sup>®</sup> NetServer families

## Making IT easy for small and midsize businesses

Small and midsize businesses (SMBs) face complex IT challenges similar to those of large enterprises, but often without the large budget or staff of IT specialists. Extron NetServer families offers software and hardware solutions that:

- Make it easy to set up and maintain a reliable and secure IT infrastructure
- Reduce the cost and time of managing servers, desktops, and applications
- Keep businesses running 24/7

Businesses of all sizes want to upgrade their technology and automate processes so they can reduce costs and increase productivity. However, getting new systems set up can be a hassle, especially for SMBs that have:

- Small or part-time IT staff
- Limited budgets for software and hardware expenditures
- Low tolerance, time, and expertise for complicated IT solutions



Keeping pace with required changes while ensuring that systems perform optimally and remain secure can be overwhelming. Intel has a solution: software and hardware packages that are designed for small and midsize companies to fit their budget and address their specific challenges. Intel<sup>®</sup> Server Essentials simplifies management of the whole network and streamlines the full range of IT activities—from building and setting up servers to managing the IT environment—all from a single console.

### Automated Energy Efficiency

With Intel<sup>®</sup> Intelligent Power Technology and Integrated Power Gates, the Intel<sup>®</sup> Xeon<sup>®</sup> processor 5500 and 3500 series monitor the needs of currently running applications, adapt to deliver the performance needed, and automatically scale back individual cores to near-zero power when performance is not needed. The Intel Xeon processor 5500 and 3500 series can also lower energy costs by automatically putting processors and memory into the lowest available power states to meet the current workload needs while minimizing impact on performance.



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### Simplify with Intel<sup>®</sup> System Management Software

With 70 percent of IT costs tied to management and monitoring and only 30 percent tied to the cost of installation, centralizing and automating network or IT management tasks lowers management costs and enables scalability. Intel<sup>®</sup> System Management Software 3.1 is a comprehensive software suite with tools for all market segments and system management needs. It is designed to ease management of the entire IT environment through a single, unified console. Included with this powerful set of applications are the Intel<sup>®</sup> Management Packs which integrate seamlessly into Microsoft<sup>®</sup> System Center Essentials 2007 (Essentials 2007) or Microsoft<sup>®</sup> System Center Operations Manager. Essentials 2007 is designed to specifically address IT management for small to midsize businesses with up to 30 servers and 500 clients. More than just a dashboard with data, the Essentials 2007 console provides expert knowledge for solving problems, tools for streamlining daily activities, and reports and tips that help IT staff efficiently monitor and maintain network health and security. Intel System Management Software also comes with Intel<sup>®</sup> Active System Console, a lightweight, easy to install and use product to manage your server hardware health. This product allows users to quickly see the overall health of their server hardware, view critical or warning events that require their attention, and configure the Baseboard Management Controller (BMC) for remote power control and access to a system where the OS has become unreachable.

### Microsoft<sup>®</sup> System Center Essentials 2007

With Microsoft<sup>®</sup> System Center Essentials 2007, IT staffers at small and midsize businesses are no longer slowed down by using more than one application to get the IT management job done. Through a single console, Essentials 2007 unifies:

- Problem detection and troubleshooting for all aspects of the network
- Service-level monitoring of business critical applications such as e-mail
- Asset tracking and reporting for simple, up-to-the-minute inventory information
- Security updates and patching of the OS, applications, and hardware
- Remote software distribution and installation of applications on servers and clients

System Center Essentials just got better and faster: Service Pack 1 improvements include up to 70 percent less memory consumption, faster console, support for workgroup-joined computers, SNMPv1 devices, improved setup, new update approval rules, enhanced third-party update experience, and support for Windows<sup>®</sup> Server 2008.

This unified experience increases productivity and reduces costs because IT staff can save time by performing a broad set of daily and maintenance tasks from a single console. Reports, alerts, and automated patches help keep the IT environment up-to-date and more secure.

Our new Extron NetRAID now includes **Adaptec Storage Manager (ASM)**. It makes simple to view, monitor, and configure all the storage in your system built on Adaptec host bus adapters (HBAs) and RAID controllers. Centrally manage direct attached storage (DAS) and networked storage with this single tool. It provides a convenient graphical user interface that looks and operates the same across all Adaptec product lines and supported operating systems, which include Windows, Linux, Net Ware, UnixWare, OpenServer, and Solaris x86. Available with Extron IntelliRAID SAS Hardware only.



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Extron's normal terms and conditions apply and are available on request.

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