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NEXCOM
Building The Digital Infrastructure

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High-Performance Computing Solutions delivering availability, scalability, performance and manageability to your infrastructure




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NEXCOM Profile

"The NEXCOM Blade Chassis was exactly what we needed because it uses very little space and it allowed me to conduct testing on one bench."

-Mr. Phillip Soliz, Information Security Engineer, Computer Sciences Corporation

NEXCOM is the leading worldwide provider of applied computing platforms for embedded, industrial and communication market segments. Established in 1992, NEXCOM designs, manufactures, and markets a full range of Industrial PC products, including high-density and high-performance blade servers, fail-over & fault-tolerant CTI platforms, slim servers, single board computers, CompactPCI, embedded computers, and network security appliances. Our goal is to become the industry leader in the digital infrastructure field by providing superior total solutions to meet the increasing demands of agile computing, networking, storage, and computer hardware for building an IT infrastructure.

Since 1992, the company has won several international certificates for its quality products that meet international standards. To better serve its customers worldwide, NEXCOM with its headquarters in Taipei, Taiwan, has branch offices and distributors in the United States, the United Kingdom, Japan and China as well as other distributors through out the world. NEXCOM is committed to product innovation, reliability, and quality, as well as customer service to build long-term relationships with customers.

NEXCOM at a Glance

Established	Oct. 1992
Major Products	High Computing Platforms Network Security Appliances Industrial Computing Solutions
Employees	220 people (50% engineering related)
Sales Revenue	US$22 Million (2003) US$27 Million (2004) US$38 Million (2005 Forecast)
Production Capability	Space 3,000 Square Meter Boards 20K/Month Systems 2K/Month
Location	Headquarters/Factory in Taipei, Taiwan
Global Subsidiaries	US, UK, Japan, China



NexBlade™ HS416
Best Choice of COMPUTEX TAIPEI 2004 Award

Competitive Advantages

Leading Technology with Strong R&D Division

The R&D division is the greatest asset of NEXCOM. With over 15-years R&D experience in the industrial PC field, our R&D division is capable of applying the latest technology to the various industrial applications.

Within the R&D Division there are three major teams - Design, Design Support, and Verification - these teams develop and constantly innovate products in order to cater for the different customers' needs. The Design team over-sees the design and innovation of different product lines as well as solution integration, electronic and mechanical design. The Design Support team looks after certifications, software, firmware, and layout, while The Verification team ensures the product's reliability, compatibility, and functionality.

There are several outstanding world-class products innovated by NEXCOM, including:

- The world's highest density blade server - HS318A, supporting up to 280 PIII Processors in a 42U rack.
- The world's highest density/performance Xeon blade server - HS420A, supporting up to 200 Xeon processors in a 42U rack.
- The world's first fan-less embedded computer board - EBC/EBS series

All of NEXCOM's products, from the mission-critical blade server systems to our tiny embedded computer boards, are built with quality, reliability, and optimized performance.

Quality Assurance

To commit itself to product quality, NEXCOM obtained TUV approval and ISO 9001 certification in 1999. So far, NEXCOM have received at least 20 TUV approvals for its products, with a further 9 items having been certified by the National Software Testing Lab (NSTL) - few other companies in the IPC industry can match this record.

Product Flexibility and Customization

NEXCOM's products are flexible and easy to configure. They incorporate flexible, cost-effective, components and I/O interfaces, based on the customer's requirement, thus are suitable for different applications, especially for high performance analytical computing. In addition, a customization service is also available upon request.

Global Services Network

NEXCOM's branch offices and distributors around the world enable it to provide prompt and reliable support to its customers. In addition, being an associate member of the Intel Communications Alliance (ICA), NEXCOM is able to keep abreast of other world-leading, high-tech companies and provide customers with the latest technology.

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NexBlade™ Solutions

In e-Business today, a business needs more agile computing, storage and networking resources to keep ahead of its game, while keeping the total cost down. To meet greater demand for less cost, a business has to lower the TCO by reducing complexity, speeding deployment and simplifying management. NexBlade™ Solutions are a scalable, integrated infrastructure designed to integrate servers, storage, power and networking into a single, managed environment. With NexBlade™ blade servers, a business can save costs not only on equipment and power, but also on management and time. Supporting both Intel and AMD processors, NexBlade™ series are suited for a wide range of applications in scale-out environments.

NexBlade™ Key Advantages

Hi-Density & Performance

- Today's highest density of 4U rack-optimized chassis supporting up to 10 server blades with 20 Intel Xeon processors.
- Innovative platform for processor and memory intensive applications
- 32-bit and 64-bit computing power with support of Dual Intel Xeon, Xeon-EM64T, and Dual AMD Opteron processors.
- Different computing platforms can work simultaneously in one chassis

Hi-Manageability

- Integrated system management solution
- Collaborative H/W, F/W & S/W operation via an easy-to-use web user interface

Hi-Availability

- Shared redundancy of power module, storage, and networking
- Hot-swappable blade and power replacement
- Failure auto-correction and recovery

Hi-Scalability and Expansion

- Modular design scalable to any IT application or service
- PCI-X expansion supporting high bandwidth device such as Infinite Band, Myrinet or Fiber Channel, as well as SCSI or RAID storage expansion

Hi-Service

- Custom engineering and commercialization services available
- Long term service and support commitment to ensure product upgrade availability and to protect customer's investment

Server Blade

All Blades' Common Features

- Modular and Hot-Swappable Design
- "Off-the-shelf" PCI-X Expansion
- Redundant Cooling System
- Dual Gigabit LAN and One Fast Ethernet
- Built-in Intelligent Management System
- Built-in Integrated KVM Architecture
- Up to Two 2.5" Harddrives
- Fit into 4U Chassis

Summary of Server Blades

Blade Types	Model No.	Description	Applicable Chassis
64-bit Blades	HDB42742	Dual Intel Xeon EM64T Blade	HS416
	HDB42812	Dual AMD Opteron Blade	HS416
Dual Intel Xeon Blades	HDB42732	Single or Dual Xeon Blade Supporting up to 3.2Ghz CPU	HS416
	HDB42722A	Single or Dual Xeon Blade Supporting up to 2.8Ghz CPU	HS416
	HDB44722	Single or Dual Xeon Blade Supporting up to 3.06Ghz CPU w/up to Three PCI-X Expansion	HS420A
	HDB42722	Single or Dual Xeon LV Blade	HS420A
Intel Pentium III Blades	HDB31670	Intel PIII Blade w/ServerWorks LC-T Chipset	HS318A
	HDB31650	Intel PIII Blade w/Intel 815E Chipset	HS318A

64-bit Blades

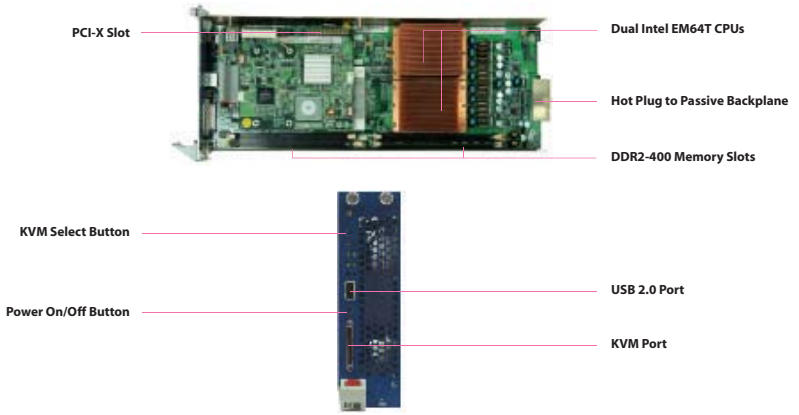
Intel Xeon EM64T 64-Bit Blade - HDB42742

Unique Features	PCI-X Expansion 32- or 64-bit Computing
Features	Supports for Single or Dual Intel Xeon EM64T 64-bit Computing Up to 16GB Memory Dual Gigabit Ethernet Ports One Fast Ethernet Port Onboard VGA One PCI-X Expansion Slot Onboard Remote Controller
Recommended Chassis for HDB42742 Blade	HS416
Potential Applications	Computer-Intensive Applications - such as HPC Clusters, Digital Effects Rendering, Genome Mapping, and High-End Digital Surveillance System Transaction-Based and High-Volume Applications - such as Financial and Communication Services

Specification

Processors	Supports Intel Dual Xeon EM64T Processor
Chipset	Intel E7520/ICH4
Memory Type	ECC Registered DDR2-400 SDRAM
Memory Capacity	Up to 16GB in Four 240-pin Dimm Sockets
Disk Controller	Onboard ATA100 IDE Controller
Storage	Supports Two 2.5" ATA 100 IDE HDDs or CompactFlash
Graphics	Onboard ATI Rage XL 8MB VGA Controller
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports One PCI-X
I/O Interface	I/O Port, Front Accessible KVM, Serial, Parallel, USB 2.0 Ports

Intel 64-bit Xeon Blade at a Glance



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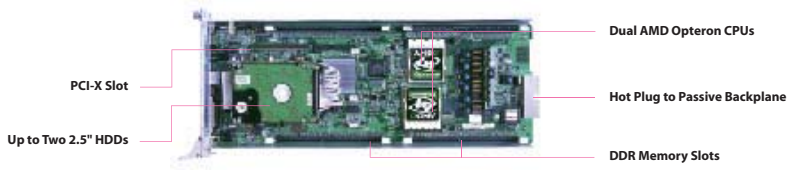
Dual AMD 64-bit Opteron Blade - HDB42812

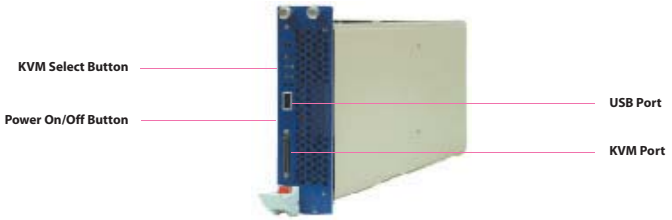
Unique Features	The First AMD Opteron Blade Server in the World 32- or 64-bit Computing PCI-X Expansion
Features	Single or Dual Opteron, with 32- or 64-bit Computing Up to 8GB Memory Dual Gigabit Ethernet Ports One Fast Ethernet Port Onboard VGA One PCI-X Expansion Slot Onboard Remote Controller
Recommended Chassis for HDB42812 Blade	HS416
Potential Applications	Computer-Intensive Applications - such as HPC Clusters, Digital Effects Rendering, and Genome Mapping Transaction-Based and High-Volume Applications - such as Financial and Communication Services

Specification

Processors	Supports AMD Dual Opteron 200 Series Processors up to 2.4Ghz with 1MB On-Die Cache
Chipset	AMD 8131/8111
Memory Type	ECC Registered DDR 200/266/333/400 SDRAM
Memory Capacity	Up to 8GB in Four 184-pin Dimm Sockets
Disk Controller	Onboard ATA 100 IDE Controller
Storage	Supports Two 2.5" ATA 100 IDE HDDs or CompactFlash
Graphics	Onboard ATI Rage XL 8MB VGA Controller
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports One PCI-X 64bit 133mhz Card
I/O Interface	I/O Port, Front Accessible KVM, Serial, Parallel, USB 1.1 Ports

HDB42812 Blade at a Glance





Dual Intel Xeon Blades

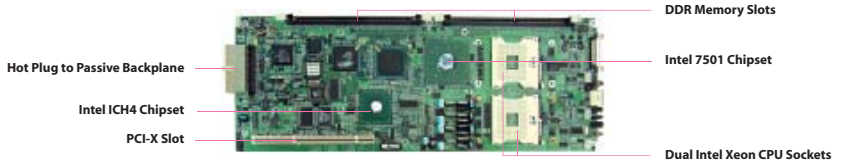
Dual Intel Xeon Blade - HDB42732

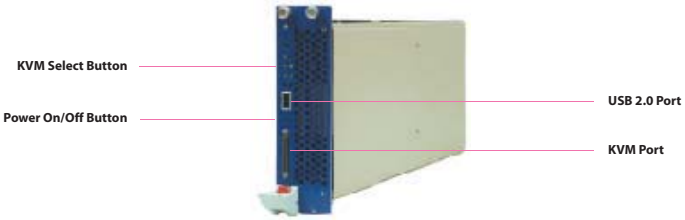
Unique Features	Supports Dual Intel 3.2GB L2 Cache 1M/L3 Cache 2M Supports USB 2.0 Port
Features	Single or Dual Intel Xeon Computing Up to 4GB Memory Dual Gigabit Etherent Ports One Fast Ethernet Port Onboard VGA One PCI-X Expansion Slot Onboard Remote Controller
Recommended Chassis for HDB42732 Blade	HS416
Potential Applications	High Performance Computing Cluster Massive Multi-Player Online Gaming Cluster

Specification

Processors	Supports Dual Intel Xeon 533/400mhz FSB up to 3.2Ghz CPU
Chipset	Intel E7501
Memory Type	ECC Registered DDR 200/266 SDRAM
Memory Capacity	Up to 4GB in Two 184-pin Dimm Sockets
Disk Controller	Onboard ATA 100 IDE Controller
Storage	Supports Two 2.5" ATA 100 IDE HDDs or CompactFlash or Disk-on Module
Graphics	Onboard ATI Rage XL 8MB VGA Controller
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports One PCI-X 64bit 133mhz card, without I/O cutout
I/O Interface	I/O Port, Front Accessible KVM, Serial, Parallel, USB 2.0 Ports

HDB42732 Blade at a Glance





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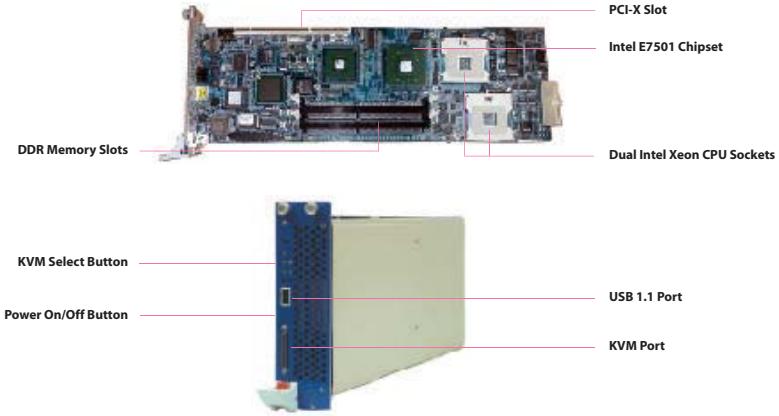
Dual Intel Xeon Blade - HDB42722A

Unique Feature	PCI-X 133mhz Expansion with I/O Cutout
Features	Single or Dual Xeon Computing Up to 4GB Memory Dual Gigabit Ethernet Ports One Fast Ethernet Port Onboard VGA One PCI-X Expansion Slot Onboard Remote Controller
Recommended Chassis for HDB42722A Blade	HS416
Potential Applications	Video or Digital Surveillance System Integrated Content Security Service Platform Mass Storage Through-Output

Specification

Processors	Supports Dual Intel Xeon 533/400mhz FSB up to 2.8Ghz CPU
Chipset	Intel E7501
Memory Type	ECC Registered DDR 200/266 SDRAM
Memory Capacity	Up to 4GB in Two 184-pin Dimm Sockets
Disk Controller	Onboard ATA 100 IDE Controller
Storage	Supports One 2.5" ATA 100 IDE HDD or CompactFlash or Disk-on Module
Graphics	Onboard C&T 69030 Graphic Controller
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports One PCI-X 64bit 133mhz card, with I/O cutout
I/O Interface	I/O Port, Front Accessible KVM & USB 1.1 Port

HDB42722A at a Glance



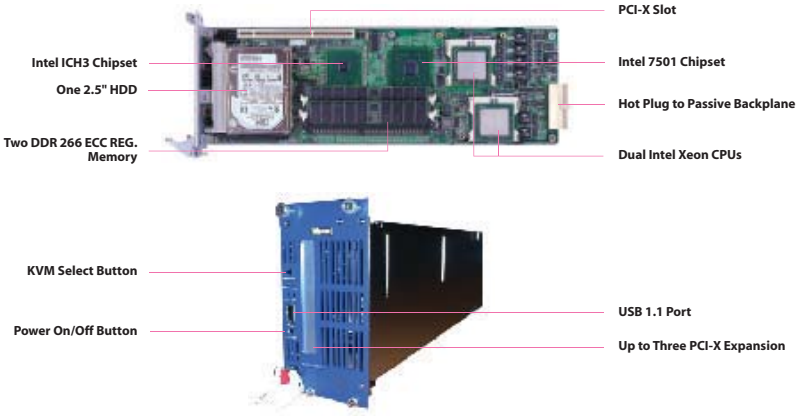
Dual Intel Xeon Blade - HDB44722

Unique Feature	Up to Three PCI-X Expansion Slots
Features	Single or Dual Intel Xeon Computing Up to 4GB Memory Dual Gigabit Ports One Fast Ethernet Port Onboard VGA Up to Three PCI-X Expansion Slots Onboard Remote Controller
Recommended Chassis for HDB44722 Blade	HS420A
Potential Applications	Integrated Security Service Platform, Digital Surveillance System

Specification

Processors	Supports Dual Intel Xeon 533/400mhz FSB up to 3.06Ghz CPU
Chipset	Intel E7501
Memory Type	ECC Registered DDR 200/266 SDRAM
Memory Capacity	Up to 4GB in Two 184-pin Dimm Sockets
Disk Controller	Onboard ATA 100 IDE Controller
Storage	Supports One 2.5" ATA 100 IDE HDD or CompactFlash or Disk-on Module
Graphics	Onboard C&T 69030 Graphic Controller
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports Three PCI-X cards, with I/O cutout
I/O Interface	I/O Port, Front Accessible USB 1.1 Port

HDB44722 at a Glance



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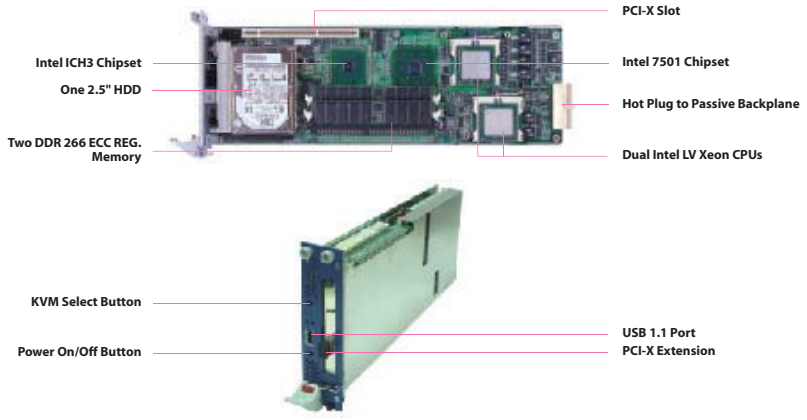
Dual Intel LV Xeon Blade - HDB42722

Unique Features	Low Power Consumption PCI-X 133Mhz High Speed Expansion with I/O Cutout
Features	Single or Dual Intel Low Voltage Computing Up to 4GB Memory Dual Gigabit Ethernet Ports One Fast Ethernet Port Onboard VGA One PCI-X Expansion Slot
Recommended Chassis for HDB42722 Blade	HS420A
Potential Applications	Video or Digital Surveillance System Integrated Content Security Service Platform Web Hosting Server, Streaming Media Application

Specification

Processors	Supports Dual Intel LV Xeon up to 2.4Ghz CPU
Chipset	Intel 7501
Memory Type	ECC Registered DDR 200/266 SDRAM
Memory Capacity	Up to 4GB in Two 184-pin Dimm Sockets
Disk Controller	Onboard ATA 100 IDE Controller
Storage	Supports One 2.5" ATA 100 IDE HDD or CompactFlash or Disk-on Module
Graphics	Onboard C&T 69030 Graphic Controller
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports One PCI-X 64bit 133mhz card, with I/O cutout
I/O Interface	I/O Port, Front Accessible USB 1.1 Port

HDB42722 at a Glance



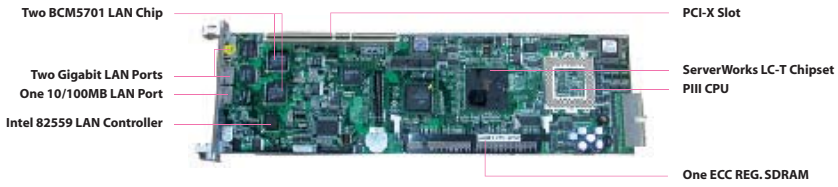
Intel PIII Server Blade - HDB31670

Unique Features	The Only PIII Blade fitted in 3U (18 Blades) Chassis PCI 66/100 Expansion Support Three Front Access LAN Ports (Two Gigabit and One Fast Ethernet Ports)
Features	Intel PIII and Celeron Computing Up to 1GB Memory Front Access Dual Gigabit Ethernet Ports Front Access One Fast Ethernet Port One PCI Expansion Slot Onboard VGA
Recommended Chassis for HDB31670 Blade	HS318A
Potential Applications	Integrated Security Service Platform Web-Centric Service Platform Network Infrastructure Server

Specification

Processors	Supports Intel PIII 1.26Ghz or Celeron 1.2Ghz
Chipset	ServerWorks LC-T
Memory Type	ECC Registered PC-133 SDRAM
Memory Capacity	Up to 1GB in One 168-pin Dimm Socket
Disk Controller	Onboard ATA 66 IDE Controller
Storage	Supports One 2.5" ATA 66 EIDE HDD or CompactFlash or Disk-on Module
Graphics	C&T69030 With 4MB
Networking	Onboard Two Gigabit Ethernet Ports and One Fast Ethernet Port
Expansion Slot	Supports One PCI 64bit 66mhz card

HDB31670 Blade at a Glance



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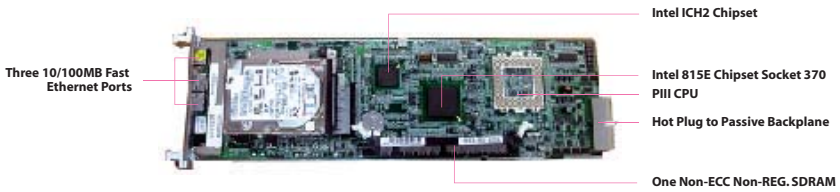
Intel PIII Server Blade - HDB31650

Unique Features	Supports Intel PIII/Celeron or VIA C3 CPU Three Front Access 10/100MB LAN Ports
Features	Intel PIII or Celeron Computing Up to 512GB Memory Three Front Access 10/100MB Ethernet Ports One 2.5" IDE HDD
Recommended Chassis for HDB31650 Blade	HS318A
Potential Applications	Integrated Security Service Platform Web-Centric Service Platform Network Infrastructure Server

Specification

Processors	Supports Intel PIII 1.26 Ghz or Celeron 1.2Ghz or VIA C3 800mhz
Chipset	Intel 815E Chipset
Memory Type	Non-ECC Non-Registered PC-133 SDRAM
Memory Capacity	Up to 512MB in One 168-pin Dimm Socket
Disk Controller	Onboard ATA 66 IDE Controller
Storage	Supports One 2.5" ATA 66 EIDE HDD or CompactFlash or Disk-on Module
Graphics	Intel 815E On-Die Display Controller
Networking	Onboard Three Fast Ethernet Ports
Expansion Slot	N/A

HDB31650 at a Glance



Server Chassis

Common Features of all Chassis

- Redundant Power Supply and System Fan
- Integrated KVM
- Industrial-Grade Steel Enclosure
- Compatible with Standard Rackmount
- Built-in Intelligent Management Architecture

HS416 Chassis (for Intel Xeon EM64T/ Intel Dual Xeon/ AMD Opteron Blades)

Unique Features	Supports Intel Xeon EM64T/Intel Dual Xeon/AMD Opteron Processors Supports the Newest Server Platform
Features	4U 19" Rackmount Chassis 6+1 Power Modules up to 2100 Watts (350W Each) 8 Server Blade Bays (Max.) 2 Gigabit Ethernet Switches/Feedthru Bays 1 Fast Ethernet Switch/Feedthru Bay 1 Management Bay KVM Switch and KVM Stacking Port 10GBs Stacking Port Support
Potential Applications	High Performance Computing Cluster Massive Multi-Player Online Gaming Cluster Integrated Security System Web Hosting Server Farm Digital Surveillance System

Specification

Enclosure	4U 19" Rackmount, Steel
Blade Bays	Up to 8 Bays (Front Access, Hot Swappable)
Backplane	2 (One Power Backplane and One Main Backplane)
Management	1 (Rear Access, Hot Swappable), Auto Discover the Presence of Blade, Report System, and KVM Switch Control
Networking	2 Gigabit Ethernet Switch/Feedthru Bays, 1 Fast Ethernet Switch Bay
Cooling System	4 Cooling Fans (Rear Access, 3+1 Redundancy, Hot Swappable)
Power Module	7 (Rear Access, 6+1 Redundancy, Hot Swappable, 350W Each), Max. 2100W, 100-240 VAC, 50/60Hz
Dimensions	426mm (W) x 177mm (H) x 670mm (D) 16.78" (W) x 6.97" (H) x 26.40" (D)
Weight (Net)	33KG (72.6LB) (Excludes Server Blade)
Environment	Relative Humidity: 10% to 90% (Non-Condensing) Operating Temperature: 5°C to 35°C

HS416 Chassis at a Glance

Front View



Rear View



Recommended Server Blades for HS416: HDB42812, HDB42742, HDB42732, HDB42722A
Recommended Networking Blades for HS416: SMB408S, CMB408, GSB408
Recommended Management Blades for HS416: AMB416, KVM420R

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HS420A (for Intel Dual or Single Xeon Blades)

Unique Features	Powerful and High Density Platform Power-Saving Design
Features	4U 19" Rackmount Chassis 6+1 Power Modules up to 2100 Watts (350W Each) 10 Server Blade Bays (Max.) 2 Gigabit Ethernet Switches/Feedthru Bays 1 Fast Ethernet Switch/Feedthru Bay Management Bay KVM Switch and KVM Stacking Port 10GBs Stacking Port for Giga LAN Switch
Potential Applications	Massive Multi-Player Online Gaming Cluster Integrated Security System Web Hosting Server Farm Digital Surveillance System Network Infrastructure Server

Specification

Enclosure	4U 19" Rackmount, Steel
Blade Bays	Up to 10 Bays (Front Access, Hot Swappable)
Backplane	2 (One Power Backplane and One Main Backplane)
Management	1 (Rear Access, Hot Swappable), Auto Discover the Presence of Blade, Report System, and KVM Switch Control
Networking	2 Gigabit Ethernet Switch Bays, 10Gbs Stacking, Copper/Fibre Ports, 1 Fast Ethernet Switch Bay
Cooling System	4 Cooling Fans (Rear Access, Hot Swappable)
Power Module	7 (Rear Access, 6+1 Redundancy, Hot Swappable, 350W Each) Max. 2100W, 100-240 VAC, 50/60Hz
Dimensions	426mm (W) x 177mm (H) x 670mm (D) 16.78" (W) x 6.97" (H) x 26.40" (D)
Weight (Net)	33KG (72.6LB) (Excludes Server Blade)
Environment	Storage Temperature: 0°C to 80°C Relative Humidity: 10% to 90% (Non-Condensing) Operating Temperature: 5°C to 35°C

HS420A Chassis at a Glance

Front View



Rear View



Recommended Server Blades for HS420A: HDB44722, HDB42722
Recommended Networking Blades for HS420A: CMB410, GSB410, SMB410S
Recommended Management Blades for HS420A: KVM420R

HS318A (for Intel Pentium III Blades)

Unique Features	Low Cost Blade Solution The Highest Density Blade Chassis Front Access Ethernet Port
Features	3U Blade Chassis Supporting up to 18 Blades Powered by Intel PIII Processor 3+1 Redundant Hot Swappable Cooling Fans Remote Server Control and Monitoring Integrated KVM Switch Hot Swappable 5+1 Redundant Modules, 250W each, Max.1250W Output
Potential Applications	Integrated Security Service Platform Web-Centric Service Platform

Specification

Enclosure	3U 19" Rackmount, Steel
Blade Bays	Up to 18 Bays (Front Access, Hot Swappable)
Backplane	2 (One Power Backplane and One Main Backplane)
Management	Hot Swappable Module KVM Switch Functions ■ Supports Keyboard/VGA/Mouse Access for All Server Blades ■ Up to 5 Chassis (Total 90 Blades) Can be Stacked Together to share one KVM Device ■ Front Accessible KVM Control Button to Select KVM among Chassis and Blades Chassis Management Functions ■ One Management Command Port in RS232 or Fast Ethernet Interface ■ One Serial Console Port for Server Blade Console Output ■ Control Power On/Off, Reset and KVM Switch ■ Monitor Chassis and Blade Status
Networking	2 Gigabit Ethernet Switches, 10Gbs Stacking, Copper/Fibre Ports 1 Fast Ethernet Switch
Cooling System	4 Cooling Fans (Rear Access, Hot Swappable)
Power Module	6 (Rear Access, N+1 Redundancy, Hot Swappable, 250W Each), Max. 1250W, 100-240 VAC Auto-Range
Dimensions	426mm (W) x 133mm (H) x 670mm (D) 16.78" (W) x 6.97" (H) x 26.40" (D)
Weight (Net)	27KG (60LB) (Excludes Server Blade)
Environment	Storage Temperature: 0°C to 80°C Relative Humidity: 10% to 90% (Non-Condensing) Operating Temperature: 5°C to 35°C

HS318A Chassis at a Glance

Front View



Rear View



Recommended Server Blades for HS318A: HDB31670, HDB31650
Recommended Management Blades for HS318A: KVM318AR, KVM318F

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Peripheral Blades

Networking Blades

GSB408C/GSB408F

Layer2 Unmanaged 12 Ports (8 Ports Internal/4 Ports External) Gigabit Ethernet Switch Blade with One 10Gb Uplink Port for HS416 Chassis



Specification

Network Protocol	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX, IEEE 802.3ab 1000 Base-T, IEEE 802.3x 1000, Base-SX IEEE 802.3x Flow Control, IEEE 802.1p CoS, IEEE 802.1Q Tagged VLAN, IEEE 802.1D Spanning Tree Protocol
Network Management	Unmanaged
Data Packet Memory	1MB On-Chip
Switching	32 Million Packets/Second MAC Address Table: 16384 VLANs: 4096 Fabric: Store and Forward Queues: 8 CoS
Switch Controller	Broadcom BCM5690 12 Ports 10/100/1000Mbps Ethernet, Copper and Fibre Interface 8 Classes of Service per Port, Supports HiGig --10Gbps Expansion Port, Supports Port Truncking and Mirroring, Supports 9126 Jumbo Packet, Built-in Advanced Fast Filter Processor
Swith Expansion Port	One HiGig™ 10Gbps Expansion Port, Supports Switch Blade to Switch Blade Direct Connection
Gigabit Ethernet Transceiver	SERDES/Copper/Fibre Gigabit Ethernet Transceiver, Two Ports for Copper Interface, Two Ports for Fiber Interface
Connector	One HSSDC2 for HiGig Expansion Port, Two RJ45 for Copper Interface Ports, Two SFP Cage for Fibre Interface Ports
Dimensions	186x256 (mm)
Environment	Operating Temperature 5°C to 35°C Storage Temperature -20°C to 80°C Relative Humidity 10% to 90% (Non-Condensing)

CMB408D

8 Ports Copper Interface Gigabit Ethernet Feedthru Blade for NexBlade HS416 Chassis



Specification

Function	Feedthru Ethernet Ports from Backplane to External Ports on Rear Panel
Gigabit Ethernet Transceiver	Broadcom BCM5464 Quad Ports SGMII/Copper/Fibre Gigabit Ethernet Transceiver
Panel Connector	8 RJ45 with Active/Link LED
Dimensions	186x256 (mm)
Environment	Operating Temperature 5°C to 35°C Storage Temperature -20°C to 80°C Relative Humidity 10% to 90% (Non-Condensing)

SMB408S

Layer2 Unmanaged 12 Ports (8 Ports Internal/4 Ports External) Fast Ethernet Switch Blade for HS416 Chassis



Specification

Network Protocol	IEEE 802.3 10 Base-T IEEE 802.3u 100 Base-TX
Network Management	Unmanaged
Swith Controller	Broadcom BCM5328 10/100Mbps Ethernet, Copper Interface
Connector	Four RJ45 for Copper Interface Ports
Dimensions	186x256 (mm)
Environment	Operating Temperature 5°C to 35°C Storage Temperature -20°C to 80°C Relative Humidity 10% to 90% (Non-Condensing)

GSB410

Layer2 Unmanaged 12 Ports (10 Ports Internal/2 Ports External) Gigabit Ethernet Switch Blade with One 10Gb Uplink Port for HS420A



Specification

Network Protocol	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX, IEEE 802.3ab 1000 Base-T, IEEE 802.3x 1000 Base-SX, IEEE 802.3x Flow Control, IEEE 802.1p CoS, IEEE 802.1Q Tagged VLAN, IEEE 802.1D Spanning Tree Protocol
Network Management	Unmanaged
Data Packet Memory	1MB On-Chip
Switching	32 Million Packets/Second MAC Address Table: 16384 VLANs: 4096 Fabric: Store and Forward Queues: 8 CoS
Switch Controller	Broadcom BCM5690 12 Ports 10/100/1000Mbps Ethernet, Copper and Fibre Interface 8 Classes of Service per Port, Supports HiGig --10Gbps Expansion Port, Supports Port Truncking and Mirroring, Supports 9126 Jumbo Packet, Built-in Advanced Fast Filter Processor
Swith Expansion Port	One HiGig™ 10Gbps Expansion Port, Support Switch Blade to Switch Blade Direct Connection
Gigabit Ethernet Transceiver	SERDES/Copper/Fibre Gigabit Ethernet Transceiver, Two Ports for Copper Interface, Two Ports for Fibre Interface
Connector	One HSSDC2 for HiGig Expansion Port, Two RJ45 for Copper Interface Ports, Two SFP Cage for Fibre Interface Ports
Dimensions	186x256 (mm)
Environment	Operating Temperature 5°C to 35°C Storage Temperature -20°C to 80°C Relative Humidity 10% to 90% (Non-Condensing)

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CMB410

10 Ports Copper Interface Gigabit Ethernet Feedthru Blade for HS420A Chassis



Specification

Function	Feedthru Ethernet Ports from Backplane to External Ports on Rear Panel
Gigabit Ethernet Transceiver	Broadcom BCM5464 Quad Ports SGMII/Copper/Fibre Gigabit Ethernet Transceiver
Panel Connector	10 RJ45 with Active/Link LED
Dimensions	186x256 (mm)
Environment	Operating Temperature 5°C to 35°C Storage Temperature -20°C to 80°C Relative Humidity 10% to 90% (Non-Condensing)

SMB410S

Layer2 Unmanaged 14 Ports (10 Ports Internal/4 Ports External) Fast Ethernet Switch Blade for HS420A



Specification

Network Protocol	IEEE 802.3 10 Base-T IEEE 802.3u 100 Base-TX
Network Management	Unmanaged
Swith Controller	Broadcom BCM5328 10/100Mbps Ethernet, Copper Interface
Connector	Two RJ45 for Copper Interface Ports
Dimensions	186x256 (mm)
Environment	Operating Temperature 5°C to 35°C Storage Temperature -20°C to 80°C Relative Humidity 10% to 90% (Non-Condensing)

Summary of Networking Blades

Networking Blades	Description	Applicable Chassis
GSB408C (Copper) GSB408F (Fibre)	12 Ports (8 Internal/4 External) Gigabit Ethernet Switch Blade w/One 10GB Uplink Port	HS416
CMB408D	8 Ports Copper Interface Gigabit Ethernet Feedthru Blade	HS416
SMB408S	12 Ports (8 Internal/4 External) Fast Ethernet Switch blade	HS416
GSB410	12 Ports (10 Internal/2 External) Gigabit Ethernet Switch Blade w/One 10GB Uplink Port	HS420A
CMB410	10 Ports Copper Interface Gigabit Ethernet Feedthru Blade	HS420A
SMB410S	14 Ports (10 Internal/4 External) Fast Ethernet Switch Blade	HS420A

Management Blades

AMB416

Switch and Chassis Management for HS420A/HS416 Chassis



- Supports Keyboard/VGA/Mouse/Switching between Server Blades
- Accepts Switch Request from Either Pushing Hot-Key Sequence or Command Packet over NexCare Management Port
- Remote Chassis Management is Provided in Web Server by Nexcare Web
- Higher Daisy Chain Capability is More Powerful than Analog Signal Device
- Internal KVM over IP Module is Optional

KVM420R

Rear Access KVM Switch and Chassis Management for HS420A/HS416 Chassis



- Supports Keyboard/VGA/Mouse/Switching between Server Blades
- Up to 20 Server Blades Can Be Switched
- Accepts Switch Request from Command Packet over NexCare Management Port
- Independent I2C Management Fabric

KVM318AR

KVM Switch and Chassis Management Module for HS318A Chassis



- Rear Access Module
- Supports KVM Switch and Chassis Management Function
- Two Rear Access KVM Switch Daisy Chain Ports for Stacking Multiple Chassis to Share One KVM Device
- One Rear Access Management Command Port in RS232 Interface or Fast Ethernet Interface
- Auto Discover the Presence of Server Blades -Control Group or Individual Server Blade
- Power ON/OFF, Restart, or KVM Switch - Report Chassis/Blade Status, and Send Alert

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Power Modules

NXP-1350P-R

Modularized Power Supply for HS416 and HS420A Chassis. 6+1 Redundant Fault-Tolerance Power Supply Available.



- Input: 100~240VAC 50/60HZ Auto Range
- Output: 3.3V/5V/12VDC, Max 350Watts

NXP-1250P-R

250Watts Hot-Swappable Power Module for HS318A Chassis



- Input: 100~240VAC 50/60HZ Auto Range
- Output: 3.3V/5V/12VDC, Max 250Watts

NexBlade™ Key Features

NexBlade™ blade server series is an impressive high-performance blade solution with high availability. Constructed with industrial standard 4U and modular frame design, NexBlade™ solution enables different computing platforms to work simontaneously in one chassis; that is, to have Intel Xeon, Xeon EM64T and AMD Opteron working together in the same enclosure.
The server chassis can interconnect the server boards with system management/control interface on backplane. The hot-swappable, redundant power modules and system cooling fans ensure a reliable operating environment with reduced cost, heat, and power usage. Built-in KVM switch, peripheral switch, and Gigabit Ethernet switch reduce the cable complexity and make the deployment and management much easier. Likewise, multiple chassis can also be stacked together to share KVM devices by linking KVM daisy chain ports reserved on each chassis. With onboard PCI-X expansion slot, each Server Blade can operate with off-the-shelf PCI-X add-on cards, such as Fiber Channel HBA, SSL accelerator, or InfiniBand HCA to meet diverse application requirements. More important, the built-in remote management module makes system administration easy to remotely control and monitor the NexBlade™ systems anytime and anywhere securely. With integrated connectivity and shared redundancy, NexBlade™ solutions intelligently facilitate the sharing of resources, thus consequently helping companies to benefit from the reduced TCO.

Key Features

- Space and Power saving
- Integrated KVM Architecture
- 10Gbps High Speed for Inter-Chassis Connection
- Off-the-Shelf PCI-X Expansion
- Redundant Cooling System Design
- Powerful Management
- Enhanced Product Image



1U Servers *Blade Servers*

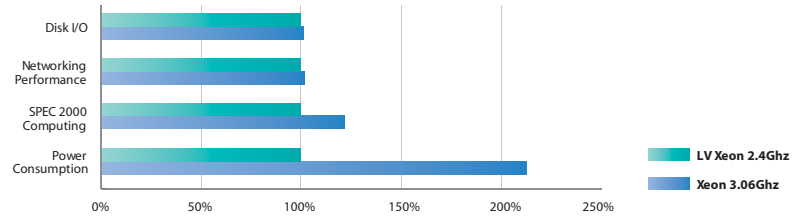
Space and Power Saving

NexBlade™ Series is currently the highest-density blade server that takes the 4U form factor with 8-server blades. By modular and resource-sharing design can these systems share the I/O devices installed, thus saving space and resources. Likewise, power-sharing is made possible with the power management. There are 7 power modules in the chassis. Each module comes with an output of 350W (DC12V), meaning a total power output of 2100W can be had. The power modules, connected to the backplane of the power source, distribute power to the entire system, thus catering to those who can use needed energy without having to waste it.

Xeon CPU v.s. LV Xeon CPU Comparison Table

	Power Consumption and Cooling	CPU Clock Speed	Computing SPEC2000	Networking (Mbit/sec)	Disk I/O (MB/S)
Dual XEON 3.06GHz	Up to 170Watts	3.06GHz	1056	863	
Dual LV XEON 2.4GHz	Up to 80Watts	2.4GHz	815	840	
Performance Comparison	112% more	27% more	22% more	2% more	<1% more

LV Xeon 2.4Ghz CPU v.s. Xeon 3.06Ghz CPU Comparison Chart

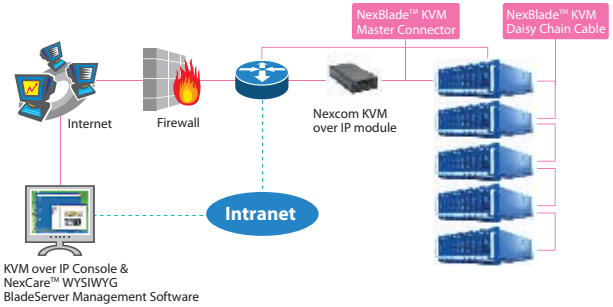


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Integrated KVM Architecture

In order to reduce the cabling, Nexblade™ series adopts IP management solution, the remote (over IP) KVM structure accessible by the NexBlade™ HS416 built-in KVM switching module to control each server blade's KVM.
The NexBlade™ incorporates distinguished features like built-in daisy-chained KVM switch with support up to 5 chassis. Customers can now easily add more servers without the problem of KVM wiring and management. The Administrator can immediately get friendly full remote (over IP) functions of the management control for all blade servers at any time, any where in the world.

NexBlade™ KVM over IP Switching & Blades Management Solution



NexBlade™ HS416

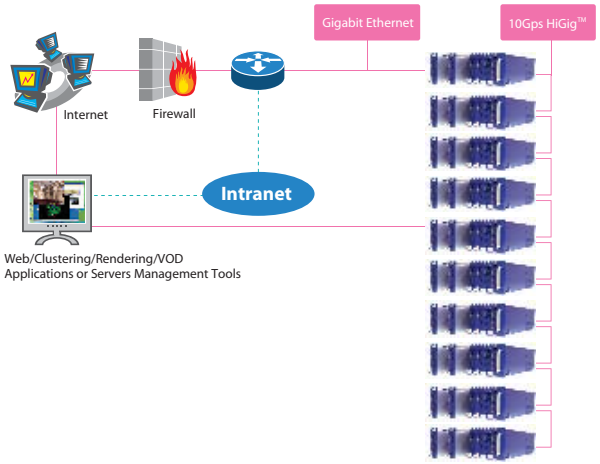
Up to 40 server blades can be easily daisy chained together with only one NEXCOM KVM over IP module to control them all remotely over the internet.

No expensive additional hardware required!!

10Gbps High Speed for Inter-Chassis Connection

With built-in 10 Gbps HiGig™ up-link port and 10-port gigabit switch, the NexBlade™ enables users to enjoy the benefits of high performance, lost cost, easy installation and maintenance. It is well-suited for today's intensive network traffic environment, such as 3D rendering, clustering, vedio-on-demand application, online gaming, etc.

NexBlade™ Inter-Chassis 10 Gbps HiGig Up-Link Solution



NexBlade™ HS416/HS420A

One standard 42U-19" server rack, supporting up to 10 Chassis (100 Server Blades, in total 200 Xeon CPU), can be easily linked together with their internal 10 Gbps HiGig Up-Link ports.

Without any additional hardware!!

Off-the-Shelf PCI-X Expansion

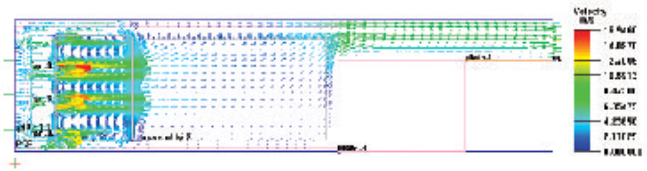


NEXCOM's blade server technology is able to provide up to 3 standard PCI-X (64-bit at 66/100/133MHz) expansion slots found on the server blades. Users are now free to choose from any off-the-shelf standard PCI-X card or specific add-on cards to fit into each server blade, such as hardware SSL accelerator, fiber channel HBA, InfiniBand HCA, Myrinet, multi-channel video capture card, etc. With the PCI-X expansion, the NexBlade™ is easily linked to SAN or coverted into other application environment, such as a scalable DVR, intelligent video surveillance system, CTI with voice recognition, enterprise-level Internet security solution, and the like. This notable feature will provide user with the outstanding performance that suppasses all other blade servers in the marketplace.

Redundant Cooling System Design

The NexBlade™ adopts the 1+1 modular design to solve the heat-dissipation problem. In addition to the (3+1) redundant cooling system fan, each server blade is also equipped with a fan of the same kind, thus making the ventilation more effective, even in a dense environment. With the redundant fan installed, any fan found malfunctioned will be of no concern at all. The design with patent wins NexBlade™ blade server the honor of the smallest-sized and highest-density blade solution.

HS416 Heat Dissipation Chart

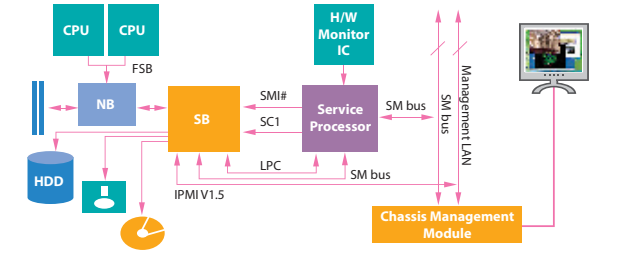


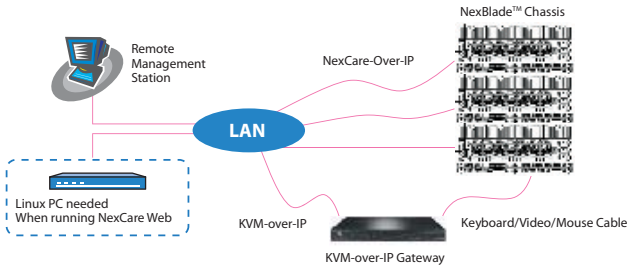
Powerful Management

NexCare™ , offered by NEXCOM, is a powerful monitoring and managing software, specially designed for NexBlade™ server series, including the HS318A, HS420A and HS416. With NexCare™, users can monitor the status of each blade, set the system warning values, remotely control all management functions and execute many important tasks. All NexBlade™ servers are equipped with one management blade in order to maintain the health status of the system; control power, ensuring that there are no fluctuations; and reset each individual server blade if one goes wrong. The same technology is in the chassis where one management controller is installed to maintain the health status of the chassis, provide each individual blade within the chassis with remote services, such as Power On/Off, Restart and the KVM switch.

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NexBlade™ Management Architecture





*** Your System Can Be Remotely Controlled and Monitored through an Ethernet Connection.

Enhanced Product Image

At present, most 1U rackmount servers are, undoubtedly, the assembled kind, but when it comes to scalability, many problems, such as cabling, management, power consumption, etc. surface. Even worse is that there is no hardware conformity, thus lowering product value. NexBlade™ series offers highly-efficient computing, and with modular and hot-swappable design, its system can be easily expanded, maintained, be energy efficient and resource-shared. With the concept of the ID design of telecom products, the environment can be protected, and at the same time, it gives you a lower price yet enhanced product value.

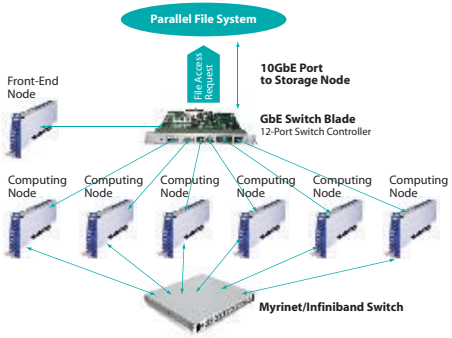
Comparison Table of NexBlade™ Blade Server and 1U Rackmount Server

	Per Rack	1U	NexBlade™ HS416	Reduction/ Addition
High Density	Max. Server No.	42	80	90.5%
	Max. Processor No.	84	160	90.5%
Resource Sharing	Power Consumption Per Server	400	250	-37.5%
	Total I/O Devices (KVM/CD-ROM/FDD)	32	1	-97.6%
Easy Maintenance	KVM Cabling	126	16	-87.3%
	Ethernet Cabling	126	30	-76.2%
	Power Cord Cabling	84	30	-64.3%
	Server Modular and Hot-Swap Design	NO	YES	+∞
	Powerful Management S/W	NO	YES	+∞

NexBlade™ Applications

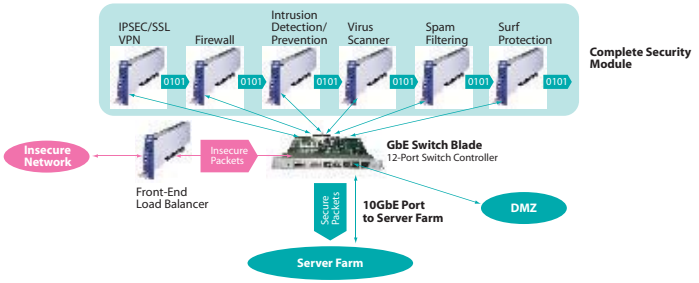
PC Cluster

Both cluster and server blade are the same kind in many respects. Cluster includes hundreds of servers, whereas a server blade can be slid into a thin computer cabinet, thus saving space when compared with the rackmounted type. As a result, cluster is suitable for the blade server system.
Firstly, one server blade acts as the front-end node, and the rest of the blades as computer nodes. The front-end node can assign and manage jobs to each node through a gigabit switch. For MPI (Message Passing Interface), users can select the built-in Gigabit Lan port or plug a standard Myrinet/InfiniBand PCI-X card in an off-the-shelf interface to connect high-speed switch (Myrinet/InfiniBand switch). The blade server's modular and hot-swappable design enable users to easily add computer nodes or maintain the system.



Integrated Security

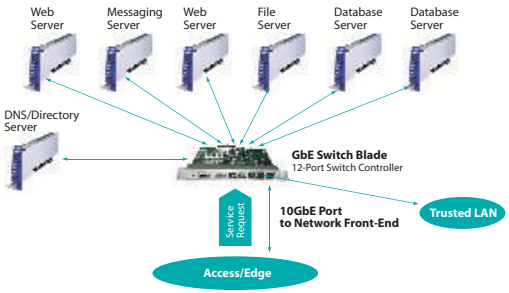
Both the development of Internet and Security are relatively important. Currently, the all-in-one Internet security infrastructure can meet users' requirements, but the amount of Internet information is explosively increasing. Intrusion by hackers also increase the demand for security computing platforms.
One good thing about blade servers is its modular design. In the security applications we suggest customers use programming modular, thus enabling each node to be responsible for different checking processes. The off-the-shelf PCI-X interface connected to the standard Quad GigaLAN ports can act as a front-end server connected to insecure network. Through the loading balancer software, work load can be evenly divided among different security processing blades. Each different complete security module comes with different server blade whose job is to complete seperate checking processes. When the processing effort is not enough, administrator can increase processing blades, thus the system can easily be upgraded.



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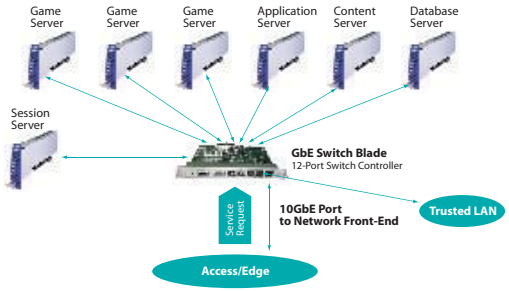
Web Hosting Server Farm

Currently the x86 server is employed for setting up web hosting server infrastructure. However, in the minds of the enterprises, it is difficult to further expand when the volume of information processing or the number of users increases. As blade server is modular in design, in web hosting, each server blade may have a different application. When there is a need for more, an extra server blade can be added. For example, the off-the-shelf PCI-X interface can be used by connecting to the fiber channel PCI-X card connected to an external SAN, which then acts as a data server or file server.



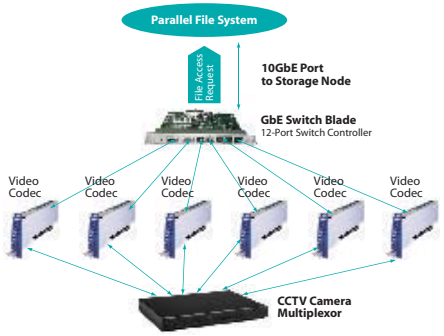
On-Line Gaming Server Cluster

As the use of the Internet is increasing by leaps and bounds, so is online gaming. To meet these users' needs for speed and efficiency, a game server is needed. Thus, in this case, a blade server is suitable for these requirements. The off-the-shelf PCI-X interface, connected to the fiber channel PCI-X card and then to an external SAN, is employed as a data server or file server.



Digital Surveillance System

Increased fear of crime and terrorism has turned security into an extremely important issue. To avoid this threat, public places are installing round-the-clock surveillance systems to monitor and record video images. All images are captured and compressed, thus saving storage space. Each server blade utilizes an off-the-shelf PCI-X interface to connect a video codec PCI-X card. Then through the Ethernet, the compressed images from each camera are saved and stored in the database.

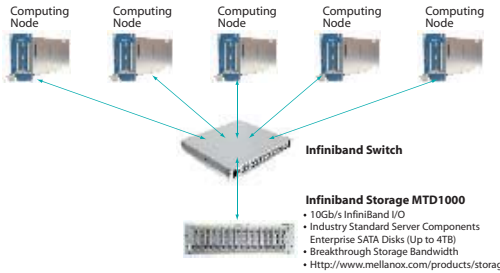


NexBlade™ Storage Solutions

Solution I

Infiniband Storage

In HPC applications, Infiniband is used for storage of data. Thus, for a quick storage of data, Infiniband storage is the best choice as the figure is shown below. Each server blade is connected to the Infiniband PCI-X card and through the Infiniband switch, data is saved and stored.

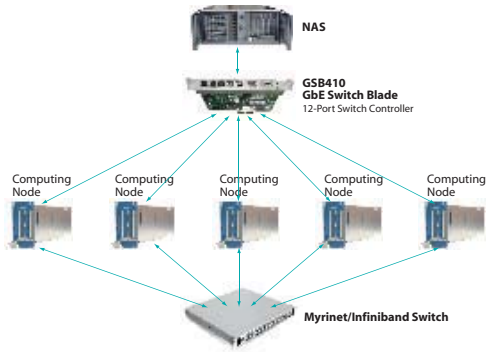


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Solution II

NAS

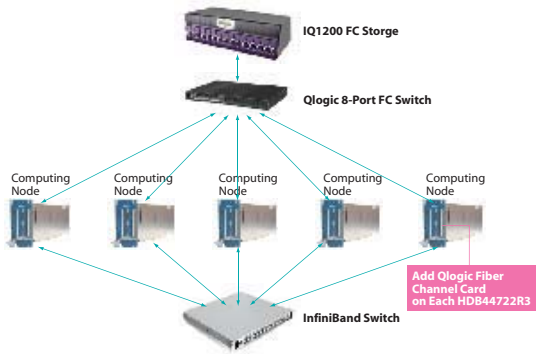
As the cost of SAN setup are high, NAS can be an alternative if the required performance does not need to be high. In the figure shown below, each blade server via the built-in GigaLAN port and the GigaLAN switch, is connected to NAS for storage of data, which is very economical.



Solution III

SAN

In addition to Infiniband storage used for speedy storage systems, fiber channel can be used for setting up FC-SAN, also used for storage purposes. As shown in the figure below, each server blade is connected to the standard fiber channel PCI-X card, and through the fiber channel switch, data are thus saved and stored.



Services

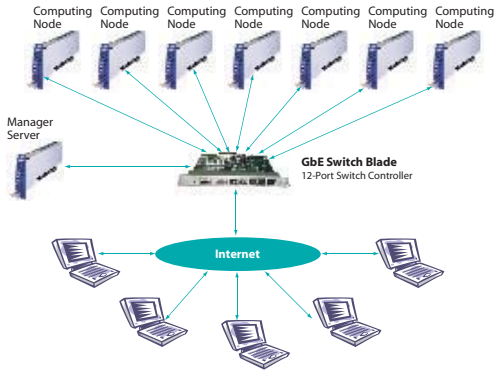
OEM Customization

Level 1	Color Change and Logo Re-brand	Customer can change the color of the chassis and the server blade panel or re-brand the company logo. Color pantone number is needed, but no NRE required.
Level 2	Mechanical Re-design	Nexcom also offers the services of the re-design of server front panel and the modification of chassis outline. Product ID is needed, but no NRE required.
Level 3	OEM	Contract manufacturing. The service scope includes material purchasing, manufacturing, system function testing, customer software pre-loading, and delivery service to customer designated location.
Level 4	New ODM project	The Design of new blade or chassis architecture is available. NRE is needed.

Remote Evaluation

NEXCOM offers blade server benchmark facilities in the R&D center. Customers can use these facilities to test their specific operating system and applications by logging into these facilities from their locations. Customers can get ID and password from NEXCOM, and tell NEXCOM when you like to do the benchmark. The benefits are:

- Customer can fully explore NEXCOM blade server platform by running their specific system environments and applications. This can reduce significantly the customer's risk before going to field production.
- By running benchmark, it can help customer to configure a right system configuration.
- It can save the transportation cost and reduce the technical clarification time.



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Order Information

HS416

Chassis		Description
Base Model	**HS416 (P/N:1H00041610)**	· 4U 19" Rackmount Chassis · 8 Server Blade Bays, 2 Gigabit Ethernet Switch Bays, 1 Fast Ethernet Switch Bay, 2 Management LAN Switch Bays · 7 Power Modules Bays, Support 110~240VAC input · 4 Hot-Swappable FAN Modules · 1 KVM Daisy Chain Cable, L=26cm · 8 Filler Panels for Empty Server Blade Bays
Management Module	**NEXKVM420/Rear (P/N:20DN420RF0)**	· KVM Switch and Chassis Management Module · Built-in KVM Switch and Remote Chassis Management Module · Support KVM Daisy-Chain up to 5
	AMB416 (P/N:TBD)	· KVM Switch and Chassis Management Module · Built-in KVM Switch and Remote Chassis Management Module · Supports KVM Hot Key Control · Supports KVM Daisy-Chain up to 16
Network Expansion	**CMB408D (P/N:1DCMB40800)**	· 8 Ports Gigabit Ethernet Feedthru · Eight 1000Mb Copper Interface Passthru Ports
	GSB408C (P/N:1DGSB40801)	· 12 Ports Layer2 Smart Gigabit Ethernet Switch · Four 10/100/1000Mb Copper Interface Uplink Ports · One 10Gbps Stacking Port · One 10Gbps Stacking Cable, L=50cm · One Serial Console Port
	GSB408F (P/N:1DGSB40802)	· 12 ports Layer2 Smart Gigabit Ethernet Switch · Four 1000Mb Fibre Interface Uplink Ports (FibreTransciever not Included) · One 10Gbps Stacking Port · One 10Gbps Stacking Cable, L=50cm · One Serial Console Port
	SMB410S (P/N:1DSMB41001)	· 16 Ports Layer2 Unmanaged Fast Ethernet Switch · Four 10/100Mb Copper Interface Uplink Ports
Power Expansion	**NXP-1350P-R (P/N:7420350001)**	· 350W Hot-Swappable Power Supply Module
	DNXP-1350 (P/N:7400000001)	· Dummy Power Module for Hi-Server Serial
Peripheral Expansion	**NEXIK408 (P/N:1DNIK40800)**	· IDE Slim Combo /USB FDD Peripheral Module for HS416 Chassis

Server Blade		Description
Base Model	**HDB42732 (w/o CPU/RAM/HDD) (P/N:1D04273200)**	· Supports Dual Intel XEON with 400/533MHz FSB, up to 3.2GHz · Intel E7501 Chipset · Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM · ATI RAGE-XL Display Controller · Onboard ATA100 IDE Controller, up to Two 2.5" HDD · Broadcom BCM5704S, Dual Gigabit Ethernet Ports · 10/100Mb Management LAN · IPMI v1.5
	HDB42732I3 (w/o CPU/RAM/HDD) (P/N:1D04273201)	· Supports Dual Intel XEON with 400/533MHz FSB, up to 3.2GHz · Intel E7501 Chipset · Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM · ATI RAGE-XL Display Controller · Onboard ATA100 IDE Controller, up to Two 2.5" HDD · Broadcom BCM5704S, Dual Gigabit Ethernet Ports · 10/100Mb Management LAN · IPMI v1.5 · One Slot PCI-X Riser Card for 3.3V VIO w/o I/O Panel Cutout
	HDB42732I5 (w/o CPU/RAM/HDD) (P/N:1D04273202)	· Supports Dual Intel XEON with 400/533MHz FSB, up to 3.2GHz · Intel E7501 Chipset · Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM · ATI RAGE-XL Display Controller · Onboard ATA100 IDE Controller, up to Two 2.5" HDD · Broadcom BCM5704S, Dual Gigabit Ethernet Ports · 10/100Mb Management LAN · IPMI v1.5 · One Slot PCI-X Rser Card for 5V VIO w/o I/O Panel Cutout
	HDB42722AI3 (P/N:1D04272210)	· Supports Dual Intel XEON with 400/533MHz FSB, up to 2.66GHz · Intel E7501 Chipset · Two 184-pin DIMM Sockets, up to 4GB DDR200 SDRAM · C&T69030 Display Controller · Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card · Broadcom BCM5704S, Dual Gigabit Ethernet Ports · 10/100Mb Management LAN · One Slot PCI-X Riser Card for 3.3V VIO w/ I/O Panel Cutout
	HDB42722AI5 (w/o CPU/RAM/HDD) (P/N:1D04272211)	· Supports Dual Intel Xeon with 400/533MHz FSB, up to 2.66GHz · Intel E7501 Chipset · Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM · C&T69030 Display Controller · Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card · Broadcom BCM5704S, Dual Gigabit Ethernet Ports · 10/100Mb Management LAN · One Slot PCI-X Riser Card for 5V VIO w/ I/O Panel Cutout
	HDB42742I3 (w/o CPU/RAM/HDD) (P/N:1D04274201)	· Supports Dual Xeon EM64T Series Processor FSB800MHz · Intel7520/ICH4 Chipset · Four 240-pin DIMM Sockets, up to 16GB DDRII ECC SDRAM · ATI RAGE-XL VGA Controller · Two onboard 2.5" ATA100 IDE HDD · Up to Two Gigabit Ethernet Ports and One Fast Ethernet Port · One Slot PCI-X Riser Card for 3.3V VIO w/ I/O Panel Cutout
	HDB42742I5 (w/o CPU/RAM/HDD) (P/N:1D04274202)	· Supports Dual Xeon EM64T Series Processor FSB800MHz · Intel7520/ICH4 Chipset · Four 240-pin DIMM Sockets, up to 16GB DDRII ECC SDRAM · ATI RAGE-XL VGA Controller · Two Onboard 2.5" ATA100 IDE HDD · Up to two Gigabit Ethernet Ports and One Fast Ethernet Port · One Slot PCI-X Riser Card for 5V VIO w/ I/O Panel Cutout
	HDB42812I3 (w/o CPU/RAM/HDD) (P/N:1D04281201)	· Supports Dual AMD 200 Series Processor up to 2.4GHz with 1MB On-Die Cache, Supports 64- bit Extension · AMD 8131/8111 Chipset · Four 184-pin DIMM Sockets, up to 8GB DDR400 ECC SDRAM · ATI RAGE-XL VGA Controller · Two Onboard 2.5" ATA100 IDE HDD · Up to Two Gigabit Ethernet Ports and One Fast Ethernet Port · One Slot PCI-X Riser Card for 3.3V VIO w/ I/O Panel Cutout
	HDB42812I5 (w/o CPU/RAM/HDD) (P/N:1D04281202)	· Supports Dual AMD 200 series Processor up to 2.4GHz with 1MB On-Die Cache, Supports 64-bit Extension · AMD 8131/8111 Chipset · Four 184-pin DIMM Sockest, up to 8GB DDR400 ECC SDRAM · ATI RAGE-XL VGA Controller · Two Onboard 2.5" ATA100 IDE HDD · Up to two Gigabit Ethernet Ports and One Fast Ethernet Port · One Slot PCI-X Riser Card for 5V VIO w/ I/O Panel Cutout

Optional Parts		Description
	KVM-D15P1 (P/N:7800000007)	· KVM Drawer with One Set of K/V/M Input and 15" LCD
	KVM-IP (P/N:P1000001043)	· KVM over IP Module
	Sliding Rail (P/N:5050200009)	· 24" Sliding Rail for HiServer

HS420A

Chassis		Description
Base Model	**HS420A (P/N:1H00420A15)**	· 4U 19" Rackmount Chassis · 10 Server Blade Bays, Two Gigabit Ethernet Switch Bays, One Fast Ethernet Switch Bay, and Two Management LAN Switch Bays · 7 Power Modules Bays, Support 110~240VAC Input · 4 Hot-Swappable FAN Modules · One KVM Daisy Chain Cable, L=26cm · Ten Filler Panels for Empty Server Blade Bays
Management Module	**NEXKVM420/Rear (P/N:20DN420RF0)**	· KVM Switch and Chassis Management Module · Built-in KVM Switch and Remote Chassis Management Module · Supports KVM Daisy-Chain up to 5
Network Expansion	**CMB410 (P/N:1DCMB41000)**	· 10 Ports Gigabit Ethernet Feedthru · Ten 1000Mb Copper Interface Passthru Ports · 12 ports Layer2 Smart Gigabit Ethernet Switch · Two 10/100/1000Mb Copper Interface Uplink Ports · Two 1000Mb Fibre Interface Uplink Ports (Fibre Transciever not Included) · One 10Gbps Stacking Port

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Network Expansion	**GSB410 (P/N:1DGSB41000)**	・12 ports Layer2 Smart Gigabit Ethernet Switch ・Two 10/100/1000Mb Copper Interface Uplink Ports ・Two 1000Mb Fibre Interface Uplink Ports (Fibre Transciever not Included) ・One 10Gbps Stacking Port ・One 10Gbps Stacking Cable, L=50cm ・One Serial Console Port
	SMB410S (P/N:1DSMB41001)	・16 Ports Layer2 Unmanaged Fast Ethernet Switch ・Four 10/100Mb Copper Interface Uplink Ports
Power Expansion	**NXP-1350P-R (P/N:7420350001)**	・350W Hot-Swappable Power Supply Module
	DNXP-1350 (P/N:7400000001)	・Dummy Power Module for Hi-Server Serial
Peripheral Expansion	**NEXIK410 (P/N:1DNIK41000)**	・IDE CDROM/USB FDD Peripheral Module for Chassis
	NEXIK410D (P/N:1DNIK41001)	・IDE DVDROM/USB FDD Peripheral Module for Chassis
Server Blade		**Description**
Server Blade	**HDB42722 (w/o CPU/RAM/HDD) (P/N:1D04272200)**	・Supports Dual Intel LV XEON with 400MHz FSB, up to 2.4GHz ・Intel E7501 Chipset ・Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM ・C&T69030 Display Controller ・Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card ・Broadcom BCM5704S, Dual Gigabit Ethernet Ports ・10/100Mb Management LAN
	HDB42722I3 (w/o CPU/RAM/HDD) (P/N:1D04272206)	・Supports Dual Intel LV XEON with 400MHz FSB, up to 2.4GHz ・Intel E7501 Chipset ・Two 184-pin DIMM Sockets, up to 4GB DDR200 SDRAM ・C&T69030 Display Controller ・Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card ・Broadcom BCM5704S, Dual Gigabit Ethernet Ports ・10/100Mb Management LAN ・One Slot PCI-X Riser Card for 3.3V VIO w/ I/O Panel Cutout
	HDB42722I5 (w/o CPU/RAM/HDD) (P/N:1D04272207)	・Supports Dual Intel LV XEON with 400/533MHz FSB, up to 2.4GHz ・Intel E7501 Chipset ・Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM ・C&T69030 Display Controller ・Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card ・Broadcom BCM5704S, Dual Gigabit Ethernet Ports ・10/100Mb Management LAN ・One Slot PCI-X Riser Card for 5V VIO w/ I/O Panel Cutout
Double-Sized Blade	**HDB44722HR3 (w/o CPU/RAM/HDD) (P/N:1D04472213)**	・Supports Dual Intel XEON with 400/533MHz FSB, up to 3.06GHz ・Intel E7501Chipset ・Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM ・C&T69030 Display Controller ・Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card ・Broadcom BCM5704S, Dual Gigabit Ethernet Ports ・10/100Mb Management LAN ・Three Slots PCI-X Riser Cards for 3.3V VIO w/ I/O Panel Cutout
	HDB44722HR5 (w/o CPU/RAM/HDD) (P/N:1D04472214)	・Supports Dual Intel XEON with 400/533MHz FSB, up to 3.06GHz ・Intel E7501 Chipset ・Two 184-pin DIMM Sockets, up to 4GB DDR266 ECC SDRAM ・C&T69030 Display Controller ・Onboard ATA100 IDE Controller, One 2.5" HDD, DOM, CF Card ・Broadcom BCM5704S, Dual Gigabit Ethernet Ports ・10/100Mb Management LAN ・Three Slots PCI-X Riser Cards for 5V VIO w/ I/O Panel Cutout
Storage Expansion	**HDCF420 (P/N:)**	・CompactFlash/DOM Adapter for Server Blade
Optional Parts		**Description**
	KVM-D15P1 (P/N:7800000007)	・KVM Drawer with One Set of K/V/M Input and 15" LCD
	KVM-IP (P/N:P000001043)	・KVM over IP Module
	Sliding Rail (P/N:5050200009)	・24" Sliding Rail for HiServer

HS318A

Chassis		**Description**
Base Model	**HS318A-DC-SM HS318A chassis w/CD-ROM (P/N:1H00318A00)**	・3U 19" Rackmount Chassis ・18 Server Blade Bays ・5+1 Redundant Hot-Swappable Power Modules, 1250W Output, 110~240VAC input ・4 redundant hot swappable FAN ・Built-in KVM Switch and Chassis Management ・Built in CD-ROM, FDD ・NexCare Management Remote Module ・9 Filler Panels for Empty Server Blade Bays
Server Blade		**Description**
Server Blade	**HDB31670 (P/N: 1D031670D0)**	・Intel Celeron & Tualatin at 100/133MHz FSB, up to 1.26GHz ・Supports SDRAM up to 1GB, DIMM Socket x 1 ・Server Works LC-T Chipset ・C&T69030 Display Controller ・Broadcom BCM5701 Gigabit Ethernet x 2, Intel 82559 Fast Ethernet x 1
	HDB31650T (P/N:1D031650E0)	・Intel Celeron & Tualatin with 100/133MHz FSB, up to 1.26GHz ・Supports SDRAM up to 512MB, DIMM Socket x 1 ・Intel 815E Chipset, On-Chip Display Controller ・Intel 82559 Fast Ethernet x 3
Expansion Options	**NXIO-I3 (P/N:1Z0PCI6401)**	・One PCI-X Slot Riser Card for 3.3V VIO
	NXIO-I5 (P/N:1Z0PCI6402)	・One PCI-X Slot Riser Card for 5V VIO
	HDB-CF (P/N: 1D0000CF00)	・Compact Flash Adapter with 44pin IDE Connector
Optional Parts		**Description**
	KVM-D15P1 (P/N:7800000007)	・KVM Drawer with One Set of K/V/M Input and 15" LCD
	KVM-IP (P/N:P/N:P1000001043)	・KVM over IP Module
	Sliding Rail (P/N:5050200009)	・24" Sliding Rail for HiServer



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