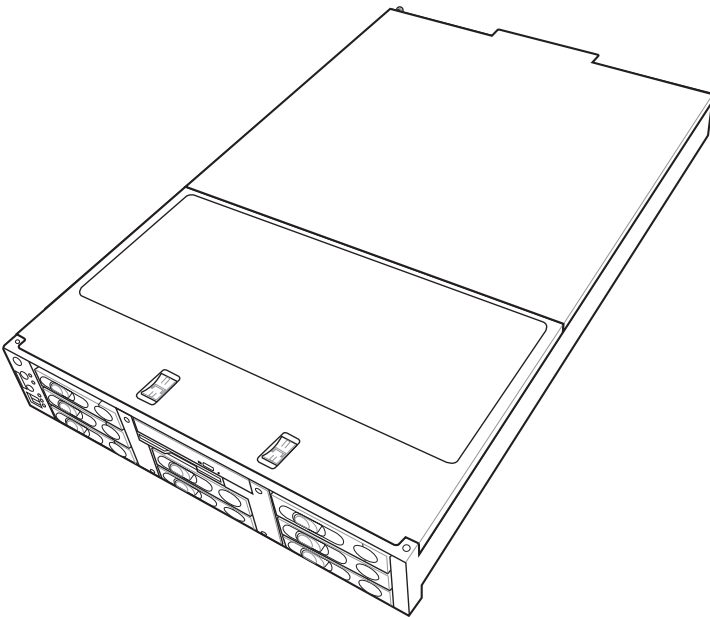




RS260-E4/RX8

Configuration Guide



E4222

First Edition V1

October 2008

Copyright © 2008 ASUSTeK COMPUTER INC. All Rights Reserved.

No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of ASUSTeK COMPUTER INC. ("ASUS").

ASUS provides this manual "as is" without warranty of any kind, either express or implied, including but not limited to the implied warranties or conditions of merchantability or fitness for a particular purpose. In no event shall ASUS, its directors, officers, employees, or agents be liable for any indirect, special, incidental, or consequential damages (including damages for loss of profits, loss of business, loss of use or data, interruption of business and the like), even if ASUS has been advised of the possibility of such damages arising from any defect or error in this manual or product.

Specifications and information contained in this manual are furnished for informational use only, and are subject to change at any time without notice, and should not be construed as a commitment by ASUS. ASUS assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual, including the products and software described in it.

Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification or alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owners' benefit, without intent to infringe.

Contents

Contents III

Revision history III

Safety information IV

Chapter 1: Product introduction

1.1 Key features..... 1-2

1.2 System overview 1-3

1.3 Front panel features..... 1-4

1.4 Rear panel features 1-5

1.5 System specifications 1-6

Chapter 2: Components

2.1 Upgrading CPU and CPU heatsink 2-2

2.2 Upgrading system memory 2-3

2.3 Upgrading hard disk drives..... 2-4

2.4 Installing ASUS RAID card 2-5

2.5 Installing ASUS Server Management Board 2-6

2.6 Upgrading power supply unit 2-7

2.7 OS support list 2-8

Revision history

Revision	Revision history	Date
V1	First release of RX260-E4/RX8 configuration guide	October 2008

Safety information

Electrical Safety

- Before installing or removing signal cables, ensure that the power cables for the system unit and all attached devices are unplugged.
- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing any additional devices to or from the system, contact a qualified service technician or your dealer. Ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you service.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your dealer.

Operation Safety

- Servicing of this product or units is to be performed by trained service personnel only.
- Before operating the server, carefully read all the manuals included with the server package.
- Before using the server, make sure all cables are correctly connected and the power cables are not damaged. If any damage is detected, contact your dealer as soon as possible.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Place the server on a stable surface.



This product is equipped with a three-wire power cable and plug for the user's safety. Use the power cable with a properly grounded electrical outlet to avoid electrical shock.

Lithium-Ion Battery Warning

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

CD-ROM Drive Safety Warning

CLASS 1 LASER PRODUCT

Heavy System

CAUTION! This server system is heavy. Ask for assistance when moving or carrying the system.

Chapter 1

This chapter describes the key features of RX260-E4/RX8. It includes the product overview and general specifications.

Product introduction

1.1 Key features

As one of the Taiwan Excellence Winners in 2006, ASUS Server RS260-E4/RX8 is based on two Dual-Core Intel® Xeon® processor 5000/5100 Sequence or Quad-Core Intel® Xeon® processor 5300/5400 Sequence, FSB 1333MHz and up to 8M L2 cache. Running on the Intel® 5000P MCH, and Intel® 6321ESB I/O Controller Hub chipset, it supports 64-bit computing to deliver outstanding performance upgrade. The RS260-E4/RX8 also supports 8 hot-swap SAS or SATA2 HDDs within the limited 2U server space. The 12 DIMM slots enable DDR2 533/667 fully buffered memory up to 48GB, significantly raising memory performance of server systems. RS260-E4/RX8 provides the high performance brought by the latest technology and ASUS unique features.

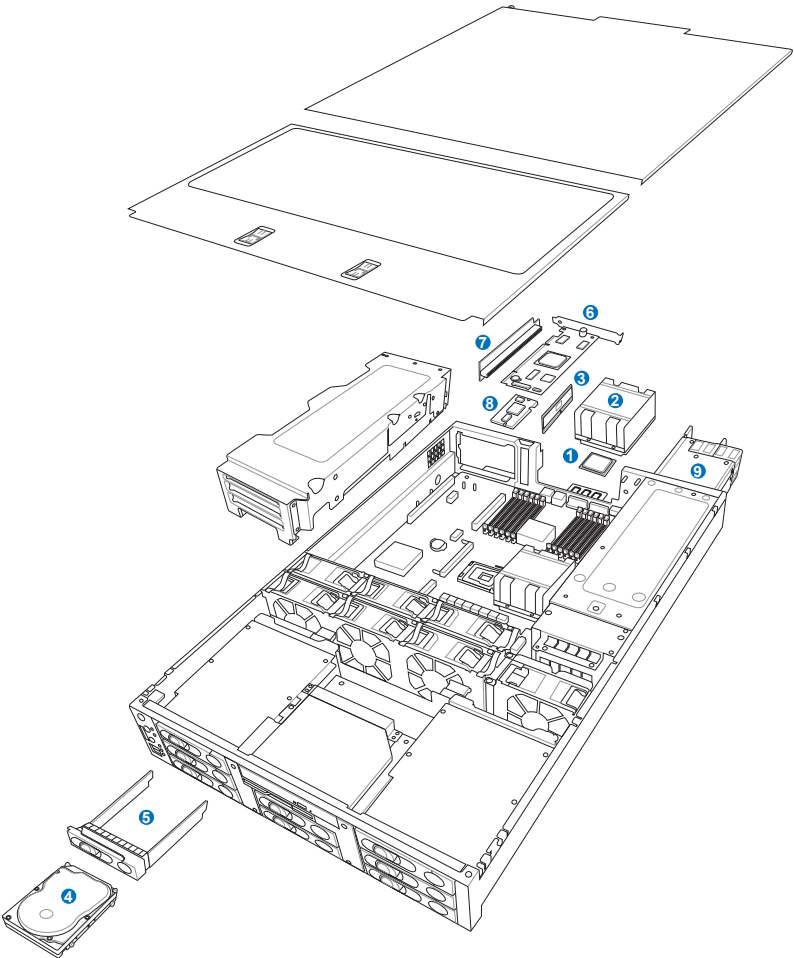
The RS260-E4/RX8 offers complete RAID functions: RAID 0, 1, 1E, providing reliable data protection. In addition, optional ZCR PCI-X card for customer, providing hardware RAID 5, 50 function for upgrading in the future. Such storage solutions help enterprises get highest level of data integrity, storage efficiency, system usability, and application flexibility.

The system thermal is always the key factor which affects system stability. Thermal solution is critical for maintaining system temperature, so every excellent server should have an outstanding cooling system. The RS260-E4/RX8 adopted the Smart Fan II technology, which could monitor system temperature and intelligently adjust fan speeds for optimal cooling or quiet operation.

Like other ASUS servers, the RS260-E4/RX8 incorporated ASWM2.0 system management software, an effective management and monitoring system. With ASUS finest after-sales service and free “0800 special telephone line” service, customers can use RS260-E4/RX8 without worrying about possible malfunctions during operation.

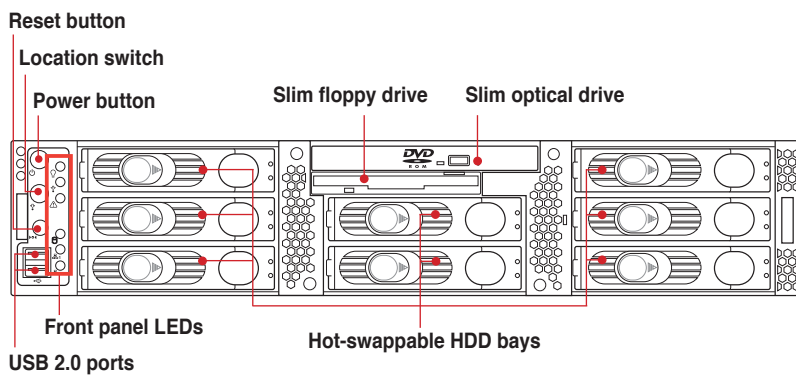
As a leading provider of performance and quality server solutions, ASUS server and server board products are recognized by the international market depending on its powerful R&D strength and solid quality. With the excellent representation of stability, compatibility and cooling capability, RS260-E4/RX8 is one of the best choices for enterprises to build an electronic environment.

1.2 System overview

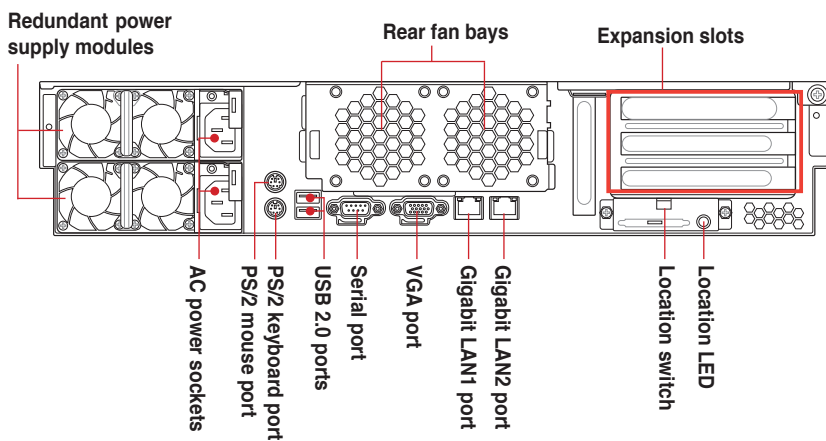


Items	Items
1. Central processing unit (CPU)	6. ASUS ZCR (Zero Channel RAID) card (optional)
2. CPU heatsink	7. Riser card for ASUS ZCR card (optional)
3. System memory	8. ASUS Server management board (optional)
4. Hard disk drives	9. Redundant power supply module (optional)
5. HDD trays	

1.3 Front panel features



1.4 Rear panel features



1.5 System specifications

Processor support	2 x Socket LGA771 Quad-Core Intel® Xeon® processor 5400 series (45nm) Dual-Core Intel® Xeon® processor 5200 series (45nm) Quad-Core Intel® Xeon® processor 5300 series Dual-Core Intel® Xeon® processor 5100 series 2 x 2M, 4M, 8M L2 cache
FSB	1333 / 1066 / 667 MHz EM64T
Chipset	Intel® 5000P Chipset Intel® 6321ESB I/O Controller Hub
Memory	12 x Quad Channel ECC Reg. DDR2 533 / 667 Fully-Buffered DIMMs, max. up to 48 GB
Expansion Slot	2 x Full-Height / Full-Length 64-bit PCI-X slots (Support only one PCI-X if plug ZCR for LSI® 1068) 1 x Full-Height / Full-Length PCI Express x 8 slot
LAN Chip	Intel® 82563EB Network Connection (Dual-Port)
Dimension	732mm x 448mm x 87.7mm

*Specifications are subject to change without notice.

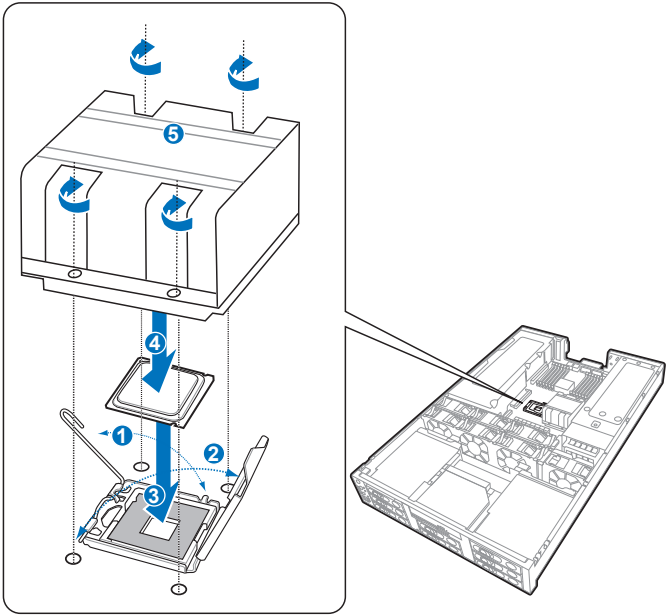
Chapter 2

This chapter lists the key components and optional accessories for the server system.

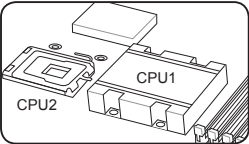
Components

2.1 Upgrading CPU and CPU heatsink

The ASUS RX260-E4/RX8 supports Intel® Xeon® Quad-core 5400 / 5300 series and Dual-core 5200 / 5100 series processor.



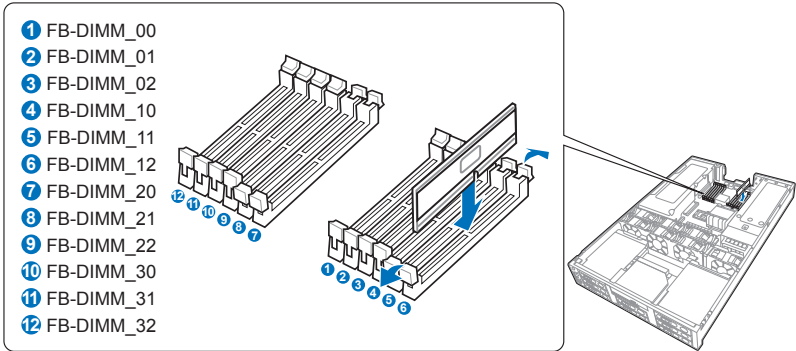
- If you install only one CPU, install the CPU to the CPU1 socket only. The system will not boot and the CPU warning LED will light up if a single CPU is installed on the CPU2 socket.
- We recommend to install CPUs with the same frequency.



Order P/N	Description
90-S3Y0U0150T	Quad Core Intel Xeon E5450, 3.00G, FSB 1333, 12M L2 (with RS260-E4 Heatsink)
90-S3Y0U0140T	Quad Core Intel Xeon E5440 2.83G, FSB 1333, 12M L2 (with RS260-E4 Heatsink)
90-S3Y0U0130T	Quad Core Intel Xeon E5430 2.66G, FSB 1333, 12M L2 (with RS260-E4 Heatsink)
90-S3Y0U0120T	Quad Core Intel Xeon E5420 2.50G, FSB 1333, 12M L2 (with RS260-E4 Heatsink)
90-S3Y0U0110T	Quad Core Intel Xeon E5410 2.33G, FSB 1333, 12M L2 (with RS260-E4 Heatsink)
90-S3Y0U0100T	Quad Core Intel Xeon E5405 2.00G, FSB 1333, 12M L2 (with RS260-E4 Heatsink)
90-S3Y0U0160T	Dual Core Intel Xeon E5205 1.86G, FSB 1066, 6M L2 (with RS260-E4 Heatsink)

2.2 Upgrading system memory

The motherboard comes with twelve (12) Double Data Rate 2 (DDR2) Fully-Buffered Dual Inline Memory Modules (DIMM) slots.



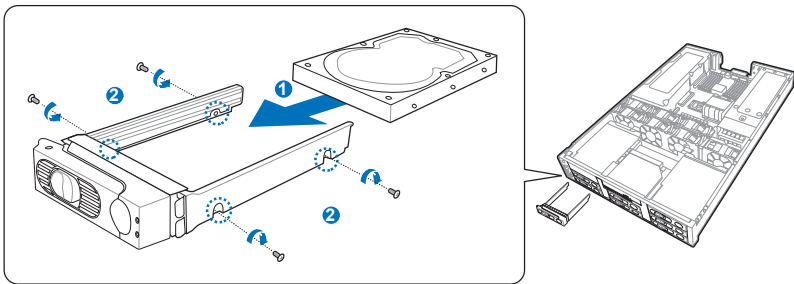
Recommended memory configurations

DIMMs	00	01	02	10	11	12	20	21	22	30	31	32
Memory size	1 GB	-	-	-	-	-	-	-	-	-	-	-
	1 GB	-	-	1 GB	-	-	-	-	-	-	-	-
	1 GB	-	-	1 GB	-	-	1 GB	-	-	1 GB	-	-
	1 GB	1 GB	-	1 GB	1 GB	-	1 GB	-	-	1 GB	-	-
	1 GB	1 GB	-	1 GB	1 GB	-	1 GB	1 GB	-	1 GB	1 GB	-
	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	-	1 GB	1 GB	-
	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB
	2 GB	-	-	-	-	-	-	-	-	-	-	-
	2 GB	-	-	2 GB	-	-	-	-	-	-	-	-
	2 GB	-	-	2 GB	-	-	2 GB	-	-	2 GB	-	-
	2 GB	2 GB	-	2 GB	2 GB	-	2 GB	-	-	2 GB	-	-
	2 GB	2 GB	-	2 GB	2 GB	-	2 GB	2 GB	-	2 GB	2 GB	-
	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	-	2 GB	2 GB	-
	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB
	4 GB	-	-	-	-	-	-	-	-	-	-	-
	4 GB	-	-	4 GB	-	-	-	-	-	-	-	-
	4 GB	-	-	4 GB	-	-	4 GB	-	-	4 GB	-	-
	4 GB	4 GB	-	4 GB	4 GB	-	4 GB	-	-	4 GB	-	-
	4 GB	4 GB	-	4 GB	4 GB	-	4 GB	4 GB	-	4 GB	4 GB	-
	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	-	4 GB	4 GB	-
	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB

Order P/N	Description
90-S000I0170T	1GB, DDR2 667 Fully-Buffered DIMM / ASUS
90-S000I0180T	2GB, DDR2 667 Fully-Buffered DIMM / ASUS
90-S000I0190T	4GB, DDR2 667 Fully-Buffered DIMM / ASUS

2.3 Upgrading hard disk drives

The system supports eight hot-swap SATAII/SAS hard disk drives.

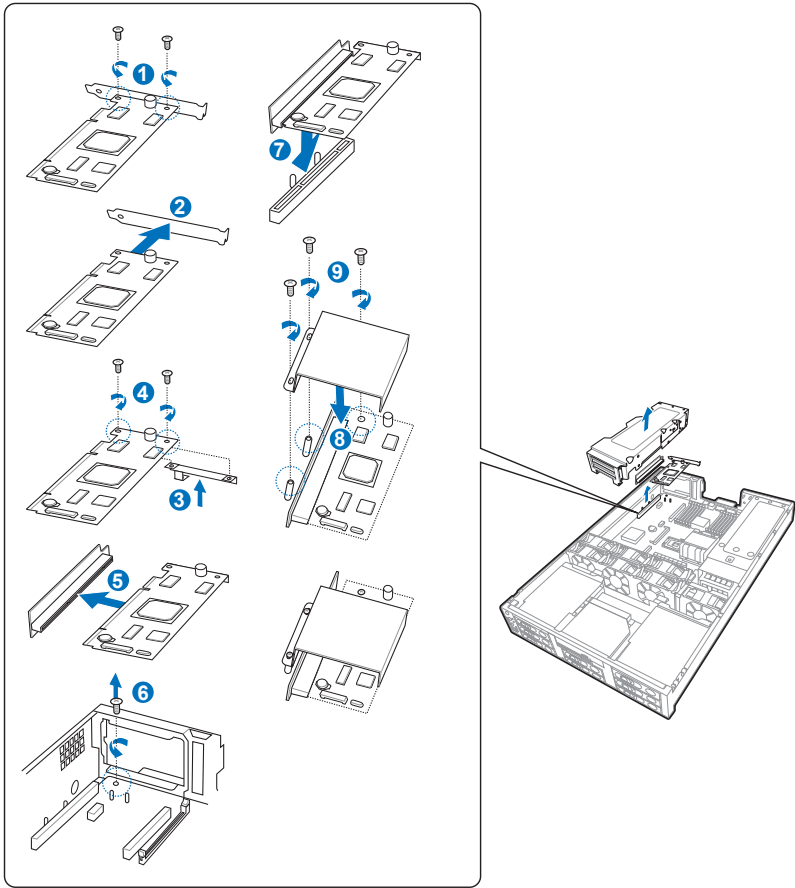


We recommend that you install identical drives of the same model and capacity for RAID configuration.

Order P/N	Description
SAS HDD	
90-S000H0050	450GB, 3.5" SAS HDD / ASUS
90-S000H0040	300GB, 3.5" SAS HDD / ASUS
90-S000H0030	146GB, 3.5" SAS HDD / ASUS
90-S000H0020	73GB, 3.5" SAS HDD / ASUS
SATAII HDD	
90-S000H5500T	1TB, 3.5" SATAII HDD / ASUS
90-S000H5400	750GB, 3.5" SATAII HDD / ASUS
90-S000H5300	500GB, 3.5" SATAII HDD / ASUS
90-S000H5000	250GB, 3.5" SATAII HDD / ASUS
90-S000H5200	160GB, 3.5" SATA2 HDD / ASUS

2.4 Installing ASUS RAID card

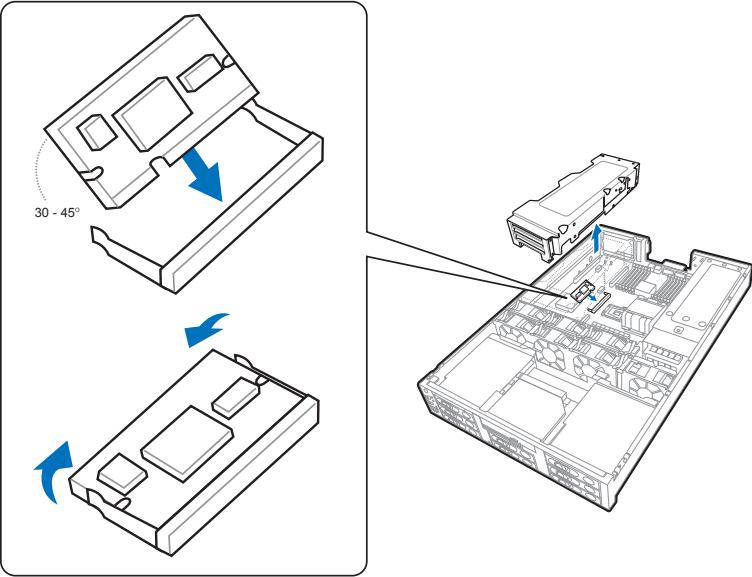
The ASUS RAID card allows users to create RAID 0, 1, 5, 10 and 50 from SAS hard disk drives connected to the SAS connectors on the motherboard.



Order P/N	Description
90-S000R0030T	ZCR Card, LSI SAS 8300XLP (Support Hardware RAID 0, 1, 5, 10, 50)

2.5 Installing ASUS Server Management Board

ASUS Server Management Board is an Intelligent Platform Management Interface (IPMI) 2.0-compliant board that allows users to monitor, control and manage a remote server from the local or central server in local area network (LAN).

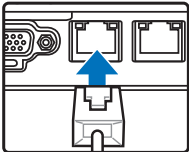


ASMB3-SOL PLUS (V3)

- Monitor the running status of major components via LAN or Serial Port, such as CPU and memory utilization, storage capacity and networking transfer rate.
- Advanced server management functions including “remote power on/off/reset”, “remote control via SOL (Serial-over LAN)” and “remote SEL (system event log reading when the system is out-of-band)”.
- Support Dynamic Host Configuration Protocol (DHCP), which avoids manually assigning IP address by setting DHCP mode to receive IP address automatically.



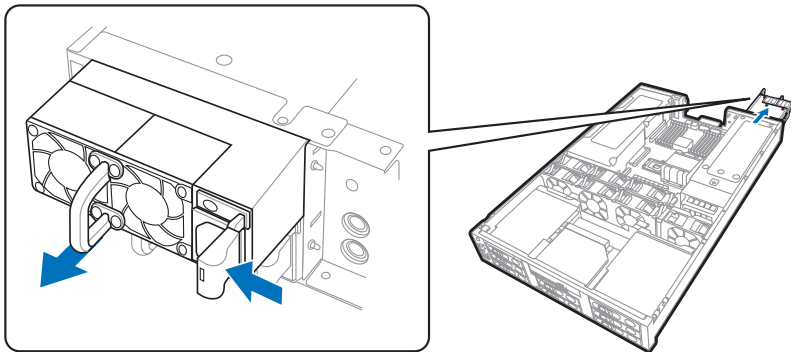
Use the LAN1 port for server management.



Order P/N	Description
90-C1SCT5-00UAN00Z	ASMB3-SOL PLUS (V3) IPMI 2.0 Module

2.6 Upgrading power supply unit

750W 1+1 hot-swap redundant power supply eliminate system and application downtime by redundancy power backup



Order P/N	Description
90-S00PR5000T	RPSU, 750W Redundant Power Supply Module



Remove the dummy power supply module before installing the second redundant power supply.

2.7 OS support list

OS support list
Windows® Server 2003 R2 Enterprise 32-bit
Windows® Server 2003 R2 Enterprise 64-bit
RedHat® Enterprise Linux AS3.0 UP6 32-bit
RedHat® Enterprise Linux AS3.0 UP6 64-bit
RedHat® Enterprise Linux AS4.0 UP2 32-bit
RedHat® Enterprise Linux AS4.0 UP2 64-bit
SuSE® Linux Enterprise Server 9 SP3 32-bit
SuSE® Linux Enterprise Server 9 SP3 64-bit

Order P/N	Description
90-S00SW7120T	OS, Microsoft® Windows® Server 2003 R2 Standard 1-4 CPU, 5 CAL (32bit) (Traditional Chinese)
90-S00SW7130T	OS, Microsoft® Windows® Small Business Server 2003 R2 STD 1-2 CPU, 5 CAL (32bit) (Chinese)