

Netfinity 5000

Start Here



Netfinity 5000

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Note

Before using this *Netfinity Server Library* and the product it supports, be sure to read the information in the “Legal and Safety Information” section of this *Server Library*.

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Start Here

Thank you for purchasing an IBM Netfinity 5000 server. This “Start Here” section gives you an overview of the *Server Library* for the Netfinity 5000 server. “Start Here” also contains a list of the features and provides illustrations of some of the major components of the Netfinity 5000 server.

The *Netfinity Server Library* contains sections that provide detailed information about set up and installation, hardware, software (ServerGuide and Netfinity Manager), Advanced System Management, getting help, and legal and safety information.

To organize your *Netfinity Server Library*, place the library materials into the binder in the following order.

CD Pack 1

HardwareGuide, SoftwareGuide, Operating Systems Fixpak,
and Server Application Programs

Server Library

Library tabs and information sections, such as Express Setup and Installation, Hardware, ServerGuide and Netfinity Manager, Advanced System Management, Getting Help, Legal and Safety, and other materials

Note: The library materials that come with your server contain Tab 8 which is blank. This tab is for you to use for any additional information you might want to add to the binder.

CD Packs 2 and 3

Additional Application Programs

Overview of the Netfinity Server Library

The following list describes the sections of the *Netfinity Server Library*.

Express Setup and Installation

This section is written for all users, but it is designed with the experienced user in mind. Here you will find the information you need to set up and cable your server, start and configure your server, and install your network operating system (NOS).

Hardware Information

This section contains detailed information, such as:

- Configuration Procedures
- Option Installation Instructions
- Rack Installation Instructions
- Solving Problems and Troubleshooting
- Server Records and Specifications

ServerGuide and Netfinity Manager Information

This section contains detailed information about:

ServerGuide

Software setup and installation tools specifically designed for IBM Netfinity and PC servers.

Netfinity Manager

A group of distributed applications designed to enhance the hardware systems-management capabilities of a network.

Advanced System Management Information

This section contains detailed information about Advanced System Management, using the Netfinity Manager Advanced System Management services.

Getting Help Information

This section contains telephone numbers and Web site addresses where you can get assistance.

Legal and Safety Information

This section contains detailed legal information (warranties, electronic emission statements, and so forth) and safety information.

Safety Statement



Before installing this product, read the Safety Information.

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 **Safety Information** (安全信息)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Пред установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

Help Information

If you need help at any time during the set up, installation, or operation of your server, refer to the “Getting Help Information” section of this *Server Library*. There you will find telephone numbers and Web site addresses where you can get assistance.

Inventory List

The following is a list of the items shipped with your Netfinity 5000 server.

Hardware:

- **Tower Models**

- Keyboard
- Mouse
- System power cord
- Two server keys and a power-on switch cover attached to the server

Note: If you lose the keys, you must order a replacement lock mechanism and keys from IBM.

- **Rack Models**

- Rack installation hardware
- System power cord
- A power-on switch cover attached to the server

Software:

- *IBM ServerGuide* CDs
- Other software packages

Publications:

- *Netfinity Server Library*
- IBM Netfinity Rack Installation Template (rack models only)

If an item is missing or damaged, contact your place of purchase.

System Features

Use the following information and illustrations to familiarize yourself with the various features of the Netfinity 5000 server.

Features at a Glance

The following table summarizes the features of the Netfinity 5000. For detailed information about the features listed in the table, refer to the “Hardware Information” section of this *Server Library*.

Microprocessor

- Intel® Pentium® II microprocessor with MMX™ technology
- 512 KB of level-2 cache (minimum)

Memory

- Standard: 64 MB (minimum), expandable to 1 GB
- 100 MHz, error correcting code (ECC) registered synchronous dynamic random access memory (SDRAM)
- Four dual-inline memory-module (DIMM) sockets

Diskette Drive

- One 3.5-inch, 1.44 MB

Hard Disk Drives

- Up to five hot-swappable internal hard disk drives are supported

CD-ROM Drive

- Standard: IDE

Keyboard and Auxiliary Device

Tower models

- Keyboard
- Mouse

Expansion Slots

- Supports up to five adapters
 - Two shared PCI/ISA slots
 - Three dedicated PCI slots

Expansion Bays

- One 3.5-inch diskette drive bay
- Two 5.25-inch drive bays (the open bay supports a half-high SCSI tape drive)
- Five 3.5-inch drive bays (hot-swappable)

Upgradable Microcode

- BIOS, diagnostics, and Netfinity Advanced System Management Processor code upgrades (when available) can update EEPROMs on the system board

Security Features

- Bolt-down capability
- Door lock (tower model only)
- Power-on and administrator passwords
- Selectable startup sequence

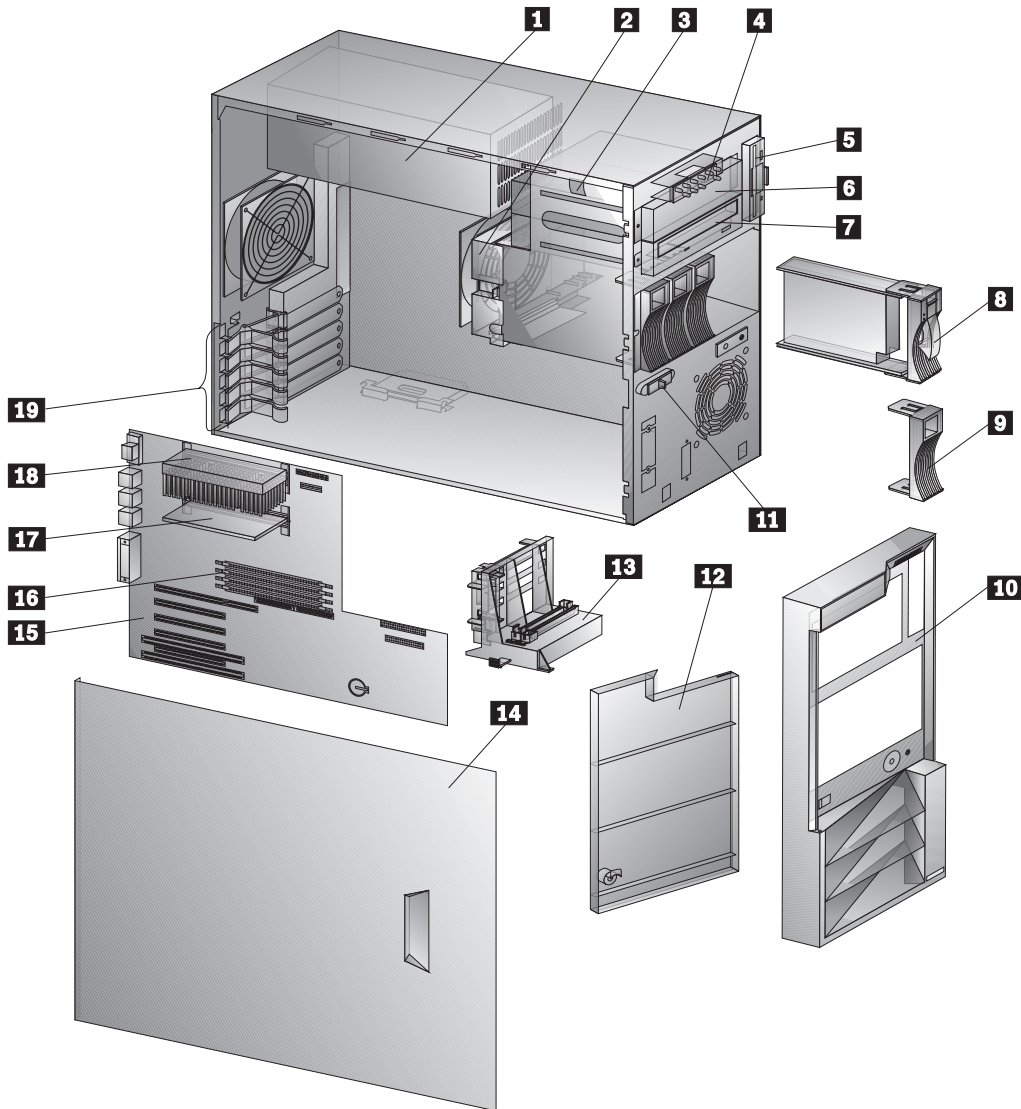
Power Supply

- 350 W with voltage auto-selection (110, 120, 220, 240 V ac) and power redundancy
 - Standard
 - 350 W (non-redundant)
 - 175 W (redundant)
 - Optional
 - 175 W (available for redundancy)
- Built-in overload and surge protection
- Automatic restart after a momentary loss of power

Integrated Functions

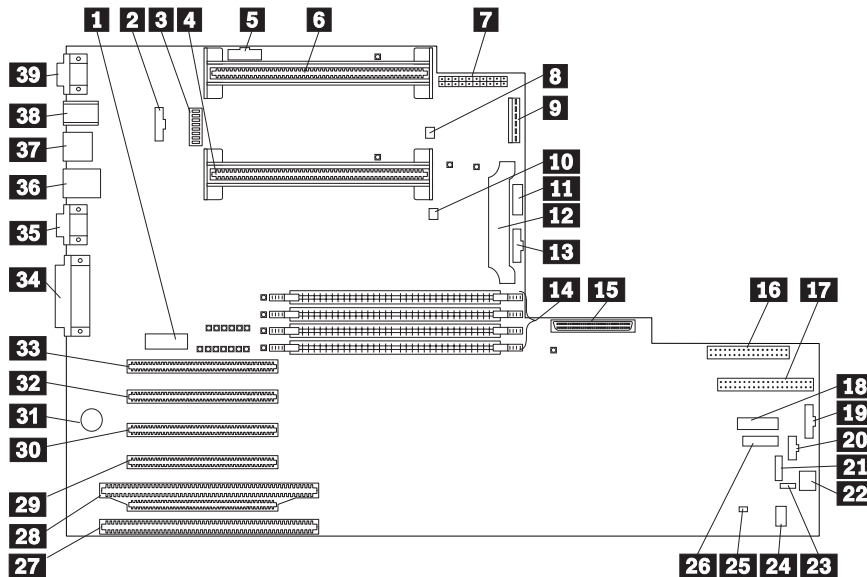
- Two serial ports
- Two universal serial bus (USB) ports
- System management port (C)
- Advanced System Management processor on the system board
- One IDE internal connector, supports the system IDE CD-ROM drive
- One parallel port
- Mouse port
- Keyboard port
- 16-bit UltraSCSI controller
 - One external connector (16-bit)
 - One internal connector (16-bit)
- Full-duplex 10/100 Mbps Ethernet controller
 - 10BASE-T/100BASE-TX port
 - Redundant Ethernet capability, through the use of an optional network interface card (NIC)
- Video controller port, super video graphics array (SVGA)
- 1 MB video memory

Exploded View of the Netfinity 5000 Server



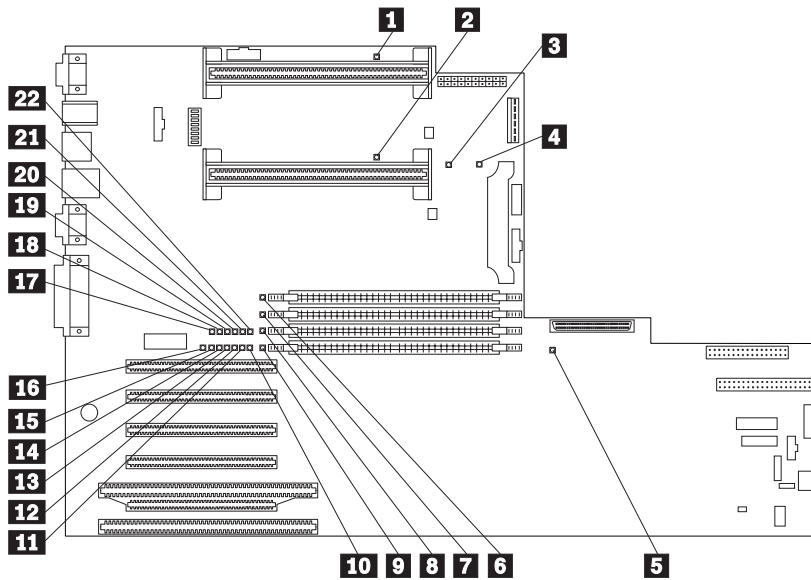
- | | | | |
|-----------|----------------------------|-----------|--|
| 1 | Power supply | 11 | Side cover release lever |
| 2 | DASD Fan | 12 | Front door |
| 3 | Bezel release lever | 13 | Adapter card support bracket |
| 4 | Operator information panel | 14 | Side cover |
| 5 | Diskette drive | 15 | System board (planar) |
| 6 | Open bay | 16 | DIMM sockets |
| 7 | CD-ROM | 17 | Microprocessor terminator card or secondary microprocessor |
| 8 | Hot-swap hard disk drive | 18 | Primary microprocessor |
| 9 | Filler panel | 19 | Adapter card retainers |
| 10 | Bezel | | |

System Board Connectors



- | | | | |
|-----------|---|-----------|--|
| 1 | Systems management adapter connector (J21) | 23 | Reserved (J36) |
| 2 | Fan 2 connector (J6) | 24 | Reserved (J41) |
| 3 | System switch block (SW1) | 25 | Reserved (J39) |
| 4 | Microprocessor 2 connector (U21) | 26 | Reserved (J32) |
| 5 | Reserved (J1) | 27 | ISA connector (J40) |
| 6 | Microprocessor 1 connector (U2) | 28 | PCI/ISA connector, PCI bus 1 (J38) |
| 7 | Power connector (J3) | 29 | PCI connector, PCI bus 1 (J33) |
| 8 | Reserved (J8) | 30 | PCI connector, PCI bus 1 (J30) |
| 9 | Power connector (J4) | 31 | Battery |
| 10 | Reserved (J12) | 32 | PCI connector, PCI bus 1 (J28) |
| 11 | Power supply data connector (J10) | 33 | PCI connector, PCI bus 0 (J24) |
| 12 | Voltage regulator module (VRM) connector (U20) | 34 | Parallel/SCSI connectors (J19) |
| 13 | Fan 1 connector (J13) | 35 | Video port and Management C port connectors (J11). (The Management C port connector is above the video connector.) |
| 14 | DIMM 1 (J15), DIMM 2 (J16), DIMM 3 (J17), & DIMM 4 (J22) connectors | 36 | USB 1 and USB 2 port connectors (J9) (USB 2 is below USB 1.) |
| 15 | SCSI connector (J18) | 37 | Ethernet connector (J7) |
| 16 | Diskette drive connector (J23) | 38 | Mouse and keyboard connectors (J5). (The mouse connector is above the keyboard connector.) |
| 17 | IDE connector (J3) | 39 | Serial port A and B connectors (J2) (Serial port B is below serial port A.) |
| 18 | Operator LED panel (J29) | | |
| 19 | Reserved (J31) | | |
| 20 | Power-on switch panel (J34) | | |
| 21 | RS-485 connector (J35) | | |
| 22 | Reserved (J37) | | |

System Board LEDs



- | | | | |
|-----------|--|-----------|---------------------------------|
| 1 | Microprocessor 1 error LED (CR1) | 12 | PCI bus 1 error LED (CR27) |
| 2 | Microprocessor 2 error LED (CR5) | 13 | PCI bus 0 error LED (CR26) |
| 3 | Integrated voltage regulator error LED (CR4) | 14 | Reserved (CR25) |
| 4 | Voltage regulator module (VRM) error LED (CR12) | 15 | DASD error LED (CR24) |
| 5 | Service processor error LED (CR49) | 16 | Temperature error LED (CR23) |
| 6 | DIMM 1 error LED (CR13) | 17 | Fan 1 (DASD) error LED (CR15) |
| 7 | DIMM 2 error LED (CR14) | 18 | Fan 2 (rear) error LED (CR16) |
| 8 | DIMM 3 error LED (CR21) | 19 | Reserved (CR17) |
| 9 | DIMM 4 error LED (CR22) | 20 | Reserved (CR18) |
| 10 | Software-maskable interrupt (SMI) error LED (CR29) | 21 | Power supply 1 error LED (CR19) |
| 11 | Non-maskable interrupt (NMI) error LED (CR28) | 22 | Power supply 2 error LED (CR20) |



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