



Netfinity 5500 M10

Start Here



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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 5500 M10. This “Start Here” section gives you an overview of the *Server Library* for the Netfinity 5500 M10. “Start Here” also contains a list of the features and provides illustrations of some of the major components of the Netfinity 5500 M10.

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

Organize your *Netfinity Server Library* by placing the library materials that come with your server into the binder in the following order.

CD Pack 1

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

Server Library

Shrink-wrapped book

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 Netfinity 5500 M10 software; specifically, ServerGuide and Netfinity Manager information.

Advanced System Management Information

This section contains detailed information about Advanced System Management.

ServeRAID Information

This section contains detailed information about ServeRAID.

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 5500 M10.

Hardware:

- **Tower Models**

- Keyboard
- Mouse
- Media mounting kit
- NetBAY3 bezel
- System power cord
- Two server keys (located near the keylock on the server)

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

- **Rack Models**

- Lift Handles
- Media mounting kit
- Rack installation hardware
- System power cord

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 5500 M10.

Features at a Glance

The following table summarizes the features of the Netfinity 5500 M10. For detailed information about the features listed in the table, refer to the “Hardware Information” section of this *Server Library*.

Microprocessor

- Intel® Pentium® II Xeon™ microprocessor with MMX™ technology
- 32 KB of level-1 cache
- 512 KB of level-2 cache (min.)
- Expandable to two microprocessors

Memory

- Standard: 128 MB (min.), expandable to 2 GB
- 100 MHz registered, error correcting code (ECC), synchronous dynamic random access memory (SDRAM)
- Four dual inline memory-module (DIMM) sockets

Diskette Drive

- Standard: One 3.5-inch, 1.44 MB

Hard Disk Drives

- Up to six hot-swappable hard disk drives supported

CD-ROM Drive

- Standard: 32X IDE

Keyboard and Auxiliary Device

(standard only on tower models)

- Keyboard
- Mouse

Predictive Failure Analysis (PFA) Alerts

- Power supplies
- Fans
- Memory
- Hard disk drives
- Microprocessors
- Voltage regulator modules (VRMs)

Expansion Bays

- Six slim (1-inch) or three half-high (1.6-inch) hot-swap drive bays
- Three 5.25-inch removable-media bays (one used by CD-ROM drive)
- The IBM Netfinity NetBAY3 (tower model only) allows installation of options to provide extra expansion bays

Expansion Slots

- Up to seven adapters can be installed.
 - Four 32-bit hot-plug PCI slots
 - Two standard (non-hot-plug) 32-bit PCI slots
 - One 16-bit ISA slot

Upgradable Microcode

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

Security Features

- Door and top cover lock (tower model only)
- NetBAY3 bezel lock
- Power-on and administrator passwords
- Selectable drive-startup
- Keyboard password
- Systems management security
 - User log-in password
 - Read-only or read/write access
 - Dial back

Integrated Functions

- Two serial ports
- Two universal serial bus (USB) ports
- One parallel port
- Mouse port
- Keyboard port
- Video port
- IBM ServeRAID controller (two channels) on system board
- 10BASE-T/100BASE-TX Ethernet port (controller on system board)
- Redundant Ethernet capability, through the use of an optional network interface card (NIC)
- Netfinity Advanced System Management Processor on the system board
- Dedicated Advanced System Management I/O port
- Video controller (with 1 MB video memory) compatible with:
 - Super video graphics array (SVGA)
 - Video graphics adapter (VGA)

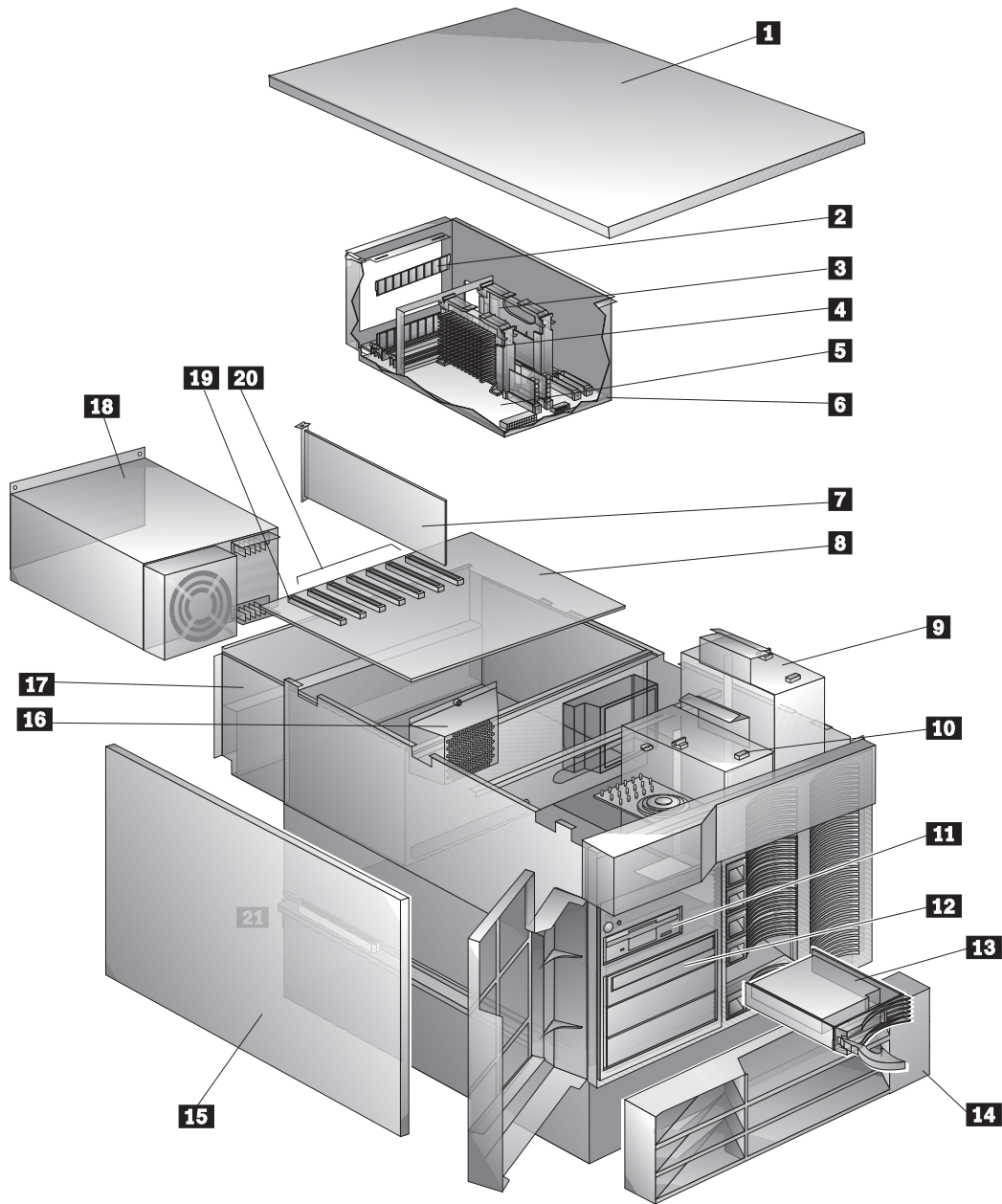
Power Supply

- 400 W (115–230 V ac)
- Automatic voltage range selection
- Built-in overload and surge protection
- Automatic restart after a loss of power
- Redundant power, through the use of an optional 400 W power supply

Redundant Cooling

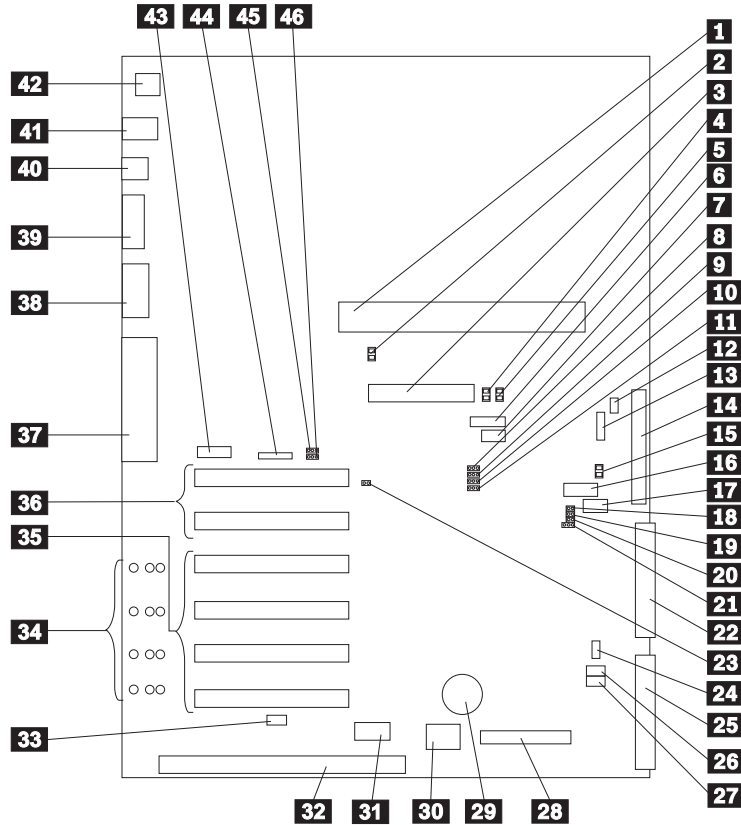
- Three hot-swap fans

Exploded View of the Netfinity 5500 M10



- | | | | |
|-----------|--|-----------|----------------------------------|
| 1 | Top cover | 11 | Diskette drive |
| 2 | DIMM (memory) | 12 | CD-ROM drive |
| 3 | Secondary microprocessor
or terminator card | 13 | Hot-swap hard disk drive |
| 4 | Primary microprocessor | 14 | NetBAY3 bezel (tower model only) |
| 5 | Processor board | 15 | Side cover (tower model only) |
| 6 | Microprocessor housing | 16 | Hot-swap fan 1 |
| 7 | PCI adapter or plastic divider | 17 | Shuttle |
| 8 | System board | 18 | Hot-swap power supply |
| 9 | Hot-swap fan 3 | 19 | ISA adapter slot |
| 10 | Hot-swap fan 2 | 20 | PCI adapter slots |

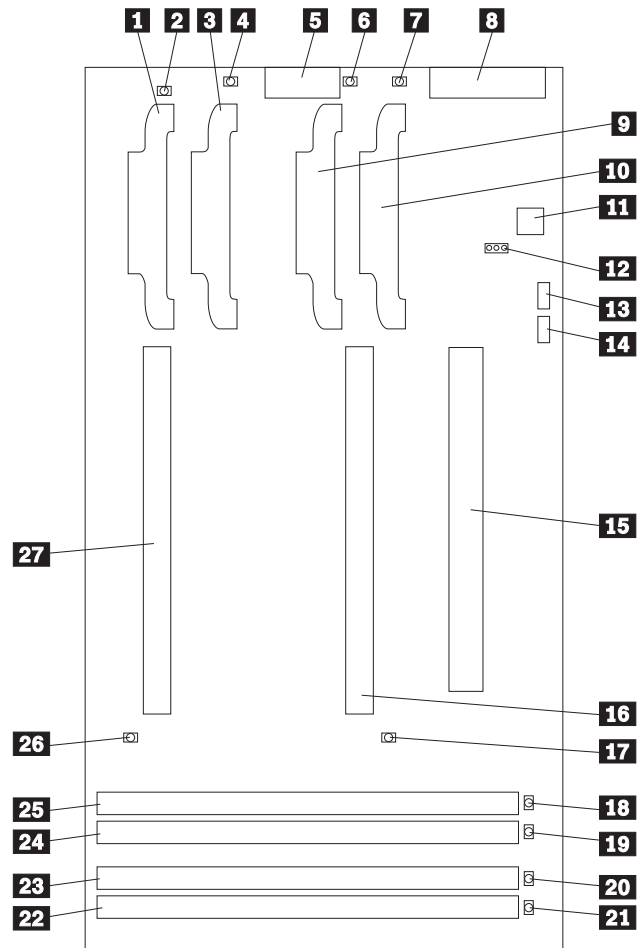
System Board Components



- 1** Processor board connector (J19)
- 2** Advanced System Management error LED (CR24)
- 3** RAID channel 1 connector (J7)
- 4** RAID channel 1 error LED (CR30)
- 5** RAID channel 2 error LED (CR31)
- 6** Reserved (J54)
- 7** Reserved (J64)
- 8** Disable RAID controller jumper block (J11)
- 9** Reserved (J45)
- 10** Power on control jumper block (J32)
- 11** Reserved (J25)
- 12** Reserved (J9)
- 13** Power backplane cable connector (J8)
- 14** RAID channel 2 connector (to backplane) (J3)
- 15** RAID system error LED (CR32)
- 16** Reserved (J27)

- 17** Reserved (J35)
- 18** SCSI activity LED connector (J52)
- 19** Reserved (J34)
- 20** Reserved (J29)
- 21** Reserved (J26)
- 22** IDE connector (J33)
- 23** Disable Advanced System Management jumper block (J51)
- 24** Fan connector (J36)
- 25** Diskette drive connector (J22)
- 26** Power on password override jumper block (J24)
- 27** Flash ROM page swap jumper block (J30)
- 28** Control panel connector (J20)
- 29** Battery
- 30** Reserved (J46)
- 31** Hot-plug PCI controller programmer interface connector (J53)
- 32** ISA expansion slot
- 33** Hot-plug switch connector (J16)
- 34** PCI slot LEDs (four are on the side of the board)
- 35** PCI slots 1 through 4 (hot-plug, secondary PCI bus)
- 36** PCI slots 5 and 6 (primary PCI bus)
- 37** Parallel port connector (J56) (Serial port A and B connectors are below the parallel port connector.)
- 38** Video port connector (J2)
- 39** Management port C connector (J42)
- 40** USB 1 and USB 2 port connectors (J31) (USB 2 is below USB 1)
- 41** Mouse and keyboard connectors (J1) (The mouse connector is above the keyboard connector.)
- 42** Ethernet port connector (J4)
- 43** Reserved (J17)
- 44** Reserved (J18)
- 45** Disable Ethernet controller jumper block (J5)
- 46** Disable video controller jumper block (J14)

Processor Board Components



- | | | | |
|-----------|--|-----------|---|
| 1 | Secondary microprocessor cache VRM connector (U15) | 13 | Reserved (J20) |
| 2 | Secondary microprocessor cache VRM error LED (CR36) | 14 | Reserved (J18) |
| 3 | Secondary microprocessor core VRM connector (U7) | 15 | System board connector (J9)
(on the reverse side of the processor board) |
| 4 | Secondary microprocessor core VRM error LED (CR37) | 16 | Primary microprocessor connector (U5) |
| 5 | Power control connector (J17) | 17 | Primary microprocessor error LED (CR12) |
| 6 | Primary microprocessor cache VRM error LED (CR19) | 18 | DIMM 1 error LED (CR8) |
| 7 | Primary microprocessor core VRM error LED (CR17) | 19 | DIMM 2 error LED (CR9) |
| 8 | Power supply connector (J10) | 20 | DIMM 3 error LED (CR10) |
| 9 | Primary microprocessor cache VRM connector (U17) | 21 | DIMM 4 error LED (CR11) |
| 10 | Primary microprocessor core VRM connector (U22) | 22 | DIMM socket 4 (J1) |
| 11 | Microprocessor core-frequency-selection switch block (SW1) | 23 | DIMM socket 3 (J2) |
| 12 | Reserved (J22) | 24 | DIMM socket 2 (J3) |
| | | 25 | DIMM socket 1 (J4) |
| | | 26 | Secondary microprocessor error LED (CR13) |
| | | 27 | Secondary microprocessor connector (U6) |



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