

Netfinity 7000 M10

Start Here

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*.

First Edition (September 1998)

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time.

This publication was developed for products and services offered in the United States of America and the United Kingdom. It is possible that this publication may contain reference to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

Requests for technical information about IBM products should be made to your IBM reseller or IBM marketing representative.

No part of this publication may be reproduced or distributed in any form or by any means without prior permission in writing from the International Business Machines Corporation.

© Copyright International Business Machines Corporation 1998. All rights reserved.

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

Start Here

Thank you for purchasing an IBM Netfinity 7000 M10. This “Start Here” section gives you an overview of the *Server Library* for the Netfinity 7000 M10. “Start Here” also contains a list of the features and provides illustrations of some of the major components of the Netfinity 7000 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, 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

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 put into the binder.

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. There 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 and Netfinity Manager information.

Advanced System Management Information

This section contains detailed information about Advanced System Management.

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 that come with your Netfinity 7000 M10.

Hardware:

- Dual-serial port Y-cable
- Lift Handles (4)
- Power-switch cover
- Rack installation hardware
- Server power cord
- Strain-relief (cable)

Software:

- *IBM ServerGuide* CDs
- Other software packages

Publications:

- *Netfinity Server Library*
- IBM Netfinity Rack Installation Template

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

System Features

The Netfinity 7000 M10 is designed to support multiple expansion units. Use the following information and illustrations to familiarize yourself with the various features of the Netfinity 7000 M10.

Features at a Glance

The following table summarizes the features of the Netfinity 7000 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
- 16 KB of level-1 cache
- 512 KB of level-2 cache (min.)
- Expandable to four microprocessors

Memory

- 128 MB (min.) of system memory, expandable to 8 GB
- 50 ns, buffered extended data output (EDO), error correcting code (ECC)
- Maximum of 32 dual inline memory-module (DIMM) sockets on two memory boards

Diskette Drive

- Standard: One 3.5-inch, 1.44 MB

Hard Disk Drives

- Up to four hot-swap hard disk drives are supported
- Four low-profile (1-inch) or two half-high (1.6-inch)

CD-ROM Drive

- Standard: Enhanced IDE

Information Panel

- Two 16-character lines of status information

Expansion Slots

- Five 64-bit hot-plug PCI slots
- Seven 32-bit hot-plug PCI slots

Expansion Bays

- Four low-profile (1-inch) or two half-high (1.6-inch) hot-swap drive bays
- One 5.25-inch removable-media bay (CD-ROM drive preinstalled)

Upgradable Microcode

- BIOS, diagnostics, and system-management processor upgrades (when available) can update EEPROM.

Security Features

- Power-on and administrator passwords
- Mountable in an optional secure rack enclosure
- Selectable drive-startup
- Keyboard password
- Netfinity Advanced System Management PCI Adapter security
 - User log-in password
 - Read-only or read/write access
 - Dial back

Redundant Cooling

- Four hot-swap fans

Integrated Functions

- LED usability support
- Two serial ports
- Two universal serial bus (USB) ports
- One parallel port
- Mouse and keyboard ports
- Netfinity Advanced System Management PCI Adapter
- Two UltraSCSI connectors
- Video controller port compatible with:
 - Super video graphics array (SVGA)
 - Video graphics adapter (VGA)
 - 1 MB video memory

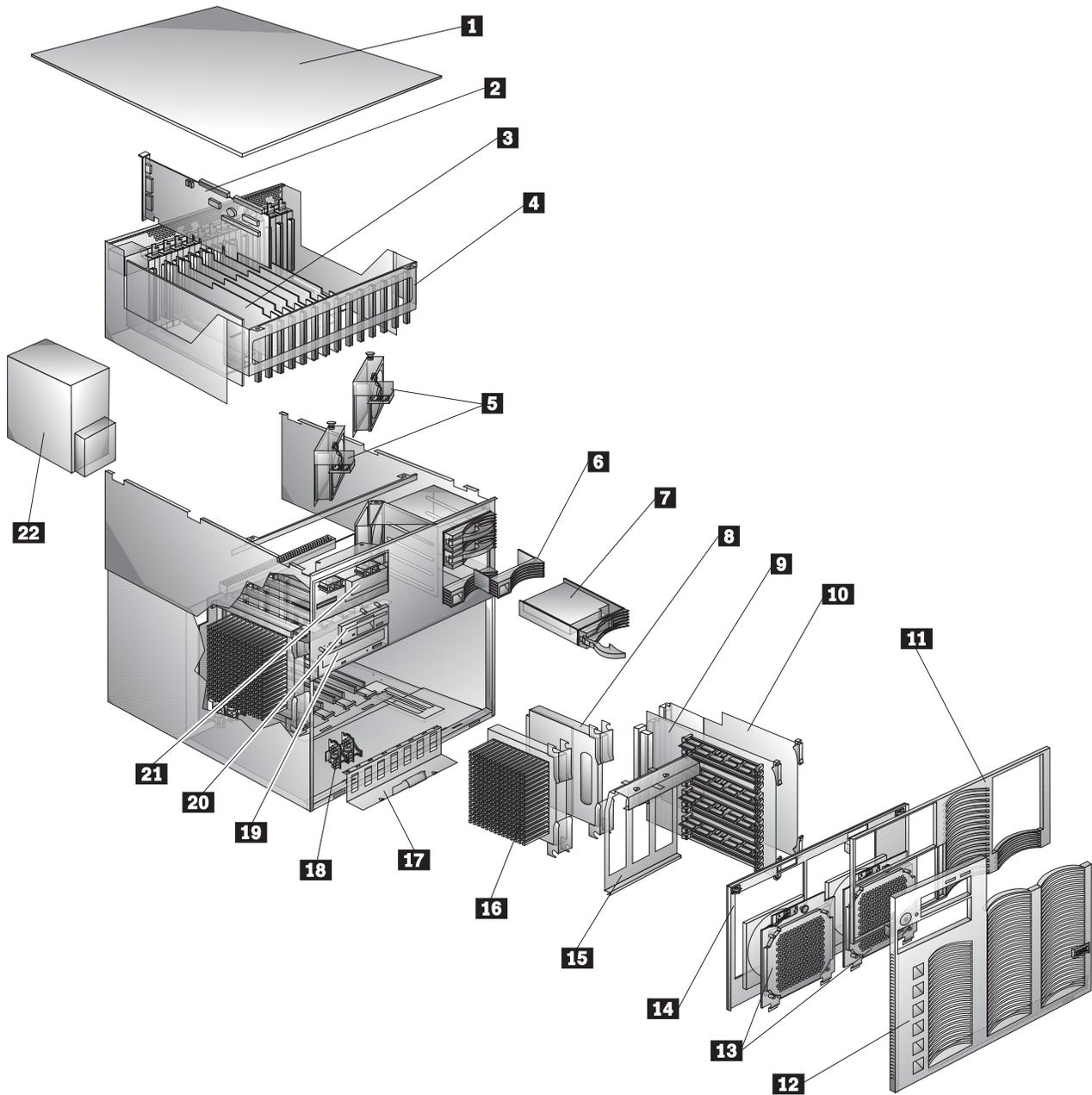
Power Supply

- 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 available with optional power supply

Predictive Failure Analysis (PFA) Alerts

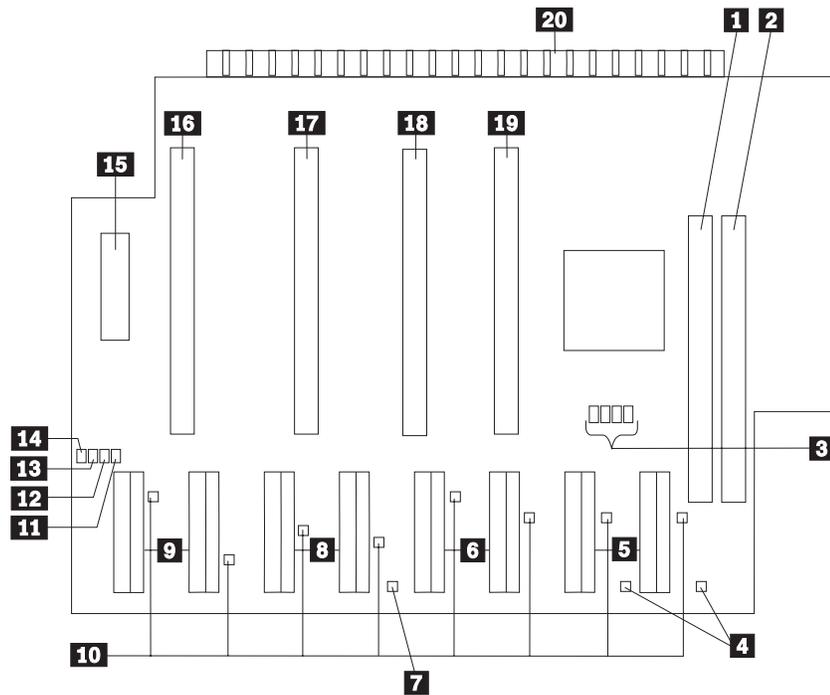
- Fans
- Power Supplies
- Memory
- Hard disk drives
- Microprocessors

Exploded View of the Netfinity 7000 M10



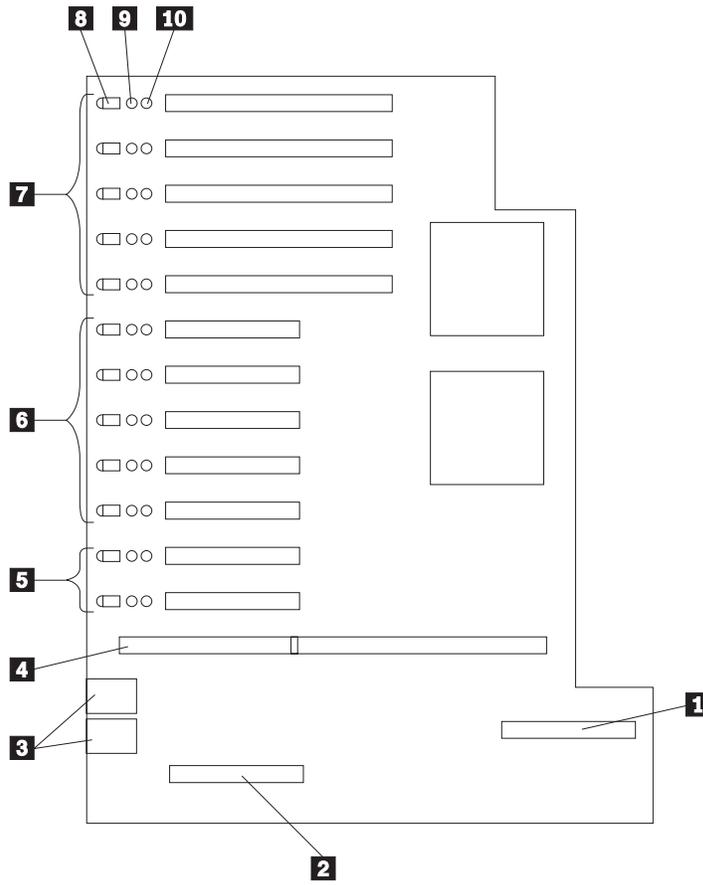
- | | | | |
|-----------|--------------------------------|-----------|---|
| 1 | Top cover | 13 | Fan assembly |
| 2 | I/O function card | 14 | Front access cover |
| 3 | Divider | 15 | Microprocessor retention bracket |
| 4 | Shuttle | 16 | Microprocessor (installed) |
| 5 | Fans | 17 | VRM retention bracket |
| 6 | Filler panel | 18 | Voltage regulator modules (VRMs)
for installed microprocessors |
| 7 | Hot-swap hard disk drive | 19 | CD-ROM drive |
| 8 | Microprocessor terminator card | 20 | Diskette drive |
| 9 | Memory card | 21 | Operator information panel |
| 10 | Memory terminator card | 22 | Hot-swap power supply |
| 11 | Front bezel (upper) | | |
| 12 | Front bezel (lower) | | |

Processor Board Components



- 1** Memory board slot 1 connector (primary slot)
- 2** Memory board slot 2 connector (secondary slot)
- 3** Microprocessor core frequency selection jumper block (J43-J46)
- 4** ERR 0 and ERR 1 LEDs
- 5** Microprocessor voltage-regulator connectors for microprocessor 4
- 6** Microprocessor voltage-regulator connectors for microprocessor 3
- 7** Microprocessor termination LED
- 8** Microprocessor voltage-regulator connectors for microprocessor 2
- 9** Microprocessor voltage-regulator connectors for microprocessor 1
- 10** Microprocessor voltage-regulator LEDs
- 11** Microprocessor bus activity LED for microprocessor 4
- 12** Microprocessor bus activity LED for microprocessor 3
- 13** Microprocessor bus activity LED for microprocessor 2
- 14** Microprocessor bus activity LED for microprocessor 1
- 15** Power backplane connector
- 16** Microprocessor 1 socket
- 17** Microprocessor 2 socket
- 18** Microprocessor 3 socket
- 19** Microprocessor 4 socket
- 20** I/O board connector

I/O Board Components



- 1** IDE connector
- 2** System-management adapter slot
- 3** USB 1 and USB 2 port connectors
- 4** I/O function card slot
- 5** 32-bit hot-plug PCI slots 11-12 (Bus C)
- 6** 32-bit hot-plug PCI slots 6-10 (Bus B)
- 7** 64-bit hot-plug PCI slots 1-5 (Bus A)
- 8** Attention LED for PCI slot
- 9** Attention LED for PCI slot
- 10** Power LED for PCI slot



Part Number: 24L7772

Printed in U.S.A.

September 1998

24L7772

