

IBM



# Hardware Maintenance Manual

Types 8301, 8302, 8303, 8304, 8305,  
8306, 8307, 8308, 8309, 8310,  
8311, 8312, 8313, 8314, and 8315



IBM



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Types 8301, 8302, 8303, 8304, 8305,  
8306, 8307, 8308, 8309, 8310,  
8311, 8312, 8313, 8314, and 8315

**Note:** Before using this information and the product it supports, be sure to read the general information under “Notices” on page 305.

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## Chapter 1. About this manual

This manual contains service and reference information for IBM® computer Types 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, and 8315.

This manual is divided into product service sections and a related service section, as follows:

- The product service sections include procedures for isolating problems to a FRU, a Symptom-to-FRU Index, additional service information and an illustrated parts catalog.
- The related service section includes safety notices and safety information, and problem determination tips.

**Note:**

This manual is intended for trained servicers who are familiar with IBM Personal Computer products. Use this manual along with advanced diagnostic tests to troubleshoot problems effectively.

Before servicing an IBM product, be sure to review the "Safety information" on page 271.

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## Important Safety Information

Be sure to read all caution and danger statements in this book before performing any of the instructions.

Prenez connaissance de toutes les consignes de type Attention et Danger avant de procéder aux opérations décrites par les instructions.

Lesen Sie alle Sicherheitshinweise, bevor Sie eine Anweisung ausführen.

---

### 주의 및 위험 경고문(한글)

**중요:**

이 책에 나오는 모든 주의 및 위험 경고문은 번호로 시작됩니다. 이 번호는 *Safety Information* 책에 나오는 영문판 주의 및 위험 경고문과 한글판 주의 및 위험 경고문을 상호 참조하는데 사용됩니다.

예를 들어 주의 경고문이 번호 1로 시작되면 *Safety Information* 책에서 이 주의 경고문은 경고문 1번 아래에 나옵니다.

지시를 따라 수행하기 전에 먼저 모든 주의 및 위험 경고문을 읽도록 하십시오.

Accertarsi di leggere tutti gli avvisi di attenzione e di pericolo prima di effettuare qualsiasi operazione.

Leia todas as instruções de cuidado e perigo antes de executar qualquer operação.

Lea atentamente todas las declaraciones de precaución y peligro ante de llevar a cabo cualquier operación.

---

## 注意和危險声明 (简体中文)

### 重要事項：

本书中的所有注意和危險声明之前都有编号。该编号用于英语的注意或危險声明与 *Safety Information* 一书中可以找到的翻译版本的注意或危險声明进行交叉引用。

例如，如果一个注意声明以编号 1 开始，那么对该注意声明的翻译出现在 *Safety Information* 一书中的声明 1 中。

在按说明执行任何操作前，请务必阅读所有注意和危險声明。

---

## 注意及危險聲明 (中文)

### 重要資訊：

本書中所有「注意」及「危險」的聲明均以數字開始。此一數字是用來作為交互參考之用，英文「注意」或「危險」聲明可在「安全資訊」(Safety Information) 一書中找到相同內容的「注意」或「危險」聲明的譯文。

例如，有一「危險」聲明以數字 1 開始，則該「危險」聲明的譯文將出現在「安全資訊」(Safety Information) 一書的「聲明」1 中。

執行任何指示之前，請詳讀所有「注意」及「危險」的聲明。



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## Chapter 2. General Checkout

This general checkout procedure is for Types 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, and 8315 computers.

**Attention:**

The drives in the computer you are servicing might have been rearranged or the drive startup sequence changed. Be extremely careful during write operations such as copying, saving or formatting. Data or programs can be overwritten if you select an incorrect drive.

Diagnostic error messages appear when a test program finds a problem with a hardware option. For the test programs to properly determine if a test *Passed*, *Failed* or *Aborted*, the test programs check the error-return code at test completion. See "Diagnostics" on page 26.

General error messages appear if a problem or conflict is found by an application program, the operating system, or both. For an explanation of these messages, refer to the information supplied with that software package.

**Notes:**

- Types 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, and 8315 computers default to come up quiet (no beep and no memory count and checkpoint code display) when no errors are detected by POST.
- To enable beep and memory count and checkpoint code display when a successful POST occurs, do the following:
  1. Select **Start Options** in the Configuration/Setup Utility program (see "Setup Utility program" on page 24).
  2. Set **Power-On Self-Test** to **Enhanced**.
- Before replacing any FRUs, ensure that the latest level of BIOS is installed on the system. A down-level BIOS might cause false errors and unnecessary replacement of the system board. For more information on how to determine and obtain the latest level BIOS, see "BIOS levels" on page 265.
- If multiple error codes are displayed, diagnose the first error code displayed.
- If the computer hangs with a POST error, go to "Symptom-to-FRU Index" on page 87.
- If the computer hangs and no error is displayed, go to "Undetermined problems" on page 127.
- If an installed device is not recognized by the diagnostics program, that device might be defective.

**001**

1. Power-off the computer and all external devices.
2. Check all cables and power cords.
3. Make sure the system board is seated properly.
4. Set all display controls to the middle position.
5. Power-on all external devices.
6. Power-on the computer.
7. Check for the following response:
  - Readable instructions or the Main Menu.

## DID YOU RECEIVE THE CORRECT RESPONSE?

If NO, continue to **002** .

If YES, proceed to **003** .

### **002**

If the Power Management feature is enabled, do the following:

1. Start the Configuration/Setup Utility program (see “Setup Utility program” on page 24)
2. Select **Power Management** from the Configuration/Setup Utility program menu.
3. Select **APM**.
4. Be sure **APM BIOS Mode** is set to **Disabled**. If it is not, press Left Arrow (←) or Right Arrow (→) to change the setting.
5. Select **Automatic Hardware Power Management**.
6. Set **Automatic Hardware Power Management** to **Disabled**.
7. If the problem persists, continue to **003** .

### **003**

Run the Diagnostic programs. If necessary, refer to “Diagnostics” on page 26.

- If you receive an error, replace the part that the diagnostic program calls out or go to “Symptom-to-FRU Index” on page 87.
- If the test stops and you cannot continue, replace the last device tested.

---

## Chapter 3. General information

This IBM® computer incorporates many of the latest advances in computer technology and can be upgraded as your needs change.

Adding hardware options to your computer is an easy way to increase its capabilities. Instructions for installing external and internal options are included in this publication. When adding an option, use these instructions along with the instructions that come with the option.

Go to Access IBM for general information about the use, operation, and maintenance of your computer. Access IBM also contains information to help solve problems and get repair service or other technical assistance.

---

### Features

This section details the features available in each computer machine Type.

#### Types 8301 and 8302

This section provides an overview of the computer features and preinstalled software.

##### Microprocessor

Intel® Pentium® 4 processor with 512 KB of internal L2 cache memory and Intel NetBurst™ micro-architecture

##### Memory

- Support for two dual inline memory modules (DIMMs)
- 512 KB flash memory for system programs

##### Internal drives

- Internal hard disk drive

**Note:** The hard disk drive should only be removed for maintenance or upgrade and not for daily security.

- EIDE CD-ROM drive (some models)

##### Video subsystem

Intel Extreme™ graphics

##### Audio subsystem

Integrated SoundMAX 3 audio

##### Connectivity

10/100 Mbps integrated Intel Ethernet controller that supports the Wake on LAN® feature

### **System management features**

- Remote Program Load (RPL) and Dynamic Host Configuration Protocol (DHCP)
- Wake on LAN
- Wake on Ring (in the IBM Setup Utility program, this feature is called Serial Port Ring Detect for an external modem and Modem Ring Detect for an internal modem)
- Remote Administration
- Automatic power-on startup
- System Management (SM) BIOS and SM software
- Ability to store POST hardware test results

### **Input/output features**

- 25-pin, Extended Capabilities Port (ECP)/Extended Parallel Port (EPP)
- Two 9-pin serial connectors
- Six 4-pin, USB connectors
- PS/2<sup>®</sup> mouse connector
- PS/2 keyboard connector
- Ethernet connector
- VGA monitor connector
- Three audio connectors (line in, line out, and microphone)

### **Expansion**

Two drive bays

### **Power**

- 125 W power supply with manual voltage selection switch
- Automatic 50/60 Hz input frequency switching
- Advanced Power Management support
- Advanced Configuration and Power Interface (ACPI) support

### **Security features**

- User and administrator passwords
- Support for the addition of a rope clip and lockable cable
- Support for the addition of an integrated cable lock
- Startup sequence control
- Startup without keyboard or mouse
- Unattended start mode
- Serial and parallel port I/O control
- Security profile by device

### **IBM preinstalled software**

Your computer might come with preinstalled software. If it does, an operating system, device drivers to support built-in features, and other support programs are included.

### **Operating systems (preinstalled)** (varies by model type)

**Note:** Not all countries or regions will have these operating systems.

- Microsoft<sup>®</sup> Windows<sup>®</sup> XP Home

- Microsoft Windows XP Professional
- Microsoft Windows 2000 Professional

**Operating systems (tested for compatibility)<sup>1</sup>**

- Microsoft Windows NT<sup>®</sup> Workstation Version 4.0
- Microsoft Windows 98 Second Edition
- Microsoft Windows Millennium<sup>®</sup>
- OS/2<sup>®</sup>

## **Types 8303, 8304, and 8312**

This section provides an overview of the computer features and preinstalled software.

**Microprocessor** (varies by model type)

Intel<sup>®</sup> Pentium<sup>®</sup> 4 processor with 256 KB or 512 KB of internal L2 cache memory and Intel NetBurst<sup>™</sup> micro-architecture

**Memory**

- Support for two dual inline memory modules (DIMMs)
- 512 KB flash memory for system programs

**Internal drives**

- 3.5-inch, 1.44 MB diskette drive
- Internal hard disk drive
- EIDE CD-ROM drive or DVD-ROM drive (some models)

**Video subsystem**

- Intel Extreme<sup>™</sup> graphics
- Accelerated graphics port (AGP) video adapter slot on the system board (some models)

**Audio subsystem**

Integrated SoundMAX 3 audio

---

1. The operating systems listed here are being tested for compatibility at the time this publication goes to press. Additional operating systems might be identified by IBM as compatible with your computer following the publication of this booklet. Corrections and additions to this list are subject to change. To determine if an operating system has been tested for compatibility, check the Web site of the operating system vendor.

**Connectivity**

- 10/100/1000 Mbps integrated Intel Ethernet controller that supports the Wake on LAN<sup>®</sup> feature
- Soft modem V.90/V.44 (some models)

**System management features**

- Remote Program Load (RPL) and Dynamic Host Configuration Protocol (DHCP)
- Wake on LAN
- Wake on Ring (in the IBM Setup Utility program, this feature is called Serial Port Ring Detect for an external modem and Modem Ring Detect for an internal modem)
- Remote Administration
- Automatic power-on startup
- System Management (SM) BIOS and SM software
- Ability to store POST hardware test results

**Input/output features**

- 25-pin, Extended Capabilities Port (ECP)/Extended Parallel Port (EPP)
- Two 9-pin serial connectors
- Six 4-pin, USB connectors
- PS/2<sup>®</sup> mouse connector
- PS/2 keyboard connector
- Ethernet connector
- VGA monitor connector
- Three audio connectors (line in, line out, and microphone)
- Front connectors for headphone, microphone, IEEE 1394, and S/PDIF (some models)

**Expansion**

- Three drive bays
- Three 32-bit peripheral component interconnect (PCI) adapter slots (supports low-profile adapters only)
- One accelerated graphics port (AGP) expansion slot (supports low-profile adapters only)

**Power**

- 160 W power supply with manual voltage selection switch
- Automatic 50/60 Hz input frequency switching
- Advanced Power Management support
- Advanced Configuration and Power Interface (ACPI) support

**Security features**

- User and administrator passwords
- Support for the addition of a rope clip and lockable cable
- Support for the addition of an integrated cable lock
- Startup sequence control
- Startup without diskette drive, keyboard, or mouse
- Unattended start mode

- Diskette and hard disk I/O control
- Serial and parallel port I/O control
- Security profile by device

#### **IBM preinstalled software**

Your computer might come with preinstalled software. If it does, an operating system, device drivers to support built-in features, and other support programs are included.

#### **Operating systems (preinstalled)** (varies by model type)

**Note:** Not all countries or regions will have these operating systems.

- Microsoft® Windows® XP Home
- Microsoft Windows XP Professional
- Microsoft Windows 2000 Professional

#### **Operating systems (tested for compatibility)<sup>2</sup>**

- Microsoft Windows NT® Workstation Version 4.0
- Microsoft Windows 98 Second Edition
- Microsoft Windows Millennium®
- OS/2®

## **Types 8305, 8306, 8309, and 8313**

This section provides an overview of the computer features and preinstalled software.

#### **Microprocessor** (varies by model type)

Intel® Pentium® 4 processor with 256 KB or 512 KB of internal L2 cache memory and Intel NetBurst™ micro-architecture

#### **Memory**

- Support for two dual inline memory modules (DIMMs)
- 512 KB flash memory for system programs

#### **Internal drives**

- 3.5-inch, 1.44 MB diskette drive
- Internal hard disk drive
- EIDE CD drive or DVD drive (some models)

#### **Video subsystem**

- Intel Extreme™ graphics
- Accelerated graphics port (AGP) video adapter slot on the system board (some models)

#### **Audio subsystem**

Integrated SoundMAX 3 audio

---

2. The operating systems listed here are being tested for compatibility at the time this publication goes to press. Additional operating systems might be identified by IBM as compatible with your computer following the publication of this booklet. Corrections and additions to this list are subject to change. To determine if an operating system has been tested for compatibility, check the Web site of the operating system vendor.

**Connectivity**

10/100/1000 Mbps integrated Intel Ethernet controller that supports the Wake on LAN<sup>®</sup> feature

**System management features**

- Remote Program Load (RPL) and Dynamic Host Configuration Protocol (DHCP)
- Wake on LAN
- Wake on Ring (in the IBM Setup Utility program, this feature is called Serial Port Ring Detect for an external modem and Modem Ring Detect for an internal modem)
- Remote Administration
- Automatic power-on startup
- System Management (SM) BIOS and SM software
- Ability to store POST hardware test results

**Input/output features**

- 25-pin, Extended Capabilities Port (ECP)/Extended Parallel Port (EPP)
- Two 9-pin serial connectors
- Six 4-pin, USB connectors
- PS/2<sup>®</sup> mouse connector
- PS/2 keyboard connector
- Ethernet connector
- VGA monitor connector
- Three audio connectors (line in, line out, and microphone)

**Expansion**

- Four drive bays
- Three 32-bit peripheral component interconnect (PCI) adapter slots
- One accelerated graphics port (AGP) expansion slot

**Power**

- 185 W power supply with manual voltage selection switch
- Automatic 50/60 Hz input frequency switching
- Advanced Power Management support
- Advanced Configuration and Power Interface (ACPI) support

**Security features**

- User and administrator passwords
- Support for the addition of a rope clip and lockable cable
- Support for the addition of an integrated cable lock
- Startup sequence control
- Startup without diskette drive, keyboard, or mouse
- Unattended start mode
- Diskette and hard disk I/O control
- Serial and parallel port I/O control
- Security profile by device



### **IBM preinstalled software**

Your computer might come with preinstalled software. If it does, an operating system, device drivers to support built-in features, and other support programs are included.

### **Operating systems (preinstalled)** (varies by model type)

**Note:** Not all countries or regions will have these operating systems.

- Microsoft® Windows® XP Home
- Microsoft Windows XP Professional
- Microsoft Windows 2000 Professional

### **Operating systems (tested for compatibility)**<sup>3</sup>

- Microsoft Windows NT® Workstation Version 4.0
- Microsoft Windows 98 Second Edition
- Microsoft Windows Millennium®
- OS/2®

## **Types 8307, 8308, 8310, 8311, 8314, and 8315**

This section provides an overview of the computer features and preinstalled software.

### **Microprocessor** (varies by model type)

Intel® Pentium® 4 processor with 256 KB or 512 KB of internal L2 cache memory and Intel NetBurst™ micro-architecture

### **Memory**

- Support for two dual inline memory modules (DIMMs)
- 512 KB flash memory for system programs

### **Internal drives**

- 3.5-inch, 1.44 MB diskette drive
- Internal hard disk drive
- EIDE CD drive or DVD drive

### **Video subsystem**

- Intel Extreme™ graphics
- Accelerated graphics port (AGP) video adapter slot on the system board (some models)

### **Audio subsystem**

Integrated SoundMAX 3 audio

### **Connectivity**

- 10/100 Mbps integrated Intel Ethernet controller that supports the Wake on LAN® feature

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3. The operating systems listed here are being tested for compatibility at the time this publication goes to press. Additional operating systems might be identified by IBM as compatible with your computer following the publication of this booklet. Corrections and additions to this list are subject to change. To determine if an operating system has been tested for compatibility, check the Web site of the operating system vendor.

- Soft modem V.90/V.44 (some models)

#### **System management features**

- Remote Program Load (RPL) and Dynamic Host Configuration Protocol (DHCP)
- Wake on LAN
- Wake on Ring (in the IBM Setup Utility program, this feature is called Serial Port Ring Detect for an external modem and Modem Ring Detect for an internal modem)
- Remote Administration
- Automatic power-on startup
- System Management (SM) BIOS and SM software
- Ability to store POST hardware test results

#### **Input/output features**

- 25-pin, Extended Capabilities Port (ECP)/Extended Parallel Port (EPP)
- Two 9-pin serial connectors
- Six 4-pin, USB connectors
- PS/2<sup>®</sup> mouse connector
- PS/2 keyboard connector
- Ethernet connector
- VGA monitor connector
- Three audio connectors (line in, line out, and microphone)
- IEEE 1394 connector (some models)
- Front connectors for microphone and headphone (some models)

#### **Expansion**

- Five drive bays
- Three 32-bit peripheral component interconnect (PCI) adapter slots
- One accelerated graphics port (AGP) expansion slot

#### **Power**

- 185 W power supply with manual voltage selection switch
- Automatic 50/60 Hz input frequency switching
- Advanced Power Management support
- Advanced Configuration and Power Interface (ACPI) support

#### **Security features**

- User and administrator passwords
- Support for the addition of a rope clip and lockable cable
- Support for the addition of an integrated cable lock
- Startup sequence control
- Startup without diskette drive, keyboard, or mouse
- Unattended start mode
- Diskette and hard disk I/O control
- Serial and parallel port I/O control
- Security profile by device

### **IBM preinstalled software**

Your computer might come with preinstalled software. If it does, an operating system, device drivers to support built-in features, and other support programs are included.

### **Operating systems (preinstalled)** (varies by model type)

**Note:** Not all countries or regions will have these operating systems.

- Microsoft® Windows® XP Home
- Microsoft Windows XP Professional
- Microsoft Windows 2000 Professional

### **Operating systems (tested for compatibility)<sup>4</sup>**

- Microsoft Windows NT® Workstation Version 4.0
- Microsoft Windows 98 Second Edition
- Microsoft Windows Millennium®
- OS/2®

---

## **Physical specifications**

This section details the physical specifications for each computer Type.

### **Types 8301 and 8302**

This section lists the physical specifications for Type 8301 and 8302 computers.

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4. The operating systems listed here are being tested for compatibility at the time this publication goes to press. Additional operating systems might be identified by IBM as compatible with your computer following the publication of this booklet. Corrections and additions to this list are subject to change. To determine if an operating system has been tested for compatibility, check the Web site of the operating system vendor.

<p><b>Dimensions</b></p> <p>Height: 110 mm (4.3 in.)  Width: 310 mm (12.2 in.)  Depth: 343 mm (13.5 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 8.1 kg (18 lb)  Maximum configuration: 9.1 kg (20 lb)</p> <p><b>Environment</b></p> <p>Air temperature:  System on: 10° to 35°C (50° to 95° F)  System off: 10° to 43°C (50° to 110° F)  Maximum altitude: 2134 m (7000 ft)  <b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:  System on: 8% to 80%  System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:  Low range:  Minimum: 90 V ac  Maximum: 137 V ac  Input frequency range: 57–63 Hz  Voltage switch setting: 115 V ac  High range:  Minimum: 180 V ac  Maximum: 265 V ac  Input frequency range: 47–53 Hz  Voltage switch setting: 230 V ac  Input kilovolt-amperes (kVA) (approximate):  Minimum configuration as shipped: 0.08 kVA  Maximum configuration: 0.30 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:  Minimum configuration: 257 Btu/hr (75 watts)  Maximum configuration: 497 Btu/hr (145 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.40 cubic meters per minute (14 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>Average sound-pressure levels:  At operator position:  Idle: 34 dBA  Operating: 36 dBA  At bystander position - 1 meter (3.3 ft):  Idle: 31 dBA  Operating: 34 dBA  Declared (upper limit) sound-power levels:  Idle: 4.4 bels  Operating: 4.7 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p> <p><b>Note:</b> See the <i>Quick Reference</i> for the classification of your computer.</p>
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## Types 8303, 8304 and 8312

This section lists the physical specifications for Type 8303, 8304, and 8312 computers.

<p><b>Dimensions</b></p> <p>Height: 104 mm (4.1 in.)  Width: 360 mm (14.2 in.)  Depth: 412 mm (16.2 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 8.1 kg (18 lb)  Maximum configuration: 9.1 kg (20 lb)</p> <p><b>Environment</b></p> <p>Air temperature:  System on: 10° to 35°C (50° to 95° F)  System off: 10° to 43°C (50° to 110° F)  Maximum altitude: 2134 m (7000 ft)  <b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:  System on: 8% to 80%  System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:  Low range:  Minimum: 90 V ac  Maximum: 137 V ac  Input frequency range: 57–63 Hz  Voltage switch setting: 115 V ac  High range:  Minimum: 180 V ac  Maximum: 265 V ac  Input frequency range: 47–53 Hz  Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate):  Minimum configuration as shipped: 0.08 kVA  Maximum configuration: 0.30 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:  Minimum configuration: 257 Btu/hr (75 watts)  Maximum configuration: 806 Btu/hr (235 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.45 cubic meters per minute (16 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>Average sound-pressure levels:  At operator position:  Idle: 32 dBA  Operating: 35 dBA  At bystander position - 1 meter (3.3 ft):  Idle: 29 dBA  Operating: 33 dBA</p> <p>Declared (upper limit) sound-power levels:  Idle: 4.4 bels  Operating: 4.7 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p> <p><b>Note:</b> See the <i>Quick Reference</i> for the classification of your computer.</p>
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## Types 8305, 8306, 8309, and 8313

This section lists the physical specifications for your computer.

<p><b>Dimensions</b></p> <p>Height: 140 mm (5.5 in.) Width: 425 mm (16.7 in.) Depth: 414 mm (16.3 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 10.0 kg (22 lb) Maximum configuration: 11.4 kg (25.0 lb)</p> <p><b>Environment</b></p> <p>Air temperature: System on: 10° to 35°C (50° to 95° F) System off: 10° to 43°C (50° to 110° F) Maximum altitude: 2134 m (7000 ft) <b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity: System on: 8% to 80% System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage: Low range: Minimum: 90 V ac Maximum: 137 V ac Input frequency range: 57–63 Hz Voltage switch setting: 115 V ac High range: Minimum: 180 V ac Maximum: 265 V ac Input frequency range: 47–53 Hz Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate): Minimum configuration as shipped: 0.08 kVA Maximum configuration: 0.3 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour: Minimum configuration: 257 Btu/hr (75 watts) Maximum configuration: 890 Btu/hr (260 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.56 cubic meters per minute (20 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>Average sound-pressure levels: At operator position: Idle: 33 dBA Operating: 36 dBA At bystander position - 1 meter (3.3 ft): Idle: 30 dBA Operating: 33 dBA</p> <p>Declared (upper limit) sound-power levels: Idle: 4.4 bels Operating: 4.7 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p> <p><b>Note:</b> See the <i>Quick Reference</i> for the classification of your computer.</p>
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## Types 8307, 8308, 8310, 8311, 8314, and 8315

This section lists the physical specifications for your computer.

<p><b>Dimensions</b></p> <p>Height: 413 mm (16.25 in.)</p> <p>Width: 191 mm (7.5 in.)</p> <p>Depth: 406 mm (16 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 9.1 kg (20 lb)</p> <p>Maximum configuration: 10.2 kg (22.5 lb)</p> <p><b>Environment</b></p> <p>Air temperature:</p> <p>System on: 10° to 35°C (50° to 95° F)</p> <p>System off: 10° to 43°C (50° to 110° F)</p> <p>Maximum altitude: 2134 m (7000 ft)</p> <p><b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:</p> <p>System on: 8% to 80%</p> <p>System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:</p> <p>Low range:</p> <p>Minimum: 90 V ac</p> <p>Maximum: 137 V ac</p> <p>Input frequency range: 57–63 Hz</p> <p>Voltage switch setting: 115 V ac</p> <p>High range:</p> <p>Minimum: 180 V ac</p> <p>Maximum: 265 V ac</p> <p>Input frequency range: 47–53 Hz</p> <p>Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate):</p> <p>Minimum configuration as shipped: 0.08 kVA</p> <p>Maximum configuration: 0.3 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:</p> <p>Minimum configuration: 257 Btu/hr (75 watts)</p> <p>Maximum configuration: 890 Btu/hr (260 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.76 cubic meters per minute (26 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 30 dBA</p> <p>Operating: 34 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 29 dBA</p> <p>Operating: 33 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.4 bels</p> <p>Operating: 4.7 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p> <p><b>Note:</b> See the <i>Quick Reference</i> for the classification of your computer.</p>
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## Available options

This section details the options available in each computer Type.

### Types 8301 and 8302

The following are some available options:

- External options
  - Parallel port devices, such as printers and external drives
  - Serial port devices, such as external modems and digital cameras
  - Audio devices, such as external speakers for the sound system
  - USB devices, such as printers, joysticks, and scanners
  - Monitors
- Internal drives, such as
  - CD-ROM drive (some models)
  - Hard disk drive

For the latest information about available options, see the following World Wide Web pages:

- <http://www.ibm.com/pc/us/options/>
- <http://www.ibm.com/pc/support/>

You can also obtain information by calling the following telephone numbers:

- Within the United States, call 1-800-IBM-2YOU (1-800-426-2968), your IBM reseller, or IBM marketing representative.
- Within Canada, call 1-800-565-3344 or 1-800-IBM-4YOU.
- Outside the United States and Canada, contact your IBM reseller or IBM marketing representative.



## Types 8303, 8304 and 8312

The following are some available options:

- External options
  - Parallel port devices, such as printers and external drives
  - Serial port devices, such as external modems and digital cameras
  - Audio devices, such as external speakers for the sound system
  - USB devices, such as printers, joysticks, and scanners
  - Security device, such as a rope clip
  - Monitors
  - IEEE 1394 devices (requires an IEEE 1394 adapter)
- Internal options
  - System memory, called dual inline memory modules (DIMMs)
  - Peripheral component interconnect (PCI) adapters (supports low-profile adapters only)
  - Accelerated graphics port (AGP) adapters (supports low-profile adapters only)
  - Internal drives, such as:
    - CD-ROM drive and DVD-ROM drive (some models)
    - Hard disk drive
    - Diskette drives and other removable media drives

For the latest information about available options, see the following World Wide Web pages:

- <http://www.ibm.com/pc/us/options/>
- <http://www.ibm.com/pc/support/>

You can also obtain information by calling the following telephone numbers:

- Within the United States, call 1-800-IBM-2YOU (1-800-426-2968), your IBM reseller, or IBM marketing representative.
- Within Canada, call 1-800-565-3344 or 1-800-IBM-4YOU.
- Outside the United States and Canada, contact your IBM reseller or IBM marketing representative.

## Types 8305, 8306, 8309, and 8313

The following are some available options:

- External options
  - Parallel port devices, such as printers and external drives
  - Serial port devices, such as external modems and digital cameras
  - Audio devices, such as external speakers for the sound system
  - USB devices, such as printers, joysticks, and scanners
  - Security device, such as a rope clip
  - Monitors
- Internal options
  - System memory, called dual inline memory modules (DIMMs)
  - Peripheral component interconnect (PCI) adapters
  - Accelerated graphics port (AGP) adapters
  - Internal drives, such as:
    - CD drive or DVD drive (some models)
    - Hard disk drive
    - Diskette drives and other removable media drives

For the latest information about available options, see the following World Wide Web pages:

- <http://www.ibm.com/pc/us/options/>
- <http://www.ibm.com/pc/support/>

You can also obtain information by calling the following telephone numbers:

- Within the United States, call 1-800-IBM-2YOU (1-800-426-2968), your IBM reseller, or IBM marketing representative.
- Within Canada, call 1-800-565-3344 or 1-800-IBM-4YOU.
- Outside the United States and Canada, contact your IBM reseller or IBM marketing representative.

## Types 8307, 8308, 8310, 8311, 8314, and 8315

The following are some available options:

- External options
  - Parallel port devices, such as printers and external drives
  - Serial port devices, such as external modems and digital cameras
  - Audio devices, such as external speakers for the sound system
  - USB devices, such as printers, joysticks, and scanners
  - Security device, such as a rope clip
  - Monitors
  - IEEE 1394 devices (requires an IEEE 1394 adapter)
- Internal options
  - System memory, called dual inline memory modules (DIMMs)
  - Peripheral component interconnect (PCI) adapters
  - Accelerated graphics port (AGP) adapters
  - Internal drives, such as:
    - CD drive and DVD drive
    - Hard disk drive
    - Diskette drives and other removable media drives

For the latest information about available options, see the following World Wide Web pages:

- <http://www.ibm.com/pc/us/options/>
- <http://www.ibm.com/pc/support/>

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- Outside the United States and Canada, contact your IBM reseller or IBM marketing representative.



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## Chapter 4. Diagnostics

The following tools are available to help identify and resolve hardware-related problems.

- Setup Utility program
- Power-On Self-Test (POST)
  - POST Beep Codes
  - Error Code Format
- Diagnostics program
- Recovery utility
  - Factory Contents
  - Partial recovery
- Repair utility

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## Setup Utility program

**Attention:**

A customized setup configuration (other than default settings) might exist on the computer you are servicing. Running the Setup Utility program might alter those settings. Note the current configuration settings and verify that the settings are in place when service is complete.

The Setup Utility (configuration) program is stored in the permanent memory of the computer. This program includes settings for the following:

- System Summary
- Product Data
- Devices and I/O Ports
- Start Options
- Date and Time
- System Security
- Advanced Setup
- Power Management

To run the Setup Utility program, use the following procedure.

1. Power-off the computer and wait for a few seconds until all in-use lights go off.
2. Power-on the computer.
3. When the Setup Utility prompt appears on the screen during start-up, press **F1**. The Setup Utility menu will appear.
4. Follow the instructions on the screen.
5. When finished, select **System Summary** to verify that any configuration changes have been accepted.

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## Product Recovery Program menu

Type 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8314, and 8315 machines have recovery and diagnostics programs on a separate hard drive partition. The Enhanced Diagnostics diskette is not shipped with the machine. To download the Diagnostics program, see “Diagnostics program download” on page 26.

At startup, the machine displays the following prompt:  
**To start the Product Recovery Program, press F11**

**Attention:** Make sure all data is backed up to avoid loss when the Product Recovery program is used.

After depressing F11, you are given the following options.

- **Factory Contents**

This utility reformats the hard drive and restores all original files.

- **System utilities**

1. **Repair (Windows NT 4.0 and 2000 Only)**

This runs the Windows NT 4.0 emergency repair utility.

2. **Run Diagnostics**

Runs the IBM Enhanced Diagnostic Program.

3. **Create a Diagnostics Diskette**

Creates a bootable diagnostic diskette.

4. **System Information**

Displays information about your computer configuration and allows the user to gather system information that would be needed during a Help Center call.

5. **Create Recovery/Repair Diskette (Disk to Disk Solution Only)**

Creates a startable diskette to restore access to the IBM Product Recovery program on the hard disk.

6. **Recovery CD**

In the event of a Hard Disk Drive failure, a Recovery CD can be used to restore the Hard Disk Drive to the original factory preset. Be sure to use the Recovery CD FRU list to obtain the proper recovery CD for the computer model you are servicing.

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## Diagnostics

The Diagnostics program uses a full range of diagnostic utilities to determine the operating condition of the computer's hardware components.

For a complete list of error codes and messages, see "Symptom-to-FRU Index" on page 87.

**Note:** The fans in this system may turn off under normal operation. This is a noise-level reduction feature, and should not be taken to mean there is something wrong with the system.

### Diagnostics program download

To download the Diagnostics program, do the following:

- Go to <http://www.ibm.com/>.
- Select **Support**.
- Select **Personal computing** from the "Get product support for" pull-down menu.
- Search for the machine type in the "Quick Path" box on the left.
- Select **Downloadable files** from the options on the left.
- Select **Diagnostics** from the pull down menu.

### Navigating through the diagnostics programs

Use the cursor movement keys to navigate within the menus.

- The **Enter** key is used to select a menu item.
- The **Esc** key is used to back up to the previous menu.
- For online help select **F1**.

### Running diagnostics tests

There are four ways to run the diagnostic tests.

1. Using the cursor movement keys, highlight **Run Normal Test** or **Run Quick Test** from the Diagnostics menu and then press **Enter**.  
This will automatically run a pre-defined group of tests from each test category. **Run Normal Test** runs a more extensive set of tests than does **Run Quick Test** and takes longer to execute.
2. Press **F5** to automatically run all selected tests in all categories. See "Test Selection".
3. From within a test category, press **Ctrl-Enter** to automatically run only the selected tests in that category. See "Test Selection".
4. Using the cursor movement keys, highlight a single test within a test category, then press **Enter**. This will run only that test.

Press **Esc** at any time to stop the testing process.

Test results, (N/A, PASSED, FAILED, ABORTED), are displayed in the field beside the test description and in the test log. See "Viewing the test log" on page 30.

### Test selection

To select one or more tests, use the following procedure.

1. Open the corresponding test category.
2. Using the cursor movement keys, highlight the desired test.



3. Press the space bar.  
A selected test is marked by >>. Pressing the space bar again de-selects a test and removes the chevron.
4. Repeat steps 2 and 3 above to select all desired tests.

## Test results

Diagnostics test results will produce the following error code format:

Function Code	Failure Type	DeviceID	Date	ChkDigits	Text
---------------	--------------	----------	------	-----------	------

- **Function Code:**  
Represents the feature or function within the PC.
- **Failure Type:**  
Represents the type of error encountered.
- **DeviceID:**  
Contains the component's unit-ID which corresponds to either a fixed disk drive, removable media drive, serial or parallel port, processor, specific RIMM, or a device on the PCI bus.
- **Date:**  
Contains the date on which the diagnostic test was run. The date is retrieved from CMOS and displayed using the YYYYMMDD format.
- **ChkDigits:**  
Contains a 2-digit check-digit value to ensure the following:
  - Diagnostics were run on the specified date.
  - Diagnostics were run on the specified IBM computer.
  - The diagnostic error code is recorded correctly.
- **Text:**  
Description of the error.

**Note:** See "Diagnostic error codes" on page 89 for error code listings.

## Fixed disk advanced test (FDAT)

PC-Doctor's (PCDR) Fixed-Disk Advanced Test module (FDAT) is a full-featured highly configurable fixed-disk test suite. The configurable capabilities of FDAT allow users to enable or disable specific tests, enable or disable testing features, control the test log detail, alter testing parameters, etc. FDAT will test for and report most commonly found errors on a fixed-disk drive and is able to test up to 128 SCSI and 4 IDE drives (up to 132 total drives). Drive information is gathered through FDAT's enumeration of available devices and user specific configuration parameters located in the FDAT.INI. FDAT uses information supplied by these features to indicate specifically what devices are available for test, what tests are available for the device, device properties, etc. Modify the FDAT.INI file in PC Doctor for DOS to change testing parameters

FDAT consists of the following subtests and features.

### Fixed-Disk Tests:

- *Seek Tests:* - checks the physical operation of the drive head.
  - Linear Seek

- Random Seek
- Min-Max Seek
- Butterfly Seek
- *Verify Tests*: - checks the integrity of the data present on the media.
  - Linear Verify
  - Random Verify
- *Surface Scan Tests*: - checks the drive media for defects.
  - Surface Scan (Linear)
  - Surface Scan (Aggressive) - this is disabled for normal customer use.
  - Surface Scan (Random)
- *SMART*: - checks the SMART functionality for drives that support SMART.
  - Start SMART Self-Test
  - Get SMART test results

**Other Test Features:**

- *Write-Splice Repair* - detects and corrects Error Correction Code errors during Verify tests.
- *Auto Spin Down* - a gradual spin down of the drive platters to avoid damaging the media.
- *Manufacturer Log* - an in-depth manufacturer supported log of errors on the drive.

**Multitasking:**

To allow simultaneous testing of multiple hard drives whenever possible, the FDAT module is written as a set of multitasking functions. Each drive under test can run the same test or run a different test at the same time. Each subtest is written to handle a single test pass and all test variables are kept track of in a structure unique for each drive . However, when testing IDE drives, FDAT will not perform simultaneous testing of IDE drives that are attached to the same IDE cable. For example, if FDAT is testing four IDE drives on a PC, it will perform simultaneous testing on drives 1 and 3 first (master drives), then perform tests on 2 and 4 (slave drives). FDAT will also perform simultaneous testing on a master and slave that are on separate IDE cables, but will not perform simultaneous tests on a master and slave on the same IDE cable. This generally increases the amount of time needed to test multiple IDE drives. Another limitation of FDAT'S multitasking capability is the use of Ultra DMA (UDMA). Only one drive at a time can access the UDMA channel and the UDMA channel buffer must be kept high in order to maintain a speed advantage over other data transfer modes. In order to use the UDMA channel during testing, users must disable the multitasking feature.

**Destructive vs non-destructive testing:**

Most of the tests found in FDAT are non-destructive. This means that PCDR will preserve any data that is present on the tested media prior to beginning any destructive operations (i.e. write operations). However, users can run certain tests in destructive mode (i.e. surface scan tests). Destructive tests will speed up testing because FDAT does not preserve the data on the media prior to the test beginning. Unlike non-destructive tests, any data present on the media prior to the test beginning is lost. FDAT allows for enabling or disabling destructive tests, as well as specifying a range of destructive and non-destructive sectors on the tested drive. This is done through the configuration of the FDAT.INI .If destructive and

non-destructive ranges somehow overlap, then the overlapped area is considered non-destructive. For example, if users specify both destructive and non-destructive ranges as the same, then the entire drive is tested as non-destructive.

## **Quick and Full erase - hard drive**

The Diagnostics program offers two hard drive format utilities:

- Quick Erase Hard Drive
- Full Erase Hard Drive

The Quick Erase Hard Drive provides a DOS utility that performs the following steps.

- Destroys the Master Boot Record (MBR) on the hard drive.
- Destroys all copies of the FAT Table on all partitions (both the master and backup).
- Destroys the partition table.
- Provides messages that warn the user that this is a non-recoverable process.

The Full Erase Hard Drive provides a DOS utility that performs the following steps.

- Performs all the steps in Quick Erase.
- Provides a DOS utility that writes random data to all sectors of the hard drive.
- Provide an estimate of time to completion along with a visual representation of completion status.
- Provides messages that warn the user about non-recoverable process.

<p><b>Important:</b> Make sure that all data is backed up before using the Quick or Full Erase functions.</p>
---

To select the Quick Erase or Full Erase Hard Drive utility, use the following procedure.

1. Select the UTILITY option on the toolbar and press **Enter**.
2. Select either the QUICK ERASE or FULL ERASE HARD DISK option and follow the instructions.

## Viewing the test log

Errors reported by the diagnostic test will be displayed by the program as a failed test.

To view details of a failure or to view a list of test results, use the following procedure from any test category screen.

- Press **F3** to activate the log file.
- Press **F3** again to save the file to diskette or **F2** to print the file.

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## Chapter 5. Installing Options

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### Installing external options

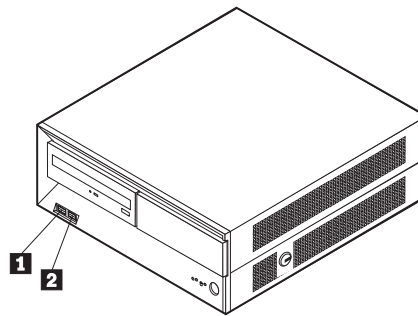
This chapter shows the various external connectors on the computer to which can be attached external options, such as external speakers, a printer, or a scanner. For some external options, additional software must be installed in addition to making the physical connection. When adding an external option, use the information in this chapter to identify the required connector, and then use the instructions that come with the option to help make the connection and install any software or device drivers that are required for the option.

**Important:** Before you install or remove any option, read “Safety information” on page 271. These precautions and guidelines will help you work safely.

### Locating connectors on the front

#### Types 8301 and 8302

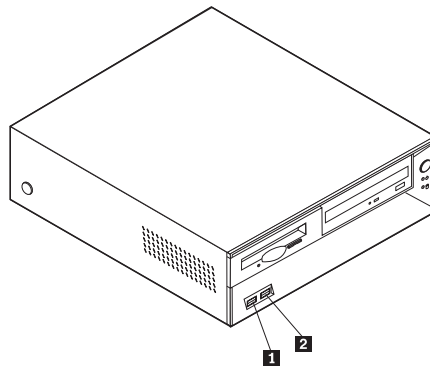
The following illustration shows the locations of the connectors on the front of the computer.



- 1** USB connector
- 2** USB connector

#### Types 8303, 8304, and 8312

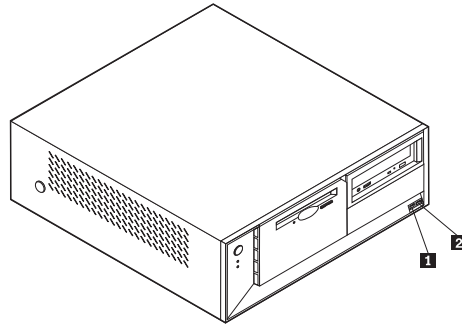
The following illustration shows the locations of the connectors on the front of the computer.



- 1** USB connector
- 2** USB connector

### Types 8305, 8306, 8309, and 8313

The following illustration shows the locations of the connectors on the front of the computer.

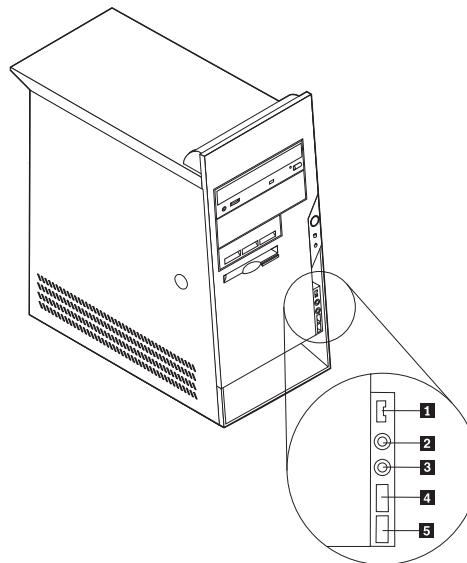


- 1** USB connector
- 2** USB connector

### Types 8307, 8308, 8310, 8311, 8314, and 8315

The following illustration shows the locations of the connectors on the front of the computer.

**Note:** Not all computer models will have the following connectors.

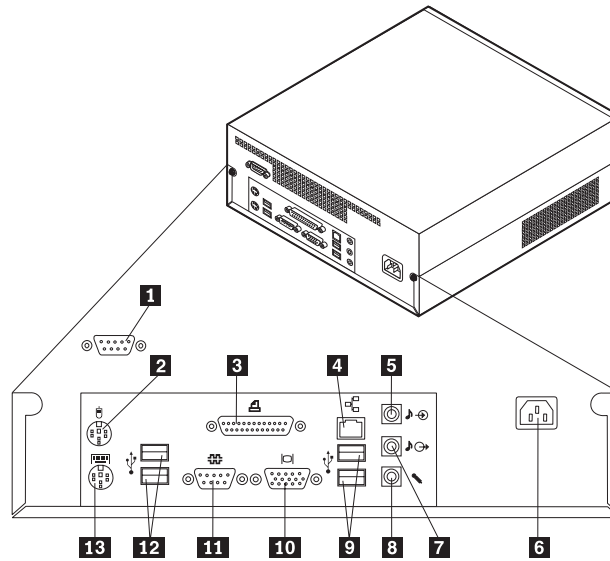


- |                               |                        |
|-------------------------------|------------------------|
| <b>1</b> IEEE 1394 connector  | <b>4</b> USB connector |
| <b>2</b> Microphone connector | <b>5</b> USB connector |
| <b>3</b> Headphone connector  |                        |

## Locating the connectors on the rear

### Types 8301 and 8302

The following illustration shows the locations of the connectors on the rear of the computer.



- |                                   |                                 |
|-----------------------------------|---------------------------------|
| <b>1</b> Serial connector         | <b>8</b> Microphone connector   |
| <b>2</b> Mouse connector          | <b>9</b> USB connectors         |
| <b>3</b> Parallel connector       | <b>10</b> VGA monitor connector |
| <b>4</b> Ethernet connector       | <b>11</b> Serial connector      |
| <b>5</b> Audio line in connector  | <b>12</b> USB connectors        |
| <b>6</b> Power connector          | <b>13</b> Keyboard connector    |
| <b>7</b> Audio line out connector |                                 |

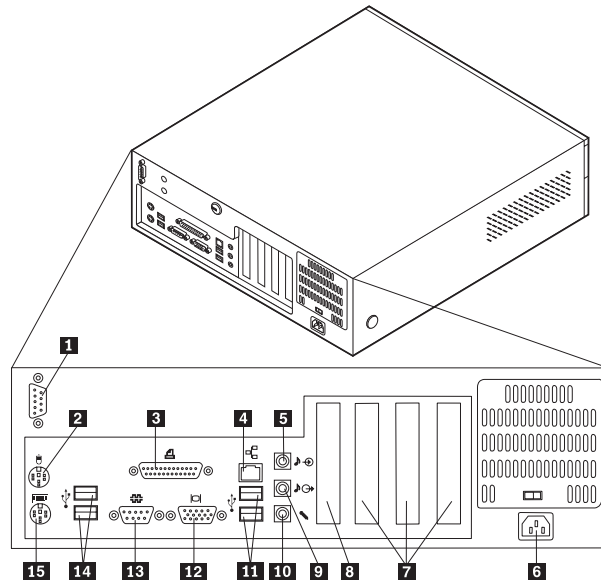
**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on your computer.

Connector	Description
Serial connector	Used to attach an external modem, serial printer, or other devices that use a 9-pin serial connector.
Mouse connector	Used to attach a mouse, trackball, or other pointing device that uses a standard mouse connector.
Parallel connector	Used to attach a parallel printer, parallel scanner, or other devices that use a 25-pin parallel connector.
Ethernet connector	Used to attach an Ethernet cable for a local area network (LAN). <b>Note:</b> To operate the computer within FCC Class B limits, use a Category 5 Ethernet cable.
Audio line in connector	Used to receive audio signals from an external audio device, such as a stereo system. When you attach an external audio device, a cable is connected between the audio line out connector of the device and the audio line in connector of the computer.
Audio line out connector	Used to send audio signals from the computer to external devices, such as powered stereo speakers (speakers with built-in amplifiers), headphones, multimedia keyboards, or the audio line in connector on a stereo system or other external recording device.
Microphone connector	Used to attach a microphone to your computer when you want to record voice or other sounds on the hard disk if you use speech-recognition software.
USB connectors	Used to attach a device that requires a Universal Serial Bus (USB) connection, such as a USB scanner or USB printer. If you have more than four USB devices, you can purchase a USB hub, which you can use to connect additional USB devices.
Keyboard connector	Used to attach a keyboard that uses a standard keyboard connector.



## Types 8303, 8304, and 8312

The following illustration shows the locations of the connectors on the rear of the computer.



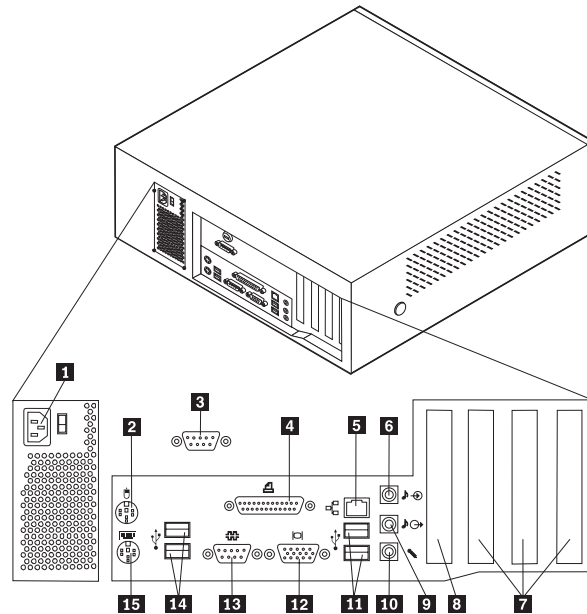
- |                                  |                                   |
|----------------------------------|-----------------------------------|
| <b>1</b> Serial connector        | <b>9</b> Audio line out connector |
| <b>2</b> Mouse connector         | <b>10</b> Microphone connector    |
| <b>3</b> Parallel connector      | <b>11</b> USB connectors          |
| <b>4</b> Ethernet connector      | <b>12</b> VGA monitor connector   |
| <b>5</b> Audio line in connector | <b>13</b> Serial connector        |
| <b>6</b> Power connector         | <b>14</b> USB connectors          |
| <b>7</b> PCI slots               | <b>15</b> Keyboard connector      |
| <b>8</b> AGP slot (some models)  |                                   |

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on your computer.

Connector	Description
Serial connector	Used to attach an external modem, serial printer, or other devices that use a 9-pin serial connector.
Mouse connector	Used to attach a mouse, trackball, or other pointing device that uses a standard mouse connector.
Parallel connector	Used to attach a parallel printer, parallel scanner, or other devices that use a 25-pin parallel connector.
Ethernet connector	Used to attach an Ethernet cable for a local area network (LAN). <b>Note:</b> To operate the computer within FCC Class B limits, use a Category 5 Ethernet cable.
Audio line in connector	Used to receive audio signals from an external audio device, such as a stereo system. When you attach an external audio device, a cable is connected between the audio line out connector of the device and the audio line in connector of the computer.
Audio line out connector	Used to send audio signals from the computer to external devices, such as powered stereo speakers (speakers with built-in amplifiers), headphones, multimedia keyboards, or the audio line in connector on a stereo system or other external recording device.
Microphone connector	Used to attach a microphone to your computer when you want to record voice or other sounds on the hard disk if you use speech-recognition software.
USB connectors	Used to attach a device that requires a Universal Serial Bus (USB) connection, such as a USB scanner or USB printer. If you have more than four USB devices, you can purchase a USB hub, which you can use to connect additional USB devices.
Keyboard connector	Used to attach a keyboard that uses a standard keyboard connector.

## Types 8305, 8306, 8309, and 8313

The following illustration shows the locations of the connectors on the rear of the computer.

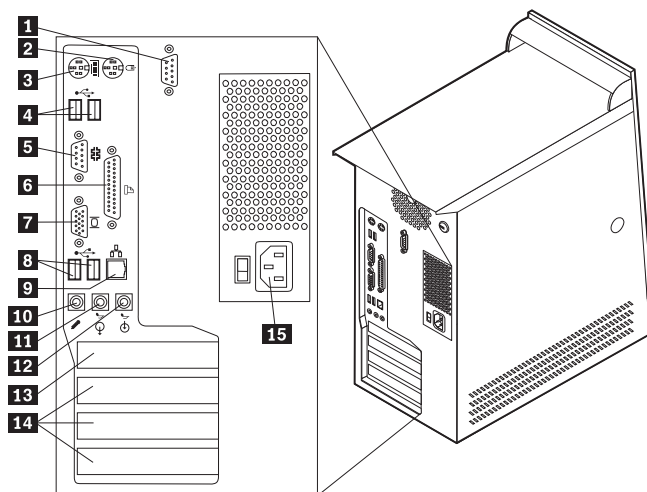


- |                                  |                                   |
|----------------------------------|-----------------------------------|
| <b>1</b> Power connector         | <b>9</b> Audio line out connector |
| <b>2</b> Mouse connector         | <b>10</b> Microphone connector    |
| <b>3</b> Serial connector        | <b>11</b> USB connectors          |
| <b>4</b> Parallel connector      | <b>12</b> VGA monitor connector   |
| <b>5</b> Ethernet connector      | <b>13</b> Serial connector        |
| <b>6</b> Audio line in connector | <b>14</b> USB connectors          |
| <b>7</b> PCI slots               | <b>15</b> Keyboard connector      |
| <b>8</b> AGP slot (some models)  |                                   |

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on your computer.

## Types 8307, 8308, 8310, 8311, 8314, and 8315

The following illustration shows the locations of the connectors on the back of the computer.



- |                                |                                    |
|--------------------------------|------------------------------------|
| <b>1</b> Serial connector      | <b>9</b> Ethernet connector        |
| <b>2</b> Mouse connector       | <b>10</b> Microphone connector     |
| <b>3</b> Keyboard connector    | <b>11</b> Audio line out connector |
| <b>4</b> USB connectors        | <b>12</b> Audio line in connector  |
| <b>5</b> Serial connector      | <b>13</b> AGP slot (some models)   |
| <b>6</b> Parallel connector    | <b>14</b> PCI slots                |
| <b>7</b> VGA monitor connector | <b>15</b> Power connector          |
| <b>8</b> USB connectors        |                                    |

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on your computer.

Connector	Description
Serial connector	Used to attach an external modem, serial printer, or other devices that use a 9-pin serial connector.
Mouse connector	Used to attach a mouse, trackball, or other pointing device that uses a standard mouse connector.
Keyboard connector	Used to attach a keyboard that uses a standard keyboard connector.
USB connectors	Used to attach a device that requires a Universal Serial Bus (USB) connection, such as a USB scanner or USB printer. If you have more than four USB devices, you can purchase a USB hub, which you can use to connect additional USB devices.
Parallel connector	Used to attach a parallel printer, parallel scanner, or other devices that use a 25-pin parallel connector.
Ethernet connector	Used to attach an Ethernet cable for a local area network (LAN). <b>Note:</b> To operate the computer within FCC Class B limits, use a Category 5 Ethernet cable.
Microphone connector	Used to attach a microphone to your computer when you want to record voice or other sounds on the hard disk if you use speech-recognition software.
Audio line out connector	Used to send audio signals from the computer to external devices, such as powered stereo speakers (speakers with built-in amplifiers), headphones, multimedia keyboards, or the audio line in connector on a stereo system or other external recording device.
Audio line in connector	Used to receive audio signals from an external audio device, such as a stereo system. When you attach an external audio device, a cable is connected between the audio line out connector of the device and the audio line in connector of the computer.

## Obtaining device drivers

Device drivers can be obtained for operating systems that are not preinstalled at <http://www.ibm.com/pc/support/> on the World Wide Web. Installation instructions are provided in README files with the device driver files.

---

## Installing internal options

The capabilities of the computer can be expanded by adding memory, drives, or adapters. When installing an option, use these instructions along with the instructions that come with the option.

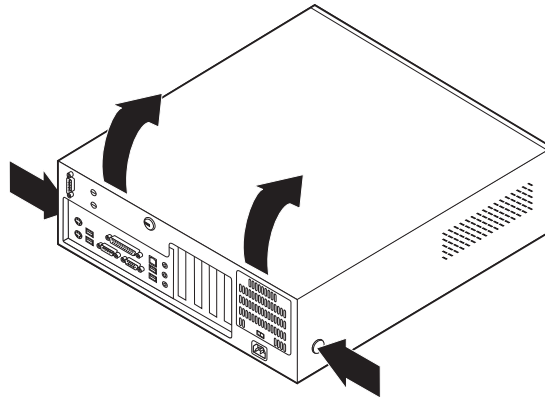
## Removing the cover

### Types 8303, 8304, and 8312

**Important:** Read “Safety information” on page 271 and “Handling electrostatic discharge-sensitive devices” on page 274 before you begin.

To remove the cover:

1. Shut down your operating system, remove any media (diskettes, CDs, or tapes) from the drives, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. Press the buttons on the sides of the computer and pivot the rear end of the cover up toward the front of the computer.



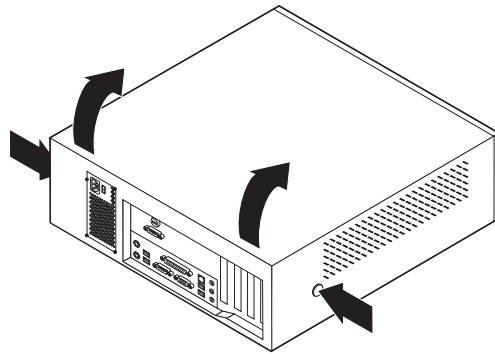
### Types 8305, 8306, 8309, and 8313

**Important:** Read “Safety information” on page 271 and “Handling electrostatic discharge-sensitive devices” on page 274 before you begin.

To remove the cover:

1. Shut down your operating system, remove any media (diskettes, CDs, or tapes) from the drives, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.

4. Press the buttons on the sides of the computer and pivot the rear end of the cover up toward the front of the computer.

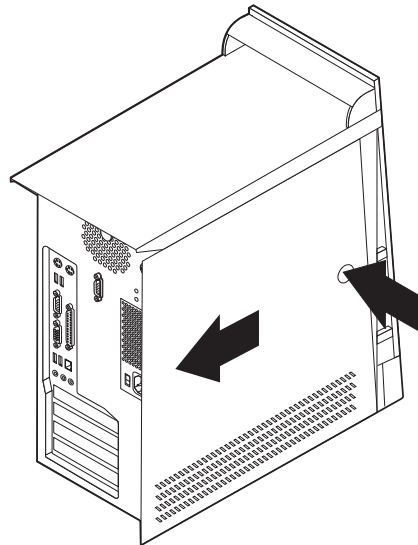


### **Types 8307, 8308, 8310, 8311, 8314, and 8315**

**Important:** Read “Safety information” on page 271 and “Handling electrostatic discharge-sensitive devices” on page 274 before you begin.

To remove the cover:

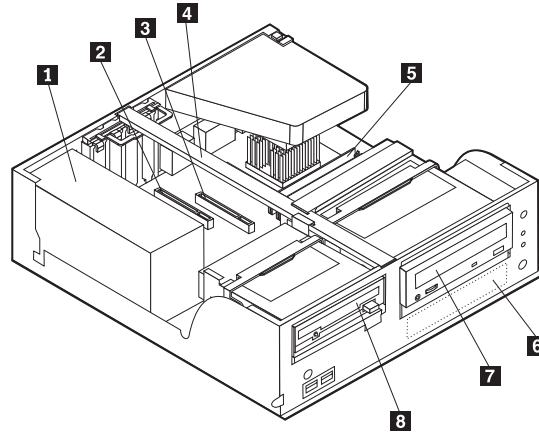
1. Shut down your operating system, remove any media (diskettes, CDs, or tapes) from the drives, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. Press the cover-release button on the left side cover and remove the cover.



## Locating components

### Types 8303, 8304, and 8312

The following illustration will help you locate the various components in your computer.



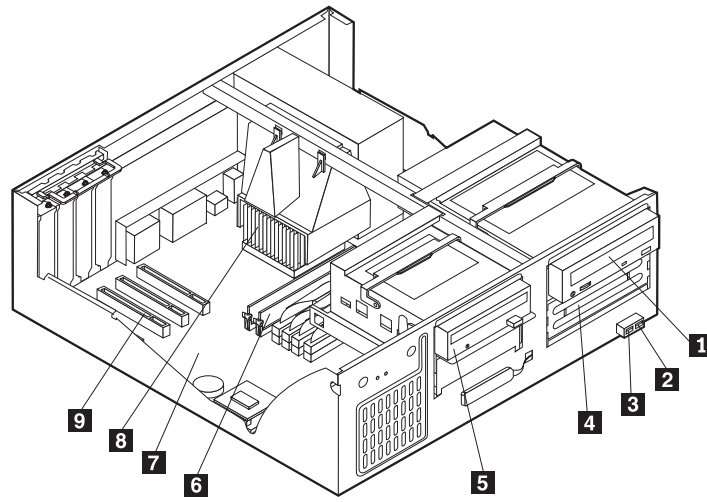
- 1** Power supply
- 2** PCI slot
- 3** AGP slot (some models)
- 4** Support bar

- 5** DIMM
- 6** Hard disk drive
- 7** CD-ROM drive or DVD-ROM drive
- 8** Diskette drive



## Types 8305, 8306, 8309, and 8313

The following illustration will help you locate the various components in your computer.



**1** CD drive or DVD drive

**2** USB connector

**3** USB connector

**4** Hard disk drive

**5** Diskette drive

**6** DIMMs

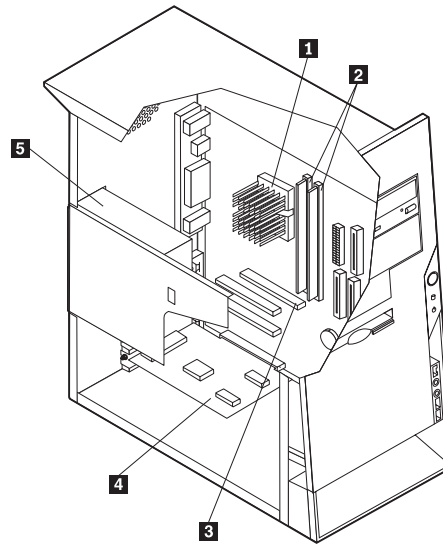
**7** System Board

**8** Microprocessor and heat sink

**9** PCI slots

## Types 8307, 8308, 8310, 8311, 8314, and 8315

The following illustration will help you locate the various components in your computer.



**1** Microprocessor and heat sink

**2** DIMMs

**3** AGP slot (some models)

**4** PCI adapter

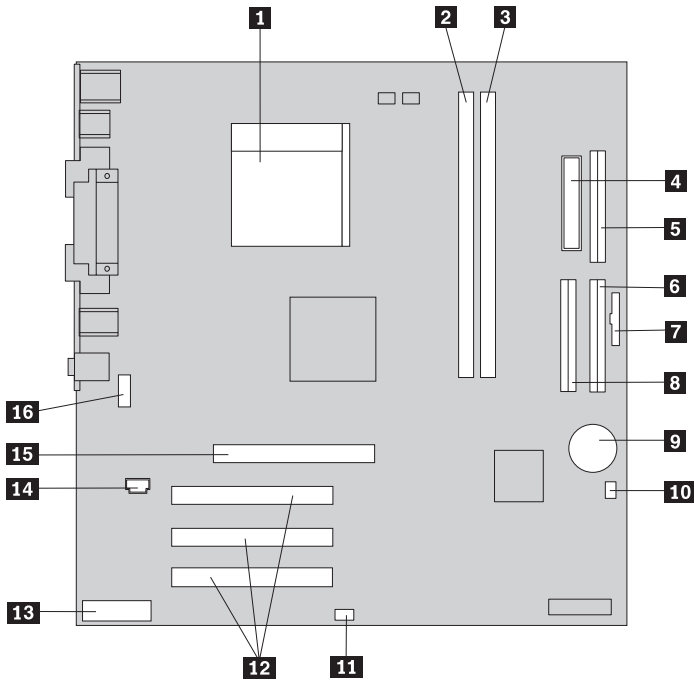
**5** Power supply

## Identifying parts on the system board

### Types 8303, 8304, and 8312

The system board (sometimes called the *planar* or *motherboard*) is the main circuit board in your computer. It provides basic computer functions and supports a variety of devices that are IBM-installed or that you can install later.

The following illustration shows the locations of parts on the system board.

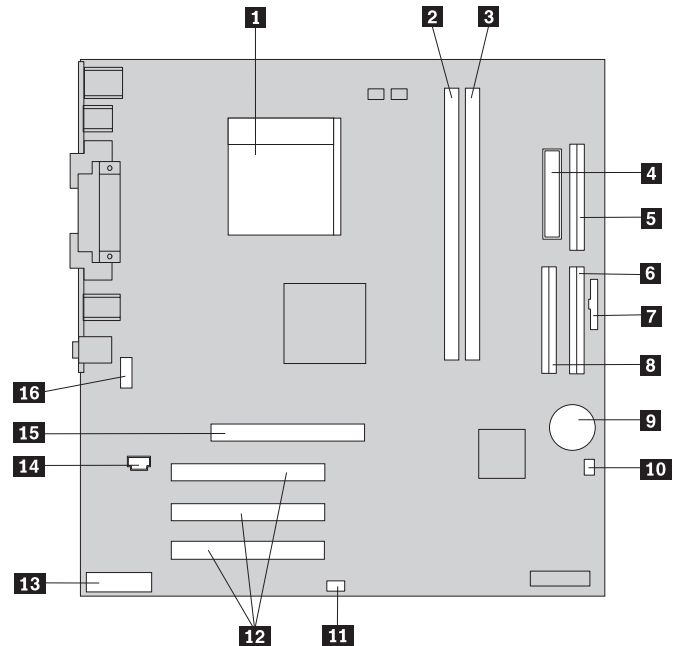


- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <b>1</b> Microprocessor           | <b>9</b> Battery                      |
| <b>2</b> DIMM connector 1         | <b>10</b> Clear CMOS/Recovery jumper  |
| <b>3</b> DIMM connector 2         | <b>11</b> SCSI LED connector          |
| <b>4</b> Power connector          | <b>12</b> PCI slots                   |
| <b>5</b> Diskette drive connector | <b>13</b> Front panel audio connector |
| <b>6</b> Primary IDE connector    | <b>14</b> CD-ROM audio connector      |
| <b>7</b> Front panel connector    | <b>15</b> AGP slot (some models)      |
| <b>8</b> Secondary IDE connector  | <b>16</b> Serial connector            |

### Types 8305, 8306, 8309, and 8313

The system board (sometimes called the *planar* or *motherboard*) is the main circuit board in your computer. It provides basic computer functions and supports a variety of devices that are IBM-installed or that you can install later.

The following illustration shows the locations of parts on the system board.

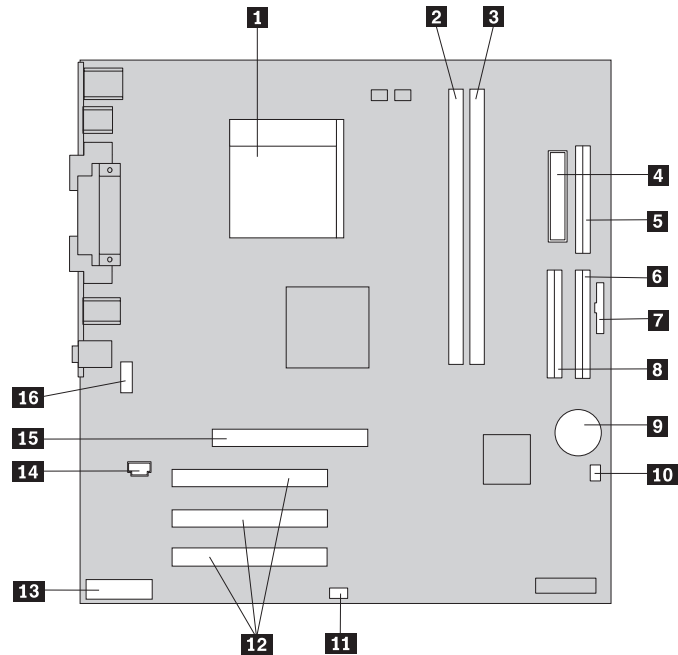


- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <b>1</b> Microprocessor           | <b>9</b> Battery                      |
| <b>2</b> DIMM connector 1         | <b>10</b> Clear CMOS/Recovery jumper  |
| <b>3</b> DIMM connector 2         | <b>11</b> SCSI LED connector          |
| <b>4</b> Power connector          | <b>12</b> PCI slots                   |
| <b>5</b> Diskette drive connector | <b>13</b> Front panel audio connector |
| <b>6</b> Primary IDE connector    | <b>14</b> CD-ROM audio connector      |
| <b>7</b> Front panel connector    | <b>15</b> AGP slot (some models)      |
| <b>8</b> Secondary IDE connector  | <b>16</b> Serial connector            |

### Types 8307, 8308, 8310, 8311, 8314, and 8315

The system board (sometimes called the *planar* or *motherboard*) is the main circuit board in your computer. It provides basic computer functions and supports a variety of devices that are IBM-installed or that you can install later.

The following illustration shows the locations of parts on the system board.



- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <b>1</b> Microprocessor           | <b>9</b> Battery                      |
| <b>2</b> DIMM connector 1         | <b>10</b> Clear CMOS/Recovery jumper  |
| <b>3</b> DIMM connector 2         | <b>11</b> SCSI LED connector          |
| <b>4</b> Power connector          | <b>12</b> PCI slots                   |
| <b>5</b> Diskette drive connector | <b>13</b> Front panel audio connector |
| <b>6</b> Primary IDE connector    | <b>14</b> CD-ROM audio connector      |
| <b>7</b> Front panel connector    | <b>15</b> AGP slot (some models)      |
| <b>8</b> Secondary IDE connector  | <b>16</b> Serial connector            |

## Installing memory

Your computer has two connectors for installing dual inline memory modules (DIMMs) that provide up to a maximum of 2.0 GB of system memory.

When installing DIMMs, the following rules apply:

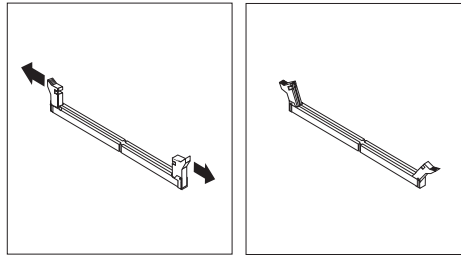
- Fill each system memory connector sequentially, starting at DIMM connector 1.
- Use 2.5 V, 184-pin, 266 MHz double data rate synchronous dynamic random access memory (DDR SDRAM).
- Use 128 MB, 256 MB, 512 MB or 1.0 GB (when available) DIMMs in any combination.
- DIMMs are 38.1 mm (1.5 inches) in height.

**Note:** Only DDR SDRAM DIMMs can be used.

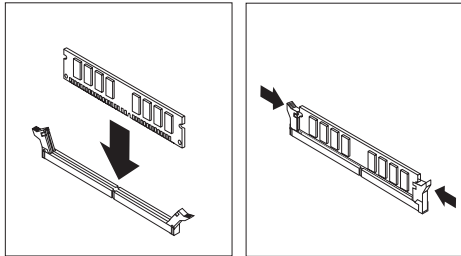
To install a DIMM:

1. Remove the cover. See “Removing the cover” on page 40.
2. To locate the DIMM connectors. See “Identifying parts on the system board” on page 44.

3. Open the retaining clips.



4. Make sure the notches in the DIMM align with the tabs on the connector. Push or insert the DIMM straight down into the connector until the retaining clips close.



**What to do next:**

- To work with another option, go to the appropriate section.
- To complete the installation, go to “Replacing the cover and connecting the cables” on page 67.

## Installing adapters

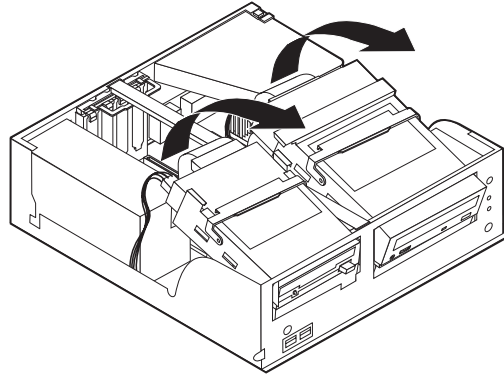
### Types 8303, 8304, and 8312

This section provides information and instructions for installing and removing adapters. Your computer has three expansion slots for PCI adapters and one slot used for an AGP adapter. Adapters must be low profile. Your computer supports adapters up to 168 mm (6.6 inches) long.

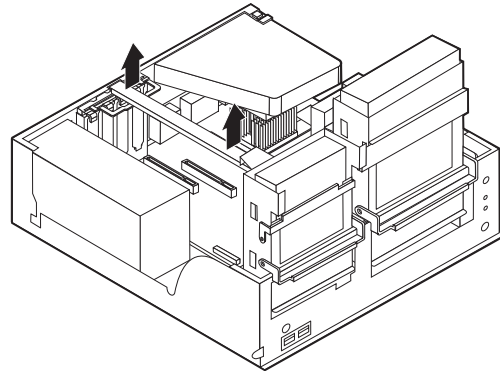
To install an adapter:

1. Remove the cover. See “Removing the cover” on page 40.

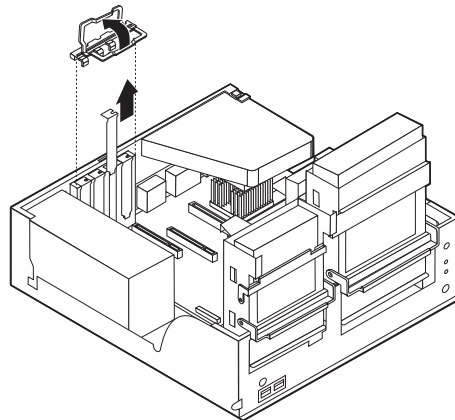
- Pivot one of the drive bay latch handles toward the front of the computer and then pivot the drive bay cage upward, as shown, until it is latched in the up position. Repeat this procedure for the remaining drive bay.



- Remove the support bar by pulling it outward from the computer.

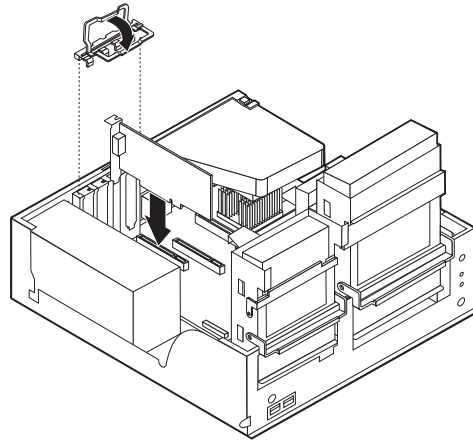


- Remove the adapter-slot-cover latch and the slot cover for the appropriate expansion slot.



- Remove the adapter from its static-protective package.
- Install the adapter into the appropriate slot on the system board.

7. Install the adapter-slot-cover latch.



8. Clear any cables that might impede the replacement of the drive bays.
9. Replace the support bar and pivot the two drive bays back to their original positions.

**What to do next:**

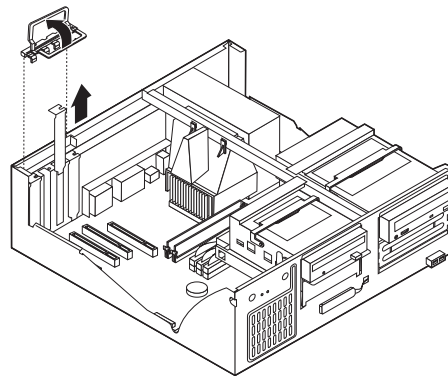
- To work with another option, go to the appropriate section.
- To complete the installation, go to “Replacing the cover and connecting the cables” on page 67.

### Installing adapters in Types 8305, 8306, 8309, and 8313

This section provides information and instructions for installing and removing adapters. Your computer has three expansion slots for PCI adapters and one slot used for an AGP adapter. You can install an adapter up to 340 mm (13.4 inches) long.

To install an adapter:

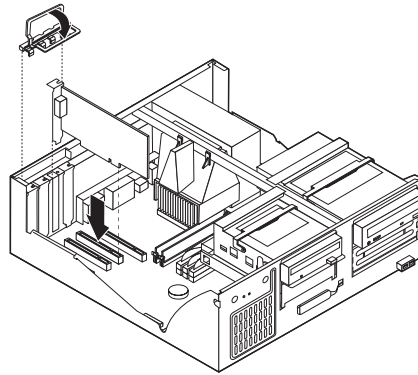
1. Remove the cover. See “Types 8305, 8306, 8309, and 8313” on page 40.
2. Remove the adapter-slot-cover latch and the slot cover for the appropriate expansion slot.



3. Remove the adapter from its static-protective package.
4. Install the adapter into the appropriate slot on the system board.



5. Install the adapter-slot-cover latch.



**What to do next:**

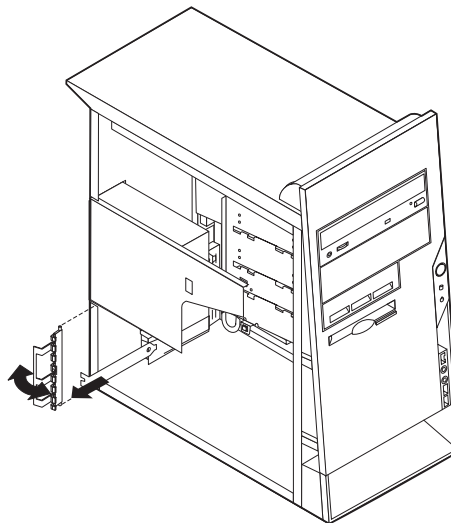
- To work with another option, go to the appropriate section.
- To complete the installation, go to “Types 8305, 8306, 8309, and 8313” on page 68.

### **Installing adapters in Types 8307, 8308, 8310, 8311, 8314, and 8315**

This section provides information and instructions for installing and removing adapters. Your computer has three expansion slots for PCI adapters and one slot used for an AGP adapter. You can install an adapter up to 228 mm (9 inches) long.

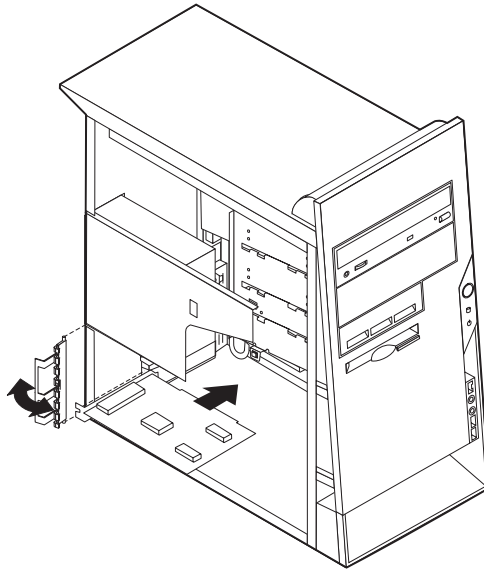
To install an adapter:

1. Remove the cover. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 41.
2. Remove the adapter-slot-cover latch and the slot cover for the appropriate expansion slot.



3. Remove the adapter from its static-protective package.
4. Install the adapter into the appropriate slot on the system board.

5. Install the adapter-slot-cover latch.



#### What to do next

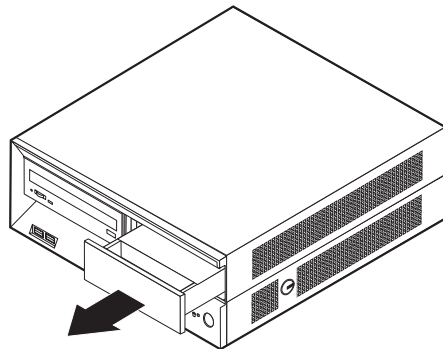
- To work with another option, go to the appropriate section.
- To complete the installation, go to “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 68.

## Installing internal drives

### Types 8301 and 8302

To remove the hard disk drive, do the following:

1. Push up on the blue bar on the front of the computer. This will detach the hard drive.
2. Slide the hard drive forward out of the computer.



3. Disconnect the hard drive cables.
4. Remove the 4 screws securing the hard drive inside the hard drive cage and slide the drive out of the cage.

**Note:** When replacing the hard disk drive, make sure you obtain the proper Recovery CD to install after you install the new hard drive.

## Types 8303, 8304, and 8312

This section provides information and instructions for installing and removing internal drives.

Internal drives are devices that your computer uses to read and store data. You can add or replace drives to your computer to increase storage capacity and to enable your computer to read other types of media such as CD-ROM.

Internal drives are installed in *bays*. In this book, the bays are referred to as bay 1, bay 2, and so on.

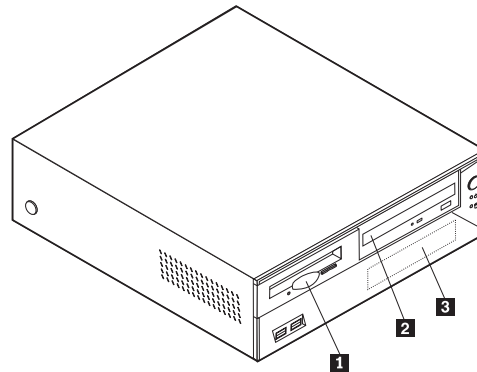
When you install an internal drive, it is important to note what type and size of drive that you can install in each bay. Also, it is important to correctly connect the internal drive cables to the installed drive.

**Drive specifications:** Your computer might come with the following IBM-installed drives:

- A 3.5-inch diskette drive in bay 1
- A CD-ROM drive or DVD-ROM drive in bay 2 (some models)
- A 3.5-inch hard disk drive in bay 3

Any bay that does not have a drive installed has a static shield and bay panel installed.

The following illustration shows the locations of the drive bays.



The following list describes some of the drives that you can install in each bay and their height requirements:

- 1** Bay 1 - Maximum height: 25.8 mm (1.0 in.) 3.5-inch diskette drive (preinstalled)
- 2** Bay 2 - Maximum height: 43.0 mm (1.7 in.) CD-ROM drive or DVD-ROM drive (preinstalled in some models)
- 3** Bay 3 - Maximum height: 25.8 mm (1.0 in.) 3.5-inch hard disk drive (preinstalled)

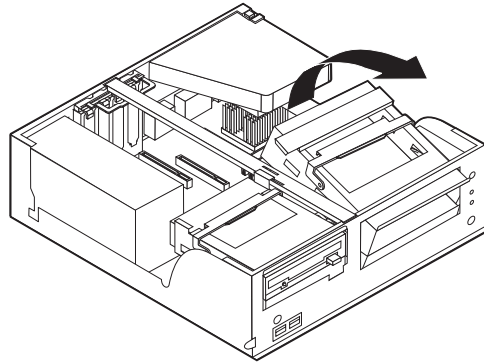
### Notes:

1. Drives that are greater than 43.0 mm (1.7 in.) high cannot be installed.
2. Install removable media (tape or CD) drives in the accessible bay (bay 2).

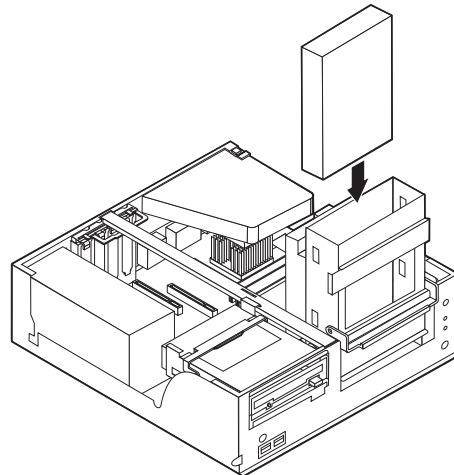
**Installing a drive:** To install a CD-ROM drive or DVD-ROM drive in bay 2, follow these steps:

1. Remove the cover (see “Removing the cover” on page 40).
2. If the drive you are installing is a removable-media drive, remove the bay panel from the front bezel.

3. Remove the metal shield from the drive bay by inserting a flat-blade screwdriver into one of the slots and gently prying it loose.
4. Make sure the drive is set correctly as the master device. Refer to the documentation that comes with your CD-ROM drive or DVD-ROM drive for master/slave jumper information.
5. Pivot the drive bay latch handle toward the front of the computer and then pivot the drive bay cage upward, as shown, until it is latched in the up position.



6. Install the drive into the bay. Align the screw holes and insert the two screws.

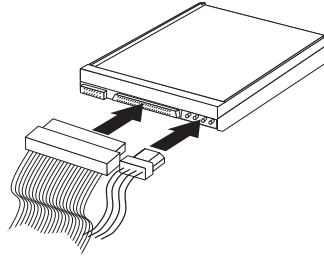


7. Each integrated drive electronics (IDE) drive requires two cables; a four-wire power cable that connects to the power supply, and a signal cable that connects to the system board.

To connect a CD-ROM drive or DVD-ROM drive to your computer, follow these steps:

- a. Locate the signal cable that comes with your computer or with the new drive.
- b. Locate the secondary IDE connector on the system board. See “Identifying parts on the system board” on page 44.
- c. Connect one end of the signal cable to the secondary IDE connector on the system board and the other to the CD-ROM drive or DVD-ROM drive.

- d. Your computer has extra power connectors for connecting additional drives. Connect the power cable to the drive.



8. Clear any cables that might impede replacement of the drive cage.
9. Pivot the drive cage back into place.

**What to do next:**

- To work with another option, go to the appropriate section.
- To complete the installation, go to “Replacing the cover and connecting the cables” on page 67.

## Installing internal drives in Types 8305, 8306, 8309, and 8313

This section provides information and instructions for installing and removing internal drives.

Internal drives are devices that your computer uses to read and store data. You can add drives to your computer to increase storage capacity and to enable your computer to read other types of media. Some of the different drives that are available for your computer are:

- Hard disk drives
- Tape drives
- CD drives or DVD drives
- Removable media drives

Internal drives are installed in *bays*. In this book, the bays are referred to as bay 1, bay 2, and so on.

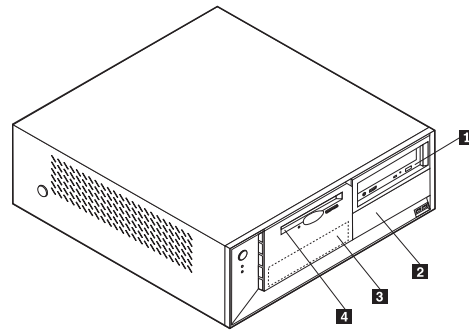
When you install an internal drive, it is important to note what type and size of drive that you can install in each bay. Also, it is important to correctly connect the internal drive cables to the installed drive.

**Drive specifications:** Your computer comes with the following IBM-installed drives:

- A CD drive or DVD drive in bay 1 (some models)
- A 3.5-inch hard disk drive in bay 3
- A 3.5-inch diskette drive in bay 4

Any bay that does not have a drive installed has a static shield and bay panel installed.

The following illustration shows the locations of the drive bays.



The following list describes some of the drives that you can install in each bay and their height requirements:

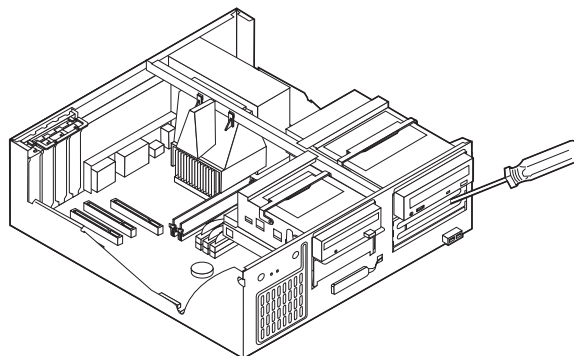
- |  |  |
|--|--|
| <b>1</b> Bay 1 - Maximum height: 43.0 mm (1.7 in.) | CD drive or DVD drive (preinstalled in some models)    |
| <b>2</b> Bay 2 - Maximum height: 43.0 mm (1.7 in.) | 5.25-inch hard disk drive                              |
|  | 3.5-inch hard disk drive (requires a mounting bracket) |
|  | CD drive   |
|  | DVD drive  |
| <b>3</b> Bay 3 - Maximum height: 25.8 mm (1.0 in.) | 3.5-inch hard disk drive (preinstalled)                |
| <b>4</b> Bay 4 - Maximum height: 25.8 mm (1.0 in.) | 3.5-inch diskette drive (preinstalled)                 |

**Notes:**

1. Drives that are greater than 43.0 mm (1.7 in.) high cannot be installed.
2. Install removable media (tape or CD) drives in the accessible bay (bay 1 or 2).

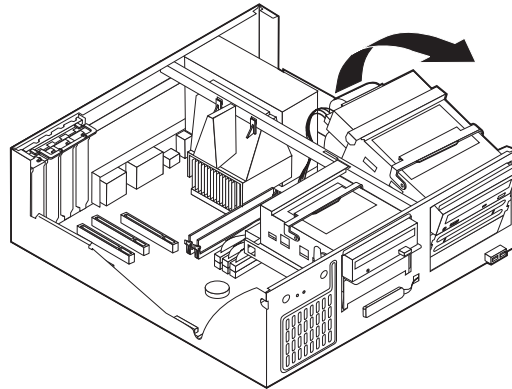
**Installing a drive:** To install an internal drive, follow these steps:

1. Remove the cover. See “Types 8305, 8306, 8309, and 8313” on page 40.
2. If your computer has a CD drive or DVD drive, you might need to remove the signal and power cables from the drive.
3. If the drive you are installing is a removable-media drive, remove the bay panel from the front bezel.
4. Remove the metal shield from the drive bay by inserting a flat-blade screwdriver into one of the slots and gently prying it loose.

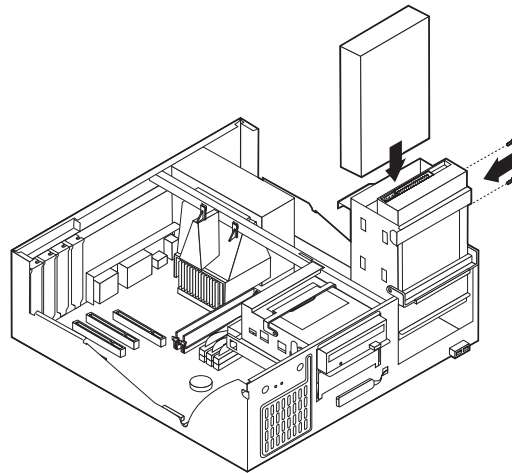


5. Pivot the drive-bay latch handle toward the front of the computer and then pivot the drive-bay cage upward, as shown, until it is latched in the upright

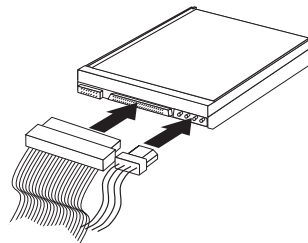
position.



6. Make sure the drive that you are installing is set correctly as either a master or a slave device.
  - If it is a hard disk drive, set it as a slave device.
  - If it is the first CD drive or DVD drive, set it as a master device.
  - If it is an additional CD drive or DVD drive, set it as a slave device.Refer to the documentation that comes with your drive for master/slave jumper information.
7. Install the drive into the bay. Align the screw holes and insert the two screws.



8. Pivot the drive-bay cage back into place.
9. Each integrated drive electronics (IDE) drive requires two cables; a four-wire power cable that connects to the power supply and a signal cable that connects to the system board.



The steps to connect an IDE drive are different depending on the type of drive you are connecting. Use one of the following procedure for your drive connection.



*Connecting the first IDE CD drive or DVD drive:*

1. Locate the three-connector signal cable that comes with your computer or with the new drive.
2. Locate the secondary IDE connector on the system board. See “Types 8305, 8306, 8309, and 8313” on page 45.
3. Connect one end of the signal cable to the drive and the other to the secondary IDE connector on the system board. To reduce electronic noise, use the connectors at the end of the cable only.
4. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.
5. If you have a CD-ROM audio cable, connect it to the drive and to the system board. See “Types 8305, 8306, 8309, and 8313” on page 45.

*Connecting an additional IDE CD drive or DVD drive:*

1. Locate the secondary IDE connector on the system board and the three-connector signal cable. See “Types 8305, 8306, 8309, and 8313” on page 45.
2. Connect the extra connector in the signal cable to the new CD drive or DVD drive.
3. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.

*Connecting an additional IDE hard disk drive:*

1. Locate the primary IDE connector on the system board. One end of the three-connector cable connects to the hard disk drive, and the other connects to the system board. See “Types 8305, 8306, 8309, and 8313” on page 45.
2. Connect the extra connector in the signal cable to the new hard disk drive.
3. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.

#### **What to do next**

- To work with another option, go to the appropriate section.
- To complete the installation, go to “Types 8305, 8306, 8309, and 8313” on page 68.

## **Installing internal drives in Types 8307, 8308, 8310, 8311, 8314, and 8315**

This section provides information and instructions for installing and removing internal drives.

Internal drives are devices that your computer uses to read and store data. You can add drives to your computer to increase storage capacity and to enable your computer to read other types of media. Some of the different drives that are available for your computer are:

- Hard disk drives
- CD drives or DVD drives
- Removable media drives

Internal drives are installed in *bays*. In this book, the bays are referred to as bay 1, bay 2, and so on.

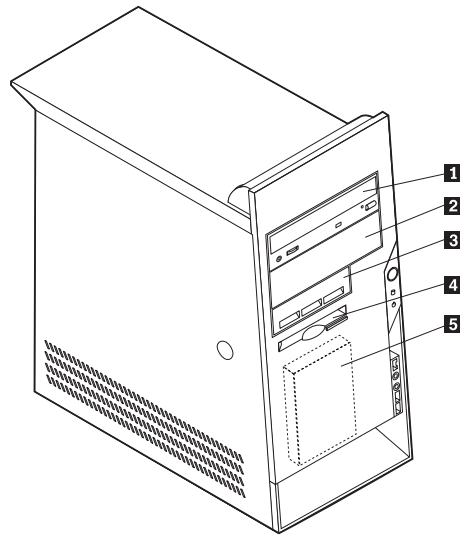
When you install an internal drive, it is important to note what type and size of drive that you can install in each bay. Also, it is important to correctly connect the internal drive cables to the installed drive.

**Drive specifications:** Your computer comes with the following IBM-installed drives:

- A CD drive or DVD drive in bay 1 (some models)
- A 3.5-inch diskette disk drive in bay 4
- A 3.5-inch hard drive in bay 5

Any bay that does not have a drive installed has a static shield and bay panel installed.

The following illustration shows the locations of the drive bays.



The following list describes some of the drives you can install in each bay and their height requirements:

- |  |  |
|--|--|
| <b>1</b> Bay 1 - Maximum height: 43.0 mm (1.7 in.) | CD drive or DVD drive (preinstalled in some models)<br>5.25-inch hard disk drive                             |
| <b>2</b> Bay 2 - Maximum height: 43.0 mm (1.7 in.) | 5.25-inch hard disk drive<br>3.5-inch hard disk drive (requires a mounting bracket)<br>CD drive<br>DVD drive |
| <b>3</b> Bay 3 - Maximum height: 25.8 mm (1.0 in.) | 3.5-inch hard disk drive<br>CD drive<br>DVD drive  |
| <b>4</b> Bay 4 - Maximum height: 25.8 mm (1.0 in.) | 3.5-inch diskette drive (preinstalled)   |
| <b>5</b> Bay 5 - Maximum height: 25.8 mm (1.0 in.) | Hard disk drive (preinstalled)   |

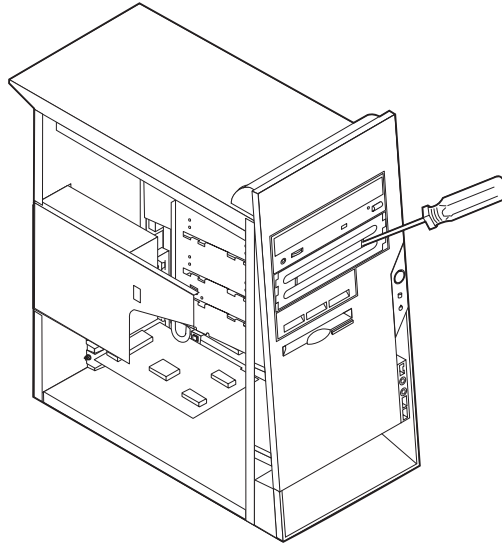
**Notes:**

1. Drives that are greater than 43.0 mm (1.7 in.) high cannot be installed.
2. Install removable media (tape or CD) drives in the accessible bays (bay 1 or 2).

**Installing a drive:** To install an internal drive, follow these steps:

1. Remove the cover. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 41.
2. If your computer has a CD drive or DVD drive, you might need to remove the signal and power cables from the drive.
3. Remove the bay panel from the drive bay by inserting a flat-blade screwdriver at the end and gently prying it loose.

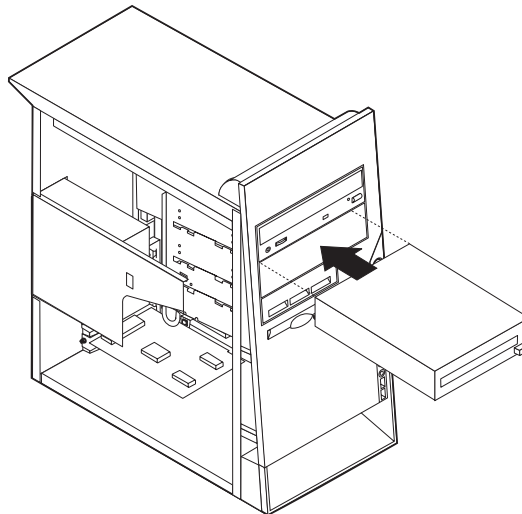
4. Remove the metal shield from the drive bay by inserting a flat-blade screwdriver into one of the slots and gently prying it loose.



5. Make sure the drive that you are installing is set correctly as either a master or a slave device.
  - If it is the first CD drive or DVD drive, set it as a master device.
  - If it is an additional CD drive or DVD drive, set it as a slave device.
  - If it is a hard disk drive, set it as a slave device.

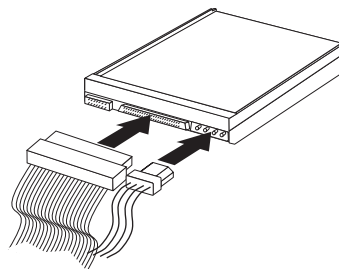
Refer to the documentation that comes with your drive for master/slave jumper information.

6. Install the drive into the bay. Align the screw holes, and insert the screws that secure the drive to the bay.



7. Each integrated drive electronics (IDE) drive requires two cables; a four-wire power cable that connects to the power supply and a signal cable that connects

to the system board. For a CD-ROM drive, you might also have an audio cable.



The steps to connect an IDE drive are different depending on the type of drive you are connecting. Use one of the following procedures for your drive connection.

*Connecting the first IDE CD drive or DVD drive:*

1. Locate the three-connector signal cable that comes with your computer or with the new drive.
2. Locate the secondary IDE connector on the system board. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 46.
3. Connect one end of the signal cable to the drive and the other to the secondary IDE connector on the system board. To reduce electronic noise, use the connectors at the end of the cable only.
4. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.
5. If you have a CD-ROM audio cable, connect it to the drive and to the system board. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 46.

*Connecting an additional IDE CD drive or DVD drive:*

1. Locate the secondary IDE connector on the system board and the three-connector signal cable. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 46.
2. Connect the extra connector in the signal cable to the new CD drive or DVD drive.
3. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.

*Connecting an additional IDE hard disk drive:*

1. Locate the primary IDE connector on the system board. One end of the three-connector cable connects to the hard disk drive, and the other connects to the system board. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 46.
2. Connect the extra connector in the signal cable to the new hard disk drive.
3. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.

**What to do next**

- To work with another option, go to the appropriate section.
- To complete the installation, go to “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 68.

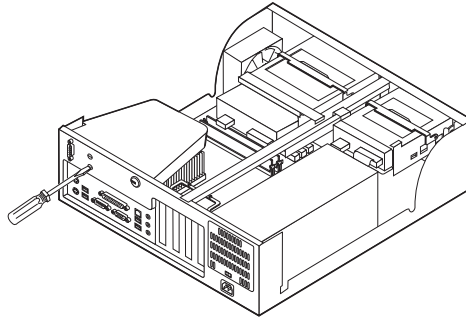
## Installing a rope clip

### Types 8303, 8304, and 8312

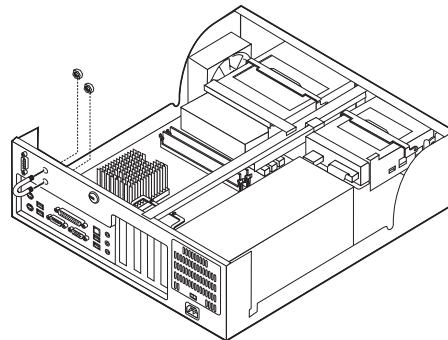
To help prevent hardware theft, you can add a 3/16-inch or 5-mm rope clip and cable to your computer. After you add the security cable, make sure that it does not interfere with other cables that are connected to the computer. For more information about security, see *Installing a cable lock* in Access IBM.

To install a rope clip:

1. Remove the cover (see “Removing the cover” on page 40).
2. Use a tool, such as a screwdriver, to remove the two metal knockouts.



3. Press both sides of the air baffle and lift it outward from the computer to remove.
4. Insert the rope clip through the rear panel; then attach and tighten the nuts with an appropriately sized or adjustable wrench.



5. Replace the computer cover. For more information, see “Replacing the cover and connecting the cables” on page 67.
6. Thread the cable through the rope clip and around an object that is not a part of or permanently secured to the building structure or foundation, and from which it cannot be removed; then fasten the cable ends together with a lock.

#### What to do next:

- To work with another option, go to the appropriate section.
- To complete the installation, go to “Replacing the cover and connecting the cables” on page 67.

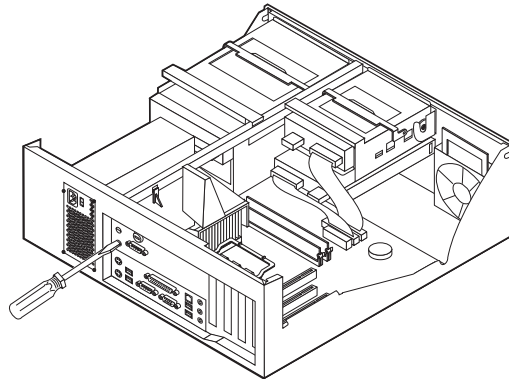
### Installing a rope clip in Types 8305, 8306, 8309, and 8313

To help prevent hardware theft, you can add a 3/16-inch or 5-mm rope clip and cable to your computer. After you add the security cable, make sure that it does

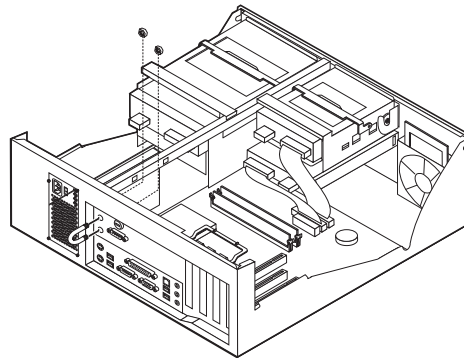
not interfere with other cables that are connected to the computer. For more information about security, see *Installing a cable lock* in Access IBM.

To install a rope clip:

1. Remove the cover. See “Types 8305, 8306, 8309, and 8313” on page 40.
2. Use a tool, such as a screwdriver, to remove the two metal knockouts.



3. Insert the rope clip through the rear panel; then attach and tighten the nuts with an appropriately sized or adjustable wrench.



4. Replace the computer cover. For more information, see “Types 8305, 8306, 8309, and 8313” on page 68.
5. Thread the cable through the rope clip and around an object that is not a part of or permanently secured to the building structure or foundation, and from which it cannot be removed; then fasten the cable ends together with a lock.

#### What to do next

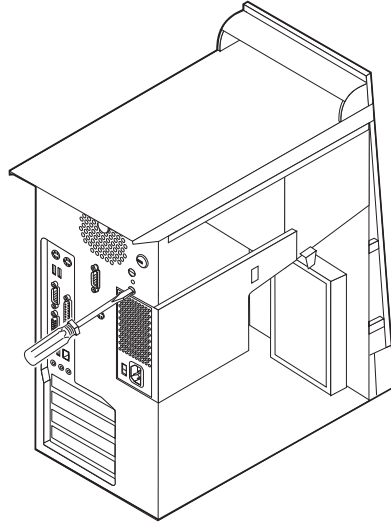
- To work with another option, go to the appropriate section.
- To complete the installation, go to “Types 8305, 8306, 8309, and 8313” on page 68.

### Installing a rope clip in Types 8307, 8308, 8310, 8311, 8314, and 8315

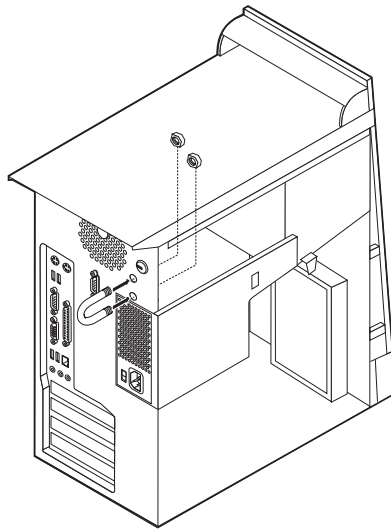
To help prevent hardware theft, you can add a 3/16-inch or 5-mm rope clip and cable to your computer. After you add the security cable, make sure that it does not interfere with other cables that are connected to the computer. For more information about security, see *Installing a cable lock* in Access IBM.

To install a rope clip:

1. Remove cover (see “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 41).
2. Use a tool, such as a screwdriver, to remove the two metal knockouts.



3. Insert the rope clip through the rear panel; then attach and tighten the nuts with an appropriately sized or adjustable wrench.



4. Replace the computer cover. For more information, see “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 68.
5. Thread the cable through the rope clip and around an object that is not a part of or permanently secured to the building structure or foundation, and from which it cannot be removed; then fasten the cable ends together with a lock.

**What to do next**

- To work with another option, go to the appropriate section.
- To complete the installation, go to “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 68.



## Changing the battery

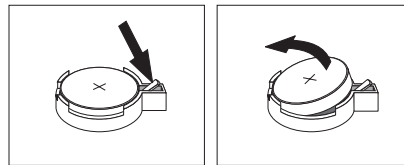
Your computer has a special type of memory that maintains the date, time, and settings for built-in features, such as parallel-port assignments (configuration). A battery keeps this information active when you turn off the computer.

The battery normally requires no charging or maintenance throughout its life; however, no battery lasts forever. If the battery fails, the date, time, and configuration information (including passwords) are lost. An error message is displayed when you turn on the computer.

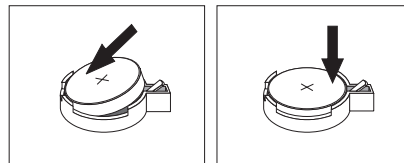
Refer to “Safety notices (multi-lingual translations)” on page 275 for information about replacing and disposing of the battery.

To change the battery:

1. Turn off the computer and all attached devices.
2. Remove the cover. See “Removing the cover” on page 40.
3. Locate the battery. See “Identifying parts on the system board” on page 44.
4. If necessary, remove any adapters that impede access to the battery. See “Installing adapters” on page 48 for more information.
5. Remove the old battery.



6. Install the new battery.



7. Replace any adapters that were removed to gain access to the battery. See “Installing adapters” on page 48 for instructions for replacing adapters.
8. Replace the cover, and plug in the power cord. See “Replacing the cover and connecting the cables.”

**Note:** When the computer is turned on for the first time after battery replacement, an error message might be displayed. This is normal after replacing the battery.

9. Turn on the computer and all attached devices.
10. Use the IBM Setup Utility program to set the date and time and any passwords. See “Setup Utility program” on page 24.

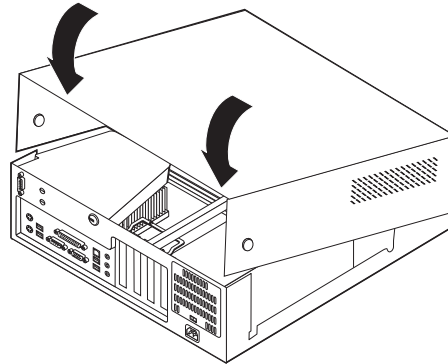
## Replacing the cover and connecting the cables

### Types 8303, 8304, and 8312

After working with options, you need to install any removed parts, replace the cover, and reconnect cables, including telephone lines and power cords. Also, depending on the option that is installed, you might need to confirm the updated information in the IBM Setup Utility program.

To replace the cover and connect cables to your computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer.
2. Clear any cables that might impede the replacement of the cover.
3. Position the cover over the chassis and pivot it down over the computer until it snaps into place.



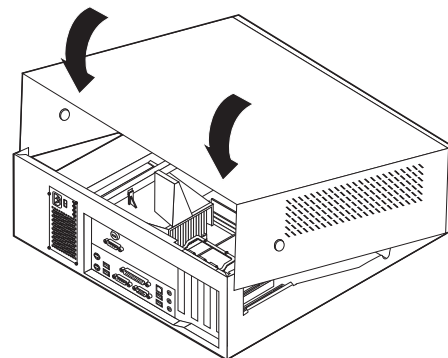
4. Reconnect the external cables and power cords to the computer. See “Installing external options” on page 31.
5. To update the configuration, see “Setup Utility program” on page 24.

### **Types 8305, 8306, 8309, and 8313**

After working with options, you need to install any removed parts, replace the cover, and reconnect any cables, including telephone lines and power cords. Also, depending on the option that is installed, you might need to confirm the updated information in the IBM Setup Utility program.

To replace the cover and connect cables to your computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer.
2. Clear any cables that might impede the replacement of the cover.
3. Position the cover over the chassis and pivot it down over the computer until it snaps into place.



4. Reconnect the external cables and power cords to the computer. See “Installing external options” on page 31.
5. To update the configuration, see “Setup Utility program” on page 24.

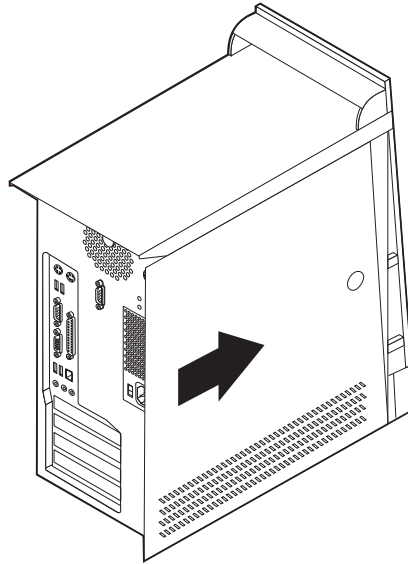
### **Types 8307, 8308, 8310, 8311, 8314, and 8315**

After working with options, you need to install any removed parts, replace the cover, and reconnect any cables, including telephone lines and power cords. Also,

depending on the option that is installed, you might need to confirm the updated information in the IBM Setup Utility program.

To replace the cover and connect cables to your computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer.
2. Clear any cables that might impede the replacement of the cover.
3. Position the cover on the chassis so that the rail guides on the bottom of the cover engage the rails and push the cover closed until it latches.



4. Reconnect the external cables and power cords to the computer. See “Installing external options” on page 31.
5. To update the configuration, see “Setup Utility program” on page 24.

**Important:**

When the power cord is first plugged in, the computer might appear to turn on for a few seconds and then turn off. This is a normal sequence to enable the computer to initialize.



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## Chapter 6. FRU Removals

These removals are to be done by trained service technicians only.

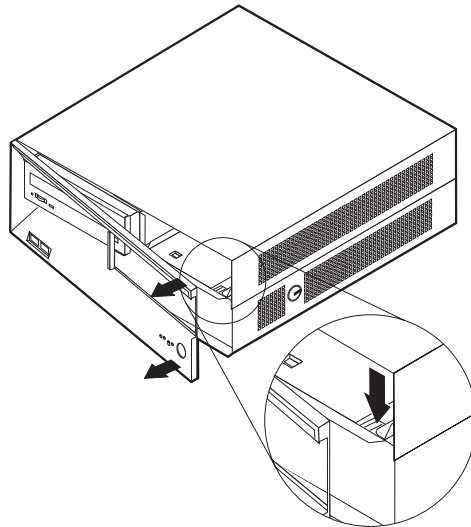
**Important:** Before you install or remove any option, read “Safety information” on page 271. These precautions and guidelines will help you work safely.

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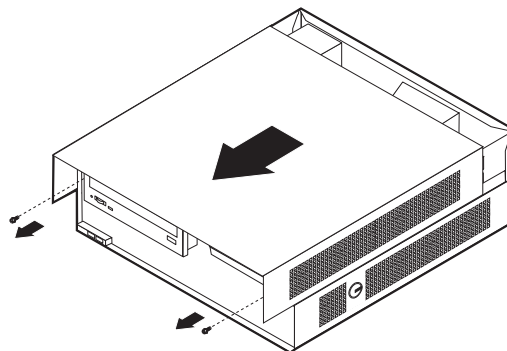
### Removing the cover Types 8301 and 8302

To replace a microprocessor on any of the machine types, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords.
2. Unlock and remove the Hard Disk Drive. See “Hard disk drive removal” on page 73.
3. Remove the front bezel by inserting a finger and pressing down on the tab as shown in the bubble, detaching from the right side and lifting it off.



4. Remove the 2 front and 2 back screws holding the cover in place.
5. Slide the top cover toward the front of the box and lift off.

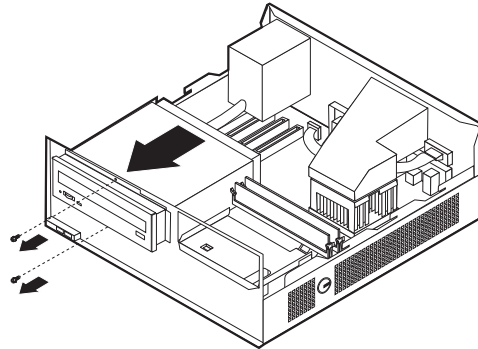


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### Removing the CD-ROM drive Types 8301 and 8302

To remove the CD-ROM drive from these machine types, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover Types 8301 and 8302” on page 71.
2. Remove the 2 screws holding the CD cage in place and pull the cage out.



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## Front bezel Types 8307, 8308, 8310, 8311, 8314, and 8315

To remove the front bezel, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords.
2. Push in on the bezel release arm (the blue arm sticking out of the back of the chassis) to detach the bezel from the chassis.
3. Pull the bezel off the front of the computer.

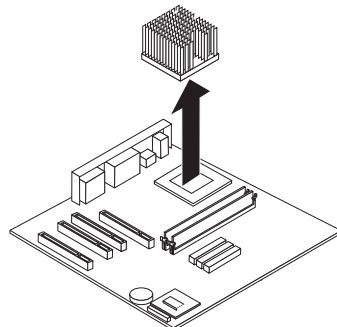
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## Replacing a microprocessor

To replace a microprocessor on any of the machine types, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover” on page 40.
2. Remove the CD drive cage.
3. Remove the rear section of the power source. See “Power supply removal” on page 77.
4. Loosen the two captured screws that hold the fansink in place, and pivot them off of the fansink notches.
5. To remove the fansink from the processor, twist the fansink to break the seal formed by the thermal grease and remove.

**Note:** If the thermal grease seal cannot be broken, you may want to start up the system to heat the processor and loosen the thermal grease.



6. Pull out and lift up the processor socket lever arm upward to its maximum vertical position to release the processor.
7. Lift the processor out of the system board.

**Notes:**

- a. When installing the new processor, make sure to reinstall the fansink to insure proper cooling.
- b. When installing the same fansink/processor, make sure to align the fansink in the same direction it was when it was removed, as this will ensure there are no gaps in the thermal grease.

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## Hard disk drive removal

### Types 8303, 8304, and 8312

This section provides information and instructions for installing and removing internal drives.

Internal drives are devices that your computer uses to read and store data. You can add or replace drives to your computer to increase storage capacity and to enable your computer to read other types of media such as CD-ROM.

Internal drives are installed in *bays*. Within this book, the bays are referred to as bay 1, bay 2, and so on.

When you install an internal drive, it is important to note what type and size of drive that you can install in each bay. Also, it is important to correctly connect the internal drive cables to the installed drive.

#### Drive specifications

**Notes:**

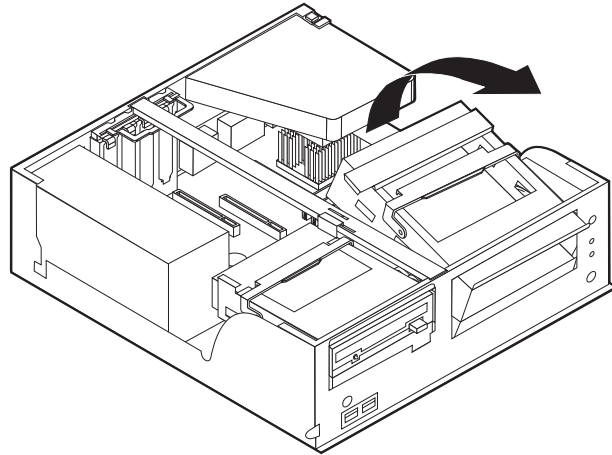
1. Drives that are greater than 41.3 mm (1.6 in.) high cannot be installed.
2. Install removable media (tape or CD) drives in the accessible bay: bay 2.

#### Installing a drive

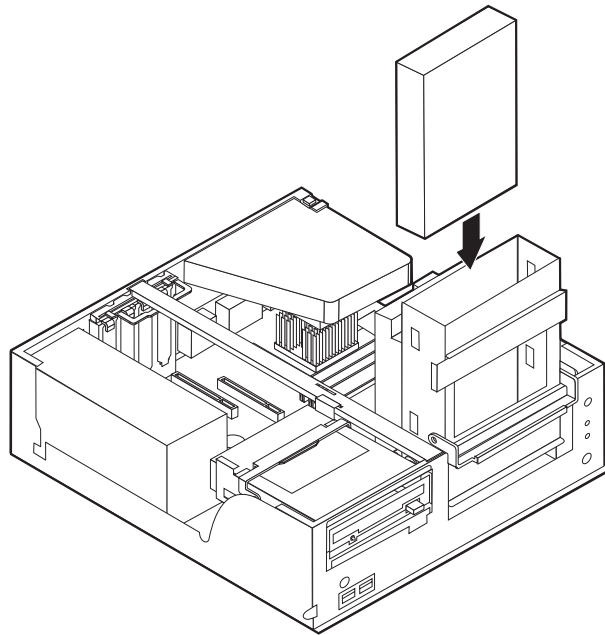
To install a hard disk drive, follow these steps.

1. Remove the cover (see “Removing the cover” on page 40).
2. Make sure the drive is set correctly as the master device. Refer to the documentation that comes with your drive for master/slave jumper information.

3. Pivot the drive bay latch handle toward the front of the computer and pivot the drive bay cage upward, as shown, until it is latched in the up position.



4. Install the drive into the bay. Align the screw holes and insert the two screws.



5. Each integrated drive electronics (IDE) drive requires two cables; a four-wire power cable that connects to the power supply, and a signal cable that connects to the system board.
6. Pivot the drive bay cage back into place.

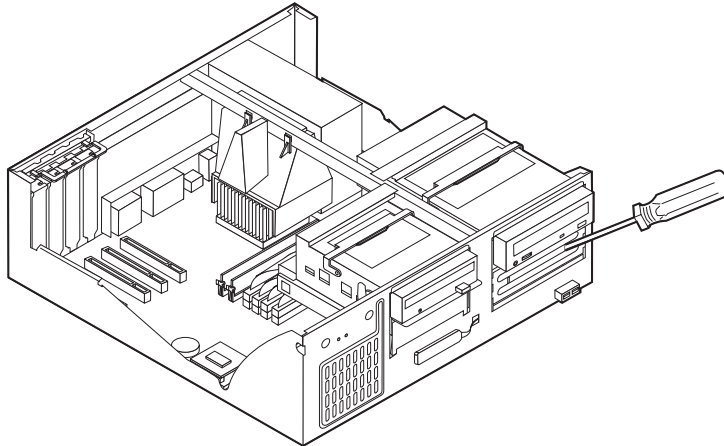
## Types 8305, 8306, 8309, and 8313

To install an internal drive, follow these steps.

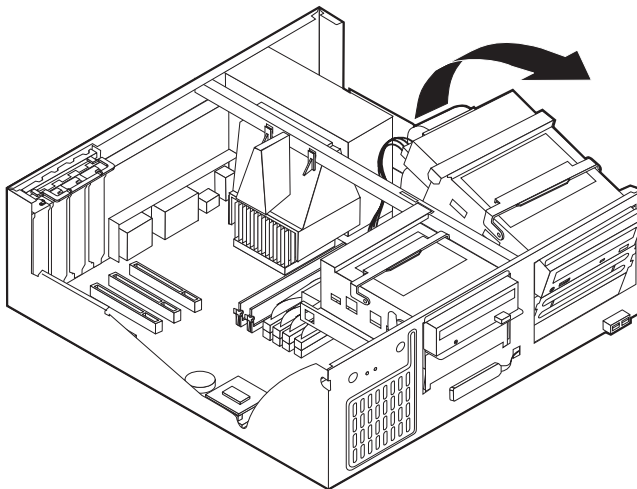
1. Remove the cover. See “Types 8305, 8306, 8309, and 8313” on page 40.
2. If your computer has a CD drive or DVD drive, you might need to remove the signal and power cables from the drive.
3. If the drive you installed is a removable-media drive, remove the bay panel from the front bezel.



4. Remove the metal shield from the drive bay by inserting a flat-blade screwdriver into one of the slots and gently pry it loose.



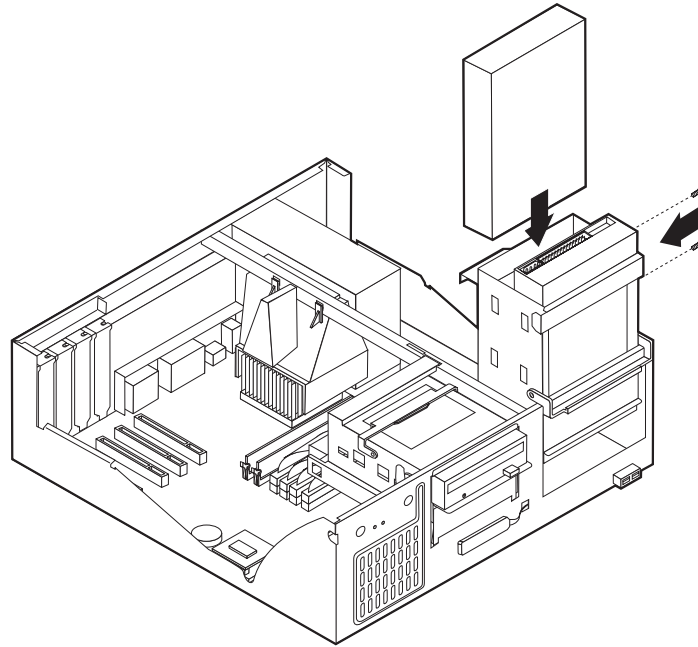
5. Pivot the drive bay latch handle toward the front of the computer and pivot the drive bay cage toward the front of the computer until the drive cage latch catches to the chassis.



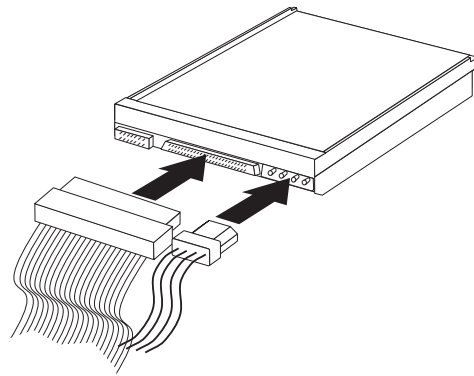
6. Make sure the drive that you are installing is set correctly as either a master or a slave device.
  - If it is the first CD drive or DVD drive, set as a master device.
  - If it is an additional CD drive or DVD drive, set as a slave device.
  - If it is a hard disk drive, set as a slave device.

Refer to the documentation that comes with your drive for master/slave jumper information.

7. Install the drive into the bay. Align the screw holes and insert the two screws.



8. Pivot the drive bay cage back into place.
9. Each integrated drive electronics (IDE) drive requires two cables; a four-wire power cable that connects to the power supply and a signal cable that connects to the system board. You might also have an audio cable to connect.

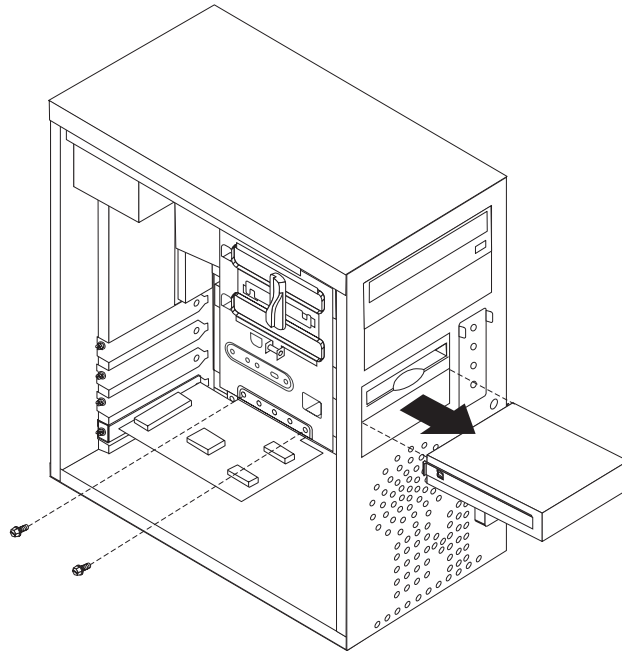


The steps to connect an IDE drive are different depending on the type of drive you are connecting. Locate the procedure below for your drive connection.

### To connect an additional IDE hard disk drive

1. You will have to obtain a three-connector, ATA-100 compatible signal cable to connect your new hard disk.
2. Remove the two-connector cable from the hard disk drive.
3. Locate the primary IDE connector on the system board. One end of the three-connector cable connects to the hard disk drive and the other connects to the system board. See "Types 8305, 8306, 8309, and 8313" on page 45.
4. Connect the extra connector in the signal cable to the new hard disk drive.
5. Your computer has extra power connectors for additional drives. Connect a power connector to the drive.

## Types 8307, 8308, 8310, 8311, 8314, and 8315



To remove the hard disk drive, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 41.
2. Disconnect all hard disk drive wires.
3. Remove the screws securing the hard disk drive.
4. Remove the hard disk drive.

**Note:** When replacing the hard disk drive, make sure you obtain the proper Recovery CD to install after you install the new hard drive.

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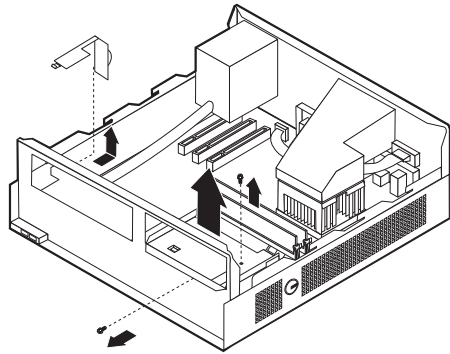
## Power supply removal

### Types 8301 and 8302

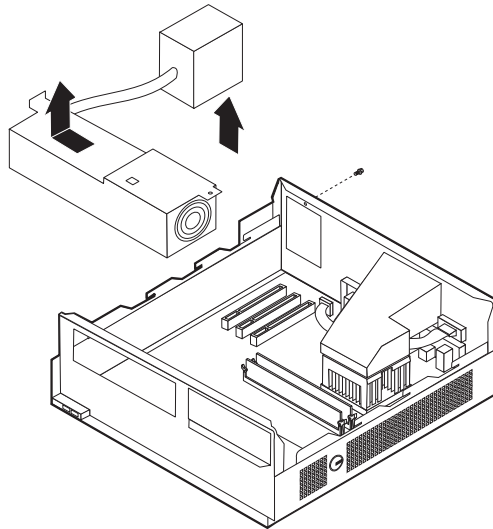
To remove the power supply, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover Types 8301 and 8302” on page 71.
2. Remove the black plastic spacer from the front left corner of the box.
3. Remove the power supply cables from the white plastic holder.
4. Remove the screw holding the power source from the front of the machine.

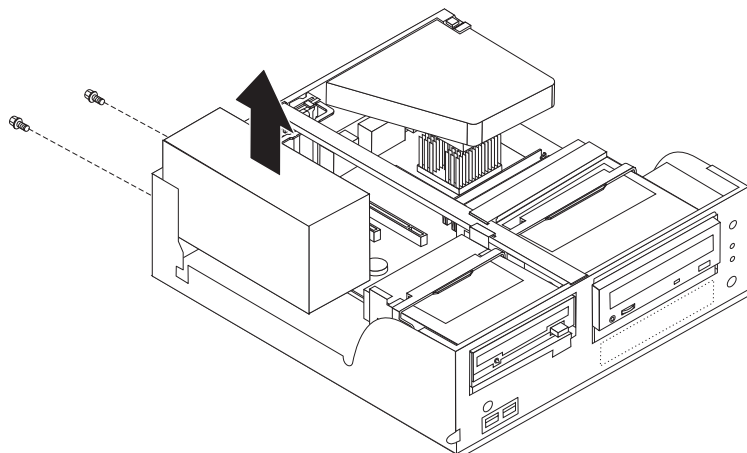
5. Remove the hard disk drive guide from the top of the power source.



6. Remove the screw holding the rear portion of the power supply.
7. Slide the main portion of the power supply to the left and lift it out. Lift the rear portion of the power supply out.



## Types 8303, 8304, and 8312



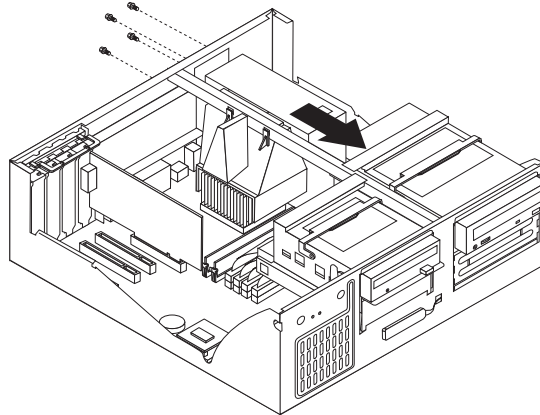
To remove the power supply, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Types 8303, 8304, and 8312” on page 40.

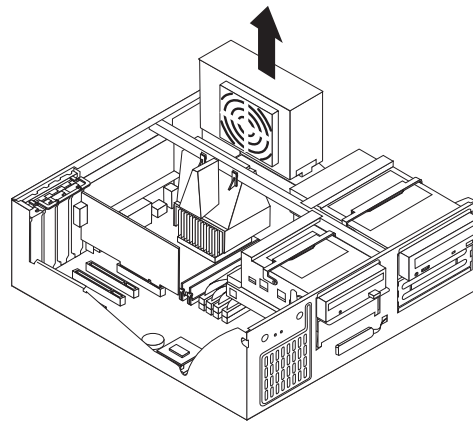
2. Disconnect all wires that the power supply is attached to.
3. Remove the two screws that hold the power supply in place.
4. Lift the power supply out.

### Types 8305, 8306, 8309, and 8313

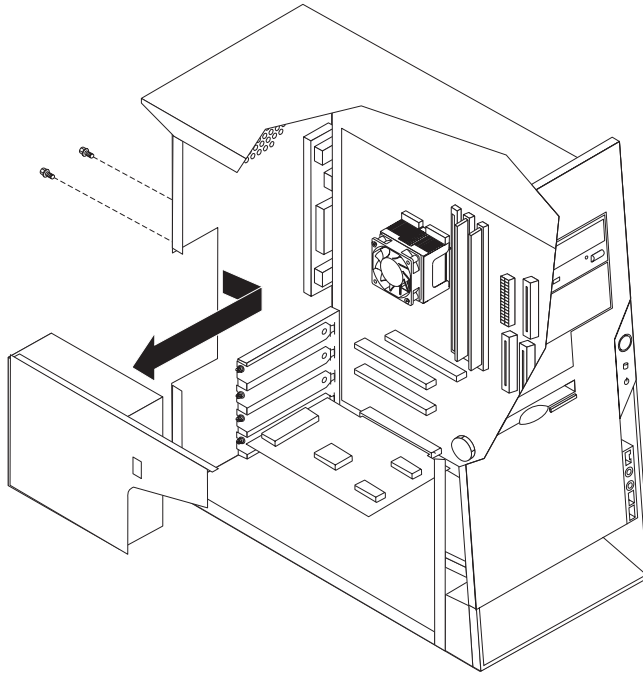
1. Remove the cover. See “Types 8305, 8306, 8309, and 8313” on page 40.
2. Remove the four screws that hold the power supply to the back of the chassis.



3. The power supply is attached to the base of the chassis by a latch on the front. Slide the power supply forward to detach it from the chassis.
4. Lift out the power supply.



## Types 8307, 8308, 8310, 8311, 8314, and 8315



To remove the power supply, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 41.
2. Disconnect all power supply wires.
3. Remove the two screws holding the power supply to the back of the chassis.
4. Lift out the power supply.

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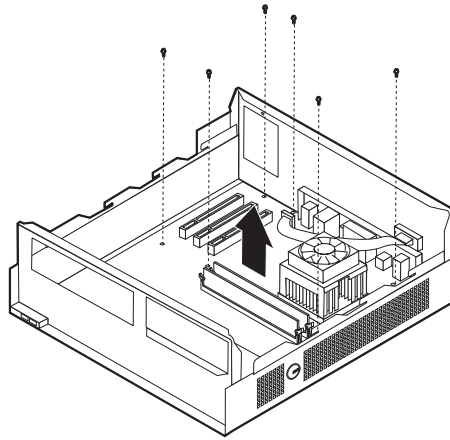
## System board removal

### Types 8301 and 8302

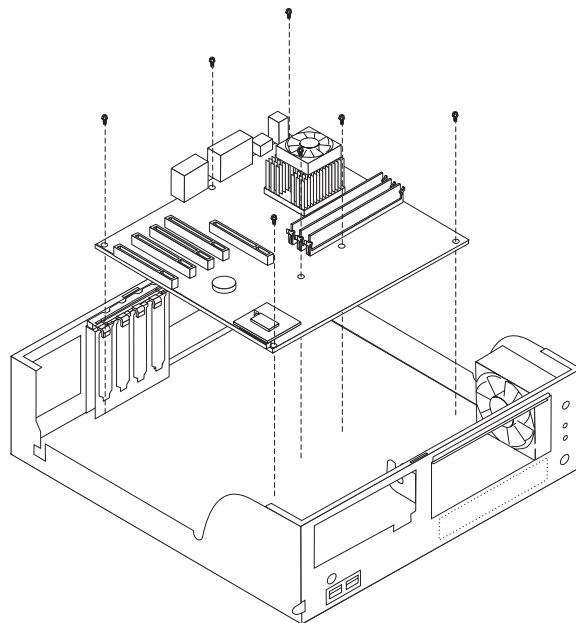
To remove the system board, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover Types 8301 and 8302” on page 71.
2. Remove the CD drive cage. See “Removing the CD-ROM drive Types 8301 and 8302” on page 71.
3. Remove the power supply. See “Power supply removal” on page 77.
4. Disconnect all wires connected to the system board.
5. Remove the six screws that attach the system board to the chassis.

- Slide the system board toward the front of the machine and lift out.



### Types 8303, 8304, and 8312



To remove the system board, do the following:

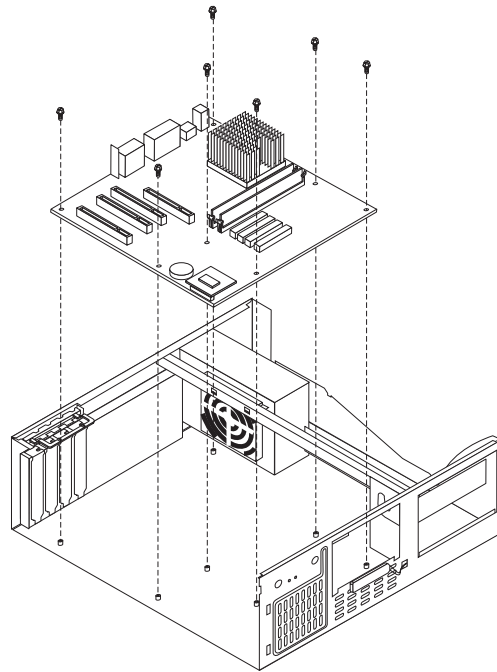
- Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Types 8303, 8304, and 8312” on page 40
- Remove the air baffle.
- Disconnect all wires connected to the system board.
- Rotate the drive chassis over the system board and lock it in the upright position.
- Remove the support arm by pulling it out.
- Remove the seven screws that attach the system board to the chassis.
- Lift out the system board.

## Types 8305, 8306, 8309, and 8313

### Notes:

1. The BIOS and Vital Product Data (VPD) for the computer you are servicing must be installed on the new system board (FRU) after it is installed in the computer. To do this, **you must run the Flash Update program using the Flash Update diskette**. See “BIOS levels” on page 265, “Vital product data” on page 264, and “Flash update procedures” on page 265.
2. Always ensure the latest level of BIOS is installed on the computer. A down level BIOS may cause false errors and unnecessary replacement of the system board.
3. The processor is a separate FRU from the system board and is not included with the system board FRU.
4. If the new system board does not correct the problem, reinstall the options on the old system board, reinstall the old system board, then replace the processor.

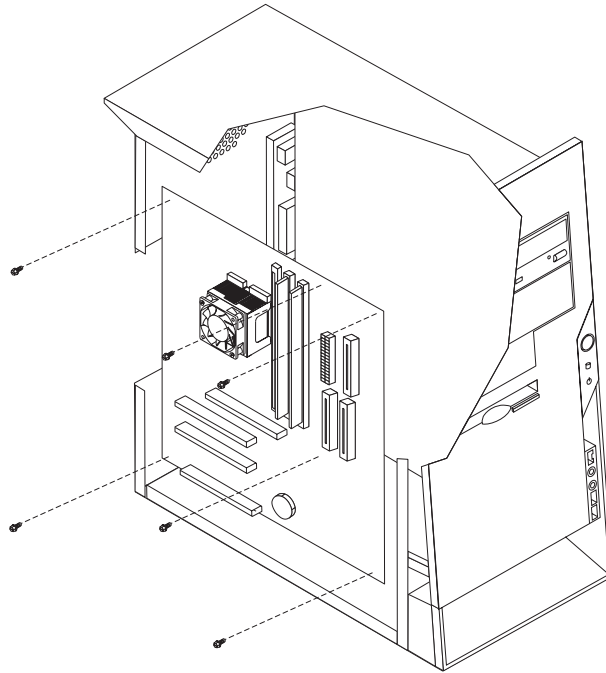
1. Remove the cover. See “Removing the cover” on page 40.
2. Remove the 7 screws that attach the system board to the chassis.



3. Remove the board from the chassis.
4. Remove the processor from the old system board and install it on the new system board.
5. Remove any memory modules on the old system board, and install them on the new system board.
6. Ensure that the new system board jumper settings match the old system board jumper settings.



## Types 8307, 8308, 8310, 8311, 8314, and 8315



To remove the system board, do the following:

1. Turn off the server and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 41.
2. See “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 80
3. Disconnect all wires connected to the system board.
4. Remove the six screws that attach the system board to the chassis.
5. Lift out the system board.

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## Replacing the cover, Types 8301 and 8302

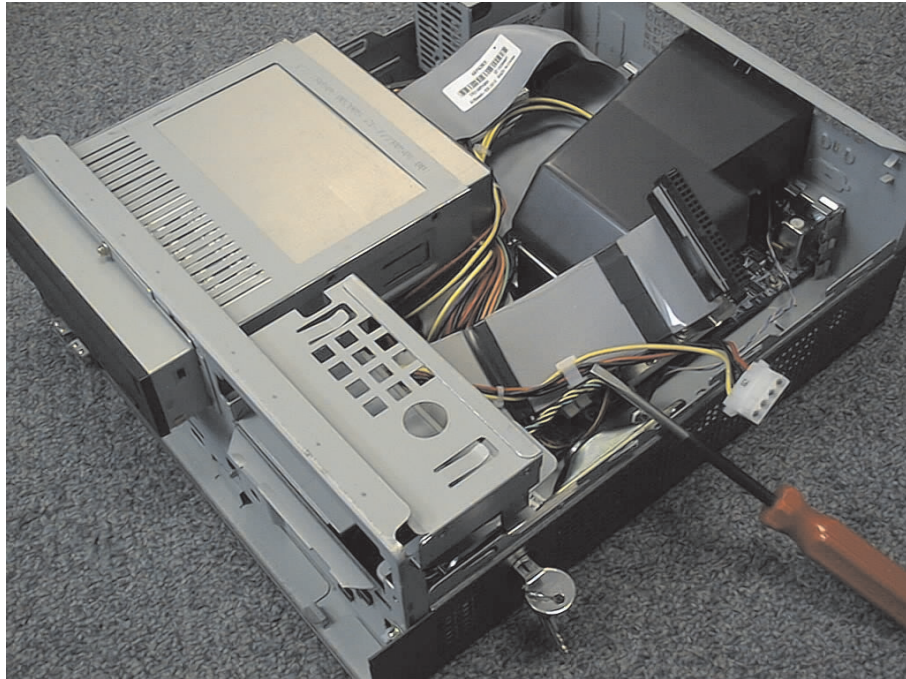
After replacing parts, you need to replace the cover and reconnect cables, including telephone lines and power cords. Also, depending on the option that is installed, you might need to confirm the updated information in the IBM Setup Utility program. To replace the cover and connect cables to the computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside the computer.
2. Clear any cables that might impede the replacement of the cover.

**Important:**

Before replacing the cover, ensure that these cable routing measures are adhered to:

- a. Route the hard disk drive power cable through the plastic clip attached to the hard disk drive IDE cable as shown.

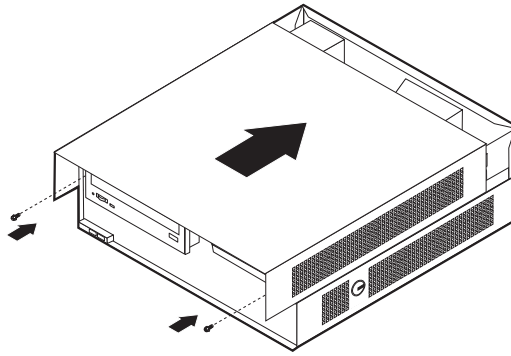


- b. Route the hard disk drive IDE cable around the power plug on the board as shown.



- c. Route both the hard disk drive IDE cable and the hard disk drive power cable through the plastic clip shown on the back of the power supply.

3. Place the lid on the computer and slide toward the rear.



4. Replace the 2 front and 2 back screws which hold the cover in place.
5. Replace the bezel.
6. Reconnect the external cables and power cords to the computer.
7. To update the configuration, see "Setup Utility program" on page 24.



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## Chapter 7. Symptom-to-FRU Index

The Symptom-to-FRU index lists error symptoms and possible causes. The most likely cause is listed first. Always begin with "General Checkout" on page 3. This index can also be used to help you decide which FRUs to have available when servicing a computer. If you are unable to correct the problem using this index, go to "Undetermined problems" on page 127.

**Notes:**

- If you have both an error message and an incorrect audio response, diagnose the error message first.
- If you cannot run the diagnostic tests or you get a diagnostic error code when running a test, but did receive a POST error message, diagnose the POST error message first.
- If you did not receive any error message, look for a description of your error symptoms in the first part of this index.
- Check the hard disk drive jumper settings before you replace a hard disk drive.

---

### Hard disk drive boot error

A hard disk drive boot error (error codes 1962 and I999030X) can have the following causes.

Error	FRU/Action
The start-up drive is not in the boot sequence in configuration.	Check the configuration and ensure the start-up drive is in the boot sequence.
No operating system installed on the boot drive.	Install an operating system on the boot drive.
The boot sector on the start-up drive is corrupted.	The drive must be formatted, do the following: <ol style="list-style-type: none"><li>1. Attempt to access and recover (back-up) the failing hard disk drive.</li><li>2. Using the operating systems programs, format the hard disk drive.</li></ol>
The drive is defective.	Replace the hard disk drive.

---

### Power Supply Errors

If the power-on indicator is not on, the power supply fan is not running, or the computer will not power-off, use the following procedures.

Check/Verify	FRU/Action
Check the following for proper installation. <ul style="list-style-type: none"><li>• Power Cord</li><li>• On/Off Switch connector</li><li>• On/Off Switch Power Supply connector</li><li>• System Board Power Supply connectors</li><li>• Microprocessor(s) connection</li></ul>	Reseat
Check the power-on switch for continuity.	Power Cord

<b>Check/Verify</b>	<b>FRU/Action</b>
Check the power-on switch for continuity.	Power-on Switch

## Diagnostic error codes

Refer to the following diagnostic error codes when using the diagnostic tests. See "Diagnostics" on page 23 for the specific type for information about the Diagnostic programs.

In the following index, X can represent any number.

Diagnostic Error Code	FRU/Action
<b>000-000-XXX</b> BIOS Test Passed	1. <b>No action</b>
<b>000-002-XXX</b> BIOS Timeout	1. <b>Flash the system</b> 2. System board
<b>000-024-XXX</b> BIOS Addressing test failure	1. <b>Flash the system</b> 2. System board
<b>000-025-XXX</b> BIOS Checksum Value error	1. <b>Flash the system</b> 2. Boot block 3. System board
<b>000-026-XXX</b> FLASH data error	1. <b>Flash the system</b> 2. Boot block 3. System board
<b>000-027-XXX</b> BIOS Configuration/Setup error	1. <b>Run Setup</b> 2. Flash the system 3. Boot block 4. System board
<b>000-034-XXX</b> BIOS Buffer Allocation failure	1. <b>Reboot the system</b> 2. Flash the system 3. Run memory test 4. System board
<b>000-035-XXX</b> BIOS Reset Condition detected	1. <b>Flash the system</b> 2. System board
<b>000-036-XXX</b> BIOS Register error	1. <b>Flash the system</b> 2. Boot block 3. System board
<b>000-038-XXX</b> BIOS Extension failure	1. <b>Flash the system</b> 2. Adapter card 3. System board
<b>000-039-XXX</b> BIOS DMI data error	1. <b>Flash the system</b> 2. System board
<b>000-195-XXX</b> BIOS Test aborted by user	1. <b>Information</b> 2. Re-start the test, if necessary
<b>000-196-XXX</b> BIOS test halt, error threshold exceeded	1. <b>Press F3 to review the log file</b> 2. Re-start the test to reset the log file

Diagnostic Error Code	FRU/Action
<b>000-197-XXX</b> BIOS test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>000-198-XXX</b> BIOS test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>000-199-XXX</b> BIOS test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>000-250-XXX</b> BIOS APM failure	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>000-270-XXX</b> BIOS ACPI failure	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-000-XXX</b> System Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>001-00X-XXX</b> System Error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-01X-XXX</b> System Error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-024-XXX</b> System Addressing test failure	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-025-XXX</b> System Checksum Value error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-026-XXX</b> System FLASH data error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-027-XXX</b> System Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>001-032-XXX</b> System Device Controller failure	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-034-XXX</b> System Device Buffer Allocation failure	<ol style="list-style-type: none"> <li>1. <b>Reboot the system</b></li> <li>2. Flash the system</li> <li>3. Run memory test</li> <li>4. System board</li> </ol>
<b>001-035-XXX</b> System Device Reset condition detected	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-036-XXX</b> System Register error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>



Diagnostic Error Code	FRU/Action
<b>001-038-XXX</b> System Extension failure	<ol style="list-style-type: none"> <li>1. <b>Adapter card</b></li> <li>2. System board</li> </ol>
<b>001-039-XXX</b> System DMI data structure error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-040-XXX</b> System IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Power-off/on system and re-test</b></li> <li>2. System board</li> </ol>
<b>001-041-XXX</b> System DMA failure	<ol style="list-style-type: none"> <li>1. <b>Power-off/on system and re-test</b></li> <li>2. System board</li> </ol>
<b>001-195-XXX</b> System Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>001-196-XXX</b> System test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>001-197-XXX</b> System test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>001-198-XXX</b> System test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>001-199-XXX</b> System test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>001-250-XXX</b> System ECC error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-254-XXX</b> <b>001-255-XXX</b> <b>001-256-XXX</b> <b>001-257-XXX</b> System DMA error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-260-XXX</b> <b>001-264-XXX</b> System IRQ error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>001-268-XXX</b> System IRQ1 failure	<ol style="list-style-type: none"> <li>1. <b>Device on IRQ1</b></li> <li>2. System board</li> </ol>
<b>001-269-XXX</b> System IRQ2 failure	<ol style="list-style-type: none"> <li>1. <b>Device on IRQ2</b></li> <li>2. System board</li> </ol>
<b>001-270-XXX</b> System IRQ3 failure	<ol style="list-style-type: none"> <li>1. <b>Device on IRQ3</b></li> <li>2. System board</li> </ol>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
<b>001-271-XXX</b> System IRQ4 failure	1. <b>Device on IRQ4</b> 2. System board
<b>001-272-XXX</b> System IRQ5 failure	1. <b>Device on IRQ5</b> 2. System board
<b>001-273-XXX</b> System IRQ6 (diskette drive) failure	1. <b>Diskette Cable</b> 2. Diskette drive 3. System board
<b>001-274-XXX</b> System IRQ7 failure	1. <b>Device on IRQ7</b> 2. System board
<b>001-275-XXX</b> System IRQ8 failure	1. <b>Device on IRQ8</b> 2. System board
<b>001-276-XXX</b> System IRQ9 failure	1. <b>Device on IRQ9</b> 2. System board
<b>001-277-XXX</b> System IRQ10 failure	1. <b>Device on IRQ10</b> 2. System board
<b>001-278-XXX</b> System IRQ11 failure	1. <b>Device on IRQ11</b> 2. System board
<b>001-279-XXX</b> System IRQ12 failure	1. <b>Device on IRQ12</b> 2. System board
<b>001-280-XXX</b> System IRQ13 failure	1. <b>Device on IRQ13</b> 2. System board
<b>001-281-XXX</b> System IRQ14 (hard disk drive) failure	1. <b>Hard disk drive cable</b> 2. Hard disk drive 3. System board
<b>001-282-XXX</b> System IRQ15 failure	1. <b>Device on IRQ15</b> 2. System board
<b>001-286-XXX</b> <b>001-287-XXX</b> <b>001-288-XXX</b> System Timer failure	1. <b>System board</b>
<b>001-292-XXX</b> System CMOS RAM error	1. <b>Run Setup and re-test</b> 2. System board
<b>001-293-XXX</b> System CMOS Battery	1. <b>Battery</b> 2. System board
<b>001-298-XXX</b> System RTC date/time update failure	1. <b>Flash the system</b> 2. System board
<b>001-299-XXX</b> System RTC periodic interrupt failure	1. <b>System board</b>
<b>001-300-XXX</b> System RTC Alarm failure	1. <b>System board</b>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
<b>001-301-XXX</b> System RTC Century byte error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>005-000-XXX</b> Video Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>005-00X-XXX</b> Video error	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-010-XXX</b> <b>005-011-XXX</b> <b>005-012-XXX</b> <b>005-013-XXX</b> Video Signal failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-016-XXX</b> Video Simple Pattern test failure	<ol style="list-style-type: none"> <li>1. <b>Video Ram</b></li> <li>2. Video card, if installed</li> <li>3. System board</li> </ol>
<b>005-024-XXX</b> Video Addressing test failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-025-XXX</b> Video Checksum Value error	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-027-XXX</b> Video Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Video drivers update</li> <li>3. Video card, if installed</li> <li>4. System board</li> </ol>
<b>005-031-XXX</b> Video Device Cable failure	<ol style="list-style-type: none"> <li>1. <b>Video cable</b></li> <li>2. Monitor</li> <li>3. Video card, if installed</li> <li>4. System board</li> </ol>
<b>005-032-XXX</b> Video Device Controller failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-036-XXX</b> Video Register error	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-038-XXX</b> System BIOS extension failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-040-XXX</b> Video IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-195-XXX</b> Video Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>005-196-XXX</b> Video test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>

Diagnostic Error Code	FRU/Action
005-197-XXX Video test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
005-198-XXX Video test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
005-199-XXX Video test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
005-2XX-XXX 005-3XX-XXX Video subsystem error	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
006-000-XXX Diskette interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
006-0XX-XXX Diskette interface error	<ol style="list-style-type: none"> <li>1. <b>Diskette drive Cable</b></li> <li>2. Diskette drive</li> <li>3. System board</li> </ol>
006-195-XXX Diskette interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
006-196-XXX Diskette interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
006-197-XXX Diskette interface test warning	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
006-198-XXX Diskette interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
006-199-XXX Diskette interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
006-25X-XXX Diskette interface Error	<ol style="list-style-type: none"> <li>1. <b>Diskette drive cable</b></li> <li>2. Diskette drive</li> <li>3. System board</li> </ol>

Diagnostic Error Code	FRU/Action
<b>011-000-XXX</b> Serial port Interface Test Passed	1. <b>No action</b>
<b>011-001-XXX</b> Serial port Presence	1. <b>Remove external serial device, if present</b> 2. Run setup, enable port 3. System board
<b>011-002-XXX</b> <b>011-003-XXX</b> Serial port Timeout/Parity error	1. <b>System board</b>
<b>011-013-XXX</b> <b>011-014-XXX</b> Serial port Control Signal/Loopback test failure	1. <b>System board</b>
<b>011-015-XXX</b> Serial port External Loopback failure	1. <b>Wrap plug</b> 2. System board
<b>011-027-XXX</b> Serial port Configuration/Setup error	1. <b>Run Setup, enable port</b> 2. Flash the system 3. System board
<b>011-03X-XXX</b> <b>011-04X-XXX</b> Serial port failure	1. <b>System board</b>
<b>011-195-XXX</b> Serial port Test aborted by user	1. <b>Information</b> 2. Re-start the test, if necessary
<b>011-196-XXX</b> Serial port test halt, error threshold exceeded	1. <b>Press F3 to review the log file</b> 2. Re-start the test to reset the log file
<b>011-197-XXX</b> Serial port test warning	1. <b>Make sure the component that is called out is connected and/or enabled</b> 2. Re-run test 3. Component that is called out in warning statement 4. Component under test
<b>011-198-XXX</b> Serial port test aborted	1. <b>If a component is called out, make sure it is connected and/or enabled</b> 2. Flash the system and re-test 3. Go to the "Undetermined problems" section
<b>011-199-XXX</b> Serial port test failed, cause unknown	1. <b>Go to the "Undetermined problems" section</b> 2. Flash the system and re-test 3. Replace component under function test
<b>011-2XX-XXX</b> Serial port signal failure	1. <b>External serial device</b> 2. System board
<b>014-000-XXX</b> Parallel port Interface Test Passed	1. <b>No action</b>

Diagnostic Error Code	FRU/Action
014-001-XXX Parallel port Presence	<ol style="list-style-type: none"> <li>1. <b>Remove external parallel device, if present</b></li> <li>2. Run setup, enable port</li> <li>3. System board</li> </ol>
014-002-XXX 014-003-XXX Parallel port Timeout/Parity error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
014-013-XXX 014-014-XXX Parallel port Control Signal/Loopback test failure	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
014-015-XXX Parallel port External Loopback failure	<ol style="list-style-type: none"> <li>1. <b>Wrap plug</b></li> <li>2. System board</li> </ol>
014-027-XXX Parallel port Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Run Setup, enable port</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
014-03X-XXX 014-04X-XXX Parallel port failure	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
014-195-XXX Parallel port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
014-196-XXX Parallel port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
014-197-XXX Parallel port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
014-198-XXX Parallel port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
014-199-XXX Parallel port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
014-2XX-XXX 014-3XX-XXX Parallel port failure	<ol style="list-style-type: none"> <li>1. <b>External parallel device</b></li> <li>2. System board</li> </ol>
015-000-XXX USB port Interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
015-001-XXX USB port Presence	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>

Diagnostic Error Code	FRU/Action
<b>015-002-XXX</b> USB port Timeout	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-015-XXX</b> USB port External Loopback failure	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-027-XXX</b> USB port Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>015-032-XXX</b> USB port Device Controller failure	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>015-034-XXX</b> USB port buffer allocation failure	<ol style="list-style-type: none"> <li>1. <b>Reboot the system</b></li> <li>2. Flash the system</li> <li>3. Run memory test</li> <li>4. System board</li> </ol>
<b>015-035-XXX</b> USB port Reset condition detected	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-036-XXX</b> USB port Register error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>
<b>015-040-XXX</b> USB port IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Run setup and check for conflicts</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>015-195-XXX</b> USB port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>015-196-XXX</b> USB port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>015-197-XXX</b> USB port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>015-198-XXX</b> USB port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>015-199-XXX</b> USB port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>018-000-XXX</b> PCI Card Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>018-0XX-XXX</b> PCI Card Failure	<ol style="list-style-type: none"> <li>1. <b>Riser card, if installed</b></li> <li>2. System board</li> </ol>

Diagnostic Error Code	FRU/Action
<b>018-195-XXX</b> PCI Card Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Information</li> <li>3. Re-start the test, if necessary</li> </ol>
<b>018-196-XXX</b> PCI Card test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>018-197-XXX</b> PCI Card test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>018-198-XXX</b> PCI Card test aborted	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>018-199-XXX</b> PCI Card test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>018-250-XXX</b> PCI Card Services error	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Riser card, if installed</li> <li>3. System board</li> </ol>
<b>020-000-XXX</b> PCI Interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>020-0XX-XXX</b> PCI Interface error	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Riser card, if installed</li> <li>3. System board</li> </ol>
<b>020-195-XXX</b> PCI Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>020-196-XXX</b> PCI test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>020-197-XXX</b> PCI test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>020-198-XXX</b> PCI test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>



Diagnostic Error Code	FRU/Action
<b>020-199-XXX</b> PCI test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to the "Undetermined problems" section</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>020-262-XXX</b> PCI system error	<ol style="list-style-type: none"> <li>1. PCI card</li> <li>2. Riser card, if installed</li> <li>3. System board</li> </ol>
<b>025-000-XXX</b> IDE interface Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>025-00X-XXX</b> <b>025-01X-XXX</b> IDE interface failure	<ol style="list-style-type: none"> <li>1. IDE signal cable</li> <li>2. Check power supply</li> <li>3. IDE device</li> <li>4. System board</li> </ol>
<b>025-027-XXX</b> IDE interface Configuration/Setup error	<ol style="list-style-type: none"> <li>1. IDE signal cable</li> <li>2. Flash the system</li> <li>3. IDE device</li> <li>4. System board</li> </ol>
<b>025-02X-XXX</b> <b>025-03X-XXX</b> <b>025-04X-XXX</b> IDE Interface failure	<ol style="list-style-type: none"> <li>1. IDE signal cable</li> <li>2. Check power supply</li> <li>3. IDE device</li> <li>4. System board</li> </ol>
<b>025-195-XXX</b> IDE interface Test aborted by user	<ol style="list-style-type: none"> <li>1. Information</li> <li>2. Re-start the test, if necessary</li> </ol>
<b>025-196-XXX</b> IDE interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. Press F3 to review the log file</li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>025-197-XXX</b> IDE interface test warning	<ol style="list-style-type: none"> <li>1. Make sure the component that is called out is connected and/or enabled</li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>025-198-XXX</b> IDE interface test aborted	<ol style="list-style-type: none"> <li>1. If a component is called out, make sure it is connected and/or enabled</li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>025-199-XXX</b> IDE interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to the "Undetermined problems" section</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>030-000-XXX</b> SCSI interface Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>

Diagnostic Error Code	FRU/Action
030-00X-XXX 030-01X-XXX SCSI interface failure	<ol style="list-style-type: none"> <li>1. <b>SCSI signal cable</b></li> <li>2. Check power supply</li> <li>3. SCSI device</li> <li>4. SCSI adapter card, if installed</li> <li>5. System board</li> </ol>
030-027-XXX SCSI interface Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>SCSI signal cable</b></li> <li>2. Flash the system</li> <li>3. SCSI device</li> <li>4. SCSI adapter card, if installed</li> <li>5. System board</li> </ol>
030-03X-XXX 030-04X-XXX SCSI interface error	<ol style="list-style-type: none"> <li>1. <b>SCSI signal cable</b></li> <li>2. Check power supply</li> <li>3. SCSI device</li> <li>4. SCSI adapter card, if installed</li> <li>5. installed System board</li> </ol>
030-195-XXX SCSI interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
030-196-XXX SCSI interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
030-197-XXX SCSI interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
030-198-XXX SCSI interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
030-199-XXX SCSI interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
035-000-XXX RAID interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
035-0XX-XXX RAID interface Failure	<ol style="list-style-type: none"> <li>1. <b>RAID signal cable</b></li> <li>2. RAID device</li> <li>3. RAID adapter card, if installed</li> <li>4. System board</li> </ol>
035-195-XXX RAID interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>

Diagnostic Error Code	FRU/Action
<b>035-196-XXX</b> RAID interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>035-197-XXX</b> RAID interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>035-198-XXX</b> RAID interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>035-199-XXX</b> RAID interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>071-000-XXX</b> Audio port Interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>071-00X-XXX</b> <b>071-01X-XXX</b> <b>071-02X-XXX</b> Audio port error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>071-03X-XXX</b> Audio port failure	<ol style="list-style-type: none"> <li>1. <b>Speakers</b></li> <li>2. Microphone</li> <li>3. Audio card, if installed</li> <li>4. System board</li> </ol>
<b>071-04X-XXX</b> Audio port failure	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Audio card, if installed</li> <li>3. System board</li> </ol>
<b>071-195-XXX</b> Audio port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>071-196-XXX</b> Audio port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>071-197-XXX</b> Audio port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>071-198-XXX</b> Audio port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
<b>071-199-XXX</b> Audio port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to the "Undetermined problems" section</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>071-25X-XXX</b> Audio port failure	<ol style="list-style-type: none"> <li>1. <b>Speakers</b></li> <li>2. Audio card, if installed</li> <li>3. System board</li> </ol>
<b>080-000-XXX</b> Game Port interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>080-XXX-XXX</b> Game Port interface Error	<ol style="list-style-type: none"> <li>1. <b>Remove the game port device and re-test the system</b></li> </ol>
<b>080-195-XXX</b> Game Port interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>080-196-XXX</b> Game Port interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>080-197-XXX</b> Game Port interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>080-198-XXX</b> Game Port interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>080-199-XXX</b> Game Port interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>086-000-XXX</b> Mouse Port interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>086-001-XXX</b> Mouse Port interface Presence	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System board</li> </ol>
<b>086-032-XXX</b> Mouse Port interface Device controller failure	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System board</li> </ol>
<b>086-035-XXX</b> Mouse Port interface Reset	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System board</li> </ol>
<b>086-040-XXX</b> Mouse Port interface IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Mouse</li> <li>3. System board</li> </ol>
<b>086-195-XXX</b> Mouse Port interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>

Diagnostic Error Code	FRU/Action
<b>086-196-XXX</b> Mouse Port interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>086-197-XXX</b> Mouse Port interface test warning	<ol style="list-style-type: none"> <li>1. Make sure the component that is called out is connected and/or enabled</li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>086-198-XXX</b> Mouse Port interface test aborted	<ol style="list-style-type: none"> <li>1. If a component is called out, make sure it is connected and/or enabled</li> <li>2. Flash the system and re-test</li> <li>3. Go to the "Undetermined problems" section</li> </ol>
<b>086-199-XXX</b> Mouse Port interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to the "Undetermined problems" section</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>089-000-XXX</b> Microprocessor Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>089-XXX-XXX</b> Microprocessor failure	<ol style="list-style-type: none"> <li>1. <b>Microprocessor(s)</b></li> <li>2. System board</li> </ol>
<b>089-195-XXX</b> Microprocessor Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>089-196-XXX</b> Microprocessor test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>089-197-XXX</b> Microprocessor test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>089-198-XXX</b> Microprocessor test aborted	<ol style="list-style-type: none"> <li>1. <b>Flash the system and re-test</b></li> <li>2. Go to the "Undetermined problems" section</li> </ol>
<b>089-199-XXX</b> Microprocessor test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Go to the "Undetermined problems" section</li> <li>3. Flash the system and re-test</li> <li>4. Replace component under function test</li> </ol>
<b>170-000-XXX</b> Voltage Sensor(s) Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>170-0XX-XXX</b> Voltage Sensor(s) failure	<ol style="list-style-type: none"> <li>1. <b>Flash system</b></li> <li>2. System board</li> </ol>

Diagnostic Error Code	FRU/Action
<b>170-195-XXX</b> Voltage Sensor(s) Test aborted by user	<ol style="list-style-type: none"> <li><b>Information</b></li> <li>Re-start the test, if necessary</li> </ol>
<b>170-196-XXX</b> Voltage Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> <li><b>Press F3 to review the log file</b></li> <li>Re-start the test to reset the log file</li> </ol>
<b>170-197-XXX</b> Voltage Sensor(s) test warning	<ol style="list-style-type: none"> <li><b>Make sure the component that is called out is connected and/or enabled</b></li> <li>Re-run test</li> <li>Component that is called out in warning statement</li> <li>Component under test</li> </ol>
<b>170-198-XXX</b> Voltage Sensor(s) test aborted	<ol style="list-style-type: none"> <li><b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>Flash the system and re-test</li> <li>Go to the "Undetermined problems" section</li> </ol>
<b>170-199-XXX</b> Voltage Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> <li><b>Go to the "Undetermined problems" section</b></li> <li>Flash the system and re-test</li> <li>Replace component under function test</li> </ol>
<b>170-250-XXX</b> <b>170-251-XXX</b> Voltage Sensor(s) Voltage limit error	<ol style="list-style-type: none"> <li><b>Power supply</b></li> <li>System board</li> </ol>
<b>170-254-XXX</b> Voltage Sensor(s) Voltage Regulator Module error	<ol style="list-style-type: none"> <li><b>Voltage Regulator Module (VRM)</b></li> <li>Microprocessor</li> <li>System board</li> </ol>
<b>175-000-XXX</b> Thermal Sensor(s) Test Passed	<ol style="list-style-type: none"> <li><b>No action</b></li> </ol>
<b>175-0XX-XXX</b> Thermal Sensor(s) failure	<ol style="list-style-type: none"> <li><b>Flash system</b></li> <li>System board</li> </ol>
<b>175-195-XXX</b> Thermal Sensor(s) Test aborted by user	<ol style="list-style-type: none"> <li><b>Information</b></li> <li>Re-start the test, if necessary</li> </ol>
<b>175-196-XXX</b> Thermal Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> <li><b>Press F3 to review the log file</b></li> <li>Re-start the test to reset the log file</li> </ol>
<b>175-197-XXX</b> Thermal Sensor(s) test warning	<ol style="list-style-type: none"> <li><b>Make sure the component that is called out is connected and/or enabled</b></li> <li>Re-run test</li> <li>Component that is called out in warning statement</li> <li>Component under test</li> </ol>
<b>175-198-XXX</b> Thermal Sensor(s) test aborted	<ol style="list-style-type: none"> <li><b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>Flash the system and re-test</li> <li>Go to "Undetermined problems" section</li> </ol>

Diagnostic Error Code	FRU/Action
<b>175-199-XXX</b> Thermal Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to the "Undetermined problems" section</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>175-250-XXX</b> <b>175-251-XXX</b> Thermal Sensor(s) limit error	<ol style="list-style-type: none"> <li>1. Check fans</li> <li>2. Check Power supply</li> <li>3. Microprocessor</li> <li>4. System board</li> </ol>
<b>185-000-XXX</b> Asset Security Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>185-XXX-XXX</b> Asset Security failure	<ol style="list-style-type: none"> <li>1. Flash system</li> <li>2. System board</li> </ol>
<b>185-278-XXX</b> Asset Security Chassis Intrusion	<ol style="list-style-type: none"> <li>1. Assure Asset Security Enabled</li> <li>2. C2 Cover Switch</li> <li>3. System board</li> </ol>
<b>201-000-XXX</b> System Memory Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>201-XXX-XXX</b> System Memory error	<ol style="list-style-type: none"> <li>1. Replace the memory module called out by the test</li> <li>2. System board</li> </ol>
<b>202-000-XXX</b> System Cache Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>202-XXX-XXX</b> System Cache error	<ol style="list-style-type: none"> <li>1. Cache, if removable</li> <li>2. System board</li> <li>3. Microprocessor</li> </ol>
<b>206-000-XXX</b> Diskette Drive Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>206-XXX-XXX</b> Diskette Drive error	<ol style="list-style-type: none"> <li>1. Diskette Drive Cable</li> <li>2. Check power supply voltages</li> <li>3. Diskette drive</li> <li>4. System board</li> </ol>
<b>215-000-XXX</b> CD-ROM Drive Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>215-XXX-XXX</b> CD-ROM Drive error	<ol style="list-style-type: none"> <li>1. CD-ROM Drive Cable</li> <li>2. Check power supply voltages</li> <li>3. CD-ROM drive</li> <li>4. System board</li> </ol>
<b>217-000-XXX</b> Hard Disk Drive Test Passed	<ol style="list-style-type: none"> <li>1. No action</li> </ol>
<b>217-25X-XXX</b> <b>217-26X-XXX</b> Hard Disk Drive (IDE) error	<ol style="list-style-type: none"> <li>1. Hard Disk Drive Cable</li> <li>2. Check power supply voltages</li> <li>3. Hard Disk drive (IDE)</li> <li>4. System board</li> </ol>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
217-28X-XXX 217-29X-XXX Hard Disk Drive (SCSI) error	<ol style="list-style-type: none"> <li>1. <b>Hard Disk Drive Cable</b></li> <li>2. Check power supply voltages</li> <li>3. Hard Disk drive (SCSI)</li> <li>4. SCSI adapter card</li> <li>5. System board</li> </ol>
220-000-XXX Hi-Capacity Cartridge Drive Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
220-XXX-XXX Hi-Capacity Cartridge Drive error	<ol style="list-style-type: none"> <li>1. <b>Remove the Hi-Capacity Cartridge Drive and re-test the system</b></li> </ol>
301-XXX-XXX Keyboard error	<ol style="list-style-type: none"> <li>1. <b>Keyboard</b></li> <li>2. Check and test mouse</li> <li>3. System board</li> </ol>
301-000-XXX Keyboard Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
302-000-XXX Mouse Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
302-XXX-XXX Mouse error	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. Check and test Keyboard</li> <li>3. System board</li> </ol>
303-000-XXX Joystick Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
303-XXX-XXX Joystick error	<ol style="list-style-type: none"> <li>1. <b>Remove the Joystick and re-test the system</b></li> </ol>
305-000-XXX Monitor DDC Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
305-250-XXX Monitor DDC self test failure	<ol style="list-style-type: none"> <li>1. <b>Run Setup to enable DDC</b></li> <li>2. Cable</li> <li>3. Monitor</li> <li>4. Video card</li> <li>5. System board</li> </ol>
415-000-XXX Modem Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
415-XXX-XXX Modem error	<ol style="list-style-type: none"> <li>1. <b>Remove the Modem and re-test the system</b></li> </ol>



## Beep symptoms

Beep symptoms are short tones or a series of short tones separated by pauses (intervals without sound). See the following examples.

Beeps	Description
1-2-X	<ul style="list-style-type: none"> <li>• One beep</li> <li>• A pause (or break)</li> <li>• Two beeps</li> <li>• A pause (or break)</li> <li>• Any number of breaks</li> </ul>
4	Four continuous beeps

Use the following table to diagnose beep symptoms.

Beep Symptom	FRU/Action
1-1-3 CMOS read-write error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. System Board</li> </ol>
1-2-2-3 ROM BIOS check error	1. <b>System Board</b>
1-2-1 Programmable Interval Timer failed	1. <b>System Board</b>
1-2-2 DMA Initialization failed	1. <b>System Board</b>
1-2-3 DMA page register write/read failed	1. <b>System Board</b>
1-2-4 RAM refresh verification failed	<ol style="list-style-type: none"> <li>1. <b>DIMM</b></li> <li>2. System Board</li> </ol>
1-3-3-1 1st 64K RAM test failed	<ol style="list-style-type: none"> <li>1. DIMM</li> <li>2. System Board</li> </ol>
1-3-2 1st 64K RAM parity test failed	<ol style="list-style-type: none"> <li>1. <b>DIMM</b></li> <li>2. Processor</li> <li>3. System Board</li> </ol>
2-2-3-1 Interrupt vector loading test failed	1. <b>System Board</b>
2-1-1 Secondary DMA register failed	1. <b>System Board</b>
2-1-2 Primary DMA register failed	1. <b>System Board</b>
2-1-3 Primary interrupt mask register failed	1. <b>System Board</b>
2-1-4 Secondary interrupt mask register failed	1. <b>System Board</b>
2-2-1 Interrupt vector loading failed	1. <b>System Board</b>
1-3-1-3 Keyboard controller failed	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Keyboard</li> </ol>
2-2-3 CMOS power failure and checksum checks failed	<ol style="list-style-type: none"> <li>1. <b>Battery</b></li> <li>2. System Board</li> </ol>

<b>Beep Symptom</b>	<b>FRU/Action</b>
2-2-4 CMOS configuration info validation failed	1. <b>Battery</b> 2. System Board
2-3-1 Screen initialization failed	1. <b>Jumper on J28</b> 2. System Board
2-3-2 Screen memory failed	1. <b>System Board</b>
2-3-3 Screen retrace failed	1. <b>System Board</b>
1-2 Search for video ROM failed	1. <b>System Board</b>
All other beep code sequences	1. <b>System Board</b>
Continuous beep	1. <b>System Board</b>
Repeating short beeps	1. <b>Keyboard stuck key</b> 2. Keyboard Cable 3. System Board

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## No-beep symptoms

Symptom/Error	FRU/Action
No beep during POST but computer works correctly.	1. <b>System Board</b>
No beep during POST.	1. See “Undetermined problems” on page 127. 2. System Board 3. Memory Module 4. Any Adapter or Device 5. Riser Card 6. Power Cord 7. Power Supply

## POST error codes

Each time you power-on the system, it performs a series of tests that check the operation of the system and some options. This series of tests is called the *Power-On Self-Test*, or *POST*. POST does the following operations.

- Checks some basic system-board operations
- Checks the memory operation
- Starts the video operation
- Verifies that the diskette drive is working
- Verifies that the hard disk drive is working

If the POST finishes without detecting any problems, a single beep sounds and the first screen of the operating system or application program appears.

**Note:**

Type 6029 computers default to come up quiet (no beep and no memory count and checkpoint code display) when no errors are detected by POST.

To enable beep and memory count and checkpoint code display when a successful POST occurs, do the following:

1. Select **Start Options** in the Configuration/Setup Utility program (see “Setup Utility program” on page 24).
2. Set **Power-On Self-Test** to **Enhanced**.

If the POST detects a problem, an error message appears on the screen. A single problem can cause several error messages to appear. When you correct the cause of the first error message, the other error messages probably will not appear on the screen the next time you turn on the system.

In the following index, *X* can represent any number.

POST Error Code	FRU/Action
<b>000</b> SCSI Adapter not enabled	1. <b>Verify adapter device and Bus Master fields are enabled in PCI configuration program. See documentation shipped with computer.</b>
<b>02X</b>	1. <b>SCSI Adapter</b>
<b>08X</b> Check SCSI terminator installation.	1. <b>SCSI Cable</b> 2. <b>SCSI Terminator</b> 3. <b>SCSI Device</b> 4. <b>SCSI Adapter</b>
<b>101</b> System board interrupt failure	1. <b>System Board</b>
<b>102</b> System board timer error	1. <b>System Board</b>
<b>106</b>	1. <b>System Board</b>
<b>110</b> System board memory parity error	1. <b>Memory Module</b> 2. <b>System Board</b>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>111</b> I/O channel parity error	<ol style="list-style-type: none"> <li><b>Reseat adapters</b></li> <li>Any adapter</li> <li>Riser card</li> <li>System Board</li> </ol>
<b>114</b> Adapter ROM error	<ol style="list-style-type: none"> <li><b>Adapter Memory</b></li> <li>System Board</li> <li>Riser card</li> </ol>
<b>129</b> Internal cache test error	<ol style="list-style-type: none"> <li><b>Processor</b></li> <li>L2 Cache Memory</li> <li>System Board</li> </ol>
<b>135</b> Fan failure	<ol style="list-style-type: none"> <li><b>Fan</b></li> <li>System board</li> </ol>
<b>151</b> System board failure	<ol style="list-style-type: none"> <li><b>System Board</b></li> </ol>
<b>161</b> Bad CMOS battery	<ol style="list-style-type: none"> <li><b>Run Setup</b></li> <li>CMOS Backup Battery (see "Safety information" on page 271)</li> <li>System Board</li> </ol>
<b>162</b> Configuration mismatch	<ol style="list-style-type: none"> <li><b>Run Setup and verify Configuration</b></li> <li>Had a device been added, removed, changed location? If not, suspect that device.</li> <li>Power-on external devices first, then power-on computer</li> <li>CMOS Backup Battery (see "Safety information" on page 271) System Board</li> <li>System Board</li> </ol>
<b>163</b> Date and Time Incorrect	<ol style="list-style-type: none"> <li><b>Time and Date Set</b></li> <li>CMOS Backup Battery (see "Safety information" on page 271)</li> <li>System Board</li> </ol>
<b>164</b> Memory Size Error	<ol style="list-style-type: none"> <li><b>Run Setup. Check System Summary menu for memory size change. (See "Setup Utility program" on page 24.)</b></li> <li>Run the Extended Memory Diagnostic tests</li> </ol>
<b>166</b> Boot Block Check Sum Error	<ol style="list-style-type: none"> <li><b>Run Flash Recovery using Boot Block. See "Flash recovery boot block jumper" on page 267.</b></li> <li>System Board</li> </ol>
<b>167</b> No Processor BIOS Update Found	<ol style="list-style-type: none"> <li><b>Run Setup. Check Stepping level for the BIOS level needed, then perform the flash update.</b></li> <li>Processor</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>168</b> Alert on LAN error	<ol style="list-style-type: none"> <li>1. <b>Run Setup. Check to see that Ethernet and Alert on LAN are enabled.</b></li> <li>2. System Board</li> </ol>
<b>17X, 18X</b>	<ol style="list-style-type: none"> <li>1. <b>C2 Security</b></li> </ol>
<b>175</b> Primary Copy of Secure Data is damaged	<ol style="list-style-type: none"> <li>1. <b>Run Configuration. See "Setup Utility program" on page 24.</b></li> <li>2. System Board</li> </ol>
<b>176</b> The System has been tampered with	<ol style="list-style-type: none"> <li>1. <b>Covers were removed from the computer</b></li> </ol>
<b>177</b> Corrupted Administrator Password	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>178</b>	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>179</b> Boot Integrity Services Segment Error	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>183</b>	<ol style="list-style-type: none"> <li>1. <b>Enter the administrator password</b></li> </ol>
<b>184</b> Asset Control Antenna not detected	<ol style="list-style-type: none"> <li>1. <b>Make sure Asset Care and Asset ID are enabled in Configuration/Setup</b></li> <li>2. RFID Antenna</li> <li>3. System Board</li> </ol>
<b>185</b> Corrupted boot sequence	<ol style="list-style-type: none"> <li>1. <b>Set configuration and reinstall the boot sequence</b></li> </ol>
<b>186</b> Security Hardware Control Logic Error	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>187</b>	<ol style="list-style-type: none"> <li>1. <b>Clear Administration password</b></li> <li>2. System Board</li> </ol>
<b>189</b>	<ol style="list-style-type: none"> <li>1. <b>More than three password attempts were made to access the computer</b></li> </ol>
<b>190</b> System Security: Invalid Remote Change Requested	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>191</b> System Security: IBM Embedded Security Hardware Reset	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>193</b> System Security: IBM Embedded Security Hardware Removed	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>194</b> System Security: Asset ID Antenna has been Removed	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>195</b> System Security: Asset ID Antenna has been Installed	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>196</b> System Tampered Cleared	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>1XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> </ol>
<b>201, 20X</b> Memory data error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics Memory Test</b></li> <li>2. Memory Module</li> <li>3. System Board</li> </ol>

POST Error Code	FRU/Action
225	1. <b>Unsupported Memory</b>
229 External cache test error	1. <b>L2 Cache Memory</b> 2. System Board
262 POST detected a base memory or extended memory type error	1. <b>Run Setup. Check System Summary menu for memory. (See "Setup Utility program" on page 24.)</b> 2. Run the Extended Memory Diagnostic tests.
301 Keyboard Error	1. <b>Keyboard</b> 2. Keyboard Cable 3. System Board
303 With an 8603 error	1. <b>Mouse</b> 2. Keyboard 3. Keyboard Cable 4. System Board
303 With no 8603 error	1. <b>Keyboard</b> 2. Keyboard Cable 3. System Board
3XX Not listed above	1. <b>Keyboard</b> 2. Keyboard Cable 3. System Board
5XX	1. <b>Video Adapter (if installed)</b> 2. System Board
601	1. <b>Diskette Drive A</b> 2. Diskette Drive Cable 3. System Board 4. Riser card
602	1. <b>Bad Diskette?</b> 2. Verify Diskette and retry
604 And able to run diagnostics	1. <b>Run Setup and verify diskette configuration settings</b> 2. Diskette Drive A/B 3. Diskette Drive Cable 4. System Board 5. Riser card
605 POST cannot unlock the diskette drive	1. <b>Diskette Drive</b> 2. Diskette Drive Cable 3. System Board 4. Riser card
662 Configuration Change has occurred	1. <b>Diskette drive configuration error or wrong diskette drive type; run Setup Configuration</b>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>6XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. System Board</li> <li>3. Riser card</li> <li>4. External Drive Adapter</li> <li>5. Diskette Drive Cable</li> <li>6. Power Supply</li> </ol>
<b>762</b> Math coprocessor configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Processor</li> <li>3. System Board</li> </ol>
<b>7XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Processor</b></li> <li>2. System Board</li> </ol>
<b>962</b> Parallel port configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Configuration</b></li> <li>2. Parallel Adapter (if installed)</li> <li>3. System Board</li> </ol>
<b>9XX</b>	<ol style="list-style-type: none"> <li>1. <b>Printer</b></li> <li>2. System Board</li> </ol>
<b>1047</b>	<ol style="list-style-type: none"> <li>1. <b>16-Bit AT™ Fast SCSI Adapter</b></li> </ol>
<b>107X</b> Check SCSI terminator installation	<ol style="list-style-type: none"> <li>1. <b>Check SCSI terminator installation</b></li> <li>2. SCSI Cable</li> <li>3. SCSI Terminator</li> <li>4. SCSI Device</li> <li>5. SCSI Adapter</li> </ol>
<b>1101</b> Serial connector error, possible system board failure	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> </ol>
<b>1101, 1102, 1106, 1108, 1109</b>	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Any Serial Device</li> </ol>
<b>1107</b>	<ol style="list-style-type: none"> <li>1. <b>Communications Cable</b></li> <li>2. System Board</li> </ol>
<b>1102</b> Card selected feedback error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> </ol>
<b>1103</b> Port fails register check	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. System Board</li> </ol>
<b>1106</b> Serial option cannot be turned off	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. System Board</li> </ol>
<b>1107</b>	<ol style="list-style-type: none"> <li>1. <b>Serial Device Cable</b></li> <li>2. System Board</li> </ol>
<b>1110</b> Register test failed	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. System Board</li> </ol>
<b>1116</b> Interrupt error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> </ol>



<b>POST Error Code</b>	<b>FRU/Action</b>
<b>1117</b> Failed baud rate test	1. <b>Run Enhanced Diagnostics</b>
<b>1162</b> Serial port configuration error	1. <b>Run Configuration</b> 2. Serial Adapter (if installed) 3. System Board
<b>11XX</b> Not listed above	1. <b>System Board</b>
<b>1201</b>	1. <b>System Board</b> 2. Any Serial Device
<b>1202, 1206, 1208, 1209, 12XX</b>	1. <b>Dual Async Adapter/A</b> 2. System Board 3. Any Serial Device
<b>1207</b>	1. <b>Communications Cable</b> 2. Dual Async Adapter/A
<b>13XX</b>	1. <b>Game Adapter</b>
<b>1402</b> Printer not ready	Information only
<b>1403</b> No paper error, or interrupt failure	Information only
<b>1404</b> System board timeout failure	1. <b>Run Enhanced Diagnostics</b>
<b>1405</b> Parallel adapter error	1. <b>Run Enhanced Diagnostics</b>
<b>1406</b> Presence test error	1. <b>Run Enhanced Diagnostics</b>
<b>14XX</b> Not listed above. Check printer before replacing system board	1. <b>Printer</b> 2. System Board
<b>15XX</b>	1. <b>SDLC Adapter</b>
<b>1692</b> Boot sequence error	1. <b>Run FDISK to ensure at least one active partition is set active</b>
<b>16XX</b>	1. <b>36/38 Workstation Adapter</b>
<b>1762</b> Hard disk drive configuration error	1. <b>Run Configuration. (See "Setup Utility program" on page 24.)</b>
<b>1780</b> (Disk Drive 0) <b>1781</b> (Disk Drive 1) <b>1782</b> (Disk Drive 2) <b>1783</b> (Disk Drive 3)	1. <b>Hard Disk Drive</b> 2. System Board 3. Riser card 4. Hard Disk Cable 5. Power Supply

POST Error Code	FRU/Action
1800 PCI/PnP Error! No Hardware Interrupt Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>
1801 PCI/PnP Error! No Space Available to Shadow ROM	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>
1802 PCI/PnP Error! Not Enough I/O Space Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>
1803 PCI/PnP Error! Not Enough Memory Space Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>
1804 PCI/PnP Error! Not Enough Real Memory Space Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>
1805 PCI/PnP Error! Adapter ROM Checksum Error	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>

POST Error Code	FRU/Action
<b>180X, 188X</b> PCI configuration or resource error	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. If necessary, set ISA adapters to <i>Not available</i> to allow PCI adapters to properly configure.</li> <li>3. Remove any suspect ISA adapters.</li> <li>4. Rerun diagnostics.</li> <li>5. PCI Adapter</li> </ol>
<b>1962</b> No operating system found	<ol style="list-style-type: none"> <li>1. <b>Press F1 to repeat boot sequence.</b></li> </ol>
<b>209X</b>	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. Diskette Cable</li> </ol>
<b>20XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>BSC Adapter</b></li> </ol>
<b>21XX</b>	<ol style="list-style-type: none"> <li>1. <b>SCSI Device</b></li> <li>2. 16-bit AT Fast SCSU adapter</li> <li>3. Alternate BSC adapter</li> </ol>
<b>2401, 2402</b> If screen colors change	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> </ol>
<b>2401, 2402</b> If screen colors are OK	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Display</li> </ol>
<b>2409</b>	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> </ol>
<b>2410</b>	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Display</li> </ol>
<b>2462</b> Video memory configuration error	<ol style="list-style-type: none"> <li>1. <b>Check cable connections</b></li> <li>2. Run Setup and verify video configuration settings</li> <li>3. Video Memory Modules</li> <li>4. Video Adapter (if installed)</li> <li>5. System Board</li> </ol>
<b>4611, 4630</b>	<ol style="list-style-type: none"> <li>1. <b>Multiport/2 Interface Board</b></li> <li>2. Multiport/2 Adapter</li> </ol>
<b>4612, 4613, 4640, 4641</b>	<ol style="list-style-type: none"> <li>1. <b>Memory Module Package</b></li> <li>2. Multiport/2 Adapter</li> </ol>
<b>4650</b>	<ol style="list-style-type: none"> <li>1. <b>Multiport/2 Interface Cable</b></li> </ol>
<b>46XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Multiport/2 Adapter</b></li> <li>2. Multiport/2 Interface Board</li> <li>3. Memory Module</li> </ol>
<b>5600</b>	<ol style="list-style-type: none"> <li>1. <b>Financial System Controller Adapter</b></li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>5962</b> An IDE device (other than hard drive) configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Configuration</b></li> <li>2. CD-ROM Drive</li> <li>3. CD-ROM Adapter</li> <li>4. Zip or other ATAPI device</li> <li>5. System Board</li> <li>6. Riser card</li> </ol>
<b>62XX</b>	<ol style="list-style-type: none"> <li>1. <b>1st Store Loop Adapter</b></li> <li>2. Adapter Cable</li> </ol>
<b>63XX</b>	<ol style="list-style-type: none"> <li>1. <b>2nd Store Loop Adapter</b></li> <li>2. Adapter Cable</li> </ol>
<b>64XX</b>	<ol style="list-style-type: none"> <li>1. <b>Network Adapter</b></li> </ol>
<b>71XX</b>	<ol style="list-style-type: none"> <li>1. <b>Voice Adapter</b></li> </ol>
<b>74XX</b>	<ol style="list-style-type: none"> <li>1. <b>Video Adapter (if installed)</b></li> </ol>
<b>76XX</b>	<ol style="list-style-type: none"> <li>1. <b>Page Printer Adapter</b></li> </ol>
<b>78XX</b>	<ol style="list-style-type: none"> <li>1. <b>High Speed Adapter</b></li> </ol>
<b>79XX</b>	<ol style="list-style-type: none"> <li>1. <b>3117 Adapter</b></li> </ol>
<b>80XX</b>	<ol style="list-style-type: none"> <li>1. <b>PCMCIA Adapter</b></li> </ol>
<b>84XX</b>	<ol style="list-style-type: none"> <li>1. <b>Speech Adapter</b></li> <li>2. Speech Control Assembly.</li> </ol>
<b>8601, 8602</b>	<ol style="list-style-type: none"> <li>1. <b>Pointing Device (Mouse)</b></li> <li>2. System Board</li> </ol>
<b>8603, 8604</b> Pointing Device Error	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Pointing Device (Mouse)</li> </ol>
<b>86XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System Board</li> </ol>
<b>89XX</b>	<ol style="list-style-type: none"> <li>1. <b>PC Music Adapter</b></li> <li>2. MIDI Adapter Unit</li> </ol>
<b>91XX</b>	<ol style="list-style-type: none"> <li>1. <b>Optical Drive</b></li> <li>2. Adapter</li> </ol>
<b>96XX</b>	<ol style="list-style-type: none"> <li>1. <b>SCSI Adapter</b></li> <li>2. Any SCSI Device</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
<b>10101, 10102, 10104, 10105, 10106, 10107, 10108, 10109, 10111, 10112, 10113, 10114, 10115, 10116</b>	<ol style="list-style-type: none"> <li>1. <b>Have customer verify correct operating system device drivers are installed and operational.</b></li> <li>2. Modem</li> </ol>

POST Error Code	FRU/Action
10103, 10110, 101171	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Data/Fax Modem</li> <li>3. Riser card</li> </ol>
10117 Not listed above	<ol style="list-style-type: none"> <li>1. <b>Check system speaker</b></li> <li>2. Check PSTN cable</li> <li>3. External DAA (if installed)</li> <li>4. Modem</li> </ol>
10118	<ol style="list-style-type: none"> <li>1. <b>Run Diagnostics and verify the correct operation of the modem slot</b></li> <li>2. Modem</li> </ol>
10119	<ol style="list-style-type: none"> <li>1. <b>Diagnostics detected a non-IBM modem</b></li> <li>2. Modem</li> </ol>
10120	<ol style="list-style-type: none"> <li>1. <b>Check PSTN Cable</b></li> <li>2. External DAA (if installed)</li> <li>3. Modem</li> </ol>
10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152	<ol style="list-style-type: none"> <li>1. <b>Modem</b></li> </ol>
10153	<ol style="list-style-type: none"> <li>1. <b>Data/Fax Modem</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
101XX Not listed above	<ol style="list-style-type: none"> <li>1. <b>Modem Adapter/A</b></li> <li>2. Data/Fax Modem</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
10450, 10451, 10490, 10491, 10492, 10499 Read/write error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. Hard Disk Drive</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
10452 Seek test error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> </ol>
10453 Wrong drive type?	Information only
10454 Sector buffer test error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> </ol>
10455, 10456 Controller error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> </ol>
10459 Drive diagnostic command error	Information only

POST Error Code	FRU/Action
<b>10461</b> Drive format error	1. <b>Run Enhanced Diagnostics</b>
<b>10462</b> Controller seek error	1. <b>Run Enhanced Diagnostics</b>
<b>10464</b> Hard Drive read error	1. <b>Run Enhanced Diagnostics</b>
<b>10467</b> Drive non-fatal seek error	1. <b>Run Enhanced Diagnostics</b>
<b>10468</b> Drive fatal seek error	1. <b>Run Enhanced Diagnostics</b>
<b>10469</b> Drive soft error count exceeded	1. <b>Run Enhanced Diagnostics</b>
<b>10470, 10471, 10472</b> Controller wrap error	1. <b>Run Enhanced Diagnostics</b>
<b>10473</b> Corrupt data. Low level format might be required	Information only
<b>10480</b>	1. <b>Hard Disk Drive (ESDI)</b> 2. Drive Cable 3. System Board
<b>10481</b> ESDI drive D seek error	1. <b>Run Enhanced Diagnostics</b>
<b>10482</b> Drive select acknowledgement bad	1. <b>Run Enhanced Diagnostics</b>
<b>106X1</b>	1. <b>Check Configuration</b> 2. Ethernet Adapter
<b>10635</b>	1. <b>Power-off computer, wait ten seconds then power-on the computer</b> 2. Ethernet Adapter
<b>10651, 10660</b>	1. <b>Check Cables</b> 2. Ethernet Adapter
<b>106XX</b> Not listed above	1. <b>Ethernet Adapter</b>
<b>107XX</b>	1. <b>5.25-inch External Diskette Drive</b> 2. 5.25-inch Diskette Drive Adapter/A
<b>109XX</b> Check the adapter cables	1. <b>ActionMedia Adapter/A</b> 2. System Board 3. Riser card
<b>112XX</b> This adapter does not have cache	1. <b>SCSI Adapter</b> 2. Any SCSI Device 3. System Board 4. Riser card

<b>POST Error Code</b>	<b>FRU/Action</b>
119XX	1. <b>3119 Adapter</b>
121XX	1. <b>Modem Adapter</b> 2. Any Serial Device 3. System Board 4. Riser card
136XX	1. <b>ISDN Primary Rate Adapter</b> 2. System Board 3. Riser card
137XX	1. <b>System Board</b>
141XX	1. <b>Realtime Interface Coprocessor Portmaster Adapter/A</b>
143XX	1. <b>Japanese Display Adapter</b> 2. System Board 3. Riser card
14710, 14711	1. <b>System Board Video Adapter</b> 2. Adapter Video Memory
148XX	1. <b>Video Adapter</b>
14901, 14902, 1491X, 14922	1. <b>Video Adapter (if installed)</b> 2. System Board 3. Riser card 4. Display (any type)
14932	1. <b>External Display</b> 2. Video Adapter
161XX	1. <b>FaxConcentrator Adapter</b>
164XX	1. <b>120 MB Internal Tape Drive</b> 2. Diskette Cable 3. System Board 4. Riser card
16500	1. <b>6157 Tape Attachment</b> 2. Adapter
16520, 16540	1. <b>6157 Streaming Tape Drive</b> 2. 6157 Tape Attachment Adapter
166XX, 167XX	1. <b>Token Ring Adapter</b> 2. System Board 3. Riser card
18001 to 18029	1. <b>Wizard Adapter</b> 2. Wizard Adapter Memory
18031 to 18039	1. <b>Wizard Adapter Cable</b>

POST Error Code	FRU/Action
185XXXX	<ol style="list-style-type: none"> <li>1. <b>DBCS Japanese Display Adapter/A</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
20001 to 20003	<ol style="list-style-type: none"> <li>1. <b>Image Adapter/A</b> <b>Image-I Adapter/A</b></li> <li>2. Memory Module DRAM, VRAM</li> </ol>
20004	<ol style="list-style-type: none"> <li>1. <b>Memory Module DRAM, VRAM</b></li> <li>2. Image Adapter/A Image-I Adapter/A</li> </ol>
20005 to 20010	<ol style="list-style-type: none"> <li>1. <b>Image Adapter/A</b> <b>Image-I Adapter/A</b></li> <li>2. Memory Module DRAM, VRAM</li> </ol>
200XX Not listed above	<ol style="list-style-type: none"> <li>1. <b>Image Adapter/A</b></li> <li>2. Image-I Adapter/A</li> <li>3. Memory Module DRAM, VRAM</li> <li>4. System Board</li> <li>5. Riser card</li> </ol>
20101 to 20103	<ol style="list-style-type: none"> <li>1. <b>Printer/Scanner Option</b></li> <li>2. Image Adapter/A</li> <li>3. Memory Module DRAM, VRAM</li> </ol>
20104	<ol style="list-style-type: none"> <li>1. <b>Memory Module DRAM, VRAM</b></li> <li>2. Printer/Scanner Option</li> <li>3. Image Adapter/A</li> </ol>
20105 to 20110	<ol style="list-style-type: none"> <li>1. <b>Printer/Scanner Option</b></li> <li>2. Image Adapter/A</li> <li>3. Memory Module DRAM, VRAM</li> </ol>
Image Adapter/A Memory Test failure indicated by graphic of adapter	<ol style="list-style-type: none"> <li>1. <b>Replace memory module (shown in graphic)</b></li> </ol>
206XX	<ol style="list-style-type: none"> <li>1. <b>SCSI-2 Adapter</b></li> <li>2. Any SCSI Device</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
208XX Verify there are no duplicate SCSI ID settings on the same bus.	<ol style="list-style-type: none"> <li>1. <b>Any SCSI Device</b></li> </ol>
210XXXX Internal bus, size unknown 210XXX1 External bus, size unknown	<ol style="list-style-type: none"> <li>1. <b>SCSI Hard Disk Drive</b></li> <li>2. SCSI Adapter or System Board</li> <li>3. SCSI Cable</li> <li>4. SCSI ID Switch (on some models)</li> </ol>
Tape Drive amber LED remains on	<ol style="list-style-type: none"> <li>1. <b>Tape Drive</b></li> <li>2. SCSI Cable (internal)</li> <li>3. SCSI Adapter or System Board</li> </ol>



<b>POST Error Code</b>	<b>FRU/Action</b>
Tape Drive green "in use" LED fails to come on	<ol style="list-style-type: none"> <li>1. <b>Tape Drive</b></li> <li>2. SCSI Adapter or System Board</li> <li>3. SCSI Cable (internal)</li> <li>4. SCSI Cable (external)</li> </ol>
Tape automatically ejected from drive	<ol style="list-style-type: none"> <li>1. <b>Tape Cassette Drive</b></li> </ol>
SCSI ID on rotary switch does not match SCSI ID set in configuration. Verify drive switches inside cover are set to zero	<ol style="list-style-type: none"> <li>1. <b>Rotary Switch Circuit Board</b></li> <li>2. Circuit Board Cable</li> <li>3. Tape Drive</li> </ol>
Tape sticks or breaks in drive. Verify that the tapes used meet ANSI standard X3B5	<ol style="list-style-type: none"> <li>1. <b>Tape Cassette</b></li> </ol>
<b>212XX</b>	<ol style="list-style-type: none"> <li>1. <b>SCSI Printer</b></li> <li>2. Printer Cable</li> </ol>
<b>213XX</b>	<ol style="list-style-type: none"> <li>1. <b>SCSI Processor</b></li> </ol>
<b>214XX</b>	<ol style="list-style-type: none"> <li>1. <b>WORM Drive</b></li> </ol>
<b>215XXXC, 215XXXD, 215XXXE, 215XXXU</b> If an external device, and power-on LED is off, check external voltages	<ol style="list-style-type: none"> <li>1. <b>CD-ROM Drive I</b></li> <li>2. CD-ROM Drive II Enhanced CD-ROM Drive II Any CD-ROM Drive</li> <li>3. SCSI Cable</li> <li>4. SCSI Adapter or System Board</li> </ol>
<b>216XX</b>	<ol style="list-style-type: none"> <li>1. <b>Scanner</b></li> </ol>
<b>217XX</b> If an external device, and power-on LED is off, check external voltages	<ol style="list-style-type: none"> <li>1. <b>Rewritable Optical Drive</b></li> <li>2. SCSI Adapter or System Board</li> <li>3. SCSI Cable</li> </ol>
<b>218XX</b> Check for multi CD tray or jukebox	<ol style="list-style-type: none"> <li>1. <b>Changer</b></li> </ol>
<b>219XX</b>	<ol style="list-style-type: none"> <li>1. <b>SCSI Communications Device</b></li> </ol>
<b>24201Y0, 24210Y0</b> Be sure wrap plug is attached	<ol style="list-style-type: none"> <li>1. <b>ISDN/2 Adapter</b></li> <li>2. ISDN/2 Wrap Plug</li> <li>3. ISDN/2 Communications Cable</li> </ol>
<b>273XX</b>	<ol style="list-style-type: none"> <li>1. <b>1 Mbps Micro Channel</b></li> <li>2. Infrared LAN Adapter</li> </ol>
<b>27501, 27503, 27506, 27507</b>	<ol style="list-style-type: none"> <li>1. <b>ServerGuard Adapter</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
<b>27502, 27504, 27510, 27511, 27533, 27534, 27536, 27537</b>	<ol style="list-style-type: none"> <li>1. <b>ServerGuard Adapter</b></li> </ol>
<b>27509</b>	<ol style="list-style-type: none"> <li>1. <b>Remove redundant adapters, run Auto Configuration program, then retest.</b></li> </ol>

POST Error Code	FRU/Action
27512	<ol style="list-style-type: none"> <li>1. <b>WMSELF.DGS diagnostics file is missing</b></li> <li>2. WMSELF.DGS diagnostics file is incorrect</li> </ol>
27535	<ol style="list-style-type: none"> <li>1. <b>3V Lithium Backup Battery</b></li> <li>2. ServerGuard Adapter</li> </ol>
27554	<ol style="list-style-type: none"> <li>1. <b>Internal Temperature out of range</b></li> <li>2. ServerGuard Adapter</li> </ol>
27555, 27556	<ol style="list-style-type: none"> <li>1. <b>ServerGuard Adapter</b></li> <li>2. Power Supply</li> </ol>
27557	<ol style="list-style-type: none"> <li>1. <b>7.2V NiCad Main Battery Pack</b></li> <li>2. ServerGuard Adapter</li> </ol>
27558, 27559, 27560, 27561	<ol style="list-style-type: none"> <li>1. <b>PCMCIA Type II Modem</b></li> <li>2. ServerGuard Adapter</li> </ol>
27562	<ol style="list-style-type: none"> <li>1. <b>External Power Control not connected</b></li> <li>2. External Power Control</li> <li>3. ServerGuard Adapter</li> </ol>
27563, 27564	<ol style="list-style-type: none"> <li>1. <b>External Power Control</b></li> <li>2. ServerGuard Adapter</li> </ol>
275XX	<ol style="list-style-type: none"> <li>1. <b>Update Diagnostic Software</b></li> </ol>
27801 to 27879	<ol style="list-style-type: none"> <li>1. <b>Personal Dictation System</b></li> <li>2. Adapter</li> <li>3. System Board</li> </ol>
27880 to 27889	<ol style="list-style-type: none"> <li>1. <b>External FRU (Speaker, Microphone)</b></li> </ol>
999030X Hard disk reset failure	<ol style="list-style-type: none"> <li>1. <b>Possible hard disk drive problem; see "Hard disk drive boot error" on page 87.</b></li> </ol>

## Miscellaneous error messages

Message/Symptom	FRU/Action
CMOS Backup Battery inaccurate	<ol style="list-style-type: none"> <li>1. <b>CMOS Backup Battery</b> (see “Safety information” on page 271)</li> <li>2. System Board</li> </ol>
Changing colors	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> </ol>
Computer will <i>not</i> power-off. See “Power Supply Errors” on page 87.	<ol style="list-style-type: none"> <li>1. <b>Power Switch</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
Computer will <i>not</i> RPL from server	<ol style="list-style-type: none"> <li>1. <b>Ensure that network is in startup sequence as first device or first device after diskette</b></li> <li>2. Ensure that network adapter is enabled for RPL</li> <li>3. Network adapter (Advise network administrator of new MAC address)</li> </ol>
Computer will <i>not</i> Wake On LAN (if applicable)	<ol style="list-style-type: none"> <li>1. <b>Check power supply and signal cable connections to network adapter</b></li> <li>2. Ensure that the operating system settings are set to enable Wake on LAN</li> <li>3. Ensure Wake On LAN feature is enabled in Setup/Configuration (see “Setup Utility program” on page 24)</li> <li>4. Ensure network administrator is using correct MAC address</li> <li>5. Ensure no interrupt or I/O address conflicts</li> <li>6. Network adapter (advise network administrator of new MAC address)</li> </ol>
Dead computer. See “Power Supply Errors” on page 87.	<ol style="list-style-type: none"> <li>1. <b>Power Supply</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
Diskette drive in-use light remains on or does not light when drive is active.	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. System Board</li> <li>3. Diskette Drive Cable</li> <li>4. Riser card</li> </ol>
Flashing cursor with an otherwise blank display.	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Primary Hard Disk Drive</li> <li>3. Hard Disk Drive Cable</li> <li>4. Riser card</li> </ol>
Incorrect memory size during POST	<ol style="list-style-type: none"> <li>1. <b>Run the Memory tests</b></li> <li>2. Memory Module</li> <li>3. System Board</li> </ol>

<b>Message/Symptom</b>	<b>FRU/Action</b>
"Insert a Diskette" icon appears with a known-good diagnostics diskette in the first 3.5-inch diskette drive.	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Diskette Drive Cable</li> <li>3. Riser card</li> <li>4. Network Adapter</li> </ol>
Intensity or color varies from left to right of characters and color bars	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> <li>2. System Board</li> </ol>
No power or fan not running	1. <b>See "Power Supply Errors" on page 87.</b>
Non-system disk or disk error-type message with a known-good diagnostic diskette.	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. System Board</li> <li>3. Diskette Drive Cable</li> <li>4. Riser card</li> </ol>
Other display symptoms not listed above (including blank or illegible display)	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> <li>2. System Board</li> </ol>
Power-on indicator or hard disk drive in-use light not on, but computer works correctly	<ol style="list-style-type: none"> <li>1. <b>Power Supply</b></li> <li>2. System Board</li> <li>3. LED Cables</li> </ol>
Printer problems	1. <b>Printer</b>
Program loads from the hard disk with a known-good diagnostics diskette in the first 3.5-inch diskette drive	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Diskette Drive</li> <li>3. Diskette Drive Cable</li> <li>4. System Board</li> <li>5. Riser card</li> <li>6. Power Supply</li> </ol>
RPL computer cannot access programs from its own hard disk.	<ol style="list-style-type: none"> <li>1. <b>If network administrator is using LCCM Hybrid RPL, check startup sequence:</b> <ol style="list-style-type: none"> <li>a. <b>First device - network</b></li> <li>b. <b>Second device - hard disk</b></li> </ol> </li> <li>2. Hard disk drive</li> </ol>
RPL computer does not RPL from server	<ol style="list-style-type: none"> <li>1. <b>Check startup sequence</b></li> <li>2. Check the network adapter LED status</li> </ol>
Serial or parallel port device failure (system board port)	<ol style="list-style-type: none"> <li>1. <b>External Device Self-Test OK?</b></li> <li>2. External Device</li> <li>3. Cable</li> <li>4. System Board</li> </ol>
Serial or parallel port device failure (adapter port)	<ol style="list-style-type: none"> <li>1. <b>External Device Self-Test OK?</b></li> <li>2. External Device</li> <li>3. Cable</li> <li>4. Alternate Adapter</li> <li>5. System Board</li> </ol>

Message/Symptom	FRU/Action
Some or all keys on the keyboard do not work	<ol style="list-style-type: none"> <li>1. <b>Keyboard</b></li> <li>2. Keyboard Cable</li> <li>3. System Board</li> </ol>

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## Undetermined problems

Check the power supply voltages (see “Power Supply Errors” on page 87). If the voltages are correct, return here and continue with the following steps.

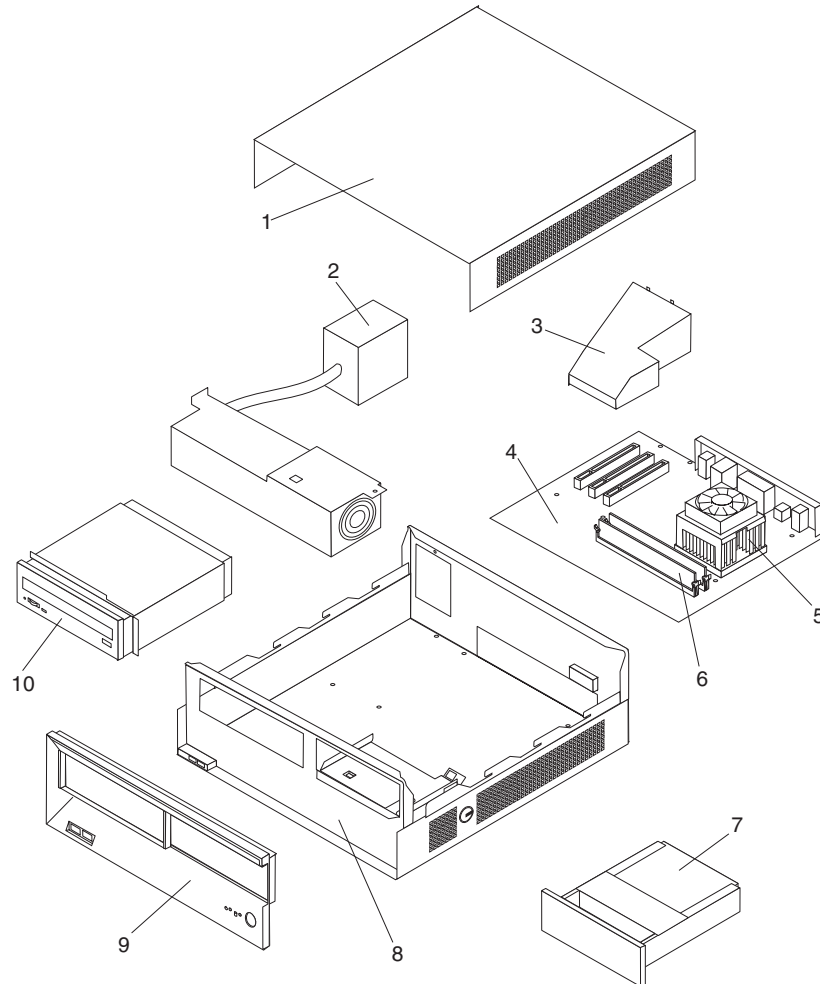
1. Power-off the computer.
2. Remove or disconnect the following components (if installed) one at a time.
  - a. Non-IBM devices
  - b. External devices (modem, printer, or mouse)
  - c. Any adapters
  - d. Riser card
  - e. Memory modules
  - f. Extended video memory
  - g. External Cache
  - h. External Cache RAM
  - i. Hard disk drive
  - j. Diskette drive
3. Power-on the computer to re-test the system.
4. Repeat steps 1 through 3 until you find the failing device or adapter.

If all devices and adapters have been removed, and the problem continues, replace the system board (see “Types 8307, 8308, 8310, 8311, 8314, and 8315” on page 83).



## Chapter 8. Parts listing

This section lists the replaceable FRUs for Machine Types 8301 and 8302.



Item #	Machine Type 8301	FRU#	CRU?
1	Top Cover (all models)	33P0859	Y
2	125W Power Supply (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P)	49P2002	N
2	125W Power Supply (w/PFC) China	49P2004	N
3	Air Duct (all models)	48P6599	Y
4	Planar (Spartan 10/100 wo-POV) (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P 41G)	02R4084	N

Item #	Machine Type 8301	FRU#	CRU?
4	Planar (Spartan 10/100 wo-POV) (optional to 02R4084) (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P 41G)	88P8474	N
5	Processor P4 1.8 GHz (model 11G)	33P0965	N
5	Processor P4 1.8 GHz (model 51U 51F 51G 52U 52S 52P 53U 53S 53P 54U 54F 54S 54P)	58P9968	N
5	Processor P4 1.9 GHz	49P1726	N
5	Processor P4 2.0 GHz (models 21U 21F 22U CTO 23G)	48P7205	N
5	Processor P4 2.2 GHz	48P7206	N
5	Processor P4 2.26 GHz (models 31U 31F 31G 32U CTO)	48P6837	N
5	Processor P4 2.4 GHz	33P3743	N
5	Processor P4 2.4 GHz (model 41G 41U 41F)	48P7684	N
5	Processor P4 2.53 GHz (model 61U 61F)	48P6839	N
5	Processor P4 1.8 GHz (models 51U 51F 51G 52U 52S 52P 53U 53S 53P 54U 54F 54S 54P)	02R4501	N
5	Processor P4 1.8 GHz (models 51U 51F 51G 52U 52S 52P 53U 53S 53P 54U 54F 54S 54P)	02R4507	N
5	Processor P4 2.0 GHz (models 21U 21F 22U CTO 23G)	59P7160	N
5	Processor P4 2.0 GHz (models 21U 21F 22U CTO 23G)	02R4509	N
5	Processor P4 2.2 GHz	59P7161	N
5	Processor P4 2.2 GHz	02R4511	N
5	Processor P4 2.26 GHz (models 31U 31F 31G 32U CTO)	59P1987	N
5	Processor P4 2.26 GHz (models 31U 31F 31G 32U CTO)	02R4513	N
5	Processor P4 2.4 GHz	59P1989	N
5	Processor P4 2.4 GHz	02R4515	N
5	Processor P4 2.4 GHz (models 41U 41F)	59P1991	N
5	Processor P4 2.4 GHz (models 41U 41F)	02R4517	N
5	Processor P4 2.53 GHz (models 61U 61F)	59P1993	N
5	Processor P4 2.53 GHz (models 61U 61F)	02R4519	N
5	Processor P4 2.66 GHz (models 81U 81S 81P)	58P9963	N
5	Processor P4 2.8 GHz	01R3171	N
5	Processor P4 3.06 GHz (models E1U E1F E1S E1P)	02R5347	N
5	Processor P4 1.8 GHz (models 51U 51F 51G 52U 52S 52P 53U 53S 53P 54U 54F 54S 54P)	73P0569	N
5	Processor P4 2.0 GHz (models 21U 21F 22U CTO 23G)	73P0570	N
5	Processor P4 2.2 GHz	73P0571	N
5	Processor P4 2.26 GHz (models 31U 31F 31G 32U CTO)	73P0575	N
5	Processor P4 2.4 GHz	73P0572	N



Item #	Machine Type 8301	FRU#	CRU?
5	Processor P4 2.4 GHz (models 41U 41F)	73P0576	N
5	Processor P4 2.53 GHz (models 61U 61F)	73P0577	N
5	Processor P4 2.66 GHz (models 81U 81S 81P)	74P1615	N
5	Processor P4 2.8 GHz	74P1637	N
5	Fan Sink (1.8 - 2.4 GHz) (models 21U 21F 22U 31U 31F 31G 32U CTO 61U 61F 41U 41F 81U 81S 81P 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 54U 54F 54S 54P)	32P4004	N
5	Fan Sink (3.06 GHz) (models E1U E1F E1S E1P)	01R3330	N
6	Memory 128MB NP SDRAM (models 22U 32U CTO 52U 52S 52P)	33L3303	**
6	Memory 256MB NP SDRAM (models 21U 21F 31U 31F 31G CTO 23G 11G 51U 51F 51G 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P)	33L3305	**
6	Memory 512MB NP SDRAM	33L3307	**
7	HDD 40GB 5400RPM (model CTO)	19K1562	*
7	HDD 40GB 7200RPM (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P)	19K1568	*
7	HDD 80GB 7200RPM (model CTO)	24P3665	*
7	HDD 120GB 7200RPM (model CTO)	24P3687	*
8	Chassis assembly (all models)	33P0857	**
9	Bezel Kit (all models)	33P0860	*
10	48X CDROM (Black) (models 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 61U 61F 41U 41F 81U 81S 81P E1U E1F E1S E1P)	33P3203	**
10	48X CDROM (Black) (models 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 61U 61F 41U 41F 81U 81S 81P E1U E1F E1S E1P)	33P3207	**
10	48X CDROM (Black) (models 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 61U 61F 41U 41F 81U 81S 81P E1U E1F E1S E1P)	33P3211	**
10	48X CDROM (Black) (models 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 61U 61F 41U 41F 81U 81S 81P E1U E1F E1S E1P)	33P3215	**
10	48X CDROM (White) (XP-OK)	33P3201	**
10	48X CDROM (White) (XP-OK)	33P3205	**
10	48X CDROM (White) (XP-OK)	33P3209	**
10	48X CDROM (White) (XP-OK)	33P3213	**
10	DVD-ROM 16X48X (White)	33P3257	**
10	DVD-ROM 16X48X (White)	24P3617	**
10	DVD-ROM 16X48X (Black) (model CTO)	33P3259	**
10	DVD-ROM 16X48X (Black) (model CTO)	33P3277	**
10	DVD-ROM 16X48X (Black) (model CTO)	33P3281	**

Item #	Machine Type 8301	FRU#	CRU?
10	DVD-ROM 16X48X (Black) (model CTO)	33P3297	**
10	24X10X40X CD-RW (White)	24P3625	**
10	24X10X40X CD-RW (Black) (model CTO)	24P3627	**
10	24X10X40X CD-RW (Black) (model CTO)	24P3635	**
10	24X10X40X CD-RW (White)	24P3632	**
10	40X12X40X CD-RW (Black) (model CTO)	33P3269	**
10	40X12X40X CD-RW (Black) (model CTO)	33P3273	**
10	40X12X40X CD-RW (White)	33P3267	**
10	40X12X40X CD-RW (White)	33P3271	**
10	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black) (model CTO)	33P3227	**
10	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
10	32X10X40X16X DVD-ROM/CD-RW combo drive (Black)	33P3251	**
10	32X10X40X16X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
	Fan bracket assembly (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P)	01R1958	Y
	Mounting Assembly for P4 Processor (all models)	48P6726	N
	MOUSE PS/2 2BUTTON (Black) (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black) (model CTO)	24P0485	*
	Vertical Stand assembly (all models)	33P0868	*
	Shield 5.25 (all models)	19K5548	**
	Keylock Asm (all models)	33P0858	**
	Pwr\LED panel cable (all models)	48P6597	**
	Serial Cable (models 21U 21F 22U 31U 31F 31G 32U CTO 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 54S 54P 81U 81S 81P E1U E1F E1S E1P)	49P4530	**
	HDD Bracket/Bezel Asm (all models)	33P0862	*
	5.25" Brkt Asm (all models)	33P0865	**
	Miscellaneous Hardware Kit (all models)	33P0866	**
	Dual Front USB (all models)	33P0867	**
	Cable 1 Drop ATA-66 (CD/DVD) (all models)	49P4364	**
	CD Audio Cable (all models)	75H9219	**
	HDD Cable IDE (all models)	48P6598	**
	RJ11 connector adapter (Spain Ireland)	60H6043	*
	RJ11 connector adapter (Austria)	60H6045	*

Item #	Machine Type 8301	FRU#	CRU?
	RJ11 connector adapter (Belgium)	60H6046	*
	RJ11 connector adapter (Denmark)	60H6047	*
	RJ11 connector adapter (Norway Finland)	60H6048	*
	RJ11 connector adapter (France)	60H6049	*
	RJ11 connector adapter (Germany)	60H6050	*
	RJ11 connector adapter (UK NZ HK)	60H6051	*
	RJ11 connector adapter (Italy)	60H6052	*
	RJ11 connector adapter (Netherlands)	60H6053	*
	RJ11 connector adapter (Sweden)	60H6054	*
	RJ11 connector adapter (Switzerland)	60H6055	*
	Planar Shield kit (all models)	49P0179	**

	Recovery CDs Win 2k	FRU #	CRU?
	US/UK/AP/TH Win2000 Recovery CD (model 53U)	71P6405	*
	FR/CF Win2000 Recovery CD	71P6425	*
	GR Win2000 Recovery CD	71P6413	*
	IT Win2000 Recovery CD	71P6433	*
	BR Win2000 Recovery CD (model 53P)	71P6445	*
	SP/LA Win2000 Recovery CD (model 53S)	71P6421	*
	DK Win2000 Recovery CD	71P6417	*
	NL Win2000 Recovery CD	71P6441	*
	AE Win2000 Recovery CD	71P6465	*
	SV Win2000 Recovery CD	71P6409	*
	HE Win2000 Recovery CD	71P6453	*
	FI Win2000 Recovery CD	71P6429	*
	NO Win2000 Recovery CD	71P6437	*
	PL Win2000 Recovery CD	71P6457	*
	PO Win2000 Recovery CD	71P6449	*
	RU Win2000 Recovery CD	71P6477	*
	HU Win2000 Recovery CD	71P6473	*
	CZ Win2000 Recovery CD	71P6461	*
	TR Win2000 Recovery CD	71P6469	*
	GK Win2000 Recovery CD	71P6481	*
	Japanese Win2000 Recovery CD	71P5962	*
	Simplified Chinese Win2000 Recovery CD	62P8983	*
	Taiwan-TC Win2000 Recovery CD	62P8984	*
	Hong Kong-TC Win2000 Recovery CD	62P8985	*

	Recovery CDs Win XP Pro	FRU #	CRU?
	US English (Models 21U 22U 31U 31G 32U 23G 41G 11G 51U 51G 52U 61U 41U 54U 81U E1U)	71P6485	*

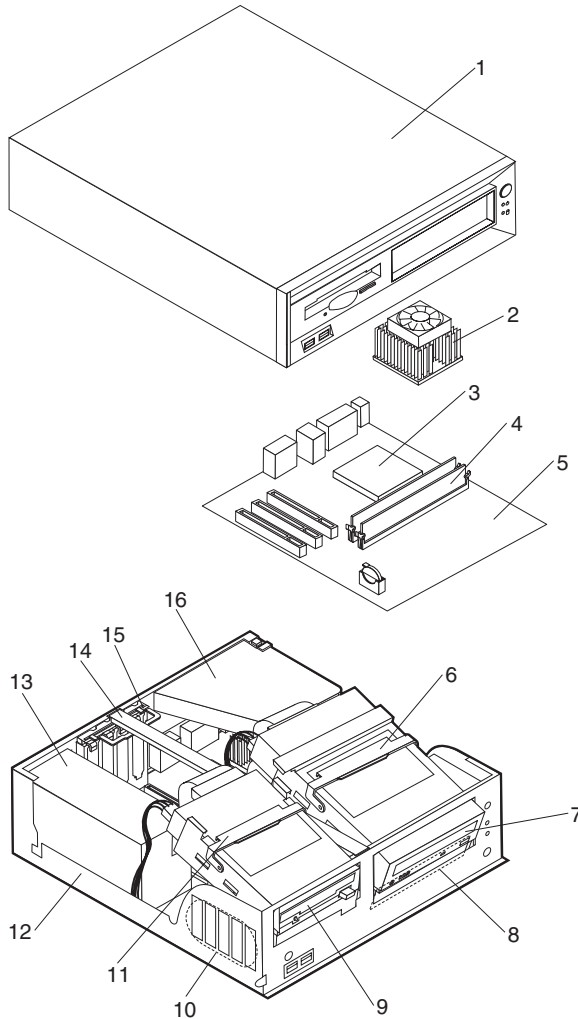
	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	French (models 21F 31F 51F 61F 41F 54F E1F 31G 23G 11G 51G)	71P6505	*
	German (models 31G 23G 11G 51G)	71P6493	*
	Italian (models 31G 23G 11G 51G)	71P6513	*
	Spanish (models 31G 23G 11G 51G 52S 54S 81S E1S)	71P6501	*
	Brazilian/Portuguese (models 52P 54P 81P E1P)	71P6525	*
	Danish (models 31G 23G 11G 51G)	71P6497	*
	Netherlands (models 31G 23G 11G 51G)	71P6521	*
	Arabic Enabled (models 31G 23G 11G 51G)	71P6545	*
	Swedish (models 31G 23G 11G 51G)	71P6489	*
	Hebrew (models 31G 23G 11G 51G)	71P6533	*
	Finnish (models 31G 23G 11G 51G)	71P6509	*
	Norwegian (models 31G 23G 11G 51G)	71P6517	*
	Polish (models 31G 23G 11G 51G)	71P6537	*
	Portuguese (models 31G 23G 11G 51G)	71P6529	*
	Russian (models 31G 23G 11G 51G)	71P6557	*
	Hungarian (models 31G 23G 11G 51G)	71P6553	*
	Czechoslovakian (models 31G 23G 11G 51G)	71P6541	*
	Turkish (models 31G 23G 11G 51G)	71P6549	*
	Greek (models 31G 23G 11G 51G)	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 21U 22U 31U 31G 32U 23G 11G 51U 51G 52U 53U 61U 41U 54U 81U E1U)	32P5100	*
	Arabic (models 31G 23G 11G 51G)	32P5101	*
	Belgian/French (models 31G 23G 11G 51G)	32P5102	*
	Belgian/UK (models 31G 23G 11G 51G)	32P5103	*
	Bulgarian (models 31G 23G 11G 51G)	32P5104	*
	Chinese/US	32P5105	*
	Czech (models 31G 23G 11G 51G)	32P5106	*
	Danish (models 31G 23G 11G 51G)	32P5107	*
	Dutch (models 31G 23G 11G 51G)	32P5108	*
	French (models 31G 23G 11G 51G)	32P5109	*
	French Canadian (models 21F 31F 51F 61F 41F 54F)	32P5110	*
	French Canadian (models 21F 31F 51F 61F 41F 54F E1F)	32P5111	*
	German (models 31G 23G 11G 51G)	32P5112	*
	Greek (models 31G 23G 11G 51G)	32P5113	*

	<b>Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Hebrew (models 31G 23G 11G 51G)	32P5114	*
	Hungarian (models 31G 23G 11G 51G)	32P5115	*
	Iceland (models 31G 23G 11G 51G)	32P5116	*
	Italian (models 31G 23G 11G 51G)	32P5117	*
	Japanese	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 52S 53S 54S 81S E1S)	32P5120	*
	Norwegian (models 31G 23G 11G 51G)	32P5121	*
	Polish (models 31G 23G 11G 51G)	32P5122	*
	Portuguese (models 31G 23G 11G 51G)	32P5123	*
	Romanian (models 31G 23G 11G 51G)	32P5124	*
	Russian (models 31G 23G 11G 51G)	32P5125	*
	Russian/Cy (models 31G 23G 11G 51G)	32P5126	*
	Serbian/Cyrillic (models 31G 23G 11G 51G)	32P5127	*
	Slovak (models 31G 23G 11G 51G)	32P5128	*
	Spanish (models 31G 23G 11G 51G)	32P5129	*
	Swedish/Finn (models 31G 23G 11G 51G)	32P5130	*
	Swiss F/G (models 31G 23G 11G 51G)	32P5131	*
	Thailand	32P5132	*
	Turkish (models 31G 23G 11G 51G)	32P5133	*
	Turkish (models 31G 23G 11G 51G)	32P5134	*
	UK English (models 31G 23G 11G 51G)	32P5135	*
	US International (models 31G 23G 11G 51G)	32P5136	*
	Yugoslav/Latin (models 31G 23G 11G 51G)	32P5137	*
	Brazil/Portuguese (models 52P 53P 54P 81P E1P)	32P5138	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 21U 22U 31U 32U CTO 31G 23G 11G 51U 51F 51G 52U 52S 52P 53U 53S 53P 61U 61F 41U 41F 54U 54F 81U 81S 81P E1U E1F E1S E1P)	6952301	*
	Line Cord	13F9939	*
	Line Cord (models 31G CTO 23G 11G 51G)	13F9978	*
	Line Cord (models 31G CTO 23G 11G 51G)	14F0032	*
	Line Cord (models 31G CTO 23G 11G 51G)	13F9996	*
	Line Cord (models 31G CTO 23G 11G 51G 52S 52P 53S 53P 54S 54P 81S 81P E1S E1P)	14F0068	*
	Line Cord	36L8879	*
	Line Cord (models 21U 22U 31U 32U CTO 41U)	1838576	*
	Line Cord	02K0545	*
	Line Cord (models 31G CTO 23G 11G 51G)	14F0086	*
	Line Cord (models 31G CTO 23G 11G 51G)	14F0014	*
	Line Cord (models 31G CTO 23G 11G 51G)	14F0050	*

This section lists the replaceable FRUs for Machine Types 8303 8304 and 8312.



Item #	Machine Type 8303	FRU#	CRU?
1	Top Cover assembly stealth black (all models)	48P6742	*
2	Fan Sink (all except 3.06GHz) (models 11B 11V 11H 12A 12B 12V 12H 13A CTO 13G 14G 15G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 71G 74G CGJ 63U 63F 63S 63P CAU CBU CCU CDU CEU CGU 46U 46S 62U 62F 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T D4G 22U 22A 22T 22B 22V 22H13A 21U 21F 21G 21A 24U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 26U 26A 35U 35F 35G 35A 44U 28G 37G CTO 26F 29G 38G 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 72G 73G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 83F 83S 83P 22C 2AA 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P D2U D3U D3F D3S D3P CAJ CBJ B1B B1H B2A)	32P4004	*

Item #	Machine Type 8303	FRU#	CRU?
2	Fan Sink (3.06GHz) (models E1U E1F E1S E1P E2U CJU CJJ)	01R3330	*
2	Mounting Assembly P4 Processor (models 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 83F 83S 83P 22C 2AA 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P D2U E1U E1F E1S E1P E2U D3U D3F D3S D3P CHU CJU CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ 63U 63F 63S 63P CAU CBU CCU CDU CEU CGU 46U 46S 62U 62F 64B 64H D1G 44U 44F 83A 47A 47T 47B 47)	48P6726	*
2	Retention kit Fan sink (all models)	24P4811	*
3	Processor P4 1.8 GHz (models 11B 11V 11H 12A 12B 12V 12H 13A CTO 13G 14G 15G)	33P0965	N
3	Processor P4 1.9 GHz (model A1G)	49P1726	N
3	Processor P4 2.0 GHz (models 21U 21F 21G 21A 23B 23V 23H 24U 26U 26A 27U 28G CTO 26F 29G 22C 2AA CAJ)	48P7205	N
3	Processor P4 2.2 GHz	48P7206	N
3	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 35U 35F 35G 35A 36U 37G CTO 38G 3AA CBJ)	48P6837	N
3	Processor P4 2.4 GHz	33P3743	N
3	Processor P4 2.4 GHz (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 44U CTO 72G 73G 44A 46A CCJ CCU 46U 46S 44U 44F 47A 47T 47B 47H)	48P7684	N
3	Processor 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 63A 64A 64T CDJ 63U 63F 63S 63P CDU 62U 62F 64B 64H)	48P6839	N
3	Processor 1.7 GHz (models B1B B1H B2A)	25P5041	N
3	Processor 1.7 GHz (models B1B B1H B2A)	49P0189	N
3	Processor 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 35U 35F 35G 35A 36U 37G CTO 38G 3AA CBJ)	59P1987	N
3	Processor P4 1.8 GHz (models 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 71G 74G CGJ)	58P9968	N
3	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 83F 83S 83P 84B 84H CEJ CEU 83A 85A 85T)	58P9963	N
3	Processor P4 2.4GHz (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 44U CTO 72G 73G 44A 46A CCJ CCU 46U 46S 44U 44F 47A 47T 47B 47H)	59P1991	N

Item #	Machine Type 8303	FRU#	CRU?
3	Processor P4 2.53GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 63A 64A 64T CDJ 63U 63F 63S 63P CDU 62U 62F 64B 64H)	59P1993	N
3	Processor P4 1.8GHz (models 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 71G 74G CGJ)	02R4501	N
3	Processor P4 1.8GHz (models 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 71G 74G CGJ)	02R4507	N
3	Processor P4 2.0 GHz (models 21U 21F 21G 21A 23B 23V 23H 24U 26U 26A 27U 28G CTO 26F 29G 22C 2AA CAJ)	59P7160	N
3	Processor P4 2.0 GHz (models 21U 21F 21G 21A 23B 23V 23H 24U 26U 26A 27U 28G CTO 26F 29G 22C 2AA CAJ)	02R4509	N
3	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 35U 35F 35G 35A 36U 37G CTO 38G 3AA CBJ)	02R4513	N
3	Processor P4 2.4 GHz (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 44U CTO 72G 73G 44A 46A CCJ CCU 46U 46S 44U 44F 47A 47T 47B 47H)	02R4517	N
3	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 63A 64A 64T CDJ 63U 63F 63S 63P CDU 62U 62F 64B 64H)	02R4519	N
3	Processor P4 2.8 GHz (models D1U D1S D1P D2U D3U D3F D3S D3P CHU CHJ D1G D4G)	01R3171	N
3	Processor P4 3.06 GHz (models E1U E1F E1S E1P E2U CJU CJJ)	02R5347	N
3	Processor P4 1.8 GHz (models 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 71G 74G CGJ CGU)	73P0569	N
3	Processor P4 2.0 GHz (models 21U 21F 21G 21A 23B 23V 23H 24U 26U 26A 27U 28G CTO 26F 29G 22C 2AA CAJ CAU)	73P0570	N
3	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 35U 35F 35G 35A 36U 37G CTO 38G 3AA CBJ CBU)	73P0575	N
3	Processor P4 2.4 GHz (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 44U CTO 72G 73G 44A 46A CCJ CCU 46U 46S 44U 44F 47A 47T 47B 47H)	73P0576	N
3	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 63A 64A 64T CDJ 63U 63F 63S 63P CDU 62U 62F 64B 64H)	73P0577	N
3	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 83F 83S 83P 84B 84H CEJ CEU 83A 85A 85T)	74P1615	N
3	Processor P4 2.8 GHz (models D1U D1S D1P D2U D3U D3F D3S D3P CHU CHJ D1G D4G)	74P1637	N



Item #	Machine Type 8303	FRU#	CRU?
4	Memory 128MB NP SDRAM (models 11B 11V 11H 12A 12B 12V 12H 23B 23V 23H 27U 36U CTO B1B B1H 51U 51S 51P 51B 51V 51H 51C 53U 53S 53P 56B 56V 56H 22C 64A 64T CHU CJU CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ CAU CBU CCU CDU CEU CGU 64B 64H 47A 47T 47B 47H 85A 85)	33L3303	*
4	Memory 256MB NP SDRAM (models 44A 46A 63A 84B 84H D1U D1S D1P D2U E1U E1F E1S E1P E2U D3U D3F D3S D3P 63U 63F 63S 63P 46U 46S 62U 62F D1G 44U 44F 83A D4G 13A 21U 21F 21G 21A 24U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 26U 26A 35U 35F 35G 35A 44U 28G 37G CTO 13G 26F 14G A1G B2A 15G 29G 38G 52U 52F 52S 52P 52G 52A 54U 54F 54S 54P 55A 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 83F 83S 83P 2AA 3AA)	33L3305	*
5	Planar (Spartan 10/100 POV) (models 26U 26A 35U 35F 35G 35A 44U CTO 54U 54F 54S 54P 83U 83F 83S 83P 63A D3U D3F D3S D3P 63U 63F 63S 63P 44U 44F 83A)	02R4083	N
5	Planar (Spartan 10/100 wo-POV) (models CAJ CBJ CCJ CDJ CEJ CGJ CAU CBU CCU CDU CEU CGU 46U 46S 64B 64H D1G 47A 47T 47B 47H 85A 85T 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 36U 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 28G 37G CTO B1B B1H B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52S 52P 52G 52U 52F 52A 53U 53S 53P 55A 56B 56V 56H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 22C 2AA 3AA 44A 46A 64A 64T 84B 84H D1U D1S D1P E1U E1F E1S E1P CHU CJU CHJ CJJ)	02R4084	N
5	Planar (Spartan-G 10/100/1000 POV) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U 62U 62S 62P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J D2U E2U 62U 62F)	02R4086	N
5	Planar (Spartan-L 10/100/1000 POV) (model D4G)	02R4085	N
6	Pivot Lock 5.25 DASD (all models)	24P9877	*

Item #	Machine Type 8303	FRU#	CRU?
7	48X CDROM (Black) (models 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P E1U E1F E1S E1P D3U D3F D3S D3P 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 36U 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 26U 26A 35U 35F 35G 35A 44U 28G 37G 13G 26F 14G A1G B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 83U 83F 83S 83P 22C 2AA 46U 46S 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T)	33P3203	**
7	48X CDROM (Black) (models 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P E1U E1F E1S E1P D3U D3F D3S D3P 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 36U 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 26U 26A 35U 35F 35G 35A 44U 28G 37G 13G 26F 14G A1G B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 83U 83F 83S 83P 22C 2AA 46U 46S 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T)	33P3207	**
7	48X CDROM (Black) (models 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P E1U E1F E1S E1P D3U D3F D3S D3P 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 36U 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 26U 26A 35U 35F 35G 35A 44U 28G 37G 13G 26F 14G A1G B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 83U 83F 83S 83P 22C 2AA 46U 46S 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T)	33P3211	**
7	48X CDROM (Black) (models 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P E1U E1F E1S E1P D3U D3F D3S D3P 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 36U 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 26U 26A 35U 35F 35G 35A 44U 28G 37G 13G 26F 14G A1G B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 56B 56V 56H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 83U 83F 83S 83P 22C 2AA 46U 46S 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T)	33P3215	**
7	48X CDROM (White) (XP-OK)	33P3201	**

Item #	Machine Type 8303	FRU#	CRU?
7	48X CDROM (White) (XP-OK)	33P3205	**
7	48X CDROM (White) (XP-OK)	33P3209	**
7	48X CDROM (White) (XP-OK)	33P3213	**
7	DVD-ROM 16X48X (White)	33P3257	**
7	DVD-ROM 16X48X (White)	24P3617	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U 62U 62S 62P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 62U 62F D4G)	33P3259	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U 62U 62S 62P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J D2U E2U 62U 62F D4G)	33P3277	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U 62U 62S 62P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 62U 62F D4G)	33P3281	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U 62U 62S 62P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 62U 62F D4G)	33P3297	**
7	24X10X40X CD-RW (White)	24P3625	**
7	24X10X40X CD-RW (Black)	24P3627	**
7	24X10X40X CD-RW (Black)	24P3635	**
7	24X10X40X CD-RW (White)	24P3632	**
7	40X12X40X CD-RW (Black)	33P3269	**
7	40X12X40X CD-RW (Black)	33P3273	**
7	40X12X40X CD-RW (White)	33P3267	**
7	40X12X40X CD-RW (White)	33P3271	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3227	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
7	32X10X40X16X DVD-ROM/CD-RW Combo Drive (Black)	33P3251	**
7	32X10X40X16X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
8	HDD 40GB 5400RPM	19K1562	**

Item #	Machine Type 8303	FRU#	CRU?
8	HDD 40GB 7200RPM (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 83F 83S 83P 22C 56B 56V 56H 2AA 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P D2U E1U E1F E1S E1P E2U D3U D3F D3S D3P 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33U 36U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 26U 26A 35U 35F 35G 35A 44U 28G 37G 13G 26F 14G A1G B1B B1H B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62S 62P 71G 72G 73G 74G 46U 46S 62U 62F 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T D4G)	19K1568	**
8	HDD 80GB 7200RPM (model 43U)	24P3665	**
8	HDD 120GB 7200RPM	24P3687	**
9	FDD 3.5" 1.44MB (wo/Bezel) (models 56B 56V 56H 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 83U 83F 83S 83P 22C 2AA 3AA 44A 46A 63A 64A 64T 84B 84H D1U D1S D1P D2U E1U E1F E1S E1P E2U D3U D3F D3S D3P CHU CJU 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 33U 36U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 43U 26U 26A 35U 35F 35G 35A 44U 28G 37G CTO 13G 26F 14G A1G B1B B1H B2A 15G 29G 38G 51U 51S 51P 51B 51V 51H 51C 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 54F 54S 54P 55A 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 62U 62S 62P 71G 72G 73G 74G 46U 46S 62U 62F 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T D4G)	75H9550	**
9	FDD 3.5" 1.44MB (wo/Bezel) (model 31J 41J 42J CTO 61J 81J 82J CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ)	19K1543	**
10	Speaker assembly (all models)	00N5151	*
11	Pivot Lock 3.5 FDD (all models)	24P9876	*
12	Chassis assembly (all models)	49P4686	*

Item #	Machine Type 8303	FRU#	CRU?
13	160W Power Supply (models D1S D1P D2U E1U E1F E1S E1P E2U D3U D3F D3S D3P CHU CJU CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ 11B 11V 11H 12A 12B 12V 12H 13A 21U 21F 21G 21A 23B 23V 23H 24U 27U 31U 31F 31S 31G 31A 31T 31B 31V 31H 31J 33U 36U 41U 41F 41S 41G 41A 41T 41B 41V 41H 41J 42U 42F 42S 42G 42A 42T 42B 42V 42H 42J 43U 26U 26A 35U 35F 35G 35A 44U 28G 37G CTO 13G 26F 14G A1G B2A 15G 29G 38G 51U 52U 52F 52S 52G 52A 53U 53S 54U 54F 54S 55A 61U 61F 61S 61G 61A 61T 61V 61J 62U 62S 71G 72G 73G 74G 81U 81F 81S 81G 81A 81T 81J 82U 82F 82S 82G 82A 82T 82J 83U 83F 83S 2AA 3AA 44A 46A 63A 64A 64T 84B 84H D1U 46U 46S 62U 62F 64B 64H D1G 44U 44F 83A 47A 47T 47B 47H 85A 85T D4G)	24P6829	N
13	160W Power Supply (models 31P 41P 42P 31C 41C 42C B1B B1H 51S 51P 51B 51V 51H 51C 52P 53P 56B 56V 56H 61P 61C 61B 61H 62P 81P 81C 81B 81V 81H 82P 82C 82B 82V 82H 83P 22C)	24P6831	N
14	Link Bracket (all models)	25P5032	N
15	I/O cam bracket (all models)	24P9869	* *
16	Air Duct w/o fan (all models)	49P0163	*
	Mouse PS/2 2 button(Black) (all models)	24P0383	*
	Mouse PS/2 2button (White)	24P0381	*
	Mouse Scrollpoint III (Black)	24P0485	*
	Video ATI Radeon VE 64MB (models 24U 33U 43U)	49P4685	*
	Video nVidia GeForce4 MX 64MB x/TV Out	49P4692	*
	Soft Modem V.92/V.44	22P7945	*
	Speakers Infinity Active T1 (Black)	25P4726	*
	Stand black (all models)	25P5033	*
	Stand white	25P5034	*
	Cable USB 2.0 (all models)	49P4365	*
	RFID antenna velcro (models 26U 26A 35U 35F 35G 35A 44U 83U 83F 83S 83P 44A 63A D3U D3F D3S D3P 44U 44F 83A D4G)	03K9654	*
	C2 cable (models 26U 26A 35U 35F 35G 35A 44U 83U 83F 83S 83P 44A 63A D3U D3F D3S D3P 44U 44F 83A D4G)	09K9827	*
	Cable Primary IDE (ATA66 1 drop) (all models)	24P9870	*
	FDD cable (all models)	24P9871	*
	3.5 FDD cage (all models)	24P9874	* *
	5.25 DASD cage (all models)	24P9875	* *
	Shield 5.25 EMC (models B1B B1H CAU CBU CCU CTO)	19K5548	*
	DASD rail soft mount (all models)	19K5331	* *
	Cable - Secondary IDE (ATA66 1 drop) (all models)	24P9872	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*

Item #	Machine Type 8303	FRU#	CRU?
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Misc. Hardware Kit (all models)	24P9878	*
	Bezel Kit (B) (all models)	24P9868	*
	Keylock (models 26U 26A 35U 35F 35G 35A 44U 83U 83F 83S 83P 44A 63A D3U D3F D3S D3P 44U 44F 83A D4G)	25P5031	*
	Bottom Foot (4) (all models)	03K9655	*
	Pwr/LED Cable Asm (all models)	37L5092	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	49P4530	*
	CDROM Audio Cable (all models)	75h9219	*
	ZIGGY 2 Audio Fr Pnl	49P1750	*
	ZIGGY 2 Audio w/1394 Fr Pnl	49P1752	*
	ZIGGY 2 Audio w/1394&SPDIF Fr Pnl	49P1754	*
	PCI adapter 1394	22P6849	*
	Audio Cable	49P1933	*
	Cable (6-pin) 1394	25P0084	*

	Recovery CDs Win 2K	FRU #	CRU?
	US (Models 27U 36U 53U 15G 29G 38G 73G 74G 55A 2AA 3AA 46A 46U)	71P6405	*
	FR (Models 15G 29G 38G 73G 74G)	71P6425	*
	GR (Models 15G 29G 38G 73G 74G)	71P6413	*
	IT (Models 15G 29G 38G 73G 74G)	71P6433	*
	BR (Model 53P)	71P6445	*
	SP (Models 15G 29G 38G 73G 74G 46S)	71P6421	*
	DK (Models 15G 29G 38G 73G 74G)	71P6417	*
	NL (Models 15G 29G 38G 73G 74G)	71P6441	*
	AE (Models 15G 29G 38G 73G 74G)	71P6465	*
	SV (Models 15G 29G 38G 73G 74G)	71P6409	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	HE (Models 15G 29G 38G 73G 74G)	71P6453	*
	FI (Models 15G 29G 38G 73G 74G)	71P6429	*
	NO (Models 15G 29G 38G 73G 74G)	71P6437	*
	PL (Models 15G 29G 38G 73G 74G)	71P6457	*
	PO (Models 15G 29G 38G 73G 74G)	71P6449	*
	RU (Models 15G 29G 38G 73G 74G)	71P6477	*
	HU (Models 15G 29G 38G 73G 74G)	71P6473	*
	CZ (Models 15G 29G 38G 73G 74G)	71P6461	*
	TR (Models 15G 29G 38G 73G 74G)	71P6469	*
	GK (Models 15G 29G 38G 73G 74G)	71P6481	*
	Japanese	71P5962	*
	Simplified Chinese	62P8983	*
	Taiwan - TC	62P8984	*
	Hong Kong - TC	62P8985	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (Models 12A 12H 23H 56H 84H)	71P6565	*
	French	71P6585	*
	German	71P6573	*
	Italian	71P6593	*
	Spanish	71P6581	*
	Brazilian/Portuguese	71P6605	*
	Danish	71P6577	*
	Netherlands	71P6601	*
	Arabic Enabled	71P6625	*
	Swedish	71P6569	*
	Hebrew	71P6613	*
	Finnish	71P6589	*
	Norwegian	71P6597	*
	Polish	71P6617	*
	Portuguese	71P6609	*
	Russian	71P6637	*
	Hungarian	71P6633	*
	Czechoslovakian	71P6621	*
	Turkish	71P6629	*
	Greek	71P6641	*
	Japanese	71P6066	*
	Simplified Chinese	71P6084	*
	Traditional Chinese (models 12V 23V 56V)	71P6087	*
	Traditional Chinese Hong Kong (models 12B 23B 56B 84B)	71P6090	*

	Recovery CDs Win XP Pro	FRU #	CRU?
	US English (Models 21U 24U 31U 33U 41U 42U 43U 26U 35U 44U 21G 31G 41G 42G 35G 28G 37G 13A 21A 31A 41A 42A 26A 35A 31T 41T 42T 11H 31H 41H 42H 13G 14G A1G B1H B2A 51U 51H 52U 52G 52A 54U 61U 61G 61A 61T 61H 62U 71G 72G 81U 81G 81A 81T 81H 82U 82G 82A 82T 82H 83U 44A 63A 64A 64T D1U D2U E1U E2U D3U 62U 64H D1G 44U 83A 47A 47T 47H 85A 85T D4G)	71P6485	*
	French (Models 21F 31F 41F 42F 35F 21G 31G 41G 42G 35G 28G 37G 13G 26F 14G A1G 52F 52G 54F 61F 61G 71G 72G 81F 81G 82F 82G 83F E1F D3F 62F D1G 44F D4G)	71P6505	*
	German (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6493	*
	Italian (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6513	*
	Spanish (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6501	*
	Brazilian/Portuguese (Models 51P 52P 54P 61P 62P 81P 82P 83P D1P E1P D3P)	71P6525	*
	Danish (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6497	*
	Netherlands (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6521	*
	Arabic Enabled (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6545	*
	Swedish (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6489	*
	Hebrew (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6533	*
	Finnish (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6509	*
	Norwegian (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6517	*
	Polish (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6537	*
	Portuguese (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6529	*
	Russian (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6557	*
	Hungarian (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6553	*
	Czechoslovakian (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6541	*
	Turkish (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6549	*
	Greek (Models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 52G 61G 71G 72G 81G 82G D1G D4G)	71P6561	*



	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Japanese (Models 31J 41J 42J 61J 81J 82J)	71P5958	*
	Simplified Chinese (Models 31C 41C 42C 51C 61C 81C 82C)	71P6093	*
	Traditional Chinese ( Models 11V 12V 22V 23V 31V 41V 42V 51V 56V 61V 81V 82V)	71P6096	*
	Traditional Chinese Hong Kong (Models 12B 22B 23B 31B 41B 42B B1B 51B 56B 61B 81B 82B 64B 47B)	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 21U 24U 27U 31U 33U 36U 41U 42U 43U 26U 35U 44U 21G 31G 41G 42G 35G 28G 37G 12A 13A 21A 31A 41A 42A 26A 35A 31C 41C 42C 11H 12H 23H 31H 41H 42H 13G 14G A1G B1H B2A 15G 29G 38G 51U 51H 51C 52U 52G 52A 53U 54U 55A 56H 61U 61G 61A 61C 61H 62U 71G 72G 73G 74G 81U 81G 81A 81C 81H 82U 82G 82A 82C 82H 83U 22C 2AA 3AA 44A 46A 63A 64A 84H D1U D2U E1U E2U D3U CHU CJU 46U 62U 64H D1G 44U 83A 47A 47H 85A D4G)	32P5100	*
	Arabic (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5101	*
	Belgian/French (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5102	*
	Belgian/UK (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5103	*
	Bulgarian (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5104	*
	Chinese/US (models 11B 12B 23B 31B 41B 42B 11V 12V 23V 31V 41V 42V B1B 51B 51V 56B 56V 61B 61V 81B 81V 82B 82V 84B 64B 47B)	32P5105	*
	Czech (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5106	*
	Danish (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5107	*
	Dutch (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5108	*
	French (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5109	*
	French Canadian (models 41F 42F 35F 52F 54F 61F 81F 82F 83F E1F D3 62F 44F)	32P5110	*
	French Canadian (models 41F 42F 35F 52F 54F 61F 81F 82F 83F E1F D3 62F 44F)	32P5111	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	German (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5112	*
	Greek (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5113	*
	Hebrew (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82GD1G D4G)	32P5114	*
	Hungarian (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5115	*
	Iceland (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5116	*
	Italian (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5117	*
	Japanese (models 31J 41J 42J 61J 81J 82J CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ)	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 31S 41S 42S 51S 52S 53S 54S 61S 62S 81S 82S 83S D1S E1S D3S 46S)	32P5120	*
	Norwegian (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5121	*
	Polish (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5122	*
	Portuguese (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5123	*
	Romanian (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5124	*
	Russian (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5125	*
	Russian/Cy (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5126	*
	Serbian/Cyrillic (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5127	*
	Slovak (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5128	*
	Spanish (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G)	32P5129	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Swedish/Finn (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5130	*
	Swiss F/G (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5131	*
	Thailand (models 31T 41T 42T 61T 81T 82T 64T 47T 85T)	32P5132	*
	Turkish (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5133	*
	Turkish (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5134	*
	UK English (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5135	*
	US International (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5136	*
	Yugoslav/Latin (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	32P5137	*
	Brazil/Portuguese (models 31P 41P 42P 51P 52P 53P 54P 61P 62P 81P 82P 83P D1P E1P D3P)	32P5138	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 21U 24U 27U 31U 33U 36U 41U 42U 43U 26U 35U 44U CTO 21F 31F 41F 42F 35F 31S 41S 42S 31P 41P 42P 21G 31G 41G 42G 35G 28G 37G 12A 13A 21A 31A 41A 42A 26A 35A 31T 41T 42T 11V 12V 23V 31V 41V 42V 26F B2A 51U 51S 51P 51V 52U 52F 52S 52P 52G 52A 53U 53S 53P 54U 55A 54F 54S 54P 56V 61U 61F 61S 61P 61G 61A 61T 61V 62U 62F 62S 62P 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81V 82U 82F 82S 82P 82G 82A 82T 82V 83U 83F 83S 83P 2AA 3AA 44A 46A 63A 64A 64T D1U D1S D1P D2U E1U E1F E1S E1P E2U 46U 46S 62U 62F D1G 44U 44F 83A 47A 47T 85A 85T D4G)	6952301	*
	Line Cord (models 12A 13A 21A 31A 41A 42A 26A 35A 52A 55A 61A 81A 82A 2AA 3AA 44A 46A 63A 64A 83A 47A 85A)	13F9939	*
	Line Cord (models 21G 31G 41G 42G 35G 28G 37G 12A 13A 21A 31A 41A 42A 26A 35A 13G 14G A1G 15G 29G 38G 52G 52A 55A 61G 61A 71G 72G 73G 74G 81G 81A 82G 82A 2AA 3AA 44A 46A 63A 64A D1G 83A 47A 85A D4G)	13F9978	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 21G 31G 41G 42G 35G 28G 37G 12A 13A 21A 31A 41A 42A 26A 35A 11H 12H 23H 31H 41H 42H 13G 14G A1G B1H 15G 29G 38G 51H 52G 52A 55A 56H 61G 61A 61H 71G 72G 73G 74G 81G 81A 81H 82G 82A 82H 2AA 3AA 44A 46A 63A 64A 84H 64H D1G 83A 47A 47H 85A D4G 64H D1G 83A 47A 47H 85A D4G)	14F0032	*
	Line Cord (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	13F9996	*
	Line Cord (models 31S 41S 42S 31P 41P 42P 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 51S 51P 52S 52P 52G 53S 53P 54S 54P 61S 61P 62S 62P 71G 72G 73G 74G 81S 81P 81G 82S 82P 82G D1S D1P E1S E1P D3S D3P 46S D1G D4G)	14F0068	*
	Line Cord	36L8879	*
	Line Cord (models CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ)	1838576	*
	Line Cord	34G0222	*
	Line Cord (models 61J 81J 82J CHJ CJJ CAJ CBJ CCJ CDJ CEJ CGJ)	05K2876	*
	Line Cord (models 31C 41C 42C 11B 12B 23B 31B 41B 42B 11H 12H 23H 31H 41H 42H B1B 51B 51H 51C 56B 56H 61C 61B 61H 81C 81B 81H 82C 82B 82H 22C 84B 84H 64B 64H 47B 47H)	02K0545	*
	Line Cord (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	14F0086	*
	Line Cord (models 21G 31G 41G 42G 35G 28G 37G 12A 13A 21A 31A 41A 42A 26A 35A 13G 14G A1G 15G 29G 38G 52G 52A 55A 61G 61A 71G 72G 73G 74G 81G 81A 82G 82A 2AA 3AA 44A 46A 63A 64A D1G 83A 47A 85A D4G)	14F0014	*
	Line Cord (models 21G 31G 41G 42G 35G 28G 37G 13G 14G A1G 15G 29G 38G 52G 61G 71G 72G 73G 74G 81G 82G D1G D4G)	14F0050	*

	<b>Machine Type 8304</b>	<b>FRU #</b>	<b>CRU?</b>
1	Top Cover assembly stealth black (all models)	48P6742	*
2	Fan Sink (all except 3.06 GHz processor models)	32P4004	N
2	Mounting Assembly for P4 Processor (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	48P6726	N
2	Retention kit Fansink (all models)	24P4811	*
3	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J)	73P0575	N
3	Processor P4 2.4 GHz (model 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J)	73P0576	N

	<b>Machine Type 8304</b>	<b>FRU #</b>	<b>CRU?</b>
3	Processor P4 2.4 GHz (model 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J) (optional to 73P0576)	74P1625	N
3	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61)	73P0577	N
3	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J) (optional to 73P0577)	74P1627	N
3	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	74P1615	N
3	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J) (optional to 74P1615)	74P1629	N
4	Memory 256MB NP SDRAM (all models)	33L3305	*
5	Planar (Spartan 10/100/400/533 FSB wo-POV) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	02R4084	N
5	Planar (Spartan 10/100/400/533 FSB wo-POV) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J) (optional to 02R4084)	88P8474	N
5	Planar (Spartan-G 10/100/1000 wo-POV) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	02R4086	N
5	Planar (Spartan-G 10/100/1000 wo-POV) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J) (optional to 02R4086)	88P8476	N
6	Pivot Lock 5.25 DASD (all models)	24P9877	*
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3203	**
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3207	**
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3211	**

	Machine Type 8304	FRU #	CRU?
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3215	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	33P3277	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	33P3259	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	33P3281	**
7	DVD-ROM 16X48X (Black) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	33P3297	**
8	HDD 40GB 7200RPM (all models)	19K1568	**
9	FDD 3.5" 1.44MB (wo/Bezel) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H)	75H9550	**
9	FDD 3.5" 1.44MB (wo/Bezel) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H) (optional to 75H9550)	33P3345	**
9	FDD 3.5" 1.44MB (wo/Bezel) (model 31J 41J 42J 61J 81J 82J)	19K1543	**
10	Speaker assembly (all models)	00N5151	*
11	Pivot Lock 3.5 FDD (all models)	24P9876	*
12	Chassis assembly (all models)	49P4686	*
13	160W Power Supply (models 31U 31F 31S 31G 31A 31T 31B 31V 31H 31J 41U 41F 41S 41G 41A 41T 41B 41V 41H 41J 42U 42F 42S 42G 42A 42T 42B 42V 42H 42J 61U 61F 61S 61G 61A 61T 61B 61V 61H 61J 81U 81F 81S 81G 81A 81T 81B 81V 81H 81J 82U 82F 82S 82G 82A 82T 82B 82V 82H 82J)	24P6829	N
13	160W Power Supply (models 31P 31C 41P 41C 42P 42C 61P 61C 81P 81C 82P 82C)	24P6831	N
14	Link Bracket (all models)	25P5032	**
15	I/O cam bracket (all models)	24P9869	*
16	Air Duct w/o fan (all models)	49P0163	*
	Mouse PS/2 2button (Black) (all models)	24P0383	*
	Stand black (all models)	25P5033	*

	<b>Machine Type 8304</b>	<b>FRU #</b>	<b>CRU?</b>
	Cable USB 2.0 (all models)	49P4365	*
	Cable Primary IDE (ATA66 1 drop) (all models)	24P9870	*
	FDD cable (all models)	24P9871	*
	5.25 DASD cage (all models)	24P9875	**
	3.5 FDD cage (all models)	24P9874	**
	Cable - Secondary IDE (ATA66 1 drop) (all models)	24P9872	*
	Misc. Hardware Kit (all models)	24P9878	*
	Bezel Kit (B) (all models)	24P9868	*
	Bottom Foot (4) (all models)	03K9655	*
	Pwr/LED Cable Asm (all models)	37L5092	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	49P4530	*
	Shield 5.25 EMC (all models)	19K5548	*
	CDROM Audio Cable (all models)	75h9219	*
	DASD rail soft mount (all models)	19K5331	**
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (Models 31U 41U 42U 31G 41G 42G 31A 41A 42A 31T 41T 42T 31H 41H 42H 61U 61G 61A 61T 61H 81U 81G 81A 81T 81H 82U 82G 82A 82T 82H)	74P2412	*
	French (models 31F 41F 42F 31G 41G 42G 61F 61G 81F 81G 82F 82G)	74P2663	*
	German (models 31G 41G 42G 61G 81G 82G)	71P6493	*
	Italian (models 31G 41G 42G 61G 81G 82G)	71P6513	*
	Spanish (models 31S 41S 42S 31G 41G 42G 61S 81S 82S 61G 81G 82G)	71P6501	*
	Brazilian/Portuguese (models 31P 41P 42P 61P 81P 82P)	71P6525	*
	Danish (models 31G 41G 42G 61G 81G 82G)	71P6497	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Netherlands (models 31G 41G 42G 61G 81G 82G)	71P6521	*
	Arabic Enabled (models 31G 41G 42G 61G 81G 82G)	71P6545	*
	Swedish (models 31G 41G 42G 61G 81G 82G)	71P6489	*
	Hebrew (models 31G 41G 42G 61G 81G 82G)	71P6533	*
	Finnish (models 31G 41G 42G 61G 81G 82G)	71P6509	*
	Norwegian (models 31G 41G 42G 61G 81G 82G)	71P6517	*
	Polish (models 31G 41G 42G 61G 81G 82G)	71P6537	*
	Portuguese (models 31G 41G 42G 61G 81G 82G)	71P6529	*
	Russian (models 31G 41G 42G 61G 81G 82G)	71P6557	*
	Hungarian (models 31G 41G 42G 61G 81G 82G)	71P6553	*
	Czechoslovakian (models 31G 41G 42G 61G 81G 82G)	71P6541	*
	Turkish (models 31G 41G 42G 61G 81G 82G)	71P6549	*
	Greek (models 31G 41G 42G 61G 81G 82G)	71P6561	*
	Japanese (models 31J 41J 42J 61J 81J 82J)	71P5958	*
	Simplified Chinese (models 31C 41C 42C 61C 81C 82C)	71P6093	*
	Traditional Chinese (models 31V 41V 42V 61V 81V 82V)	71P6096	*
	Traditional Chinese Hong Kong (models 31B 41B 42B 61B 81B 82B)	71P6099	*

	<b>Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 31U 41U 42U 31G 41G 42G 31A 41A 42A 31C 41C 42C 31H 41H 42H 61U 61G 61A 61C 61H 81U 81G 81A 81C 81H 82U 82G 82A 82C 82H)	89P8300	*
	Arabic (models 31G 41G 42G 61G 81G 82G)	89P8301	*
	Belgian/French (models 31G 41G 42G 61G 81G 82G)	89P8302	*
	Belgian/UK (models 31G 41G 42G 61G 81G 82G)	89P8303	*
	Bulgarian (models 31G 41G 42G 61G 81G 82G)	89P8305	*
	Chinese/US (models 31B 41B 42B 31V 41V 42V 61B 61V 81B 81V 82B 82V)	89P8306	*
	Czech (models 31G 41G 42G 61G 81G 82G)	89P8307	*
	Danish (models 31G 41G 42G 61G 81G 82G)	89P8308	*
	Dutch (models 31G 41G 42G 61G 81G 82G)	89P8309	*
	French (models 31G 41G 42G 61G 81G 82G)	89P8310	*
	French Canadian (models 31F 41F 42F 61F 81F 82F)	89P8311	*
	French Canadian (models 31F 41F 42F 61F 81F 82F)	89P8312	*
	German (models 31G 41G 42G 61G 81G 82G)	89P8313	*
	Greek (models 31G 41G 42G 61G 81G 82G)	89P8314	*
	Hebrew (models 31G 41G 42G 61G 81G 82G)	89P8315	*
	Hungarian (models 31G 41G 42G 61G 81G 82G)	89P8316	*
	Iceland (models 31G 41G 42G 61G 81G 82G)	89P8317	*



	<b>Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Italian 141 (models 31G 41G 42G 61G 81G 82G)	89P8318	*
	Italian 142 (models 31G 41G 42G 61G 81G 82G)	89P8319	*
	Japanese (models 31J 41J 42J 61J 81J 82J)	89P8320	*
	Korean (models)	89P8321	*
	LA Spanish (models 31S 41S 42S)	89P8322	*
	Norwegian (models 31G 41G 42G 61G 81G 82G)	89P8323	*
	Polish (models 31G 41G 42G 61G 81G 82G)	89P8324	*
	Portuguese (models 31G 41G 42G 61G 81G 82G)	89P8325	*
	Romanian (models 31G 41G 42G 61G 81G 82G)	89P8326	*
	Russian (models 31G 41G 42G 61G 81G 82G)	89P8327	*
	Russian/Cy	89P8328	*
	Serbian/Cyrillic (models 31G 41G 42G 61G 81G 82G)	89P8329	*
	Slovak (models 31G 41G 42G 61G 81G 82G)	89P8330	*
	Spanish (models 31G 41G 42G 61G 81G 82G)	89P8331	*
	Swedish/Finn (models 31G 41G 42G 61G 81G 82G)	89P8332	*
	Swiss F/G (models 31G 41G 42G 61G 81G 82G)	89P8333	*
	Thailand (models 31T 41T 42T 61T 81T 82T)	89P8334	*
	Turkish (models 31G 41G 42G 61G 81G 82G)	89P8335	*
	Turkish (models 31G 41G 42G 61G 81G 82G)	89P8336	*
	UK English (models 31G 41G 42G 61G 81G 82G)	89P8337	*
	US International (models 31G 41G 42G 61G 81G 82G)	89P8338	*
	Yugoslav/Latin (models 31G 41G 42G 61G 81G 82G)	89P8339	*
	Brazil/Portuguese (models 31P 41P 42P 61P 81P 82P)	89P8304	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 31U 41U 42U 31F 41F 42F 31S 41S 42S 31P 41P 42P 31G 41G 42G 31A 41A 42A 31T 41T 42T 31V 41V 42V 61U 61F 61S 61P 61G 61A 61T 61V 81U 81F 81S 81P 81G 81A 81T 81V 82U 82F 82S 82P 82G 82A 82T 82V)	6952301	*
	Line Cord (models 31A 41A 42A 61A 81A 82A)	13F9939	*
	Line Cord (models 31G 41G 42G 31A 41A 42A 61G 81G 82G 61A 81A 82A)	13F9978	*
	Line Cord (models 31G 41G 42G 31A 41A 42A 31H 41H 42H 61G 81G 82G 61A 81A 82A 61H 81H 82H)	14F0032	*
	Line Cord (models 31G 41G 42G 61G 81G 82G)	13F9996	*
	Line Cord (models 31S 41S 42S 31P 41P 42P 31G 41G 42G 61S 81S 82S 61P 81P 82P 61G 81G 82G)	14F0068	*
	Line Cord	36L8879	*
	Line Cord	1838576	*
	Line Cord	34G0222	*
	Line Cord	05K2876	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 31C 41C 42C 31B 41B 42B 31H 41H 42H 61C 81C 82C 61B 81B 82B 61H 81H 82H)	02K0545	*
	Line Cord (models 31G 41G 42G 61G 81G 82G)	14F0086	*
	Line Cord (models 31G 41G 42G 31A 41A 42A 61G 81G 82G 61A 81A 82A)	14F0014	*
	Line Cord (models 31G 41G 42G 61G 81G 82G)	14F0050	*

	<b>Machine Type 8312</b>	<b>FRU #</b>	<b>CRU?</b>
1	Top Cover assembly stealth black (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 41B 36A 62A 63V 64B 81B D1C A1C 82C 91C 92B)	48P6742	*
2	Fan Sink (all except 3.06 GHz) (models 21B 22V 23C 31C 32B 33V 24A 25A 34A 35A 26A 41B 36A 81B D1C 51A 52A 5AA 5BA 11B 12V 13C 14A 15A 61A 62A 63V 64B 82C 91C 92B)	32P4004	N
2	Fan Sink (3.06 GHz) (model A1C)	01R3330	N
2	Mounting Assembly for P4 Processor (all models)	48P6726	N
2	Retention kit Fansink (all models)	24P4811	*
3	Processor Celeron 1.7 GHz (models 51A 52A)	58P9937	N
3	Processor Celeron 1.8 GHz (models 5AA 5BA)	58P9965	N
3	Processor P4 1.8 GHz (models 11B 12V 13A 14A 15A)	33P0965	N
3	Processor P4 1.8 GHz (models 61A 62A 63V 64B)	73P0569	N
3	Processor P4 2.0 GHz (models 21B 22V 23C 24A 25A)	73P0570	N
3	Processor P4 2.26 GHz (models 31C 32B 33V 34A 35A)	48P6837	N
3	Processor P4 2.26 GHz (models 31C 32B 33V 34A 35A)	73P0575	N
3	Processor P4 2.4 GHz (model 41B)	74P1625	N
3	Processor P4 2.4 GHz (model 41B)	73P0576	N
3	Processor P4 2.53 GHz (model 81B 82C)	73P0577	N
3	Processor P4 2.53 GHz (model 81B 82C)	74P1627	N
3	Processor P4 2.66 GHz (models 91C 92B)	74P1615	N
3	Processor P4 2.66 GHz (models 91C 92B)	74P1629	N
3	Processor P4 2.8 GHz (model D1C)	74P1637	N
3	Processor P4 2.8 GHz (model D1C)	74P1631	N
3	Processor P4 3.06 GHz (model A1C)	02R5347	N
3	Processor P4 3.06 GHz (model A1C)	74P1633	N
4	Memory 128MB NP SDRAM (models 11B 13C 21B 23C 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 63V 64B)	33L3303	*
4	Memory 256MB NP SDRAM (models 12V 22V 31C 32B 33V 41B 81B D1C 82C 91C)	33L3305	*
4	Memory 512MB NP SDRAM (model A1C 92B)	33L3307	*

	<b>Machine Type 8312</b>	<b>FRU #</b>	<b>CRU?</b>
5	Planar (Spartan 10/100 400/533 FSB wo-POV) (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 41B 36A 62A 63V 64B 81B D1C A1C 82C 91C 92B)	02R4084	N
5	Planar (Spartan 10/100 400/533 FSB wo-POV) (optional to 02R4084) (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 41B 36A 62A 63V 64B 81B D1C A1C 82C 91C 92B )	88P8474	N
6	Pivot Lock 5.25 DASD (all models)	24P9877	*
7	48X CDROM (Black) (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 64B)	33P3203	**
7	48X CDROM (Black) (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 64B)	33P3207	**
7	48X CDROM (Black) (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 64B)	33P3211	**
7	48X CDROM (Black) (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 64B)	33P3215	**
7	DVD-ROM 16X48X (Black) (models 11B 12V 21B 22V 32B 33V)	33P3277	**
7	DVD-ROM 16X48X (Black) (models 11B 12V 21B 22V 32B 33V)	33P3259	**
7	DVD-ROM 16X48X (Black) (models 11B 12V 21B 22V 32B 33V)	33P3281	**
7	DVD-ROM 16X48X (Black) (models 11B 12V 21B 22V 32B 33V)	33P3297	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black) (models 13C 23C 31C 41B)	33P3227	**
7	32X10X40X16X DVD-ROM/CD-RW Combo Drive (Black) (models 13C 23C 31C 41B 81B D1C A1C 82C 91C 92B)	33P3251	**
8	HDD 40GB 7200RPM (models 11B 13C 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 64B 81B)	19K1568	**
8	HDD 80GB 7200RPM (model 12V 21B 22V 23C 31C 32B 33V 41B 63V D1C A1C 82C 91C 92B)	24P3665	**
9	FDD 3.5" 1.44MB (wo/Bezel) (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 41B 36A 62A 63V 64B 81B D1C A1C 82C 91C 92B)	75H9550	**
10	Speaker assembly (all models)	00N5151	Y
11	Pivot Lock 3.5 FDD (all models)	24P9876	*
12	Chassis assembly (all models)	49P4686	Y
13	160W Power Supply (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A)	24P6829	N
13	160W Power Supply (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 41B 63V 64B 81B D1C A1C 82C 91C 92B)	49P2131	N
14	Link Bracket (all models)	25P5032	*
15	I/O cam bracket (all models)	24P9869	**

	Machine Type 8312	FRU #	CRU?
16	Air Duct w/o fan (all models)	49P0163	*
	MOUSE PS/2 2BUTTON (Black) (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A D1C A1C)	24P0383	*
	Mouse Scrollpoint III (Black) (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 41B 63V 64B 81B 82C 91C 92B)	24P0485	*
	Video nVidia GeForce4 MX 64MB x/TV Out (models D1C A1C)	49P4692	*
	Soft Modem V.92/V.44 (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 41B 63V 64B 81B)	22P7943	*
	Speakers Infinity Active T1 (Black) (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 41B 63V 64B 81B)	25P4726	*
	Speaker Power brick - Taiwan (models 12V 22V 33V 63V)	03R0338	*
	Speaker Power brick (newer 2 prong) - China Hong Kong (models 11B 13C 21B 23C 31C 32B 41B 64B 81B 82C 91C 92B)	10K2597	*
	Speaker Power brick - UK Hong Kong (3 prong) (models 11B 21B 32B 41B 64B 81B)	25P5703	*
	Stand black (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 41B 36A 62A 63V 64B 81B D1C A1C 82C 91C 92B)	25P5033	*
	Cable USB 2.0 (all models)	49P4365	*
	Cable Primary IDE (ATA66 1 drop) (all models)	24P9870	*
	FDD cable (all models)	24P9871	*
	Shield 5.25 EMC (all models)	19K5548	*
	3.5 FDD cage (all models)	24P9874	**
	5.25 DASD cage (all models)	24P9875	**
	Cable - Secondary IDE (ATA66 1 drop) (all models)	24P9872	*
	Misc. Hardware Kit (all models)	24P9878	*
	Bezel Kit (B) (models 11B 12V 13C 21B 22V 23C 31C 32B 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 41B 36A 62A 63V 64B 81B D1C A1C 82C 91C 92B)	24P9868	*
	DASD Rail Soft Mount Assembly (blue) (models 81B D1C A1C 82C 91C 92B)	19K5331	*
	Keylock (all models)	25P5031	*
	Bottom Foot (4) (models 81B D1C A1C 82C 91C 92B)	03K9655	*
	Pwr/LED Cable Asm (all models)	37L5092	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	49P4530	*
	Audio Cable (front panel) (models 11B 21B 32B 41B 64B 81B 12V 13C 22V 23C 31C 33V 63V 82C 91B 92B)	25P4974	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*

	<b>Machine Type 8312</b>	<b>FRU #</b>	<b>CRU?</b>
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	ZIGGY 2 Audio Fr Pnl (models 11B 21B 32B 92B)	49P1750	*
	ZIGGY 2 Audio w/1394& SPDIF Fr Pnl (models 12V 13C 22V 23C 31C 33V 82C 91B)	49P1754	*
	PCI adapter 1394 (models 12V 13C 22V 23C 31C 33V 82C 91B)	22P6849	*
	Cable (6-pin) 1394 (models 12V 13C 22V 23C 31C 33V 82C 91B)	25P0084	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 14A 15A 24A 25A 34A 35A 51A 5AA)	71P6565	*
	Simplified Chinese (models 13C 23C 31C D1C A1C 82C 91C)	71P6084	*
	Traditional Chinese (models 12V 22V 33V 63V)	71P6087	*
	Traditional Chinese Hong Kong (models 11B 21B 32B 41B 64B 81B 92B)	71P6090	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (models 52A 5BA 61A 26A 36A 62A)	74P2412	*

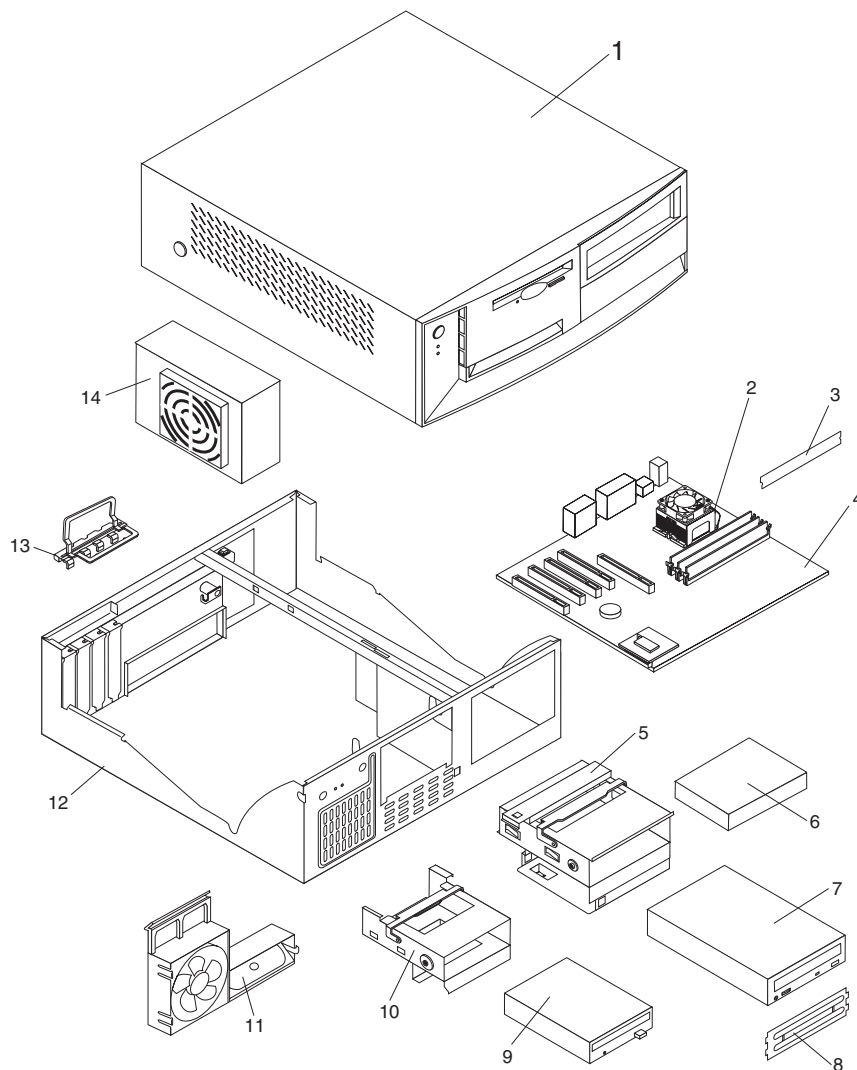
	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A D1C A1C)	89P8300	*

	<b>Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 13C 23C 31C 82C 91C)	19K1910	*
	Chinese/US (models 11B 12V 21B 22V 32B 33V 41B 63V 64B 81B 92B)	19K1915	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 12V 22V 33V 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A 63V)	6952301	*

	Power Cords	FRU#	CRU?
	Line Cord (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A)	13F9939	*
	Line Cord (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A)	13F9978	*
	Line Cord (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A)	14F0032	*
	Line Cord (models 11B 13C 21B 23C 31C 32B 41B 64B 81B D1C A1C 82C 91C 92B)	02K0545	*
	Line Cord (models 14A 15A 24A 25A 34A 35A 51A 52A 5AA 5BA 61A 26A 36A 62A)	14F0014	*

This section lists the replaceable FRUs for Machine Types 8305 8306 8309 and 8313.



Item #	Machine Type 8305	FRU#	CRU?
1	Top Cover assembly stealth black (models 77G 78G A2P A2S A2U CHU CJU CKU D1P D1S D1U D2U D3P D3S D3U E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U 44C 65A 65C 6AA 85J 86J 87J 88J 89J D4F D4J D4P D4S D4U D5J D6J D7J D8J 4DS 4DP CHJ CJJ CKJ D1F CAJ CBJ CCJ CDJ CEJ CGJ D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U CAU CBU CCU CDU CEU CGU 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 4GU 4GS 4GP 8AA 8AT 8BU 8BS 8BP 6BU 6BF D9G E4U 79G 7AG 7BG 4HG 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 16G 29F 17G A1G 4DU 4EU 58P 58S 58U 69A 69T 75G 76G 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J B1A B1T B1C B1V B2A 18G 2EG 3GG 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT 57U)	49P4367	*
1	Top cover assembly pearl white (models 3CA 3CC 3CB 3CH 3CJ 3CT 3CH)	49P4368	*
2	Processor P4 1.7 GHz (models B1A B1T B1C B1V B2A)	49P0189	N
2	Processor P4 1.7 GHz (models B1A B1T B1C B1V B2A)	25P5041	N
2	Processor P4 1.7 GHz (models A2P A2S A2U)	58P9937	N
2	Processor P4 1.8 GHz	58P9965	N
2	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 71G 74G 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 58P 58S 58U CGJ)	58P9968	N
2	Processor P4 1.8 GHz (models 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 13A 13T 13B 13H 14C CTO 16G 17G 18G)	33P0965	N
2	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 71G 74G 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 58P 58S 58U CGJ)	02R4501	N
2	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 71G 74G 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 58P 58S 58U CGJ)	02R4507	N

Item #	Machine Type 8305	FRU#	CRU?
2	Processor P4 1.9 GHz (model A1G)	49P1726	N
2	Processor P4 2.0 GHz (models 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 25U 25F 25A 27A 27T 27C 27V 2CG CTO 29F 2EG 2FA CAJ)	48P7205	N
2	Processor P4 2.0 GHz (models 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 25U 25F 25A 27A 27T 27C 27V 2CG CTO 29F 2EG 2FA CAJ)	59P7160	N
2	Processor P4 2.0 GHz (models 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 25U 25F 25A 27A 27T 27C 27V 2CG CTO 29F 2EG 2FA CAJ)	02R4509	N
2	Processor P4 2.2 GHz	48P7206	N
2	Processor P4 2.2 GHz	59P7161	N
2	Processor P4 2.2 GHz	02R4511	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 3CA 3CC 3CB 3CV 3CJ 3DJ 3EJ 3FJ 3BG CTO CBU 3CT 3CH 3GG 37C 3HA)	48P6837	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 3CA 3CC 3CB 3CV 3CJ 3DJ 3EJ 3FJ 3BG CTO CBU 3CT 3CH 3GG 37C 3HA)	59P1987	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 3CA 3CC 3CB 3CV 3CJ 3DJ 3EJ 3FJ 3BG CTO CBU 3CT 3CH 3GG 37C 3HA)	02R4513	N
2	Processor P4 2.4 GHz	33P3743	N
2	Processor P4 2.4 GHz	59P1989	N
2	Processor P4 2.4 GHz	02R4515	N
2	Processor P4 2.4 GHz (model 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 46J 47J 48J CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 72G 73G 4AA 4AT 4BA 4CA 4CT 44C 4DU 4EU CHU 4DS 4DP CHJ CCJ)	48P7684	N
2	Processor P4 2.4 GHz (model 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 46J 47J 48J CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 72G 73G 4AA 4AT 4BA 4CA 4CT 44C 4DU 4EU CHU 4DS 4DP CHJ CCJ)	59P1991	N
2	Processor P4 2.4 GHz (model 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 46J 47J 48J CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 72G 73G 4AA 4AT 4BA 4CA 4CT 44C 4DU 4EU CHU 4DS 4DP CHJ CCJ)	02R4517	N



Item #	Machine Type 8305	FRU#	CRU?
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 65A 65C 69A 69T 6AA 75G 76G CDJ)	48P6839	N
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 65A 65C 69A 69T 6AA 75G 76G CDJ)	59P1993	N
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 65A 65C 69A 69T 6AA 75G 76G CDJ)	02R4519	N
2	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 84U 84S 84P 85J 86J 87J 88J 89J CEJ)	58P9963	N
2	Processor P4 2.8 GHz (model 78G CJU D1P D1S D1U D2U D3P D3S D3U D4F D4J D4P D4S D4U D5J D6J D7J D8J 77G CJJ D1F)	01R3171	N
2	Processor 3.06 GHz (models CKU E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U CKJ E4U 7AG 7BG)	02R5347	N
2	Fan Sink (1.9 - 2.2 GHz) (models 6AA 75G 76G 77G 78G 85J 86J 87J 88J 89J CHU CJU D1P D1S D1U D2U D3P D3S D3U D4F D4J D4P D4S D4U D5J D6J D7J D8J E3U 4DS 4DP CHJ CJJ D1F CAJ CBJ CCJ CDJ CEJ A2P A2S A2U B1A B1T B1C B1V B2A 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 13A 13T 13B 13H 14C CTO 16G 17G 18G 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 71G 74G 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 58P 58S 58U CGJ21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 3CA 3CC 3CB 3CV 3CJ 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 13A 13T 13B 13H 14C 16G 44C 4DU 4EU 65A 65C 69A 69T 29F 3CT 3CH 17G A1G 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 2EG 3GG 37C 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 72G 73G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 84U 84S 84P 2FA 3HA 4AA 4AT 4BA 4CA 4CT)	32P4004	N
2	Fan Sink (3.06 GHz) (models CKU E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U CKJ E4U 7AG 7BG)	01R3330	N
2	Mounting Assembly for P4 Processor (all models)	48P6726	N

Item #	Machine Type 8305	FRU#	CRU?
3	Memory 128MB NP SDRAM (models 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 33A 33T 36S 36P 3AS 3AP 14C 27A 27T 27C 27V CTO B1A B1T B1C B1V 52U 52S 52P 52A 52T 52C 52B 52V 52H 56A 57U 56T 56C 56B 56V 56H 4AA 4AT 4CA 4CT 69A 69T 6AA CHU CJU CKU CHJ CJJ CKJ CAJ CBJ CCJ CDJ CEJ CGJ)	33L3303	*
3	Memory 256MB NP SDRAM (models D9G E4U 79G 7AG 7BG 4HG 64U 64S 64P 66J 67J 68J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 84U 84S 84P 51A 55A 2FA 3HA 4BA 44C 4EU 58P 58S 58U 65A 65C 75G 76G 77G 78G 85J 86J 87J 88J 89J A2P A2S A2U D1P D1S D1U D2U D3P D3S D3U D4F D4J D4P D4S D4U D5J D6J D7J D8J E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U D1F D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 4BU 4BS 4BP 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 4GU 4GS 4GP 8BU 8BS 8BP 6BU 6BF 21U 21F 21G 21A 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 34U 39U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 3CA 3CC 3CB 3CV 3CJ 13A 13T 13B 13H 25U 25F 25A 3DJ 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 16A 16G 29F 3CT 3CH 17G A1G B2A 18G 2EG 3GG 37C 51U 51F 51S 51P 51G 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P)	33L3305	*
3	Memory 512MB NP SDRAM (model CTO 4DU 4DS 4DP)	33L3307	*
4	Planar (Spartan 10/100 POV) (models 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 37C 54U 54F 54S 54P 66J 67J 68J 4CA 4CT 44C 65A 65C 6AA 85J 86J 87J 88J 89J D4F D4J D4P D4S D4U D5J D6J D7J D8J 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 85A 6BU 6BF E4U 79G )	02R4083	N
4	Planar (Spartan 10/100 400/533 FSB wo-POV) (models D1F CAJ CBJ CCJ CDJ CEJ CGJ 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 3CA 3CC 3CB 3CV 3CJ 2CG 3BG CTO 16G 29F 3CT 3CH 17G A1G B1A B1T B1C B1V B2A 18G 2EG 3GG 51U 51F 51S 51P 51G 52U 52S 52P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 63U 63S 63P 64U 64S 64P 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 83U 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4DU 4EU 58P 58S 58U 69A 69T 75G 76G 77G 78G CJU CKU D1P D1S D1U D3P D3S D3U E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V 4DS 4DP CJJ CKJ)	02R4084	N

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4	Planar (Spartan-G 10/100/1000 POV) (models 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J)	02R4085	N
4	Planar (Spartan-G 10/100/1000 wo-POV) (models 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 62U 62F 62S 62P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	02R4086	N
4	Planar (Spartan-L 10/100 400 FSB AGP wo-POV) (models A2P A2S A2U)	02R4087	N
5	5.25 locking handle (all models)	09N5747	**
6	HDD 40GB 5400RPM (model CTO A2U A2S A2P)	19K1562	**
6	HDD 40GB 7200RPM (models 57U 44C 4DU 58P 58S 58U 65A 65C 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J 88J 89J D1P D1S D1U D2U D3P D3S D3U D4F D4J D4P D4S D4U D5J D6J D7J D8J E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U 4DS 4DP D1F D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 4GU 4GS 4GP 8AA 8AT 8BU 8BS 8BP 6BU 6BF D9G E4U 79G 7AG 7BG 4HG 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J B1A B1T B1C B1V B2A 18G 2EG 3GG 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 66J 67J 68J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 51A 52A 52T 52C 52B 52V 52H 55A 56A 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 3CA 3CC 3CB 3CV 3CJ 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 16G 29F 3CT 3CH A1G 17G 49U)	19K1568	**
6	HDD 80GB 7200RPM (model CTO 64U 64S 64P 84U 84S 84P 4EU )	24P3665	**
6	HDD 120GB 7200RPM (model CTO)	24P3687	**

Item #	Machine Type 8305	FRU#	CRU?
7	48X CDROM (Black) (models E1S E1T E1U E1V E2G 4DS 4DP D1F D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 8AA 8AT E4U 7AG 7BG 4HG 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 29U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 46J 47J 2CG 3BG CTO 16G 29F 17G A1G B1A B1T B1C B1V B2A 18G 2EG 3GG 44C 4DU 65A 65C 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J A2P A2S A2U D1P D1S D1U D4F D4J D4P D4S D4U D5J D6J E1A E1B E1C E1F E1G E1H E1P 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 64U 64S 64P 66J 67J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT)	33P3203	**
7	48X CDROM (Black) (models E1S E1T E1U E1V E2G 4DS 4DP D1F D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 8AA 8AT E4U 7AG 7BG 4HG 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 29U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 46J 47J 2CG 3BG CTO 16G 29F 17G A1G B1A B1T B1C B1V B2A 18G 2EG 3GG 44C 4DU 65A 65C 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J A2P A2S A2U D1P D1S D1U D4F D4J D4P D4S D4U D5J D6J E1A E1B E1C E1F E1G E1H E1P 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 64U 64S 64P 66J 67J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT)	33P3207	**

Item #	Machine Type 8305	FRU#	CRU?
7	48X CDROM (Black) (models E1S E1T E1U E1V E2G 4DS 4DP D1F D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 8AA 8AT E4U 7AG 7BG 4HG 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 29U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 46J 47J 2CG 3BG CTO 16G 29F 17G A1G B1A B1T B1C B1V B2A 18G 2EG 3GG 44C 4DU 65A 65C 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J A2P A2S A2U D1P D1S D1U D4F D4J D4P D4S D4U D5J D6J E1A E1B E1C E1F E1G E1H E1P 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 64U 64S 64P 66J 67J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT)	33P3211	**
7	48X CDROM (Black) (models E1S E1T E1U E1V E2G 4DS 4DP D1F D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 8AA 8AT E4U 7AG 7BG 4HG 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 29U 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 46J 47J 2CG 3BG CTO 16G 29F 17G A1G B1A B1T B1C B1V B2A 18G 2EG 3GG 44C 4DU 65A 65C 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J A2P A2S A2U D1P D1S D1U D4F D4J D4P D4S D4U D5J D6J E1A E1B E1C E1F E1G E1H E1P 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 64U 64S 64P 66J 67J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT)	33P3215	**
7	48X CDROM (White) (XP-OK) (models 3CA 3CC 3CB 3CV 3CJ CTO 3CT 3CH)	33P3201	**
7	48X CDROM (White) (XP-OK) (models 3CA 3CC 3CB 3CV 3CJ CTO 3CT 3CH)	33P3205	**
7	48X CDROM (White) (XP-OK) (models 3CA 3CC 3CB 3CV 3CJ CTO 3CT 3CH)	33P3209	**
7	48X CDROM (White) (XP-OK) (models 3CA 3CC 3CB 3CV 3CJ CTO 3CT 3CH)	33P3213	**

Item #	Machine Type 8305	FRU#	CRU?
7	DVD-ROM 16X48X (Black) (models 2DA 2DT 39U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 62U 62F 62S 62P 63U 63S 63P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U D2U D3P D3S D3U E3U)	33P3277	**
7	DVD-ROM 16X48X (Black) (models 2DA 2DT 39U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 62U 62F 62S 62P 63U 63S 63P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U D2U D3P D3S D3U E3U)	33P3259	**
7	DVD-ROM 16X48X (Black) (models 2DA 2DT 39U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 62U 62F 62S 62P 63U 63S 63P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U D2U D3P D3S D3U E3U)	33P3281	**
7	DVD-ROM 16X48X (Black) (models 2DA 2DT 39U 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 43U CTO 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J 62U 62F 62S 62P 63U 63S 63P 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U D2U D3P D3S D3U E3U)	33P3297	**
7	DVD-ROM 16X48X (White)	33P3257	**
7	DVD-ROM 16X48X (White)	24P3617	**
7	24X10X40X CD-RW (Black) (model 68J)	24P3627	**
7	24X10X40X CD-RW (Black) (model 68J)	24P3635	**
7	24X10X40X CD-RW (White)	24P3625	**
7	24X10X40X CD-RW (White)	24P3632	**
7	40X12X40X CD-RW (Black) (models 3FJ 48J CTO)	33P3269	**
7	40X12X40X CD-RW (Black) (models 3FJ 48J CTO)	33P3273	**
7	40X12X40X CD-RW (White)	33P3267	**
7	40X12X40X CD-RW (White)	33P3271	**
7	48X24X48X CD-RW (Black) (models 58P 58S 58U 88J 89J D7J D8J 3FJ 48J CTO 4GU 4GS 4GP)	33P3289	**
7	48X24X48X CD-RW (Black) (models 58P 58S 58U 88J 89J D7J D8J 3FJ 48J CTO 4GU 4GS 4GP)	33P3293	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3227	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3251	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
8	Shield 5.25 EMC (all models)	19K5548	*
9	FDD 3.5" 1.44MB (wo/bezel)	75H9549	**

Item #	Machine Type 8305	FRU#	CRU?
9	FDD 3.5" 1.44MB (w/o bezel) (models 11T 11C 11B 11V 11H 12T 12C 12B 12V 12H 15T 15C 15V 21U 21F 21G 22U 22T 22C 22B 22V 22H 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DT 31U 31F 31S 31P 31G 31T 31C 31B 31V 31H 33T 34U 36S 36P 39U 3AS 3AP 41U 41F 41S 41P 41G 41T 41C 41B 41V 41H 41U 42F 42S 42P 42G 42T 42C 42B 42V 42H 43U 3CC 3CB 3CV 13T 13B 13H 14C 25U 25F 27T 27C 27V 44U 44F 2CG 3BG CTO CAU CBU CCU 16G 29F 3CT 3CH 17G A1G 49U 49F 49S 49P 49G 49T 49C 49B 49V 49H 18G 2EG 3GG 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53T 53C 53B 53V 53H 54U 54F 54S 54P 61U 61F 61S 61P 61G 61T 61C 61B 61V 61H 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 65U 65F 65S 65P 71G 72G 73G 74G 81U 81F 81S 81P 81G 81T 81C 81B 81V 81H 82U 82F 82S 82P 82G 82T 82C 82B 82V 82H 83U 84U 84S 84P 85U 85F 85S 85P CDU CEU CGU 51A 52A 52T 52C 52B 52V 52H 55A 56A 57U 56T 56C 56B 56V 56H 2FA 3HA D1G 4AA 4AT 4BA 4A 4CA 4CT)	75H9550	**
9	FDD 3.5" 1.44MB (wo/Bezel) (model 11A 11J 12A 12J 15A 16A 21A 22A 23A 31A 31J 33A 41A 41J 42A 42J 3CA 3CJ 13A 25A 27A 3DJ 3EJ 3FJ 46J 47J 48J CTO 49A 49J 53A 53J 61A 61J 66J 67J 68J 81A 81J 82A 82J 85J 86J 87J 88J 89J D4J D5J D6J D7J D8J CHJ CJJ CKJ CAJ CBJ CCJ CDJ CEJ CGJ 44J 65J)	19K1543	**
10	3.5 locking handle (all models)	09N5748	**
11	Speaker assembly (all models)	01K4909	*
11	Speaker assembly (all models)	00N5151	*
12	185W Power Supply (models 81U 81F 81G 81A 81T 81J 82U 82F 82G 82A 82T 82J 83U 84U 51A 52A 52T 55A 56A 57U 56T 2FA 3HA 4AA 4AT 4BA 4CA 4CT 4DU 4EU 58U 65A 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J 88J 89J A2U CHU CJU CKU D1U D2U D3U D4F D4J D4U D5J D6J D7J D8J E1A E1F E1G E1T E1U E2G E3U CHJ CJJ CKJ D1F CAJ CBJ CCJ CDJ CEJ CGJ D1G 44A 44U 44F 44J 65F 65J 65U 85F 85U CAU CBU CCU CDU CEU CGU 4BU 85A A3U A4U A5U 4GU 6BU 6BF D9G E4U 79G 7AG 7BG 4HG 11A 11T 11J 12A 12T 12J 15A 15T 16A 21U 21F 21G 21A 22U 22A 22T 23A 23T 29U 2DA 2DT 31U 31F 31G 31A 31T 31J 33A 33T 34U 39U 41U 41F 41G 41A 41T 41J 41U 42F 42G 42A 42T 42J 43U 3CA 3CJ 13A 13T 25U 25F 25A 27A 27T 3DJ 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 16G 29F 3CT 17G A1G 49U 49F 49G 49A 49T 49J B1A B1T B2A 18G 2EG 3GG 51U 51F 51G 52U 53U 53F 53G 53A 53T 53J 54U 54F 61U 61F 61G 61A 61T 61J 62U 62F 63U 64U 66J 67J 68J 71G 72G 73G 74G)	24P6883	N

Item #	Machine Type 8305	FRU#	CRU?
12	160W Power Supply (models 11C 11B 11V 11H 12C 12B 12V 12H 15C 15V 22C 22B 22V 22H 23C 23V 24S 24P 2AB 2AH 2AS 2AP 31S 31P 31C 31B 31V 31H 36S 36P 3AS 3AP 41S 41P 41C 41B 41V 41H 42S 42P 42C 42B 42V 42H 3CC 3CB 3CV 13B 13H 14C 27C 27V CTO 3CH 49C 49B 49H 49S 49P B1C B1V 37C 51S 51P 52S 52P 53S 53P 53C 53B 53V 53H 54S 54P 61S 61P 61C 61B 61V 61H 62S 62P 63S 63P 64S 64P 81S 81P 81C 81B 81V 81H 82S 82P 82C 82B 82V 82H 84S 84P 52C 52B 52V 52H 56C 56B 56V 56H 44C 58P 58S 65C A2P A2S D1P D1S D3P D3S D4P D4S E1B E1C E1H E1P E1 4DS 4DP)	24P6885	N
13	Chassis assembly (all models)	49P4369	*
14	I/O cam bracket (all models)	09N5734	**
	MOUSE PS/2 2BUTTON (Black) (models E4U 79G 7AG 7BG 4HG 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT 57U 44C 4DU 4EU 58P 58S 58U 65A 65C 69A 69T 6AA 75G 76G 77G 78G 85J 86J 87J 88J 89J A2P A2S A2U CHU CJU CKU D1P D1S D1U D2U D3P D3S D3U D4F D4J D4P D4S D4U D5J D6J D7J D8J E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U 4DS 4DP CHJ CJJ CKJ D1F CAJ CBJ CCJ CDJ CEJ CGJ D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U CAU CBU CCU CDU CEU CGU 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 4GU 4GS 4GP 8AA 8AT 8BU 8BS 8BP 6BU 6BF D9G 43G 17G 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J B1A B1T B1C B1V B2A 18G 2EG 3GG 37C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 56T 56C 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 3DJ 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 3CA 3CC 3CB 3CV 3CJ 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 16G 29F A1G)	24P0383	*
	MOUSE PS/2 2BUTTON (White) (models 3CA 3CC 3CB 3CH 3CJ 3CT 3CH)	24P0381	*
	Mouse Scrollpoint III (Black)	24P0485	*
	DASD rail soft mount (all models)	19K5331	**
	Video ATI Radeon VE 64MB (models 2DA 2DT 34U 39U 43U CTO 63U 63S 63P 83U 4EU D3P D3S D3U )	49P4685	*
	Video nVidia GeForce4 MX 64MB x/TV Out (model CTO)	49P4692	*
	Video nVidia GeForce4 MX 128MB w/VGA TV DVI	58P9865	*



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	56k V.90 Modem (US) (model CTO)	19K2965	*
	56k V.90 Modem (WT) (model CTO)	19K2963	*
	Soft Modem V.92/V.44 (model CTO)	22P7943	*
	Speakers Infinity Active T1 (Black) (model CTO)	25P4726	*
	Label planar locating (all models)	49P4366	*
	Bezel kit pearl white (models 3CA 3CC 3CB 3CH 3CJ 3CT 3CH)	49P4370	*
	Bezel kit stealth black (models 77G 78G A2P A2S A2U CHU CJU CKU D1P D1S D1U D2U D3P D3S D3U E1A E1B E1C E1F E1G E1H E1P E1S E1T E1U E1V E2G E3U 44C 65A 65C 6AA 85J 86J 87J 88J 89J D4F D4J D4P D4S D4U D5J D6J D7J D8J 4DS 4DP CHJ CJJ CKJ D1F CAJ CBJ CCJ CDJ CEJ CGJ D1G 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U CAU CBU CCU CDU CEU CGU 4AB 4AH 4BU 4BS 4BP 69B 69H 85A A3U A3S A3P A4U A4S A4P A5U A5S A5P 4GU 4GS 4GP 8AA 8AT 8BU 8BS 8BP 6BU 6BF D9G E4U 79G 7AG 7BG 4HG 11A 11T 11C 11B 11V 11H 11J 12A 12T 12C 12B 12V 12H 12J 15A 15T 15C 15V 16A 21U 21F 21G 21A 22U 22A 22T 22C 22B 22V 22H 23A 23T 23C 23V 24S 24P 29U 2AB 2AH 2AS 2AP 2DA 2DT 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 33A 33T 34U 36S 36P 39U 3AS 3AP 41U 41F 41S 41P 41G 41A 41T 41C 41B 41V 41H 41J 41U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 43U 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 2CG 3BG CTO 16G 29F 17G A1G 4DU 4EU 58P 58S 58U 69A 69T 75G 76G 49U 49F 49S 49P 49G 49A 49T 49C 49B 49V 49H 49J B1A B1T B1C B1V B2A 18G 2EG 3GG 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53C 53B 53V 53H 53J 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 66J 67J 68J 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 83U 84U 84S 84P 51A 52A 52T 52C 52B 52V 52H 55A 56A 56T 56C 56B 56V 56H 2FA 3HA 4AA 4AT 4BA 4CA 4CT 57U)	49P4371	*
	Cable USB 2.0 (all models)	49P4365	*
	Cable ATA-66 1 drop (all models)	49P4364	*
	Planar shield kit (all models)	49P0179	*
	Serial port cable (all models)	49P4530	*
	Blue nameplate (all models)	09N5733	*
	RFID antenna velcro (models 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 37C 54U 54F 54S 54P 66J 67J 68J 4CA 4CT 44C 65A 65C 6AA 85J 86J 87J 88J 89J D4F D4J D4P D4S D4U D5J D6J D7J D8J 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 85A 6BU 6BF D9G E4U 79G)	03K9654	*

Item #	Machine Type 8305	FRU#	CRU?
	Keylock assembly (SQUALL) (models 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 37C 54U 54F 54S 54P 66J 67J 68J 4CA 4CT 44C 65A 65C 6AA 85J 86J 87J 88J 89J D4F D4J D4P D4S D4U D5J D6J D7J D8J 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 85A 6BU 6BF D9G E4U 79G)	09K9829	*
	C2 cable (SQUALL) (models 13A 13T 13B 13H 14C 25U 25F 25A 27A 27T 27C 27V 3DJ 3EJ 3FJ 46J 47J 48J 37C 54U 54F 54S 54P 66J 67J 68J 4CA 4CT 44C 65A 65C 6AA 85J 86J 87J 88J 89J D4F D4J D4P D4S D4U D5J D6J D7J D8J 44A 44U 44F 44J 65F 65J 65P 65S 65U 85F 85P 85S 85U 85A 6BU 6BF D9G E4U)	09K9827	*
	FDD cable long (all models)	49P4764	*
	Cable - Secondary IDE (ATA66 1 drop) (all models)	37L5098	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Misc. Hardware Kit (all models)	09N5764	*
	Bottom Foot (4) (all models)	03K9655	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	24P9065	*
	Fan bracket assembly 60mm (all models)	22P3635	*
	Battery 3.0V (all models)	33F8354	*

	Recovery CDs Win 2K	FRU #	CRU?
	US (Model 29U 18G 2EG 3GG 73G 74G 55A 2FA 3HA 4BA 57U 76G 78G)	71P6405	*
	FR (models 29F 18G 2EG 3GG 73G 74G 76G 78G)	71P6425	*
	GR (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6413	*
	IT (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6433	*
	BR (models 2AP 3AP)	71P6445	*
	SP (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6421	*
	DK (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6417	*
	NL (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6441	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	AE (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6465	*
	SV (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6409	*
	HE (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6453	*
	FI (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6429	*
	NO (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6437	*
	PL (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6457	*
	PO (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6449	*
	RU (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6477	*
	HU (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6473	*
	CZ (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6461	*
	TR (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6469	*
	GK (models 18G 2EG 3GG 73G 74G 76G 78G)	71P6481	*
	Japanese (models 87J 89J D6J D8J 3EJ 3FJ 47J 48J 67J 68J)	71P5962	*
	Simplified Chinese (model 15C)	62P8983	*
	Taiwan - TC (model 15V)	62P8984	*
	Hong Kong - TC (model 2AB)	62P8985	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (Models 12A 12T 12H 23A 23T 33A 33T 56A 56T 56H)	71P6565	*
	French	71P6585	*
	German	71P6573	*
	Italian	71P6593	*
	Spanish	71P6581	*
	Brazilian/Portuguese	71P6605	*
	Danish	71P6577	*
	Netherlands	71P6601	*
	Arabic Enabled	71P6625	*
	Swedish	71P6569	*
	Hebrew	71P6613	*
	Finnish	71P6589	*
	Norwegian	71P6597	*
	Polish	71P6617	*
	Portuguese	71P6609	*
	Russian	71P6637	*
	Hungarian	71P6633	*
	Czechoslovakian	71P6621	*
	Turkish	71P6629	*
	Greek	71P6641	*
	Japanese (models 86J D5J 3DJ 46J 66J)	71P6066	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	Simplified Chinese (models 12C 23C 56C)	71P6084	*
	Traditional Chinese (models 12V 23V 56V)	71P6087	*
	Traditional Chinese Hong Kong (models 12B 56B)	71P6090	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (Models 11A 11T 11H 16A 21U 21G 21A 22U 22A 22T 22H 2DA 2DT 31U 31G 31A 31T 31H 34U 39U 41U 41G 41A 41T 41H 42U 42G 42A 42T 42H 43U 13A 13T 13H 25U 25A 27A 27T 2CG 3BG 16G 17G A1G 49U 49G 49A 49T 49H B1A B1T B2A 51U 51G 52U 53U 53G 53A 53T 53H 54U 61U 61G 61A 61T 61H 62U 63U 64U 71G 72G 81U 81G 81A 81T 81H 82U 82G 82A 82T 82H 83U 84U 51A 52A 52T 52H 4AA 4AT 4CA 4CT 4DU 4EU 58U 65A 69A 69T 6AA 75G 77G A2U D1U D2U D3U D4U E1A E1G E1H E1T E1U E2G E3U)	71P6485	*
	French (models 21F 21G 31F 31G 41F 41G 42F 42G 25F 2CG 3BG 16G 17G A1G 49G 49F 51F 51G 53F 53G 54F 61F 61G 62F 71G 72G 81F 81G 82F 82G 75G 77G D4F E1F E1G E2G D1F)	71P6505	*
	German (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6493	*
	Italian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6513	*
	Spanish (models 22S 21G 31S 31G 36S 41S 41G 42S 42G 2CG 3BG 16G 17G A1G 49S 49G 51S 51G 52S 53S 53G 54S 61S 61G 62S 63S 64S 71G 72G 81S 81G 82S 82G 84S 58S 75G 77G A2S D1S D3S D4S E1G E1S E2G 4DS)	71P6501	*
	Brazilian/Portuguese (models 24P 31P 36P 41P 42P 49P 51P 52P 53P 54P 61P 62P 63P 64P 65P 81P 82P 84P 85P)	71P6525	*
	Danish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6497	*
	Netherlands (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6521	*
	Arabic Enabled (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6545	*
	Swedish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6489	*
	Hebrew (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6533	*
	Finnish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6509	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Norwegian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6517	*
	Polish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6537	*
	Portuguese (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6529	*
	Russian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6557	*
	Hungarian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6553	*
	Czechoslovakian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6541	*
	Turkish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)	71P6549	*
	Greek (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 51G 53G 61G 71G 72G 81G 82G 75G 77G E1G E2G)24P 31P 36P 41P 42P 49P 51P 52P 53P 54P 61P 62P 63P 64P 81P 82P 84P 58P A2P D1P D3P D4P E1P 4DP	71P6561	*
	Japanese (models 85J 88J D4J D7J 11J 41J 42J 49J 53J 61J 81J 82J 44J 65J)	71P5958	*
	Simplified Chinese (models 11C 22C 31C 41C 42C 14C 27C 49C B1C 37C 53C 61C 81C 82C 52C 44C 65C E1C)	71P6093	*
	Traditional Chinese (models 11V 22V 31V 41V 42V 27V 49V B1V 53V 61V 81V 82V 52V E1V)	71P6096	*
	Traditional Chinese Hong Kong (models 11B 22B 31B 41B 42B13B 49B 53B 61B 81B 82B 52B E1B)	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 77G 78G A2U CHU CJU CKU D1U D2U D3U D4U E1A E1C E1G E1H E1U E2G E3U D1G 44A 44U 65U 85U CAU CBU CCU CDU CEU CGU 4AH 4BU 69H 85A A3U A4U A5U 4GU 8AA 8BU 6BU D9G E4U 79G 7AG 7BG 4HG 11A 11C 11H 12A 12C 12H 15A 15C 16A 21U 21G 21A 22U 22A 22C 22H 23A 23C 29U 2AH 2DA 31U 31G 31A 33A 34U 39U 41U 41G 41A 41C 41H 41U 42G 42A 42C 42H 43U 13A 13H 14C 25U 25A 27A 27C 2CG 3BG CTO 16G 17G A1G 49U 49G 49A 49C 49H B1A B2A B1C 18G 2EG 3GG 37C 51U 51G 52U 53U 53G 53A 53C 53H 54U 61U 61G 61A 61C 61H 62U 63U 64U 71G 72G 73G 74G 81U 81G 81A 81C 81H 82U 82G 82A 82C 82H 83U 84U 51A 52A 52C 52H 55A 56A 56C 56H 2FA 3HA 4AA 4BA 4CA 57U 44C 4DU 4EU 58U 65A 65C 69A 6AA 75G 76G)	32P5100	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Arabic (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5101	*
	Belgian/French (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5102	*
	Belgian/UK (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5103	*
	Bulgarian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5104	*
	Chinese/US (models 11B 11V 12B 12V 15V 22B 22V 23V 2AB 31B 31V 41B 41V 42B 42V 13B 27V 49B 49V B1V 53B 53V 61B 61V 81B 81V 82B 82V 52B 52V 56B 56V 4AB 69B)	32P5105	*
	Czech (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5106	*
	Danish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5107	*
	Dutch (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5108	*
	French (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5109	*
	French Canadian (models 21F 31F 41F 42F 25F 29F 49F 51F 53F 54F 61F 62F 81F 82F D4F E1F D1F 44F 65F 85F 6BF)	32P5110	*
	French Canadian (models 21F 31F 41F 42F 25F 29F 49F 51F 53F 54F 61F 62F 81F 82F D4F E1F D1F 44F 65F 85F 6BF)	32P5111	*
	German (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5112	*
	Greek (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5113	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Hebrew (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5114	*
	Hungarian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5115	*
	Iceland (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5116	*
	Italian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5117	*
	Japanese (models 11J 31J 41J 42J 3DJ 3EJ 3FJ 46J 47J 48J 49J 53J 61J 66J 67J 68J 81J 82J 85J 86J 87J 88J 89J D4J D5J D6J D7J D8J CHJ CJJ CKJ CAJ CBJ CCJ CDJ CEJ CGJ 44J 65J)	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 24S 2AS 31S 36S 3AS 41S 42S 49S 51S 52S 53S 54S 61S 62S 63S 64S 81S 82S 84S 58S A2S D1S D3S D4S E1S 4DS 65S 85S 4BS A3S A4S A5S 4GS 8BS)	32P5120	*
	Norwegian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5121	*
	Polish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5122	*
	Portuguese (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5123	*
	Romanian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5124	*
	Russian (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5125	*
	Russian/Cy (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5126	*
	Serbian/Cyrillic (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5127	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Slovak (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5128	*
	Spanish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5129	*
	Swedish/Finn (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5130	*
	Swiss F/G (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5131	*
	Thailand (models 11T 12T 15T 22T 23T 2DT 31T 33T 41T 42T 13T 27T 49T B1T 53T 61T 81T 82T 52T 56T 4AT 4CT 69T E1T 8AT)	32P5132	*
	Turkish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5133	*
	Turkish (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5134	*
	UK English (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5135	*
	US International (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5136	*
	Yugoslav/Latin (models 21G 31G 41G 42G 2CG 3BG 16G 17G A1G 49G 18G 2EG 3GG 51G 53G 61G 71G 72G 73G 74G 81G 82G 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	32P5137	*
	Brazil/Portuguese (models 24P 2AP 31P 36P 3AP 41P 42P 49P 51P 52P 53P 54P 61P 62P 63P 64P 81P 82P 84P 58P A2P D1P D3P D4P E1P 4DP 65P 85P 4BP A3P A4P A5P 4GP 8BP)	32P5138	*



	Power Cords	FRU#	CRU?
	Line Cord (models B1A B1T B1V B2A 18G 2EG 3GG 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 53S 53P 53G 53A 53T 53V 54U 54F 54S 54P 61U 61F 61S 61P 61G 61A 61T 61V 62U 62F 62S 62P 63U 63S 63P 64U 64S 64P 71G 72G 73G 74G 81U 81F 81S 81P 81G 81A 81T 81V 82U 82F 82S 82P 82G 82A 82T 82V 82J 83U 84U 84S 84P 51A 52A 52T 52V 55A 56A 56T 56V 2FA 3HA 4DU 4EU 58P 58S 58U 65A 69A 69T 6AA 75G 76G 77G 78G A2P A2S A2U CHU CJU CKU D1P D1S D1U D2U D3P D3S D3U D4F D4P D4S D4U E1A E1F E1G E1P E1S E1T E1U E1V E2G E3U 4DS 4DP D1F 4AA 4AT 4BA 4CA 4CT 57U)	6952301	*
	Line Cord (models 65A 69A 6AA E1A 44A 85A 8AA)	13F9939	*
	Line Cord (models 65A 69A 6AA 75G 76G 77G 78G E1A E1G E2G D1G 44A 85A 8AA D9G 79G 7AG 7BG 4HG)	13F9978	*
	Line Cord (models 65A 69A 6AA 75G 76G 77G 78G E1A E1G E1H E2G D1G 44A 4AH 69H 85A 8AA D9G 79G 7AG 7BG 4HG)	14F0032	*
	Line Cord (models 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	13F9996	*
	Line Cord (models 58P 58S 75G 76G 77G 78G A2P A2S D1P D1S D3P D3S D4P D4S E1G E1P E1S E2G 4DS 4DP D1G 65P 65S 85P 85S 4BS 4BP A3S A3P A4S A4P A5S A5P 4GS 4GP 8BS 8BP D9G 79G 7AG 7BG 4HG)	14F0068	*
	Line Cord (all models)	36L8879	*
	Line Cord (models 85J 86J 87J 88J 89J D4J D5J D6J D7J D8J CHJ CJJ CKJ CAJ CBJ CCJ CDJ CEJ CGJ 44J 65J)	1838576	*
	Line Cord (models 11J 31J 41J 42J 3CJ 3DJ 3EJ 3FJ 46J 47J 48J 49J CTO 85J 86J 87J 88J 89J D4J D5J D6J D7J D8J CHJ CJJ CKJ CAJ CBJ CCJ CDJ CEJ CGJ 44J 65J)	34G0222	*
	Line Cord	05K2876	*
	Line Cord (models B1C 37C 37C 53C 53B 53H 61C 61B 61H 81C 81B 81H 82C 82B 82H 52C 52B 52H 56C 56B 56H 44C 65C E1B E1C E1H)	02K0545	*
	Line Cord (models 75G 76G 77G 78G E1G E2G)	14F0086	*
	Line Cord (models 65A 69A 6AA 75G 76G 77G 78G E1A E1G E2G D1G 44A 85A 8AA D9G 79G 7AG 7BG 4HG)	14F0014	*
	Line Cord (models 75G 76G 77G 78G E1G E2G D1G D9G 79G 7AG 7BG 4HG)	14F0050	*

	Machine Type 8306	FRU#	CRU?
1	Top cover assembly stealth black (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	49P4367	*
1	Top Cover assembly pearl white	49P4368	*
2	Processor P4 1.8 GHz	33P0965	N
2	Processor P4 1.9 GHz	49P1726	N
2	Processor P4 2.0 GHz	48P7205	N
2	Processor P4 2.2 GHz	48P7206	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J)	48P6837	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J)	59P1987	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J)	02R4513	N
2	Processor P4 2.4 GHz	33P3743	N
2	Processor P4 2.4 GHz (models 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	48P7684	N
2	Processor P4 2.4 GHz	59P1989	N
2	Processor P4 2.4 GHz	02R4515	N
2	Processor P4 2.4 GHz (models 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	59P1991	N
2	Processor P4 2.4 GHz (models 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	02R4517	N
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	48P6839	N
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	59P1993	N
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	02R4519	N
2	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	58P9963	N

	<b>Machine Type 8306</b>	<b>FRU#</b>	<b>CRU?</b>
2	Processor P4 2.0 GHz	73P0570	N
2	Processor P4 2.0 GHz	59P7160	N
2	Processor P4 2.0 GHz	02R4509	N
2	Processor P4 2.2 GHz	73P0571	N
2	Processor P4 2.2 GHz	59P7161	N
2	Processor P4 2.2 GHz	02R4511	N
2	Processor P4 2.26 GHz (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J)	73P0575	N
2	Processor P4 2.4 GHz	73P0572	N
2	Processor P4 2.4 GHz (models 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	73P0576	N
2	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	73P0577	N
2	Processor P4 2.66 GHz (models 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	74P1615	N
2	Fan Sink (1.9 - 2.2 GHz) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	32P4004	N
2	Mounting Assembly for P4 Processor (all models)	48P6726	N
3	Memory 128MB NP SDRAM	33L3303	*
3	Memory 256MB NP SDRAM (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	33L3305	*
3	Memory 512MB NP SDRAM	33L3307	*
4	Planar (Spartan 10/100 wo-POV) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	02R4084	N
4	Planar (Spartan-G 10/100/1000 POV) (models 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J)	02R4085	N
4	Planar (Spartan-G 10/100/1000 wo-POV) (models 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J)	02R4086	N

	Machine Type 8306	FRU#	CRU?
5	5.25 locking handle (all models)	09N5747	**
6	HDD 40GB 5400RPM	19K1562	*
6	HDD 40GB 7200RPM (all models)	19K1568	*
6	HDD 80GB 7200RPM	24P3665	*
6	HDD 120GB 7200RPM	24P3687	*
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3203	**
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3207	**
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3211	**
7	48X CDROM (Black) (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J)	33P3215	**
7	48X CDROM (White) (XP-OK)	33P3201	**
7	48X CDROM (White) (XP-OK)	33P3205	**
7	48X CDROM (White) (XP-OK)	33P3209	**
7	48X CDROM (White) (XP-OK)	33P3213	**
7	DVD-ROM 16X48X (Black) (models 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	33P3277	**
7	DVD-ROM 16X48X (Black) (models 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	33P3259	**
7	DVD-ROM 16X48X (Black) (models 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	33P3281	**

	Machine Type 8306	FRU#	CRU?
7	DVD-ROM 16X48X (Black) (models 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	33P3297	**
7	DVD-ROM 16X48X (White)	33P3257	**
7	DVD-ROM 16X48X (White)	24P3617	**
7	24X10X40X CD-RW (Black)	24P3627	**
7	24X10X40X CD-RW (Black)	24P3635	**
7	24X10X40X CD-RW (White)	24P3625	**
7	24X10X40X CD-RW (White)	24P3632	**
7	40X12X40X CD-RW (Black)	33P3269	**
7	40X12X40X CD-RW (Black)	33P3273	**
7	40X12X40X CD-RW (White)	33P3267	**
7	40X12X40X CD-RW (White)	33P3271	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3227	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3251	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
8	Shield 5.25 EMC (all models)	19K5548	**
9	FDD 3.5" 1.44MB (wo/Bezel) (models 31U 31F 31S 31P 31G 31T 31C 31B 31V 31H 42U 42F 42S 42P 42G 42T 42C 42B 42V 42H 44U 44F 44S 44P 44G 44T 44C 44B 44V 44H 45U 45F 45S 45P 45G 45T 45C 45B 45V 45H 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H)	75H9550	**
9	FDD 3.5" 1.44MB (wo/Bezel) (models 31A 31J 42A 42J 44A 44J 45A 45J 61J 81J 82J 46J 47J)	19K1543	**
10	3.5 locking handle (all models)	09N5748	**
11	Speaker assembly (all models)	01K4909	Y
11	Speaker assembly (all models)	00N5151	Y
12	185W Power Supply (models 31U 31F 31G 31A 31T 31J 42U 42F 42G 42A 42T 42J 44U 44F 44G 44A 44T 44J 45U 45F 45G 45A 45T 45J 61U 61F 61G 61A 61T 61J 81U 81F 81G 81A 81T 81J 82U 82F 82G 82A 82T 82J 46U 46F 46G 46A 46T 46J 47U 47F 47G 47A 47T 47J)	24P6883	N
12	185W Power Supply (models 31S 31P 31C 31B 31V 31H 42S 42P 42C 42B 42V 42H 44S 44P 44C 44B 44V 44H 45S 45P 45C 45B 45V 45H 61S 61P 61C 61B 61V 61H 81S 81P 81C 81B 81V 81H 82S 82P 82C 82B 82V 82H 46S 46P 46C 46B 46V 46H 47S 47P 47C 47B 47V 47H)	24P6885	N
13	Chassis assembly (all models)	49P4369	*
14	I/O cam bracket (all models)	09N5734	**

	Machine Type 8306	FRU#	CRU?
	MOUSE PS/2 2BUTTON (Black) (all models)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black)	24P0485	*
	Label planar locating (all models)	49P4366	*
	Bezel kit pearl white	49P4370	*
	Bezel kit stealth black (models 31U 31F 31S 31P 31G 31A 31T 31C 31B 31V 31H 31J 42U 42F 42S 42P 42G 42A 42T 42C 42B 42V 42H 42J 44U 44F 44S 44P 44G 44A 44T 44C 44B 44V 44H 44J 45U 45F 45S 45P 45G 45A 45T 45C 45B 45V 45H 45J 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J 81U 81F 81S 81P 81G 81A 81T 81C 81B 81V 81H 81J 82U 82F 82S 82P 82G 82A 82T 82C 82B 82V 82H 82J 46U 46F 46S 46P 46G 46A 46T 46C 46B 46V 46H 46J 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	49P4371	*
	DASD rail soft mount (all models)	19K5331	**
	Cable dual USB 2.0	49P4365	*
	Cable ATA-66 1 drop (all models)	49P4364	*
	Serial port cable (all models)	49P4530	*
	Blue nameplate (all models)	09N5733	*
	RFID antenna velcro (models 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	03K9654	*
	Keylock assembly (models 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	09K9829	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	C2 cable (models 47U 47F 47S 47P 47G 47A 47T 47C 47B 47V 47H 47J)	09K9827	*
	FDD cable long	49P4764	*
	FDD cable (all models)	24P9871	*
	Control panel (all models)	37L5092	*
	Cable - Secondary IDE (ATA66 1 drop) (all models)	37L5098	*
	Misc. Hardware Kit (all models)	09N5764	*

	<b>Machine Type 8306</b>	<b>FRU#</b>	<b>CRU?</b>
	Bottom Foot (4) (all models)	03K9655	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	24P9065	*
	Fan bracket assembly 60mm (all models)	22P3635	*
	Battery 3.0V (all models)	33F8354	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (Models 31U 31G 31A 31T 31H 42U 42G 42A 42T 42H 44U 44G 44A 44T 44H 45U 45G 45A 45T 45H 61U 61G 61A 61T 61H 81U 81G 81A 81T 81H 82U 82G 82A 82T 82H 46U 46G 46A 46T 46H 47U 47G 47A 47T 47H)	71P6485	*
	French (models 31F 31G 42F 42G 44F 44G 45F 45G 61F 61G 81F 81G 82F 82G 46F 46G 47F 47G)	71P6505	*
	German (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6493	*
	Italian (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6513	*
	Spanish (models 31S 31G 42S 42G 44S 44G 45S 45G 61S 61G 81S 81G 82S 82G 46S 46G 47S 47G)	71P6501	*
	Brazilian/Portuguese (models 31P 42P 44P 45P 61P 81P 82P 46P 47P)	71P6525	*
	Danish (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6497	*
	Netherlands (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6521	*
	Arabic Enabled (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6545	*
	Swedish (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6489	*
	Hebrew (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6533	*
	Finnish (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6509	*
	Norwegian (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6517	*
	Polish (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6537	*
	Portuguese (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6529	*
	Russian (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6557	*
	Hungarian (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6553	*
	Czechoslovakian (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6541	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Turkish (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6549	*
	Greek (models 31G 42G 44G 45G 61G 81G 82G 46G 47G)	71P6561	*
	Japanese (models 31J 42J 44J 45J 61J 81J 82J 46J 47J)	71P5958	*
	Simplified Chinese (models 31C 42C 44C 45C 61C 81C 82C 46C 47C)	71P6093	*
	Traditional Chinese (models 31V 42V 44V 45V 61V 81V 82V 46V 47V)	71P6096	*
	Traditional Chinese Hong Kong (models 31B 42B 44B 45B 61B 81B 82B 46B 47B)	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 31U 31G 31A 31C 31H 42U 42G 42A 42C 42H 61U 61G 61A 61C 61H 81U 81G 81A 81C 81H 82U 82G 82A 82C 82H 46U 46G 46A 46C 46H 47U 47G 47A 47C 47H)	32P5100	*
	Arabic (models 31G 42G 61G 81G 82G 46G 47G)	32P5101	*
	Belgian/French (models 31G 42G 61G 81G 82G 46G 47G)	32P5102	*
	Belgian/UK (models 31G 42G 61G 81G 82G 46G 47G)	32P5103	*
	Bulgarian (models 31G 42G 61G 81G 82G 46G 47G)	32P5104	*
	Chinese/US (models 31B 31V 42B 42V 61B 61V 81B 81V 82B 82V 46B 46V 47B 47V)	32P5105	*
	Czech (models 31G 42G 61G 81G 82G 46G 47G)	32P5106	*
	Danic (models 31G 42G 61G 81G 82G 46G 47G)	32P5107	*
	Dutch (models 31G 42G 61G 81G 82G 46G 47G)	32P5108	*
	French (models 31G 42G 61G 81G 82G 46G 47G)	32P5109	*
	French Canadian (models 31F 42F 61F 81F 82F 46F 47F)	32P5110	*
	French Canadian (models 31F 42F 61F 81F 82F 46F 47F)	32P5111	*
	German (models 31G 42G 61G 81G 82G 46G 47G)	32P5112	*
	Greek (models 31G 42G 61G 81G 82G 46G 47G)	32P5113	*
	Hebrew (models 31G 42G 61G 81G 82G 46G 47G)	32P5114	*
	Hungarian (models 31G 42G 61G 81G 82G 46G 47G)	32P5115	*
	Iceland (models 31G 42G 61G 81G 82G 46G 47G)	32P5116	*
	Italian (models 31G 42G 61G 81G 82G 46G 47G)	32P5117	*
	Japanese (models 31J 42J 61J 81J 82J 46J 47J)	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 31S 42S 61S 81S 82S 46S 47S)	32P5120	*
	Norwegian (models 31G 42G 61G 81G 82G 46G 47G)	32P5121	*
	Polish (models 31G 42G 61G 81G 82G 46G 47G)	32P5122	*
	Portuguese (models 31G 42G 61G 81G 82G 46G 47G)	32P5123	*
	Romanian (models 31G 42G 61G 81G 82G 46G 47G)	32P5124	*
	Russian (models 31G 42G 61G 81G 82G 46G 47G)	32P5125	*



	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Russian/Cy (models 31G 42G 61G 81G 82G 46G 47G)	32P5126	*
	Serbian/Cyrillic (models 31G 42G 61G 81G 82G 46G 47G)	32P5127	*
	Slovak (models 31G 42G 61G 81G 82G 46G 47G)	32P5128	*
	Spanish (models 31G 42G 61G 81G 82G 46G 47G)	32P5129	*
	Swedish/Finn (models 31G 42G 61G 81G 82G 46G 47G)	32P5130	*
	Swiss F/G (models 31G 42G 61G 81G 82G 46G 47G)	32P5131	*
	Thailand (models 31T 42T 61T 81T 82T 46T 47T)	32P5132	*
	Turkish (models 31G 42G 61G 81G 82G 46G 47G)	32P5133	*
	Turkish (models 31G 42G 61G 81G 82G 46G 47G)	32P5134	*
	UK English (models 31G 42G 61G 81G 82G 46G 47G)	32P5135	*
	US International (models 31G 42G 61G 81G 82G 46G 47G)	32P5136	*
	Yugoslav/Latin (models 31G 42G 61G 81G 82G 46G 47G)	32P5137	*
	Brazil/Portuguese (models 31P 42P 61P 81P 82P 46P 47P)	32P5138	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 44U 44F 44S 44P 44G 44A 44T 44V 45U 45F 45S 45P 45G 45A 45T 45V 61U 61F 61S 61P 61G 61A 61T 61V 81U 81F 81S 81P 81G 81A 81T 81V 82U 82F 82S 82P 82G 82A 82T 82V 46U 46F 46S 46P 46G 46A 46T 46V 47U 47F 47S 47P 47G 47A 47T 47V)	6952301	*
	Line Cord (models 44A 45A 61A 81A 82A 46A 47A)	13F9939	*
	Line Cord (models 44G 44A 45G 45A 61G 61A 81G 81A 82G 82A 46G 46A 47G 47A)	13F9978	*
	Line Cord (models 44G 44A 45G 45A 61G 61A 81G 81A 82G 82A 46G 46A 46H 47G 47A 47H)	14F0032	*
	Line Cord (models 44G 45G 61G 81G 82G 46G 47G)	13F9996	*
	Line Cord (models 44S 44P 44G 45S 45P 45G 61S 61P 61G 81S 81P 81G 82S 82P 82G 46S 46P 46G 47S 47P 47G)	14F0068	*
	Line Cord	36L8879	*
	Line Cord (models 44J 45J 61J 81J 82J 46J 47J)	1838576	*
	Line Cord	34G0222	*
	Line Cord	05K2876	*
	Line Cord (models 44C 44B 44H 45C 45V 45H 61C 61B 61H 81C 81B 81H 82C 82B 82H 46C 46B 46H 47C 47B 47H)	02K0545	*
	Line Cord (models 44G 45G 61G 81G 82G 46G 47G)	14F0086	*
	Line Cord (models 44G 44A 45G 45A 61G 61A 81G 81A 82G 82A 46G 46A 47G 47A)	14F0014	*
	Line Cord (models 44G 45G 61G 81G 82G 46G 47G)	14F0050	*

	<b>Machine Type 8309</b>	<b>FRU#</b>	<b>CRU?</b>
1	Top cover assembly stealth black (all models)	49P4367	*
1	Top Cover assembly pearl white	49P4368	*
2	Processor P4 1.8 GHz (models 12G 16A 15G 13G 17A 19A 18G 1AG 7BG 7CG)	33P0965	N
2	Processor P4 1.9 GHz (models A2G A5G A3G A4G)	49P1726	N
2	Processor P4 2.0 GHz (models 221G 26A 22G 25G 27A 29A 28G 2BG 2AA)	48P7205	N
2	Processor P4 2.2 GHz	48P7206	N
2	Processor P4 2.26 GHz (models 31G 32G 34G 35A 37A 38A 37G 3AG 39A)	48P6837	N
2	Processor P4 2.4 GHz	33P3743	N
2	Processor P4 2.4 GHz	48P7684	N
2	Processor P4 1.7 GHz (models 51A 52A 53G 54G)	58P9937	N
2	Processor P4 1.8 GHz (models 5AA 5BA 7AG 79G)	58P9965	N
2	Processor P4 1.7 GHz (models B1A B2A)	25P5041	N
2	Processor P4 1.7 GHz (models B1A B2A)	49P0189	N
2	Processor P4 1.8 GHz (models 61A 62G 63A 64A 65A 71G 73G 74G 77G 7BG 7CG)	58P9968	N
2	Processor P4 2.26 GHz (models 31G 32G 34G 35A 37A 38A 37G 3AG 39A)	59P1987	N
2	Processor P4 2.4 GHz	59P1989	N
2	Processor P4 2.4 GHz (models 44G 45A 46A 47A 48A 72G 75G 76G 78G)	59P1991	N
2	Processor P4 1.8 GHz (models 61A 62G 63A 64A 65A 71G 73G 74G 77G 7BG 7CG)	02R4501	N
2	Processor P4 1.8 GHz (models 61A 62G 63A 64A 65A 71G 73G 74G 77G 7BG 7CG)	02R4507	N
2	Processor P4 2.0 GHz (models 21G 26A 22G 25G 27A 29A 28G 2BG 2AA)	59P7160	N
2	Processor P4 2.0 GHz (models 21G 26A 22G 25G 27A 29A 28G 2BG 2AA)	02R4509	N
2	Processor P4 2.2 GHz	59P7161	N
2	Processor P4 2.2 GHz	02R4511	N
2	Processor P4 2.26 GHz (models 31G 32G 34G 35A 37A 38A 37G 3AG 39A)	02R4513	N
2	Processor P4 2.4 GHz	02R4515	N
2	Processor P4 2.4 GHz (models 45A 46A 47A 48A 72G 75G 76G 78G 49A 4AA 4BA 44A)	02R4517	N
2	Processor P4 2.53 GHz (models 7DG 7EG)	48P6839	N
2	Processor P4 2.53 GHz (models 7DG 7EG)	59P1993	N
2	Processor P4 2.53 GHz (models 7DG 7EG)	02R4519	N
2	Processor P4 2.66 GHz	58P9963	N
2	Processor P4 2.8 GHz (models 7FG 7GG)	01R3171	N
2	Processor P4 3.06 GHz	02R5347	N

	Machine Type 8309	FRU#	CRU?
2	Processor Celeron 2.0 GHz (models B3A B4A)	02R5350	N
2	Processor Celeron 2.0 GHz (models B3A B4A)	88P5835	N
2	Processor Celeron 2.1 GHz (models 7HG 7JG)	02R5352	N
2	Processor Celeron 2.2 GHz (models 7KG 7LG)	02R5355	N
2	Processor P4 1.8 GHz (models 61A 62G 63A 64A 65A 71G 73G 74G 77G 7BG 7CG)	73P0569	N
2	Processor P4 2.0 GHz (models 21G 26A 22G 25G 27A 29A 28G 2BG 2AA)	73P0570	N
2	Processor P4 2.2 GHz	73P0571	N
2	Processor P4 3.06 GHz 31G 32G 34G 35A 37A 38A 37G 3AG 39A)	73P0575	N
2	Processor P4 2.4 GHz	73P0572	N
2	Processor P4 2.4 GHz (models 45A 46A 47A 48A 72G 75G 76G 78G 49A 4AA 4BA 44A 44G)	73P0576	N
2	Processor P4 2.53 GHz (models 7DG 7EG 81G 81A)	73P0577	N
2	Processor P4 2.66 GHz (models 91G 7MG 7NG)	74P1615	N
2	Processor P4 2.8 GHz (models 7FG 7GG D1G)	74P1637	N
2	Fan Sink (1.9 - 2.2 GHz) (all models)	32P4004	N
2	Fan sink (3.06 GHz)	01R3330	N
2	Mounting Assembly for P4 Processor (all models)	48P6726	N
3	Memory 128MB NP SDRAM (models 17A 27A 36A 19A 29A 38A 16A 26A 35A B1A B2A 51A 52A 5AA 5BA 61A 63A 64A 65A 2AA 39A 53G 54G 7AG 79G 45A 46A 47A 48A 7BG 7CG)	33L3303	*
3	Memory 256MB NP SDRAM (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G 81G 81A 91G D1G 7MG 7NG)	33L3305	*
3	Memory 512MB NP SDRAM	33L3307	*
4	Planar (Spartan-G 10/100/ 400/533 FSB wo-POV) (all models)	02R4084	N
4	Planar (Spartan-G 10/100/ 400/533 FSB wo-POV) (optional to 02R4084) (all models)	88P8474	N
5	5.25 locking handle (all models)	09N5747	**
6	HDD 40GB 5400RPM (models 53G 54G)	19K1562	**
6	HDD 40GB 7200RPM (models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 1AG 2BG 3AG 51A 52A 5AA 5BA 61A 62G 63A 64A 65A 2AA 45A 46A 47A 48A 39A 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 7BG 7CG 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G B3A B4A 81G 81A 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	19K1568	**
6	HDD 80GB 7200RPM	24P3665	**
6	HDD 120GB 7200RPM	24P3687	**
7	48X CDROM (Black) (all models)	33P3203	**

	Machine Type 8309	FRU#	CRU?
7	48X CDROM (Black) (all models )	33P3207	**
7	48X CDROM (Black) (all models)	33P3211	**
7	48X CDROM (Black) (all models)	33P3215	**
7	48X CDROM (White) (XP-OK)	33P3201	**
7	48X CDROM (White) (XP-OK)	33P3205	**
7	48X CDROM (White) (XP-OK)	33P3209	**
7	48X CDROM (White) (XP-OK)	33P3213	**
7	DVD-ROM 16X48X (Black)	24P3619	**
7	DVD-ROM 16X48X (Black)	33P3257	**
7	DVD-ROM 16X48X (White)	24P3617	**
7	DVD-ROM 16X48X (White)	33P3259	**
7	24X10X40X CD-RW (Black)	24P3627	**
7	24X10X40X CD-RW (Black)	24P3635	**
7	24X10X40X CD-RW (White)	24P3625	**
7	24X10X40X CD-RW (White)	24P3632	**
7	40X12X40X CD-RW (Black)	33P3269	**
7	40X12X40X CD-RW (Black)	33P3273	**
7	40X12X40X CD-RW (White)	33P3267	**
7	40X12X40X CD-RW (White)	33P3271	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3227	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3251	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
8	Shield 5.25 EMC (all models)	19K5548	*
9	FDD 3.5" 1.44MB (wo/Bezel) (all models)	75H9550	**
9	FDD 3.5" 1.44MB (wo/Bezel)	19K1543	**
10	3.5 locking handle (all models)	09N5748	**
11	Speaker assembly (all models)	01K4909	*
11	Speaker assembly (all models)	00N5151	*
12	185W Power Supply (all models)	24P6883	N
12	185W Power Supply	24P6885	N
13	Chassis assembly (all models)	49P4369	*
14	I/O cam bracket (all models)	09N5734	**
	MOUSE PS/2 2BUTTON (Black) (all models)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black)	24P0485	*
	DASD rail soft mount (all models)	19K5331	**
	Label planar locating (all models)	49P4366	*
	Bezel kit pearl white	49P4370	*
	Bezel kit stealth black (all models)	49P4371	*
	Cable dual USB 2.0	49P4365	*

	<b>Machine Type 8309</b>	<b>FRU#</b>	<b>CRU?</b>
	Cable ATA-66 1 drop (all models)	49P4364	*
	Serial port cable (all models)	49P4530	*
	Blue nameplate (all models)	09N5733	*
	RFID antenna velcro	03K9654	*
	Keylock assembly (SQUALL)	09K9829	*
	C2 cable (SQUALL) (all models)	09K9827	*
	FDD cable long	49P4764	*
	FDD cable (all models)	24P9871	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Control panel (all models)	37L5092	*
	Cable - Secondary IDE (ATA66 1 drop) (all models)	37L5098	*
	Cable CD-ROM audio (all models)	75H9219	*
	Misc. Hardware Kit (all models)	09N5764	*
	Bottom Foot (4) (all models)	03K9655	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	24P9065	*
	Fan bracket assembly 60mm (all models)	22P3635	*
	Battery 3.0V (all models)	33F8354	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	US (Models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6405	*
	FR (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6425	*
	GR (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6413	*
	IT (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6433	*
	BR	71P6445	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	SP (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6421	*
	DK (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6417	*
	NL (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6441	*
	AE (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6465	*
	SV (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6409	*
	HE (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6453	*
	FI (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6429	*
	NO (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6437	*
	PL (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6457	*
	PO (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6449	*
	RU (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6477	*
	HU (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6473	*
	CZ (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6461	*
	TR (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6469	*
	GK (models 1AG 2BG 3AG 77G 78G 79G 54G 7CG 7EG 7GG 7JG 7LG 7MG)	71P6481	*
	Japanese	71P5962	*
	Simplified Chinese	62P8983	*
	Taiwan - TC	62P8984	*
	Hong Kong - TC	62P8985	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (Models 51A 5AA 61A 2AA 39A 46A 49A B4A)	71P6565	*
	French	71P6585	*
	German	71P6573	*
	Italian	71P6593	*
	Spanish	71P6581	*
	Brazilian/Portuguese	71P6605	*
	Danish	71P6577	*
	Netherlands	71P6601	*
	Arabic Enabled	71P6625	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	Swedish	71P6569	*
	Hebrew	71P6613	*
	Finnish	71P6589	*
	Norwegian	71P6597	*
	Polish	71P6617	*
	Portuguese	71P6609	*
	Russian	71P6637	*
	Hungarian	71P6633	*
	Czechoslovakian	71P6621	*
	Turkish	71P6629	*
	Greek	71P6641	*
	Japanese	71P6066	*
	Simplified Chinese	71P6084	*
	Traditional Chinese	71P6087	*
	Traditional Chinese Hong Kong	71P6090	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6485	*
	French (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6505	*
	German (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6493	*
	Italian (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6513	*
	Spanish (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6501	*
	Brazilian/Portuguese	71P6525	*

	Recovery CDs Win XP Pro	FRU #	CRU?
	Danish (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6497	*
	Netherlands (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG )	71P6521	*
	Arabic Enabled (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6545	*
	Swedish (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6489	*
	Hebrew (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6533	*
	Finnish (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6509	*
	Norwegian (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6517	*
	Polish (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6537	*
	Portuguese (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6529	*



	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Russian (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6557	*
	Hungarian (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6553	*
	Czechoslovakian (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6541	*
	Turkish (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6549	*
	Greek (Models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 52A 5BA 62G 63A 64A 65A 71G 72G 73G 74G 75G 76G 7AG 53G 45A 46A 47A 48A 7BG 7DG 7FG 4AA 4BA 44A B3A 81G 81A 91G D1G 7HG 7KG 7NG)	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 12G 16A A2G 21G 26A 31G 35A 15G A5G 22G 32G 13G A3G 25G 34G 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 1AG 2BG 3AG 51A 52A 5AA 5BA 61A 63A 64A 65A 62G 2AA 45A 46A 47A 48A 39A 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G B3A B4A 81G 81A 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5100	*
	Arabic (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5101	*
	Belgian/French (models 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5102	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Belgian/UK (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5103	*
	Bulgarian (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5104	*
	Chinese/US	32P5105	*
	Czech (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5106	*
	Danish (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5107	*
	Dutch (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5108	*
	French (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5109	*
	French Canadian	32P5110	*
	French Canadian	32P5111	*
	German (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5112	*
	Greek (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5113	*
	Hebrew (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5114	*
	Hungarian (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5115	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Iceland (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5116	*
	Italian (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5117	*
	Japanese	32P5118	*
	Korean	32P5119	*
	LA Spanish	32P5120	*
	Norwegian (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5121	*
	Polish (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5122	*
	Portuguese (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5123	*
	Romanian (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5124	*
	Russian (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5125	*
	Russian/Cy (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5126	*
	Serbian/Cyrillic (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5127	*
	Slovak (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5128	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Spanish (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5129	*
	Swedish/Finn (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5130	*
	Swiss F/G (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5131	*
	Thailand	32P5132	*
	Turkish (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5133	*
	Turkish (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5134	*
	UK English (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5135	*
	US International (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5136	*
	Yugoslav/Latin (models 12G A2G 21G 31G 15G A5G 22G 32G 13G A3G 25G 34G 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	32P5137	*
	Brazil/Portuguese	32P5138	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 1AG 2BG 3AG 51A 52A 5AA 5BA 61A 62G 63A 64A 65A 2AA 39A 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 45A 46A 47A 48A 7BG 7CG 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G B3A B4A 81G 81A 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	6952301	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 17A 27A 36A 19A 29A 38A B1A B2A 51A 52A 5AA 5BA 61A 2AA 39A 63A 64A 65A 45A 46A 47A 48A 49A 4AA 4BA 44A B3A B4A 81A)	13F9939	*
	Line Cord (models 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 1AG 2BG 3AG 51A 52A 5AA 5BA 61A 62G 63A 64A 65A 2AA 39A 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 45A 46A 47A 48A 7BG 7CG 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G B3A B4A 81G 81A 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	13F9978	*
	Line Cord (models 17A 27A 36A 19A 29A 38A 18G A4G 28G 37G B1A B2A 1AG 2BG 3AG 51A 52A 5AA 5BA 61A 62G 63A 64A 65A 2AA 39A 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 45A 46A 47A 48A 7BG 7CG 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G B3A B4A 81G 81A 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	14F0032	*
	Line Cord (models 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	13F9996	*
	Line Cord (models 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	14F0068	*
	Line Cord	36L8879	*
	Line Cord	1838576	*
	Line Cord	34G0222	*
	Line Cord	05K2876	*
	Line Cord	02K0545	*
	Line Cord (models 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	14F0086	*
	Line Cord (models 18G A4G 28G 37G 1AG 2BG 3AG 51A 52A 5AA 5BA 61A 62G 63A 64A 2AA 39A 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 45A 46A 47A 48A 7BG 7CG 7DG 7EG 7FG 7GG 49A 4AA 4BA 44A 44G B3A B4A 81G 81A 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	14F0014	*
	Line Cord (models 18G A4G 28G 37G 1AG 2BG 3AG 62G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 79G 53G 54G 7BG 7CG 7DG 7EG 7FG 7GG 44G 81G 91G D1G 7HG 7JG 7KG 7LG 7MG 7NG)	14F0050	*

	<b>Machine Type 8313</b>	<b>FRU#</b>	<b>CRU?</b>
1	Top cover assembly stealth black (all models)	49P4367	*
1	Top Cover assembly pearl white	49P4368	*
2	Processor Celeron 1.7 GHz (models 51G 52G 54G 52U 52S 52P 52D 52Y 53U 53S 53P 53D 53Y 55U 55F 55S 55P 55D 55Y CAU)	58P9937	N

	<b>Machine Type 8313</b>	<b>FRU#</b>	<b>CRU?</b>
2	Processor P4 1.8 GHz (models 11G 12G)	33P0965	N
2	Processor P4 1.9 GHz (models A1G A2G)	49P1726	N
2	Processor P4 2.0 GHz (models 23U 23F.23G 24G)	48P7205	N
2	Processor P4 2.2 GHz (models 33G)	48P7206	N
2	Processor P4 2.26 GHz	48P6837	N
2	Processor P4 2.4 GHz (models 43U 43F)	33P3743	N
2	Processor P4 2.4 GHz (model 44G)	48P7684	N
2	Processor Celeron 1.8 GHz (models 5AG 5BU 5BS 5BP 5BD 5BY 5CU 5CS 5CP 5CD 5CY CBU 5DU 5DF)	58P9965	N
2	Processor P4 1.8 GHz (models 61G 62U 62F)	58P9968	N
2	Processor P4 2.26 GHz	59P1987	N
2	Processor P4 2.4 GHz (models 43U 43F)	59P1989	N
2	Processor P4 2.4 GHz (model 44G)	59P1991	N
2	Processor P4 2.5 GHz (models 81U 81F)	48P6840	N
2	Processor P4 2.6 GHz (models 91U 91F)	58P9961	N
2	Processor P4 2.0 GHz (models B1U B1F B2U B2S B2D B2Y B3U B3S CCU)	02R5350	N
2	Processor P4 1.8 GHz (models 61G 62U 62F)	02R4501	N
2	Processor P4 1.8 GHz (models 61G 62U 62F)	02R4507	N
2	Processor P4 2.0 GHz (models 23U 23F.23G 24G)	59P7160	N
2	Processor P4 2.0GHz (models 23U 23F.23G 24G)	02R4509	N
2	Processor P4 2.2 GHz (model 33G)	59P7161	N
2	Processor P4 2.2 GHz (model 33G)	02R4511	N
2	Processor P4 2.26 GHz	02R4513	N
2	Processor P4 2.4 GHz (models 43U 43F)	02R4515	N
2	Processor P4 2.4 GHz (model 44G)	02R4517	N
2	Processor Celeron 2.0 GHz (models B1U B1F B2U B2S B2D B2Y B3U B3S CCU)	88P5835	N
2	Processor Celeron 2.1 GHz (models B4U B4S B4P B4D B4Y B5U B5S B5P)	02R5352	N
2	Processor Celeron 2.2 GHz (models B6U B6S B6P B6D B6Y B7U B7S B7P B8U B8F)	02R5355	N
2	Processor P4 1.8 GHz (models 61G 62U 62F)	73P0569	N
2	Processor P4 2.4 GHz (models 23U 23F 23G 24G)	73P0570	N
2	Processor P4 2.2 GHz (model 33G)	73P0571	N
2	Processor P4 2.26 GHz	73P0575	N
2	Processor P4 2.4 GHz (models 43U 43F)	73P0572	N
2	Processor P4 2.4 GHz (model 44G)	73P0576	N
2	Fan Sink (1.9 - 2.2 GHz) (all models)	32P4004	N
2	Fan Sink (3.06 GHz)	01R3330	N
2	Mounting Assembly for P4 Processor (all models)	48P6726	N

	Machine Type 8313	FRU#	CRU?
3	Memory 128MB NP SDRAM (models 11G A1G 12G A2G 51G 52G 54G 52U 52S 52P 52D 52Y 53U 53S 53P 53D 53Y 5AG 5BU 5BS 5BP 5BD 5BY 5CU 5CS 5CP 5CD 5CY 61G CAU CBU B2U B2S B2D B2Y B3U B3S CCU B4U B4S B4P B4D B4Y B5U B5S B5P B6U B6S B6P B6D B6Y B7U B7S B7P)	33L3303	*
3	Memory 256MB NP SDRAM (models 23U 23F 23G 43U 43F 24G 55U 55F 55S 55P 55D 55Y 5DU 5DF 62U 62F 81U 81F 91U 91F B1U B1F B8U B8F 44G)	33L3305	*
3	Memory 512MB NP SDRAM	33L3307	*
4	Planar (Spartan 10/100 400 FSB wo-POV) (models B4U B4S B4P B4D B4Y B5U B5S B5P B6U B6S B6P B6D B6Y B7U B7S B7P B8U B8F)	02R4084	N
4	Planar (Spartan-L 10/100 wo-AGP wo-POV) (models 11G A1G 23U 23F 23G 43U 43F 12G A2G 24G 51G 52G 54G 33G 52U 52S 52P 52D 52Y 53U 53S 53P 53D 53Y 55U 55F 55S 55P 55D 55Y 5AG 5BU 5BS 5BP 5BD 5BY 5CU 5CS 5CP 5CD 5CY 5DU 5DF 61G 62U 62F 81U 81F 91U 91F CAU CBU B1U B1F B2U B2S B2D B2Y B3U B3S CCU)	02R4087	N
4	Planar (Spartan-GL/GV 10/100 400/533 FSB AGP wo-POV) (model 44G)	02R4637	N
5	5.25 locking handle (all models)	09N5747	**
6	HDD 40GB 5400RPM (models 52U 52S 52P 52D 52Y 53U 53S 53P 53D 53Y 55U 55F 55S 55P 55D 55Y 5BU 5BS 5BP 5BD 5BY 5CU 5CS 5CP 5CD 5CY 5DU 5DF B1U B1F B2U B2S B2D B2Y B3U B3S B4U B4S B4P B4D B4Y B5U B5S B5P B6U B6S B6P B6D B6Y B7U B7S B7P)	19K1562	**
6	HDD 40GB 7200RPM (models 11G A1G 23U 23F 23G 43U 43F 12G A2G 24G 51G 52G 54G 33G 5AG 61G 62U 62F 81U 81F 91U 91F B8U B8F 44G)	19K1568	**
6	HDD 80GB 7200RPM	24P3665	**
6	HDD 120GB 7200RPM	24P3687	**
7	48X CDROM (Black) (all models) 91U 91F B1U B1F B2U B2S B2D B2Y B3U B3S)	33P3203	**
7	48X CDROM (Black) (all models)	33P3207	**
7	48X CDROM (Black) (all models)	33P3211	**
7	48X CDROM (Black) (all models)	33P3215	**
7	48X CDROM (White) (XP-OK)	33P3201	**
7	48X CDROM (White) (XP-OK)	33P3205	**
7	48X CDROM (White) (XP-OK)	33P3209	**
7	48X CDROM (White) (XP-OK)	33P3213	**
7	DVD-ROM 16X48X (Black)	24P3619	**
7	DVD-ROM 16X48X (Black)	33P3257	**
7	DVD-ROM 16X48X (White)	24P3617	**
7	DVD-ROM 16X48X (White)	33P3259	**
7	24X10X40X CD-RW (Black)	24P3627	**

	Machine Type 8313	FRU#	CRU?
7	24X10X40X CD-RW (Black)	24P3635	**
7	24X10X40X CD-RW (White)	24P3625	**
7	24X10X40X CD-RW (White)	24P3632	**
7	40X12X40X CD-RW (Black)	33P3269	**
7	40X12X40X CD-RW (Black)	33P3273	**
7	40X12X40X CD-RW (White)	33P3267	**
7	40X12X40X CD-RW (White)	33P3271	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3227	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black)	33P3251	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
7	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
8	Shield 5.25 EMC (all models)	19K5548	*
9	FDD 3.5" 1.44MB (wo/Bezel) (all models)	75H9550	**
9	FDD 3.5" 1.44MB (wo/Bezel)	19K1543	**
10	3.5 locking handle (all models)	09N5748	**
11	Speaker assembly (all models)	01K4909	*
11	Speaker assembly (all models)	00N5151	*
12	185W Power Supply (models 11G A1G 23U 23F 23G 43U 43F 12G A2G 24G 51G 52G 54G 33G 52U 53U 55U 55F 5AG 5BU 5CU 5DU 5DF 61G 62U 62F 81U 81F 91U 91F CAU CBU B1U B1F B2U B3U CCU B4U B5U B6U B7U B8U B8F 44G)	24P6883	N
12	185W Power Supply (models 52S 52P 52D 52Y 53S 53P 53D 53Y 55S 55P 55D 55Y 5BS 5BP 5BD 5BY 5CS 5CP 5CD 5CY B2S B2D B2Y B3S B4S B4P B4D B4Y B5S B5P B6S B6P B6D B6Y B7S B7P)	24P6885	N
13	Chassis assembly (all models)	49P4369	*
14	I/O cam bracket (all models)	09N5734	*
	MOUSE PS/2 2BUTTON (Black) (all models)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black)	24P0485	*
	DASD rail soft mount (all models)	19K5331	**
	Video ATI Radeon VE 64MB	49P4685	*
	Video nVidia GeForce4 MX 64MB x/TV Out	49P4692	*
	Video nVidia GeForce4 MX 128MB w/VGA TV DVI	58P9865	*
	56k V.90 Modem (US) (models 52U 5BU B1U B1F B2U)	19K2965	*
	56k V.90 Modem (WT) (models 52S 52P 52D 52Y 5BS 5BP 5BD 5BY B2S B2D B2Y)	19K2963	*
	Soft Modem V.92/V.44 (models 52U 5BU B1U B1F B2U 52S 52P 52D 52Y 5BS 5BP 5BD 5BY B2S B2D B2Y B4U B4S B4P B4D B4Y B6U B6S B6P B6D B6Y)	22P7943	*
	Speakers Infinity Active T1 (Black) (models 52U 52S 52P 52D 52Y 5BU 5BS 5BP 5BD 5BY B2U B2S B2D B2Y B4U B4S B4P B4D B4Y B6U B6S B6P B6D B6Y B8U B8F)	25P4726	*



	<b>Machine Type 8313</b>	<b>FRU#</b>	<b>CRU?</b>
	Speaker Power brick - US CE CF LA Taiwan (models 52U 52S 52D 52Y 5BU 5BS 5BP 5BD 5BY B2U B2S B2D B2Y B4U B4S B4D B4Y B6U B6S B6D B6Y B8U B8F)	10K2587	*
	Speaker Power brick - Brazil (models 52P B4P B6P)	25P5706	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Label planar locating (all models)	49P4366	*
	Bezel kit pearl white	49P4370	*
	Bezel kit stealth black (all models)	49P4371	*
	Cable dual USB 2.0	49P4365	*
	Cable ATA-66 1 drop (all models)	49P4364	*
	Serial port cable (all models)	49P4530	*
	Blue nameplate (all models)	09N5733	*
	RFID antenna velcro (all models)	03K9654	*
	Keylock assembly (SQUALL) (all models)	09K9829	*
	C2 cable (SQUALL) (all models)	09K9827	*
	FDD cable long	49P4764	*
	FDD cable (all models)	24P9871	*
	Control panel (all models)	37L5092	*
	Cable - Secondary IDE (ATA66 1 drop) (all models)	37L5098	*
	Cable CD-ROM audio (all models)	75H9219	*
	Misc. Hardware Kit (all models)	09N5764	*
	Bottom Foot (4) (all models)	03K9655	*
	Planar Shield (all models)	49P0179	*
	Serial Cable (all models)	24P9065	*
	Fan bracket assembly 60mm (all models)	22P3635	*
	Battery 3.0V (all models)	33F8354	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	US (model 54G)	71P6405	*
	FR (model 54G)	71P6425	*
	GR (model 54G)	71P6413	*
	IT (model 54G)	71P6433	*
	BR	71P6445	*
	SP (model 54G)	71P6421	*
	DK (model 54G)	71P6417	*
	NL (model 54G)	71P6441	*
	AE (model 54G)	71P6465	*
	SV (model 54G)	71P6409	*
	HE (model 54G)	71P6453	*
	FI (model 54G)	71P6429	*
	NO (model 54G)	71P6437	*
	PL (model 54G)	71P6457	*
	PO (model 54G)	71P6449	*
	RU (model 54G)	71P6477	*
	HU (model 54G)	71P6473	*
	CZ (model 54G)	71P6461	*
	TR (model 54G)	71P6469	*
	GK (model 54G)	71P6481	*
	Japanese	71P5962	*
	Simplified Chinese	62P8983	*
	Taiwan - TC	62P8984	*
	Hong Kong - TC	62P8985	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 52U 5BU B2U)	71P6565	*
	French	71P6585	*
	German	71P6573	*
	Italian	71P6593	*
	Spanish (models 52S 52D 52Y 5BS 5BD 5BY B2S B2D B2Y)	71P6581	*
	Brazilian/Portuguese (models 52P 5BP)	71P6605	*
	Danish	71P6577	*
	Netherlands	71P6601	*
	Arabic Enabled	71P6625	*
	Swedish	71P6569	*
	Hebrew	71P6613	*
	Finnish	71P6589	*
	Norwegian	71P6597	*
	Polish	71P6617	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	Portuguese	71P6609	*
	Russian	71P6637	*
	Hungarian	71P6633	*
	Czechoslovakian	71P6621	*
	Turkish	71P6629	*
	Greek	71P6641	*
	Japanese	71P6066	*
	Simplified Chinese	71P6084	*
	Traditional Chinese	71P6087	*
	Traditional Chinese Hong Kong	71P6090	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (Models 33G 11G A1G 23U 23G 33U 43U 12G A2G 24G 51G 52G 53U 55U 5AG 5CU 5DU 61G 62U 81U 91U B1U B3U)	71P6485	*
	French (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 55F 5AG 5DF 61G 62F 81F 91F B1F)	71P6505	*
	German (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6493	*
	Italian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6513	*
	Spanish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 53S 53D 53Y 55S 55D 55Y 5AG 5CS 5CD 5CY 61G B3S)	71P6501	*
	Brazilian/Portuguese (model 55P)	71P6525	*
	Danish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6497	*
	Netherlands (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6521	*
	Arabic Enabled (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6545	*
	Swedish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6489	*
	Hebrew (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6533	*
	Finnish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6509	*
	Norwegian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6517	*
	Polish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6537	*
	Portuguese (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6529	*
	Russian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6557	*

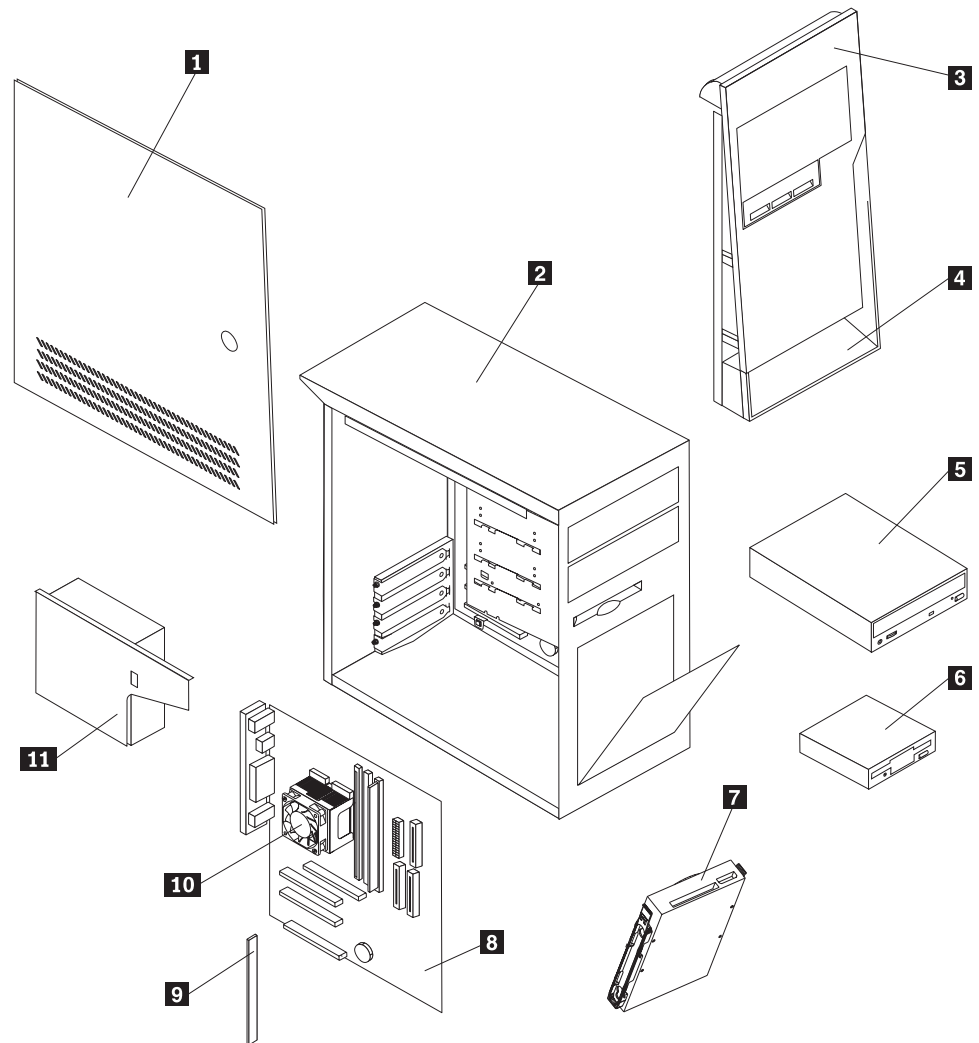
	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Hungarian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6553	*
	Czechoslovakian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6541	*
	Turkish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6549	*
	Greek (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 5AG 61G)	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 11G A1G 23U 23G 43U 12G A2G 24G 51G 52G 54G 33G 52U 53U 55U 5AG 5BU 5CU 5DU 61G 62U 81U 91U CAU CBU B1U B2U B3U CCU B4U B5U B6U B7U B8U 44G)	32P5100	*
	Arabic (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5101	*
	Belgian/French (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5102	*
	Belgian/UK (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5103	*
	Bulgarian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5104	*
	Chinese/US (model 44G)	32P5105	*
	Czech (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5106	*
	Danish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5107	*
	Dutch (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5108	*
	French (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5109	*
	French Canadian (models 23F 43F 55F 5DF 62F 81F 91F B1F B8F)	32P5110	*
	French Canadian (models 23F 43F 55F 5DF 62F 81F 91F B1F B8F)	32P5111	*
	German (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5112	*
	Greek (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5113	*
	Hebrew (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5114	*
	Hungarian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5115	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Iceland (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5116	*
	Italian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5117	*
	Japanese	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 52D 52Y 53D 53Y 55S 55D 55Y 5BD 5BY 5CD 5CY 52S 53S 5BS 5CS 55S B2S B2D B2Y B3S B4S B4D B4Y B5S B6S B6D B6Y B7S)	32P5120	*
	Norwegian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5121	*
	Polish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5122	*
	Portuguese (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5123	*
	Romanian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5124	*
	Russian (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5125	*
	Russian/Cy (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5126	*
	Serbian/Cyrillic (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5127	*
	Slovak (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5128	*
	Spanish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5129	*
	Swedish/Finn (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5130	*
	Swiss F/G (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5131	*
	Thailand	32P5132	*
	Turkish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5133	*
	Turkish (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5134	*
	UK English (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5135	*
	US International (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5136	*
	Yugoslav/Latin (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	32P5137	*
	Brazil/Portuguese (models 52P 53P 55P 5BP 5CP B4P B5P B6P B7P)	32P5138	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 33G 11G A1G 23U 23F 23G 43U 43F 12G A2G 24G 51G 52G 54G 52U 52S 52P 52D 53U 53S 53P 53D 55U 55F 55S 55P 55D 5AG 5BU 5BS 5BP 5BD 5CU 5CS 5CP 5CD 5DU 5DF 61G 62U 62F 81U 81F 91U 91F CAU CBU B1U B1F B2U B2S B2D B3U B3S CCU B4U B4S B4P B4D B5U B5S B5P B6U B6S B6P B6D B7U B7S B7P B8U B8F 44G)	6952301	*
	Line Cord	13F9939	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	13F9978	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	14F0032	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	13F9996	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 52S 52P 52D 52Y 53S 53P 53D 53Y 55S 55P 55D 55Y 5AG 5BS 5BP 5BD 5BY 5CS 5CP 5CD 5CY 61G B2S B2D B2Y B3S B4S B4P B4D B4Y B5S B5P B6S B6P B6D B6Y B7S B7P 44G)	14F0068	*
	Line Cord (models 52Y 53Y 55Y 5BY 5CY B2Y B4Y B6Y)	36L8879	*
	Line Cord	1838576	*
	Line Cord	34G0222	*
	Line Cord	05K2876	*
	Line Cord	02K0545	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	14F0086	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	14F0014	*
	Line Cord (models 33G 11G A1G 23G 12G A2G 24G 51G 52G 54G 5AG 61G 44G)	14F0050	*

This section lists the replaceable FRUs for Machine Types 8307 8308 8310 8311 8314 and 8315.



Item#	Machine Type 8307	FRU#	CRU?
1	Side cover assembly black (all models)	25P0066	*
2	"L" cover assembly black (all models)	25P0065	*
3	Front bezel assembly (black) (all models)	25P0067	*
4	Trim bezel/label kit (black) (all models)	49P1900	*
4	Trim bezel/label kit (white) (all models)	49P1901	*
5	48X CDROM (Black) (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 62F 63U 63F 63S 63P 71G 73G 74G 75G 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 45A 45T 46U D1U D1S D1P D1G E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 49U 49S 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	33P3203	**

Item#	Machine Type 8307	FRU#	CRU?
5	48X CDROM (Black) (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 62F 63U 63F 63S 63P 71G 73G 74G 75G 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 45A 45T 46U D1U D1S D1P D1G E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 49U 49S 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	33P3207	**
5	48X CDROM (Black) (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 62F 63U 63F 63S 63P 71G 73G 74G 75G 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 45A 45T 46U D1U D1S D1P D1G E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 49U 49S 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	33P3211	**
5	48X CDROM (Black) (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 62F 63U 63F 63S 63P 71G 73G 74G 75G 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 45A 45T 46U D1U D1S D1P D1G E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 49U 49S 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	33P3215	**
5	DVD-ROM 16X48X (Black) (models 43U CTO 62U 72G 82U D2U D2S D2P 64U 64F 85G D4G E2G 7AG)	33P3277	**
5	DVD-ROM 16X48X (Black) (models 43U CTO 62U 72G 82U D2U D2S D2P 64U 64F 85G D4G E2G 7AG)	33P3259	**
5	DVD-ROM 16X48X (Black) (models 43U CTO 62U 72G 82U D2U D2S D2P 64U 64F 85G D4G E2G 7AG)	33P3281	**
5	DVD-ROM 16X48X (Black) (models 43U CTO 62U 72G 82U D2U D2S D2P 64U 64F 85G D4G E2G 7AG)	33P3297	**
5	CD-RW 24X10X40X (Black) (model CTO)	24P3627	**
5	CD-RW 24X10X40X (Black) (model CTO)	24P3635	**
5	CD/RW 48X/32X/48X Black (Universal) (model 55U 55S 55P CTO 48U 48S)	26K5376	**
5	CD-RW 40X12X40X (Black) (model CTO)	33P3269	**
5	CD-RW 40X12X40X (Black) (model CTO)	33P3273	**
5	48X24X48X CD-RW (Black) (models 55U 55S 55P CTO 48U 48S)	33P3289	**
5	48X24X48X CD-RW (Black) (models 55U 55S 55P CTO 48U 48S)	33P3293	**
5	32X10X40X16X DVD-ROM/CD-RW Combo Drive (Black) (models CTO 47U 47S 47P 84U)	33P3251	**



Item#	Machine Type 8307	FRU#	CRU?
6	FDD 3.5" 1.44MB (wo/Bezel) (models 11C 11B 11V 21U 22U 22T 22C 22V 23C 25U 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G CDU CEU CGU 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 55U 55S 55P 45A 45T 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G CHU CJU 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 7AG 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	75H9550	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 11C 11B 11V 21U 22U 22T 22C 22V 23C 25U 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G CDU CEU CGU 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 55U 55S 55P 45A 45T 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G CHU CJU 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 7AG 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	33P3345	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 22A CTO)	19K1543	**
7	HDD 40GB 5400RPM (model CTO A2U A2S A2P)	19K1562	**
7	HDD 40GB 7200RPM (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G 54C 54B 54V 53S 53P 53U 83U 83F 55U 55S 55P 45A 45T 46U D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	19K1568	**
7	HDD 80GB 7200RPM (models 43U CTO 47U 47S 47P)	24P3665	**
7	HDD 120GB 7200RPM (model CTO)	24P3687	**
8	Planar (Spartan 10/100 POV) (models 32U 32F 32G 32V 53U 53F 63U 63F 63S 63P 53S 53P 53U 83U 83F D3U D3F D3S D3P 64U 64F 7AG)	02R4083	N
8	Planar (Spartan 10/100 400/533FSB wo-POV) (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 43U 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 62U 82U 71G 72G 73G 74G 75G CDU CEU CGU 54C 54B 54V 55U 55S 55P 45A 45T 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P 76G 77G 79G CHU CJU 61C 81C 78G 21F 21G 61G 81G E1G 48U 48S 49U 49S 84U 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	02R4084	N
8	Planar (Spartan-G 10/100/1000 POV) (models 85G D4G E2G)	02R4085	N

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8	Planar (Spartan-G 10/100/1000 wo-POV) (model 46U)	02R4086	N
8	Planar (Spartan-L 10/100 400 FSB AGP wo-POV) (models A2U A2S A2P A3U A4U A4S A5U A5S)	02R4087	N
9	Memory 128MB NP SDRAM (models 11C 11B 11V 22U 22A 22T 22C 22V 25U CTO CAU CBU CCU 52U 52S 52P CDU CEU CGU 54C 54B 54V 45A 45T CHU CJU)	33L3303	*
9	Memory 256MB NP SDRAM (models 21U 23C 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G 53S 53P 53U 83U 83F A2U A2S A2P 55U 55S 55P 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	33L3305	*
9	Memory 512MB NP SDRAM (model CTO)	33L3307	*
10	Processor P4 1.8 GHz (models 11C 11B 11V CTO 12G 13G 15G)	33P0965	N
10	Processor P4 1.9 GHz (models CTO A1G)	49P1726	N
10	Processor P4 2.0 GHz (models 21U 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G)	48P7205	N
10	Processor P4 2.2 GHz (model CTO)	48P7206	N
10	Processor P4 2.26 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	48P6837	N
10	Processor P4 2.4 GHz (model CTO)	33P3743	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G 45A 45T 46U 47U 47S 47P)	48P7684	N
10	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P)	58P9968	N
10	Processor P4 2.27 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	59P1987	N
10	Processor P4 2.4 GHz (model CTO)	59P1989	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G 45A 45T 46U 47U 47S 47P)	59P1991	N
10	Processor P4 2.53 GHz (models 62U 63U 63F 63S 63P CEU 76G 78G 61C)	48P6839	N
10	Processor P4 2.53 GHz (models 62U 63U 63F 63S 63P CEU 76G 78G 61C)	59P1993	N
10	Processor P4 2.66 GHz (models 82U CGU 83U 83F 81C)	58P9963	N
10	Processor Celeron 1.7 GHz (models A2U A2S A2P)	58P9937	N
10	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P)	02R4501	N
10	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P)	02R4507	N

Item#	Machine Type 8307	FRU#	CRU?
10	Processor P4 2.0 GHz (models 21U 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G)	59P7160	N
10	Processor P4 2.0 GHz (models 21U 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G)	02R4509	N
10	Processor P4 2.2 GHz (model CTO)	59P7161	N
10	Processor P4 2.2 GHz (model CTO)	02R4511	N
10	Processor P4 2.26 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	02R4513	N
10	Processor P4 2.4 GHz (model CTO)	02R4515	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G 45A 45T 46U 47U 47S 47P)	02R4517	N
10	Processor P4 2.53 GHz (models 62U 63U 63F 63S 63P CEU 76G 78G 61C)	02R4519	N
10	Processor P4 2.8 GHz (models D1U D1S D1P D1G D2U D2S D2P D3U D3F D3S D3P 77G 79G CHU)	01R3171	N
10	Processor P4 3.06 GHz (models E1U E1F E1S E1P CJU)	02R5347	N
10	Processor Celeron 2.0 GHz (models A4U A4S)	02R5350	N
10	Processor Celeron 2.0 GHz (models A4U A4S)	88P5835	N
10	Processor P4 2.1GHz (models A5U A5S)	02R5352	N
10	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P)	73P0569	N
10	Processor P4 2.0 GHz (models 21U 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G 21F 21G)	73P0570	N
10	Processor P4 2.26 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	73P0575	N
10	Processor P4 2.4 GHz (model CTO)	73P0572	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G 45A 45T 46U 47U 47S 47P 48U 48S 49U 49S)	73P0576	N
10	Processor P4 2.53 GHz (models 62U 63U 63F 63S 63P CEU 76G 78G 61C 61G 64U 64F 7AG)	73P0577	N
10	Processor P4 2.66 GHz (models 82U CGU 83U 83F 81C 81G 84U 85G 81U 81F 81S 81P)	74P1615	N
10	Processor P4 2.8 GHz (models D1U D1S D1P D1G D2U D2S D2P D3U D3F D3S D3P 77G 79G CHU D4G)	74P1637	N
10	Fan Sink (1.9 - 2.2 GHz) (models 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO CAU CBU CCU A1G 27G 34G 41C 62U 63U 63F 63S 63P 82U 72G 73G 75G CEU CGU 83U 83F 45A 45T 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P D3U D3F D3S D3P 76G 77G 79G CHU 61C 81C 78G A2U A2S A2P 11C 11B 11V CTO 12G 13G 15G 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P 21F 21G 61G 81G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G 7AG 4AG 41U 41F 41G 81U 81F 81S 81P)	32P4004	N
10	Fan sink (3.06 GHz) (models E1U E1F E1S E1P CJU E1G E2G 7BG 7CG)	01R3330	N

Item#	Machine Type 8307	FRU#	CRU?
10	P4 mounting assembly (all models)	48P6726	*
11	185W Power Supply (models 21U 22U 22A 22T 25U 31U 31F 31G 43U 32U 32F 32G 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 51U 51F 51G 52U 53U 53F 62U 63U 63F 82U 71G 72G 73G 74G 75G CDU CEU CGU A2U 55U 45A 45T 46U 47U D1U D1G D2U E1U E1F D3U D3F 76G 77G 79G CHU CJU 78G 21F 21G 61G 81G E1G A3U A4U A5U 48U 49U 84U 64U 64F 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41F 41G 81U 81F)	24P6883	N
11	185W Power Supply (models 11C 11B 11V 22C 22V 23C 32V 31C 41C 51S 51P 52S 52P 63S 63P A2S A2P 55S 55P 47S 47P D1S D1P D2S D2P E1S E1P D3S D3P 61C 81C A4S A5S 48S 49S 81S 81P)	49P2127	N
	MOUSE PS/2 2BUTTON (Black) (models 11C 11B 11V 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G CDU CEU CGU 54C 54B 54V 53S 53P 53U 83U 83F A2U A2S A2P 55U 55S 55P 45A 45T 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G CHU CJU 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41F 41G 81P)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black) (model CTO)	24P0485	*
	Video ATI Radeon VE 64MB (models 23C CTO 62U 82U 47U 47S 47P D2U D2S D2P 84U)	49P4685	*
	Video nVidia GeForce4 MX 64MB x/TV Out	49P4692	*
	Video nVidia GeForce4 MX 128MB w/VGA TV DVI	58P9865	*
	Soft Modem V.92/V.44 (model CTO)	22P7943	*
	56k V.90 Modem (US) (model CTO)	19K2965	*
	56k V.90 Modem (WT) (model CTO)	19K2963	*
	Speakers Infinity Active T1 (Black)	25P4726	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*

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	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Chassis assembly (all models)	25P0064	*
	Front bezel blanks kit (all models)	25P0068	*
	Front bezel release (all models)	25P0069	*
	I/O retainer cards (all models)	25P0070	*
	DASD soft mount rail kit (all models)	19K5331	**
	Cable FDD (all models)	01K1513	*
	Cable audio	75H9219	*
	Cable C2 (models 53U 53F 63U 63F 63S 63P 53S 53P 53U 83U 83F D3U D3F D3S D3P 64U 64F 85G D4G E2G 7AG)	09K9827	*
	Cable IDE ATA-66 1 drop (all models)	49P4364	*
	Cable IDE ATA-66 2 drop (all models)	37L5098	*
	RFID antenna w/o velcro (models 53U 53F 63U 63F 63S 63P 53S 53P 53U 83U 83F D3U D3F D3S D3P 64U 64F 85G D4G E2G 7AG)	03K9654	*
	Speaker assembly (all models)	00N5151	*
	Shield 5.25 EMC (all models)	19K5548	*
	HDD bracket assembly (all models)	25P0072	**
	Power supply bracket (all models)	25P0073	*
	Foot rubber (all models)	03K9655	*
	Control panel assembly (all models)	25P0074	*
	Misc. hardware kit (all models)	09N5764	*
	Lock assembly (models 53U 53F 63U 63F 63S 63P 53S 53P 53U 83U 83F D3U D3F D3S D3P 64U 64F 85G D4G E2G 7AG)	25P0076	*
	PWR panel kit (all models)	25P0079	*
	Adapter PCI 1394 combo	31P7307	*
	PCMCIA assembly	25P0091	*
	Cable audio	49P1933	*
	Cable 1394 6-pin	25P0084	*
	Cable PCMCIA ATA-66 (all models)	49P4361	*
	Audio front panel	49P1750	*
	Audio w/1394 front panel	49P1752	*
	Audio w/1394 & SPDIF front panel	49P1754	*
	PCI 1394 adapter	22P6849	*
	Universal adapter bracket (all models)	32P4743	**
	Battery 3.0V (all models)	33F8354	*
	Fan 80mm fixed speed	22P4447	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	US (model 76G 79G 15G 27G 34G 52U 74G 75G 49U 7BG)	71P6405	*
	FR (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6425	*
	GR (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6413	*
	IT (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6433	*
	BR (model 52P)	71P6445	*
	SP (model 15G 27G 34G 74G 75G 76G 79G 49S 7BG)	71P6421	*
	DK (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6417	*
	NL (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6441	*
	AE (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6465	*
	SV (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6409	*
	HE (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6453	*
	FI (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6429	*
	NO (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6437	*
	PL (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6457	*
	PO (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6449	*
	RU (model 15G 27G 34G 52U 74G 75G 76G 79G7BG)	71P6477	*
	HU (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6473	*
	CZ (model15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6461	*
	TR (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6469	*
	GK (model 15G 27G 34G 52U 74G 75G 76G 79G 7BG)	71P6481	*
	Japanese	71P5962	*
	Simplified Chinese	62P8983	*
	Taiwan - TC	62P8984	*
	Hong Kong - TC	62P8985	*

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	US English (Models A2U 55U 45A 45T 46U 47U D1U D1G D2U E1U D3U 77G 21U 22U 22A 22T 31U 31G 43U 32U 32G 26G 33G 12G 13G A1G 51U 51G 53U 62U 63U 82U 71G 72G 73G 53U 83U 78G 21G 61G 81G E1G A3U A4U A5U 48U 84U 64U 85G D4G E2G 7AG 7CG 81U)	74P2412	*
	French (models 31F.31G 32F 32G 26G 33G 12G 13G A1G 51F 51G 53F 63F 71G 72G 73G 83F 78G 21F 21G D1G E1F D3F 77G 61G 81G E1G 64F 85G D4G E2G 7AG 7CG 41F 41G 81F)	74P2663	*
	German (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6493	*
	Italian (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6513	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Spanish (models 31G 32G 26G 33G 12G 13G A1G 51G 51S 63S 71G 72G 73G 53S 78G 21G A2S 55S 47S D1S D1G D2S E1S D3S 77G 61G 81G E1G A4S A5S 48S 85G D4G E2G 7AG 7CG 41G 81S)	71P6501	*
	Brazilian/Portuguese (models 51P 63P 53P A2P 55P 47P D1P D2P E1P D3P 81P)	71P6525	*
	Danish (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6497	*
	Netherlands (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6521	*
	Arabic Enabled (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6545	*
	Swedish (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6489	*
	Hebrew (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6533	*
	Finnish (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6509	*
	Norwegian (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6517	*
	Polish (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6537	*
	Portuguese (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6529	*
	Russian (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6557	*
	Hungarian (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6553	*
	Czechoslovakian (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6541	*
	Turkish (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6549	*
	Greek (models 31G 32G 26G 33G 12G 13G A1G 51G 71G 72G 73G 78G 21G D1G 77G 61G 81G E1G 85G D4G E2G 7AG 7CG)	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese (models 11C 22C 23C 31C 41C 54C 61C 81C)	71P6093	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Traditional Chinese (models 11V 22V 32V 54V)	71P6096	*
	Traditional Chinese Hong Kong (model 11B 54B)	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 11C 21U 22U 22A 22C 23C 25U 31U 31G 43U 32U 32G 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 31C 41C 51U 51G 52U 53U 62U 63U 82U 71G 72G 73G 74G 75G CDU CEU CGU 54C 53U 83U A2U 55U 45A 46U 47U D1U D1G D2U E1U D3U 76G 77G 79G CHU CJU 61C 81C 78G 21G 61G 81G E1G A3U A4U A5U 48U 49U 84U 64U 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41G 81U)	32P5100	*
	Arabic (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5101	*
	Belgian/French (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5102	*
	Belgian/UK (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5103	*
	Bulgarian (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5104	*
	Chinese/US (models 11B 11V 22V 32V 54B 54V)	32P5105	*
	Czech (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5106	*
	Danish (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5107	*
	Dutch (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5108	*
	French (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5109	*
	French Canadian (models 31F 32F CTO 51F 53F 63F 83F E1F D3F 21F 64F 81F)	32P5110	*
	French Canadian (models 31F 32F CTO 51F 53F 63F 83F E1F D3F 21F 64F)	32P5111	*
	German (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5112	*
	Greek (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5113	*



	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Hebrew (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5114	*
	Hungarian (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5115	*
	Iceland (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5116	*
	Italian (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5117	*
	Japanese	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 51S 52S 63S 53S A2S 55S 47S D1S D2S E1S D3S A4S A5S 48S 49S 81S)	32P5120	*
	Norwegian (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5121	*
	Polish (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5122	*
	Portuguese (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5123	*
	Romanian (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5124	*
	Russian (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5125	*
	Russian/Cy (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5126	*
	Serbian/Cyrillic (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5127	*
	Slovak (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5128	*
	Spanish (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5129	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Swedish/Finn (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5130	*
	Swiss F/G (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5131	*
	Thailand (model 22T 45T)	32P5132	*
	Turkish (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5133	*
	Turkish (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5134	*
	UK English (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5135	*
	US International (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5136	*
	Yugoslav/Latin (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	32P5137	*
	Brazil/Portuguese (models 51P 52P 63P 53P A2P 55P 47P D1P D2P E1P D3P 81P)	32P5138	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 11V 21U 22U 22A 22T 22V 25U 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO CAU CBU CCU 12G 13G A1G 15G 27G 34G 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G CDU CEU CGU A2U A2S A2P 55U 55S 55P 45A 45T 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G CHU CJU 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41F 41G 81U 81F 81S 81P)	6952301	*
	Line Cord (model 22A 45A)	13F9939	*
	Line Cord (models 22A 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G 45A D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	13F9978	*
	Line Cord (models 22A 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G 45A D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	14F0032	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	13F9996	*
	Line Cord (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51S 51P 51G 52S 52P 63S 63P 71G 72G 73G 74G 75G 53S 53P A2S A2P 55S 55P 47S 47P D1S D1P D1G D2S D2P E1S E1P D3S D3P 76G 77G 79G 78G 21G 61G 81G E1G A4S A5S 48S 49S 85G D4G E2G 7AG 7BG 7CG)	14F0068	*
	Line Cord	36L8879	*
	Line Cord	1838576	*
	Line Cord	34G0222	*
	Line Cord	05K2876	*
	Line Cord (models 11B 11C 22C 23C 31C 41C 54C 54B 61C 81C)	02K0545	*
	Line Cord (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	14F0086	*
	Line Cord (models 22A 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G 45A D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	14F0014	*
	Line Cord (models 31G 32G 26G 33G 12G 13G A1G 15G 27G 34G 51G 71G 72G 73G 74G 75G D1G 76G 77G 79G 78G 21G 61G 81G E1G 85G D4G E2G 7AG 7BG 7CG)	14F0050	*

<b>Item#</b>	<b>Machine Type 8308</b>	<b>FRU#</b>	<b>CRU?</b>
1	Side cover assembly black (all models)	25P0066	*
2	"L" cover assembly black (all models)	25P0065	*
3	Front bezel assembly (black) (all models)	25P0067	*
4	Trim bezel/label kit (black) (all models)	49P1900	*
5	48X CDROM (Black) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	33P3203	**
5	48X CDROM (Black) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	33P3207	**
5	48X CDROM (Black) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	33P3211	**
5	48X CDROM (Black) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	33P3215	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H)	75H9550	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H)	33P3345	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 61J)	19K1543	**

Item#	Machine Type 8308	FRU#	CRU?
7	HDD 40GB 7200RPM (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	19K1568	**
8	Planar (Spartan 10/100 400/533FSB wo-POV) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	02R4084	N
8	Planar (Spartan 10/100 400/533FSB wo-POV) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	88P8474	N
9	Memory 256MB NP SDRAM (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	33L3305	*
10	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	73P0577	N
10	Processor P4 2.53 GHz (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	74P1627	N
10	Fan Sink (all except 3.06GHz) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	32P4004	N
10	P4 mounting assembly (all models)	48P6726	N
11	185W Power Supply (models 61U 61F 61G 61A 61T 61J)	24P6883	N
11	185W Power Supply (models 61S 61P 61C 61B 61V 61H)	49P2127	N
	Mouse PS/2 2 button (Black) (models 61U 61F 61S 61P 61G 61A 61T 61C 61B 61V 61H 61J)	24P0383	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Front bezel blanks kit (all models)	25P0068	*
	Chassis assembly (all models)	25P0064	*
	Front bezel release (all models)	25P0069	*
	I/O retainer cards (all models)	25P0070	*
	DASD soft mount rail kit (all models)	19K5331	**
	Cable FDD (all models)	01K1513	*
	Cable IDE ATA-66 1 drop (all models)	49P4364	*
	Cable IDE ATA-66 2 drop (all models)	37L5098	*
	Speaker assembly (all models)	00N5151	*
	Shield 5.25 EMC (all models)	19K5548	*

Item#	Machine Type 8308	FRU#	CRU?
	HDD bracket assembly (all models)	25P0072	**
	Power supply bracket (all models)	25P0073	*
	Foot rubber (all models)	03K9655	*
	Control panel assembly (all models)	25P0074	*
	Misc. hardware kit (all models)	09N5764	*
	Lock assembly (models 53U 53F 63U 63F 63S 63P 53S 53P 53U 83U 83F D3U D3F D3S D3P 64U 64F 85G D4G E2G 7AG)	25P0076	*
	PWR panel kit (all models)	25P0079	*
	Adapter PCI 1394 combo	31P7307	*
	PCMCIA assembly	25P0091	*
	Cable audio	49P1933	*
	Cable 1394 6-pin	25P0084	*
	Cable PCMCIA ATA-66 (all models)	49P4361	*
	Audio front panel	49P1750	*
	Audio w/1394 front panel	49P1752	*
	Audio w/1394 & SPDIF front panel	49P1754	*
	PCI 1394 adapter	22P6849	*
	Universal adapter bracket (all models)	32P4743	**
	Battery 3.0V (all models)	33F8354	*
	Fan 80mm fixed speed	22P4447	*

	Recovery CDs Win XP Pro	FRU #	CRU?
	US English (Models 61U 61G 61A 61T 61H)	71P2412	*
	French (models 61G)	74P2663	*
	German (models 61G)	72P6493	*
	Italian (models 61G)	71P6513	*
	Spanish (models 61S 61G)	71P6501	*
	Brazilian/Portuguese (models 61P)	71P6525	*
	Danish (models 61G)	71P6497	*
	Netherlands (models 61G)	71P6521	*
	Arabic Enabled (models 61G)	71P6545	*
	Swedish (models 61G)	71P6489	*
	Hebrew (models 61G)	71P6533	*
	Finnish (models 61G)	71P6509	*
	Norwegian (models 61G)	71P6517	*
	Polish (models 61G)	71P6537	*
	Portuguese (models 61G)	71P6529	*
	Russian (models 61G)	71P6557	*
	Hungarian (models 61G)	71P6553	*
	Czechoslovakian (models 61G)	71P6541	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Turkish (models 61G)	71P6549	*
	Greek (models 61G)	71P6561	*
	Simplified Chinese (models 61C)	71P6093	*
	Traditional Chinese (models 61V)	71P6096	*
	Traditional Chinese Hong Kong (model 61B)	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 61U 61G 61A 61C 61H)	89P8300	*
	Arabic (models 61G)	89P8301	*
	Belgian/French (models 61G)	89P8302	*
	Belgian/UK (models 61G)	89P8303	*
	Bulgarian (models 61G)	89P8305	*
	Chinese/US (models 61B 61V)	89P8306	*
	Czech (models 61G)	89P8307	*
	Danish (models 61G)	89P8308	*
	Dutch (models 61G)	89P8309	*
	French (models 61G)	89P8310	*
	French Canadian (models 61F)	89P8311	*
	French Canadian (models 61F)	89P8312	*
	German (models 61G)	89P8313	*
	Greek (models 61G)	89P8314	*
	Hebrew (models 61G)	89P8315	*
	Hungarian (models 61G)	89P8316	*
	Iceland (models 61G)	89P8317	*
	Italian 141 (models 61G)	89P8318	*
	Italian 142 (models 61G)	89P8319	*
	Japanese (models 61J)	89P8320	*
	LA Spanish (models 61G)	89P8322	*
	Norwegian (models 61G)	89P8323	*
	Polish (models 61G)	89P8324	*
	Portuguese (models 61G)	89P8325	*
	Romanian (models 61G)	89P8326	*
	Russian (models 61G)	89P8327	*
	Russian/Cy (models 61G)	89P8328	*
	Serbian/Cyrillic (models 61G)	89P8329	*
	Slovak (models 61G)	89P8330	*
	Spanish (models 61G)	89P8331	*
	Swedish/Finn (models 61G)	89P8332	*
	Swiss F/G (models 61G)	89P8333	*
	Thailand (model 61T)	89P8334	*
	Turkish (models 61G)	89P8335	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Turkish (models 61G)	89P8336	*
	UK English (models 61G)	89P8337	*
	US International (models 61G)	89P8338	*
	Yugoslav/Latin (models 61G)	89P8339	*
	Brazil/Portuguese (models 61P)	89P8304	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 61U 61F 61S 61P 61G 61A 61T 61V)	6952301	*
	Line Cord (model 61A)	13F9939	*
	Line Cord (models 61G 61A)	13F9978	*
	Line Cord (models 61G 61A 61H)	14F0032	*
	Line Cord (models 61G)	13F9996	*
	Line Cord (models 61S 61P 61G)	14F0068	*
	Line Cord (models 61J)	1838576	*
	Line Cord (models 61C 61B 61H)	02K0545	*
	Line Cord (models 61G)	14F0086	*
	Line Cord (models 61G 61A)	14F0014	*
	Line Cord (models 61G)	14F0050	*

<b>Item#</b>	<b>Machine Type 8310</b>	<b>FRU#</b>	<b>CRU?</b>
1	Side cover assembly black (all models)	25P0066	*
2	"L" cover assembly black (all models)	25P0065	*
3	Front bezel assembly (black) (all models)	25P0067	*
4	Trim bezel/label kit (black) (all models)	49P1900	*
4	Trim bezel/label kit (white) (all models)	49P1901	*
5	48X CDROM (Black) (models 12G 13G 14U 1AU 1CA 17G 18G 23G 25G 26U 27U 2AA 32G 35G 3BA 29U 3AU CTO 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 63U 49G 4AA 4BA 3EU 65U 71G 72G 73G 74G 75G 76G D1G 4GU 4HU 93U 4KU 77G 78G 79G)	33P3203	**
5	48X CDROM (Black) (models 12G 13G 14U 1AU 1CA 17G 18G 23G 25G 26U 27U 2AA 32G 35G 3BA 29U 3AU CTO 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 63U 49G 4AA 4BA 3EU 65U 71G 72G 73G 74G 75G 76G D1G 4GU 4HU 93U 4KU 77G 78G 79G)	33P3207	**
5	48X CDROM (Black) (models 12G 13G 14U 1AU 1CA 17G 18G 23G 25G 26U 27U 2AA 32G 35G 3BA 29U 3AU CTO 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 63U 49G 4AA 4BA 3EU 65U 71G 72G 73G 74G 75G 76G D1G 4GU 4HU 93U 4KU 77G 78G 79G)	33P3211	**
5	48X CDROM (Black) (models 12G 13G 14U 1AU 1CA 17G 18G 23G 25G 26U 27U 2AA 32G 35G 3BA 29U 3AU CTO 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 63U 49G 4AA 4BA 3EU 65U 71G 72G 73G 74G 75G 76G D1G 4GU 4HU 93U 4KU 77G 78G 79G)	33P3215	**
5	48X CDROM (White) (XP-OK)	33P3201	**

Item#	Machine Type 8310	FRU#	CRU?
5	48X CDROM (White) (XP-OK)	33P3205	**
5	48X CDROM (White) (XP-OK)	33P3209	**
5	48X CDROM (White) (XP-OK)	33P3213	**
5	DVD-ROM 16X48X (Black) (models 1BU 28U CTO 24G 44G 51G 64U 3GU)	33P3277	**
5	DVD-ROM 16X48X (Black) (models 1BU 28U CTO 24G 44G 51G 64U 3GU)	33P3259	**
5	DVD-ROM 16X48X (Black) (models 1BU 28U CTO 24G 44G 51G 64U 3GU)	33P3281	**
5	DVD-ROM 16X48X (Black) (models 1BU 28U CTO 24G 44G 51G 64U 3GU)	33P3297	**
5	DVD-ROM 16X48X (White)	33P3257	**
5	DVD-ROM 16X48X (White)	24P3617	**
5	24X10X40X CD-RW (White)	24P3625	**
5	24X10X40X CD-RW (Black) (model CTO)	24P3627	**
5	24X10X40X CD-RW (Black) (model CTO)	24P3635	**
5	24X10X40X CD-RW (White)	24P3632	**
5	40X12X40X CD-RW (Black) (model 34U 34F 36U 37U CTO 2BU 2BF 24G 44G 62U 62F)	33P3269	**
5	40X12X40X CD-RW (Black) (model 34U 34F 36U 37U CTO 2BU 2BF 24G 44G 62U 62F)	33P3273	**
5	40X12X40X CD-RW (White)	33P3267	**
5	40X12X40X CD-RW (White)	33P3271	**
5	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black) (models 38U 39U 47U 48U CTO)	33P3227	**
5	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
5	32X10X40X16X DVD-ROM/CD-RW Combo Drive (Black) (models 38U 39U 47U 48U CTO 81U 82U 83U 83F 91U 92U 92F D2G A1U A1S A1D A1Y D3U D4U A2U 95U)	33P3251	**
5	48X24X48X CD-RW (Black) (models 2EA 2FA 4CA 4DA B2U B2F 4EU 34U 34F 36U 37U CTO 2BU 2BF 24G 44G 62U 62F 2EA 2FA 4CA 4DA B2U B2F 4EU 4JA 84A 85U 94U)	33P3289	**
5	48X24X48X CD-RW (Black) (models 2EA 2FA 4CA 4DA B2U B2F 4EU 34U 34F 36U 37U CTO 2BU 2BF 24G 44G 62U 62F 2EA 2FA 4CA 4DA B2U B2F 4EU 4JA 84A 85U 94U)	33P3293	**
5	32X10X40X16X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**



Item#	Machine Type 8310	FRU#	CRU?
6	FDD 3.5" 1.44MB (wo/Bezel) (models 12G 13G 14U 1AU 1BU 1CA 17G 18G 23G 24G 25G 26U 27U 28U 2AA 32G 34U 34F 35G 36U 37U 38U 39U 3BA 44G 47U 48U 29U 3AU CTO CAU CBU CCU 2BU 2BF 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 51G 61G 62U 62F 63U 64U 49G 4AA 4BA 3EU 3GU 81U 82U 83U 83F 91U 92U 92F 65U 71G 72G 73G 74G CDU CEU CGU 75G 76G B2U B2F 2EA 2FA 4CA 4DA D1G D2G A1U A1S A1D A1Y CHU 4EU 4GU 4HU 4JA 84A 85U 93U 94U 95U D3U D4U A2U 4KU 77G 78G 79G)	75H9550	**
6	FDD 3.5" 1.44MB (wo/Bezel) (model CTO)	19K1543	**
7	HDD 40GB 5400RPM (model 14U 1AU 1BU 26U 27U 28U 29U 3AU CTO 4GU)	19K1562	**
7	HDD 40GB 7200RPM (models 12G 13G 1CA 17G 18G 23G 24G 25G 2AA 32G 34U 34F 35G 3BA 2BU 2BF 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A CTO 51G 61G 62U 62F 63U 64U 49G 4AA 4BA 3EU 3GU 83U 83F 92U 92F 65U 71G 72G 73G 74G 75G 76G B2U B2F 2EA 2FA 4CA 4DA D1G 4HU 4JA 84A 93U 4KU 77G 78G 79G)	19K1568	**
7	HDD 80GB 7200RPM (models 36U 37U 38U 39U 44G CTO 4EU 85U 94U 95U)	24P3665	**
7	HDD 120GB 7200RPM (models 47U 48U CTO 81U 82U 91U D2G A1U A1S A1D A1Y D3U D4U A2U)	24P3687	**
8	Planar (Spartan 10/100 POV) (models 29U 3AU 4KU)	02R4083	N
8	Planar (Spartan 10/100 wo-POV) (models 12G 13G 14U 1AU 1BU 1CA 17G 18G 23G 24G 25G 26U 27U 28U 2AA 32G 34U 34F 35G 36U 37U 38U 39U 3BA 44G 47U 48U CTO CAU CBU CCU 2BU 2BF 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 75G 76G B2U B2F 2EA 2FA 4CA 4DA D1G D2G A1U A1S A1D A1Y CHU 4GU 4HU 4JA 84A 85U 93U 94U 95U D3U D4U A2U 77G 78G 79G)	02R4084	N
9	Memory 128MB NP SDRAM (models 14U 1AU 1BU 26U 27U 28U 36U 37U 29U 3AU CTO CAU CBU CCU 1CA 2AA 3BA 1EA 2DA 3DA B1A 63U 64U 3EU 3GU 65U CDU CEU CGU 4AA 4BA 75G 76G CHU 4EU 4GU 4HU 85U 93U 94U)	33L3303	*
9	Memory 256MB NP SDRAM (models 12G 13G 17G 18G 23G 24G 25G 32G 34U 34F 35G 38U 39U 44G 47U 48U CTO 2BU 2BF 1DG 19G 2CG 3CG 51G 61G 62U 62F 49G 81U 82U 83U 83F 91U 92U 92F 71G 72G 73G 74G B2U B2F 2EA 2FA 4CA 4DA D1G A1U A1S A1D A1Y 4JA 84A 95U D3U D4U A2U 4KU 77G 78G 79G)	33L3305	*
9	Memory 512MB NP SDRAM (model CTO D2G)	33L3307	*
10	Processor Celeron 1.7 GHz (model 51G)	58P9937	N
10	Processor P4 1.8 GHz (models 12G 13G 14U 1AU 1BU 1CA CTO 1EA 1DG)	33P0965	N
10	Processor P4 1.9 GHz (models 17G 18G CTO 19G)	49P1726	N
10	Processor P4 2.0 GHz (models 23G 24G 25G 26U 27U 28U 2AA 29U CTO CAU 2BU 2BF 2DA 2CG 2EA 2FA)	48P7205	N
10	Processor P4 2.2 GHz (model CTO)	48P7206	N

Item#	Machine Type 8310	FRU#	CRU?
10	Processor P4 2.26 GHz (models 32G 34U 34F 35G 36U 37U 38U 39U 3BA 3AU CTO CBU 3DA 3CG 3EU 3GU)	48P6837	N
10	Processor P4 2.4 GHz (model CTO)	33P3743	N
10	Processor P4 2.4 GHz (models 44G 47U 48U CTO CCU 49G 4AA 4BA 73G 74G 4CA 4DA 4EU 4GU 4HU 4JA 4KU)	48P7684	N
10	Processor P4 1.7 GHz (model B1A)	25P5041	N
10	Processor P4 1.7 GHz (model B1A)	49P0189	N
10	Processor P4 1.8 GHz (models 61G 62U 62F 63U 64U 65U 71G 72G CGU 75G 76G)	58P9968	N
10	Processor P4 2.26 GHz (models 32G 34U 34F 35G 36U 37U 38U 39U 3BA 3AU CTO CBU 3DA 3CG 3EU 3GU)	59P1987	N
10	Processor P4 2.4 GHz (model CTO)	59P1989	N
10	Processor P4 2.4 GHz (models 44G 47U 48U CTO CCU 49G 4AA 4BA 73G 74G 4CA 4DA 4EU 4GU 4HU 4JA 4KU)	59P1991	N
10	Processor P4 2.53 GHz (models 81U 82U 83U 83F CDU 84A 85U 77G 79G)	48P6839	N
10	Processor P4 2.53 GHz (models 81U 82U 83U 83F CDU 84A 85U 77G 79G)	59P1993	N
10	Processor P4 2.66 GHz (models 91U 92U 92F CEU)	58P9963	N
10	Processor P4 2.0GHz (models B2U B2F)	02R5350	N
10	Processor P4 1.8 GHz (models 61G 62U 62F 63U 64U 65U 71G 72G CGU 75G 76G)	02R4501	N
10	Processor P4 1.8 GHz (models 61G 62U 62F 63U 64U 65U 71G 72G CGU 75G 76G)	02R4507	N
10	Processor P4 2.0 GHz (models 23G 24G 25G 26U 27U 28U 2AA 29U CTO CAU 2BU 2BF 2DA 2CG 2EA 2FA)	59P7160	N
10	Processor P4 2.0 GHz (models 23G 24G 25G 26U 27U 28U 2AA 29U CTO CAU 2BU 2BF 2DA 2CG 2EA 2FA)	02R4509	N
10	Processor P4 2.2 GHz (model CTO)	59P7161	N
10	Processor P4 2.2 GHz (model CTO)	02R4511	N
10	Processor P4 2.26 GHz (models 32G 34U 34F 35G 36U 37U 38U 39U 3BA 3AU CTO CBU 3DA 3CG 3EU 3GU)	02R4513	N
10	Processor P4 2.4 GHz (model CTO)	02R4515	N
10	Processor P4 2.4 GHz (models 44G 47U 48U CTO CCU 49G 4AA 4BA 73G 74G 4CA 4DA 4EU 4GU 4HU 4JA 4KU)	02R4517	N
10	Processor P4 2.53 GHz (models 81U 82U 83U 83F CDU 84A 85U 77G 79G)	02R4519	N
10	Processor P4 2.8 GHz (models D1G D2G D3U D4U)	01R3171	N
10	Processor P4 3.06 GHz (models A1U A1S A1D A1Y CHU A2U)	02R5347	N
10	Processor Celeron 2.0 GHz (models B2U B2F)	88P5835	N
10	Processor Celeron 2.1 GHz	02R5352	N
10	Processor Celeron 2.2 GHz	02R5355	N

Item#	Machine Type 8310	FRU#	CRU?
10	Processor P4 1.8 GHz (models 61G 62U 62F 63U 64U 65U 71G 72G CGU 75G 76G)	73P0569	N
10	Processor P4 2.0 GHz (models 23G 24G 25G 26U 27U 28U 2AA 29U CTO CAU 2BU 2BF 2DA 2CG 2EA 2FA)	73P0570	N
10	Processor P4 2.2 GHz (model CTO)	73P0571	N
10	Processor P4 2.26 GHz (models 32G 34U 34F 35G 36U 37U 38U 39U 3BA 3AU CTO CBU 3DA 3CG 3EU 3GU)	73P0575	N
10	Processor P4 2.4 GHz (model CTO)	73P0572	N
10	Processor P4 2.4 GHz (models 44G 47U 48U CTO CCU 49G 4AA 4BA 73G 74G 4CA 4DA 4EU 4GU 4HU 4JA 4KU)	73P0576	N
10	Processor P4 2.53 GHz (models 81U 82U 83U 83F CDU 84A 85U 77G 79G)	73P0577	N
10	Processor P4 2.66 GHz (models 91U 92U 92F CEU 93U 94U 95U 78G)	74P1615	N
10	Processor P4 2.8 GHz (models D1G D2G D3U D4U)	74P1637	N
10	Fan Sink (1.9 - 2.2 GHz) (models 17G 18G 23G 24G 25G 26U 27U 28U 2AA 32G 34U 34F 35G 36U 37U 38U 39U 3BA 44G 47U 48U 29U 3AU CTO CAU CBU CCU 2BU 2BF 2DA 3DA 19G 2CG 3CG 49G 4AA 4BA 3EU 3GU 81U 82U 83U 83F 91U 92U 92F 73G 74G CDU CEU B2U B2F 2EA 2FA 4CA 4DA D1G D2G 4EU 51G B1A 12G 13G 14U 1AU 1BU 1CA CTO 1EA 1DG 4GU 4HU 4JA 84A 85U 93U 94U 95U D3U D4U 4KU 77G 78G 79G)	32P4004	N
10	Fan sink (3.06 GHz) (models A1U A1S A1D A1Y CHU A2U)	01R3330	N
10	Mounting Assembly for P4 Processor (all models)	48P6726	N
11	185W Power Supply (models 12G 13G 14U 1AU 1BU 1CA 17G 18G 23G 24G 25G 26U 27U 28U 2AA 32G 34U 34F 35G 36U 37U 38U 39U 3BA 44G 47U 48U 29U 3AU CTO CAU CBU CCU 2BU 2BF 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 51G 61G 62U 62F 63U 64U 49G 4AA 4BA 3EU 3GU 81U 82U 83U 83F 91U 92U 92F 65U 71G 72G 73G 74G CDU CEU CGU 75G 76G B2U B2F 2EA 2FA 4CA 4DA D1G D2G A1U CHU 4EU 4GU 4HU 4JA 84A 85U 93U 94U 95U D3U D4U A2U 4KU 77G 78G 79G)	24P6883	N
11	185W Power Supply (models A1S A1D A1Y)	24P6885	N
	MOUSE PS/2 2BUTTON (Black) (models 12G 13G 14U 1AU 1CA 17G 18G 23G 25G 26U 27U 2AA 32G 34U 34F 35G 36U 38U 3BA 47U 29U 3AU CTO CAU CBU CCU 2BU 2BF 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 62U 62F 63U 64U 49G 4AA 4BA 3EU 3GU 83U 83F 92U 92F 65U 71G 72G 73G 74G CDU CEU CGU 75G 76G 2EA 2FA 4CA 4DA D1G CHU B2U B2F 4EU 4GU 4HU 4JA 84A 85U 93U 94U D3U 4KU 77G 78G 79G)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black) (model 1BU 24G 28U 37U 39U 44G 48U CTO 51G 81U 82U 91U D2G A1U A1S A1D A1Y 95U D4U A2U)	24P0485	*

Item#	Machine Type 8310	FRU#	CRU?
	Video ATI Radeon VE 64MB (models 1CA 2AA 36U 38U 3BA CTO 2DA 3DA B1A 81U 83U 83F 92U 92F 4AA 4BA 2EA 2FA 4CA 4DA 4JA 84A)	49P4685	*
	Video nVidia GeForce4 MX 64MB x/TV Out (models 24G 37U 39U 44G CTO D3U)	49P4692	*
	Video nVidia GeForce4 MX 128MB w/VGA TV DVI (models 47U 48U CTO 82U 91U D2G A1U A1S A1D A1Y 95U D4U A2U)	58P9865	*
	56K v.90 modem	19K2965	*
	56K v.90 modem	19K2963	*
	Soft Modem V.92/V.44 (model CTO 1BU 28U 37U 39U 48U CTO 64U 3GU 82U 91U B2U B2F A1U 1CA 3BA 24G 2AA 44G CTO 1CA 1EA 2DA 3DA 51G 2EA 2FA 4CA 4DA D2G A1S A1D A1Y 4JA 84A 95U D4U A2U)	22P7943	*
	Speakers Infinity Active T1 (Black) (models 1BU 24G 28U 37U 39U 44G 48U CTO 51G 64U 3GU 82U 91U D2G A1U A1S A1D A1Y 95U D4U A2U)	25P4726	*
	Speaker Power brick - US CE CF LA Taiwan (models 1BU 28U 37U 39U 48U CTO 64U 3GU 82U 91U A1U A1S A1D A1Y 95U D4U A2U)	10K2587	*
	Speaker Power brick - Europe (non-UK) (models 24G 44G 51G D2G)	25P5704	*
	Speaker Power brick - UK (models 24G 44G 51G D2G)	25P5703	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	*
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Front bezel blanks kit (all models)	25P0068	*
	Front bezel release (all models)	25P0069	*
	I/O retainer cards (all models)	25P0070	*
	DASD soft mount rail kit (all models)	19K5331	**
	Cable FDD (all models)	01K1513	*
	Cable audio	75H9219	*
	Cable C2 (models 29U 3AU 65U 4KU)	09K9827	*
	Cable IDE ATA-66 1 drop (all models)	49P4364	*

Item#	Machine Type 8310	FRU#	CRU?
	Cable IDE ATA-66 2 drop (all models)	37L5098	*
	RFID antenna w/o velcro (models 29U 3AU 65U 4KU)	03K9654	*
	Speaker assembly (all models)	00N5151	*
	Shield 5.25 EMC (all models)	19K5548	*
	HDD bracket assembly (all models)	25P0072	**
	Power supply bracket (all models)	25P0073	**
	Foot rubber (all models)	03K9655	*
	Control panel assembly (all models)	25P0074	*
	Misc. hardware kit (all models)	09N5764	*
	Lock assembly (models 29U 3AU 65U 4KU)	25P0076	*
	PWR panel kit (all models)	25P0079	*
	Adapter PCI 1394 combo (models 39U 48U CTO 82U 91U 95U D4U A2U)	32P4742	*
	PCMCIA assembly (models 39U 48U CTO 82U 91U)	25P0091	*
	Cable audio (models 1BU 24G 28U 37U 44G 39U 48U CTO 51G 82U 91U)	49P1933	*
	Cable 1394 6-pin (models 39U 48U CTO 82U 91U 95U D4U A2U)	25P0084	*
	Cable PCMCIA ATA-66 (all models)	49P4361	*
	Audio front panel (models 1BU 24G 28U 37U 44G CTO 51G B2U B2F D2G)	49P1750	*
	Audio w/1394 front panel (model CTO 95U D4U A2U)	49P1752	*
	Audio w/1394 & SPDIF front panel (models 39U 48U CTO 82U 91U)	49P1754	*
	PCI 1394 adapter	22P6849	*
	Universal adapter bracket (all models)	32P4743	*
	Battery 3.0V (all models)	33F8354	*
	Fan 80mm fixed speed	22P4447	*
	Audio / SPDIF cable (models 39U 48U CTO 82U 91U)	25P0002	*

	Recovery CDs Win 2K	FRU #	CRU?
	US (Models 1AU 27U 76G 4HU 93U)	71P6405	*
	FR (model 76G)	71P6425	*
	GR (model 76G)	71P6413	*
	IT (model 76G)	71P6433	*
	BR	71P6445	*
	SP (model 76G)	71P6421	*
	DK (model 76G)	71P6417	*
	NL (model 76G)	71P6441	*
	AE (model 76G)	71P6465	*
	SV (model 76G)	71P6409	*
	HE (model 76G)	71P6453	*

	<b>Recovery CDs Win 2K</b>	<b>FRU #</b>	<b>CRU?</b>
	FI (model 76G)	71P6429	*
	NO (model 76G)	71P6437	*
	PL (model 76G)	71P6457	*
	PO (model 76G)	71P6449	*
	RU (model 76G)	71P6477	*
	HU (model 76G)	71P6473	*
	CZ (model 76G)	71P6461	*
	TR (model 76G)	71P6469	*
	GK (model 76G)	71P6481	*
	Japanese	71P5962	*
	Simplified Chinese	62P8983	*
	Taiwan - TC	62P8984	*
	Hong Kong - TC	62P8985	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (Models 1BU 24G 28U 37U 39U 44G 48U 51G 64U 3GU 82U 91U 92U D2G 95U D4U A2U)	71P6565	*
	French (models 24G 44G 51G D2G)	71P6585	*
	German (models 24G 44G 51G D2G)	71P6573	*
	Italian (models 24G 44G 51G D2G)	71P6593	*
	Spanish (models 24G 44G 51G D2G)	71P6581	*
	Brazilian/Portuguese	71P6605	*
	Danish (models 24G 44G 51G D2G)	71P6577	*
	Netherlands (models 24G 44G 51G D2G)	71P6601	*
	Arabic Enabled (models 24G 44G 51G D2G)	71P6625	*
	Swedish (models 24G 44G 51G D2G)	71P6569	*
	Hebrew (models 24G 44G 51G D2G)	71P6613	*
	Finnish (models 24G 44G 51G D2G)	71P6589	*
	Norwegian (models 24G 44G 51G D2G)	71P6597	*
	Polish (models 24G 44G 51G D2G)	71P6617	*
	Portuguese (models 24G 44G 51G D2G)	71P6609	*
	Russian (models 24G 44G 51G D2G)	71P6637	*
	Hungarian (models 24G 44G 51G D2G)	71P6633	*
	Czechoslovakian (models 24G 44G 51G D2G)	71P6621	*
	Turkish (models 24G 44G 51G D2G)	71P6629	*
	Greek (models 24G 44G 51G D2G)	71P6641	*
	Japanese	71P6066	*
	Simplified Chinese	71P6084	*
	Traditional Chinese	71P6087	*
	Traditional Chinese Hong Kong	71P6090	*

	Recovery CDs Win XP Pro	FRU #	CRU?
	US English (Models 12G 13G 14U 1CA 17G 18G 23G 25G 26U 2AA 32G 34U 35G 36U 38U 3BA 47U 29U 3AU 2BU 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 62U 63U 49G 3EU 81U 83U 92U 65U 71G 72G 73G 74G 4AA 4BA 75G B2U 2EA 2FA 4CA 4DA D1G A1U 4EU 4GU 4JA 84A 85U 94U D3U 4KU 77G 78G 79G)	71P6485	*
	French (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6505	*
	German (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6493	*
	Italian (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6513	*
	Spanish (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G D1G A1S A1D A1Y 77G 78G 79G)	71P6501	*
	Brazilian/Portuguese	71P6525	*
	Danish (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6497	*
	Netherlands (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6521	*
	Arabic Enabled (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6545	*
	Swedish (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6489	*
	Hebrew (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6533	*
	Finnish (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6509	*
	Norwegian (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6517	*
	Polish (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6537	*
	Portuguese (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6529	*
	Russian (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6557	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Hungarian (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6553	*
	Czechoslovakian (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6541	*
	Turkish (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6549	*
	Greek (models 12G 13G 17G 18G 23G 25G 32G 34F 35G 2BF 1DG 19G 2CG 3CG 61G 62F 49G 83F 92F 71G 72G 73G 74G 75G B2F D1G 77G 78G 79G)	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 12G 13G 14U 1AU 1CA 17G 18G 23G 25G 26U 27U 2AA 32G 34U 35G 36U 38U 3BA 47U 29U 3AU CTO CAU CBU CCU 2BU 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 61G 62U 63U 64U 49G 4AA 4BA 3EU 3GU 83U 92U 65U 71G 72G 73G 74G CDU CEU CGU 4AA 4BA 75G 76G 2EA 2FA 4CA 4DA D1G CHU B2U 4EU 4GU 4HU 4JA 84A 85U 93U 94U D3U 4KU 77G 78G 79G)	32P5100	*
	Arabic (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5101	*
	Belgian/French (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5102	*
	Belgian/UK (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5103	*
	Bulgarian (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5104	*
	Chinese/US	32P5105	*
	Czech (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5106	*
	Danish (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5107	*
	Dutch (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5108	*



	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	French (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5109	*
	French Canadian (models 34F 2BF 62F 83F 92F B2F)	32P5110	*
	French Canadian (models 34F 2BF 62F 83F 92F B2F)	32P5111	*
	German (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5112	*
	Greek (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5113	*
	Hebrew (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5114	*
	Hungarian (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5115	*
	Iceland (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5116	*
	Italian (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5117	*
	Japanese	32P5118	*
	Korean	32P5119	*
	LA Spanish	32P5120	*
	Norwegian (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5121	*
	Polish (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5122	*
	Portuguese (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5123	*
	Romanian (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5124	*
	Russian (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5125	*
	Russian/Cy (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G 77G 78G 79G)	32P5126	*
	Serbian/Cyrillic (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G)	32P5127	*
	Slovak (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5128	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Spanish (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5129	*
	Swedish/Finn (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5130	*
	Swiss F/G (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5131	*
	Thailand	32P5132	*
	Turkish (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5133	*
	Turkish (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5134	*
	UK English (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5135	*
	US International (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5136	*
	Yugoslav/Latin (models 12G 13G 17G 18G 23G 25G 32G 35G 1DG 19G 2CG 3CG 61G 49G 71G 72G 73G 74G 75G 76G D1G 77G 78G 79G)	32P5137	*
	Brazil/Portuguese	32P5138	*

	<b>Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 11A 13U 22U 27U 28S 28D 28Y 2AA 2CU 31S 31D 31Y 36U 3DU 3EA 45U CTO 16A 2DA 3HA B1A B2A 4DU 83U 86U 92U 93U 26A 34A 51A 5AA 4FA 4GA 94A D1U D2U 4CA 82A D2G A1U 95U D4U A2U)	19K1910	*
	Arabic (models CTO D2G)	19K1911	*
	Belgian/French (models CTO D2G)	19K1912	*
	Belgian/UK (models CTO D2G)	19K1913	*
	Bulgarian (models CTO D2G)	19K1914	*
	Chinese/US	19K1915	*
	Czech (models CTO D2G)	19K1916	*
	Danish (models CTO D2G)	19K1917	*
	Dutch (models CTO D2G)	19K1918	*
	French (models CTO D2G)	19K1919	*
	French Canadian (models 22F 27F 45F CTO 36F 86F 93F D2F)	19K1920	*
	French Canadian (models 22F 27F 45F CTO 36F 86F 93F D2F)	19K1921	*
	German (models CTO D2G)	19K1922	*

	<b>Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU?</b>
	Greek (models CTO D2G)	19K1923	*
	Hebrew (models CTO D2G)	19K1924	*
	Hungarian (models CTO D2G)	19K1925	*
	Iceland (models CTO D2G)	19K1926	*
	Italian (models CTO D2G)	19K1927	*
	Japanese	19K1928	*
	LA Spanish (models 28S 28D 28Y 31S 31D 31Y 4ES 4ED 4EY 84S 84D 84Y 91S 91D 91Y A1S A1D A1Y)	19K1930	*
	Norwegian (models CTO D2G)	19K1931	*
	Polish (models CTO D2G)	19K1931	*
	Portuguese (models CTO D2G)	19K1933	*
	Romanian (models CTO D2G)	19K1934	*
	Russian (models CTO D2G)	19K1935	*
	Russian/Cy (models CTO D2G)	19K1936	*
	Serbian/Cyrillic (models CTO D2G)	19K1937	*
	Slovak (models CTO D2G)	19K1938	*
	Spanish (models CTO D2G)	19K1939	*
	Swedish/Finn (models CTO D2G)	19K1940	*
	Swiss F/G (models CTO D2G)	19K1941	*
	Thailand (models 26T 34T)	19K1942	*
	Turkish (models CTO D2G)	19K1943	*
	Turkish (models CTO D2G)	19K1944	*
	UK English (models CTO D2G)	19K1945	*
	US International (models CTO D2G)	19K1946	*
	Yugoslav/Latin (models CTO D2G)	19K1947	*
	Brazil/Portuguese	19K1948	*
	Japanese	19K1908	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 2BU 2BF 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 51G 61G 62U 62F 63U 64U 49G 3EU 3GU 81U 82U 83U 83F 91U 92U 92F 65U 71G 72G 73G 74G CDU CEU CGU 4AA 4BA 75G 76G B2U B2F 2EA 2FA 4CA 4DA D1G D2G A1U A1S A1D CHU 4EU 4GU 4HU 4JA 84A 85U 93U 94U 95U D3U D4U A2U 4KU 77G 78G 79G)	6952301	*
	Line Cord (model 1EA 2DA 3DA B1A 4AA 4BA 2EA 2FA 4CA 4DA 4JA 84A)	13F9939	*
	Line Cord (models 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 51G 61G 49G 71G 72G 73G 74G 4AA 4BA 75G 76G 2EA 2FA 4CA 4DA D1G D2G 4JA 84A 77G 78G 79G)	13F9978	*
	Line Cord (models 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 51G 61G 49G 71G 72G 73G 74G 4AA 4BA 75G 76G 2EA 2FA 4CA 4DA D1G D2G 4JA 84A 77G 78G 79G)	14F0032	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 1DG 19G 2CG 3CG 51G 61G 49G 71G 72G 73G 74G 75G 76G D1G D2G 77G 78G 79G)	13F9996	*
	Line Cord (models 1DG 19G 2CG 3CG 51G 61G 49G 71G 72G 73G 74G 75G 76G D1G D2G A1S A1D A1Y 77G 78G 79G)	14F0068	*
	Line Cord (model A1Y)	36L8879	*
	Line Cord	1838576	*
	Line Cord	05K2876	*
	Line Cord	02K0545	*
	Line Cord (models 1DG 19G 2CG 3CG 51G 61G 49G 71G 72G 73G 74G 75G 76G D1G D2G 77G 78G 79G)	14F0086	*
	Line Cord (models 1EA 2DA 3DA 1DG 19G 2CG 3CG B1A 51G 61G 49G 71G 72G 73G 74G 4AA 4BA 75G 76G 2EA 2FA 4CA 4DA D1G D2G 4JA 84A 77G 78G 79G)	14F0014	*
	Line Cord (models 1DG 19G 2CG 3CG 51G 61G 49G 71G 72G 73G 74G 75G 76G D1G D2G 77G 78G 79G)	14F0050	*

<b>Item#</b>	<b>Machine Type 8311</b>	<b>FRU#</b>	<b>CRU?</b>
1	Side cover assembly black (all models)	25P0066	*
2	"L" cover assembly black (all models)	25P0065	*
3	Front bezel assembly (black) (all models)	25P0067	*
4	Trim bezel/label kit (black) (all models)	49P1900	*
4	Trim bezel/label kit (white) (all models)	49P1901	*
5	48X CDROM (Black) (models 15U 26A 26T 39J 3AJ 3BJ 3GU 47U CTO 61U 61S 48J 49J 4AJ 85U 85D 85Y 51A 5AA 61D 61Y 85S 94A 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 2FU 2FS 2FD 2FY 87J 88J 89J 64G B4A 4MS 4MD 4MY 96U 96S 96D 96Y 97J 98J 99J D3U 4PU)	33P3203	**
5	48X CDROM (Black) (models 15U 26A 26T 39J 3AJ 3BJ 3GU 47U CTO 61U 61S 48J 49J 4AJ 85U 85D 85Y 51A 5AA 61D 61Y 85S 94A 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 2FU 2FS 2FD 2FY 87J 88J 89J 64G B4A 4MS 4MD 4MY 96U 96S 96D 96Y 97J 98J 99J D3U 4PU)	33P3207	**
5	48X CDROM (Black) (models 15U 26A 26T 39J 3AJ 3BJ 3GU 47U CTO 61U 61S 48J 49J 4AJ 85U 85D 85Y 51A 5AA 61D 61Y 85S 94A 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 2FU 2FS 2FD 2FY 87J 88J 89J 64G B4A 4MS 4MD 4MY 96U 96S 96D 96Y 97J 98J 99J D3U 4PU)	33P3211	**
5	48X CDROM (Black) (models 15U 26A 26T 39J 3AJ 3BJ 3GU 47U CTO 61U 61S 48J 49J 4AJ 85U 85D 85Y 51A 5AA 61D 61Y 85S 94A 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 2FU 2FS 2FD 2FY 87J 88J 89J 64G B4A 4MS 4MD 4MY 96U 96S 96D 96Y 97J 98J 99J D3U 4PU)	33P3215	**
5	48X CDROM (White) (XP-OK)	33P3201	**
5	48X CDROM (White) (XP-OK)	33P3205	**
5	48X CDROM (White) (XP-OK)	33P3209	**
5	48X CDROM (White) (XP-OK)	33P3213	**

Item#	Machine Type 8311	FRU#	CRU?
5	DVD-ROM 16X48X (Black) (models 36U 36F 45U 45F CTO 27U 27F B3U B3F 93U 93F D2U D2F)	33P3277	**
5	DVD-ROM 16X48X (Black) (models 36U 36F 45U 45F CTO 27U 27F B3U B3F 93U 93F D2U D2F)	33P3259	**
5	DVD-ROM 16X48X (Black) (models 36U 36F 45U 45F CTO 27U 27F B3U B3F 93U 93F D2U D2F)	33P3281	**
5	DVD-ROM 16X48X (Black) (models 36U 36F 45U 45F CTO 27U 27F B3U B3F 93U 93F D2U D2F)	33P3297	**
5	DVD-ROM 16X48X (White)	33P3257	**
5	DVD-ROM 16X48X (White)	24P3617	**
5	24X10X40X CD-RW (White) (model CTO)	24P3625	**
5	24X10X40X CD-RW (Black) (model CTO)	24P3627	**
5	24X10X40X CD-RW (Black) (model CTO)	24P3635	**
5	24X10X40X CD-RW (White)	24P3632	**
5	40X12X40X CD-RW (Black) (model CTO 16A 2DA 3HA 27U 27F B1A B2A 11A 13U 22U 22F 2AA 2CU 36U 36F 3CJ 3DU 3EA 45U 45F 62U 62S 63U 63F 4BJ 4DU 4ES 4ED 4EY 83U 84S 84D 84Y 91S 91D 91Y 92U 93U 93F 62D 62Y 3JE 4FA 4GA D1U D2U D2F)	33P3269	**
5	40X12X40X CD-RW (Black) (model CTO 16A 2DA 3HA 27U 27F B1A B2A 11A 13U 22U 22F 2AA 2CU 36U 36F 3CJ 3DU 3EA 45U 45F 62U 62S 63U 63F 4BJ 4DU 4ES 4ED 4EY 83U 84S 84D 84Y 91S 91D 91Y 92U 93U 93F 62D 62Y 3JE 4FA 4GA D1U D2U D2F)	33P3273	**
5	48X24X48X CD-RW (Black) (models CTO 16A 2DA 3HA 27U 27F B1A B2A 11A 13U 22U 22F 2AA 2CU 36U 36F 3CJ 3DU 3EA 45U 45F 62U 62S 63U 63F 4BJ 4DU 4ES 4ED 4EY 83U 84S 84D 84Y 91S 91D 91Y 92U 93U 93F 62D 62Y 3JE 4FA 4GA D1U D2U D2F B3U B3F 2EU 2ES 2ED 2EY 2GA 2HA 4KA 4LA 8AJ 8BJ A2S A2D A2Y B5U B5F 4NU 4NS 4ND 4NY 8CA 8DU 9AE 9AJ 9BJ 9CA)	33P3289	**
5	48X24X48X CD-RW (Black) (models CTO 16A 2DA 3HA 27U 27F B1A B2A 11A 13U 22U 22F 2AA 2CU 36U 36F 3CJ 3DU 3EA 45U 45F 62U 62S 63U 63F 4BJ 4DU 4ES 4ED 4EY 83U 84S 84D 84Y 91S 91D 91Y 92U 93U 93F 62D 62Y 3JE 4FA 4GA D1U D2U D2F B3U B3F 2EU 2ES 2ED 2EY 2GA 2HA 4KA 4LA 8AJ 8BJ A2S A2D A2Y B5U B5F 4NU 4NS 4ND 4NY 8CA 8DU 9AE 9AJ 9BJ 9CA)	33P3293	**
5	40X12X40X CD-RW (White)	33P3267	**
5	40X12X40X CD-RW (White)	33P3271	**
5	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black) (models CTO 29U 31S 31D 31Y 34A 34T 46J 4CA 81J 82A 86U 86F)	33P3227	**
5	8X4X32X8X DVD-ROM/CD-RW Combo Drive (White)	33P3225	**
5	32X10X40X16X DVD-ROM/CD-RW Combo Drive (Black) (models CTO 29U 31S 31D 31Y 34A 34T 46J 4CA 81J 82A 86U 86F 95J A1U A1F A1S A1D A1Y B6U B6F D4J)	33P3251	**

Item#	Machine Type 8311	FRU#	CRU?
5	32X10X40X16X DVD-ROM/CD-RW Combo Drive (White)	33P3249	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 11A 13U 15U 22U 22F 26A 26T 27U 27F 28S 28D 28Y 29U 2AA 2CU 31S 31D 31Y 34A 34T 36U 36F 3DU 3EA 3GU 45U 45F 47U CTO 16A 2DA 3HA B1A B2A 61U 61S 62U 62S 63U 63F 4CA 4DU 4ES 4ED 4EY 82A 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 91S 91D 91Y 92U 93U 93F 51A 5AA 61D 61Y 62D 62Y 4FA 4GA 85S 94A 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY D1U D2U D2F B3U B3F 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 2GA 2HA 4KA 4LA A1U A1F A1S A1D A1Y A2S A2D A2Y CJU 64G CAU CBU CCU CDU CEU CGU CHU B4A B5U B5F B6U B6F 4MS 4MD 4MY 4NU 4NS 4ND 4NY 8CA 8 4PU)	75H9550	**
6	FDD 3.5" 1.44MB (wo/Bezel) (model CTO 48J 49J 4AJ 4BJ 81J 39J 3AJ 3BJ 3CJ 46J 3JE 87J 88J 89J 8AJ 8BJ 95J CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ CKJ CLJ CMJ CNJ CPJ CQJ 97J 98J 99J 9AJ 9BJ D4J)	19K1543	**
7	HDD 40GB 5400RPM (model 15U 29U 3GU 47U CTO 85U 85D 85Y 85S 4PU 4MS 4MD 4MY)	19K1562	**
7	HDD 40GB 7200RPM (models 11A 22U 22F 28S 28D 28Y 2AA 39J 3AJ 3BJ 3CJ 3EA CTO 26A 26T 27U 27F 16A 2DA 3HA B1A B2A 61U 61S 63U 63F 48J 49J 4AJ 4BJ 51A 5AA 61D 61Y 3JE 4FA 4GA 94A 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 2GA 2HA 4KA 4LA 87J 88J 89J 8AJ 8BJ 64G B4A B5U B5F 4NU 4NS 4ND 4NY 8CA 96U 96S 96D 96Y 97J 98J 99J 9AE 9AJ 9BJ 9CA D3U)	19K1568	**
7	HDD 80GB 7200RPM (models 13U 2CU 31S 31D 31Y 34A 34T 36U 36F 3DU 46J CTO 62U 62S 4CA 4DU 4ES 4ED 4EY 81J 82A 83U 84S 84D 84Y 86U 86F 91S 91D 91Y 92U 62D 62Y D1U 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 95J A1U A1F A1S A1D A1Y A2S A2D A2Y B3U B3F B6U B6F 8DU D4J)	24P3665	**
7	HDD 120GB 7200RPM (model 45U 45F CTO 93U 93F D2U D2F)	24P3687	**
8	Planar (Spartan 10/100 POV)	02R4083	N
8	Planar (Spartan 10/100 400/533FSB wo-POV) (all models)	02R4084	N
8	Planar (Spartan-G 10/100/1000 POV)	02R4085	N
8	Planar (Spartan-G 10/100/1000 wo-POV)	02R4086	N
8	Planar (Spartan-L 10/100 400FSB AGP wo-POV)	02R4087	N
8	Planar (Spartan-GL/GV 10/100 400/533FSB AGP wo-POV)	02R4637	N
9	Memory 128MB NP SDRAM (models 11C 11B 11V 22U 22A 22T 22C 22V 25U CTO CAU CBU,CCU 52U 52S 52P CDU CEU CGU 54C 54B 54V 45A 45T CHU CJU)	33L3303	*

Item#	Machine Type 8311	FRU#	CRU?
9	Memory 256MB NP SDRAM (models 21U 23C 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO 12G 13G A1G 15G 27G 34G 31C 41C 51U 51F 51S 51P 51G 53U 53F 62U 63U 63F 63S 63P 82U 71G 72G 73G 74G 75G 53S 53P 53U 83U 83F A2U A2S A2P 55U 55S 55P 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P E1U E1F E1S E1P D3U D3F D3S D3P 76G 77G 79G 61C 81C 78G 21F 21G 61G 81G E1G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G E2G 7AG 7BG 7CG 4AG 41U 41F 41G)	33L3305	*
9	Memory 512MB NP SDRAM (model CTO)	33L3307	*
10	Processor P4 1.7 GHz (models B1A B2A)	49P0189	N
10	Processor P4 1.8 GHz (models 11C 11B 11V CTO 12G 13G 15G)	33P0965	N
10	Processor P4 1.9 GHz (models CTO A1G)	49P1726	N
10	Processor P4 2.0 GHz (models 22U 22F 26A 26T 27U 27F 28S 28D 28Y 29U 2AA 2CU CTO 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 2GA 2HA CAJ)	48P7205	N
10	Processor P4 2.2 GHz	48P7206	N
10	Processor P4 2.26 GHz (models 31S 31D 31Y 34A 34T 36U 36F 39J 3AJ 3BJ 3CJ 3DU 3EA 3GU CTO CBJ)	48P6837	N
10	Processor P4 2.4 GHz (model 47U CTO)	33P3743	N
10	Processor P4 2.4 GHz (models 45U 45F 46J CTO 48J 49J 4AJ 4BJ 4CA 4DU 4ES 4ED 4EY 4FA 4GA 3JE 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 4KA 4LA CCJ CCU CLJ 4MS 4MD 4MY 4NU 4NS 4ND 4NY 4PU)	48P7684	N
10	Processor Celeron 1.7 GHz (model 51A)	58P9937	N
10	Processor Celeron 1.8 GHz (model A3U)	58P9965	N
10	Processor P4 1.7 GHz (models B1A B2A)	25P5041	N
10	Processor P4 1.8 GHz (models 61U 61S 62U 62S 63U 63F 61D 61Y 62D 62Y CGJ 64G)	58P9968	N
10	Processor P4 2.26 GHz (models 31S 31D 31Y 34A 34T 36U 36F 39J 3AJ 3BJ 3CJ 3DU 3EA 3GU CTO 3JE CBJ)	59P1987	N
10	Processor P4 2.4 GHz (models 47U CTO)	59P1989	N
10	Processor P4 2.4 GHz (models 45U 45F 46J CTO 48J 49J 4AJ 4BJ 4CA 4DU 4ES 4ED 4EY 4FA 4GA 3JE 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 4KA 4LA CCJ CCU CLJ 4MS 4MD 4MY 4NU 4NS 4ND 4NY 4PU)	59P1991	N
10	Processor P4 2.53 GHz (models 81J 82A 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 85S 87J 88J 89J 8AJ 8BJ CDJ CDU CMJ 8CA 8DU)	48P6839	N
10	Processor P4 2.53 GHz (models 81J 82A 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 85S 87J 88J 89J 8AJ 8BJ CDJ CDU CMJ 8CA 8DU CMJ)	59P1993	N
10	Processor P4 2.66 GHz (models 91S 91D 91Y 92U 93U 93F 94A 95J CEJ)	58P9963	N
10	Processor P4 2.8 GHz (models D1U D2U D2F CHJ CHU CPJ D3U D4J)	01R3171	N

Item#	Machine Type 8311	FRU#	CRU?
10	Processor Celeron 2.0 GHz (models B3U B3F B4A B5U B5F)	02R5350	N
10	Processor P4 1.8 GHz (models 61U 61S 62U 62S 63U 63F 61D 61Y 62D 62Y CGJ 64G)	02R4501	N
10	Processor P4 1.8 GHz (models 61U 61S 62U 62S 63U 63F 61D 61Y 62D 62Y CGJ 64G)	02R4507	N
10	Processor P4 2.0 HGz (models 22U 22F 26A 26T 27U 27F 28S 28D 28Y 29U 2AA 2CU CTO 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 2GA 2HA CAJ)	59P7160	N
10	Processor P4 2.0 HGz (models 22U 22F 26A 26T 27U 27F 28S 28D 28Y 29U 2AA 2CU CTO 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 2GA 2HA CAJ)	02R4509	N
10	Processor P4 2.2 GHz	59P7161	N
10	Processor P4 2.2 GHz	02R4511	N
10	Processor P4 2.26 GHz (models 31S 31D 31Y 34A 34T 36U 36F 39J 3AJ 3BJ 3CJ 3DU 3EA 3GU CTO 3JE CBJ)	02R4513	N
10	Processor P4 2.4 GHz (models 47U CTO)	02R4515	N
10	Processor P4 2.4 GHz (models 45U 45F 46J CTO 48J 49J 4AJ 4BJ 4CA 4DU 4ES 4ED 4EY 4FA 4GA 3JE 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 4KA 4LA CCJ CCU CLJ 4MS 4MD 4MY 4NU 4NS 4ND 4NY 4PU)	02R4517	N
10	Processor P4 2.53 GHz (models 81J 82A 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 85S 87J 88J 89J 8AJ 8BJ CDJ CDU CMJ 8CA 8DU)	02R4519	N
10	Processor P4 3.06 GHz (models E1U E1F E1S E1P CJU E1G E2G 7BG 7CG)	02R5347	N
10	Processor Celeron 2.0 GHz (models A4U A4S)	88P5835	N
10	Processor Celeron 2.1 GHz (models A5U A5S)	02R5352	N
10	Processor Celeron 2.2 GHz (models B6U B6F)	02R5355	N
10	Processor P4 1.8 GHz (models 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P)	73P0569	N
10	Processor P4 2.0 GHz (models 21U 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G 21F 21G)	73P0570	N
10	Processor P4 2.26 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	73P0575	N
10	Processor P4 2.4 GHz (models CTO)	73P0572	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G 45A 45T 46U 47U 47S 47P 48U 48S 49U 49S 4AG 41U 41F 41G)	73P0576	N
10	Processor P4 2.53 GHz (models 62U 63U 63F 63S 63P CEU 76G 78G 61C 61G 64U 64F 7AG)	73P0577	N
10	Processor P4 2.66 GHz (models 82U CGU 83U 83F 81C 81G 84U 85G)	74P1615	N
10	Processor P4 2.8 GHz (models D1U D1S D1P D1G D2U D2S D2P D3U D3F D3S D3P 77G 79G CHU D4G)	74P1637	N
10	Processor P4 2.2 GHz (models CTO)	73P0571	N



Item#	Machine Type 8311	FRU#	CRU?
10	Fan Sink (1.9 - 2.2 GHz) (models 21U 22U 22A 22T 22C 22V 23C 25U 31U 31F 31G 43U 32U 32F 32G 32V 26G 33G CTO CAU CBU,CCU,A1G 27G 34G 41C 62U 63U 63F 63S 63P 82U 72G 73G 75G CEU CGU 83U 83F 45A 45T 46U 47U 47S 47P D1U D1S D1P D1G D2U D2S D2P D3U D3F D3S D3P 76G 77G 79G CHU 61C 81C 78G A2U A2S A2P 11C,11B,11V,CTO,12G,13G 15G 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U 55U 55S 55P 21F 21G 61G 81G A3U A4U A4S A5U A5S 48U 48S 49U 49S 84U 64U 64F 85G D4G 7AG 4AG 41U 41F 41G)	32P4004	N
10	Fan sink (3.06 GHz) (models E1U E1F E1S E1P CJU E1G E2G 7BG 7CG)	01R3330	N
10	Mounting Assembly for P4 Processor (all models)	48P6726	N
11	185W Power Supply (models 11A 13U 15U 22U 22F 26A 26T 27U 27F 29U 2AA 2CU 34A 34T 36U 36F 39J 3AJ 3BJ 3CJ 3DU 3EA 3GU 45U 45F 46J 47U CTO 16A 2DA 3HA B1A B2A 61U 62U 63U 63F 48J 49J 4AJ 4BJ 4CA 4DU 81J 82A 83U 85U 86U 86F 92U 93U 93F 51A 5AA 3JE 4FA 4GA 94A 4HU 4JU D1U D2U D2F B3U B3F 2EU 2FU 2GA 2HA 4KA 4LA 87J 88J 89J 8AJ 8BJ 95J A1U A1F CJU CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ 64G CAU CBU CCU CDU CEU CGU CHU CKJ CLJ CMJ CNJ CPJ CQJ B4A B5U B5F B6U B6F 4NU 8CA 8DU 96U 97J 98J 99J 9AE 9AJ 9BJ 9CA D3U D4J 4PU)	24P6883	N
11	185W Power Supply (models 28S 28D 28Y 31S 31D 31Y 61S 62S 4ED 4EY 84S 84D 84Y 85D 85Y 91S 91D 91Y 61D 61Y 62D 62Y 85S 4HS 4HD 4HY 4JS 4JD 4JY 2ES 2ED 2EY 2FS 2FD 2FY A1S A1D A1Y A2S A2D A2Y 4MS 4MD 4MY 4NS 4ND 4NY 96S 96D 96Y)	24P6885	N
10	Side cover assembly black (all models)	25P0066	*
	MOUSE PS/2 2BUTTON (Black) (models 39J 3AJ 3BJ 3CJ CTO 61U 61S 62U 62S 63U 63F 48J 49J 4AJ 4BJ 61D 61Y 62D 62Y 85U 85D 85Y 85S 4HS 4HU 4HD 4HY 4JS 4JU 4JD 4JY 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 87J 88J 89J 8AJ 8BJ CJU CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ 64G CAU CBU CCU CDU CEU CGU CHU CKJ CLJ CMJ CNJ CPJ CQJ 4MS 4MD 4MY 4NU 4NS 4ND 4NY 8DU 96U 96S 96D 96Y 97J 98J 99J 9AE 9AJ 9BJ D3U 4PU)	24P0383	*
	MOUSE PS/2 2BUTTON (White)	24P0381	*
	Mouse Scrollpoint III (Black) (mode 11A 13U 15U 22U 22F 27U 27F 28S 28D 28Y 29U 2AA 2CU 31S 31D 31Y 36U 36F 3DU 3EA 3GU 45U 45F 46J 47U CTO 16A 2DA 3HA B1A B2A 4DU 4ES 4ED 4EY 81J 83U 84S 84D 84Y 86U 86F 91S 91D 91Y 92U 93U 93F 26A 26T 34A 34T 51A 5AA 4FA 4GA 94A D1U D2U D2F 4CA 82A 2GA 2HA 4KA 4LA 95J A1U A1F A1S A1D A1Y A2S A2D A2Y B3U B3F B4A B5U B5F B6U B6F 8CA 9CA D4J)	24P0485	*
	Video ATI Radeon VE 64MB (models 11A 2AA 3EA CTO 16A 2DA 3HA B1A B2A 86U 86F 93U 93F 4FA 4GA D1U 2GA 2HA 4KA 4LA 8CA 9CA)	49P4685	*

Item#	Machine Type 8311	FRU#	CRU?
	Video nVidia GeForce4 MX 64MB x/TV Out (models 13U 22U 22F 27U 27F 28S 28D 28Y 2CU 31S 31D 31Y 34A 34T 36U 36F 3DU 45U 45F CTO 4CA 4DU 82A 83U 92U A1U A1F A1S A1D A1Y)	49P4692	*
	Video nVidia GeForce4 MX 128MB w/VGA TV DVI (models CTO D2U D2F)	58P9865	*
	56K V.90 modem (US)	19K2965	*
	56K V.90 modem (WT)	19K2963	*
	Soft Modem V.92/V.44 (models CTO 13U 15U 22U 22F 27U 27F 29U 2CU 36U 36F 3DU 3GU 45U 45F 47U CTO 61U 62U 63U 63F 4DU 83U 85U 86U 86F 92U 93U 93F D1U D2U D2F B3U B3F 2EU 2FU A1U A1F 11A 26A 26T 28S 28D 28Y 2AA 31S 31D 31Y 34A 34T 3EA 46J CTO 16A 2DA 3HA B1A B2A 61S 62S 4CA 4ES 4ED 4EY 81J 82A 84S 84D 84Y 85D 85Y 91S 91D 91Y 51A 5AA 61D 61Y 62D 62Y 3JE 4FA 4GA 85S 94A 2ES 2ED 2EY 2FS 2FD 2FY 2GA 2HA 4KA 4LA 95J A1S A1D A1Y A2S A2D A2Y B4A B5U B5F B6U B6F 4MS 4MD 4MY 4NU 4NS 4ND 4NY 8CA 8DU 96U 96S 96D 96Y 9CA D3U D4J)	22P7943	*
	Speakers Infinity Active T1 (Black) (models 11A 13U 15U 22U 22F 26A 26T 27U 27F 28S 28D 28Y 29U 2AA 2CU 31S 31D 31Y 34A 34T 36U 36F 3DU 3EA 3GU 45U 45F 46J 47U CTO 16A 2DA 3HA B1A B2A 61U 61S 62U 62S 63U 63F 4CA 4DU 4ES 4ED 4EY 81J 82A 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 91S 91D 91Y 92U 93U 93F 51A 5AA 61D 61Y 62D 62Y 3JE 4FA 4GA 85S 94A B3U B3F 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY 2GA 2HA 4KA 4LA 95J A1U A1F A1S A1D A1Y A2S A2D A2Y 4JU 4JS 4JD 4JY D1U D2U D2F B5U B5F B6U B6F 4MS 4MD 4MY 4NU 4NS 4ND 4NY 8DU 96U 96S 96D 96Y D3U D4J B4A 8CA 9CA)	25P4726	*
	Speaker Power brick - US CE CF LA Taiwan (models 13U 15U 22U 22F 26T 27U 27F 28S 28D 28Y 29U 2CU 31S 31D 31Y 34T 36U 36F 3DU 3GU 45U 45F 47U CTO 61U 61S 62U 62S 63U 63F 4DU 4ES 4ED 4EY 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 91S 91D 91Y 92U 93U 93F 61D 61Y 62D 62Y 85S B3U B3F 2EU 2ES 2ED 2EY 2FU 2FS 2FD 2FY A1U A1F A1S A1D A1Y A2S A2D A2Y 4JU 4JS 4JD 4JY D1U D2U D2F B5U B5F B6U B6F 4MS 4MD 4MY 4NU 4NS 4ND 4NY 8DU 96U 96S 96D 96Y D3U)	10K2587	*
	Speaker Power brick - Europe (non-UK)	25P5704	*
	Speaker Power brick - UK	25P5703	*
	Speaker Power brick - China	10K2597	*
	Speaker Power brick - Japan (models 46J 81J 3JE 95J D4J)	10K2593	*
	Speaker Power brick - ANZ (models 11A 26A 2AA 34A 3EA 16A 2DA 3HA B1A B2A 4CA 82A 51A 5AA 4FA 4GA 94A 2GA 2HA 4KA 4LA B4A 8CA 9CA)	25P5705	*
	RJ11 connector adapter (Spain Ireland) (all "G" models)	60H6043	*
	RJ11 connector adapter (Austria) (all "G" models)	60H6045	*

Item#	Machine Type 8311	FRU#	CRU?
	RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
	RJ11 connector adapter (Denmark) (all "G" models)	60H6047	**
	RJ11 connector adapter (Norway Finland) (all "G" models)	60H6048	
	RJ11 connector adapter (France) (all "G" models)	60H6049	*
	RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
	RJ11 connector adapter (UK NZ HK) (all "G" "A" "B" "H" models)	60H6051	*
	RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
	RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
	RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
	RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*
	Front bezel blanks kit (all models)	25P0068	*
	Front bezel release (all models)	25P0069	*
	I/O retainer cards (all models)	25P0070	*
	DASD soft mount rail kit (all models)	19K5331	**
	Cable FDD (all models)	01K1513	*
	Cable audio	75H9219	*
	Cable C2	09K9827	*
	Cable IDE ATA-66 1 drop (all models)	49P4364	*
	Cable IDE ATA-66 2 drop (all models)	37L5098	*
	RFID antenna w/o velcro	03K9654	*
	Speaker assembly (all models)	00N5151	*
	Shield 5.25 EMC (all models)	19K5548	*
	HDD bracket assembly (all models)	25P0072	**
	Power supply bracket (all models)	25P0073	**
	Foot rubber (all models)	03K9655	*
	Control panel assembly (all models)	25P0074	*
	Misc. hardware kit (all models)	09N5764	*
	Lock assembly (all models)	25P0076	*
	PWR panel kit (all models)	25P0079	*
	Adapter PCI 1394 combo (models 46J CTO 81J)	32P4742	*
	PCMCIA assembly (models 46J CTO 81J)	25P0091	*
	Cable audio	49P1933	*
	Cable 1394 6-pin (models 13U 15U 26A 26T 34A 34T 46J CTO 4CA 81J 82A)	25P0084	*
	Cable PCMCIA ATA-66 (all models)	49P4361	*
	Audio front panel (models 11A 22U 22F 27U 27F 28S 28D 28Y 29U 2AA 2CU 31S 31D 31Y 36U 36F 39J 3DU 3EA 3GU 45U 45F 47U 13U 15U 26A 26T 34A 34T 46J CTO 16A 2DA 3HA B1A B2A 4DU 4ES 4ED 4EY 83U 84S 84D 84Y 85U 85D 85Y 86U 86F 91S 91D 91Y 92U 93U 93F 85S 94A D2U D2F B5U B5F B6U B6F)	49P1750	*

Item#	Machine Type 8311	FRU#	CRU?
	Audio w/1394 front panel (model 13U 15U 26A 26T 34A 34T CTO 4CA 82A)	49P1752	*
	Audio w/1394 & SPDIF front panel (models 46J CTO 81J 95J D4J)	49P1754	*
	Audio / SPDIF cable (models 46J CTO 81J)	25P0002	*
	PCI 1394 adapter (models 13U 15U 26A 26T 34A 34T CTO 4CA 82A D4J)	22P6849	*
	Universal adapter bracket (all models)	32P4743	*
	Battery 3.0V (all models)	33F8354	*
	Fan 80mm fixed speed	22P4447	*

	Recovery CDs Win 2K	FRU #	CRU?
	US	71P6405	*
	FR	71P6425	*
	GR	71P6413	*
	IT	71P6433	*
	BR	71P6445	*
	SP	71P6421	*
	DK	71P6417	*
	NL	71P6441	*
	AE	71P6465	*
	SV	71P6409	*
	HE	71P6453	*
	FI	71P6429	*
	NO	71P6437	*
	PL	71P6457	*
	PO	71P6449	*
	RU	71P6477	*
	HU	71P6473	*
	CZ	71P6461	*
	TR	71P6469	*
	GK	71P6481	*
	Japanese (models 89J 8BJ 3BJ 3CJ 4AJ 4BJ 99J 9AJ)	71P6066	*
	Simplified Chinese	62P8983	*
	Taiwan - TC	62P8984	*
	Hong Kong - TC	62P8985	*

	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (Models 11A 13U 15U 22U 26A 27U 28S 28D 28Y 29U 2AA 2CU 31S 31D 31Y 34A 36U 3DU 3EA 3GU 45U 47U 16A 2DA 3HA B1A B2A 61U 62U 63U 4CA 4DU 82A 83U 85U 86U 92U 93U 51A 5AA 4FA 4GA 94A 4JU D1U D2U B3U 2EU 2FU 2GA 2HA 4KA 4LA A1U B4A B5U B6U 4NU 8CA 8DU 96U 9CA D3U 4PU)	71P6565	*
	French (models 22F 27F 36F 45F 63F 86F 93F D2F B3F A1F B5F B6F)	71P6585	*
	German	71P6573	*
	Italian	71P6593	*
	Spanish (models 61S 62S 4ES 4ED 4EY 84S 84D 84Y 85D 85Y 91S 91D 91Y 61D 61Y 62D 62Y 85S 4JS 4JD 4JY 2ES 2ED 2EY 2FS 2FD 2FY A1S A1D A1Y A2S A2D A2Y 4MS 4MD 4MY 4NS 4ND 4NY 96S 96D 96Y)	71P6581	*
	Brazilian/Portuguese	71P6605	*
	Danish	71P6577	*
	Netherlands	71P6601	*
	Arabic Enabled	71P6625	*
	Swedish	71P6569	*
	Hebrew	71P6613	*
	Finnish	71P6589	*
	Norwegian	71P6597	*
	Polish	71P6617	*
	Portuguese	71P6609	*
	Russian	71P6637	*
	Hungarian	71P6633	*
	Czechoslovakian	71P6621	*
	Turkish	71P6629	*
	Greek	71P6641	*
	Japanese (models 3AJ 46J 49J 81J 88J 95J 98J D4J)	71P6066	*
	Simplified Chinese	71P6084	*
	Traditional Chinese	71P6087	*
	Traditional Chinese Hong Kong	71P6090	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (models 3JE 4HU 64G 9AE)	71P6485	*
	French (model 64G)	71P6505	*
	German (model 64G)	71P6493	*
	Italian (model 64G)	71P6513	*
	Spanish (models 4HS 4HD 4HY 64G)	71P6501	*
	Brazilian/Portuguese	71P6525	*
	Danish (model 64G)	71P6497	*
	Netherlands (model 64G)	71P6521	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	Arabic Enabled (model 64G)	71P6545	*
	Swedish (model 64G)	71P6489	*
	Hebrew (model 64G)	71P6533	*
	Finnish (model 64G)	71P6509	*
	Norwegian (model 64G)	71P6517	*
	Polish (model 64G)	71P6537	*
	Portuguese (model 64G)	71P6529	*
	Russian (model 64G)	71P6557	*
	Hungarian (model 64G)	71P6553	*
	Czechoslovakian (model 64G)	71P6541	*
	Turkish (model 64G)	71P6549	*
	Greek (model 64G)	71P6561	*
	Japanese (model 87J 8AJ 39J 48J 97J 9AJ)	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 15U 29U 3GU 47U CTO 61U 62U 63U 85U 3JE 4HU 4JU 2EU 2FU CJU 64G CAU CBU CCU CDU CEU CGU CHU 4NU 8DU 96U 9AE D3U 4PU)	32P5100	*
	Arabic (model 64G)	32P5101	*
	Belgian/French (model 64G)	32P5102	*
	Belgian/UK (model 64G)	32P5103	*
	Bulgarian (model 64G)	32P5104	*
	Chinese/US (model 64G)	32P5105	*
	Czech (model 64G)	32P5106	*
	Danish (model 64G)	32P5107	*
	Dutch (model 64G)	32P5108	*
	French (model 64G)	32P5109	*
	French Canadian (model 63F)	32P5110	*
	French Canadian (model 63F)	32P5111	*
	German (model 64G)	32P5112	*
	Greek (model 64G)	32P5113	*
	Hebrew (model 64G)	32P5114	*
	Hungarian (model 64G)	32P5115	*
	Iceland (model 64G)	32P5116	*
	Italian (model 64G)	32P5117	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	Japanese (models 39J 3AJ 3BJ 3CJ 46J 48J 49J 4AJ 4BJ 81J 87J 88J 89J 8AJ 8BJ 95J CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ CKJ CLJ CMJ CNJ CPJ CQJ 97J 98J 99J 9AJ 9BJ D4J)	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 61S 62S 85D 85Y 61D 61Y 62D 62Y 85S 4HS 4HD 4HY 4JS 4JD 4JY 2ES 2ED 2EY 2FS 2FD 2FY 4MS 4MD 4MY 4NS 4ND 4NY 96S 96D 96Y)	32P5120	*
	Norwegian (model 64G)	32P5121	*
	Polish (model 64G)	32P5122	*
	Portuguese (model 64G)	32P5123	*
	Romanian (model 64G)	32P5124	*
	Russian (model 64G)	32P5125	*
	Russian/Cy	32P5126	*
	Serbian/Cyrillic (model 64G)	32P5127	*
	Slovak (model 64G)	32P5128	*
	Spanish (model 64G)	32P5129	*
	Swedish/Finn (model 64G)	32P5130	*
	Swiss F/G (model 64G)	32P5131	*
	Thailand	32P5132	*
	Turkish (model 64G)	32P5133	*
	Turkish (model 64G)	32P5134	*
	UK English (model 64G)	32P5135	*
	US International (model 64G)	32P5136	*
	Yugoslav/Latin (model 64G)	32P5137	*
	Brazil/Portuguese	32P5138	*

	<b>Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 11A 13U 22U 27U 28S 28D 28Y 2AA 2CU 31S 31D 31Y 36U 3DU 3EA 45U CTO 16A 2DA 3HA B1A B2A 4DU 83U 86U 92U 93U 26A 34A 51A 5AA 4FA 4GA 94A D1U D2U 4CA 82A 2GA 2HA 4KA 4LA A1U B3U B4A B5U B6U 8CA 9CA)	19K1910	*
	Arabic (model CTO)	19K1911	*
	Belgian/French (model CTO)	19K1912	*
	Belgian/UK (model CTO)	19K1913	*
	Bulgarian (model CTO)	19K1914	*
	Chinese/US (model CTO)	19K1915	*
	Czech (model CTO)	19K1916	*
	Danish (model CTO)	19K1917	*
	Dutch (model CTO)	19K1918	*
	French (model CTO)	19K1919	*
	French Canadian (models 22F 27F 45F CTO 36F 86F 93F D2F A1F B3F B5F B6F)	19K1920	*

	<b>Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU?</b>
	French Canadian (models 22F 27F 45F CTO 36F 86F 93F D2F A1F B3F B5F B6F)	19K1921	*
	German (model CTO)	19K1922	*
	Greek (model CTO)	19K1923	*
	Hebrew (model CTO)	19K1924	*
	Hungarian (model CTO)	19K1925	*
	Iceland (model CTO)	19K1926	*
	Italian (model CTO)	19K1927	*
	Japanese	19K1928	*
	LA Spanish (models 28S 28D 28Y 31S 31D 31Y 4ES 4ED 4EY 84S 84D 84Y 91S 91D 91Y A1S A1D A1Y A2S A2D A2Y)	19K1930	*
	Norwegian (model CTO)	19K1931	*
	Polish (model CTO)	19K1931	*
	Portuguese (model CTO)	19K1933	*
	Romanian (model CTO)	19K1934	*
	Russian (model CTO)	19K1935	*
	Russian/Cy (model CTO)	19K1936	*
	Serbian/Cyrillic (model CTO)	19K1937	*
	Slovak (model CTO)	19K1938	*
	Spanish (model CTO)	19K1939	*
	Swedish/Finn (model CTO)	19K1940	*
	Swiss F/G (model CTO)	19K1941	*
	Thailand (models 26T 34T)	19K1942	*
	Turkish (model CTO)	19K1943	*
	Turkish (model CTO)	19K1944	*
	UK English (model CTO)	19K1945	*
	US International (model CTO)	19K1946	*
	Yugoslav/Latin (model CTO)	19K1947	*
	Brazil/Portuguese	19K1948	*
	Japanese	19K1908	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 11A 13U 15U 22F 26A 26T 27U 27F 28S 28D 29U 2AA 2CU 31S 31D 34A 34T 36U 36F 3DU 3EA 3GU 45U 45F 47U CTO 16A 2DA 3HA B1A B2A 22U 61U 61S 62U 62S 63U 63F 4CA 4DU 4ES 4ED 82A 83U 84S 84D 85U 85D 86U 86F 91S 91D 92U 93U 93F 51A 5AA 61D 62D 85S 94A 4HU 4JU D1U D2U D2F B3U B3F 2EU 2ES 2ED 2FU 2FS 2FD 2GA 2HA 4KA 4LA A1U A1F A1S A1D A2S A2D CJU 64G CAU CBU CCU CDU CEU CGU CHU B4A B5U B5F B6U B6F 4MS 4MD 4NU 4NS 4ND 8CA 8DU 96U 96S 96D 9CA D3U 4PU)	6952301	*



	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (model 11A 26A 2AA 34A 3EA 16A 2DA 3HA B1A B2A 4CA 82A 51A 5AA 94A 2GA 2HA 4KA 4LA B4A 8CA 9CA)	13F9939	*
	Line Cord (models 11A 26A 2AA 34A 3EA 16A 2DA 3HA B1A B2A 4CA 82A 51A 5AA 94A 2GA 2HA 4KA 4LA 64G B4A 8CA 9CA)	13F9978	*
	Line Cord (models 11A 26A 2AA 34A 3EA 16A 2DA 3HA B1A B2A 4CA 82A 51A 5AA 94A 2GA 2HA 4KA 4LA 64G B4A 8CA 9CA)	14F0032	*
	Line Cord (model 64G)	13F9996	*
	Line Cord (models 22Y 28S 28D 28Y 31S 31D 61S 62S 4ES 4ED 4EY 84S 84D 84Y 85D 85Y 91S 91D 91Y 61D 61Y 62D 62Y 85S 4HS 4HD 4HY 4JS 4JD 4JY 2ES 2ED 2EY 2FS 2FD 2FY A1S A1D A1Y A2S A2D A2Y 64G 4MS 4MD 4MY 4NS 4ND 4NY 96S 96D 96Y)	14F0068	*
	Line Cord (models 22Y 28Y 4EY 84Y 85Y 91Y 61Y 62Y 4HY 4JY 2EY 2FY A1Y A2Y 4MY 4NY 96Y)	36L8879	*
	Line Cord (models 39J 3AJ 3BJ 3CJ 46J 48J 49J 4AJ 4BJ 81J 3JE 87J 88J 89J 8AJ 8BJ 95J CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ CKJ CLJ CMJ CNJ CPJ CQJ 97J 98J 99J 9AE 9AJ 9BJ D4J)	1838576	*
	Line Cord (models 39J 3AJ 3BJ 3CJ 46J 3JE 87J 88J 89J 8AJ 8BJ 95J CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ CKJ CLJ CMJ CNJ CPJ CQJ 97J 98J 99J 9AE 9AJ 9BJ D4J)	34G0222	*
	Line Cord (models 39J 3AJ 3BJ 3CJ 46J 48J 49J 4AJ 4BJ 81J 3JE 87J 88J 89J 8AJ 8BJ 95J CJJ CAJ CBJ CCJ CDJ CEJ CGJ CHJ CKJ CLJ CMJ CNJ CPJ CQJ 97J 98J 99J 9AE 9AJ 9BJ D4J)	05K2876	*
	Line Cord	02K0545	*
	Line Cord (model 64G)	14F0086	*
	Line Cord (models 11A 26A 2AA 34A 3EA 16A 2DA 3HA B1A B2A 4CA 82A 51A 5AA 94A 2GA 2HA 4KA 4LA 64G B4A 8CA 9CA)	14F0014	*
	Line Cord (model 64G)	14F0050	*

<b>Item#</b>	<b>Machine Type 8314</b>	<b>FRU#</b>	<b>CRU?</b>
1	Side cover assembly black (all models)	25P0066	*
2	"L" cover assembly black (all models)	25P0065	*
3	Front bezel assembly (black) (all models)	25P0067	*
4	Trim bezel/label kit (black) (all models)	49P1900	*
4	Trim bezel/label kit (white) (all models)	49P1901	*
5	48X CDROM (Black) (models 21U,21F,31U,31F,41U,41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	33P3203	* *
5	48X CDROM (Black) (models 21U,21F,31U,31F,41U,41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	33P3207	* *

Item#	Machine Type 8314	FRU#	CRU?
5	48X CDROM (Black) (models 21U,21F,31U,31F,41U,41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	33P3211	**
5	48X CDROM (Black) (models 21U,21F,31U,31F,41U,41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	33P3215	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 21U 21F 31U 31F 41U 41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	75H9550	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 21U 21F 31U 31F 41U 41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	33P3345	**
7	HDD 40GB 5400RPM (models 51U 51F 5AU 5AF B1U B1F)	19K1562	**
7	HDD 40GB 7200RPM (models 21U 21F 31U 31F 41U 41F 61U 61F 81U 81F 91U 91F B2U B2F)	19K1568	**
8	Planar (Spartan-L 10/100 400FSB AGP wo-POV) (models 21U,21F,31U,31F,41U,41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	02R4087	N
8	Planar (Spartan-L 10/100 400FSB AGP wo-POV) (models 21U,21F,31U,31F,41U,41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	89P8072	N
9	Memory 256MB NP SDRAM (models 21U 21F 31U 31F 41U 41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	33L3305	*
10	Processor Celeron 1.7 GHz (models 51U 51F)	58P9937	N
10	Processor Celeron 1.8 GHz (models 5AU 5AF)	58P9965	N
10	Processor Celeron 2.0 GHz (models B1U B1F)	88P5835	N
10	Processor Celeron 2.2 GHz (models B2U B2F)	02R5355	N
10	Processor P4 1.8 GHz (models 11C,11B,11V,CTO,12G,13G 15G)	33P0965	N
10	Processor P4 1.9 GHz (models CTO A1G)	49P1726	N
10	Processor P4 2.0 GHz (models 21U 21F 21G 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G)	73P0570	N
10	Processor P4 2.2 GHz (model CTO)	73P0571	N
10	Processor P4 2.26 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	73P0575	N
10	Processor P4 2.4 GHz (model CTO)	73P0572	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G)	73P0576	N
10	Processor P4 2.5 GHz (models 81U 81F)	48P6840	N
10	Processor P4 2.6 GHz (models 91U 91F)	58P9961	N
10	Processor P4 2.0 GHz (models 21U 21F 21G 22U 22A 22T 22C 22V 23C 25U 26G CTO CAU 27G 72G)	73P0570	N
10	Processor P4 2.2 GHz (model CTO)	73P0571	N
10	Processor P4 2.26 GHz (models 31U 31F 31G 32U 32F 32G 32V 33G CTO CBU 34G 31C)	73P0575	N

Item#	Machine Type 8314	FRU#	CRU?
10	Processor P4 2.4 GHz (model CTO)	73P0572	N
10	Processor P4 2.4 GHz (models 43U CTO CCU 41C 73G 75G)	73P0576	N
10	Processor P4 2.4 GHz (models 41U 41F 41G)	74P1625	N
10	Processor P4 2.66 GHz (models 91U 91F)	74P1629	N
10	Fan Sink (all except 3.06GHz) models 21U 21F 31U 31F 41U 41F 81U 81F 91U 91F B1U B1F 51U 51F 5AU 5AF 11C 11B 11V CTO 12G 13G 15G 51U 51F 51S 51P 51G 52U 52S 52P 53U 53F 71G 74G CDU 54C 54B 54V 53S 53P 53U B2U B2F)	32P4004	N
10	Mounting Assembly for P4 Processor (all models)	48P6726	N
11	185W Power Supply (all models 21U 21F 31U 31F 41U 41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	24P6883	N
	Mouse PS/2 2 button (Black) models 21U 21F 31U 31F 41U 41F 51U 51F 5AU 5AF 61U 61F 81U 81F 91U 91F B1U B1F B2U B2F)	24P0383	*
	Soft Modem V.92/V.44 (models B1U B1F)	22P7943	*
	Speakers Infinity Active T1 (Black) (models B1U B1F)	25P4726	*
	Speaker Power brick - US CE CF LA Taiwan (models B1U B1F)	10K2587	*
	Front bezel blanks kit (all models)	25P0068	*
	Front bezel release (all models)	25P0069	*
	I/O retainer cards (all models)	25P0070	*
	DASD soft mount rail kit (all models)	19K5331	**
	Cable FDD (all models)	01K1513	*
	Cable IDE ATA-66 1 drop (all models)	49P4364	*
	Cable IDE ATA-66 2 drop (all models)	37L5098	*
	Speaker assembly (all models)	00N5151	*
	Shield 5.25 EMC (all models)	19K5548	*
	HDD bracket assembly (all models)	25P0072	**
	Power supply bracket (all models)	25P0073	**
	Foot rubber (all models)	03K9655	*
	Control panel assembly (all models)	25P0074	*
	Misc. hardware kit (all models)	09N5764	*
	Lock assembly (models B2U B2F)	25P0076	*
	PWR panel kit (all models)	25P0079	*
	Cable PCMCIA ATA-66 (all models)	49P4361	*
	Universal adapter bracket (all models)	32P4743	*
	Battery 3.0V (all models)	33F8354	*
	Fan 80mm fixed speed (all models)	22P4447	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (models 21U 31U 41U 51U 5AU 61U 81U 91U B1U B2U)	71P6485	*
	French (models 21F 31F 41F 51F 5AF 61F 81F 91F B1F B2F)	71P6505	*
	German	71P6493	*
	Italian	71P6513	*
	Spanish	71P6501	*
	Brazilian/Portuguese	71P6525	*
	Danish	71P6497	*
	Netherlands	71P6521	*
	Arabic Enabled	71P6545	*
	Swedish	71P6489	*
	Hebrew	71P6533	*
	Finnish	71P6509	*
	Norwegian	71P6517	*
	Polish	71P6537	*
	Portuguese	71P6529	*
	Russian	71P6557	*
	Hungarian	71P6553	*
	Czechoslovakian	71P6541	*
	Turkish	71P6549	*
	Greek	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 21U 31U 41U 51U 5AU 61U 81U 91U B1U B2U)	89P8300	*
	French Canadian (models 21F 31F 41F 51F 5AF 61F 81F 91F B1F B2F)	89P8311	*
	French Canadian (models 21F 31F 41F 51F 5AF 61F 81F 91F B1F B2F)	89P8312	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 21U 21F 31U 31F 41U 41F 51U 51F 51S 51P 51D 5AU 5AF 5AS 5AP 5AD 61U 61F 81U 81F 91U 91F B1U B1F)	6952301	*
	Line Cord (models 51S 51P 51D 51Y 5AS 5AP 5AD 5AY)	14F0068	*
	Line Cord (models 51Y 5AY)	36L8879	*

Item #	Machine Type 8315	FRU#	CRU?
1	Side cover assembly black (all models)	25P0066	*
2	"L" cover assembly black (all models)	25P0065	*
3	Front bezel assembly (black) (all models)	25P0067	*
4	Trim bezel/label kit (black) (all models)	49P1900	*
4	Trim bezel/label kit (white) (all models)	49P1901	*
5	48X CDROM (Black) (models 11U 12U 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y B1U B1S B2U B2S B2D B2Y 54U B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S B9U)	33P3203	**
5	48X CDROM (Black) (models 11U 12U 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y B1U B1S B2U B2S B2D B2Y 54U B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S B9U)	33P3207	**
5	48X CDROM (Black) (models 11U 12U 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y B1U B1S B2U B2S B2D B2Y 54U B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S B9U)	33P3211	**
5	48X CDROM (Black) (models 11U 12U 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y B1U B1S B2U B2S B2D B2Y 54U B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S B9U)	33P3215	**
5	40X12X40X CD-RW (Black) (models 5BU 5BS 5BD 5BY)	33P3269	**
5	40X12X40X CD-RW (Black) (models 5BU 5BS 5BD 5BY)	33P3273	**
5	48X24X48X CD-RW (Black) (models 5BU 5BS 5BD 5BY B4U B4S B4D B4Y)	33P3289	**
5	48X24X48X CD-RW (Black) (models 5BU 5BS 5BD 5BY B4U B4S B4D B4Y)	33P3293	**
5	8X4X32X8X DVD-ROM/CD-RW Combo Drive (Black) (models 21S 21D 21Y)	33P3227	**
5	32X10X40X16X DVD-ROM/CD-RW Combo Drive (Black)(models 21S 21D 21Y)	33P3251	**
6	FDD 3.5" 1.44MB (wo/Bezel) (models 11U 12U 21S 21D 21Y 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y CBU CCU B1U B1S B2U B2S B2D B2Y CDU 54U B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F B9U)	75H9550	**
6	FDD 3.5" 1.44MB (wo/Bezel) (model CAJ)	19K1543	**

Item #	Machine Type 8315	FRU#	CRU?
7	HDD 20GB (models 52U 53U 5CU 5DU 52S 52D 52Y 53S 53D 53Y B9U)	19K1560	**
7	HDD 40GB 5400RPM (models 11U 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 61U 62U 24U 39U 91U B1U B1S B2U B2S B2D B2Y 54U)	19K1562	**
7	HDD 40GB 7200RPM (models 12U 21S 21D 21Y B3U B3F B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F)	19K1568	**
7	HDD 80GB 7200RPM (models B4U B4S B4D B4Y)	24P3665	**
8	System board GL 10/100 @400 FSB w/plug, wo-POV (models 11U 12U 21S 21D 21Y 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y CBU CCU B1U B1S B2U B2S B2D B2Y CDU 54U CAJ CAU B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F B9U)	02R4087	**
8	System board GL 10/100 @400 FSB w/plug, wo-POV (models 11U 12U 21S 21D 21Y 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y CBU CCU B1U B1S B2U B2S B2D B2Y CDU 54U CAJ CAU B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F B9U)	89P8072	**
9	Memory 128MB NP SDRAM (models 11U 21S 21D 21Y 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y CBU CCU B1U B1S B2U B2S B2D B2Y CDU 54U CAJ CAU B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F B9U)	33L3303	*
10	Processor Celeron 1.7 GHz (models 51S 51U 51D 51Y 52U 53U 52S 52D 52Y 53S 53D 53Y 54U CAJ CAU)	58P9937	N
10	Processor Celeron 1.8 GHz (models 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU CBU)	58P9965	N
10	Processor Celeron 2.0 GHz (models B1U B1S B2U B2S B2D B2Y CDU B3U B3F B4U B4S B4D B4Y B9U)	88P5835	N
10	Processor Celeron 2.1 GHz (models B5U B5S B5D B5Y B6U B6S)	02R5352	N
10	Processor Celeron 2.2 GHz (models B7U B7S B7D B7Y B8U B8S)	02R5355	N
10	Processor P4 1.8 GHz (models 11U 12U)	33P0965	N
10	Processor P4 1.8 GHz (models 61U 62U CCU)	73P0569	N
10	Processor P4 2.0 GHz (models 21S 21D 21Y 23U 24U 25U 25F)	73P0570	N
10	Processor P4 2.2 GHz (models 37U 38S 38D 38Y 39U)	73P0571	N
10	Processor P4 2.4 GHz (models 41S 41D 41Y 42U)	73P0572	N
10	Processor P4 2.6 GHz (models 91U)	58P9961	N

Item #	Machine Type 8315	FRU#	CRU?
10	Processor P4 2.6 GHz (models 91U)	73P0574	N
10	Fan Sink (1.9 - 2.2 GHz) (models 21S 21D 21Y 23U 37U 38S 38D 38Y 41S 41D 41Y 42U 24U 39U 91U B1U B1S B2U B2S B2D B2Y CDU 51S 51U 51D 51Y 52U 53U 52S 52D 52Y 53S 53D 53Y 54U CAJ 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU CBU 11U,12U 61U CCU CAU B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F B9U)	32P4004	N
10	Mounting Assembly for P4 Processor (all models)	48P6726	N
11	185W Power Supply (models 11U 12U 23U 37U 42U 51U 52U 53U 5AU 5BU 5CU 5DU 61U 62U 24U 39U 91U B1U B2U CDU 54U CAJ CAU B3U B3F B4U B5U B6U B7U B8U 25U 25F B9U)	24P6883	N
11	185W Power Supply (models 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y 51S 51D 51Y 5AS 5AD 5AY 5BS 5BD 5BY 52S 52D 52Y 53S 53D 53Y B1S B2S B2D B2Y B4S B4D B4Y B5S B5D B5Y B6S B7S B7D B7Y B8S)	49P2127	N
	Mouse PS/2 2 button (Black) (models 11U 12U 23U 37U 42U 51S 51U 51D 51Y 52U 53U 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5DU 61U 62U 24U 39U 91U 52S 52D 52Y 53S 53D 53Y CBU CCU B1U B1S B2U B2S B2D B2Y CDU 54U CAJ CAU B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B6U B6S B7U B7S B7D B7Y B8U B8S 25U 25F B9U)	24P0383	*
	Mouse Scrollpoint III (Black) (models 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y)	24P0485	*
	Soft Modem V.92/V.44 (models 51U 52U 52F 5AU 5BU 5CU 5CF 62U 24U 39U B2U 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y 51S 51D 51Y 5AS 5AD 5AY 5BS 5BD 5BY 52S 52D 52Y B2S B2D B2Y B4U B4S B4D B4Y B5U B5S B5D B5Y B7U B7S B7D B7Y)	22P7943	*
	Speakers Infinity Active T1 (Black) (models 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y 51S 51U 51D 51Y 52U 52F 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5CF 62U 52S 52D 52Y B2U B2S B2D B2Y 54U B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B7U B7S B7D B7Y 25U 25F)	25P4726	*
	Speaker Power brick - US CE CF LA Taiwan (models 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y 51S 51U 51D 51Y 52U 52F 5AS 5AU 5AD 5AY 5BU 5BS 5BD 5BY 5CU 5CF 62U 52S 52D 52Y B2U B2S B2D B2Y 54U B3U B3F B4U B4S B4D B4Y B5U B5S B5D B5Y B7U B7S B7D B7Y 25U 25F)	10K2587	*
	Front bezel blanks kit (all models)	25P0068	*
	Front bezel release (all models)	25P0069	*
	I/O retainer cards (all models)	25P0070	*
	DASD soft mount rail kit (all models)	19K5331	**
	Cable FDD (all models)	01K1513	*
	Cable IDE ATA-66 1 drop (all models)	49P4364	*
	Cable IDE ATA-66 2 drop (all models)	37L5098	*

Item #	Machine Type 8315	FRU#	CRU?
	Speaker assembly (all models)	00N5151	*
	Shield 5.25 EMC (all models)	19K5548	*
	HDD bracket assembly (all models)	25P0072	**
	Power supply bracket (all models)	25P0073	**
	Foot rubber (all models)	03K9655	*
	Control panel assembly (all models)	25P0074	*
	Misc. hardware kit (all models)	09N5764	*
	PWR panel kit (all models)	25P0079	*
	Cable audio (models 11U 12U 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y)	49P1933	*
	Cable 1394 6-pin (model 11U)	25P0084	*
	Cable PCMCIA ATA-66 (all models)	49P4361	*
	Audio front panel (models 12U 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y)	49P1750	*
	Audio w/1394 front panel (model 11U)	49P1752	*
	Audio w/1394 & SPDIF front panel	49P1754	*
	PCI 1394 adapter (model 11U)	22P6849	*
	Universal adapter bracket (all models)	32P4743	*
	Battery 3.0V (all models)	33F8354	*
	Fan 80mm fixed speed (all models)	22P4447	*

	Recovery CDs Win XP Home	FRU#	CRU?
	US English (model 12U 51U 52U 5AU 5BU 5CU 62U 24U 39U B2U 54U B3U B4U B5U B7U B9U)	71P6565	*
	French (model B3F)	71P6585	*
	German	71P6573	*
	Italian	71P6593	*
	Spanish (models 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y 51S 51D 51Y 5AS 5AD 5AY 5BS 5BD 5BY 52S 52D 52Y B2S B2D B2Y B4S B4D B4Y B5S B5D B5Y B7S B7D B7Y)	71P6581	*
	Brazilian/Portuguese	71P6605	*
	Danish	71P6577	*
	Netherlands	71P6601	*
	Arabic Enabled	71P6625	*
	Swedish	71P6569	*
	Hebrew	71P6613	*
	Finnish	71P6589	*
	Norwegian	71P6597	*
	Polish	71P6617	*
	Portuguese	71P6609	*
	Russian	71P6637	*



	<b>Recovery CDs Win XP Home</b>	<b>FRU#</b>	<b>CRU?</b>
	Hungarian	71P6633	*
	Czechoslovakian	71P6621	*
	Turkish	71P6629	*
	Greek	71P6641	*
	Japanese	71P6066	*
	Simplified Chinese	71P6084	*
	Traditional Chinese	71P6087	*
	Traditional Chinese Hong Kong	71P6090	*

	<b>Recovery CDs Win XP Pro</b>	<b>FRU #</b>	<b>CRU?</b>
	US English (models 11U 23U 37U 42U 53U 5DU 61U 91U B1U B6U B8U 25U)	71P6485	*
	French (model 25F)	71P6505	*
	German	71P6493	*
	Italian	71P6513	*
	Spanish (models 53S 53D 53Y B1S B6S B8S)	71P6501	*
	Brazilian/Portuguese	71P6525	*
	Danish	71P6497	*
	Netherlands	71P6521	*
	Arabic Enabled	71P6545	*
	Swedish	71P6489	*
	Hebrew	71P6533	*
	Finnish	71P6509	*
	Norwegian	71P6517	*
	Polish	71P6537	*
	Portuguese	71P6529	*
	Russian	71P6557	*
	Hungarian	71P6553	*
	Czechoslovakian	71P6541	*
	Turkish	71P6549	*
	Greek	71P6561	*
	Japanese	71P5958	*
	Simplified Chinese	71P6093	*
	Traditional Chinese	71P6096	*
	Traditional Chinese Hong Kong	71P6099	*

	<b>Keyboards (PS/2 Black)</b>	<b>FRU#</b>	<b>CRU?</b>
	US English (models 11U 12U 23U 37U 42U 51U 52U 53U 5AU 5BU 5CU 5DU 61U 62U 24U 39U 91U CBU CCU B1U B2U CDU 54U CAU B3U B4U B5U B6U B7U B8U 25U B9U)	32P5100	*
	Arabic	32P5101	*

	Keyboards (PS/2 Black)	FRU#	CRU?
	Belgian/French	32P5102	*
	Belgian/UK	32P5103	*
	Bulgarian	32P5104	*
	Chinese/US	32P5105	*
	Czech	32P5106	*
	Danish	32P5107	*
	Dutch	32P5108	*
	French	32P5109	*
	French Canadian (models B3F 25F)	32P5110	*
	French Canadian (models B3F 25F)	32P5111	*
	German	32P5112	*
	Greek	32P5113	*
	Hebrew	32P5114	*
	Hungarian	32P5115	*
	Iceland	32P5116	*
	Italian	32P5117	*
	Japanese (model CAJ)	32P5118	*
	Korean	32P5119	*
	LA Spanish (models 51S 51D 51Y 5AS 5AD 5AY 5BS 5BD 5BY 52S 52D 52Y 53S 53D 53Y B1S B2S B2D B2Y B4S B4D B4Y B5S B5D B5Y B6S B7S B7D B7Y B8S)	32P5120	*
	Norwegian	32P5121	*
	Polish	32P5122	*
	Portuguese	32P5123	*
	Romanian	32P5124	*
	Russian	32P5125	*
	Russian/Cy	32P5126	*
	Serbian/Cyrillic	32P5127	*
	Slovak	32P5128	*
	Spanish	32P5129	*
	Swedish/Finn	32P5130	*
	Swiss F/G	32P5131	*
	Thailand	32P5132	*
	Turkish	32P5133	*
	Turkish	32P5134	*
	UK English	32P5135	*
	US International	32P5136	*
	Yugoslav/Latin	32P5137	*
	Brazil/Portuguese	32P5138	*

	<b>Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU?</b>
	US English	19K1910	*
	Arabic	19K1911	*
	Belgian/French	19K1912	*
	Belgian/UK	19K1913	*
	Bulgarian	19K1914	*
	Chinese/US	19K1915	*
	Czech	19K1916	*
	Danish	19K1917	*
	Dutch	19K1918	*
	French	19K1919	*
	French Canadian	19K1920	*
	French Canadian	19K1921	*
	German	19K1922	*
	Greek	19K1923	*
	Hebrew	19K1924	*
	Hungarian	19K1925	*
	Iceland	19K1926	*
	Italian	19K1927	*
	Japanese	19K1928	*
	LA Spanish (models 21S 21D 21Y 38S 38D 38Y 41S 41D 41Y)	19K1930	*
	Norwegian	19K1931	*
	Polish	19K1931	*
	Portuguese	19K1933	*
	Romanian	19K1934	*
	Russian	19K1935	*
	Russian/Cy	19K1936	*
	Serbian/Cyrillic	19K1937	*
	Slovak	19K1938	*
	Spanish	19K1939	*
	Swedish/Finn	19K1940	*
	Swiss F/G	19K1941	*
	Thailand	19K1942	*
	Turkish	19K1943	*
	Turkish	19K1944	*
	UK English	19K1945	*
	US International	19K1946	*
	Yugoslav/Latin	19K1947	*
	Brazil/Portuguese	19K1948	*
	Japanese	19K1908	*

	<b>Power Cords</b>	<b>FRU#</b>	<b>CRU?</b>
	Line Cord (models 11U 12U 21S 21D 23U 37U 38S 38D 41S 41D 42U 51S 51U 51D 53U 5AS 5AU 5AD 5BU 5BS 5BD 5CU 5CF 5DU 61U 62U 24U 39U 91U 52S 52D 53S 53D CBU CCU B1U B1S B2U B2S B2D CDU 54U CAU B3U B3F B4U B4S B4D B5U B5S B5D B6U B6S B7U B7S B7D B8U B8S 25U 25F B9U)	6952301	*
	Line Cord	13F9939	*
	Line Cord	13F9978	*
	Line Cord	14F0032	*
	Line Cord	13F9996	*
	Line Cord (models 21D 21Y 38D 38Y 41D 41Y 51S 51D 51Y 5AS 5AD 5AY 5BS 5BD 5BY 52S 52D 52Y 53S 53D 53Y B1S B2S B2D B2Y B4S B4D B4Y B5S B5D B5Y B6S B7S B7D B7Y B8S)	14F0068	*
	Line Cord (models 21Y 38Y 41Y 51Y 5AY 5BY 52Y 53Y B2Y B4Y B5Y B7Y)	36L8879	*
	Line Cord (model CAJ)	1838576	*
	Line Cord	34G0222	*
	Line Cord	05K2876	*
	Line Cord	02K0545	*
	Line Cord	14F0086	*
	Line Cord	14F0014	*
	Line Cord	14F0050	*

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## Chapter 9. Additional Service Information

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### Security features

Security features in this section include the following:

- Passwords
- Vital Product Data
- Management Information Format (MIF)
- Alert on LAN

### Passwords

The following section provides information about computer hardware and software-related passwords.

- Power-on Password
- Administrator Password
- Operating System Password

Power-on and Administrator passwords are set in the Setup Utility program. See “Setup Utility program” on page 24 for information about running the Setup Utility.

#### Power-on password

A power-on password denies access to the computer by an unauthorized user when the computer is powered on. When a power-on password is active, the password prompt appears on the screen each time the computer is powered on. The computer starts after the proper password is entered.

#### Removing a power-on password

To service a computer with an active and unknown power-on password, power-off the computer and use the following procedure.

<b>Note:</b> On some models, this procedure will also remove the administrator password.
--

1. Unplug the power cord and remove the top cover.
2. Refer to “Identifying parts on the system board” on page 44 to find the Virtual clear CMOS/BIOS recovery jumper.
3. Move the recovery jumper from **normal** to **ROM recovery**.
4. Power-on the computer. The system senses the change in the position and erases the password.
5. Wait 30 seconds for beeps to sound, and then power down by holding the power button for 10 seconds.
6. Return the jumper to normal position.
7. Reset the date and time and remind the user to enter a new password when service is complete.

#### Administrator password

The administrator password is used to restrict access to the Configuration/Setup Utility program. If the administrator password is activated, and you do not enter the administrator password, the configuration can be viewed but not changed.

**Note:**

Type 6029 computers have Enhanced Security Mode. If Enhanced Security mode is enabled and there is no password given, the computer will act as if Enhanced Security is disabled.

If Enhanced Security is Enabled and an administrator password is given, the administrator password must be entered to use the computer. If the administrator password is lost or forgotten, the system board in the computer must be replaced in order to regain access to the Configuration/Setup Utility program.

### **Administrator password control**

The Administrator password is set in the Setup Configuration. Refer to “Setup Utility program” on page 24.

### **Operating system password**

An operating system password is very similar to a power-on password and denies access to the computer by an unauthorized user when the password is activated. The computer is unusable until the password is entered and recognized by the computer.

## **Vital product data**

Each computer has a unique Vital Product Data (VPD) code stored in the nonvolatile memory on the system board. After you replace the system board, the VPD must be updated. To update the VPD, see “Flash update procedures” on page 265.

## **Management Information Format (MIF)**

Management Information Format (MIF) is a file used to maintain a list of the system unit serial number along with all serialized components (for example, system board, riser card, memory, and processor).

At the time of computer manufacture, the EPROM will be loaded with the serial numbers of the system and all major components.

A company called Retain-a-Group is a central data warehouse offering serial number data management. Retain-a-Group acts as a focal point to law enforcement. The customer has the option to purchase serial number information and services from Retain-a-Group. It is the customer’s responsibility to maintain the MIF file and to inform Retain-a-Group of any changes to the file.

Some customers may request their servicers to assist them in maintaining the MIF file when serialized components are replaced during hardware service. This assistance is between the customer and the servicer. The servicer can use the DMI MIF Browser to update the MIF information in the EPROM. It is anticipated that some servicers might charge for this service.

To update the EPROM using the DMI MIF Browser, use the following procedure.

1. Click **Start** from the desktop, then **Programs**.
2. Select **IBM SystemView Agent**
3. Select the **Serial Number Information** icon
4. Click the plus sign to expand.
5. Select the component you want to view or edit.
6. Double click on the component you want to change.

7. Enter new data in the *Value* field, then click **Apply**.

## Alert on LAN

Alert on LAN provides notification of changes in the computer, even when the computer power is turned off. Working with DMI and Wake on LAN<sup>®</sup> technologies, Alert on LAN helps to manage and monitor the hardware and software features of the computer. Alert on LAN generates notifications to the server of these occurrences:

- Computer disconnected from the network
- Computer unplugged from the power outlet
- All POST errors
- Operating system or POST hang condition

Alert on LAN events are configured to be Enabled or Disabled from the LAN server only, and not from the computer. See the LAN administrator for configuration status information.

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## BIOS levels

An incorrect level of BIOS can cause false errors and unnecessary FRU replacement. Use the following information to determine the current level of BIOS installed in the computer, the latest BIOS available for the computer, and where to obtain the latest level of BIOS.

- Current Level BIOS information
  - Run the Configuration Utility to determine the level of BIOS installed.
- Sources for determining the latest level BIOS available
  1. IBM Home Page  
<http://www.ibm.com/pc/us/>
  2. PC PartnerInfo-Technical Database (CTSTIPS.NSF)
  3. HelpCenter<sup>®</sup>
  4. Levels 1 and 2 Support
  5. RETAIN<sup>®</sup>
- Sources for obtaining the latest level BIOS available
  1. IBM Home Page  
<http://www.ibm.com/pc/us/>
  2. PC PartnerInfo-Technical Database (CTSTIPS.NSF)
  3. HelpCenter
  4. Levels 1 and 2 Support

To update (flash) the BIOS, see “Flash update procedures.”

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## Flash update procedures

This section details how to flash (update) the BIOS.

## Flash from Operating System (WinPhlash)

**Attention:**

Refer to the information label located inside the system unit cover for any model-specific information.

1. Click the file link to download the file (24jyNNusa.exe) from the web page.
2. When prompted, select a drive and directory in which to save the downloaded file.
3. Click Start, select Find or Search, then click Files and Folders.
4. Type 24jyNNusa.exe in the search field, then click Find Now. This will locate the 24jyNNusa.exe file you just downloaded.
5. Double-click the 24jyNNusa.exe icon.
6. Click Next. Read the license agreement.
7. Click I Agree. The installation folder should be C:\IBMTOOLS\FLASH\24JYnnUS.
8. Click Finish. You will be prompted with a message stating "The specified output folder does not exist. Create it?"
9. Click Yes. You will be prompted with a message stating "The package has been delivered successfully."
10. Click OK.
11. Close all open applications.
12. Click Start, then click Run.
13. Type C:\IBMTOOLS\FLASH\24JYnnUS\WINPHLASH.EXE.
14. Click OK.
15. Select Backup BIOS and Flash BIOS with new settings.
16. Click Flash BIOS. You will be told to save your work and close all other applications.
17. Click OK. The system will automatically shutdown and restart so that the changes will take effect.

## Flash from CD-ROM ISO image

**Attention:**

Refer to the information label located inside the system unit cover for any model-specific information.

1. Click the file link to download the file (24jyNNusa.exe) from the web page.
2. When prompted, select a drive and directory in which to save the downloaded file.
3. Click Start, select Find or Search, then click Files and Folders.
4. Type 24jyNNusa.exe in the search field, then click Find Now. This will locate the 24jyNNusa.exe file you just downloaded.
5. Double-click the 24jyNNusa.exe icon.
6. Click Next. Read the license agreement.
7. Click I Agree. The installation folder should be C:\IBMTOOLS\FLASH\24JYnnUS.



8. Click Finish. You will be prompted with a message stating "The specified output folder does not exist. Create it?"
9. Click Yes. You will be prompted with a message stating "The package has been delivered successfully."
10. Click OK.
11. Use your CD-R software's feature for creating a CD from an ISO image; Adaptec Easy CD Creator calls this feature Create CD from CD image. Refer to the help provided with your CD-R software for further assistance.
12. Create a CD from the CD ISO image located in your C:\IBMTOOLS\FLASH\24JZnnUS folder. The filename of the ISO image is 24J9nnA.ISO.
13. Close all open applications.
14. Insert the bootable CD into your CD-ROM drive.
15. Shutdown the computer.
16. With the CD still inserted in the CD-ROM drive, power on the system.
17. When you are prompted to select a country, press the number on your keyboard which corresponds to the country in which you are using the computer. For example, press 1 for the United States.
18. Press Enter. You will be asked if you wish to update the serial number of your machine.
19. Press N. You will be asked if you wish to update the machine type/model number of your machine.
20. Press N. The Phoenix Phlash16 utility will appear onscreen.
21. Wait until you see a message stating "Phoenix Phlash16 Status: Flash memory has been successfully programmed, PRESS KEY TO RESTART THE SYSTEM. If the system does not restart TURN THE POWER OFF, THEN ON"
22. Remove the CD from the CD-ROM drive.
23. Press Enter.

**Note:** If your system boots back to a 1962 POST error or displays a picture of a diskette on the screen, enter the Setup utility by pressing F1 during startup and change the Startup options to include the hard disk drive.

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## Flash recovery boot block jumper

**Attention:**

If an interruption occurs during a Flash/BIOS upgrade, the BIOS might be left in an unusable state. The Boot Block jumper enables you to restart the system and recover the BIOS. During this process, machine type and serial number data stored in the BIOS is lost, so a normal flash update has to be done after a boot block recovery process to re-enter this information to the system BIOS. Please, notice that there will be some variations on the Flash/BIOS update process done after a boot block recovery process has been performed.

To perform a Flash/BIOS recovery using the recovery jumper, use the following procedure.

1. Power-off the computer and remove the cover.
2. Move the system board Virtual clear CMOS/BIOS recovery jumper to the **ROM recovery** position. Refer to "Types 8307, 8308, 8310, 8311, 8314, and 8315" on page 46 or the label inside the computer for more information.

3. Insert the upgrade diskette into the diskette drive.
4. Power-on the computer.
5. At power up, the system will make a beep sound and will show no video, as it starts reading from the floppy disk.
6. The system will continue making a series of beep sounds followed by a few seconds of silence. The whole process should last for a few minutes.
7. When the boot block recovery process is finished, the system will make a final long-lasting beep sound.
8. Remove the floppy disk, power off the computer (keeping power button pressed for around 5 seconds), move the recovery jumper back to the normal position and replace the cover.
9. Perform a Flash/BIOS update to re-enter machine type and serial number data using the procedure provided below:

Flash/BIOS Update process to follow after performing a boot block recovery process:

1. After replacing the cover, insert the upgrade floppy disk into the disk drive and turn on the computer. The IBM Logo will appear.
2. When the Flash Update Utility appears, select the country/keyboard, then press enter.
3. Since the serial number data has been deleted, you will be prompted to enter it. Press Y to update the data.
4. Type the 7-digit Serial Number of the computer and press enter.
5. You will also be prompted to update the Machine Type information of your system. Follow the onscreen instructions to do so.
6. After Serial Number and Machine Type information has been entered, the BIOS will be updated.
7. During the update process, the following message will pop up: "BIOS ROM file is older than (or same as) BIOS ROM Image. Continue anyway? (Y/N)" Press Y to continue.
8. When finished, remove the floppy disk and re-start the system.
9. When re-starting, the system will prompt a message indicating that an unauthorized CMOS change was detected. Press F1 to go to Setup.
10. Once in the setup utility, go to the EXIT tab and select the option Save and Exit the Setup utility.
11. A Setup confirmation window pops up. Press Y continue.

---

## Power management

Power management reduces the power consumption of certain components of the computer such as the system power supply, processor, hard disk drives, and some monitors. Advanced Power Management and Rapid Resume™ Manager are features of some personal computers.

### Automatic configuration and power interface (ACPI) BIOS

Being an ACPI BIOS system, the operating system is allowed to control the power management features of the computer and the setting for Advanced Power Management (APM) BIOS mode are ignored. Not all operating systems support ACPI BIOS mode.

### Advanced Power Management

Energy-saving settings can be viewed and changed by using the Advanced Power Management menu in the Configuration/Setup Utility program.

**Attention:**

If a device, such as a monitor, does not have power-management capabilities, it can be damaged when exposed to a reduced-power state. Before making energy-saving selections for the monitor, check the documentation supplied with the monitor to see if it supports Display Power Management Signaling (DPMS).

### Automatic Hardware Power Management features

Automatic Hardware Power Management can reduce the power states of the computer, processor, and monitor (if the monitor supports DPMS) if they are inactive for a predetermined length of time.

Set the time for the system to enter a low-power state.

You can define the amount of energy savings by specifying values for the following options.

- **System Power**

- Select **On** for the computer to remain on.
- Select **Off** for the computer to shut down.

- **Display**

Set display to be disabled or to be reduced at these power states:

- **Standby:** Screen is blank, but can be restored immediately when any activity is detected.
- **Suspend:** Monitor uses less power than in Standby mode. Screen image is restored after a few seconds when any activity is detected.
- **Off:** Monitor power is off. Press Monitor power button to restore power. On some monitors, you might have to depress the power button twice.

### Setting Automatic Hardware Power Management features

1. Start the Configuration/Setup Utility program (see “Setup Utility program” on page 24).
2. Select **Power Management** from the Configuration/Setup Utility program menu.

3. Select **APM BIOS Mode** within the APM sub menu and be sure it is set to **Enabled**. If it is not, press Left Arrow (←) or Right Arrow (→) to change the setting.
4. Select **Automatic Hardware Power Management**.
5. Set **Automatic Hardware Power Management** to **Enabled**.
6. Select values for the three categories of power management (system power, processor speed, and display), as necessary.
7. Set **Hard Disk** to **Enabled** or **Disabled**.

**Note:** This does not apply to SCSI drives.

8. Press **Esc** twice to return to the Configuration/Setup Utility program menu.
9. Before you exit from the program, select **Save Settings** from the Configuration/Setup Utility program menu.
10. To exit from the Configuration/Setup Utility program, press **Esc** and follow the instructions on the screen.

## Automatic Power-On features

The Automatic Power-On features within the Power Management menu allow you to enable and disable features that turn on the computer automatically.

- **Serial Port A Ring Detect:** With this feature set to **Enabled** and an external modem connected to serial port (COM1), the computer will turn on automatically when a ring is detected on the modem.
- **PCI Modem Ring Detect:** With this feature set to **Enabled**, the computer will turn on automatically when a ring is detected on the internal modem.
- **PCI Wake Up:** This feature allow PCI cards that support this capability to wake the system.
- **Wake Up on Alarm:** You can specify a date and time at which the computer will be turned on automatically. This can be either a single event or a daily event.
- **Wake on LAN:** If the computer has a properly configured token-ring or Ethernet LAN adapter card that is Wake on LAN-enabled and there is remote network management software, you can use the IBM-developed Wake on LAN feature. When you set Wake on LAN to **Enabled**, the computer will turn on when it receives a specific signal from another computer on the local area network (LAN).

---

## Chapter 10. Related service information

**Note:** The service procedures are designed to help you isolate problems. They are written with the assumption that you have model-specific training on all computers, or that are familiar with the computers, functions, terminology, and service information provided in this manual.

---

### Safety information

The following section contains the safety information that you need to be familiar with before servicing an IBM computer.

#### General safety

Follow these rules to ensure general safety:

- Observe good housekeeping in the area of the machines during and after maintenance.
- When lifting any heavy object:
  1. Ensure you can stand safely without slipping.
  2. Distribute the weight of the object equally between your feet.
  3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift.
  4. Lift by standing or by pushing up with your leg muscles; this action removes the strain from the muscles in your back. *Do not attempt to lift any objects that weigh more than 16 kg (35 lb) or objects that you think are too heavy for you.*
- Do not perform any action that causes hazards to the customer, or that makes the equipment unsafe.
- Before you start the machine, ensure that other service representatives and the customer's personnel are not in a hazardous position.
- Place removed covers and other parts in a safe place, away from all personnel, while you are servicing the machine.
- Keep your tool case away from walk areas so that other people will not trip over it.
- Do not wear loose clothing that can be trapped in the moving parts of a machine. Ensure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with a nonconductive clip, approximately 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.

**Remember:** Metal objects are good electrical conductors.
- Wear safety glasses when you are: hammering, drilling soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that might be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.

## Electrical safety



### CAUTION:

Electrical current from power, telephone, and communication cables can be hazardous. To avoid personal injury or equipment damage, disconnect the attached power cords, telecommunication systems, networks, and modems before you open the server/workstation covers, unless instructed otherwise in the installation and configuration procedures.

Observe the following rules when working on electrical equipment.

**Important:** Use only approved tools and test equipment. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have, near their equipment, rubber floor mats that contain small conductive fibers to decrease electrostatic discharges. Do not use this type of mat to protect yourself from electrical shock.

- Find the room emergency power-off (EPO) switch, disconnecting switch, or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Disconnect all power before:
  - Performing a mechanical inspection
  - Working near power supplies
  - Removing or installing main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.  
**Remember:** Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.  
**Remember:** There must be a complete circuit to cause electrical shock. By observing the above rule, you may prevent a current from passing through your body.
  - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

Observe the special safety precautions when you work with very high voltages; these instructions are in the safety sections of maintenance information. Use extreme care when measuring high voltages.

- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- *Never assume* that power has been disconnected from a circuit. First, *check* that it has been powered-off.
- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.
- Do not service the following parts with the power on when they are removed from their normal operating places in a machine:
  - Power supply units
  - Pumps
  - Blowers and fans
  - Motor generators
 and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
  - Use caution; do not become a victim yourself.
  - Switch off power.
  - Send another person to get medical aid.

## Safety inspection guide

The intent of this inspection guide is to assist you in identifying potentially unsafe conditions on these products. Each machine, as it was designed and built, had required safety items installed to protect users and service personnel from injury. This guide addresses only those items. However, good judgment should be used to identify potential safety hazards due to attachment of non-IBM features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

Consider these conditions and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock).
- Explosive hazards, such as a damaged CRT face or bulging capacitor
- Mechanical hazards, such as loose or missing hardware

The guide consists of a series of steps presented in a checklist. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Power-off the computer. Disconnect the power cord.
3. Check the power cord for:

- a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and frame ground.
  - b. The power cord should be the appropriate type as specified in the parts listings.
  - c. Insulation must not be frayed or worn.
4. Remove the cover.
  5. Check for any obvious non-IBM alterations. Use good judgment as to the safety of any non-IBM alterations.
  6. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
  7. Check for worn, frayed, or pinched cables.
  8. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

## Handling electrostatic discharge-sensitive devices

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD). ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

### Notes:

1. Use product-specific ESD procedures when they exceed the requirements noted here.
2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

**Note:** The use of a grounding system is desirable but not required to protect against ESD damage.

- Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
- Use an ESD common ground or reference point when working on a double-insulated or battery-operated system. You can use coax or connector-outside shells on these systems.
- Use the round ground-prong of the ac plug on ac-operated computers.



## Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

## Safety notices (multi-lingual translations)

The caution and danger safety notices in this section are provided in the following languages:

- English
- Brazilian/Portuguese
- Chinese
- French
- German
- Italian
- Korean
- Spanish



### DANGER

Electrical current from power, telephone and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded electrical outlet.**
- **Connect to properly wired outlets any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.**

To Connect	To Disconnect
<ol style="list-style-type: none"><li>1. Turn everything OFF.</li><li>2. First, attach all cables to devices.</li><li>3. Attach signal cables to connectors.</li><li>4. Attach power cords to outlet.</li><li>5. Turn device ON.</li></ol>	<ol style="list-style-type: none"><li>1. Turn everything OFF.</li><li>2. First, remove power cords from outlet.</li><li>3. Remove signal cables from connectors.</li><li>4. Remove all cables from devices.</li></ol>



**CAUTION:**

When replacing the lithium battery, use only IBM Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

*Do not:*

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.



**CAUTION:**

When laser products (such as CD-ROMs, DVD-ROM drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



**DANGER:** Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following:

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

**CAUTION:**

Use safe practices when lifting.



**CAUTION:**

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



**CAUTION:**

Do not place any object weighing more than 82 kg (180 lbs.) on top of rack-mounted devices.





## PERIGO

A corrente elétrica proveniente de cabos de alimentação, de telefone e de comunicações é perigosa.

Para evitar risco de choque:

- Não conecte ou desconecte cabos e não realize instalação, manutenção ou reconfiguração deste produto durante uma tempestade com raios.
- Conecte todos os cabos de alimentação a tomadas elétricas corretamente instaladas e aterradas.
- Conecte todos os equipamentos ao qual esse produto será conectado a tomadas corretamente instaladas.
- Sempre que possível, utilize apenas uma das mãos para conectar ou desconectar cabos de sinal.
- Nunca ligue qualquer equipamento quando existir evidência de danos por fogo, água ou na estrutura.
- Desconecte cabos de alimentação, sistemas de telecomunicação, redes e modems antes de abrir as tampas dos dispositivos, a menos que especificado de maneira diferente nos procedimentos de instalação e configuração.
- Conecte e desconecte cabos conforme descrito na seguinte tabela, ao instalar ou movimentar este produto ou os dispositivos conectados, ou ao abrir suas tampas.

Para Conectar:	Para Desconectar:
<ol style="list-style-type: none"><li>1. DESLIGUE Tudo.</li><li>2. Primeiramente, conecte todos os cabos aos dispositivos.</li><li>3. Conecte os cabos de sinal aos conectores.</li><li>4. Conecte os cabos de alimentação às tomadas.</li><li>5. LIGUE os dispositivos.</li></ol>	<ol style="list-style-type: none"><li>1. DESLIGUE Tudo.</li><li>2. Primeiramente, remova os cabos de alimentação das tomadas.</li><li>3. Remova os cabos de sinal dos conectores.</li><li>4. Remova todos os cabos dos dispositivos.</li></ol>



## CUIDADO:

Ao substituir a bateria de lítio, utilize apenas uma bateria IBM, Número de Peça 33F8354 ou uma bateria de tipo equivalente, recomendada pelo fabricante. Se o seu sistema possui um módulo com uma bateria de lítio, substitua-o apenas pelo mesmo tipo de módulo, do mesmo fabricante. A bateria contém lítio e pode explodir se não for utilizada, manuseada e descartada de maneira correta.

Não:

- Jogue ou coloque na água
- Aqueça a mais de 100°C (212°F)
- Conserte nem desmonte

Para descartar a bateria, entre em contato com a área de atendimento a clientes IBM, pelo telefone (011) 889-8986, para obter informações sobre como enviar a bateria pelo correio para a IBM.



#### PRECAUCIÓN:

Quando produtos a laser (unidades de CD-ROM, unidades de DVD, dispositivos de fibra ótica, transmissores, etc.) estiverem instalados, observe o seguinte:

- Não remova as tampas. A remoção das tampas de um produto a laser pode resultar em exposição prejudicial à radiação de laser. Nenhuma peça localizada no interior do dispositivo pode ser consertada.
- A utilização de controles ou ajustes ou a execução de procedimentos diferentes dos especificados aqui pode resultar em exposição prejudicial à radiação.

#### PERIGO

Alguns produtos a laser contêm um diodo laser da Classe 3A ou Classe 3B embutido. Observe o seguinte:

Radiação de laser quando aberto. Não olhe diretamente para o raio a olho nu ou com instrumentos óticos, e evite exposição direta ao raio.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

#### CUIDADO:

Ao levantar a máquina, faça-o com segurança.



#### CUIDADO:

Os botões Liga/Desliga localizados no dispositivo e na fonte de alimentação não desligam a corrente elétrica fornecida ao dispositivo. O dispositivo também pode ter mais de um cabo de alimentação. Para remover toda a corrente elétrica do dispositivo, assegure que todos os cabos de alimentação estejam desconectados da

fonte de energia elétrica.



**CUIDADO:**



**CUIDADO:**



Não coloque nenhum objeto com peso superior a 82 kg (180 lbs.) sobre dispositivos montados em rack.

## 重要:

Server Library 中的所有提醒和危险条款前都有一个数字标识。该数字是用来交叉引用一个英文的提醒和危险条款及本部分中的与之对应的已翻译成其它文字的提醒和危险条款。

例如, 如果一个提醒条款前的数字为 1, 则本部分中相应的译文也带有标号 1。

在执行任何指示的操作之前, 请确保您已经阅读了全部提醒和危险条款。

### 声明 1



#### 危险

电源、电话和通信电缆中带有危险电流。

为避免电击:

雷电期间不要拆接电缆或安装、维修及重新配置本产品。

将所有电源线连接至正确布线并已安全接地的电源插座上。

将与本产品连接的所有设备连接至正确布线的插座上。

尽量只使用单手拆接信号电缆。

有水、火及结构损坏迹象时, 请勿打开任何设备。

除非在安装配置过程中有明确指示, 否则, 打开设备机盖前应先断开与电源线、远程通信系统、网络和调制解调器的所有连接。

安装、移动或打开本产品及其附带设备的机盖时, 应按下表所述连接和断开电缆。

#### 连接时:

1. 关闭所有设备。

2. 首先将所有电缆连接至设备。

3. 将信号电缆连接至接口。

4. 将电源线连接至插座。

#### 断开连接时:

1. 关闭所有设备。

2. 首先从插座中拔出电源线。

3. 从接口上拔下信号电缆。

## 声明 2



### 警告:

更换锂电池时，只能使用 IBM 产品号 33F8354 或者是厂商推荐的等同类型的电池。

如果系统模块中含有锂电池，则只能使用同一厂商制造的同类型的模块进行更换。电池中含有锂，如果使用、拿放或处理不当，可能会发生爆炸。

请勿对电池进行下列操作：  
扔入或浸入水电  
加热超过 100 ° (212 F)  
进行修理或分解  
请按本地法规要求处理电池。

## 声明 3



### 警告:

安装激光产品（如 CD-ROM、DVD 驱动器、光纤设备或送话器）时，应注意以下事项：

不要拆除外盖。拆除激光产品的外盖可能会导致激光辐射的危险，本设备中没有用户可维修的部件。

非此处指定的其它控制、调整或与性能有关的操作都有可能致激光辐射的危险。



### 危险

某些激光产品中包含内嵌的 3A 级或 3B 级激光二极管。请注意以下事项。  
打开时会产生激光辐射。不要直视光束，不要使用光学仪器直接观看光束，避免直接暴露于光束之下。



声明 4



≥18 kg (37 磅)



≥32 kg (70.5 磅)



≥55 kg (121.2 磅)

警告：  
抬起时请采用安全操作方法。

声明 5



警告：

使用设备上的电源控制按钮和电源上的开关都不能断开本设备上的电流。  
另外，本设备可能带有多条电源线。如要断开设备上的所有电流，请确保所有电源线均已与电源断开连接。



声明 6



警告：

如果在电源线连接设备的一端安装了固定松紧夹，则必须将电源线的另一端连接至使用方便的电源。

声明 7



警告:

如果设备带有外门，则在移动或抬起设备前应将其拆除或固定以避免造成人员伤害。外门支撑不了设备的重量。

声明 8



警告:

不要拆除电源外盖或贴有下列标签的任何部件。



贴有此标签的组件内部存在高电压、高电流的危险。这些组件中没有用户可维修的部件。如果怀疑其中的部件存在问题，应与服务技术人员联系。

声明 9



警告:

为避免人员伤害，拆除设备上的风扇前应拨下热插拔风扇电缆。

声明 10



警告:

机柜安装的设备上面不能放置重于 82kg (180 磅) 的物品。



> 82 kg (180 磅)

声明 11



警告:

下面的标签表明附近有锋利的边、角或接头。



声明 12



警告:

下面的标签表明附近有高热表面。



## 重要資訊：

*Server Library* 中所有「注意」及「危險」的聲明均以數字開始。此一數字是用來作為交互參考之用，英文「注意」或「危險」聲明可在本節中找到相同內容的「注意」或「危險」聲明的譯文。

例如，有一「危險」聲明以數字 1 開始，則該「危險」聲明的譯文將出現在本節的「聲明」1 中。

執行任何指示之前，請詳讀所有「注意」及「危險」的聲明。

### 聲明 1



#### 危險

電源、電話及通信電纜上所產生的電流均有危險性。

欲避免電擊危險：

- 在雷雨期間，請勿連接或切斷本產品上的任何電纜線，或安裝、維修及重新架構本產品。
- 請將電源線接至接線及接地正確的電源插座。
- 請將本產品隨附的設備連接至接線正確的插座。
- 儘可能使用單手來連接或切斷信號電纜線。
- 當設備有火燒或泡水的痕跡，或有結構性損害時，請勿開啓該設備的電源。
- 在安裝及架構之時，若非非常熟悉，在開啓裝置蓋子之前，請切斷電源線、電信系統、網路及數據機。
- 在安裝、移動本產品或附加裝置，或開啓其蓋子時，請依照下表中「連接」及「切斷」電纜線的步驟執行。

#### 連接：

1. 關閉所有開關。
2. 先將所有電纜線接上裝置。
3. 將信號電纜接上接頭。
4. 再將電源線接上電源插座。
5. 開啓裝置的電源。

#### 切斷：

1. 關閉所有開關。
2. 先自電源插座拔掉電源線。
3. 拔掉接頭上的所有信號電纜。
4. 再拔掉裝置上的所有電纜線。

### 聲明 2



#### 注意：

更換鋰電池時，只可使用 IBM 零件編號 33F8354 的電池，或製造商建議之相當類型的電池。若系統中具有包含鋰電池的模組，在更換此模組時，請使用相同廠商製造的相同模組類型。如未正確使用、處理或丟棄含有鋰的電池時，可能會引發爆炸。

請勿將電池：

- 丟入或浸入水中
- 加熱超過 100°C (212°F)
- 修理或拆開

請遵照當地法令規章處理廢棄電池。

聲明 3



注意：

安裝雷射產品(如 CD-ROM、DVD 光碟機、光纖裝置或發射器)時，請注意下列事項：

- 請勿移開蓋子。移開雷射產品的蓋子，您可能會暴露於危險的雷射輻射之下。裝置中沒有需要維修的組件。
- 不依此處所指示的控制、調整或處理步驟，您可能會暴露於危險的輻射之下。



危險

有些雷射產品含有內嵌式 Class 3A 或 Class 3B 雷射二極體。請注意下列事項：

開啓時會產生雷射輻射。請勿凝視光束，不要使用光學儀器直接觀察，且應避免直接暴露在光束下。

聲明 4



≥ 18 公斤 (37 磅)    ≥ 32 公斤 (70.5 磅)    ≥ 55 公斤 (121.2 磅)

注意：

抬起裝置時，請注意安全措施。

聲明 5



注意：

裝置上的電源控制按鈕及電源供應器上的電源開關均無法關閉裝置上的電流。本裝置可能有一條以上的電源線。如要移除裝置上的所有電流，請確認所有電源線已與電源分離。



聲明 10



注意：

請勿將任何重量超過 82 公斤 (180 磅) 的物品置於已安裝機架的裝置上方。



>82 公斤 (180 磅)



## DANGER

Le courant électrique passant dans les câbles de communication, ou les cordons téléphoniques et d'alimentation peut être dangereux.

Pour éviter tout risque de choc électrique:

- Ne manipulez aucun câble et n'effectuez aucune opération d'installation, d'entretien ou de reconfiguration de ce produit au cours d'un orage.
- Branchez tous les cordons d'alimentation sur un socle de prise de courant correctement câblé et mis à la terre.
- Branchez sur des socles de prise de courant correctement câblés tout équipement connecté à ce produit.
- Lorsque cela est possible, n'utilisez qu'une seule main pour connecter ou déconnecter les câbles d'interface.
- Ne mettez jamais un équipement sous tension en cas d'incendie ou d'inondation, ou en présence de dommages matériels.
- Avant de retirer les carters de l'unité, mettez celle-ci hors tension et déconnectez ses cordons d'alimentation, ainsi que les câbles qui la relient aux réseaux, aux systèmes de télécommunication et aux modems (sauf instruction contraire mentionnée dans les procédures d'installation et de configuration).
- Lorsque vous installez ou que vous déplacez le présent produit ou des périphériques qui lui sont raccordés, reportez-vous aux instructions ci-dessous pour connecter et déconnecter les différents cordons.

Connexion	Déconnexion
1. Mettez les unités hors tension.	1. Mettez les unités hors tension.
2. Commencez par brancher tous les cordons sur les unités.	2. Débranchez les cordons d'alimentation des prises.
3. Branchez les câbles d'interface sur des connecteurs.	3. Débranchez les câbles d'interface des connecteurs.
4. Branchez les cordons d'alimentation sur des prises.	4. Débranchez tous les câbles des unités.
5. Mettez les unités sous tension.	



## ATTENTION:

**Remplacez la pile au lithium usagée par une pile de référence identique exclusivement - voir la référence IBM - ou par une pile équivalente recommandée par le fabricant. Si votre système est doté d'un module contenant une pile au lithium, vous devez le remplacer uniquement par un module identique, produit par le même fabricant. La pile contient du lithium et présente donc un risque d'explosion en cas de mauvaise manipulation ou utilisation.**

- Ne la jetez pas à l'eau.
- Ne l'exposez pas à une température supérieure à 100 °C.
- Ne cherchez pas à la réparer ou à la démonter.

Pour la mise au rebut, reportez-vous à la réglementation en vigueur.



**ATTENTION:**

Si des produits laser sont installés (tels que des unités de CD-ROM ou de DVD, des périphériques contenant des fibres optiques ou des émetteurs-récepteurs), prenez connaissance des informations suivantes:

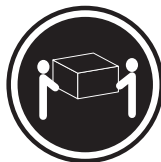
- N'ouvrez pas ces produits pour éviter une exposition directe au rayon laser. Vous ne pouvez effectuer aucune opération de maintenance à l'intérieur.
- Pour éviter tout risque d'exposition au rayon laser, respectez les consignes de réglage et d'utilisation des commandes, ainsi que les procédures décrites dans le présent document.



**DANGER**

Certains produits laser contiennent une diode laser de classe 3A ou 3B. Prenez connaissance des informations suivantes:

Rayonnement laser lorsque le carter est ouvert. évitez de regarder fixement le faisceau ou de l'observer à l'aide d'instruments optiques. évitez une exposition directe au rayon.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

**ATTENTION:**

Faites-vous aider pour soulever ce produit.



**ATTENTION:**

Le bouton de mise sous tension/hors tension de l'unité et l'interrupteur d'alimentation du bloc d'alimentation ne coupent pas l'arrivée de courant électrique à l'intérieur de la machine. Il se peut que votre unité dispose de plusieurs cordons d'alimentation. Pour isoler totalement l'unité du réseau électrique, débranchez tous les cordons d'alimentation des socles de prise de

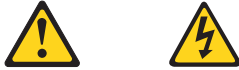


courant.



**ATTENTION:**

Ne posez pas d'objet dont le poids dépasse 82 kg sur les unités montées en armoire.



## VORSICHT

Elektrische Spannungen von Netz-, Telefon- und Datenübertragungsleitungen sind gefährlich.

Aus Sicherheitsgründen:

- Bei Gewitter an diesem Gerät keine Kabel anschließen oder lösen. Ferner keine Installations-, Wartungs- oder Rekonfigurationsarbeiten durchführen.
- Gerät nur an eine Schutzkontaktsteckdose mit ordnungsgemäß geerdetem Schutzkontakt anschließen.
- Alle angeschlossenen Geräte ebenfalls an Schutzkontaktsteckdosen mit ordnungsgemäß geerdetem Schutzkontakt anschließen.
- Signalkabel möglichst einhändig anschließen oder lösen.
- Keine Geräte einschalten, wenn die Gefahr einer Beschädigung durch Feuer, Wasser oder andere Einflüsse besteht.
- Die Verbindung zu den angeschlossenen Netzkabeln, Telekommunikationssystemen, Netzwerken und Modems ist vor dem öffnen des Gehäuses zu unterbrechen. Es sei denn, dies ist in den zugehörigen Installations- und Konfigurationsprozeduren anders angegeben.
- Nur nach den nachfolgend aufgeführten Anweisungen arbeiten, die für Installation, Transport oder öffnen von Gehäusen von Personal Computern oder angeschlossenen Einheiten gelten.

Kabel anschließen:	Kabel lösen:
<ol style="list-style-type: none"><li>1. Alle Geräte ausschalten und Netzstecker ziehen.</li><li>2. Zuerst alle Kabel an Einheiten anschließen.</li><li>3. Signalkabel an Anschlußbuchsen anschließen.</li><li>4. Netzstecker an Steckdose anschließen.</li><li>5. Gerät einschalten.</li></ol>	<ol style="list-style-type: none"><li>1. Alle Geräte ausschalten.</li><li>2. Zuerst Netzstecker von Steckdose lösen.</li><li>3. Signalkabel von Anschlußbuchsen lösen.</li><li>4. Alle Kabel von Einheiten lösen.</li></ol>



## ACHTUNG:

Eine verbrauchte Batterie nur durch eine Batterie mit der IBM Teilenummer 33F8354 oder durch eine vom Hersteller empfohlene Batterie ersetzen. Wenn Ihr System ein Modul mit einer Lithium-Batterie enthält, ersetzen Sie es immer mit dem selben Modultyp vom selben Hersteller. Die Batterie enthält Lithium und kann bei unsachgemäßer Verwendung, Handhabung oder Entsorgung explodieren.

Die Batterie nicht:

- mit Wasser in Berührung bringen.
- über 100° C erhitzen.
- reparieren oder zerlegen.

Die örtlichen Bestimmungen für die Entsorgung von Sondermüll beachten.



**ACHTUNG:**

Wenn ein Laserprodukt (z. B. CD-ROM-Laufwerke, DVD-Laufwerke, Einheiten mit Glasfaserkabeln oder Transmitter) installiert ist, beachten Sie folgendes.

- Das Entfernen der Abdeckungen des CD-ROM-Laufwerks kann zu gefährlicher Laserstrahlung führen. Es befinden sich keine Teile innerhalb des CD-ROM-Laufwerks, die vom Benutzer gewartet werden müssen. Die Verkleidung des CD-ROM-Laufwerks nicht öffnen.
- Steuer- und Einstellelemente sowie Verfahren nur entsprechend den Anweisungen im vorliegenden Handbuch einsetzen. Andernfalls kann gefährliche Laserstrahlung auftreten.



**VORSICHT**

Manche CD-ROM-Laufwerke enthalten eine eingebaute Laserdiode der Klasse 3A oder 3B. Die nachfolgend aufgeführten Punkte beachten.

Laserstrahlung bei geöffneter Tür. Niemals direkt in den Laserstrahl sehen, nicht direkt mit optischen Instrumenten betrachten und den Strahlungsbereich meiden.



≥18 kg



≥32 kg



≥55 kg

**ACHTUNG:**

Beim Anheben der Maschine die vorgeschriebenen Sicherheitsbestimmungen beachten.



**ACHTUNG:**

Mit dem Betriebsspannungsschalter an der Vorderseite des Servers und dem Betriebsspannungsschalter am Netzteil wird die Stromversorgung für den Server nicht unterbrochen. Der Server könnte auch mehr als ein Netzkabel aufweisen. Um die gesamte Stromversorgung des Servers auszuschalten, muß sichergestellt

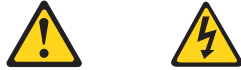
werden, daß alle Netzkabel aus den Netzsteckdosen herausgezogen wurden.



**ACHTUNG:**



Keine Gegenstände, die mehr als 82 kg wiegen, auf Rack-Einheiten ablegen.



## PERICOLO

La corrente elettrica circolante nei cavi di alimentazione, del telefono e di segnale è pericolosa.

Per evitare il pericolo di scosse elettriche:

- Non collegare o scollegare i cavi, non effettuare l'installazione, la manutenzione o la riconfigurazione di questo prodotto durante i temporali.
- Collegare tutti i cavi di alimentazione ad una presa elettrica correttamente cablata e munita di terra di sicurezza.
- Collegare qualsiasi apparecchiatura collegata a questo prodotto ad una presa elettrica correttamente cablata e munita di terra di sicurezza.
- Quando possibile, collegare o scollegare i cavi di segnale con una sola mano.
- Non accendere qualsiasi apparecchiatura in presenza di fuoco, acqua o se sono presenti danni all'apparecchiatura stessa.
- Scollegare i cavi di alimentazione, i sistemi di telecomunicazioni, le reti e i modem prima di aprire i coperchi delle unità, se non diversamente indicato nelle procedure di installazione e configurazione.
- Collegare e scollegare i cavi come descritto nella seguente tabella quando si effettuano l'installazione, la rimozione o l'apertura dei coperchi di questo prodotto o delle unità collegate.

Per collegare:	Per scollegare:
1. SPEGNERE tutti i dispositivi.	1. SPEGNERE tutti i dispositivi.
2. Collegare prima tutti i cavi alle unità.	2. Rimuovere prima i cavi di alimentazione dalle prese elettriche.
3. Collegare i cavi di segnale ai connettori.	3. Rimuovere i cavi di segnale dai connettori.
4. Collegare i cavi di alimentazione alle prese elettriche.	4. Rimuovere tutti i cavi dalle unità.
5. ACCENDERE le unità.	



## ATTENZIONE:

Quando si sostituisce la batteria al litio, utilizzare solo una batteria IBM con numero parte 33F8354 o batterie dello stesso tipo o di tipo equivalente consigliate dal produttore. Se il sistema di cui si dispone è provvisto di un modulo contenente una batteria al litio, sostituire tale batteria solo con un tipo di modulo uguale a quello fornito dal produttore. La batteria contiene litio e può esplodere se utilizzata, maneggiata o smaltita impropriamente.

Evitare di:

- Gettarla o immergerla in acqua
- Riscaldarla ad una temperatura superiore ai 100°C
- Cercare di ripararla o smontarla

Smaltire secondo la normativa in vigore (D.Lgs 22 del 5/2/9) e successive disposizioni nazionali e locali.



**ATTENZIONE:**

Quando si installano prodotti laser come, ad esempio, le unità DVD, CD-ROM, a fibre ottiche o trasmettitori, prestare attenzione a quanto segue:

- Non rimuovere i coperchi. L'apertura dei coperchi di prodotti laser può determinare l'esposizione a radiazioni laser pericolose. All'interno delle unità non vi sono parti su cui effettuare l'assistenza tecnica.
- L'utilizzo di controlli, regolazioni o l'esecuzione di procedure non descritti nel presente manuale possono provocare l'esposizione a radiazioni pericolose.



**PERICOLO**

Alcuni prodotti laser contengono all'interno un diodo laser di Classe 3A o Classe 3B. Prestare attenzione a quanto segue:

Aperto l'unità vengono emesse radiazioni laser. Non fissare il fascio, non guardarlo direttamente con strumenti ottici ed evitare l'esposizione diretta al fascio.



≥18 kg



≥32 kg



≥55 kg

**ATTENZIONE:**

Durante il sollevamento della macchina seguire delle norme di sicurezza.



**ATTENZIONE:**

Il pulsante del controllo dell'alimentazione situato sull'unità e l'interruttore di alimentazione posto sull'alimentatore non disattiva la corrente elettrica fornita all'unità. L'unità potrebbe disporre di più di un cavo di alimentazione. Per disattivare la corrente elettrica dall'unità, accertarsi che tutti i cavi di alimentazione

siano scollegati dalla sorgente di alimentazione.



**ATTENZIONE:**



Non poggiare oggetti che pesano più di 82 kg sulla parte superiore delle unità montate in rack.

## 중요:

본 *Server Library*에 있는 모든 주의 및 위험 경고문은 번호로 시작합니다. 이 번호는 영문 주의 혹은 위험 경고문과 이 절에 나오는 번역된 버전의 주의 혹은 위험 경고문을 상호 참조하는 데 사용됩니다.

예를 들어, 주의 경고문이 번호 1로 시작하면, 번역된 해당 주의 경고문을 본 절의 경고문 1에서 찾아볼 수 있습니다.

모든 지시사항을 수행하기 전에 반드시 모든 주의 및 위험 경고문을 읽으십시오.

### 경고문 1



위험

전원, 전화 및 통신 케이블로부터 흘러 나오는 전류는 위험합니다.

전기 충격을 피하려면:

- 뇌우를 동반할 때는 케이블의 연결이나 철수, 이 제품의 설치, 유지보수 또는 재구성을 하지 마십시오.
- 모든 전원 코드를 적절히 배선 및 접지해야 합니다.
- 이 제품에 연결될 모든 장비를 적절하게 배선된 콘센트에 연결하십시오.
- 가능한 한 신호 케이블을 한 손으로 연결하거나 끊으십시오.
- 화재, 수해 또는 구조상의 손상이 있을 경우 장비를 켜지 마십시오.
- 설치 및 구성 프로시저에 다른 설명이 없는 한, 장치 덮개를 열기 전에 연결된 전원 코드, 원거리 통신 시스템, 네트워크 및 모뎀을 끊어 주십시오.
- 제품 또는 접속된 장치를 설치, 이동 및 덮개를 열 때 다음 설명에 따라 케이블을 연결하거나 끊도록 하십시오.

연결하려면:

1. 모든 스위치를 끕니다.
2. 먼저 모든 케이블을 장치에 연결합니다.
3. 신호 케이블을 커넥터에 연결합니다.
4. 콘센트에 전원 코드를 연결합니다.
5. 장치 스위치를 켭니다.

연결을 끊으려면:

1. 모든 스위치를 끕니다.
2. 먼저 콘센트에서 전원 코드를 뽑습니다.
3. 신호 케이블을 커넥터에서 제거합니다.
4. 장치에서 모든 케이블을 제거합니다.

### 경고문 2



주의:

리튬 배터리를 교체할 때는 IBM 부품 번호 33F8354 또는 제조업체에서 권장하는 동등한 유형의 배터리를 사용하십시오. 시스템에 리튬 배터리를 갖고 있는 모듈이 있으면 동일한 제조업체에서 생산된 동일한 모듈 유형으로 교체하십시오. 배터리에 리튬이 있을 경우 제대로 사용, 처리 또는 처분하지 않으면 폭발할 수 있습니다.

다음은 주의하십시오.

- 먼지거나 물에 담그지 않도록 하십시오.
- 100°C(212°F) 이상으로 가열하지 마십시오.
- 수리하거나 분해하지 마십시오.

지역 법령이나 규정의 요구에 따라 배터리를 처분하십시오.



경고문 3



주의:  
레이저 제품(CD-ROMs, DVD 드라이브, 광 장치 또는 트랜스미터 등과 같은)이 설치되어 있을 경우 다음을 유의하십시오.

- 덮개를 제거하지 마십시오. 레이저 제품의 덮개를 제거했을 경우 위험한 레이저 광선에 노출될 수 있습니다. 이 장치 안에는 서비스를 받을 수 있는 부품이 없습니다.

- 여기에서 지정하지 않은 방식의 제어, 조절 또는 실행으로 인해 위험한 레이저 광선에 노출될 수 있습니다.



위험

일부 레이저 제품에는 클래스 3A 또는 클래스 3B 레이저 다이오드가 들어 있습니다. 다음을 주의하십시오.

열면 레이저 광선에 노출됩니다. 광선을 주시하거나 광학 기계를 직접 쳐다보지 않도록 하고 광선에 노출되지 않도록 하십시오.

경고문 4



≥ 18 kg (37 lbs)



≥ 32 kg (70.5 lbs)



≥ 55 kg (121.2 lbs)

주의:

기계를 들 때는 안전하게 들어 올리십시오.

경고문 5



주의:

장치의 전원 제어 버튼 및 전원 공급기의 전원 스위치는 장치에 공급되는 전류를 차단하지 않습니다. 장치에 둘 이상의 전원 코드가 연결되어 있을 수도 있습니다. 장치에서 모든 전류를 차단하려면 모든 전원 코드가 전원으로부터 차단되어 있는지 확인하십시오.



경고문 10



주의:

서랍형 모델의 장치 상단에 82 kg(180 lbs.)이 넘는 물체를 올려 놓지 마십시오.



> 82 kg (180 lbs)



## PELIGRO

La corriente eléctrica de los cables telefónicos, de alimentación y de comunicaciones es perjudicial.

Para evitar una descarga eléctrica:

- No conecte ni desconecte ningún cable ni realice las operaciones de instalación, mantenimiento o reconfiguración de este producto durante una tormenta.
- Conecte cada cable de alimentación a una toma de alimentación eléctrica con conexión a tierra y cableado correctos.
- Conecte a tomas de alimentación con un cableado correcto cualquier equipo que vaya a estar conectado a este producto.
- Si es posible, utilice una sola mano cuando conecte o desconecte los cables de señal.
- No encienda nunca un equipo cuando haya riesgos de incendio, de inundación o de daños estructurales.
- Desconecte los cables de alimentación, sistemas de telecomunicaciones, redes y módems conectados antes de abrir las cubiertas del dispositivo a menos que se indique lo contrario en los procedimientos de instalación y configuración.
- Conecte y desconecte los cables tal como se describe en la tabla siguiente cuando desee realizar una operación de instalación, de traslado o de apertura de las cubiertas para este producto o para los dispositivos conectados.

Para la conexión	Para la desconexión
1. APÁGUELO todo.	1. APÁGUELO todo.
2. En primer lugar, conecte los cables a los dispositivos.	2. En primer lugar, retire cada cable de alimentación de la toma de alimentación.
3. Conecte los cables de señal a los conectores.	3. Retire los cables de señal de los conectores.
4. Conecte cada cable de alimentación a la toma de alimentación.	4. Retire los cables de los dispositivos.
5. ENCIENDA el dispositivo.	



## PRECAUCIÓN:

Cuando desee sustituir la batería de litio, utilice únicamente el número de pieza 33F8354 de IBM o cualquier tipo de batería equivalente que recomiende el fabricante. Si el sistema tiene un módulo que contiene una batería de litio, sustitúyalo únicamente por el mismo tipo de módulo, que ha de estar creado por el mismo fabricante. La batería contiene litio y puede explotar si el usuario no la utiliza ni la maneja de forma adecuada o si no se desprende de la misma como corresponde.

No realice las acciones siguientes:

- Arrojarla al agua o sumergirla

- Calentarla a una temperatura que supere los 100°C (212°F)
- Repararla o desmontarla

Despréndase de la batería siguiendo los requisitos que exija el reglamento o la legislación local.



**PRECAUCIÓN:**

Cuando instale productos láser (como, por ejemplo, CD-ROM, unidades DVD, dispositivos de fibra óptica o transmisores), tenga en cuenta las advertencias siguientes:

- No retire las cubiertas. Si retira las cubiertas del producto láser, puede quedar expuesto a radiación láser perjudicial. Dentro del dispositivo no existe ninguna pieza que requiera mantenimiento.
- El uso de controles o ajustes o la realización de procedimientos que no sean los que se han especificado aquí pueden dar como resultado una exposición perjudicial a las radiaciones.



**PELIGRO**

Algunos productos láser contienen un diodo de láser incorporado de Clase 3A o de Clase 3B. Tenga en cuenta la advertencia siguiente.

Cuando se abre, hay radiación láser. No mire fijamente el rayo ni lleve a cabo ningún examen directamente con instrumentos ópticos; evite la exposición directa al rayo.



≥18 kg



≥32 kg



≥55 kg

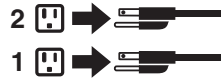
**PRECAUCIÓN:**

Tome medidas de seguridad al levantar el producto.



**PRECAUCIÓN:**

El botón de control de alimentación del dispositivo y el interruptor de alimentación de la fuente de alimentación no apagan la corriente eléctrica suministrada al dispositivo. Es posible también que el dispositivo tenga más de un cable de alimentación. Para eliminar la corriente eléctrica del dispositivo, asegúrese de desconectar todos los cables de alimentación de la fuente de alimentación.



**PRECAUCIÓN:**



No coloque ningún objeto que pese más de 82 kg (180 libras) encima de los dispositivos montados en bastidor.

---

## Send us your comments!

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Name: \_\_\_\_\_

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1. Do you like this manual?

Yes  No

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Less than five years

More than five years

4. Which computers do you service most?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Thank you for your response!**

---

## Problem determination tips

Due to the variety of hardware and software combinations that can be encountered, use the following information to assist you in problem determination. If possible, have this information available when requesting assistance from Service Support and Engineering functions.

- Machine type and model
- Processor or hard disk upgrades
- Failure symptom
  - Do diagnostics fail?
  - What, when, where, single, or multiple systems?
  - Is the failure repeatable?
  - Has this configuration ever worked?
  - If it has been working, what changes were made prior to it failing?
  - Is this the original reported failure?
- Reference/Diagnostics version
  - Type and version level
- Hardware configuration
  - Print (print screen) configuration currently in use
  - BIOS level
- Operating system software
  - Type and version level

**Note:** To eliminate confusion, identical systems are considered identical only if they:

1. Are the exact machine type and models
2. Have the same BIOS level
3. Have the same adapters/attachments in the same locations
4. Have the same address jumpers/terminators/cabling
5. Have the same software versions and levels
6. Have the same Reference/Diagnostics Diskette (version)
7. Have the same configuration options set in the system
8. Have the same setup for the operation system control files

Comparing the configuration and software set-up between "working and non-working" systems will often lead to problem resolution.

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