



Hardware Maintenance Manual

Types 8104, 8105, 8106, 8107

Types 8108, 8109, 8118, 8121



Hardware Maintenance Manual

Types 8104, 8105, 8106, 8107

Types 8108, 8109, 8118, 8121

Note: Before using this information and the product it supports, be sure to read the information under “Notices,” on page 201.

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Chapter 1. About this manual

This manual contains service and reference information for ThinkCentre® computers listed on the cover. It is intended only for trained servicers who are familiar with Lenovo™ computer products.

Before servicing a Lenovo product, be sure to read the Safety Information. See Chapter 2, "Safety information," on page 5.

The Symptom-to-FRU (field replaceable unit) Index and Additional Service Information chapters are not specific to any machine type and are applicable to all ThinkCentre computers.

This manual includes a complete FRU part number listing for each machine type and model listed on the cover. If you have internet access, FRU part numbers are also available at:

<http://www.lenovo.com/think/support>

This manual does not include procedures for replacing FRUs. For FRU replacement procedures, refer to the *Hardware Replacement Guide* for the appropriate machine type. The *Hardware Replacement Guide* is available at:

<http://www.lenovo.com/think/support>.

Important Safety Information

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

Veuillez lire toutes les consignes de type DANGER et ATTENTION du présent document avant d'exécuter les instructions.

Lesen Sie unbedingt alle Hinweise vom Typ "ACHTUNG" oder "VORSICHT" in dieser Dokumentation, bevor Sie irgendwelche Vorgänge durchführen

Leggere le istruzioni introdotte da ATTENZIONE e PERICOLO presenti nel manuale prima di eseguire una qualsiasi delle istruzioni

Certifique-se de ler todas as instruções de cuidado e perigo neste manual antes de executar qualquer uma das instruções

Es importante que lea todas las declaraciones de precaución y de peligro de este manual antes de seguir las instrucciones.

تأكد من قراءة كل التحذيرات الموجودة في هذا الكتاب قبل اتباع هذه التعليمات .

执行任何说明之前，请确保已阅读本书中的所有警告和危险声明。

執行任何指示前，請確實閱讀本書中的所有警告及危險聲明。

ודאו שקראתם את כל הודעות האזהרה והסכנה במסמך זה לפני שתבצעו פעולה כלשהי.

본 사용 설명서에 기재된 내용을 실행하기 전에 모든 주의사항 및 위험사항을 숙지하십시오.

Strategy for replacing FRUs for CTO, CMV, and GAV products

Product definition

Dynamic Configure To Order (CTO)

This provides the ability for a customer to configure a Lenovo solution from an eSite, and have this configuration sent to fulfillment, where it is built and shipped directly to the customer. The machine label, PC Entitlement Warehouse (PEW), eSupport, and the HMM will include these products as the 4-digit machine type (MT) and 3-digit model, where model = 'CTO' (Example: 8129-CTO).

Custom Model Variant (CMV)

This is a unique configuration that has been negotiated between Lenovo and the customer. A unique 4-digit MT and 3-digit model is provided to the customer to place orders (Example: 8129-W15). A CMV is a special bid offering. Therefore, it is NOT generally announced.

- The machine type model (MTM) portion of the machine label is the 4-digit MT and 3-digit model, where model = 'CTO' (Example: 8129-CTO). The PRODUCT ID portion of the machine label is the 4-digit MT and 3-digit CMV model (Example: 8129-W15).
- The PEW record is the 4-digit MT and 3-digit model, where model = 'CTO' (Example: 8129-CTO).
- eSupport will show both the CTO and CMV machine type models (Example: 8129-CTO and 8129-W15 will be found on the eSupport site.)
- The HMM will have the 4-digit MT and 3-digit CTO model only (Example: 8129-CTO). Again, CMVs are custom models and are not found in the HMM.

General Announce Variant (GAV)

This is a standard model (fixed configuration). GAVs are announced and offered to all customers. The MTM portion of the machine label is a 4-digit MT and 3-digit model, where model = a "fixed model number", not 'CTO' (Example: 8129-F1U). Also, PEW, eSupport, and the HMM will list these products under the same fixed model number.

FRU Identification for CTO, CMV, and GAV products

There are three information resources to identify which FRUs are used to support CTO, CMV, and GAV products. These sources are PEW, eSupport, and the HMM.

Using PEW

- PEW is the primary source for identifying FRU part numbers and FRU descriptions for the key commodities for CTO, CMV and GAV products at a MT - serial number level. An example of key commodities are hard disk drives, system boards, microprocessors, Liquid Crystal Displays (LCDs), and memory.
- Remember, All CTO and CMV products are loaded in PEW under the 4-digit MT and 3-digit model, where model = 'CTO' (Example: 8129-CTO). GAVs are loaded in PEW under the 4-digit MT and 3-digit model, where model = a "fixed model number", not 'CTO' (Example: 8129-F1U).

- PEW can be accessed as follows:
 1. Point your browser to <http://w3-3.ibm.com/pc/entitle>.
 2. Under PEW Home, click **Machine Lookup**.
 3. Under Machine Lookup, click **Warranty Information**.
 4. Under Warranty Information, type the MT and Serial number and click **Submit**.

The list of key commodities is returned in the PEW record under Component Information.

- **Business Partners** using Eclaim will access PEW when performing Entitlement Lookup. Business Partners will enter Loc ID, MT and Serial, and the key commodities will be returned in the Eclaim record under System Details.
- Authorized Lenovo Business Partners can access Eclaim at the following Web site:
<http://wca.eclaim.com>

Using eSupport

For Key Commodities (Examples - hard disk drive, system board, microprocessor, LCD, and memory)

- eSupport can be used to view the list of key commodities built in a particular machine serial (this is the same record found in PEW).
- eSupport can be accessed at the following Web site:
<http://www.lenovo.com/think/support>
- To view the key commodities:
 1. Click **Parts information**.
 2. Under Parts information, click **Parts lookup**.
 3. Under Parts lookup, type the model type and serial number; then click **Continue**.

The key commodities are returned in the eSupport record under Parts shipped with your system.

For the remaining FRUs (the complete list of FRUs at the MT Model level)

- eSupport can be used to view the complete list of FRUs for a machine type and model.
- To view the complete list of FRUs for a machine type:
 1. Point your browser to <http://www.lenovo.com/think/support>.
 2. Type the machine type (Example: 8129) in the Use Quick Path field; then click **Go**.
 3. Under Browse by product, click **Continue**.
 4. Under Important information, click **Parts information**.
 5. In the Refine results field, select **Service parts**; then click the entry for your machine type.

The list of service parts by description, with applicable machine type model and FRU part number is displayed.

Using the HMM

- Use the HMM as a back-up to PEW and eSupport to view the complete list of FRU part numbers at the MT Model level.

Important information about replacing RoHS compliant FRUs

RoHS, The Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (2002/95/EC) is a European Union legal requirement affecting the global electronics industry. RoHS requirements must be implemented on Lenovo products placed on the market after June 2006. Products on the market before June 2006 are not required to have RoHS compliant parts. So, if the parts are not compliant originally, replacement parts can also be noncompliant, but in all cases, if the parts are compliant, the replacement parts must also be compliant.

Lenovo plans to transition to RoHS compliance well before the implementation date and expects its suppliers to be ready to support Lenovo's requirements and schedule. Products sold in 2005, will contain some RoHS compliant FRUs. The following statement pertains to these products and any product Lenovo produces containing RoHS compliant parts.

RoHS compliant ThinkCentre parts have unique FRU part numbers. Before or after June, 2006, failed RoHS compliant parts must always be replaced using RoHS compliant FRUs, so only the FRUs identified as compliant in the system HMM or direct substitutions for those FRUs can be used.

Products marketed before June 2006		Products marketed after June 2006	
Current or original part	Replacement FRU	Current or original part	Replacement FRU
Non-RoHS	Can be Non-RoHS	Must be RoHS	Must be RoHS
Non-RoHS	Can be RoHS		
Non-RoHS	Can sub to RoHS		
RoHS	Must be RoHS		

Note: A direct substitution is a part with a different FRU part number that is automatically shipped by the distribution center at the time of order.

Chapter 2. Safety information

This chapter contains the safety information that you need to be familiar with before servicing a 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 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 alterations. Use good judgment as to the safety of any 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
- Arabic
- Brazilian/Portuguese
- Chinese (simplified)
- Chinese (traditional)
- French
- German
- Hebrew
- 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
1. Turn everything OFF. 2. First, attach all cables to devices. 3. Attach signal cables to connectors. 4. Attach power cords to outlet. 5. Turn device ON.	1. Turn everything OFF. 2. First, remove power cords from outlet. 3. Remove signal cables from connectors. 4. Remove all cables from devices.



CAUTION:

When replacing the lithium battery, use only 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)

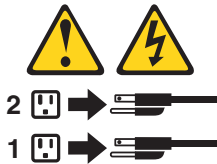
CAUTION:

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.





خطر

التيار الكهربائي الموجود بمصدر الطاقة أو أجهزة التليفون أو أسلاك الاتصالات يشكل خطورة.

لتفادي مخاطر الصدمات الكهربائية:

لا تحاول توصيل أو فصل أي أسلاك أو القيام بعمليات تركيب أو صيانة أو إعادة توصيف لهذا المنتج أثناء وجود عاصفة كهربائية.

يجب توصيل كل أسلاك الكهرباء في مخارج كهرباء ذات توصيلات أسلاك وتوصيلات أرضية صحيحة. يجب توصيل أي جهاز سيتم الحاقه بهذا المنتج في مخارج كهرباء ذات توصيلات أسلاك صحيحة.

وإن أمكن يجب استخدام يد واحدة فقط في توصيل أو فصل أسلاك الإشارة.

لا تحاول تشغيل أي جهاز إذا كان هناك أثر لحرق أو مياه أو تلف بالمكونات

يجب فصل أسلاك الكهرباء وأنظمة الاتصالات وشبكات الاتصال وأجهزة المودم الملحقة قبل فتح أغطية الجهاز، ما لم يتم طلب خلاف ذلك في التعليمات الخاصة بالتركيب والتوصيف.

قم بتوصيل وفصل الأسلاك كما هو موضح في الجدول التالي وذلك عند القيام بعمليات التركيب أو النقل أو فتح أغطية هذا المنتج أو الأجهزة الملحقة.

للتوصيل:

قم بإيقاف كل شيء.

أولاً، قم بتوصيل كل الأسلاك بالأجهزة.

قم بتوصيل أسلاك الإشارة في لموصلات.

قم بتوصيل أسلاك الكهرباء في المخارج.

قم بتشغيل الجهاز.

للفصل:

قم بإيقاف كل شيء.

أولاً، قم بفصل كل أسلاك الكهرباء من المخرج.

قم بفصل أسلاك الإشارة من الموصلات.

قم بفصل كل الأسلاك من الأجهزة.



تنبيه :

عند استبدال البطارية الليثيوم، استخدم فقط رقم الجزء الخاص **Part Number 33F8354** أو نوع آخر يكون على نفس مستوى الكفاءة يحدده لك المصنع.
إذا كان النظام الخاص يستخدم معه بطارية ليثيوم قم باستبدالها بنفس النوع الذي تم
صناعتها من خلال نفس المصنع. تحتوي البطارية على مادة الليثيوم ويمكن أن تنفجر في حالة عدم استخدامها
أو التعامل معها بطريقة صحيحة أو عند التخلص منها بطريقة خطأ.

لا تقم بـ:

- القاء البطارية أو غمرها في الماء
- تسخينها أعلى من ١٠٠ درجة مئوية و(٢١٢ ° فهرنهايت)
- بتصليحها أو فكها

تخلص من البطارية طبقاً للقانون أو النظام المحلي .



تنبيه :

أثناء تركيب منتجات ليزر (مثل CD-ROMs أو وحدة تشغيل DVD أو أجهزة Fiber Optic أو وحدات الإرسال) يجب مراعاة الآتي:

لا تنزع الأغشية. قد ينتج عن نزع أغشية منتج الليزر انفجار أشعة الليزر شديدة الخطورة.
لا يوجد أجزاء يمكن تغييرها داخل الجهاز. قد ينتج عن استخدام تحكمات أو تعديلات أو عمل أي تصرفات أخرى تخالف ما هو محدد هنا إلى انفجار أشعة شديدة الخطورة.



خطر

تحتوي بعض منتجات الليزر على الفئة دايود ليزر مدمج من الفئة Class 3A أو Class 3B. يجب مراعاة الآتي .

أشعة الليزر عند الفتح. لا تحقق إلى الإشعاع و لا تنظر إليه مباشرة بواسطة أي أجهزة مرئية
وتجنب التعرض المباشر للإشعاع .



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)

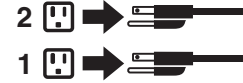


≥55 kg (121.2 lbs)

تنبيه :
يجب استخدام ممارسات آمنة عند الرفع



تنبيه :
لا يَقم زر التحكم في التشغيل الموجود على الجهاز والمفتاح الكهربائي الموجود على لوحة التحكم بإيقاف التيار الكهربائي المار بالجهاز. قد يكون للجهاز أكثر من سلك كهربائي واحد. لايقاف التيار الكهربائي المار بالجهاز، تأكد من فصل جميع أسلاك الكهرباء من مصدر الكهرباء .



تنبيه :
لا تضع أي عنصر يزن أكثر من ٨٢ كيلوجرام (١٨٠ رطل) أعلى سطح الأجهزة.





PERIGO

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

Para evitar risco de choque elétrico:

- Não conecte nem desconecte nenhum cabo ou execute instalação, manutenção ou reconfiguração deste produto durante uma tempestade com raios.
- Conecte todos os cabos de alimentação a tomadas elétricas corretamente instaladas e aterradas.
- Todo equipamento que for conectado a este produto deve ser conectado a tomadas corretamente instaladas.
- Quando possível, utilize apenas uma das mãos para conectar ou desconectar cabos de sinal.
- Nunca ligue nenhum equipamento quando houver evidência de fogo, água ou danos estruturais.
- Antes de abrir tampas de dispositivos, desconecte cabos de alimentação, sistemas de telecomunicação, redes e modems conectados, a menos que especificado de maneira diferente nos procedimentos de instalação e configuração.
- Conecte e desconecte os cabos conforme descrito na tabela apresentada a seguir ao instalar, mover ou abrir tampas deste produto ou de dispositivos conectados.

Para Conectar:	Para Desconectar:
1. DESLIGUE Tudo. 2. Primeiramente, conecte todos os cabos aos dispositivos. 3. Conecte os cabos de sinal aos conectores. 4. Conecte os cabos de alimentação às tomadas. 5. LIGUE os dispositivos.	1. DESLIGUE Tudo. 2. Primeiramente, remova os cabos de alimentação das tomadas. 3. Remova os cabos de sinal dos conectores. 4. Remova todos os cabos dos dispositivos.



CUIDADO:

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

Não:

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

Descarte a bateria conforme requerido pelas leis ou regulamentos locais.



PRECAUCIÓN:

Quando produtos a laser (como unidades de CD-ROMs, unidades de DVD-ROM, dispositivos de fibra ótica ou transmissores) 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. Não existem peças que podem ser consertadas no interior do dispositivo.
- 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 diodo de laser integrado da Classe 3A ou da Classe 3B. Observe o seguinte:

Radiação a laser quando aberto. Não olhe diretamente para o feixe a olho nu ou com instrumentos ópticos e evite exposição direta ao feixe.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

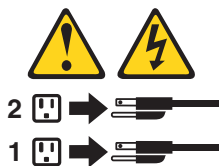
CUIDADO:

Utilize procedimentos de segurança para levantar equipamentos.



CUIDADO:

O botão de controle de alimentação do dispositivo e o botão para ligar/desligar da 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 alimentação.



CUIDADO:

Não coloque nenhum objeto com mais de 82 kg (180 lbs.) sobre dispositivos montados em rack.





危险

电源、电话和通信电缆中的电流是危险的。

为避免电击危险：

- 请勿在雷电期间连接或断开任何电缆的连接，或者对本产品进行安装、维护或重新配置。
- 将所有电源线连接到正确连线和妥善接地的电源插座。
- 将所有要连接到该产品的设备连接到正确连线的插座。
- 如果可能，请仅使用一只手来连接或断开信号电缆的连接。
- 切勿在有火、水、结构损坏迹象的情况下开启任何设备。
- 在打开设备外盖之前请断开已连接的电源线、远程通信系统、网络和调制解调器，除非在安装和配置过程中另有说明。
- 当安装、移动或打开该产品或连接设备的外盖时，请按照下表所述来连接或断开电缆的连接。

要连接	要断开连接
1. 切断所有电源。 2. 首先将所有电缆连接到设备。 3. 将信号电缆连接到接口。 4. 将电源线连接到插座。 5. 开启设备。	1. 切断所有电源。 2. 首先从插座上拔出电源线。 3. 从接口上拔出信号电缆。 4. 从设备上拔出所有电缆。



警告：

更换锂电池时，请仅使用部件号为 33F8354 的电池或制造商推荐的同类电池。如果您的系统有包含锂电池的模块，请仅使用同一制造商生产的相同模块类型来替换该模块。该电池中含有锂，如果使用、操作或处理不当，可能会发生爆炸。

切勿：

- 投入或浸入水中
- 加热到 100 °C（212 °F）以上
- 维修或拆卸

请按照当地法令或条例的要求处理电池。



警告：
安装激光产品（例如 CD-ROM、DVD-ROM 驱动器、光纤设备或发射设备）时，
请注意以下声明：

- 请勿卸下外盖。卸下激光产品的外盖可能导致遭受激光辐射的危险。该设备内没有可维修的部件。
- 如果不按照此处指定的过程进行控制、调整或操作，则有可能导致遭受辐射的危险。



危险

某些激光产品包含嵌入式 3A 类或 3B 类激光二极管。请注意以下声明：

打开后有激光辐射。请勿注视光束，请勿直接用光学仪器查看，并应避免直接暴露在光束中。



≥18 千克 (37 磅)



≥32 千克 (70.5 磅)



≥55 千克 (121.2 磅)

警告：
抬起时请采取安全措施。



警告：
设备上的电源控制按钮和电源上的电源开关不会切断供给该设备的电流。该设备还可能有多条电源线。要切断该设备的所有电流，请确保所有电源线都与电源断开连接。





警告：

切勿在机架安装设备的顶部放置任何重量超过 82 千克（180 磅）的物体。





危險

電源、電話及通訊纜線上的電流都具有危險性。

若要避免觸電危險：

- 請勿在雷雨期間，連接或拔除纜線、執行安裝、維護或重新配置本產品。
- 將所有電源線連接到正確配線及接地的電源插座。
- 任何與本產品連接的設備都必須連接到配線妥當的電源插座。
- 請盡可能用單手連接或拔除信號線。
- 發生火災、水災或結構損害時，絕對不要開啟任何設備。
- 除非在安裝及配置程序中另有指示，否則在開啟裝置機蓋之前，請拔掉連接的電源線、電信系統、網路及數據機。
- 安裝、移動或開啟本產品或附屬裝置的機蓋時，請遵循下列說明連接及拔掉纜線。

連線	切斷連線
1. 關閉所有開關。 2. 首先，連接所有接線到裝置。 3. 連接信號線到接頭。 4. 連接電源線到插座。 5. 開啟裝置。	1. 關閉所有開關。 2. 首先，拔掉插座上的電源線。 3. 拔掉接頭上的信號線。 4. 拔掉裝置上所有接線。



警告：

更換鋰電池時，請僅使用產品編號 **33F8354** 或製造商所建議的同類型電池。

如果您的系統中含有鋰電池模組，請僅使用同一家製造商所生產的相同模組進行更換。

如果未以正確方式使用、處理或棄置含鋰的電池，會有爆炸的危險。

請勿：

- 沾溼或浸入水中
- 置於 **100C (212F)** 以上的高溫環境
- 修理或拆開

請按照各地區有關廢棄電池的法令和規定處理舊電池。

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警告：

- 請勿移除機蓋。移除雷射產品的機蓋，可能會導致暴露在危險的雷射輻射中。裝置內部並無可自行維修的零件。
- 利用或執行非本文中所指定的控制、調整及執行程序，可能會導致危險的輻射外洩。



危險

部分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：

在開啟光碟機時，會發生雷射輻射。請勿直視光束或用光學儀器直接檢視，並避免直接暴露在光束中。



≥ 18 公斤 (37 磅)



≥ 32 公斤 (70.5 磅)



≥ 55 公斤 (121.2 磅)

警告：
搬運時請注意安全。



警告：
裝置上的電源控制按鈕及電源供應器上的電源開關，無法關閉裝置所產生的電流。
該裝置可能有多條電源線。若要除去裝置流出的所有電流，請確認已切斷所有電源線的電源。



警告：

請勿堆放重量超過 **82 公斤 (180 磅)** 的物體於框架裝載式裝置上。





DANGER

Le courant électrique provenant de l'alimentation, du téléphone et des câbles de transmission peut présenter un danger.

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, que vous déplacez, ou que vous manipulez 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. 2. Commencez par brancher tous les cordons sur les unités. 3. Branchez les câbles d'interface sur des connecteurs. 4. Branchez les cordons d'alimentation sur des prises. 5. Mettez les unités SOUS TENSION.	1. Mettez les unités HORS TENSION. 2. Débranchez les cordons d'alimentation des prises. 3. Débranchez les câbles d'interface des connecteurs. 4. Débranchez tous les câbles des unités.



ATTENTION:

Remplacer la pile au lithium usagée par une pile de référence identique exclusivement, (référence 33F8354), ou suivre les instructions du fabricant qui en définit les équivalences. 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 peut exploser en cas de mauvaise utilisation, de mauvaise manipulation ou de mise au rebut inappropriée.

Ne pas :

- la jeter à l'eau,
- l'exposer à des températures supérieures à 100°C,
- chercher à la réparer ou à la démonter.

Ne pas mettre la pile à la poubelle. Pour la mise au rebut, se reporter à la réglementation en vigueur.



ATTENTION:

Si des produits à laser (tels que des unités de CD-ROM, de DVD-ROM, des unités à fibres optiques, ou des émetteurs) sont installés, prenez connaissance des informations suivantes :

- Ne retirez pas le carter. En ouvrant l'unité de CD-ROM ou de DVD-ROM, vous vous exposez au rayonnement dangereux du laser. Aucune pièce de l'unité n'est réparable.
- 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 manuel.



DANGER

Certains produits à laser contiennent une diode à laser intégrée de classe 3A ou 3B. Prenez connaissance des informations suivantes:

Rayonnement laser lorsque le carter est ouvert. Evitez toute exposition directe au rayon laser. Evitez de regarder fixement le faisceau ou de l'observer à l'aide d'instruments optiques.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

ATTENTION:

Soulevez la machine avec précaution.



ATTENTION:

L'interrupteur de contrôle d'alimentation de l'unité et l'interrupteur dubloc d'alimentation ne coupent pas le courant électrique alimentant l'unité. En outre, le système peut être équipé de plusieurs cordons d'alimentation. Pour mettre l'unité hors tension, vous devez déconnecter tous les cordons de la source d'alimentation.



2  → 

1  → 



ATTENTION:

Ne placez pas d'objet supérieur à 82 kg sur une unité montée en armoire.





VORSICHT

An Netz-, Telefon- und Datenleitungen können gefährliche Spannungen anliegen.

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.
- Die Signalkabel nach Möglichkeit einhändig anschließen oder lösen, um einen Stromschlag durch Berühren von Oberflächen mit unterschiedlichem elektrischem Potenzial zu vermeiden.
- Geräte niemals einschalten, wenn Hinweise auf Feuer, Wasser oder Gebäudeschäden vorliegen.
- Die Verbindung zu den angeschlossenen Netzkabeln, Telekommunikationssystemen, Netzwerken und Modems ist vor dem Öffnen des Gehäuses zu unterbrechen, sofern in den Installations- und Konfigurationsprozeduren keine anders lautenden Anweisungen enthalten sind.
- Zum Installieren, Transportieren und Öffnen der Abdeckungen des Computers oder der angeschlossenen Einheiten die Kabel gemäß der folgenden Tabelle anschließen und abziehen.

Zum Anschließen der Kabel gehen Sie wie folgt vor	Zum Abziehen der Kabel gehen Sie wie folgt vor
1. Schalten Sie alle Einheiten AUS. 2. Schließen Sie erst alle Kabel an die Einheiten an. 3. Schließen Sie die Signalkabel an die Buchsen an. 4. Schließen Sie die Netzkabel an die Steckdose an. 5. Schalten Sie die Einheit EIN.	1. Schalten Sie alle Einheiten AUS. 2. Ziehen Sie zuerst alle Netzkabel aus den Netzsteckdosen. 3. Ziehen Sie die Signalkabel aus den Buchsen. 4. Ziehen Sie alle Kabel von den Einheiten ab.



CAUTION:

Eine verbrauchte Lithiumbatterie nur durch eine Batterie mit der Teilenummer 33F8354 oder eine gleichwertige, vom Hersteller empfohlene Batterie ersetzen. Enthält das System ein Modul mit einer Lithiumbatterie, dieses nur durch ein Modul desselben Typs und von demselben Hersteller ersetzen. 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:

Bei der Installation von Lasergeräten (wie CD-ROM-Laufwerken, DVD-Laufwerken, Einheiten mit Lichtwellenleitertechnik oder Sendern) Folgendes beachten:

- Die Abdeckungen nicht entfernen. Durch Entfernen der Abdeckungen des Lasergeräts können gefährliche Laserstrahlungen freigesetzt werden. Das Gerät enthält keine zu wartenden Teile.
- Werden Steuerelemente, Einstellungen oder Durchführungen von Prozeduren anders als hier angegeben verwendet, kann gefährliche Laserstrahlung auftreten.



VORSICHT

Einige Lasergeräte enthalten eine Laserdiode der Klasse 3A oder 3B. Beachten Sie Folgendes:

Laserstrahlung bei geöffneter Verkleidung. Nicht in den Strahl blicken. Keine Lupen oder Spiegel verwenden. Strahlungsbereich meiden.



≥18 kg



≥32 kg



≥55 kg

ACHTUNG:

Arbeitsschutzrichtlinien beim Anheben der Maschine beachten.



ACHTUNG:

Mit dem Netzschalter an der Einheit und am Netzteil wird die Stromversorgung für die Einheit nicht unterbrochen. Die Einheit kann auch mit mehreren Netzkabeln ausgestattet sein. Um die Stromversorgung für die Einheit vollständig zu unterbrechen, müssen alle zum Gerät führenden Netzkabel vom Netz getrennt werden.



ACHTUNG:

Legen Sie auf in einem Rack montierten Einheiten keine über 82 kg schweren Gegenstände ab.





סכנה

זרם חשמלי המועבר בכבלי חשמל, טלפון ותקשורת הוא מסוכן.

כדי להימנע מסכנת התחשמלות:

- אל תחברו או תנתקו כבלים, ואל תבצעו פעולת התקנה, תחזוקה או שינוי תצורה במוצר זה במהלך סופת ברקים.
- חברו את כל כבלי החשמל לשקע חשמל מחווט ומוארק כהלכה.
- חברו כל ציוד שיחובר למוצר זה לשקעי חשמל מחוטים כהלכה.
- במידת האפשר, השתמשו ביד אחת בלבד לחיבור או לניתוק של כבלי אותות.
- לעולם אל תפעילו ציוד כלשהו כאשר יש עדות לנזק מבני או לנזק כתוצאה מאש או ממים.
- נתקו את כבלי החשמל, מערכות התקשורת, התקני הרשת והמודמים המחוברים לפני פתיחת כיסויי ההתקן, אלא אם הליכי ההתקנה וקביעת התצורה מורים אחרת.
- בעת התקנה, העברה או פתיחת כיסויים במוצר זה או בהתקנים המחוברים, חברו ונתקו את הכבלים כמתואר בטבלה שלהלן.

כדי לחבר	כדי לנתק
1. כבו הכל.	1. כבו הכל.
2. ראשית, חברו את כל הכבלים להתקנים.	2. ראשית, נתקו את כבלי החשמל מהשקעים.
3. חברו את כבלי האותות למחברים.	3. נתקו את כבלי האותות מהמחברים.
4. חברו את כבלי החשמל לשקעים.	4. הסירו את כל הכבלים מההתקנים.
5. הפעילו את ההתקן.	



זהירות:

בעת החלפת סוללת הליתיום, השתמשו רק בסוללה בעלת מק"ט 33F8354 או בסוג תואם שהומלץ על ידי היצרן. אם המערכת כוללת מודול המכיל סוללת ליתיום, החליפו אותו רק במודול מאותו סוג ומתוצרת אותו יצרן. הסוללה מכילה ליתיום, ועלולה להתפוצץ אם לא משתמשים ומטפלים בה או משליכים אותה כיאות.

לעולם:

- אל תטבלו במים

- אל תחממו לטמפרטורה הגבוהה מ-100°C (212°F)

- אל תתקנו או תפרקו

השליכו את הסוללה כנדרש לפי התקנות והחוקים המקומיים.



זהירות:

בעת התקנת מוצרי ליזר (כגון כונני תקליטורים ו-DVD, התקני סיב אופטי או משדרים), שימו לב לאזהרות הבאות:

- אל תסירו את הכיסויים. הסרת הכיסויים של מוצר הלייזר עלולה לגרום לחשיפה לקרינת לייזר מסוכנת. אין חלקים ברי טיפול בתוך ההתקן.

- שינויים, שימוש בבקורות או ביצוע הליכים אחרים מאלה המתוארים כאן, עלולים לגרום לחשיפה לקרינה מסוכנת.



סכנה

מוצרי לייזר מסוימים מכילים דיודת לייזר מסוג Class 3A או Class 3B. שימו לב לאזהרה הבאה:

כאשר הוא פתוח, המוצר פולט קרינת לייזר. אל תביטו ישירות בקרן, אל תביטו ישירות בעזרת ציוד אופטי, והימנעו מחשיפה לקרן.



≤ 18 ק"ג (37 ליב')



≤ 32 ק"ג (70.5 ליב')

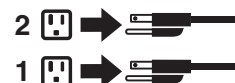


≤ 55 ק"ג (121.2 ליב')

זהירות:
השתמשו בהליכים
הנאותים בעת
הרמת הצידוד.



זהירות:
לחצן ההפעלה של ההתקן ומתג ההפעלה של ספק החשמל אינם מפסיקים את זרם החשמל המסופק להתקן.
בנוסף, ההתקן עשוי לכלול יותר מכבל חשמל אחד. כדי לסלק את כל הזרם החשמלי מההתקן,
ודאו שכל כבלי החשמל מנותקים ממקור החשמל.



זהירות:
אל תניחו חפץ כלשהו השוקל יותר מ-82 ק"ג (180 ליב') על התקנים המחוברים למעמד מסגרת.





PERICOLO

La corrente elettrica proveniente dai cavi di alimentazione, del telefono e di comunicazione può essere pericolosa.

Per evitare il rischio di scosse elettriche:

- Non collegare o scollegare qualsiasi cavo oppure effettuare l'installazione, la manutenzione o la riconfigurazione del prodotto durante un temporale.
- Collegare tutti i fili elettrici a una presa di alimentazione correttamente cablata e dotata di messa a terra.
- Collegare alle prese elettriche appropriate tutte le apparecchiature che verranno utilizzate per questo prodotto.
- Se possibile, utilizzare solo una mano per collegare o scollegare i cavi di segnale.
- Non accendere assolutamente apparecchiature in presenza di incendi, perdite d'acqua o danno strutturale.
- Scollegare i cavi di alimentazione, i sistemi di telecomunicazione, le reti e il modem prima di aprire i coperchi del dispositivo, salvo istruzioni contrarie relative alle procedure di installazione e configurazione.
- Collegare e scollegare i cavi come descritto nella seguente tabella quando vengono effettuate operazioni di installazione, spostamento o apertura dei coperchi di questo prodotto o delle unità collegate.

Per collegarsi	Per scollegarsi
1. SPEGNERE le apparecchiature. 2. Innanzitutto, collegare tutti i cavi alle unità. 3. Collegare i cavi di segnale ai connettori. 4. Collegare i cavi di alimentazione alla presa. 5. Accendere l'unità.	1. SPEGNERE le apparecchiature. 2. Innanzitutto, rimuovere i cavi di alimentazione dalla presa. 3. Rimuovere i cavi di segnale dai connettori. 4. Rimuovere tutti i cavi dalle unità.



ATTENZIONE:

Quando si sostituisce la batteria al litio, utilizzare solo il Numero parte 33F8354 o un tipo di batteria equivalente consigliato dal produttore. Se sul sistema è presente un modulo che contiene una batteria al litio, sostituirlo solo con un tipo di modulo dello stesso tipo della stessa casa di produzione. La batteria contiene litio e può esplodere se usata, maneggiata o smaltita in modo non corretto.

Non:

- Gettare o immergere la batteria nell'acqua
- Riscaldarla ad una temperatura superiore ai 100 gradi C (212 gradi F)
- Smontarla, ricaricarla o tentare di ripararla

Le batterie usate vanno smaltite in accordo alla normativa in vigore (DPR 915/82 e successive disposizioni e disposizioni locali).



ATTENZIONE:

Quando vengono installati prodotti laser (quali CD-ROM, unità DVD-ROM, unità a fibre ottiche o trasmettenti), tener presente quanto segue:

- Non rimuovere gli sportelli. L'apertura di un'unità laser può determinare l'esposizione a radiazioni laser pericolose. All'interno dell'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

Alcune unità laser contengono un diodo laser di Classe 3A o Classe 3B. Tener presente quanto segue:

Aperto l'unità vengono emesse radiazioni laser. Non fissare il fascio, non guardarlo direttamente con strumenti ottici ed evitare l'esposizione al fascio.



≥18 kg



≥32 kg



≥55 kg

ATTENZIONE:

Prestare attenzione nel sollevare l'apparecchiatura.



ATTENZIONE:

Il pulsante di controllo dell'alimentazione presente sull'unità e l'interruttore dell'alimentatore non disattivano l'alimentazione corrente fornita all'unità. E' possibile che l'unità disponga di più cavi di alimentazione. Per disattivare l'alimentazione dall'unità, accertarsi che tutti i cavi di alimentazione siano scollegati dalla fonte di alimentazione.



ATTENZIONE:

Non collocare oggetti che pesano più di 82 kg (180 lb.) sulla parte superiore delle unità montate nel rack.





위험

전원, 전화, 통신 케이블의 전류는 위험합니다.

감전의 위험을 피하려면 다음과 같이 하십시오.

- 번개가 치는 날에는 케이블을 연결 또는 분리하거나 본 제품을 설치, 보수, 재구성하지 마십시오.
- 모든 전원 코드는 올바르게 접지된 전기 콘센트에 연결하십시오.
- 본 제품에 연결될 장치는 올바르게 배선된 콘센트에 연결하십시오.
- 신호 케이블을 연결 또는 분리할 때 가능하면 한 손만을 사용하십시오.
- 불 또는 물로 인한 손상이나 구조적인 손상이 있을 경우 장치의 전원을 절대 켜지 마십시오.
- 설치 및 구성 과정에 별도의 지시 사항이 없는 경우, 장치의 덮개를 열기 전에 연결된 전원 코드, 원격 통신 시스템, 네트워크, 모뎀을 분리하십시오.
- 본 제품이나 연결된 장치를 설치, 이동하거나 덮개를 열 때 다음 표와 같은 순서로 케이블을 연결하거나 분리하십시오.

연결할 때:	분리할 때:
1. 모든 장치의 전원을 끄십시오. 2. 먼저 모든 케이블을 장치에 연결하십시오. 3. 커넥터에 신호 케이블을 연결하십시오. 4. 콘센트에 전원 코드를 연결하십시오. 5. 장치의 전원을 켜십시오.	1. 모든 장치의 전원을 끄십시오. 2. 먼저 콘센트에서 전원 코드를 분리하십시오. 3. 커넥터에서 신호 케이블을 분리하십시오. 4. 장치에서 모든 케이블을 분리하십시오.



주의:

배터리를 교환할 때는 Part Number 33F8354 또는 제조업체에서 지정한 동일한 종류의 제품을 사용하십시오. 사용자의 시스템이 리튬 배터리를 포함하는 모듈일 경우, 동일한 제조업체에서 동일한 모듈 유형으로 생산된 제품으로 교체하십시오. 배터리에는 리튬이 함유되어 있어 잘못 사용, 취급 또는 폐기할 경우 폭발의 위험이 있습니다.

사고를 방지하려면 다음 사항을 준수하십시오.

- 배터리를 물 속에 던지거나 침수시키지 마십시오.
- 100℃ (212°F) 이상 가열하지 마십시오.
- 수리하거나 분해하지 마십시오.

배터리를 폐기할 때는 법령 또는 회사의 안전 수칙에 따라 폐기하십시오.



주의:

CD-ROM, DVD-ROM 장치, 광섬유 장치 또는 송신 장치와 같은 레이저 제품을 설치할 때, 다음과 같은 취급 주의사항을 참고하십시오.

- 덮개를 열지 마십시오. 덮개를 열면 레이저 복사 에너지에 노출될 위험이 있습니다. 장치 내부에는 사용자가 조정하거나 수리할 수 있는 부품이 없습니다.
- 규정된 것 이외의 절차 수행, 제어 조정 등의 행위로 인해 해로운 레이저 복사에 노출될 수 있습니다.



위험

일부 장비에는 임베디드 클래스 3A 또는 클래스 3B 레이저 다이오드가 있습니다. 다음 주의사항에 유의하십시오.

드라이브가 열리면 레이저 복사 에너지가 방출됩니다. 광선이 눈에 직접 쏘이지 않도록 하십시오. 나안 또는 광학 기구를 착용한 상태에서 광선을 직접 바라보지 않도록 하십시오.



≥ 18 kg (37 lbs)



≥ 32 kg (70.5 lbs)



≥ 55 kg (121.2 lbs)

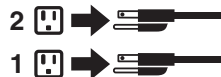
주의:

제품을 들어 올릴 때
안전 규제를 따르십시오.



주의:

장치의 전원 제어 버튼 및 전원 공급 장치의 전원 스위치를 사용하여 장치에 공급되는 전기를 차단하지 마십시오. 장치는 둘 이상의 코드를 가지고 있을 수 있습니다. 장치에서 모든 전원을 차단하려면 콘센트에서 코드가 모두 분리되어 있는지 확인하십시오.





주의:

랙 마운트 장치 위에 무게가 82 kg (180 lbs.) 이상인 물체를 올려 두지 마십시오.





PELIGRO

La corriente eléctrica procedente de cables de alimentación, teléfonos y cables de comunicación puede ser peligrosa.

Para evitar el riesgo de descarga eléctrica:

- No conecte ni desconecte los cables ni realice ninguna tarea de instalación, mantenimiento o reconfiguración de este producto durante una tormenta eléctrica.
- Conecte todos los cables de alimentación a tomas de corriente debidamente cableadas y conectadas a tierra.
- Cualquier equipo que se conecte a este producto también debe conectarse a tomas de corriente debidamente cableadas.
- Siempre que sea posible, utilice una sola mano para conectar o desconectar los cables de señal.
- No encienda nunca un equipo cuando hay señales de fuego, agua o daños estructurales.
- Desconecte los cables de alimentación, los sistemas de telecomunicaciones, las redes y los módems conectados antes de abrir las cubiertas de los dispositivos, a menos que se indique lo contrario en los procedimientos de instalación y configuración.
- Conecte y desconecte los cables, como se describe en la tabla siguiente, cuando instale, mueva o abra las cubiertas de este producto o de los dispositivos conectados.

Para conectar	Para desconectar
1. APÁGUELO todo. 2. En primer lugar, conecte todos los cables a los dispositivos. 3. Conecte los cables de señal a los conectores. 4. Enchufe los cables de alimentación a las tomas de corriente. 5. Encienda el dispositivo.	1. APÁGUELO todo. 2. En primer lugar, desenchufe los cables de alimentación de las tomas de corriente. 3. Desconecte los cables de señal de los conectores. 4. Desconecte todos los cables de los dispositivos.



PRECAUCIÓN:

Cuando sustituya una batería de litio, utilice solamente una batería número de pieza 33F8354 u otra de tipo equivalente recomendada por el fabricante. Si su sistema dispone de un módulo que contiene una batería de litio, reemplácelo sólo con el mismo tipo de módulo, del mismo fabricante. La batería contiene litio y puede explotar si no se utiliza, manipula o desecha correctamente.

No debe:

- Arrojarla al agua o sumergirla en ella
- Exponerla a temperaturas superiores a 100°C (212°F)
- Repararla o desmontarla

Deshágase de la batería según especifiquen las leyes o normas locales.



PRECAUCIÓN:

Cuando haya productos láser (como unidades de CD-ROM, unidades de DVD, dispositivos de fibra óptica o transmisores) instalados, tenga en cuenta lo siguiente:

- No quite las cubiertas. Si quita las cubiertas del producto láser, podría quedar expuesto a radiación láser peligrosa. Dentro del dispositivo no existe ninguna pieza que requiera servicio técnico.
- Si usa controles o ajustes o realiza procedimientos que no sean los especificados aquí, podría exponerse a radiaciones peligrosas.



PELIGRO

Algunos productos láser tienen incorporado un diodo láser de clase 3A o clase 3B. Tenga en cuenta lo siguiente:

Cuando se abre, queda expuesto a radiación láser. No mire directamente al rayo láser, ni siquiera con instrumentos ópticos, y evite exponerse directamente al rayo láser.



≥18 kg



≥32 kg



≥55 kg

PRECAUCIÓN:

Adopte procedimientos seguros al levantar el equipo.



PRECAUCIÓN:

El botón de control de alimentación del dispositivo y el interruptor de alimentación de la fuente de alimentación no desconectan la corriente eléctrica suministrada al dispositivo. Además, el dispositivo podría tener más de un cable de alimentación. Para suprimir toda la corriente eléctrica del dispositivo, asegúrese de que todos los cables de alimentación estén desconectados de la toma de corriente.



PRECAUCIÓN:

No coloque ningún objeto que pese más de 82 Kg (180 lb) encima de dispositivos montados en un bastidor.



Chapter 3. General information

This chapter provides general information that applies to all machine types supported by this publication.

The Access IBM program

Use the Access IBM® program for general information about the use, operation, and maintenance of the computer. The Access IBM program also contains information to help solve problems and get repair service or other technical assistance. The Access IBM program is preinstalled on most ThinkCentre products.

Additional information resources

If you have Internet access, the most up-to-date information for your computer is available from the World Wide Web.

You can find the following information:

- CRU (customer replaceable unit) removal and installation instructions
- Publications
- Troubleshooting information
- Parts information
- Downloads and drivers
- Links to other useful sources of information

To access this information, point your browser to <http://www.lenovo.com/think/support/>.

Specifications

This section lists the physical specifications for your computer.

Dimensions Height: 89 mm (3.5 in.) Width: 276 mm (10.9 in.) Depth: 273 mm (10.7 in.) Weight Minimum configuration as shipped: 6.3 kg (13.4 lb) Maximum configuration: 6.4 kg (14.1 lb) Environment Air temperature: Operating at 0 - 3000 ft (914.4 m): 10° to 35°C (50° to 95°F) Operating at 3000 ft - 7000 ft (2134 m): 10° to 32°C (50° to 89.6°F) Non-operating: 10° to 43°C (50° to 110°F) Humidity: Operating: 8% to 80% Non-operating: 8% to 80% Transit: 8% to 90% Maximum altitude: 2134 m (7000 ft) Note: Since airline interiors are pressurized, this computer can operate on airplanes at altitudes above 2134 m (7000 ft). Electrical input Input voltage: Low range: Minimum: 100 V ac Maximum: 127 V ac Input frequency: 50/60 Hz High range: Minimum: 200 V ac Maximum: 240 V ac Input frequency: 50/60 Hz Input kilovolt-amperes (kVA) (approximate): Minimum configuration as shipped: 0.09 kVA Maximum configuration: 0.23 kVA	Heat output (approximate) in British thermal units (Btu) per hour: Minimum configuration: 256 Btu/hr (75 watts) Maximum configuration: 682 Btu/hr (200 watts) Airflow Approximately 20 cubic feet (0.57 cubic meters) per minute Acoustical noise-emission values Average sound-pressure levels: At operator position: Idle: 26 dBA Operating: 34 dBA At bystander position - 1 meter (3.3 ft): Idle: 28 dBA Operating: 30 dBA Declared (upper limit) sound-power levels: Idle: 3.8 bels Operating: 4.3 bels Note: 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.
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Chapter 4. General Checkout

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.

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:

- The default is for this computer to boot up in quiet mode (no beep, no memory count and checkpoint code display) when no errors are detected by POST.
- To enable beep, memory count, and checkpoint code display when a successful POST occurs, do the following:
 1. Start the Setup Utility program. See “Starting the Setup Utility program” on page 53.
 2. Select **Start Options**.
 3. 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 196.

Use the following procedure to help determine the cause of the problem:

1. Power-off the computer and all external devices.
2. Check all cables and power cords.
3. Set all display controls to the middle position.
4. Power-on all external devices.
5. Power-on the computer.
 - Look for displayed error codes
 - Listen for beep codes
 - Look for readable instructions or a main menu on the display.

If you **did not** receive the correct response, proceed to step 6.

If you **do** receive the correct response, proceed to step 8 on page 44.
6. Look at the following conditions and follow the instructions:
 - If you hear beep codes during POST, go to “Beep symptoms” on page 80.
 - If the computer displays a POST error, go to “POST error codes” on page 83.
 - If the computer hangs and no error is displayed, continue at step 7.
7. There are three LEDs to help you determine if the power supply and system board are working correctly. A power button LED is located on the front of the computer and two diagnostic LEDs are located on the power supply at the rear of the computer.
 - a. Disconnect the power cord from the electrical outlet.
 - b. Reconnect the power cord to a working electrical outlet.
 - c. Press the power button.

d. Observe the LEDs and refer to the following table.

Power LED	Green diagnostic LED	Yellow diagnostic LED	Action
ON	ON	OFF	This is the normal condition of the LEDs when the power is OK.
OFF	OFF	OFF	Make sure the power cord is attached to a working electrical outlet. If the electrical outlet is OK, replace the power supply.
OFF (after the power button has been pressed)	ON	OFF	Replace the system board
ON	ON	ON	Replace the power supply

If the Diagnostic LEDs are in the normal condition and the problem persists, replace the system board and the microprocessor, one at a time, until the computer works correctly.

8. Run the Diagnostic programs. See Chapter 5, "Diagnostics using PC-Doctor for DOS," on page 47.
 - If you receive an error, replace the part that the diagnostic program calls out or go to "Diagnostic error codes" on page 59.
 - If the test stops and you cannot continue, replace the last device tested.

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 indicate a failure?
 - 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?
- 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 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.

Chapter 5. Diagnostics using PC-Doctor for DOS

Diagnostics are provided by the PC-Doctor program for DOS. These include a full range of diagnostic utilities to determine the operating condition of the computer's hardware components.

You can run diagnostics from the Rescue and Recovery™ workspace or you can create a bootable diagnostic diskette from the Rescue and Recovery workspace. Alternatively, you can download either a diskette image or a startable CD-ROM image (.iso file) from the Customer Support Web site and run diagnostics using them.

The latest version of the diagnostics program is available from <http://www.lenovo.com/think/support> on the World Wide Web. Type your machine type into the **Use Quick path** field and click **Go** to find the downloadable files that are specific to the computer. See "Diagnostics program download" on page 48.

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 "Diagnostic error codes" on page 59.

If an installed device is not recognized by the diagnostics program, that device might be defective.

Starting PC-Doctor from the Rescue and Recovery workspace

This procedure describes how to start PC-Doctor from the Rescue and Recovery workspace.

1. If your computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. To launch the Rescue and Recovery workspace, repeatedly press the F11 key as you turn on the computer.

Note: If a user password or an administrator password has been set, the Rescue and Recovery workspace is not displayed until you type the password.

3. When the Rescue and Recovery workspace is displayed, look for "Troubleshoot" on the left side of the screen. Click **Diagnose hardware**.

Notes:

- a. Additional diagnostic information is available from the Rescue and Recovery workspace, such as a diagnostic overview. Refer to the Rescue and Recovery help system for details.
- b. After selecting Diagnose hardware, make sure the computer is restarted using the restart button on the Rescue and Recovery workspace. Do not use the power switch to start the reboot.
- c. You can also create a set of diagnostic disks from the Rescue and Recovery workspace by clicking **Create diagnostic disks** from the Rescue and Recovery menu.

Starting PC-Doctor from a diagnostic diskette or CD-ROM

Note: If your computer has no internal diskette drive, an external USB diskette drive is required when using the diagnostic diskette.

1. If your computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. Insert the diskette or CD-ROM in the appropriate drive.
3. Turn on the computer.

Note: If the PC-Doctor program fails to start, make sure that the startup device sequence is configured to allow startup from the diskette or CD-ROM drive. See “Selecting a startup device” on page 56.

Diagnostics program download

If you have access to the internet, you can download a diskette image or a startable CD-ROM image (.iso file) of the diagnostics.

To download the latest diagnostics program from the WWW, do the following:

- Go to <http://www.lenovo.com/think/support>.
- Type the machine type in the “Use Quick Path” field and click **Go**.
- Click **Downloads and drivers** and scroll down to locate the Enhanced diagnostics.

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.

- Using the cursor movement keys, highlight **Run Normal Test** or **Run Quick Test** from the Diagnostics menu and then press **Enter**.

This automatically runs 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 complete.

- Press **F5** to automatically run all selected tests in all categories. See “Test selection” on page 49.
- From within a test category, press **Ctrl-Enter** to automatically run only the selected tests in that category. See “Test selection” on page 49.
- Using the cursor movement keys, highlight a single test within a test category, and then press **Enter**. This runs 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 52.

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 >>.
4. Repeat steps 2 and 3 above to select all desired tests.

Test results

Diagnostics test results 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 when 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 computer.
 - The diagnostic error code is recorded correctly.
- **Text:**
Description of the error.

Note: See "Diagnostic error codes" on page 59 for error code listings.

Fixed disk advanced test (FDAT)

PC-Doctor Fixed-Disk¹ 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, and so on. FDAT tests for and reports 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

1. The terms fixed disk and hard disk are used interchangeably.

available for test, what tests are available for the device, device properties, and so on. To change testing parameters, you modify the FDAT.INI file in PC Doctor for DOS.

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)
- Self-monitoring, Analysis and Reporting Technology (SMART) - checks the SMART functionality for drives that support SMART.
 - Start SMART Self-Test

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 versus non-destructive testing:

Most of the tests found in FDAT are non-destructive. This means that PC-Doctor program will preserve any data that is present on the tested media prior to beginning any destructive operations (such as 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:

- 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:

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

Important: Make sure that all data is backed up before using the Quick or Full Erase functions.
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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:

1. Press **F3** to activate the log file.
2. Press **F3** again to save the file to diskette or press **F2** to print the file.

Chapter 6. Using the Setup Utility

The Setup Utility program is stored in the electrically erasable programmable read-only memory (EEPROM) of the computer. The Setup Utility program is used to view and change the configuration settings of the computer, regardless of which operating system you are using. However, the operating-system settings might override any similar settings in the Setup Utility program.

Starting the Setup Utility program

To start the Setup Utility program, do the following:

1. If your computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. Repeatedly press the F1 key as you turn on the computer.

Notes:

- a. If a password has been set, the Setup Utility program menu is not displayed until you type your password. See “Using passwords” for more information.
- b. BIOS settings cannot be changed without the correct password.
- c. The Setup Utility might start automatically when the power-on self-test (POST) detects that hardware has been removed or new hardware has been installed in your computer.

Viewing and changing settings

The Setup Utility program menu lists items that identify system configuration topics.

When working with the Setup Utility program menu, you must use the keyboard. The keys used to perform various tasks are displayed at the bottom of each screen.

Exiting from the Setup Utility program

When you finish viewing or changing settings, press Esc to return to the Setup Utility program menu (you might have to press Esc several times). If you want to save the new settings, press F10.

Using passwords

By using the Setup Utility program, you can set passwords to prevent unauthorized persons from gaining access to your computer and data. The types of passwords used are:

- User Password
- Administrator Password
- IDE Drive User Password (some computers)
- IDE Drive Master Password (some computers)

You do not have to set any passwords to use your computer. However, if you decide to set any passwords, read the following sections.

Password considerations

If you are setting any of the various types of passwords on your computer, you should read and understand the following information:

- If you type an incorrect password, you will see an error message. If you type an incorrect password three consecutive times, you must turn the computer off and start again.
- If you set both a User Password and an IDE Drive User Password to the same string, you will be prompted for the password only once when you turn on your computer.
- Do not move an internal IDE hard disk drive to another computer if an IDE Drive User Password has been set unless that computer also supports the IDE Drive User Password.
- If your computer is connected to a local area network (LAN), Wake on LAN will not work unless both a User Password and an IDE Drive User Password are set using the same password.

User Password

When a User Password is set, the user is prompted to type a valid password each time the computer is turned on. The computer cannot be used until a valid password is typed from the keyboard.

Administrator Password

Setting an Administrator Password deters unauthorized persons from changing configuration settings. If you are responsible for maintaining the settings of several computers, you might want to set an Administrator Password.

After you set an Administrator Password, a password prompt is displayed each time you try to access the Setup Utility program.

If both the user and administrator passwords are set, you can type either password. However, to change any configuration settings, you must use your administrator password.

IDE Drive User Password

The IDE Drive User Password, used on some computers, is used to protect the data on the IDE hard disk drive(s). When this password is set, you are prompted to type a valid password before any hard disk drive can be used. This prompt is displayed each time you turn on your computer. If your computer has multiple hard disk drives, they all must use the same password.

Attention

If an IDE Drive User Password is set but the IDE Drive Master Password is not set, there is no recovery in the event that the IDE Drive User Password is lost or forgotten. The hard disk drive must be replaced. See "IDE Drive Master Password."

IDE Drive Master Password

The IDE Drive Master Password, used on some computers, is used to recover use of the hard disk drive in the event that the IDE Drive User Password is lost or forgotten. Only the person who knows the IDE Drive Master password can reset the IDE Drive User Password.

Attention

Make sure that the IDE Drive Master password is stored in a safe place. If both the IDE Drive User password and the IDE Drive Master password are lost or forgotten, the IDE hard disk drive must be replaced.

If both the IDE Drive User Password and the IDE Drive Master Password are to be set, the IDE Drive Master Password must be set before setting the IDE Drive User Password.

Setting, changing, and deleting a password

To set, change, or delete a password, do the following:

Note: A password can be any combination of up to seven characters (A- Z, a-z, and 0-9).

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 53).
2. From the Setup Utility program menu, select **Security**.
3. Select **Set Passwords**. Read the information displayed on the right side of the screen.

Using Security Profile by Device

Security Profile by Device is used to enable or disable user access to the following devices:

IDE controller	When this feature is set to Disable , all devices connected to the IDE controller (such as hard disk drives or the CD-ROM drive) are disabled and will not be displayed in the system configuration.
Diskette Drive Access	When this feature is set to Disable , the diskette drive cannot be accessed.
Diskette Write Protect	When this feature is set to Enable , all diskettes are treated as if they are write-protected.

To set Security Profile by Device, do the following:

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 53).
2. From the Setup Utility program menu, select **Security**.
3. Select **Security Profile by Device**.
4. Select the desired devices and settings and press Enter.
5. Return to the Setup Utility program menu, select **Exit**, and then **Save Settings** or **Save and exit the Setup Utility**.

Note: If you do not want to save the settings, select **Exit the Setup Utility without saving**.

Selecting a startup device

If the computer does not start up (boot) from a device such as the CD-ROM, diskette, or hard disk as expected, use one of the following procedures to select a startup device.

Selecting a temporary startup device

Use this procedure to startup from any boot device.

Note: Not all CDs, hard disks, and diskettes are startable (bootable).

1. If your computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. To open the Startup Device Menu, repeatedly press the F12 key as you turn on the computer.

Note: Selecting a startup device from this list does not permanently change the startup sequence; it is valid for one boot cycle only.

Changing the startup device sequence

To view or permanently change the configured startup device sequence, do the following:

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 53).
2. Select **Startup**.
3. Select **Startup Sequence**. See the information displayed on the right side of the screen.
4. Select the devices for the Primary Startup Sequence, the Automatic Startup Sequence, and the Error Startup Sequence.
5. Select **Exit** from the Setup Utility menu and then **Save Settings** or **Save and exit the Setup Utility**.

If you have changed these settings and want to return to the default settings, select **Load Default Settings** on the Exit menu.

Advanced settings

On some computer models the Advanced settings menu includes a setting to Enable/Disable HyperThreading. This feature works only with HyperThreading-aware operating systems such as Microsoft® Windows® XP. The default setting for HyperThreading is Enabled. However, if you select **Set Defaults** and are using an operating system other than Windows XP, the computer performance might be degraded. Therefore, you should always set HyperThreading to Disabled unless you are sure your operating system supports HyperThreading.

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 Chapter 4, “General Checkout,” on page 43. 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 88.

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: 1. Attempt to back-up the data on the failing hard disk drive. 2. Using the operating systems programs, format the hard disk drive.
The drive is defective.	Replace the hard disk drive.

Power Supply Errors

If you suspect a power problem, use the following procedures.

Check/Verify	FRU/Action
Check the following for proper installation. • Power Cord • On/Off Switch connector • On/Off Switch Power Supply connector • System Board Power Supply connectors • Microprocessor(s) connection	Reseat connectors
Check the power cord for continuity.	Power Cord
Check the power-on switch for continuity.	Power-on Switch

1. Turn off the computer and disconnect all external devices.
2. Power-on the computer.
3. There are three LEDs to help you determine if the power supply and system board are working correctly. The power button LED is located on the front of the computer and the two diagnostic LEDs are located on the power supply at the rear of the computer. After pressing the power button, observe the LEDs and refer to the following table:

Power LED	Green diagnostic LED	Yellow diagnostic LED	Action
ON	ON	OFF	This is the normal condition of the LEDs when the power is OK.
OFF	OFF	OFF	• Make sure the power cord is attached to a working electrical outlet. • Check the power cord for continuity. • If the problem persists, replace the power supply.
OFF (after the power button has been pressed)	ON	OFF	Replace the system board
ON	ON	ON	Replace the power supply

If the Diagnostic LEDs are in the normal condition and the problem persists, replace the system board and the microprocessor, one at a time, until the computer works correctly.

Diagnostic error codes

Refer to the following diagnostic error codes when using the diagnostic tests. See “Running diagnostics tests” on page 48 for the specific type for information about the Diagnostic programs.

In the following index, X can represent any number.

Diagnostic Error Code	FRU/Action
000-000-XXX BIOS Test Passed	No action
000-002-XXX BIOS Timeout	1. Flash the system. See “Flash update procedures” on page 196 2. System board
000-024-XXX BIOS Addressing test failure	1. Flash the system. See “Flash update procedures” on page 196 2. System board
000-025-XXX BIOS Checksum Value error	1. Flash the system. See “Flash update procedures” on page 196 2. Boot block 3. System board
000-026-XXX FLASH data error	1. Flash the system. See “Flash update procedures” on page 196 2. Boot block 3. System board
000-027-XXX BIOS Configuration/Setup error	1. Run Setup 2. Flash the system. See “Flash update procedures” on page 196 3. Boot block 4. System board
000-034-XXX BIOS Buffer Allocation failure	1. Reboot the system 2. Flash the system. See “Flash update procedures” on page 196 3. Run memory test 4. System board
000-035-XXX BIOS Reset Condition detected	1. Flash the system. See “Flash update procedures” on page 196 2. System board
000-036-XXX BIOS Register error	1. Flash the system. See “Flash update procedures” on page 196 2. Boot block 3. System board
000-038-XXX BIOS Extension failure	1. Flash the system. See “Flash update procedures” on page 196 2. Adapter card 3. System board

Diagnostic Error Code	FRU/Action
000-039-XXX BIOS DMI data error	1. Flash the system. See “Flash update procedures” on page 196 2. System board
000-195-XXX BIOS Test aborted by user	Information only Re-start the test, if necessary
000-196-XXX BIOS test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
000-197-XXX BIOS test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
000-198-XXX BIOS test aborted	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Flash the system and retest. See “Flash update procedures” on page 196 3. Go to “Undetermined problems” on page 88
000-199-XXX BIOS test failed, cause unknown	1. Go to “Undetermined problems” on page 88 2. Flash the system and re-test 3. Replace component under function test
000-250-XXX BIOS APM failure	1. Flash the system. See “Flash update procedures” on page 196 2. System board
000-270-XXX BIOS ACPI failure	1. Flash the system. See “Flash update procedures” on page 196 2. System board
001-000-XXX System Test Passed	No action
001-00X-XXX System Error	System board
001-01X-XXX System Error	System board
001-024-XXX System Addressing test failure	System board
001-025-XXX System Checksum Value error	1. Flash the system. See “Flash update procedures” on page 196 2. System board
001-026-XXX System FLASH data error	1. Flash the system. See “Flash update procedures” on page 196 2. System board

Diagnostic Error Code	FRU/Action
001-027-XXX System Configuration/Setup error	1. Run Setup 2. Flash the system. See “Flash update procedures” on page 196 3. System board
001-032-XXX System Device Controller failure	System board
001-034-XXX System Device Buffer Allocation failure	1. Reboot the system 2. Flash the system. See “Flash update procedures” on page 196 3. Run memory test 4. System board
001-035-XXX System Device Reset condition detected	System board
001-036-XXX System Register error	System board
001-038-XXX System Extension failure	1. Adapter card 2. System board
001-039-XXX System DMI data structure error	1. Flash the system. See “Flash update procedures” on page 196 2. System board
001-040-XXX System IRQ failure	1. Power-off/on system and re-test 2. System board
001-041-XXX System DMA failure	1. Power-off/on system and re-test 2. System board
001-195-XXX System Test aborted by user	Information only Re-start the test, if necessary
001-196-XXX System test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
001-197-XXX System test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
001-198-XXX System test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Flash the system and retest. See “Flash update procedures” on page 196 3. Go to “Undetermined problems” on page 88

Diagnostic Error Code	FRU/Action
001-199-XXX System test failed, cause unknown	1. Go to “Undetermined problems” on page 88 2. Flash the system and re-test 3. Replace component under function test
001-250-XXX System ECC error	System board
001-254-XXX 001-255-XXX 001-256-XXX 001-257-XXX System DMA error	System board
001-260-XXX 001-264-XXX System IRQ error	System board
001-268-XXX System IRQ1 failure	1. Device on IRQ1 2. System board
001-269-XXX System IRQ2 failure	1. Device on IRQ2 2. System board
001-270-XXX System IRQ3 failure	1. Device on IRQ3 2. System board
001-271-XXX System IRQ4 failure	1. Device on IRQ4 2. System board
001-272-XXX System IRQ5 failure	1. Device on IRQ5 2. System board
001-273-XXX System IRQ6 (diskette drive) failure	1. Diskette Cable 2. Diskette drive 3. System board
001-274-XXX System IRQ7 failure	1. Device on IRQ7 2. System board
001-275-XXX System IRQ8 failure	1. Device on IRQ8 2. System board
001-276-XXX System IRQ9 failure	1. Device on IRQ9 2. System board
001-277-XXX System IRQ10 failure	1. Device on IRQ10 2. System board
001-278-XXX System IRQ11 failure	1. Device on IRQ11 2. System board
001-279-XXX System IRQ12 failure	1. Device on IRQ12 2. System board
001-280-XXX System IRQ13 failure	1. Device on IRQ13 2. System board

Diagnostic Error Code	FRU/Action
001-281-XXX System IRQ14 (hard disk drive) failure	1. Hard disk drive cable 2. Hard disk drive 3. System board
001-282-XXX System IRQ15 failure	1. Device on IRQ15 2. System board
001-286-XXX 001-287-XXX 001-288-XXX System Timer failure	System board
001-292-XXX System CMOS RAM error	1. Run Setup and re-test 2. System board
001-293-XXX System CMOS Battery	1. Battery 2. System board
001-298-XXX System RTC date/time update failure	1. Flash the system. See “Flash update procedures” on page 196 2. System board
001-299-XXX System RTC periodic interrupt failure	System board
001-300-XXX System RTC Alarm failure	System board
001-301-XXX System RTC Century byte error	1. Flash the system. See “Flash update procedures” on page 196 2. System board
005-000-XXX Video Test Passed	No action
005-00X-XXX Video error	1. Video card, if installed 2. System board
005-010-XXX 005-011-XXX 005-012-XXX 005-013-XXX Video Signal failure	1. Video card, if installed 2. System board
005-016-XXX Video Simple Pattern test failure	1. Video Ram 2. Video card, if installed 3. System board
005-024-XXX Video Addressing test failure	1. Video card, if installed 2. System board
005-025-XXX Video Checksum Value error	1. Video card, if installed 2. System board
005-027-XXX Video Configuration/Setup error	1. Run Setup 2. Video drivers update 3. Video card, if installed 4. System board

Diagnostic Error Code	FRU/Action
005-031-XXX Video Device Cable failure	1. Video cable 2. Monitor 3. Video card, if installed 4. System board
005-032-XXX Video Device Controller failure	1. Video card, if installed 2. System board
005-036-XXX Video Register error	1. Video card, if installed 2. System board
005-038-XXX System BIOS extension failure	1. Video card, if installed 2. System board
005-040-XXX Video IRQ failure	1. Video card, if installed 2. System board
005-195-XXX Video Test aborted by user	Information only Re-start the test, if necessary
005-196-XXX Video test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
005-197-XXX Video test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component called out in warning statement 4. Replace the component under test
005-198-XXX Video test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
005-199-XXX Video test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
005-2XX-XXX 005-3XX-XXX Video subsystem error	1. Video card, if installed 2. System board
006-000-XXX Diskette interface Test Passed	No action
006-0XX-XXX Diskette interface error	1. Diskette drive Cable 2. Diskette drive 3. System board

Diagnostic Error Code	FRU/Action
006-195-XXX Diskette interface Test aborted by user	Information only Re-start the test, if necessary
006-196-XXX Diskette interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
006-197-XXX Diskette interface test warning	1. If a component is called out, make sure it is connected and/or enabled 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
006-198-XXX Diskette interface test aborted	1. If a component is called out, make sure it is connected and/or enabled 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
006-199-XXX Diskette interface test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test 3. Replace component under function test
006-25X-XXX Diskette interface Error	1. Diskette drive cable 2. Diskette drive 3. System board
011-000-XXX Serial port Interface Test Passed	No action
011-001-XXX Serial port Presence	1. Remove external serial device, if present 2. Run setup, enable port 3. System board
011-002-XXX 011-003-XXX Serial port Timeout/Parity error	System board
011-013-XXX 011-014-XXX Serial port Control Signal/Loopback test failure	System board
011-015-XXX Serial port External Loopback failure	1. Wrap plug 2. System board
011-027-XXX Serial port Configuration/Setup error	1. Run Setup, enable port 2. Flash the system. See "Flash update procedures" on page 196 3. System board
011-03X-XXX 011-04X-XXX Serial port failure	System board

Diagnostic Error Code	FRU/Action
011-195-XXX Serial port Test aborted by user	Information only Re-start the test, if necessary
011-196-XXX Serial port test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
011-197-XXX Serial port test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
011-198-XXX Serial port test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
011-199-XXX Serial port test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
011-2XX-XXX Serial port signal failure	1. External serial device 2. System board
014-000-XXX Parallel port Interface Test Passed	No action
014-001-XXX Parallel port Presence	1. Remove external parallel device, if present 2. Run setup, enable port 3. System board
014-002-XXX 014-003-XXX Parallel port Timeout/Parity error	System board
014-013-XXX 014-014-XXX Parallel port Control Signal/Loopback test failure	System board
014-015-XXX Parallel port External Loopback failure	1. Wrap plug 2. System board
014-027-XXX Parallel port Configuration/Setup error	1. Run Setup, enable port 2. Flash the system. See "Flash update procedures" on page 196 3. System board

Diagnostic Error Code	FRU/Action
014-03X-XXX 014-04X-XXX Parallel port failure	System board
014-195-XXX Parallel port Test aborted by user	Information only Re-start the test, if necessary
014-196-XXX Parallel port test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
014-197-XXX Parallel port test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
014-198-XXX Parallel port test aborted	1. If a component is called out, make sure it is connected and/or enabled 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
014-199-XXX Parallel port test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
014-2XX-XXX 014-3XX-XXX Parallel port failure	1. External parallel device 2. System board
015-000-XXX USB port Interface Test Passed	No action
015-001-XXX USB port Presence	1. Remove USB device(s) and re-test 2. System board
015-002-XXX USB port Timeout	1. Remove USB device(s) and re-test 2. System board
015-015-XXX USB port External Loopback failure	1. Remove USB device(s) and re-test 2. System board
015-027-XXX USB port Configuration/Setup error	1. Flash the system. See "Flash update procedures" on page 196 2. System board
015-032-XXX USB port Device Controller failure	System board

Diagnostic Error Code	FRU/Action
015-034-XXX USB port buffer allocation failure	1. Reboot the system 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Run memory test 4. System board
015-035-XXX USB port Reset condition detected	1. Remove USB device(s) and re-test 2. System board
015-036-XXX USB port Register error	System board
015-040-XXX USB port IRQ failure	1. Run setup and check for conflicts 2. Flash the system. See "Flash update procedures" on page 196 3. System board
015-195-XXX USB port Test aborted by user	Information only Re-start the test, if necessary
015-196-XXX USB port test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
015-197-XXX USB port test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
015-198-XXX USB port test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
015-199-XXX USB port test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
018-000-XXX PCI Card Test Passed	No action
018-0XX-XXX PCI Card Failure	1. Riser card, if installed 2. System board
018-195-XXX PCI Card Test aborted by user	1. PCI card 2. Information only Re-start the test, if necessary

Diagnostic Error Code	FRU/Action
018-196-XXX PCI Card test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
018-197-XXX PCI Card test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
018-198-XXX PCI Card test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
018-199-XXX PCI Card test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
018-250-XXX PCI Card Services error	1. PCI card 2. Riser card, if installed 3. System board
020-000-XXX PCI Interface Test Passed	No action
020-0XX-XXX PCI Interface error	1. PCI card 2. Riser card, if installed 3. System board
020-195-XXX PCI Test aborted by user	Information only Re-start the test, if necessary
020-196-XXX PCI test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
020-197-XXX PCI test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
020-198-XXX PCI test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Flash the system and re-test. See “Flash update procedures” on page 196 3. Go to “Undetermined problems” on page 88
020-199-XXX PCI test failed, cause unknown	1. Go to “Undetermined problems” on page 88 2. Flash the system and re-test. See “Flash update procedures” on page 196 3. Replace component under function test
020-262-XXX PCI system error	1. PCI card 2. Riser card, if installed 3. System board
025-000-XXX IDE interface Test Passed	No action
025-00X-XXX 025-01X-XXX IDE interface failure	1. IDE signal cable 2. Check power supply voltages 3. Reseat IDE signal cable 4. IDE device 5. System board
025-027-XXX IDE interface Configuration/Setup error	1. IDE signal cable 2. Flash the system. See “Flash update procedures” on page 196 3. Reseat IDE signal cable 4. IDE device 5. System board
025-02X-XXX 025-03X-XXX 025-04X-XXX IDE Interface failure	1. IDE signal cable 2. Check power supply 3. Reseat IDE signal cable 4. IDE device 5. System board
025-195-XXX IDE interface Test aborted by user	Information only Re-start the test, if necessary
025-196-XXX IDE interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
025-197-XXX IDE interface test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
025-198-XXX IDE interface test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
025-199-XXX IDE interface test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
030-000-XXX SCSI interface Test Passed	No action
030-00X-XXX 030-01X-XXX SCSI interface failure	1. SCSI signal cable 2. Check power supply 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-027-XXX SCSI interface Configuration/Setup error	1. SCSI signal cable 2. Flash the system. See "Flash update procedures" on page 196 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-03X-XXX 030-04X-XXX SCSI interface error	1. SCSI signal cable 2. Check power supply 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-195-XXX SCSI interface Test aborted by user	Information only Re-start the test, if necessary
030-196-XXX SCSI interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
030-197-XXX SCSI interface test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
030-198-XXX SCSI interface test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
030-199-XXX SCSI interface test failed, cause unknown	1. Go to "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
035-000-XXX RAID interface Test Passed	No action
035-0XX-XXX RAID interface Failure	1. RAID signal cable 2. RAID device 3. RAID adapter card, if installed 4. System board
035-195-XXX RAID interface Test aborted by user	Information only Re-start the test, if necessary
035-196-XXX RAID interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
035-197-XXX RAID interface test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
035-198-XXX RAID interface test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
035-199-XXX RAID interface test failed, cause unknown	1. See "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
071-000-XXX Audio port Interface Test Passed	No action

Diagnostic Error Code	FRU/Action
071-00X-XXX 071-01X-XXX 071-02X-XXX Audio port error	1. Run Setup 2. Flash the system. See “Flash update procedures” on page 196 3. System board
071-03X-XXX Audio port failure	1. Speakers 2. Microphone 3. Audio card, if installed 4. System board
071-04X-XXX Audio port failure	1. Run Setup 2. Audio card, if installed 3. System board
071-195-XXX Audio port Test aborted by user	Information only Re-start the test, if necessary
071-196-XXX Audio port test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
071-197-XXX Audio port test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
071-198-XXX Audio port test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 53 2. Flash the system and re-test. See “Flash update procedures” on page 196 3. Go to “Undetermined problems” on page 88
071-199-XXX Audio port test failed, cause unknown	1. See “Undetermined problems” on page 88 2. Flash the system and re-test. See “Flash update procedures” on page 196 3. Replace component under function test
071-25X-XXX Audio port failure	1. Speakers 2. Audio card, if installed 3. System board
080-000-XXX Game Port interface Test Passed	No action
080-XXX-XXX Game Port interface Error	1. Remove the game port device and re-test the system
080-195-XXX Game Port interface Test aborted by user	Information only Re-start the test, if necessary

Diagnostic Error Code	FRU/Action
080-196-XXX Game Port interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
080-197-XXX Game Port interface test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
080-198-XXX Game Port interface test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
080-199-XXX Game Port interface test failed, cause unknown	1. See "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
086-000-XXX Mouse Port interface Test Passed	No action
086-001-XXX Mouse Port interface Presence	1. Mouse 2. System board
086-032-XXX Mouse Port interface Device controller failure	1. Mouse 2. System board
086-035-XXX Mouse Port interface Reset	1. Mouse 2. System board
086-040-XXX Mouse Port interface IRQ failure	1. Run Setup 2. Mouse 3. System board
086-195-XXX Mouse Port interface Test aborted by user	Information only Re-start the test, if necessary
086-196-XXX Mouse Port interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file

Diagnostic Error Code	FRU/Action
086-197-XXX Mouse Port interface test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
086-198-XXX Mouse Port interface test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
086-199-XXX Mouse Port interface test failed, cause unknown	1. See "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
089-000-XXX Microprocessor Test Passed	No action
089-XXX-XXX Microprocessor failure	1. Microprocessor(s) 2. System board
089-195-XXX Microprocessor Test aborted by user	Information only Re-start the test, if necessary
089-196-XXX Microprocessor test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
089-197-XXX Microprocessor test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
089-198-XXX Microprocessor test aborted	1. Flash the system. See "Flash update procedures" on page 196 2. Go to "Undetermined problems" on page 88
089-199-XXX Microprocessor test failed, cause unknown	1. See "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
170-000-XXX Voltage Sensor(s) Test Passed	No action

Diagnostic Error Code	FRU/Action
170-0XX-XXX Voltage Sensor(s) failure	1. Flash system 2. System board
170-195-XXX Voltage Sensor(s) Test aborted by user	Information only Re-start the test, if necessary
170-196-XXX Voltage Sensor(s) test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
170-197-XXX Voltage Sensor(s) test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
170-198-XXX Voltage Sensor(s) test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
170-199-XXX Voltage Sensor(s) test failed, cause unknown	1. See "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
170-250-XXX 170-251-XXX Voltage Sensor(s) Voltage limit error	1. Power supply 2. System board
170-254-XXX Voltage Sensor(s) Voltage Regulator Module error	1. Voltage Regulator Module (VRM) 2. Microprocessor 3. System board
175-000-XXX Thermal Sensor(s) Test Passed	No action
175-0XX-XXX Thermal Sensor(s) failure	1. Flash system 2. System board
175-195-XXX Thermal Sensor(s) Test aborted by user	Information only Re-start the test, if necessary
175-196-XXX Thermal Sensor(s) test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file

Diagnostic Error Code	FRU/Action
175-197-XXX Thermal Sensor(s) test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 53 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
175-198-XXX Thermal Sensor(s) test aborted	1. If a component is called out, make sure it is connected and/or enabled 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Go to "Undetermined problems" on page 88
175-199-XXX Thermal Sensor(s) test failed, cause unknown	1. See "Undetermined problems" on page 88 2. Flash the system and re-test. See "Flash update procedures" on page 196 3. Replace component under function test
175-250-XXX 175-251-XXX Thermal Sensor(s) limit error	1. Check fans 2. Check Power supply voltages 3. Microprocessor 4. System board
185-000-XXX Asset Security Test Passed	No action
185-XXX-XXX Asset Security failure	1. Flash system 2. System board
185-278-XXX Asset Security Chassis Intrusion	1. Assure Asset Security Enabled 2. C2 Cover Switch 3. System board
201-000-XXX System Memory Test Passed	No action
201-XXX-XXX System Memory error	1. Replace the memory module called out by the test 2. System board
202-000-XXX System Cache Test Passed	No action
202-XXX-XXX System Cache error	1. Cache, if removable 2. System board 3. Microprocessor
206-000-XXX Diskette Drive Test Passed	No action
206-XXX-XXX Diskette Drive error	1. Diskette Drive Cable 2. Check power supply voltages 3. Diskette drive 4. System board

Diagnostic Error Code	FRU/Action
215-000-XXX CD-ROM Drive Test Passed	No action
215-XXX-XXX CD-ROM Drive error	1. CD-ROM Drive Cable 2. Check power supply voltages 3. CD-ROM drive 4. System board
217-000-XXX Hard Disk Drive Test Passed	No action
217-25X-XXX 217-26X-XXX Hard Disk Drive (IDE) error	1. Hard Disk Drive Cable 2. Check power supply voltages 3. Reseat the hard disk drive cable 4. Hard Disk drive (IDE) 5. System board
217-28X-XXX 217-29X-XXX Hard Disk Drive (SCSI) error	1. Hard Disk Drive Cable 2. Check power supply voltages 3. Reseat the hard disk drive cable 4. Hard Disk drive (SCSI) 5. SCSI adapter card 6. System board
220-000-XXX Hi-Capacity Cartridge Drive Test Passed	No action
220-XXX-XXX Hi-Capacity Cartridge Drive error	1. Remove the Hi-Capacity Cartridge Drive and re-test the system
301-XXX-XXX Keyboard error	1. Keyboard 2. Check and test mouse 3. System board
301-000-XXX Keyboard Test Passed	No action
302-000-XXX Mouse Test Passed	No action
302-XXX-XXX Mouse error	1. Mouse 2. Check and test Keyboard 3. System board
303-000-XXX Joystick Test Passed	No action
303-XXX-XXX Joystick error	Remove the Joystick and re-test the system
305-000-XXX Monitor DDC Test Passed	No action
305-250-XXX Monitor DDC self test failure	1. Run Setup to enable DDC 2. Cable 3. Monitor 4. Video card 5. System board

Diagnostic Error Code	FRU/Action
415-000-XXX Modem Test Passed	No action
415-XXX-XXX Modem error	Remove the Modem and re-test the system

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	• One beep • A pause (or break) • Two beeps • A pause (or break) • Any number of breaks
4	Four continuous beeps

Use the following table to diagnose beep symptoms.

Beep Symptom	FRU/Action
1-1-3 CMOS read-write error	1. Run Setup 2. System Board
1-2-2-3 ROM BIOS check error	System board
1-2-1 Programmable Interval Timer failed	System board
1-2-2 DMA Initialization failed	System board
1-2-3 DMA page register write/read failed	System board
1-2-4 RAM refresh verification failed	1. Memory module 2. System Board
1-3-3-1 1st 64K RAM test failed	1. Memory module 2. System Board
1-3-2 1st 64K RAM parity test failed	1. Memory module 2. Processor 3. System Board
2-2-3-1 Interrupt vector loading test failed	System board
2-1-1 Secondary DMA register failed	System board
2-1-2 Primary DMA register failed	System board
2-1-3 Primary interrupt mask register failed	System board
2-1-4 Secondary interrupt mask register failed	System board
2-2-1 Interrupt vector loading failed	System board
1-3-1-3 Keyboard controller failed	1. System Board 2. Keyboard
2-2-3 CMOS power failure and checksum checks failed	1. Battery 2. System Board

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

No-beep symptoms

Symptom/Error	FRU/Action
No beep during POST but computer works correctly.	System board
No beep during POST.	1. See “Undetermined problems” on page 88. 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.

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
162 Configuration error	Select the default settings in BIOS. See Chapter 6, "Using the Setup Utility," on page 53.
164 Memory Size Error	1. Run the Extended Memory Diagnostic tests 2. Replace memory modules
166 Boot Block Check Sum Error	1. Perform a flash update to update the BIOS level 2. System board
167 No Processor BIOS update found	1. Run Setup. Check Stepping level for the BIOS level needed, then perform the flash update. 2. Replace the microprocessor
175 Primary Copy of Secure Data is damaged	1. Run Setup and select default settings 2. System board
176 The System has been tampered with	1. Covers were removed from the computer
179 Boot Integrity Services Segment Error	1. Perform a flash update to update the BIOS level 2. System board
184 Asset Control Antenna not detected	1. Make sure Asset Care and Asset ID™ are enabled in Configuration/Setup 2. RFID Antenna 3. Replace system board
186 Security Hardware Control Logic Error	If problem persists, replace the system board
190 System Security: Invalid Remote Change Requested	If problem persists, replace the system board

POST Error Code	FRU/Action
191 System Security: Embedded Security hardware Reset	If problem persists, replace the system board
192 System Security: Embedded Security hardware tamper detected	If problem persists, replace the system board
193 System Security: Embedded Security hardware Removed	If problem persists, replace the system board
194 System Security: Asset ID Antenna has been Removed	If problem persists, replace the system board
195 System Security: Asset ID Antenna has been installed	If problem persists, replace the system board
196 System Tampered Cleared	If problem persists, replace the system board
201 Memory error	1. Run Enhanced Diagnostics Memory Test 2. Memory module 3. System board
210 Keyboard stuck key error	1. Check for stuck keys 2. Replace the keyboard
211 Keyboard error	1. Make sure keyboard is connected correctly 2. Check for stuck keys 3. Replace the keyboard
212 Keyboard controller error	1. Replace the keyboard 2. If problem persists, replace the system board
250 Battery is dead	1. Replace the battery and run Setup 2. If problem persists, replace the system board
270 Real time clock error	1. Run Setup and set date and time 2. If problem persists, replace the system board
271 Date and time out of range	1. Run Setup and set date and time 2. If problem persists, replace the system board
662 Configuration Change has occurred	Diskette drive configuration error or wrong diskette drive type; run Setup.
1762 Configuration Change has occurred	1. Run Setup and verify hard disk drive settings. 2. Run hard disk drive diagnostics. 3. Replace hard disk drive
1800 PCI/PnP Error! No Hardware Interrupt Available	1. Run Setup and verify PCI/ISA configuration settings. 2. Run diagnostics. 3. Replace PCI Adapter

POST Error Code	FRU/Action
1801 PCI/PnP Error! No Space Available to Shadow ROM	1. Run Setup and verify PCI/ISA configuration settings. 2. Run diagnostics. 3. Replace PCI Adapter
1802 PCI/PnP Error! Not Enough I/O Space Available	1. Run Setup and verify PCI/ISA configuration settings. 2. Run diagnostics. 3. Replace PCI Adapter
1803 PCI/PnP Error! Not Enough Memory Space Available	1. Run Setup and verify PCI/ISA configuration settings. 2. Run diagnostics. 3. Replace PCI Adapter
1804 PCI/PnP Error! Not Enough Real Memory Space Available	1. Run Setup and verify PCI/ISA configuration settings. 2. Run diagnostics. 3. Replace PCI Adapter
1805 PCI/PnP Error! Adapter ROM Checksum Error	1. Run Setup and verify PCI/ISA configuration settings. 2. Run diagnostics. 3. Replace PCI Adapter
1962 No operating system found	Press F1 to repeat boot sequence.
5962 An IDE device (other than hard drive) configuration error	1. Run Setup. 2. CD-ROM Drive 3. CD-ROM Adapter 4. Zip or other ATAPI device 5. Replace system Board 6. Replace riser card if applicable
8603, 8604 Pointing Device Error	1. Replace pointing device (mouse) 2. if problem persists, replace the system board

Miscellaneous error messages

Message/Symptom	FRU/Action
CMOS Backup Battery inaccurate	1. CMOS Backup Battery (see Chapter 2, "Safety information," on page 5) 2. System Board
Changing colors	Display/Monitor
Computer will <i>not</i> power-off. See "Power Supply Errors" on page 57.	1. Power Switch 2. System Board 3. Riser card
Computer will <i>not</i> RPL from server	1. Ensure that network is in startup sequence as first device or first device after diskette 2. Ensure that network adapter is enabled for RPL 3. Network adapter (Advise network administrator of new MAC address)
Computer will <i>not</i> perform a Wake On LAN [®] (if applicable)	1. Check power supply and signal cable connections to network adapter 2. Ensure that the operating system settings are set to enable Wake on LAN[®] 3. Ensure Wake On LAN feature is enabled in Setup/Configuration (see "Starting the Setup Utility program" on page 53) 4. Ensure network administrator is using correct MAC address 5. Ensure no interrupt or I/O address conflicts 6. Network adapter (advise network administrator of new MAC address)
Dead computer. See "Power Supply Errors" on page 57.	1. Power Supply 2. System Board 3. Riser card
Diskette drive in-use light remains on or does not light when drive is active.	1. Diskette Drive 2. System Board 3. Diskette Drive Cable 4. Riser card
Flashing cursor with an otherwise blank display.	1. System Board 2. Primary Hard Disk Drive 3. Hard Disk Drive Cable 4. Riser card
Incorrect memory size during POST	1. Run the Memory tests 2. Memory Module 3. System Board

Message/Symptom	FRU/Action
"Insert a Diskette" icon appears with a known-good diagnostics diskette in the first 3.5-inch diskette drive.	1. System Board 2. Diskette Drive Cable 3. Riser card 4. Network Adapter
Intensity or color varies from left to right of characters and color bars	1. Display 2. System Board
No power or fan not running	1. See "Power Supply Errors" on page 57.
Non-system disk or disk error-type message with a known-good diagnostic diskette.	1. Diskette Drive 2. System Board 3. Diskette Drive Cable 4. Riser card
Other display symptoms not listed above (including blank or illegible display)	1. Display 2. System Board
Power-on indicator or hard disk drive in-use light not on, but computer works correctly	1. Power Supply 2. System Board 3. LED Cables
Printer problems	1. Printer
Program loads from the hard disk with a known-good diagnostics diskette in the first 3.5-inch diskette drive	1. Run Setup 2. Diskette Drive 3. Diskette Drive Cable 4. System Board 5. Riser card 6. Power Supply
RPL computer cannot access programs from its own hard disk.	1. If network administrator is using LCCM Hybrid RPL, check startup sequence: a. First device - network b. Second device - hard disk 2. Hard disk drive
RPL computer does not RPL from server	1. Check startup sequence 2. Check the network adapter LED status
Serial or parallel port device failure (system board port)	1. External Device Self-Test OK? 2. External Device 3. Cable 4. System Board
Serial or parallel port device failure (adapter port)	1. External Device Self-Test OK? 2. External Device 3. Cable 4. Alternate Adapter 5. System Board

Message/Symptom	FRU/Action
Some or all keys on the keyboard do not work	1. Keyboard 2. Keyboard Cable 3. System Board

Undetermined problems

Check the power supply voltages (see “Power Supply Errors” on page 57). 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. External devices (modem, printer, or mouse)
 - b. Any adapters
 - c. Riser card
 - d. Memory modules
 - e. Extended video memory
 - f. External Cache
 - g. External Cache RAM
 - h. Hard disk drive
 - i. 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.

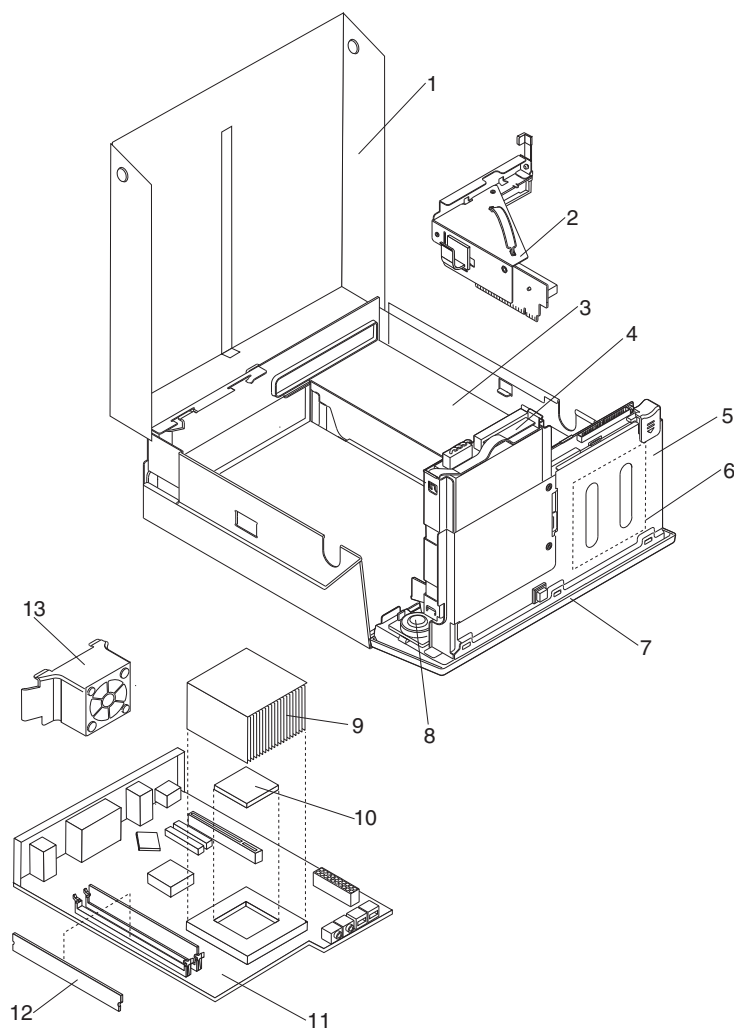
If all devices and adapters have been removed, and the problem continues, replace the system board.

Chapter 8. FRU lists

Notes:

1. FRUs can also be replaced as CRUs. In the following tables, each FRU is identified as either a tier 1 (1), tier 2 (2), or non-CRU (N).
2. In the following tables, each FRU is identified in the RoHS column as being either RoHS compliant (Y) or non-compliant (N). See “Important information about replacing RoHS compliant FRUs” on page 4.

Machine Type 8104



Item #	8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y

Item #	8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
2	Riser card and bracket assembly (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39S 39Y 39P 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G C1U C2U C3U C4U C5U C6U C7U C8U CTO BTV BYJ BZJ 2PS 2PP 2PY 2QS 2QP 2QY 2RU 2RF 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 51 C 51B 51H 52B 52H 53A 53T 54J 55J 56J 57J 58J 59S 59Y 59P 5AS 5AP 5AY 5BU 5BF 5BS 5BY 5BZ 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5CC 5DC 5EQ 5FU 5GQ 3YS 3YP 3YY 3ZS 3ZY 3ZP 91S 91Y 91P 92U 92F 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J 94U 94F 61S 61P 61Y CFU CGU CHU)	39M0552	1	Y
2	Riser Card Bracket Asm, PCI Riser, RoHS (all models)	39M0621	1	Y
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J)	39M0618	1	Y
3	Power Supply (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39S 39Y 39P 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G C1U C2U C3U C4U C5U C6U C7U C8U CTO)	89P6805	2	N
3	Power Supply (all models)	41N3105	2	Y
4	Hard disk drive, 40GB 7200rpm SATA non-RoHS (models BKU BLU BMU 2CU 3AU 4EU CTO)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models BKU BLU BMU 2CU 3AU 4EU CTO 2RU 2RF)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA (models BKU BLU BMU 2CU 3AU 4EU CTO 2RU 2RF)	40Y9033	1	Y

Item #	8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 80GB 7200rpm SATA (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4DS 4DY 4DP 4DG 4FU 4FF 4GU 4HU 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO AKJ ALJ AMJ ANJ APJ BTV BUV BVV BWV 2LC 2MC 3VC 3WC 4PJ 4QJ D4U D4F D7A D7Q D7T D8A D8Q D8T D8V D9V E6A E6Q E6T E7U E7F 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2JJ 2KJ 3SJ 3TJ 3UJ DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ)	71P7293	1	N
4	Hard disk drive 80GB 7200rpm SATA (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4DS 4DY 4DP 4DG 4FU 4FF 4GU 4HU 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO AKJ ALJ AMJ ANJ APJ BTV BUV BVV BWV 2LC 2MC 3VC 3WC 4PJ 4QJ D4U D4F D7A D7Q D7T D8A D8Q D8T D8V D9V E6A E6Q E6T E7U E7F 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2JJ 2KJ DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J BTV BYJ BZJ 2PS 2PP 2PY 2QS 2QP 2QY 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 51C 51B 51H 52B 52H 53A 53T 54J 55J 59S 59Y 59P 5AS 5AP 5AY 5BU 5BF 5BS 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5CC 5DC 5EQ 5FU 5GQ 3YS 3YP 3YY 3ZS 3ZY 3ZP 92U 92F 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J 94U 94F 61S 61P 61Y CFU CGU CHU)	40Y8761	1	Y

Item #	8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 80GB 7200rpm SATA (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4DS 4DY 4DP 4DG 4FU 4FF 4GU 4HU 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2JJ 2KJ 3SJ 3TJ 3UJ AKJ ALJ AMJ ANJ APJ BTV BUV BVV BWV 2LC 2MC 3VC 3WC 4PJ 4QJ D4U D4F D7A D7Q D7T D8A D8Q D8T D8V D9V E6A E6Q E6T E7U E7F 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J 'BTV BYJ BZJ 2PS 2PP 2PY 2QS 2QP 2QY 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 51C 51B 51H 52B 52H 53A 53T 54J 55J 59S 59Y 59P 5AS 5AP 5AY 5BU 5BF 5BS 5BY 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5CC 5DC 5EQ 5FU 5GQ 3YS 3YP 3YY 3ZS 3ZY 3ZP 92U 92F 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J 94U 94F 61S 61P 61Y CFU CGU CHU)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4DS 4DY 4DP 4DG 4FU 4FF 4GU 4HU 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2JJ 2KJ 3SJ 3TJ 3UJ AKJ ALJ AMJ ANJ APJ BTV BUV BVV BWV 2LC 2MC 3VC 3WC 4PJ 4QJ D4U D4F D7A D7Q D7T D8A D8Q D8T D8V D9V E6A E6Q E6T E7U E7F 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J BTV BYJ BZJ 2PS 2PP 2PY 2QS 2QP 2QY 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 51C 51B 51H 52B 52H 53A 53T 54J 55J 59S 59Y 59P 5AS 5AP 5AY 5BU 5BF 5BS 5BY 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5CC 5DC 5EQ 5FU 5GQ 3YS 3YP 3YY 3ZS 3ZY 3ZP 92U 92F 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J 94U 94F 61S 61P 61Y CFU CGU CHU)	41X2500	1	Y

Item #	8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 160GB 7200rpm SATA, non-RoHS (models 4AJ 4BJ 4CJ 4JC CTO 4PJ 4QJ D5J D6J E8J E9J F2J F3J)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models 4AJ 4BJ 4CJ 4JC CTO 4PJ 4QJ D5J D6J E8J E9J F2J F3J 56J 57J 58J 91S 91Y 91P)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 4AJ 4BJ 4CJ 4JC CTO 4PJ 4QJ D5J D6J E8J E9J F2J F3J 56J 57J 58J 91S 91Y 91P)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 4AJ 4BJ 4CJ 4JC CTO 4PJ 4QJ D5J D6J E8J E9J F2J F3J 56J 57J 58J 91S 91Y 91P)	TBD	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 4AJ 4BJ 4CJ 4JC CTO 4PJ 4QJ D5J D6J E8J E9J F2J F3J 56J 57J 58J 91S 91Y 91P)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J)	40Y9036	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J)	40Y8763	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J)	40Y8757	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J AAJ ABJ ACJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J ALJ D7A D7Q D7T DAE DAJ DBJ DCE DCJ DDJ 24E 24J 25J 2CU 2EU 2EF 2FC 31S 31Y 31P 31E 31J 32E 32J 33J 3AU 3GU 3GF 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4EU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2HJ 3SJ)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J AAJ ABJ ACJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J ALJ D7A D7Q D7T DAE DAJ DBJ DCE DCJ DDJ 24E 24J 25J 2CU 2EU 2EF 2FC 31S 31Y 31P 31E 31J 32E 32J 33J 3AU 3GU 3GF 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4EU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2HJ 3SJ)	40Y8907	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J AAJ ABJ ACJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J ALJ D7A D7Q D7T DAE DAJ DBJ DCE DCJ DDJ 24E 24J 25J 2CU 2EU 2EF 2FC 31S 31Y 31P 31E 31J 32E 32J 33J 3AU 3GU 3GF 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4EU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2HJ 3SJ BYJ 2PS 2PP 2PY 2QS 2QP 2QY 2RU 2RF 51C 51B 51H 56J 59S 59Y 59P 5AS 5AP 5AY 5CC 3YS 3YP 3YY 3ZS 3ZY 3ZP 92U 92F 94F 61S 61P 61Y CFU CGU CHU)	40Y8793	1	Y

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6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J AAJ ABJ ACJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J ALJ D7A D7Q D7T DAE DAJ DBJ DCE DCJ DDJ 24E 24J 25J 2CU 2EU 2EF 2FC 31S 31Y 31P 31E 31J 32E 32J 33J 3AU 3GU 3GF 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4EU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2HJ 3SJ)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (RoHS) (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J AAJ ABJ ACJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J ALJ D7A D7Q D7T DAE DAJ DBJ DCE DCJ DDJ 24E 24J 25J 2CU 2EU 2EF 2FC 31S 31Y 31P 31E 31J 32E 32J 33J 3AU 3GU 3GF 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4EU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2HJ 3SJ BYJ 2PS 2PP 2PY 2QS 2QP 2QY 2RU 2RF 51C 51B 51H 56J 59S 59Y 59P 5AS 5AP 5AY 5CC 3YS 3YP 3YY 3ZS 3ZY 3ZP 92U 92F 94F 61S 61P 61Y CFU CGU CHU)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (RoHS) (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J AAJ ABJ ACJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J ALJ D7A D7Q D7T DAE DAJ DBJ DCE DCJ DDJ 24E 24J 25J 2CU 2EU 2EF 2FC 31S 31Y 31P 31E 31J 32E 32J 33J 3AU 3GU 3GF 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4EU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2HJ 3SJ BYJ 2PS 2PP 2PY 2QS 2QP 2QY 2RU 2RF 51C 51B 51H 56J 59S 59Y 59P 5AS 5AP 5AY 5CC 3YS 3YP 3YY 3ZS 3ZY 3ZP 92U 92F 94F 61S 61P 61Y CFU CGU CHU)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models 2GC 3CS 3CY 3CP 3DU 3JU 4DS 4DY 4DP 4DG 4GU 4HU CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ BUV BVV 2LC 2MC D8A D8Q D8T D8V 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models 2GC 3CS 3CY 3CP 3DU 3JU 4DS 4DY 4DP 4DG 4GU 4HU CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ BUV BVV 2LC 2MC D8A D8Q D8T D8V 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J 5BU 5BF 5BS 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5DC 5EQ 5GQ 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J)	40Y8965	1	Y

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6	DVD-ROM Drive (8X/24X) (models 2GC 3CS 3CY 3CP 3DU 3JU 4DS 4DY 4DP 4DG 4GU 4HU CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ BUV BVV 2LC 2MC D8A D8Q D8T D8V 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J 5BU 5BF 5BS 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5DC 5EQ 5GQ 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J)	40Y8959	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models A4J A5S A5Y A5P A5J A6J ADJ AEJ AFJ B4J B5S B5Y B5P B5J B6J BDJ BEJ BFJ BPS BPY BPP BRV BSV 26J 27S 27Y 27P 27J 28J 2DU 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 3BU 3FU 3HU 3HF 3KC 44J 45S 45Y 45P 45J 46J 4FU 4FF 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH D2U D3S D3Y D3P E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2JJ 3TJ AMJ ANJ BTV BWV 3VC 3WC D4U D4F D9V E6A E6Q E6T E7U E7F DEJ DFJ DGJ DHJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J BZJ 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 52B 52H 53A 53T 54J 57J 5FU 91S 91Y 91P 94U)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models A4J A5S A5Y A5P A5J A6J ADJ AEJ AFJ B4J B5S B5Y B5P B5J B6J BDJ BEJ BFJ BPS BPY BPP BRV BSV 26J 27S 27Y 27P 27J 28J 2DU 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 3BU 3FU 3HU 3HF 3KC 44J 45S 45Y 45P 45J 46J 4FU 4FF 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH D2U D3S D3Y D3P E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 2JJ 3TJ AMJ ANJ BTV BWV 3VC 3WC D4U D4F D9V E6A E6Q E6T E7U E7F DEJ DFJ DGJ DHJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J BZJ 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 52B 52H 53A 53T 54J 57J 5FU 91S 91Y 91P 94U)	40Y8949	1	Y
6	Multi-Burner Plus Ultrabay Enhanced Drive (024\024\024\008) (models A7J A8J A9J AGJ AHJ AJJ B7J B8J B9J BGJ BHJ BJJ 29J 2AJ 2BJ 37J 38J 39J 3NJ 3PJ 3QJ 3RS 3RY 3RP 47J 48J 49J 4AJ 4BJ 4CJ 4NS 4NY 4NP CTO 2KJ 3UJ APJ 4PJ 4QJ D5J D6J E8J E9J F2J F3J EAJ EBJ ECJ EDJ 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J 55J 58J)	40Y8951	1	Y
6	Slim PATA RAMBO 5 drive (models A7J A8J A9J AGJ AHJ AJJ B7J B8J B9J BGJ BHJ BJJ 29J 2AJ 2BJ 37J 38J 39J 3NJ 3PJ 3QJ 3RS 3RY 3RP 47J 48J 49J 4AJ 4BJ 4CJ 4NS 4NY 4NP CTO 2KJ 3UJ APJ 4PJ 4QJ D5J D6J E8J E9J F2J F3J EAJ EBJ ECJ EDJ 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J 55J 58J)	41N3355	1	Y
6	Slim PATA RAMBO 5 drive (models A7J A8J A9J AGJ AHJ AJJ B7J B8J B9J BGJ BHJ BJJ 29J 2AJ 2BJ 37J 38J 39J 3NJ 3PJ 3QJ 3RS 3RY 3RP 47J 48J 49J 4AJ 4BJ 4CJ 4NS 4NY 4NP CTO 2KJ 3UJ APJ 4PJ 4QJ D5J D6J E8J E9J F2J F3J EAJ EBJ ECJ EDJ 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J 55J 58J)	TBD	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models D1U D2U D3S D3Y D3P C6U CTO D4U D4F D5J D6J D7A A7Q D7T D8A D8Q D8T D8V D9V CCJ DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ)	39J7029	2	Y

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10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models E1U E2U E3S E3Y E3P E4S E4Y E4P C7U CTO CDJ E6A E6Q E6T E7U E7F E8J E9J E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J EAJ EBJ ECJ EDJ)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models F1G C8U CTO F2J F3J CEJ)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 2QS 2QY 2QP 2RU 2RF 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ CGU)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC C3U CTO 2HJ 2JJ 2KJ 2LC 2MC 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ 5CC 5DC 5EQ 5FU 5GQ)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ C4U CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 3SJ 3TJ 3UJ 3VC 3WC CAC 3YS 3YP 3YY 3ZS 3ZY 3ZP 91S 91Y 91P 92U 92F 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J 94U 94F)	39J6095	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH C5U CTO 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 4PJ 4QJ CBJ)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models CTO)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models CTO)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6084	2	Y
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ AKV CTO AKJ ALJ AMJ ANJ APJ)	39J6085	2	Y
10	Microprocessor - P4 2.66Ghz Prescott, Intel 506 supporting EM64T (models 2PS 2PY 2PP CFU)	41D1029	2	Y
10	Microprocessor - P4 517 2.93Gz/533/ 1M (models 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J)	41T4103	2	Y
10	Microprocessor - P4 524 processor 3.06Ghz/533/1M (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J 51C 51B 51H 52B 52H 53A 53T 54J 55J 56J 57J 58J 59S 59Y 59P 5AS 5AP 5AY 5BU 5BF 5BS 5BY 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ)	41T4104	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BQC C1U BYJ BZJ CTO BTV BUV)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models CTO C9U)	39J6087	2	Y

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10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BRV BSV C2U CTO BVV BWV)	39J6088	2	Y
10	Microprocessor - P4 620 Processor 2.80 (800 MHG/2M) (533/256) (models 61S 61Y 61P CHU)	41X3138	2	Y
11	System board, Planar With 10/1000 Lan (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J36J 37J 38J 39S 39Y 39P 39J3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G C1U C2U C3U C4U C5U C6U C7U C8U CTO)	39J6410	2	N
11	System board, Tobago (1.1C planar erv) w/ 10/1000 LAN (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J36J 37J 38J 39S 39Y 39P 39J3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G C1U C2U C3U C4U C5U C6U C7U C8U CTO)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BQC 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 2FC 2GC 3KC 3MB 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH CTO AKJ ALJ AMJ D7A D7Q D7T 2PS 2PP 2PY 2QS 2QP 2QY 51C 51B 51H 59S 59Y 59P 5CC 5EQ 3YS 3YP 3YY)	30R5120	1	Y

Item #	8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BRK BSK 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2JJ 2KJ 3SJ 3TJ 3UJ ANJ APJ BTV BUV BVV BWV 2LC 2MC 3VC 3WC 4PJ 4QJ D4U D4F D5J D6J D8A D8Q D8T D8V D9V E6A E6Q E6T E7U E7F E8J E9J F2J F3J 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J BTV BYJ BZJ 2RU 2RF 2SU 2SF 2TU 2TF 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 52B 52H 53A 53T 54J 55J 56J 57J 5AS 5AP 5AY 5BU 5BF 5BS 5BY 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BR 5BE 5BJ 5DC 5FU 5GQ 3ZS 3ZY 3ZP 91S 91Y 91P 92U 92F 93U 93F 93S 93P 93L 93D 93Y 93G 93M 93A 93Q 93T 93C 93B 93H 93V 93K 93R 93E 93J 61S 61P 61Y CFU CGU CHU)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J 58J 94U 94F)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)+	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39S 39Y 39P 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49S 49Y 49P 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G C1U C2U C3U C4U C5U C6U C7U C8U CTO)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (all models)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y

8104 FRUs	FRU#	CRU Tier	RoHS Compliant?
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic Parts Kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BNS BNY BNP BNB BNH BPS BPY BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J 36J 37J 38J 39J 3CS 3CY 3CP 3DU NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4GU 4NS 4NY 4NP D3S D3Y D3P E3S E3Y E3P E4S E4Y E4P F1G E6A E6Q E6T E8J E9J F2J F3J CAJ CBJ CCJ CDJ CEJ 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2KJ 2JJ 3SJ 3TJ 3UJ AJK ALJ AMJ ANJ APJ BTV BUV BVV BWV 4PJ 4QJ D5J D6J D7Q D7A D7T D8A D8Q D8T D8V D9V DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 11U 11F 11S 11P 11G 11M 11A 11Q 11T 11C 11B 11H 11V 11K 11J 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J BYJ BZJ 2PS 2PP 2PY 2QS 2QP 2QY 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 53A 53T 54J 55J 56J 57J 58J 59S 59Y 59P 5AS 5AP 5AY 3YS 3YP 3YY 3ZS 3ZY 3ZP 91S 91Y 91P 61S 61P 61Y)	09K9827	1	Y

8104 Adapters and miscellaneous FRUs	FRU#	CRU Tier	RoHS Compliant?
Soft Modem V.90/V.44 (models 2UU 2UF 2US 2UP 2UG 2UM 2UA 2UQ 2UT 2UC 2UB 2UH 2UK 2UV 2UJ 51C 51B 51H 52B 52H 53A 53T 5CC)	29R9729	1	Y
PCI-E DVI-D connection adapter (ADD2-R) (models 12U 12F 12S 12P 12G 12M 12A 12Q 12T 12C 12B 12H 12V 12K 12J)	39J9334	1	Y

8104 Keyboards (Preferred Pro Fullsize, PS/2, Stealth black)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models BKU BLU BMU BNH 21A 21Q 21H 21R 21E 23E 2CU 2DU 2EU 31E 3AU 3BU 3FU 3GU 3HU 3JU 3MH 4EU 4FU 4HU D1U D2U E1U E2U 4DG F1G 3JU 3JG 3JM 3JA 3JQ 3JH 3JR 3JE 4HG 4HM 4HA 4HQ 4HH 4HR 4HE DAE 2RU 2SU 2TU 2UU 2UG 2UM 2UA 2UQ 2UH 51H 52H 53A 5BU 5BG 5BM 5BA 5BQ 5BH 5BR 5EQ 5FU 5GQ 92U 93U 93G 93M 93A 93Q 93H 93R 94U 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G BQC 3JC 4HC 2LC 2MC 2NC 3VC 3WC E5C 2UC 51C 5DC 5EC)	89P8300	1	Y
Arabic (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8301	1	Y
Belgian/French (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8302	1	Y
Belgian/UK (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8303	1	Y
Brazilian Portuguese (models A1P B1P BNP 21P 23P 31P 34P 3CP 3RP 41P 4DP 4NP D3P E3P 3JP 4HP 2QP 2PP 59P 5AP 5BP 3YP 3ZP 91P)	89P8304	1	Y

8104 Keyboards (Preferred Pro Fullsize, PS/2, Stealth black)	FRU#	CRU Tier	RoHS Compliant?
Bulgarian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8305	1	Y
Chinese/US (models BNB 21B 21V 3MB BTV BUV BVV BWV D9V D8V 2NV E5V 2UV 5BV 93V)	89P8306	1	Y
Czech (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8307	1	Y
Danish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8308	1	Y
Dutch (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8309	1	Y
French (models 2EF 3GF 3HF 4FF 4DG F1G 3JG 4HG 3JF 4HF 2NG E5G E7F 2EF 3GF 3HF 4FF 4DG F1G 3JG 4HG 3JF 4HF 2NG E5G E7F D4F)	89P8310	1	Y
French Canadian 445 (models 2RF 2SF 2TF 2UF 5BF 5FF 94F 93F 92F)	89P8311	1	Y
French Canadian 58 (models 2RF 2SF 2TF 2UF 5BF 5FF 94F 93F 92F)	89P8312	1	Y
German (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8313	1	Y
Greek (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8314	1	Y
Hebrew (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8315	1	Y
Hungarian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8316	1	Y
Iceland (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8317	1	Y
Italian 141 (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8318	1	Y
Italian 142 (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8319	1	Y
Japanese (models A1J A3J A4J A6J A7J A9J AAJ ACJ ADJ AFJ AGJ AJJ B3J B4J B6J B7J B9J BAJ BCJ BDJ BFJ BGJ BJJ 21J 23J 25J 26J 28J 29J 2BJ 31J 33J 34J 36J 37J 39J 3NJ 3QJ 41J 43J 44J 46J 47J 49J 4AJ 4CJ 3JJ 4HJ 2NJ E5J DAJ DBJ DEJ DFJ EAJ EBJ BYJ BZJ 2UJ 58J 57J 56J 55J 54J)	89P8320	1	Y
Korean (models BQK 21K 3JK 4HK 2NK E5K 2UK 93K 5BK)	89P8321	1	Y
LA Spanish (models A1S A1Y B1S B1Y BNS BNY 21S 21Y 23S 23Y 31S 31Y 34S 34Y 3CS 3CY 3RS 3RY 41S 41Y 4DS 4DY 4NS 4NY D3S D3Y E3S E3Y 3JS 3JY 4HS 4HY 2NS 2NY E5S 5EY 2PS 2PY 2QS 2QY 2US 59S 59Y 5AS 5AY 5BS 5BY 5BY 3YS 3YY 3ZS 3ZY 91S 91Y 93S 93Y 61S 61Y)	89P8322	1	Y
Norwegian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8323	1	Y
Polish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8324	1	Y
Portuguese (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8325	1	Y
Romanian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8326	1	Y
Russian/Cy (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8327	1	Y
Russian/Cy (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8328	1	Y
Serbian/Cyrillic (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8329	1	Y
Slovak (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8330	1	Y
Spanish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8331	1	Y
Swedish/Finn (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8332	1	Y
Swiss French/German (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8333	1	Y
Thailand (models 21T 2FT 2GT 3JT 4HT D8T D7T E6T E5T 2NT 2UT 53T 5BT 93T)	89P8334	1	Y
Turkish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8336	1	Y
UK English (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8337	1	Y
US Euro (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8338	1	Y
Yugoslav/Latin (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	89P8339	1	Y

8104 Keyboards (Productivity USB, no hub)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models 4KA 4KM 4KQ 4KH 3KC 4JC)	89P8800	1	Y
Chinese/US (models 4KB)	89P8807	1	Y
Thailand (models 4KT)	89P8834	1	Y

8104 Keyboard (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models 22E 24E 32E 3DU 4GU 4MA 4MQ 4MH 12U 12G 12M 12A 12H 12C 12B 12V)	89P9000	1	Y
Arabic (models 12G)	89P9001	1	Y
Belgium French (models 12G)	89P9003	1	Y
Belgium English (models 12G)	89P9004	1	Y
Brazilian Portuguese (models A2P A5P B5P BPP 27P 35P E4P 45P 12P)	89P9005	1	Y
Bulgarian (models 12G)	89P9006	1	Y
Chinese/US (models 4MB)	89P9007	1	Y
Czech (ABB) (models 12G)	89P9008	1	Y
Danish (models 12G)	89P9009	1	Y
Dutch (models 12G)	89P9010	1	Y
French (models 12G)	89P9011	1	Y
French Canadian (models 12G)	89P9012	1	Y
French Canadian (models 12G)	89P9013	1	Y
German (models 12G)	89P9014	1	Y
Greek (models 12G)	89P9015	1	Y
Hebrew (models 12G)	89P9016	1	Y
Hungarian (models 12G)	89P9017	1	Y
Iceland (models 12G)	89P9018	1	Y
Japanese (models A2J A5J A8J ABJ AEJ AHJ B2J B5J B8J BBJ BEJ BHJ 22J 24J 27J 2AJ 32J 35J 38J 3PJ 42J 45J 48J 4BJ 2HJ 2KJ 2JJ 3SJ 3TJ 3UJ ALJ AMJ ANJ APJ APJ AQJ D5J D6J E8J E9J F2J F3J DCJ DEJ DGJ DHJ ECJ EDJ 12J)	89P9020	1	Y
Korean (models BSK 12K)	89P9021	1	Y
LA Spanish (models A2S A2Y A5S A5Y B5S B5Y BPS BPY 27S 27Y 35S 35Y E4S E4Y 45S 45Y 12S)	89P9022	1	Y
Norwegian (models 12G)	89P9023	1	Y
Polish (models 12G)	89P9024	1	Y
Portuguese (models 12G)	89P9025	1	Y
Romanian (models 12G)	89P9026	1	Y
Romanian (models 12G)	89P9027	1	Y
Russian/Cyrillic (models 12G)	89P9028	1	Y
Serbian/Cyrillic (models 12G)	89P9029	1	Y
Slovak (models 12G)	89P9030	1	Y
Spanish (models 12G)	89P9031	1	Y

8104 Keyboard (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
Swedish/Finn (models 12G)	89P9032	1	Y
Swiss French/German (models 12G)	89P9033	1	Y
Thailand (models 4MT)	89P9034	1	Y
Turkish (models 12G)	89P9035	1	Y
Turkish (models 12G)	89P9036	1	Y
UK English (models 12G)	89P9037	1	Y
US Euro (models 12G)	89P9038	1	Y
Yugoslav/Latin (models 12G)	89P9039	1	Y

8104 Keyboards (Preferred Pro Fullsize USB w/o palmrest)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models 11U 11G 11M 11A 11H 11Q 11C 11B 11V)	89P9040	1	Y
Arabic (models 11G)	89P9041	1	Y
Arabic/French (models 11G)	89P9058	1	Y
Belgium French (models 11G)	89P9042	1	Y
Belgium English (models 11G)	89P9043	1	Y
Brazilian Portuguese (models 11G)	89P9044	1	Y
Bulgarian (models 11G)	89P9045	1	Y
Czech (ABB) (models 11G)	89P9047	1	Y
Danish (models 11G)	89P9048	1	Y
Dutch (models 11G)	89P9049	1	Y
French (models 11G)	89P9050	1	Y
French Canadian (models 11F)	89P9051	1	Y
French Canadian (models 11F)	89P9052	1	Y
German (models 11G)	89P9053	1	Y
Greek (models 11G)	89P9054	1	Y
Hebrew (models 11G)	89P9055	1	Y
Hungarian (models 11G)	89P9056	1	Y
Iceland (models 11G)	89P9057	1	Y
Italy (models 11G)	89P9059	1	Y
Japanese (models 11J)	89P9060	1	Y
Korean (models 11K)	89P9061	1	Y
LA Spanish (models 11G)	89P9062	1	Y
Norwegian (models 11G)	89P9063	1	Y
Polish (models 11G)	89P9064	1	Y
Portuguese (models 11G)	89P9065	1	Y
Romanian (models 11G)	89P9066	1	Y
Russian/Cyrillic (models 11G)	89P9068	1	Y
Serbian/Cyrillic (models 11G)	89P9069	1	Y
Slovak (models 11G)	89P9070	1	Y

8104 Keyboards (Preferred Pro Fullsize USB w/o palmrest)	FRU#	CRU Tier	RoHS Compliant?
Spanish (models 11G)	89P9072	1	Y
Swedish/Finn (models 11G)	89P9073	1	Y
Thailand (models 11T)	89P9075	1	Y
Turkish (models 11G)	89P9077	1	Y
Turkish (models 11G)	89P9076	1	Y
UK English (models 11G)	89P9078	1	Y
US Euro (models 11G)	89P9079	1	Y
Yugoslav/Latin (models 11G)	89P9071	1	Y

8104 Keyboards (Preferred Pro Fullsize USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models 11U 11G 11M 11A 11H 11Q)	41A5289	1	Y
Arabic (models 11G)	41A5290	1	Y
Arabic/French (models 11G)	41A5291	1	Y
Belgium French (models 11G)	41A5292	1	Y
Belgium English (models 11G)	41A5293	1	Y
Brazilian Portuguese (models 11G)	41A5294	1	Y
Bulgarian (models 11G)	41A5295	1	Y
Czech (ABB) (models 11G)	41A5297	1	Y
Danish (models 11G)	41A5298	1	Y
Dutch (models 11G)	41A5299	1	Y
French (models 11G)	41A5300	1	Y
French Canadian (models 11F)	41A5301	1	Y
French Canadian (models 11F)	41A5302	1	Y
German (models 11G)	41A5303	1	Y
Greek (models 11G)	41A5304	1	Y
Greek/US(models 11G)	41A5305	1	Y
Hebrew (models 11G)	41A5306	1	Y
Hungarian (models 11G)	41A5307	1	Y
Iceland (models 11G)	41A5308	1	Y
Italy (models 11G)	41A5309	1	Y
Japanese (models 11J)	41A5310	1	Y
Korean (models 11K)	41A5311	1	Y
LA Spanish (models 11G)	41A5312	1	Y
Norwegian (models 11G)	41A5313	1	Y
Polish (models 11G)	41A5314	1	Y
Portuguese (models 11G)	41A5315	1	Y
Romanian (models 11G)	41A5316	1	Y
Romanian (models 11G)	41A5317	1	Y
Russian/Cyrillic (models 11G)	41A5318	1	Y

8104 Keyboards (Preferred Pro Fullsize USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
Serbian/Cyrillic (models 11G)	41A5319	1	Y
Slovak (models 11G)	41A5320	1	Y
Spanish (models 11G)	41A5321	1	Y
Swedish/Finn (models 11G)	41A5322	1	Y
Thailand (models 11T)	41A5324	1	Y
Turkish (models 11G)	41A5325	1	Y
Turkish (models 11G)	41A5326	1	Y
UK English (models 11G)	41A5327	1	Y
US Euro (models 11G)	41A5328	1	Y
Slovenian (models 11G)	41A5329	1	Y

8104 Keyboards (Enhanced Performance w/Hub USB)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models 4KA 4KM 4KQ 4KH)	41A4961	1	Y
Chinese/US (models 4KB)	41A4968	1	Y
Thailand (models 4KT)	41A4994	1	Y

8104 Fingerprint Keyboard	FRU#	CRU Tier	RoHS Compliant?
US English/China (models 22E 24E 32E 3DU 4GU 4MA 4MQ 4MH 12U 12G 12M 12A 12H)	41A5248	1	Y
Arabic (models 12G)	41A5249	1	Y
Arabic/French (models 12G)	41A5250	1	Y
Belgium French (models 12G)	41A5251	1	Y
Belgium English (models 12G)	41A5252	1	Y
Brazilian Portuguese (models A2P A5P B5P BPP 27P 35P E4P 45P 12P)	41A5253	1	Y
Bulgarian (models 12G)	41A5254	1	Y
Chinese/US (models 4MB)	41A5255	1	Y
Czech (ABB) (models 12G)	41A5256	1	Y
Danish (models 12G)	41A5257	1	Y
Dutch (models 12G)	41A5258	1	Y
French (models 12G)	41A5259	1	Y
French Canadian (models 12G)	41A5260	1	Y
French Canadian (models 12G)	41A5261	1	Y
German (models 12G)	41A5262	1	Y
Greek (models 12G)	41A5263	1	Y
Greek/US (models 12G)	41A5264	1	Y
Hebrew (models 12G)	41A5265	1	Y
Hungarian (models 12G)	41A5266	1	Y
Iceland (models 12G)	41A5267	1	Y

8104 Fingerprint Keyboard	FRU#	CRU Tier	RoHS Compliant?
Japanese (models A2J A5J A8J ABJ AEJ AHJ B2J B5J B8J BBJ BEJ BHJ 22J 24J 27J 2AJ 32J 35J 38J 3PJ 42J 45J 48J 4BJ 2HJ 2KJ 2JJ 3SJ 3TJ 3UJ ALJ AMJ ANJ APJ APJ AQJ D5J D6J E8J E9J F2J F3J DCJ DEJ DGJ DHJ ECJ EDJ 12J)	41A5269	1	Y
Korean (models BSK 12K)	41A5270	1	Y
LA Spanish (models A2S A2Y A5S A5Y B5S B5Y BPS BPY 27S 27Y 35S 35Y E4S E4Y 45S 45Y 12S)	41A5271	1	Y
Norwegian (models 12G)	41A5272	1	Y
Polish (models 12G)	41A5273	1	Y
Portuguese (models 12G)	41A5274	1	Y
Romanian (models 12G)	41A5275	1	Y
Romanian (models 12G)	41A5276	1	Y
Russian/Cyrillic (models 12G)	41A5277	1	Y
Serbian/Cyrillic (models 12G)	41A5278	1	Y
Slovak (models 12G)	41A5279	1	Y
Spanish (models 12G)	41A5280	1	Y
Swedish/Finn (models 12G)	41A5281	1	Y
Swiss French/German (models 12G)	41A5282	1	Y
Thailand (models 4MT)	41A5283	1	Y
Turkish (models 12G)	41A5284	1	Y
Turkish (models 12G)	41A5285	1	Y
UK English (models 12G)	41A5286	1	Y
US Euro (models 12G)	41A5287	1	Y
Slovenian (models 12G)	41A5288	1	Y

8104 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models BKU BLU BMU BNH 21A 21Q 21H 21R 21E 23E 2CU 2DU 2EU 31E 3AU 3BU 3FU 3GU 3HU 3JU 3MH 4EU 4FU 4HU D1U D2U E1U E2U 4DG F1G 3JU 3JG 3JM 3JA 3JQ 3JH 3JR 3JE 4HG 4HM 4HA 4HQ 4HH 4HR 4HE DAE 2RU 2SU 2TU 2UU 2UG 2UM 2UA 2UQ 2UH 51H 52H 53A 5BU 5BG 5BM 5BA 5BQ 5BH 5BR 5EQ 5FU 5GQ 92U 93U 93G 93M 93A 93Q 93H 93R 94U 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5039	1	Y
Arabic (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5040	1	Y
Arabic/French (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5041	1	Y
Belgian/French (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5042	1	Y
Belgian/UK (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5043	1	Y
Brazilian Portuguese (models A1P B1P BNP 21P 23P 31P 34P 3CP 3RP 41P 4DP 4NP D3P E3P 3JP 4HP 2QP 2PP 59P 5AP 5BP 3YP 3ZP 91P)	41A5044	1	Y
Bulgarian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5045	1	Y
Chinese/US (models BNB 21B 21V 3MB BTV BUV BVV BWV D9V D8V 2NV E5V 2UV 5BV 93V)	41A5046	1	Y
Czech (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5047	1	Y
Danish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5048	1	Y

8104 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
Dutch (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5049	1	Y
French (models 2EF 3GF 3HF 4FF 4DG F1G 3JG 4HG 3JF 4HF 2NG E5G E7F 2EF 3GF 3HF 4FF 4DG F1G 3JG 4HG 3JF 4HF 2NG E5G E7F D4F)	41A5050	1	Y
French Canadian 445 (models 2RF 2SF 2TF 2UF 5BF 5FF 94F 93F 92F)	41A5051	1	Y
French Canadian 58 (models 2RF 2SF 2TF 2UF 5BF 5FF 94F 93F 92F)	41A5052	1	Y
German (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A50533	1	Y
Greek (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5054	1	Y
Greek/US (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5080	1	Y
Hebrew (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5055	1	Y
Hungarian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5056	1	Y
Iceland (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5057	1	Y
Italy (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5058	1	Y
Japanese (models A1J A3J A4J A6J A7J A9J AAJ ACJ ADJ AFJ AGJ AJJ B3J B4J B6J B7J B9J BAJ BCJ BDJ BFJ BGJ BJJ 21J 23J 25J 26J 28J 29J 2BJ 31J 33J 34J 36J 37J 39J 3NJ 3QJ 41J 43J 44J 46J 47J 49J 4AJ 4CJ 3JJ 4HJ 2NJ E5J DAJ DBJ DEJ DFJ EAJ EBJ BYJ BZJ 2UJ 58J 57J 56J 55J 54J)	41A5059	1	Y
Korean (models BQK 21K 3JK 4HK 2NK E5K 2UK 93K 5BK)	41A5060	1	Y
LA Spanish (models A1S A1Y B1S B1Y BNS BNY 21S 21Y 23S 23Y 31S 31Y 34S 34Y 3CS 3CY 3RS 3RY 41S 41Y 4DS 4DY 4NS 4NY D3S D3Y E3S E3Y 3JS 3JY 4HS 4HY 2NS 2NY E5S 5EY 2PS 2PY 2QS 2QY 2US 59S 59Y 5AS 5AY 5BS 5BY 5BY 3YS 3YY 3ZS 3ZY 91S 91Y 93S 93Y 61S 61Y)	41A5061	1	Y
Norwegian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5062	1	Y
Polish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5063	1	Y
Portuguese (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5064	1	Y
Romanian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5065	1	Y
Russian/Cy (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5066	1	Y
Serbian/Cyrillic (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5067	1	Y
Slovak (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5068	1	Y
Spanish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5069	1	Y
Swedish/Finn (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5070	1	Y
Swiss French/German (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5071	1	Y
Thailand (models 21T 2FT 2GT 3JT 4HT D8T D7T E6T E5T 2NT 2UT 53T 5BT 93T)	41A5072	1	Y
Turkish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5073	1	Y
Turkish (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5074	1	Y
UK English (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5075	1	Y
US Euro (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5076	1	Y
Slovenian (models 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	41A5077	1	Y

8104 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 2-button (black) (models CTO)	41A4909	1	Y

8104 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, optical wheelmouse (all models)	41A4935	1	Y
Mouse, optical wheelmouse, 400 dpi (all models)	41U3013	1	Y
Mouse, optical wheelmouse (models A1S A1Y A1P A1J A2S A2Y A2P A2J A3J A4J A5S A5Y A5P A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1S B1Y B1P B1J B2J B3J B4J B5S B5Y B5P B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ BKU BLU BMU BNS BNY BNP BNB BNH BPS BPY BPP BQC BRV BSV 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 21K 21E 21J 22E 22J 23S 23Y 23P 23E 23J 24E 24J 25J 26J 27S 27Y 27P 27J 28J 29J 2AJ 2BJ 2CU 2DU 2EU 2EF 2FC 2GC 31S 31Y 31P 31E 31J 32E 32J 33J 34S 34Y 34P 34J 35S 35Y 35P 35J36J 37J 38J 39J 3AU 3BU 3CS 3CY 3CP 3DU 3FU 3GU 3GF 3HU 3HF 3JU 3KC 3MB 3MH 3NJ 3PJ 3QJ 3RS 3RY 3RP 41S 41Y 41P 41J 42J 43J 44J 45S 45Y 45P 45J 46J 47J 48J 49J 4AJ 4BJ 4CJ 4DS 4DY 4DP 4DG 4EU 4FU 4FF 4GU 4HU 4JC 4KA 4KQ 4KT 4KB 4KH 4MA 4MQ 4MT 4MB 4MH 4NS 4NY 4NP D1U D2U D3S D3Y D3P E1U E2U E3S E3Y E3P E4S E4Y E4P F1G C1U C2U C3U C4U C5U C6U C7U C8U CTO 3JF 3JS 3JP 3JU 3JD 3JY 3JG 3JM 3JA 3JQ 3JT 3JC 3JB 3JH 3JV 3JK 3JR 3JE 3JJ 4HF 4HS 4HP 4HD 4HY 4HG 4HM 4HA 4HQ 4HT 4HC 4HB 4HH 4HV 4HK 4HR 4HE 4HJ 2HJ 2KJ 2JJ 3SJ 3TJ 3UJ ALJ AMJ ANJ APJ BTV BUV BVV BWV 2LC 2MC 3VC 3WC 4PJ 4QJ D4U D4F D7A D7Q D7T D8A D8Q D8T D8V D9V E6A E6Q E6T E7U E7F DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 2NU 2NF 2NS 2NP 2ND 2NY 2NG 2NM N2A 2NQ 2NT 2NC 2NB 2NH 2NV 2NK 2NR 2NE 2NJ E5U E5F E5S E5P E5U E5D E5Y E5G E5M E5A E5Q E5T E5C E5B E5H E5V E5K E5R E5E E5J)	89P5089	1	N

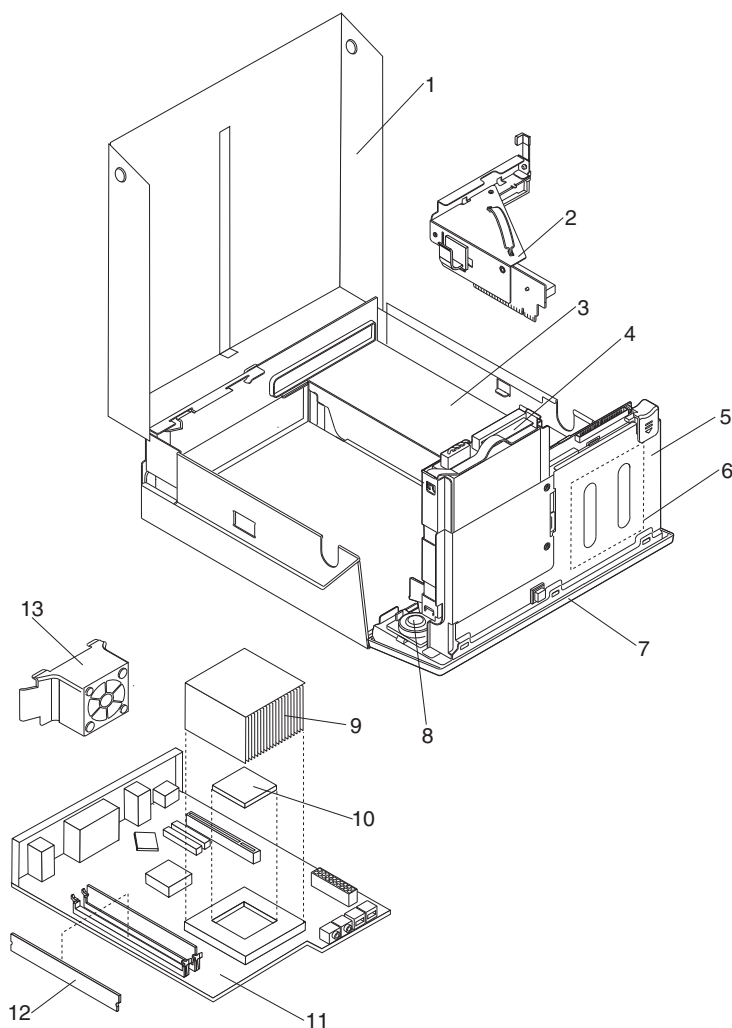
8104 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models C1U C2U C3U C4U C5U C6U C7U C8U C9U 2NU E5U D4U E7U)	6952301	1	N
Power Cord (ANZ) (models 21A 4KA 4MA CTO 3JA 4HA 2NA E5A D7A D8A E6A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models 21A 4KA 4MA 4DG FIG BRK BSK 21K CTO 2NA E5A D7A D8A E6A 2NG E5G 2NK E5K)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models 21A 4KA 4MA 4DG FIG 21V CTO 3JA 4HA 3JG 4HG 3JV 4HV 2NA E5A D7A D8A E6A 2NG E5G 2NH E5H)	14F0032	1	N
Power Cord (EMEA) (models 4DG F1G CTO 3JG 4HG 2NG E5G)	13F9996	1	N
Power Cord (EMEA, LA) (models CTO 4DG F1G A1S A1Y A1P A2S A2Y A2P A5S A5Y A5P B1S B1Y B1P B5S B5Y B5P BNS BNY BNP BMS BMY BMP 21S 21Y 21P 23S 23Y 23P 27S 27Y 27P 31S 31Y 31P 33S 33Y 33P 34S 34Y 34P 3CS 3CY 3CP 3RS 3RY 3RP 41S 41Y 41P 45S 45Y 45P 4DS 4DY 4DP 4NS 4NY 4NP D3S D3Y D3P E3S E3Y E3P E4S E4Y E4P 3JF 3JS 3JP 3JY 3JG 4HF 4HS 4HP 4HY 4HG 2NG E5G 2NS E5S 2NY E5Y 2NP E5P D4F E7F)	14F0068	1	N
Power Cord (APU) (models CTO A1Y A2Y A5Y B1Y B5Y BNY BMY 21Y 23Y 27Y 31Y 33Y 34Y 39Y 3CY 3RY 41Y 45Y 49Y 4DY 4NY D3Y E3Y E4Y 3JY 4HY 2NY E5Y)	36L8879	1	Y

8104 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (Japan) (models A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1J B2J B3J B4J B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ 21J 22J 23J 24J 25J 26J 27J 28J 29J 2AJ 2BJ 31J 32J 33J 34J 35J 36J 37J 38J 39J 3NJ 3PJ 3QJ 41J 42J 43J 44J 45J 46J 47J 48J 49J 4AJ 4BJ 4CJ 3JJ 4HJ 2HJ 2KJ 2JJ 3SJ 3TJ 3UJ ALJ AMJ ANJ APJ APJ AQJ D5J D6J E8J E9J F2J F3J 2NJ E5J CAJ CBJ CCJ CDJ CEJ DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ)	05K2876	1	Y
Power Cord (China, HK) (models BNH BNB BQC 21B 21H 2FC 2GC 3KC 3MB 3MH 4JC 4KB 4KH 4MB 4MK CTO-A 3JH 4HH 3VC 3WC 2LC 2MC 2NC E5C 2NH E5H)	02K0545	1	Y
Power Cord (EMEA) (models 4DG F1G CTO 3JG 4HG 2NG E5G)	14F0086	1	Y
Power Cord (EMEA, ANZ, ASEAN Eng) (models 4DG F1G CTO 4KA 4MA 21A 3JA 4HA 2NG E5G 2NM E5M 2NA E5A)	14F0014	1	Y
Power Cord (EMEA) (models 4DG F1G CTO 3JG 4HG 2NG E5G)	14F0050	1	Y
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8104 Windows XP Home Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
Simplified Chinese (models 2GC 3KC 4JC)	41W3456	1	Y
Taiwan - TC (models BRV BSV BTW BWV D9V)	41W3463	1	Y

8104 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models BKU BLU BMU BNH 21E 22E 23E 24E 2CU 2DU 2EU 31E 32E 3AU 3BU 3DU 3FU 3GU 3HU 3JU 3MH 4EU 4FU 4GU 4HU 4KA 4KQ 4KH 4KT 4MA 4MQ 4MH 4MT D1U D2U E1U E2U 4DG FIG 3JU 3JG 3JM 3JA 3JQ 3JT 3JH 3JR 3JE 4HG 4HA 4HQ 4HT 4HH 4HR 4HE 2NU E5U 2NA E5A 2NQ 25Q 2NH E5H 2NR E5R 2NE E5E 11U 12U 11G 12G 11M 12M 11A 12A 11Q 12Q 11H 12H 2RU 2SU 2TU 2UU 2UG 2UM 2UA 2UQ 2UH 51H 52H 53A 5BU 5BG 5BM 5BA 5BQ 5BH 5BR 5EQ 5FU 5GQ 92U 93U 93G 93M 93A 93Q 93H 93R 94U 4DG F1G 3JG 4HG 2NG E5G 2UG 5BG 93G)	39J9061	1	Y
FR/CF (models 2EF 3GF 3HF 4FF 4DG FIG 3JF 4HF E5F 2NF D4F E7F 11F 12F 2RF 2SF 2TF 2UF 5BF 92F 93F 94F)	39J9062	1	Y
GR (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9063	1	Y
IT (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9065	1	Y
BR (models A1P A2P A5P B1P B5P BNP BPP 21P 23P 27P 31P 34P 35P 3CP 3RP 41P 45P 4DP 4NP D3P E3P E4P 3JP 4HP 2NP E5P 11P 12P 2PP 2QP 2UP 59P 5AP 3YP 3ZP 91P 93P 61P)	39J9066	1	Y
SP/LA (models A1S A1Y A2S A2Y A5S A5Y B1S B1Y B5S B5Y BNS BNY BPS BPY 21S 21Y 23S 23Y 27S 27Y 31S 31Y 34S 34Y 35S 35Y 3CS 3CY 3RS 3RY 41S 41Y 45S 45Y 4DS 4DY 4NS 4NY D3S D3Y E3S E3Y E4S E4Y 4DG FIG 3JS 3JY 4HS 4HY 4DG FIG 3JG 4HG 2NS E5S 2NY E5Y 11S 12S 2PS 2PY 2QS 2QY 2US 59S 59Y 5AS 5AY 5BS 5BY 5BY 3YS 3YY 3ZS 3ZY 91S 91Y 93S 61S 61Y)	39J9064	1	Y
DK (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9068	1	Y
NL (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9071	1	Y
AE (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9075	1	Y
SV (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9067	1	Y
HE (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9072	1	Y
FI (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9069	1	Y
NO (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9070	1	Y
PL (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9073	1	Y
PO (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9079	1	Y
RU (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9076	1	Y
HU (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9078	1	Y
CZ (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9074	1	Y
TR (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9077	1	Y
GK (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9080	1	Y
SL (models 4DG FIG 3JG 4HG 2NG E5G 11G 12G ADD 2UG 5BG 93G)	39J9081	1	Y
JP (models A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ ABJ ACJ ADJ AEJ AFJ AGJ AHJ AJJ B1J B2J B3J B4J B5J B6J B7J B8J B9J BAJ BBJ BCJ BDJ BEJ BFJ BGJ BHJ BJJ 21J 22J 23J 24J 25J 26J 27J 28J 29J 2AJ 2BJ 31J 32J 33J 34J 35J 36J 37J 38J 39J 3NJ 3PJ 3QJ 41J 42J 43J 44J 45J 46J 47J 48J 49J 4AJ 4BJ 4CJ 3JJ 4HJ 2HJ 2KJ 2JJ 3SJ 3TJ 3UJ E5J 2NJ DAE DAJ DBJ DCE DCJ DDJ DEJ DFJ DGJ DHJ EAJ EBJ ECJ EDJ 11J 12J)	41W3442	1	Y
Simplified Chinese (models 3JC 4HC 2NC E5C 2MC 2NC 3WV 11C 12C ADD 2UC 51C 5DC 5BC)	41W3422	1	Y
Taiwan - TC (models 3JV 4HV 2NC E5C 2MC 2NC 3WV 11V 12V)	41W3428	1	Y
Hong Kong - TC (models BNB 3MB 4KB 4MB 3JB 4HB 2NB E5B 11B 12B)	41W3435	1	Y
Korea (models 3JK 4HK 2NK E5K 11K 12K)	41W3415	1	Y

Machine Type 8105



Item #	8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 23S 23Y 23P 24U 24F 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 33U 34S 34Y 34P 35U 36S 36Y 36P 37U 37F D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G C1U C2U C3U C4U C5U C6U C7U C8U C9U B6C 22A 22Q 22T 22H 38K B7K B8K B9C BAC 28K 29K 2AC 39K 3AC 3BC 41K F1K 73G 74G 91U BBG 2BU 2BF 2CB 2CH 2DB 2DH 2EH 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2JU 2JF 2KU 2KF 2AC 2MU 2NQ 3CB 3CH 3DB 3DH 3EU 3EF 3FU 3FF 3GU 3GF 3HU 3JU 3JF)	39M0552	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y
2	Riser Car Bracket Asm, PCI Riser, RoHS (all models)	39M0621	1	Y

Item #	8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
3	Power Supply (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 23S 23Y 23P 24U 24F 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 33U 34S 34Y 34P 35U 36S 36Y 36P 37U 37F D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G C1U C2U C3U C4U C5U C6U C7U C8U C9U B6C 22A 22Q 22T 22H 38K B7K B8K B9C BAC 28K 29K 2AC 39K 3AC 3BC 41K F1K 73G 74G)	89P6805	2	N
3	Power Supply (all models)	41N3105	2	Y
4	Hard disk drive, 40GB 7200rpm SATA, non-RoHS (models CTO A2S A2P A3U B2U 24U 24F 33U 71G 72G)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models CTO A2S A2P A3U B2U 24U 24F 33U 71G 72G 2BU 2BF)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA, (models CTO A2S A2P A3U B2U 24U 24F 33U 71G 72G 2BU 2BF)	40Y9033	1	Y
4	Hard disk drive 80GB 7200rpm SATA, (models CTO A1S, A1P A1U A4S A4Y A4P B1S B1P B1Y B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P B6C 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 22A 22Q 22T 22H 23S 23Y 23P 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 34S 34Y 34P 35U 36S 36Y 36P 37U 37F 38K D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P B7K B9C BAC 29K 2AC 3AC 3BC 41K 73G 74G)	71P7293	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1U A4S A4Y A4P B1S B1P B1Y B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P B6C 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 22A 22Q 22T 22H 23S 23Y 23P 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 34S 34Y 34P 35U 36S 36Y 36P 37U 37F 38K D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P B7K B9C BAC 29K 2AC 3AC 3BC 41K 73G 74G 91U BBG 2CB 2CH 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2JU 2JF 2KU 2KF 2AC 2MU 2NQ 3EU 3EF 3FU 3FF 3HU 3JU 3JF)	40Y8761	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1U A4S A4Y A4P B1S B1P B1Y B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P B6C 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 22A 22Q 22T 22H 23S 23Y 23P 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 34S 34Y 34P 35U 36S 36Y 36P 37U 37F 38K D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P B7K B9C BAC 29K 2AC 3AC 3BC 41K 73G 74G 91U BBG 2CB 2CH 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2JU 2JF 2KU 2KF 2AC 2MU 2NQ 3EU 3EF 3FU 3FF 3HU 3JU 3JF)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1U A4S A4Y A4P B1S B1P B1Y B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P B6C 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 22A 22Q 22T 22H 23S 23Y 23P 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 34S 34Y 34P 35U 36S 36Y 36P 37U 37F 38K D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P B7K B9C BAC 29K 2AC 3AC 3BC 41K 73G 74G 91U BBG 2CB 2CH 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2JU 2JF 2KU 2KF 2AC 2MU 2NQ 3EU 3EF 3FU 3FF 3HU 3JU 3JF)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G B8K 28K 39K F1K)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G B8K 28K 39K F1K 2DB 2DH 2EH 3CB 3CH 3GU 3GF)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G B8K 28K 39K F1K 2DB 2DH 2EH 3CB 3CH 3GU 3GF)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G B8K 28K 39K F1K 2DB 2DH 2EH 3CB 3CH 3GU 3GF)	TBD	1	Y

Item #	8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G B8K 28K 39K F1K 2DB 2DH 2EH 3CB 3CH 3GU 3GF)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 3DB 3DH)	40Y9036	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 3DB 3DH)	40Y8763	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 3DB 3DH)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models 3DB 3DH)	40Y8757	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K 91U 2BU 2BF 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2MU 3EU 3EF 3FU 3FF 3HU)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K 91U 2BU 2BF 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2MU 3EU 3EF 3FU 3FF 3HU)	40Y8793	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K 91U 2BU 2BF 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2MU 3EU 3EF 3FU 3FF 3HU)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K 91U 2BU 2BF 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2MU 3EU 3EF 3FU 3FF 3HU)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23Y 23P 24U 24F 25S 25Y 25P 2S 32P 32Y 33U 34S 34Y 34P 35U 37U 37F 71G 72G B6C B7K 91U 2BU 2BF 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2MU 3EU 3EF 3FU 3FF 3HU)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO 22B 31C 22A 22Q 22T 22H B9C BAC 2AC 3AC 73G 74G)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models CTO 22B 31C 22A 22Q 22T 22H B9C BAC 2AC 3AC 73G 74G BBG 2AC 2NQ)	40Y8965	1	Y

Item #	8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
6	DVD-ROM Drive (8X/24X) (models CTO 22B 31C 22A 22Q 22T 22H B9C BAC 2AC 3AC 73G 74G BBG 2AC 2NQ)	40Y8959	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 21K 26U 27S 27Y 27P 35U 36S 36Y 36P D1S D1Y D1P D2S D2Y D2P E1S E1Y E1P E2S E2Y E2P 38K B8K 29K 3BC 41K 3GU 3GF 3CB 3CH 2KU 2KF 2JU 2JF 2EH 2CB 2CH)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 21K 26U 27S 27Y 27P 35U 36S 36Y 36P D1S D1Y D1P D2S D2Y D2P E1S E1Y E1P E2S E2Y E2P 38K B8K 29K 3BC 41K 3GU 3GF 3CB 3CH 2KU 2KF 2JU 2JF 2EH 2CB 2CH)	40Y8949	1	Y
6	Multi-Burner Plus (Rambo 4) Ultrabay Enhanced Drive (models CTO 28K 39K F1K 2DB 2DH 3DB 3DH 3JU 3JF)	40Y8951	1	Y
6	Slim PATA RAMBO 5 drive (models CTO 28K 39K F1K 2DB 2DH 3DB 3DH 3JU 3JF)	41N3355	1	Y
6	Slim PATA RAMBO 5 drive (models CTO 28K 39K F1K 2DB 2DH 3DB 3DH 3JU 3JF)	TBD	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (RoHS) (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models D1S D1P D1Y D2S D2P D2Y C7U CTO)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models E1S E1Y E1P E2S E2Y E2P C8U CTO)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models C9U CTO)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 2BU 2BF)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 21K 22B 22A 22Q 22T 22H 23S 23Y 23P 24U 24F 25S 25Y 25P 26U 27S 27Y 27P C4U CTO 28K 29K 2AC 2AC 2MU 2NQ)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 31C 32S 32P 33U 34S 34Y 34P 35U 36S 36Y 36P 37U 37F 38K C5U CTO 39K 3AC 3BC 3CB 3CH 3DB 3DH 3EU 3EF 3FU 3FF 3GU 3GF 3HU 3JU 3JF CCU)	39J6095	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models C6U CTO 41K F1K)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models 11S 11Y 11P 12S 12Y 12P CTO)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models 13S 13Y 13P 14S 14Y 14P CAU CTO)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models A1U A1S A1P CTO)	39J6084	2	Y
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models A2S A2P A3U A4S A4P A4Y C1U CTO)	39J6085	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models B1S B1Y B1P B2U B3S B3Y B3P B6C 71G C2U CTO 73G 91U)	39J6086	2	Y

Item #	8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models B2S B4P B4Y 72G CTO 74G)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models B5S B5Y B5P C3U CTO B7K B8K B9C BAC BBG)	39J6088	2	Y
10	Microprocessor - P4 3.06 Ghz/533/1MB 519K (models CBU)	41T1125	2	Y
10	Microprocessor - P4 524 processor 3.06Ghz/533/1M (models 2CB 2CH 2DB 2DH 2EH 2FS 2FY 2FP 2GS 2GY 2GP 2HU 2JU 2JF 2KU 2KF)	41T4104	2	Y
11	System board, Planar With 10/1000 Lan (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 23S 23Y 23P 24U 24F 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 33U 34S 34Y 34P 35U 36S 36Y 36P 37U 37F D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G C1U C2U C3U C4U C5U C6U C7U C8U C9U B6C 22A 22Q 22T 22H 38K B7K B8K B9C BAC 28K 29K 2AC 39K 3AC 3BC 41K F1K 73G 74G)	39J6410	2	N
11	System board, Tobago (1.1C planar erv) w/ 10/1000 LAN (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 23S 23Y 23P 24U 24F 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 33U 34S 34Y 34P 35U 36S 36Y 36P 37U 37F D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G C1U C2U C3U C4U C5U C6U C7U C8U C9U B6C 22A 22Q 22T 22H 38K B7K B8K B9C BAC 28K 29K 2AC 39K 3AC 3BC 41K F1K 73G 74G)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO A1S, A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P B6C 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 22A 22Q 22T 22H 23S 23Y 23P 24U 24F 25S 25Y 25P 31C 34S 34Y 34P 37U 37F 71G 72G 73G 74G BBG 2FS 2FY 2FP 3EU 3EF)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO 26U 27S 27Y 27P 32S 32P 32Y 33U 35U 36S 36Y 36P D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 38K B7K B8K B9C BAC 28K 29K 2AC 3AC 3BC 41K 91U 2BU 2BF 2CB 2CH 2DB 2DH 2EH 2GS 2GY 2GP 2HU 2JU 2JF 2AC 2MU 2NQ 3CB 3CH 3EU 3EF 3FU 3FF 3GU 3GF 3HU)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO F1K 39K 3JU 3JF 3DB 3DH 2KU 2KF)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (all models)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (all models)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y

8105 FRUs	FRU#	CRU Tier	RoHS Compliant?
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models A1S, A1P A1U A4S A4P A4Y B1S B1P B1Y B3S B3P B3Y B4S B4P B4Y B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 23S 23P 23Y 25S 25P 25Y 27S 27Y 27P 32S 32P 32Y 34S 34P 34Y 36S 36Y 36P D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 2FS 2FP 2FY 2GS 2GY 2GP 3ES 3EY 3EP 3FS 3FY 3FP 3GS 3GY 3GP)	09K9827	1	Y

8105 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI Modem Card (Soft), ATX V.90 (models A1U B1S B1Y B1P B4S B4Y B4P 11S 11Y 11P 13S 13Y 13P 23S 23Y 23P 32S 32Y 32P E1S E1Y E1P)	22P7943	1	N
PCI Modem Card (Soft), ATX V.90 (models A1U B1S B1Y B1P B4S B4Y B4P 11S 11Y 11P 13S 13Y 13P 23S 23Y 23P 32S 32Y 32P E1S E1Y E1P 2DB 2BH 2CB 2CH 3CB 3CH 3DB 3DH)	29R9729	1	Y
Intel Pro Gigabit Enet / 1000T (Card) ATX (models CTO)	22P6509	1	N
IEEE 1394 Adapter - Firewire (models CTO)	73P2608	1	N
IEEE 1394 Adapter - Firewire (models CTO)	41D2781	1	Y
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	19R2374	1	N

8105 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models CTO 71G 72G A3U B2U 24U 33U 37U 22A 22Q 22H 73G 74G BBG 2CH 2DH 2EH 3CH 3DH BBG 91U 2BU 2JU 2KU 2MU 3HU B6C 9C BAC 2AC 3AC 3BC)	89P8300	1	Y
Arabic (models CTO-G 71G 72G 73G 74G BBG)	89P8301	1	Y
Belgian/French (models CTO-G 71G 72G 73G 74G BBG)	89P8302	1	Y
Belgian/UK (models CTO-G 71G 72G 73G 74G BBG)	89P8303	1	Y
Brazil/Portuguese (models CTO-L A2P A4P B3P B5P 12P 14P 25P 34P D1P E2P)	89P8304	1	Y
Bulgarian (models CTO-G 71G 72G 73G 74G BBG)	89P8305	1	Y
Czech (models CTO-G 71G 72G 73G 74G BBG)	89P8307	1	Y
Danish (models CTO-G 71G 72G 73G 74G BBG)	89P8308	1	Y
Dutch (models CTO-G 71G 72G 73G 74G BBG)	89P8309	1	Y
French (models CTO-G 71G 72G 73G 74G BBG)	89P8310	1	Y
French Canadian 445 (models CTO-U 24F 37F)	89P8311	1	Y
French Canadian 58 (models CTO-U 24F 37F)	89P8312	1	Y
German (models CTO-G 71G 72G 73G 74G BBG)	89P8313	1	Y
Greek (models CTO-G 71G 72G 73G 74G BBG)	89P8314	1	Y

8105 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
Hebrew (models CTO-G 71G 72G 73G 74G BBG)	89P8315	1	Y
Hungarian (models CTO-G 71G 72G 73G 74G BBG)	89P8316	1	Y
Iceland (models CTO-G 71G 72G 73G 74G BBG)	89P8317	1	Y
Italian 141 (models CTO-G 71G 72G 73G 74G BBG)	89P8318	1	Y
Italian 142 (models CTO-G 71G 72G 73G 74G BBG)	89P8319	1	Y
Korean (models 21K 38K B7K B8K 28K 29K 39K 41K F1K)	89P8321	1	Y
LA Spanish (models CTO-L A1S A2S A4S A4Y B3S B3Y B5S B5Y 12S 12Y 14S 14Y 25S 25Y 34S 34Y D1S D1Y E2S E2Y)	89P8322	1	Y
Norwegian (models CTO-G 71G 72G 73G 74G BBG)	89P8323	1	Y
Polish (models CTO-G 71G 72G 73G 74G BBG)	89P8324	1	Y
Portuguese (models CTO-G 71G 72G 73G 74G BBG)	89P8325	1	Y
Romanian (models CTO-G 71G 72G 73G 74G BBG)	89P8326	1	Y
Russian/Cy (models CTO-G 71G 72G 73G 74G BBG)	89P8327	1	Y
Russian/Cy (models CTO-G 71G 72G 73G 74G)	89P8328	1	Y
Serbian/Cyrillic (models CTO-G 71G 72G 73G 74G BBG)	89P8329	1	Y
Slovak (models CTO-G 71G 72G 73G 74G BBG)	89P8330	1	Y
Spanish (models CTO-G 71G 72G 73G 74G BBG)	89P8331	1	Y
Swedish/Finn (models CTO-G 71G 72G 73G 74G BBG)	89P8332	1	Y
Swiss French/German (models CTO-G 71G 72G 73G 74G BBG)	89P8333	1	Y
Thailand (models CTO-A)	89P8334	1	Y
Turkish (models CTO-G 71G 72G 73G 74G BBG)	89P8336	1	Y
UK English (models CTO-G 71G 72G 73G 74G BBG)	89P8337	1	Y
US Euro (models CTO-G 71G 72G 73G 74G BBG)	89P8338	1	Y
Yugoslav/Latin (models CTO-G 71G 72G 73G 74G BBG)	89P8339	1	Y

8105 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models CTO A1U 2AC 2AC 2CB 2DB 3CB 3DB)	89P8800	1	Y
Arabic (models CTO-G)	89P8801	1	Y
Arabic/French (models CTO-G)	89P8802	1	Y
Belgian/French (models CTO-G)	89P8803	1	Y
Belgian/English (models CTO-G)	89P8804	1	Y
Brazil/Portuguese (models CTO-L A1P B1P B4P 11P 13P 23P 32P E1P 2FP 2GP)	89P8805	1	Y
Bulgarian (models CTO-G)	89P8806	1	Y
Chinese/US (models CTO-A)	89P8807	1	Y
Czech (models CTO-G)	89P8808	1	Y
Danish (models CTO-G)	89P8809	1	Y
Dutch (models CTO-G)	89P8810	1	Y
French (models CTO-G)	89P8811	1	Y
French Canadian 445 (models CTO-U)	89P8812	1	Y
French Canadian 58 (models CTO-U)	89P8813	1	Y

8105 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
German (models CTO-G)	89P8814	1	Y
Greek (models CTO-G)	89P8815	1	Y
Hebrew (models CTO-G)	89P8816	1	Y
Hungarian (models CTO-G)	89P8817	1	Y
Iceland (models CTO-G)	89P8818	1	Y
Italian (models CTO-G)	89P8819	1	Y
LA Spanish (models CTO-L A1S B1S B1Y B4S B4Y 11S 11Y 13S 13Y 23S 23Y 32S 32Y E1S E1Y)	89P8822	1	Y
Norwegian (models CTO-G)	89P8823	1	Y
Polish (models CTO-G)	89P8824	1	Y
Portuguese (models CTO-G)	89P8825	1	Y
Romanian (models CTO-G)	89P8826	1	Y
Romanian (models CTO-G)	89P8827	1	Y
Russian/Cyrillic (models CTO-G)	89P8828	1	Y
Serbian/Cyrillic (models CTO-G)	89P8829	1	Y
Slovak (models CTO-G)	89P8830	1	Y
Spanish (models CTO-G)	89P8831	1	Y
Swedish/Finn (models CTO-G)	89P8832	1	Y
Swiss French/German (models CTO-G)	89P8833	1	Y
Thailand (models CTO-A)	89P8834	1	Y
Turkish (models CTO-G)	89P8835	1	Y
Turkish (models CTO-G)	89P8836	1	Y
UK English (models CTO-G)	89P8837	1	Y
US Euro (models CTO-G)	89P8838	1	Y
Yugoslav/Latin (models CTO-G)	89P8839	1	Y

8105 Keyboard (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO 26U 35U)	89P9000	1	Y
Brazilian Portuguese (models CTO-L 27P 36P D2P)	89P9005	1	Y
LA Spanish (models CTO-L 27S 27Y 36S 36Y D2S D2Y)	89P9022	1	Y

8105 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A4961	1	Y
Arabic (models CTO-G)	41A4962	1	Y
Arabic/French (models CTO-G)	41A4963	1	Y
Belgian/French (models CTO-G)	41A4964	1	Y
Belgian/English (models CTO-G)	41A4965	1	Y
Brazil/Portuguese (models CTO-L A1P B1P B4P 11P 13P 23P 32P E1P 2FP 2GP)	41A4966	1	Y
Bulgarian (models CTO-L)	41A4967	1	Y

8105 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
Chinese/US (models CTO-A)	41A4968	1	Y
Czech (models CTO-G)	41A4969	1	Y
Danish (models CTO-G)	41A4970	1	Y
Dutch (models CTO-G)	41A4971	1	Y
French (models CTO-G)	41A4972	1	Y
French Canadian 445 (models CTO-U)	41A4973	1	Y
French Canadian 58 (models CTO-U)	41A4974	1	Y
German (models CTO-G)	41A4975	1	Y
Greek (models CTO-G)	41A4976	1	Y
Greek/US (models CTO-G)	41A5078	1	Y
Hebrew (models CTO-G)	41A4977	1	Y
Hungarian (models CTO-G)	41A4978	1	Y
Iceland (models CTO-G)	41A4979	1	Y
Italian (models CTO-G)	41A4980	1	Y
LA Spanish (models CTO-L A1S B1S B1Y B4S B4Y 11S 11Y 13S 13Y 23S 23Y 32S 32Y E1S E1Y)	41A4983	1	Y
Norwegian (models CTO-G)	41A4984	1	Y
Polish (models CTO-G)	41A4985	1	Y
Portuguese (models CTO-G)	41A4986	1	Y
Romanian (models CTO-G)	41A4987	1	Y
Russian/Cyrillic (models CTO-G)	41A4988	1	Y
Serbian/Cyrillic (models CTO-G)	41A4989	1	Y
Slovak (models CTO-G)	41A4990	1	Y
Spanish (models CTO-G)	41A4991	1	Y
Swedish/Finn (models CTO-G)	41A4992	1	Y
Swiss French/German (models CTO-G)	41A4993	1	Y
Thailand (models CTO-A)	41A4994	1	Y
Turkish (models CTO-G)	41A4995	1	Y
Turkish (models CTO-G)	41A4996	1	Y
UK English (models CTO-G)	41A4997	1	Y
US Euro (models CTO-G)	41A4998	1	Y
Slovenian (models CTO-G)	41A4999	1	Y

8105 Fingerprint Keyboard	FRU#	CRU Tier	RoHS Compliant?
US English/China (models CTO 26U 35U)	41A5248	1	Y
Brazilian Portuguese (models CTO-L 27P 36P D2P)	41A5253	1	Y
LA Spanish (models CTO-L 27S 27Y 36S 36Y D2S D2Y)	41A5271	1	Y

8105 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO 71G 72G A3U B2U 24U 33U 37U 22A 22Q 22H 73G 74G BBG 2CH 2DH 2EH 3CH 3DH BBG 91U 2BU 2JU 2KU 2MU 3HU)	41A5039	1	Y
Arabic (models CTO-G 71G 72G 73G 74G BBG)	41A5040	1	Y
Arabic/French (models CTO-G 71G 72G 73G 74G BBG)	41A5041	1	Y
Belgian/French (models CTO-G 71G 72G 73G 74G BBG)	41A5042	1	Y
Belgian/UK (models CTO-G 71G 72G 73G 74G BBG)	41A5043	1	Y
Brazilian Portuguese (models CTO-L A2P A4P B3P B5P 12P 14P 25P 34P D1P E2P)	41A5044	1	Y
Bulgarian (models CTO-G 71G 72G 73G 74G BBG)	41A5045	1	Y
Czech (models CTO-G 71G 72G 73G 74G BBG)	41A5047	1	Y
Danish (models CTO-G 71G 72G 73G 74G BBG)	41A5048	1	Y
Dutch (models CTO-G 71G 72G 73G 74G BBG)	41A5049	1	Y
French (models CTO-G 71G 72G 73G 74G BBG)	41A5050	1	Y
French Canadian 445 (models CTO-U 24F 37F)	41A5051	1	Y
French Canadian 58 (models CTO-U 24F 37F)	41A5052	1	Y
German (models CTO-G 71G 72G 73G 74G BBG)	41A50533	1	Y
Greek (models CTO-G 71G 72G 73G 74G BBG)	41A5054	1	Y
Greek/US (models CTO-G 71G 72G 73G 74G BBG)	41A5080	1	Y
Hebrew (models CTO-G 71G 72G 73G 74G BBG)	41A5055	1	Y
Hungarian (models CTO-G 71G 72G 73G 74G BBG)	41A5056	1	Y
Iceland (models CTO-G 71G 72G 73G 74G BBG)	41A5057	1	Y
Italy (models CTO-G 71G 72G 73G 74G BBG)	41A5058	1	Y
Korean (models 21K 38K B7K B8K 28K 29K 39K 41K F1K)	41A5060	1	Y
LA Spanish (models CTO-L A1S A2S A4S A4Y B3S B3Y B5S B5Y 12S 12Y 14S 14Y 25S 25Y 34S 34Y D1S D1Y E2S E2Y)	41A5061	1	Y
Norwegian (models CTO-G 71G 72G 73G 74G BBG)	41A5062	1	Y
Polish (models CTO-G 71G 72G 73G 74G BBG)	41A5063	1	Y
Portuguese (models CTO-G 71G 72G 73G 74G BBG)	41A5064	1	Y
Romanian (models CTO-G 71G 72G 73G 74G BBG)	41A5065	1	Y
Russian/Cy (models CTO-G 71G 72G 73G 74G BBG)	41A5066	1	Y
Serbian/Cyrillic (models CTO-G 71G 72G 73G 74G BBG)	41A5067	1	Y
Slovak (models CTO-G 71G 72G 73G 74G BBG)	41A5068	1	Y
Spanish (models CTO-G 71G 72G 73G 74G BBG)	41A5069	1	Y
Swedish/Finn (models CTO-G 71G 72G 73G 74G BBG)	41A5070	1	Y
Swiss French/German (models CTO-G 71G 72G 73G 74G BBG)	41A5071	1	Y
Thailand (models CTO-A)	41A5072	1	Y
Turkish (models CTO-G 71G 72G 73G 74G BBG)	41A5073	1	Y
Turkish (models CTO-G 71G 72G 73G 74G BBG)	41A5074	1	Y
UK English (models CTO-G 71G 72G 73G 74G BBG)	41A5075	1	Y
US Euro (models CTO-G 71G 72G 73G 74G BBG)	41A5076	1	Y
Slovenian (models CTO-G 71G 72G 73G 74G BBG)	41A5077	1	Y

8105 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, optical wheelmouse (all models)	41A4935	1	Y
Mouse, optical wheelmouse (400 dpi) (all models)	41U3013	1	Y
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, optical wheelmouse (models CTO A1S A1P A1U A2S A2P A3U A4S A4Y A4P B1S B1P B1Y B2U B3S B3P B3Y B4S B4Y B4P B5S B5Y B5P 11S 11P 11Y 12S 12P 12Y 13S 13Y 13P 14S 14Y 14P 21K 22B 23S 23Y 23P 24U 24F 25S 25Y 25P 26U 27S 27Y 27P 31C 32S 32P 32Y 33U 34S 34Y 34P 35U 36S 36Y 36P 37U 37F D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G C1U C2U C3U C4U C5U C6U C7U C8U C9U B6C 22A 22Q 22T 22H 38K B7K B8K B9C BAC 28K 29K 2AC 39K 3AC 3BC 41K F1K 73G 74G)	89P5089	1	N

8105 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models CTO-U CTO-L A1U A3U B2U 24U 26U 33U 35U 37U 23F 37F A1S A1P A2S A2P A4S A4P A4G B1S B1P B3S B3P B4S B4P B5S B5P 11S 11P 12S 12P 13S 13P 14S 14P 23S 23P 24A 24F 25S 25P 26U 27S 27P 32S 32P 33U 34S 34P 35U 36S 36P 37U 37F D1S D1P D2S D2P E1S E1U E2S E2U 71G 72G C1U C2U C3U C4U C5U C6U C7U C8U C9U CAU 73G 74G)	6952301	1	N
Power Cord (ANZ) (models CTO-A 22A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models CTO CTO-A 71G 72G 38K 22A B7K B8K B9C BAC 28K 29K 2AC 39K 3AC 3BC 41K F1K 73G 74G)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models CTO CTO-A 71G 72G 38K 22A B7K B8K 28K 29K 39K 41K F1K)	14F0032	1	N
Power Cord (EMEA) (models CTO 71G 72G 73G 74G)	13F9996	1	N
Power Cord (EMEA, LA) (models CTO CTO-L 71G 72G 1S A1P A2S A2P A4S A4P A4G B1S B1P B3S B3P B4S B4P B5S B5P 11S 11P 12S 12P 13S 13P 14S 14P 23S 23P 24A 24F 25S 25P 27S 27P 32S 32P 34S 34P 36S 36P 37F D1S D1P D2S A4Y B1Y B3Y B4Y B5Y 11Y 12Y 13Y 14Y 23Y 25Y 73G 74G 27Y 32Y 34Y 36Y D1Y D2Y E1Y E2Y)	14F0068	1	N
Power Cord (APU) (models CTO-L A4Y B1Y B3Y B4Y B5Y 11Y 12Y 13Y 14Y 23Y 25Y 27Y 32Y 34Y 36Y D1Y D2Y E1Y E2Y)	36L8879	1	N
Power Cord (China, HK) (models CTO-A B6C 22H B9C BAC 2AC 3AC 3BC)	02K0545	1	N
Power Cord (EMEA) (models CTO 71G 72G 22A 73G 74G)	14F0086	1	N
Power Cord (EMEA, ANZ, ASEAN Eng) (models CTO 71G 72G 22A 73G 74G)	14F0014	1	N
Power Cord (EMEA) (models CTO 71G 72G 22A 73G 74G)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y
Power Cord (Korea) (all K and R models)	39M5212	1	Y

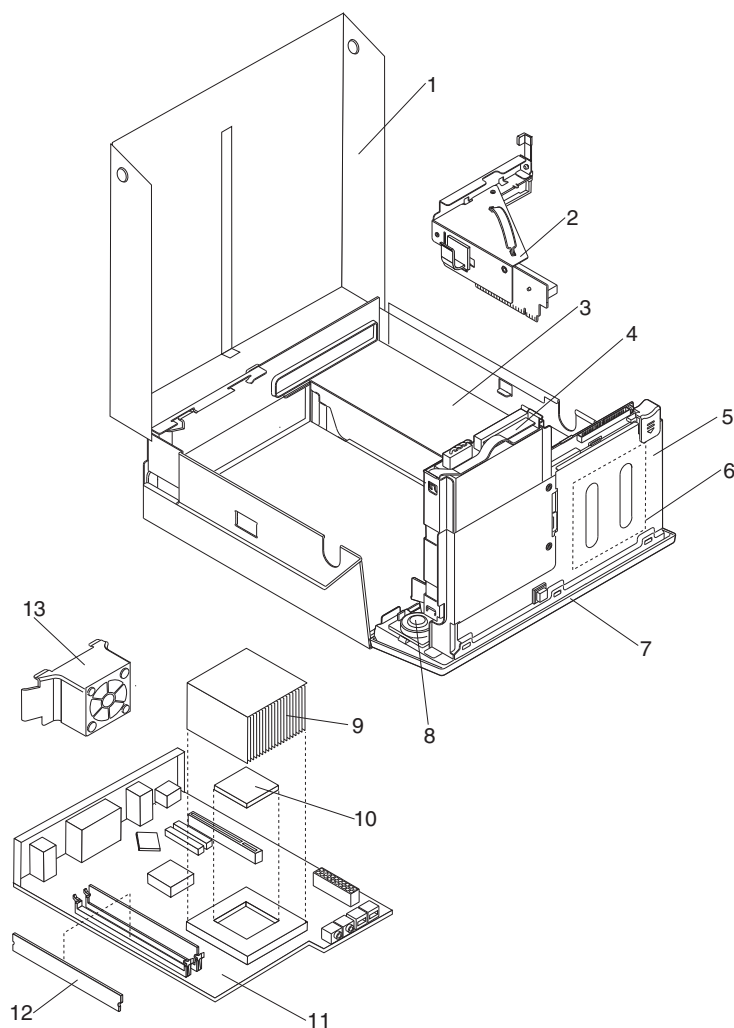
8105 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK /Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8105 Windows XP Home Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models A1U 22A 22Q 22T 22H)	39J8901	1	Y
BR (models A1P A2P B1P B4P 11P 13P 23P 32P E1P)	39J8906	1	Y
SP/LA (models A1S A2S B2S B2Y B2S B4Y 11S 11Y 13S 13Y 23S 23Y 32S 32Y E1S E1Y)	39J8904	1	Y
Simplified Chinese (models BAC 3BC)	41W3456	1	Y
Korean (models 21K 38K B7K B8K 28K 29K 39K 41K F1K)	41W3449	1	

8105 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models A3U B2U 24U 26U 33U 35U 37U 71G 72G 73G 74G)	39J9061	1	Y
FR/CF (models 24F 37F 71G 72G 73H 74G 2BF BBG 2JF 2KF 3JF)	39J9062	1	Y
GR (models 71G 72G 73G 74G BBG)	39J9063	1	Y
IT (models 71G 72G 73G 74G BBG)	39J9065	1	Y
BR (models A4P B3P B5P 12P 14P 25P 27P 34P 36P D1P D2P E2P)	39J9066	1	Y
SP/LA (models A4S A4Y B4S B4Y B5S B5Y 12S 12Y 14S 14Y 25S 25Y 27S 27Y 34S 34Y 36S 36Y D1S D1Y D2S D2Y E2S E2Y 71G 72G)	39J9064	1	Y
DK (models 71G 72G 73G 74G BBG)	39J9068	1	Y
NL (models 71G 72G 73G 74G BBG)	39J9071	1	Y
AE (models 71G 72G 73G 74G BBG)	39J9075	1	Y
SV (models 71G 72G 73G 74G BBG)	39J9067	1	Y
HE (models 71G 72G 73G 74G BBG)	39J9072	1	Y
FI (models 71G 72G 73G 74G BBG)	39J9069	1	Y
NO (models 71G 72G 73G 74G BBG)	39J9070	1	Y
PL (models 71G 72G 73G 74G BBG)	39J9073	1	Y
PO (models 71G 72G 73G 74G BBG)	39J9079	1	Y
RU (models 71G 72G 73G 74G BBG)	39J9076	1	Y
HU (models 71G 72G 73G 74G BBG)	39J9078	1	Y

8105 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
CZ (models 71G 72G 73G 74G BBG)	39J9074	1	Y
TR (models 71G 72G 73G 74G BBG)	39J9077	1	Y
GK (models 71G 72G 73G 74G BBG)	39J9080	1	Y
SL (models 71G 72G 73G 74G BBG)	39J9081	1	Y
Simplified Chinese (models 31C)	41W3422	1	Y
Hong Kong - TC (models 2CB 2DB 3CB 3DB)	41W3435	1	Y

Machine Type 8106



Item #	8106 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	39M0552	1	Y
2	Riser card and bracket assembly (RoHS) (all models)	39M0621	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models 2AM E2M)	39M0557	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (RoHS) (models 2AM E2M)	39M0618	1	Y

Item #	8106 FRUs	FRU#	CRU Tier	RoHS Compliant?
3	Power Supply (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	89P6805	2	N
3	Power Supply (all models)	41N3105	2	Y
4	Hard disk drive 80GB 7200rpm SATA (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	71P7293	1	N
4	Hard disk drive 80GB 7200rpm SATA (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1JA A6V 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	40Y8761	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1JAD A6V 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1JAD A6V 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 2AM E2M)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models 2AM E2M)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 2AM E2M)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 2AM E2M)	TBD	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models 2AM E2M)	TBD	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1C A2M A3M 23C 24C 28M 28A 28Q 28T B2M D1M)	26K5415	1	N

Item #	8106 FRUs	FRU#	CRU Tier	RoHS Compliant?
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1C A2M A3M 23C 24C 28M 28A 28Q 28T B2M D1M 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1C A2M A3M 23C 24C 28M 28A 28Q 28T B2M D1M 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	40Y8793	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1C A2M A3M 23C 24C 28M 28A 28Q 28T B2M D1M)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1C A2M A3M 23C 24C 28M 28A 28Q 28T B2M D1M 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models A1C A2M A3M 23C 24C 28M 28A 28Q 28T B2M D1M 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models 25C 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A5V B1V D2M D2V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models 25C 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A5V B1V D2M D2V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J A6V)	40Y8965	1	Y
6	DVD-ROM Drive (8X/24X) (models A6V)	40Y8959	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models 21K 22K 29M 2AM 27M A4V B3V E2M D3M D4V)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models 21K 22K 29M 2AM 27M A4V B3V E2M D3M D4V)	40Y8949	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models D1M D2M D2V D3M D4V)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J E2M)	39J7031	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 2ES 2EY 2EP)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 21K 22K 23C 24C 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ)	39J6095	2	Y

Item #	8106 FRUs	FRU#	CRU Tier	RoHS Compliant?
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J)	39J6096	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models A1C A4V A5V A6V)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models A2M A3M)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models B1V B2M B3V)	39J6088	2	Y
10	Microprocessor - P4 2.66Ghz Prescott, Intel 506 supporting EM64T (models 2DS 2DY 2DP)	41D1029	2	Y
10	Microprocessor - PA 620 2.0 GHZ 800MHZ 2M (models 61S 61Y 61P)	41X3138	2	Y
11	System board, Planar With 10/1000 Lan (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	39J6410	2	N
11	System board, Tobago (1.1C planar rev)w/ 10/1000 LAN (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models A1C 23C 24C 25C A6V 2DS 2DP 2DY 2ES 2EP 2EY)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models A2M A3M 21K 22K 26M 27M 28M 28A 28Q 28T 29M 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J 61S 61P 61Y)	30R5121	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8106 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y

8106 FRUs	FRU#	CRU Tier	RoHS Compliant?
Ultra Bay Enhanced Cable/Card Assembly (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (all models)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models A2M A3M 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V 31M D1M D2M D2V D3M D4V A6V 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	09K9827	1	Y

8106 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI-E DVI-D connection adapter (ADD2-R) (models 2AM)	19R2374	1	N
PCI-E DVI-D connection adapter (ADD2-R) (models 2AM)	39J9334	1	Y

8106 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
US/China English (models A2M A3M 26M 27M 28M 29M 2AM 28A 28Q 2BM 2BA 2BQ B2M 2CU 2CG 2CM 2CA 2CQ 2CH 2CR 2CE E2M D1M D2M D3M 41U 41G 41M 41A 41Q 41H 41R 41E E1U E1G E1M E1A E1Q E1H E1R E1E A1C 23C 24C 25C 2BC 2CC 41C E1C)	89P8300	1	Y
Arabic (models 2BG 2CG E1G 41G)	89P8301	1	Y
Belgian/French (models 2BG 2CG E1G 41G)	89P8302	1	Y
Belgian/UK (models 2BG 2CG E1G 41G)	89P8303	1	Y
Brazil/Portuguese (models 2BP 41P 2CP E1P 2DP 2EP 61P)	89P8304	1	Y
Bulgarian (models 2BG 2CG E1G 41G)	89P8305	1	Y
Chinese/US (models 2BC 2BV 2CC 41C E1C 2CV E1V 41V A4V A5V B1V B3V D2V D4V A6V)	89P8306	1	Y
Czech (models 2BG 2CG E1G 41G)	89P8307	1	Y
Danish (models 2BG 2CG E1G 41G)	89P8308	1	Y
Dutch (models 2BG 2CG E1G 41G)	89P8309	1	Y
French (models 2BG 2CG E1G 41G)	89P8310	1	Y
French Canadian 445 (models 41F E1F 2CF)	89P8311	1	Y
French Canadian 058 (models 41F E1F 2CF)	89P8312	1	Y

8106 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
German (models 2BG 2CG E1G 41G)	89P8313	1	Y
Greek (models 2BG 2CG E1G 41G)	89P8314	1	Y
Hebrew (models 2BG 2CG E1G 41G)	89P8315	1	Y
Hungarian (models 2BG 2CG E1G 41G)	89P8316	1	Y
Iceland (models 2BG 2CG E1G 41G)	89P8317	1	Y
Italian 141 (models 2BG 2CG E1G 41G)	89P8318	1	Y
Italian 142 (models 2BG 2CG E1G 41G)	89P8319	1	Y
Japanese (models 2BJ 2CJ E1J 41J)	89P8320	1	Y
Korean (models 21K 22K 2BK 2CK E1K 41K)	89P8321	1	Y
LA Spanish (models 2BD 2BY 2BS 2CS 2CD 2CY E1S E1D E1Y 41S 41D 41Y 2ES 2EY 2DS 2DY 61S 61Y)	89P8322	1	Y
Norwegian (models 2BG 2CG E1G 41G)	89P8323	1	Y
Polish (models 2BG 2CG E1G 41G)	89P8324	1	Y
Portuguese (models 2BG 2CG E1G 41G)	89P8325	1	Y
Romanian (models 2BG 2CG E1G 41G)	89P8326	1	Y
Russian/Cy (models 2BG 2CG E1G 41G)	89P8327	1	Y
Russian/Cy (models 2BG 2CG E1G 41G)	89P8328	1	Y
Serbian/Cyrillic (models 2BG 2CG E1G 41G)	89P8329	1	Y
Slovak (models 2BG 2CG E1G 41G)	89P8330	1	Y
Spanish (models 2BG 2CG E1G 41G)	89P8331	1	Y
Swedish/Finn (models 2BG 2CG E1G 41G)	89P8332	1	Y
Swiss French/German (models 2BG 2CG E1G 41G)	89P8333	1	Y
Thailand (models 28T)	89P8334	1	Y
Turkish 440 (models 2BG 2CG E1G 41G)	89P8335	1	Y
Turkish 179 (models 2BG 2CG E1G 41G)	89P8336	1	Y
UK English (models 2BG 2CG E1G 41G)	89P8337	1	Y
US Euro (models 2BG 2CG E1G 41G)	89P8338	1	Y
Yugoslav/Latin (models 2BG 2CG E1G 41G)	89P8339	1	Y

8106 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models A2M A3M 26M 27M 28M 29M 2AM 28A 28Q 2BM 2BA 2BQ B2M 2CU 2CG 2CM 2CA 2CQ 2CH 2CR 2CE E2M D1M D2M D3M 41U 41G 41M 41A 41Q 41H 41R 41E E1U E1G E1M E1A E1Q E1H E1R E1E)	41A5039	1	Y
Arabic (models 2BG 2CG E1G 41G)	41A5040	1	Y
Arabic/French (models 2BG 2CG E1G 41G)	41A5041	1	Y
Belgian/French (models 2BG 2CG E1G 41G)	41A5042	1	Y
Belgian/UK (models 2BG 2CG E1G 41G)	41A5043	1	Y
Brazilian Portuguese (models 2BP 41P 2CP E1P 2DP 2EP 61P)	41A5044	1	Y
Bulgarian (models 2BG 2CG E1G 41G)	41A5045	1	Y

8106 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
Chinese/US (models 2BC 2BV 2CC 41C E1C 2CV E1V 41V A4V A5V B1V B3V D2V D4V A6V)	41A5046	1	Y
Czech (models 2BG 2CG E1G 41G)	41A5047	1	Y
Danish (models 2BG 2CG E1G 41G)	41A5048	1	Y
Dutch (models 2BG 2CG E1G 41G)	41A5049	1	Y
French (models 2BG 2CG E1G 41G)	41A5050	1	Y
French Canadian 445 (models 41F E1F 2CF)	41A5051	1	Y
French Canadian 58 (models 41F E1F 2CF)	41A5052	1	Y
German (models 2BG 2CG E1G 41G)	41A50533	1	Y
Greek (models 2BG 2CG E1G 41G)	41A5054	1	Y
Greek/US (models 2BG 2CG E1G 41G)	41A5080	1	Y
Hebrew (models 2BG 2CG E1G 41G)	41A5055	1	Y
Hungarian (models 2BG 2CG E1G 41G)	41A5056	1	Y
Iceland (models 2BG 2CG E1G 41G)	41A5057	1	Y
Italy (models 2BG 2CG E1G 41G)	41A5058	1	Y
Japanese (models 2BJ 2CJ E1J 41J)	41A5059	1	Y
Korean (models 21K 22K 2BK 2CK E1K 41K)	41A5060	1	Y
LA Spanish (models 2BD 2BY 2BS 2CS 2CD 2CY E1S E1D E1Y 41S 41D 41Y 2ES 2EY 2DS 2DY 61S 61Y)	41A5061	1	Y
Norwegian (models 2BG 2CG E1G 41G)	41A5062	1	Y
Polish (models 2BG 2CG E1G 41G)	41A5063	1	Y
Portuguese (models 2BG 2CG E1G 41G)	41A5064	1	Y
Romanian (models 2BG 2CG E1G 41G)	41A5065	1	Y
Russian/Cy (models 2BG 2CG E1G 41G)	41A5066	1	Y
Serbian/Cyrillic (models 2BG 2CG E1G 41G)	41A5067	1	Y
Slovak (models 2BG 2CG E1G 41G)	41A5068	1	Y
Spanish (models 2BG 2CG E1G 41G)	41A5069	1	Y
Swedish/Finn (models 2BG 2CG E1G 41G)	41A5070	1	Y
Swiss French/German (models 2BG 2CG E1G 41G)	41A5071	1	Y
Thailand (models 28T)	41A5072	1	Y
Turkish (models 2BG 2CG E1G 41G)	41A5073	1	Y
Turkish (models 2BG 2CG E1G 41G)	41A5074	1	Y
UK English (models 2BG 2CG E1G 41G)	41A5075	1	Y
US Euro (models 2BG 2CG E1G 41G)	41A5076	1	Y
Slovenian (models 2BG 2CG E1G 41G)	41A5077	1	Y

8106 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, optical wheelmouse (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J A6V 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	41A4935	1	Y
Mouse, optical wheelmouse (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M D1M D2M D2V D3M D4V 2CU 2CF 2CS 2CP 2CD 2CY 2CG 2CM 2CA 2CQ 2CT 2CC 2CB 2CH 2CV 2CK 2CR 2CE 2CJ 41U 41F 41S 41P 41D 41Y 41G 41M 41A 41Q 41T 41C 41B 41H 41V 41K 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J)	89P5089	1	N
Mouse, optical wheelmouse (400 dpi) (models A1C A2M A3M 21K 22K 23C 24C 25C 26M 27M 28M 28A 28Q 28T 29M 2AM 2BU 2BF 2BS 2BP 2BU 2BD 2BY 2BG 2BM 2BA 2BQ 2BT 2BC 2BB 2BH 2BV 2BK 2BR 2BE 2BJ A4V A5V B1V B2M B3V E2M 41R 41E 41J E1U E1F E1S E1P E1D E1Y E1G E1M E1A E1Q E1T E1C E1B E1H E1V E1K E1R E1E E1J A6V 2DS 2DP 2DY 2ES 2EP 2EY 61S 61P 61Y)	41U3013	1	Y

8106 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models A2M A3M 26M 27M 28M 28A 28Q 28T 29M 2AM 2BM 2BA 2BQ 2BT)	6952301	1	N
Power Cord (ANZ) (models 28A 2BM 41M E2M 2CM E2M)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models 28A 21K 22K 2BA 2BK 2BM 2CA 41A E1A E1G 2CG 41G 41M E1M 2CM 41K E1K 2CK E2M)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models 28A 2BA 2BM 2BH 2CA 41A E1A E1G 2CG 41G 41M E1M 2CM 41B E1B 2CB 41H 2CH E1H E2M)	14F0032	1	N
Power Cord (EMEA) (models 2BG)	13F9996	1	N
Power Cord (EMEA, LA) (models 2BG E1G 2CG 41G E1S E1P E1D 2CS 2CP 2CD 41S 41P 41D)	14F0068	1	N
Power Cord (APU) (models 41Y E1Y 2CY)	36L8879	1	N
Power Cord (Japan) (models 2BJ 2CJ 41J E1J)	05K2876	1	N
Power Cord (China, HK) (models 2BC 2BB 2BH E1C 2CC 41C E1B 41B 2CB E1H 41H 2CH)	02K0545	1	N
Power Cord (EMEA) (models 2BG)	14F0086	1	N
Power Cord (EMEA, ANZ, ASEAN Eng) (models 28A 2CA 41A E1A E1G 2CG 41G 41M E1M 2CM E2M)	14F0014	1	N
Power Cord (EMEA) (models 2BG)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y

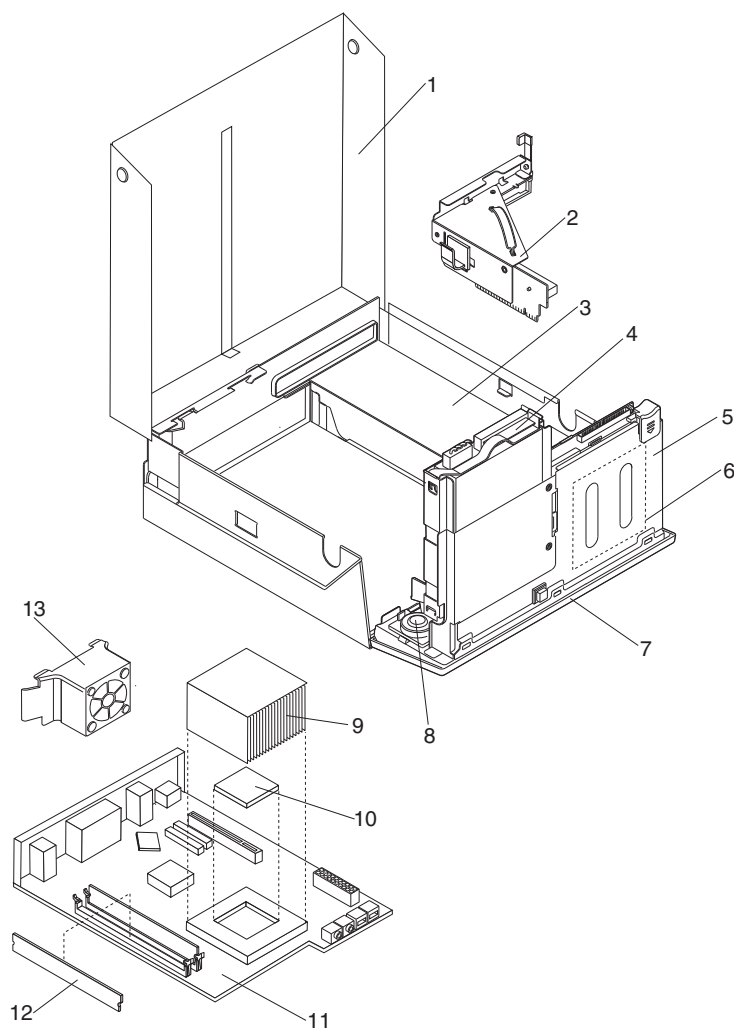
8106 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8106 Windows XP Home Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models A2M 27M)	39J8901	1	Y
Taiwan - TC (models A4V B3V D4V)	41W3463	1	Y

8106 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models A3M 26M 27M 28M 29M 2AM 28A 28Q 28T 2BU 2BG 2BM 2BA 2BQ 2BT 2BH 2BR 2BE E2M)	39J9061	1	Y
FR/CF (models 2BG 2CG E1G 41G)	39J9062	1	Y
GR (models 2BG 2CG E1G 41G)	39J9063	1	Y
IT (models 2BG 2CG E1G 41G)	39J9065	1	Y
BR (models 2BG 2CG 41G E1G 2EP 2DP 61P)	39J9066	1	Y
SP/LA (models 2BG 2CG 41G E1G 2ES 2EY 2DS 2DY 61S 61Y)	39J9064	1	Y
DK (models 2BG 2CG E1G 41G)	39J9068	1	Y
NL (models 2BG 2CG E1G 41G)	39J9071	1	Y
AE (models 2BG 2CG E1G 41G)	39J9075	1	Y
SV (models 2BG 2CG E1G 41G)	39J9067	1	Y
HE (models 2BG 2CG E1G 41G)	39J9072	1	Y
FI (models 2BG 2CG E1G 41G)	39J9069	1	Y
NO (models 2BG 2CG E1G 41G)	39J9070	1	Y
PL (models 2BG 2CG E1G 41G)	39J9073	1	Y
PO (models 2BG 2CG E1G 41G)	39J9079	1	Y
RU (models 2BG 2CG E1G 41G)	39J9076	1	Y
HU (models 2BG 2CG E1G 41G)	39J9078	1	Y
CZ (models 2BG 2CG E1G 41G)	39J9074	1	Y
TR (models 2BG 2CG E1G 41G)	39J9077	1	Y
GK (models 2BG 2CG E1G 41G)	39J9080	1	Y

8106 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
SL (models 2BG 2CG E1G 41G)	39J9081	1	Y
Japanese (models 2BJ 2CJ 41J E1J)	41W3442	1	Y
Simplified Chinese (models 24C 25C 2BC 2CC E1C 41C)	41W3422	1	Y
Taiwan - TC (models 2BV A6V)	41W3428	1	Y
Hong Kong - TC (models 2BB E1B 41B 2CB)	41W3435	1	Y
Korea (models 21K 22K 2BK 2CK E1K 41K)	41W3415	1	Y

Machine Type 8107



Item #	8107 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	PCI riser card and bracket assembly (models A1S A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G)	39M0552	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y
3	Power Supply (all models)	89P6805	2	N
3	Power Supply (all models)	41N3105	2	Y
4	Hard disk drive, 40GB 7200rpm SATA (models CTO)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models CTO)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA (models CTO)	40Y9033	1	Y

Item #	8107 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 77G)	71P7293	1	N
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 77G 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 79G)	40Y8761	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 77G 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 79G)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 77G 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 79G)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G 78G)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G 78G 93S 93Y 93P)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G 78G 93S 93Y 93P)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G 78G 93S 93Y 93P)	TBD	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 74G 75G 76G 78G 93S 93Y 93P)	TBD	1	Y
4	Hard disk drive 250GB SATA (models CTO)	40Y9036	1	Y
4	Hard disk drive 250GB SATA (models CTO)	40Y8763	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models CTO)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models CTO)	40Y8757	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P)	40Y8793	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P)	92P6565	1	N

Item #	8107 FRUs	FRU#	CRU Tier	RoHS Compliant?
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO 71G 72G 73G 77G)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models CTO 71G 72G 73G 77G)	40Y8965	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO 71G 72G 73G 77G)	40Y8959	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 32S 32Y 32P 22S 22Y 22P D1S D1Y D1P D2S D2Y D2P E1S E1Y E1P E2S E2Y E2P 74G 75G 76G 78G 93S 93Y 93P)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 32S 32Y 32P 22S 22Y 22P D1S D1Y D1P D2S D2Y D2P E1S E1Y E1P E2S E2Y E2P 74G 75G 76G 78G 93S 93Y 93P)	40Y8949	1	Y
6	Multi-Burner Plus (Rambo 4) Ultrabay Enhanced Drive (RoHS) (models CTO 79G)	40Y8951	1	Y
6	Slim PATA RAMBO 5 drive (models CTO 79G)	41N3355	1	Y
6	Slim Rambo-5 (models CTO 79G)	TBD	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	39K5012	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO D1S D1Y D1P D2S D2Y D2P 74G 77G)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO E1S E1Y E1P E2S E2Y E2P 75G 78G)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO 76G)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 721S 21Y 21P 22S 22Y 22P 71G)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 31S 31Y 31P 32S 32Y 32P 72G 91S 91Y 91P 92S 92Y 92P 93S 93Y 93P)	39J6095	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 73G)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models CTO 11S 11Y 11P)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models CTO 12S 12Y 12P)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models CTO A1S A1P A1Y)	39J6084	2	Y

Item #	8107 FRUs	FRU#	CRU Tier	RoHS Compliant?
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models CTO A2S A2Y A2P)	39J6085	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models CTO B1S B1Y B1P)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models CTO B2S B2Y B2P)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models CTO B3S B3Y B3P)	39J6088	2	Y
10	Microprocessor - P4 3.06 Ghz/533/1MB 519K (models 61S 61Y 61P 62S 62Y 62P)	41T1125	2	Y
10	Microprocessor - P4 620 PROCESSOR 2.80 (800/2M) (models 79G)	41X3138	2	Y
11	System board, Planar With 10/1000 Lan (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G)	39J6410	2	Y
11	System board, Tobago (1.1C planar rev)w/ 10/1000 LAN (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G)	41T1121	2	N
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO A1S A1Y A1P A2S A2Y A2P B1S B1Y B1P B2S B2Y B2P B3S B3Y B3P 11S 11Y 11P 12S 12Y 12P 21S 21Y 21P 31S 31Y 31P 71G 72G 73G 77G 61S 61Y 61P 91S 91Y 91P)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO 22S 22Y 22P 32S 32Y 32P D1S D1Y D1P D2S D2Y D2P E1S E1Y E1P E2S E2Y E2P 74G 75G 76G 78G 62S 62Y 62P 92S 92Y 92P 93S 93Y 93P 79G)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8107 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (models A1S A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (models 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 93S 93Y 93P 79G)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y
Cable, intrusion switch (all models)	39K5022	1	Y

8107 FRUs	FRU#	CRU Tier	RoHS Compliant?
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 74G 75G 76G 78G 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 93S 93Y 93P 79G)	09K9827	1	Y

8107 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8300	1	Y
Arabic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8301	1	Y
Belgian/French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8302	1	Y
Belgian/UK (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8303	1	Y
Brazilian Portuguese (models CTO-L A1P A2P B1P B2P B3P 11P 12P 21P 31P D1P E1P E2P 61P 62P 91P 92P 93P)	89P8304	1	Y
Bulgarian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8305	1	Y
Chinese/US (models CTO-A)	89P8306	1	Y
Czech (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8307	1	Y
Danish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8308	1	Y
Dutch (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8309	1	Y
French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8310	1	Y
French Canadian 445 (models CTO-U)	89P8311	1	Y
French Canadian 58 (models CTO-U)	89P8312	1	Y
German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8313	1	Y
Greek (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8314	1	Y
Hebrew (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8315	1	Y
Hungarian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8316	1	Y
Iceland (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8317	1	Y
Italian 141 (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8318	1	Y
Italian 142 (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8319	1	Y
LA Spanish (models CTO-L A1S A2S B1S B2S B3S 11S 12S 21S 31S D1S E1S A1Y A2Y B1Y B2Y B3Y 11Y 12Y 21Y 31Y D1Y E1Y 61S 62S 61Y 62Y 91S 91Y 92S 92Y 93S 93Y)	89P8322	1	Y
Norwegian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8323	1	Y
Polish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8324	1	Y
Portuguese (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8325	1	Y
Romanian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8326	1	Y

8107 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
Russian/Cy (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8328	1	Y
Serbian/Cyrillic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8329	1	Y
Slovak (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8330	1	Y
Spanish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8331	1	Y
Swedish/Finn (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8332	1	Y
Swiss French/German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8333	1	Y
Thailand (models CTO-A)	89P8334	1	Y
Turkish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8336	1	Y
UK English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8337	1	Y
US Euro (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8338	1	Y
Yugoslav/Latin (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	89P8339	1	Y

8107 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P8800	1	Y
Arabic (models CTO-G)	89P8801	1	Y
Arabic/French (models CTO-G)	89P8802	1	Y
Belgian/French (models CTO-G)	89P8803	1	Y
Belgian/English (models CTO-G)	89P8804	1	Y
Brazil/Portuguese (models CTO-L)	89P8805	1	Y
Bulgarian (models CTO-G)	89P8806	1	Y
Chinese/US (models CTO-A)	89P8807	1	Y
Czech (models CTO-G)	89P8808	1	Y
Danish (models CTO-G)	89P8809	1	Y
Dutch (models CTO-G)	89P8810	1	Y
French (models CTO-G)	89P8811	1	Y
French Canadian 445 (models CTO-U)	89P8812	1	Y
French Canadian 58 (models CTO-U)	89P8813	1	Y
German (models CTO-G)	89P8814	1	Y
Greek (models CTO-G)	89P8815	1	Y
Hebrew (models CTO-G)	89P8816	1	Y
Hungarian (models CTO-G)	89P8817	1	Y
Iceland (models CTO-G)	89P8818	1	Y
Italian (models CTO-G)	89P8819	1	Y
LA Spanish (models CTO-L)	89P8822	1	Y
Norwegian (models CTO-G)	89P8823	1	Y
Polish (models CTO-G)	89P8824	1	Y
Portuguese (models CTO-G)	89P8825	1	Y
Romanian (models CTO-G)	89P8826	1	Y
Romanian (models CTO-G)	89P8827	1	Y

8107 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
Russian/Cyrillic (models CTO-G)	89P8828	1	Y
Serbian/Cyrillic (models CTO-G)	89P8829	1	Y
Slovak (models CTO-G)	89P8830	1	Y
Spanish (models CTO-G)	89P8831	1	Y
Swedish/Finn (models CTO-G)	89P8832	1	Y
Swiss French/German (models CTO-G)	89P8833	1	Y
Thailand (models CTO-A)	89P8834	1	Y
Turkish (models CTO-G)	89P8835	1	Y
Turkish (models CTO-G)	89P8836	1	Y
UK English (models CTO-G)	89P8837	1	Y
US Euro (models CTO-G)	89P8838	1	Y
Yugoslav/Latin (models CTO-G)	89P8839	1	Y

8107 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P9000	1	Y
Arabic (models CTO-G)	89P9001	1	Y
Belgian/French (models CTO-G)	89P9003	1	Y
Belgian/UK (models CTO-G)	89P9004	1	Y
Brazilian Portuguese (models CTO-L 22P 32P D2P E2P)	89P9005	1	Y
Bulgarian (models CTO-G)	89P9006	1	Y
Czech (models CTO-G)	89P9008	1	Y
Danish (models CTO-G)	89P9009	1	Y
Dutch (models CTO-G)	89P9010	1	Y
French (models CTO-G)	89P9011	1	Y
French Canadian 445 (models CTO-U)	89P9012	1	Y
French Canadian 58 (models CTO-U)	89P9013	1	Y
German (models CTO-G)	89P9014	1	Y
Greek (models CTO-G)	89P9015	1	Y
Hebrew (models CTO-G)	89P9016	1	Y
Hungarian (models CTO-G)	89P9017	1	Y
Iceland (models CTO-G)	89P9018	1	Y
Korean (models CTO-G)	89P9021	1	Y
LA Spanish (models CTO-L 22S 22Y 32S 32Y D2S D2Y E2S E2Y)	89P9022	1	Y
Norwegian (models CTO-G)	89P9023	1	Y
Polish (models CTO-G)	89P9024	1	Y
Portuguese (models CTO-G)	89P9025	1	Y
Romanian (models CTO-G)	89P9026	1	Y
Romanian (models CTO-G)	89P9027	1	Y
Russian/Cyrillic (models CTO-G)	89P9028	1	Y

8107 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
Serbian/Cyrillic (models CTO-G)	89P9029	1	Y
Slovak (models CTO-G)	89P9030	1	Y
Spanish (models CTO-G)	89P9031	1	Y
Swedish/Finn (models CTO-G)	89P9032	1	Y
Swiss French/German (models CTO-G)	89P9033	1	Y
Thailand (models CTO-A)	89P9034	1	Y
Turkish 440 (models CTO-G)	89P9035	1	Y
Turkish 179 (models CTO-G)	89P9036	1	Y
UK English (models CTO-G)	89P9037	1	Y
US Euro (models CTO-G)	89P9038	1	Y
Yugoslav/Latin (models CTO-G)	89P9039	1	Y

8107 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A4961	1	Y
Arabic/French (models CTO-G)	41A4963	1	Y
Belgian/French (models CTO-G)	41A4964	1	Y
Belgian/English (models CTO-G)	41A4965	1	Y
Brazil/Portuguese (models CTO-G)	41A4966	1	Y
Bulgarian (models CTO-L)	41A4967	1	Y
Chinese/US (models CTO-A)	41A4968	1	Y
Czech (models CTO-G)	41A4969	1	Y
Danish (models CTO-G)	41A4970	1	Y
Dutch (models CTO-G)	41A4971	1	Y
French (models CTO-G)	41A4972	1	Y
French Canadian 445 (models CTO-U)	41A4973	1	Y
French Canadian 58 (models CTO-U)	41A4974	1	Y
German (models CTO-G)	41A4975	1	Y
Greek (models CTO-G)	41A4976	1	Y
Greek/US (models CTO-G)	41A5078	1	Y
Hebrew (models CTO-G)	41A4977	1	Y
Hungarian (models CTO-G)	41A4978	1	Y
Iceland (models CTO-G)	41A4979	1	Y
Italian (models CTO-G)	41A4980	1	Y
LA Spanish (models CTO-L)	41A4983	1	Y
Norwegian (models CTO-G)	41A4984	1	Y
Polish (models CTO-G)	41A4985	1	Y
Portuguese (models CTO-G)	41A4986	1	Y
Romanian (models CTO-G)	41A4987	1	Y
Russian/Cyrillic (models CTO-G)	41A4988	1	Y

8107 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
Serbian/Cyrillic (models CTO-G)	41A4989	1	Y
Slovak (models CTO-G)	41A4990	1	Y
Spanish (models CTO-G)	41A4991	1	Y
Swedish/Finn (models CTO-G)	41A4992	1	Y
Swiss French/German (models CTO-G)	41A4993	1	Y
Thailand (models CTO-A)	41A4994	1	Y
Turkish (models CTO-G)	41A4995	1	Y
Turkish (models CTO-G)	41A4996	1	Y
UK English (models CTO-G)	41A4997	1	Y
US Euro (models CTO-G)	41A4998	1	Y
Slovenian (models CTO-G)	41A4999	1	Y

8107 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A5248	1	Y
Arabic/French (models CTO-G)	41A5250	1	Y
Belgian/French (models CTO-G)	41A5251	1	Y
Belgian/English (models CTO-G)	41A5252	1	Y
Brazil/Portuguese (models CTO-L 22P 32P D2P E2P)	41A5253	1	Y
Bulgarian (models CTO-G)	41A5254	1	Y
Czech (models CTO-G)	41A5256	1	Y
Danish (models CTO-G)	41A5257	1	Y
Dutch (models CTO-G)	41A5258	1	Y
French (models CTO-G)	41A5259	1	Y
French Canadian 445 (models CTO-U)	41A5260	1	Y
French Canadian 58 (models CTO-U)	41A5261	1	Y
German (models CTO-G)	41A5262	1	Y
Greek (models CTO-G)	41A5263	1	Y
Greek/US (models CTO-G)	41A5264	1	Y
Hebrew (models CTO-G)	41A5265	1	Y
Hungarian (models CTO-G)	41A5266	1	Y
Iceland (models CTO-G)	41A5267	1	Y
Italian (models CTO-G)	41A5268	1	Y
LA Spanish (models CTO-L 22S 22Y 32S 32Y D2S D2Y E2S E2Y)	41A5271	1	Y
Norwegian (models CTO-G)	41A5272	1	Y
Polish (models CTO-G)	41A5273	1	Y
Portuguese (models CTO-G)	41A5274	1	Y
Romanian (models CTO-G)	41A5275	1	Y
Romanian (models CTO-G)	41A5276	1	Y
Russian/Cyrillic (models CTO-G)	41A5277	1	Y

8107 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
Serbian/Cyrillic (models CTO-G)	41A5278	1	Y
Slovak (models CTO-G)	41A5279	1	Y
Spanish (models CTO-G)	41A5280	1	Y
Swedish/Finn (models CTO-G)	41A5281	1	Y
Swiss French/German (models CTO-G)	41A5282	1	Y
Thailand (models CTO-A)	41A5283	1	Y
Turkish (models CTO-G)	41A5284	1	Y
Turkish (models CTO-G)	41A5285	1	Y
UK English (models CTO-G)	41A5286	1	Y
US Euro (models CTO-G)	41A5287	1	Y
Slovenian (models CTO-G)	41A5288	1	Y

8107 Keyboards (Perferred PRO fullsize keyboard PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5039	1	Y
Arabic/French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5041	1	Y
Belgian/French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5042	1	Y
Belgian/English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5043	1	Y
Brazil/Portuguese (models CTO-L A1P A2P B1P B2P B3P 11P 12P 21P 31P D1P E1P E2P 61P 62P 91P 92P 93P)	41A5044	1	Y
Bulgarian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5045	1	Y
Chinese/US (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5046	1	Y
Czech (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5047	1	Y
Danish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5048	1	Y
Dutch (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5049	1	Y
French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5050	1	Y
French Canadian 445 (models CTO-U)	41A5051	1	Y
French Canadian 58 (models CTO-U)	41A5052	1	Y
German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5053	1	Y
Greek (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5054	1	Y
Greek/US (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5080	1	Y
Hebrew (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5055	1	Y
Hungarian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5056	1	Y
Iceland (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5057	1	Y
Italian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5058	1	Y
LA Spanish (models CTO-L A1S A2S B1S B2S B3S 11S 12S 21S 31S D1S E1S A1Y A2Y B1Y B2Y B3Y 11Y 12Y 21Y 31Y D1Y E1Y 61S 62S 61Y 62Y 91S 91Y 92S 92Y 93S 93Y)	41A5061	1	Y
Norwegian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5062	1	Y
Polish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5063	1	Y
Portuguese (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5064	1	Y

8107 Keyboards (Perferred PRO fullsize keyboard PS/2)	FRU#	CRU Tier	RoHS Compliant?
Romanian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5065	1	Y
Russian/Cyrillic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5066	1	Y
Serbian/Cyrillic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5067	1	Y
Slovak (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5068	1	Y
Spanish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5069	1	Y
Swedish/Finn (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5070	1	Y
Swiss French/German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5071	1	Y
Thailand (models CTO-A)	41A5072	1	Y
Turkish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5073	1	Y
Turkish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5074	1	Y
UK English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5075	1	Y
US Euro (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5076	1	Y
Slovenian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 78G 79G)	41A5077	1	Y

8107 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, Wheel Mouse (models CTO A1S A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 93S 93Y 93P 79G)	41A4935	1	Y
Mouse, Optical Wheel Mouse USB (400dpi) (models CTO A1S A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G 61S 61Y 61P 62S 62Y 62P 91S 91Y 91P 92S 92Y 92P 93S 93Y 93P 79G)	41U3013	1	Y
Mouse, Wheel Mouse (models CTO A1S, A1P A1Y A2S A2P A2Y B1S B1P B1Y B2S B2P B2Y B3S B3P B3Y 11S 11P 11Y 12S 12P 12Y 21S 21P 21Y 22S 22P 22Y 31S 31P 31Y 32S 32P 32Y D1S D1P D1Y D2S D2P D2Y E1S E1Y E1P E2S E2Y E2P 71G 72G 73G 74G 75G 76G 77G 78G)	89P5089	1	N

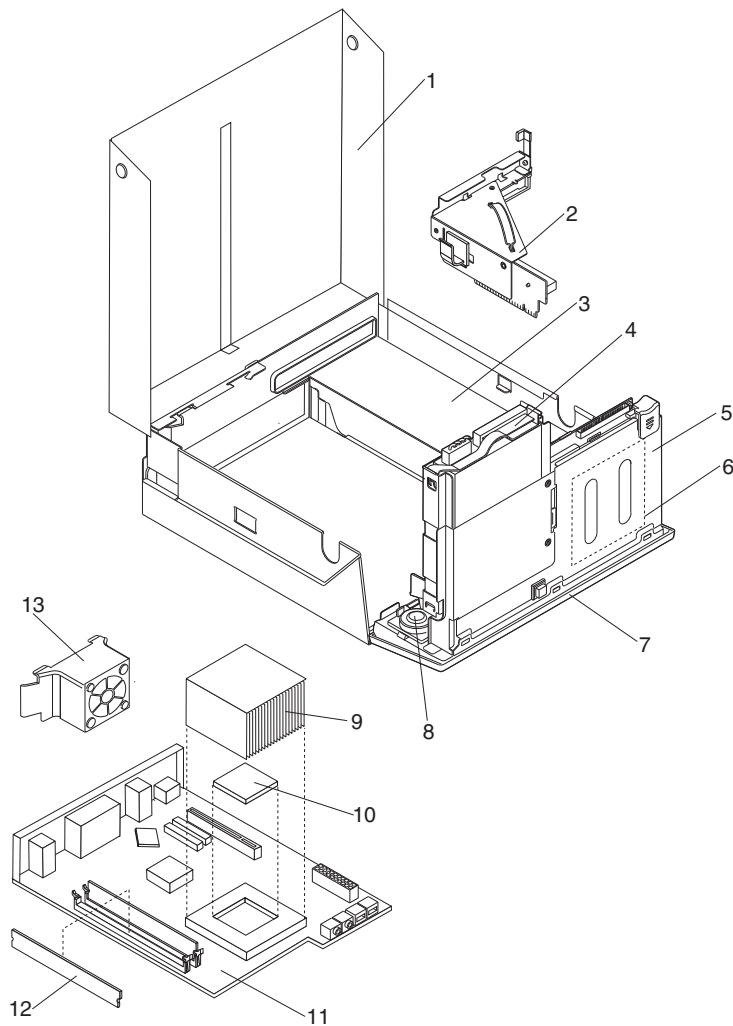
8107 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI Modem Card (Soft), ATX V.90 (models CTO)	22P7943	1	N
PCI Modem Card (Soft), V.90/V.44 (models CTO)	29R9729	1	Y
Intel Pro Gigabit Enet / 1000T (Card) ATX (models CTO)	22P6509	1	N
IEEE 1394 Adapter - Firewire (models CTO)	73P2608	1	N
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	19R2374	1	N

8107 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models CTO A1S A1P A2S A2P B1S B1P B2S B2P B3S B3P 11S 11P 12S 12P 21S 21P 22S 22P 31S 31P 32S 32P D1S D1P D2S D2P E1S E1P E2S E2P 71G 72G 73G 74G 75G 76G 77G 78G)	6952301	1	N
Power Cord (ANZ) (models CTO-A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models CTO-E CTO-A 71G 72G 73G 74G 75G 77G 78G)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models CTO-E CTO-A 71G 72G 73G 74G 75G 77G 78G)	14F0032	1	N
Power Cord (EMEA) (models CTO-E 71G 72G 73G 74G 75G 77G 78G)	13F9996	1	N
Power Cord (EMEA, LA) (models CTO A1S A1P A2S A2P B1S B1P B2S B2P B3S B3P 11S 11P 12S 12P 21S 21P 22S 22P 31S 31P 32S 32P D1S D1P D2S D2P E1S E1P E2S E2P 71G 72G 73G 74G 75G 76G 77G 78G)	14F0068	1	N
Power Cord (APU) (models CTO-L A1Y A2Y B1Y B2Y B3Y 11Y 12Y 21Y 22Y 31Y 32Y D1Y D2Y E1Y E2Y)	36L8879	1	N
Power Cord (China, HK) (models CTO-A)	02K0545	1	N
Power Cord (EMEA) (models CTO-E 71G 72G 73G 74G 75G 77G 78G)	14F0086	1	N
Power Cord (EMEA, ANZ, ASEAN Eng) (models CTO-E CTO-A 71G 72G 73G 74G 75G 77G 78G)	14F0014	1	N
Power Cord (EMEA) (models CTO-E 71G 72G 73G 74G 75G 77G 78G)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8107 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9061	1	Y
FR/CF (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9062	1	Y
GR (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9063	1	Y

8107 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
IT (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9065	1	Y
BR (models A1P A2P B1P B2P B3P 11P 12P 21P 22P 31P 32P D1P D2P E1P E2P 61P 62P 91P 92P 93P)	39J9066	1	Y
SP/LA (models 71G 72G 73G 74G 75G 76G CTO-L CTO-E A1Y A1S A2Y A2S B1Y B1S B2Y B2S B3Y B3S 11Y 11S 12Y 12S 21Y 21S 22Y 22S 31Y 31S 32Y 32S D1Y D1S D2S D2Y E1Y E1S E2Y E2S 61S 62S 61Y 62Y 91S 91Y 92S 92Y 93S 93Y)	39J9064	1	Y
DK (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9068	1	Y
NL (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9071	1	Y
AE (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9075	1	Y
SV (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9067	1	Y
HE (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9072	1	Y
FI (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9069	1	Y
NO (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9070	1	Y
PL (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9073	1	Y
PO (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9079	1	Y
RU (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9076	1	Y
HU (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9078	1	Y
CZ (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9074	1	Y
TR (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9077	1	Y
GK (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9080	1	Y
SL (models 71G 72G 73G 74G 75G 76G CTO 77G 78G 79G)	39J9081	1	Y

Machine Type 8108



Item #	8108 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K 31V)	39M0552	1	Y
2	Riser card and bracket assembly (RoHS) (all models)	39M0621	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (RoHS) (models 31V)	39M0618	1	Y
3	Power Supply (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K)	89P6805	2	N
3	Power Supply (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K 31V)	41N3105	2	Y

Item #	8108 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive, 40GB 7200rpm SATA (models B1G 21A 21Q 21T 21B 21H 21V CTO)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models B1G 21A 21Q 21T 21B 21H 21V CTO)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA (models B1G 21A 21Q 21T 21B 21H 21V CTO)	40Y9033	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO B2K B3K B4K 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K)	71P7293	1	N
4	Hard disk drive 80GB 7200rpm SATA (models CTO B2K B3K B4K 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K)	40Y8761	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO B2K B3K B4K 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO B2K B3K B4K 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 28K 29K 2AK E1K)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models CTO 28K 29K 2AK E1K 31V)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 28K 29K 2AK E1K 31V)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 28K 29K 2AK E1K 31V)	TBD	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 28K 29K 2AK E1K 31V)	TBD	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 21A 21Q 21T 21B 21H 21V 21S 21Y 21P B2K B3K 22V 22K 26A 26Q 26T 26B 26H CTO)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 21A 21Q 21T 21B 21H 21V 21S 21Y 21P B2K B3K 22V 22K 26A 26Q 26T 26B 26H CTO)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 21A 21Q 21T 21B 21H 21V 21S 21Y 21P B2K B3K 22V 22K 26A 26Q 26T 26B 26H CTO)	40Y8793	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 21A 21Q 21T 21B 21H 21V 21S 21Y 21P B2K B3K 22V 22K 26A 26Q 26T 26B 26H CTO)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (RoHS) (models B1G 21A 21Q 21T 21B 21H 21V 21S 21Y 21P B2K B3K 22V 22K 26A 26Q 26T 26B 26H CTO)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (RoHS) (models B1G 21A 21Q 21T 21B 21H 21V 21S 21Y 21P B2K B3K 22V 22K 26A 26Q 26T 26B 26H CTO)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models CTO)	40Y8959	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO)	40Y8965	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (RoHS) (models CTO B4K 23K 24K 25K 27K 28K 29K 2AK E1K 31V)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (RoHS) (models CTO B4K 23K 24K 25K 27K 28K 29K 2AK E1K 31V)	40Y8949	1	Y
6	Multi-Burner Plus Ultrabay Enhanced Drive (RoHS) (models CTO)	40Y8951	1	Y

Item #	8108 FRUs	FRU#	CRU Tier	RoHS Compliant?
6	Slim PATA RAMBO 5 drive (models CTO)	41N3355	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO E1K)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 21A 21Q 21T 21B 21H 21V 21S 21Y 21P 22V 22K 2323K 24K 25K 26A 26Q 26T 26B 26H CTO 2AK)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 27K)	39J6095	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 28K 29K)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models CTO)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models CTO)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6084	2	Y
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6085	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models CTO B2K)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models B1G CTO)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models CTO B3K B4K)	39J6088	2	Y
10	Microprocessor - P4 524 processor 3.06Ghz/533/1M (models 31V)	41T4104	2	Y
11	System board, Planar With 10/1000 Lan (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K)	39J6410	2	N
11	System board, Tobago (1.1C planar rev)w/ 10/1000 LAN (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K 31V)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models B1G 21A 21Q 21T 21B 21H 21V B2K B3K 21S 21Y 21P 22V 22K 23K 26A 26Q 26T 26B 26H CTO)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO B4K 24K 25K 27K 28K 29K 2AK E1K 31V)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8108 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (all models)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models B3K B4K)	09K9827	1	Y

8108 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI Modem Card (Soft), ATX V.90 (models CTO)	22P7943	1	N
Intel Pro Gigabit Enet / 1000T (Card) ATX (models CTO)	22P6509	1	N
IEEE 1394 Adapter - Firewire (models CTO)	73P2608	1	N
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	19R2374	1	N

8108 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
US English (models B1G 21A 21Q 21H 26A 26Q 26H CTO)	89P8300	1	Y
Arabic (models B1G CTO-G)	89P8301	1	Y
Belgian/French (models B1G CTO-G)	89P8302	1	Y
Belgian/UK (models B1G CTO-G)	89P8303	1	Y
Brazil/Portuguese (models CTO-L 21P)	89P8304	1	Y
Bulgarian (models CTO-G)	89P8305	1	Y
Chinese/US (models 21B 21V 22V 26B CTO-A 31V)	89P8306	1	Y
Czech (models B1G CTO-G)	89P8307	1	Y
Danish (models B1G CTO-G)	89P8308	1	Y
Dutch (models B1G CTO-G)	89P8309	1	Y
French (models B1G CTO-G)	89P8310	1	Y
French Canadian 445 (models CTO-U)	89P8311	1	Y

8108 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
French Canadian 58 (models CTO-U)	89P8312	1	Y
German (models B1G CTO-G)	89P8313	1	Y
Greek (models B1G CTO-G)	89P8314	1	Y
Hebrew (models B1G CTO-G)	89P8315	1	Y
Hungarian (models B1G CTO-G)	89P8316	1	Y
Iceland (models B1G CTO-G)	89P8317	1	Y
Italian 141 (models B1G CTO-G)	89P8318	1	Y
Italian 142 (models B1G CTO-G)	89P8319	1	Y
Korean (models B2K 22K 23K 24K 27K 28K 2AK E1K)	89P8321	1	Y
LA Spanish (models CTO-L 21Y 21S)	89P8322	1	Y
Norwegian (models B1G CTO-G)	89P8323	1	Y
Polish (models B1G CTO-G)	89P8324	1	Y
Portuguese (models B1G CTO-G)	89P8325	1	Y
Romanian (models B1G CTO-G)	89P8326	1	Y
Russian/Cy (models B1G CTO-G)	89P8327	1	Y
Russian/Cy (models B1G CTO-G)	89P8328	1	Y
Serbian/Cyrillic (models B1G CTO-G)	89P8329	1	Y
Slovak (models B1G CTO-G)	89P8330	1	Y
Spanish (models B1G CTO-G)	89P8331	1	Y
Swedish/Finn (models B1G CTO-G)	89P8332	1	Y
Swiss French/German (models B1G CTO-G)	89P8333	1	Y
Thailand (models 21T 26T CTO-A)	89P8334	1	Y
Turkish 440 (models B1G CTO-G)	89P8335	1	Y
Turkish 179 (models B1G CTO-G)	89P8336	1	Y
UK English (models B1G CTO-G)	89P8337	1	Y
US Euro (models B1G CTO-G)	89P8338	1	Y
Yugoslav/Latin (models B1G CTO-G)	89P8339	1	Y

8108 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P8800	1	Y
Arabic (models CTO-G)	89P8801	1	Y
Arabic/French (models CTO-G)	89P8802	1	Y
Belgian/French (models CTO-G)	89P8803	1	Y
Belgian/English (models CTO-G)	89P8804	1	Y
Brazil/Portuguese (models CTO-L)	89P8805	1	Y
Bulgarian (models CTO-G)	89P8806	1	Y
Chinese/US (models CTO-A)	89P8807	1	Y
Czech (models CTO-G)	89P8808	1	Y
Danish (models CTO-G)	89P8809	1	Y

8108 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
Dutch (models CTO-G)	89P8810	1	Y
French (models CTO-G)	89P8811	1	Y
French Canadian 445 (models CTO-U)	89P8812	1	Y
French Canadian 58 (models CTO-U)	89P8813	1	Y
German (models CTO-G)	89P8814	1	Y
Greek (models CTO-G)	89P8815	1	Y
Hebrew (models CTO-G)	89P8816	1	Y
Hungarian (models CTO-G)	89P8817	1	Y
Iceland (models CTO-G)	89P8818	1	Y
Italian (models CTO-G)	89P8819	1	Y
LA Spanish (models CTO-L)	89P8822	1	Y
Norwegian (models CTO-G)	89P8823	1	Y
Polish (models CTO-G)	89P8824	1	Y
Portuguese (models CTO-G)	89P8825	1	Y
Romanian (models CTO-G)	89P8826	1	Y
Russian/Cyrillic (models CTO-G)	89P8828	1	Y
Serbian/Cyrillic (models CTO-G)	89P8829	1	Y
Slovak (models CTO-G)	89P8830	1	Y
Spanish (models CTO-G)	89P8831	1	Y
Swedish/Finn (models CTO-G)	89P8832	1	Y
Swiss French/German (models CTO-G)	89P8833	1	Y
Thailand (models CTO-A)	89P8834	1	Y
Turkish (models CTO-G)	89P8835	1	Y
Turkish (models CTO-G)	89P8836	1	Y
UK English (models CTO-G)	89P8837	1	Y
US Euro (models CTO-G)	89P8838	1	Y
Yugoslav/Latin (models CTO-G)	89P8839	1	Y

8108 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P9000	1	Y
Arabic (models CTO-G)	89P9001	1	Y
Belgian/French (models CTO-G)	89P9003	1	Y
Belgian/UK (models CTO-G)	89P9004	1	Y
Brazilian Portuguese (models CTO-L)	89P9005	1	Y
Bulgarian (models CTO-G)	89P9006	1	Y
Czech (models CTO-G)	89P9008	1	Y
Danish (models CTO-G)	89P9009	1	Y
Dutch (models CTO-G)	89P9010	1	Y
French (models CTO-G)	89P9011	1	Y

8108 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
French Canadian 445 (models CTO-U)	89P9012	1	Y
French Canadian 58 (models CTO-U)	89P9013	1	Y
German (models CTO-G)	89P9014	1	Y
Greek (models CTO-G)	89P9015	1	Y
Hebrew (models CTO-G)	89P9016	1	Y
Hungarian (models CTO-G)	89P9017	1	Y
Iceland (models CTO-G)	89P9018	1	Y
Korean (models 25K 29K)	89P9021	1	Y
LA Spanish (models CTO-L)	89P9022	1	Y
Norwegian (models CTO-G)	89P9023	1	Y
Polish (models CTO-G)	89P9024	1	Y
Portuguese (models CTO-G)	89P9025	1	Y
Romanian (models CTO-G)	89P9026	1	Y
Romanian (models CTO-G)	89P9027	1	Y
Russian/Cyrillic (models CTO-G)	89P9028	1	Y
Serbian/Cyrillic (models CTO-G)	89P9029	1	Y
Slovak (models CTO-G)	89P9030	1	Y
Spanish (models CTO-G)	89P9031	1	Y
Swedish/Finn (models CTO-G)	89P9032	1	Y
Swiss French/German (models CTO-G)	89P9033	1	Y
Thailand (models CTO-A)	89P9034	1	Y
Turkish 440 (models CTO-G)	89P9035	1	Y
Turkish 179 (models CTO-G)	89P9036	1	Y
UK English (models CTO-G)	89P9037	1	Y
US Euro (models CTO-G)	89P9038	1	Y
Yugoslav/Latin (models CTO-G)	89P9039	1	Y

8108 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A4961	1	Y
Arabic (models CTO-G)	41A4962	1	Y
Arabic/French (models CTO-G)	41A4963	1	Y
Belgian/French (models CTO-G)	41A4964	1	Y
Belgian/English (models CTO-G)	41A4965	1	Y
Brazil/Portuguese (models CTO-L)	41A4966	1	Y
Bulgarian (models CTO-L)	41A4967	1	Y
Chinese/US (models CTO-A)	41A4968	1	Y
Czech (models CTO-G)	41A4969	1	Y
Danish (models CTO-G)	41A4970	1	Y
Dutch (models CTO-G)	41A4971	1	Y

8108 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
French (models CTO-G)	41A4972	1	Y
French Canadian 445 (models CTO-U)	41A4973	1	Y
French Canadian 58 (models CTO-U)	41A4974	1	Y
German (models CTO-G)	41A4975	1	Y
Greek (models CTO-G)	41A4976	1	Y
Greek/US (models CTO-G)	41A5078	1	Y
Hebrew (models CTO-G)	41A4977	1	Y
Hungarian (models CTO-G)	41A4978	1	Y
Iceland (models CTO-G)	41A4979	1	Y
Italian (models CTO-G)	41A4980	1	Y
LA Spanish (models CTO-L)	41A4983	1	Y
Norwegian (models CTO-G)	41A4984	1	Y
Polish (models CTO-G)	41A4985	1	Y
Portuguese (models CTO-G)	41A4986	1	Y
Romanian (models CTO-G)	41A4987	1	Y
Russian/Cyrillic (models CTO-G)	41A4988	1	Y
Serbian/Cyrillic (models CTO-G)	41A4989	1	Y
Slovak (models CTO-G)	41A4990	1	Y
Spanish (models CTO-G)	41A4991	1	Y
Swedish/Finn (models CTO-G)	41A4992	1	Y
Swiss French/German (models CTO-G)	41A4993	1	Y
Thailand (models CTO-A)	41A4994	1	Y
Turkish (models CTO-G)	41A4995	1	Y
Turkish (models CTO-G)	41A4996	1	Y
UK English (models CTO-G)	41A4997	1	Y
US Euro (models CTO-G)	41A4998	1	Y
Slovenian (models CTO-G)	41A4999	1	Y

8108 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A5248	1	Y
Arabic/French (models CTO-G)	41A5250	1	Y
Belgian/French (models CTO-G)	41A5251	1	Y
Belgian/English (models CTO-G)	41A5252	1	Y
Brazil/Portuguese (models CTO-L)	41A5253	1	Y
Bulgarian (models CTO-G)	41A5254	1	Y
Czech (models CTO-G)	41A5256	1	Y
Danish (models CTO-G)	41A5257	1	Y
Dutch (models CTO-G)	41A5258	1	Y
French (models CTO-G)	41A5259	1	Y

8108 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
French Canadian 445 (models CTO-U)	41A5260	1	Y
French Canadian 58 (models CTO-U)	41A5261	1	Y
German (models CTO-G)	41A5262	1	Y
Greek (models CTO-G)	41A5263	1	Y
Greek/US (models CTO-G)	41A5264	1	Y
Hebrew (models CTO-G)	41A5265	1	Y
Hungarian (models CTO-G)	41A5266	1	Y
Iceland (models CTO-G)	41A5267	1	Y
Korean (models 25K 29K)	41A5270	1	Y
LA Spanish (models CTO-L)	41A5271	1	Y
Norwegian (models CTO-G)	41A5272	1	Y
Polish (models CTO-G)	41A5273	1	Y
Portuguese (models CTO-G)	41A5274	1	Y
Romanian (models CTO-G)	41A5275	1	Y
Romanian (models CTO-G)	41A5276	1	Y
Russian/Cyrillic (models CTO-G)	41A5277	1	Y
Serbian/Cyrillic (models CTO-G)	41A5278	1	Y
Slovak (models CTO-G)	41A5279	1	Y
Spanish (models CTO-G)	41A5280	1	Y
Swedish/Finn (models CTO-G)	41A5281	1	Y
Swiss French/German (models CTO-G)	41A5282	1	Y
Thailand (models CTO-A)	41A5283	1	Y
Turkish (models CTO-G)	41A5284	1	Y
Turkish (models CTO-G)	41A5285	1	Y
UK English (models CTO-G)	41A5286	1	Y
US Euro (models CTO-G)	41A5287	1	Y
Slovenian (models CTO-G)	41A5288	1	Y

8108 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models B1G, 21A 21Q 21H 26A 26Q 26H CTO)	41A5039	1	Y
Arabic (models B1G CTO-G)	41A5040	1	Y
Arabic/French (models B1G CTO-G)	41A5041	1	Y
Belgian/French (models B1G CTO-G)	41A5042	1	Y
Belgian/UK (models B1G CTO-G)	41A5043	1	Y
Brazilian Portuguese (models CTO-L 21P)	41A5044	1	Y
Bulgarian (models B1G CTO-G)	41A5045	1	Y
Chinese/US (models 21B 21V 22V 26B CTO-A 31V)	41A5046	1	Y
Czech (models B1G CTO-G)	41A5047	1	Y
Danish (models B1G CTO-G)	41A5048	1	Y

8108 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
Dutch (models B1G CTO-G)	41A5049	1	Y
French (models B1G CTO-G)	41A5050	1	Y
French Canadian 445 (models CTO-U)	41A5051	1	Y
French Canadian 58 (models CTO-U)	41A5052	1	Y
German (models B1G CTO-G)	41A50533	1	Y
Greek (models B1G CTO-G)	41A5054	1	Y
Greek/US (models B1G CTO-G)	41A5080	1	Y
Hebrew (models B1G CTO-G)	41A5055	1	Y
Hungarian (models B1G CTO-G)	41A5056	1	Y
Iceland (models B1G CTO-G)	41A5057	1	Y
Italy (models B1G CTO-G)	41A5058	1	Y
Korean (models B2K 22K 23K 24K 27K 28K 2AK E1K)	41A5060	1	Y
LA Spanish (models CTO-L 21Y 21S)	41A5061	1	Y
Norwegian (models B1G CTO-G)	41A5062	1	Y
Polish (models B1G CTO-G)	41A5063	1	Y
Portuguese (models B1G CTO-G)	41A5064	1	Y
Romanian (models B1G CTO-G)	41A5065	1	Y
Russian/Cy (models B1G CTO-G)	41A5066	1	Y
Serbian/Cyrillic (models B1G CTO-G)	41A5067	1	Y
Slovak (models B1G CTO-G)	41A5068	1	Y
Spanish (models B1G CTO-G)	41A5069	1	Y
Swedish/Finn (models B1G CTO-G)	41A5070	1	Y
Swiss French/German (models B1G CTO-G)	41A5071	1	Y
Thailand (models 21T 26T CTO-A)	41A5072	1	Y
Turkish (models B1G CTO-G)	41A5073	1	Y
Turkish (models B1G CTO-G)	41A5074	1	Y
UK English (models B1G CTO-G)	41A5075	1	Y
US Euro (models B1G CTO-G)	41A5076	1	Y
Slovenian (models B1G CTO-G)	41A5077	1	Y

8108 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, optical wheelmouse (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K 31V)	41A4935	1	Y
Mouse, optical wheelmouse (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K)	89P5089	1	N

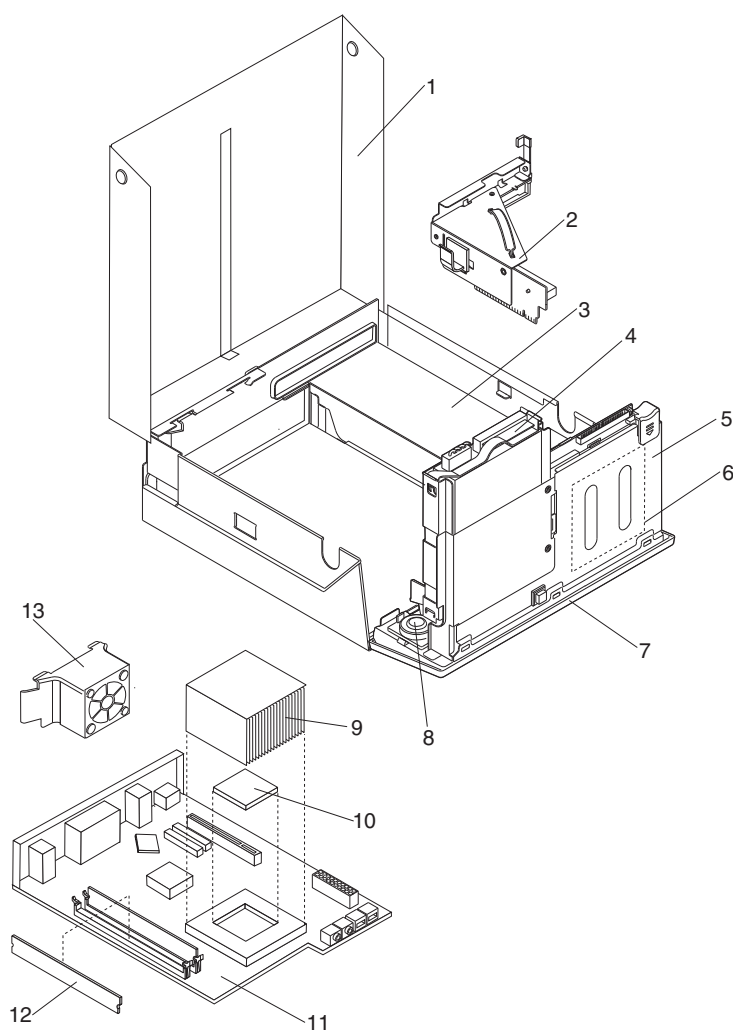
8108 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, Optical Wheel, USB (400dpi) (models B1G B2K B3K B4K 21S 21Y 21P 21A 21Q 21T 21B 21H 21V 22V 22K 23K 24K 25K 26A 26Q 26T 26B 26H 27K 28K 29K CTO 2AK E1K 31V)	41U3013	1	Y

8108 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models CTO B1G 21S 21P 21A 21T 21V 22V 26A 26T 26M)	6952301	1	N
Power Cord (ANZ) (models 21A 26A CTO-A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models B1G B2K B3K B4K 21A 22K 23K 24K 25K 26A 27K 28K 29K CTO-E CTO-A 2AK E1K)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models B1G 21A 26A 26H CTO-E CTO-A)	14F0032	1	N
Power Cord (EMEA) (models B1G CTO-E)	13F9996	1	N
Power Cord (EMEA, LA) (models B1G 21P CTO-E CTO-L)	14F0068	1	N
Power Cord (APU) (models CTO-L)	36L8879	1	N
Power Cord (China, HK) (models CTO-A 21B 21H 26B 26H)	02K0545	1	N
Power Cord (EMEA) (models B1G CTO-E)	14F0086	1	N
Power Cord (EMEA, ANZ, ASEAN Eng) (models B1G 21A 26A CTO-E CTO-A)	14F0014	1	N
Power Cord (EMEA) (models B1G CTO-E)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8108 Windows XP Home Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
Korean (models B2K B3K B4K 22K 23K 28K 29K 2AK E1K)	41W3449	1	Y
Taiwan - TC (models 22V 31V)	41W3463	1	Y

8108 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models 21A 21Q 21H 21T 26A 26Q 26H 26T)	39J9061	1	Y
BR (models 21P)	39J9066	1	Y
SP/LA (models 21S 21Y)	39J9064	1	Y
Taiwan - TC (models 21V)	41W3428	1	Y
Korea (models 24K 25K 27K)	41W3435	1	Y
Hong Kong - TC (models 21B 26B)	41W3415	1	Y

Machine Type 8109



Item #	8109 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly (models CTO 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39M0552	1	Y
2	Riser card and bracket assembly (RoHS) (all models)	39M0621	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (RoHS) (models CTO 7AG 7BG)	39M0618	1	Y
3	Power Supply (all models)	89P6805	2	N
3	Power Supply (models CTO 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41N3105	2	Y
4	Hard disk drive, 40GB 7200rpm SATA (models CTO 71G 72G)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models CTO 71G 72G)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA (models CTO 71G 72G)	40Y9033	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO 73G 74G 75G 76G 77G)	71P7293	1	N

Item #	8109 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 80GB 7200rpm SATA (models CTO 73G 74G 75G 76G 77G 7AG 7BG)	40Y8761	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO 73G 74G 75G 76G 77G 7AG 7BG)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO 73G 74G 75G 76G 77G)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	40Y8762	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	40Y8793	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (RoHS) (models CTO)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (RoHS) (models CTO)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO 71G 72G 73G 74G 75G 76G 77G)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models CTO 71G 72G 73G 74G 75G 76G 77G 7BG)	40Y8965	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO 71G 72G 73G 74G 75G 76G 77G 7BG)	40Y8959	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 7AG)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 7AG)	40Y8949	1	Y
6	Multi-Burner Plus (Rambo 4) Ultrabay Enhanced Drive (models CTO)	40Y8951	1	Y
6	Slim PATA RAMBO 5 drive (models CTO)	41N3355	1	Y
6	Slim PATA RAMBO 5 drive (models CTO)	TBD	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO 77G)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 7BG)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 73G)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 74G)	39J6095	2	Y

Item #	8109 FRUs	FRU#	CRU Tier	RoHS Compliant?
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 75G)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models CTO)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models CTO)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6084	2	Y
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6085	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models CTO 71G 76G)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models CTO 72G)	39J6088	2	Y
10	Microprocessor - P4 3.06 Ghz/533/1MB 519K (models 7AG)	41T1125	2	Y
11	System board, Planar With 10/1000 Lan (models CTO 71G 72G 73G 74G 75G 76G 77G)	39J6410	2	N
11	System board, Tobago (1.1C planar rev)w/ 10/1000 LAN (models CTO 71G 72G 73G 74G 75G 76G 77G)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO 71G 72G 73G 74G 75G 76G 77G)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO 7AG 7BG)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8109 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (models CTO 71G 72G 73G 74G 75G 76G 77G)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (all models)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y

8109 FRUs	FRU#	CRU Tier	RoHS Compliant?
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y

8109 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI Modem Card (Soft), ATX V.90 (models CTO)	22P7943	1	N
Intel Pro Gigabit Enet / 1000T (Card) ATX (models CTO)	22P6509	1	N
IEEE 1394 Adapter - Firewire (models CTO)	73P2608	1	N
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	19R2374	1	N

8109 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8300	1	Y
Arabic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8301	1	Y
Belgian/French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8302	1	Y
Belgian/UK (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8303	1	Y
Bulgarian (models CTO-G 7AG 7BG)	89P8305	1	Y
Chinese/US (models CTO-A)	89P8306	1	Y
Czech (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8307	1	Y
Danish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8308	1	Y
Dutch (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8309	1	Y
French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8310	1	Y
French Canadian 445 (models CTO-U)	89P8311	1	Y
French Canadian 58 (models CTO-U)	89P8312	1	Y
German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8313	1	Y
Greek (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8314	1	Y
Hebrew (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8315	1	Y
Hungarian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8316	1	Y
Iceland (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8317	1	Y
Italian 141 (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8318	1	Y
Italian 142 (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8319	1	Y
LA Spanish (models CTO-L)	89P8322	1	Y
Norwegian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8323	1	Y
Polish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8324	1	Y
Portuguese (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8325	1	Y
Romanian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8326	1	Y
Russian/Cy (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8328	1	Y
Serbian/Cyrillic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8329	1	Y
Slovak (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8330	1	Y
Spanish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8331	1	Y
Swedish/Finn (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8332	1	Y

8109 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
Swiss French/German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8333	1	Y
Thailand (models CTO-A)	89P8334	1	Y
Turkish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8336	1	Y
UK English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8337	1	Y
US Euro (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8338	1	Y
Yugoslav/Latin (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	89P8339	1	Y
Brazil/Portuguese (models CTO-L)	89P8304	1	Y

8109 Keyboard (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P8800	1	Y
Arabic (models CTO-G)	89P8801	1	Y
Arabic/French (models CTO-G)	89P8802	1	Y
Belgian/French (models CTO-G)	89P8803	1	Y
Belgian/English (models CTO-G)	89P8804	1	Y
Brazil/Portuguese (models CTO-L)	89P8805	1	Y
Bulgarian (models CTO-G)	89P8806	1	Y
Chinese/US (models CTO-A)	89P8807	1	Y
Czech (models CTO-G)	89P8808	1	Y
Danish (models CTO-G)	89P8809	1	Y
Dutch (models CTO-G)	89P8810	1	Y
French (models CTO-G)	89P8811	1	Y
French Canadian 445 (models CTO-U)	89P8812	1	Y
French Canadian 58 (models CTO-U)	89P8813	1	Y
German (models CTO-G)	89P8814	1	Y
Greek (models CTO-G)	89P8815	1	Y
Hebrew (models CTO-G)	89P8816	1	Y
Hungarian (models CTO-G)	89P8817	1	Y
Iceland (models CTO-G)	89P8818	1	Y
Italian (models CTO-G)	89P8819	1	Y
LA Spanish (models CTO-L)	89P8822	1	Y
Norwegian (models CTO-G)	89P8823	1	Y
Polish (models CTO-G)	89P8824	1	Y
Portuguese (models CTO-G)	89P8825	1	Y
Romanian (models CTO-G)	89P8826	1	Y
Romanian (models CTO-G)	89P8827	1	Y
Russian/Cyrillic (models CTO-G)	89P8828	1	Y
Serbian/Cyrillic (models CTO-G)	89P8829	1	Y
Slovak (models CTO-G)	89P8830	1	Y
Spanish (models CTO-G)	89P8831	1	Y

8109 Keyboard (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
Swedish/Finn (models CTO-G)	89P8832	1	Y
Swiss French/German (models CTO-G)	89P8833	1	Y
Thailand (models CTO-A)	89P8834	1	Y
Turkish (models CTO-G)	89P8835	1	Y
Turkish (models CTO-G)	89P8836	1	Y
UK English (models CTO-G)	89P8837	1	Y
US Euro (models CTO-G)	89P8838	1	Y
Yugoslav/Latin (models CTO-G)	89P8839	1	Y

8109 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P9000	1	Y
Arabic (models CTO-G)	89P9001	1	Y
Belgian/French (models CTO-G)	89P9003	1	Y
Belgian/UK (models CTO-G)	89P9004	1	Y
Brazilian Portuguese (models CTO-L)	89P9005	1	Y
Bulgarian (models CTO-G)	89P9006	1	Y
Czech (models CTO-G)	89P9008	1	Y
Danish (models CTO-G)	89P9009	1	Y
Dutch (models CTO-G)	89P9010	1	Y
French (models CTO-G)	89P9011	1	Y
French Canadian 445 (models CTO-U)	89P9012	1	Y
French Canadian 58 (models CTO-U)	89P9013	1	Y
German (models CTO-G)	89P9014	1	Y
Greek (models CTO-G)	89P9015	1	Y
Hebrew (models CTO-G)	89P9016	1	Y
Hungarian (models CTO-G)	89P9017	1	Y
Iceland (models CTO-G)	89P9018	1	Y
LA Spanish (models CTO-L)	89P9022	1	Y
Norwegian (models CTO-G)	89P9023	1	Y
Polish (models CTO-G)	89P9024	1	Y
Portuguese (models CTO-G)	89P9025	1	Y
Romanian (models CTO-G)	89P9026	1	Y
Romanian (models CTO-G)	89P9027	1	Y
Russian/Cyrillic (models CTO-G)	89P9028	1	Y
Serbian/Cyrillic (models CTO-G)	89P9029	1	Y
Slovak (models CTO-G)	89P9030	1	Y
Spanish (models CTO-G)	89P9031	1	Y
Swedish/Finn (models CTO-G)	89P9032	1	Y
Swiss French/German (models CTO-G)	89P9033	1	Y

8109 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
Thailand (models CTO-A)	89P9034	1	Y
Turkish 440 (models CTO-G)	89P9035	1	Y
Turkish 179 (models CTO-G)	89P9036	1	Y
UK English (models CTO-G)	89P9037	1	Y
US Euro (models CTO-G)	89P9038	1	Y
Yugoslav/Latin (models CTO-G)	89P9039	1	Y

8109 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A4961	1	Y
Arabic (models CTO-G)	41A4962	1	Y
Arabic/French (models CTO-G)	41A4963	1	Y
Belgian/French (models CTO-G)	41A4964	1	Y
Belgian/English (models CTO-G)	41A4965	1	Y
Brazil/Portuguese (models CTO-L)	41A4966	1	Y
Bulgarian (models CTO-L)	41A4967	1	Y
Chinese/US (models CTO-A)	41A4968	1	Y
Czech (models CTO-G)	41A4969	1	Y
Danish (models CTO-G)	41A4970	1	Y
Dutch (models CTO-G)	41A4971	1	Y
French (models CTO-G)	41A4972	1	Y
French Canadian 445 (models CTO-U)	41A4973	1	Y
French Canadian 58 (models CTO-U)	41A4974	1	Y
German (models CTO-G)	41A4975	1	Y
Greek (models CTO-G)	41A4976	1	Y
Greek/US (models CTO-G)	41A5078	1	Y
Hebrew (models CTO-G)	41A4977	1	Y
Hungarian (models CTO-G)	41A4978	1	Y
Iceland (models CTO-G)	41A4979	1	Y
Italian (models CTO-G)	41A4980	1	Y
LA Spanish (models CTO-L)	41A4983	1	Y
Norwegian (models CTO-G)	41A4984	1	Y
Polish (models CTO-G)	41A4985	1	Y
Portuguese (models CTO-G)	41A4986	1	Y
Romanian (models CTO-G)	41A4987	1	Y
Russian/Cyrillic (models CTO-G)	41A4988	1	Y
Serbian/Cyrillic (models CTO-G)	41A4989	1	Y
Slovak (models CTO-G)	41A4990	1	Y
Spanish (models CTO-G)	41A4991	1	Y
Swedish/Finn (models CTO-G)	41A4992	1	Y

8109 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
Swiss French/German (models CTO-G)	41A4993	1	Y
Thailand (models CTO-A)	41A4994	1	Y
Turkish (models CTO-G)	41A4995	1	Y
Turkish (models CTO-G)	41A4996	1	Y
UK English (models CTO-G)	41A4997	1	Y
US Euro (models CTO-G)	41A4998	1	Y
Slovenian (models CTO-G)	41A4999	1	Y

8109 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A5248	1	Y
Arabic/French (models CTO-G)	41A5250	1	Y
Belgian/French (models CTO-G)	41A5251	1	Y
Belgian/English (models CTO-G)	41A5252	1	Y
Brazil/Portuguese (models CTO-L)	41A5253	1	Y
Bulgarian (models CTO-G)	41A5254	1	Y
Czech (models CTO-G)	41A5256	1	Y
Danish (models CTO-G)	41A5257	1	Y
Dutch (models CTO-G)	41A5258	1	Y
French (models CTO-G)	41A5259	1	Y
French Canadian 445 (models CTO-U)	41A5260	1	Y
French Canadian 58 (models CTO-U)	41A5261	1	Y
German (models CTO-G)	41A5262	1	Y
Greek (models CTO-G)	41A5263	1	Y
Greek/US (models CTO-G)	41A5264	1	Y
Hebrew (models CTO-G)	41A5265	1	Y
Hungarian (models CTO-G)	41A5266	1	Y
Iceland (models CTO-G)	41A5267	1	Y
LA Spanish (models CTO-L)	41A5271	1	Y
Norwegian (models CTO-G)	41A5272	1	Y
Polish (models CTO-G)	41A5273	1	Y
Portuguese (models CTO-G)	41A5274	1	Y
Romanian (models CTO-G)	41A5275	1	Y
Romanian (models CTO-G)	41A5276	1	Y
Russian/Cyrillic (models CTO-G)	41A5277	1	Y
Serbian/Cyrillic (models CTO-G)	41A5278	1	Y
Slovak (models CTO-G)	41A5279	1	Y
Spanish (models CTO-G)	41A5280	1	Y
Swedish/Finn (models CTO-G)	41A5281	1	Y
Swiss French/German (models CTO-G)	41A5282	1	Y

8109 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
Thailand (models CTO-A)	41A5283	1	Y
Turkish (models CTO-G)	41A5284	1	Y
Turkish (models CTO-G)	41A5285	1	Y
UK English (models CTO-G)	41A5286	1	Y
US Euro (models CTO-G)	41A5287	1	Y
Slovenian (models CTO-G)	41A5288	1	Y

8109 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5039	1	Y
Arabic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5040	1	Y
Arabic/French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5041	1	Y
Belgian/French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5042	1	Y
Belgian/UK (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5043	1	Y
Brazilian Portuguese (models CTO-L)	41A5044	1	Y
Bulgarian (models CTO-G)	41A5045	1	Y
Chinese/US (models CTO-A)	41A5046	1	Y
Czech (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5047	1	Y
Danish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5048	1	Y
Dutch (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5049	1	Y
French (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5050	1	Y
French Canadian 445 (models CTO-U)	41A5051	1	Y
French Canadian 58 (models CTO-U)	41A5052	1	Y
German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A50533	1	Y
Greek (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5054	1	Y
Greek/US (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5080	1	Y
Hebrew (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5055	1	Y
Hungarian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5056	1	Y
Iceland (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5057	1	Y
Italy (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5058	1	Y
LA Spanish (models CTO-L)	41A5061	1	Y
Norwegian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5062	1	Y
Polish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5063	1	Y
Portuguese (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5064	1	Y
Romanian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5065	1	Y
Russian/Cy (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5066	1	Y
Serbian/Cyrillic (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5067	1	Y
Slovak (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5068	1	Y
Spanish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5069	1	Y
Swedish/Fin (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5070	1	Y

8109 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
Swiss French/German (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5071	1	Y
Thailand (models CTO-A)	41A5072	1	Y
Turkish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5073	1	Y
Turkish (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5074	1	Y
UK English (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5075	1	Y
US Euro (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5076	1	Y
Slovenian (models CTO-G 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A5077	1	Y

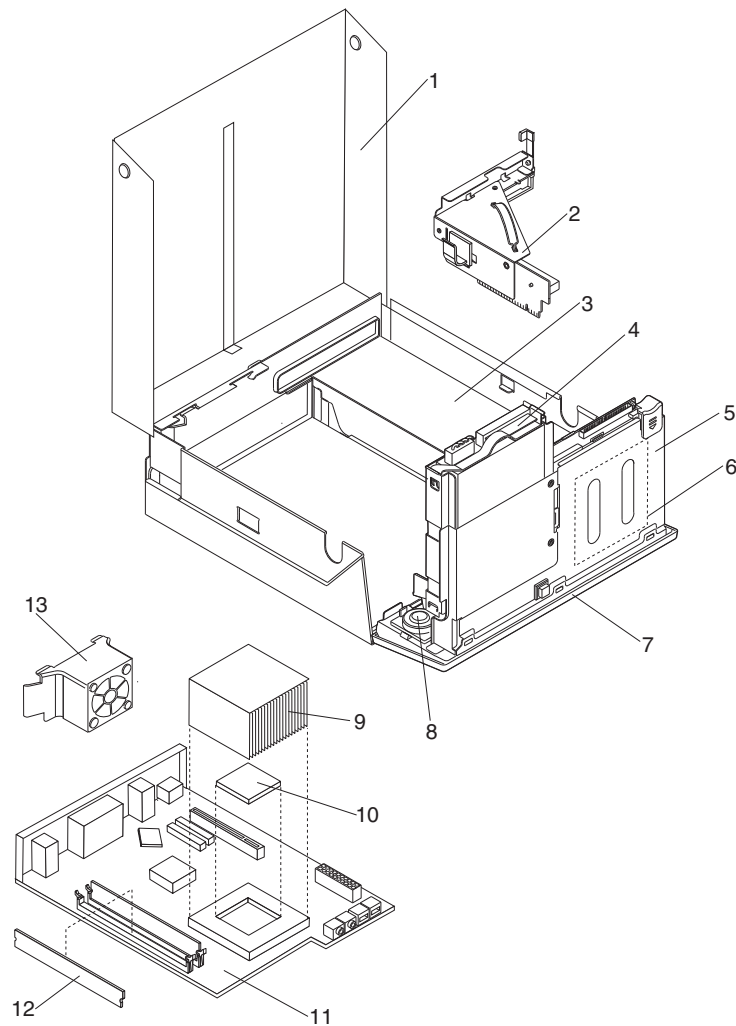
8109 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, optical wheelmouse (models CTO 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41A4935	1	Y
Mouse, optical wheelmouse (400 dpi) (models CTO 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	41U3013	1	Y
Mouse, optical wheelmouse (models CTO 71G 72G 73G 74G 75G 76G 77G)	89P5089	1	N

8109 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models CTO-U CTO-L)	6952301	1	N
Power Cord (ANZ) (models CTO-A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models CTO-E CTO-A 71G 72G 73G 74G 75G 76G 77G)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models CTO-E CTO-A 71G 72G 73G 74G 75G 76G 77G)	14F0032	1	N
Power Cord (EMEA) (models CTO-E 71G 72G 73G 74G 75G 76G 77G)	13F9996	1	N
Power Cord (EMEA, LA) (models CTO-E CTO-L 71G 72G 73G 74G 75G 76G 77G)	14F0068	1	N
Power Cord (APU) (models CTO-L)	36L8879	1	N
Power Cord (China, HK) (models CTO-A)	02K0545	1	N
Power Cord (EMEA) (models CTO-E 71G 72G 73G 74G 75G 76G 77G)	14F0086	1	N
Power Cord (EMEA, ANZ, ASEAN Eng) (models CTO-E CTO-A 71G 72G 73G 74G 75G 76G 77G)	14F0014	1	N
Power Cord (EMEA) (models CTO-E 71G 72G 73G 74G 75G 76G 77G)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y

8109 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8109 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9061	1	Y
FR/CF (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9062	1	Y
GR (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9063	1	Y
IT (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9065	1	Y
SP/LA (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9064	1	Y
DK (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9068	1	Y
NL (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9071	1	Y
AE (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9075	1	Y
SV (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9067	1	Y
HE (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9072	1	Y
FI (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9069	1	Y
NO (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9070	1	Y
PL (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9073	1	Y
PO (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9079	1	Y
RU (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9076	1	Y
HU (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9078	1	Y
CZ (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9074	1	Y
TR (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9077	1	Y
GK (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9080	1	Y
SL (models 71G 72G 73G 74G 75G 76G 77G 7AG 7BG)	39J9081	1	Y

Machine Type 8118



Item #	8118 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	39M0552	1	Y
2	Riser card and bracket assembly (RoHS) (models B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	39M0621	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (RoHS) (models CTO B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	39M0618	1	Y
3	Power Supply (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5K)	89P6805	2	N
3	Power Supply (all models)	41N3105	2	Y

Item #	8118 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive, 40GB 7200rpm SATA (models B1G CTO B2G)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models B1G CTO B2G)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA (models B1G CTO B2G)	40Y9033	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models 41G 42A 42Q 42T 43C 44Q 45Q CTO 46C 47C D1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J)	71P7293	1	N
4	Hard disk drive 80GB 7200rpm SATA (models 41G 42A 42Q 42T 43C 44Q 45Q CTO 46C 47C D1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 38G)	40Y8761	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models 41G 42A 42Q 42T 43C 44Q 45Q CTO 46C 47C D1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 38G)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models 41G 42A 42Q 42T 43C 44Q 45Q CTO 46C 47C D1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 38G)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 51C E1C F1C)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models CTO 51C E1C F1C 34J 35J 36J 37J)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 51C E1C F1C 34J 35J 36J 37J)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 51C E1C F1C 34J 35J 36J 37J)	TBD	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO 51C E1C F1C 34J 35J 36J 37J)	TBD	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 42A 42Q 42T 43C 45Q CTO B2G A1J A3J A4J D2E D2J D3J D4E D4J D5J)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 42A 42Q 42T 43C 45Q CTO B2G A1J A3J A4J D2E D2J D3J D4E D4J D5J B3J B4J 31J 34J)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 42A 42Q 42T 43C 45Q CTO B2G A1J A3J A4J D2E D2J D3J D4E D4J D5J B3J B4J 31J 34J)	40Y8793	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 42A 42Q 42T 43C 45Q CTO B2G A1J A3J A4J D2E D2J D3J D4E D4J D5J)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 42A 42Q 42T 43C 45Q CTO B2G A1J A3J A4J D2E D2J D3J D4E D4J D5J B3J B4J 31J 34J)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models B1G 42A 42Q 42T 43C 45Q CTO B2G A1J A3J A4J D2E D2J D3J D4E D4J D5J B3J B4J 31J 34J)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models 41G CTO 46C 47C D1C F2G)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models 41G CTO 46C 47C D1C F2G 38G)	40Y8965	1	Y
6	DVD-ROM Drive (8X/24X) (models 38G)	40Y8959	1	Y

Item #	8118 FRUs	FRU#	CRU Tier	RoHS Compliant?
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 51C E1CA A5J A6J A7J A8J D6J D7J D8J D9J B5J B6J 32J 35J)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO 51C E1CA A5J A6J A7J A8J D6J D7J D8J D9J B5J B6J 32J 35J)	40Y8949	1	Y
6	Multi-Burner Plus (Rambo 4) Ultrabay Enhanced Drive (RoHS) (models CTO F1C A9J AAJ E2J E3J E4J E5J B7J B8J 32J 35J 37J)	40Y8951	1	Y
6	Slim PATA RAMBO 5 drive (models CTO F1C A9J AAJ E2J E3J E4J E5J B7J B8J 32J 35J 37J)	41N3355	1	Y
6	Slim PATA RAMBO 5 drive (models CTO F1C A9J AAJ E2J E3J E4J E5J B7J B8J 33J 36J 37J)	TBD	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO D1C D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO E1C E2J E3J E4J E5J)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO F1C F2G)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 42A 42Q 42T 43C 44Q 46C 47C)	39J6094	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO 45Q 51C)	39J6095	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models 41G CTO)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models CTO)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models CTO)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6084	2	Y
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models CTO A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ)	39J6085	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models CTO B3J B4J B5J B6J B7J B8J)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models CTO B1G B2G)	39J6088	2	Y
10	Microprocessor - P4 524 processor 3.06Ghz/533/1M (models 31J 32J 33J 34J 35J 36J 37J 38G)	41T4104	2	Y
11	System board, Planar With 10/1000 Lan (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J)	39J6410	2	N

Item #	8118 FRUs	FRU#	CRU Tier	RoHS Compliant?
11	System board, Tobago (1.1C planar rev)w/ 10/1000 LAN (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models B1G 42A 42Q 42T 43C 44Q CTO B2G 46C 47C A1J A2J A3J A4J A5J A6J)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models 41G 45Q CTO 51C D1C E1C F2G D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J A7J A8J A9J AAJ B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 37J 38G)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO F1C 36J)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8118 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (models B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	41N5305	2	Y
Fan assembly, front (all models)	39M0550	1	Y
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models 41G F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	09K9827	1	Y

8118 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI Modem Card (Soft), ATX V.90 (models CTO)	22P7943	1	N
Intel Pro Gigabit Enet / 1000T (Card) ATX (models CTO)	22P6509	1	N
IEEE 1394 Adapter - Firewire (models CTO)	73P2608	1	N

8118 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	19R2374	1	N

8118 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models B1G 41G 42A 42Q 44Q 45Q CTO B2G F2G D2E 38G)	89P8300	1	Y
Arabic (models B1G 41G CTO-G B2G F2G 38G)	89P8301	1	Y
Belgian/French (models B1G 41G CTO-G B2G F2G 38G)	89P8302	1	Y
Belgian/UK (models B1G 41G CTO-G B2G F2G 38G)	89P8303	1	Y
Bulgarian (models B1G 41G CTO-G B2G F2G 38G)	89P8305	1	Y
Chinese/US (models B1G 41G CTO-G B2G F2G 38G)	89P8306	1	Y
Czech (models B1G 41G CTO-G B2G F2G 38G)	89P8307	1	Y
Danish (models B1G 41G CTO-G B2G F2G 38G)	89P8308	1	Y
Dutch (models B1G 41G CTO-G B2G F2G 38G)	89P8309	1	Y
French (models B1G 41G CTO-G B2G F2G 38G)	89P8310	1	Y
French Canadian 445 (models CTO-U)	89P8311	1	Y
French Canadian 58 (models CTO-U)	89P8312	1	Y
German (models B1G 41G CTO-G B2G F2G 38G)	89P8313	1	Y
Greek (models B1G 41G CTO-G B2G F2G 38G)	89P8314	1	Y
Hebrew (models B1G 41G CTO-G B2G F2G 38G)	89P8315	1	Y
Hungarian (models B1G 41G CTO-G B2G F2G 38G)	89P8316	1	Y
Iceland (models B1G 41G CTO-G B2G F2G 38G)	89P8317	1	Y
Italian 141 (models B1G 41G CTO-G B2G F2G 38G)	89P8318	1	Y
Italian 142 (models B1G 41G CTO-G B2G F2G 38G)	89P8319	1	Y
Japanese (models A3J A5J A7J A9J D2J D3J D6J D7J E2J E3J B3J N4J N5J N6J 31J 32J 33J 34J 35J 36J 37J)	89P8320	1	Y
LA Spanish (models CTO-L)	89P8322	1	Y
Norwegian (models B1G 41G CTO-G B2G F2G 38G)	89P8323	1	Y
Polish (models B1G 41G CTO-G B2G F2G 38G)	89P8324	1	Y
Portuguese (models B1G 41G CTO-G B2G F2G 38G)	89P8325	1	Y
Romanian (models B1G 41G CTO-G B2G F2G 38G)	89P8326	1	Y
Russian/Cy (models B1G 41G CTO-G B2G F2G 38G)	89P8328	1	Y
Serbian/Cyrillic (models B1G 41G CTO-G B2G F2G 38G)	89P8329	1	Y
Slovak (models B1G 41G CTO-G B2G F2G 38G)	89P8330	1	Y
Spanish (models B1G 41G CTO-G B2G F2G 38G)	89P8331	1	Y
Swedish/Finn (models B1G 41G CTO-G B2G F2G 38G)	89P8332	1	Y
Swiss French/German (models B1G 41G CTO-G B2G F2G 38G)	89P8333	1	Y
Thailand (models CTO-A 42T)	89P8334	1	Y
Turkish (models B1G 41G CTO-G B2G F2G 38G)	89P8336	1	Y
UK English (models B1G 41G CTO-G B2G F2G 38G)	89P8337	1	Y
US Euro (models B1G 41G CTO-G B2G F2G 38G)	89P8338	1	Y

8118 Keyboards (Preferred Pro Fullsize, Black)	FRU#	CRU Tier	RoHS Compliant?
Yugoslav/Latin (models B1G 41G CTO-G B2G F2G 38G)	89P8339	1	Y
Brazil/Portuguese (models CTO-L)	89P8304	1	Y

8118 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
US/China English (models CTO F1C)	89P8800	1	Y
Arabic (models CTO-G)	89P8801	1	Y
Arabic/French (models CTO-G)	89P8802	1	Y
Belgian/French (models CTO-G)	89P8803	1	Y
Belgian/English (models CTO-G)	89P8804	1	Y
Brazil/Portuguese (models CTO-L)	89P8805	1	Y
Bulgarian (models CTO-G)	89P8806	1	Y
Chinese/US (models CTO-A)	89P8807	1	Y
Czech (models CTO-G)	89P8808	1	Y
Danish (models CTO-G)	89P8809	1	Y
Dutch (models CTO-G)	89P8810	1	Y
French (models CTO-G)	89P8811	1	Y
French Canadian 445 (models CTO-U)	89P8812	1	Y
French Canadian 58 (models CTO-U)	89P8813	1	Y
German (models CTO-G)	89P8814	1	Y
Greek (models CTO-G)	89P8815	1	Y
Hebrew (models CTO-G)	89P8816	1	Y
Hungarian (models CTO-G)	89P8817	1	Y
Iceland (models CTO-G)	89P8818	1	Y
Italian (models CTO-G)	89P8819	1	Y
LA Spanish (models CTO-L)	89P8822	1	Y
Norwegian (models CTO-G)	89P8823	1	Y
Polish (models CTO-G)	89P8824	1	Y
Portuguese (models CTO-G)	89P8825	1	Y
Romanian (models CTO-G)	89P8826	1	Y
Romanian (models CTO-G)	89P8827	1	Y
Russian/Cyrillic (models CTO-G)	89P8828	1	Y
Serbian/Cyrillic (models CTO-G)	89P8829	1	Y
Slovak (models CTO-G)	89P8830	1	Y
Spanish (models CTO-G)	89P8831	1	Y
Swedish/Finn (models CTO-G)	89P8832	1	Y
Swiss French/German (models CTO-G)	89P8833	1	Y
Thailand (models CTO-A)	89P8834	1	Y
Turkish (models CTO-G)	89P8835	1	Y
Turkish (models CTO-G)	89P8836	1	Y

8118 Keyboards (Productivity USB)	FRU#	CRU Tier	RoHS Compliant?
UK English (models CTO-G)	89P8837	1	Y
US Euro (models CTO-G)	89P8838	1	Y
Yugoslav/Latin (models CTO-G)	89P8839	1	Y

8118 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO D4E)	89P9000	1	Y
Arabic (models CTO-G)	89P9001	1	Y
Belgian/French (models CTO-G)	89P9003	1	Y
Belgian/UK (models CTO-G)	89P9004	1	Y
Brazilian Portuguese (models CTO-L)	89P9005	1	Y
Bulgarian (models CTO-G)	89P9006	1	Y
Czech (models CTO-G)	89P9008	1	Y
Danish (models CTO-G)	89P9009	1	Y
Dutch (models CTO-G)	89P9010	1	Y
French (models CTO-G)	89P9011	1	Y
French Canadian 445 (models CTO-U)	89P9012	1	Y
French Canadian 58 (models CTO-U)	89P9013	1	Y
German (models CTO-G)	89P9014	1	Y
Greek (models CTO-G)	89P9015	1	Y
Hebrew (models CTO-G)	89P9016	1	Y
Hungarian (models CTO-G)	89P9017	1	Y
Iceland (models CTO-G)	89P9018	1	Y
Japanese (models A1J A2J A4J A6J A8J AAJ D5J D4J D8J D9J E4J E5J B7J B8J)	89P9020	1	Y
LA Spanish (models CTO-L)	89P9022	1	Y
Norwegian (models CTO-G)	89P9023	1	Y
Polish (models CTO-G)	89P9024	1	Y
Portuguese (models CTO-G)	89P9025	1	Y
Romanian (models CTO-G)	89P9026	1	Y
Romanian (models CTO-G)	89P9027	1	Y
Russian/Cyrillic (models CTO-G)	89P9028	1	Y
Serbian/Cyrillic (models CTO-G)	89P9029	1	Y
Slovak (models CTO-G)	89P9030	1	Y
Spanish (models CTO-G)	89P9031	1	Y
Swedish/Finn (models CTO-G)	89P9032	1	Y
Swiss French/German (models CTO-G)	89P9033	1	Y
Thailand (models CTO-A)	89P9034	1	Y
Turkish 440 (models CTO-G)	89P9035	1	Y
Turkish 179 (models CTO-G)	89P9036	1	Y
UK English (models CTO-G)	89P9037	1	Y

8118 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US Euro (models CTO-G)	89P9038	1	Y
Yugoslav/Latin (models CTO-G)	89P9039	1	Y

8118 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A4961	1	Y
Arabic (models CTO-G)	41A4962	1	Y
Arabic/French (models CTO-G)	41A4963	1	Y
Belgian/French (models CTO-G)	41A4964	1	Y
Belgian/English (models CTO-G)	41A4965	1	Y
Brazil/Portuguese (models CTO-L)	41A4966	1	Y
Bulgarian (models CTO-L)	41A4967	1	Y
Chinese/US (models CTO-A)	41A4968	1	Y
Czech (models CTO-G)	41A4969	1	Y
Danish (models CTO-G)	41A4970	1	Y
Dutch (models CTO-G)	41A4971	1	Y
French (models CTO-G)	41A4972	1	Y
French Canadian 445 (models CTO-U)	41A4973	1	Y
French Canadian 58 (models CTO-U)	41A4974	1	Y
German (models CTO-G)	41A4975	1	Y
Greek (models CTO-G)	41A4976	1	Y
Greek/US (models CTO-G)	41A5078	1	Y
Hebrew (models CTO-G)	41A4977	1	Y
Hungarian (models CTO-G)	41A4978	1	Y
Iceland (models CTO-G)	41A4979	1	Y
Italian (models CTO-G)	41A4980	1	Y
LA Spanish (models CTO-L)	41A4983	1	Y
Norwegian (models CTO-G)	41A4984	1	Y
Polish (models CTO-G)	41A4985	1	Y
Portuguese (models CTO-G)	41A4986	1	Y
Romanian (models CTO-G)	41A4987	1	Y
Russian/Cyrillic (models CTO-G)	41A4988	1	Y
Serbian/Cyrillic (models CTO-G)	41A4989	1	Y
Slovak (models CTO-G)	41A4990	1	Y
Spanish (models CTO-G)	41A4991	1	Y
Swedish/Finn (models CTO-G)	41A4992	1	Y
Swiss French/German (models CTO-G)	41A4993	1	Y
Thailand (models CTO-A)	41A4994	1	Y
Turkish (models CTO-G)	41A4995	1	Y
Turkish (models CTO-G)	41A4996	1	Y

8118 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
UK English (models CTO-G)	41A4997	1	Y
US Euro (models CTO-G)	41A4998	1	Y
Slovenian (models CTO-G)	41A4999	1	Y

8118 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A5248	1	Y
Arabic/French (models CTO-G)	41A5250	1	Y
Belgian/French (models CTO-G)	41A5251	1	Y
Belgian/English (models CTO-G)	41A5252	1	Y
Brazil/Portuguese (models CTO-L)	41A5253	1	Y
Bulgarian (models CTO-G)	41A5254	1	Y
Czech (models CTO-G)	41A5256	1	Y
Danish (models CTO-G)	41A5257	1	Y
Dutch (models CTO-G)	41A5258	1	Y
French (models CTO-G)	41A5259	1	Y
French Canadian 445 (models CTO-U)	41A5260	1	Y
French Canadian 58 (models CTO-U)	41A5261	1	Y
German (models CTO-G)	41A5262	1	Y
Greek (models CTO-G)	41A5263	1	Y
Greek/US (models CTO-G)	41A5264	1	Y
Hebrew (models CTO-G)	41A5265	1	Y
Hungarian (models CTO-G)	41A5266	1	Y
Iceland (models CTO-G)	41A5267	1	Y
Japanese (models A1J A2J A4J A6J A8J AAJ D5J D4J D8J D9J E4J E5J B7J B8J)	41A5269	1	Y
LA Spanish (models CTO-L)	41A5271	1	Y
Norwegian (models CTO-G)	41A5272	1	Y
Polish (models CTO-G)	41A5273	1	Y
Portuguese (models CTO-G)	41A5274	1	Y
Romanian (models CTO-G)	41A5275	1	Y
Romanian (models CTO-G)	41A5276	1	Y
Russian/Cyrillic (models CTO-G)	41A5277	1	Y
Serbian/Cyrillic (models CTO-G)	41A5278	1	Y
Slovak (models CTO-G)	41A5279	1	Y
Spanish (models CTO-G)	41A5280	1	Y
Swedish/Finn (models CTO-G)	41A5281	1	Y
Swiss French/German (models CTO-G)	41A5282	1	Y
Thailand (models CTO-A)	41A5283	1	Y
Turkish (models CTO-G)	41A5284	1	Y
Turkish (models CTO-G)	41A5285	1	Y

8118 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
UK English (models CTO-G)	41A5286	1	Y
US Euro (models CTO-G)	41A5287	1	Y
Slovenian (models X)	41A5288	1	Y

8118 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models B1G 41G 42A 42Q 44Q 45Q CTO B2G F2G D2E 38G)	41A5039	1	Y
Arabic (models B1G 41G CTO-G B2G F2G 38G)	41A5040	1	Y
Arabic/French (models B1G 41G CTO-G B2G F2G 38G)	41A5041	1	Y
Belgian/French (models B1G 41G CTO-G B2G F2G 38G)	41A5042	1	Y
Belgian/UK (models B1G 41G CTO-G B2G F2G 38G)	41A5043	1	Y
Brazilian Portuguese (models CTO-L)	41A5044	1	Y
Bulgarian (models B1G 41G CTO-G B2G F2G 38G)	41A5045	1	Y
Chinese/US (models B1G 41G CTO-G B2G F2G 38G)	41A5046	1	Y
Czech (models B1G 41G CTO-G B2G F2G 38G)	41A5047	1	Y
Danish (models B1G 41G CTO-G B2G F2G 38G)	41A5048	1	Y
Dutch (models B1G 41G CTO-G B2G F2G 38G)	41A5049	1	Y
French (models B1G 41G CTO-G B2G F2G 38G)	41A5050	1	Y
French Canadian 445 (models CTO-U)	41A5051	1	Y
French Canadian 58 (models CTO-U)	41A5052	1	Y
German (models B1G 41G CTO-G B2G F2G 38G)	41A50533	1	Y
Greek (models B1G 41G CTO-G B2G F2G 38G)	41A5054	1	Y
Greek/US (models B1G 41G CTO-G B2G F2G 38G)	41A5080	1	Y
Hebrew (models B1G 41G CTO-G B2G F2G 38G)	41A5055	1	Y
Hungarian (models B1G 41G CTO-G B2G F2G 38G)	41A5056	1	Y
Iceland (models B1G 41G CTO-G B2G F2G 38G)	41A5057	1	Y
Italy (models B1G 41G CTO-G B2G F2G 38G)	41A5058	1	Y
Japanese (models A3J A5J A7J A9J D2J D3J D6J D7J E2J E3J B3J N4J N5J N6J 31J 32J 33J 34J 35J 36J 37J)	41A5059	1	Y
LA Spanish (models CTO-L)	41A5061	1	Y
Norwegian (models B1G 41G CTO-G B2G F2G 38G)	41A5062	1	Y
Polish (models B1G 41G CTO-G B2G F2G 38G)	41A5063	1	Y
Portuguese (models B1G 41G CTO-G B2G F2G 38G)	41A5064	1	Y
Romanian (models B1G 41G CTO-G B2G F2G 38G)	41A5065	1	Y
Russian/Cy (models B1G 41G CTO-G B2G F2G 38G)	41A5066	1	Y
Serbian/Cyrillic (models B1G 41G CTO-G B2G F2G 38G)	41A5067	1	Y
Slovak (models B1G 41G CTO-G B2G F2G 38G)	41A5068	1	Y
Spanish (models B1G 41G CTO-G B2G F2G 38G)	41A5069	1	Y
Swedish/Finn (models B1G 41G CTO-G B2G F2G 38G)	41A5070	1	Y
Swiss French/German (models B1G 41G CTO-G B2G F2G 38G)	41A5071	1	Y
Thailand (models CTO-A 42T)	41A5072	1	Y

8118 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
Turkish (models B1G 41G CTO-G B2G F2G 38G)	41A5073	1	Y
Turkish (models B1G 41G CTO-G B2G F2G 38G)	41A5074	1	Y
UK English (models B1G 41G CTO-G B2G F2G 38G)	41A5075	1	Y
US Euro (models B1G 41G CTO-G B2G F2G 38G)	41A5076	1	Y
Slovenian (models B1G 41G CTO-G B2G F2G 38G)	41A5077	1	Y

8118 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, optical wheelmouse (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	41A4935	1	Y
Mouse, optical wheelmouse (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J)	89P5089	1	N
Mouse, optical wheelmouse (400 dpi) (models B1G 41G 42A 42Q 42T 43C 44Q 45Q CTO B2G 46C 47C 51C D1C E1C F1C F2G A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J 38G)	41U3013	1	Y

8118 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models CTO B1G 41G 42A 42Q 42T 44Q 45Q)	6952301	1	N
Power Cord (ANZ) (models CTO-A 42A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models B1G 41G 42A CTO-E CTO-A)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models B1G 41G 42A CTO-E CTO-A)	14F0032	1	N
Power Cord (EMEA) (models B1G 41G CTO-E)	13F9996	1	N
Power Cord (EMEA, LA) (models B1G 41G CTO-E CTO-L)	14F0068	1	N
Power Cord (APU) (models CTO-L)	36L8879	1	N
Power Cord (China, HK) (models CTO-A 43C 46C 47C 51C D1C E1C F1C)	02K0545	1	N
Power Cord (Japan) (models A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2E D2J D3J D4E D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J)	05K2876	1	N
Power Cord (EMEA) (models B1G 41G CTO-E)	14F0086	1	N
Power Cord (EMEA, ANZ, ASEAN Eng) (models B1G 41G 42A 42Q 44Q 45Q CTO-E CTO-A)	14F0014	1	N
Power Cord (EMEA) (models B1G 41G CTO-E)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y

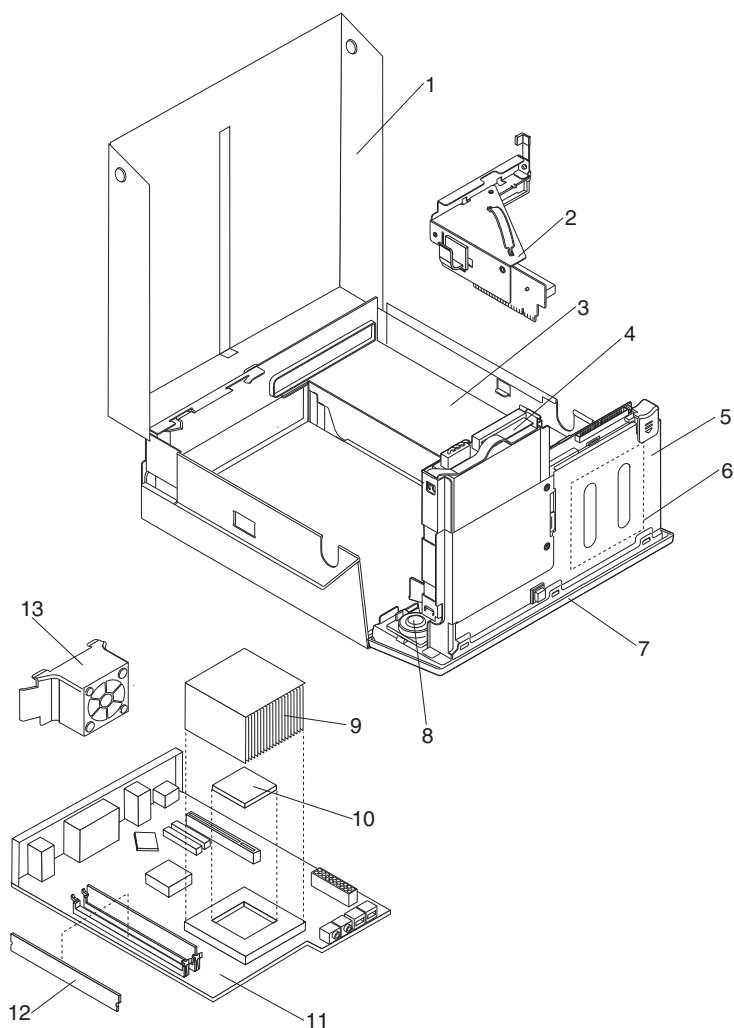
8118 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

8118 Windows XP Home Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
Simplified Chinese (models 47C 51C D1C E1C F1C)	41W3456	1	Y

8118 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
US/UK/AP/TH (models 42A 42Q 45Q 42T B1G 41G B2G F2G 38G)	39J9061	1	Y
FR/CF (models B1G 41G B2G F2G 38G)	39J9062	1	Y
GR (models B1G 41G B2G F2G 38G)	39J9063	1	Y
IT (models B1G 41G B2G F2G 38G)	39J9065	1	Y
BR (models B1G 41G B2G F2G 38G)	39J9066	1	Y
SP/LA (models B1G 41G B2G F2G 38G)	39J9064	1	Y
DK (models B1G 41G B2G F2G 38G)	39J9068	1	Y
NL (models B1G 41G B2G F2G 38G)	39J9071	1	Y
AE (models B1G 41G B2G F2G 38G)	39J9075	1	Y
SV (models B1G 41G B2G F2G 38G)	39J9067	1	Y
HE (models B1G 41G B2G F2G 38G)	39J9072	1	Y
FI (models B1G 41G B2G F2G 38G)	39J9069	1	Y
NO (models B1G 41G B2G F2G 38G)	39J9070	1	Y
PL (models B1G 41G B2G F2G 38G)	39J9073	1	Y
PO (models B1G 41G B2G F2G 38G)	39J9079	1	Y
RU (models B1G 41G B2G F2G 38G)	39J9076	1	Y
HU (models B1G 41G B2G F2G 38G)	39J9078	1	Y
CZ (models B1G 41G B2G F2G 38G)	39J9074	1	Y
TR (models B1G 41G B2G F2G 38G)	39J9077	1	Y

8118 Windows XP Pro Recovery CDs	FRU#	CRU Tier	RoHS Compliant?
GK (models B1G 41G B2G F2G 38G)	39J9080	1	Y
SL (models B1G 41G B2G F2G 38G)	39J9081	1	Y
Japanese (models A1J A2J A3J A4J A5J A6J A7J A8J A9J AAJ D2J D3J D4J D5J D6J D7J D8J D9J E2J E3J E4J E5J B3J B4J B5J B6J B7J B8J 31J 32J 33J 34J 35J 36J 37J)	41W3442	1	Y

Machine Type 8121



Item #	8121 FRUs	FRU#	CRU Tier	RoHS Compliant?
1	Top Cover (all models)	89P6782	1	Y
2	Riser card and bracket assembly (all models)	39M0552	1	Y
2	Riser card and bracket assembly (RoHS) (models CTO)	39M0621	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (models CTO)	39M0557	1	Y
2	Riser card and bracket assembly, Flippable, PCI and PCIX/DVI Add card (RoHS) (models CTO)	39M0618	1	Y
3	Power Supply (models CTO)	89P6805	2	N
3	Power Supply, 225W (models CTO)	41N3105	2	Y
4	Hard disk drive, 40GB 7200rpm SATA (models CTO)	71P7312	1	N
4	Hard disk drive, 40GB 7200rpm SATA (models CTO)	40Y8760	1	Y
4	Hard disk drive, 40GB 7200rpm SATA HGST Pathfinder (models CTO)	40Y9033	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO)	71P7293	1	N
4	Hard disk drive 80GB 7200rpm SATA (models CTO)	40Y8761	1	Y

Item #	8121 FRUs	FRU#	CRU Tier	RoHS Compliant?
4	Hard disk drive 80GB 7200rpm SATA (models CTO)	40Y9034	1	Y
4	Hard disk drive 80GB 7200rpm SATA (models CTO)	41X2500	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	71P7297	1	N
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	40Y8762	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	40Y9035	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	TBD	1	Y
4	Hard disk drive 160GB 7200rpm SATA (models CTO)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models CTO)	40Y9036	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models CTO)	40Y8763	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models CTO)	TBD	1	Y
4	Hard disk drive 250GB 7200rpm SATA (models CTO)	40Y8757	1	Y
5	Front Rotating Cage assembly (all models)	39K5057	2	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	26K5415	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	40Y8907	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	40Y8793	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	92P6565	1	N
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	40Y8963	1	Y
6	CD-ROM (24x) Plus Ultrabay Enhanced Drive (models CTO)	40Y8961	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO)	40Y8787	1	N
6	DVD-ROM Drive (8X/24X) (models CTO)	40Y8965	1	Y
6	DVD-ROM Drive (8X/24X) (models CTO)	40Y8959	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO)	40Y8945	1	Y
6	DVD-ROM/CD-RW Combo Drive (024\024\024\008) (models CTO)	40Y8949	1	Y
6	Multi-Burner Plus (Rambo 4) Ultrabay Enhanced Drive (RoHS) (models CTO)	40Y8951	1	Y
6	Slim PATA RAMBO 5 drive (models CTO)	41N3355	1	Y
6	Slim PATA RAMBO 5 drive (models CTO)	TBD	1	Y
7	Main Bezel assembly (all models)	39M0553	1	Y
8	Speaker and Cable assembly (all models)	03R0294	1	N
8	Speaker and Cable assembly (all models)	39K5012	1	Y
9	Heat Sink (all models)	39K5030	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7029	2	Y
10	Microprocessor - P4 3.2GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7031	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) N0 (800 fsb/2M cache) (models CTO)	39J7033	2	Y
10	Microprocessor - P4 2.8GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6093	2	Y
10	Microprocessor - P4 3.0GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6094	2	Y

Item #	8121 FRUs	FRU#	CRU Tier	RoHS Compliant?
10	Microprocessor - P4 3.2GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6095	2	Y
10	Microprocessor - P4 3.4GHz Prescott, (HT) E0-Value EM64T (800/1M) (models CTO)	39J6096	2	Y
10	Microprocessor - P4 2.66Ghz Prescott E0-Value (533/1M) (models CTO)	39J6089	2	Y
10	Microprocessor - P4 2.93GHz Prescott E0-Value (533/1M) (models CTO)	39J6091	2	Y
10	Microprocessor - Celeron 2.53Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6084	2	Y
10	Microprocessor - Celeron 2.66Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6085	2	Y
10	Microprocessor - Celeron 2.8Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6086	2	Y
10	Microprocessor - Celeron 2.93Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6087	2	Y
10	Microprocessor - Celeron 3.06Ghz Prescott E0-Value EM64T (533/256) (models CTO)	39J6088	2	Y
10	Microprocessor - P4 2.66Ghz Prescott, Intel 506 supporting EM64T (models CTO)	41D1029	2	Y
10	Microprocessor - P4 2.93Ghz Prescott, Intel 506 supporting EM64T (models CTO)	41D1031	2	Y
10	Microprocessor - Celeron 3.20Ghz/533/256 Prescott EM64T (models CTO)	41T1123	2	Y
10	Microprocessor - Celeron 3.33Ghz/533/256 Prescott EM64T (models CTO)	41T1169	2	Y
10	Microprocessor - P4 3.06Ghz/533/1MB 519K (models CTO)	41T1125	2	Y
10	Microprocessor - P4 3.0Ghz/800/1MG (models CTO)	39J6094	2	Y
11	System board, Planar With 10/1000 Lan (models CTO)	39J6410	2	N
11	System board, Tobago (1.1C planar rev)w/ 10/1000 LAN (models CTO)	41T1121	2	Y
12	Memory - 256MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO)	30R5120	1	Y
12	Memory - 512MB PC2-4200 (533MHz) DDR2 SDRAM (models CTO)	30R5121	1	Y
12	Memory - 1GB PC2-4200 (533MHz) DDR2 SDRAM (models CTO)	30R5122	1	Y
13	Rear exhaust fan (all models)	39M0551	1	Y

The FRUs listed in the following table are not illustrated.

8121 FRUs	FRU#	CRU Tier	RoHS Compliant?
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1	Y
HSS Tray assembly (includes grommet/pins/brkt/ground springs) (all models)	89P6778	1	Y
Power/LED cable assembly with bracket (all models)	39K5055	1	Y
Chassis and cover assembly (all models)	39K5056	2	Y
Cable, SATA HDD (all models)	39K5061	1	Y
Ultra Bay Enhanced Cable/Card Assembly (all models)	89P6787	2	N
Ultra Bay Enhanced Cable/Card Assembly (models CTO)	41N5305	2	Y

8121 FRUs	FRU#	CRU Tier	RoHS Compliant?
Fan assembly, front (all models)	39M0550	1	Y
Cable, intrusion switch (all models)	39K5022	1	Y
Vertical stand (all models)	89P6792	1	Y
Rear air deflector (all models)	89P6793	1	Y
Miscellaneous hardware kit (all models)	89P6794	1	Y
Battery 3.0V (all models)	33F8354	1	Y
Underdesk Mounting Kit (all models)	39M0599	1	Y
Plastic parts kit (all models)	39M0575	1	Y
Chassis Intrusion Switch-C2 Cable-Switch (models CTO)	09K9827	1	Y

8121 Keyboards (Standard PS/2 Black)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models CTO-U)	89P8300	1	Y
Arabic (models CTO-G)	89P8301	1	Y
Belgian/French (models CTO-G)	89P8302	1	Y
Belgian/UK (models CTO-G)	89P8303	1	Y
Brazilian/Portuguese (models CTO-L)	89P8304	1	Y
Bulgarian (models CTO-G)	89P8305	1	Y
Chinese/US (models CTO)	89P8306	1	Y
Czech (models CTO-G)	89P8307	1	Y
Danish (models CTO-G)	89P8308	1	Y
Dutch (models CTO-G)	89P8309	1	Y
French (models CTO-G)	89P8310	1	Y
French Canadian 445 (models CTO-U)	89P8311	1	Y
French Canadian 58 (models CTO-U)	89P8312	1	Y
German (models CTO-G)	89P8313	1	Y
Greek (models CTO-G)	89P8314	1	Y
Hebrew (models CTO-G)	89P8315	1	Y
Hungarian (models CTO-G)	89P8316	1	Y
Iceland (models CTO-G)	89P8317	1	Y
Italian 141 (models CTO-G)	89P8318	1	Y
Italian 142 (models CTO-G)	89P8319	1	Y
LA Spanish (models CTO-L)	89P8322	1	Y
Norwegian (models CTO-G)	89P8323	1	Y
Polish (models CTO-G)	89P8324	1	Y
Portuguese (models CTO-G)	89P8325	1	Y
Romanian (models CTO-G)	89P8326	1	Y
Russian/Cy (models CTO-G)	89P8327	1	Y
Russian/Cy (models CTO-G)	89P8328	1	Y
Serbian/Cyrillic (models CTO-G)	89P8329	1	Y

8121 Keyboards (Standard PS/2 Black)	FRU#	CRU Tier	RoHS Compliant?
Slovak (models CTO-G)	89P8330	1	Y
Spanish (models CTO-G)	89P8331	1	Y
Swedish/Finn (models CTO-G)	89P8332	1	Y
Swiss French/German (models CTO-G)	89P8333	1	Y
Turkish 440 (models CTO-G)	89P8335	1	Y
Turkish 179 (models CTO-G)	89P8336	1	Y
UK English (models CTO-G)	89P8337	1	Y
US Euro (models CTO-G)	89P8338	1	Y
Yugoslav/Latin (models CTO-G)	89P8339	1	Y

8121 USB Productivity keyboards	FRU#	CRU Tier	RoHS Compliant?
US/China English (models CTO)	89P8800	1	Y
Arabic (models CTO-G)	89P8801	1	Y
Arabic/French (models CTO-G)	89P8802	1	Y
Belgian/French (models CTO-G)	89P8803	1	Y
Belgian/English (models CTO-G)	89P8804	1	Y
Brazil/Portuguese (models CTO-L)	89P8805	1	Y
Bulgarian (models CTO-G)	89P8806	1	Y
Chinese/US (models CTO-A)	89P8807	1	Y
Czech (models CTO-G)	89P8808	1	Y
Danish (models CTO-G)	89P8809	1	Y
Dutch (models CTO-G)	89P8810	1	Y
French (models CTO-G)	89P8811	1	Y
French Canadian 445 (models CTO-U)	89P8812	1	Y
French Canadian 58 (models CTO-U)	89P8813	1	Y
German (models CTO-G)	89P8814	1	Y
Greek (models CTO-G)	89P8815	1	Y
Hebrew (models CTO-G)	89P8816	1	Y
Hungarian (models CTO-G)	89P8817	1	Y
Iceland (models CTO-G)	89P8818	1	Y
Italian (models CTO-G)	89P8819	1	Y
LA Spanish (models CTO-L)	89P8822	1	Y
Norwegian (models CTO-G)	89P8823	1	Y
Polish (models CTO-G)	89P8824	1	Y
Portuguese (models CTO-G)	89P8825	1	Y
Romanian (models CTO-G)	89P8826	1	Y
Romanian (models CTO-G)	89P8827	1	Y
Russian/Cyrillic (models CTO-G)	89P8828	1	Y
Serbian/Cyrillic (models CTO-G)	89P8829	1	Y

8121 USB Productivity keyboards	FRU#	CRU Tier	RoHS Compliant?
Slovak (models CTO-G)	89P8830	1	Y
Spanish (models CTO-G)	89P8831	1	Y
Swedish/Finn (models CTO-G)	89P8832	1	Y
Swiss French/German (models CTO-G)	89P8833	1	Y
Thailand (models CTO-A)	89P8834	1	Y
Turkish (models CTO-G)	89P8835	1	Y
Turkish (models CTO-G)	89P8836	1	Y
UK English (models CTO-G)	89P8837	1	Y
US Euro (models CTO-G)	89P8838	1	Y
Yugoslav/Latin (models CTO-G)	89P8839	1	Y

8121 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	89P9000	1	Y
Arabic (models CTO-G)	89P9001	1	Y
Belgian/French (models CTO-G)	89P9003	1	Y
Belgian/UK (models CTO-G)	89P9004	1	Y
Brazilian Portuguese (models CTO-L)	89P9005	1	Y
Bulgarian (models CTO-G)	89P9006	1	Y
Czech (models CTO-G)	89P9008	1	Y
Danish (models CTO-G)	89P9009	1	Y
Dutch (models CTO-G)	89P9010	1	Y
French (models CTO-G)	89P9011	1	Y
French Canadian 445 (models CTO-U)	89P9012	1	Y
French Canadian 58 (models CTO-U)	89P9013	1	Y
German (models CTO-G)	89P9014	1	Y
Greek (models CTO-G)	89P9015	1	Y
Hebrew (models CTO-G)	89P9016	1	Y
Hungarian (models CTO-G)	89P9017	1	Y
Iceland (models CTO-G)	89P9018	1	Y
LA Spanish (models CTO-L)	89P9022	1	Y
Norwegian (models CTO-G)	89P9023	1	Y
Polish (models CTO-G)	89P9024	1	Y
Portuguese (models CTO-G)	89P9025	1	Y
Romanian (models CTO-G)	89P9026	1	Y
Romanian (models CTO-G)	89P9027	1	Y
Russian/Cyrillic (models CTO-G)	89P9028	1	Y
Serbian/Cyrillic (models CTO-G)	89P9029	1	Y
Slovak (models CTO-G)	89P9030	1	Y
Spanish (models CTO-G)	89P9031	1	Y

8121 Keyboards (with fingerprint reader)	FRU#	CRU Tier	RoHS Compliant?
Swedish/Finn (models CTO-G)	89P9032	1	Y
Swiss French/German (models CTO-G)	89P9033	1	Y
Thailand (models CTO-A)	89P9034	1	Y
Turkish 440 (models CTO-G)	89P9035	1	Y
Turkish 179 (models CTO-G)	89P9036	1	Y
UK English (models CTO-G)	89P9037	1	Y
US Euro (models CTO-G)	89P9038	1	Y
Yugoslav/Latin (models CTO-G)	89P9039	1	Y

8121 Keyboards (Preferred Pro Fullsize w/ palmrest USB)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models CTO)	89P8530	1	Y
Arabic (models CTO-G)	89P8531	1	Y
Arabic/French (models CTO-G)	89P8548	1	Y
Belgian/French (models CTO-G)	89P8532	1	Y
Belgian/English (models CTO-G)	89P8533	1	Y
Brazilian/Portuguese (models CTO-L)	89P8534	1	Y
Bulgarian (models CTO-G)	89P8535	1	Y
Chinese/US (models CTO)	89P8536	1	Y
Czech (models CTO-G)	89P8537	1	Y
Danish (models CTO-G)	89P8538	1	Y
Dutch (models CTO-G)	89P8539	1	Y
French (models CTO-G)	89P8540	1	Y
French Canadian 445 (models CTO-U)	89P8541	1	Y
French Canadian 58 (models CTO-U)	89P8542	1	Y
German (models CTO-G)	89P8543	1	Y
Greek (models CTO-G)	89P8544	1	Y
Hebrew (models CTO-G)	89P8545	1	Y
Hungarian (models CTO-G)	89P8546	1	Y
Iceland (models CTO-G)	89P8547	1	Y
Italian 142 (models CTO-G)	89P8549	1	Y
LA Spanish (models CTO-L)	89P8552	1	Y
Norwegian (models CTO-G)	89P8553	1	Y
Polish (models CTO-G)	89P8554	1	Y
Portuguese (models CTO-G)	89P8555	1	Y
Romanian (models CTO-G)	89P8556	1	Y
Romanian (models CTO-G)	89P8557	1	Y
Russian/Cy (models CTO-G)	89P8558	1	Y
Serbian/Cyrillic (models CTO-G)	89P8559	1	Y
Slovak (models CTO-G)	89P8560	1	Y

8121 Keyboards (Preferred Pro Fullsize w/ palmrest USB)	FRU#	CRU Tier	RoHS Compliant?
Spanish (models CTO-G)	89P8562	1	Y
Swedish/Finn (models CTO-G)	89P8563	1	Y
Swiss French/German (models CTO-G)	89P8564	1	Y
Turkish 440 (models CTO-G)	89P8567	1	Y
Turkish 179 (models CTO-G)	89P8566	1	Y
UK English (models CTO-G)	89P8568	1	Y
US Euro (models CTO-G)	89P8569	1	Y
Yugoslav/Latin (models CTO-G)	89P8561	1	Y

8121 Keyboards (Preferred Pro Fullsize USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English/China (models CTO)	41A5289	1	Y
Arabic (models CTO-G)	41A5290	1	Y
Arabic/French (models CTO-G)	41A5291	1	Y
Belgium French (models CTO-G)	41A5292	1	Y
Belgium English (models CTO-G)	41A5293	1	Y
Brazilian Portuguese (models CTO-L)	41A5294	1	Y
Bulgarian (models CTO-G)	41A5295	1	Y
Czech (ABB) (models CTO-G)	41A5297	1	Y
Danish (models CTO-G)	41A5298	1	Y
Dutch (models CTO-G)	41A5299	1	Y
French (models CTO-G)	41A5300	1	Y
French Canadian (models CTO-U)	41A5301	1	Y
French Canadian (models CTO-U)	41A5302	1	Y
German (models CTO-G)	41A5303	1	Y
Greek (models CTO-G)	41A5304	1	Y
Greek/US(models CTO-G)	41A5305	1	Y
Hebrew (models CTO-G)	41A5306	1	Y
Hungarian (models CTO-G)	41A5307	1	Y
Iceland (models CTO-G)	41A5308	1	Y
Italy (models CTO-G)	41A5309	1	Y
LA Spanish (models CTO-L)	41A5312	1	Y
Norwegian (models CTO-G)	41A5313	1	Y
Polish (models CTO-G)	41A5314	1	Y
Portuguese (models CTO-G)	41A5315	1	Y
Romanian (models CTO-G)	41A5316	1	Y
Romanian (models CTO-G)	41A5317	1	Y
Russian/Cyrillic (models CTO-G)	41A5318	1	Y
Serbian/Cyrillic (models CTO-G)	41A5319	1	Y
Slovak (models CTO-G)	41A5320	1	Y

8121 Keyboards (Preferred Pro Fullsize USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
Spanish (models CTO-G)	41A5321	1	Y
Swedish/Finn (models CTO-G)	41A5322	1	Y
Turkish (models CTO-G)	41A5325	1	Y
Turkish (models CTO-G)	41A5326	1	Y
UK English (models CTO-G)	41A5327	1	Y
US Euro (models CTO-G)	41A5328	1	Y
Slovenian (models CTO-G)	41A5329	1	Y

8121 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A4961	1	Y
Arabic (models CTO-G)	41A4962	1	Y
Arabic/French (models CTO-G)	41A4963	1	Y
Belgian/French (models CTO-G)	41A4964	1	Y
Belgian/English (models CTO-G)	41A4965	1	Y
Brazil/Portuguese (models CTO-L)	41A4966	1	Y
Bulgarian (models CTO-G)	41A4967	1	Y
Chinese/US (models CTO-A)	41A4968	1	Y
Czech (models CTO-G)	41A4969	1	Y
Danish (models CTO-G)	41A4970	1	Y
Dutch (models CTO-G)	41A4971	1	Y
French (models CTO-G)	41A4972	1	Y
French Canadian 445 (models CTO-U)	41A4973	1	Y
French Canadian 58 (models CTO-U)	41A4974	1	Y
German (models CTO-G)	41A4975	1	Y
Greek (models CTO-G)	41A4976	1	Y
Greek/US (models CTO-G)	41A5078	1	Y
Hebrew (models CTO-G)	41A4977	1	Y
Hungarian (models CTO-G)	41A4978	1	Y
Iceland (models CTO-G)	41A4979	1	Y
Italian (models CTO-G)	41A4980	1	Y
LA Spanish (models CTO-L)	41A4983	1	Y
Norwegian (models CTO-G)	41A4984	1	Y
Polish (models CTO-G)	41A4985	1	Y
Portuguese (models CTO-G)	41A4986	1	Y
Romanian (models CTO-G)	41A4987	1	Y
Russian/Cyrillic (models CTO-G)	41A4988	1	Y
Serbian/Cyrillic (models CTO-G)	41A4989	1	Y
Slovak (models CTO-G)	41A4990	1	Y
Spanish (models CTO-G)	41A4991	1	Y

8121 Keyboards (Enhanced Performance w/ Hub USB keyboard)	FRU#	CRU Tier	RoHS Compliant?
Swedish/Finn (models CTO-G)	41A4992	1	Y
Swiss French/German (models CTO-G)	41A4993	1	Y
Thailand (models CTO-A)	41A4994	1	Y
Turkish (models CTO-G)	41A4995	1	Y
Turkish (models CTO-G)	41A4996	1	Y
UK English (models CTO-G)	41A4997	1	Y
US Euro (models CTO-G)	41A4998	1	Y
Slovenian (models CTO-G)	41A4999	1	Y

8121 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO)	41A5248	1	Y
Arabic/French (models CTO-G)	41A5250	1	Y
Belgian/French (models CTO-G)	41A5251	1	Y
Belgian/English (models CTO-G)	41A5252	1	Y
Brazil/Portuguese (models CTO-L)	41A5253	1	Y
Bulgarian (models CTO-G)	41A5254	1	Y
Czech (models CTO-G)	41A5256	1	Y
Danish (models CTO-G)	41A5257	1	Y
Dutch (models CTO-G)	41A5258	1	Y
French (models CTO-G)	41A5259	1	Y
French Canadian 445 (models CTO-U)	41A5260	1	Y
French Canadian 58 (models CTO-U)	41A5261	1	Y
German (models CTO-G)	41A5262	1	Y
Greek (models CTO-G)	41A5263	1	Y
Greek/US (models CTO-G)	41A5264	1	Y
Hebrew (models CTO-G)	41A5265	1	Y
Hungarian (models CTO-G)	41A5266	1	Y
Iceland (models CTO-G)	41A5267	1	Y
LA Spanish (models CTO-L)	41A5271	1	Y
Norwegian (models CTO-G)	41A5272	1	Y
Polish (models CTO-G)	41A5273	1	Y
Portuguese (models CTO-G)	41A5274	1	Y
Romanian (models CTO-G)	41A5275	1	Y
Romanian (models CTO-G)	41A5276	1	Y
Russian/Cyrillic (models CTO-G)	41A5277	1	Y
Serbian/Cyrillic (models CTO-G)	41A5278	1	Y
Slovak (models CTO-G)	41A5279	1	Y
Spanish (models CTO-G)	41A5280	1	Y
Swedish/Finn (models CTO-G)	41A5281	1	Y

8121 Keyboards (Fingerprint Keyboard)	FRU#	CRU Tier	RoHS Compliant?
Swiss French/German (models CTO-G)	41A5282	1	Y
Thailand (models CTO-A)	41A5283	1	Y
Turkish (models CTO-G)	41A5284	1	Y
Turkish (models CTO-G)	41A5285	1	Y
UK English (models CTO-G)	41A5286	1	Y
US Euro (models CTO-G)	41A5287	1	Y
Slovenian (models CTO-G)	41A5288	1	Y

8121 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
US English (models CTO -U)	41A5039	1	Y
Arabic (models CTO-G)	41A5040	1	Y
Arabic/French (models CTO-G)	41A5041	1	Y
Belgian/French (models CTO-G)	41A5042	1	Y
Belgian/UK (models CTO-G)	41A5043	1	Y
Brazilian Portuguese (models CTO-L)	41A5044	1	Y
Bulgarian (models CTO-G)	41A5045	1	Y
Chinese/US (models CTO)	41A5046	1	Y
Czech (models CTO-G)	41A5047	1	Y
Danish (models CTO-G)	41A5048	1	Y
Dutch (models CTO-G)	41A5049	1	Y
French (models CTO-G)	41A5050	1	Y
French Canadian 445 (models CTO-U)	41A5051	1	Y
French Canadian 58 (models CTO-U)	41A5052	1	Y
German (models CTO-G)	41A50533	1	Y
Greek (models CTO-G)	41A5054	1	Y
Greek/US (models CTO-G)	41A5080	1	Y
Hebrew (models CTO-G)	41A5055	1	Y
Hungarian (models CTO-G)	41A5056	1	Y
Iceland (models CTO-G)	41A5057	1	Y
Italy (models CTO-G)	41A5058	1	Y
LA Spanish (models CTO-L)	41A5061	1	Y
Norwegian (models CTO-G)	41A5062	1	Y
Polish (models CTO-G)	41A5063	1	Y
Portuguese (models CTO-G)	41A5064	1	Y
Romanian (models CTO-G)	41A5065	1	Y
Russian/Cy (models CTO-G)	41A5066	1	Y
Serbian/Cyrillic (models CTO-G)	41A5067	1	Y
Slovak (models CTO-G)	41A5068	1	Y
Spanish (models CTO-G)	41A5069	1	Y

8121 Keyboards (Preferred Pro Fullsize, PS/2)	FRU#	CRU Tier	RoHS Compliant?
Swedish/Finn (models CTO-G)	41A5070	1	Y
Swiss French/German (models CTO-G)	41A5071	1	Y
Thailand (models CTO-A 42T)	41A5072	1	Y
Turkish (models CTO-G)	41A5073	1	Y
Turkish (models CTO-G)	41A5074	1	Y
UK English (models CTO-G)	41A5075	1	Y
US Euro (models CTO-G)	41A5076	1	Y
Slovenian (models CTO-G)	41A5077	1	Y

8121 mice	FRU#	CRU Tier	RoHS Compliant?
Mouse, PS/2 - 2-button (black) (models CTO)	24P0383	1	N
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	24P0491	1	N
Mouse, Scrollpoint Optical (models CTO)	24P0499	1	N
Mouse, optical wheelmouse (models CTO)	89P5089	1	N
Mouse, PS/2 - 2-button (black) (models CTO)	41A4909	1	Y
Mouse, PS/2 - 3-button (Ball) Wheel Mouse (models CTO)	41A4917	1	Y
Mouse, Scrollpoint Optical (models CTO)	41A4933	1	Y
Mouse, optical wheelmouse (models CTO)	41A4935	1	Y
Mouse, optical wheelmouse (400 dpi) (models CTO)	41U3013	1	Y

8121 Adapters and miscellaneous FRU	FRU#	CRU Tier	RoHS Compliant?
PCI Modem Card (Soft), ATX V.90 (models CTO)	22P7943	1	N
Intel Pro Gigabit Enet / 1000T (Card) ATX (models CTO)	22P6509	1	N
IEEE 1394 Adapter - Firewire (models CTO)	73P2608	1	N
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	19R2374	1	N
Soft Modem V.90/V.44 (models CTO)	29R9729	1	Y
IEEE 1394 Adapter - Firewire (models CTO)	41D2781	1	Y
PCI-E DVI-D connection adapter (ADD2-R) (models CTO)	39J9334	1	Y

8121 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (models CTO)	6952301	1	N
Power Cord (ANZ) (models CTO-A)	13F9939	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, Korea) (models CTO-E CTO-A)	13F9978	1	N
Power Cord (EMEA, ANZ, ASEAN Eng, HK Eng) (models CTO-E CTO-A)	14F0032	1	N
Power Cord (EMEA) (models CTO-E)	13F9996	1	N
Power Cord (EMEA, LA) (models CTO-E CTO-L)	14F0068	1	N
Power Cord (APU) (models CTO-L)	36L8879	1	N
Power Cord (EMEA) (models CTO-E)	14F0086	1	N

8121 Power Cords	FRU#	CRU Tier	RoHS Compliant?
Power Cord (EMEA, ANZ, ASEAN Eng) (models CTO-E CTO-A)	14F0014	1	N
Power Cord (EMEA) (models CTO-E)	14F0050	1	N
Power Cord US (all U, F, T, S, D, L, and A models)	39M5080	1	Y
Power Cord (China) (all C models)	39M5205	1	Y
Power Cord (Japan) (all J models)	39M5193	1	Y
Power Cord (Brazil) (all P models)	39M5232	1	Y
Power Cord (LA (High Voltage) (Argentina, Paraguay, Uruguay) (all Y models)	39M5067	1	Y
Power Cord (ANZ) (all M models)	39M5102	1	Y
Power Cord (Korea) (all K and R models)	39M5212	1	Y
Power Cord (Hong Kong) (all B and H models)	39M5151	1	Y
Power Cord (Taiwan) (all V models)	39M5246	1	Y
Power Cord (Italy) (all G models)	39M5164	1	Y
Power Cord (Denmark) (all G models)	39M5129	1	Y
Power Cord (Switzerland) (all G models)	39M5157	1	Y
Power Cord (Israel) (all G models)	39M5171	1	Y
Power Cord (South Africa) (all G models)	39M5143	1	Y
Power Cord (India) (all Q models)	39M5004	1	Y
Power Cord (Austria, Belgium, Croatia, Czech, Finland, France, Germany, Netherlands, Norway, Poland, Romania, Spain, Sweden) (all G and A models)	39M5122	1	Y
Power Cord (UK / Ireland /Singapore, Malaysia, Brunei) (all G and A models)	39M5150	1	Y

Chapter 9. Additional Service Information

This chapter provides additional information that the service representative might find helpful.

Security features

Security features in this section include the following:

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

Hardware controlled Passwords

Hardware controlled passwords are set using the Setup Utility program. For more information about passwords, see “Using passwords” on page 53.

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 196.

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 is 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 might request that their servicers 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 **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**.

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 Setup Utility to determine the level of BIOS installed.
- Sources for obtaining the latest level BIOS available
 1. Lenovo support web site:
<http://www.lenovo.com/think/support/>
 2. Lenovo Customer Support Center
 3. Levels 1 and 2 Support

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

Flash update procedures

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

Updating (flashing) BIOS from a diskette or CD-ROM

1. Shut down the operating system and turn off the computer.
2. Insert the flash update diskette or CD-ROM.
3. Turn on the computer. The update begins.
4. When you are prompted to select a language, press the number on your keyboard that corresponds to the language; then press Enter.
5. When prompted to change the serial number, press Y, type the seven character serial number of your computer, and then press Enter.
6. When prompted to change the machine type/model, press Y, type the seven character machine type/model of your computer, and then press Enter.
7. Follow the instructions on the screen to complete the update.

Updating (flashing) BIOS from your operating system

Note: Due to constant improvements being made to the Lenovo Web site, Web page content (including the links referenced in the following procedure) is subject to change.

1. From your browser, type <http://www.lenovo.com/think/support>.
2. In the Use Quick path field, type your 4-digit machine type and click **Go**.
3. Under Browse by product, click **Downloads and drivers**.
4. Scroll down to the BIOS category and click on the **Flash Bios Update**.

5. On the Flash BIOS Update page, scroll down to locate the .txt file for the flash from the operating system version. Click the .txt file.
6. Print these instructions. This is very important because these instructions are not on the screen after the download begins.
7. From the browser, click **Back** to return to the list of files. Carefully follow the printed instructions to download, extract, and install the update.

Recovering from a POST/BIOS update failure

Attention: If an interruption occurs during a POST/BIOS update (flash update), the computer might not restart correctly. If this occurs, perform the following procedure (also known as a Boot-block recovery).

Note: If your computer has no internal diskette drive, an optional USB diskette drive must be connected to use the BIOS flash diskette.

1. Open the cover.
2. Remove any parts necessary to gain access to the Clear CMOS/Recovery jumper.
3. Move the Clear CMOS/Recovery jumper from the standard position (pins 1 and 2) to pins 2 and 3.
4. Insert the BIOS flash diskette in the diskette drive.
5. Close the cover and reconnect the computer power cord to the computer and to an electrical outlet. Turn on the computer.
6. The recovery session takes two to three minutes. During this time you will hear a series of beeps. After the update session completes, the series of beeps ends and the computer automatically turns off. There is no video during the recovery session.
7. When the computer turns off, open the cover.
8. Move the Clear CMOS/Recovery jumper back to the original position (pins 1 and 2).
9. Remove the BIOS flash diskette from the diskette drive.
10. Close or install the cover and reconnect all external cables.

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.

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 is ignored. Not all operating systems support ACPI BIOS mode.

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 allows 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 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).

Recovering software using the Rescue and Recovery program

The Rescue and Recovery program provides an environment that runs independently of the Windows operating system and is hidden from the Windows operating system. Because the Rescue and Recovery workspace is hidden, it is immune from most virus attacks and provides a safe place to perform rescue and recovery operations that might not be possible in the Windows environment. The following recovery solutions are provided by the Rescue and Recovery program:

- Create Product Recovery discs.
- Create rescue media.
- Back up your hard disk periodically.
- Create a Recovery Repair diskette.

If a problem with the software is encountered, you can use the recovery tools from either the Windows environment or from the Rescue and Recovery workspace to do one of the two recovery operations:

- Rescue files
- Restore your backups

Starting the Rescue and Recovery workspace

To start the program:

1. If your computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. Repeatedly press the F11 key as you turn on the computer.

Note: If a user password or an administrator password has been set, the Rescue and Recovery workspace is not displayed until you type the password.

3. The Rescue and Recovery workspace is displayed.

Refer to the *Quick Reference* that comes with the computer and the Rescue and Recovery help system for additional information about using the Rescue and Recovery program.

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