



ThinkCentre Hardware Maintenance Manual



ThinkThink**ThinkCentre**Think

Machine Types: 3026, 3029, 3039, 3054, 3137, 3139, 3149, 3219, 3245, 3246, 3269, 3282, 3319, 3349, 3394, 3421, 3491, 3544, 3627, 3652, 3699, 3769, 3878, 3934, 4972, 4992, 5132, 5206, 5261, 5267, 5297, 5325, 5384, 5391, 5450, 5472, 5474, 5485, 5498, 5536, 5548, 5554, 5567, 5852, 5864, 6213, 6232, and 6590



ThinkCentre Hardware Maintenance Manual

Note

Before using this information and the product it supports, be sure to read and understand the Chapter 2, "Safety information," on page 3 and "Notices," on page 329.

First Edition (February 2010)

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Chapter 1. About this manual

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

Note: Be sure to read and understand the Chapter 2, "Safety information," on page 3 before using the information in this manual.

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

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

Important safety information

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

Veillez 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.

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 and sold in the European Union after June, 2006. Products on the market before June, 2006 are not required to have RoHS compliant parts. 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.

Note: RoHS and non-RoHS FRU part numbers with the same fit and function are identified with unique FRU part numbers.

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 in the EU. 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 hardware maintenance manual 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 substitute for 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 computer 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 an electric 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 Field Replaceable Units (FRUs)
- 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 an electric 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 the testers.
 - 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 generatorsand 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.

Voltage-selection switch

Some computers are equipped with a voltage-selection switch located near the power-cord connection point on the computer. If your computer has a voltage-selection switch, ensure that you set the switch to match the voltage available at your electrical outlet. Setting the voltage-selection switch incorrectly can cause permanent damage to the computer.

If your computer does not have a voltage-selection switch, your computer is designed to operate only at the voltage provided in the country or region where the computer was originally purchased.

If you relocate your computer to another country, be aware of the following:

- If your computer does not have a voltage-selection switch, do not connect the computer to an electrical outlet until you have verified that the voltage provided is the same as it was in the country or region where the computer was originally purchased.
- If your computer has a voltage-selection switch, do not connect the computer to an electrical outlet until you have verified that the voltage-selection switch is set to match the voltage provided in that country or region.

If you are not sure of the voltage provided at your electrical outlet, contact your local electric company or refer to official Web sites or other literature for travelers to the country or region where you are located.

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 while handling the part.
- 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 tables when installing, moving, or opening covers on this product or attached devices.**

To Connect	To Disconnect
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 45C1566 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)

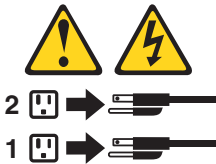
CAUTION:

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.





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 45C1566** 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 صناعته 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:

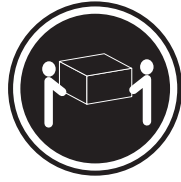
لا تنزع الأغشية. قد ينتج عن نزع أغشية منتج الليزر انفجار أشعة الليزر شديدة الخطورة.
لا يوجد أجزاء يمكن تغييرها داخل الجهاز. قد ينتج عن استخدام تحكمات أو تعديلات أو عمل أي تصرفات أخرى تخالف ما هو محدد هنا إلى انفجار أشعة شديدة الخطورة.



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)

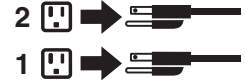


≥55 kg (121.2 lbs)

تنبيه :
يجب استخدام ممارسات آمنة عند الرفع



تنبيه :
لا يقرم 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 .





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:
<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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 45C1566 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)

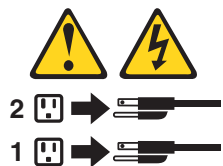
CUIDADO:

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.





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



警告：
更换锂电池时，请仅使用部件号为 45C1566 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，并请避免直接暴露在光束中。



≥18 千克（37 磅）



≥32 千克（70.5 磅）

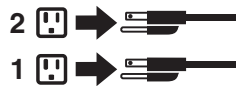


≥55 千克（121.2 磅）

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。





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
<ol style="list-style-type: none"> 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。 	<ol style="list-style-type: none"> 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 **45C1566** 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 **100°C (212°F)** 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。



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。





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
<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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 45C1566), 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.





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
<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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 45C1566 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 (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

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.





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 45C1566 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 כראות.

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 לייזר (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.

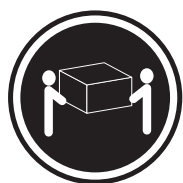
- שינויים, שימוש בבקורות או ביצוע הליכים אחרים מאלה המתוארים כאן, עלולים לגרום לחשיפה לקרינה מסוכנת.



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')

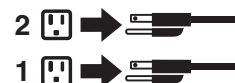


≤ 55 ק"ג (121.2 ליב')

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.





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
<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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 45C1566 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 (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

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.





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:
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 45C1566 또는 제조업체에서 지정한 동일한 종류의 제품을 사용하십시오. 사용자의 시스템이 리튬 배터리를 포함하는 모듈일 경우, 동일한 제조업체에서 동일한 모듈 유형으로 생산된 제품으로 교체하십시오. 배터리에 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.





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
<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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 45C1566 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 (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

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.



Chapter 3. General information

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

ThinkVantage Productivity Center

Note: This section applies only to computer models that have an internal hard disk drive and preinstalled software from Lenovo.

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

Additional information resources

If you have Internet access, the most up-to-date information for your computer is available at:

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

You can find the following information:

- CRU removal and installation instructions
- Downloads and drivers
- Parts information
- Publications
- Troubleshooting information
- Links to other useful sources of information

Specifications

This section lists the physical specifications for your computer.

For machine types: 3029, 3054, 3139, 3219, 3246, 3282, 3349, 3421, 3544, 3652, 3769, 3934, 4992, 5206, 5267, 5325, 5384, 5450, 5474, 5498, 5554, 5852, 6232, and 6590.

Dimensions

Width: 175 mm (6.89 inches)

Height: 402 mm (15.83 inches)

Depth: 440 mm (17.32 inches)

Weight

Maximum configuration as shipped: 11 kg (24.25 lbs)

For machine types: 3026, 3039, 3137, 3149, 3245, 3269, 3319, 3394, 3491, 3627, 3699, 3878, 4972, 5132, 5261, 5297, 5391, 5472, 5485, 5536, 5548, 5567, 5864, and 6213.

Dimensions

Width: 317 mm (12.48 inches)

Height: 99 mm (3.9 inches)

Depth: 355 mm (13.98 inches)

Weight

Maximum configuration as shipped: 7.5 kg (16.53 lbs)

For all machine types

Environment

Air temperature:

Operating: 10° to 35°C (50° to 95°F)

Non-operating: -40° to 60°C (-40° to 140°F) (with package)

Non-operating: -10° to 60°C (14° to 140°F) (without package)

Humidity:

Operating: 20% to 80% (non-condensing)

Non-operating: 20% to 90% (non-condensing)

Altitude:

Operating: -50 to 10 000 ft (-15.2 to 3 048 m)

Non-operating: -50 to 35 000 ft (-15.2 to 10 668 m)

Electrical input

Input voltage:

Low range:

Minimum: 100 V ac

Maximum: 127 V ac

Input frequency range: 50 to 60 Hz

Voltage-selection switch setting: 115 V ac

High range:

Minimum: 200 V ac

Maximum: 240 V ac

Input frequency range: 50 to 60 Hz

Voltage-selection switch setting: 230 V ac

Chapter 4. General checkout

Attention

The drives in the computer you are servicing might have been rearranged or the drive startup sequence might have been 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 the explanation of these messages, refer to the information supplied with that software package.

Before replacing a FRU, 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 325.

Note: For computer models that do not have an internal hard disk drive and use a remote hard disk drive accessed through the Secure Managed Client - Storage Array (SMC - Storage Array):

- You might receive the error message “No operating system found. Press F1 to repeat boot sequence.” In this case, press Ctrl+Alt+Delete instead of F1 to establish a connection to the storage area network where your operating system is stored. Verify that the user name is not logged on in another location.
- If the SMC login prompt disappears before you log in and then a black screen displays, contact your administrator.

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

1. Turn off the computer and all external devices.
2. Check all cables and power cords.
3. Set all display controls to the middle position.
4. Turn on all external devices.
5. Turn 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 7.
6. Look at the following conditions and follow the instructions:
 - If you hear beep codes during POST, go to “Beep symptoms” on page 74.
 - If the computer displays a POST error, go to “POST error codes” on page 74.
 - If the computer hangs and no error is displayed, turn off the computer and the power. Then, turn the power and the computer back on, continue at step 7.
7. Run the Diagnostic programs. See Chapter 5, “Diagnostics,” on page 45.
 - If you receive an error, replace the part that the diagnostic program calls out or go to “Diagnostic error codes” on page 57.
 - 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 drive 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 diagnostic diskettes (version)
7. Have the same configuration options set in the system
8. Have the same setup for operating-system-controlled files

Comparing the configuration and software set-up between “working and non-working” systems will often lead to problem resolution.

Chapter 5. Diagnostics

Diagnostic programs are used to test hardware components of your computer and report operating-system-controlled settings that can cause hardware failures. There are two programs preinstalled on your computer to help you diagnose computer problems:

- Lenovo ThinkVantage Toolbox or Lenovo System Toolbox, depending on your operating system (used when you are running the Windows operating system)
- PC-Doctor for Rescue and Recovery (used when your Windows operating system does not start)

Notes:

1. You can also download the PC-Doctor for DOS diagnostic program from <http://www.lenovo.com/support>.
2. If you are unable to isolate and repair the problem yourself after running the diagnostic programs, save and print the log files created by the diagnostic programs. You will need the log files when you speak to a Lenovo technical support representative.

Lenovo ThinkVantage Toolbox

Note: The Lenovo ThinkVantage Toolbox program is only available on computers preinstalled with Windows 7 from Lenovo.

The Lenovo ThinkVantage Toolbox program helps you maintain your computer, improve computing security, diagnose computer problems, get familiar with the innovative technologies provided by Lenovo, and get more information about your computer. You can use the Diagnostics feature of the Lenovo ThinkVantage Toolbox program to test devices, diagnose problems, create bootable diagnostic media, update system drivers, and review system information.

To diagnose the computer problems by using the Lenovo ThinkVantage Toolbox program, click **Start → All Programs → Lenovo ThinkVantage Tools → System Health and Diagnostics → Diagnostics**. Follow the instructions on the screen. For additional information, refer to the Lenovo ThinkVantage Toolbox help system.

Lenovo System Toolbox

Note: The Lenovo System Toolbox program is only available on computers preinstalled with Windows Vista or Windows XP from Lenovo.

The Lenovo System Toolbox program is a diagnostic program that works through the Windows operating system to enable you to view symptoms and solutions for computer problems, access the Lenovo troubleshooting center, update system drivers, and review system information.

To run the Lenovo System Toolbox program, click **Start → All Programs → Lenovo Services → Lenovo System Toolbox**. Follow the instructions on the screen. For additional information about running the diagnostic program, refer to the Lenovo System Toolbox help system.

PC-Doctor for Rescue and Recovery

The PC-Doctor for Rescue and Recovery diagnostic program is part of the Rescue and Recovery workspace on each Lenovo computer. Use the PC-Doctor for Rescue and Recovery diagnostic program if you are unable to start the Windows operating system.

To run the PC-Doctor for Rescue and Recovery diagnostic program from the Rescue and Recovery workspace, do the following:

1. Turn off the computer.
2. Repeatedly press and release the F11 key when turning on the computer. When you hear beeps or see a logo screen, stop pressing the F11 key. The Rescue and Recovery workspace opens after a short delay.
3. From the Rescue and Recovery workspace, select **Launch advanced Rescue and Recovery → Diagnose hardware**. The PC-Doctor for Rescue and Recovery diagnostic program opens.
4. Select the diagnostic test you want to run. Then, follow the instructions on the screen.

For additional information about running the PC-Doctor for Rescue and Recovery diagnostic program, refer to the PC-Doctor for Rescue and Recovery diagnostic program help system.

Note: If you encounter failures that prevent you from gaining access to the Rescue and Recovery workspace, you can run the PC-Doctor for Rescue and Recovery diagnostic program after using a rescue medium to recover the computer from failures and gaining access to the Rescue and Recovery workspace.

PC-Doctor for DOS

You can also download the latest version of the PC-Doctor for DOS diagnostic program from <http://www.lenovo.com/support>. The PC-Doctor for DOS diagnostic program runs independently of the Windows operating system. Use the PC-Doctor for DOS diagnostic program if you are unable to start the Windows operating system or if the two diagnostic programs preinstalled on your computer have not been successful in isolating a possible problem. You can run the PC-Doctor for DOS diagnostic program from a diagnostic disc that you created.

Creating a diagnostic disc

This section provides instructions on how to create a diagnostic disc.

To create a diagnostic disc, do the following:

1. Download a self-starting bootable CD/DVD image (known as an ISO image) of the diagnostic program from:
<http://www.lenovo.com/support>
2. Use any CD/DVD burning software to create a diagnostic disc with the ISO image.

Running the diagnostic program from a diagnostic disc

This section provides instructions on how to run the diagnostic program from a diagnostic disc that you created.

To run the diagnostic program from a diagnostic disc that you created, do the following:

1. Make sure the optical drive you want to use is set as the first boot device in the startup device sequence. See “Selecting a startup device” on page 53.
2. Make sure the computer is turned on and then insert the disc into the optical drive. The diagnostic program opens.

Note: You can insert the disc into the optical drive when you are setting the startup device sequence. However, if you insert the disc into the optical drive when you have already entered the operating system, you need to restart the computer to access the diagnostic program.

3. Follow the instructions on the screen to select the diagnostic test you want to run.

Note: For additional help, press the F1 key.

4. Remove the diagnostic disc from the optical drive when you complete the diagnostic process.

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 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 **Run Quick Test** does and takes longer to complete.

- Press F5 to automatically run all selected tests in all categories.
- From within a test category, press Ctrl+Enter to automatically run only the selected tests in that category.
- 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 49.

To select one or more tests, do the following:

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 computer.
- **Failure Type:**
Represents the type of error encountered.
- **DeviceID:**
Contains the component's unit-ID that corresponds to a fixed disk drive, removable media drive, 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 57 for error code listings.

Quick and Full erase - hard disk drive

The diagnostics program offers two hard disk drive format utilities:

- Quick Erase Hard Drive
- Full Erase Hard Drive

Quick Erase Hard Drive provides a DOS utility that performs the following:

- Destroys the Master Boot Record (MBR) on the hard disk 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 about 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 disk drive.
- Provides an estimate of time to completion along with a visual representation of completion status.
- Provides messages that warn the user about a non-recoverable process.

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

To select the Quick Erase Hard Drive or Full Erase Hard Drive utility, do the following:

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 on the screen.

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 program

The Setup Utility program is used to view and change the configuration settings of your 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. Make sure your computer is turned off.
2. Repeatedly press and release the F1 key when turning on the computer. When you hear multiple beeps or see a logo screen, release the F1 key.

Note: If a Power-On Password or an Administrator Password has been set, the Setup Utility program menu will not be displayed until you type the correct password. For more information, see “Using passwords.”

The Setup Utility program might start automatically when 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 various items about the system configuration. To view or change settings, start the Setup Utility program. See “Starting the Setup Utility program.” Then, follow the instructions on the screen.

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.

Using passwords

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

- Power-On Password
- Administrator Password
- Hard Disk Password

You do not have to set any passwords to use your computer. However, using passwords improves computing security. If you decide to set any passwords, read the following sections.

Password considerations

A password can be any combination of up to 64 alphabetic and numeric characters. For security reasons, it is recommended to use a strong password that cannot be easily compromised. To set a strong password, use the following guidelines:

- Have at least eight characters in length
- Contain at least one alphabetic character and one numeric character
- Setup Utility program and hard disk drive passwords are not case sensitive
- Not be your name or your user name
- Not be a common word or a common name
- Be significantly different from your previous passwords

Power-On Password

When a Power-On Password is set, you are prompted to type a valid password each time the computer is turned on. The computer cannot be used until the valid password is typed in.

Administrator Password

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

When an Administrator Password is set, you are prompted to type a valid password each time you try to access the Setup Utility program. The Setup Utility program cannot be accessed until a valid password is typed in.

If both the Power-On Password and Administrator Password are set, you can type either password. However, you must use your Administrator Password to change any configuration settings.

Hard Disk Password

Setting a Hard Disk Password prevents unauthorized access to the data on the hard disk drive. When a Hard Disk Password is set, you are prompted to type a valid password each time you try to access the hard disk drive.

Setting, changing, and deleting a password

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

1. Start the Setup Utility program. See “Starting the Setup Utility program” on page 51.
2. From the Setup Utility program main menu, select **Security**.
3. Depending on the password type, select **Set Power-On Password**, **Set Administrator Password**, or **Hard Disk Password**.
4. Follow the instructions on the right side of the screen to set, change, or delete a password.

Note: A password can be any combination of up to 64 alphabetic and numeric characters. For more information, see “Password considerations.”

Enabling or disabling a device

This section provides information on how to enable or disable user access to the following devices:

USB Setup	Use this option to enable or disable a USB connector. When a USB connector is disabled, the device connected to the USB connector cannot be used.
SATA Controller	When this feature is set to Disable , all devices connected to the SATA connectors (such as hard disk drives or the optical drive) are disabled and cannot be accessed.
External SATA Port	When this option is set to Disable , the device connected to the External SATA connector cannot be accessed.

To enable or disable a device, do the following:

1. Start the Setup Utility program. See “Starting the Setup Utility program” on page 51.
2. From the Setup Utility program main menu, select **Devices**.
3. Depending on the device you want to enable or disable, do one of the following:
 - Select **USB Setup** to enable or disable a USB device.
 - Select **ATA Drive Setup** to enable or disable an internal or external SATA device.
4. Select the desired settings and press Enter.
5. Press F10 to save and exit the Setup Utility program. See “Exiting from the Setup Utility program” on page 54.

Selecting a startup device

If your computer does not start up from a device such as the disc, diskette, or hard disk drive as expected, do one of the following to select the startup device you want.

Selecting a temporary startup device

Use this procedure to select a temporary startup device.

Note: Not all discs, hard disk drives, and diskettes are bootable.

1. Turn off your computer.
2. Repeatedly press and release the F12 key when turning on the computer. When the Please select boot device window displays, release the F12 key.
3. Select the desired startup device and press Enter. The computer will start up from the device you selected.

Note: Selecting a startup device from the Please select boot device window does not permanently change the startup sequence.

Selecting or 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 51.
2. From the Setup Utility program main menu, select **Startup**.
3. Select the devices for the Primary Startup Sequence, the Automatic Startup Sequence, and the Error Startup Sequence. Read the information displayed on the right side of the screen.
4. Press F10 to save and exit the Setup Utility program. See “Exiting from the Setup Utility program.”

Exiting from the Setup Utility program

After you finish viewing or changing settings, press Esc to return to the Setup Utility program main menu. You might have to press Esc several times. Then, do one of the following:

- If you want to save the new settings, press F10 to save and exit the Setup Utility program.
- If you do not want to save the settings, select **Exit → Discard Changes and Exit**.
- If you want to return to the default settings, press F9 to load the default settings.

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 the Chapter 4, “General checkout,” on page 43. You can use this index to help you decide which FRUs are needed when servicing a computer. If you are unable to correct the problem using this index, go to “Undetermined problems” on page 78.

Notes:

1. If you have both an error message and an incorrect audio response, diagnose the error message first.
2. 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.
3. If you did not receive any error message, look for a description of your error symptoms in the first part of this index.
4. For computer models that do not have an internal hard disk drive and use a remote hard disk drive accessed through the SMC - Storage Array:
 - You might receive the error message “No operating system found. Press F1 to repeat boot sequence.” In this case, press Ctrl+Alt+Delete instead of F1 to establish a connection to the storage area network where your operating system is stored. Verify that the user name is not logged on in another location.
 - If the SMC login prompt disappears before you log in and then a black screen displays, contact the administrator.

Hard disk drive boot error

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

Note: For computer models that do not have an internal hard disk drive and use a remote hard disk drive accessed through the SMC - Storage Array, contact the network or storage administrator.

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

Power Supply Problems

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

Check/Verify	FRU/Action
Check the following for proper installation. <ul style="list-style-type: none">• 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

Diagnostic error codes

Refer to the following diagnostic error codes when using the diagnostic tests. See “Running tests” on page 47 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 “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-024-XXX BIOS Addressing test failure	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-025-XXX BIOS Checksum Value error	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-026-XXX FLASH data error	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-027-XXX BIOS Configuration/Setup error	1. Run the Setup Utility program. 2. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 3. System board
000-034-XXX BIOS Buffer Allocation failure	1. Reboot the system. 2. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 3. Run memory test 4. System board
000-035-XXX BIOS Reset Condition detected	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-036-XXX BIOS Register error	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-038-XXX BIOS Extension failure	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. Adapter card 3. System board
000-039-XXX BIOS DMI data error	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
000-195-XXX BIOS Test aborted by user	Information only Restart the test, if necessary.

Diagnostic Error Code	FRU/Action
000-196-XXX BIOS test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
000-197-XXX BIOS test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 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	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Flash the system and retest. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
000-199-XXX BIOS test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 78. 2. Flash the system and re-test. 3. Replace component under function test.
000-250-XXX BIOS APM failure	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a disc" on page 326. 2. System board
000-270-XXX BIOS ACPI failure	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a disc" on page 326. 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	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a disc" on page 326. 2. System board
001-026-XXX System FLASH data error	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a disc" on page 326. 2. System board
001-027-XXX System Configuration/Setup error	<ol style="list-style-type: none"> 1. Run the Setup Utility program. 2. Flash the system. See "Updating (flashing) BIOS from a disc" on page 326. 3. System board
001-032-XXX System Device Controller failure	System board

Diagnostic Error Code	FRU/Action
001-034-XXX System Device Buffer Allocation failure	<ol style="list-style-type: none"> 1. Reboot the system 2. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 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	<ol style="list-style-type: none"> 1. Adapter card 2. System board
001-039-XXX System DMI data structure error	<ol style="list-style-type: none"> 1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 2. System board
001-040-XXX System IRQ failure	<ol style="list-style-type: none"> 1. Turn off/on the system and re-test. 2. System board
001-041-XXX System DMA failure	<ol style="list-style-type: none"> 1. Turn off/on the system and re-test. 2. System board
001-195-XXX System Test aborted by user	Information only Restart the test, if necessary.
001-196-XXX System test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
001-197-XXX System test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and retest. See “Updating (flashing) BIOS from a disc” on page 326. 3. Go to “Undetermined problems” on page 78.
001-199-XXX System test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 78. 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

Diagnostic Error Code	FRU/Action
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
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 the Setup and Utility program and re-test. 2. System board

Diagnostic Error Code	FRU/Action
001-293-XXX System CMOS Battery	1. CMOS Battery 2. System board
001-298-XXX System RTC date/time update failure	1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 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 “Updating (flashing) BIOS from a disc” on page 326. 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 the Setup Utility program. 2. Video drivers update 3. Video card, if installed 4. System board
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

Diagnostic Error Code	FRU/Action
005-040-XXX Video IRQ failure	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-195-XXX Video Test aborted by user	Information only Restart the test, if necessary.
005-196-XXX Video test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
005-197-XXX Video test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the test. 3. Replace the component called out in warning statement. 4. Replace the component under test.
005-198-XXX Video test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
005-199-XXX Video test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 78. 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Replace component under function test.
005-2XX-XXX 005-3XX-XXX Video subsystem error	<ol style="list-style-type: none"> 1. Video card, if installed. 2. System board
006-000-XXX Diskette interface Test Passed	No action
006-0XX-XXX Diskette interface error	<ol style="list-style-type: none"> 1. Diskette drive Cable 2. Diskette drive 3. System board
006-195-XXX Diskette interface Test aborted by user	Information only Restart the test, if necessary.
006-196-XXX Diskette interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
006-197-XXX Diskette interface test warning	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled . 2. Re-run the test. 3. Replace the component that is called out in warning statement. 4. Replace the component under test.

Diagnostic Error Code	FRU/Action
006-198-XXX Diskette interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Go to “Undetermined problems” on page 78.
006-199-XXX Diskette interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 78. 2. Flash the system and re-test. 3. Replace component under function test.
006-25X-XXX Diskette interface Error	<ol style="list-style-type: none"> 1. Diskette drive cable 2. Diskette drive 3. System board
015-000-XXX USB port Interface Test Passed	No action
015-001-XXX USB port Presence	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-002-XXX USB port Timeout	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-015-XXX USB port External Loopback failure	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-027-XXX USB port Configuration/Setup error	<ol style="list-style-type: none"> 1. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326 2. System board
015-032-XXX USB port Device Controller failure	System board
015-034-XXX USB port buffer allocation failure	<ol style="list-style-type: none"> 1. Reboot the system 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Run memory test 4. System board
015-035-XXX USB port Reset condition detected	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Run the Setup Utility program and check for conflicts. 2. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 3. System board
015-195-XXX USB port Test aborted by user	Information only Restart the test, if necessary.

Diagnostic Error Code	FRU/Action
015-196-XXX USB port test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
015-197-XXX USB port test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
015-199-XXX USB port test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 78. 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Replace component under function test.
018-000-XXX PCI Card Test Passed	No action
018-0XX-XXX PCI Card Failure	<ol style="list-style-type: none"> 1. Riser card, if installed 2. System board
018-195-XXX PCI Card Test aborted by user	<ol style="list-style-type: none"> 1. PCI card 2. Information only Restart the test, if necessary.
018-196-XXX PCI Card test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
018-197-XXX PCI Card test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.

Diagnostic Error Code	FRU/Action
018-199-XXX PCI Card test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 78. 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Replace component under function test.
018-250-XXX PCI Card Services error	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. PCI card 2. Riser card, if installed 3. System board
020-195-XXX PCI Test aborted by user	Information only Restart the test, if necessary.
020-196-XXX PCI test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
020-197-XXX PCI test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the test. 3. Replace the component that is called out in warning statement. 4. Replace the component under test.
020-198-XXX PCI test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Go to “Undetermined problems” on page 78.
020-199-XXX PCI test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 78. 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Replace component under function test.
020-262-XXX PCI system error	<ol style="list-style-type: none"> 1. PCI card 2. Riser card, if installed 3. System board
025-000-XXX IDE interface Test Passed	No action

Diagnostic Error Code	FRU/Action
025-00X-XXX 025-01X-XXX IDE interface failure	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. IDE signal cable 2. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. 3. Reseat IDE signal cable 4. IDE device 5. System board
025-02X-XXX 025-03X-XXX 025-04X-XXX IDE Interface failure	<ol style="list-style-type: none"> 1. IDE signal cable 2. Check AC/DC power adapter 3. Reseat IDE signal cable 4. IDE device 5. System board
025-195-XXX IDE interface Test aborted by user	Information only Restart the test, if necessary.
025-196-XXX IDE interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
025-197-XXX IDE interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the test. 3. Replace the component that is called out in warning statement. 4. Replace the component under test.
025-198-XXX IDE interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Go to “Undetermined problems” on page 78.
025-199-XXX IDE interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 78. 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Replace component under function test.
030-000-XXX SCSI interface Test Passed	No action
030-00X-XXX 030-01X-XXX SCSI interface failure	<ol style="list-style-type: none"> 1. SCSI signal cable 2. Check AC/DC power adapter 3. SCSI device 4. SCSI adapter card, if installed 5. System board

Diagnostic Error Code	FRU/Action
030-027-XXX SCSI interface Configuration/Setup error	<ol style="list-style-type: none"> 1. SCSI signal cable 2. Flash the system. See “Updating (flashing) BIOS from a disc” on page 326 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-03X-XXX 030-04X-XXX SCSI interface error	<ol style="list-style-type: none"> 1. SCSI signal cable 2. Check AC/DC power adapter 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-195-XXX SCSI interface Test aborted by user	Information only Restart the test, if necessary.
030-196-XXX SCSI interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
030-197-XXX SCSI interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the test. 3. Replace the component that is called out in warning statement. 4. Replace the component under test.
030-198-XXX SCSI interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Go to “Undetermined problems” on page 78.
030-199-XXX SCSI interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 78. 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Replace component under function test.
035-000-XXX RAID interface Test Passed	No action
035-0XX-XXX RAID interface Failure	<ol style="list-style-type: none"> 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 Restart the test, if necessary.
035-196-XXX RAID interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.

Diagnostic Error Code	FRU/Action
035-197-XXX RAID interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
035-199-XXX RAID interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 78. 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Replace component under function test.
071-000-XXX Audio port Interface Test Passed	No action
071-00X-XXX 071-01X-XXX 071-02X-XXX Audio port error	<ol style="list-style-type: none"> 1. Run the Setup Utility program. 2. Flash the system. See "Updating (flashing) BIOS from a disc" on page 326. 3. System board
071-03X-XXX Audio port failure	<ol style="list-style-type: none"> 1. Speakers 2. Microphone 3. Audio card, if installed 4. System board
071-04X-XXX Audio port failure	<ol style="list-style-type: none"> 1. Run the Setup Utility program. 2. Audio card, if installed 3. System board
071-195-XXX Audio port Test aborted by user	Information only Restart the test, if necessary.
071-196-XXX Audio port test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
071-197-XXX Audio port test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the test. 3. Replace the component that is called out in warning statement. 4. Replace the component under test.

Diagnostic Error Code	FRU/Action
071-198-XXX Audio port test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
071-199-XXX Audio port test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 78. 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Replace component under function test.
071-25X-XXX Audio port failure	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Remove the game port device and re-test the system.
080-195-XXX Game Port interface Test aborted by user	Information only Restart the test, if necessary.
080-196-XXX Game Port interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
080-197-XXX Game Port interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
080-199-XXX Game Port interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 78. 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Replace component under function test.
086-000-XXX Mouse Port interface Test Passed	No action
086-001-XXX Mouse Port interface Presence	<ol style="list-style-type: none"> 1. Mouse 2. System board

Diagnostic Error Code	FRU/Action
086-032-XXX Mouse Port interface Device controller failure	<ol style="list-style-type: none"> 1. Mouse 2. System board
086-035-XXX Mouse Port interface Reset	<ol style="list-style-type: none"> 1. Mouse 2. System board
086-040-XXX Mouse Port interface IRQ failure	<ol style="list-style-type: none"> 1. Run the Setup Utility program. 2. Mouse 3. System board
086-195-XXX Mouse Port interface Test aborted by user	Information only Restart the test, if necessary.
086-196-XXX Mouse Port interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
086-197-XXX Mouse Port interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See . 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Go to "Undetermined problems" on page 78.
086-199-XXX Mouse Port interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 78. 2. Flash the system and re-test. See "Updating (flashing) BIOS from a disc" on page 326. 3. Replace component under function test.
089-000-XXX Microprocessor Test Passed	No action
089-XXX-XXX Microprocessor failure	<ol style="list-style-type: none"> 1. Microprocessor(s) 2. System board
089-195-XXX Microprocessor Test aborted by user	Information only Restart the test, if necessary.
089-196-XXX Microprocessor test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
089-197-XXX Microprocessor test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 2. Re-run the test. 3. Replace the component that is called out in warning statement. 4. Replace the component under test.

Diagnostic Error Code	FRU/Action
089-198-XXX Microprocessor test aborted	<ol style="list-style-type: none"> Flash the system. See “Updating (flashing) BIOS from a disc” on page 326. Go to “Undetermined problems” on page 78.
089-199-XXX Microprocessor test failed, cause unknown	<ol style="list-style-type: none"> See “Undetermined problems” on page 78. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. Replace component under function test.
170-000-XXX Voltage Sensor(s) Test Passed	No action
170-0XX-XXX Voltage Sensor(s) failure	<ol style="list-style-type: none"> Flash system System board
170-195-XXX Voltage Sensor(s) Test aborted by user	Information only Restart the test, if necessary.
170-196-XXX Voltage Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> Press F3 to review the log file. Restart the test to reset the log file.
170-197-XXX Voltage Sensor(s) test warning	<ol style="list-style-type: none"> Make sure the component that is called out is connected and/or enabled. See . Re-run the test. Replace the component that is called out in warning statement. Replace the component under test.
170-198-XXX Voltage Sensor(s) test aborted	<ol style="list-style-type: none"> If a component is called out, make sure it is connected and/or enabled. See . Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. Go to “Undetermined problems” on page 78.
170-199-XXX Voltage Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> See “Undetermined problems” on page 78. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. Replace component under function test.
170-250-XXX 170-251-XXX Voltage Sensor(s) Voltage limit error	<ol style="list-style-type: none"> AC/DC power adapter System board
170-254-XXX Voltage Sensor(s) Voltage Regulator Module error	<ol style="list-style-type: none"> Voltage Regulator Module (VRM) Microprocessor System board
175-000-XXX Thermal Sensor(s) Test Passed	No action

Diagnostic Error Code	FRU/Action
175-0XX-XXX Thermal Sensor(s) failure	<ol style="list-style-type: none"> 1. Flash system 2. System board
175-195-XXX Thermal Sensor(s) Test aborted by user	Information only Restart the test, if necessary
175-196-XXX Thermal Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file. 2. Restart the test to reset the log file.
175-197-XXX Thermal Sensor(s) test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See . 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	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled . 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Go to “Undetermined problems” on page 78.
175-199-XXX Thermal Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> 1. See “Undetermined problems” on page 78. 2. Flash the system and re-test. See “Updating (flashing) BIOS from a disc” on page 326. 3. Replace component under function test.
175-250-XXX 175-251-XXX Thermal Sensor(s) limit error	<ol style="list-style-type: none"> 1. Check fans 2. Check AC/DC power adapter voltages. 3. Microprocessor 4. System board
185-000-XXX Asset Security Test Passed	No action
185-XXX-XXX Asset Security failure	<ol style="list-style-type: none"> 1. Flash system 2. System board
185-278-XXX Asset Security Chassis Intrusion	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Replace the memory module called out by the test 2. System board
202-000-XXX System Cache Test Passed	No action

Diagnostic Error Code	FRU/Action
202-XXX-XXX System Cache error	<ol style="list-style-type: none"> 1. Cache, if removable 2. System board 3. Microprocessor
206-000-XXX Diskette Drive Test Passed	No action
206-XXX-XXX Diskette Drive error	<ol style="list-style-type: none"> 1. Diskette Drive Cable 2. Check AC/DC power adapter voltages 3. Diskette drive 4. System board
215-000-XXX CD-ROM Drive Test Passed	No action
215-XXX-XXX CD-ROM Drive error	<ol style="list-style-type: none"> 1. CD-ROM Drive Cable 2. Check AC/DC power adapter 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	<ol style="list-style-type: none"> 1. Hard Disk Drive Cable 2. Check AC/DC power adapter 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	<ol style="list-style-type: none"> 1. Hard Disk Drive Cable 2. Check AC/DC power adapter 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	<ol style="list-style-type: none"> 1. Remove the Hi-Capacity Cartridge Drive and re-test the system.
301-XXX-XXX Keyboard error	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Mouse 2. Check and test Keyboard 3. System board
303-000-XXX Joystick Test Passed	No action

Diagnostic Error Code	FRU/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	<ol style="list-style-type: none"> 1. Run the Setup Utility program to enable DDC 2. Cable 3. Monitor 4. Video card 5. System board
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 tones or a series of tones separated by pauses (intervals without sound) during POST.

The following tables describes beep symptoms.

Beep Symptom	FRU/Action
1, 2, or 3 beeps	Reseat the memory modules. If the error persists, replace the memory modules one at a time until the failing module is determined.
4, 5, 6, or 7 beeps 9, 10, or 11 beeps	Before replacing the system board, remove any optional adapters (Express card, Modem card, Media reader) and retry. If the problem persists, replace the system board. Otherwise, reinstall the optional adapters one at a time until the failing adapter is determined.
8 beeps	Replace the system board.

POST error codes

Each time you turn on your computer, it performs a series of tests to check the operation of the computer components and some optional devices in the computer. This series of tests is called the *power-on self-test*, or POST. The POST does the following operations:

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

If the POST detects a problem, an error message is displayed on the screen. A single problem can cause several error messages. When you correct the cause of the first error message, the other error messages probably will not be displayed the

next time you turn on the computer.

Error code	POST error message	Description/Action
	CMOS Battery Failure	The CMOS battery is no longer functional. Replace the battery.
	Keyboard error or no keyboard present	Cannot initialize the keyboard. Make sure the keyboard is correctly connected to the computer and that no keys are held pressed during the POST. To purposely configure the computer without a keyboard, set the error halt condition in the Setup Utility program to HALT ON ALL, BUT KEYBOARD. The BIOS then ignores the missing keyboard during the POST.
	Press TAB to show POST screen	Pressing the TAB key permits you to toggle between the default POST screen and a custom POST display screen.
	Main processor	The main microprocessor information is displayed on the POST screen.
	Installed memory:	The total size of installed memory modules is displayed on the POST screen.
	SATA 0:	The hard disk drive information is displayed on the POST screen.
0210	Stuck key	When a key is kept pressed for a long time, the error message will be displayed during the POST.
0135	Fan failure	The system might be overheating. Press F10 to exit. Note: If the problem is caused by the microprocessor fan, pressing F10 will not solve the problem.
0211	Keyboard not found	When there is no keyboard detected, the error message will be displayed.
0164	Memory size decreased	Press F10 to exit.

Error code	POST error message	Description/Action
1762	Configuration change has occurred	This error message is displayed when a hard disk drive or optical drive change has been made. Press F10 to exit.
0662	Configuration change has occurred	This error message is displayed when a floppy drive change has been made. Press F10 to exit.
1820	More than one external fingerprint reader is attached. Power off and remove all but the reader that you set up within your main operating system.	If more than one external fingerprint reader is connected to a computer, this error message will be displayed to inform you to remove all of the fingerprint keyboards except the one compatible with the fingerprint application on your computer.
1962	No operating system found. Press any key to repeat boot sequence.	This error occurs only after the POST is completed. Press any key to repeat boot sequence.

Miscellaneous error messages

Message/Symptom	FRU/Action
Changing display colors	Display / Monitor
Computer will <i>not</i> power-off. See "Power Supply Problems" on page 56.	<ol style="list-style-type: none"> 1. Power Switch 2. System Board 3. Riser card, if installed
Computer will <i>not</i> PXE from server	<ol style="list-style-type: none"> 1. Ensure that network is in startup sequence as first device or first device after diskette 2. Ensure that network adapter is enabled for PXE 3. Network adapter (Advise network administrator of new MAC address)
Computer will <i>not</i> perform a Wake on LAN® (if applicable)	<ol style="list-style-type: none"> 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 51) 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 Problems" on page 56.	<ol style="list-style-type: none"> 1. AC/DC Power Adapter 2. System Board
Diskette drive in-use light remains on or does not light when drive is active.	<ol style="list-style-type: none"> 1. Diskette Drive 2. System Board 3. Diskette Drive Cable
Flashing cursor with an otherwise blank display.	<ol style="list-style-type: none"> 1. System Board 2. Primary Hard Disk Drive 3. Hard Disk Drive Cable
Incorrect memory size during POST	<ol style="list-style-type: none"> 1. Run the Memory tests 2. Memory Module 3. System Board
"Insert a Diskette" icon appears with a known-good diagnostics diskette in the first 3.5-inch diskette drive.	<ol style="list-style-type: none"> 1. System Board 2. Diskette Drive Cable 3. Network Adapter
Intensity or color varies from left to right of characters and color bars	<ol style="list-style-type: none"> 1. Display 2. Video adapter (if present) 3. System Board
No power or fan not running	See "Power Supply Problems" on page 56.

Message/Symptom	FRU/Action
Non-system disk or disk error-type message with a known-good diagnostic diskette.	<ol style="list-style-type: none"> 1. Diskette Drive 2. System Board 3. Diskette Drive Cable
Other display symptoms not listed above (including blank or illegible display)	<ol style="list-style-type: none"> 1. Display 2. System Board
Power-on indicator or hard disk drive in-use light not on, but computer works correctly	<ol style="list-style-type: none"> 1. Power switch/LED assembly 2. System Board
Printer problems	<ol style="list-style-type: none"> 1. Printer 2. System Board
Program loads from the hard disk with a known-good diagnostics diskette in the first 3.5-inch diskette drive	<ol style="list-style-type: none"> 1. Run the Setup and Utility program and check Startup sequence. 2. Diskette Drive 3. Diskette Drive Cable 4. System Board 5. AC/DC power adapter
PXE computer cannot access programs from its own hard disk.	Replace the hard disk drive
PXE computer does not PXE from server	<ol style="list-style-type: none"> 1. Check startup sequence 2. Check the network adapter LED status
Some or all keys on the keyboard do not work	<ol style="list-style-type: none"> 1. Keyboard 2. Keyboard Cable 3. System Board

Undetermined problems

If you encounter undetermined problems, do the following:

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

If all devices and adapter cards have been removed, and the problem continues, replace the system board. See .

Chapter 8. Replacing FRUs (Machine Types: 3029, 3054, 3139, 3219, 3246, 3282, 3349, 3421, 3544, 3652, 3769, 3934, 4992, 5206, 5267, 5325, 5384, 5450, 5474, 5498, 5554, 5852, 6232, and 6590.)

Important

Be sure to read and understand Chapter 2, "Safety information," on page 3 before you replace any FRU. These precautions and guidelines will help you work safely.

FRU replacements are to be done only by trained service technicians.

This chapter does not contain the remove or replace procedure for all FRUs. Only the major FRUs are documented.

Locating connectors on the front of the computer

The following illustration shows the location of the connectors on the front of your computer.

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

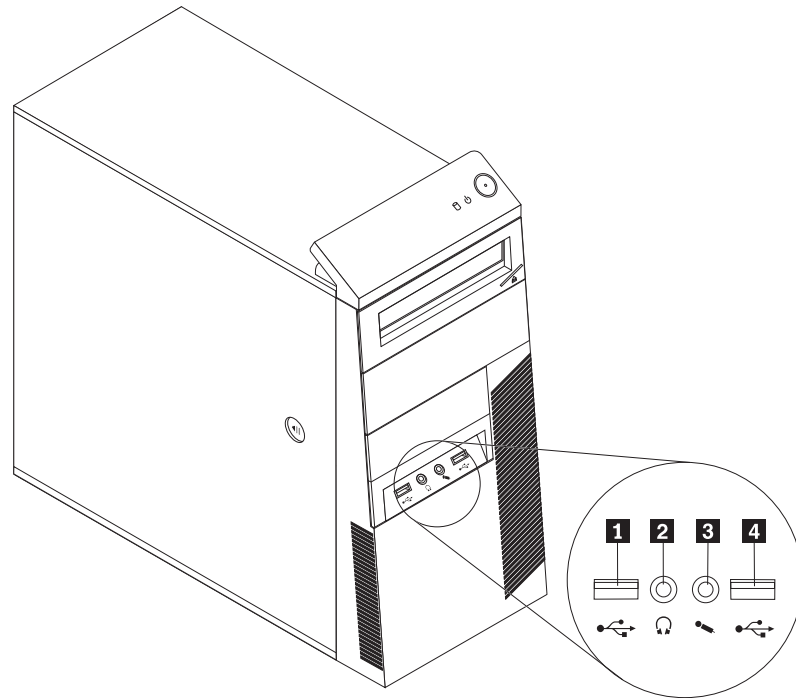


Figure 1. Front connector locations

- | | |
|------------------------------|-------------------------------|
| 1 USB connector | 3 Microphone connector |
| 2 Headphone connector | 4 USB connector |

Locating connectors on the rear of the computer

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

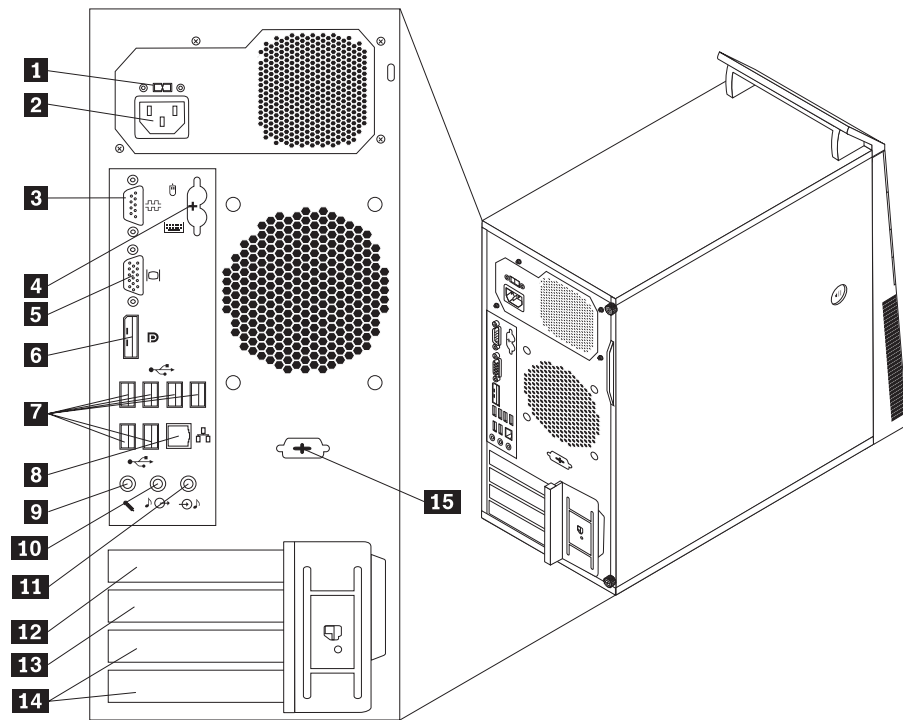


Figure 2. Rear connector locations

- | | |
|--|--|
| 1 Voltage-selection switch (some models) | 9 Microphone connector |
| 2 Power cord connector | 10 Audio line-out connector |
| 3 Serial port | 11 Audio line-in connector |
| 4 PS/2 keyboard and mouse connectors (optional) | 12 PCI Express x16 graphics card slot |
| 5 VGA monitor connector (not applicable on some models) | 13 PCI Express x1 card slot |
| 6 DisplayPort connector (not applicable on some models) | 14 PCI card slots (2) |
| 7 USB connectors (6) | 15 Optional serial port |
| 8 Ethernet connector | |

Removing the computer cover

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to remove the computer cover.

CAUTION:



Turn off the computer and wait three to five minutes to let the computer cool before removing the computer cover.

To remove the computer cover, do the following:

1. Remove any media from the drives and turn off all attached devices and the computer.
2. Disconnect all power cords from electrical outlets.
3. Disconnect the power cords, Input/Output (I/O) cables, and any other cables that are connected to the computer. See “Locating connectors on the front of the computer” on page 80 and “Locating connectors on the rear of the computer” on page 81.
4. Remove any locking device that secures the computer cover, such as a padlock or an integrated cable lock.
5. Remove any thumbscrews that secure the computer cover.

6. Press the cover-release button on the side of the computer and slide the cover to the rear of the computer to remove the cover.

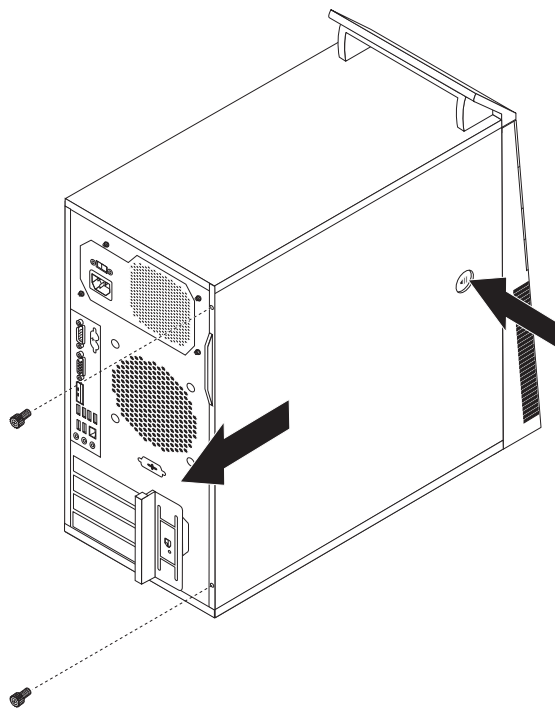


Figure 3. Removing the computer cover

Locating components

The following illustration shows the major parts in the computer.

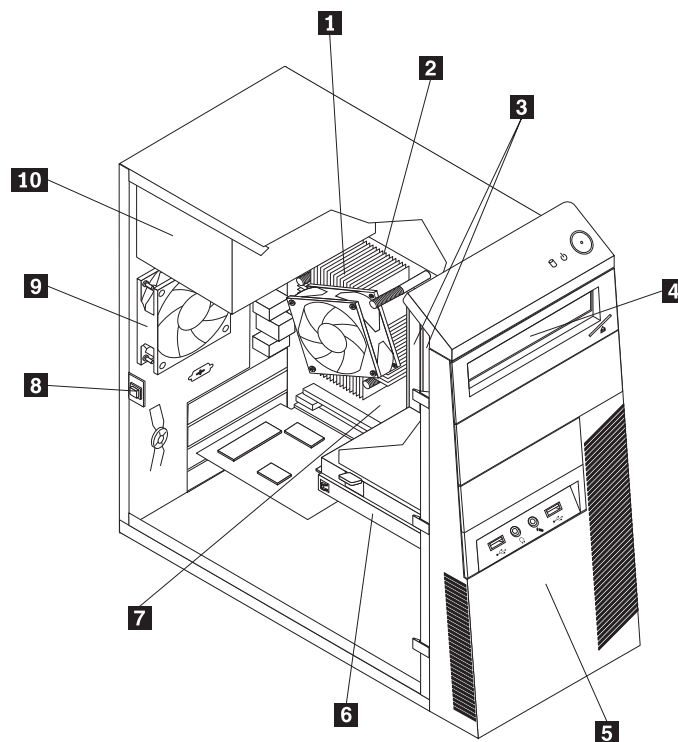


Figure 4. Component locations

- | | |
|---|---|
| 1 Heat sink and heat sink fan assembly | 6 Hard disk drive |
| 2 Microprocessor | 7 System board |
| 3 Memory modules | 8 Cover presence switch (also called intrusion switch) |
| 4 Optical drive | 9 Rear system fan |
| 5 Front bezel assembly | 10 Power supply |

Locating parts on the system board

Figure 5 shows the location of parts on the system board.

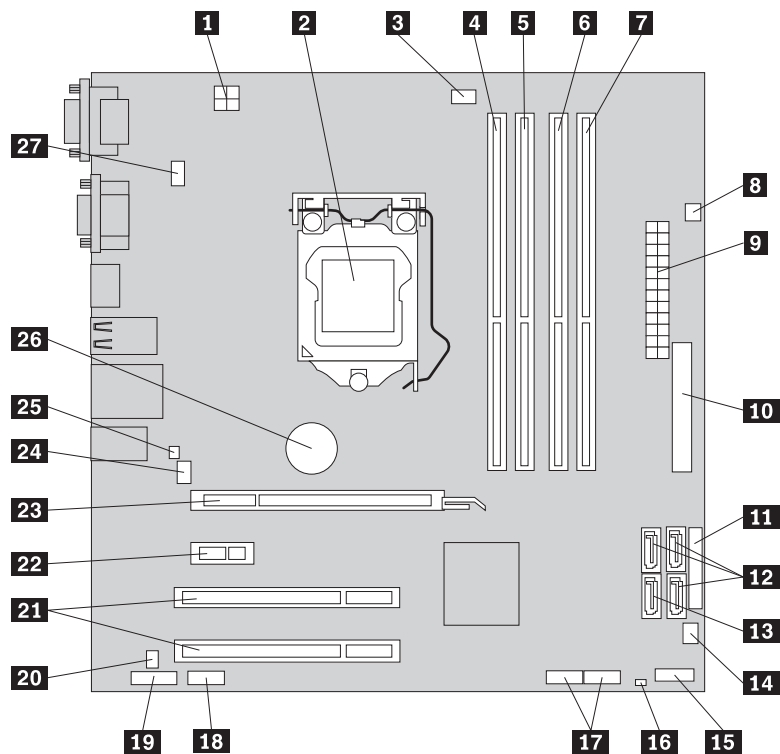


Figure 5. System board parts locations

- | | |
|---------------------------------------|---|
| 1 4-pin power connector | 15 Front panel connector |
| 2 Microprocessor | 16 Clear CMOS (Complementary Metal Oxide Semiconductor) /Recovery jumper |
| 3 Microprocessor fan connector | 17 Front USB connectors (2) |
| 4 Memory slot 2 | 18 Serial (COM2) connector |
| 5 Memory slot 1 | 19 Front audio connector |
| 6 Memory slot 4 | 20 Internal speaker connector |
| 7 Memory slot 3 | 21 PCI card slots (2) |
| 8 Thermal sensor connector | 22 PCI Express x1 card slot |
| 9 24-pin power connector | 23 PCI Express x16 graphics card slot |
| 10 Diskette drive connector | 24 System fan connector |
| 11 Parallel connector | 25 Cover presence switch connector (Intrusion switch connector) |
| 12 SATA connectors (3) | 26 Battery |
| 13 eSATA connector | 27 PS/2 keyboard and mouse connector |
| 14 Power fan connector | |

Removing and reinstalling the front bezel

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to remove and reinstall the front bezel.

To remove and reinstall the front bezel, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Remove the front bezel by releasing the three plastic tabs on the left side and pivoting the front bezel outward.

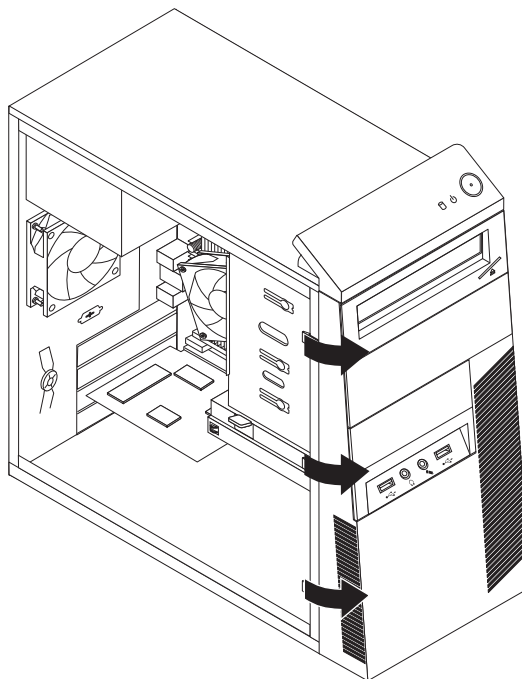


Figure 6. Removing the front bezel

4. To reinstall the front bezel, align the three plastic tabs on the right side of the front bezel with the corresponding holes in the chassis, then pivot the front bezel inwards until it snaps into position on the left side.
5. To complete the installation, go to “Completing the parts replacement” on page 115.

Replacing a memory module

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to install or replace a memory module.

Your computer has four slots for installing or replacing DDR3 DIMMs that provide up to a maximum of 16 GB system memory. When installing or replacing a memory module, use the following guidelines:

- Use 1 GB, 2 GB, or 4 GB DDR3 DIMMs in any combination up to a maximum of 16 GB.
- Install memory modules in the sequence of DIMM 1, DIMM 3, DIMM 2, and DIMM 4. See “Locating parts on the system board” on page 85.

To install or replace a memory module, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Locate the memory slots. See “Locating parts on the system board” on page 85.
4. Remove any parts that might prevent your access to the memory slots. Depending on your computer model, you might need to remove the PCI Express x16 graphics card for easier access to the memory slots.
5. Open the retaining clips.
If you are replacing an old memory module, open the retaining clips and

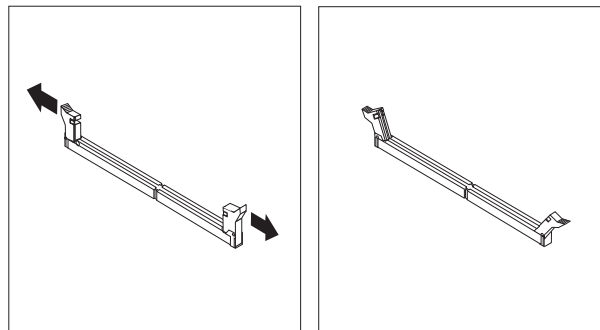


Figure 7. Opening the retaining clips

gently pull the memory module out of the memory slot.

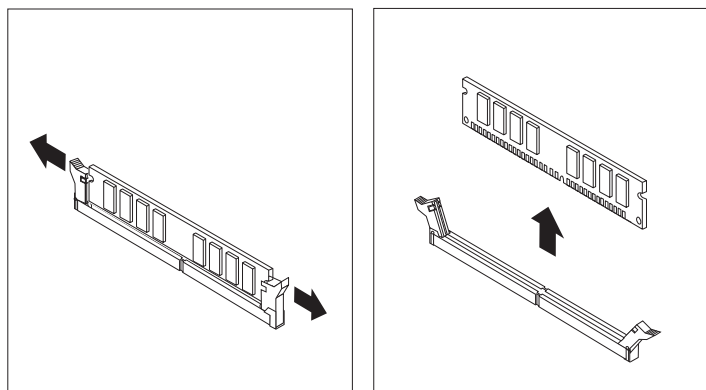


Figure 8. Removing a memory module

6. Position the new memory module over the memory slot. Make sure that the notch **1** on the memory module aligns correctly with the slot key **2** on the system board. Push the memory module straight down into the slot until the retaining clips close.

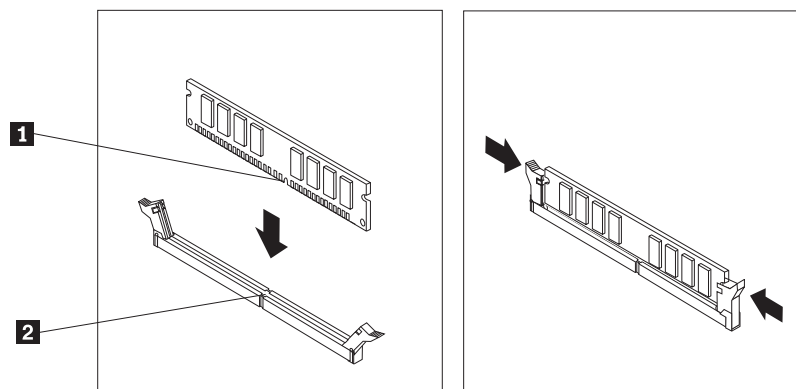


Figure 9. Installing a memory module

7. Reinstall the PCI Express x16 graphics card if you have removed it.
8. Go to “Completing the parts replacement” on page 115.

Replacing the power supply assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the power supply assembly.

To replace the power supply assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.

3. Disconnect the power supply assembly cables from the system board and all drives. See “Locating parts on the system board” on page 85.
4. Release the power supply assembly cables from the cable clips and ties in the chassis.
5. Lay the computer on its side and remove the four screws at the rear of the chassis that secure the power supply assembly.

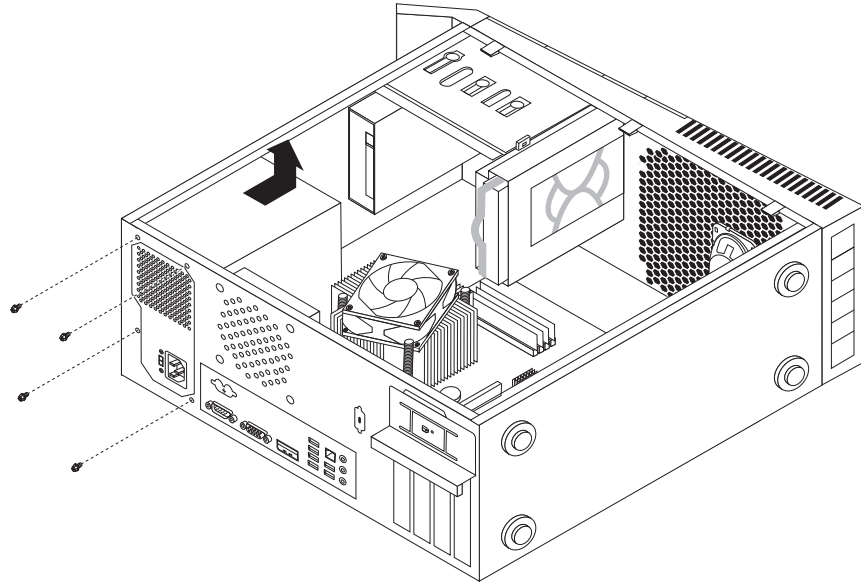


Figure 10. Removing the screws for the power supply assembly

6. Slide the power supply assembly to the front of the computer and then lift it out of the chassis.
7. Ensure that the new power supply assembly is the correct replacement. If your new power supply assembly has a voltage-selection switch, ensure that you set the voltage-selection switch to match the voltage available at your electrical outlet. If necessary, use a ballpoint pen to slide the voltage-selection switch to a different position.
 - If the voltage supply range in your local country or region is 100–127 V ac, set the switch to 115 V.
 - If the voltage supply range in your local country or region is 200–240 V ac, set the switch to 230 V.
8. Install the new power supply assembly into the chassis so that the screw holes in the power supply assembly align with those in the chassis.
9. Install and tighten the four screws to secure the power supply assembly.

Note: Use only screws provided by Lenovo.

10. Reconnect the power supply assembly cables to the system board and each of the drives.
11. Secure the power supply assembly cables with the cable clips and ties in the chassis.
12. Go to “Completing the parts replacement” on page 115.

Replacing the heat sink and fan assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the heat sink and fan assembly.

CAUTION:



The heat sink and fan assembly might be very hot. Turn off the computer and wait three to five minutes to let the computer cool before removing the computer cover.

To replace the heat sink and fan assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Lay the computer on its side for easier access to the system board.
4. Locate the heat sink and fan assembly. See “Locating parts on the system board” on page 85.
5. Disconnect the heat sink and fan assembly cable from the microprocessor fan connector on the system board. See “Locating parts on the system board” on page 85.

6. Carefully remove the four screws **1** that secure the heat sink and fan assembly to the system board.

Note: Carefully remove the four screws from the system board to avoid any possible damage to the system board. The four screws cannot be removed from the heat sink and fan assembly.

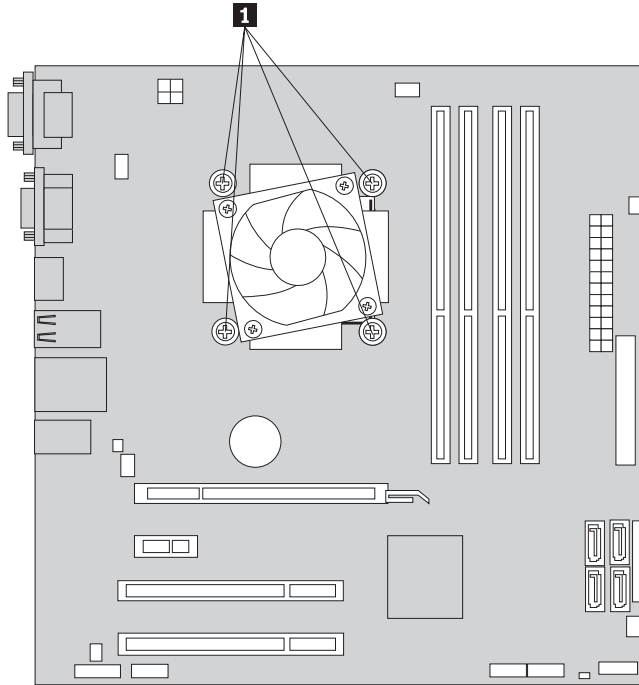


Figure 11. Removing the heat sink and fan assembly

7. Lift the failing heat sink and fan assembly off the system board.

Notes:

- a. You might have to gently twist the heat sink and fan assembly to free it from the microprocessor.
 - b. Do not touch the thermal grease while handling the heat sink and fan assembly.
8. Position the new heat sink and fan assembly on the system board so that the four screws are aligned with the holes on the system board.

Note: Position the new heat sink and fan assembly so that the heat sink and fan assembly cable is toward the microprocessor fan connector on the system board.

9. Alternate tightening each screw a small and equal amount until the heat sink and fan assembly is secured to the system board. Do not over-tighten the screws.
10. Connect the heat sink and fan assembly cable to the microprocessor fan connector on the system board. See “Locating parts on the system board” on page 85.
11. Go to “Completing the parts replacement” on page 115.

Replacing the microprocessor

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkStation Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkStation Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the microprocessor.

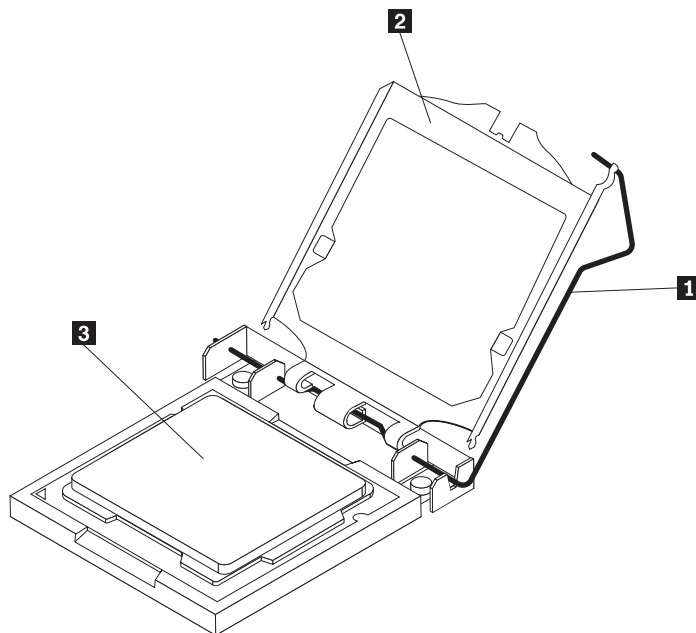
CAUTION:



The heat sink and microprocessor might be very hot. Turn off the computer and wait three to five minutes to let the computer cool before removing the computer cover.

To replace the microprocessor, do the following:

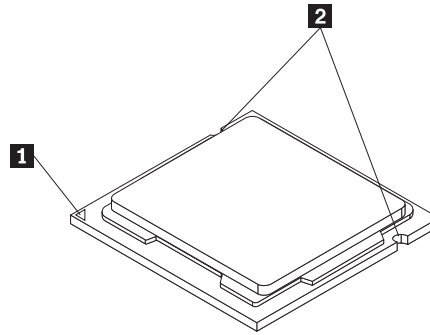
1. Remove all media from the drives and turn off all attached devices and the computer. Then, disconnect all power cords from electrical outlets and disconnect all cables that are connected to the computer.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Lay the computer on its side to get easier access to the system board.
4. Remove the heat sink and fan assembly from the system board. See “Replacing the heat sink and fan assembly” on page 90.
5. Lift the small handle **1** and open the retainer **2** to access the microprocessor **3**.



6. Lift the microprocessor straight up and out of the socket.

Notes:

- a. Your microprocessor and socket might look different from the one illustrated.
- b. Note the orientation of the microprocessor in the socket. You can either look for the small triangle **1** on one corner of the microprocessor or note the orientation of the notches **2** on the microprocessor. This is important when installing the new microprocessor on the system board.



- c. Touch only the sides of the microprocessor. Do not touch the gold contacts on the bottom.
- d. Do not drop anything onto the microprocessor socket while it is exposed. The socket pins must be kept as clean as possible.

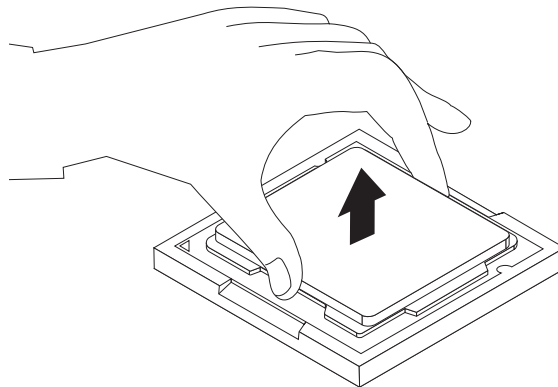


Figure 12. Removing the microprocessor

7. Make sure that the small handle is in the raised position and the microprocessor retainer is fully open.
8. Hold the new microprocessor and align the notches on it with the alignment keys in the microprocessor socket, or align the small triangle on one corner of the new microprocessor with the corresponding beveled corner of the microprocessor socket.
9. Lower the new microprocessor straight down into the microprocessor socket on the system board.
10. Close the microprocessor retainer and lock it into position with the small handle to secure the new microprocessor in the socket.
11. Reinstall the heat sink and fan assembly. See “Replacing the heat sink and fan assembly” on page 90.
12. Reinstall any other parts or reconnect any other cables you removed.
13. Go to “Completing the parts replacement” on page 115.

Replacing the system board

Attention

Do not open your computer or attempt any repair before reading and understanding the "Important safety information" in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to: <http://www.lenovo.com/support>

This section provides instructions on how to replace the system board.

CAUTION:



The heat sink and microprocessor might be very hot. Turn off the computer and wait three to five minutes to let the computer cool before removing the computer cover.

Note: When replacing the system board, you must also order a new retention module for the new system board. Make sure you have a retention module for the new system board before continuing this procedure.

To replace the system board:

1. Remove the computer cover. See "Removing the computer cover" on page 82.
2. Place the computer on the right side to make the system board more accessible.
3. Remove any adapter cards installed.
4. Disconnect the signal and power cables from the hard disk drive.
5. Remove the hard disk drive from the computer to gain access to the system board. See "Replacing the primary hard disk drive" on page 101.
6. Carefully take note of the location of all cable connections on the system board and disconnect all cables. See "Locating parts on the system board" on page 85.
7. Remove the screws that secure the system board to the chassis.
8. Lift the system board out of the chassis.
9. Remove the memory modules from the failing system board and install them in the same location on the new system board. See "Replacing a memory module" on page 87.
10. Remove the heat sink and fan assembly from the failing system board. See "Replacing the heat sink and fan assembly" on page 90.
11. Remove the retention module from the rear of the failing system board and install it in the same position on the new system board.
12. Remove the microprocessor from the failing system board and install it on the new system board. See "Replacing the microprocessor" on page 92.
13. Reinstall the heat sink and fan assembly. See "Replacing the heat sink and fan assembly" on page 90. And connect the heat sink and fan assembly cable to the system board. See "Replacing the heat sink and fan assembly" on page 90.
14. Install the new system board into the chassis and align the screw holes with those in the chassis. Insert and tighten the screws that secure the system board.

15. Reinstall the hard disk drive back into position. See “Replacing the primary hard disk drive” on page 101.
16. Reconnect the power and signal cables to the hard disk drive.
17. Reconnect all remaining cables to the system board. See “Locating parts on the system board” on page 85.
18. Go to “Completing the parts replacement” on page 115.

The failing system board must be returned with a microprocessor socket cover to protect the pins during shipping and handling.

To install the microprocessor socket cover, do the following:

1. Release the lever securing the microprocessor retainer and open the retainer to access the microprocessor.
2. Grasp the microprocessor on the sides and lift it straight up and out of the socket. Do not touch the contacts on the microprocessor socket.
3. Note the orientation of the socket cover. Align the notches **1** of the microprocessor socket cover with the alignment keys **2** of the microprocessor socket.
4. Install one side of the socket cover into the microprocessor socket as shown.

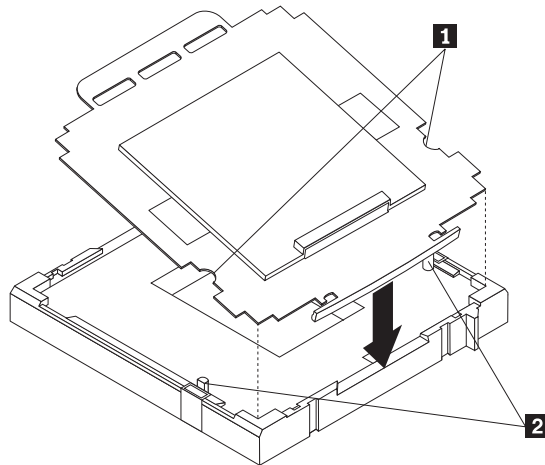


Figure 13. Installing the socket cover

Note: Your microprocessor socket and cover might look slightly different from the illustration.

5. Carefully press the other side of the socket cover downwards until the socket cover snaps into place.

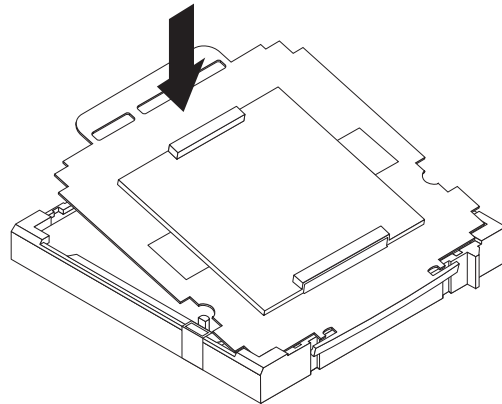


Figure 14. Securing the socket cover

6. Carefully check the four corners of the socket cover to make sure that the cover is secured in the microprocessor socket.
7. Lower the microprocessor retainer and then lower the lever to secure the retainer. Make sure the lever is locked into position.
8. Follow any additional instructions included with the replacement part you received.

Note: If your system board has two microprocessor sockets, be sure to install a socket cover for each microprocessor socket.

Replacing the battery

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

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

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

Refer to the “Lithium battery notice” in the *ThinkCentre Safety and Warranty Guide* for information about replacing and disposing of the battery.

To replace the battery, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Locate the battery. See “Locating parts on the system board” on page 85.
4. Remove the old battery.

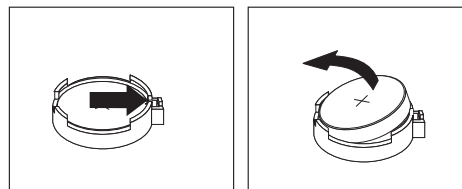


Figure 15. Removing the old battery

5. Install a new battery.

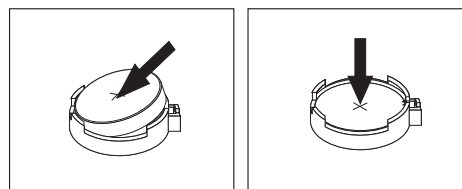


Figure 16. Installing a new battery

6. Reinstall the computer cover and connect the cables. See “Completing the parts replacement” on page 115.

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

7. Turn on the computer and all attached devices.
8. Use the Setup Utility program to set the date, time, and any passwords. See Chapter 6, "Using the Setup Utility program," on page 51.
9. Go to "Completing the parts replacement" on page 115.

Replacing a PCI card

Attention

Do not open your computer or attempt any repair before reading and understanding the "Important safety information" in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to install or replace a PCI card. Your computer has two standard PCI card slots, one PCI Express x1 card slot, and one PCI Express x16 graphics card slot.

To install or replace a PCI card, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See "Removing the computer cover" on page 82.

3. At the rear of the computer, press the release button **1** to open the card latch **2**.

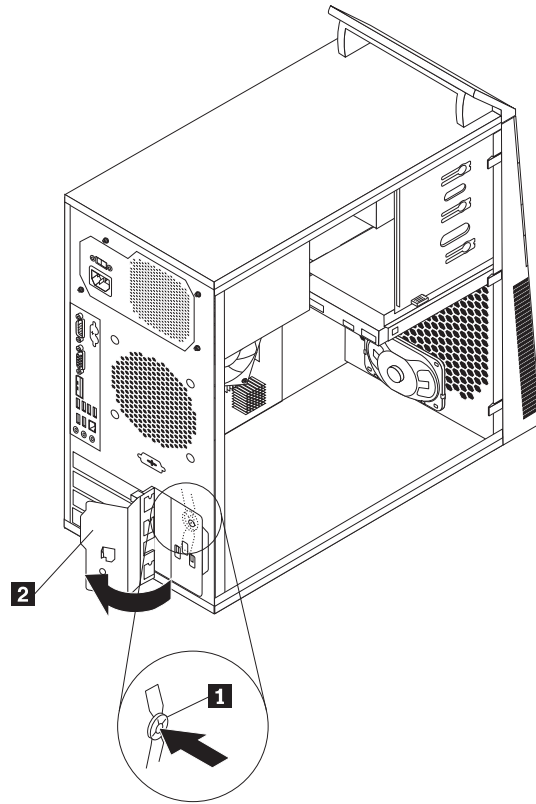


Figure 17. Opening the PCI card latch

4. If you are installing a PCI card, remove the appropriate metal slot cover. If you are replacing an old PCI card, grasp the old card that is currently installed and gently pull it out of the slot.

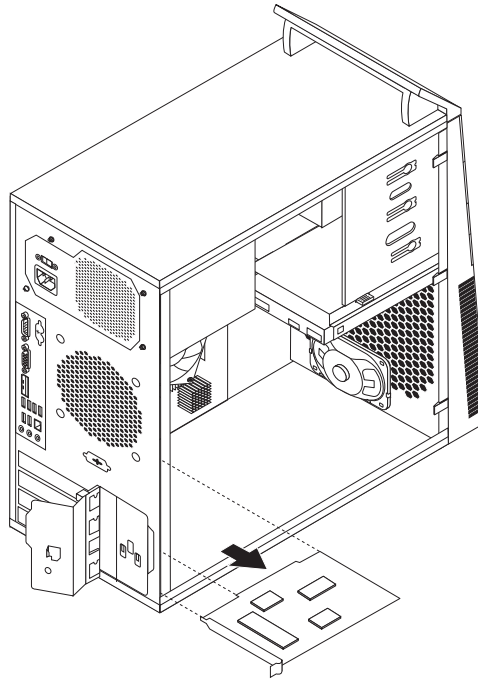
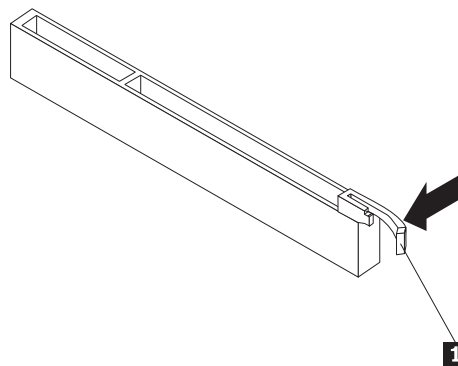


Figure 18. Removing a PCI card

Notes:

- a. The card fits tightly into the card slot. If necessary, alternate moving each side of the card a small amount until it is removed from the card slot.
- b. If the card is held in place by a retaining latch, press the card retaining latch **1** as shown to disengage the latch. Grasp the card and then gently pull it out of the slot.



5. Remove the new PCI card from its static-protective package.
6. Install the new card into the appropriate slot on the system board. See "Locating parts on the system board" on page 122.

Note: If you are installing a PCI Express x16 graphics card, make sure the memory slot retaining clips are closed before you install the graphics card.

7. Pivot the card latch to the closed position to secure the PCI card.

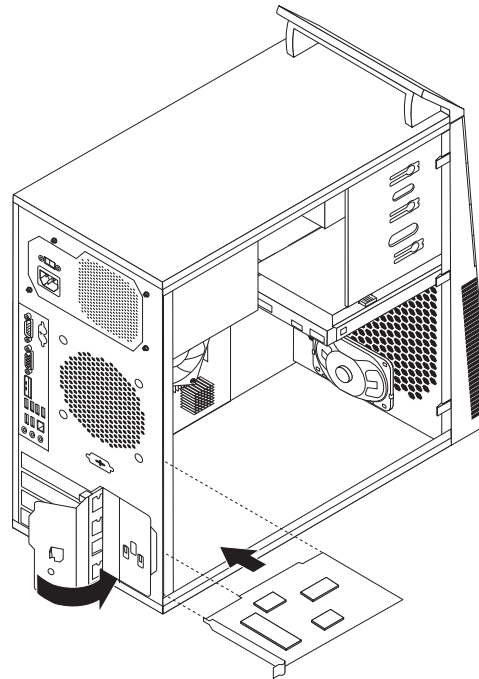


Figure 19. Installing a PCI card

8. Go to “Completing the parts replacement” on page 115.

Replacing the primary hard disk drive

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the primary hard disk drive if your computer has one. For computer models that do not have an internal hard disk drive and use a remote hard disk drive accessed through the SMC - Storage Array, contact your network or storage administrator.

To replace the primary hard disk drive, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Locate the primary hard disk drive. See “Locating components” on page 84.
4. Disconnect the signal cable and the power cable from the hard disk drive.

5. Press the blue release tab **1** down, slide the hard disk drive cage **2** to the rear of the computer, and then pivot it outward.

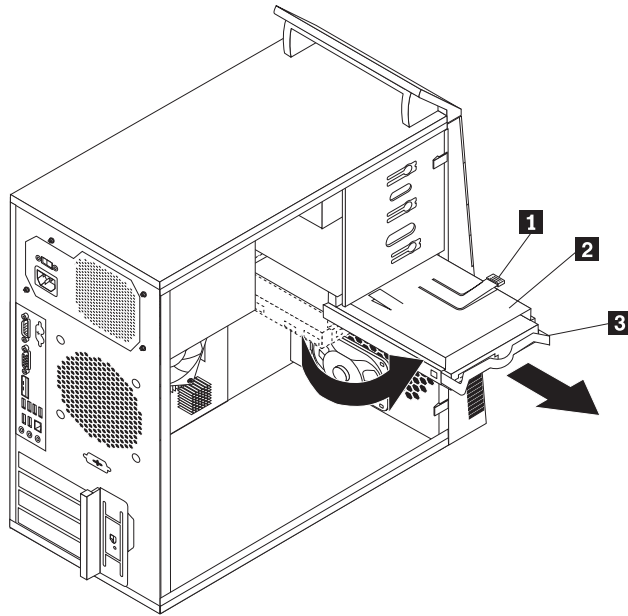


Figure 20. Removing the primary hard disk drive

6. Remove the hard disk drive cage from the chassis by sliding it outward.
7. Pull on the blue handle **3** to release and remove the hard disk drive from the drive cage.
8. Flex the sides of the blue bracket to remove the hard disk drive from the bracket.

9. To install a new hard disk drive into the blue bracket, flex the bracket and align pin **1**, pin **2**, pin **3**, and pin **4** on the bracket with the corresponding holes in the hard disk drive. Do not touch the circuit board **5** on the bottom of the hard disk drive.

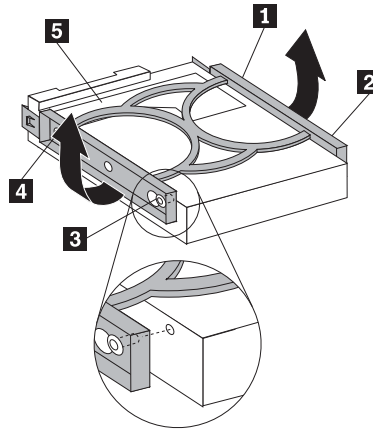


Figure 21. Installing the hard disk drive into the bracket

10. Slide the new hard disk drive into the drive cage until it snaps into position.
11. Align the drive cage pivot pin with the slot **1** in the upper drive cage and slide the hard disk drive cage into the chassis.
12. Connect the signal cable and the power cable to the new hard disk drive.
13. Press down on the metal latch **2** and pivot the drive cage into place, and then slide it to the front of the computer until it snaps into position.

Note: There are two arrows, one on the upper drive cage and one on the hard disk drive cage. The arrows are aligned when the hard disk drive is in the proper position.

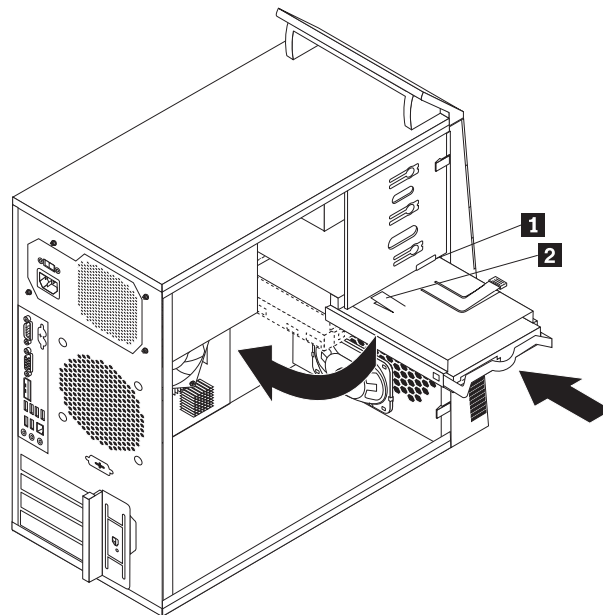


Figure 22. Installing the primary hard disk drive

14. Go to “Completing the parts replacement” on page 115.

Replacing the secondary hard disk drive

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

Note: Depending on your model type, your computer might come with a secondary hard disk drive bay for installing or replacing a secondary hard disk drive. For computer models that do not have an internal hard disk drive and use a remote hard disk drive accessed through the SMC - Storage Array, contact your network or storage administrator.

This section provides instructions on how to replace the secondary hard disk drive.

To replace the secondary hard disk drive, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Locate the secondary hard disk drive.
4. Disconnect the signal cable and the power cable from the hard disk drive.
5. Press the blue release button to release the hard disk drive cage from the chassis.

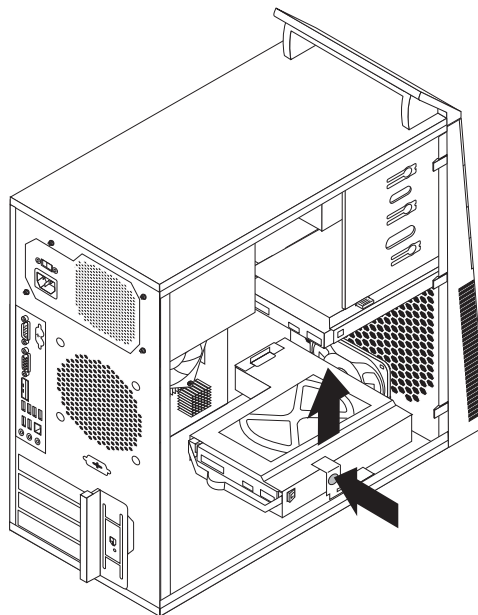


Figure 23. Removing the secondary hard disk drive

6. Remove the hard disk drive cage from the chassis by simply sliding it outward.
7. Pull on the blue handle to release and remove the hard disk drive from the hard disk drive cage.

8. Flex the sides of the blue bracket to remove the hard disk drive from the bracket.
9. To install a new hard disk drive into the blue bracket, flex the bracket and align pin **1**, pin **2**, pin **3**, and pin **4** on the bracket with the corresponding holes in the hard disk drive. Do not touch the circuit board **5** on the bottom of the hard disk drive.

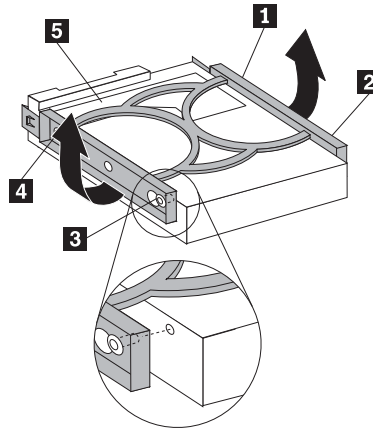


Figure 24. Installing the hard disk drive into the bracket

10. Slide the new hard disk drive into the hard disk drive cage until it snaps into position.
11. Install the hard disk drive cage into the chassis until it snaps into position underneath the metal tab. Make sure that the hard disk drive cage release button is secured in the chassis.

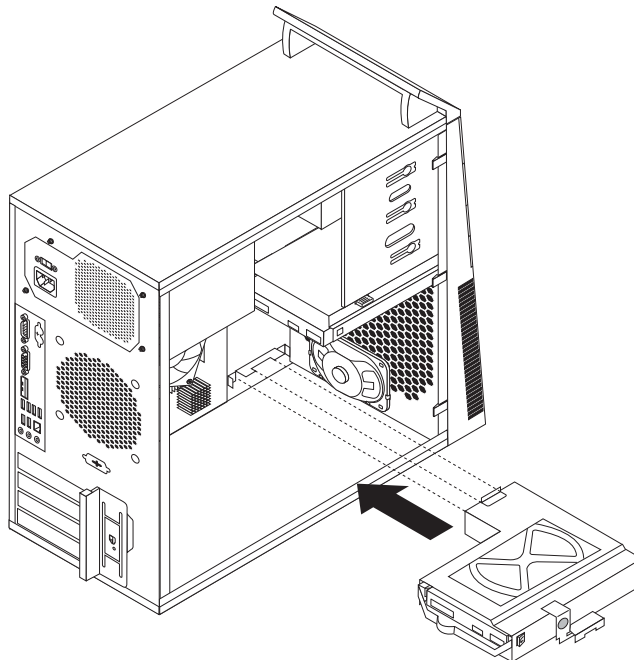


Figure 25. Installing the secondary hard disk drive

12. Connect the signal cable and the power cable to the new hard disk drive.
13. Go to “Completing the parts replacement” on page 115.

Replacing the optical drive

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to install or replace the optical drive.

To install or replace an optical drive, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Remove the front bezel. See “Removing and reinstalling the front bezel” on page 86.
4. Depending on whether you are installing or replacing an optical drive, do one of the following:
 - If you are installing a secondary optical drive, remove the plastic panel in the front bezel for the drive bay you want to use. If there is a metal static shield installed in the drive bay, remove the metal static shield.
 - If you are replacing an optical drive, disconnect the signal cable and the power cable from the rear of the optical drive, press the blue release button, and then slide the optical drive out of the front of the computer.

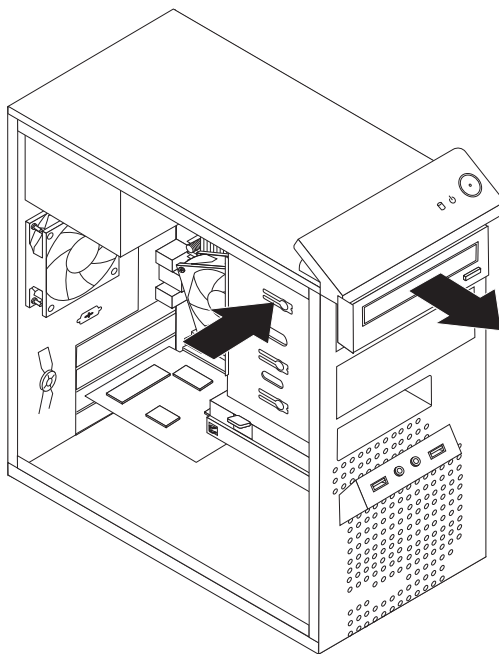


Figure 26. Removing the optical drive

5. Install the optical drive retainer on the side of the new optical drive.

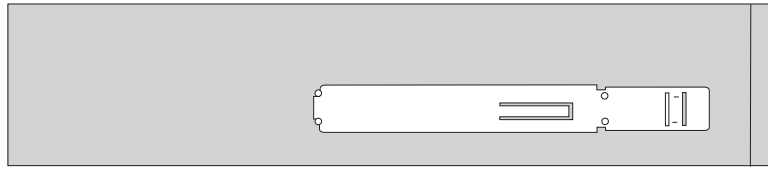


Figure 27. Installing the optical drive retainer

6. Slide the new optical drive into the drive bay from the front of the computer until the optical drive snaps into position.

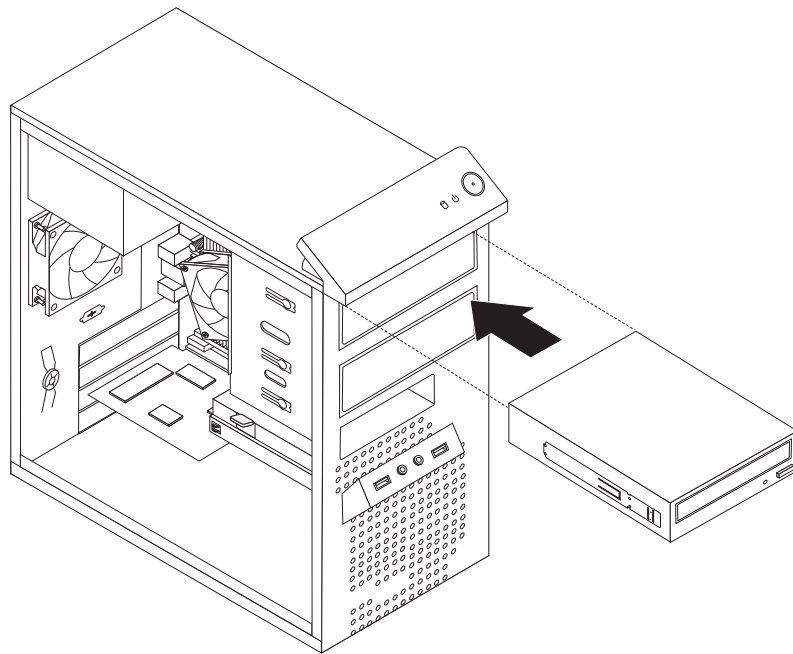


Figure 28. Installing the optical drive

7. Connect the signal cable and the power cable to the new optical drive.

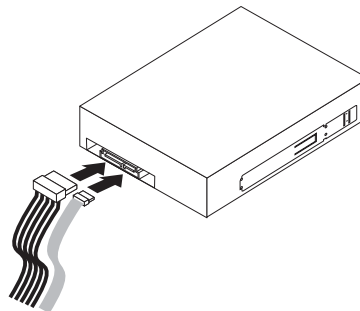


Figure 29. Connecting the optical drive

8. Reinstall the front bezel. See “Removing and reinstalling the front bezel” on page 86.
9. Go to “Completing the parts replacement” on page 115.

Replacing the front fan assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the front fan assembly.

Note: Not all computers have the front fan assembly.

To replace the front fan assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Remove the front bezel. See “Removing and reinstalling the front bezel” on page 86.
4. Disconnect the front fan assembly cable from the power fan connector on the system board. See “Locating parts on the system board” on page 85.

5. Release the two tabs **1** that attach the front fan assembly to the chassis as shown and then completely remove the front fan from the chassis.

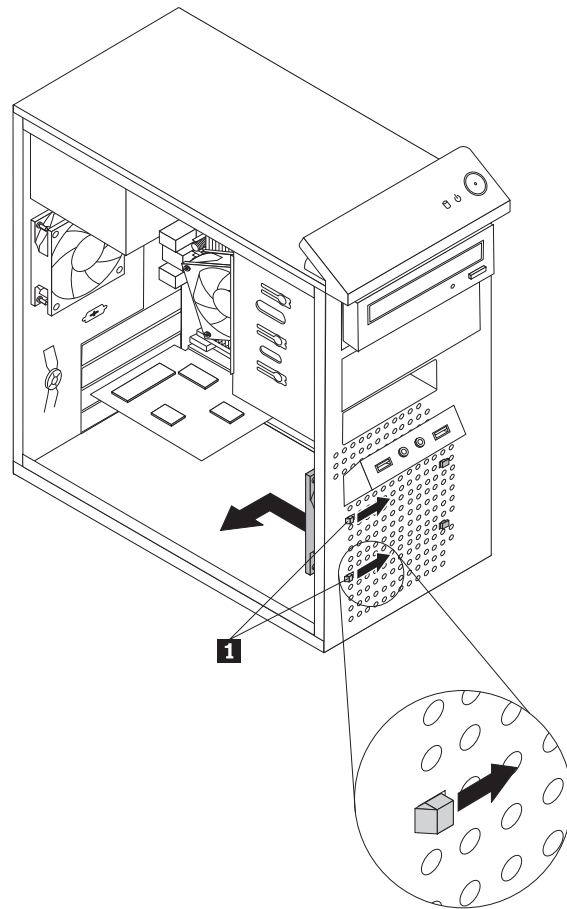


Figure 30. Removing the front fan assembly

6. Insert the two tabs **2** of the new front fan assembly into the corresponding holes in the chassis, and press the other two tabs **1** through the holes until the front fan assembly is secured in place.

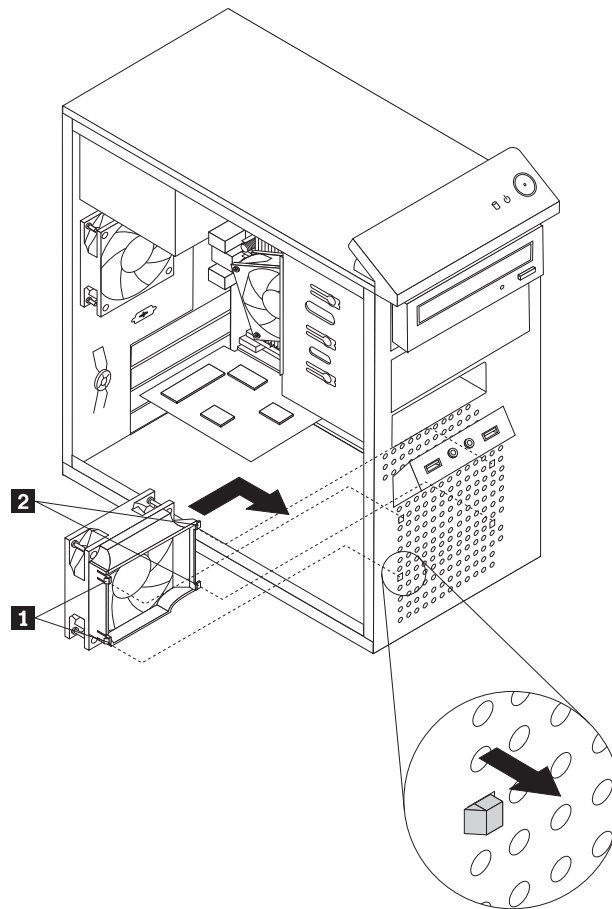


Figure 31. Installing the front fan assembly

7. Connect the front fan assembly cable to the power fan connector on the system board.
8. Go to “Completing the parts replacement” on page 115.

Replacing the rear fan assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the rear fan assembly.

To replace the rear fan assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.

2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Locate the rear fan assembly. See “Locating components” on page 84.
4. Disconnect the rear fan assembly cable from the system fan connector on the system board. See “Locating parts on the system board” on page 85.
5. The rear fan assembly is attached to the chassis by four rubber mounts. Remove the rear fan assembly by breaking or cutting the rubber mounts and gently pulling the rear fan assembly out of the chassis.

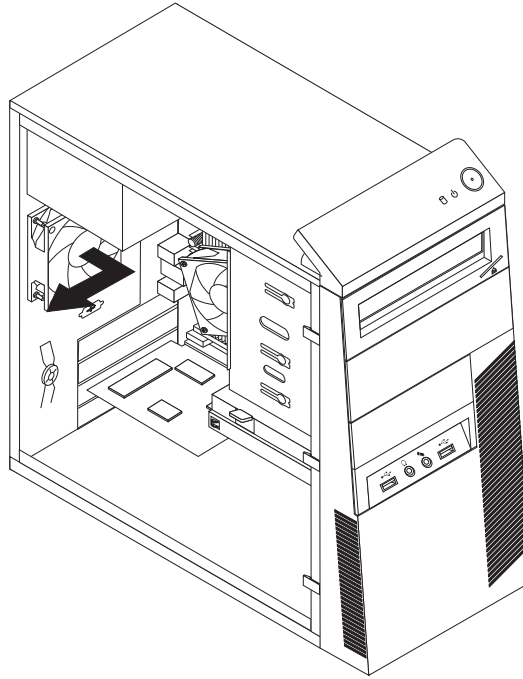


Figure 32. Removing the rear fan assembly

6. Install the new rear fan assembly by aligning the new rubber mounts with the corresponding holes in the chassis and push the rubber mounts through the holes.

Note: The new rear fan assembly you received will have four new rubber mounts attached.

7. Pull on the tips of the rubber mounts until the rear fan assembly is secured in place.

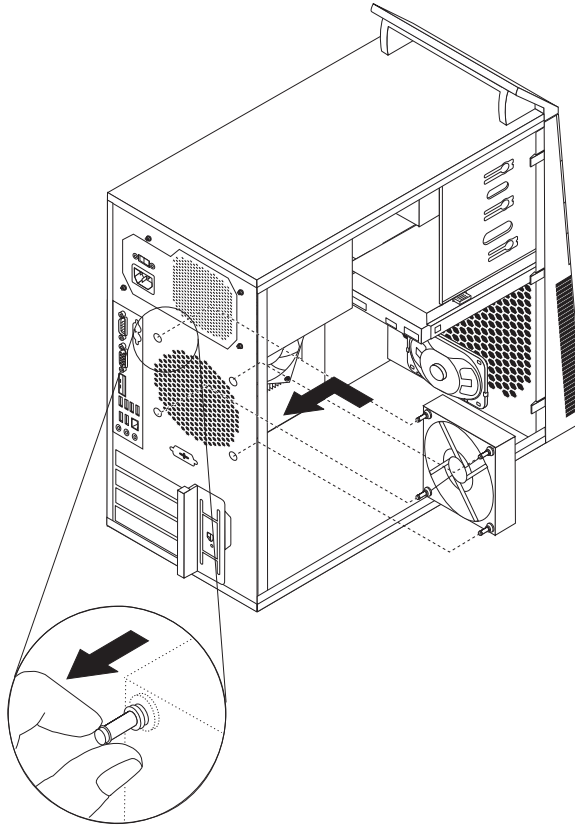


Figure 33. Installing the rear fan assembly

8. Connect the rear fan assembly cable to the system fan connector on the system board.
9. Go to “Completing the parts replacement” on page 115.

Replacing the front audio and USB assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the front audio and USB assembly.

To replace the front audio and USB assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Remove the front bezel. See “Removing and reinstalling the front bezel” on page 86.
4. Locate the front audio and USB assembly. See “Locating connectors on the front of the computer” on page 80.
5. Disconnect the front audio and USB assembly cables from the system board. See “Locating parts on the system board” on page 85.

Note: Make sure you note the locations of the cables when you disconnect the cables from the system board.

6. Remove the screw that secures the front audio and USB assembly to the chassis.

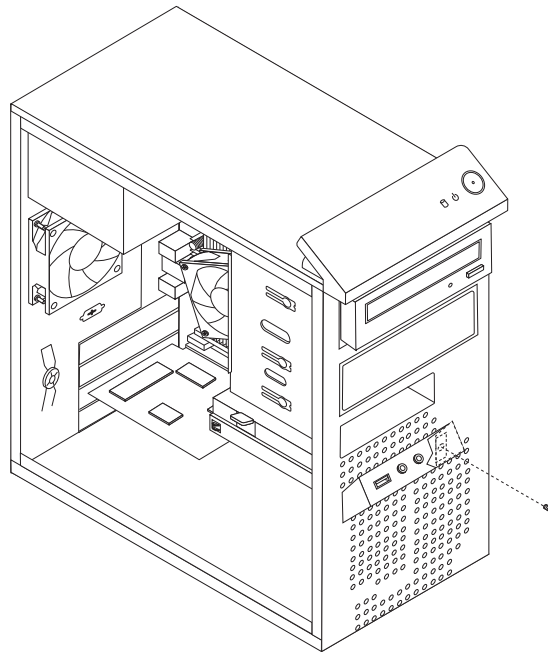


Figure 34. Removing the securing screw of the front audio and USB assembly

7. Remove the front audio and USB assembly from the chassis.
8. Install a new front audio and USB assembly into the chassis and align the screw hole in the front audio and USB assembly with the hole in the chassis.
9. Install the screw to secure the new front audio and USB assembly to the chassis.
10. Reconnect the front audio and USB assembly cables to the front audio connector and the front USB connector on the system board. See “Locating parts on the system board” on page 85.
11. Go to “Completing the parts replacement” on page 115.

Replacing the internal speaker

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the internal speaker.

Note: Not all computers have the internal speaker.

To replace the internal speaker, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Remove the computer cover. See “Removing the computer cover” on page 82.
3. Locate the internal speaker connector on the system board. See “Locating parts on the system board” on page 85.
4. Disconnect the internal speaker cable from the system board.
5. Push the metal tab **1** on the top of the internal speaker outward and slide the internal speaker upward to completely remove it from the chassis.

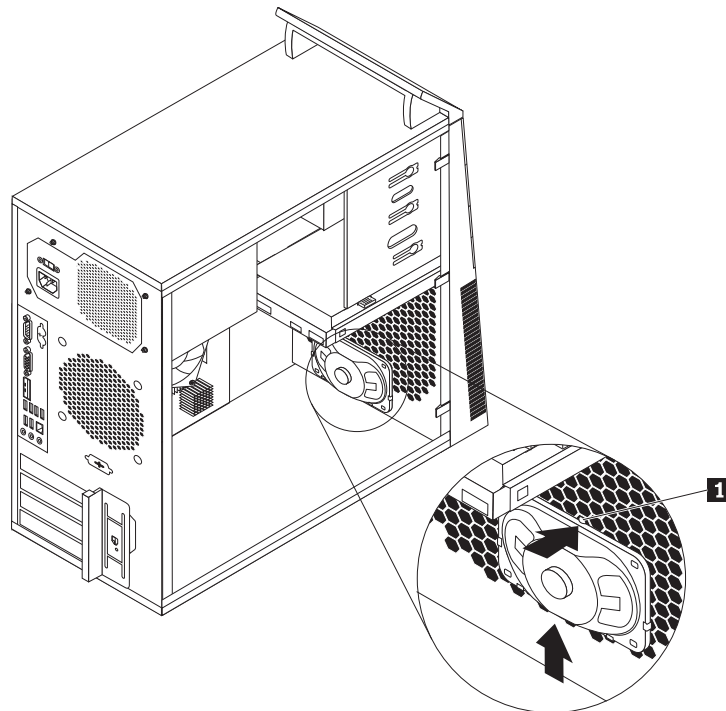


Figure 35. Removing the old internal speaker

6. Position the new internal speaker into the four metal clips **1** and push downward on the internal speaker until it is secured in place.

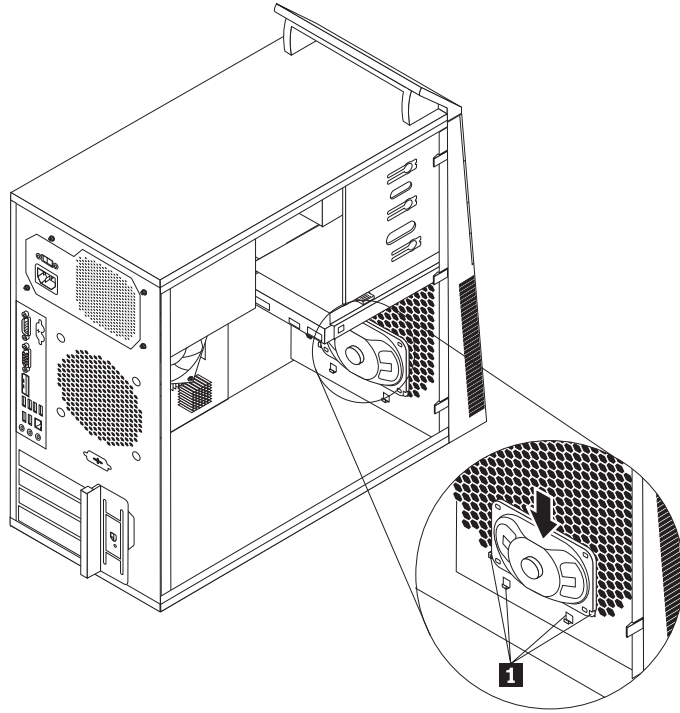


Figure 36. Installing a new internal speaker

7. Connect the internal speaker cable to the system board. See “Locating parts on the system board” on page 85.
8. Go to “Completing the parts replacement.”

Completing the parts replacement

After completing the installation or replacement for all parts, you need to reinstall the computer cover and reconnect cables. Depending on the parts you installed or replaced, you might need to confirm the updated information in the Setup Utility program. Refer to Chapter 6, “Using the Setup Utility program,” on page 51.

To reinstall the computer cover and reconnect cables to your computer, do the following:

1. Make sure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer. See “Locating components” on page 84 for the locations of various components in your computer.
2. If you have removed the front bezel, reinstall it. See “Removing and reinstalling the front bezel” on page 86.
3. Make sure that the cables are routed correctly before reinstalling the computer cover. Keep cables clear of the hinges and sides of the computer chassis to avoid interference with reinstalling the computer cover.
4. Position the computer cover on the chassis so that the rail guides on the bottom of the computer cover engage the rails on the chassis. Then, push the cover to the front of the computer until it snaps into position.

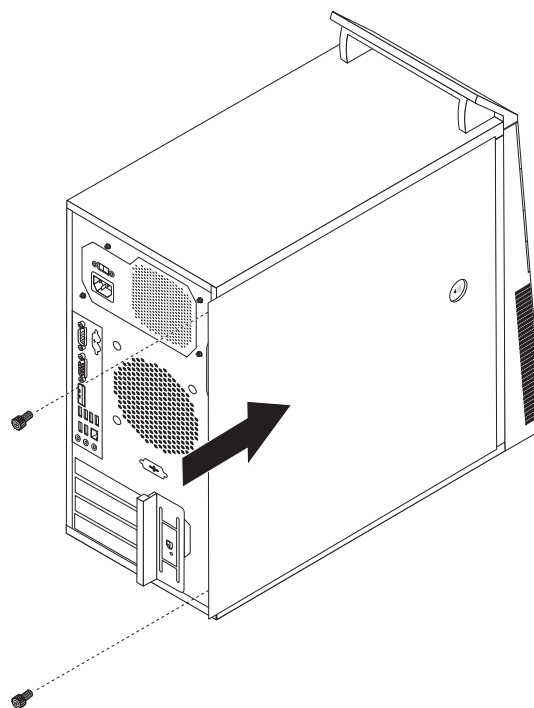


Figure 37. Reinstalling the computer cover

5. If the computer cover is secured with thumbscrews, install them.
6. Reconnect the external cables and power cords to the computer. See “Locating connectors on the rear of the computer” on page 81.

Chapter 9. Replacing FRUs (Machine types: 3026, 3039, 3137, 3149, 3245, 3269, 3319, 3394, 3491, 3627, 3699, 3878, 4972, 5132, 5261, 5297, 5391, 5472, 5485, 5536, 5548, 5567, 5864, and 6213.)

Important

Be sure to read and understand Chapter 2, "Safety information," on page 3 before you replace any FRU. These precautions and guidelines will help you work safely.

FRU replacements are to be done only by trained service technicians.

This chapter does not contain the remove or replace procedure for all FRUs. Only the major FRUs are documented.

Locating connectors on the front of the computer

Figure 38 shows the locations of the connectors on the front of your computer.

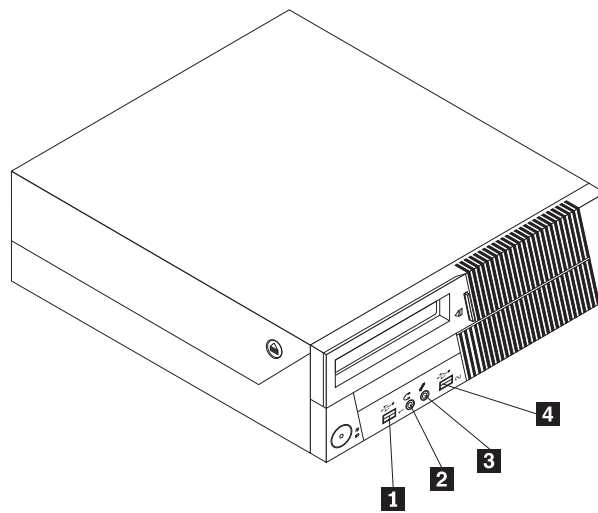


Figure 38. Front connector locations

- | | |
|------------------------------|-------------------------------|
| 1 USB connector | 3 Microphone connector |
| 2 Headphone connector | 4 USB connector |

Locating connectors on the rear of the computer

Figure 39 shows the location of connectors on the rear of the computer. Some connectors on the rear of the computer are color-coded to help you determine where to connect the cables on your computer.

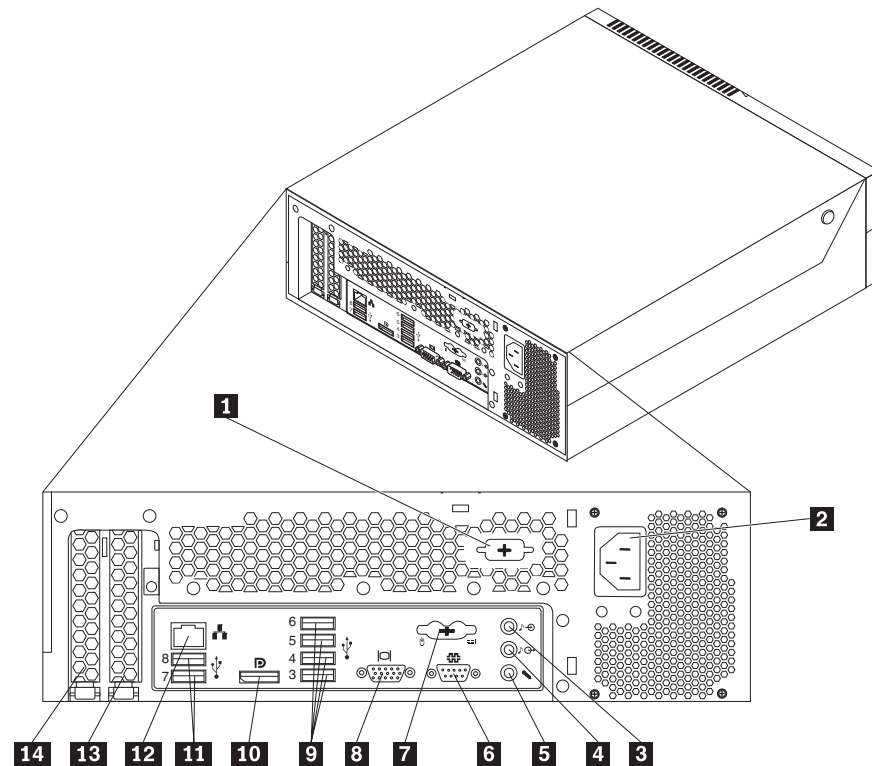


Figure 39. Rear connector locations

- | | |
|--|---|
| 1 Optional serial port | 8 VGA monitor connector (not applicable on some models) |
| 2 Power cord connector | 9 USB connectors (4) |
| 3 Audio line-in connector | 10 DisplayPort connector (not applicable on some models) |
| 4 Audio line-out connector | 11 USB connectors (2) |
| 5 Microphone connector | 12 Ethernet connector |
| 6 Serial port | 13 PCI Express x16 graphics card slot |
| 7 PS/2 keyboard and mouse connectors (optional) | 14 PCI card slot |

Opening the computer cover

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to open the computer cover.

CAUTION:



Turn off the computer and wait three to five minutes to let the computer cool before opening the computer cover.

To open the computer cover, do the following:

1. Remove any media from the drives and turn off all attached devices and the computer.
2. Disconnect all power cords from electrical outlets.
3. Disconnect the power cords, Input/Output (I/O) cables, and any other cables that are connected to the computer. See “Locating connectors on the front of the computer” on page 118 and “Locating connectors on the rear of the computer” on page 119.
4. Remove any locking device that secures the computer cover, such as an integrated cable lock.
5. Press the cover-release buttons on the sides of the computer and pivot the computer cover upward.

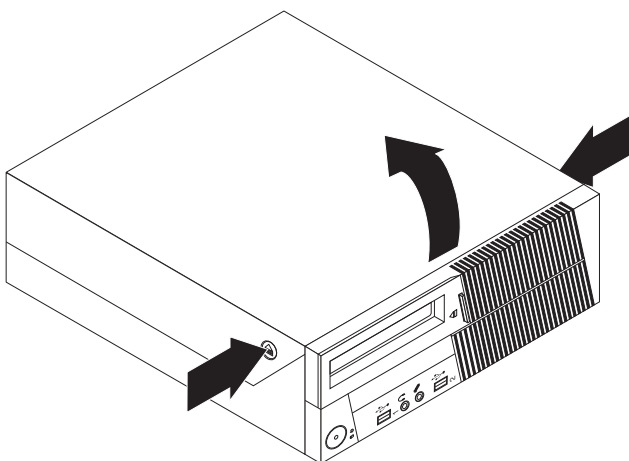


Figure 40. Opening the computer cover

Locating components

Figure 41 shows the locations of the various components in your computer. To open the computer cover, see “Opening the computer cover” on page 120.

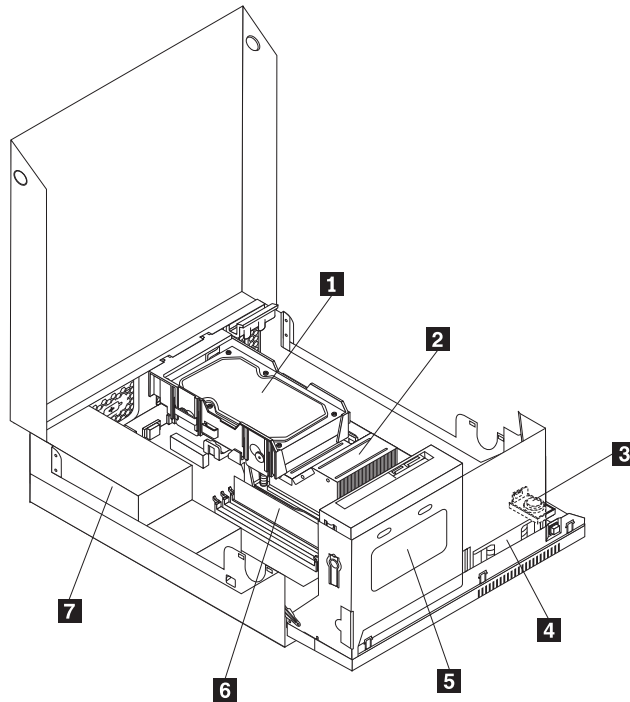


Figure 41. Component locations

- 1** Hard disk drive
(installed in some models)
- 2** Heat sink
- 3** Internal speaker
(installed in some models)
- 4** System fan assembly

- 5** Optical drive
- 6** Memory module
- 7** Power supply assembly

Locating parts on the system board

Figure 42 shows the locations of the parts on the system board.

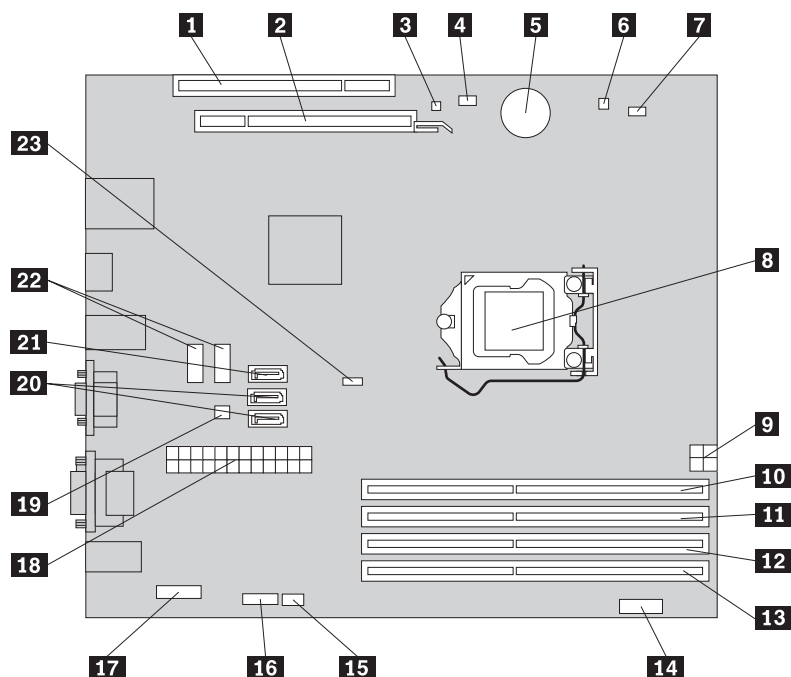


Figure 42. System board parts locations

- | | |
|--|--|
| 1 PCI card slot | 13 Memory slot 3 |
| 2 PCI Express x16 graphics card slot | 14 Front panel connector |
| 3 Internal speaker connector | 15 PS/2 keyboard and mouse connector |
| 4 Cover presence switch connector
(Intrusion switch connector) | 16 Serial (COM 2) connector |
| 5 Battery | 17 Front audio connector |
| 6 Thermal sensor connector | 18 24-pin power connector |
| 7 Microprocessor fan connector | 19 Power fan connector |
| 8 Microprocessor | 20 SATA connectors (2) |
| 9 4-pin power connector | 21 eSATA connector |
| 10 Memory slot 2 | 22 Front USB connectors (2) |
| 11 Memory slot 1 | 23 Clear CMOS (Complementary Metal
Oxide Semiconductor) /Recovery jumper |
| 12 Memory slot 4 | |

Replacing the battery

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

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

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

Refer to the “Lithium battery notice” in the *ThinkCentre Safety and Warranty Guide* for information about replacing and disposing of the battery.

To replace the battery, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Locate the battery. See “Locating parts on the system board” on page 122.
4. Remove the old battery.

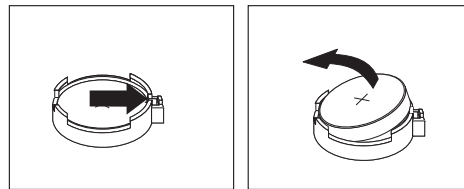


Figure 43. Removing the old battery

5. Install a new battery.

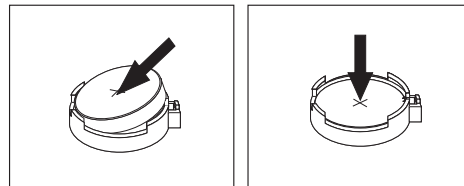


Figure 44. Installing a new battery

6. Close the computer cover and connect the cables. See “Completing the parts replacement” on page 115.

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

7. Turn on the computer and all attached devices.
8. Use the Setup Utility program to set the date, time, and any passwords. See Chapter 6, “Using the Setup Utility program,” on page 51.
9. Go to “Completing the parts replacement” on page 148.

Replacing a memory module

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to install or replace a memory module.

Your computer has four slots for installing or replacing DDR3 DIMMs that provide up to a maximum of 16 GB system memory. When installing or replacing a memory module, use the following guidelines:

- Use 1 GB, 2 GB, or 4 GB DDR3 DIMMs in any combination up to a maximum of 16 GB.
- Install memory modules in the sequence of DIMM 1, DIMM 3, DIMM 2, and DIMM 4. See “Locating parts on the system board” on page 122.

To install or replace a memory module, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Pivot the optical drive bay assembly upward to gain access to the memory slots.
4. Locate the memory slots. See “Locating parts on the system board” on page 122.
5. Remove any parts that might prevent access to the memory slots.
6. Open the retaining clips.

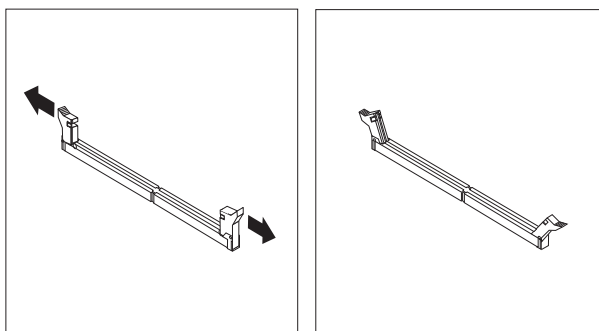


Figure 45. Opening the retaining clips

If you are replacing an old memory module, open the retaining clips and gently pull the memory module out of the memory slot.

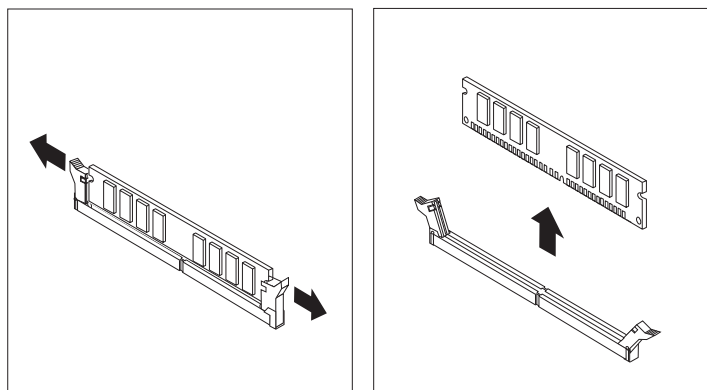


Figure 46. Removing a memory module

7. Position the new memory module over the memory slot. Make sure that the notch **1** on the memory module aligns correctly with the slot key **2** on the system board. Push the memory module straight down into the slot until the retaining clips close.

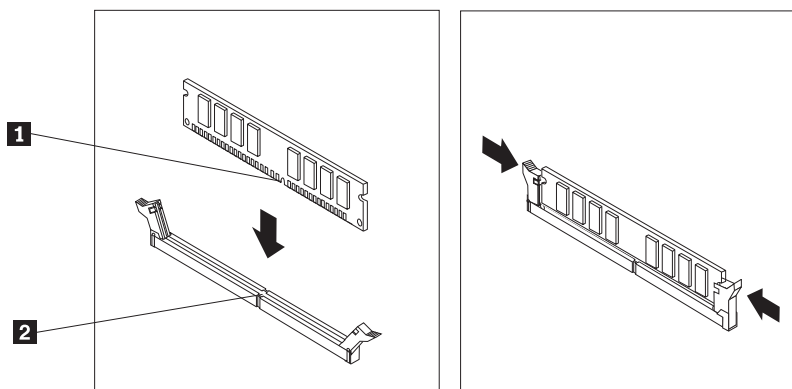


Figure 47. Installing a memory module

8. Go to “Completing the parts replacement” on page 148.

Replacing a PCI card

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to install or replace a PCI card. Your computer has one standard PCI card slot and one PCI Express x16 graphics card slot.

To install or replace a PCI card, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Rotate the PCI card retainer to the open position.
4. If you are installing a PCI card, remove the appropriate metal slot cover. If you are replacing an old PCI card, grasp the old card that is currently installed and gently pull it out of the slot.

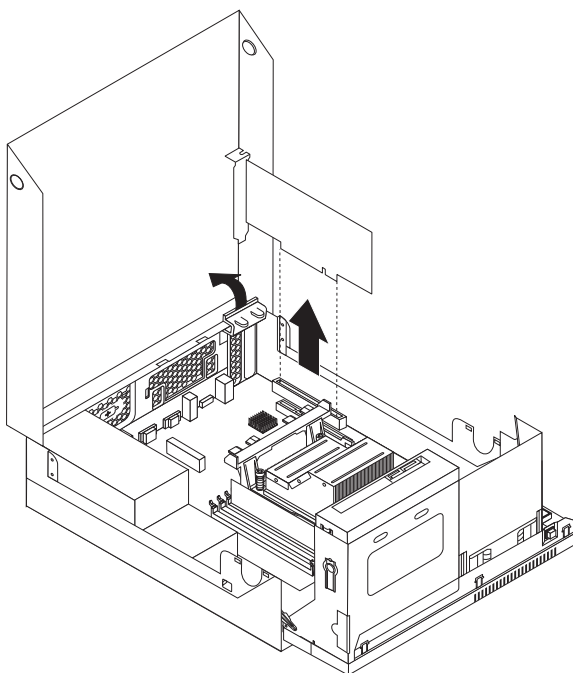
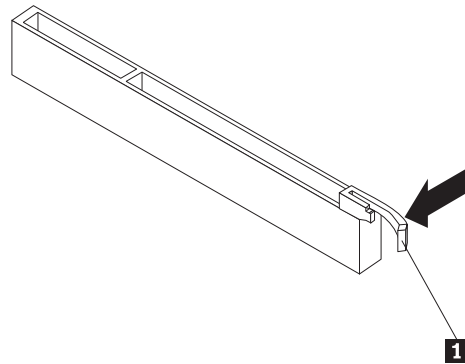


Figure 48. Removing a PCI card

Notes:

- a. The card fits tightly into the card slot. If necessary, alternate moving each side of the card a small amount until it is removed from the card slot.

- b. If the card is held in place by a retaining latch, press the card retaining latch **1** as shown to disengage the latch. Grasp the card and gently pull it out of the slot.



5. Remove the new PCI card from its static-protective package.
6. Install the new card into the appropriate card slot on the system board and rotate the card retainer to the closed position. See "Locating parts on the system board" on page 122.

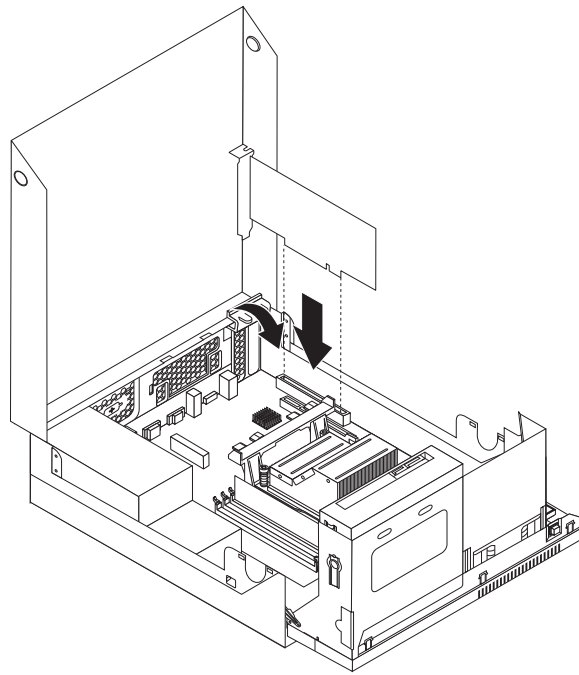


Figure 49. Installing the PCI card

7. Go to "Completing the parts replacement" on page 148.

Replacing the power supply assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the power supply assembly.

To replace the power supply assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Disconnect the power cords, Input/Output (I/O) cables, and any other cables that are connected to the computer.
3. Remove the four screws at the rear of the chassis that secure the power supply assembly.

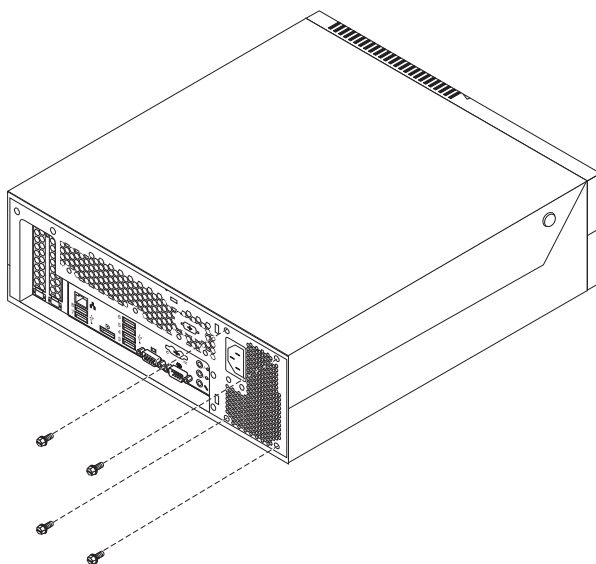


Figure 50. Removing the retaining screws for the power supply assembly

4. Open the computer cover. See “Opening the computer cover” on page 120.
5. Pivot the optical drive bay assembly upward to gain access to the power supply assembly.

6. Disconnect the power supply assembly cables from all drives and from the power connectors **1** and **2** on the system board.

Note: You might need to remove the hard disk drive to gain easy access to the power connector **2**. See “Replacing the hard disk drive” on page 139.

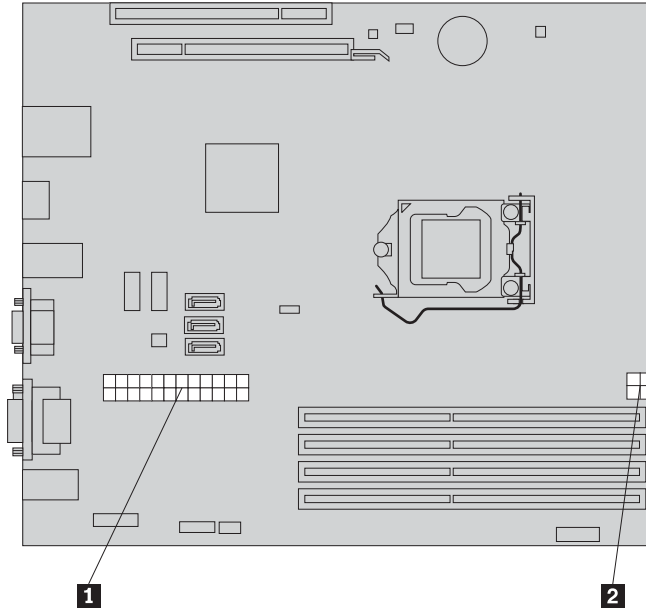


Figure 51. Power connectors on the system board

7. Release the power supply assembly cables from the cable clips and ties in the chassis.

8. Slide the power supply assembly to the front of the computer and then lift it out of the chassis.

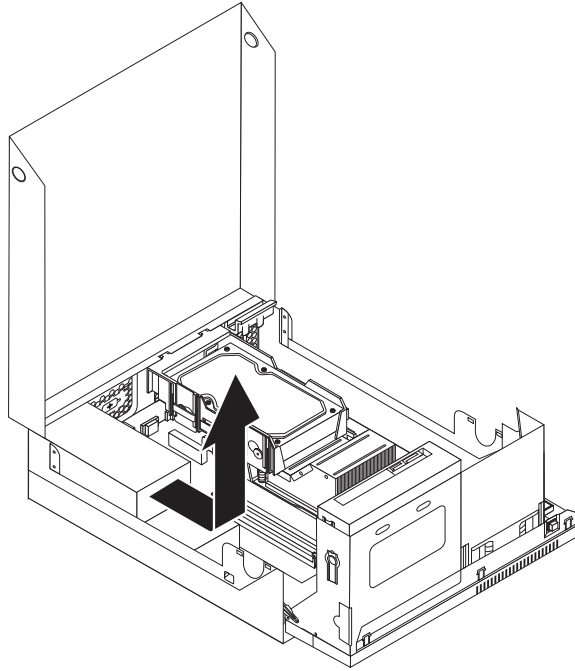


Figure 52. Removing the power supply assembly

9. Install the new power supply assembly into the chassis so that the screw holes in the new power supply assembly align with those in the chassis.
10. Install and tighten the four screws to secure the power supply assembly.

Note: Use only the screws provided by Lenovo.

11. Reconnect all the power supply assembly cables to the system board and each of the drives.
12. Secure the power supply assembly cables with the cable clips and ties in the chassis.
13. Go to “Completing the parts replacement” on page 148.

Replacing the heat sink

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the heat sink.

CAUTION:



The heat sink might be very hot. Turn off the computer and wait three to five minutes to let the computer cool before opening the computer cover.

To replace the heat sink, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Pivot the optical drive bay assembly upward.
4. Remove the hard disk drive to access the heat sink. See “Replacing the hard disk drive” on page 139.

5. Carefully remove the four screws **1** that secure the heat sink to the system board.

Note: Carefully remove the four screws from the system board to avoid any possible damage to the system board. The four screws cannot be removed from the heat sink.

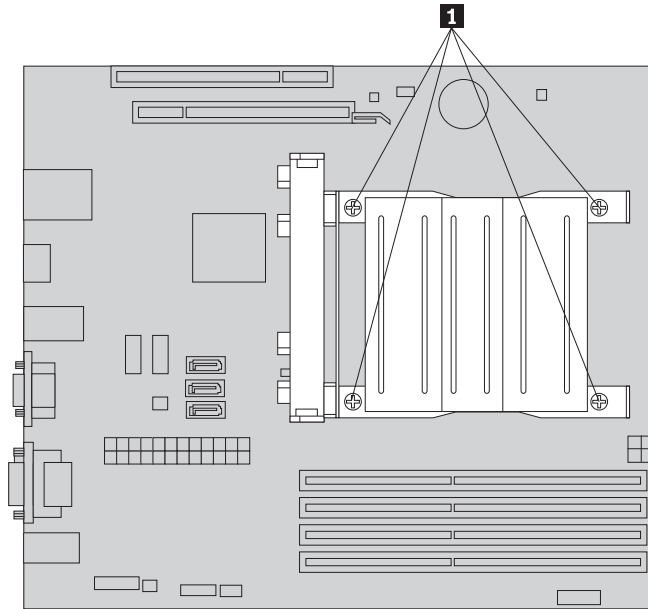


Figure 53. Removing the heat sink

6. Carefully lift the heat sink off the system board.

Notes:

- a. You might have to gently twist the heat sink to free it from the microprocessor.
- b. Do not touch the thermal grease while handling the heat sink.
7. Position the new heat sink on the system board so that the four screws are aligned with the holes on the system board.
8. Alternate tightening each screw a small and equal amount until the heat sink is secured to the system board. Do not over-tighten the screws.
9. Go to “Completing the parts replacement” on page 148.

Replacing the microprocessor

Attention

Do not open your computer or attempt any repair before reading and understanding the "Important safety information" in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to: <http://www.lenovo.com/support>

This section provides instructions on how to replace the microprocessor.

CAUTION:



The heat sink and microprocessor might be very hot. Turn off the computer and wait three to five minutes to let the computer cool before opening the computer cover.

To replace the microprocessor:

1. Open the computer cover. See "Opening the computer cover" on page 120.
2. Pivot the drive bay assembly upward to gain access to the system board.
3. Locate the heat sink and fan assembly and disconnect the heat sink and fan assembly cable from the microprocessor fan connector on the system board. See "Locating parts on the system board" on page 122.
4. Remove the heat sink and fan assembly. See "Replacing the heat sink" on page 131.
5. Place the heat sink and fan assembly on its side so that the thermal grease does not come in contact with anything.
6. Remove the hard disk drive. See "Replacing the hard disk drive" on page 139.
7. Lift the small handle **3** and open the retainer **1** to access the microprocessor **2**.

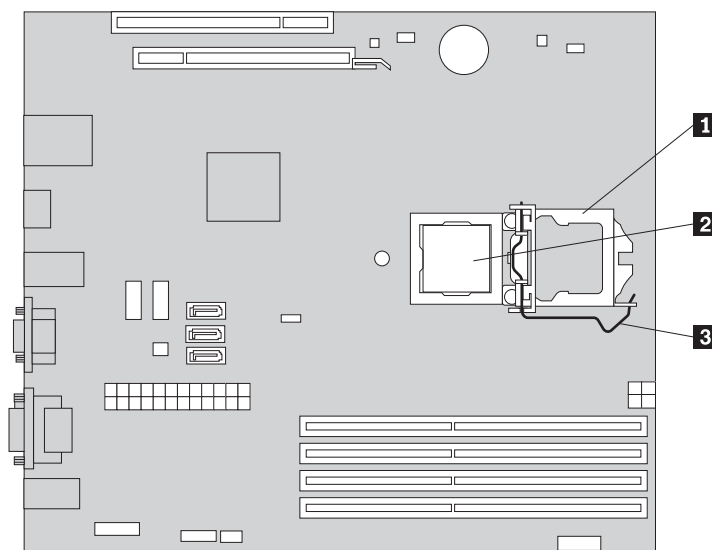
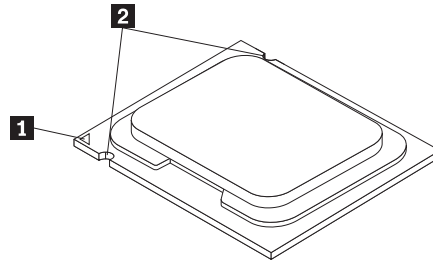


Figure 54. Accessing the microprocessor

8. Lift the microprocessor straight up and out of the socket.

Notes:

- a. Your microprocessor and socket might look different from the one illustrated.
- b. Note the orientation of the microprocessor in the socket. You can either look for the small triangle **1** on one corner of the microprocessor or note the orientation of the notches **2** on the microprocessor. This is important when installing the new microprocessor on the system board.



- c. Touch only the sides of the microprocessor. Do not touch the gold contacts on the bottom.
- d. Do not drop anything onto the microprocessor socket while it is exposed. The socket pins must be kept as clean as possible.

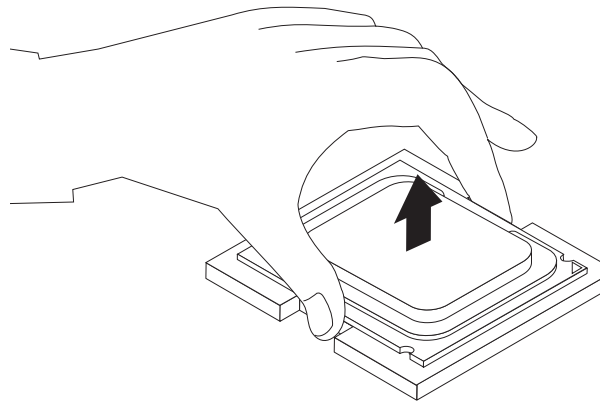
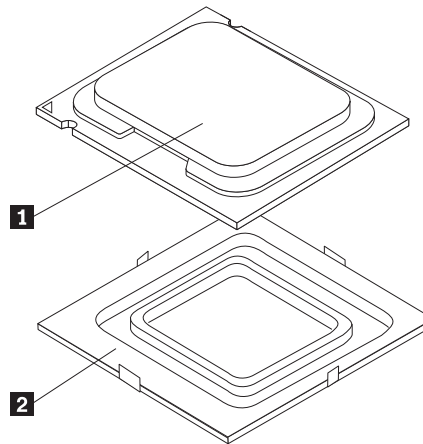


Figure 55. Removing the microprocessor

9. Make sure that the small handle is in the raised position and the microprocessor retainer is fully open.

10. Remove the protective cover **2** that protects the gold contacts on the new microprocessor **1**.



11. Hold the new microprocessor and align the notches on it with the tabs in the microprocessor socket, or align the small triangle on one corner with the corresponding beveled corner of the microprocessor socket.
12. Lower the new microprocessor straight down into the microprocessor socket on the system board.
13. Close the microprocessor retainer and lock it into position with the small handle to secure the new microprocessor in the socket.
14. Reinstall the heat sink and fan assembly. See “Replacing the heat sink” on page 131.
15. Reinstall the hard disk drive. See “Replacing the hard disk drive” on page 139.
16. Reconnect the heat sink and fan assembly cable to the microprocessor fan connector on the system board.
17. Go to “Completing the parts replacement” on page 148.

Replacing the system board

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to: <http://www.lenovo.com/support>

This section provides instructions on how to replace the system board.

CAUTION:



The heat sink and microprocessor might be very hot. Turn off the computer and wait three to five minutes to let the computer cool before opening the computer cover.

To replace the system board:

1. Open the computer cover. See “Opening the computer cover” on page 120.

2. Pivot the drive bay assembly upward to gain access to the system board.
3. Remove the hard disk drive. See “Replacing the hard disk drive” on page 139.
4. Remove all memory modules and PCI cards that are currently installed. See “Replacing a memory module” on page 124 and “Replacing a PCI card” on page 126.
5. Carefully take note of the location of all cable connections on the system board and disconnect all the cables. See “Locating parts on the system board” on page 122.
6. Remove the heat sink and fan assembly from the failing system board. See “Replacing the heat sink” on page 131.
7. Carefully slide the system board so that it can be released from the four mounting studs that secure the system board in place.
8. Lift the system board out of the chassis.
9. Remove the microprocessor from the failing system board and install it on the new system board. See “Replacing the microprocessor” on page 133.
10. Install the new system board into the chassis by aligning the four mounting studs in the chassis with the corresponding holes on the new system board, and then carefully slide the new system board in to the chassis until it is secured in place by the four mounting studs.
11. Install all memory modules and adapter cards removed from the failing system board on the new system board.
12. Install the heat sink and fan assembly and connect the heat sink and fan assembly cable to the new system board. See “Replacing the heat sink” on page 131.
13. Reinstall the hard disk drive. See “Replacing the hard disk drive” on page 139.
14. Reconnect all remaining cables to the system board. See “Locating parts on the system board” on page 122.
15. Go to “Completing the parts replacement” on page 115.

The failing system board must be returned with a microprocessor socket cover to protect the pins during shipping and handling.

To install the microprocessor socket cover, do the following:

1. Release the lever securing the microprocessor retainer and open the retainer to access the microprocessor.
2. Grasp the microprocessor on the sides and lift it straight up and out of the socket. Do not touch the contacts on the microprocessor socket.
3. Note the orientation of the socket cover. Align the notches **1** of the microprocessor socket cover with the alignment keys **2** of the microprocessor socket.
4. Install one side of the socket cover into the microprocessor socket as shown.

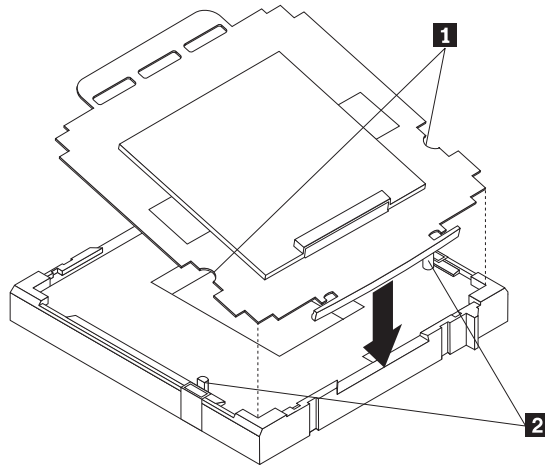


Figure 56. Installing the socket cover

Note: Your microprocessor socket and cover might look slightly different from the illustration.

5. Carefully press the other side of the socket cover downwards until the socket cover snaps into place.

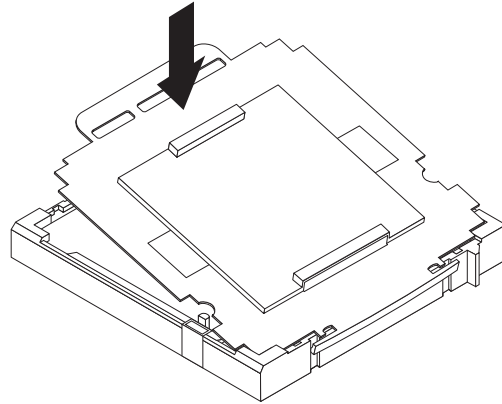


Figure 57. Securing the socket cover

6. Carefully check the four corners of the socket cover to make sure that the cover is secured in the microprocessor socket.
7. Lower the microprocessor retainer and then lower the lever to secure the retainer. Make sure the lever is locked into position.
8. Follow any additional instructions included with the replacement part you received.

Note: If your system board has two microprocessor sockets, be sure to install a socket cover for each microprocessor socket.

Replacing the hard disk drive

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the hard disk drive if your computer has one. For computer models that do not have an internal hard disk drive and use a remote hard disk drive accessed through the SMC - Storage Array, contact your network or storage administrator.

To replace the hard disk drive, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. You might need to pivot the optical drive bay assembly upward to gain easier access to the hard disk drive.
4. Locate the hard disk drive. See “Locating components” on page 121.
5. Push the release button **1** of the hard disk drive bracket as shown and then lift the hard disk drive bracket up from the heat sink.

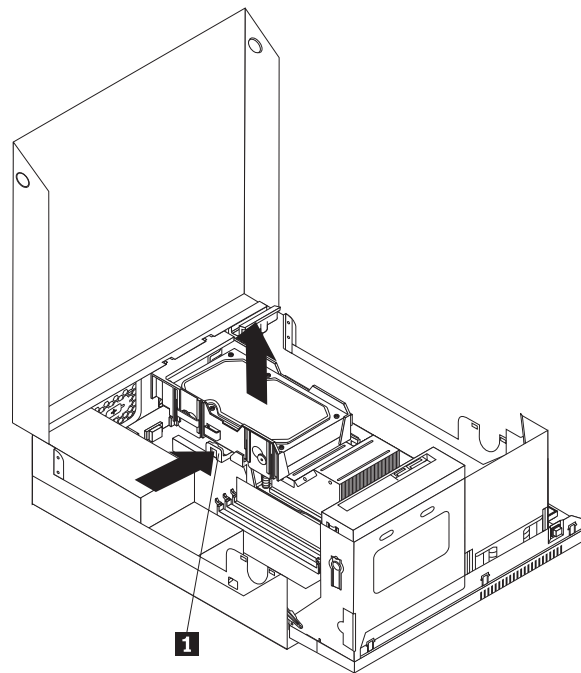


Figure 58. Removing the hard disk drive

6. Disconnect the signal cable and the power cable from the hard disk drive to completely remove the hard disk drive from the chassis.
7. Flex the sides of the bracket to remove the hard disk drive from the bracket.

8. To install a new hard disk drive into the bracket, flex the bracket and align pin **1**, pin **2**, pin **3**, and pin **4** on the bracket with the corresponding holes in the hard disk drive.

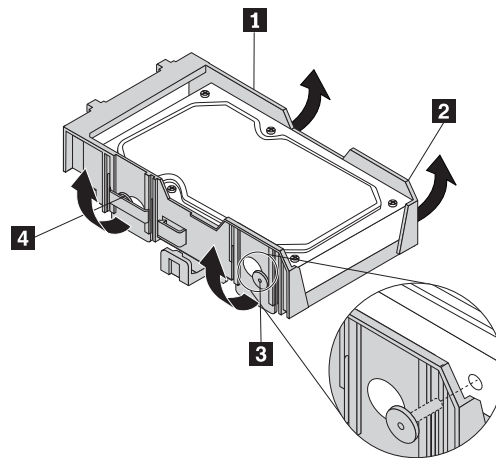


Figure 59. Installing the hard disk drive into the bracket

Important: Do not touch the circuit board on the bottom of the hard disk drive.

9. Connect the signal cable and the power cable to the new hard disk drive.
10. Insert the two retaining clips **1** of the hard disk drive bracket into the corresponding holes in the chassis, and then pivot the hard disk drive and bracket downwards until the hard disk drive bracket snaps into position.

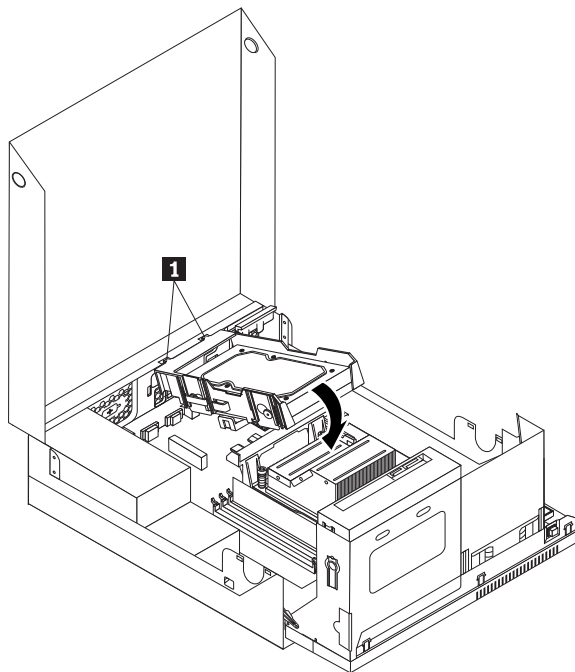


Figure 60. Installing the hard disk drive

11. Go to “Completing the parts replacement” on page 148.

Replacing the optical drive

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the optical drive.

To replace the optical drive, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Pivot the optical drive bay assembly upward to gain easy access to the optical drive.
4. Disconnect the signal cable and the power cable from the rear of the optical drive.
5. Press the optical drive lock **1** and slide the optical drive out of the rear of the drive bay assembly.

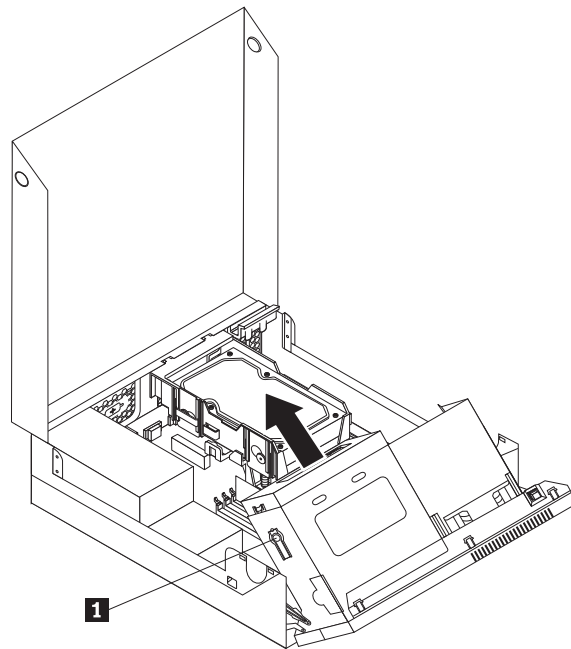


Figure 61. Removing the old optical drive

6. Install the optical drive retainer on the side of the new optical drive.

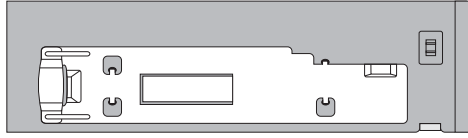


Figure 62. Installing the optical drive retainer

7. Slide the new optical drive into the drive bay until it snaps into position.

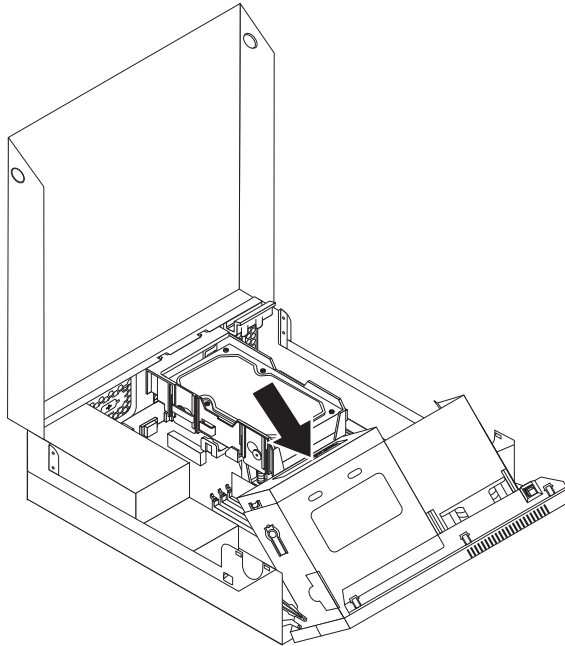


Figure 63. Installing a new optical drive

8. Connect the signal cable and the power cable to the rear of the optical drive.
9. Go to "Completing the parts replacement" on page 115.

Replacing the internal speaker

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the internal speaker.

Note: Not all computers have the internal speaker.

To replace the internal speaker, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Remove the front bezel by releasing the three plastic tabs and pivoting the front bezel outward.

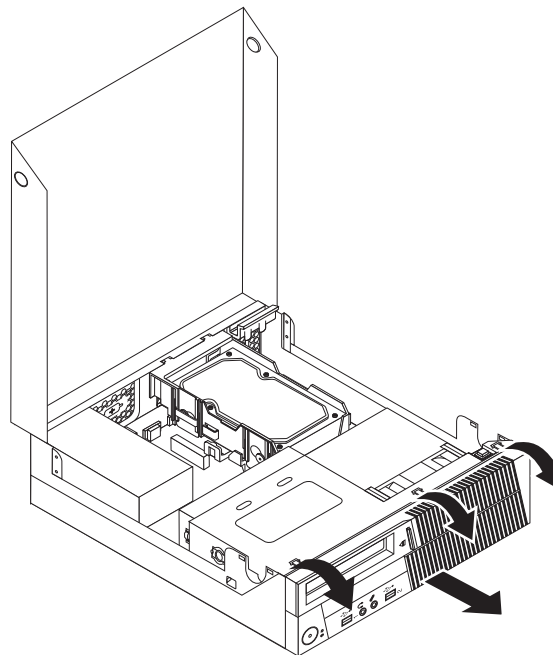


Figure 64. Removing the front bezel

4. Pivot the optical drive bay assembly upward to gain access to the internal speaker.
5. Locate the internal speaker. See “Locating components” on page 121.
6. Disconnect the internal speaker cable and the thermal sensor cable from the internal speaker connector and the thermal sensor connector on the system board. See “Locating parts on the system board” on page 122.

7. Push the two tabs **1** on the bottom of the internal speaker as shown to release the internal speaker, and then lift the internal speaker up to completely remove it from the chassis.

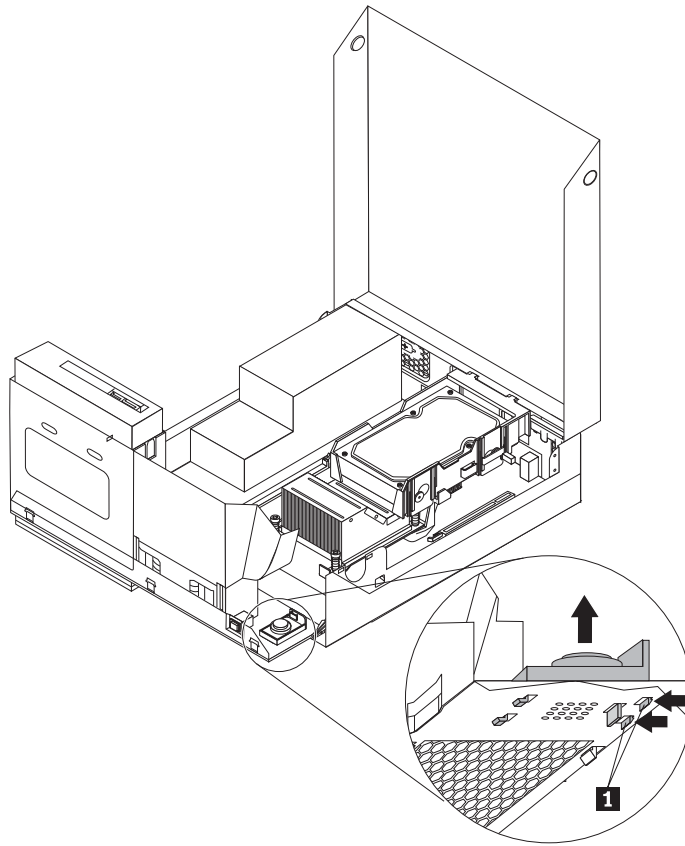


Figure 65. Removing the internal speaker

8. Remove the attached thermal sensor cable from the old internal speaker and install it on the new internal speaker.

9. Insert the two tabs **2** on the bottom of the new internal speaker into the corresponding holes in the chassis, and push the speaker straight down until the other two tabs **1** snap into position.

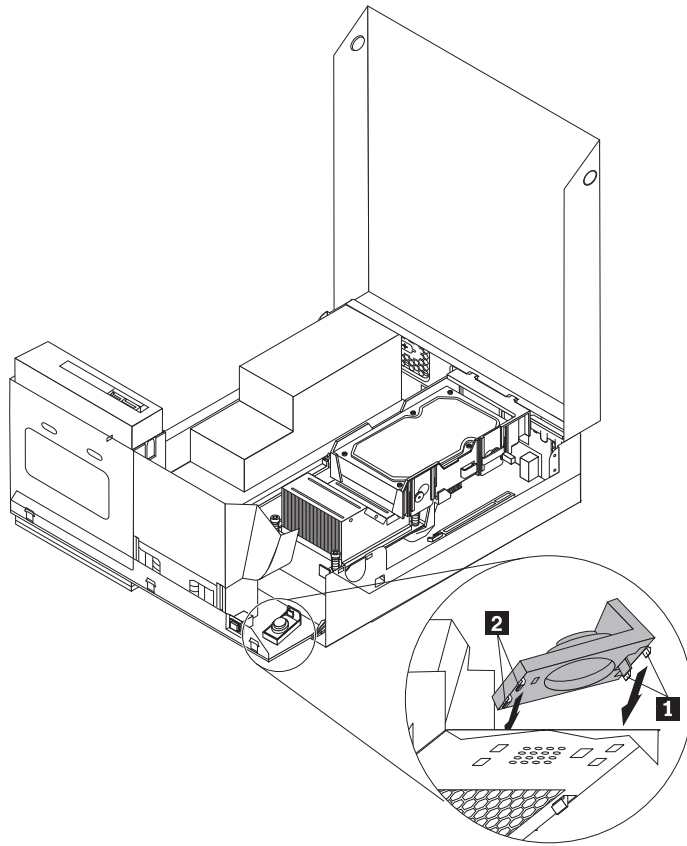


Figure 66. Installing the new internal speaker

10. Reconnect the internal speaker cable and the thermal sensor cable to the system board. See “Locating parts on the system board” on page 122.
11. To reinstall the front bezel, align the three tabs on the front bezel with the corresponding holes in the chassis and pivot the front bezel inwards until it snaps into position.
12. Go to “Completing the parts replacement” on page 148.

Replacing the front audio and USB assembly

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the front audio and USB assembly.

To replace the front audio and USB assembly, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Pivot the optical drive bay assembly upward to gain access to the front audio and USB assembly.
4. Locate the front audio and USB assembly.
5. Disconnect the front audio and USB assembly cables from the system board. See “Locating parts on the system board” on page 122.

Note: Make sure you note the locations of the cables when you disconnect the cables from the system board.

6. Remove the screw that secures the front audio and USB assembly to the chassis.

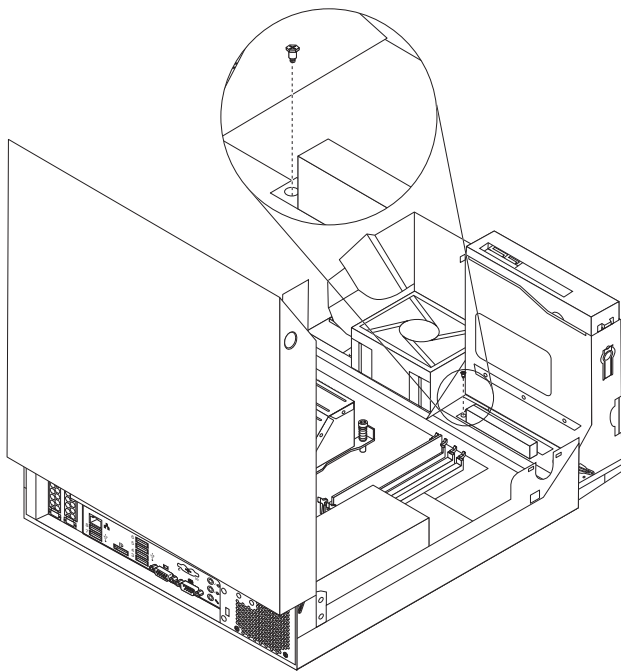


Figure 67. Removing the securing screw of the front audio and USB assembly

7. Remove the front audio and USB assembly from the chassis.

8. Install a new front audio and USB assembly into the chassis and align the screw hole in the front audio and USB assembly with the hole in the chassis.
9. Install the screw to secure the new front audio and USB assembly to the chassis.
10. Reconnect the front audio and USB assembly cables to the front audio connector and the front USB connector on the system board. See “Locating parts on the system board” on page 122.
11. Go to “Completing the parts replacement” on page 148.

Replacing the system fan

Attention

Do not open your computer or attempt any repair before reading and understanding the “Important safety information” in the *ThinkCentre Safety and Warranty Guide* that came with your computer. To obtain a copy of the *ThinkCentre Safety and Warranty Guide*, go to:
<http://www.lenovo.com/support>

This section provides instructions on how to replace the system fan.

To replace the system fan, do the following:

1. Turn off the computer and disconnect all power cords from electrical outlets.
2. Open the computer cover. See “Opening the computer cover” on page 120.
3. Remove the front bezel by releasing the three plastic tabs and pivoting the front bezel outward.

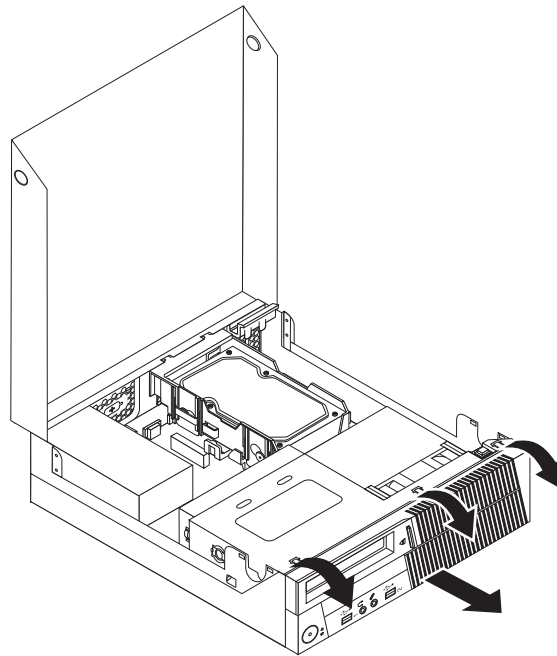


Figure 68. Removing the front bezel

4. Pivot the optical drive bay assembly upward.
5. Locate the system fan. See “Locating components” on page 121.

6. Disconnect the system fan cable from the microprocessor fan connector on the system board. See “Locating parts on the system board” on page 122.
7. Release the four tabs on the bottom of the system fan as shown, and then lift the system fan straight up to completely remove it from the chassis.

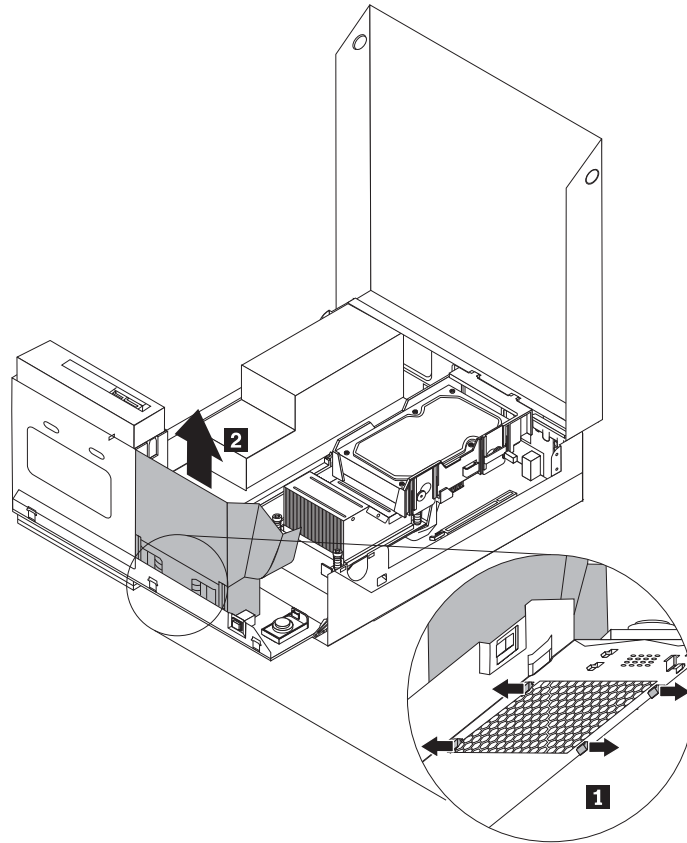


Figure 69. Removing the system fan

8. Align the four tabs on the bottom of the new system fan with the corresponding holes in the chassis, and push the new system fan straight down until it snaps into position.
9. Connect the system fan cable to the microprocessor fan connector on the system board. See “Locating parts on the system board” on page 122.
10. To reinstall the front bezel, align the three tabs on the front bezel with the corresponding holes in the chassis and pivot the front bezel inwards until it snaps into position.
11. Go to “Completing the parts replacement.”

Completing the parts replacement

After completing the installation or replacement for all parts, you need to close the computer cover and reconnect cables. Depending on the parts you installed or replaced, you might need to confirm the updated information in the Setup Utility program. Refer to Chapter 6, “Using the Setup Utility program,” on page 51.

To close the computer cover and reconnect cables to your computer, do the following:

1. Make sure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer. See “Locating components” on page 121 for the locations of various components in your computer.
2. If you have removed the front bezel, reinstall it. To reinstall the front bezel, align the three tabs on the front bezel with the corresponding holes in the chassis and pivot the front bezel inwards until it snaps into position.
3. Make sure that the cables are routed correctly. Keep cables clear of the hinges and sides of the computer chassis to avoid interference with closing the computer cover.
4. Lower the optical drive bay assembly.
5. Close the computer cover.
6. Reconnect the external cables and power cords to the computer. See “Locating connectors on the rear of the computer” on page 119.

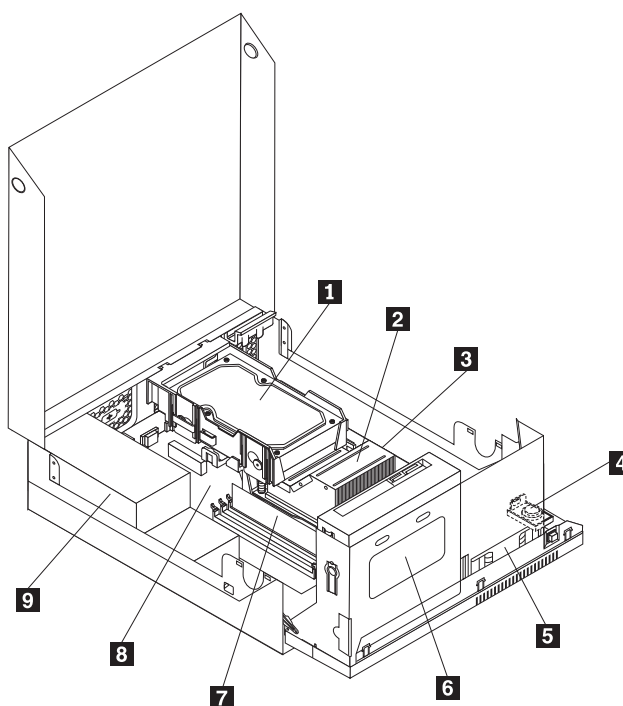
Chapter 10. FRU lists

This chapter lists the information on the field replaceable units (FRUs).

Attention: Be sure to read and understand all the safety information before replacing any FRUs.

Note: In the following tables, a customer replaceable unit (CRU) is identified as either "1", "2", or "N" in the **CRU** column. "N" means that the part is not a CRU, "1" means that the part is a Self-service CRU, and "2" means that the part is an Optional-service CRU.

Machine Type 3245



Item #	3245 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3H A4H A5V A7V)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3H A4H A5V A7V)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A8U A8F A6V)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A8U A8F A6V)	45K0410	1

Item #	3245 FRUs	FRU#	CRU
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models A2U A2F A2S A2P A2D A2Y A7V)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models A3H A4H A1U A1F A1S A1P A1D A1Y A5V A6V)	71Y6960	N
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models A8U A8F)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models A5V A7V)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A6V)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A5V A6V A7V)	64Y6649	1
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A5V A6V A7V)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A5V A6V A7V)	45J9441	1

Item #	3245 FRUs	FRU#	CRU
9	Power supply, 240 Watt (85Plus) (Standard) (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A5V A6V A7V)	45J9446	1

The FRUs listed in the following tables are not illustrated.

3245 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

3245 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1U A2U A8U A5V A6V A7V)	41A5289	1
Arabic (models)	41A5290	1
A/F (models)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models)	41A5293	1
Brazilian Portuguese (models A1P A2P)	41A5294	1
Bulgarian (models)	41A5295	1
Chinese/US (models A3H A4H)	41A5296	1
Czech (ABB) (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian (models A1F A2F A8F)	41A5301	1
French Canadian (models A1F A2F A8F)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italy (models)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y)	41A5312	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian (models)	41A5316	1
Romanian (models)	41A5317	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finnish (models)	41A5322	1
SF/G (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models)	41A5325	1
Turkish (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1

3245 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Arabic (New) (models)	45J4880	1
Lithuanian (models)	45J4896	1

3245 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1

3245 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Slovenian (models)	57Y4820	1

3245 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A5V A6V A7V)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A8U A8F A5V A6V A7V)	41U3030	1

3245 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models A1U A1S A2U A2S A8U)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models A1D A1Y A2D A2Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models)	89P8581	1
Speaker power brick, Japanese (models)	89P8577	1
Speaker power brick, Brazil (models A1P A2P)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1
Speaker power brick, ANZ (models)	89P8579	1
Speaker power brick, Korea (models)	41A4903	1
Speaker power brick, Hong Kong (models A3H A4H)	89P8573	1
Speaker power brick, Taiwan (models A5V A6V A7V)	41A4905	1
Speaker power brick, India, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models)	71Y8665	1

3245 Line Cords	FRU#	CRU
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A8U A8F)	41R3184	1
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A9U A9F)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1

3245 Line Cords	FRU#	CRU
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y A8U A8F)	41R3196	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y A9U A9F)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models A6V A7V A8V)	41R3278	1
Line Cord - Taiwan (models A6V A7V A8V)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models)	41R3212	1
Line Cord - Denmark (models)	41R3213	1
Line Cord - Switzerland (models)	41R3228	1
Line Cord - Switzerland (models)	41R3229	1
Line Cord - Israel (models)	41R3236	1
Line Cord - Israel (models)	41R3237	1
Line Cord - South Africa (models)	41R3220	1
Line Cord - South Africa (models)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3245 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1

3245 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3245 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1

3245 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3245 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1

3245 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3245 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3245 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1

3245 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

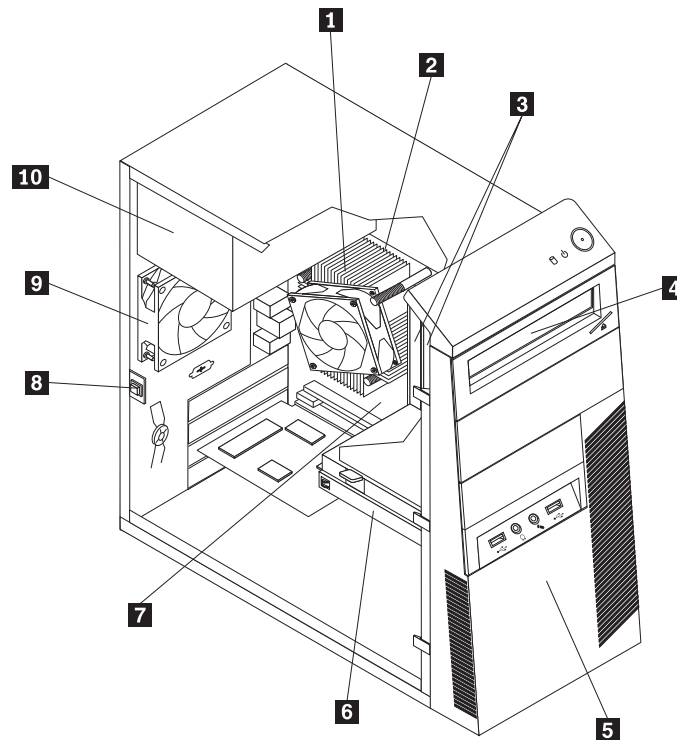
3245 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0569	1
French (models)	89Y0550	1
German (models)	89Y0552	1
La Spanish (models)	TBD	1
Italian (models)	89Y0556	1
Dutch (models)	TBD	1
Czech (models)	89Y0548	1
Polish (models)	89Y0559	1
Russian (models)	89Y0563	1
Turkish (models)	89Y0568	1
Hungarian (models)	89Y0555	1
Greek (models)	89Y0551	1
Brazilian Portuguese (models)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models)	89Y0561	1
Romanian (models)	89Y0562	1

3245 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
Sebian-Latin (models)	89Y0567	1
Slovakian (models)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models)	89Y0560	1
Spanish (models)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0571	1

3245 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1

3245 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 3246



Item #	3246 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models A1U A1F A1S A1P A1D A1Y A8V))	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models A3Q A3H A4H A2U A2F A2S A2P A2D A2Y A6V A7V)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models A5Q A9U A9F)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1

Item #	3246 FRUs	FRU#	CRU
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A3Q A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A5Q A9U A9F A6V A7V A8V)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models A6V)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models A3Q A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A5Q A9U A9F A7V A8V)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3Q A3H A4H A5Q A6V A8V)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3Q A3H A4H A5Q A6V A8V)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A9U A9F A7V)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A9U A9F A7V)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models A3Q A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A5Q A9U A9F A6V A7V A8V)	71Y5974	N
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models A3Q A3H A4H A5Q A6V A7V A8V A9U A9F)	45J9436	2
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A3Q A3H A4H A5Q A6V A7V A8V A9U A9F)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A3Q A3H A4H A5Q A6V A7V A8V A9U A9F)	45J9410	2

The FRUs listed in the following tables are not illustrated.

3246 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2

3246 FRUs	FRU#	CRU
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2

3246 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A3Q A1U A2U A5Q A9U A6V A7V A8V)	41A5289	1
Arabic (models)	41A5290	1
A/F (models)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models)	41A5293	1
Brazilian Portuguese (models A1P A2P)	41A5294	1
Bulgarian (models A3H A4H)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian (models A1F A2F A9F)	41A5301	1
French Canadian (models A1F A2F A9F)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1

3246 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italy (models)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y)	41A5312	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian (models)	41A5316	1
Romanian (models)	41A5317	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finnish (models)	41A5322	1
SF/G (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models)	41A5325	1
Turkish (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models)	45J4880	1
Lithuanian (models)	45J4896	1

3246 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1

3246 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3246 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A3Q A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A5Q A9U A9F A6V A7V A8V)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A3Q A3H A4H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A5Q A9U A9F A6V A7V A8V)	41U3030	1

3246 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models A1U A1S A2U A2S A9U)	89P8571	1

3246 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker power brick - LA high voltage (non-APU) (models A1D A1Y A2D A2Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models)	89P8581	1
Speaker power brick (models)	89P8577	1
Speaker power brick - Brazil (models A1P)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models)	89P8579	1
Speaker power brick - Korea (models)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models A3H A4H)	89P8573	1
Speaker Power brick -TAIWAN-TC (models A6V A7V A8V)	41A4905	1
Speaker Power brick - INDIA, South Africa (models A3Q A5Q)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models A9U A9F)	71Y8664	1

3246 Line cords	FRU#	CRU
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A9U A9F)	41R3184	1
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A9U A9F)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	45J9595	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y A9U A9F)	41R3196	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y A9U A9F)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1

3246 Line cords	FRU#	CRU
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models A6V A7V A8V)	41R3278	1
Line Cord - Taiwan (models A6V A7V A8V)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models)	41R3212	1
Line Cord - Denmark (models)	41R3213	1
Line Cord - Switzerland (models)	41R3228	1
Line Cord - Switzerland (models)	41R3229	1
Line Cord - Israel (models)	41R3236	1
Line Cord - Israel (models)	41R3237	1
Line Cord - South Africa (models)	41R3220	1
Line Cord - South Africa (models)	41R3221	1
Line Cord - India (models A3Q A5Q)	41R3341	1
Line Cord - India (models A3Q A5Q)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3246 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1

3246 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3246 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1

3246 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3246 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3246 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3246 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1

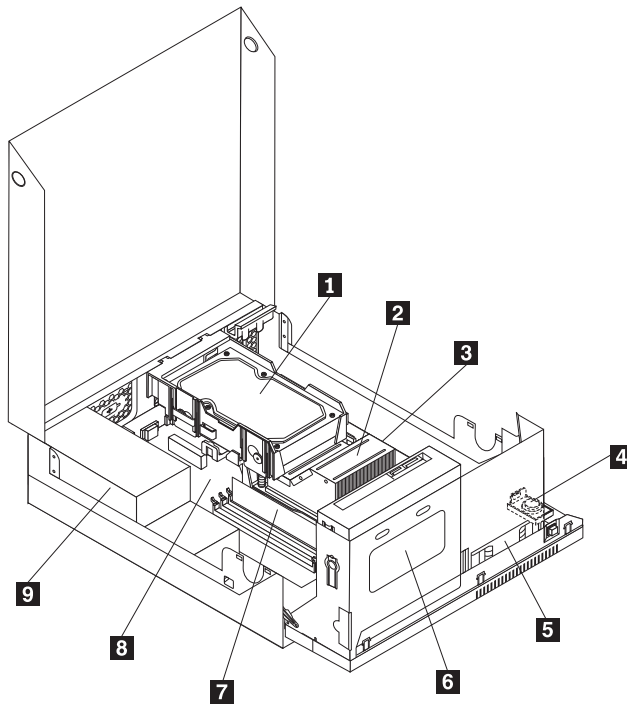
3246 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3246 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A6V A7V A8V)	89Y0569	1
French (models)	89Y0550	1
German (models)	89Y0552	1
La Spanish (models)	TBD	1
Italian (models)	89Y0556	1
Dutch (models)	TBD	1
Czech (models)	89Y0548	1
Polish (models)	89Y0559	1
Russian (models)	89Y0563	1
Turkish (models)	89Y0568	1
Hungarian (models)	89Y0555	1
Greek (models)	89Y0551	1
Brazilian Portuguese (models)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models)	89Y0561	1
Romanian (models)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models A3Q A5Q)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models)	89Y0560	1

3246 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
Spanish (models)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0571	1

3246 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

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Item #	3269 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3H A5V)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3H A5V)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V)	45K0410	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N

Item #	3269 FRUs	FRU#	CRU
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A3H A1U A1F A1S A1P A1D A1Y A5V)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A2U A2F A2S A2P A2D A2Y A4H A4V)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models A8U A8F)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models A5V)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A5V)	64Y6649	1
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A5V)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y)	45J9441	1
9	Power supply, 240 Watt (85Plus) (Standard) (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y)	45J9446	1

The FRUs listed in the following tables are not illustrated.

3269 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2

3269 FRUs	FRU#	CRU
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

3269 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1U A2U A4V A5V)	41A5289	1
Arabic (models)	41A5290	1
A/F (models)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models)	41A5293	1
Brazilian Portuguese (models A1P A2P)	41A5294	1
Bulgarian (models)	41A5295	1
Chinese/US (models A3H A4H)	41A5296	1
Czech (ABB) (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1

3269 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
French (models)	41A5300	1
French Canadian (models A1F A2F)	41A5301	1
French Canadian (models A1F A2F)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italy (models)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y)	41A5312	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian (models)	41A5316	1
Romanian (models)	41A5317	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finnish (models)	41A5322	1
SF/G (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models)	41A5325	1
Turkish (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models)	45J4880	1
Lithuanian (models)	45J4896	1

3269 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1

3269 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3269 mice	FRU#	CRU
Optical wheel ouse (400DPI, USB) (models)	41U3013	1
Optical wheel mouse (400DPI, USB) (models)	41U3030	1

3269 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1

3269 Adapters and miscellaneous FRUs	FRU#	CRU
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models A1U A1S A2U A2S)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models A1D A1Y A2D A2Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models)	89P8581	1
Speaker power brick, Japanese (models)	89P8577	1
Speaker power brick, Brazil (models A1P A2P)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1
Speaker power brick, ANZ (models)	89P8579	1
Speaker power brick, Korea (models)	41A4903	1
Speaker power brick, Hong Kong (models A3H A4H)	89P8573	1
Speaker power brick, Taiwan (models A4V A5V)	41A4905	1
Speaker power brick, India, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models)	71Y8665	1

3269 Line Cords	FRU#	CRU
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A4H)	41R3184	1
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A4H)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3196	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models A4V A5V)	41R3278	1
Line Cord - Taiwan (models A4V A5V)	41R3279	1
Line Cord - Italy (models)	41R3232	1

3269 Line Cords	FRU#	CRU
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models)	41R3212	1
Line Cord - Denmark (models)	41R3213	1
Line Cord - Switzerland (models)	41R3228	1
Line Cord - Switzerland (models)	41R3229	1
Line Cord - Israel (models)	41R3236	1
Line Cord - Israel (models)	41R3237	1
Line Cord - South Africa (models)	41R3220	1
Line Cord - South Africa (models)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3269 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1

3269 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3269 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3269 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3269 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1

3269 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3269 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1

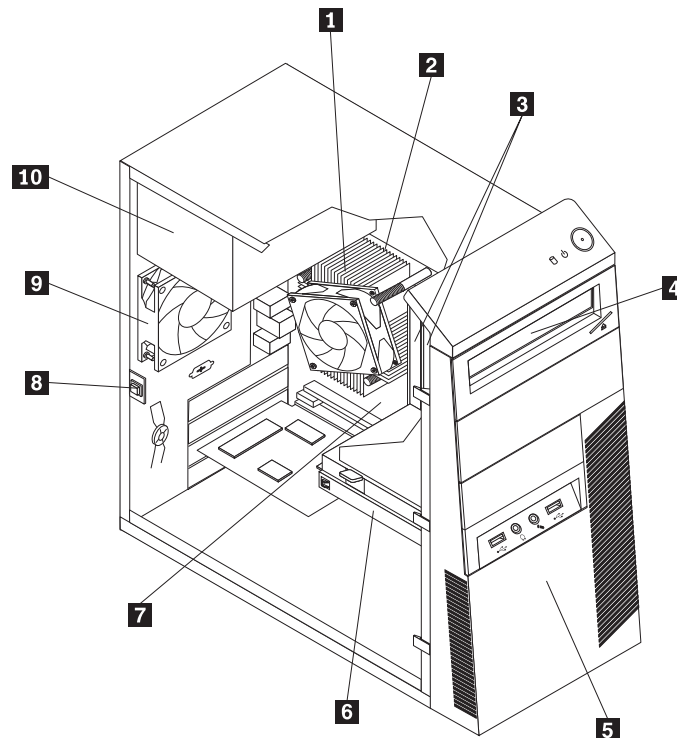
3269 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3269 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A1U A2U)	89Y0569	1
French (models A1F A2F)	89Y0550	1
German (models)	89Y0552	1
La Spanish (models A1S A1D A1Y A2S A2D A2Y)	TBD	1
Italian (models)	89Y0556	1
Dutch (models)	TBD	1
Czech (models)	89Y0548	1
Polish (models)	89Y0559	1
Russian (models)	89Y0563	1
Turkish (models)	89Y0568	1
Hungarian (models)	89Y0555	1
Greek (models)	89Y0551	1
Brazilian Portuguese (models A1P A2P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models)	89Y0561	1
Romanian (models)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models)	89Y0560	1
Spanish (models)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0571	1

3269 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1

3269 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

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Item #	3282 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A3H A1U A1F A1S A1P A1D A1Y A5V A6V)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A2U A2F A2S A2P A2D A2Y A4H A4V A7V)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1

Item #	3282 FRUs	FRU#	CRU
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A5V A6V A7V)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models A5V A7V)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A6V)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3H A5V A7V)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A3H A5V A7V)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A6V)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A6V)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A5V A6V A7V)	71Y5974	N
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models A3H A4H A4V A5V A6V A7V)	45J9436	2
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A3H A4H A4V A5V A6V A7V)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A3H A4H A4V A5V A6V A7V)	45J9410	2

The FRUs listed in the following tables are not illustrated.

3282 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2

3282 FRUs	FRU#	CRU
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2

3282 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1U A2U A4V A5V A6V A7V)	41A5289	1
Arabic (models)	41A5290	1
A/F (models)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models)	41A5293	1
Brazilian Portuguese (models A1P A2P)	41A5294	1
Bulgarian (models)	41A5295	1
Chinese/US (models A3H A4H)	41A5296	1
Czech (ABB) (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian (models A1F A2F)	41A5301	1
French Canadian (models A1F A2F)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1

3282 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Italy (models)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y)	41A5312	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian (models)	41A5316	1
Romanian (models)	41A5317	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finnish (models)	41A5322	1
SF/G (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models)	41A5325	1
Turkish (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models)	45J4880	1
Lithuanian (models)	45J4896	1

3282 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1

3282 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3282 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A5V A6V A7V)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A3H A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4H A4V A5V A6V A7V)	41U3030	1

3282 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models A1U A1S A2U A2S)	89P8571	1
Speaker power brick - LA high voltage (non-APU) (models A1D A1Y A2D A2Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models)	89P8581	1
Speaker power brick (models)	89P8577	1

3282 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker power brick - Brazil (models A1P A2P)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models)	89P8579	1
Speaker power brick - Korea (models)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models A3H)	89P8573	1
Speaker Power brick -TAIWAN-TC (models A4V A5V A6V A7V)	41A4905	1
Speaker Power brick - INDIA, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models)	71Y8664	1

3282 Line Cords	FRU#	CRU
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A3H)	41R3184	1
Line cord - US (models A1U A1F A1S A1Y A2U A2F A2S A2Y A3H)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	45J9595	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3196	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models A4V A5V A6V A7V)	41R3278	1
Line Cord - Taiwan (models A4V A5V A6V A7V)	41R3279	1
Line Cord - Italy (models)	41R3232	1

3282 Line Cords	FRU#	CRU
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models)	41R3212	1
Line Cord - Denmark (models)	41R3213	1
Line Cord - Switzerland (models)	41R3228	1
Line Cord - Switzerland (models)	41R3229	1
Line Cord - Israel (models)	41R3236	1
Line Cord - Israel (models)	41R3237	1
Line Cord - South Africa (models)	41R3220	1
Line Cord - South Africa (models)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3282 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1

3282 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3282 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3282 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3282 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1

3282 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3282 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1

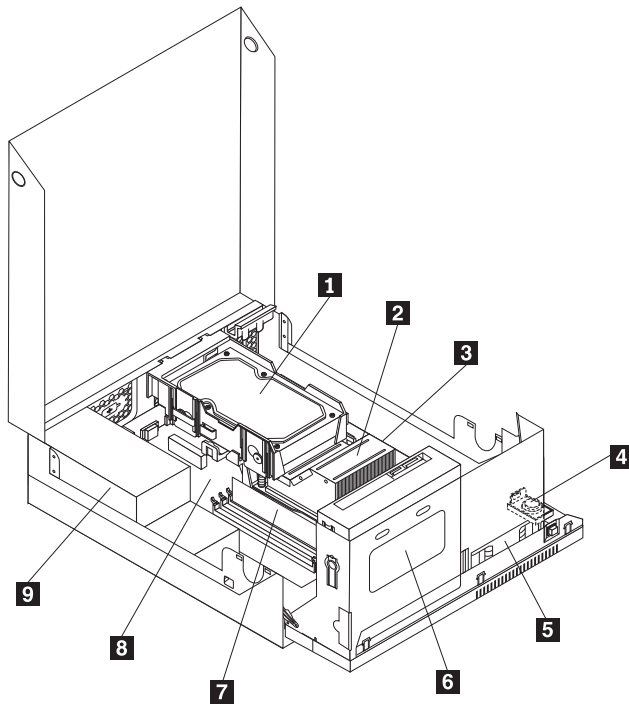
3282 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3282 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A1U A2U)	89Y0569	1
French (models A1F A2F)	89Y0550	1
German (models)	89Y0552	1
La Spanish (models A1S A1D A1Y A2S A2D A2Y)	TBD	1
Italian (models)	89Y0556	1
Dutch (models)	TBD	1
Czech (models)	89Y0548	1
Polish (models)	89Y0559	1
Russian (models)	89Y0563	1
Turkish (models)	89Y0568	1
Hungarian (models)	89Y0555	1
Greek (models)	89Y0551	1
Brazilian Portuguese (models A1P A2P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models)	89Y0561	1
Romanian (models)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models)	89Y0560	1
Spanish (models)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0571	1

3282 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1

3282 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 3491



Item #	3491 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A3G)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A3G)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G A4G)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G A4G)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	45K0410	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models A1G A2G)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models A3G A4G)	71Y6960	N
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N

Item #	3491 FRUs	FRU#	CRU
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models A8U A8F)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models A1G A2G A3G A4G)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A1G A2G A3G A4G)	64Y6649	1
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models A1G A2G A3G A4G)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models A1G A2G A3G A4G)	45J9441	1
9	Power supply, 240 Watt (85Plus) (Standard) (models A1G A2G A3G A4G)	45J9446	1

The FRUs listed in the following tables are not illustrated.

3491 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2

3491 FRUs	FRU#	CRU
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

3491 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1G A2G A3G A4G)	41A5289	1
Arabic (models A1G A2G A3G A4G)	41A5290	1
A/F (models A1G A2G A3G A4G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models A1G A2G A3G A4G)	41A5293	1
Brazilian Portuguese (models)	41A5294	1
Bulgarian (models A1G A2G A3G A4G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models A1G A2G A3G A4G)	41A5297	1
Danish (models A1G A2G A3G A4G)	41A5298	1
Dutch (models A1G A2G A3G A4G)	41A5299	1
French (models A1G A2G A3G A4G)	41A5300	1
French Canadian (models A1G A2G A3G A4G)	41A5301	1
French Canadian (models A1G A2G A3G A4G)	41A5302	1
German (models A1G A2G A3G A4G)	41A5303	1
Greek (models v)	41A5304	1

3491 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Greek/US (models A1G A2G A3G A4G)	41A5305	1
Hebrew (models A1G A2G A3G A4G)	41A5306	1
Hungarian (models A1G A2G A3G A4G)	41A5307	1
Iceland (models A1G A2G A3G A4G)	41A5308	1
Italy (models A1G A2G A3G A4G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models)	41A5312	1
Norwegian (models A1G A2G A3G A4G)	41A5313	1
Polish (models A1G A2G A3G A4G)	41A5314	1
Portuguese (models A1G A2G A3G A4G)	41A5315	1
Romanian (models A1G A2G A3G A4G)	41A5316	1
Romanian (models A1G A2G A3G A4G)	41A5317	1
Russian/Cyrillic (models A1G A2G A3G A4G)	41A5318	1
Serbian/Cyrillic (models A1G A2G A3G A4G)	41A5319	1
Slovak (models A1G A2G A3G A4G)	41A5320	1
Spanish (models A1G A2G A3G A4G)	41A5321	1
Swedish/Finnish (models A1G A2G A3G A4G)	41A5322	1
SF/G (models A1G A2G A3G A4G)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models A1G A2G A3G A4G)	41A5325	1
Turkish (models A1G A2G A3G A4G)	41A5326	1
UK English (models A1G A2G A3G A4G)	41A5327	1
US Euro (models A1G A2G A3G A4G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models A1G A2G A3G A4G)	45J4880	1
Lithuanian (models)	45J4896	1

3491 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1

3491 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3491 mice	FRU#	CRU
Optical wheel ouse (400DPI, USB) (models A1G A2G A3G A4G)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A1G A2G A3G A4G)	41U3030	1

3491 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models A1G A2G A3G A4G)	89P8581	1
Speaker power brick, Japanese (models)	89P8577	1

3491 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker power brick, Brazil (models A1P A2P)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1
Speaker power brick, ANZ (models)	89P8579	1
Speaker power brick, Korea (models)	41A4903	1
Speaker power brick, Hong Kong (models A1G A2G A3G A4G)	89P8573	1
Speaker power brick, Taiwan (models)	41A4905	1
Speaker power brick, India, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models)	71Y8665	1

3491 Line Cords	FRU#	CRU
Line cord - US (models)	41R3184	1
Line cord - US (models)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models)	41R3196	1
Line cord - Australia / New Zealand (models)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models)	41R3209	1
Line Cord - Denmark (models A1G A2G A3G A4G)	41R3212	1
Line Cord - Denmark (models A1G A2G A3G A4G)	41R3213	1

3491 Line Cords	FRU#	CRU
Line Cord - Switzerland (models A1G A2G A3G A4G)	41R3228	1
Line Cord - Switzerland (models A1G A2G A3G A4G)	41R3229	1
Line Cord - Israel (models A1G A2G A3G A4G)	41R3236	1
Line Cord - Israel (models A1G A2G A3G A4G)	41R3237	1
Line Cord - South Africa (models A1G A2G A3G A4G)	41R3220	1
Line Cord - South Africa (models A1G A2G A3G A4G)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models A1G A2G A3G A4G)	41R3224	1
Line Cord - UK, Ireland (models A1G A2G A3G A4G)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3491 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1

3491 Windows XP Professional recovery DVDs	FRU#	CRU Tier
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3491 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3491 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1

3491 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3491 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1

3491 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3491 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1

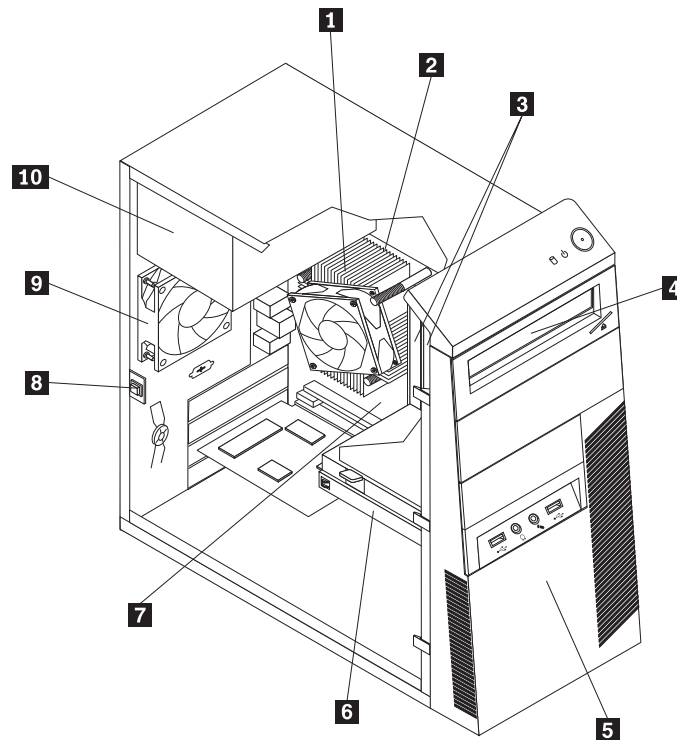
3491 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3491 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A1G A2G A3G A4G)	89Y0569	1
French (models A1G A2G A3G A4G)	89Y0550	1
German (models A1G A2G A3G A4G)	89Y0552	1
La Spanish (models)	TBD	1
Italian (models)	89Y0556	1
Dutch (models A1G A2G A3G A4G)	TBD	1
Czech (models)	89Y0548	1
Polish (models A1G A2G A3G A4G)	89Y0559	1
Russian (models A1G A2G A3G A4G)	89Y0563	1
Turkish (models A1G A2G A3G A4G)	89Y0568	1
Hungarian (models A1G A2G A3G A4G)	89Y0555	1
Greek (models A1G A2G A3G A4G)	89Y0551	1
Brazilian Portuguese (models)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models A1G A2G A3G A4G)	89Y0561	1
Romanian (models A1G A2G A3G A4G)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models A1G A2G A3G A4G)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models A1G A2G A3G A4G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models A1G A2G A3G A4G)	89Y0560	1
Spanish (models A1G A2G A3G A4G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models A1G A2G A3G A4G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models A1G A2G A3G A4G)	89Y0571	1

3491 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1

3491 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 3544



Item #	3544 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models A3G)	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models A1G A2G)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5307	N
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1

Item #	3544 FRUs	FRU#	CRU
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A1G A2G A3G)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models A1G A2G A3G)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A3G)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A3G)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models A1G A2G A3G)	71Y5974	N
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models A1G A2G A3G)	45J9436	2
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A1G A2G A3G)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A1G A2G A3G)	45J9410	2

The FRUs listed in the following tables are not illustrated.

3544 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1

3544 FRUs	FRU#	CRU
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2

3544 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1G A2G A3G)	41A5289	1
Arabic (models A1G A2G A3G)	41A5290	1
A/F (models A1G A2G A3G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models A1G A2G A3G)	41A5293	1
Brazilian Portuguese (models)	41A5294	1
Bulgarian (models A1G A2G A3G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models A1G A2G A3G)	41A5297	1
Danish (models A1G A2G A3G)	41A5298	1
Dutch (models A1G A2G A3G)	41A5299	1
French (models A1G A2G A3G)	41A5300	1
French Canadian (models A1G A2G A3G)	41A5301	1
French Canadian (models A1G A2G A3G)	41A5302	1
German (models A1G A2G A3G)	41A5303	1
Greek (models A1G A2G A3G)	41A5304	1
Greek/US (models A1G A2G A3G)	41A5305	1
Hebrew (models A1G A2G A3G)	41A5306	1
Hungarian (models A1G A2G A3G)	41A5307	1
Iceland (models A1G A2G A3G)	41A5308	1
Italy (models A1G A2G A3G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1

3544 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
LA Spanish (models)	41A5312	1
Norwegian (models A1G A2G A3G)	41A5313	1
Polish (models A1G A2G A3G)	41A5314	1
Portuguese (models A1G A2G A3G)	41A5315	1
Romanian (models A1G A2G A3G)	41A5316	1
Romanian (models A1G A2G A3G)	41A5317	1
Russian/Cyrillic (models A1G A2G A3G)	41A5318	1
Serbian/Cyrillic (models A1G A2G A3G)	41A5319	1
Slovak (models A1G A2G A3G)	41A5320	1
Spanish (models A1G A2G A3G)	41A5321	1
Swedish/Finnish (models A1G A2G A3G)	41A5322	1
SF/G (models A1G A2G A3G)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models A1G A2G A3G)	41A5325	1
Turkish (models A1G A2G A3G)	41A5326	1
UK English (models A1G A2G A3G)	41A5327	1
US Euro (models A1G A2G A3G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models A1G A2G A3G)	45J4880	1
Lithuanian (models)	45J4896	1

Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1

Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3544 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A1G A2G A3G)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A1G A2G A3G)	41U3030	1

3544 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models)	89P8571	1
Speaker power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models A1G A2G A3G)	89P8581	1
Speaker power brick (models)	89P8577	1
Speaker power brick - Brazil (models)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models)	89P8579	1
Speaker power brick - Korea (models)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models A1G A2G A3G)	89P8573	1

3544 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick -TAIWAN-TC (models)	41A4905	1
Speaker Power brick - INDIA, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models)	71Y8664	1

3544 Line Cords	FRU#	CRU
Line cord - US (models)	41R3184	1
Line cord - US (models)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	45J9595	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models)	41R3196	1
Line cord - Australia / New Zealand (models)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1

3544 Line Cords	FRU#	CRU
Line Cord - Denmark (models A1G A2G A3G)	41R3212	1
Line Cord - Denmark (models A1G A2G A3G)	41R3213	1
Line Cord - Switzerland (models A1G A2G A3G)	41R3228	1
Line Cord - Switzerland (models A1G A2G A3G)	41R3229	1
Line Cord - Israel (models A1G A2G A3G)	41R3236	1
Line Cord - Israel (models A1G A2G A3G)	41R3237	1
Line Cord - South Africa (models A1G A2G A3G)	41R3220	1
Line Cord - South Africa (models A1G A2G A3G)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models A1G A2G A3G)	41R3224	1
Line Cord - UK, Ireland (models A1G A2G A3G)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3544 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1

3544 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3544 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3544 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1

3544 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3544 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1

3544 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3544 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1

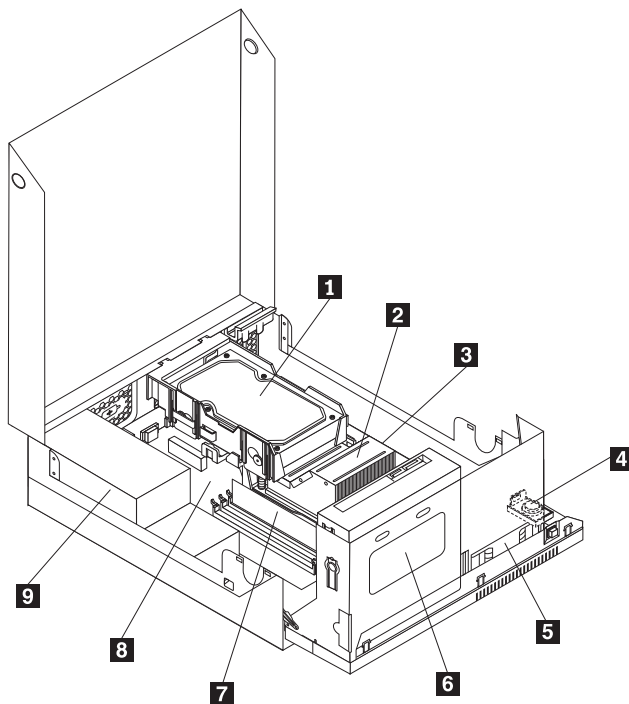
3544 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3544 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models B4A B5A B6A B7A B8A B2G B3G A8M A9J B1J A1U A2U A2G A3U A3G A4U A5U A6U A7U)	89Y0569	1
French (models B2G B3G A1F A2F A2G A3F A3G A4F A5F A6F A7F)	89Y0550	1
German (models B2G B3G A2G A3G)	89Y0552	1
La Spanish (models A1S A1D A1Y A2S A2D A2Y A3S A3D A3Y A4S A4D A4Y A5S A5D A5Y)	TBD	1
Italian (models B2G B3G A2G A3G)	89Y0556	1
Dutch (models B2G B3G A2G A3G)	TBD	1
Czech (models)	89Y0548	1
Polish (models B2G B3G A2G A3G)	89Y0559	1
Russian (models B2G B3G A2G A3G)	89Y0563	1
Turkish (models B2G B3G A2G A3G)	89Y0568	1
Hungarian (models B2G B3G A2G A3G)	89Y0555	1
Greek (models B2G B3G A2G A3G)	89Y0551	1
Brazilian Portuguese (models A1P A2P A3P A4P A5P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models B2G B3G A2G A3G)	89Y0561	1
Romanian (models B2G B3G A2G A3G)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models B2G B3G A2G A3G)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models B2G B3G A2G A3G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models B2G B3G A2G A3G)	89Y0560	1
Spanish (models B2G B3G A2G A3G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models B2G B3G A2G A3G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models B2G B3G A2G A3G)	89Y0571	1

3544 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1

3544 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 3627



Item #	3627 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A4G)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A4G)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G A6G)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G A6G)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A3G A5G)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A3G A5G)	45K0410	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N

Item #	3627 FRUs	FRU#	CRU
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A1G A2G A3G A6G)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A4G A5G)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models A8U A8F)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models A1G A2G A3G A4G A5G A6G)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A1G A2G A3G A4G A5G A6G)	64Y6649	1
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models A1G A2G A3G A4G A5G A6G)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models A1G A2G A3G A4G A5G A6G)	45J9441	1
9	Power supply, 240 Watt (85Plus) (Standard) (models A1G A2G A3G A4G A5G A6G)	45J9446	1

The FRUs listed in the following tables are not illustrated.

3627 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2

3627 FRUs	FRU#	CRU
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

3627 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1G A2G A3G A4G A5G A6G)	41A5289	1
Arabic (models A1G A2G A3G A4G A5G A6G)	41A5290	1
A/F (models A1G A2G A3G A4G A5G A6G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models A1G A2G A3G A4G A5G A6G)	41A5293	1
Brazilian Portuguese (models)	41A5294	1
Bulgarian (models A1G A2G A3G A4G A5G A6G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models A1G A2G A3G A4G A5G A6G)	41A5297	1
Danish (models A1G A2G A3G A4G A5G A6G)	41A5298	1
Dutch (models A1G A2G A3G A4G A5G A6G)	41A5299	1
French (models A1G A2G A3G A4G A5G A6G)	41A5300	1
French Canadian (models A1G A2G A3G A4G A5G A6G)	41A5301	1
French Canadian (models A1G A2G A3G A4G A5G A6G)	41A5302	1
German (models A1G A2G A3G A4G A5G A6G)	41A5303	1

3627 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Greek (models A1G A2G A3G A4G A5G A6G)	41A5304	1
Greek/US (models A1G A2G A3G A4G A5G A6G)	41A5305	1
Hebrew (models A1G A2G A3G A4G A5G A6G)	41A5306	1
Hungarian (models A1G A2G A3G A4G A5G A6G)	41A5307	1
Iceland (models A1G A2G A3G A4G A5G A6G)	41A5308	1
Italy (models A1G A2G A3G A4G A5G A6G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models)	41A5312	1
Norwegian (models A1G A2G A3G A4G A5G A6G)	41A5313	1
Polish (models A1G A2G A3G A4G A5G A6G)	41A5314	1
Portuguese (models A1G A2G A3G A4G A5G A6G)	41A5315	1
Romanian (models A1G A2G A3G A4G A5G A6G)	41A5316	1
Romanian (models A1G A2G A3G A4G A5G A6G)	41A5317	1
Russian/Cyrillic (models A1G A2G A3G A4G A5G A6G)	41A5318	1
Serbian/Cyrillic (models A1G A2G A3G A4G A5G A6G)	41A5319	1
Slovak (models A1G A2G A3G A4G A5G A6G)	41A5320	1
Spanish (models A1G A2G A3G A4G A5G A6G)	41A5321	1
Swedish/Finnish (models A1G A2G A3G A4G A5G A6G)	41A5322	1
SF/G (models A1G A2G A3G A4G A5G A6G)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models A1G A2G A3G A4G A5G A6G)	41A5325	1
Turkish (models A1G A2G A3G A4G A5G A6G)	41A5326	1
UK English (models A1G A2G A3G A4G A5G A6G)	41A5327	1
US Euro (models A1G A2G A3G A4G A5G A6G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models A1G A2G A3G A4G A5G A6G)	45J4880	1
Lithuanian (models)	45J4896	1

3627 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1

3627 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3627 mice	FRU#	CRU
Optical wheel ouse (400DPI, USB) (models A1G A2G A3G A4G A5G A6G)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A1G A2G A3G A4G A5G A6G)	41U3030	1

3627 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models)	89P8575	1

3627 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker power brick, simplified, CHN, Thailand EMEA (models A1G A2G A3G A4G A5G A6G)	89P8581	1
Speaker power brick, Japanese (models)	89P8577	1
Speaker power brick, Brazil (models)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1
Speaker power brick, ANZ (models)	89P8579	1
Speaker power brick, Korea (models)	41A4903	1
Speaker power brick, Hong Kong (models A1G A2G A3G A4G A5G A6G)	89P8573	1
Speaker power brick, Taiwan (models)	41A4905	1
Speaker power brick, India, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models)	71Y8665	1

3627 Line Cords	FRU#	CRU
Line cord - US (models)	41R3184	1
Line cord - US (models)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models)	41R3196	1
Line cord - Australia / New Zealand (models)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1

3627 Line Cords	FRU#	CRU
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1G A2G A3G A4G A5G A6G)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1G A2G A3G A4G A5G A6G)	41R3209	1
Line Cord - Denmark (models A1G A2G A3G A4G A5G A6G)	41R3212	1
Line Cord - Denmark (models A1G A2G A3G A4G A5G A6G)	41R3213	1
Line Cord - Switzerland (models A1G A2G A3G A4G A5G A6G)	41R3228	1
Line Cord - Switzerland (models A1G A2G A3G A4G A5G A6G)	41R3229	1
Line Cord - Israel (models A1G A2G A3G A4G A5G A6G)	41R3236	1
Line Cord - Israel (models A1G A2G A3G A4G A5G A6G)	41R3237	1
Line Cord - South Africa (models)	41R3220	1
Line Cord - South Africa (models)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3627 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1

3627 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3627 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3627 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3627 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1

3627 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

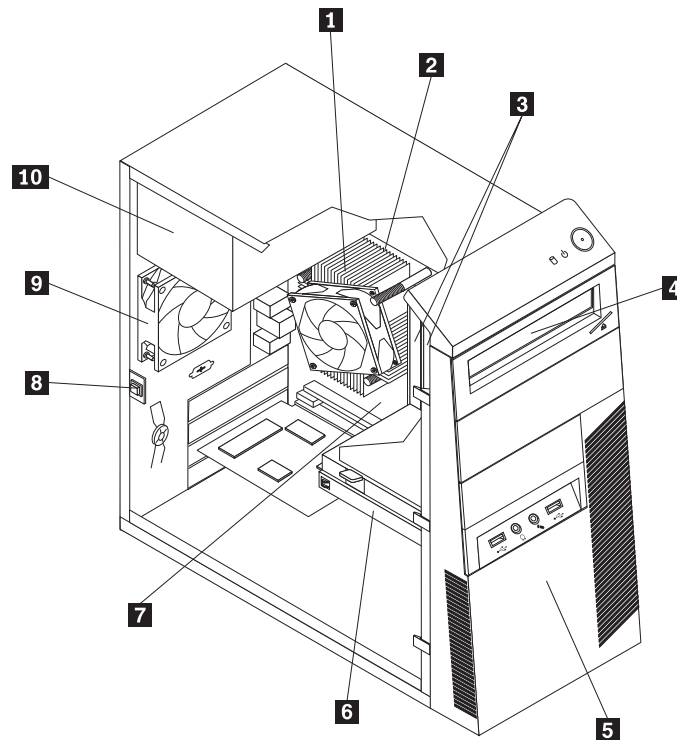
3627 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1

3627 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3627 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A1G A2G A3G A4G A5G A6G)	89Y0569	1
French (models A1G A2G A3G A4G A5G A6G)	89Y0550	1
German (models A1G A2G A3G A4G A5G A6G)	89Y0552	1
La Spanish (models)	TBD	1
Italian (models)	89Y0556	1
Dutch (models A1G A2G A3G A4G A5G A6G)	TBD	1
Czech (models)	89Y0548	1
Polish (models A1G A2G A3G A4G A5G A6G)	89Y0559	1
Russian (models A1G A2G A3G A4G A5G A6G)	89Y0563	1
Turkish (models A1G A2G A3G A4G A5G A6G)	89Y0568	1
Hungarian (models A1G A2G A3G A4G A5G A6G)	89Y0555	1
Greek (models A1G A2G A3G A4G A5G A6G)	89Y0551	1
Brazilian Portuguese (models)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models A1G A2G A3G A4G A5G A6G)	89Y0561	1
Romanian (models A1G A2G A3G A4G A5G A6G)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models A1G A2G A3G A4G A5G A6G)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models A1G A2G A3G A4G A5G A6G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models A1G A2G A3G A4G A5G A6G)	89Y0560	1
Spanish (models A1G A2G A3G A4G A5G A6G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models A1G A2G A3G A4G A5G A6G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models A1G A2G A3G A4G A5G A6G)	89Y0571	1

3627 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 3652



Item #	3652 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models A1G A2G A3G)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models A4G)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W Turbo LGA 1156 (models)	71Y5307	N
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1

Item #	3652 FRUs	FRU#	CRU
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A1G A2G A3G A4G)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models A1G A2G A3G A4G)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A4G)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1G A4G)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G A3G)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models A2G A3G)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models A1G A2G A3G A4G)	71Y5974	N
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models A1G A2G A3G A4G)	45J9436	2
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A1G A2G A3G A4G)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A1G A2G A3G A4G)	45J9410	2

The FRUs listed in the following tables are not illustrated.

3652 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1

3652 FRUs	FRU#	CRU
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2

3652 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1G A2G A3G A4G)	41A5289	1
Arabic (models A1G A2G A3G A4G)	41A5290	1
A/F (models A1G A2G A3G A4G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models A1G A2G A3G A4G)	41A5293	1
Brazilian Portuguese (models)	41A5294	1
Bulgarian (models A1G A2G A3G A4G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models A1G A2G A3G A4G)	41A5297	1
Danish (models A1G A2G A3G A4G)	41A5298	1
Dutch (models A1G A2G A3G A4G)	41A5299	1
French (models A1G A2G A3G A4G)	41A5300	1
French Canadian (models A1G A2G A3G A4G)	41A5301	1
French Canadian (models A1G A2G A3G A4G)	41A5302	1
German (models A1G A2G A3G A4G)	41A5303	1
Greek (models A1G A2G A3G A4G)	41A5304	1
Greek/US (models A1G A2G A3G A4G)	41A5305	1
Hebrew (models A1G A2G A3G A4G)	41A5306	1
Hungarian (models A1G A2G A3G A4G)	41A5307	1
Iceland (models A1G A2G A3G A4G)	41A5308	1
Italy (models A1G A2G A3G A4G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1

3652 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
LA Spanish (models)	41A5312	1
Norwegian (models A1G A2G A3G A4G)	41A5313	1
Polish (models A1G A2G A3G A4G)	41A5314	1
Portuguese (models A1G A2G A3G A4G)	41A5315	1
Romanian (models A1G A2G A3G A4G)	41A5316	1
Romanian (models A1G A2G A3G A4G)	41A5317	1
Russian/Cyrillic (models A1G A2G A3G A4G)	41A5318	1
Serbian/Cyrillic (models A1G A2G A3G A4G)	41A5319	1
Slovak (models A1G A2G A3G A4G)	41A5320	1
Spanish (models A1G A2G A3G A4G)	41A5321	1
Swedish/Finnish (models A1G A2G A3G A4G)	41A5322	1
SF/G (models A1G A2G A3G A4G)	41A5323	1
Thailand (models)	41A5324	1
Turkish (models A1G A2G A3G A4G)	41A5325	1
Turkish (models A1G A2G A3G A4G)	41A5326	1
UK English (models A1G A2G A3G A4G)	41A5327	1
US Euro (models A1G A2G A3G A4G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models A1G A2G A3G A4G)	45J4880	1
Lithuanian (models)	45J4896	1

3652 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1

3652 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

3652 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A1G A2G A3G A4G)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A1G A2G A3G A4G)	41U3030	1

3652 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models)	89P8571	1
Speaker power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models A1G A2G A3G A4G)	89P8581	1
Speaker power brick (models)	89P8577	1
Speaker power brick - Brazil (models)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models)	89P8579	1
Speaker power brick - Korea (models)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models A1G A2G A3G A4G)	89P8573	1

3652 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick -TAIWAN-TC (models)	41A4905	1
Speaker Power brick - INDIA, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models)	71Y8664	1

3652 Line Cords	FRU#	CRU
Line cord - US (models)	41R3184	1
Line cord - US (models)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	45J9595	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models)	41R3196	1
Line cord - Australia / New Zealand (models)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1

3652 Line Cords	FRU#	CRU
Line Cord - Denmark (models A1G A2G A3G A4G)	41R3212	1
Line Cord - Denmark (models A1G A2G A3G A4G)	41R3213	1
Line Cord - Switzerland (models A1G A2G A3G A4G)	41R3228	1
Line Cord - Switzerland (models A1G A2G A3G A4G)	41R3229	1
Line Cord - Israel (models A1G A2G A3G A4G)	41R3236	1
Line Cord - Israel (models A1G A2G A3G A4G)	41R3237	1
Line Cord - South Africa (models A1G A2G A3G A4G)	41R3220	1
Line Cord - South Africa (models A1G A2G A3G A4G)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

3652 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1

3652 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

3652 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

3652 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1

3652 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

3652 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1

3652 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

3652 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1

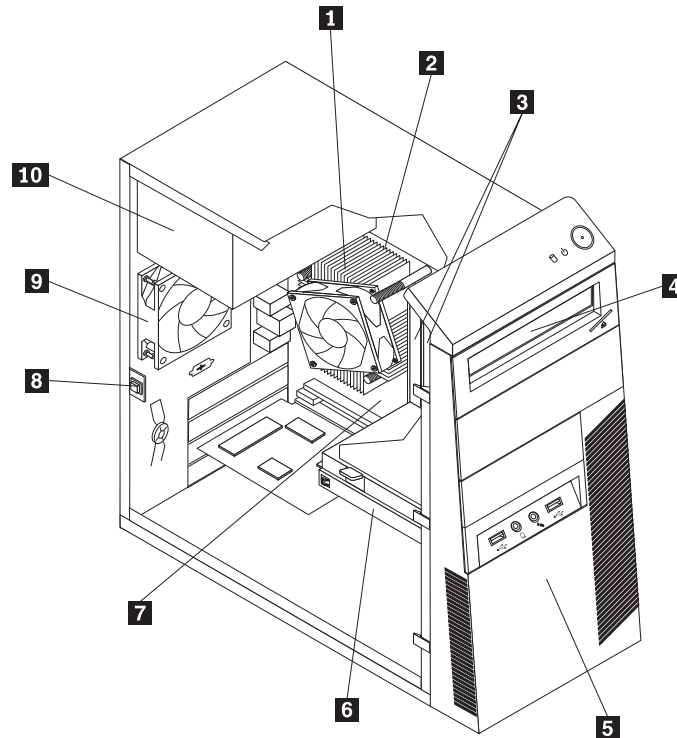
3652 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

3652 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A1G A2G A3G A4G)	89Y0569	1
French (models A1G A2G A3G A4G)	89Y0550	1
German (models A1G A2G A3G A4G)	89Y0552	1
La Spanish (models)	TBD	1
Italian (models)	89Y0556	1
Dutch (models A1G A2G A3G A4G)	TBD	1
Czech (models A1G A2G A3G A4G)	89Y0548	1
Polish (models A1G A2G A3G A4G)	89Y0559	1
Russian (models A1G A2G A3G A4G)	89Y0563	1
Turkish (models A1G A2G A3G A4G)	89Y0568	1
Hungarian (models A1G A2G A3G A4G)	89Y0555	1
Greek (models A1G A2G A3G A4G)	89Y0551	1
Brazilian Portuguese (models)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models A1G A2G A3G A4G)	89Y0561	1
Romanian (models A1G A2G A3G A4G)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models A1G A2G A3G A4G)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models A1G A2G A3G A4G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models A1G A2G A3G A4G)	89Y0560	1
Spanish (models A1G A2G A3G A4G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models A1G A2G A3G A4G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models A1G A2G A3G A4G)	89Y0571	1

3652 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1

3652 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 5474



Item #	5474 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models B4A B4T B5A B5T B9A B9T A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A2G D4U D4F D4S D4P D4Y D8V D9V F1M F2M)	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models B6A B6T B7A B7T B2G B3G A8M A3U A3F A3S A3P A3D A3Y A3G A5U A5F A5S A5P A5D A5Y D1Q D6V D7V F3M F4M)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models B8A B8T A9J B1J A4U A4F A4S A4P A4D A4Y D2J D3J D5U D5F D5S D5P D5Y E1V F5M F6M)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N

Item #	5474 FRUs	FRU#	CRU
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models A1U A1F A1S A1P A1D A1Y)	64Y6648	1
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T B2G B3G A8M A9J B1J A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D1Q D2J D3J D4U D4F D4S D4P D4Y D5U D5F D5S D5P D5Y D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models B1J A1U A1F A1S A1P A1D A1Y D3J D6V D8V)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T B2G B3G A8M A9J A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D1Q D2J D4U D4F D4S D4P D4Y D5U D5F D5S D5P D5Y D7V D9V E1V F1M F2M F3M F4M F5M F6M)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B4A B4T B5A B5T B6A B6T B7A B7T B9A B9T A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A5U A5F A5S A5P A5D A5Y D4U D4F D4S D4P D4Y F1M F2M)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B4A B4T B5A B5T B6A B6T B7A B7T B9A B9T A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A5U A5F A5S A5P A5D A5Y D4U D4F D4S D4P D4Y F1M F2M)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B8A B8T B2G A8M D1Q D6V D8V F3M)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B8A B8T B2G A8M D1Q D6V D8V F3M)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models B3G A9J B1J A4U A4F A4S A4P A4D A4Y D2J D3J D5U D5F D5S D5P D5Y D7V D9V E1V F4M F5M F6M)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models B3G A9J B1J A4U A4F A4S A4P A4D A4Y D2J D3J D5U D5F D5S D5P D5Y D7V D9V E1V F4M F5M F6M)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T B2G B3G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D1Q D2J D3J D4U D4F D4S D4P D4Y D5U D5F D5S D5P D5Y D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	71Y5974	N

Item #	5474 FRUs	FRU#	CRU
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models D1Q D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	45J9436	2
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A9J B1J D1Q D2J D3J D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A9J B1J D1Q D2J D3J D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	45J9410	2

The FRUs listed in the following tables are not illustrated.

5474 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2

5474 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models B4A B5A B6A B7A B8A B9A B2G B3G A8M A9J B1J A1U A2U A2G A3U A3G A4U A5U D1Q D2J D3J D4U D5U D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	41A5289	1
Arabic (models B2G B3G A2G A3G)	41A5290	1
A/F (models B2G B3G A2G A3G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models B2G B3G A2G A3G)	41A5293	1
Brazilian Portuguese (models A1P A2P A3P A4P A5P D4P D5P)	41A5294	1
Bulgarian (models B2G B3G A2G A3G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models B2G B3G A2G A3G)	41A5297	1
Danish (models B2G B3G A2G A3G)	41A5298	1
Dutch (models B2G B3G A2G A3G)	41A5299	1
French (models B2G B3G A2G A3G)	41A5300	1
French Canadian (models B2G B3G A1F A2F A2G A3F A3G A4F A5F D4F D5F)	41A5301	1
French Canadian (models B2G B3G A1F A2F A2G A3F A3G A4F A5F D4F D5F)	41A5302	1
German (models B2G B3G A2G A3G)	41A5303	1
Greek (models B2G B3G A2G A3G)	41A5304	1
Greek/US (models B2G B3G A2G A3G)	41A5305	1
Hebrew (models B2G B3G A2G A3G)	41A5306	1
Hungarian (models B2G B3G A2G A3G)	41A5307	1
Iceland (models B2G B3G A2G A3G)	41A5308	1
Italy (models B2G B3G A2G A3G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y A3S A3D A3Y A4S A4D A4Y A5S A5D A5Y D4S D4Y D5S D5Y)	41A5312	1
Norwegian (models B2G B3G A2G A3G)	41A5313	1
Polish (models B2G B3G A2G A3G)	41A5314	1
Portuguese (models B2G B3G A2G A3G)	41A5315	1
Romanian (models B2G B3G A2G A3G)	41A5316	1
Romanian (models B2G B3G A2G A3G)	41A5317	1
Russian/Cyrillic (models B2G B3G A2G A3G)	41A5318	1
Serbian/Cyrillic (models B2G B3G A2G A3G)	41A5319	1
Slovak (models B2G B3G A2G A3G)	41A5320	1
Spanish (models B2G B3G A2G A3G)	41A5321	1
Swedish/Finnish (models B2G B3G A2G A3G)	41A5322	1
SF/G (models B2G B3G A2G A3G)	41A5323	1
Thailand (models B4T B5T B6T B7T B8T B9T)	41A5324	1
Turkish (models B4T B5T B6T B7T B8T B9T)	41A5325	1
Turkish (models B4T B5T B6T B7T B8T B9T)	41A5326	1
UK English (models B4T B5T B6T B7T B8T B9T)	41A5327	1

5474 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US Euro (models B4T B5T B6T B7T B8T B9T)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models B4T B5T B6T B7T B8T B9T)	45J4880	1
Lithuanian (models)	45J4896	1

5474 Keyboard (Lenovo Fingerprint Reader USB)	FRU#	CRU Tier
US English China (models)	41R0038	1
Arabic (models)	41R0039	1
A/F (models)	41R0040	1
Belgium French (models)	41R0041	1
Belgium English (models)	41R0042	1
Brazilian Portuguese (models)	41R0043	1
Bulgarian (models)	41R0044	1
Chinese/US (models)	41R0045	1
Czech (ABB) (models)	41R0046	1
Danish (models)	41R0047	1
Dutch (models)	41R0048	1
French (models)	41R0049	1
French Canadian (models)	41R0050	1
French Canadian (models)	41R0051	1
German (models)	41R0052	1
Greek (models)	41R0053	1
Greek/US (models)	41R0054	1
Hebrew (models)	41R0055	1
Hungarian (models)	41R0056	1
Iceland (models)	41R0057	1
Italy (models)	41R0058	1
Japanese (models)	41R0059	1
Korean (models)	41R0060	1
LA Spanish (models)	41R0061	1
Norwegian (models)	41R0062	1
Polish (models)	41R0063	1
Portuguese (models)	41R0064	1
Romanian (models)	41R0065	1
Romanian (models)	41R0066	1
Russian/Cyrillic (models)	41R0067	1
Serbian/Cyrillic (models)	41R0068	1
Slovak (models)	41R0069	1
Spanish (models)	41R0070	1
Swedish/Finnish (models)	41R0071	1
Swiss French/German (models)	41R0072	1

5474 Keyboard (Lenovo Fingerprint Reader USB)	FRU#	CRU Tier
Thailand (models)	41R0073	1
Turkish (models)	41R0074	1
Turkish (models)	41R0075	1
UK English (models)	41R0076	1
US Euro (models)	41R0077	1
Slovenian (models)	41R0078	1

5474 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T B2G B3G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D1Q D2J D3J D4U D4F D4S D4P D4Y D5U D5F D5S D5P D5Y D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	41U3013	1
Optical wheel mouse (400DPI, USB) (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T B2G B3G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A2G A3U A3F A3S A3P A3D A3Y A3G A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D1Q D2J D3J D4U D4F D4S D4P D4Y D5U D5F D5S D5P D5Y D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M)	41U3030	1

5474 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models B4A B5A B6A B7A B8A B9A A1U A2U A3U A3S A4U A4S A5U A5S D4U D4S D5U D5S)	89P8571	1
Speaker power brick - LA high voltage (non-APU) (models A1D A1Y A2D A2Y A3D A3Y A4D A4Y A5D A5Y D4Y D5Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models B4T B5T B6T B7T B8T B9T B2G B3G A2G A3G)	89P8581	1
Speaker power brick (models A9J B1J D2J D3J)	89P8577	1
Speaker power brick - Brazil (models A1P A2P A3P A4P A5P D4P D5P)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models A8M F1M F2M F3M F4M F5M F6M)	89P8579	1
Speaker power brick - Korea (models)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models)	89P8573	1
Speaker Power brick -TAIWAN-TC (models B4T B5T B6T B7T B8T B9T D6V D7V D8V D9V E1V)	41A4905	1
Speaker Power brick - INDIA, South Africa (models D1Q)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N

5474 Adapters and miscellaneous FRUs	FRU#	CRU
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models A9U A9F) (models B8A B8T A8M A9J B1J A4U A4F A4S A4P A4D A4Y D2J D3J D5U D5F D5S D5P D5Y E1V F5M F6M)	71Y8664	1

5474 Line Cords	FRU#	CRU
Line cord - US (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y D4U D4F D4S D4Y D5U D5F D5S D5Y)	41R3184	1
Line cord - US (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y D4U D4F D4S D4Y D5U D5F D5S D5Y)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	45J9595	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y A6U A6F A7U A7F D4U D4F D4S D4Y D5U D5F D5S D5Y F1M F2M F3M F4M F5M F6M)	41R3196	1
Line cord - Australia / New Zealand (models B4A B4T B5A B5T B6A B6T B7A B7T B8A B8T B9A B9T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y A6U A6F A7U A7F D4U D4F D4S D4Y D5U D5F D5S D5Y F1M F2M F3M F4M F5M F6M)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1

5474 Line Cords	FRU#	CRU
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models B2G B3G A2G A3G)	41R3212	1
Line Cord - Denmark (models B2G B3G A2G A3G)	41R3213	1
Line Cord - Switzerland (models B2G B3G A2G A3G)	41R3228	1
Line Cord - Switzerland (models B2G B3G A2G A3G)	41R3229	1
Line Cord - Israel (models B2G B3G A2G A3G)	41R3236	1
Line Cord - Israel (models B2G B3G A2G A3G)	41R3237	1
Line Cord - South Africa (models B4A B5A B6A B7A B8A B9A B2G B3G A8M A2G A3G F1M F2M F3M F4M F5M F6M)	41R3220	1
Line Cord - South Africa (models B4A B5A B6A B7A B8A B9A B2G B3G A8M A2G A3G F1M F2M F3M F4M F5M F6M)	41R3221	1
Line Cord - India (models D1Q)	41R3341	1
Line Cord - India (models D1Q)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models B2G B3G A2G A3G)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models B4T B5T B6T B7T B8T B9T)	43N9030	1

5474 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1

5474 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

5474 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

5474 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

5474 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1

5474 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

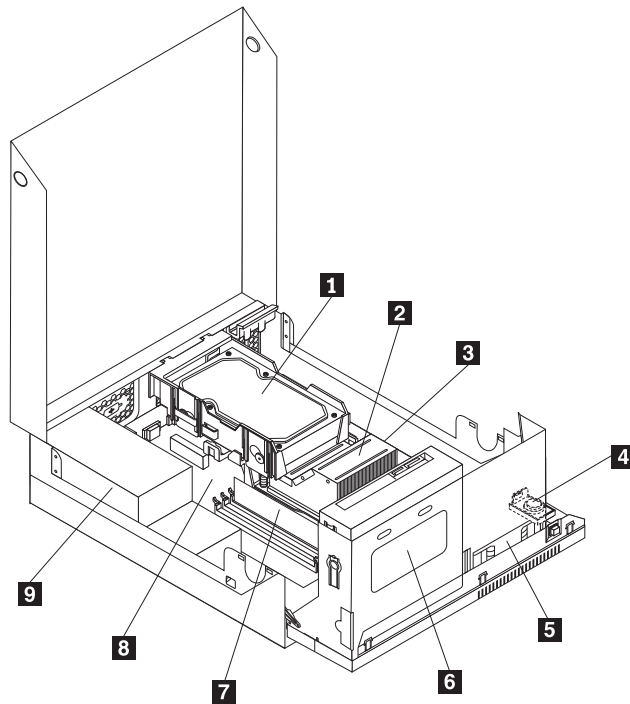
5474 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1

5474 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

5474 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models B4A B6A B8A A8M A9J B1J A5U D2J D3J D4U D5U D6V D7V D8V D9V E1V F1M F2M F3M F4M F5M F6M B2G B3G)	89Y0569	1
French (models A5F D4F D5F B2G B3G)	89Y0550	1
German (models B2G B3G)	89Y0552	1
La Spanish (models A5S A5D A5Y D4S D4Y D5S D5Y)	TBD	1
Italian (models B2G B3G)	89Y0556	1
Dutch (models B2G B3G)	TBD	1
Czech (models B2G B3G)	89Y0548	1
Polish (models B2G B3G)	89Y0559	1
Russian (models B2G B3G)	89Y0563	1
Turkish (models B2G B3G)	89Y0568	1
Hungarian (models B2G B3G)	89Y0555	1
Greek (models B2G B3G)	89Y0551	1
Brazilian Portuguese (models A5P D4P D5P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models B2G B3G)	89Y0565	1
Russian English (models B2G B3G)	89Y0561	1
Romanian (models B2G B3G)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models B2G B3G)	89Y0564	1
Arabic Localized (models B2G B3G)	TBD	1
Hebrew (models B2G B3G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models D1Q)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models B2G B3G)	89Y0560	1
Spanish (models B2G B3G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models B2G B3G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models B2G B3G)	89Y0571	1

5474 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 5485



Item #	5485 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B9A B9T D1A D1T B2G B2A B2T B4G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A5U A5F A5S A5P A5D A5Y D8J D9J E1J E2J E3U E3F E3S E3P E3Y F4M)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B9A B9T D1A D1T B2G B2A B2T B4G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A5U A5F A5S A5P A5D A5Y D8J D9J E1J E2J E3U E3F E3S E3P E3Y F4M)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B3G B5G B6G B8G D2Q D3V D6V F2M F3M F5M F6M F7M F8M F9M J1M)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B3G B5G B6G B8G D2Q D3V D6V F2M F3M F5M F6M F7M F8M F9M J1M)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models B7G A4U A4F A4S A4P A4D A4Y E4U E4F E4S E4P E4Y D4V D5V D7V J2M J3M)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models B7G A4U A4F A4S A4P A4D A4Y E4U E4F E4S E4P E4Y D4V D5V D7V J2M J3M)	45K0410	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2

Item #	5485 FRUs	FRU#	CRU
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models B9A B9T B2G B2A B2T B3G A8M A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y E1J E2J E3U E3F E3S E3P E3Y D5V D6V F1M)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models D1A D1T B4G B5G B6G B7G A9J B1J A3U A3F A3S A3P A3D A3Y A5U A5F A5S A5P A5D A5Y D2Q D8J D9J D3V D4V F2M F3M F4M F5M F6M F7M F8M)	71Y6960	N
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A3H A1U A1F A1S A1P A1D A1Y A5V)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A2U A2F A2S A2P A2D A2Y A4H A4V)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models B8G A4U A4F A4S A4P A4D A4Y E4U E4F E4S E4P E4Y D7V F9M J1M J2M J3M)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models A8M B1J A1U A1F A1S A1P A1D A1Y D9J E2J D3V D6V F1M F4M)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A9J A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q D8J E1J E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y D4V D5V D7V F2M F3M F5M F6M F7M F8M F9M J1M J2M J3M)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models A1U A1F A1S A1P A1D A1Y F1M)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A8M A9J B1J A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q D8J D9J E1J E2J E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y D3V D4V D5V D6V D7V F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	64Y6649	1

Item #	5485 FRUs	FRU#	CRU
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q D8J D9J E1J E2J E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y D3V D4V D5V D6V D7V F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A8M A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y)	45J9441	1
9	Power supply, 240 Watt (85Plus) (Standard) (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A8M A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y)	45J9446	1

The FRUs listed in the following tables are not illustrated.

5485 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1

5485 FRUs	FRU#	CRU
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

5485 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models B9A D1A B2G B2A B3G B4G B5G B6G B7G B8G A8M A9J B1J A1U A2U A3U A4U A5U D2Q D8J D9J E1J E2J E3U E4U D3V D4V D5V D6V D7V F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41A5289	1
Arabic (models B2G B3G B4G B5G B6G B7G B8G)	41A5290	1
A/F (models B2G B3G B4G B5G B6G B7G B8G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models B2G B3G B4G B5G B6G B7G B8G)	41A5293	1
Brazilian Portuguese (models A1P A2P A3P A4P A5P E3P E4P)	41A5294	1
Bulgarian (models B2G B3G B4G B5G B6G B7G B8G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models B2G B3G B4G B5G B6G B7G B8G)	41A5297	1
Danish (models B2G B3G B4G B5G B6G B7G B8G)	41A5298	1
Dutch (models B2G B3G B4G B5G B6G B7G B8G)	41A5299	1
French (models B2G B3G B4G B5G B6G B7G B8G)	41A5300	1
French Canadian (models B2G B3G B4G B5G B6G B7G B8G A1F A2F A3F A4F A5F E3F E4F)	41A5301	1
French Canadian (models B2G B3G B4G B5G B6G B7G B8G A1F A2F A3F A4F A5F E3F E4F)	41A5302	1
German (models B2G B3G B4G B5G B6G B7G B8G)	41A5303	1
Greek (models B2G B3G B4G B5G B6G B7G B8G)	41A5304	1
Greek/US (models B2G B3G B4G B5G B6G B7G B8G)	41A5305	1
Hebrew (models B2G B3G B4G B5G B6G B7G B8G)	41A5306	1
Hungarian (models B2G B3G B4G B5G B6G B7G B8G)	41A5307	1
Iceland (models B2G B3G B4G B5G B6G B7G B8G)	41A5308	1
Italy (models B2G B3G B4G B5G B6G B7G B8G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y A3S A3D A3Y A4S A4D A4Y A5S A5D A5Y E3S E3Y E4S E4Y)	41A5312	1
Norwegian (models B2G B3G B4G B5G B6G B7G B8G)	41A5313	1
Polish (models B2G B3G B4G B5G B6G B7G B8G)	41A5314	1
Portuguese (models B2G B3G B4G B5G B6G B7G B8G)	41A5315	1

5485 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Romanian (models B2G B3G B4G B5G B6G B7G B8G)	41A5316	1
Romanian (models B2G B3G B4G B5G B6G B7G B8G)	41A5317	1
Russian/Cyrillic (models B2G B3G B4G B5G B6G B7G B8G)	41A5318	1
Serbian/Cyrillic (models B2G B3G B4G B5G B6G B7G B8G)	41A5319	1
Slovak (models B2G B3G B4G B5G B6G B7G B8G)	41A5320	1
Spanish (models B2G B3G B4G B5G B6G B7G B8G)	41A5321	1
Swedish/Finnish (models B2G B3G B4G B5G B6G B7G B8G)	41A5322	1
SF/G (models B2G B3G B4G B5G B6G B7G B8G)	41A5323	1
Thailand (models B9T D1T B2T)	41A5324	1
Turkish (models B2G B3G B4G B5G B6G B7G B8G)	41A5325	1
Turkish (models B2G B3G B4G B5G B6G B7G B8G)	41A5326	1
UK English (models B2G B3G B4G B5G B6G B7G B8G)	41A5327	1
US Euro (models B2G B3G B4G B5G B6G B7G B8G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models B2G B3G B4G B5G B6G B7G B8G)	45J4880	1
Lithuanian (models)	45J4896	1

5485 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1

5485 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

5485 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q D8J D9J E1J E2J E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y D3V D4V D5V D6V D7V F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41U3013	1
Optical wheel mouse (400DPI, USB) (models B9A B9T D1A D1T B2G B2A B2T B3G B4G B5G B6G B7G B8G A8M A9J B1J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A5U A5F A5S A5P A5D A5Y D2Q D8J D9J E1J E2J E3U E3F E3S E3P E3Y E4U E4F E4S E4P E4Y D3V D4V D5V D6V D7V F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41U3030	1

5485 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models D8J D9J E1J E2J)	43N9160	1
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models B9A D1A B2A A1U A1S A2U A2S A3U A3S A4U A4S A5U A5S E3U E3S E4U E4S)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models A1D A1Y A2D A2Y A3D A3Y A4D A4Y A5D A5Y E3Y E4Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models B9T D1T B2G B2T B3G B4G B5G B6G B7G B8G)	89P8581	1
Speaker power brick, Japanese (models A9J B1J D8J D9J E1J E2J)	89P8577	1
Speaker power brick, Brazil (models A1P A2P A3P A4P A5P E3P E4P)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1

5485 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker power brick, ANZ (models A8M F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	89P8579	1
Speaker power brick, Korea (models)	41A4903	1
Speaker power brick, Hong Kong (models B2G B3G B4G B5G B6G B7G B8G)	89P8573	1
Speaker power brick, Taiwan (models D3V D4V D5V D6V D7V)	41A4905	1
Speaker power brick, India, South Africa (models D2Q)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models B8G A8M A4U A4F A4S A4P A4D A4Y E4U E4F E4S E4P E4Y D7V F8M F9M J1M J2M J3M)	71Y8665	1

5485 Line Cords	FRU#	CRU
Line cord - US (models B9A B9T D1A D1T B2A B2T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y E3U E3F E3S E3Y E4U E4F E4S E4Y)	41R3184	1
Line cord - US (models B9A B9T D1A D1T B2A B2T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y E3U E3F E3S E3Y E4U E4F E4S E4Y)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models B9A B9T D1A D1T B2A B2T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y A6U A6F A7U A7F E3U E3F E3S E3Y E4U E4F E4S E4Y F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41R3196	1
Line cord - Australia / New Zealand (models B9A B9T D1A D1T B2A B2T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y A6U A6F A7U A7F E3U E3F E3S E3Y E4U E4F E4S E4Y F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1

5485 Line Cords	FRU#	CRU
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models B9A B9T D1A D1T B2A B2T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y A6U A6F A7U A7F E3U E3F E3S E3Y E4U E4F E4S E4Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models B9A B9T D1A D1T B2A B2T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A5S A5Y A6U A6F A7U A7F E3U E3F E3S E3Y E4U E4F E4S E4Y)	41R3209	1
Line Cord - Denmark (models B2G B3G B4G B5G B6G B7G B8G)	41R3212	1
Line Cord - Denmark (models B2G B3G B4G B5G B6G B7G B8G)	41R3213	1
Line Cord - Switzerland (models B2G B3G B4G B5G B6G B7G B8G)	41R3228	1
Line Cord - Switzerland (models B2G B3G B4G B5G B6G B7G B8G)	41R3229	1
Line Cord - Israel (models B2G B3G B4G B5G B6G B7G B8G)	41R3236	1
Line Cord - Israel (models B2G B3G B4G B5G B6G B7G B8G)	41R3237	1
Line Cord - South Africa (models B9A D1A B2G B2A B3G B4G B5G B6G B7G B8G A8M F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41R3220	1
Line Cord - South Africa (models B9A D1A B2G B2A B3G B4G B5G B6G B7G B8G A8M F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M)	41R3221	1
Line Cord - India (models D2Q)	41R3341	1
Line Cord - India (models D2Q)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

5485 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1

5485 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

5485 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1

5485 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

5485 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

5485 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

5485 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1

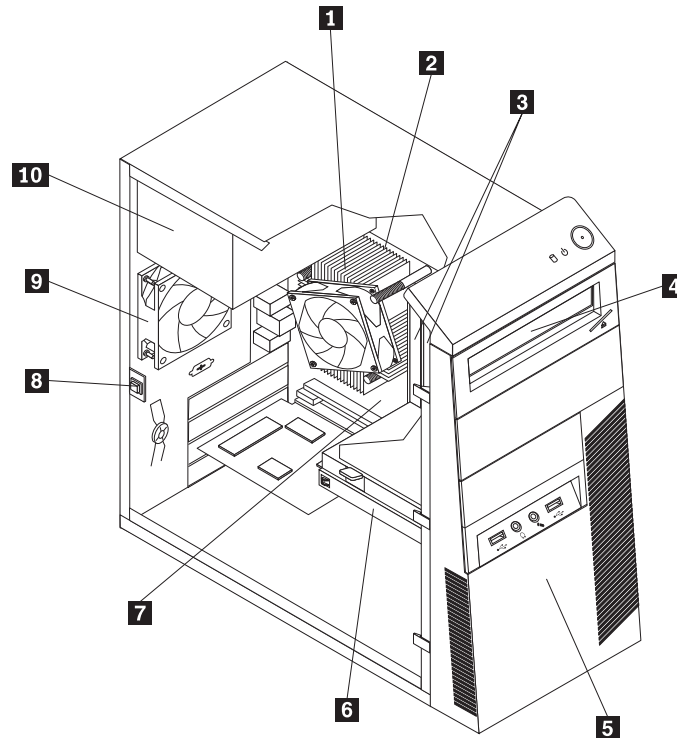
5485 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

5485 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models B9A D1A A8M A9J B1J A5U D2Q D8J D9J E1J E2J E3U E4U D3V D4V D5V D6V D7V F1M F2M F3M F4M F5M F6M F7M F8M F9M J1M J2M J3M B2G B2A B3G)	89Y0569	1
French (models A5F E3F E4F B2G B3G)	89Y0550	1
German (models B2G B3G)	89Y0552	1
La Spanish (models A5S A5D A5Y E3S E3Y E4S E4Y)	TBD	1
Italian (models B2G B3G)	89Y0556	1
Dutch (models B2G B3G)	TBD	1
Czech (models B2G B3G)	89Y0548	1
Polish (models B2G B3G)	89Y0559	1
Russian (models B2G B3G)	89Y0563	1
Turkish (models B2G B3G)	89Y0568	1
Hungarian (models B2G B3G)	89Y0555	1
Greek (models B2G B3G)	89Y0551	1
Brazilian Portuguese (models A5P E3P E4P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models B2G B3G)	89Y0565	1
Russian English (models B2G B3G)	89Y0561	1
Romanian (models B2G B3G)	89Y0562	1
Sebian-Latin (models B2G B3G)	89Y0567	1
Slovakian (models B2G B3G)	89Y0564	1
Arabic Localized (models B2G B3G)	TBD	1
Hebrew (models B2G B3G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1

5485 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
Portuguese (models B2G B3G)	89Y0560	1
Spanish (models B2G B3G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models B2G B3G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models B2G B3G)	89Y0571	1

5485 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 5498



Item #	5498 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models B1G B2G B3G B4G A7M A1U A1F A1S A1P A1D A1Y A1G A1A A1T A2U A2F A2S A2P A2D A2Y A4U A4F A4S A4P A4D A4Y A4A A4T E7U E7F E7S E7Y B9V E2V E3V F1M F2M F3M)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models B5U B5F B5S B5Y B5G B6G B7G B8G A8J A9J A3U A3F A3S A3P A3D A3Y E5J E6J E8U E8F E8S E8Y E9U E9F E9S E9Y E1V E4V F4M F5M F6M)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N

Item #	5498 FRUs	FRU#	CRU
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models B1G B2G B3G B4G B5U B5F B5S B5Y B5G B6G B7G B8G A7M A8J A9J A1U A1F A1S A1P A1D A1Y A1G A1A A1T A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A4A A4T E5J E6J E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models B1G B2G B3G B4G B5U B5F B5S B5Y B5G B6G B7G B8G A7M A8J A1U A1F A1S A1P A1D A1Y A1G A1A A1T A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A4A A4T E5J E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y B9V E1V E3V E4V F1M F2M F3M F4M F5M F6M)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B5U B5F B5S B5Y B5G A1U A1F A1S A1P A1D A1Y A1G A1A A1T A4U A4F A4S A4P A4D A4Y A4A A4T E9U E9F E9S E9Y)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B5U B5F B5S B5Y B5G A1U A1F A1S A1P A1D A1Y A1G A1A A1T A4U A4F A4S A4P A4D A4Y A4A A4T E9U E9F E9S E9Y)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B1G B2G B6G B9V E2V E4V F1M F2M F4M)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B1G B2G B6G B9V E2V E4V F1M F2M F4M)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models B3G B4G B7G B8G A7M A8J A9J A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y E5J E6J E7U E7F E7S E7Y E8U E8F E8S E8Y E1V E3V F3M F5M F6M)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models B3G B4G B7G B8G A7M A8J A9J A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y E5J E6J E7U E7F E7S E7Y E8U E8F E8S E8Y E1V E3V F3M F5M F6M)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models B1G B2G B3G B4G B5U B5F B5S B5Y B5G B6G B7G B8G A7M A8J A9J A1U A1F A1S A1P A1D A1Y A1G A1A A1T A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A4A A4T E5J E6J E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	71Y5974	N
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	45J9436	2

Item #	5498 FRUs	FRU#	CRU
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A8J A9J E5J E6J B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A8J A9J E5J E6J B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	45J9410	2

The FRUs listed in the following tables are not illustrated.

5498 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2

5498 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models B1G B2G B3G B4G B5U B5G B6G B7G B8G A7M A8J A9J A1U A1G A1A A2U A3U A4U A4A E5J E6J E7U E8U E9U B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	41A5289	1
Arabic (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5290	1
A/F (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5291	1
B/F (models)	41A5292	1

5498 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Belgium English (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5293	1
Brazilian Portuguese (models A1P A2P A3P A4P)	41A5294	1
Bulgarian (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5297	1
Danish (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5298	1
Dutch (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5299	1
French (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5300	1
French Canadian (models B1G B2G B3G B4G B5F B5G B6G B7G B8G A1F A1G A2F A3F A4F A5F E7F E8F E9F)	41A5301	1
French Canadian (models B1G B2G B3G B4G B5F B5G B6G B7G B8G A1F A1G A2F A3F A4F A5F E7F E8F E9F)	41A5302	1
German (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5303	1
Greek (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5304	1
Greek/US (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5305	1
Hebrew (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5306	1
Hungarian (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5307	1
Iceland (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5308	1
Italy (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models B5S B5Y A1S A1D A1Y A2S A2D A2Y A3S A3D A3Y A4S A4D A4Y E7S E7Y E8S E8Y E9S E9Y)	41A5312	1
Norwegian (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5313	1
Polish (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5314	1
Portuguese (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5315	1
Romanian (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5316	1
Romanian (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5317	1
Russian/Cyrillic (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5318	1
Serbian/Cyrillic (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5319	1
Slovak (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5320	1
Spanish (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5321	1
Swedish/Finnish (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5322	1
SF/G (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5323	1
Thailand (models A1T A4T)	41A5324	1
Turkish (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5325	1
Turkish (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5326	1
UK English (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5327	1
US Euro (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	45J4880	1
Lithuanian (models)	45J4896	1

5498 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

5498 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models B1G B2G B3G B4G B5U B5F B5S B5Y B5G B6G B7G B8G A7M A8J A9J A1U A1F A1S A1P A1D A1Y A1G A1A A1T A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A4A A4T E5J E6J E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	41U3013	1
Optical wheel mouse (400DPI, USB) (models B1G B2G B3G B4G B5U B5F B5S B5Y B5G B6G B7G B8G A7M A8J A9J A1U A1F A1S A1P A1D A1Y A1G A1A A1T A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y A4A A4T E5J E6J E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	41U3030	1

5498 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models A1U A1S A1A A2U A2S A3U A3S A4U A4S A4A B5U B5S E7U E7S E8U E8S E9U E9S)	89P8571	1
Speaker power brick - LA high voltage (non-APU) (models A1D A2D A2Y A3D A3Y A4D A4Y B5Y E7Y E8Y E9Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models B1G B2G B3G B4G B5G B6G B7G B8G A7M A8J A9J A1U A1G A1T A4T)	89P8581	1
Speaker power brick (models A8J A9J E5J E6J)	89P8577	1
Speaker power brick - Brazil (models A2P A1P A4P)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models A7M F1M F2M F3M F4M F5M F6M)	89P8579	1
Speaker power brick - Korea (models)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models B1G B2G B3G B4G B5G B6G B7G B8G A7M A8J A9J A1U A1G)	89P8573	1
Speaker Power brick -TAIWAN-TC (models B9V E1V E2V E3V E4V)	41A4905	1
Speaker Power brick - INDIA, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models E5J E6J)	45C7816	2

5498 Adapters and miscellaneous FRUs	FRU#	CRU
DVI-I to VGA Dongle second source (models E5J E6J)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models A9U A9F) (models F3M F5M)	71Y8664	1

5498 Line Cords	FRU#	CRU
Line cord - US (models B5U B5F B5S B5Y A1U A1F A1S A1Y A1A A1T A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A4A A4T E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y)	41R3184	1
Line cord - US (models B5U B5F B5S B5Y A1U A1F A1S A1Y A1A A1T A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A4A A4T E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	45J9595	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models B5U B5F B5S B5Y A1U A1F A1S A1Y A1A A1T A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A4A A4T A5U A5F A6U A6F E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y F1M F2M F3M F4M F5M F6M)	41R3196	1
Line cord - Australia / New Zealand (models B5U B5F B5S B5Y A1U A1F A1S A1Y A1A A1T A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A4A A4T A5U A5F A6U A6F E7U E7F E7S E7Y E8U E8F E8S E8Y E9U E9F E9S E9Y F1M F2M F3M F4M F5M F6M)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41R3212	1
Line Cord - Denmark (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41R3213	1
Line Cord - Switzerland (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41R3228	1
Line Cord - Switzerland (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41R3229	1
Line Cord - Israel (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41R3236	1
Line Cord - Israel (models B1G B2G B3G B4G B5G B6G B7G B8G A1G)	41R3237	1

5498 Line Cords	FRU#	CRU
Line Cord - South Africa (models B1G B2G B3G B4G B5G B6G B7G B8G A7M A1G A1A A4A F1M F2M F3M F4M F5M F6M)	41R3220	1
Line Cord - South Africa (models B1G B2G B3G B4G B5G B6G B7G B8G A7M A1G A1A A4A F1M F2M F3M F4M F5M F6M)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

5498 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

5498 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

5498 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1

5498 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

5498 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1

5498 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

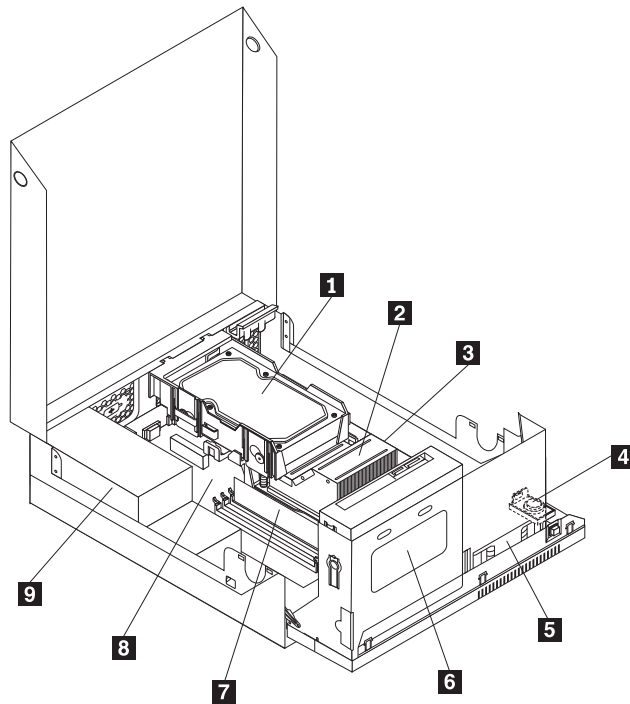
5498 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

5498 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models B4G B5U B5G A7M A8J A9J A4U A4A E5J E6J E7U E8U E9U B9V E1V E2V E3V E4V F1M F2M F3M F4M F5M F6M)	89Y0569	1
French (models B4G B5F B5G A4F E7F E8F E9F)	89Y0550	1
German (models B4G B5G)	89Y0552	1
La Spanish (models B5S B5Y A4S A4D A4Y E7S E7Y E8S E8Y E9S E9Y)	TBD	1
Italian (models B4G B5G)	89Y0556	1
Dutch (models B4G B5G)	TBD	1
Czech (models B4G B5G)	89Y0548	1
Polish (models B4G B5G)	89Y0559	1
Russian (models B4G B5G)	89Y0563	1
Turkish (models B4G B5G)	89Y0568	1
Hungarian (models B4G B5G)	89Y0555	1
Greek (models B4G B5G)	89Y0551	1
Brazilian Portuguese (models A4P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models B4G B5G)	89Y0561	1
Romanian (models B4G B5G)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models B4G B5G)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models B4G B5G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models B4G B5G)	89Y0560	1
Spanish (models B4G B5G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models B4G B5G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models B4G B5G)	89Y0571	1

5498 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1

5498 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 5536



Item #	5536 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B1G B1A B1T A7M A7A A7T A1U A1F A1S A1P A1D A1Y A4U A4F A4S A4P A4D A4Y E1U E1F E1S E1Y E2U E2F E2S E2Y H2M H3M H9M J1M J2M J3M J4M J5M J6M)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models B1G B1A B1T A7M A7A A7T A1U A1F A1S A1P A1D A1Y A4U A4F A4S A4P A4D A4Y E1U E1F E1S E1Y E2U E2F E2S E2Y H2M H3M H9M J1M J2M J3M J4M J5M J6M)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B2G A8J A9J B6J B7J B3V B5V F1M F2M F7M F8M F9M H1M H4M H7M H8M J7M J8M J9M)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models B2G A8J A9J B6J B7J B3V B5V F1M F2M F7M F8M F9M H1M H4M H7M H8M J7M J8M J9M)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y B8U B8F B8S B8Y B9U B9F B9S B9Y B4V F3M F4M F5M F6M H5M H6M)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y B8U B8F B8S B8Y B9U B9F B9S B9Y B4V F3M F4M F5M F6M H5M H6M)	45K0410	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2

Item #	5536 FRUs	FRU#	CRU
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models B1G B1A B1T B2G A7M A7A A7T A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A4U A4F A4S A4P A4D A4Y B6J B7J B8U B8F B8S B8Y B3V F1M F2M F3M F4M F5M F6M F7M F8M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A8J A9J A3U A3F A3S A3P A3D A3Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y B4V B5V F9M H1M H2M H3M H4M H5M H6M H7M)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models A8U A8F)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models A9J B7J B3V B5V H2M H9M J1M)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models B1G B1A B1T B2G A7M A7A A7T A8J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B6J B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y B4V F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H3M H4M H5M H6M H7M H8M J2M J3M J4M J5M J6M J7M J8M J9M)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models B1G B1A B1T B2G A7M A7A A7T A8J A9J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B6J B7J B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y B3V B4V B5V F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	64Y6649	1

Item #	5536 FRUs	FRU#	CRU
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models B1G B1A B1T B2G A7M A7A A7T A8J A9J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B6J B7J B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y B3V B4V B5V F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models B1G B1A B1T B2G A7M A7A A7T A8J A9J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	45J9441	1
9	Power supply, 240 Watt (85Plus) (Standard) (models B1G B1A B1T B2G A7M A7A A7T A8J A9J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	45J9446	1

The FRUs listed in the following tables are not illustrated.

5536 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1

5536 FRUs	FRU#	CRU
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

5536 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models B1G B1A B2G A7M A7A A8J A9J A1U A2U A3U A4U B6J B7J B8U B9U E1U E2U B3V B4V B5V F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	41A5289	1
Arabic (models B1G B2G)	41A5290	1
A/F (models B1G B2G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models B1G B2G)	41A5293	1
Brazilian Portuguese (models A1P A2P A3P A4P)	41A5294	1
Bulgarian (models B1G B2G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (ABB) (models B1G B2G)	41A5297	1
Danish (models B1G B2G)	41A5298	1
Dutch (models B1G B2G)	41A5299	1
French (models B1G B2G)	41A5300	1
French Canadian (models B1G B2G A1F A2F A3F A4F B8F B9F E1F E2F)	41A5301	1
French Canadian (models B1G B2G A1F A2F A3F A4F B8F B9F E1F E2F)	41A5302	1
German (models B1G B2G)	41A5303	1
Greek (models B1G B2G)	41A5304	1
Greek/US (models B1G B2G)	41A5305	1
Hebrew (models B1G B2G)	41A5306	1
Hungarian (models B1G B2G)	41A5307	1
Iceland (models B1G B2G)	41A5308	1
Italy (models B1G B2G)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y A3S A3D A3Y A4S A4D A4Y B8S B8Y B9S B9Y E1S E1Y E2S E2Y)	41A5312	1
Norwegian (models B1G B2G)	41A5313	1
Polish (models B1G B2G)	41A5314	1

5536 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Portuguese (models B1G B2G)	41A5315	1
Romanian (models B1G B2G)	41A5316	1
Romanian (models B1G B2G)	41A5317	1
Russian/Cyrillic (models B1G B2G)	41A5318	1
Serbian/Cyrillic (models B1G B2G)	41A5319	1
Slovak (models B1G B2G)	41A5320	1
Spanish (models B1G B2G)	41A5321	1
Swedish/Finnish (models B1G B2G)	41A5322	1
SF/G (models B1G B2G)	41A5323	1
Thailand (models B1T A7T)	41A5324	1
Turkish (models B1G B2G)	41A5325	1
Turkish (models B1G B2G)	41A5326	1
UK English (models B1G B2G)	41A5327	1
US Euro (models B1G B2G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models B1G B2G)	45J4880	1
Lithuanian (models)	45J4896	1

5536 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1

5536 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

5536 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models B1G B1A B1T B2G A7M A7A A7T A8J A9J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B6J B7J B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y B3V B4V B5V)	41U3013	1
Optical wheel mouse (400DPI, USB) (models B1G B1A B1T B2G A7M A7A A7T A8J A9J A1U A1F A1S A1P A1D A1Y A2U A2F A2S A2P A2D A2Y A3U A3F A3S A3P A3D A3Y A4U A4F A4S A4P A4D A4Y B6J B7J B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y B3V B4V B5V)	41U3030	1

5536 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models B1A A7A A1U A1S A2U A2S A3U A3S A4U A4S)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models A1D A1Y A2D A2Y A3D A3Y A4D A4Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models B1G B2G B1T A7T)	89P8581	1
Speaker power brick, Japanese (models A8J A9J)	89P8577	1
Speaker power brick, Brazil (models A1P A2P A3P A4P)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1
Speaker power brick, ANZ (models A7M F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	89P8579	1

5536 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker power brick, Korea (models)	41A4903	1
Speaker power brick, Hong Kong (models B1G B2G)	89P8573	1
Speaker power brick, Taiwan (models)	41A4905	1
Speaker power brick, India, South Africa (models)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models A8J A9J B6J B7J)	45C7816	2
DVI-I to VGA Dongle second source (models A8J A9J B6J B7J)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models F1M F2M F5M F6M H6M)	71Y8665	1

5536 Line Cords	FRU#	CRU
Line cord - US (models B1A B1T A7A A7T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y)	41R3184	1
Line cord - US (models B1A B1T A7A A7T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y)	41R3185	1
Line cord - China (models)	41R3256	1
Line cord - China (models)	41R3257	1
Line cord - Japanese (models)	41R3248	1
Line cord - Japanese (models)	41R3249	1
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models B1A B1T A7A A7T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A6U A6F B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	41R3196	1
Line cord - Australia / New Zealand (models B1A B1T A7A A7T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A6U A6F B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1
Line Cord - Taiwan (models)	41R3278	1
Line Cord - Taiwan (models)	41R3279	1

5536 Line Cords	FRU#	CRU
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models B1A B1T A7A A7T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A6U A6F B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models B1A B1T A7A A7T A1U A1F A1S A1Y A2U A2F A2S A2Y A3U A3F A3S A3Y A4U A4F A4S A4Y A5U A5F A6U A6F B8U B8F B8S B8Y B9U B9F B9S B9Y E1U E1F E1S E1Y E2U E2F E2S E2Y)	41R3209	1
Line Cord - Denmark (models B1G B2G)	41R3212	1
Line Cord - Denmark (models B1G B2G)	41R3213	1
Line Cord - Switzerland (models B1G B2G)	41R3228	1
Line Cord - Switzerland (models B1G B2G)	41R3229	1
Line Cord - Israel (models B1G B2G)	41R3236	1
Line Cord - Israel (models B1G B2G)	41R3237	1
Line Cord - South Africa (models B1G B1A B2G A7M A7A F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	41R3220	1
Line Cord - South Africa (models B1G B1A B2G A7M A7A F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	41R3221	1
Line Cord - India (models)	41R3341	1
Line Cord - India (models)	41R3175	1
Line Cord - UK, Ireland (models)	41R3224	1
Line Cord - UK, Ireland (models)	41R3225	1
Line Cord - Thailand (models)	43N9029	1
Line Cord - Thailand (models)	43N9030	1

5536 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1

5536 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

5536 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1

5536 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

5536 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

5536 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

5536 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1
Slovenian (models)	TBD	1

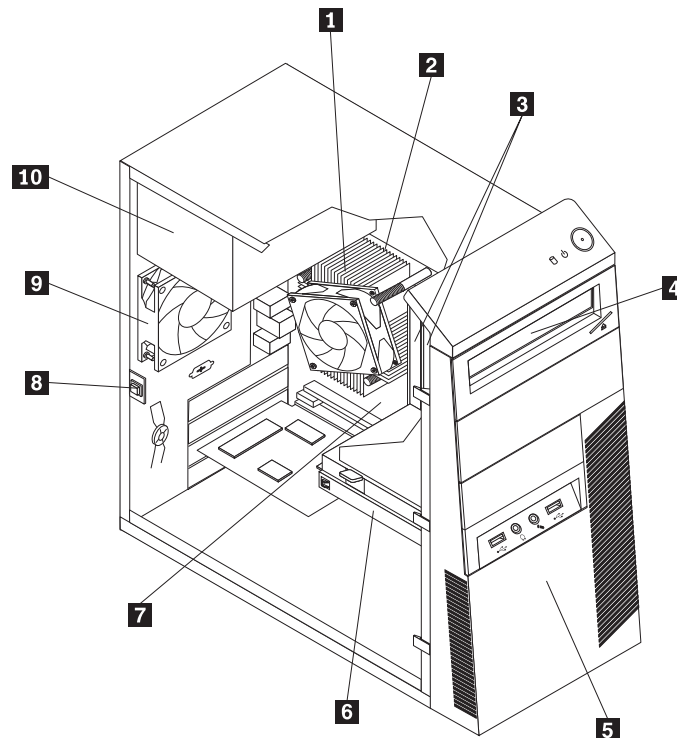
5536 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

5536 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A7M A7A A8J A9J A4U B8U B9U E2U B3V B4V B5V F1M F2M F3M F4M F5M F6M F7M F8M F9M H1M H2M H3M H4M H5M H6M H7M H8M H9M J1M J2M J3M J4M J5M J6M J7M J8M J9M)	89Y0569	1
French (models A4F B8F B9F E2F)	89Y0550	1
German (models)	89Y0552	1
La Spanish (models A4S A4D A4Y B8S B8Y B9S B9Y E2S E2Y)	TBD	1
Italian (models)	89Y0556	1
Dutch (models)	TBD	1
Czech (models)	89Y0548	1
Polish (models)	89Y0559	1
Russian (models)	89Y0563	1
Turkish (models)	89Y0568	1
Hungarian (models)	89Y0555	1
Greek (models)	89Y0551	1
Brazilian Portuguese (models A4P)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models)	89Y0561	1
Romanian (models)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1

5536 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
Japanese (models)	89Y0557	1
Portuguese (models)	89Y0560	1
Spanish (models)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0571	1

5536 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 5852



Item #	5852 FRUs	FRU#	CRU
1	Heat sink, IV Intel LGA1156 95W\73W cooler kit (all models)	45K6295	N
2	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
2	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N
2	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
2	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1CA1B A1H A1V A1K A1R A1E A1J)	71Y6961	N
2	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
2	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
2	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5305	N
2	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
2	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
3	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
3	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1

Item #	5852 FRUs	FRU#	CRU
3	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
3	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	64Y6649	1
4	Optical drive, DVD-ROM Drive, 16x/48x, SATA (models)	71Y5543	1
4	Optical drive, DVD Recordable Rambo 8, SATA 12XRAM write (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	71Y5545	1
5	Bezel assembly, front bezel (all models)	45K6258	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
6	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9036	1
6	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	45K0408	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models)	87H4891	1
6	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models)	45K0409	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	41X5582	1
6	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	45K0410	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
6	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
6	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
6	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
7	System board, Tower - Q57 (GA Level), special bid, Russia only (models)	64Y6644	N
7	System board, Intel Q57 non-AMT GA Level without LAN surge and TCM header planar (LI Only) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1CA1B A1H A1V A1K A1R A1E A1J)	71Y5974	N
8	C2 intrusion switch (all models)	39K5022	2
10	Power supply, 280 Watt ATX Power Supply; (Standard; Robust) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R)	45J9436	2
10	Power supply, 280W Watt ATX Power supply (85plus) (Standard, Robust, JP) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	45J9431	2
10	Power supply, ATX 320W 88% PSU for TW -- Power Supply (Standard, Robust, JP) ATX 320W 88% PSU for TW (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	45J9410	2

The FRUs listed in the following tables are not illustrated.

5852 FRUs	FRU#	CRU
Cable, SATA 457mm (RoHS) (all models)	43N9013	2
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
Cable, SATA 120mm RoHS used for 2nd HDD (all models)	41R3328	2
EMC shield (all models)	41N8080	2
Second serial port cable (300mm) - with level shift IC (all models)	71Y6221	2

5852 FRUs	FRU#	CRU
eSATA cable (all models)	41R3308	2
Intrusion switch assembly (all models)	41R6116	2
Parallel cable 280mm ROHS (optional) (all models)	43N9022	2
Optional HDD bracket assembly, without 4 pin cable (all models)	41R6106	1
Hard disk drive tray (all models)	41R6291	1
Speaker cable, 9*5, 400mm (all models)	43N9091	2
Temp sense cable (6pin 460 mm) kit w/ bracket (all models)	45J9495	2
1.8 SSD to 3.5 HDD conversion kit, no bezel, with PCB (all models)	43N9593	2
LED/switch cable (PCB_760mm_25L) kit (all models)	45J9577	2
Front I/O cable (25L_A660_U280) (all models)	45J9573	2
PS2 cable, 170mm, knockout (With screw) (all models)	43N9149	2
IV 9225 front fan (with fan bracket) (all models)	43N9599	N
Chassis primary HDD cage (all models)	45K6272	1
FDD / card reader blank bezel (all models)	45K6261	1
ODD bezel, button for ODD (all models)	45K6265	2
Top handle assembly (all models)	45K6259	2
USB cover (all models)	45K6260	1
FDD/card reader cover (all models)	45K6262	1
ODD blank cover assembly (all models)	45K6263	1
1st ODD cover assembly (all models)	45K6264	1
Rear I/O shield, ATX, Q57, FOF, with USB number (all models)	43N9846	2
Rubber foot (For acoustic improvement) (all models)	45K6278	2

5852 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1U A1L A1G A1M A1A A1Q A1V A1E)	41A5289	1
Arabic (models A1G)	41A5290	1
A/F (models A1G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models A1G)	41A5293	1
Brazilian Portuguese (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1H A1K)	41A5296	1
Czech (ABB) (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian (models A1F A1G)	41A5301	1
French Canadian (models A1F A1G)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Greek/US (models A1G)	41A5305	1

5852 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italy (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1
Korean (models A1R)	41A5311	1
LA Spanish (models A1S A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian (models A1G)	41A5316	1
Romanian (models A1G)	41A5317	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finnish (models A1G)	41A5322	1
SF/G (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish (models A1G)	41A5325	1
Turkish (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models A1G)	45J4880	1
Lithuanian (models)	45J4896	1

5852 Keyboard (Lenovo Fingerprint Reader USB)	FRU#	CRU Tier
US English China (models)	41R0038	1
Arabic (models)	41R0039	1
A/F (models)	41R0040	1
Belgium French (models)	41R0041	1
Belgium English (models)	41R0042	1
Brazilian Portuguese (models)	41R0043	1
Bulgarian (models)	41R0044	1
Chinese/US (models)	41R0045	1
Czech (ABB) (models)	41R0046	1
Danish (models)	41R0047	1
Dutch (models)	41R0048	1
French (models)	41R0049	1
French Canadian (models)	41R0050	1

5852 Keyboard (Lenovo Fingerprint Reader USB)	FRU#	CRU Tier
French Canadian (models)	41R0051	1
German (models)	41R0052	1
Greek (models)	41R0053	1
Greek/US (models)	41R0054	1
Hebrew (models)	41R0055	1
Hungarian (models)	41R0056	1
Iceland (models)	41R0057	1
Italy (models)	41R0058	1
Japanese (models)	41R0059	1
Korean (models)	41R0060	1
LA Spanish (models)	41R0061	1
Norwegian (models)	41R0062	1
Polish (models)	41R0063	1
Portuguese (models)	41R0064	1
Romanian (models)	41R0065	1
Romanian (models)	41R0066	1
Russian/Cyrillic (models)	41R0067	1
Serbian/Cyrillic (models)	41R0068	1
Slovak (models)	41R0069	1
Spanish (models)	41R0070	1
Swedish/Finnish (models)	41R0071	1
Swiss French/German (models)	41R0072	1
Thailand (models)	41R0073	1
Turkish (models)	41R0074	1
Turkish (models)	41R0075	1
UK English (models)	41R0076	1
US Euro (models)	41R0077	1
Slovenian (models)	41R0078	1

5852 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

5852 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader, 25 in 1 ROHS (models)	45R8139	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1521	1
HD3470(RV620Pro) 256MB 64BIT ATX video card (models)	46R1524	1
DP to DVI dongle 200mm (models)	43N9160	1
IEEE 1394 firewire adapter (ATX) (models)	41D2781	2

5852 Adapters and miscellaneous FRUs	FRU#	CRU
Speakers (2 piece) Lenovo Logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo Logo (Secondary) (models)	41A5334	1
Speaker power brick - US, Canada, LA low voltage (models A1U A1S A1A A1Y)	89P8571	1
Speaker power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models A1C A1T A1G)	89P8581	1
Speaker power brick (models A1E A1J)	89P8577	1
Speaker power brick - Brazil (models A1P)	89P8583	1
Speaker power brick - Argentina (models)	41A4901	1
Speaker power brick - ANZ (models A1M)	89P8579	1
Speaker power brick - Korea (models A1K A1R)	41A4903	1
Speaker power brick - Hong Kong, EMEA (models A1H A1G)	89P8573	1
Speaker Power brick -TAIWAN-TC (models A1B)	41A4905	1
Speaker Power brick - INDIA, South Africa (models A1Q)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	N
Nvidia FX370 256MB 64BIT DMS59 LP video card (models)	53Y6807	1
Dongle DMS-59 to single VGA&single DVI cable (models)	42Y8183	1
Dongle DMS-59 to dual VGA cable (models)	42Y8181	1
Dongle DMS-59 to dual DVI I cable (models)	41X6398	1
New casper DVI-D card low profile support HDCP (models)	43C0258	1
Display port to VGA dongle (models)	45J9524	1
ATI Radeon HD4650 DDR2 (models)	64Y4480	1
DVI-I to VGA Dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) ATX (models)	64Y8204	1
NVIDIA GeForce NVS3100 512MB DDR3 (VGA+DP) HP (models)	71Y8664	1

5852 Line Cords	FRU#	CRU
Line cord - US (models A1U A1F A1S A1L A1Y A1A)	41R3184	1
Line cord - US (models A1U A1F A1S A1L A1Y A1A)	41R3185	1
Line cord - China (models A1C)	41R3256	1
Line cord - China (models A1C)	41R3257	1
Line cord - Japanese (models A1J)	41R3248	1
Line cord - Japanese (models A1J)	41R3249	1
Line cord - Brazil (models A1P)	45J9595	1
Line cord - Brazil (models A1P)	41R3271	1
Line cord - LA High Volt APU (models A1S 1Y)	41R3176	1
Line Cord - LA High Volt APU (models A1S 1Y)	41R3177	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1L A1Y A1A A1T)	41R3196	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1L A1Y A1A A1T)	41R3197	1
Line Cord - Korea (models A1K A1R)	41R3260	1

5852 Line Cords	FRU#	CRU
Line Cord - Korea (models A1K A1R)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models A1H A1B)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models A1H A1B)	41R3225	1
Line Cord - Taiwan (models A1V)	41R3278	1
Line Cord - Taiwan (models A1V)	41R3279	1
Line Cord - Italy (models A1G)	41R3232	1
Line Cord - Italy (models A1G)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1Y A2U A2F A2S A2Y)	41R3209	1
Line Cord - Denmark (models A1G)	41R3212	1
Line Cord - Denmark (models A1G)	41R3213	1
Line Cord - Switzerland (models A1G)	41R3228	1
Line Cord - Switzerland (models A1G)	41R3229	1
Line Cord - Israel (models A1G)	41R3236	1
Line Cord - Israel (models A1G)	41R3237	1
Line Cord - South Africa (models A1G A1M A1A)	41R3220	1
Line Cord - South Africa (models A1G A1M A1A)	41R3221	1
Line Cord - India (models A1Q)	41R3341	1
Line Cord - India (models A1Q)	41R3175	1
Line Cord - UK, Ireland (models A1G)	41R3224	1
Line Cord - UK, Ireland (models A1G)	41R3225	1
Line Cord - Thailand (models A1T)	43N9029	1
Line Cord - Thailand (models A1T)	43N9030	1

5852 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1

5852 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

5852 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1

5852 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

5852 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

5852 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

5852 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0645	1
French (models)	89Y0636	1
German (models)	89Y0637	1
Spanish (models)	89Y0644	1
Italian (models)	89Y0640	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	89Y0642	1

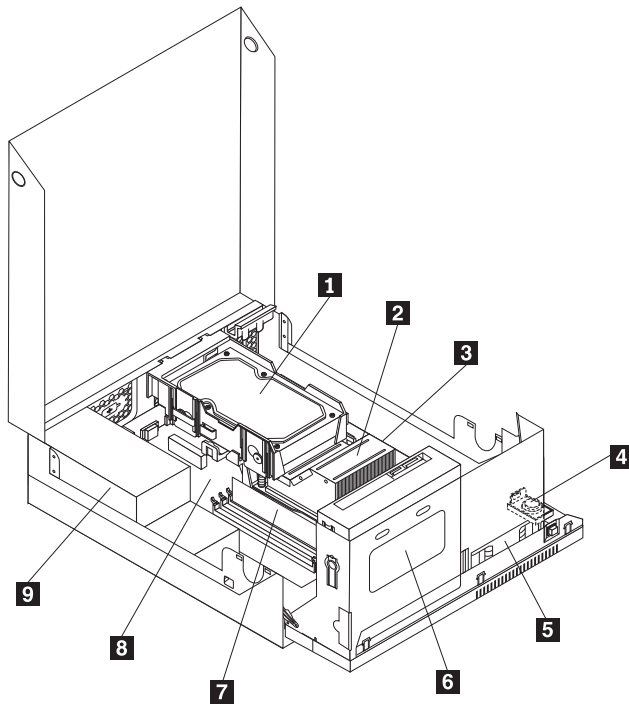
5852 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	89Y0643	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

5852 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models A1U A1L A1G A1M A1A A1V A1E)	89Y0569	1
French (models A1F A1G)	89Y0550	1
German (models A1G)	89Y0552	1
La Spanish (models A1S A1D A1Y)	TBD	1
Italian (models A1G)	89Y0556	1
Dutch (models A1G)	TBD	1
Czech (models A1G)	89Y0548	1
Polish (models A1G)	89Y0559	1
Russian (models A1G)	89Y0563	1
Turkish (models A1G)	89Y0568	1
Hungarian (models A1G)	89Y0555	1
Greek (models A1G)	89Y0551	1
Brazilian Portuguese (models A1P)	89Y0546	1
Korean (models A1R)	89Y0558	1
Slovenian (models A1G)	89Y0565	1
Russian English (models A1G)	89Y0561	1
Romanian (models A1G)	89Y0562	1
Sebian-Latin (models A1G)	89Y0567	1
Slovakian (models A1G)	89Y0564	1
Arabic Localized (models A1G)	TBD	1
Hebrew (models A1G)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models A1Q)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models A1J)	89Y0557	1

5852 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
Portuguese (models A1G)	89Y0560	1
Spanish (models A1G)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models A1G)	89Y0570	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models A1G)	89Y0571	1

5852 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Machine Type 5864



Item #	5864 FRUs	FRU#	CRU
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	40Y9035	1
1	Hard disk drive, SATA 160GB 7200RPM / 3Gb / 8M (models)	53Y6837	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	40Y9036	1
1	Hard disk drive, SATA 250GB 7200RPM / 3Gb / 8M (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	45K0408	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models)	87H4891	1
1	Hard disk drive, SATA 320GB 7200RPM / 3Gb / 8M (models)	45K0409	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	41X5582	1
1	Hard disk drive, SATA 500GB 7200RPM / 3Gb / 16M (models)	45K0410	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45C5973	1
1	Hard disk drive, SATA 1TB 7200RPM / 3Gb / 32M (models)	45K0412	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N7953	1
1	Hard disk drive, 1.8 inch 128G SSD HDD (models)	45N8203	1
1	Hard disk drive, 2.5 inch 150G 10K RPM HDD (models)	46R6400	1
2	Heat sink, LX-607 Intel 95W thermal Kit (all models)	43N9815	2
2	Heat sink, LX-607 Intel 73W thermal Kit (all models)	43N9816	2
3	Microprocessor, Clarkdale Pentium G6950 2.80G 1066MHz Dual core\3M\73W LGA 1156 (Gfx core speed 533MHz) (models)	71Y5303	N
3	Microprocessor, Clarkdale Core i3-530 2.93G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y6960	N

Item #	5864 FRUs	FRU#	CRU
3	Microprocessor, Clarkdale Core i3-540 3.06G 1333MHz 4T\Dual core\4M\73W LGA 1156 (Gfx core speed 733MHz) (models)	71Y5304	N
3	Microprocessor, Clarkdale Core i5-650 3.20G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	71Y6961	N
3	Microprocessor, Clarkdale Core i5-660 3.33G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6962	N
3	Microprocessor, Clarkdale Core i5-670 3.46G 1333MHz 4T\Dual core\4M\73W\Turbo LGA 1156 (Gfx core speed 733MHz) (models)	71Y6963	N
3	Microprocessor, Lynnfield Quad Core i5-750 2.66G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models A8U A8F)	71Y5305	N
3	Microprocessor, Lynnfield Quad Core i7-860 2.80G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5306	N
3	Microprocessor, Lynnfield Quad Core i7-870 2.93G 1333MHz 8T\4 core\8M\95W\Turbo LGA 1156 (models)	71Y5307	N
4	Internal speaker (all models)	39K5012	2
5	System fan assembly, 607DT (all models)	45K6331	1
6	Optical drive, DVD-ROM Drive - 16x/48x - SATA (models)	71Y5543	1
6	Optical drive, DVD recordable Rambo 8, SATA 12XRAM write (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	71Y5545	1
6	Optical drive, SATA, Slim ODD Rambo (models)	45K0433	1
6	Optical drive, SATA, Slim ODD DVD ROM (models)	71Y5848	1
7	Memory module, 1GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3322	1
7	Memory module, 2GB PC3-8500 1066MHz DDR3 UDIMM (models)	46R3323	1
7	Memory module, 1GB PC3-10600 1333MHz DDR3 UDIMM (models)	64Y6648	1
7	Memory module, 2GB PC3-10600 1333MHz DDR3 UDIMM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	64Y6649	1
8	System board, Intel Q57 non-AMT GA Level for 607DT without LAN surge planar (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	71Y5975	N
8	System board, Intel Q57 (GA Level) without LAN surge (models)	64Y6645	N
9	Power supply, 240 Watt (Standard) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1T A1K A1R)	45J9441	1
9	Power supply, 240 Watt (85Plus) (Standard) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1T A1K A1R)	45J9446	1

The FRUs listed in the following tables are not illustrated.

5864 FRUs	FRU#	CRU
Cable, SATA 250mm (RoHS) (all models)	43N9012	2
LED/switch cable (non-PCB_220mm_10L) (all models)	43N9075	2
Sensor cable (165mm) (all models)	43N9079	2
C2 intrusion switch (all models)	43N9080	2
PCI parallel card (all models)	46R1519	2
Chassis mechanical kit assembly (all models)	45J9520	2

5864 FRUs	FRU#	CRU
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
SATA cable, 600mm (RoHS) (all models)	45J9579	2
PS2 cable (170mm) (all models)	43N9149	2
eSATA cable, 300mm (all models)	41R3311	2
Front I/O cable (10L_ESD_A400_U505) (all models)	45J9569	2
C2 intrusion switch cable (260mm) (all models)	43N9080	2
PCI parallel card (all models)	46R1519	1
Second serial port cable 120mm/140mm (all models)	71Y6219	2
Power cable for Slim ODD and HDD (all models)	45J9596	2
Daughter card for slim ODD and 2HDD bracket (all models)	71Y6841	1
Air deflector, recycle resin (all models)	43N9610	2
Vertical stand (all models)	43N9644	2
Front I/O cable (10L_A400_U505) (all models)	43N9077	2
Front bezel assembly (Plastic) (all models)	45K6328	2
Chassis assembly (Metal) (all models)	45K6329	2
HDD bracket assembly (all models)	45K6330	2
ODD bezel kit assembly (all models)	45K6332	1
Non-card reader bezel (all models)	45K6333	1
Optical blank bezel kit (all models)	45K6334	1
Card reader bezel kit (all models)	45K6335	1
Universal slim+HDD bracket assembly (all models)	45K6336	2
Universal adapter bracket 5.25 to 3.5 W/bezel, recycle resin (all models)	45K6209	2
Mechanical kit (all models)	43N9855	2
Universal adapter bracket 5.25 to 3.5 bezel and retainer (all models)	45K6369	2
Speaker cable (all models)	45K6374	2
Cable clip (all models)	45K6375	1
Top cover assembly (all models)	45K6376	1
Thermal sense cable 180 mm (all models)	54Y9904	2

5864 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
US English (models A1U A1L A1G A1M A1A A1Q A1V A1E A1J)	41A5289	1
Arabic (models A1G)	41A5290	1
A/F (models A1G)	41A5291	1
B/F (models)	41A5292	1
Belgium English (models A1G)	41A5293	1
Brazilian Portuguese (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1H A1K)	41A5296	1
Czech (ABB) (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1

5864 Keyboard (Lenovo Preferred Pro USB -- without hub)	FRU#	CRU Tier
French (models A1G)	41A5300	1
French Canadian (models A1F A1G)	41A5301	1
French Canadian (models A1F A1G)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Greek/US (models A1G)	41A5305	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italy (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1
Korean (models A1R)	41A5311	1
LA Spanish (models A1S A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian (models A1G)	41A5316	1
Romanian (models A1G)	41A5317	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finnish (models A1G)	41A5322	1
SF/G (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish (models A1G)	41A5325	1
Turkish (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models)	41A5329	1
Arabic (New) (models A1G)	45J4880	1
Lithuanian (models)	45J4896	1

5864 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
US English China (models)	57Y4780	1
Brazilian Portuguese (models)	57Y4785	1
Chinese/US (models)	57Y4787	1
French Canadian (models)	57Y4792	1
French Canadian (models)	57Y4793	1
Korean (models)	57Y4802	1
LA Spanish (models)	57Y4803	1

5864 Keyboard (Lenovo fingerprint reader USB)	FRU#	CRU Tier
Thailand (models)	57Y4815	1
Japanese (models)	57Y4801	1
Danish (models)	57Y4789	1
Dutch (models)	57Y4790	1
French (models)	57Y4791	1
German (models)	57Y4794	1
Italy (models)	57Y4800	1
Spanish (models)	57Y4812	1
Swedish/Finnish (models)	57Y4813	1
UK English (models)	57Y4818	1
US Euro (models)	57Y4819	1
Arabic (models)	57Y4781	1
Belgium French (models)	57Y4783	1
Belgium English (models)	57Y4784	1
Czech (ABB) (models)	57Y4788	1
Greek (models)	57Y4795	1
Greek/US (models)	57Y4796	1
Hebrew (models)	57Y4797	1
Hungarian (models)	57Y4798	1
Iceland (models)	57Y4799	1
Norwegian (models)	57Y4804	1
Polish (models)	57Y4805	1
Portuguese (models)	57Y4806	1
Romanian (models)	57Y4807	1
Russian/Cyrillic (models)	57Y4809	1
Serbian/Cyrillic (models)	57Y4810	1
Slovak (models)	57Y4811	1
Turkish (models)	57Y4817	1
Turkish (models)	57Y4816	1
Swiss French/German (models)	57Y4814	1
Slovenian (models)	57Y4820	1

5864 mice	FRU#	CRU
Optical wheel mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Optical wheel mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

5864 Adapters and miscellaneous FRUs	FRU#	CRU
USB2.0 media card reader (models)	46R1529	2
DP to DVI dongle 200mm (models)	43N9160	1

5864 Adapters and miscellaneous FRUs	FRU#	CRU
IEEE 1394 firewire adapter (LP) (models)	41D2781	1
Speakers (2-piece) Lenovo logo (Primary) (models)	41A5331	1
Speakers (2-piece) Lenovo logo (Secondary) (models)	41A5334	1
Speaker power brick, US, Canada, LA low voltage (models A1U A1S A1A)	89P8571	1
Speaker power brick, LA high voltage (non-APU) (models A1D A1Y)	89P8575	1
Speaker power brick, simplified, CHN, Thailand EMEA (models A1G A2G A3G A4G A5G A6G A1C A1T)	89P8581	1
Speaker power brick, Japanese (models A1J)	89P8577	1
Speaker power brick, Brazil (models A1P)	89P8583	1
Speaker power brick, Argentina (models)	41A4901	1
Speaker power brick, ANZ (models A1M)	89P8579	1
Speaker power brick, Korea (models A1K A1R)	41A4903	1
Speaker power brick, Hong Kong (models A1B A1H A1G)	89P8573	1
Speaker power brick, Taiwan (models A1V)	41A4905	1
Speaker power brick, India, South Africa (models A1Q)	89P8585	1
Modem phone cable (models)	39K5120	1
Thermal grease syringe (models)	91P8835	2
Display port to VGA dongle (models)	45J9524	1
Soft modem V.90/V.44 (models)	46R4220	1
DVI-I to VGA dongle (models)	45C7816	2
DVI-I to VGA Dongle second source (models)	40Y7611	2
NVIDIA Quadro FX380 (DVI + DP) (models)	64Y8206	1
NVIDIA GeForce 310 512MB DDR3 (VGA+DP) LP (models)	71Y8665	1

5864 Line Cords	FRU#	CRU
Line cord - US (models A1U A1F A1S A1L A1Y A1A)	41R3184	1
Line cord - US (models A1U A1F A1S A1L A1Y A1A)	41R3185	1
Line cord - China (models A1B)	41R3256	1
Line cord - China (models A1B)	41R3257	1
Line cord - Japanese (models A1E A1J)	41R3248	1
Line cord - Japanese (models A1E A1J)	41R3249	1
Line cord - Brazil (models)	41R3270	1
Line cord - Brazil (models)	41R3271	1
Line cord - LA High Volt APU (models)	41R3176	1
Line Cord - LA High Volt APU (models)	41R3177	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1L A1Y A1A A1T)	41R3196	1
Line cord - Australia / New Zealand (models A1U A1F A1S A1L A1Y A1A A1T)	41R3197	1
Line Cord - Korea (models)	41R3260	1
Line Cord - Korea (models)	41R3261	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3224	1
Line Cord - Hong Kong, UK, Ireland, Singapore, Malaysia, Brunei, Hong Kong (models)	41R3225	1

5864 Line Cords	FRU#	CRU
Line Cord - Taiwan (models A1K)	41R3278	1
Line Cord - Taiwan (models A1K)	41R3279	1
Line Cord - Italy (models)	41R3232	1
Line Cord - Italy (models)	41R3233	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1L A1Y A1A A1T)	41R3208	1
Line Cord - Indonesia, Laos, Cambodia, and Vietnam A models (models A1U A1F A1S A1L A1Y A1A A1T)	41R3209	1
Line Cord - Denmark (models A1G)	41R3212	1
Line Cord - Denmark (models A1G)	41R3213	1
Line Cord - Switzerland (models A1G)	41R3228	1
Line Cord - Switzerland (models A1G)	41R3229	1
Line Cord - Israel (models A1G)	41R3236	1
Line Cord - Israel (models A1G)	41R3237	1
Line Cord - South Africa (models A1G A1M A1A)	41R3220	1
Line Cord - South Africa (models A1G A1M A1A)	41R3221	1
Line Cord - India (models A1Q)	41R3341	1
Line Cord - India (models A1Q)	41R3175	1
Line Cord - UK, Ireland (models A1G)	41R3224	1
Line Cord - UK, Ireland (models A1G)	41R3225	1
Line Cord - Thailand (models A1T)	43N9029	1
Line Cord - Thailand (models A1T)	43N9030	1

5864 Windows XP Professional recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0476	1
French (models)	89Y0461	1
German (models)	89Y0463	1
Italian (models)	89Y0467	1
Brazilian Portuguese (models)	89Y0458	1
Spanish (models)	89Y0474	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Arabic English (models)	89Y0457	1
Swedish (models)	TBD	1
Hebrew (models)	89Y0464	1
Finland (models)	TBD	1
Norwegian (models)	TBD	1
Polish (models)	89Y0470	1
Portuguese (models)	89Y0471	1
Russian (models)	89Y0473	1
Russian English (models)	89Y0472	1

5864 Windows XP Professional recovery DVDs	FRU#	CRU Tier
Hungarian (models)	89Y0466	1
Czech (models)	89Y0460	1
Turkish (models)	89Y0475	1
Greek (models)	89Y0462	1
Slovakian (models)	TBD	1
Japanese (models)	89Y0468	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	89Y0459	1
Hong Kong Traditional Chinese (models)	89Y0465	1
Korea (models)	89Y0469	1
C&L 1 EMEA -- English, Dutch, French, German, Italian (models)	89Y0478	1
C&L 2 Nordics -- English, Danish, Finland, Norwegian, Swedish (models)	89Y0477	1

5864 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0544	1
French (models)	TBD	1
German (models)	TBD	1
Spanish (models)	TBD	1
Brazilian (models)	TBD	1
Italian (models)	TBD	1
Japanese (models)	89Y0543	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Hong Kong (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Hebrew (models)	TBD	1
Arabic Localized (models)	TBD	1

5864 Windows Vista Home Basic 32 recovery DVDs	FRU#	CRU Tier
Slovakian (models)	TBD	1
India English (models)	89Y0542	1

5864 Windows Vista Business 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0529	1
French (models)	89Y0523	1
German (models)	89Y0524	1
Spanish (models)	89Y0528	1
Brazilian Portuguese (models)	TBD	1
Italian (models)	89Y0526	1
Japanese (models)	89Y0527	1
Norwegian (models)	TBD	1
Swedish (models)	TBD	1
Danish (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Finnish (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Simplified Chinese (models)	TBD	1
Traditional Chinese (models)	TBD	1
Hong Kong (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Croatian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Ukrainian (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
India English (models)	89Y0525	1

5864 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
English (models)	89Y0632	1
French (models)	TBD	1

5864 Windows 7 Home Basic 32 recovery DVDs	FRU#	CRU Tier
German (models)	TBD	1
Spanish (models)	89Y0629	1
Italian (models)	TBD	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	89Y0628	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Portuguese (models)	TBD	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	89Y0627	1
Romanian (models)	TBD	1
Sebian-Latin (models)	89Y0630	1
Slovakian (models)	TBD	1
Arabic localized (models)	89Y0624	1
Hebrew (models)	TBD	1
Brazilian Portuguese (models)	89Y0625	1
Traditional Chinese (models)	89Y0631	1
India English (models)	89Y0626	1

5864 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
English (models A1U A1L A1G A1M A1A A1Q A1V A1E)	89Y0645	1
French (models A1F A1G)	89Y0636	1
German (models A1G)	89Y0637	1
Spanish (models A1S A1D A1Y)	89Y0644	1
Italian (models A1G)	89Y0640	1
Dutch (models A1G)	TBD	1
Czech (models A1G)	TBD	1
Polish (models A1G)	TBD	1
Russian (models A1G)	TBD	1
Turkish (models A1G)	TBD	1
Hungarian (models A1G)	TBD	1
Greek (models A1G)	TBD	1
Portuguese (models A1P)	TBD	1
Korean (models A1R)	89Y0642	1
Slovenian (models)	TBD	1
Russian English (models A1G)	TBD	1
Romanian (models A1G)	89Y0643	1

5864 Windows 7 Home Premium 32 recovery DVDs	FRU#	CRU Tier
Sebian-Latin (models)	TBD	1
Slovakian (models A1G)	TBD	1
Arabic localized (models)	TBD	1
Hebrew (models A1G)	89Y0638	1
Brazilian Portuguese (models)	89Y0633	1
Traditional Chinese (models)	89Y0634	1
India English (models A1G)	89Y0635	1
Hong Kong (models)	89Y0639	1
Japanese (models A1J)	89Y0641	1
C&L1 Nordics: DK/FI/SV/NO/EN (models)	89Y0646	1
C&L2 EMEA: NL/FR/GR/IT/EN (models)	89Y0647	1

5864 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0569	1
French (models)	89Y0550	1
German (models)	89Y0552	1
La Spanish (models)	TBD	1
Italian (models)	89Y0556	1
Dutch (models)	TBD	1
Czech (models)	89Y0548	1
Polish (models)	89Y0559	1
Russian (models)	89Y0563	1
Turkish (models)	89Y0568	1
Hungarian (models)	89Y0555	1
Greek (models)	89Y0551	1
Brazilian Portuguese (models)	89Y0546	1
Korean (models)	89Y0558	1
Slovenian (models)	89Y0565	1
Russian English (models)	89Y0561	1
Romanian (models)	89Y0562	1
Sebian-Latin (models)	89Y0567	1
Slovakian (models)	89Y0564	1
Arabic Localized (models)	TBD	1
Hebrew (models)	89Y0553	1
Traditional Chinese (models)	89Y0547	1
India English (models)	89Y0549	1
Hong Kong (models)	89Y0554	1
Japanese (models)	89Y0557	1
Portuguese (models)	89Y0560	1
Spanish (models)	89Y0566	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0570	1

5864 Windows 7 Professional 32 recovery DVDs	FRU#	CRU Tier
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0571	1

5864 Windows 7 Professional 64 recovery DVDs	FRU#	CRU Tier
US English (models)	89Y0672	1
French (models)	89Y0652	1
German (models)	89Y0653	1
La Spanish (models)	TBD	1
Italian (models)	89Y0655	1
Dutch (models)	TBD	1
Czech (models)	TBD	1
Polish (models)	TBD	1
Russian (models)	TBD	1
Turkish (models)	TBD	1
Hungarian (models)	TBD	1
Greek (models)	TBD	1
Brazilian Portuguese (models)	89Y0648	1
Korean (models)	TBD	1
Slovenian (models)	TBD	1
Russian English (models)	TBD	1
Romanian (models)	TBD	1
Sebian-Latin (models)	TBD	1
Slovakian (models)	TBD	1
Arabic Localized (models)	TBD	1
Hebrew (models)	TBD	1
Traditional Chinese (models)	89Y0650	1
India English (models)	89Y0651	1
Hong Kong (models)	89Y0654	1
Japanese (models)	89Y0656	1
Spanish (models)	89Y0671	1
C&L 1 Windows 7 Professional 32 -- DK/FI/SV/NO/EN (models)	89Y0673	1
C&L 2 Windows 7 Professional 32 -- NL/FR/GR/IT/EN (models)	89Y0674	1

Chapter 11. 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
- Secure Managed Client (some models)

Hardware-controlled passwords

Use the Setup Utility program to set the hardware-controlled passwords. For more information about passwords, see “Using passwords” on page 51.

Operating system password

Note: This section applies only to computer models that have an operating system preinstalled from Lenovo.

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 correct 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 “Updating (flashing) BIOS from a disc” on page 326.

Secure Managed Client

The Secure Managed Client (SMC) is a storage-based, desktop computing solution that helps businesses reduce IT costs and improve security by turning off hard disk drives and storing all data in a non-server remote location while offering users the flexibility and performance of a traditional desktop computer. For computer models that do not have an internal hard disk drive and a preinstalled operating system, but use a remote hard disk drive accessed through the SMC - Storage Array, contact the network or storage administrator.

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.

- To determine the current level of BIOS:
 - Start the Setup Utility program.
 - See **BIOS Revision Level** on the Main setup screen.

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

To update (flash) the BIOS, see “Updating (flashing) BIOS from a disc.”

Updating (flashing) BIOS from a disc

This section provides instructions on how to update (flash) BIOS from a disc. System BIOS program updates are available at:
<http://www.lenovo.com/support>

To update (flash) BIOS from a disc, do the following:

1. Make sure the optical drive you want to use is set as the first boot device in the startup device sequence. See “Selecting or changing the startup device sequence” on page 54.
2. Make sure the computer is turned on. Insert the disc into the optical drive.
3. Turn off the computer and back on again. The update begins.
4. When prompted to change the serial number, press N.

Note: If you want to change the serial number, press Y when prompted. Type in the serial number and then press Enter.

5. When prompted to change the machine type/model, press N.

Note: If you want to change the machine type/model, press Y when prompted. Type in the machine type/model and then press Enter.

6. Follow the instructions on the screen to complete the update.

Updating (flashing) BIOS from your operating system

Note: Because Lenovo makes constant improvements to the Web site, the Web page contents are subject to change without notice, including the contents referenced in the following procedure.

To update (flash) BIOS from your operating system, do the following:

1. Go to <http://www.lenovo.com/support>.
2. Do the following to locate the downloadable files for your machine type:
 - a. In the **Enter a product number** field, type your machine type and click **Go**.
 - b. Click **Downloads and drivers**.
 - c. Select **BIOS** in the **Refine results** field to easily locate all the BIOS related links.
 - d. Click the BIOS update link.
 - e. Click the TXT file that contains the instructions for updating (flashing) BIOS from your operating system.
3. Print these instructions. This is very important because they are not on the screen after the download begins.
4. Follow the printed instructions to download, extract, and install the update.

Recovering from a POST/BIOS update failure

If the power to your computer is interrupted while POST/BIOS is being updated (flash update), your computer might not restart correctly. If this happens, perform the following procedure commonly called Boot-block Recovery.

1. Turn off the computer and any attached devices, such as printers, monitors, and external drives.
2. Unplug all power cords from electrical outlets, and open the computer cover. Refer to “Opening the computer cover” on page 120.
3. Access the system board. Refer to “Removing and reinstalling the front bezel” on page 86.
4. Locate the Clear CMOS /Recovery jumper on the system board. Refer to “Locating parts on the system board” on page 122.
5. Remove any cables that impede access to the Clear CMOS/Recovery jumper.
6. Move the jumper from the standard position (pin 1 and pin 2) to the maintenance position (pin 2 and pin 3).
7. Reconnect any cables that were disconnected and reinstall the hard disk drive if removed.
8. Close the computer cover and reconnect the power cords for the computer and monitor to electrical outlets. Refer to “Completing the parts replacement” on page 115.
9. Turn on the computer and the monitor. Insert the POST/BIOS update (flash) disc into the optical drive.
10. Turn the computer off and back on again. The recovery session begins.

Note: The recovery session will take two to three minutes. During this time you will hear a series of beeps.

11. After the recovery session is completed, the series of beeps will end, and the system will automatically turn off. Remove the disc from the optical drive before the system completely turns off.
12. Repeat steps 2 through 5.
13. Move the Clear CMOS /Recovery jumper back to the standard position (pin 1 and pin 2).
14. Reconnect any cables that were disconnected and reinstall the hard disk drive if removed.
15. Close the computer cover and reconnect the power cords for the computer and monitor to electrical outlets. Refer to “Completing the parts replacement” on page 115.
16. Turn on the computer to restart the operating system.

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.

- **RTC resume:** 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).

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Part Number: 71Y7233

Printed in USA

(1P) P/N: 71Y7233

