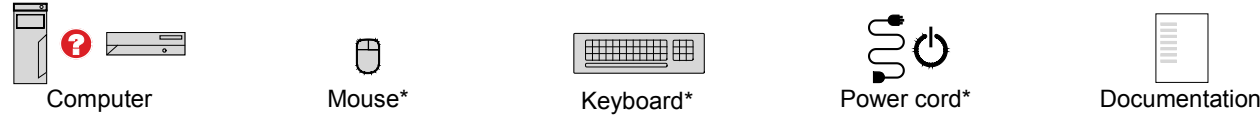


Unpack

* Available on some models



Note: Your computer might not come with a Windows® recovery disc set or USB key. To restore the Microsoft® Windows operating system, see the recovery information in the *User Guide*. See "Accessing your *User Guide*" later in this document for additional information.

Read this documentation before using your computer



This documentation provides critical safety and regulatory information for Lenovo computers.

Safety information



Laser compliance statement

CAUTION:

When laser products (such as CD-ROMs, DVD 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.

Plastic bag notice

DANGER
Plastic bags can be dangerous. Keep plastic bags away from babies and children to avoid danger of suffocation.

Lithium coin-cell battery notice

DANGER
Danger of explosion if battery is incorrectly replaced.

When replacing the lithium coin-cell battery, use only the same type or equivalent type that is recommended by the 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.

The following statement applies to users in the state of California, U.S.A.

California Perchlorate Information:

Products containing manganese dioxide lithium coin-cell batteries may contain perchlorate.

Perchlorate Material - special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate

Using earphones, headphones, or a headset

- If your computer has both a headphone connector and an audio line-out connector, always use the headphone connector for earphones, headphones, or a headset. However, the headphone connector does not support the microphone of the headset.
- If your computer has both a headset connector and an audio line-out connector, always use the headset connector for earphones, headphones, or a headset.

CAUTION:

Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphone and headphone output voltage and the sound pressure

level. Therefore, to protect your hearing, adjust the equalizer to an appropriate level.

Excessive use of headphones or earphones for a long period of time at high volume can be dangerous if the output of the headphone or earphone connectors do not comply with specifications of EN 50332-2. The headphone output connector of your computer complies with EN 50332-2 Sub clause 7. This specification limits the computer's maximum wide band true RMS output voltage to 150 mV. To help protect against hearing loss, ensure that the headphones or earphones you use also comply with EN 50332-2 (Clause 7 Limits) or a wide band characteristic voltage of 75 mV. Using headphones that do not comply with EN 50332-2 can be dangerous due to excessive sound pressure levels.

If your Lenovo computer came with headphones or earphones in the package, as a set, the combination of the headphones or earphones and the computer already complies with the specifications of EN 50332-1. If different headphones or earphones are used, ensure that they comply with EN 50332-1 (Clause 6.5 Limitation Values). Using headphones that do not comply with EN 50332-1 can be dangerous due to excessive sound pressure levels.

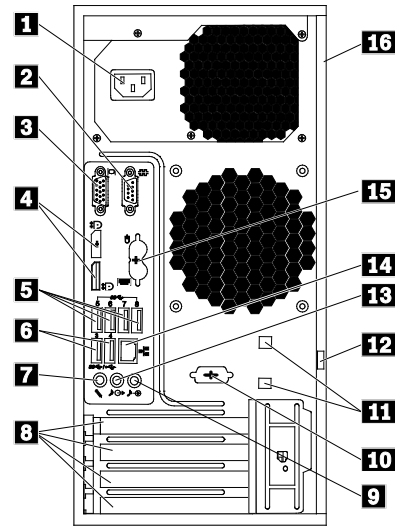
Connector locations

Note: The locations of the connectors, controls, and indicators on your computer might be slightly different from the illustrations.

* Available on some models

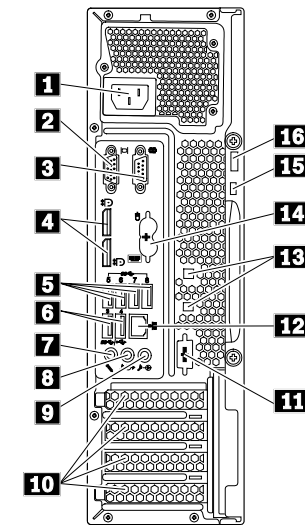
Tower, rear view

- Power-cord connector
- Serial connector
- VGA connector
- DisplayPort® connectors
- USB 3.0 connectors (4)
- USB 2.0 connectors (2)
- Microphone connector
- PCI-Express card area (different cards provide different connectors)
- Audio line-in connector
- Optional serial connector
- Cable-lock slots (2)
- Padlock loop
- Audio line-out connector
- Ethernet connector
- PS/2 keyboard and mouse connectors*
- Security-lock slot



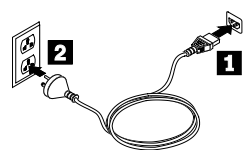
Small desktop, rear view

- Power-cord connector
- VGA connector
- Serial connector
- DisplayPort connectors
- USB 3.0 connectors (4)
- USB 2.0 connectors (2)
- Microphone connector
- Audio line-out connector
- Audio line-in connector
- PCI-Express card area (different cards provide different connectors)
- Optional serial connector
- Ethernet connector
- Cable-lock slots (2)
- PS/2 keyboard and mouse connectors*
- Security-lock slot
- Padlock loop



Initial setup instructions

- Connect the cable from your monitor to the appropriate video connector on the computer (VGA or DisplayPort).
Note: If your computer contains a graphics card in one of the card slots, connect the cable from your monitor to an appropriate connector on the graphics card.
- Connect the keyboard cable and the mouse cable to the appropriate connector respectively (PS/2 or USB).
- If you will be using a wired network connection, connect the Ethernet cable to the Ethernet connector.
- Connect the power cord to the power-cord connector on the computer first and then connect it to a properly-grounded electrical outlet.



Ensure that all power cord connectors are securely and completely plugged into receptacles.

- Press the power button on the front of your computer.

- Follow the on-screen instructions to complete the setup.

For additional information about using your computer, refer to the *User Guide* for your computer.

Accessing your User Guide

Your *User Guide* contains detailed information about your computer. To access your *User Guide*, do the following:

Microsoft Windows 10:

- Open the Start menu and then click **Lenovo Companion**.
- Click **View User Guide** in the **SUPPORT** section.

Microsoft Windows 7:

From the Windows desktop, click **Start → All Programs** (if the program name is not displayed) → **Lenovo PC Experience → Lenovo User Guide**.

Ubuntu®:

Go to the following directory:
`/usr/share/doc/lenovo-doc`

Lenovo makes constant improvements to the *User Guide* of your computer. To ensure that you have the up-to-date information of your computer, see "Downloading publications" for information about downloading the latest *User Guide*.

Downloading publications

The latest electronic publications for your computer are available from the Lenovo Support Web site. To download the publications, go to:
<http://www.lenovo.com/support>

Service, support, and warranty information

The following information describes the technical support that is available for your product during the warranty period and throughout the life of your product. Online technical support is available throughout the lifetime of your product at:
<http://www.lenovo.com/support>

If you purchased Lenovo services, refer to the following terms and conditions for detailed information:

- For Lenovo Warranty Service Upgrades or Extensions, go to:**
<http://support.lenovo.com/lwsu>
- For Lenovo Accidental Damage Protection Services, go to:**
<http://support.lenovo.com/ladps>

Warranty information

Lenovo provides a warranty period for your computer. To check the warranty status of your computer, go to

<http://www.lenovo.com/warranty-status>, and then follow the instructions on the screen.

Your computer is covered by the terms of the Lenovo Limited Warranty (LLW), version L505-0010-02 08/2011. The LLW is displayed on your computer during the initial setup. After the initial setup has been completed, you can view the warranty information from your computer by doing the following:

Windows 10:

- Open the Start menu and then click **Lenovo Companion**.
- Click **SUPPORT**. The warranty information is listed in the **WARRANTY & SERVICES** section.

Windows 7:

From the Windows desktop, click **Start → All Programs** (if the program name is not displayed) → **Lenovo PC Experience → Lenovo Warranty**.

Ubuntu:

To access the LLW, go to the following directory:
`/usr/share/doc/lenovo-doc`

If you cannot view the LLW either from the Web site (http://www.lenovo.com/warranty/llw_02) or from your computer, contact your local Lenovo office or reseller to obtain a printed version.

Customer Replaceable Units

Customer Replaceable Units (CRUs) are parts that can be upgraded or replaced by the customer. To view the instructions on replacing the CRUs, see the respective section in the *User Guide*. See "Accessing your *User Guide*" for additional information.

The following table lists the CRUs for your computer.

Note: Depending on your computer model, some hardware parts might not be available.

Self-service CRUs	Optional-service CRUs
<ul style="list-style-type: none"> Computer cover Flex module Front-access storage enclosure Front bezel Hard disk drive Keyboard Memory modules Mouse Multi-drive conversion kit 	<ul style="list-style-type: none"> Coin-cell battery Front fan assembly (for tower desktop computer) Heat sink and fan assembly Power supply assembly Rear fan assembly (for tower desktop computer)

Self-service CRUs	Optional-service CRUs
<ul style="list-style-type: none"> Optical drive Peripheral Component Interconnect Express (PCIe) card Slim optical drive adapter Solid-state drive 	

Worldwide telephone technical support

This section lists Lenovo Support telephone numbers. If you cannot find the support telephone number for your country or region, contact your Lenovo reseller or Lenovo marketing representative.

Before contacting a Lenovo technical support representative, have the following information available: model and serial number, the exact wording of any error message, and a description of the problem.

Important: Telephone numbers are subject to change without notice. The most up-to-date telephone list for the Customer Support Center is always available at:
<http://www.lenovo.com/support/phone>

Country or region	Telephone number
Algeria	+33 6 7348 1739 (French, Spanish)
Anguilla	1-800-426-7378 (English)
Antigua and Barbuda	1-800-426-7378 (English)
Argentina	0800-666-0011 0800-266-1583 (Spanish, English)
Armenia	0-60690077 (Standard charges apply) (Russian, English)
Australia	1800 041 267 (English)
Austria	0810-100-654 (German)
Bahamas	1-800-426-7378 (English)
Bahrain	Kanoo IT: 00 973 1771 1722

Country or region	Telephone number
	Bahrain Business Machine LLC: 00 973 1758 4302 (Arabic, English)
Bangladesh	AWSP Flora Limited: 70-200-6853 88-0171-000-0000 (Mobile) Email: hasan_reaz@globalbrand.com.bd
Belarus	8-256400184 (Standard charges apply) (Russian, English)
Belgium	02-339-36-11 (Warranty service and support) (Dutch, French)
Bermuda	1-800-426-7378 (English)
Bolivia	0800-10-0189 (Spanish)
Brazil	Calls made from within the Sao Paulo region: 11-3889-8986



Country or region	Telephone number
	Calls made from outside the Sao Paulo region: 0800-701-4815 (Portuguese)
Brunei Darussalam	Dial 800-1111, and then dial 866-273-5446 (Bahasa Melayu, English)
Canada	1-800-565-3344 (English, French)
Cayman Islands	1-800-426-7378 (English)
Chile	800-361-213 (Spanish)
China	Technical Support Line: 400-100-6000 (Mandarin)
Colombia	01-800-011-0227 01-800-912-3021 (Spanish)
Costa Rica	0-800-011-1029 (Spanish)
Croatia	385-1-3033-120 (Hrvatski)
Cyprus	800-92537 (Greek)
Czech Republic	800-353-637 (Czech)
Denmark	7010-5150 (Warranty service and support) (Danish)
Dominican Republic	1-866-434-2080 (Spanish)
Ecuador	1-800-426911-OPCION 4 (Spanish)
Egypt	Primary: 0800-0000-850 Secondary: 0800-0000-744 (Arabic, English)
El Salvador	800-6264 (English)
Estonia	372-66-00-800 (Estonian, Russian, English)
Finland	358-800-1-4260 (Warranty service and support) (Finnish)
France	Hardware: 0810-631-213 (Warranty service and support) (French)
Georgia	995-706-777-826 (Standard charges apply) (Russian, English)
Germany	0800-500-4618 (Gebührenfrei) (Garantieservice und Support) (German)
Greece	Contact the nearest Lenovo Business Partner
Grenada	1-800-426-7378 (English)
Guatemala	Dial 999-9190, wait for operator, and request to reach 877-404-9661 (Spanish)
Honduras	800-0123 (Spanish)
Hong Kong	(852) 3516-8977 (Cantonese, English, Mandarin)
Hungary	+ 36-13-825-716 (English, Hungarian)
India	(Primary) 1800-419-4666 (Tata) (Secondary) 1800-3000-8465 (Reliance) Email: commercialts@lenovo.com (English, Hindi)
Indonesia	1-803-442-425 62 213-002-1090 (Standard charges apply) (English, Bahasa Indonesia)
Ireland	1-881-1444 (Warranty service and support) (English)
Israel	972-3-9142-800 (Hebrew, English)
Italy	39-800-820-094 (Warranty service and support) (Italian)
Jamaica	1-800-426-7378 (English)
Japan	0120-000-817 (Japanese, English)
Jordan	Jordan Business Systems: 00-962-6-500-0999 Ext 713/127 General Computer & Electronic (GCE): 00-962-6-551-3879 (Arabic, English)
Kazakhstan	77-273-231-427 (Standard charges apply) (Russian, English)
Kenya	080-0733-256 (English)
Korea	1670-0088 (Standard charges apply)
Kuwait	Easa Hussain Al Yousifi: 00-965-2244-5280 AM. KHORAFI: 00-965-2200-1100 1127 Khorafi Business Machines (KBM): 00-965-2259-4611 Diyar United Company: 00-965-4378-383 Redington Kuwait: 00-965-2433-3203; 2545-6250 / 2545-6251 (Arabic, English)
Latvia	371-6707-360 (Latvian, Russian, English)
Lebanon	Quantech: 00-961-1999-500 Computer Business Machine (CBM): 00-961-1680-180 El Haceb S.A.L.: 00-961-1771-300 (Arabic, English, French)
Libyan Arab Jamahiriya	33-6-7348-1739 (French, English)
Lithuania	370 5278 6602 (Lithuanian, Russian, English)
Luxembourg	352-360-385-343 (French)
Macao	0800-807 / (852) 3071-3559 (Cantonese, English, Mandarin)
Macedonia	389-2309-625 (Macedonian)
Malaysia	1-800-88-0013 03-7724-8023 (Standard charges apply)

Country or region	Telephone number
	(English)
Malta	356-21-445-566 (English, Italian, Maltese, Arabic)
Mexico	001-866-434-2080 01-800-083-5622 01-554-738-0318 (Standard charges apply) (Spanish)
Moldova	0-60223433 (Standard charges apply) (Russian, English)
Morocco	212-5-22-509-35 (Arabic)
Nepal	977-985-0-0 300-071-399 (mobile) Email: suresh@megatech.com.np
Netherlands	020-513-3939 (Dutch)
New Zealand	0508-770-506 (English)
Nicaragua	001-800-220-2282 (Spanish)
Nigeria	070-8060-1481 (English)
Norway	8152-1550 (Norwegian)
Oman	Khimji Ramdas Computer Communication Systems: 00-968-2469-6255 Overseas Business Machines (OBM): 00-968-2460-1072, 2460-5018 Gulf Business Machines Services (GBMS): 00-968-2455-9831
Pakistan	International Office Products (pvt) Ltd.: 00-92-212-422-569 00-92-213-241-2023 Selling Business Systems: 00-92-21-568-9823
Panama	001-866-434 (Lenovo Customer Support Center- toll free) (Spanish)
Paraguay	009-800-52-10026 009-800-44-10119 (Spanish)
Peru	0-800-50-866 OPCION 2 (Spanish)
Philippines	1-800-8908-6454 (GLOBE subscribers) 1-800-1441-0719 (PLDT subscribers) (Tagalog, English)
Poland	48-22-878-6999 (Polish, English)
Portugal	808-225-115 (Standard charges apply) (Portuguese)
Qatar	Al Mana Computer Services: 00-9744-4489-966 (ext. 1992) Qatar Computer Services W.L.L.: 00-9744-4441-212 (Arabic)
Romania	4-021-224-4015 (Romanian)
Russia	+7-499-705-6204 +7-495-240-8558 (Standard charges apply) (Russian)
Saint Lucia	1-800-426-7378 (English)
Saudi Arabia	800-84-451-28 (Standard charges apply) (Arabic)
Singapore	6818-5315 (Standard charges apply) 1-800-415-5529 (English, Mandarin, Bahasa Malaysia)
Slovakia	421-2-4954-5555
Slovenia	386-1-2005-60 (Slovenian)
South Africa	0800-110-756 (English)
Spain	34-917-147-833 (Spanish)
Sri Lanka	9477-7357-123 (Sumathi Information systems) (English)
Sweden	077-117-1040 (Warranty service and support) (Swedish)
Switzerland	0800-55-54-54 (Warranty service and support) (German, French, Italian)
Taiwan	0800-000-702 (Mandarin)
Thailand	001-800-4415-734 (+662) 787-3067 (Standard charges apply) (Thai, English)
Tortola	1-800-426 7378 (English)
Trinidad and Tobago	1-800-426-7378 (English)
Turkey	444-04-26 (Turkish)
Turks and Caicos	1-800-426-7378 (English)
Ukraine	044-362-42-81 (Standard charges apply) 089-320-24-92 (Standard charges apply) (Ukrainian, Russian, English)
United Arab Emirates	8000-3570-2810 (Standard charges apply) (Arabic)
United Kingdom	03705-500-900 (local rate) (Standard warranty support) (English)
United States	1-800-426-7378 (English)
Uruguay	000-411-005-6649 (Spanish)
Venezuela	0-800-100-2011 (Spanish)
Vietnam	120-11072 (Toll Free) 84-8-4458-1042 (Standard charges apply)
Yemen	Al Khirbash and Agencies: 00-967-1209-8278 Yemen Business Machines (YBM): 00-967-3-213324 00-967-3-214655

Country or region	Telephone number
	00-967-3-213909 (Arabic)

Lenovo product service information for Taiwan

委製商/進口商名稱：荷蘭商聯想股份有限公司台灣分公司
進口商地址：台北市內湖區堤頂大道2段89號5樓
進口商電話：0800-000-702 (代表號)

Recycling and environmental information



Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products.

For information on recycling Lenovo products, go to: <http://www.lenovo.com/recycling>

For additional recycling and environmental statements, refer to your *User Guide*. See "Accessing your *User Guide*" for details.

The latest environmental information about our products is available at: <http://www.lenovo.com/ecodeclaration>

Important battery and WEEE information

	Batteries and electrical and electronic equipment marked with the symbol of a crossed-out wheeled bin may not be disposed as unsorted municipal waste. Batteries and waste of electrical and electronic equipment (WEEE) shall be treated separately using the collection framework available to customers for the return, recycling, and treatment of batteries and WEEE.
	When possible, remove and isolate batteries from WEEE prior to placing WEEE in the waste collection stream. Batteries are to be collected separately using the framework available for the return, recycling, and treatment of batteries and accumulators. Country-specific information is available at: http://www.lenovo.com/recycling

Recycling information for Japan

日本でのリサイクルまたは廃棄についての詳細は、Webサイト<http://www.lenovo.com/recycling/japan>を参照してください。

Recycling information for China

《废弃电器电子产品回收处理管理条例》提示性说明
联想鼓励拥有联想品牌产品的用户当不再需要此类产品时，遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。更多回收服务信息，请点击进入
<http://support.lenovo.com.cn/activity/551.htm>

Restriction of Hazardous Substances Directive (RoHS)

European Union RoHS

This Lenovo product, with included parts (cables, cords, and so on) meets the requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("RoHS recast" or "RoHS 2").
For more information about Lenovo worldwide compliance on RoHS, go to: http://www.lenovo.com/social_responsibility/us/en/RoHS_C_ommunication.pdf

China RoHS

部件名称	产品中有毒物质的名称及含量					
	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板组件*	X	O	O	O	O	O
硬盘	X	O	O	O	O	O
光驱	X	O	O	O	O	O
内存	X	O	O	O	O	O
电脑I/O附件	X	O	O	O	O	O
电源	X	O	O	O	O	O
键盘	X	O	O	O	O	O
鼠标	X	O	O	O	O	O
机箱/附件	X	O	O	O	O	O

本表格依据SJ/T 11364的规定编制。
O: 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。
注: 表中标记“X”的部件, 皆因全球技术发展水平限制而无法实现有害物质的替代。

印刷电路板组件*: 包括印刷电路板及其零部件、电容和连接器
根据型号的不同, 可能不会含有以上的所有部件, 请以实际购买机型为准

 在中华人民共和国境内销售的电子信息产品必须标识此标志, 标志内的数字代表在正常使用状态下的产品的环保使用期限

Turkish RoHS

The Lenovo product meets the requirements of the Republic of Turkey Directive on the Restriction of the Use of Certain Hazardous Substances in Waste Electrical and Electronic Equipment (WEEE).

Türkiye AEEE Yönetmeliğine Uygunluk Beyanı

Bu Lenovo ürünü. T.C. Çevre ve Orman Bakanlığı'nın "Atık Elektrik ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlanmasına Dair Yönetmelik (AEEE)" direktiflerine uygundur. AEEE Yönetmeliğine Uyğundur.

Ukraine RoHS

Цим підтверджуємо, що продукція Леново відповідає вимогам нормативних актів України, які обмежують вміст небезпечних речовин.

India RoHS

RoHS compliant as per E-Waste (Management & Handling) Rules.

Compliance information

The latest compliance information is available at: <http://www.lenovo.com/compliance>

Electronic emission notices

This device has been tested and found to comply with the limits for a Class B digital device. The *User Guide* for this product provides the complete Class B compliance statements that are applicable for this device. See "Accessing your *User Guide*" for additional information.

Korean Class B compliance statement

B급 기기(가정용 방송통신기자재)
이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다

European Union conformity

EU contact: Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia



Compliance to Directives for Information Technology Equipment (ITE) and Radio Equipment

Models without a radio device: This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility. The full compliance statement is located in the *User Guide*. See "Accessing your *User Guide*" for additional information.

Models with a radio device: This product is in compliance with the essential requirements and other relevant provisions of the EU Council Radio and Telecommunications Terminal Equipment (R&TTE) Directive, 1999/5/EC. The Declaration of Conformity information related to the wireless function is located in the *Regulatory Notice*, which you can download from the Lenovo Support Web site. See "Downloading publications" in this document. for additional information.

Note: R&TTE 1999/5/EC remains in force during the transition period of Radio Equipment Directive (RED) 2014/53/EU until 12 June, 2017. After then, RED 2014/53/EU will take the place of R&TTE 1999/5/EC.

In addition, the product EU DoC can be obtained from the following location: <http://www.lenovo.com/compliance>

Wireless-radio compliance information

Computer models equipped with wireless communications comply with the radio frequency and safety standards of any country or region in which it has been approved for wireless use.

Besides this document, ensure that you read the *Regulatory Notice* for your country or region before using the wireless devices contained in your computer. To obtain a PDF version of the *Regulatory Notice*, see "Downloading publications" in this document.

Brazil wireless-radio compliance information

Aviso para usuários no Brasil

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Mexico wireless-radio compliance information
Advertencia: En Mexico la operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Singapore wireless-radio compliance information

Complies with IMDA Standards DB102306

Korean wireless-radio compliance information

무선설비 전파 혼신 (사용주파수 2400 ~ 2483.5, 5725 ~ 5825 무선제품 해당)
해당 무선설비가 전파 혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

Additional compliance information

Brazil audio notice

Ouvir sons com mais de 85 decibéis por longos períodos pode provocar danos ao sistema auditivo.

Eurasian compliance mark



ENERGY STAR



Select models conform to ENERGY STAR® requirements. Additional ENERGY STAR information is in your *User Guide*. See "Accessing your *User Guide*".