Getting Started
HP 2533t Mobile Thin Client

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This guide explains how to set up your hardware and begin using the computer in Windows® XPe.

Product notice

This user guide describes features that are common to most models. Some features may not be available on your computer.

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Basic setup

Your computer is designed for use in a business setting. The instructions provided here are general guidelines. Contact your network administrator if you have additional questions about your computer or your company network.

✎ If you have already unpacked the box and set up your computer, go to step 6, "Enter your logon information," to begin using your computer.

1 Unpack the box

✎ Computer color, features, and options may vary by computer model.

Component		**Component**	
❶	Power cord*	❸	Battery*
❷	AC adapter		

*Batteries and power cords vary in appearance by region and country.

2 Insert the battery
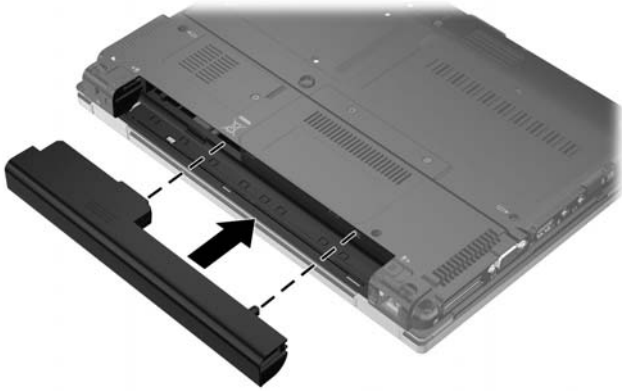
⚠ **WARNING:** To reduce potential safety issues, use only the AC adapter or battery provided with the computer, a replacement AC adapter or battery provided by HP, or a compatible AC adapter or battery purchased separately as an accessory from HP.

3 Connect the computer to external power
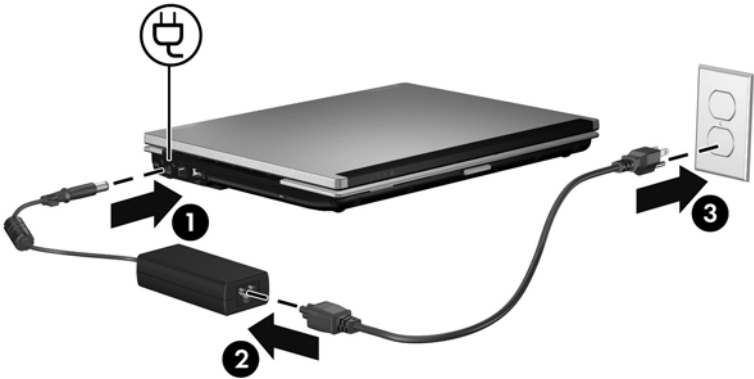
⚠ **WARNING:** To reduce the risk of electric shock or damage to your equipment, observe these practices:
- Plug the power cord into an AC outlet that is easily accessible at all times.
- Disconnect power from the computer by unplugging the power cord from the AC outlet (not by unplugging the power cord from the computer).
- If provided with a 3-pin attachment plug on your power cord, plug the cord into a grounded (earthed) 3-pin outlet. Do not disable the power cord grounding pin, for example, by attaching a 2-pin adapter. The grounding pin is an important safety feature.

Leave the computer connected to external power until the battery is fully charged and the battery light turns off.

4 Open the computer
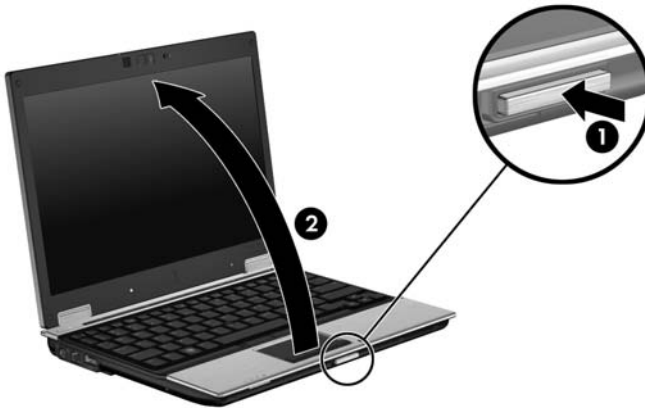
5 Turn on the computer
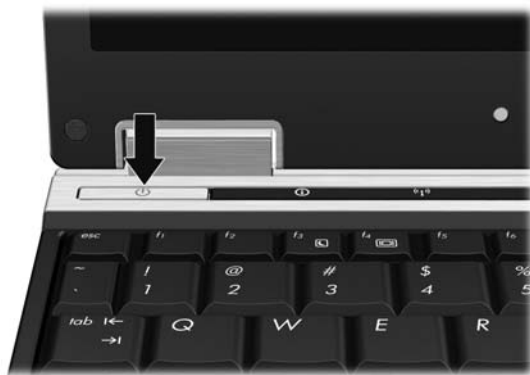
✎ If the computer will not start up, plug the computer into AC power and be sure that the power cord and AC adapter connections are secure.

To turn off the computer:

1. Save your work, and close all programs.
2. Click **Start**, click **Turn Off Computer**, and then click **Turn Off**.

If you have been registered to a network domain, the button you click will be called Shut Down instead of Turn Off Computer.

6 Enter your logon information

End users will typically follow the manual logon steps. Consult your network administrator for instructions.

✎ For additional security, network administrators can use HP Logon Manager to disable and reenable automatic logon and to change the automatic logon user name, password, and domain. For details, refer to the *HP Mobile Thin Client* reference guides on the Web.

Automatic logon

The factory setting for the computer is automatic logon.

✎ Only the network administrator can change automatic logon properties.

With automatic logon, the **Log On to Windows** dialog box is bypassed, which brings you directly to the Windows desktop. So, to log on as a different user, follow these steps:

1. Press and hold down the left **Shift** key, and then click **Start**.
2. Click **Shut Down**, and then click **Log Off**.

   The **Log On to Windows** dialog box opens, allowing you to manually enter the logon information.

Manual logon

If the automatic logon is disabled by the network administrator, log on as follows:

1. In the **Log On to Windows** dialog box, type your information in the **User Name** and **Password** boxes.

   ❏ For a user, the initial user name and password are both **User**.

   ❏ For an administrator, the initial user name and password are both **Administrator**.

2. Click **OK**.

Note the following considerations:

■ To prevent unauthorized access to your information, change your password as soon as possible after setup.

■ Passwords are case sensitive, but user names are not.

Administrator logon

To access the administrator logon screen in either automatic or manual logon mode:

1. Hold down the left **Shift** key, and then click **Start**.
2. Click **Shut Down**, and then click **Log Off**.

The Administrator logon screen is displayed.

You can use the HP Logon Manager to permanently modify the default user mode. For details, refer to the administrator's guide on the Web.

7 Connect to a computer network

The computer may have the following networking features:

■ Modem
■ Local area network (LAN)
■ Wireless local area network (WLAN)

If you plan to connect the computer to a home office LAN or WLAN, refer to the *HP Mobile Thin Client* reference guides on the Web for information on networking. If you need assistance to connect to a company LAN or WLAN, or information on remote access, contact your network administrator.

✎ The computer display must be open, and the antennae free from obstruction, before you can connect to a wireless network.

8 Begin managing your network (network administrators only)

Your computer ships with a current release of Altiris Deployment Solution, a leading-edge tool to assist you with quick deployment and on-going management of computers in your organization. Altiris Deployment Solution provides the capability of deploying new images by HP or created by you, updating drivers, and managing patches. For more information on Altiris Deployment Solution, go to http://www.Altiris.com/products/developmentsol.

To begin managing the computer, follow these steps:

1. Register the software at the Altiris registration Web site: http://www.altiris.com/hptc

   ✎ Links to the software, user guides, and online training are provided when you register on the Altiris Web site.

2. Download the Deployment Solution console.
3. Follow the instructions in the Deployment Solution product guide from Altiris to install and configure the Deployment Solution on a server: http://www.altiris.com/support/documentation

Quick tour

Identifying the hardware

✎ Components included with the computer may vary by region and model. The illustrations in this chapter identify the standard components included on most computer models.

Top components

Pointing devices

Component		Component	
❶	Pointing stick	❺	Right point stick button
❷	Left pointing stick button	❻	TouchPad scroll zone
❸	TouchPad	❼	Right TouchPad button
❹	Left TouchPad button		

Lights
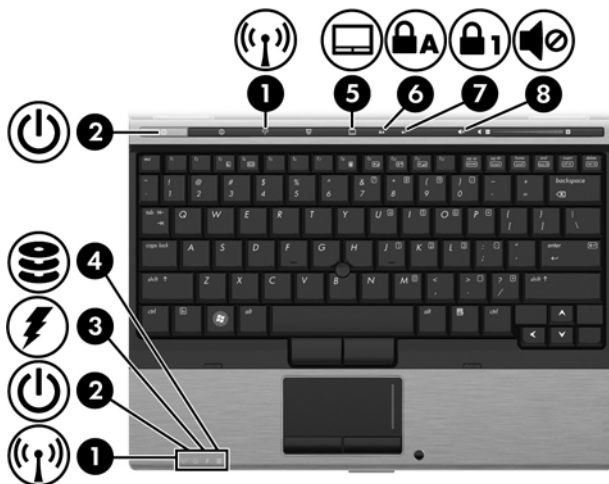
Component		**Component**	
❶	Wireless lights (2)*	❺	TouchPad light
❷	Power lights (2)†	❻	Caps lock light
❸	Battery light	❼	Num lock light
❹	Drive light	❽	Volume mute light

*The 2 wireless lights display the same information. The light on the wireless button is visible only when the computer is open. The wireless light on the front of the computer is visible whether the computer is open or closed.

†The 2 power lights display the same information. The light on the power button is visible only when the computer is open. The power light on the front of the computer is visible whether the computer is open or closed.

Buttons

Component		**Component**	
❶	Power button	❺	TouchPad on/off button
❷	Info button	❻	Volume mute button
❸	Wireless button	❼	Volume scroll zone
❹	Presentation button		

Front components
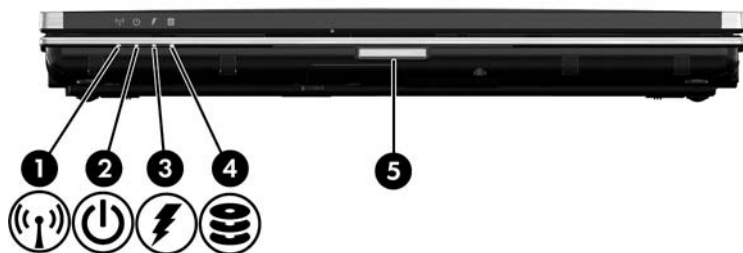
Component		Component	
❶	Wireless light	❹	Drive light
❷	Power light	❺	Display release latch
❸	Battery light		

Left-side components

✎ Refer to the illustration that most closely matches your computer.
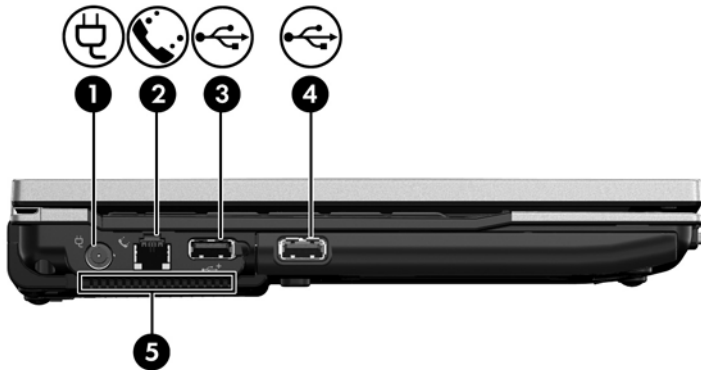
Component		Component	
❶	Power connector	❹	USB port*
❷	RJ-11 (modem) jack	❺	Vent
❸	USB port*		

*For information regarding the status of the USB ports, contact your network administrator.
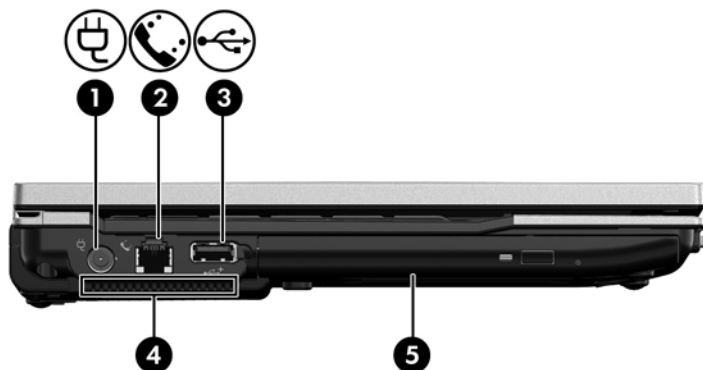
Component		**Component**	
❶	Power connector	❹	Vent
❷	RJ-11 (modem) jack	❺	Optical drive (select models only)
❸	USB port*		

*For information regarding the status of the USB port, contact your network administrator.

Right-side components
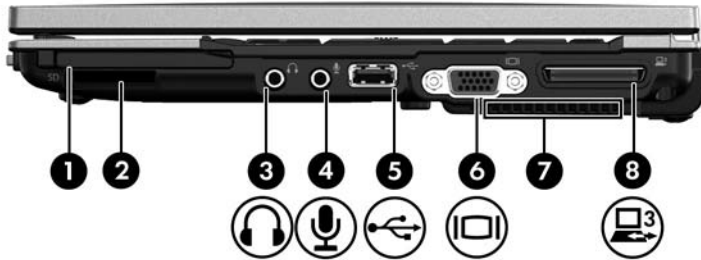
	Component			Component
❶	PC Card slot*		❺	USB port*
❷	Media Card Reader*		❻	External monitor port
❸	Audio-out (headphone) jack		❼	Vent
❹	Audio-in (microphone) jack		❽	Expansion port 3

*For information regarding the status of the PC Card slot, Media Card Reader, and USB port, contact your network administrator.

Rear components

Component		Component	
❶	RJ-45 (network) jack	❷	Security cable slot

Bottom components
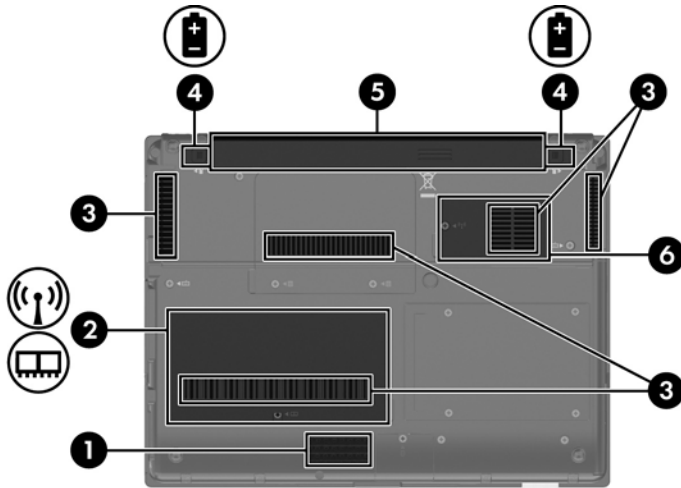
Component		Component	
❶	Speaker	❹	Battery release latches (2)
❷	WLAN module and memory module compartment	❺	Battery bay
❸	Vents (5)	❻	Flash drive bay

Wireless antennae

Wireless antennae send and receive signals from one or more wireless devices. These antennae are not visible from the outside of the computer.

✎ The computer display must be open, and the antennae free from obstruction, before you can connect to a wireless network.

To see wireless regulatory notices, refer to the "Regulatory, safety, and environmental notices" section in this guide, and then refer to the subsection that applies to your country or region.

Troubleshooting

Quick troubleshooting

The computer is unable to start up

If the computer does not turn on when you press the power button, adequate power may not be available to the computer.

The following suggestions may help you determine why the computer will not start up:

- If the computer is plugged into an AC outlet, plug another electrical device into the outlet to be sure that the AC outlet is providing adequate power.

    ✎ Use only the AC adapter provided with this computer or one approved for this computer.

- If the computer is running on battery power or is plugged into an external power source other than an AC outlet, plug the computer into an AC outlet using the AC adapter. Be sure that the power cord and AC adapter connections are secure.

The computer screen is blank

- If the power lights are blinking, the computer may be in Standby. To exit Standby, briefly press the power button.
- If the screen is blank, the computer may not be set to display the image on the computer screen. To transfer the image to the computer screen, press **fn+f4**.

The computer is on but not responding

If the computer is on, but not responding to software or keyboard commands, try the following emergency shutdown procedures in the sequence provided, until shutdown occurs:

⚠ **CAUTION:** Emergency shutdown procedures result in the loss of unsaved information.

1. Press and hold the power button for at least 5 seconds.
2. Disconnect the computer from external power and remove the battery.

The computer is unusually warm

It is normal for the computer to feel warm to the touch while it is in use. But if the computer feels unusually warm, it may be overheating because a vent is blocked.

If you suspect that the computer is overheating, allow the computer to cool to room temperature. Then be sure to keep all vents free from obstructions while you are using the computer.

⚠ **WARNING:** To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

The WLAN connection is not working

If a WLAN connection is not working as expected, follow these suggestions:

✎ If you cannot connect to a corporate network, contact the network administrator.

■ Be sure that the wireless light on the computer is on.

■ Be sure that the computer display is open and the antennae are free from obstructions.

■ Be sure that the DSL or cable modem and its power cord are properly connected and that the power lights are on.

■ If applicable, be sure that the wireless router (access point) is turned on and properly connected to the DSL or cable modem.

■ Disconnect and then reconnect all cables, and turn the power off and then back on.

Contacting technical support

For the fastest possible resolution of your problem, have the computer and the following information available when you call or e-mail:

■ Product name located on the display or keyboard.

■ Serial number (s/n) listed on the service tag.

The service tag label is on the bottom of the computer.

■ Date the computer was purchased.

■ Conditions under which the problem occurred.

■ Error messages that have been displayed.

■ The manufacturer and model of the printer or other accessories connected to the computer.

■ Operating system version number and registration number.

On some models, the registration number may be identified in the Operating System table as the Product Id.

Product information

Safe operation

⚠ **WARNING:** To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup and proper posture, health, and work habits for computer users. The *Safety & Comfort Guide* also provides important electrical and mechanical safety information. The *Safety & Comfort Guide* is available on the Web at http://www.hp.com/ergo.

⚠ **WARNING:** To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

For more safety and regulatory information, and for battery disposal information, refer to "Regulatory, safety, and environmental notices" section in this chapter.

Important display information

All HP notebook display panels adhere to strict quality and reliability specifications. A small percentage of display panels may have minor cosmetic imperfections that appear as bright or dark dots (described below) in the viewable area:

✎ This is consistent with industry standards and common to all display panel types used by notebook PC vendors and is not specific to any HP model or product line.

■ A pixel consists of 1 red, 1 green, and 1 blue subpixel, each of which is commonly referred to as a dot.

■ A pixel imperfection may manifest as either always turned on (a bright spot on a dark background) or as always off (a dark spot on a bright background).

■ A subpixel imperfection is less visible than a whole pixel imperfection, because it is small and may be visible only on a specific background.

HP expects that, over time, the industry will continue to improve its ability to produce displays with fewer cosmetic imperfections, and HP will adjust guidelines as improvements are made.

For more information about the display panel on your notebook PC, go to the HP Web site: http://www.hp.com/support.

Regulatory, safety, and environmental notices

Regulatory notices

This section provides country- and region-specific non-wireless and wireless regulatory notices and compliance information for the computer product. Some of these notices may not apply to your product.

One or more integrated wireless devices may be installed. In some environments, the use of wireless devices may be restricted. Such restrictions may apply on-board airplanes, in hospitals, near explosives, in hazardous locations, and so on. If you are uncertain of the policy that applies to the use of this product, ask for authorization to use it before you turn it on.

To identify a hardware device, such as a wireless LAN (WLAN) network device, installed on the computer, follow these steps:

» Click **Start**, and then click **HP System Information**.

Regulatory markings for your country may be located on the bottom of the product, under the battery, under a user-removable door (or some other user-accessible location), or on the wireless or modem module.

Federal Communications Commission notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

■ Reorient or relocate the receiving antenna.

■ Increase the separation between the equipment and receiver.

■ Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

■ Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by HP may void the user's authority to operate the equipment.

Cables

To maintain compliance with FCC Rules and Regulations, connections to this device must be made with shielded cables having metallic RFI/EMI connector hoods.

Declaration of Conformity for products marked with the FCC logo (United States only)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 2 conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

If you have questions about the product that are not related to this declaration, write to

Hewlett-Packard Company
P. O. Box 692000, Mail Stop 530113
Houston, TX 77269-2000

For questions regarding this FCC declaration, write to

Hewlett-Packard Company
P. O. Box 692000, Mail Stop 510101
Houston, TX 77269-2000

or call HP at 281-514-3333

To identify your product, refer to the part, series, or model number located on the product.

Products with wireless LAN devices or HP Broadband Wireless Modules

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

⚠ **WARNING:** Exposure to Radio Frequency Radiation The radiated output power of this device is below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact is minimized during normal operation of tablet PCs and notebooks.

During normal operation of tablet PCs: To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antennae should not be less than 2.5 cm (1 inch). To identify the location of the wireless antennae, refer to the Tablet PC Tour user guide included with the computer.

During normal operation of notebooks: To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antennae should not be less than 20 cm (8 inches), including when the computer display is closed. To identify the location of the wireless antennae, refer to the Notebook Tour section of the references guides that are located on the HP Web site.

⚠ **CAUTION:** When using IEEE 802.11a wireless LAN, this product is restricted to indoor use, due to its operation in the 5.15- to 5.25-GHz frequency range. The FCC requires this product to be used indoors for the frequency range of 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to cochannel mobile satellite systems. High-power radar is allocated as the primary user of the 5.25- to 5.35- GHz and 5.65- to 5.85-GHz bands. These radar stations can cause interference with and/or damage to this device.

Brazilian notice

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.

Este equipamento atende aos limites de Taxa de Absorção Específica referente à exposição a campos elétricos, magnéticos e eletromagnéticos de radiofreqüências adotados pela ANATEL.

Unless the computer has an Intel® PRO/Wireless 2100 Wireless LAN radio or an Intel PRO/Wireless 2200 Wireless LAN radio, the Brazilian certification mark is located on the bottom of the computer.

Wireless LAN certification markings

The Intel PRO/Wireless 2100 Wireless LAN has the certification mark below:

The Intel PRO/Wireless 2200 Wireless LAN has the certification mark below:

Canadian notices

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Wireless operation is subject to 2 conditions. The first is that the wireless device may not cause interference. The second is that the wireless device must accept any interference, including interference that may cause undesired operation of the device.

⚠ **CAUTION:** When using IEEE 802.11a wireless LAN, this product is restricted to indoor use, due to its operation in the 5.15- to 5.25-GHz frequency range. Industry Canada requires this product to be used indoors for the frequency range of 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel mobile satellite systems. High-power radar is allocated as the primary user of the 5.25-to 5.35-GHz and 5.65- to 5.85-GHz bands. These radar stations can cause interference with and/or damage to this device.

The antennae for this device are not replaceable. Any attempt at user access will damage your computer.

For radio devices in the 5250- to 5350-MHz and 5470- to 5725-MHz bands, the maximum gain as specified by the Canadian e.i.r.p. limit is noted below:

■ Broadcom 802.11a/b/g WLAN = 5.6 dBi

■ Broadcom 4321AG 802.11a/b/g/draft-n Wi-Fi Adapter = 5.6 dBi
■ Intel PRO/Wireless 3945ABG = 6 dBi
■ Intel Wireless WiFi Link 4965AG = 6 dBi
■ Intel Wireless WiFi Link 4965AGN = 6 dBi

For radio devices in the 5725- to 5825-MHz band, the maximum gain permitted, as specified by the Canadian e.i.r.p. limits for point-to-point and non-point-to-point operation, is noted below:

■ Broadcom 802.11a/b/g WLAN = 5.8 dBi
■ Broadcom 4321AG 802.11a/b/g/draft-n Wi-Fi Adapter = 5.8 dBi
■ Intel PRO/Wireless 3945ABG = 6 dBi
■ Intel Wireless WiFi Link 4965AG = 6 dBi
■ Intel Wireless WiFi Link 4965AGN = 6 dBi

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Products with 2.4-GHz wireless LAN devices

France

L'utilisation de cet equipement (2.4GHz Wireless LAN) est soumise a certaines restrictions: Cet equipement peut être utilisé a l'interieur d'un batiment en utilisant toutes les frequences de 2400 a 2483.5MHz (Chaîne 1-13). Pour une utilisation en environement exterieur, les frequences comprises entre 2400-2454 MHz (Chaîne 1-9) peuvent être utilisé. Pour les dernieres restrictions, voir http://www.arcep.fr.

For 2.4 GHz Wireless LAN operation of this product certain restrictions apply: This product may be used indoor for the entire 2400-2483.5 MHz frequency band (channels 1-13). For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see http://www.arcep.fr/.

Italy

E'necessaria una concessione ministeriale anche per l'uso del prodotto. Verifici per favore con il proprio distributore o direttamente presso la Direzione Generale Pianificazione e Gestione Frequenze.

License required for use. Verify with your dealer or directly with the General Direction for Frequency Planning and Management (Direzione Generale Pianificazione e Gestione Frequenze).

Products with 5-GHz wireless LAN devices

Frequency availability for 802.11a or 802.11h wireless LAN is not currently harmonized throughout the European Union. For compliance requirements, users should verify compliance with their supplier, local HP office, or telecommunications authority.

Products with HP Broadband Wireless Modules

THIS DEVICE MEETS INTERNATIONAL GUIDELINES FOR EXPOSURE TO RADIO FREQUENCY RADIATION.

The HP Broadband Wireless Module in your notebook is a radio transmitter and receiver. The device is designed not to exceed the limits for exposure to radio frequency (RF) recommended by international guidelines (ICNIRP). These limits are part of comprehensive guidelines that establish permitted levels of RF radiation for the general population. The guidelines were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The device also meets the European R&TTE directives, including the protection of the health and the safety of the user and any other person.

The exposure standard for mobile devices employs a unit of measurement known as the Specific Absorption Rate (SAR).* The SAR was obtained by testing the device at standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. The SAR information for your computer, including the recommended minimum distance from the body, is available on the HP Web site at http://www.hp.com/broadbandwireless. The actual SAR of the device while operating can be well below the maximum value, because the device operates at multiple power levels and uses only the power required to reach the network.

When installed in the notebook computer, this device meets RF exposure guidelines when the antennae are positioned at a minimum distance from the body. In order to transmit data or messages, this device requires a quality connection to the network. In some cases, transmission of data or messages may be delayed until such a connection becomes available. Be sure that the recommended distance is observed until the transmission is complete.

*The non-FCC, international guidelines state that the SAR limit for mobile devices used by the public is 2.0 watts/kilogram (W/kg) averaged over 10 grams of body tissue. The guidelines incorporate a substantial margin of safety to give additional protection for the public and to account for any variations in measurements. SAR values may vary depending on national reporting requirements and the network band.

Ergonomics notice

Germany

Mobile computers bearing the "GS" approval mark meet the ergonomic requirements and are suitable only for short time use of VDU tasks. When a mobile computer is used for display work tasks where the VDU Directive 90/270/EEC is applicable, an adequate external keyboard is required. Depending on the application and task, an adequate external monitor may also be necessary to attain working conditions comparable to a workstation setup.

Mobile Computer, welche das "GS" Zeichen tragen, entsprechen den ergonomischen Anforderungen und sind nur für kurzzeitige Benutzung von Bildschirmarbeitsaufgaben geeignet. Wird ein mobiler Computer für Bildschirmarbeitsaufgaben verwendet, wo die Richtlinie 90/270/EEG (Bildschirmarbeitsrichtlinie) anzuwenden ist, wird eine geeignete externe Tastatur notwendig. Abhängig von der Anwendung und der Aufgabe kann ein geeigneter externer Monitor erforderlich sein, um vergleichbare Arbeitsbedingungen zu einem stationären Arbeitsplatz zu erreichen.

Indian notice

The India Telegraph Act of 1885 requires that an IEEE 802.11a wireless LAN end user obtain a license. To obtain this license, please contact The Wireless Planning & Coordination Wing, Ministry of Communications, Sanchar Ghavan New Delhi.

Japanese notices

　この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
　取扱説明書に従って正しい取り扱いをして下さい。

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1　この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局が運用されていないことを確認して下さい。
2　万一、この機器から移動体識別用の構内無線局に対して電波干渉の事例が発生した場合には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混信回避のための処置等（例えば、パーティションの設置など）についてご相談して下さい。
3　その他、この機器から移動体識別用の特定小電力無線局に対して電波干渉の事例が発生した場合など何かお困りのことが起きたときは、次の連絡先へお問い合わせ下さい。

連絡先：日本ヒューレット・パッカード株式会社　ＴＥＬ：０１２０－０１４１２１

5 GHz帯を使用する特定無線設備（802.11a相当）は屋内使用に限られています。この機器を屋外で使用することは電波法で禁じられています。

Wireless LAN 802.11b devices

Wireless LAN 802.11g devices

Wireless LAN certification markings

The Intel PRO/Wireless 2200b/g Wireless LAN has the certification mark below:

003NY03120 1020
003GZ03071 1020

The Intel PRO/Wireless 2915a/b/g Wireless LAN has the certification mark below:

003NY04086 0213
003WY04016 0214

The Intel PRO/Wireless 3945a/b/g Wireless LAN has the certification mark below:

003NY05120 0201
003WY05061 0202

The Intel Wireless WiFi Link 4965AG has the certification mark below:

003NY06153 0207
003WY06057 0207

The Intel Wireless WiFi Link 4965AGN has the certification mark below:

003NY06153 0206
003WY06057 0206

The Broadcom 802.11b/g Wireless LAN has the certification mark below:

003NY04088 0000
003GZ04045 0000

The Broadcom 4311BG 802.11b/g Wireless LAN has the certification mark below:

003NY05086 0000
003GZ05033 0000

The Broadcom 4311AG 802.11a/b/g Wireless LAN has the certification mark below:

003NY05100 0000
003GZ05039 0000
003WY05043 0000

The Broadcom 802.11a/b/g Wireless LAN has the certification mark below:

003NY04093 0000
003GZ04050 0000
003WY04019 0101

The Broadcom 802.11b/g Wireless LAN with Broadrange has the certification mark below:

003NY05004 0000
003GZ05005 0000

The Broadcom 802.11a/b/g Wireless LAN with Broadrange has the certification mark below:

003NY05029 0000
003GZ05017 0000
003WY05010 0101

The Atheros 2425BG 802.11b/g WiFi Adapter has the certification mark below:

003NY06131 0000
003GZ06036 0000

The Broadcom 4321AG 802.11a/b/g/draft-n Wi-Fi Adapter has the certification mark below:

003NY06105 1004
003GZ06032 1004
003WY06041 1004

The Broadcom 802.11b/g WLAN has the certification mark below:

003WW07020 0000
003GZ07029 0000

Wireless WAN certification markings

The HP hs2300 HSDPA Broadband Wireless Module has the certification mark below:

005MWAA 0025

Bluetooth devices

2 . 4 F H 1

Certification markings for Bluetooth devices

The HP integrated module with Bluetooth 2.0 has the certification mark below:

003NY05048 0000

Korean notice

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서
주거지역에서는 물론 모든지역에서 사용할 수 있습니다.

Singaporean wireless notice

Turn off any WWAN devices while you are onboard aircraft. The use of these devices onboard aircraft is illegal, may be dangerous to the operation of the aircraft, and may disrupt the cellular network. Failure to observe this instruction may lead to suspension or denial of cellular services to the offender, or legal action, or both.

Users are reminded to restrict the use of radio equipment in fuel depots, chemical plants, and where blasting operations are in progress.

As with other mobile radio transmitting equipment, users are advised that for satisfactory operation of the equipment and for the safety of personnel, no part of the human body should be allowed to come too close to the antenna during operation of the equipment.

This device has been designed to comply with applicable requirements for exposure to radio waves, based on scientific guidelines that include margins intended to assure the safety of all people, regardless of health and age. These radio wave exposure guidelines employ a unit of measurement known as the specific absorption rate (SAR). Tests for SAR are conducted using standardized methods, with the phone transmitting at its highest certified power level in all used frequency bands. The SAR data information is based on CENELEC's standards EN50360 and EN50361, which use the limit of 2 watts per kilogram, averaged over 10 grams of tissue.

Taiwan notice

低功率電波輻射性電機管理辦法

第十四條 經型式認證合格之低功率射頻電機，非經許可，公司、
商號或使用者均不得擅自變更頻率、加大功率或變更原
設計之特性及功能。
第十七條 低功率射頻電機之使用不得影響飛航安全及干擾合法通
信；經發現有干擾現象時，應立即停用，並改善至無干
擾時方得繼續使用。
前項合法通信，指依電信規定作業之無線電信。低功率
射頻電機須忍受合法通信或工業、科學及醫療用電波輻
射性電機設備之干擾。

Airline travel notice

Use of electronic equipment onboard commercial aircraft is at the discretion of the airline.

Battery notices

⚠ **CAUTION:** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

For information about removing a battery, refer to the user guide included with the product.

ENERGY STAR compliance

HP computers marked with the ENERGY STAR® logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR specifications for computers. The EPA ENERGY STAR logo does not imply endorsement by the EPA. As an ENERGY STAR Partner, Hewlett-Packard Company has determined that the products marked with the ENERGY STAR logo are ENERGY STAR qualified as per the applicable ENERGY STAR guidelines for energy efficiency. The following logo will appear on all ENERGY STAR qualified computers:

The ENERGY STAR program for computers was created by the EPA to promote energy efficiency and reduce air pollution through more energy-efficient equipment in homes, offices, and factories. One way that products achieve this goal is by using the Microsoft Windows power management feature to reduce power consumption when the product is not in use.

The power management feature allows the computer to initiate a low-power or Standby mode after a period of user inactivity. When used with an external ENERGY STAR qualified monitor, this feature also supports similar power management features of the monitor. To take advantage of these potential energy savings, the power management feature has been preset to behave in the following ways when the system is operating on AC power:

■ Turn off the display after 15 minutes
■ Initiate Standby after 30 minutes

The computer exits Standby when the power/Standby button is pressed. When the Wake On LAN (WOL) feature is enabled, the computer can also exit Standby in response to a network signal.

Additional information on the potential energy and financial savings of the power management feature can be found on the EPA ENERGY STAR Power Management Web site at http://www.energystar.gov/powermanagement.

Additional information on the ENERGY STAR program and its environmental benefits are available on the EPA ENERGY STAR Web site at http://www.energystar.gov.

Laser compliance

This product may be provided with a device containing a laser that is classified as a Class 1 Laser Product in accordance with US FDA regulations and the IEC 60825-1. The product does not emit hazardous laser radiation.

Each laser product complies with 21 CFR 1040.10 and 1040.11, except for deviations pursuant to Laser Notice No. 50, dated May 27, 2001; and with IEC 60825-1:1993/A2:2001.

⚠ **WARNING:** Use of controls or adjustments, or performance of procedures other than those specified in the laser product installation guide, may result in hazardous radiation exposure. To reduce the risk of exposure to hazardous radiation:

■ Do not try to open the module enclosure. There are no user-serviceable components inside.

■ Do not operate controls, make adjustments, or perform procedures to the laser device other than those specified in the laser product installation guide.

■ Allow only authorized service providers to repair the unit.

Modem notices

⚠ **WARNING:** To reduce the risk of fire, electric shock, and injury to persons when using this device, always follow basic safety precautions, including the following:

■ Do not use this product near water—for example, near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.

■ Avoid using this product during an electrical storm. There is a remote risk of electric shock from lightning.

■ Do not use this product to report a gas leak while in the vicinity of the leak.

■ Always disconnect the modem cable before opening the equipment enclosure or touching an uninsulated modem cable, jack, or internal component.

■ If this product was not provided with a telephone line cord, use only 0.126 mm² (No. 26 AWG) or larger telecommunication line cord.

■ Do not plug a modem or telephone cable into the RJ-45 (network) jack.

SAVE THESE INSTRUCTIONS

Telecommunications device approvals

The telecommunications device in the computer is approved for connection to the telephone network in the countries and regions whose approval markings are indicated on the product label located on the bottom of the computer or on the modem.

Refer to the user guide included with the product to ensure that the product is configured for the country or region in which the product is located. Selecting a country or region other than the one in which it is located may cause the modem to be configured in a way that violates the telecommunication regulations/laws of that country or region. In addition, the modem may not function properly if the correct country or region selection is not made. If, when you select a country or region, a message appears that states that the country or region is not supported, this means that the modem has not been approved for use in this country or region and thus should not be used.

U.S. modem statements

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by the ACTA. On the bottom of the computer or on the modem is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. Provide this information to the telephone company if you are requested to do so.

Applicable certification jack USOC = RJ11C. A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all locations, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If this HP equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But, if advance notice isn't practical, the telephone company will notify you as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes to its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted telephone service.

If trouble is experienced with this equipment, call technical support. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved. You should perform repairs only to the equipment specifically discussed in the "Troubleshooting" section of the user guide, if one is provided.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission, or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure that the installation of this HP equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including a fax machine, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page, or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or other individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges).

In order to program this information into your fax machine, you should complete the steps outlined in the faxing software instructions.

U.S. modem declarations

Refer to the following modem vendor declarations for the modem device installed in your computer:
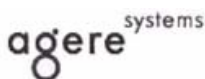
agere systems

Brad Grande
Technical Manager

1110 American Parkway NE
Lehigh Valley Central Campus
Allentown, PA 18109
Phone: 610-712-7853
bgrande@agere.com

Supplier's Declaration of Conformity

Reference Number: AthensAM2
Place of Issue: Allentown, PA, USA
Date of Issue: 5th October 2004

Agere Systems Inc. at 1110 American Parkway NE, Lehigh Valley Central Campus, Allentown, PA 18109 in the United States of America, hereby certifies that the Stryker Modem, bearing labelling identification number **US: AGSMD01BATHENS** complies with the Federal Communications Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA")-adopted technical criteria TIA/EIA/IS-968, Telecommunications – Telephone Terminal Equipment –Technical Requirements for Connection of Terminal Equipment To the Telephone Network, July 2001.

Brad Grand
Technical Manager

CONEXANT SYSTEMS, INC
4000 MacArthur Blvd.
Newport Beach, CA 92660

Supplier's Declaration of Conformity

Reference Number: _____ (Optional)
Place of Issue: NEWPORT BEACH, CA
Date of Issue: November 1, 2005

Conexant Systems, Inc. located at **4000 MacArthur Blvd, Newport Beach, CA 92660,** in the United States of America hereby certifies that the **Conexant RD02-D450 Data/Fax Modem** bearing labeling identification number **US: CXSMM01BRD02D450** complies with the Federal Communications Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA")-adopted technical criteria TIA-968-A-3, Telecommunications – Telephone Terminal Equipment –Technical Requirements for Connection of Terminal Equipment To the Telephone Network, February 2005.

By: *Jordan Wilcox*   Mr. Jordan Wilcox
       Signature   Printed Name

Responsible Party (Company Name): **CONEXANT SYSTEMS INC.**

Motorola Inc
Access Solutions Business Unit, GSG
1303 E. Algonquin Road
9th. Floor
Schaumburg, IL 60196
USA
+1 847-576-5000

Supplier's Declaration of Conformity

Reference Number: ML3080
Place of Issue: Schaumburg, IL,USA
Date of Issue: 5th October 2005

Motorola. at Access Solutions Business Unit, GSG, 1303 E. Algonquin Road, 9th. Floor, Schaumburg, IL 60196, in the United States of America, hereby certifies that the ML3054 Modem, bearing labelling identification number **US: S56MD01B13080** complies with the Federal Communications Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA")-adopted technical criteria TIA/EIA/IS-968-A-3, Telecommunications – Telephone Terminal Equipment –Technical Requirements for Connection of Terminal Equipment To the Telephone Network, July 2001.

Ankur Sood
Product Manager
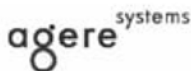
agere systems

Brad Grande
Technical Manager

1110 American Parkway NE
Lehigh Valley Central Campus
Allentown, PA 18109
Phone: 610-712-7853
bgrande@agere.com

Supplier's Declaration of Conformity

Reference Number: Delphi D40
Place of Issue: Allentown, PA, USA
Date of Issue: 21st July 2005

Agere Systems Inc. at 1110 American Parkway NE, Lehigh Valley Central Campus, Allentown, PA 18109
in the United States of America, hereby certifies that the Delphi Modem, bearing labelling
identification number **US: AGSMD01BDELPHI** complies with the Federal Communications
Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on
Terminal Attachments ("ACTA")-adopted technical criteria TIA/EIA/IS-968-A-3, Telecommunications –
Telephone Terminal Equipment –Technical Requirements for Connection of Terminal Equipment
To the Telephone Network.

Brad Grand
Technical Manager

⟨⟨⟨ CONEXANT

CONEXANT SYSTEMS, INC.
4000 MacArthur Blvd.
Newport Beach, CA 92660

Supplier's Declaration of Conformity

Reference Number: _____ (Optional)
Place of Issue: NEWPORT BEACH, CA
Date of Issue: October 3, 2005

Conexant Systems, Inc. located at **4000 MacArthur Blvd, Newport Beach, CA 92660** in the United States of America hereby certifies that the Conexant RD02-D330 Data/Fax MDC Modem bearing labeling identification number *US: CXSMM01BRD02D330* complies with the Federal Communications' Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA")-adopted technical criteria TIA-968-A-3, Telecommunications – Telephone Terminal Equipment –Technical Requirements for Connection of Terminal Equipment To the Telephone Network, February 2005.

By: _____   Ms. Mariana Garzon
      Signature   Printed Name

Responsible Party (Company Name): **CONEXANT SYSTEMS INC.**

⟨⟨⟨ CONEXANT™

CONEXANT SYSTEMS, INC
4311 Jamboree Road
Newport Beach, CA 92660

Supplier's Declaration of Conformity

Reference Number: _____ (Optional)
Place of Issue: NEWPORT BEACH, CA
Date of Issue: 11/24/2003

Conexant Systems, Inc. located at **4311 JAMBOREE ROAD NEWPORT BEACH, CA 92660, USA** in the United States of America hereby certifies that the Conexant RD02-D110 Data/Fax MDC Modem bearing labeling identification number *US: CXSMM01BRD02D110* complies with the Federal Communications Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA")-adopted technical criteria TIA-968-A, Telecommunications – Telephone Terminal Equipment – Technical Requirements for Connection of Terminal Equipment To the Telephone Network, October 2002.

By: _____   Mr. Jordan Wilcox
      Signature   Printed Name

Responsible Party (Company Name): **CONEXANT SYSTEMS INC.**

agere systems
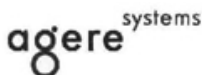
Brad Grande
Technical Manager

1110 American Parkway NE
Lehigh Valley Central Campus
Allentown, PA 18109
Phone: 610-712-7853
bgrande@agere.com

Supplier's Declaration of Conformity

Reference Number: Delphi D40 (revision AM5)
Place of Issue: Allentown, PA, USA
Date of Issue: 30th November 2006

Agere Systems Inc. at 1110 American Parkway NE, Lehigh Valley Central Campus, Allentown, PA 18109 in the United States of America, hereby certifies that the Modem, bearing labelling identification number US: AGSMD01BDELPHI complies with the Federal Communications Commission's ("FCC") Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments ("ACTA")-adopted technical criteria TIA/EIA/IS-968, 968-A, 968-A-1, 968-A-2 and 968-A-3 Telecommunications – Telephone Terminal Equipment –Technical Requirements for Connection of Terminal Equipment To the Telephone Network.

Brad Grand
Technical Manager

Canadian modem statements

This equipment meets the applicable Industry Canada technical specifications.

The Ringer Equivalence Number, REN, is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices, subject only to the requirement that the sum of the RENs of all devices does not exceed 5. The REN for this terminal equipment is 1.0.

Japanese modem statements

If the computer does not have the Japanese certification mark on the bottom of the computer, refer to the appropriate certification marking below.

The Japanese certification mark for the Agere Systems AC'97 modem is below:

The Japanese certification mark for the HDAUDIO Soft Data Fax Modem with SmartCP is below:

The Japanese certification mark for the Agere Systems HDA modem is below:

The Japanese certification mark for the HDAUDIO Soft Data Fax Modem with SmartCP is below:

The Japanese certification mark for the V.92 56K Data/Fax Modem is below:

The Japanese certification mark for the V.92 56K Data/Fax Modem is below:

A05-5016201

The Japanese certification mark for the V.92 56K Data/Fax Modem is below:

A06-5003201

New Zealand modem statements

The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

This equipment is not capable, under all operating conditions, of correct operation at the higher speeds for which it is designed. Telecom will accept no responsibility should difficulties arise in such circumstances.

If this device is equipped with pulse dialing, note that there is no guarantee that Telecom lines will always continue to support pulse dialing.

Use of pulse dialing, when this equipment is connected to the same line as other equipment, may give rise to bell tinkle or noise and may also cause a false answer condition. Should such problems occur, the user should not contact the Telecom Faults Service.

Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specifications:

1. There shall be no more than 10 call attempts to the same number within any 30-minute period for any single manual call initiation.
2. The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next attempt.

3. Where automatic calls are made to different numbers, the equipment shall be set to go on-hook for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.

4. The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing (So set between 2 and 10).

Voice support

All persons using this device for recording telephone conversations shall comply with New Zealand law. This requires that at least one party to the conversation is aware that it is being recorded. In addition, the Principles enumerated in the Privacy Act 1993 shall be complied with in respect to the nature of the personal information collected, the purpose for its collection, how it is to be used, and what is disclosed to any other party.

This equipment shall not be set to make automatic calls to the Telecom '111' Emergency Service.

Power cord notices

If you were not provided with a power cord for the computer or for an external power accessory intended for use with the computer, you should purchase a power cord that is approved for use in your country or region.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product. In addition, the diameter of the wire must be a minimum of 0.75 mm²/18AWG, and the length of the cord must be between 1.5 m (5 ft) and 2 m (6½ ft). If you have questions about the type of power cord to use, contact your authorized service provider.

A power cord should be routed so that it is not likely to be walked on or pinched by items placed upon it or against it. Particular attention should be paid to the plug, electrical outlet, and the point where the cord exits from the product.

Japanese power cord notice

製品には、同梱された電源コードをお使い下さい。
同梱された電源コードは、他の製品では使用出来ません。

Macrovision Corporation notice

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation and is intended for home and other limited viewing uses only, unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Safety notices

Heat-related safety warning notice

⚠️ **WARNING:** To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

Battery notices

⚠️ **WARNING:** To reduce the risk of fire or burns, do not disassemble, crush, or puncture a battery; short the external contacts on a battery; or dispose of a battery in fire or water. Do not expose a battery to temperatures above 60°C (140°F).

⚠️ **WARNING:** Keep the battery away from children.

⚠️ **WARNING:** To reduce potential safety issues, only the battery provided with the computer, a replacement battery provided by HP, or a compatible battery purchased as an accessory from HP should be used with the computer.

Headset and earphone volume level notice

⚠ **WARNING:** Listening to music at high volume levels and for extended durations can damage one's hearing. To reduce the risk of hearing damage, lower the volume to a safe, comfortable level and reduce the amount of time listening at high levels.
For your own safety, before using headsets or earphones, always reset the volume. Some headphones are louder than other headphones, even if the volume control setting is the same.

Changing the default audio or equalizer settings might lead to higher volume and should only be done with caution.

For your own safety, headsets or earphones used with this product should comply with the headphone limits in EN 50332-2.

If the computer includes a headset or earphones, this combination is in compliance to EN 50332-1.

Power cord notices

⚠ **WARNING:** To reduce the risk of electric shock or damage to the equipment:
■ Plug the power cord into an AC outlet that is easily accessible at all times.
■ Disconnect power from the computer by unplugging the power cord from the AC outlet (not by unplugging the power cord from the computer).
■ If provided with a 3-pin attachment plug on the power cord, plug the cord into a grounded (earthed) 3-pin outlet. Do not disable the power cord grounding pin, for example, by attaching a 2-pin adapter. The grounding pin is an important safety feature.

⚠ **WARNING:** To reduce potential safety issues, only the AC adapter provided with the computer, a replacement AC adapter provided by HP, or an AC adapter purchased as an accessory from HP should be used with the computer.

Cleaning the keyboard

⚠ **WARNING:** To reduce the risk of electric shock or damage to internal components, do not use a vacuum cleaner attachment to clean the keyboard. A vacuum cleaner can deposit household debris on the keyboard surface. Clean the keyboard regularly to prevent keys from sticking and to remove dust, lint, and particles that can become trapped beneath the keys. A can of compressed air with a straw extension can be used to blow air around and under the keys to loosen and remove debris.

Travel notice

⚠ **WARNING:** To reduce the risk of electric shock, fire, or damage to the equipment, do not attempt to power the computer with a voltage converter kit sold for appliances.

Norway and Sweden: Cable grounding notice for products with a TV tuner

⚠ **CAUTION:** To reduce potential safety issues, use a galvanic isolator when connecting to a cable distribution system.

Environmental notices

This section provides country- and region-specific environmental notices and compliance information. Some of these notices may not apply to your product.

Battery disposal

⚠ **WARNING:** When a battery has reached the end of its useful life, do not dispose of the battery in general household waste. Follow the local laws and regulations in your area for computer battery disposal.

Electronic hardware and battery recycling

HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, see the HP Web site at http://www.hp.com/recycle.

Disposal of waste equipment by users in private households in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

Chinese material content declarations

The Table of Toxic and Hazardous Substances/Elements and their Content As required by China's Management Methods for Controlling Pollution by Electronic Information Products.

Toxic and Hazardous Substances and Elements					
Part Name	**Lead (Pb)**	**Mercury (Hg)**	**Cadmium (Cd)**	**Hexavalent Chromium (Cr(VI))**	**Polybrominated biphenyls (PBB)**	**Polybrominated diphenyl ethers (PBDE)**
Battery	X	O	O	O	O	O
Cables	X	O	O	O	O	O
Camera	X	O	O	O	O	O
Chassis/ Other	X	O	O	O	O	O
Flash memory card reader	X	O	O	O	O	O
Floppy disk drive	X	O	O	O	O	O

	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated	Polybrominated diphenyl ethers
Part Name					**biphenyls (PBB)**	**(PBDE)**
Hard disk drive	X	O	O	O	O	O
Headphones	X	O	O	O	O	O
I/O PCAs	X	O	O	O	O	O
Keyboard	X	O	O	O	O	O
Liquid crystal display (LCD) panel	X	X	O	O	O	O
Media (CD/DVD/floppy)	X	O	O	O	O	O
Memory	X	O	O	O	O	O
Motherboard, processor, heat sinks	X	O	O	O	O	O
Mouse	X	O	O	O	O	O
Optical disk drive	X	O	O	O	O	O
Optional docking device	X	O	O	O	O	O
Power adapter	X	O	O	O	O	O
Power supply	X	O	O	O	O	O
Remote control	X	O	O	O	O	O
Smart card/Java^{TM} card reader	X	O	O	O	O	O
Speakers, external	X	O	O	O	O	O
TV tuner	X	O	O	O	O	O
USB flash memory drive	X	O	O	O	O	O
USB flash memory drive/USB hub	X	O	O	O	O	O
Web camera	X	O	O	O	O	O
Wireless receiver	X	O	O	O	O	O

The table title: **Toxic and Hazardous Substances and Elements *(Continued)***

Toxic and Hazardous Substances and Elements *(Continued)*					
Part Name	**Lead (Pb)**	**Mercury (Hg)**	**Cadmium (Cd)**	**Hexavalent Chromium (Cr(VI))**	**Polybrominated biphenyls (PBB)**	**Polybrominated diphenyl ethers (PBDE)**
Wireless cards	X	O	O	O	O	O

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.

All parts named in this table with an X are in compliance with the European Union's RoHS Legislation "Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment."

✎ The referenced Environmental Protection Use Period Marking was determined according to normal operating use conditions of the product such as temperature and humidity.

Japanese material content declaration

A Japanese regulatory requirement, defined by specification JIS C 0950, 2005, mandates that manufacturers provide material content declarations for certain categories of electronic products offered for sale after July 1, 2006. To view the JIS C 0950 material declaration for this product, see the HP Web site at http://www.hp.com/go/jisc0950.

United States mercury disposal

This computer contains mercury in the fluorescent lamp of the computer display, which may require special handling when the computer has reached the end of its useful life. Because of environmental considerations, local authorities may regulate the disposal of the mercury.

For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance (EIA) at http://www.eiae.org.

Perchlorate material - special handling may apply

See http://www.dtsc.ca.gov/hazardouswaste/perchlorate.

This product's real-time clock battery or coin cell battery may contain perchlorate and may require special handling when recycled or disposed of in California.

Operating environment

The operating environment information in the following table may be helpful if you plan to use or transport the computer in extreme environments.

Factor	Metric	U.S.
Temperature		
Operating (reading to an optical disc)	0°C to 35°C	32°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (noncondensing)		
Operating	10% to 90%	10% to 90%
Nonoperating	5% to 95%	5% to 95%
Maximum altitude (unpressurized)		
Operating	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating	-15 m to 12,192 m	-50 ft to 40,000 ft

Rated input power

The power information in this section may be helpful if you plan to travel internationally with the computer.

The computer operates on DC power, which can be supplied by an AC or a DC power source. Although the computer can be powered from a standalone DC power source, it should be powered only with an AC adapter or a DC power source supplied and approved by HP for use with this computer.

The computer is capable of accepting DC power within the following specifications.

Input power	Rating
Operating voltage	18.5 V dc @ 3.50 A - 65 W
Operating current	3.50 A

This product is designed for IT power systems in Norway with phase-to-phase voltage not exceeding 240 V rms.

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