

TOSHIBA

Portégé® M200/M205 Resource Guide

NOTE Keep this guide in a convenient place to access important information about your computer.

If you need assistance:

- ❖ Toshiba Global Support Centre
Calling within the United States (800) 457-7777
Calling from outside the United States (949) 859-4273

Please fill in for your reference and future use:

Model name_____

Part number_____

Serial number_____

⚠ WARNING

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

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Regulatory information

Model: Portégé® M200/M205

ReWritable CD/DVD Drives

The computer system you purchased may include a ReWritable CD and/or DVD drive(s), among the most advanced data storage technologies available. As with any new technology, you must read and follow all set-up and usage instructions in the applicable user guides and/or manuals enclosed. If you fail to do so, this product may not function properly and you may lose data or suffer other damage.

TOSHIBA AMERICA INFORMATION SYSTEMS ("TOSHIBA"), ITS AFFILIATES AND SUPPLIERS DO NOT WARRANT THAT OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR FREE. YOU AGREE THAT TOSHIBA, ITS AFFILIATES AND SUPPLIERS SHALL HAVE NO RESPONSIBILITY FOR DAMAGE TO OR LOSS OF ANY BUSINESS, PROFITS, PROGRAMS, DATA OR REMOVABLE STORAGE MEDIA ARISING OUT OF OR RESULTING FROM THE USE OF THE PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

Protection of Stored Data

For your important data, please make periodic back-up copies of all the data stored on the hard disk or other storage devices as a precaution against possible failures, alteration, or loss of the data.

IF YOUR DATA IS ALTERED OR LOST DUE TO ANY TROUBLE, FAILURE OR MALFUNCTION OF THE HARD DISK DRIVE OR OTHER STORAGE DEVICES AND THE DATA CANNOT BE RECOVERED, TOSHIBA SHALL NOT BE LIABLE FOR ANY DAMAGE OR LOSS OF DATA, OR ANY OTHER DAMAGE RESULTING THEREFROM. WHEN COPYING OR TRANSFERRING YOUR DATA, PLEASE BE SURE TO CONFIRM WHETHER THE DATA HAS BEEN SUCCESSFULLY COPIED OR TRANSFERRED. TOSHIBA DISCLAIMS ANY LIABILITY FOR THE FAILURE TO COPY OR TRANSFER THE DATA CORRECTLY.

Critical Applications

The computer you have purchased is not designed for any "critical applications." "Critical applications" means life support systems, medical applications, connections to implanted medical devices, commercial transportation, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage.

ACCORDINGLY, TOSHIBA, ITS AFFILIATES AND SUPPLIERS DISCLAIM ANY AND ALL LIABILITY ARISING OUT OF THE USE OF THE COMPUTER PRODUCTS IN ANY CRITICAL APPLICATIONS. IF YOU USE THE COMPUTER PRODUCTS IN A CRITICAL APPLICATION, YOU, AND NOT TOSHIBA, ASSUME FULL RESPONSIBILITY FOR SUCH USE.

FCC Notice "Declaration of Conformity Information"

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, it 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/TV technician for help.
-

NOTE

Only Peripherals complying with the FCC Class B limits may be attached to this equipment. Operation with noncompliant peripherals or peripherals not recommended by Toshiba is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices and the computer's parallel port, monitor port, USB port, PS/2 port®, i.LINK® port and microphone jack. Changes or modifications made to this equipment not expressly approved by Toshiba or parties authorized by Toshiba could void the user's authority to operate the equipment.

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

- ❖ This device may not cause harmful interference.
- ❖ This device must accept any interference received, including interference that may cause undesired operation.

Contact:

Toshiba America Information Systems, Inc.

9740 Irvine Blvd.

Irvine, CA 92618-1697

(949) 583-3000

Industry Canada requirement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conformé à la norme NMB-003 du Canada.

FCC requirements

The following information is pursuant to FCC CFR 47, Part 68 and refers to internal modems.

This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, the information must be provided to the telephone company.

The modem connects to the telephone line by means of a standard jack called the 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.

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 areas, 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 the ## 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.

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

Telephone Company Procedures

The goal of the telephone company is to provide you with the best service it can. In order to do this, it may occasionally be necessary for them to make changes in their equipment, operations or procedures. If these changes might affect your service or the operation of your equipment, the telephone company will give you notice, in writing, to allow you to make any changes necessary to maintain uninterrupted service.

If Problems Arise

If this 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 advanced notice is not practical, the telephone company will notify the customer 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.

If trouble is experienced with this equipment, for repair or limited warranty information, please contact Toshiba Corporation, Toshiba America Information Systems, Inc. or an authorized representative of Toshiba, or the Toshiba Support Centre within the United States at (800) 457-7777 or Outside the United States at (949) 859-4273. 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.

Disconnection

If you should ever decide to permanently disconnect your modem from its present line, please call the telephone company and let them know of this change.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including Fax machines, 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 or 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 transmission, refer to the fax software instructions installed on this computer.

Alarm Equipment

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this 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.

Instructions for IC CS-03 Certified Equipment

- 1 NOTICE:** The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

- 2 The user manual of analog equipment must contain the equipment's Ringer Equivalence Number (REN) and an explanation notice similar to the following:

The Ringer Equivalence Number (REN) of this device can be found on the label affixed to your computer.

NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals 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 Ringer Equivalence Numbers of all the devices does not exceed 5.

- 3 The standard connecting arrangement (telephone jack type) for this equipment is jack type(s): USOC RJ11C.

Wireless Interoperability

The TOSHIBA Wireless LAN Mini PCI Card products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS) radio technology, and is compliant to:

- ❖ The IEEE 802.11 Standard on Wireless LANs (Revision A/B), as defined and approved by the Institute of Electrical and Electronics Engineers.
- ❖ The Wireless Fidelity (Wi-Fi) certification as defined by the WECA Wireless Ethernet Compatibility Alliance.

CAUTION

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either one of your Bluetooth™ or Wireless LAN device.

Please contact Toshiba PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcbsupport.global.toshiba.com> in the United States for more information.

CAUTION

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.85 GHz frequency range.

Wireless LAN and your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- ❖ Using the Wireless LAN equipment on board of airplanes, or
- ❖ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

Regulatory Information

The TOSHIBA Wireless LAN Mini PCI Card must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This device complies with the following radio frequency and safety standards.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb. The RF device shall not be co-located with any other transmitter that has not been tested with this device.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériau (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC with essential test suites as per standards:

- ❖ EN 60950 Safety of Information Technology equipment
- ❖ ETS 300 328 Technical requirements for radio equipment
- ❖ ETS 300 826 General EMC requirements for radio equipment.

België/ Belgique:	<p>For outdoor usage only channel 10 (2457 MHz) and 11 (2462 MHz) is allowed.</p> <p>For private usage outside buildings across public grounds over less than 300m no special registration with IBPT/BIPT is required. Registration to IBPT/BIPT is required for private usage outside buildings across public grounds over more than 300m. An IBPT/BIPT license is required for public usage outside building. For registration and license please contact IBPT/BIPT.</p>
	Gebruik buiten gebouw alleen op kanalen 10 (2457 MHz) en 11 (2462 MHz). Voor privé gebruik buiten gebouw over publieke grond over afstand kleiner dan 300m geen registratie bij BIPT/IBPT nodig; voor gebruik over afstand groter dan 300m is wel registratie bij BIPT/IBPT nodig. Voor publiek gebruik buiten gebouwen is licentie van BIPT/IBPT verplicht. Voor registratie of licentie kunt u contact opnemen met BIPT.
	L'utilisation en extérieur est autorisé sur le canal 10 (2457 MHz) et 11 (2462 MHz). Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigungspflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
France:	Restricted frequency band: only channels 10 and 11 (2457 MHz and 2462 MHz respectively) may be used in France. License required for every installation, indoor and outdoor installations. Please contact ART for procedure to follow.

	Bande de fréquence restreinte: seuls les canaux 10 à 11 (2457 MHz et 2462 MHz respectivement) doivent être utilisés en France. Toute utilisation, qu'elle soit intérieure ou extérieure, est soumise à autorisation. Vous pouvez contacter l'Autorité de Régulation des Télécommunications (http://www.art-telecom.fr) pour la procédure à suivre.
Italia:	License required for indoor use. Use with outdoor installations not allowed.
	E' necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire. L'uso per installazione in esterni non e' permessa.
Nederland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure.

USA – Federal Communications Commission (FCC)

This device complies with Part 15 of FCC Rules. Operation of the devices in a Wireless LAN System is subject to the following two conditions:

- ❖ This device may not cause harmful interference.
- ❖ This device must accept any interference that may cause undesired operation.

TOSHIBA is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this TOSHIBA Wireless LAN Mini PCI Card, or the substitution or attachment of connecting cables and equipment other than specified by TOSHIBA.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Caution: Exposure to Radio Frequency Radiation

The Toshiba Wireless LAN Mini PCI Card will be installed with one of two types of antennas. The both of antenna types, when installed are located at the upper edge of the LCD screen.

For both antennas, the radiated output power of the TOSHIBA Wireless LAN Mini PCI Card is far below the FCC radio frequency exposure limits. Nevertheless, the TOSHIBA Wireless LAN Mini PCI Card shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Antenna(s) used in 5.15 GHz to 5.25 GHz frequency band must be integral antenna which provide no access to the end user.

Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

Caution: Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. FCC requires this product to be used indoors for frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

NOTE

The above Caution information applies to products that operate with an 802.11a device.

Taiwan

- Article 14 Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design.
- Article 17 Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.

Using this Equipment in Japan

In Japan, the frequency bandwidth of 2,400 MHz to 2,483.5 MHz for second generation low-power data communication systems such as this equipment overlaps that of mobile object identification systems (premises radio station and specified low-power radio station).

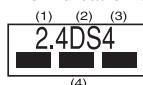
1. Sticker

Please put the following sticker on devices incorporating this product.

- In the frequency bandwidth of this equipment, industrial device, scientific device, medical device like microwave oven, licensed premises radio station and non-licensed specified low-power radio station for mobile object identification system (RF-ID) that is used in product line of factories,(Other Radio Stations) are used.
- 1 Please make sure before using this equipment that no Other Radio Stations are used in the neighborhood.
 - 2 In case that RF interference occurs to Other Radio Stations from this equipment, please change promptly the frequency for use, place to use, or stop emitting Radio.
 - 3 Please contact TOSHIBA Direct PC if you have a problem, such as interference from this equipment to Other Radio Stations

2. Indication

The indication shown below appears on this equipment.



- 1 2.4: This equipment uses a frequency of 2.4 GHz.
- 2 DS: This equipment uses DS-SS modulation.
- 3 The interference range of this equipment is less than 40m.
- 4 This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz.

It is possible to avoid the band of mobile object identification systems.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-13-1100

Direct Dial: 03-3457-5916

Fax: 03-5444-9450

Device Authorization

This device obtains the Technical Regulation Conformity Certification and the Technical Conditions Compliance Approval, and it belongs to the device class of radio equipment of low-power data communication system radio station stipulated in the Radio Law and the Telecommunications Business Law of Japan.

The Name of the radio equipment: MPC13A-20/R

JAPAN APPROVALS INSTITUTE FOR TELECOMMUNICATIONS EQUIPMENT

Approval Number: D01-1128JP

TELECOM ENGINEERING CENTER Approval Number: 03NY.A0018, 03GZDA0017

The following restrictions apply:

- ❖ Do not disassemble or modify the device.
- ❖ Do not install the embedded wireless module into other device.

Interference Statement

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. If not installed and used in accordance with the instructions, it 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 and correct the interference by one or more of the following measures:

- ❖ Reorient or relocate the receiving antenna.
- ❖ Increase the distance between the equipment and the 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/TV technician for help.

Toshiba is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this Toshiba Wireless LAN Mini PCI Card, or the substitution or attachment of connecting cables and equipment other than specified by Toshiba.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

NOTE

The following information is dependent on what type of wireless device is in your computer.

Wireless Interoperability for the Atheros AR5001X Wireless Network Adapter

The Atheros AR5001X Wireless Network Adapter products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS)/Orthogonal Frequency Division Multiplexing (OFDM) radio technology, and is compliant to:

- ❖ The IEEE 802.11 Standard on Wireless LANs (Revision B/G), as defined and approved by the Institute of Electrical and Electronics Engineers.
- ❖ The Wireless Fidelity (Wi-Fi) certification as defined by the Wi-Fi Alliance. The “Wi-Fi CERTIFIED” logo is a certification mark of the Wi-Fi Alliance.

CAUTION

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience

a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either one of your Bluetooth™ or Wireless LAN.

Please contact Toshiba PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcsupport.global.toshiba.com> in the United States for more information.

CAUTION

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.85 GHz frequency range.

Wireless LAN and your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- ❖ Using the Wireless LAN equipment on board of airplanes, or
- ❖ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

Regulatory Information

The Atheros AR5001X Wireless Network Adapter must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This device complies with the following radio frequency and safety standards.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device."

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu,

même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

This device has been designed to operate with an antenna having a maximum gain of 4.8dB.

Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériau (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC with essential test suites as per standards:

- ❖ EN 60950 Safety of Information Technology equipment
- ❖ EN 300 328 and Draft EN 301 893 Technical requirements for radio equipment
- ❖ EN 301 489 General EMC requirements for radio equipment.

België/ Belgique:	<p>For outdoor usage only channel 10 (2457 MHz) and 11 (2462 MHz) is allowed.</p> <p>For private usage outside buildings across public grounds over less than 300m no special registration with IBPT/BIPT is required. Registration to IBPT/BIPT is required for private usage outside buildings across public grounds over more than 300m. An IBPT/BIPT license is required for public usage outside building.</p> <p>For registration and license please contact IBPT/BIPT.</p>
	<p>Gebruik buiten gebouw alleen op kanalen 10 (2457 MHz) en 11 (2462 MHz). Voor privé gebruik buiten gebouw over publieke grond over afstand kleiner dan 300m geen registratie bij BIPT/IBPT nodig; voor gebruik over afstand groter dan 300m is wel registratie bij BIPT/IBPT nodig. Voor publiek gebruik buiten gebouwen is licentie van BIPT/IBPT verplicht. Voor registratie of licentie kunt u contact opnemen met BIPT.</p>

	L'utilisation en extérieur est autorisé sur le canal 10 (2457 MHz) et 11 (2462 MHz). Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow
	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigungspflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
France	Restricted frequency band: only channels 10 and 11 (2457 MHz and 2462 MHz respectively) may be used in France. License required for every installation, indoor and outdoor installations. Please contact ART for procedure to follow.
	Band de fréquence restreinte: seuls les canaux 10 à 11 (2457 et 2462 MHz respectivement) doivent être utilisés en France.
	Toute utilisation, qu'elle soit intérieure ou extérieure, est soumise à autorisation. Vous pouvez contacter l'Autorité de Régulation des Télécommunications (http://www.art-telecom.fr) pour la procédure à suivre.
Italia:	License required for indoor use. Use with outdoor installations not allowed
	E'necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire. L'uso per installazioni esterne non e' permessa.
Nederland:	License required for outdoor installations. Check with reseller for procedure to follow
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure

Table: The table below lists allowed frequency ranges within Europe

Country/Region	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
Austria, Belgium, Italy, Liechtenstein, Switzerland	O	X	X	X

Country/Region	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
Denmark, Finland, France, Germany, Ireland, Netherlands, Portugal, Sweden, UK	O	O	O	x
Luxemburg, Norway	x	O	O	x
Iceland	O	O	O	O
Greece, Spain	x	x	x	x

O: allowed x: forbidden

*1) PA3233U-1MPC is not available in this frequency band

USA – Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- ❖ Reorient or relocate the receiving antenna
- ❖ Increase the distance between the equipment and the receiver.
- ❖ Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- ❖ Consult the dealer or an experienced radio/TV technician for help.

TOSHIBA is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this Atheros AR5001X Wireless Network Adapter, or the substitution or attachment of connecting cables and equipment other than specified by TOSHIBA.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of the Atheros AR5001X Wireless Network Adapter is far below the FCC radio frequency exposure limits.

Nevertheless, the Atheros AR5001X Wireless Network Adapter shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used in this device are located at the upper edge of the LCD screen, and this device has been tested as portable device as defined in Section 2.1093 of FCC rules when the LCD

screen is rotated 180 degree and covered the keyboard area. In addition, Wireless LAN has been tested with Bluetooth transceiver (FCC ID:CJ6UPA3232BT) for co-location requirements. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb.

Caution: Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. FCC requires this product to be used indoors for frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Taiwan

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| Article 14 | Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design. |
| Article 17 | Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery. |

Wireless Interoperability for the Atheros AR5001X+ Wireless Network Adapter

The Atheros AR5001X+ Wireless Network Adapter products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS)/Orthogonal Frequency Division Multiplexing (OFDM) radio technology, and is compliant to:

- ❖ The IEEE 802.11 Standard on Wireless LANs (Revision A/B/G), as defined and approved by the Institute of Electrical and Electronics Engineers.
- ❖ The Wireless Fidelity (Wi-Fi) certification as defined by the Wi-Fi Alliance. The "Wi-Fi CERTIFIED" logo is a certification mark of the Wi-Fi Alliance.

CAUTION

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either one of your Bluetooth™ or Wireless LAN.

Please contact Toshiba PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcsupport.global.toshiba.com> in the United States for more information.

CAUTION

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.85 GHz frequency range.

Wireless LAN and your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- ❖ Using the Wireless LAN equipment on board of airplanes, or
- ❖ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

Regulatory Information

The Atheros AR5001X+ Wireless Network Adapter must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This device complies with the following radio frequency and safety standards.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device."

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

This device has been designed to operate with an antenna having a maximum gain of 4.8dB.

Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC with essential test suites as per standards:

België/ Belgique:	<p>For outdoor usage only channel 10 (2457 MHz) and 11 (2462 MHz) is allowed.</p> <p>For private usage outside buildings across public grounds over less than 300m no special registration with IBPT/BIPT is required. Registration to IBPT/BIPT is required for private usage outside buildings across public grounds over more than 300m. An IBPT/BIPT license is required for public usage outside building.</p> <p>For registration and license please contact IBPT/BIPT.</p>
	<p>Gebruik buiten gebouw alleen op kanalen 10 (2457 MHz) en 11 (2462 MHz). Voor privé-gebruik buiten gebouw over publieke grond over afstand kleiner dan 300m geen registratie bij BIPT/IBPT nodig; voor gebruik over afstand groter dan 300m is wel registratie bij BIPT/IBPT nodig. Voor publiek gebruik buiten gebouwen is licentie van BIPT/IBPT verplicht. Voor registratie of licentie kunt u contact opnemen met BIPT.</p>

	L'utilisation en extérieur est autorisé sur le canal 10 (2457 MHz) et 11 (2462 MHz). Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow
	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigungspflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
France	Restricted frequency band: only channels 10 and 11 (2457 MHz and 2462 MHz respectively) may be used in France. License required for every installation, indoor and outdoor installations. Please contact ART for procedure to follow.
	Band de fréquence restreinte: seuls les canaux 10 à 11 (2457 et 2462 MHz respectivement) doivent être utilisés en France.
	Toute utilisation, qu'elle soit intérieure ou extérieure, est soumise à autorisation. Vous pouvez contacter l'Autorité de Régulation des Télécommunications (http://www.art-telecom.fr) pour la procédure à suivre.
Italia:	License required for indoor use. Use with outdoor installations not allowed
	E'necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire. L'uso per installazioni in esterni non e' permessa.
Nederland:	License required for outdoor installations. Check with reseller for procedure to follow
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure

Table: The table below lists allowed frequency ranges within Europe

Country/Region	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
Austria, Belgium, Italy, Liechtenstein, Switzerland	O	X	X	X
Denmark, Finland, France, Germany, Ireland, Netherlands, Portugal, Sweden, UK	O	O	O	X
Luxemburg, Norway	X	O	O	X
Spain	X	X	O	O

Country/Region	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
Iceland	O	O	O	O
Greece, Spain	x	x	x	x

O: allowed x: forbidden

*1) PA3233U-1MPC is not available in this frequency band

USA – Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- ❖ Reorient or relocate the receiving antenna
- ❖ Increase the distance between the equipment and the receiver.
- ❖ Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- ❖ Consult the dealer or an experienced radio/TV technician for help.

TOSHIBA is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this Atheros AR5001X+ Wireless Network Adapter, or the substitution or attachment of connecting cables and equipment other than specified by TOSHIBA.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of the Atheros AR5001X+ Wireless Network Adapter is far below the FCC radio frequency exposure limits.

Nevertheless, the Atheros AR5001X+ Wireless Network Adapter shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used in this device are located at the upper edge of the LCD screen, and this device has been tested as portable device as defined in Section 2.1093 of FCC rules when the LCD screen is rotated 180 degree and covered the keyboard area. In addition, Wireless LAN has been tested with Bluetooth transceiver (FCC ID:CJ6UPA3232BT) for co-location requirements. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. Antenna(s) used in 5.15 GHz to 5.25 GHz frequency band must be integral antenna which provide no access to the end user. Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb.

Caution: Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. FCC requires this product to be used indoors for frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Taiwan

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| Article 14 | Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design. |
| Article 17 | <p>Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.</p> <p>The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.</p> <p>Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.</p> |

Wireless Interoperability for the Intel® PRO/Wireless 2100A LAN Mini PCI Adapter

The Intel® PRO/Wireless 2100A LAN Mini PCI Adapter products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS)/Orthogonal Frequency Division Multiplexing (OFDM) radio technology, and is compliant to:

- ❖ The IEEE 802.11 Standard on Wireless LANs (Revision A/B), as defined and approved by the Institute of Electrical and Electronics Engineers.
- ❖ The Wireless Fidelity (Wi-Fi) certification as defined by the Wi-Fi Alliance. The “Wi-Fi CERTIFIED” logo is a certification mark of the Wi-Fi Alliance.

CAUTION

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience

a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either one of your Bluetooth™ or Wireless LAN.

Please contact Toshiba PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcsupport.global.toshiba.com> in the United States for more information.

CAUTION

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.85 GHz frequency range.

Wireless LAN and your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- ❖ Using the Wireless LAN equipment on board of airplanes, or
- ❖ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

Regulatory Information

The Intel® PRO/Wireless 2100A LAN Mini PCI Adapter must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This device complies with the following radio frequency and safety standards.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device."

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu,

même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

This device has been designed to operate with an antenna having a maximum gain of 4.8dB.

Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériau (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

USA – Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- ❖ Reorient or relocate the receiving antenna.
- ❖ Increase the distance between the equipment and the receiver.
- ❖ Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- ❖ Consult the dealer or an experienced radio/TV technician for help.

TOSHIBA is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this Intel® PRO/Wireless 2100A LAN Mini PCI Adapter, or the substitution or attachment of connecting cables and equipment other than specified by TOSHIBA.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Caution: Exposure to Radio Frequency Radiation.

The radiated output power of the Intel® PRO/Wireless 2100A LAN Mini PCI Adapter is far below the FCC radio frequency exposure limits.

Nevertheless, the Intel® PRO/Wireless 2100A LAN Mini PCI Adapter shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used in this device are

located at the upper edge of the LCD screen, and this device has been tested as portable device as defined in Section 2.1093 of FCC rules when the LCD screen is rotated 180 degree and covered the keyboard area. In addition, Wireless LAN has been tested with Bluetooth transceiver (FCC ID:CJ6UPA3232BT) for co-location requirements. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. Antenna(s) used in 5.15 GHz to 5.25 GHz frequency band must be integral antenna which provide no access to the end user.

Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb.

Caution: Radio Frequency Interference Requirements.

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. FCC requires this product to be used indoors for frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Taiwan

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| Article 14 | Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design. |
| Article 17 | Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery. |

Wireless Interoperability for the Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter

The Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS) radio technology, and is compliant to:

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- ❖ The IEEE 802.11 Standard on Wireless LANs (Revision B), as defined and approved by the Institute of Electrical and Electronics Engineers.
 - ❖ The Wireless Fidelity (Wi-Fi) certification as defined by the Wi-Fi Alliance.
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CAUTION

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either one of your Bluetooth™ or Wireless LAN.

Please contact Toshiba PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pc-support.global.toshiba.com> in the United States for more information.

Wireless LAN and your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- ❖ Using the Wireless LAN equipment on board of airplanes, or
- ❖ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

Regulatory Information

The Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This device complies with the following radio frequency and safety standards.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device."

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

This device has been designed to operate with an antenna having a maximum gain of 4.8dB.

Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC with essential test suites as per standards:

- ❖ EN 60950 Safety of Information Technology equipment
- ❖ ETS 300 328-2 Technical requirements for radio equipment
- ❖ EN 301 489-1 and -17 General EMC requirements for radio equipment.

België/ Belgique:	<p>For outdoor usage only channel 10 (2457 MHz) and 11 (2462 MHz) is allowed.</p> <p>For private usage outside buildings across public grounds over less than 300m no special registration with IBPT/BIPT is required. Registration to IBPT/BIPT is required for private usage outside buildings across public grounds over more than 300m. An IBPT/BIPT license is required for public usage outside building. For registration and license please contact IBPT/BIPT.</p>
	<p>Gebruik buiten gebouw alleen op kanalen 10 (2457 MHz) en 11 (2462 MHz). Voor privé-gebruik buiten gebouw over publieke grond over afstand kleiner dan 300m geen registratie bij BIPT/IBPT nodig; voor gebruik over afstand groter dan 300m is wel registratie bij BIPT/IBPT nodig. Voor publiek gebruik buiten gebouwen is licentie van BIPT/IBPT verplicht. Voor registratie of licentie kunt u contact opnemen met BIPT.</p>

	L'utilisation en extérieur est autorisé sur le canal 10 (2457 MHz) et 11 (2462 MHz). Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, audessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigungspflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
France:	Restricted frequency band: only channels 10 and 11 (2457 MHz and 2462 MHz respectively) may be used in France. License required for every installation, indoor and outdoor installations. Please contact ART for procedure to follow.
	Bande de fréquence restreinte: seuls les canaux 10 à 11 (2457 MHz et 2462 MHz respectivement) doivent être utilisés en France. Toute utilisation, qu'elle soit intérieure ou extérieure, est soumise à autorisation. Vous pouvez contacter l'Autorité de Régulation des Télécommunications (http://www.art-telecom.fr) pour la procédure à suivre.
Italia:	License required for indoor use. Use with outdoor installations not allowed.
	E' necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire. L'uso per installazione in esterni non e' permessa.
Nederland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure.

USA – Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- ❖ Reorient or relocate the receiving antenna
- ❖ Increase the distance between the equipment and the receiver.

- ❖ Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- ❖ Consult the dealer or an experienced radio/TV technician for help.

TOSHIBA is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter, or the substitution or attachment of connecting cables and equipment other than specified by TOSHIBA.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of the Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter is far below the FCC radio frequency exposure limits. Nevertheless, the Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used in this device are located at the upper edge of the LCD screen, and this device has been tested as portable device as defined in Section 2.1093 of FCC rules when the LCD screen is rotated 180 degree and covered the keyboard area. In addition, Wireless LAN has been tested with Bluetooth transceiver (FCC ID:CJ6UPA3232BT) for co-location requirements. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb.

Taiwan

Article 14 Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design.

Article 17 Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.

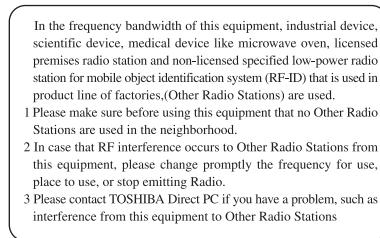
Using this equipment in Japan

In Japan, the frequency bandwidth of 2,400 MHz to 2,483.5 MHz for second generation low-power data communication systems such as this

equipment overlaps that of mobile object identification systems (premises radio station and specified low-power radio station).

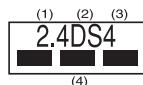
1. Sticker

Please put the following sticker on devices incorporating this product.



2. Indication

The indication shown below appears on this equipment.



- 1 2.4: This equipment uses a frequency of 2.4 GHz.
- 2 FH: This equipment uses FH-SS modulation.
- 3 The interference range of this equipment is less than 10m.
- 4 This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz. It is impossible to avoid the band of mobile object identification systems.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-13-1100

Direct Dial: 03-3457-5916

Fax: 03-5444-9450

Device Authorization

This device obtains the Technical Regulation Conformity Certification and the Technical Conditions Compliance Approval, and it belongs to the device class of radio equipment of low-power data communication system radio station stipulated in the Radio Law and the Telecommunications Business Law of Japan.

- ❖ The Name of the radio equipment: WM3B2100
- ❖ DSP Research Inc.
- ❖ Approval Number: 03NYDA0172 or 03NYDA0041,03GZDA0036 or 003NY03013,003GZ03010
- ❖ JAPAN APPROVALS INSTITUTE FOR TELECOMMUNICATIONS EQUIPMENT

-
- ❖ Approval Number: D03-0001JPB
 - ❖ The following restrictions apply:
 - ❖ Do not disassemble or modify the device.
 - ❖ Do not install the embedded wireless module into other device.

Bluetooth wireless technology Interoperability

Bluetooth™ Cards from TOSHIBA are designed to be interoperable with any product with Bluetooth wireless technology that is based on Frequency Hopping Spread Spectrum (FHSS) radio technology, and is compliant to:

- ❖ Bluetooth Specification Ver. 1.1, as defined and approved by The Bluetooth Special Interest Group.
- ❖ Logo certification with Bluetooth wireless technology as defined by The Bluetooth Special interest Group.

CAUTION

Bluetooth wireless technology is a new innovative technology, and TOSHIBA has not confirmed compatibility of its Bluetooth™ products with all PCs and/or equipment using Bluetooth wireless technology other than TOSHIBA portable computers.

Always use Bluetooth™ cards from TOSHIBA in order to enable wireless networks over two or more (up to a total of seven) TOSHIBA portable computers using these cards. Please contact TOSHIBA PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcsupport.global.toshiba.com> in the United States for more information.

When you use Bluetooth™ cards from TOSHIBA close to 2.4 GHz Wireless LAN devices, Bluetooth transmissions might slow down or cause errors. If you detect certain interference while you use Bluetooth™ cards from TOSHIBA, always change the frequency, move your PC to the area outside of the interference range of 2.4 GHz Wireless LAN devices (40 meters/43.74 yards or more) or stop transmitting from your PC. Please contact TOSHIBA PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcglobal.toshiba.com> in the United States for more information.

Bluetooth™ and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth™ and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection. If you should experience any such problem, immediately turn off either one of your Bluetooth™ or Wireless LAN. Please contact Toshiba PC product support on Web site <http://www.toshiba-europe.com/computers/tnt/bluetooth.htm> in Europe or <http://www.pcglobal.toshiba.com> in the United States for more information.

Bluetooth wireless technology and your Health

The products with Bluetooth wireless technology, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by devices with Bluetooth wireless technology however is far much less

than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because products with Bluetooth wireless technology operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Bluetooth wireless technology is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Bluetooth wireless technology may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- ❖ Using the equipment with Bluetooth wireless technology on board of airplanes, or
- ❖ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the device with Bluetooth wireless technology prior to turning on the equipment.

Regulatory statements

This product complies with any mandatory product specification in any country/region where the product is sold. In addition, the product complies with the following:

European Union (EU) and EFTA

This equipment complies with the R&TTE directive 1999/5/EC and has been provided with the CE mark accordingly.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device."

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

Caution: FCC Interference Statement

This device complies with part15 of the FCC rules. Operation is subject to the following two conditions:

- ❖ This device may not cause harmful interference, and

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

Note that any changes or modifications to this equipment not expressly approved by the manufacturer may void the authorization to operate this equipment.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of the Bluetooth™ Card from TOSHIBA is far below the FCC radio frequency exposure limits. Nevertheless, the Bluetooth™ Card from TOSHIBA shall be used in such a manner that the potential for human contact during normal operation is minimized.

Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

The Bluetooth™ Card from TOSHIBA is far below the FCC radio frequency exposure limits.

Nevertheless, it is advised to use the Bluetooth™ Card from TOSHIBA in such a manner that human contact during normal operation is minimized.

NOTE

Changes or modifications made to this equipment not expressly approved by TOSHIBA or parties authorized by TOSHIBA could void the user's authority to operate the equipment.

Taiwan

Article 14	Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design.
Article 17	Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.

Using this equipment in Japan

In Japan, the frequency bandwidth of 2,400 MHz to 2,483.5 MHz for second generation low-power data communication systems such as this equipment overlaps that of mobile object identification systems (premises radio station and specified low-power radio station).

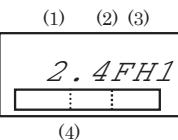
1. Sticker

Please put the following sticker on devices incorporating this product.

- In the frequency bandwidth of this equipment, industrial device, scientific device, medical device like microwave oven, licensed premises radio station and non-licensed specified low-power radio station for mobile object identification system (RF-ID) that is used in product line of factories,(Other Radio Stations) are used.
- 1 Please make sure before using this equipment that no Other Radio Stations are used in the neighborhood.
 - 2 In case that RF interference occurs to Other Radio Stations from this equipment, please change promptly the frequency for use, place to use, or stop emitting Radio.
 - 3 Please contact TOSHIBA Direct PC if you have a problem, such as interference from this equipment to Other Radio Stations

2. Indication

The indication shown below appears on this equipment.



- 1 2.4: This equipment uses a frequency of 2.4 GHz.
- 2 FH: This equipment uses FH-SS modulation.
- 3 The interference range of this equipment is less than 10m.
- 4 This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz. It is impossible to avoid the band of mobile object identification systems.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-13-1100

Direct Dial: 03-3457-5916

Fax: 03-5444-9450

Device Authorization

This device obtains the Technical Regulation Conformity Certification, and it belongs to the device class of radio equipment of low-power data communication system radio station stipulated in the Radio Law of Japan.

The Name of the radio equipment: EYXF2CS

TELECOM ENGINEERING CENTER

Approval Number: 01NYDA1305

The following restrictions apply:

- ❖ Do not disassemble or modify the device.
- ❖ Do not install the embedded wireless module into other device.

DVD-ROM, multi-function drive safety instructions

The DVD-ROM and multi-function drives employ a laser system. To ensure proper use of this product, please read this instruction manual

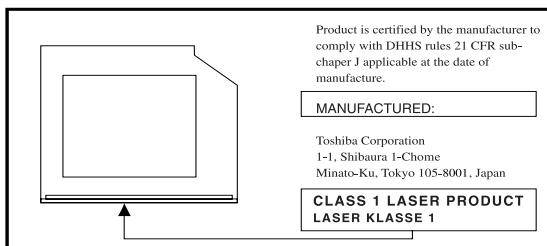
carefully and retain for future reference. Should the unit ever require maintenance, contact an authorized service location.

Use of controls, adjustments or the performance of procedures other than those specified may result in hazardous radiation exposure.

To prevent direct exposure to the laser beam, do not try to open the enclosure.

Location of the required label

(Sample shown below. Location of the label and manufacturing information may vary.)



▲ CAUTION

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT." To use this model properly, read the user's guide carefully and keep it for your future reference. In case of any trouble with this model, please contact your nearest "AUTHORIZED service station." To prevent direct exposure to the laser beam, do not try to open the enclosure.

CLASS 1 LASER PRODUCT
LASER KLASSE 1

Use of controls or adjustments or performance of procedures other than those specified in the owner's manual may result in hazardous radiation exposure.

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Wi-Fi is a trademark of the Wireless Capability Ethernet Alliance.

Bluetooth is a trademark owned by its proprietor and used by Toshiba under license.

Symbol Commander is a trademark of Sensiva, inc.

All other brand and product names are trademarks or registered trademarks of their respective companies.

Computer Disposal Information

This product contains mercury. Disposal of this material may be regulated due to environmental considerations. For disposal, reuse or recycling information, please contact your local government or the Electronic Industries Alliance at www.eiae.org.

Introduction

Welcome to the world of powerful and portable multimedia computers! With your new Toshiba notebook computer, your access to information can accompany you wherever you go.

You will find that the Microsoft® Windows® XP Tablet PC Edition operating system is already installed on your computer. It offers exciting features and easy Internet access.

This guide

This guide offers important information about your computer, including solutions to the most common problems, and features and specifications.

For more detailed information, descriptions of other features and more extensive troubleshooting guidelines, see the electronic user's guide preinstalled on your system. It is also available on the Web at pcsupport.toshiba.com.

Safety icons

This guide contains safety instructions that must be observed in order to avoid potential hazards that could result in personal injuries, damage to your equipment, or loss of data. These safety cautions have been classified according to the seriousness of the risk, and the icons highlight these instructions as follows:

DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTE Provides important information.

Other icons used

Additional icons highlight other helpful or educational information:



TECHNICAL NOTE: This icon highlights technical information about the computer.



HINT: This icon denotes helpful hints and tips.



DEFINITION: This icon indicates the definition of a term used in the text.

Other documentation

Your computer comes with all or some of the following documentation in addition to this resource guide:

- ❖ An electronic version of the user's guide. Look for the user's guide icon on your desktop or in the DOCS folder on the C: drive.
- ❖ Guides for other programs that may come preinstalled on your computer and for additional programs on your Recovery media.
- ❖ For accessory information, visit Toshiba's Web site at toshiba.com.
- ❖ The Microsoft® Windows® operating system documentation which explains the features of the operating system.

Setting up your computer and getting started

Strain and stress injuries are becoming more common as people spend more time using their computers. With a little care and proper use of the equipment, you can work comfortably throughout the day.

▲ CAUTION

Using the computer keyboard incorrectly can result in discomfort and possible injury. If your hands, wrists, and/or arms bother you while typing, stop using the computer and rest. If the discomfort persists, consult a physician.

For more information, consult books on ergonomics, repetitive-strain injury, and repetitive-stress syndrome.

Placement of the computer

Proper placement of the computer and external devices is important to avoid stress-related injuries. Consider the following when placing your computer.

- ❖ Place the computer on a flat surface at a comfortable height and distance. You should be able to type without twisting your torso or neck, and look at the screen without slouching.
- ❖ If you are using an external monitor, the top of the display should be no higher than eye level.
- ❖ If you use a paper holder, set it at about the same height and distance as the screen.

Seating and posture

When using your computer, maintain good posture with your body relaxed and your weight distributed evenly. Proper seating is a primary factor in reducing work strain.

Precautions

Your notebook computer is designed to provide optimum safety and ease of use, and to withstand the rigors of travel. You should observe certain precautions to further reduce the risk of personal injury or damage to the computer.

▲ CAUTION

Some PC Cards become hot with prolonged use. If two cards are installed, both can become hot even if only one is being used. Overheating of a PC Card can result in errors or instability in its operation.

Be careful when you remove a PC Card that has been used for lengthy periods of time.

CAUTION

Never apply heavy pressure to the computer or subject it to sharp impacts. Excessive pressure or impact can damage computer components or otherwise cause your computer to malfunction.

Connecting to an AC outlet

The AC adapter enables you to power the computer from a wall outlet and to charge the computer's battery.

WARNING

Hold the power cable by its plug when you connect/disconnect it. Do NOT pull the cable itself. Doing so may damage the power cable and result in a short circuit or electric shock.

WARNING

When you connect the AC adapter to the computer, always follow the steps in the exact order as described in the User's Guide. Connecting the power cable to a live electrical outlet should be the last step otherwise the adapter DC output plug could hold an electrical charge and cause an electrical shock or minor bodily injury when touched. As a general safety precaution, avoid touching any metal parts.

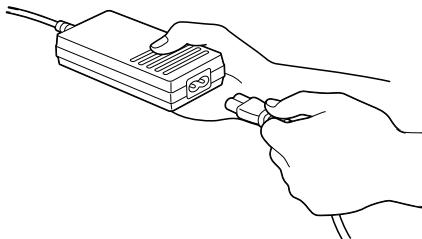
CAUTION

Use only the AC adapter supplied with your computer or an equivalent adapter that is compatible. Use of any incompatible adapter could damage your computer. Toshiba assumes no liability for any damage caused by use of an incompatible adapter.

When you connect the AC adapter to the computer, always follow the steps in the exact order as described in the User's Manual. Connecting the power cable to a live electrical outlet should be the last step otherwise the adapter DC output plug could hold an electrical charge and cause an electrical shock or minor bodily injury when touched. As a general safety precaution, avoid touching any metal parts.

To connect AC power to the computer:

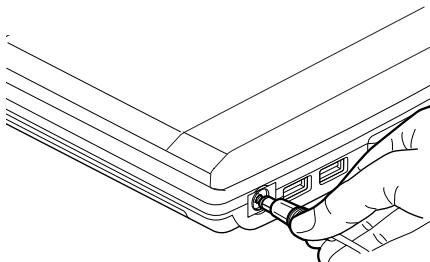
- 1 Connect the power cable to the AC adapter.



Connecting a sample power cable to the AC adapter

⚠ WARNING Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

- ② 2 Plug the AC adapter into the DC-IN on the back of the computer.



Connecting the sample AC adapter to the computer

- 3 Connect the power cable to a live electrical outlet.
If the electrical outlet is live, the system indicator panel's AC power light (■) glows green.

▲ WARNING

Damaged power cables can cause fire or electric shock. Never modify, forcibly bend, place heavy objects on top of, or apply heat to the power cable.

If the power cable becomes damaged or the plug overheats, discontinue use. There is a risk of electric shock.

Never remove the power plug from the outlet with wet hands. Doing so may cause an electric shock.

Connecting a printer

You can connect a local USB printer to your computer.

If the printer has a USB interface, you can connect it directly to the computer.

You also need a USB cable, which may come with your printer. You can purchase one from a computer or electronics store.

You also need a USB cable, which may come with your printer. You can purchase one from a computer or electronics store.

Installing a memory module

Your computer is equipped with two memory slots which can provide for various memory configurations. When additional memory is added, or original memory replaced, it is recommended that you use only compatible memory. In the event original memory is replaced with invalid memory, the system will beep and will not boot beyond the BIOS memory check. A message may display. If this occurs, contact Toshiba's support center at (800) 457-7777.

Since your computer was built to order, it should have enough memory to run your current applications. However, if your requirements change, you can install extra memory.

Additional memory modules can be installed in the memory expansion slots on the base of the computer. You will need a standard Phillips no.1 screwdriver for this procedure.

CAUTION

To avoid damaging the computer's screws, use a standard Phillips no. 1 screwdriver that is in good condition.

CAUTION

Do not install or remove a memory module while any internal or external drive power is on.

CAUTION

Installing a memory module with the computer's power on may damage the computer, the module, or both.

CAUTION

Make sure that the computer is not in Hibernation or Standby mode (see "Hibernation command" and "Standby command" in the electronic user's guide).

If the computer is on, begin at step 1, otherwise, skip to step 3.

If the computer is on, begin at step 1; otherwise, skip to step 3.

1 If the computer is on, click **Start, Turn Off Computer**.

The Turn off computer window appears.

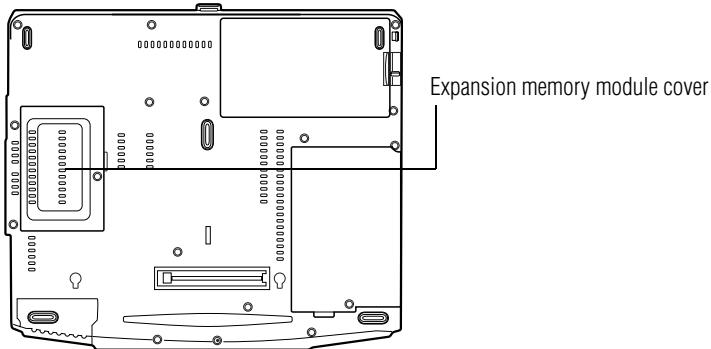
2 Click **Turn Off**.

The operating system turns off the computer.

3 Unplug and remove any cables connected to the computer.

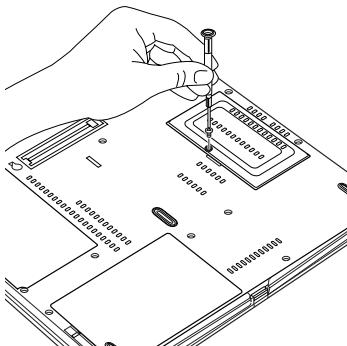
4 Remove the battery.

-
- 5 Close the display panel and turn the computer upside down to locate the expansion memory module cover to the memory slot.



Locating the sample expansion memory module cover

- 6 Using a standard Phillips no. 1 screwdriver, unscrew the screw that secures the expansion memory module slot cover, then remove the memory slot cover.



Removing the sample memory module cover screw

- 7 Place the screw and the cover in a safe place so that you can retrieve them later.

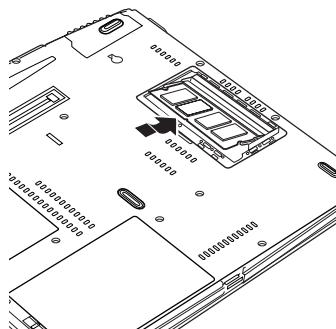
CAUTION

Static electricity can damage the memory module. Before you handle the module, touch a grounded metal surface to discharge any static electricity you may have built up.

To avoid damaging the memory module, be careful not to touch its gold connector bar (on the side you insert into the computer).

- 8 Remove the new memory module from its antistatic packaging.
- 9 Insert the memory module in the slot and gently press it down into place.

The clips on either side of the module will click to secure the module.



Inserting the sample memory module

CAUTION

Avoid touching the connectors on the memory module or on the computer. Grease or dust on the connectors may cause memory access problems.

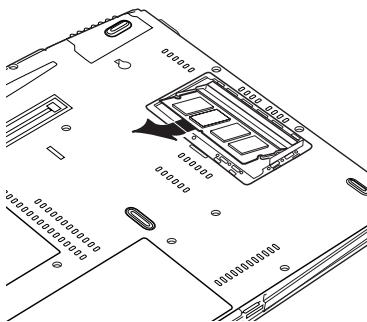
- 10 Replace the memory slot cover.
- 11 Replace the screw and tighten it.
- 12 Turn the computer over and reconnect any cables you removed.

Removing a memory module

If you need to remove a memory module:

- 1 Complete steps 1-7 in “Installing a memory module” on page 43 to shut down the computer and expose the memory module(s).
- 2 Pull the clips away from the memory module.

The memory module pops partially out of the slot.



Removing the sample memory module

- 3 Carefully remove the module from the slot.
- 4 Replace the memory slot cover and the screw.
- 5 Restart the computer.

Using PC Cards

You may insert a Type I/Type II card into the computer’s PC Card slot.

PC Cards are credit-card sized expansion cards that greatly increase the capabilities of your computer.

Some PC Cards combine several functions. multi-function cards allow you to get the most out of your PC Card slot.

Most PC Cards conform to the PCMCIA (Personal Computer Memory Card International Association) standard.



TECHNICAL NOTE: For PCMCIA-compatible PC Cards, check the package to make sure they conform to the PCMCIA 2.1 standard (or later). Other cards may work with your computer, but they are likely to be much more difficult to set up and use.

Inserting a PC Card

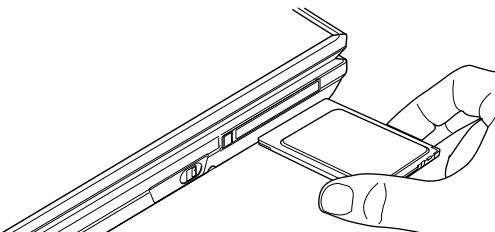
Before inserting a PC Card, read the documentation that came with the card to see if it has any special requirements.



HINT: The operating system provides the Card and Socket Services software for your PC Card. Even if your PC Card comes with its own version of Card and Socket Services, you should use the files included in the operating system.

To insert a PC Card:

- 1 Locate the PC Card slot on the left side of the computer.
- 2 Insert the PC Card.



Inserting a sample PC Card

- 3 When the card is almost all the way into the slot, push firmly, but gently, to ensure a firm connection with the computer. Avoid forcing the card into position.

Removing a PC Card

- 1 Locate the PC Card eject tab.
- 2 Push the eject button.

The eject button pops out from the slot.

- 3 Push the eject button again so the card will pop out.
- 4 Grasp the edges of the PC Card and slide it out of the slot.

Setting up a PC Card for your computer

Some PC Cards are ready to use as soon as you install them. Others, such as hard disk cards, and network cards, may need to be set up to work with your computer. To set up your PC Card, refer to the documentation that came with the card or refer to your operating system manual or online help.

Hot swapping

One of the great things about PC Cards is that you can replace one PC Card with another while the computer is on. This is called “hot swapping.”



DEFINITION: Hot swapping is the ability to change PC Cards while the computer is on.

Hot swapping precautions

Although you can insert a PC Card at any time, remember not to remove a card while it is in use. Otherwise, you could lose valuable information.

For example:

- ❖ Never remove a hard disk card or CD-ROM drive card while the system is accessing the card.
- ❖ Never remove a network card while you are connected to the network.

Before removing a PC Card, stop it by clicking the **PC Card** (PCMCIA) icon on the taskbar.

Learning the basics

Computing tips

- ❖ Save your work frequently.

Your work temporarily stays in the computer's memory until you save it to the disk. You will lose all unsaved work, if, for example, a system error occurs and you must restart your computer, or your battery runs out of charge while you are working. Your computer can be configured to warn you when the battery is running low. See "Setting battery alarms" on page 55.



HINT: Some programs have an automatic save feature that you can turn on. This feature saves your file to the hard disk at preset intervals. See your software documentation for details.

- ❖ Back up your files to diskettes (or other removable storage media) on a regular basis. Label the backup copies clearly and store them in a safe place.
If your hard disk suddenly fails, you may lose all the data on it unless you have a separate backup copy.
- ❖ Use Error-Checking and Disk Defragmenter regularly to conserve disk space and help your computer perform at its optimal level. Consult your Windows® XP Tablet PC Edition operating system documentation for more information on these and other utilities.
- ❖ Always use the proper procedure to power off the computer. See "Powering down the computer" in the electronic user's guide.



TECHNICAL NOTE: The operating system records information, such as your desktop setup, during its shutdown procedure. If you do not let the operating system shut down, details such as new icon positions may be lost.

Using a DVD-ROM drive

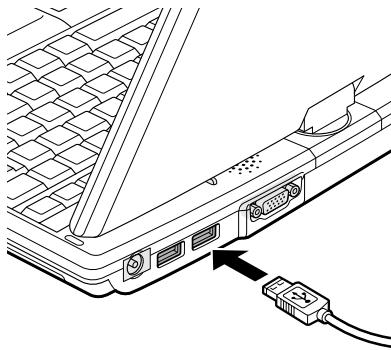
Your computer may come with an external DVD/CD-RW drive that can read CDs and DVDs.

To attach this drive to your computer using an optional PC Card SCSI adapter, follow the instructions in "Using PC Cards" on page 47. To attach this drive to your computer using the USB port, follow the instructions below.

Connecting an optional external DVD drive

You may want to use an external USB DVD drive instead of an external SCSI DVD drive. You can attach an external USB DVD drive to one of the computer's USB ports.

To connect an external USB DVD drive to your computer, plug its cable into one of the USB ports. You can connect it while the computer is on.



Sample USB DVD drive connection

Inserting a disc (CD or DVD)

To insert a disc into the drive:

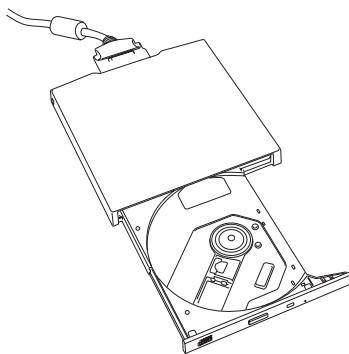
- 1 Make sure the computer is turned on.
- 2 Make sure the drive-in-use indicator light is off.
- 3 Press the drive's eject button.

The disc tray slides partially out of the drive (about 1 inch).



HINT: The drive will not open if the computer's power is off.

- 4 Grasp the tray and pull it fully open.



Sample drive tray fully extended

- 5 Hold the disc by its edges and check that it is free of dust.
If the disc is dusty, clean it as described in “If Something Goes Wrong” chapter of the electronic user’s guide.
- 6 Place the disc carefully in the disc tray, label side up.
- 7 Gently press the disc onto the center spindle until you feel it click into place.

CAUTION

Handle DVDs and CDs carefully, making contact only with the center hole and edge. Never touch the surface of the disc. Never stack discs. If you incorrectly handle the discs, you could lose data.

- 8 Make sure the disc is completely on the spindle and is lying flat on the tray.

CAUTION

If you insert the disc incorrectly, it may jam the drive. If this happens, contact your network administrator for assistance.

- 9 Push the disc tray in by pressing gently on the center of the tray until it clicks into place.

You are ready to use the disc.

Removing discs (CD or DVD)

To remove a disc with the computer turned on:

-
- 1 Press the eject button on the drive.
-

CAUTION

Never press the eject button while the drive-in-use indicator light is glowing. Doing so could damage the disc or the drive.

Also, if the disc is still spinning when you open the disc tray, wait for it to stop spinning before you remove it.

- 2 Pull the tray until it is fully open, remove the disc, and place it in its protective cover.
- 3 Gently push the tray in to close it.

To remove a disc with the computer turned off:

- 1 Insert a slender object, such as a straightened paper clip, into the manual eject hole.
-

CAUTION

Never use a pencil to press the manual eject button. Pencil lead can break off inside the computer and damage it.

- 2 Gently pull the tray out until it is fully open, remove the disc, and place it in its protective cover.
- 3 Gently push the tray in to close it.

Moving the computer

Before moving your computer, even across the room, make sure all disk activity has ended (the drive-in-use lights stop glowing) and all external peripheral cables are disconnected.

Mobile computing

Running the computer on battery power



The computer contains a removable Lithium-Ion (Li-Ion) battery that provides power when you are away from an AC outlet. You can recharge it many times.

Battery life may vary depending on applications, power management settings and features utilized. Recharge time varies depending on usage. The battery may not charge while the computer is consuming full power.

After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. To purchase a new battery pack, see the accessories information that shipped with your computer or visit the Toshiba Web site at toshibaaccessories.com.

To ensure that the battery maintains its maximum capacity, operate the computer on battery power at least once a month until the battery is fully discharged. Please see “Maximizing battery life” below for procedures. If the computer is continuously operated on AC power, either through an AC adapter or a Tablet Multi Dock (if applicable to your system), for an extended period (more than a month) the battery may fail to retain a charge. This may shorten the life of the battery, and the battery light may not indicate a low-battery condition.

The computer has an internal, Lithium-Ion (Li-Ion), real-time clock (RTC) battery.

The RTC battery powers the RTC memory that stores your system configuration settings and the current time and date information. It maintains this information for up to a month while the computer is turned off.

The RTC battery may have become completely discharged while your computer was shipped, resulting in the following error message during startup:

BAD RTC BATTERY
BAD CHECKSUM (CMOS)
CHECK SYSTEM

NOTE This message may vary by model.

NOTE The RTC battery does not charge while the computer is turned off, even when the AC power is attached.

Monitoring battery power

- The computer’s battery light gives you an indication of the battery’s current charge:

- ❖ No illumination means the battery is not in use and the AC Adapter is not connected.
 - ❖ Green means the battery is fully charged.
 - ❖ Amber means the battery is charging (AC Adapter connected).
 - ❖ Flashing amber means the battery charge is low and it is time to recharge the battery or plug in the AC Adapter.
-



HINT: Be careful not to confuse the battery light (■) with the on/off light (⌚). When the on/off light flashes amber, it indicates that the system is suspended (using the operating system Standby command).

Setting battery alarms

Your computer can be configured to warn you when the battery is running low. For more information, see “Setting battery alarms” in the electronic user’s guide.

Changing the main battery

When your battery has run out of power, you have two options: plug in the AC Adapter or install a fresh battery.



TECHNICAL NOTE: To avoid losing any data, save your files and then either completely shut down your computer, or put it into Hibernation mode before changing the battery.

Removing the battery from the computer

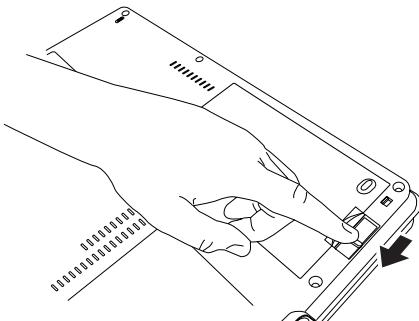
CAUTION

When handling batteries, do not drop or knock them. Also be careful not to damage the casing or short-circuit the terminals.

To remove the battery:

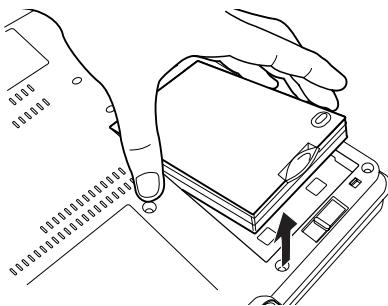
- 1 Save your work.
- 2 Shut down and turn off the computer.
- 3 Remove all cables connected to the computer.

- 4 Turn the computer over.
- 5 Slide the battery lock to the left.
- 6 Push the release latch up.



Sample battery release

- 7 Insert a fingertip in the battery pack recessed area.
- 8 Pull the discharged battery module out of the computer.



Sample discharged battery removal

⚠ WARNING

If the battery is leaking or its case is cracked, put on protective gloves to handle it, and discard it immediately following the advice in “Disposing of used batteries safely” on page 59.

Inserting a charged battery

- 1 Wipe the terminals of the charged battery with a clean cloth to ensure a good connection.
- 2 Insert the charged battery into the slot.

The battery has been designed so that you cannot install it with reverse polarity.

CAUTION If the battery does not slide into the slot easily, remove the battery and try again. Avoid forcing the battery into position.

- 3 Lock the battery into place using the battery lock.
- 4 Reconnect any cables.
- 5 Restart the computer.

Battery safety precautions

- ❖ If the battery pack produces an odor, overheats or changes color or shape while it is being used or charged, turn off the computer's power immediately and disconnect the power cord from the power socket. Carefully remove the battery pack from the computer.
- ❖ Do not try to disassemble a battery pack.
- ❖ Do not overcharge or reverse charge a battery. Overcharging will shorten its life, and reverse charging could damage it.
- ❖ Avoid touching the metal terminals of the battery with another metal object. Short-circuiting the battery can cause it to overheat and may cause damage to the battery or the computer.
- ❖ Do not incinerate a spent battery, as this could cause it to explode and release toxic materials.
- ❖ If a battery is leaking or damaged, replace it immediately. Use protective gloves when handling a damaged battery.
- ❖ To replace the main battery, use an identical battery that you can purchase through toshiba.com.
- ❖ A reverse polarity condition should be avoided with all batteries. The main battery is designed so that it cannot be installed to cause reverse polarity.
- ❖ Charge the battery only in the computer or in a battery charger designated as an approved option.
- ❖ When you install the battery, you should hear a click when it is seated properly.

- ❖ Do not expose the battery to fire. The battery could explode.

Maximizing battery life

To maximize the life of your battery:

- ❖ At least once a month, disconnect the computer from a power source and operate it on battery power until the battery fully discharges. Before doing so, follow the steps below:
 - 1 Turn off the computer's power.
 - 2 Disconnect the AC adapter and turn on the computer's power. If it does not turn on, go to step 4.
 - 3 Operate the computer on battery power for five minutes. If the battery has at least five minutes of operating time, continue operating until the battery is fully discharged. If the battery light flashes or there is some other warning to indicate a low battery, go to step 4.
 - 4 Connect the AC adapter to the computer and the power cable to a power outlet. The DC-IN (if applicable to your system) or AC power light should glow green, and the battery light should glow amber to indicate that the battery is being charged. If the DC-IN or AC power light indicator does not glow, power is not being supplied. Check the connections to the AC adapter and power cable.
 - 5 Charge the battery until the battery light glows green.
- ❖ If you have extra batteries, rotate their use.
- ❖ If you will not be using the system for an extended period (more than one month) remove the battery.
- ❖ Disconnect the AC adapter when the battery is fully charged. Overcharging makes the battery hot and shortens life.
- ❖ If you are not going to use the computer for more than eight hours, disconnect the AC adapter.

- ❖ Store spare batteries in a cool dry place out of direct sunlight.

Disposing of used batteries safely

Your Toshiba computer contains rechargeable batteries. After repeated use, the batteries will finally lose their ability to hold a charge and you will need to replace them. Under federal, state and local laws, it may be illegal to dispose of old batteries by placing them in the trash.

Please be kind to our shared environment. Check with your local government authority for details regarding where to recycle old batteries or how to dispose of them properly. If you cannot find the information you need elsewhere, call Toshiba at: 1 (800) 457-7777.



The battery is a Lithium-Ion (Li-Ion) battery, which can explode if not properly replaced, used, handled, or disposed of. Putting spent batteries in the trash is not only irresponsible, it may be illegal. Dispose of the battery as required by local ordinances or regulations.

Use only batteries recommended by Toshiba.

The materials that came with your computer may include an insert regarding the disposal of batteries. If not, check with your local government for information on where to recycle or dispose of old batteries.

If something goes wrong

Problems that are easy to fix

Your program stops responding.

If you are working with a program that suddenly freezes all operations, chances are the program has stopped responding. You can exit the failed program without shutting down the operating system or closing other programs.

To close a program that has stopped responding:

- 1 Press Ctrl, Alt, and Del simultaneously (once).

The Windows Task Manager window appears.

2 Click the Applications tab.

If a program has stopped responding, the words “not responding” appear beside its name in the list.

3 Select the program you want to close, then click End Task.

Closing the failed program should allow you to continue working. If it does not, continue with step 4.

4 Close the remaining programs one by one by selecting the program name, then End Task.

To power off your computer, do one of the following:

If you are not connected to a domain server:

1 Click Start, Turn off computer.

The Turn off computer window appears.

2 Click Turn Off.

The computer turns off.

If you are connected to a domain server:

1 Click the Start button, then Shut down.

The Shut Down window appears.

2 Select Shut down from the drop-down list.

3 Click OK.

The computer shuts down completely.

Your program performs an illegal operation.

If you receive the message, “Your program has performed an illegal operation,” you should record the details of the message and consult the software manufacturer.

To record the details:

1 Click the Details button and select the text the operating system displays.

The Details button displays information that the software manufacturer needs to help you solve your problem.

- 2 Press Ctrl and c simultaneously to copy the text to the clipboard.
- 3 Open Notepad (click **Start**, point to **All Programs**, then point to **Accessories** and click **Notepad**).
- 4 Press Ctrl and v simultaneously to paste the details into Notepad.
- 5 Add a paragraph break and type some notes describing what you were doing when you received the message.
- 6 Save the file and refer to it when you contact the software manufacturer.

Problems when you turn on the computer

These problems may occur when you turn on the power.

The computer will not start.

Make sure you attached the AC adapter and power cable properly or installed a charged battery.

Press and hold down the power button for a few seconds.

If you are using the AC adapter, check that the wall outlet is working by plugging in another device, such as a lamp.

The computer starts but, when you press a key, nothing happens.

You are probably in Standby mode and have a software or resource conflict. When this happens, turning the power on returns you to the problem instead of restarting the system. To clear the condition, press Ctrl, Alt, and Del simultaneously.

Clearing the condition may get the computer running, but it will not solve a resource conflict. Read the documentation that came with the conflicting device and “Resolving a hardware conflict” in the electronic user’s guide.

The computer is not accessing the hard disk or the optional external diskette drive.

Your computer normally loads the operating system from the hard disk. If you have a hard disk problem, you will not be able to start the computer. Insert a system diskette into the

optional external diskette drive and press F12 when the machine starts and use the arrow keys to select the boot-up device.

The computer displays the WARNING RESUME FAILURE message.

The computer was placed in Stand By mode and the battery has discharged. Data stored in the computer's memory has been lost.

To charge the battery, leave the computer plugged into a live wall outlet for several hours. For more information, see "Power and the batteries" in the electronic user's guide.

The computer displays the Non-System disk or disk error message.

Make sure there is no diskette in the optional external diskette drive. If there is one, remove it and press any key to continue. If pressing any key does not work, press Ctrl, Alt, and Del to restart the computer.

Display problems

Here are some typical display problems and their solutions:

The screen is blank.

Display Auto Off may have gone into effect. Press any key to activate the screen.

You may have activated the instant password feature by pressing Fn and F1 simultaneously. If you have registered a password, press any key, type the password and press Enter. If no password is registered, press any key. The screen reactivates and allows you to continue working.

If you are using the built-in screen, make sure the display priority is not set for an external monitor. To do this, press Fn and F5 simultaneously (once). If this does not correct the problem, press Fn and F5 simultaneously again to return the display priority to its previous setting.

If you are using an external monitor:

- ❖ Check that the monitor is turned on.

- ❖ Check that the monitor's power cable is firmly plugged into a working power outlet.
- ❖ Check that the cable connecting the external monitor to the computer is firmly attached.
- ❖ Try adjusting the contrast and brightness controls on the external monitor.
- ❖ Press Fn and F5 simultaneously to make sure the display priority is not set for the built-in screen.

The screen does not look right.

You can change the display settings by clicking a blank area of the desktop with the secondary control button, then clicking Properties. This opens the Display Properties dialog box. The Appearance tab of this dialog box allows you to choose the colors for the screen. The Settings tab allows you to choose the screen resolution.

The built-in screen flickers.

Some flickering is a normal result of the way the screen produces colors. To reduce the amount of flickering, try using fewer colors.

To change the number of colors displayed:

- 1 Point at the desktop and click with the secondary button.
- 2 Click **Properties**, and then the **Settings** tab.
- 3 Change the Colors option and click **OK**.

For more information, see Windows® Help.

A message tells you that there is a problem with your display settings and that the adapter type is incorrect or the current settings do not work with your hardware.

Reduce the size of the color palette to one that is supported by the computer's internal display.

To change the display properties:

- 1 Point at the desktop and click with the secondary button.

The Display Properties window appears.

- 2 Click **Properties**, then click the **Settings** tab.
- 3 Adjust the screen resolution and/or color quality.
- 4 Click **OK**.

The display mode is set to Simultaneous and the external display device does not work.

Make sure the external monitor is capable of displaying at resolutions of 800 x 600 or higher. Devices that do not support this resolution will only work in External monitor only mode.

PC Card problems

PC Cards (PCMCIA-compatible) include many types of devices, such as a removable hard disk, additional memory, or a pager.

Most PC Card problems occur during installation and setup of new cards. If you're having trouble getting one or more of these devices to work together, several sections in this chapter may apply.

Resource conflicts can cause problems when using PC Cards. See "Resolving a hardware conflict" in the electronic user's guide.

Card Information Structure

When you insert a PC Card into a slot, the computer attempts to determine the type of card and the resources it requires by reading its Card Information Structure (CIS). Sometimes the CIS contains enough information for you to use the card immediately.

Other cards must be set up before you can use them. Use the Windows® XP Tablet PC Edition PC Card (PCMCIA) Wizard to set up the card. Refer to your Microsoft® documentation for more information, or refer to the documentation that came with the PC Card.

Some card manufacturers use special software called *enablers* to support their cards. Enablers result in

nonstandard configurations that can cause problems when installing the PC Card.

If your system does not have built-in drivers for your PC Card and the card did not come with an operating system driver, it may not work under the operating system. Contact the manufacturer of the PC Card for information about using the card under the operating system.

PC Card checklist

- ❖ Make sure the card is inserted properly into the slot.
- ❖ Make sure all cables are securely connected.
- ❖ Occasionally a defective PC Card slips through quality control. If another PCMCIA-equipped computer is available, try the card in that machine. If the card malfunctions again, it may be defective.

Resolving PC Card problems

Here are some common problems and their solutions:

The slot appears to be dead. PC Cards that used to work no longer work.

Check the PC Card status:

- 1 Click **Start**.
- 2 Click **My Computer** icon with the secondary button, then click **Properties**.
The System Properties dialog box appears.
- 3 Click the **Hardware** tab.
- 4 Click the **Device Manager** button.
- 5 Double-click the **PCMCIA adapter**.
- 6 Double-click the appropriate PC Card.

The operating system displays your PC Card's Properties dialog box, which contains information about your PC Card configuration and status.

The computer stops working (hangs) when you insert a PC Card.

The problem may be caused by an I/O (input/output) conflict between the PCMCIA socket and another device in the system. Use Device Manager to make sure each device has its own I/O base address. See “Fixing a problem with Device Manager” in the electronic user’s guide for more information.

Since all PC Cards share the same socket, each card is not required to have its own address.

Hot swapping (removing one PC Card and inserting another without turning the computer off) fails.

Follow this procedure before you remove a PC Card:

- 1 Double-click the **PC Card** icon on the taskbar.
- 2 Click **Safely remove xxxx**, where xxxx is the identifier for your PC Card.

The operating system displays a message that you may safely remove the card.

- 3 Remove the card from the slot.

The system does not recognize your PC Card.

Refer to the PC Card documentation.

Removing a malfunctioning card and reinstalling it can correct many problems.

A PC Card error occurs.

Reinsert the card to make sure it is properly connected.

If the card is attached to an external device, check that the connection is secure.

Refer to the card’s documentation, which should contain a troubleshooting section.

If you need further assistance

If you have followed the recommendations in this chapter and are still having problems, you may need additional technical assistance. This section contains the steps to take to ask for help.

Before you call

Since some problems may be related to the operating system or the program you are using, it is important to investigate other sources of assistance first.

Try the following before contacting Toshiba:

- ❖ Review the troubleshooting information in your operating system documentation.
- ❖ If the problem occurs while you are running a program, consult the program's documentation for troubleshooting suggestions. Contact the software company's technical support group for their assistance.
- ❖ Consult the dealer from whom you purchased your computer and/or program. Your dealer is your best source for current information.

Detailed system specifications are available at www.ts.toshiba.com by selecting your particular product and model number, clicking **GO**, and then clicking the **Detailed Specs** link from the menu on the left, or just refer to the computer documentation shipped with your product.

For the number of a Toshiba dealer near you in the United States, call: (800) 457-7777.

Contacting Toshiba

If you still need help and suspect that the problem is hardware-related, start with accessing Toshiba on the Internet using any Internet browser by typing:
pcsupport.toshiba.com.

Toshiba voice contact

Before calling Toshiba, make sure you have:

- ❖ Your computer's serial number.
- ❖ The computer and any optional devices related to the problem.
- ❖ Backup copies of your Windows® operating system and all other preloaded software on your choice of media.

- ❖ Name and version of the program involved in the problem along with its installation media.
- ❖ Information about what you were doing when the problem occurred.
- ❖ Exact error messages and when they occurred.

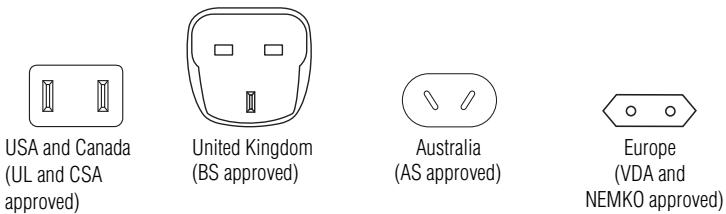
For technical support, call the Toshiba Global Support Centre:

Within the United States at (800) 457-7777

Outside the United States at (949) 859-4273

Power cable connectors

Your notebook computer features a universal power supply you can use worldwide. Depicted below are the shapes of the typical AC power cable connectors for various parts of the world.



Features and specifications

This section lists the computer's features.

NOTE

The product specifications and configuration information are designed for a product Series. Your particular model may not have all the features and specifications listed or illustrated. For more detailed information about the features and specifications on your particular model, visit Toshiba's Web site at pcsupport.toshiba.com.

While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. For the most up-to-date product information about your computer, or to stay current with the various computer software or hardware options, visit Toshiba's Web site at pcsupport.toshiba.com.

Technology and processor

Microprocessor Intel® Pentium® M processor at 1.40 GHz, 1.50 GHz, 1.60 GHz, OR 1.70 GHz

CPU performance in your computer product may vary from specifications under the following conditions:

- use of certain external peripheral products
- use of battery power instead of AC power
- use of certain multimedia games or videos with special effects
- use of standard telephone lines or low speed network connections
- use of complex modeling software, such as high end computer aided design applications
- use of computer in areas with low air pressure (high altitude >1,000 meters or >3,280 feet above sea level)

CPU performance may also vary from specifications due to design configuration.

Under some conditions, your computer product may automatically shut-down. This is a normal protective feature designed to reduce the risk of lost data or damage to the product when used outside recommended conditions. To avoid risk of lost data, always make back-up copies of data by periodically storing it on an external storage medium. For optimum performance, use your computer product only under recommended conditions. Read additional restrictions under "Environmental Conditions" in your product Resource Guide. Contact Toshiba Technical Service and Support for more information.

Graphics NVIDIA GeForce Go5200 graphics accelerator with 32 MB of external shared DDR SDRAM

Power

Computer 75 watt autosensing external AC power adapter; 100-240 VAC input voltage, 50/60 Hz frequency, 15V output voltage, 5.0 amps maximum current

Main battery	Removable, rechargeable Lithium-Ion (Li-Ion) battery (4,300 mAh, 10.8V x 9 cell) Battery life is up to 3.5 hours*. Battery recharge time is several hours*. *Battery life may vary depending on product model, configuration, applications, power management settings and features utilized. Recharge time varies depending on usage. Battery may not charge while computer is consuming full power. After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. To purchase a new battery pack, see the accessories information that shipped with your computer or visit the Toshiba Web site at www.accessories.toshiba.com .
Optional secondary battery	Removable, rechargeable Lithium-Ion (Li-Ion) battery (3,600 mAh, 10.8V x 6 cell) Lithium-Ion (Li-Ion) battery pack for use in the optional Tablet Multi Dock Slim-SelectBay (if or when available)
RTC battery	Provides power for the internal real-time clock and calendar

NOTE The RTC battery does not charge while the computer is turned off even when the AC adapter is charging the computer.

Storage capacity

Hard disk	2.5-inch removable drive and controller provides non-volatile storage for 40 GB, 60 GB, or 80 GB (GB means 1 billion bytes) A second hard disk drive is available by using the optional Tablet Multi Dock Slim-SelectBay® (if or when available)
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Ports

DC-IN	Lets you connect the computer to AC power, using the AC adapter and power cable
Headphone jack	Use the 3.5 mm, headphone jack to connect stereo headphones or other audio output devices. Connecting headphones or other devices to this jack automatically disables the internal speakers
Microphone in jack	The 3.5 mm, stereo jack lets you connect an external monaural microphone or other audio input device

RGB (monitor) port	The 15-pin, analog VGA port lets you connect an external monitor or projector
Modem port	The modem port lets you connect the internal modem directly to a telephone line via an RJ11 connection
USB 2.0 ports	Support for USB peripherals (2 ports)
Ethernet port	The Ethernet port lets you connect to a LAN via an RJ45 connection
Fast infrared port	The Infrared Data Association (IrDA)-compliant serial infrared port enables 4 Mbps (FIR mode) cableless data transfer with IrDA 1.1-compatible external devices
Expansion port	The 240-pin port lets you connect an optional expansion device
SD® Slot	The SD® slot can be used with SD® cards for additional storage

Standard hardware

Memory	The system may come with 256 MB, 512 MB, or 1024 MB of RAM (when and if available), expandable to 2048 MB of RAM (2 GB) (GB means 1 billion bytes)
Display options	12.1-inch (measured diagonally) SXGA+ Poly Silicon active matrix TFT color LCD displays up to 16 million colors at 1400 x 1050 External video support: 16 million colors at 800 x 600 and 1024 x 768, and 64,000 colors at 1280 x 1024 and 1400 x 1050
Communication	Integrated V.92 56K* modem *Due to FCC limitations, speeds of 53 kbps are the maximum permissible rates during downloads. Actual data transmission speeds will vary depending on online conditions
Networking	Integrated Intel 10/100 Base-TX Ethernet LAN adapter with RJ45 port For more detailed information regarding your system's modem, visit the Toshiba Web site at toshiba.com
Pointing device	TouchPad
Tablet pen	The Toshiba tablet pen is used for input directly onto the computer screen with a hovering feature
Windows Security button	The Windows Security button can be used to open the Windows Task Manager application, allowing you to quickly manage applications

ESC/Display Rotation button	The ESC button can be used to close windows (similar to an ESC key) in certain applications The Display Rotation button allows you to manually set the display to either landscape or portrait
Cross-Functional button	The Cross-Functional button can be used to move the cursor as well as make selections by pressing it
Tablet Multi Dock	The Tablet Multi Dock hosts optional expansion devices (if or when available)
PC Card slots	One PC Card slot lets you install one Type II or Type I PC Cards; 32-bit CardBus-ready
Sound controller	Ali M1535 Integrated software sound, 16-bit stereo, DirectSound®, Direct3D® Sound, DirectMusic®, full duplex support, MIDI, Sound Volume (by Dial), microphone port, headphone port
DVD-ROM/ CD-RW drive	External - optional. Compatibility: CD-ROM, CD-R, CD-RW, DVD-ROM, DVD-R (Read only)
Wireless communication	The computer may also come with an optional integrated Wi-Fi™ wireless LAN mini-PCI communication module providing wireless LAN functions at up to 11 Mbps
	The computer may also come with optional Bluetooth™ wireless technology, making it possible to connect many different kinds of electronic devices without the need for cables. Bluetooth uses the 2.45 GHz frequency band and can transmit at data rates up to 1 MBit/sec

NOTE

Toshiba recommends that Wi-Fi and Bluetooth options be factory-installed at the time of order.

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