TOSHIBA
Leading Innovation >>>

User's Manual

Satellite Click 10 LX0W-C

Satellite Click 10 LX5W-C

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Chapter 1

TOSHIBA Legal, Regulatory, and Safety

This chapter states the legal, regulatory, and safety information applicable to TOSHIBA computers.

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This manual has been validated and reviewed for accuracy. The instructions and descriptions it contains are accurate for your computer at the time of this manual's production. However, succeeding computers and manuals are subject to change without notice. TOSHIBA assumes no liability for damages incurred directly or indirectly from errors, omissions or discrepancies between the computer and the manual.

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Dolby and the double-D symbol are trademarks of Dolby Laboratories.

All other product names and service names in this manual might be trademarks or registered trademarks of their respective companies.

Regulatory Information

EU Declaration of Conformity

This product is carrying the CE-Mark in accordance with the related European Directives. Responsible for CE-Marking is TOSHIBA EUROPE GMBH, Hammfelddamm 8, 41460 Neuss, Germany. The complete and official EU Declaration of Conformity can be found on TOSHIBA's web site

http://epps.toshiba-teg.com on the Internet.

CE compliance

This product is labeled with the CE Mark in accordance with the applicable European Directives, notably RoHS Directive 2011/65/EU, Radio Equipment and Telecommunications Terminal Directive 1999/5/EC, Ecodesign Directive 2009/125/EC (ErP) and the related implementing measures.

This product and the original options are designed to observe the related EMC (Electromagnetic Compatibility) and safety standards. However, TOSHIBA cannot guarantee that this product still observes these EMC standards if options or cables not produced by TOSHIBA are connected or implemented. In this case the persons who have connected/implemented those options/cables have to provide assurance that the system (PC plus options/cables) still fulfils the required standards. To avoid general EMC problems, the following guidance should be noted:

◼ Only CE marked options should be connected/implemented
◼ Only best shielded cables should be connected

Working environment

This product was designed to fulfil the EMC (Electromagnetic Compatibility) requirements to be observed for so-called "Residential, commercial and light industry environments". TOSHIBA do not approve the use of this product in working environments other than the above mentioned "Residential, commercial and light industry environments".

For example, the following environments are not approved:

■   Industrial Environments (e.g. environments where a mains voltage of 380 V three-phase is used)
■   Medical Environments
■   Automotive Environments
■   Aircraft Environments

Any consequences resulting from the use of this product in working environments that are not approved are not the responsibility of TOSHIBA.

The consequences of the use of this product in non-approved working environments may be:

■   Interference with other devices or machines in the near surrounding area.
■   Malfunction of, or data loss from, this product caused by disturbances generated by other devices or machines in the near surrounding area.

Therefore TOSHIBA strongly recommend that the electromagnetic compatibility of this product should be suitably tested in all non-approved working environments before use. In the case of automobiles or aircraft, the manufacturer or airline respectively should be asked for permission before use of this product.

Furthermore, for general safety reasons, the use of this product in environments with explosive atmospheres is not permitted.

Following information is only valid for EU-member States:

Disposal of products

The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.

The black bar indicates that the product was placed on the market after August 13, 2005.

By participating in the separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please visit our website

(www.toshiba.eu/recycling) or contact your local council office or the retail outlet where you purchased the product.

Disposal of batteries and/or accumulators

Pb, Hg, Cd

The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.

If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the European Battery Directive, then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled dust bin symbol.

By participating in the separate collection of batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health. To achieve this you should take any battery and/or accumulator to your local recycling site, or to a retail outlet or facility that offers to collect these devices for environmentally friendly disposal, ensuring that the terminal contacts are covered by non-conductive tape.

For more detailed information about the collection and recycling programmes available in your country, please visit our website

(www.toshiba.eu/recycling) or contact your local council office or the retail outlet where you purchased the product.

⚠ *These symbols might not stick depending on the country and region where you purchased.*

REACH - Compliance Statement

The European Union (EU) chemical regulation, REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), entered into force on 1 June 2007, with phased deadlines to 2018.

Toshiba will meet all REACH requirements and is committed to provide our customers with information about the presence in our articles of substances included on the candidate list according to REACH regulation.

Please consult the following website

www.toshiba.eu/reach for information about the presence in our articles of substances included on the candidate list according to REACH in a concentration above 0.1 % weight by weight.

Following information is only for Turkey:

■ Disposal of products:

The crossed wheelie bin symbol means that this product should not be collected and disposed with other household wastes. When product become waste at the end-of-life, to protect environment and human health, it should be given to nearest collection recycling or disposal center. For more information about collection and recycling programs in your country please contact your local authority or the retailer where the product was purchased.

■ Toshiba meets all requirements of Turkish regulation 28300 "Restriction of the use of certain hazardous substances in electrical and electronic equipment".

AEEE Yönetmeliğine Uygundur

Toshiba 28300 sayılı Türkiye "Elektrikle çalişan ve elektronik ekipmanda belirli tehlikeli maddelerin kullanimiyla ilgili kisitlama" yönetmeliği gereklerini tamamen yerine getirmektedir.

■ The number of possible pixel failures of your display is defined according to ISO 9241-307 standards. If the number of pixel failures is less than this standard, they will not be counted as defect or failure.

■ Battery is a consumption product, since the battery time depends on the usage of your computer. If the battery can not be charged at all, then it is a defect or failure. The changes in battery time is not a defect or failure.

Video Standard Notice

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ENERGY STAR® Program

Your Computer model may be ENERGY STAR® compliant. If the model you purchased is compliant, it uses the Energy Star logo and the following information applies.

TOSHIBA is a partner in the ENERGY STAR Program and has designed this computer to meet the latest ENERGY STAR guidelines for energy efficiency. Your computer ships with the power management options preset to a configuration that will provide the most stable operating environment and optimum system performance for both AC power and battery modes.

To conserve energy, your computer is set to enter the low-power Sleep Mode which shuts down the system and display within 15 minutes of inactivity in AC power mode.

TOSHIBA recommends that you leave this and other energy saving features active, so that your computer will operate at its maximum energy efficiency. You can wake the computer from Sleep Mode by pressing the power button.

Your ENERGY STAR certified computer should be set by default to enter a low-power "sleep mode" after a period of inactivity. Simply touching the mouse or keyboard "wakes" the computer in seconds. These sleep features can save you up to $23 per year (200 kWh per year in electricity) and prevent up to 300 pounds of greenhouse gas emissions annually. To learn how to adjust or activate these sleep settings on your computer, please go to:

www.energystar.gov/sleepinstructions

To activate sleep settings organization-wide quickly and easily through network tools, please go to

www.energystar.gov/powermanagement

Disposing of the computer and the computer's battery

The computer's battery pack is not user-accessible. Contact an authorized TOSHIBA service provider for details regarding how to dispose of the computer and the battery pack.

General Precautions

TOSHIBA computers are designed to optimize safety, minimize strain, and withstand the rigors of portability. However, certain precautions should be

observed to further reduce the risk of personal injury or damage to the computer.

Be certain to read the following general precautions and to note the cautions included in the text of the manual.

Provide adequate ventilation

Always make sure that your computer and AC adaptor have adequate ventilation and are protected from overheating when the power is turned on or when an AC adaptor is connected to a power outlet (even if your computer is in Sleep Mode). In this condition, observe the following:

- Never cover your computer or AC adaptor with any object.
- Never place your computer or AC adaptor near a heat source, such as an electric blanket or heater.
- Never cover or block the air vents including those at the base of the computer.
- Always operate your computer on a hard flat surface. Using your computer on a carpet or other soft material can block the vents.
- Always provide sufficient space around the computer.

Overheating your computer or AC adaptor could cause system failure, computer or AC adaptor damage or a fire, possibly resulting in serious injury.

Creating a computer-friendly environment

Place the computer on a flat surface that is large enough for the computer and any other items you are using, such as a printer.

Leave enough space around the computer and other equipment to provide adequate ventilation. Otherwise, they might overheat.

To keep your computer in prime operating condition, protect your work area from:

- Dust, moisture, and direct sunlight.
- Equipment that generates a strong electromagnetic field, such as stereo speakers (other than speakers that are connected to the computer) or speakerphones.
- Rapid changes in temperature or humidity and sources of temperature change such as air conditioner vents or heaters.
- Extreme heat, cold, or humidity.
- Liquids and corrosive chemicals.

Stress injury

Carefully read the *Instruction Manual for Safety and Comfort*. It contains information on the prevention of stress injuries to your hands and wrists that can be caused by extensive keyboard use. It also includes information on work space design, posture, and lighting that can help reduce physical stress.

Heat injury

- Avoid prolonged physical contact with the computer. If the computer is used for long periods, its surface can become very warm. While the temperature will not feel hot to the touch, if you maintain physical contact with the computer for a long time, for example if you rest the computer on your lap or if you keep your hands on the palm rest, your skin might suffer a low-heat injury.
- If the computer has been used for a long time, avoid direct contact with the metal plate supporting the various interface ports as this can become hot.
- The surface of the AC adaptor can become hot when in use but this condition does not indicate a malfunction. If you need to transport the AC adaptor, disconnect it and let it cool before moving it.
- Do not lay the AC adaptor on a material that is sensitive to heat as the material could become damaged.

Pressure or impact damage

Do not apply heavy pressure to the computer or subject it to any form of strong impact as this can damage the computer's components or otherwise cause it to malfunction.

Cleaning the computer

To help ensure long, trouble-free operation, keep the computer free of dust and dirt, and use care with all liquids around it.

- Be careful not to spill liquids into the computer. If the computer does get wet, turn the power off immediately and let the computer dry completely. In these circumstances, you should get the computer inspected by an authorized service provider in order to assess the scope of any damage.
- Clean the plastics of the computer using a cloth slightly dampened with water.
- You can clean the display screen by spraying a small amount of glass cleaner onto a soft, clean cloth and then wiping the screen gently with the cloth.

Never spray cleaner directly onto the computer or let liquid run into any part of it. Never use harsh or caustic chemical products to clean the computer.

Moving the computer

While the computer is designed for flexible day-to-day usage, you should exercise a few simple precautions when moving it in order to help ensure trouble-free operation.

- Make sure all disk/disc activity has ended before moving the computer.
- Turn off (shut down) the computer.
- Disconnect the AC adaptor and all peripherals before moving the computer.
- Close the display panel.
- Do not pick up the computer by its display panel.
- Before carrying your computer, shut it down, disconnect the AC adaptor and allow it to cool down. A failure to follow this instruction might result in minor heat injury.
- Do not expose the computer to rapid temperature changes (for example, in a situation where you carry the computer from a cold environment to a warm room). Do not turn on the power until condensation disappears.
- Be careful not to subject the computer to impact or shock. A failure to follow this instruction could result in damage to computer, computer failure, or loss of data.
- Never transport your computer with any cards installed. This might damage either the computer and/or the card resulting in computer failure.
- Always use a suitable carry case when transporting the computer.
- When carrying your computer, be sure to hold it securely so that it does not fall or hit anything.
- Do not carry your computer by holding any of its protruding elements.

Mobile phones

Be aware that the use of mobile phones can interfere with the audio system. The operation of the computer will not be impaired in any way, but it is recommended that a minimum distance of 30 cm is maintained between the computer and a mobile phone that is in use.

Instruction Manual for Safety and Comfort

All important information on the safe and proper use of this computer is described in the enclosed Instruction Manual for Safety and Comfort. Be sure to read it before using the computer.

Safety Icons

Safety icons are used in this manual to bring important information to your attention. Each type of message is identified as follows.

Indicates a potentially hazardous situation, which could result in death or serious injury, if you do not follow instructions.

A caution informs you that improper use of equipment or failure to follow instructions might cause data loss, equipment damage, or might result in minor or moderate injury.

Please read. A note is a hint or advice that helps you make best use of your equipment.

Chapter 2

Getting Started

This chapter provides an equipment checklist, and basic information to start using your computer.

⚠️ *If you use an operating system that was not pre-installed by TOSHIBA, some of the features described in this manual might not function properly.*

Equipment checklist

Carefully unpack your computer, taking care to save the box and packaging materials for future use.

Hardware

Check to make sure that you have all the following items:

- TOSHIBA Portable Personal Computer
- TOSHIBA Keyboard Dock (equipped with some models)
- AC adaptor (2-pin or 3-pin)

Documentation

- Quickstart
- Instruction Manual for Safety and Comfort
- Warranty Information

If any of the items are missing or damaged, contact your dealer immediately.

Dual Operating Mode

Depending on the model you purchased, your device might be provided a TOSHIBA Keyboard Dock and supports dual operating mode - your computer can be easily converted from a tablet PC to a laptop PC. Throughout this manual, operating your computer as a laptop PC and a tablet PC is called "laptop mode" and "tablet mode" respectively.

Conventions

This manual uses the following formats to describe, identify, and highlight terms and operating procedures.

Click	■	Tap the Touch Pad or click the left Touch Pad control button once.
	■	Left-click the mouse once.
	■	Tap the touch screen once.
Right-click	■	Tap the Touch Pad with two fingers together or click the right Touch Pad control button once.
	■	Right-click the mouse once.
	■	Press and hold on the touch screen.
Double-click	■	Tap the Touch Pad or click the left Touch Pad control button twice.
	■	Left-click the mouse twice.
	■	Tap the touch screen twice.
Start		The word "Start" refers to the " ■■ " button in the lower-left corner of the screen.
All apps		You can find a list of all your apps and programs in the **All apps**.
		To access it, click **Start** and select **All apps** (▤≡) in the lower-left corner.

Using your computer for the first time

Be sure to read the enclosed Instruction Manual for Safety and Comfort for information on the safe and proper use of this computer. It is intended to help you be more comfortable and productive while using the computer. By following the recommendations in it, you can reduce your chance of developing a painful or disabling injury to your hand, arms, shoulders, or neck.

This section provides basic information to start using your computer. It covers the following topics:

■ Connecting/Removing TOSHIBA Keyboard Dock
■ Connecting the AC adaptor
■ Turning on the power
■ Initial setup

■ *Use a virus-check program and make sure that it is updated regularly.*

■ *Never format storage media without checking its content - formatting destroys all stored data.*

■ *It is a good idea to back up the internal storage or other main storage device to external media periodically. General storage media is not durable or stable over long periods of time and under certain conditions might result in data loss.*

■ *Before you install a device or application, save any data in memory to the internal storage or other storage media. Failure to do so might result in data loss.*

Connecting/Removing TOSHIBA Keyboard Dock

TOSHIBA Keyboard Dock provided with some models can turn your tablet into a laptop for extensibility including a physical keyboard and extra ports.

To use in laptop mode, you need to connect TOSHIBA Keyboard Dock to the tablet by following the steps below:

1. Hold middle-top side of the tablet (with the web camera on the top side), and align the guide pins on the keyboard dock with the guide pin grooves on the bottom of the tablet.

Figure 2-1 Connecting the keyboard dock
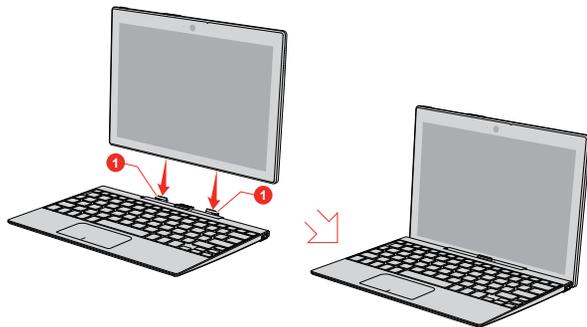
1. Guide pins

Product appearance depends on the model you purchased.

Please follow the illustrations above and do not reverse the tablet.

2. Gently press down the tablet until hear it clicks into place. The docking connector on the keyboard dock engages the docking interface on the tablet.

    The computer can be opened to a wide range of angles for optimal viewing.

    To do this, hold down the palm rest with one hand so that the body of the keyboard dock is not raised, and slowly lift the computer with the other hand holding the center position of the display screen (as shown in the following figure).

Figure 2-2 Opening the computer
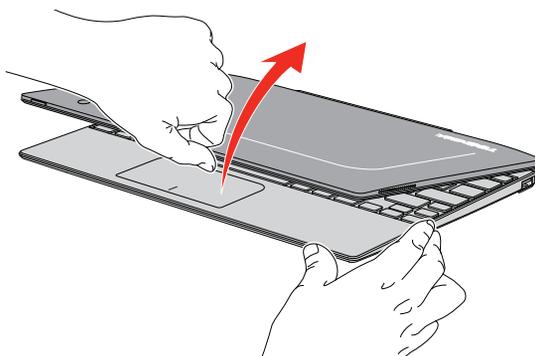
Product appearance depends on the model you purchased.

Open and close the computer with reasonable care. Opening it vigorously or slamming it shut might cause damage.

- *Be careful not to open the computer too wide as it might put stress on the hinges and cause damage.*

- *Be careful not to hurt your fingers when docking the computer to the keyboard dock.*

- *The rear of the keyboard dock is designed as a fulcrum, and moves slightly upwards when the computer is opened. Do not use the computer on soft surfaces or on rough surfaces where the base is vulnerable to scratches.*
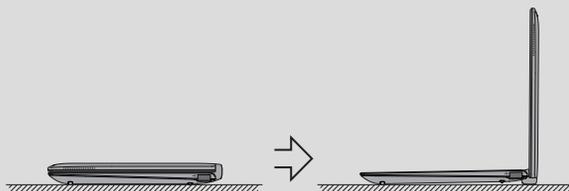
- *Do not press or push with excess force on the display screen, otherwise the computer might become unsteady and possibly fall over.*

- *Do not close the computer with pens or any other objects left in between the display screen and the keyboard dock.*

- *Never turn the hinges without the computer docked, otherwise it might cause damage or possibly result in mechanical malfunction.*

To disconnect and remove the computer from the keyboard dock, do the following:

⚠️ *Failure to follow the procedures below may result in data loss.*

1. Disconnect and remove all peripheral devices and cables connected to the computer.
2. Press down the release button while holding the middle-top side of the display panel first and then lift it to release it from the computer holder and completely off the keyboard dock.

Figure 2-3 Removing the computer from the keyboard dock

1. Release button
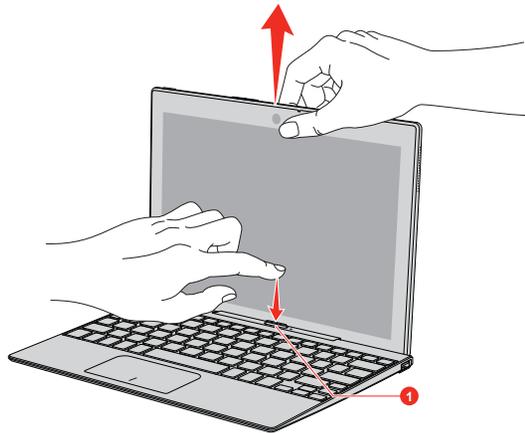
Product appearance depends on the model you purchased.

⚠️
- *Do not undock the computer if the remaining power of Battery (refers to the battery pack inside the tablet) is 10% or less. To check the remaining battery power, click the battery icon on the Windows taskbar.*
- *Do not dock the computer immediately after undocking operation. Wait at least 5 seconds.*

Connecting the AC adaptor

Attach the AC adaptor when you want to charge the battery or operate from AC power. The battery pack must be charged before you can operate from battery power.

The AC adaptor can automatically adjust to any voltage ranging from 100 volts to 240 volts and to a frequency of either 50 hertz or 60 hertz, enabling you to use this computer in almost any country/region. The adaptor

converts AC power to DC power and reduces the voltage supplied to this computer.

⚠️

■ *Always use the TOSHIBA AC adaptor that was included with your computer, or use AC adaptors specified by TOSHIBA to avoid any risk of fire or other damage to the computer. Use of an incompatible AC adaptor might cause fire or damage to the computer possibly resulting in serious injury. TOSHIBA assumes no liability for any damage caused by use of an incompatible adaptor.*

■ *Never plug the AC adaptor into a power source that does not correspond to both the voltage and the frequency specified on the regulatory label of the unit. Failure to do so might result in a fire or electric shock, possibly resulting in serious injury.*

■ *Always use or purchase power cables that comply with the legal voltage and frequency specifications and requirements in the country of use. Failure to do so might result in a fire or electric shock, possibly resulting in serious injury.*

■ *The supplied power cord conforms to safety rules and regulations in the region the computer is bought and should not be used outside this region. For use in other regions, buy power cords that conform to safety rules and regulations in the particular region.*

■ *Do not use a 3-pin to 2-pin conversion plug.*

■ *When you connect the AC adaptor to the computer, always follow the steps in the exact order as described in this User's Manual. Connecting the power cable to a live electrical outlet should be the last step otherwise the adaptor DC output plug might 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.*

■ *Never place your computer or AC adaptor on a wooden surface, furniture, or any other surface that might be marred by exposure to heat since the computer base and the surface of the AC adaptor increase in temperature during normal use.*

■ *Always place your computer or AC adaptor on a flat and hard surface that is resistant to heat damage.*

Refer to the enclosed Instruction Manual for Safety and Comfort for detailed precautions and handling instructions.

1. Plug the Micro-USB connector of the AC adaptor into the Micro-USB port on your computer.

Figure 2-4 Plugging the Micro-USB cable into computer

2 PIN   3 PIN
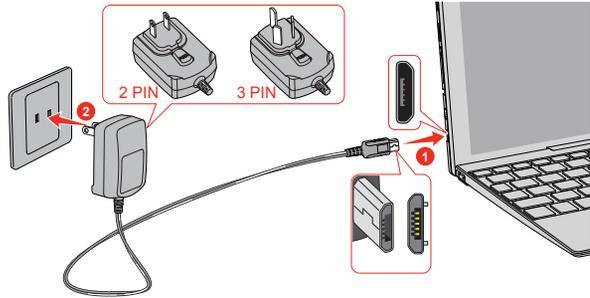
1. Micro-USB port   2. Micro-USB connector

Product appearance depends on the model you purchased.

Either a 2-pin or 3-pin adaptor/cord is included with the computer depending on the model.

The Micro-USB connector of the AC adaptor must be correctly plugged into the Micro-USB port on the computer. Failure to do so correctly might result in possible damage to the Micro-USB port.
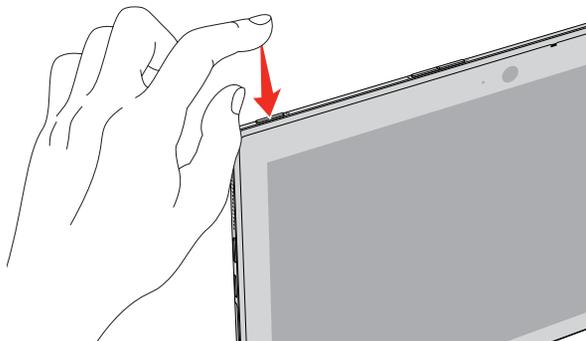
2.   Plug the power cord into a live wall outlet.

Turning on the power

This section describes how to turn on the power.

Press the **Power** button to turn on the power.

Figure 2-5 Turning on the power

1. Power button

Product appearance depends on the model you purchased.

Initial setup

The Windows Startup Screen is the first screen displayed when you turn on the power. To install the operating system properly, follow the on-screen instructions on each screen.

When it is displayed, be sure to read the icense terms and license agreement carefully.

Getting to know Windows

For detailed information on what is new and how to operate Windows, refer to **Get Started** in the Start menu.

Start menu

The Start menu is the launching pad for everything you can do in the Windows operating system, providing easy ways to access your apps, programs, websites and other important information.

You can access the Start menu from an app or the desktop in the following ways:

- Click the **Start** button (▦) in the lower-left corner of the screen.
- Press the Windows® logo key (▦) on your keyboard.

Most used allows quick access to your frequently used apps, and your recently installed apps are highlighted under **Recently added**.

You can pin your favorite apps to the Start menu as tiles in grid-like pattern, and also group them. Typical tiles are the **People** tile and the **Mail** tile for instance. Tiles show you dynamic information from apps without having to open them.

Windows taskbar

By default, the bottom of the desktop is Windows taskbar. You can see all of your currently running apps on the Windows taskbar.

Task view

Task view (⬜) is launched from Windows taskbar at the bottom of the screen. Task view allows you to view the apps that are currently running. Also, you can create custom desktops so that running apps can be grouped for entertainment, productivity, or what you just want.

To do this, click the **Task view** icon ⬜ , and then click **New desktop**. Open the apps you want to use on that desktop. To switch between desktops, click **Task view** again.

Search

Search on the Windows taskbar allows you to find apps, files, settings, and more on the computer. When Internet connection is available, it also shows you the best search result from the Internet.

The personal assistant called **Cortana** might be available depending on your country/region. You can ask questions or talk to Cortana in natural voice, and Cortana answers your questions using information from the Internet. To use Cortana, an internal or external microphone is required. Press the **F1** key to activate Cortana.

Action center

You can review important notifications from apps or Windows in action center, and take action without having to open apps. It also provides quick action buttons to access to most-used settings instantly. Select the action center icon ▤ on the Windows taskbar to view your notifications and quick actions.

Settings

Settings provides system settings including advanced settings in the Control Panel. They are divided in categories so that you can configure, optimize, or personalize Windows.

You can also type in the keyword, and use **Search** to find any setting.

To open Settings, click **Start -> All apps -> Settings** (⚙).

You can pin it to the Start menu as a tile by right-clicking on **Settings** and selecting **Pin to Start**.

Windows Store

Although many apps are pre-installed in your computer, you can also download many others from the Windows Store.

You can search for and browse thousands of apps, all grouped into easy-to-find categories there.

Sign-in options

Windows offers a number of sign-in options including **Password ( )**, **PIN (   )** and **Picture password ( )** authentication to prevent from unauthorized access. If you have multiple sign-in methods set for a user account, you can select an option on the Windows login screen by clicking sign-in options. Password authentication is the default sign-in option.

Tablet mode

Tablet mode enables touch-optimized working environment without keyboard and mouse.

After switching to tablet mode, Start menu and apps are running in full screen, giving you more space to work in. To use two apps side-by-side, drag an app to one side. You will see any open apps that can snap next to it. To close an app, drag it to the bottom of the screen.

Turning off the power

The power can be turned off in one of the following modes, either Shut Down Mode, Sleep Mode or Hibernation Mode.

Shut Down Mode

When you turn off the power in Shut Down Mode, no data will be saved and the computer will boot to the main screen of the operating system the next time it is turned on.

1. If you have entered data, either save it to the internal storage or to other storage media.
2. Make sure all disk/disc activity has stopped before removing the disk/disc.

■ *If you turn off the power while a disk (disc) is being accessed, you might lose data or damage the disk.*

■ *Never turn off the power while an application is running. Failure to do so can cause data loss.*

■ *Never turn off the power, disconnect an external storage device, or remove storage media during data read/write. Failure to do so can cause data loss.*

3. Click **Start -> Power** and then select **Shut down**.
4. Turn off any peripheral devices connected to your computer.

Do not turn the computer or peripheral devices back on immediately. Wait a short period to avoid any potential damage.

Restarting the computer

Certain conditions require that you reset the computer, for example if:

■ You change certain computer settings.

To restart the computer, there are several ways this can be achieved:

■ Click **Start -> Power** and then select **Restart**.
■ Press **CTRL**, **ALT**, and **DEL** simultaneously (once) to display the menu window, and then select **Restart** by clicking the power icon (⏻) in the lower-right corner.

Sleep Mode

If you have to interrupt your work, you are able to turn off the power without exiting from your software by placing the computer into Sleep Mode. In this mode, data is maintained in the main memory of the computer. When you turn on the power again, you can continue working right where you left off.

Your system supports Connected Standby function, which starts working after your tablet goes into Sleep Mode. Connected Standby function is to provide a constant connectivity while delivering long battery life, and at the same time, some activities are allowed to run to ensure that the supported Connected Standby scenarios (for example, receiving emails, updating tiles alive with fresh content, downloading/uploading a file from/to a website, and playing music) are functioning properly.

When you have to turn off your computer aboard an aircraft or in places where electronic devices are regulated or controlled, always shut down the computer. This includes turning off any wireless communication functionalities, and canceling settings that reactivate the computer automatically, such as a timer recording function. Failure to shut down the computer in this way might allow the operating system to reactivate and run pre-programmed tasks or preserve unsaved data, which might interfere with aviation or other systems, possibly causing serious injury.

■ *Before entering Sleep Mode, be sure to save your data.*
■ *To prevent data loss, do not switch to Sleep Mode while transferring data to external media, such as USB devices, memory media, or other external memory devices.*

■ *When the AC adaptor is connected, the computer will go into Sleep Mode according to the settings in the Power Options (to access it, click **Control Panel -> System and Security -> Power Options** under **Windows System** group in **All apps**).*

- *To restore the operation of the computer from Sleep Mode, press and hold the power button for a short amount of time.*
- *If the computer enters Sleep Mode while a network application is active, the application might not be restored when the computer is next turned on and the system returns from Sleep Mode.*
- *To prevent the computer from automatically entering Sleep Mode, disable Sleep Mode within the Power Options.*

Benefits of Sleep Mode

The Sleep Mode feature provides the following benefits:

- Restores the previous working environment more rapidly than the Hibernation Mode feature.
- Saves power by shutting down the system when the computer receives no input or hardware access for the time period set by the System Sleep Mode feature.
- Allows the use of the panel power off feature.

Executing Sleep Mode

You can enter Sleep Mode in one of following ways:

- Click **Start -> Power** and then select **Sleep**.
- Close the display panel. Note that this feature must be enabled within the Power Options.
- Press the power button. Note that this feature must be enabled within the Power Options.

When you turn the power back on, you can continue where you left off when you shut down the computer.

Sleep Mode limitations

Sleep Mode will not function under the following conditions:

- Power is turned back on immediately after shutting down.
- Memory circuits are exposed to static electricity or electrical noise.

Hibernation Mode (supported by some models)

The Hibernation Mode feature saves the contents of memory to the internal storage when the computer is turned off so that, the next time it is turned on, the previous state is restored. Note that the Hibernation Mode feature does not save the status of any peripheral devices connected to the computer.

- *Save your data. While entering Hibernation Mode, the computer saves the contents of memory to the internal storage. However, for safety sake, it is best to save your data manually.*

■   *Data will be lost if you disconnect the AC adaptor before the save is completed.*

Automatic Hibernation Mode

The computer can be configured to enter Hibernation Mode automatically when battery power is exhausted to the point that computer operation cannot be continued. This can be specified in the Power Options. To define these settings, do the following:

1. Click **Control Panel -> System and Security -> Power Options -> Change when the computer sleeps -> Change advanced power settings** under **Windows System** group in **All apps**.
2. Click **Low battery action** or **Critical battery action** under **Battery**, and then select **Hibernate** from the list with the condition of **On battery** or **Plugged in**.
3. Click **Apply** and then click **OK**.

Benefits of Hibernation Mode

The Hibernation Mode feature provides the following benefits:

■   Saves data to the internal storage when the computer automatically shuts down because of a low battery condition.
■   You can return to your previous working environment immediately when you turn on the computer.
■   Saves power by shutting down the system when the computer receives no input or hardware access for the time period set by the System Hibernate feature.

System Recovery (For models without Recovery Media Creator pre-installed)

There is recovery image on the internal storage for the System Recovery Options in the event of a problem.

The following items are described in this section:

■   Creating Recovery Media
■   Restoring the pre-installed software from your created Recovery Media
■   Restoring the pre-installed software from the Internal Storage

If you choose TOSHIBA Maintenance Utility to erase the internal storage, all data including the operating system and recovery image will be deleted. In that case, you cannot create recovery media or restore the pre-installed software from the recovery image. Make sure that you have already created recovery media before you start TOSHIBA Maintenance Utility.

This recovery media can be used to restore your system after you have erased your internal storage.

Creating Recovery Media

This section describes how to create Recovery Media.

- *Be sure to connect the AC adaptor when you create Recovery Media.*
- *Be sure to close all other software programs.*
- *Do not run software such as screen savers which can put a heavy load on the CPU.*
- *Operate the computer at full power.*
- *Do not use power-saving features.*
- *Do not write to the media when the virus check software is running. Wait for it to finish, then disable virus detection programs including any software that checks files automatically in the background.*
- *Do not use utilities, including those intended to enhance internal storage access speed. They might cause unstable operation and damage data.*
- *Do not shut down/log off or Sleep/Hibernate while writing or rewriting the media.*
- *Set the computer on a level surface and avoid places subjected to vibrations such as airplanes, trains, or cars.*
- *Do not use on an unstable surface such as a stand.*

A recovery image of the software on your computer is stored on the internal storage, and can be copied to either disc media or USB Flash Memory by using the following steps:

1. Select either blank disc or USB Flash Memory.

- *Some of the disc media might not be compatible with the optical disc drive connected to your computer. You should therefore verify that the optical disc drive supports the blank media you have chosen before proceeding.*
- *USB Flash Memory will be formatted and all the data in the USB Flash Memory will be lost when proceeding.*

2. Turn on your computer and allow it to load the Windows operating system as normal.
3. Insert the first blank disc into the external optical disc drive tray, or insert the USB Flash Memory into one available USB port.
4. Click **Control Panel -> System and Security -> Security and Maintenance -> Recovery -> Create a recovery drive** under **Windows System** group in **All apps**.

5. Follow the on-screen instructions to finish creating the Recovery Media.

Restoring the pre-installed software from your created Recovery Media

If the pre-installed files are damaged, you are able to use the Recovery Media you have created to restore the computer to the state it was in when you originally received it. To perform this restoration, do the following:

■ *Make sure that the AC adaptor is connected during the restoring process.*

■ *Make sure to dock the computer to TOSHIBA Keyboard Dock before restoring the operating system.*

■ *When you reinstall the Windows operating system, internal storage will be reformatted and all data will be lost.*

1. Load the Recovery Media into the external optical disc drive or insert the recovery USB Flash Memory into one available USB port.
2. Click **Start -> Power** and then select **Restart**.
3. Hold down the **F12** key (by pressing **FN** + "labelled letter key") and then release this key one second after the computer is power on.

   You can hold down the **Volume up** button until the Boot menu is loaded.
4. Use the up and down cursor key to select the appropriate option from the menu according to your actual recovery media.
   You can also use the **Volume up** and the **Volume down** button on the computer to select the appropriate option from the menu, and press the **Windows** button to confirm the selection.
5. A menu is displayed from which you should follow the on-screen instructions.

If you have previously chosen to delete the recovery image without creating "Recovery Media", the "Recovery Media" cannot be created.

However, if you have already created a "Recovery Media", you can use it to restore the recovery image.

If you have not created "Recovery Media", contact TOSHIBA support for assistance.

Restoring the pre-installed software from the Internal Storage

A portion of the total internal storage space is used to store the recovery image which can be used to restore pre-installed software in the event of a problem.

- *Make sure that the AC adaptor is connected during the restoring process.*
- *Make sure to dock the computer to TOSHIBA Keyboard Dock before restoring the operating system.*

When you reinstall the Windows operating system, the internal storage will be reformatted and all data will be lost.

1. Click **Start -> Power** and then select **Restart**.
2. Hold down **0** (zero) key and then release this key one second after the computer is power on.

   You can also hold down the **Volume up** button on the computer until the Boot menu is loaded, and then select **HDD Recovery**.
3. Select **Troubleshoot**.
4. Select **Reset this PC**.
5. Follow the on-screen instructions to finish the recovery.

You can also perform the restoration through Settings in the operating system:

1. Go to **Settings** and click **Update & security -> Recovery**.
2. Click **Get started** under **Reset this PC**.
3. Follow the on-screen instructions to finish the recovery.

System Recovery (For models with Recovery Media Creator pre-installed)

There is a hidden partition allocated on the internal storage for the System Recovery Options in the event of a problem.

You can also create recovery media and restore the system.

The following items are described in this section:

- Creating Recovery Media
- Restoring the pre-installed software from your created Recovery Media
- Restoring the pre-installed software from the Recovery Partition

If you choose TOSHIBA Maintenance Utility to erase the internal storage, all data including the operating system and recovery partition will be deleted. In that case, you cannot create recovery media or restore the pre-installed software from the recovery partition. Make sure that you have already created recovery media before you start TOSHIBA Maintenance Utility. This recovery media can be used to restore your system after you have erased your internal storage.

Creating Recovery Media

This section describes how to create Recovery Media.

■ *Be sure to connect the AC adaptor when you create Recovery Media.*

■ *Be sure to close all other software programs except the Recovery Media Creator.*

■ *Do not run software such as screen savers which can put a heavy load on the CPU.*

■ *Operate the computer at full power.*

■ *Do not use power-saving features.*

■ *Do not write to the media when the virus check software is running. Wait for it to finish, then disable virus detection programs including any software that checks files automatically in the background.*

■ *Do not use utilities, including those intended to enhance internal storage access speed. They might cause unstable operation and damage data.*

■ *Do not shut down/log off or Sleep/Hibernate while writing or rewriting the media.*

■ *Set the computer on a level surface and avoid places subjected to vibrations such as airplanes, trains, or cars.*

■ *Do not use on an unstable surface such as a stand.*

A recovery image of the software on your computer is stored on the internal storage, and can be copied to either disc media or USB Flash Memory by using the following steps:

1. Select either blank disc or USB Flash Memory.

   The application allows you to choose from a variety of different media onto which the recovery image can be copied including disc media and USB Flash Memory.

■ *Some of the disc media might not be compatible with the optical disc drive connected to your computer. You should therefore verify that the optical disc drive supports the blank media you have chosen before proceeding.*

■ *USB Flash Memory will be formatted and all the data in the USB Flash Memory will be lost when proceeding.*

2. Turn on your computer and allow it to load the Windows operating system as normal.
3. Insert the first blank disc into the external optical disc drive tray, or insert the USB Flash Memory into one available USB port.
4. Click **Recovery Media Creator** under **TOSHIBA** group in **All apps**.
5. After Recovery Media Creator starts, select the type of media and the title you wish to copy, and then click the **Create** button.

*Make sure that you create recovery media by using **Recovery Media Creator** instead of the recovery drive creating option in Windows system. Otherwise, **Recovery Media Creator** will not work and **TOSHIBA HDD Recovery** option in TOSHIBA Maintenance Utility will not exist if you restore the computer from the recovery media you created by options in Windows system.*

Restoring the pre-installed software from your created Recovery Media

If the pre-installed files are damaged, you are able to use the Recovery Media you have created to restore the computer to the state it was in when you originally received it. To perform this restoration, do the following:

- *Make sure that the AC adaptor is connected during the restoring process.*
- *Make sure to dock the computer to TOSHIBA Keyboard Dock before restoring the operating system.*

- *When you reinstall the Windows operating system, the internal storage will be reformatted and all data will be lost.*

1. Load the Recovery Media into the external optical disc drive or insert the recovery USB Flash Memory into one available USB port.
2. Click **Start -> Power** and then select **Restart**.
3. Hold down the **F12** key (by pressing **FN** + "labelled letter key") and then release this key one second after the computer is power on.

   You can hold down the **Volume up** button until the Boot menu is loaded.
4. Use the up and down cursor key to select the appropriate option from the menu according to your actual recovery media.

   You can also use the **Volume up** and the **Volume down** button on the computer to select the appropriate option from the menu, and press the **Windows** button to confirm the selection.
5. A menu is displayed from which you should follow the on-screen instructions.

If you have previously chosen to remove the recovery partition and are trying to create "Recovery Media", the following message apppears: "The Recovery Media Creator can not be launched because there is no recovery partition."

When there is no recovery partition, the Recovery Media Creator cannot make Recovery Media.

However, if you have already created a "Recovery Media", you can use it to restore the recovery partition.

If you have not created "Recovery Media", contact TOSHIBA support for assistance.

Restoring the pre-installed software from the Recovery Partition

A portion of the total internal storage space is configured as a hidden recovery partition. This partition stores files which can be used to restore pre-installed software in the event of a problem.

If you set up your internal storage again later, do not change, delete, or add partitions in a manner other than specified in the manual, otherwise you might find that space for the required software is not available.

In addition, if you use a third-party partitioning program to reconfigure the partitions on your internal storage, you might find that it becomes impossible to set up your computer.

- *Make sure that the AC adaptor is connected during the restoring process.*
- *Make sure to dock the computer to TOSHIBA Keyboard Dock before restoring the operating system.*

When you reinstall the Windows operating system, the internal storage will be reformatted and all data will be lost.

1. Click **Start -> Power** and then select **Restart**.
2. Hold down **0** (zero) key and then release this key one second after the computer is power on.

   You can also hold down the **Volume up** button on the computer until the Boot menu is loaded, and then select **HDD Recovery**.
3. Select **Troubleshoot -> TOSHIBA Maintenance Utility -> TOSHIBA HDD Recovery**.
4. Follow the on-screen instructions to finish the recovery.

Enabling System Protection for System Restore

Depending upon your system, the Windows® System Protection feature, that automatically creates restore points, might be disabled to conserve space on your system. To enable this feature, do the following:

1. Tap **Control Panel -> System and Security -> System -> System protection** under **Windows System** group in **All apps**.
2. In the **System Protection** tab, tap **Configure**, and then tap **Turn on system protection** to enable the function.

After the **System Protection** feature is enabled, you can undo changes by reverting your tablet to a previous state by creating a restore point.

Chapter 3

The Grand Tour

This chapter identifies the various components of the computer. It is recommended that you become familiar with each before you operate the computer.

Legal Footnote (Non-applicable Icons)

For more information regarding Non-applicable Icons, refer to the *Legal Footnotes* section.

Handle your computer carefully to avoid scratching or damaging the surface.

The Computer (tablet mode)

The following figure shows essential components of the computer.

Figure 3-1 The computer in tablet mode
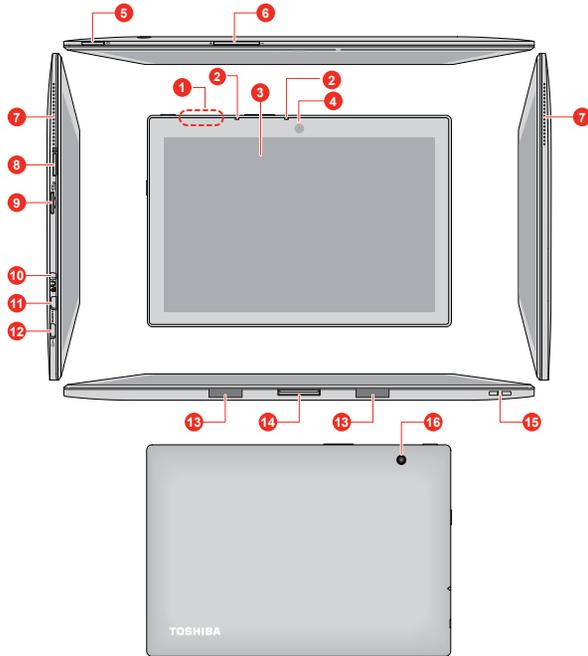
1. Wireless communication antennas (not shown)	9. Memory media slot
2. Microphones*	10. Headphone/Microphone combo jack
3. Display screen	11. HDMI micro port
4. Web Camera (front)	12. Micro-USB port
5. Power button	13. Guide pin grooves
6. Volume up/down button	14. Docking interface
7. Stereo speakers	15. Strap hole
8. Windows button	16. Web Camera (back)

* Provided with some models.
Product appearance depends on the model you purchased.

Wireless communication antennas	The computer is equipped with the Wireless LAN/ Bluetooth antennas.

Legal Footnote (Wireless LAN)

For more information regarding Wireless LAN, refer to the *Legal Footnotes* section.

	Display screen	25.4 cm (10") LCD screen, configured with the following resolution:
		■ WUXGA, 1920 horizontal x 1200 vertical pixels
		Be aware that, when the computer is operating on the AC adaptor, the image displayed on the internal screen is somewhat brighter than when it operates on battery power. This difference in brightness levels is intended to save power when operating on batteries.

Legal Footnote (LCD)

For more information regarding LCD, refer to the *Legal Footnotes* section.

	Web Camera (front)	**Web Camera** is a device that allows you to record video or take photographs with your computer. You can use it for video chatting or video conferences using a communication tool.

- *Do not point the web camera directly at the sun.*
- *Do not touch or press strongly on the web camera lens. Failure to do so might reduce image quality. Use an eyeglass cleaner (cleaner cloth) or other soft cloth to clean the lens if it becomes dirty.*

	Microphones	The built-in microphones allow you to import and record sounds for your application. Refer to the *Sound System and Video mode* section for more information.
⏻	**Power button**	Press this button to turn the computer's power on or off.
╋ ━	**Volume up/down button**	Press the button to increase or decrease the volume.
	Stereo speakers	The speakers emit sound generated by your software as well as audio alarms, such as low battery condition, generated by the system.
⊞	**Windows button**	Press this button to open the Start screen or, if already on the Start screen, returns you to your last app.

micro	**Memory media slot**	This slot lets you insert a micro SD™/SDHC™/ SDXC™ memory card. Refer to the *Memory media* section for more information.

⚠️ *Keep foreign metal objects, such as screws, staples, and paper clips, out of the Memory media slot. Foreign metal objects can create a short circuit, which can cause damage and fire, possibly resulting in serious injury.*

⌒/〇	**Headphone/ Microphone combo jack**	A 3.5 mm mini headphone/microphone combo jack enables connection of a monaural microphone or a stereo headphone.

⚠️ *Be careful when you connect an external microphone or headphone, the computer might be lifted. Any possible stress put on the body of the computer might cause damage.*

HDMI	**HDMI Micro port**	HDMI Micro port can connect to HDMI cable with Type D connector.
		An HDMI cable sends video and audio signals. In addition to this, it can send and receive control signals.
		Refer to the *HDMI port* section for more information.

⚠️ *Be careful when you connect an HDMI cable, the computer might be lifted. Any possible stress put on the body of the computer might cause damage.*

←	**Micro-USB port**	One Micro-USB port, which complies to the USB 2.0 standard, is provided on the left side of the computer. To connect a USB device, you must purchase a Micro B plug - Standard A receptacle cable.

ℹ️ ■ *Note that it is not possible to confirm the operation of all functions of all USB devices that are available. Some functions associated with a specific device might not operate properly.*

■ *Before removing a USB device from the Micro-USB port, click the **Safely Remove Hardware and Eject Media** icon on the Windows taskbar, and then select the USB device that you want to remove.*

⚠️ ■ *Be careful when you connect and use chunky USB devices, the computer might be lifted. Any possible stress put on the body of the tablet computer might cause damage.*

Guide pin grooves	Designed to engage the guide pins on the keyboard dock.
Docking interface	Designed to engage the docking connector on the keyboard dock.
Strap hole	This hole is used for hanging decorations.
Web camera (back)	Your computer is also equipped with a back Web Camera used for recording video or taking photographs.

ⓘ ■ *Do not point the web camera directly at the sun.*
■ *Do not touch or press strongly on the web camera lens. Failure to do so might reduce image quality. Use an eyeglass cleaner (cleaner cloth) or other soft cloth to clean the lens if it becomes dirty.*

The Computer (laptop mode)

Front with the display closed

The following figure shows the front of the computer with the display panel in the closed position.

Figure 3-2 Front of the computer with display panel closed
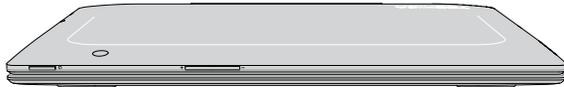
Product appearance depends on the model you purchased.

Left side

The following figure shows the left side of the computer.

Figure 3-3 The left side of the computer
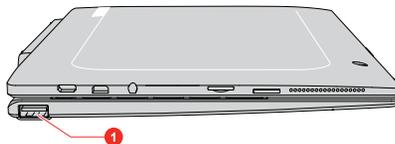
1. Universal Serial Bus (USB 2.0) port

Product appearance depends on the model you purchased.

Right side

The following figure shows the right side of the computer.

Figure 3-4 The right side of the computer
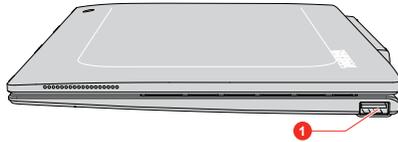
1. Universal Serial Bus (USB 2.0) port

Product appearance depends on the model you purchased.

Back

The following figure shows the back of the computer.

Figure 3-5 The back of the computer

Product appearance depends on the model you purchased.

Front with the display open

This section shows the computer with the display panel open. In order to open the display, lift up the display panel and position it at a comfortable viewing angle for you.

Figure 3-6 The front of the computer with the display panel open
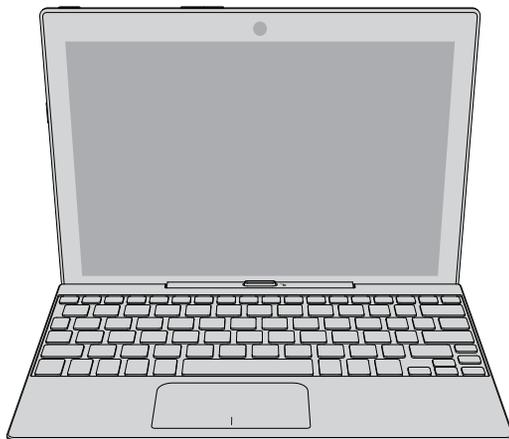

Product appearance depends on the model you purchased.

TOSHIBA Keyboard Dock

The following figure shows each important component of the keyboarddock.

Figure 3-7 The keyboard dock
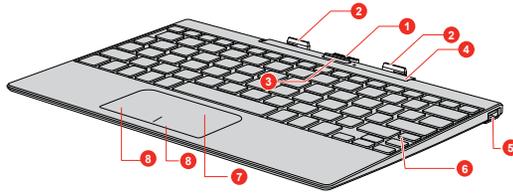
1. Docking connector	5. Universal Serial Bus (USB 2.0) port
2. Guide pins	6. Keyboard
3. Release button	7. Touch Pad
4. Computer holder	8. Touch Pad control buttons

Product appearance depends on the model you purchased.

	Docking connector	Connect the keyboard dock to this connnector to support keyboard, Touch Pad, and USB 2.0 port functions.
	Guide pins	Guide pins make it easy for you to align the tablet with the keyboard dock. They also secure the physical connection between them.
⌵	**Release button**	Press the release button to disengage the computer from the keyboard dock.
	Computer holder	The holder provides firm support to the computer.
⛫	**Universal Serial Bus (USB 2.0) port**	One Universal Serial Bus port, which complies to the USB 2.0 standard, is provided on the right side of the keyboard dock.
		The USB 2.0 port is not compatible with USB 3.0 devices.

> ■ *Note that it is not possible to confirm the operation of all functions of all USB devices that are available. Some functions associated with a specific device might not operate properly.*
>
> ■ *Before removing a USB device from the USB port of your computer, click the **Safely Remove Hardware and Eject Media** icon on the Windows taskbar, and then select the USB device that you want to remove.*

	Be careful when you connect and use chunky USB devices, the computer might be lifted. Any possible stress put on the body of the tablet computer might cause damage.

Keyboard	The keyboard contains character keys, control keys, function keys, shortcut keys and special Windows keys.
	Refer to the *The Keyboard* section for details.
Touch Pad	The Touch Pad located in the palm rest is used to control the movement of the on-screen pointer.
	To use the Touch Pad, simply touch and move your fingertip across it in the direction you want the on-screen pointer to go.
Touch Pad control buttons	The two buttons located on the bottom of the Touch Pad are used like the buttons on a standard mouse. Press the left button to select a menu item or to manipulate text or graphics designated by the pointer, and press the right button to display a menu or other function depending on the software you are using.

Internal Hardware Components

This section describes the internal hardware components of your computer.

The actual specifications might vary depending on the model you purchased.

Battery pack	The tablet computer includes a battery pack inside. The keyboard dock might include a second battery pack inside depending on the model you purchased.
	Do not attempt to dismount or replace the battery pack by yourself. Contact an authorized TOSHIBA service provider, if necessary.
	The rechargeable lithium-ion battery pack provides power to the computer when the AC adaptor is not connected.
	For more detailed information on the use and operation of the battery pack, refer to the *Battery* section.

Legal Footnote (Battery Life)

For more information regarding Battery Life, refer to the *Legal Footnotes* section.

CPU	The processor type varies depending on model.
	To check which type of processor is included in your model, click **Control Panel -> System and Security -> System** under **Windows System** group in **All apps**.

Legal Footnote (CPU)

For more information regarding CPU, refer to the *Legal Footnotes* section.

Internal storage	The capacity of the internal storage varies depending on the model.
	Note that part of the internal storage overall capacity is reserved as administration space.

Your computer is equipped with an eMMC (Embedded Multi Media Card). In this manual, the word "internal storage" refers to eMMC unless otherwise stated.

Video RAM	The memory in the graphics adaptor of the computer, used to store the image displayed on a bitmap display.
	The amount of Video RAM available depends on the system memory of the computer.
	Click **Control Panel -> Appearance and Personalization -> Display -> Adjust resolution** under **Windows System** group in **All apps**.
	The amount of Video RAM can be verified by clicking the **Advanced settings** button in the Screen Resolution window.
Graphics Processing Unit	Graphics Processing Unit (GPU) performance might vary depending on product model, design configuration, applications, power management settings and features utilized. GPU performance is only optimized when operating in AC power mode and might decrease considerably when operating in battery power mode.

Legal Footnote (Graphics Processing Unit (GPU))

For more information regarding Graphics Processing Unit (GPU), refer to the *Legal Footnotes* section.

Chapter 4

Operating Basics

This chapter describes the basic operations of your computer, and highlights the precautions that must be taken when using it.

Operating in tablet mode

Observe the following instructions when you operate the computer in tablet mode.

Figure 4-1 Operating the computer in tablet mode
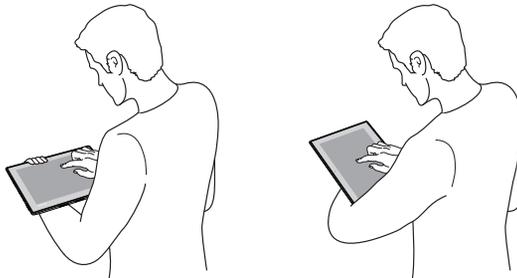
- ■ Remove all external peripheral devices and their connection cables from the computer before carrying.
- ■ Hold the computer firmly on your forearm.
- ■ Be careful not to accidentally touch the Windows button.
- ■ Remove the AC adaptor from the computer when using it held in your forearm.
- ■ Do not use the computer while walking or driving a car.
- ■ Do not drop the computer or apply excessive impact to it. Do not leave the computer in a car or similar environment where it is exposed to direct sunlight.

Changing the screen orientation

When operating the computer in tablet mode, you can change the screen orientation by rotating the computer sideways. The screen orientation automatically changes according to the rotation angle detected.

Figure 4-2 Rotating the computer sideways
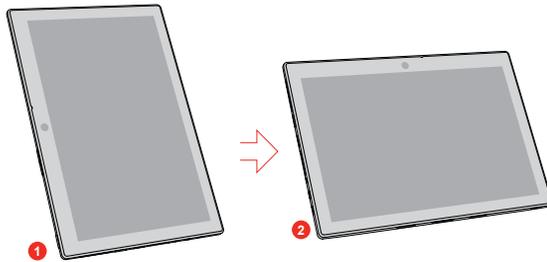
1. Landscape mode   2. Portrait mode

To manually disable the automatic screen orientation, do the following:

1. Click the action center icon 🗐 on the Windows taskbar.
2. Click **Rotation lock** that the automatic screen orientation is currently disabled.

When operating the computer in laptop mode, however, the automatic screen orientation is locked, and the computer stays in **landscape mode**.

> ■ *Some drivers/utilities might not perform install and uninstall operation when the screen orientation is changed to portrait mode. If it occurs, switch to landscape mode to proceed.*
>
> ■ *Some applications might not display completely when the screen orientation is changed to portrait mode. If it occurs, switch to landscape mode to proceed.*

Calibrating digital compass

If you have downloaded a compass application to use this feature, note that the performance of any compass feature varies depending on environmental conditions. For example, any source using electromagnetic or radio waves.

Before using any compass feature the compass needs to be calibrated for accuracy. To calibrate, disconnect the AC adaptor and remove all peripherals/cables, and then horizontally/vertically rotate the computer with the power on several times as shown in the illustration below. Please note this is the most effective method of calibrating this computer.

Figure 4-3 Calibrating digital compass
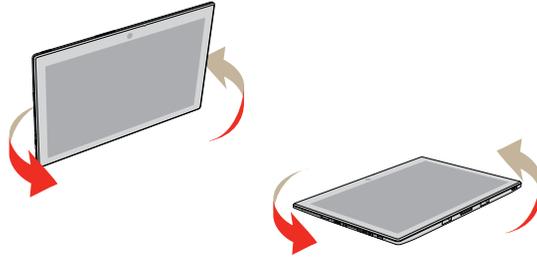
⚠️ *Do not place any products utilizing magnetic materials in close proximity to the area marked in the following figure.*
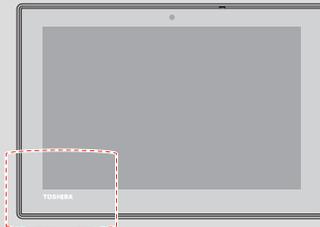
Using the Touch Screen

You can use your finger to manipulate icons, buttons, menu items, the onscreen keyboard, and other items on the touch screen.

	Tap	Simply tap your finger once on the touch screen to activate an item, such as an app.
	Press and hold	Press your finger down and leave it there for a few seconds. This shows information to help you learn more about an item or opens a menu specific to what you are doing.
	Pinch or stretch	Touch the screen or an item with two or more fingers, and then move the fingers toward each other (pinch) or away from each other (stretch). This shows different levels of information or visually zooms in or out.

	Rotate	Put two or more fingers on an item and then turn your hand to rotate things in the direction you turn your hand. Only some items can be rotated.
	Slide	Drag your finger on the touch screen to move through what is on the screen.
	Swipe	Quickly move your finger in from the edge of the screen, without pausing when you first touch it. Swipe from the left edge: views all your open apps in task view. Swipe from the right edge: opens the Action center. Swipe from the top edge: views title bars for full-screened apps.

For details and more advanced touch screen gestures to interact with Windows operating system, refer to the **Get Started**.

- *Do not press or push with excess force on the touch screen.*
- *Do not apply excess force when cleaning the touch screen.*
- *Never touch the screen with a sharp object such as a ball-point pen which might scratch or damage the surface.*
- *Do not use a protecting sheet for the touch screen as it might decrease its sensitivity to gestures.*
- *Do not touch the screen with gloves, wet hands, or the tip of your fingernails as it might decrease the sensitivity.*
- *The touch screen might not work correctly if part of the surface is slightly wet, or covered with an object.*

Using the Touch Pad

The Touch Pad on the palm rest might support the following gestures:

	Tap	Tap once on the Touch Pad to activate an item, such as an app.
	Two-Finger Tap	Tap once on the Touch Pad with two fingers together to display a menu or other function depending on the software you are using. (Similar to right-click)

	Pinch or stretch	Place two or more fingers down on the Touch Pad and move them toward each other (pinch) or away from each other (stretch). This shows different levels of information or visually zooms in or out.
	Two-Finger Scroll	Place two fingers down and slide them vertically or horizontally from anywhere on the Touch Pad. This allows you to operate the scroll bars of a window.

Do not put items on the Touch Pad surface to prevent abnormal actions.

Some of the Touch Pad operations described in this section are only supported in certain applications.

The Keyboard

The number of keys available on the keyboard dock depends on which country/region your computer is configured for, with keyboards being available for numerous languages.

There are different types of keys, specifically typewriter keys, function keys, shortcut keys and Windows special keys.

Never remove the key caps on your keyboard. Failure to do so might damage the parts under the key caps.

Function Keys

The function keys (F1 ~ F12) are the 12 keys at the top of your keyboard.

You can configure the function keys' mode as "Special function mode" or "Standard F1-F12 mode" by clicking **System Settings -> Function Key** under **TOSHIBA** group in **All apps**.

"Special function mode" allows you to use special functions without pressing the **FN** key.

Special function mode	Standard F1-F12 mode	Function
F1	FN + F1	Allows you to search your computer, the web, or within an app, or activates Cortana (dependent on country).

Special function mode	Standard F1-F12 mode	Function
F2	FN + F2	Decreases the brightness of the display panel in individual steps.
F3	FN + F3	Increases the brightness of the display panel in individual steps.
F4	FN + F4	Changes the active display device. To use a simultaneous mode, you must set the resolution of the internal display panel to match the resolution of the external display device.
F5	FN + F5	Enables or disables the Touch Pad.
F6	FN + F6	Moves media backward.
F7	FN + F7	Plays or pauses media playback.
F8	FN + F8	Moves media forward.
F9	FN + F9	Decreases the computer's volume.
F10	FN + F10	Increases the computer's volume.
F11	FN + F11	Turns the sound on or off.
F12	FN + F12	Turns the Airplane mode on or off.

Some functions show the toast notification at the edges of the screen.

Those toast notifications are enabled by default. You can disable them in the Function Key settings.

To access it, click System Settings -> Function Key under TOSHIBA group in All apps.

Windows special keys

The keyboard provides some keys that have special functions in Windows, the Windows® logo key activates the **Start menu** while the application key has the same function as the secondary (right) mouse button.

This key activates the Windows **Start menu**.

This key has the same function as the secondary (right) mouse button.

This key activates **Cortana** (supported in some countries).

Touch keyboard

Touch keyboard is an on-screen virtual keyboard allowing you to type on the touch screen.

To use the touch keyboard, tap in an area where you can type. The keyboard opens automatically.

To manually open the touch keyboard, click the keyboard icon (⌨) in the taskbar of your Windows desktop.

3D Playback on an External 3D Device

3D playback on an external 3D device feature is only provided with some models.

Effect of 3D can be shown only on an external 3D devices connected via an HDMI output. It cannot be shown on the internal display. In order for 3D playback to work on external display/TV, you need a 3D enabled display/ TV that has an HDCP compliant HDMI port.

3D playback feature supports the following resolutions:1920x1080 24Hz and 1280x720 60Hz.

Change the Screen Resolution to one of the above before using 3D playback function.

Important Safety Information for 3D Function

- Refrain from or stop viewing if you feel ill or experience discomfort before or while watching 3D video images.
- Refrain from viewing 3D video images if you experience convulsions, photosensitivity reaction, or heart disease.
- Due to the possibility of impact on vision development, viewers of 3D video images should be aged 6 or older. Children and teenagers might be more susceptible to health issues associated with viewing in 3D and should be closely supervised to avoid prolonged viewing without rest.
- Avoid use of the 3D function when under the influence of alcohol.
- Read the user's manual that comes with the computer carefully before using the 3D playback function.
- The 3D effect differs between individuals.

Battery

This section explains battery use, recharging methods and handling.

Battery pack

The tablet computer contains a battery pack inside, Also, depending on the model you purchased, the keyboard dock might contain a second battery pack to extend the battery operating time.

When the AC adaptor is not connected, the main power source of the computer is the lithium ion battery pack.

Real-Time Clock (RTC) function

The Real-Time Clock (RTC) function is supported. The battery pack provides power for the internal real-time clock and calendar function and also maintains the system configuration while the computer is turned off. If the RTC lasting time completely runs out, the system will lose this information and the real-time clock and calendar will stop working.

You can change the Real-Time Clock settings in the BIOS setup utility. Refer to *Troubleshooting* for further information.

Care and use of the battery pack

This section provides the important safety precautions in order to handle your battery pack properly.

Refer to the enclosed **Instruction Manual for Safety and Comfort** for detailed precautions and handling instructions.

> ⚠ *Charge the battery pack only in an ambient temperature from 5 through 35 degrees Celsius. Otherwise, the electrolyte solution might leak, battery pack performance might deteriorate, and the battery life might be shortened.*

Charging the battery pack

When the power in the battery pack becomes low, the computer enters Hibernation Mode so that you do not lose any data, and automatically turn itself off.

You must recharge the battery pack when it becomes discharged.

Procedures

To recharge the battery pack, plug the Micro-USB connector of the AC adaptor into the Micro-USB port on your computer and plug the AC adaptor into a working outlet.

When charging, the battery pack inside the tablet begins charging first. Charging of the battery pack inside the keyboard dock follows when the battery pack inside the tablet computer is fully charged.

Use only the computer connected to an AC power source or optional TOSHIBA Battery charger to charge the battery pack. Never attempt to charge the battery pack with any other charger.

Charging Time

The following table shows the approximate time required to fully charge an exhausted battery pack.

Battery pack type	Power off	Power on
Battery pack (22.5 Wh, 1S2P cell)	about 4 hours	about 6.5 hours
With the second battery pack (22.5 Wh, 1S2P cell)	about 8 hours	about 13 hours

Be aware that the charging time when the computer is on is affected by ambient temperature, the temperature of the computer and how you are using the computer. If you make heavy use of external devices for example, the battery might scarcely charge at all during operation.

Charging notice

The battery pack might not begin charging immediately under the following conditions:

■ The battery pack is extremely hot or cold (if the battery pack is extremely hot, it might not charge at all). To ensure the battery pack charges to its full capacity, charge it at room temperature of between 5°C to 35°C (41–95°F).
■ The battery pack is nearly completely discharged. In this instance, leave the AC adaptor connected for a few minutes and the battery pack should begin charging.

The battery might have a rapid decrease in battery operating time when you try to charge a battery under the following conditions:

■ The battery pack has not been used for a long time.
■ The battery pack has completely discharged.

In such cases, do the following:

1. Fully discharge the battery pack with power on until the system automatically turns itself off.
2. Connect the AC adaptor to the Micro-USB port, and to a wall outlet that is supplying power.
3. Charge the battery pack until it reaches its full capacity.

Repeat these steps two or three times until the battery pack recovers normal capacity.

Monitoring battery pack capacity

Remaining battery power can be monitored using the following methods.

- Clicking the battery icon on the Windows taskbar
- Via the **Battery Status** (average remaining battery power of **Battery1** and **Battery2**) in the **Windows Mobility Center** window

When you use the computer with the keyboard dock, the second battery pack is the first source to provide power.

- *Wait several seconds to monitor the remaining operating time because the computer needs time to check the remaining capacity of the battery pack and then calculate the remaining operating time, based on this together with the current power consumption.*
- *Be aware that the actual remaining operating time might differ slightly from the calculated time.*
- *With repeated discharges and recharges, the battery pack capacity will gradually decrease. In view of this, it is noted that an often used, older battery pack will not operate for as long as a new battery pack even when both are fully charged.*

Maximizing battery operating time

The usefulness of a battery pack depends on how long it can supply power on a single charge, while how long the charge lasts in a battery pack depends on:

- Processor speed
- Screen brightness
- System Sleep Mode
- System Hibernation Mode
- Display power off period
- How often and for how long you use the internal storage and external disk drives, for example, optical disc
- How much charge the battery pack contained to begin with
- How you use optional devices, such as a USB device, to which the battery pack supplies power
- Whether you enable Sleep Mode, which can conserve battery power if you are frequently turning the computer off and on
- Where you store your programs and data
- Whether you close the display screen when you are not using the keyboard - closing the display screen saves power.
- The environmental temperature - operating time decreases at low temperatures.

Battery pack exhausted time

When you turn off the power of your computer with the battery pack fully charged, the battery pack exhaust within the following approximate period.

Battery pack type	Sleep Mode	Shut Down Mode
Battery pack (22.5 Wh, 1S2P cell)	about 205 hours	about 265 days
With the second battery pack (22.5 Wh, 1S2P cell)	about 300 hours	about 325 days

Extending battery life

To maximize the life of your battery pack, do the following at least once a month.

1. Turn off the computer's power.
2. Disconnect the AC adaptor and turn on the computer's power. If it does not turn on then go to Step 4.
3. Operate the computer on battery power for five minutes. If you find that the battery pack has at least five minutes of operating time, continue operating until the battery pack is fully discharged. However, if the warning to indicate a low battery condition, go to Step 4.
4. Connect the AC adaptor to the Micro-USB port and to a wall outlet that is supplying power.
5. Charge the battery pack until the battery reaches its full capacity.

Memory media

The computer is equipped with a memory media slot that can accommodate some kinds of memory media with various memory capacities so that you can easily transfer data from devices, such as digital cameras and Personal Digital Assistants.

Keep foreign objects out of the memory media slot. Never allow metal objects, such as screws, staples and paper clips, to enter the computer or Keyboard. Foreign metal objects can create a short circuit, which can cause computer damage and fire, possibly resulting in serious injury.

- *This Memory media slot supports the following memory media:microSD/SDHC/SDXC Card.*
- *Not all memory media have been tested and verified to work correctly. Therefore, it is not possible to guarantee that all memory media can operate properly.*

Figure 4-4 Examples of memory media(microSD card)

Points to note about the memory media card

microSD/SDHC/SDXC memory cards comply with SDMI (Secure Digital Music Initiative), which is a technology adopted to prevent unlawful copy or playback of digital music. For this reason, you cannot copy or play back protected material on another computer or other device, and you cannot reproduce any copyrighted material except for your personal enjoyment.

The supported maximum capacity of memory card is 128GB.

Memory media format

New media cards are formatted according to specific standards. If you wish to reformat a media card, be sure to do so with a device that uses media cards.

Formatting a memory media card

Memory media cards are sold already formatted in conformity to specific standards. If you reformat a memory card, be sure to reformat it with a device such as digital camera or digital audio player that uses the memory cards, not with the format command provided within Windows.

To format all areas of the memory card, including the protected area, you must obtain an appropriate application that applies the copy protection system.

Media care

Observe the following precautions when handling the card.

- Do not twist or bend cards.
- Do not expose cards to liquids or store in humid areas or lay media close to containers of liquid.
- Do not touch the metal part of a card or expose it to liquids or let it get dirty.
- After using card, return it to its case.
- The card is designed so that it can be inserted only one way. Do not try to force the card into the slot.
- Do not leave a card partially inserted in the slot. Press the card until you hear it click into place.
- Memory cards have a limited lifespan, so it is important to back up important data.
- Do not write to a card if the battery power is low. Low power might affect writing accuracy.

■ Do not remove a card while read/write is in progress.

For more details on using memory cards, see manuals accompanying the cards.

Inserting memory media

The following instructions apply to all types of supported media devices. To insert memory media, do the following:

1. Turn the memory media so that the contacts (metal areas) face down.
2. Insert the memory media into the memory media slot on the computer.
3. Press the memory media gently until it clicks into place.

Figure 4-5 Inserting memory media (laptop mode)
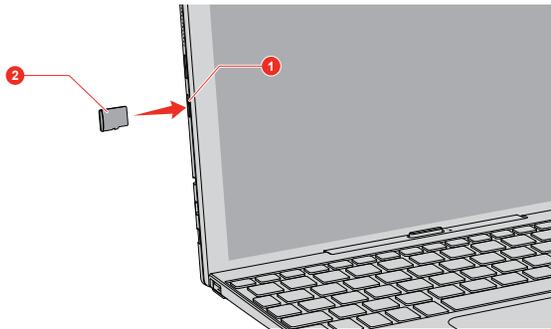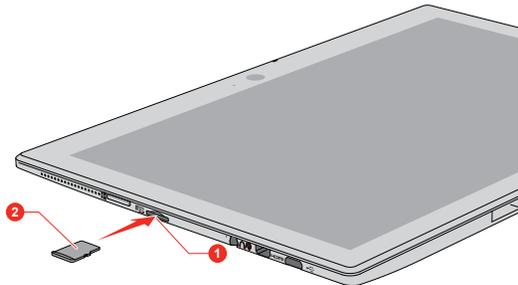

Figure 4-6 Inserting memory media (tablet mode)

1. Memory media slot   2. Memory media

Product appearance depends on the model you purchased.

■ *Make sure that the memory media is oriented properly before you insert it. If you insert the media in wrong direction, you might not be able to remove it.*

- *When inserting the memory media, do not touch the metal contacts. You might expose the storage area to static electricity, which can destroy data.*
- *Do not turn off the computer or switch to Sleep Mode or Hibernation Mode while files are being copied. Failure to do so might cause data loss.*

Removing memory media

The following instructions apply to all types of supported media devices. To remove memory media, do the following:

1. Click the **Safely Remove Hardware and Eject Media** icon on the Windows taskbar.
2. Select **memory media**.
3. Push the memory media until you hear a click to partially release it.
4. Grasp the media and remove it.

- *If you remove the memory media or turn off the power while the computer is accessing the memory media, you might lose data or damage the media.*
- *Do not remove the memory media while the computer is in Sleep or Hibernation Mode. The computer might become unstable or data in the memory media might be lost.*

External Display

Your computer video capabilities can be enhanced with additional displays.

External displays allow you to share your desktop or extend the desktop area.

Connecting an external display

Your computer comes with a built-in display, but you can also connect other external displays via available ports on the computer.

As the port operation of all external display devices have not been confirmed, some devices might not function properly.

HDMI port

HDMI (High-Definition Multimedia Interface) port digitally transfers both video and audio data without reducing the quality. HDMI-compatible external display devices including televisions can be connected via the HDMI port.

To connect an HDMI-compatible display device, do the following:

As the port operation of all HDMI display devices have not been confirmed, some HDMI display devices might not function properly.

To connect a device to the HDMI out port, you must purchase a suitable HDMI cable.

1. Plug one end of the HDMI cable into the HDMI in port of the HDMI display device.
2. Plug the other end of the HDMI cable into the HDMI Micro port on your computer.
3. Turn the HDMI display device's power on.

Figure 4-7 Connecting the HDMI cable (laptop mode)
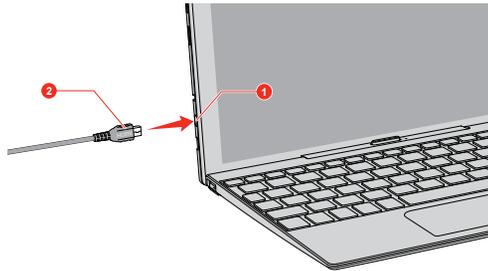
Figure 4-8 Connecting the HDMI cable (tablet mode)
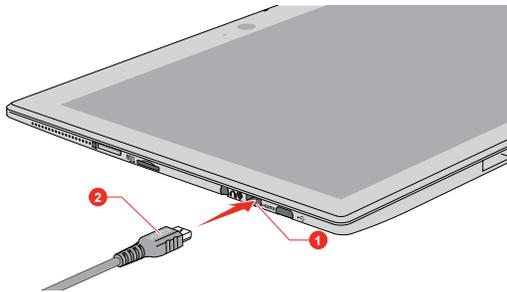
1. HDMI Micro port   2. HDMI cable (Type D connector)

Product appearance depends on the model you purchased.

Do not plug/unplug an HDMI device under the following conditions:

The system is starting up.

The system is shutting down.

When you connect a television or external monitor to the HDMI Micro port, the display output device is set to HDMI.

When you unplug the HDMI cable and replug it, wait at least 5 seconds before you replug the HDMI cable again.

When you change the display output device, the playback device might not switch automatically. In this case, to set the playback device to the same device as the display output device, adjust the playback device manually by the following steps:

*1. Click **Control Panel -> Hardware and Sound -> Sound** under **Windows System** group in **All apps**.*

*2. In the **Playback** tab, select the playback device which you want to switch to.*

*3. To use the internal speakers on your computer, select **Speakers**. To use the television or the external monitor that you have connected to the computer, select a different playback device.*

*4. Click the **Set Default** button.*

*5. Click **OK** to close the **Sound** dialog.*

Settings for display video on HDMI

To view video on the HDMI display device, be sure to configure the following settings otherwise you might find that nothing is displayed.

Be sure to use the shortcut key to select the display device before starting to play video. Do not change the display device or audio device while playing media files.

Do not change the display device under the following conditions.

- *While data is being read or written*
- *While communication is being carried out*

Selecting HD Format

To select the display mode, do the following:

1. Click **Control Panel -> Appearance and Personalization -> Display -> Change display settings -> Advanced settings -> List All Modes** under **Windows System** in **All apps**.
2. Select one of the modes at **List All Modes**.

Wireless display

Your computer might support Wireless display, a wireless technology which utilizes Wi-Fi to allow the computer to be wirelessly connected to external displays including TVs as extended screens. With Wireless display, documents, streamed/local media contents or other online contents can be shared wirelessly with others.

To use Wireless display, either one of the following devices is required:

- A compatible external display with built-in support for Wireless display.

■	An external display with HDMI port and a Wireless display adaptor.

The Wireless display adaptor is a device that connects to the external display via HDMI port and can receive Wi-Fi signals from your computer.

To wirelessly connect to an external display, do the following:

1.	Go to **Settings** and click **Devices -> Connected devices**.
2.	Click **Add a device**. Your computer will start searching for the Wireless display device.
3.	After the Wireless display device is searched, follow the on-screen instructions to finish connection.

After the connection is established, the name of the Wireless display device appears under **Projectors**.

To disconnect the Wireless display device, click the Wireless display device name and then click **Remove device**.

Changing the display settings

After one or more external displays are connected, the operating system can automatically detect, identify, and set up the display settings.

You can also manually manage how the external displays work and change the display settings by pressing **P** while holding down the **Windows** ( ) key. If you disconnect the external display before you turn off the computer's power, be sure to switch to the internal display.

Optional TOSHIBA Accessories

To make your computer even more powerful and convenient to use, you can add a number of options and accessories. For reference, the following list details some of the items that are available from your reseller or TOSHIBA dealer:

Universal AC Adaptor	If you frequently use your computer at more than one site, it might be convenient to purchase an additional AC adaptor to be kept at each site in order to remove the need to carry the adaptor with you always.

Sound System and Video mode

This section describes some of the audio control functions.

Volume Mixer

The Volume Mixer utility lets you control the audio volume for playback of devices and applications under Windows.

- To launch the Volume Mixer utility, right-click on the speaker icon on the Windows taskbar, and then select **Open Volume Mixer** from the sub menu.
- To adjust the volume level of speakers or headphones, move the **Speakers** slider.
- To adjust the volume level of an application that you are using, move the slider for the corresponding application.

Microphone Level

To change the microphone recording level, do the following:

1. Right-click on the speaker icon on the Windows taskbar, and select **Recording devices** from the sub menu.
2. Select **Microphone**, and click **Properties**.
3. On the **Levels** tab, move the **Microphone** slider to increase or decrease the microphone volume level.

If you feel the microphone volume level is inadequate, move the **Microphone Boost** slider to a higher level.

Video mode

Video mode settings are configured via the **Screen Resolution** dialog.

To open the **Screen Resolution** dialog, click **Control Panel -> Appearance and Personalization -> Display -> Change display settings** under **Windows System** group in **All apps**.

If you are running some applications (for example a 3D application or video playback), you might see some disturbance, flickering, or frame dropping on your screen.

If that occurs, adjust the resolution of display, lowering it until the screen is displayed properly.

Chapter 5

Utilities and Advanced Usage

This chapter describes the utilities and special features of this computer, and the advanced usage of some utilities.

Utilities and Applications

This section describes the pre-installed utilities that come with the computer and details how to start them. For further information on their operation, refer to online manual, help files, or README.TXT file (if applicable) of each utility.

TOSHIBA Service Station	This application allows your computer to automatically search for TOSHIBA software updates or other alerts from TOSHIBA that are specific to your computer system and its programs. When enabled, this application periodically transmits to our servers a limited amount of system information, which will be treated in strict accordance with the rules and regulations as well as applicable data protection law.
	To access this utility, click **Service Station** under **TOSHIBA** group in **All apps**.
TOSHIBA Password Utility	This utility allows you to set a password to restrict access to the computer.
	To access this utility, click **Password Utility** under **TOSHIBA** group in **All apps**.
TOSHIBA System Settings	This utility allows you to view the current BIOS version and configure the function key options.
	To access this utility, click **System Settings** under **TOSHIBA** group in **All apps**.
TruCapture	This software is a camera application with special features to take improved photographs of whiteboards, books, printed material, notebooks, and so on.
	To access it, click **TruCapture** in **All apps**.
	For more information, refer to the *TruCapture* section.

TruRecorder	This software is a recording application that can check its recorded data quickly and easily, analyze voices to automatically identify specific speakers,and allow you to mark important statements in the recording.
	To access it, click **TruRecorder** in **All apps**.
	This utility is only provided with some models.
	For more information, refer to the *TruRecorder* section.
TOSHIBA Product Improvement Program	The TOSHIBA Product Improvement Program recognizes the system and individual component serial numbers and will track specific activities related to the computer and their usage.
	This utility does not provide the user interface. You can enable or disable the monitoring operation by clicking **Product Improvement Program** under **TOSHIBA** group in **All apps**.
TOSHIBA Maintenance Utility	TOSHIBA Maintenance Utility is provided to erase the internal storage. This utility allows you to delete all data and partitions, and also overwrite all sectors on the internal storage.
	If there is an external hard disk drive connected to your computer, it can also be erased. However, if you do not want to delete the data from the external hard disk drive, disconnect it from your computer.
	To access this utility:
	1. Go to **Settings** and click **Update & security -> Recovery**.
	2. Click **Restart now** under **Advanced startup**.
	3. Click **Troubleshoot -> TOSHIBA Maintenance Utility**.
	If you select the deletion method and continue with the operation, you will lose all data (including the operating system and recovery image) on the internal storage. Make sure that you have already created recovery media if you want to use the computer after erasing your internal storage.

Dolby® Digital Plus™ Advanced Audio™	Dolby Digital Plus Advanced Audio is a suite of audio technologies that enables a PC to deliver a crisp, clear cinematic surround sound experience over its built-in speakers. It also adds clarity to sound from headphones.
	To access this utility,
	1. Click Dolby Digital Plus Advanced Audio in **All apps**.
	2. Click Dolby Digital Plus Advanced Audio on the **desktop**.
	3. Click Dolby Digital Plus Advanced Audio from **Start menu**.

You might not have all the software listed in this section depending on the model you purchased.

Windows Store apps are not included in the setup files above but can be downloaded from Windows Store.

Special features

The following features are either unique to TOSHIBA computers or are advanced features which make the computer more convenient to use.

Access each function using the following procedures.

[1] To access the Power Options, click **Control Panel -> System and Security -> Power Options** under **Windows System** group in **All apps**.

Display automatic power off [1]	This feature automatically cuts off power to the computer's display panel when there is no keyboard input for a specified time, with power being restored the next time a key is pressed. This can be specified in the Power Options.
Power on password	Two levels of password security, supervisor and user, are available to prevent unauthorized access to your computer.
Battery save mode [1]	This feature lets you configure the computer in order to save battery power. This can be specified in the Power Options.
Panel power on/off [1]	This feature automatically turns power to the computer off when the display panel is closed, and turns it back on when the display panel is opened. This can be specified in the Power Options.

Low battery automatic Hibernation Mode *1	When battery power is exhausted to the point that computer operation cannot be continued, the system automatically enters Hibernation Mode and shuts itself down. This can be specified in the Power Options.

TOSHIBA Password Utility

The TOSHIBA Password Utility provides two levels of password security: User and Supervisor.

Passwords set by the TOSHIBA Password Utility function are different from the Windows password.

User Password

To start the utility, click **Password Utility** under **TOSHIBA** group in **All apps**, and click **User Password**.

User authentication might be required to validate user rights when using TOSHIBA Password Utility to delete or change passwords, and so on.

- **Set** (button)

  Click this button to register a password. After a password is set, you are prompted to enter it when you start the computer.

- *After you set the password, a dialog box appears asking whether you want to save it to other media. If you forget the password, you can open the password file on another computer. Be sure to keep the media in a safe place.*

- *When entering the character string to register the password, enter from the keyboard character by character and do not enter as ASCII code or copy-and-paste the character string. In addition, ensure that the registered password is correct by outputting the character string to the password file.*

- *When entering a password, do not enter any characters (for example "!" or "#") produced by pressing the **SHIFT** or **ALT** keys.*

- **Delete** (button)

  Click this button to delete a registered password. Before you can delete a password, you must first enter the current password correctly.

- **Change** (button)

  Click this button to change a registered password. Before you can change a password, you must first enter the current password correctly.

■ **Owner String** (text box)

You can use this box to associate text with the password. After you enter text, click **Apply** or **OK**. When the computer is started, this text is displayed together with the prompt asking you to enter a password.

You can launch the BIOS setup to set, change or delete the HDD Password or HDD Master Password.

■ *If you forget your HDD User Password, TOSHIBA will NOT be able to assist you, and your HDD will be rendered COMPLETELY and PERMANENTLY INOPERABLE. TOSHIBA will NOT be held responsible for any loss of any data, any loss of use or access to your HDD, or for any other losses to you or any other person or organization that result from the loss of access to your HDD. If you cannot accept this risk, do not register the HDD User Password.*

■ *When saving the HDD User Password shut down or restart the computer. If the computer is not shut down or restarted, the saved data might not be correctly reflected. For more information on shutting down or restarting the computer, refer to Turning on the power.*

Supervisor Password

If you set a Supervisor Password, some functions might be restricted when a user logs on with the User Password. To set a Supervisor Password:

Click **Password Utility** under **TOSHIBA** group in **All apps**, and click **Supervisor Password**.

This utility lets you do the following:

■ Register or delete the Supervisor Password.
■ Specify restrictions for general users.

Starting the computer using a password

If you have already registered a user password, there is one way to start the computer:

■ Enter the password manually.

The password is necessary only if the computer was shut down in Hibernation mode or boot mode. It is not needed in Sleep mode and Restart.

To enter a password manually, do the following:

1. Turn on the power as described in the *Getting Started* section. The following message appears in the screen:

   Password =

2. Enter the Password.
3. Press **ENTER**.

TruCapture

TruCapture is a camera application with special features to improve the readability of whiteboards, books, and so on in photographs taken by TruCapture. Those features include reflection reduction, color enhancement, and cropping.

A Tutorial appears on the screen which provides the basic information about how to use this feature.

Click **Next** if you want to continue viewing the Tutorial.

For more detailed information on the use of this feature, tap **More information**.

TruRecorder

TruRecorder is a recording application that can check recorded data quickly and easily, analyze voices to automatically identify specific speakers, and allow you to mark important statements in the recording.

For non-preinstalled models, you can download the application from Windows store.

To open TruRecorder, click **TruRecorder** in **All apps**.

A **Tutorial** appears on the screen which provides the basic information about how to use this feature.

Click **Next** if you want to continue viewing the Tutorial.

For more detailed information on the use of this feature, tap **View help / details**.

TOSHIBA Product Improvement Program

The TOSHIBA Product Improvement Program recognizes the system and individual component serial numbers and will track specific activities related to the computer and their usage.

The collected information includes basic computer information (that is: product name, model number, part number, serial number, BIOS version, FW version), basic components information (that is: Video device, Sound

device, Network device, HDD/SSD, Optical Disc drive), operating system information (that is: OS version, settings (power button action, lid close action, property of taskbar, file extension settings, user profile number), error information (BSoD, application error)), device operation time and number of actuations or status changes (that is: number of power button and **FN** key combination uses, AC adaptor, battery (for models with battery), LCD, fan (for models with fan), HDD/SSD, sound volume, wireless communication functionalities and USB information), usage of TOSHIBA provided features/applications (that is: settings, operation, install state and launch times), date of initial system use, and also computer and device usage (that is: power settings, battery temperature and recharging (for models with battery), CPU, memory, backlight illumination time, and temperatures for various devices). The collected information is not limited to the examples specified here. The stored data uses a very small portion of the total hard disk capacity, approximately 20 MB or less per year.

Transmission of collected data is performed when the data transfer feature is enabled. The transferred information will be analyzed statistically, and it will be used for the better product planning and development such as improvement of application software.

Subject to the use restrictions noted above, the stored data may be made available to entities located outside of your country or region of residence and those countries might or might not have the same data protection laws or data protection levels as required by your home country or region.

Once enabled, you can select to disable the monitoring operation at any time by clicking **Product Improvement Program** under **TOSHIBA** group in **All apps** and uninstall the application by using the "Uninstall a program" utility in the Control Panel. Uninstalling the Product Improvement Program will automatically delete all of the data previously collected and stored by the application.

The TOSHIBA Product Improvement Program or it's use does not in any way expand or modify TOSHIBA obligations under its standard limited warranty. TOSHIBA standard limited warranty terms and limitations apply.

Chapter 6

Troubleshooting

TOSHIBA has designed this computer for durability, however, should problems occur you are able to use the procedures detailed in this chapter to help determine the cause.

You should become familiar with this chapter as knowing what might go wrong can help prevent problems from occurring in the first place.

Problem-solving process

If you observe the following guidelines, resolving problems will be much easier.

- Stop immediately when you recognize a problem exists as taking further action might result in data loss or damage, or you might destroy valuable problem-related information that can help solve the problem.
- Observe what is happening. Write down what the system is doing and what actions you performed immediately before the problem occurred. Make a screenshot of the current display.

Also be aware that the questions and procedures described in this chapter are meant only as a guide, they are not definitive problem-solving techniques. In reality many problems can be solved simply, but a few might require help from TOSHIBA Support. If you find you need to consult others, be prepared to describe the problem in as much detail as possible.

Preliminary checklist

You should always consider the simplest solution first. The items detailed in this checklist are easy to fix and yet can cause what appears to be a serious problem:

- Make sure that you turn on all peripheral devices before you turn on the computer. This includes your printer and any other external device you are using.
- Before you attach an external device you should first turn off the computer, then when you turn the computer back on it recognizes the new device.
- Make sure that all optional accessories are configured properly in the computer's setup program and that all required driver software has been loaded (refer to the documentation included with the optional accessories for further information on its installation and configuration).

- Check all cables to ensure that they are correctly and firmly attached to the computer - loose cables can cause signal errors.
- Inspect all connecting cables for loose wires and all connectors for loose pins.
- Check that your disc media is correctly loaded

Always try to make detailed notes of your observations and keep them in a permanent error log - this helps you to describe your problems to TOSHIBA Support. In addition, if a problem recurs, the log you have made helps to identify the problem faster.

Analyzing the problem

Sometimes the computer gives you clues that can help you identify why it is malfunctioning. In view of this, keep the following questions in mind:

- Which part of the computer is not operating properly - keyboard, internal storage, display panel, Touch Pad, Touch Pad control buttons - as each device produces different symptoms.
- Check the options within the operating system to ensure that its configuration is set properly.
- What appears on the display? Does it display any messages or random characters? Make a screenshot of the current display and, if possible, look up the messages in the documentation included with the computer, software, or operating system.
- Check that all connecting cables are correctly and firmly attached as loose cables can cause erroneous or intermittent signals.
- Do you hear any beeps, if so how many, are they long or short and are they high pitched or low pitched? In addition, is the computer making any unusual noises? Write down what you hear.

Record your observations so you can describe them in detail to TOSHIBA Support.

Software	The problems might be caused by your software or disk. If you cannot load a software package, the media might be damaged or the program might be corrupted. In these instances, try loading another copy of the software if possible.
	If an error message appears while you are using a software package, you should refer to the documentation supplied with it as this usually includes a problem-solving section or a summary of error messages.
	Next, check any error messages against the operating system documentation.

| Hardware | If you cannot find a software problem, you should then check the setup and configuration of your hardware. First run through the items in the preliminary checklist as described previously then, if you still cannot correct the problem, try to identify the source. The next section provides checklists for individual components and peripherals. |

Before using a peripheral device or application software that is not an authorized TOSHIBA part or product, make sure that the device or software can be used with your computer. Use of incompatible devices might cause injury or might damage your computer.

If something goes wrong

Your computer does not respond to the keyboard commands

If an error occurs and the computer does not respond to your keyboard commands, do the following:

- Press the power button and hold it down for five seconds. Once the computer has turned itself off, wait 10–15 seconds before turning on the power again by pressing the power button.

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), then click **Task Manager**. The Windows Task Manager window appears.
2. 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 the next step.
3. Close the remaining programs one by one by selecting the program name, then **End Task**. Closing all programs should allow you to continue working. If it does not, power off your computer and then restart it.

The computer does not start

Make sure that you attached the AC adaptor and power cord/cable properly.

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

Verify that the computer is on.

If you are using an AC adaptor, verify that the computer is receiving power from the external power source.

The computer does not load advanced options during startup

By holding down one of the following keys or buttons during startup, your computer can load the following advanced options.

Advanced option	Key	Button
BIOS utility	**F2**	**Volume up**
Boot Menu	**F12**	**Volume up**
Recovery options	**0 (zero)**	-

If your computer starts to load the Operating System instead of desired advanced options, do the following:

Make sure that fast startup is disabled in the Power Options by the following steps:

*1. Click **Control Panel -> System and Security -> Power Options** under Windows System group in **All apps**.*

*2. Click **Choose what the power button does** or **Choose what closing the lid does**.*

*3. Click **Change settings that are currently unavailable**.*

*4. Deselect the **Turn on fast startup** check box from Shutdown settings.*

*5. Click the **Save changes** button.*

1. Click **Start -> Power** and then select **Shut down**.
2. While holding down the corresponding key or button, press the **Power** button to turn on the power.
3. Follow the on-screen instructions to proceed.

Hardware and system checklist

This section discusses problems caused by your computer's hardware or attached peripherals. Basic problems might occur in the following areas:

- Power
- Keyboard
- Internal display panel
- Internal Storage
- Memory Media Card
- Pointing Device

- USB device
- Sound system
- External monitor
- Wireless LAN
- Bluetooth

Power

When the computer is not plugged into an AC power outlet, the battery pack is the primary power source. Your computer also has Real-Time Clock (RTC) function. All of the power resources are interrelated with anyone having the ability to produce apparent power problems.

Overheating power down

If the processor's temperature reaches an unacceptably high level with either setting, the computer automatically shuts down to prevent any damage. In this instance, all unsaved data in memory is lost.

Problem	Procedure
Computer shuts down automatically.	Leave the computer off until it reaches room temperature. If the computer has reached room temperature and it still does not start, or if it starts but shuts down quickly, contact TOSHIBA Support.

AC power

Problem	Procedure
AC adaptor does not power the computer	Check the connections to make sure that the power cord/adaptor is firmly connected to the computer and a working power outlet.
	Check the condition of the cord and terminals. If the cord is frayed or damaged it should be replaced, while if the terminals are soiled, they should be cleaned with a clean cotton cloth.
	If the AC adaptor still does not power the computer, you should contact TOSHIBA Support.

Battery

Problem	Procedure
Battery does not power the computer	The battery might be discharged. Connect the AC adaptor to recharge the battery.
Battery does not charge when the AC adaptor is attached.	If the battery is completely discharged, it will not begin charging immediately. In these instances, wait a few minutes before trying again. If the battery still does not charge, check that the power outlet the AC adaptor is connected to is supplying power. This can be tested by plugging another appliance into it.

Problem	Procedure
Battery does not power the computer as long as expected	If you frequently recharge a partially charged battery, the battery might not charge to its full potential. In these instances, you should fully discharge the battery and then attempt to charge it again.
	Check the **Power saver** option under **Choose or customize a power plan** in the **Power Options**.

Real-Time Clock

Problem	Procedure
The BIOS setting and system date/time are lost.	The charge of the Real-Time Clock (RTC) has run out. You must set the date and time in the BIOS Setup Utility by using the following steps:

1. Click **Start -> Power** and then select **Restart**
2. Hold down the **F2** key and then release this key one second after the computer is power on.The BIOS setup utility load.
3. Set the date in the **System Date** field.
4. Set the time in the **System Time** field.
5. Follow the on-screen instructions to proceed.

Keyboard

Keyboard problems can be caused by the setup and configuration of the computer. Refer to the *The Keyboard* section for further information.

Problem	Procedure
Output to screen is garbled	Refer to your software documentation to ensure that it is not remapping the keyboard in any way (remapping involves changing or reassigning the function of each key).
	If you are still unable to use the keyboard, you should contact TOSHIBA Support.

Internal display panel

Apparent problems of the computer's display panel might be related to setup and configuration of the computer.

Problem	Procedure
No display	Press the shortcut keys to adjust the display priority, and to make sure that it is not set for output to an external monitor.
Markings appear on the computer's display panel.	These marks might have come from contact with the keyboard and Touch Pad while the display panel has been closed. Try to remove the marks by gently wiping the display panel with a clean dry cloth or, if this fails, with a good quality LCD screen cleaner. In this latter instance, you should always follow the instructions with the screen cleaner and always ensure that you let the display panel dry properly before closing it.

Internal Storage

Problem	Procedure
Computer does not boot from the internal storage	Check to see whether there is a disc in the external optical disc drive - if so remove it and try to start the computer again.

Memory Media Card

For further information, refer to *Operating Basics*.

Problem	Procedure
Memory media card error occurs	Remove the memory media card from the computer and then reinsert it to ensure that it is firmly connected.
	If the problem persists, then you should refer to the documentation supplied with your memory media card for further information.
You cannot read a file	Check to ensure that the required file is actually on the memory media card that is inserted into the computer.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

Pointing device

If you are using a USB mouse, you should also refer to both the *USB mouse* section and the documentation supplied with your mouse.

Touch Pad

Problem	Procedure
The Touch Pad does not work.	Check the Device Select settings by the following steps: Click **Control Panel -> Hardware and Sound -> Mouse** under **Windows System** group in **All apps**.
On-screen pointer does not respond to pointing device operation	In this instance, the system might be busy. Try moving the mouse again after waiting a short while.
Double-tapping (Touch Pad) does not work	In this instance, you should initially try changing the double-click speed setting within the Mouse Control utility. 1. To access this utility, click **Control Panel -> Hardware and Sound -> Mouse** under **Windows System** group in **All apps**. 2. Within the Mouse Properties window, click the **Buttons** tab. 3. Set the double-click speed as required and click **OK**.
The on-screen pointer moves too fast or too slow	In this instance, you should initially try changing the speed setting within the Mouse Control utility. 1. To access this utility, click **Control Panel -> Hardware and Sound -> Mouse** under **Windows System** group in **All apps**. 2. Within the Mouse Properties window, click the **Pointer Options** tab. 3. Set the pointer speed as required and click **OK**.
The reaction of Touch Pad is either too sensitive or not sensitive enough.	Adjust the touch Sensitivity. To access it, click **Control Panel -> Hardware and Sound -> Mouse** under **Windows System** group in **All apps**. If you are still unable to resolve the problem, contact TOSHIBA Support.

USB mouse

Problem	Procedure
On-screen pointer does not respond to mouse operation	In this instance, the system might be busy. Try moving the mouse again after waiting a short while.
	Remove the mouse from the computer and then reconnect it to a free USB port to ensure that it is firmly attached.
Double-clicking does not work	In this instance, you should initially try changing the double-click speed setting within the Mouse Control utility. 1. To access this utility, click **Control Panel -> Hardware and Sound -> Mouse** under **Windows System** group in **All apps**. 2. Within the Mouse Properties window, click the **Buttons** tab. 3. Set the double-click speed as required and click **OK**.
The on-screen pointer moves too fast or too slow	In this instance, you should initially try changing the speed setting within the Mouse Control utility. 1. To access this utility, click **Control Panel -> Hardware and Sound -> Mouse** under **Windows System** group in **All apps**. 2. Within the Mouse Properties window, click the **Pointer Options** tab. 3. Set the pointer speed as required and click **OK**.
The on-screen pointer moves erratically	The elements of the mouse responsible for detecting movement might be dirty. Refer to the documentation supplied with the mouse for instructions on how to clean it.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

USB device

In addition to the information in this section, also refer to the documentation supplied with your USB device.

Problem	Procedure
USB device does not work	Remove the USB device from the computer and then reconnect it to a free port to ensure that it is firmly attached.
	Ensure that any required USB device drivers are properly installed. To achieve this, you should refer to both the device documentation and the operating system documentation.

Sound system

In addition to the information in this section, also refer to the documentation supplied with your audio device.

Problem	Procedure
No sound is heard	Press the shortcut keys to increase or decrease volume.
	Check the software volume settings.
	Check to see if Mute is turned to Off
	Check to make sure that the headphone connection is secure.
	Check within the Windows Device Manager application to ensure that the sound device is enabled and that the device is properly working.
Annoying sound is heard	In this instance, you might be experiencing feedback from either the internal microphone or an external microphone connected to the computer. Refer to *Sound System and Video mode* for further information.
	Volume cannot be adjusted during Windows start up or shut down.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

External monitor

Also refer to *Operating Basics*, and to the documentation supplied with your monitor for further information.

Problem	Procedure
Monitor does not turn on	After confirming that the monitor's power switch is on, check the connections to make sure that the power cord/adaptor is firmly connected to the monitor and to a working power outlet.
No display	Try adjusting the contrast and brightness controls on the external monitor.
	Press the shortcut key to change the display priority and ensure that it is not set for the internal display only.
	Check to see if the external monitor is connected.
	When the external monitor is set as the primary display device in extended desktop mode, it does not display when the computer wakes up from Sleep Mode if the external monitor has been disconnected while in Sleep Mode.
	To keep this from happening, do not disconnect the external monitor while the computer is in Sleep or Hibernation Mode.
	Remember to turn off the computer before disconnecting the external monitor.
	When the display panel and an external monitor are set to clone mode and they are turned off by the timer, the display panel or the external monitor might not display when turned on again.
	If this occurs, press the shortcut key to reset the display panel and external monitor to clone mode.
Display error occurs	Check that the cable connecting the external monitor to the computer is firmly attached.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

Wireless LAN

Problem	Procedure
Cannot access Wireless LAN	Make sure that the wireless communication function of the computer is on.
	If problems persist, contact your LAN administrator.

Bluetooth

Problem	Procedure
Cannot access Bluetooth device	Check to ensure that the wireless communication function of the computer is on.
	Check to ensure that the Bluetooth Manager application is running on the computer and that power to the external Bluetooth device is turned on.
	Check to ensure that no optional Bluetooth Adaptor is installed in the computer. The built-in Bluetooth hardware cannot operate simultaneously with another Bluetooth controller.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

TOSHIBA support

If you require any additional help using your computer or if you are having problems operating the computer, you might need to contact TOSHIBA for additional technical assistance.

Before you call

Some problems you experience might be related to software or the operating system so it is important that you investigate other sources of assistance first. Before contacting TOSHIBA, try the following:

- Review troubleshooting sections in the documentation supplied with your software and/or peripheral devices.
- If a problem occurs when you are running software applications, consult the software documentation for troubleshooting suggestions and consider calling the software company's technical support department for assistance.
- Consult the reseller or dealer from where you purchased your computer and/or software - they are your best resource for current information and support.

TOSHIBA technical support

If you are still unable to solve the problem and suspect that it is hardware-related, read the enclosed warranty booklet or visit the TOSHIBA technical support website

http://pc-support.toshiba.eu

Chapter 7

Appendix

Specifications

This section summarizes the technical specifications of the computer.

Physical Dimensions

The following physical dimensions do not include parts that extend beyond the main body. The physical dimensions might vary depending on the model you purchased.

Size	
	■ Approximately 258.8 (w) x 178 (d) x 9.05 (h) millimeters (tablet mode)
	■ Approximately 258.8 (w) x 178 (d) x 19.4~21.6 (h) millimeters (laptop mode)
	(not including parts that extend beyond the main body).

Environmental Requirements

Conditions	Ambient temperature	Relative humidity
Operating	5°C to 35°C	20% to 80% (noncondensing)
Non-operating	-20°C to 60°C	10% to 90% (noncondensing)
Wet-bulb temperature	29°C maximum	

Conditions	Altitude (from sea level)
Operating	-60 to 3,000 meters
Non-operating	-60 to 10,000 meters maximum

Power Requirements

AC adaptor	100-240V AC
	50 Hz or 60 Hz (cycles per second)

Computer	5 V DC

Information for Wireless Devices

Wireless Technology Interoperability

The Wireless LAN is compatible with other LAN systems 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/n, b/g/n or Revision a/b/g/n/ac), as defined and approved by the Institute of Electrical and Electronics Engineers.

Bluetooth® Modules 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 (depending on the model you purchased), as defined and approved by the Bluetooth Special Interest Group.
■ Logo certification with Bluetooth wireless technology as defined by the Bluetooth Special interest Group.

This Bluetooth product is not compatible with devices using Bluetooth Version 1.0B specifications.

The wireless devices have not completed verification of connection and operation with all devices which are using the Wireless LAN or Bluetooth radio technology.

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

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

If you have any questions about using Wireless LAN or Bluetooth Module, visit

http://www.pc.support.global.toshiba.com

In Europe, visit

http://www.toshiba-europe.com/computers/tnt/bluetooth.htm

Wireless Devices and your health

Wireless products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless products

however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless products are 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 products may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the Wireless products 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 device prior to turning on the equipment.

Wireless LAN Technology

The wireless communication function of the computer supports some wireless communication devices.

Only some models are equipped with both Wireless LAN and Bluetooth functions.

- *Do not use the Wireless LAN (Wi-Fi) or Bluetooth functionalities near a microwave oven or in areas subject to radio interference or magnetic fields. Interference from a microwave oven or other source can disrupt Wi-Fi or Bluetooth operation.*

- *Turn off all wireless functionalities when near a person who might have a cardiac pacemaker implant or other medical electric device. Radio waves might affect pacemaker or medical device operation, possibly resulting in serious injury. Follow the instruction for your medical device when using any wireless functionality.*

- *Always turn off wireless functionality if the computer is near automatic control equipment or appliances such as automatic doors or fire detectors. Radio waves can cause malfunction of such equipment, possibly resulting in serious injury.*

- *It might not be possible to make a network connection to a specified network name using the ad hoc network function. If this occurs, the new network (*) has to be configured for all computers connected to the same network in order to re-enable network connections.*
  * Make sure to use new network name.

Security

■ TOSHIBA strongly recommends that you enable encryption functionality, otherwise your computer is open to illegal access by an outsider using a wireless connection. If this occurs, the outsider might illegally access your system, eavesdrop, or cause the loss or destruction of stored data.
■ TOSHIBA is not liable for the loss of data due to eavesdropping or illegal access through the wireless LAN and the damage thereof.

Card Specifications

Compatibility	■	IEEE 802.11 Standard for Wireless LANs
Network Operating System	■	Microsoft Windows Networking
Media Access Protocol	■	CSMA/CA (Collision Avoidance) with Acknowledgment (ACK)

Radio Characteristics

Radio Characteristics of Wireless LAN module might vary according to:

■ Country/region where the product was purchased
■ Type of product

Wireless communication is often subject to local radio regulations. Although Wireless LAN wireless networking products have been designed for operation in the license-free 2.4 GHz and 5 GHz band, local radio regulations might impose a number of limitations to the use of wireless communication equipment.

Radio Frequency	■	Band 5 GHz (5150-5850 MHz) (Revision a and n)
	■	Band 2.4 GHz (2400-2483.5 MHz) (Revision b/g and n)

The range of the wireless signal is related to the transmit rate of the wireless communication. Communications at lower transmit range might travel larger distances.

■ The range of your wireless devices can be affected when the antennas are placed near metal surfaces and solid high-density materials.
■ Range is also impacted due to "obstacles" in the signal path of the radio that might either absorb or reflect the radio signal.

Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operation in the 5.15 to 5.25GHz frequency range.

High-power radars are allocated as primary users (i.e. priority users) of the bands 5.25 to 5.35GHz and 5.65 to 5.85GHz and that these radars could cause interference and/or damage to LE-LAN devices.

Bluetooth wireless technology

Some computers in this series have Bluetooth wireless communication function which eliminates the need for cables between electronic devices such as computers, printers, and mobile phones. When it is enabled, Bluetooth provides the wireless personal area network environment which is safe and trustworthy, that is quick and easy.

You cannot use the built-in Bluetooth functions of the computer and an external Bluetooth adaptor simultaneously. For reference, Bluetooth wireless technology has the following features:

Security

Two advanced security mechanisms ensure a high level of security:

- Authentication prevents access to critical data and makes it impossible to falsify the origin of a message.
- Encryption prevents eavesdropping and maintains link privacy.

Worldwide operation

The Bluetooth radio transmitter and receiver operate in the 2.4 GHz band, which is license-free and compatible with radio systems in most countries in the world.

Radio links

You can easily establish links between two or more devices, with these links being maintained even if the devices are not within a line-of-sight of each other.

Radio Regulatory Information

The wireless device 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 product complies with the following radio frequency and safety standards.

Europe

Restrictions for Use of 2400.0-2483.5MHz Frequencies in Europe

France:	Outdoor use limited to 10mW e.i.r.p. within the band 2454-2483.5MHz	Military Radiolocation use.Refarming of the 2.4GHz band has been ongoing in recent years to allow current relaxed regulation Full implementation planned 2012.

Italy:	-	For private use, a general authorization is required if WAS/RLAN's are used outside own premises. For public use, a general authorization is required.
Luxembourg:	Implemented	General authorization required for network and service supply.
Norway:	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Alesund.
Russian Federation:	-	Only for indoor applications.

Restrictions for Use of 5150-5350MHz Frequencies in Europe

Italy:	-	For private use, a general authorization is required if WAS/RLAN's are used outside own premises.
Luxembourg:	Implemented	General authorization required for network and service supply.
Russian Federation:	Limited	e.i.r.p 100mW. Permitted to use only for indoor applications, closed industrial and warehouse areas, and on board aircraft.
		1. Permitted to use for local networks of aircraft crew service communications on board aircraft in area of the airport and at all stages of flight.
		2. Permitted to use for public wireless access local networks on board aircraft during a flight at the altitude not less than 3000m.

Italy:	-	For private use, a general authorization is required if WAS/RLAN's are used outside own premises.
Luxembourg:	Implemented	General authorization required for network and service supply
Russian Federation:	Limited	e.i.r.p 100mW. Permitted to use only for indoor applications, closed industrial and warehouse areas, and on board aircraft.
		1. Permitted to use for local networks of aircraft crew service communications on board aircraft in area of the airport and at all stages of flight.
		2. Permitted to use for public wireless access local networks on board aircraft during a flight at the altitude not less than 3000m.

To remain in conformance with European spectrum usage laws for Wireless LAN operation, the above 2.4GHz and 5GHz channel limitations apply for outdoor usage. The user should use the wireless LAN utility to check the current channel of operation. If operation is occurring outside of the allowable frequencies for outdoor use, as listed above, the user must contact the applicable national spectrum regulator to request a license for outdoor operation.

Canada - Industry Canada (IC)

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Les dispositifs fonctionnant dans la bande 5.15-5.25GHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5.25-5.35GHz et 5.65-5.85GHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

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

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.

Refer to the FCC information section for the detailed information.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

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

In the usual operating configuration, the distance between the antenna and the user should not be less than 20cm. Please refer to the computer user's manual for the details regarding antenna location.

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

Taiwan

Article 12	Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to an approved low power radio frequency devices.

Article 14	The low power radio-frequency devices shall not influence aircraft security and interfere legal communications;
	If found, the user shall cease operating immediately until no interference is achieved.
	The said legal communications means radio communications is operated in compliance with the Telecommunications Act.
	The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

Australia and New Zealand regulatory compliance

This equipment incorporates a radio transmitting device, in normal use a separation distance of 20cm will ensure radio frequency exposure levels complies with the Australian and New Zealand Standards.

Using this equipment in Japan

In Japan, the frequency bandwidth of 2,400MHz to 2,483.5MHz 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. Important notice

The frequency bandwidth of this equipment may operate within the same range as industrial devices, scientific devices, medical devices, microwave ovens, licensed radio stations and non-licensed specified low-power radio stations for mobile object identification systems (RFID) used in factory production lines (Other Radio Stations).

1. Before using this equipment, ensure that it does not interfere with any of the equipment listed above.
2. If this equipment causes RF interference to other radio stations, promptly change the frequency being used, change the location of use, or turn off the source of emissions.
3. Contact an authorized TOSHIBA service provider if you have problems with interference caused by this product to Other Radio Stations.

2. Indication for Wireless LAN

The indication shown below appears on this equipment.
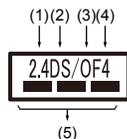
1. 2.4: This equipment uses a frequency of 2.4 GHz.
2. DS: This equipment uses DS-SS modulation.
3. OF: This equipment uses OFDM modulation.
4. 4: The interference range of this equipment is less than 40 m.
5. ▬▬▬ : This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz. It is possible to avoid the band of mobile object identification systems.

3. Indication for Bluetooth

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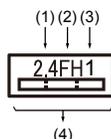
1. 2.4: This equipment uses a frequency of 2.4 GHz.
2. FH: This equipment uses FH-SS modulation.
3. 1: The interference range of this equipment is less than 10 m.
4. ▭▭▭: This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz. It is impossible to avoid the band of mobile object identification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

4. About the JEITA

5GHz Wireless LAN supports W52/W53/W56 Channel.
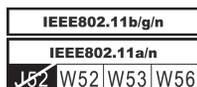
Device Authorization

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 Telecommunications Business Law of Japan.

- Broadcom® BCM43340 802.11a/g/n Wireless LAN and Bluetooth

  The Name of the radio equipment: BCM43340

  Telefication B.V. Ltd.

  Approval Number: D1500057201

The following restrictions apply:

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

Radio approvals for wireless devices

This equipment is approved to the radio standard by the countries/regions in the following table.

⚠️ *If you use this equipment in the countries/regions which are not listed in the following table, contact TOSHIBA Support.*

As of August 2015

Austria	Belgium	Bulgaria	Canada
Cyprus	Czech Rep	Denmark	Estonia
Finland	France	Germany	Greece
Hong Kong	Hungary	Iceland	India
Ireland	Italy	Japan	Korea
Latvia	Liechtenstein	Lithuania	Luxemburg
Malta	Monaco	Netherlands	Norway
Philippines	Poland	Portugal	Romania
Slovak Republic	Slovenia	Spain	Sweden
Switzerland	UK	USA	

Legal Footnotes

Non-applicable Icons

Certain computer chassis are designed to accommodate all possible configurations for an entire product series. Therefore, be aware that your selected model might not have all the features and specifications corresponding to all of the icons or switches shown on the computer chassis.

CPU

Central Processing Unit (CPU) Performance Legal Footnotes.

CPU performance in your computer product might 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, computer generated graphics or video applications
- 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 several applications or functionalities simultaneously
- use of computer in areas with low air pressure (high altitude >1,000 meters or >3,280 feet above sea level)
- use of computer at temperatures outside the range of 5°C to 30°C (41–86°F) or >25°C (77°F) at high altitude (all temperature references are approximate and might vary depending on the specific computer model - contact TOSHIBA support for details).

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

Under some conditions, your computer product might automatically shutdown. 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 in your product documentation. Contact TOSHIBA technical service and support, refer to *TOSHIBA support* section for more information.

64-Bit Computing

Certain 32-bit device drivers and/or applications might not be compatible with a 64-bit CPU/operating system and therefore might not function properly.

Memory (Main System)

Part of the main system memory might be used by the graphics system for graphics performance and therefore reduce the amount of main system memory available for other computing activities. The amount of main system memory allocated to support graphics might vary depending on the graphics system, applications utilized, system memory size, and other factors.

If your computer is configured with more than 3 GB memory, the memory might be displayed as approximately 3 GB only (depending on the hardware specifications of the computer).

This is correct because the operating system usually displays the available memory instead of the physical memory (RAM) built into the computer.

Various system components (like the video adapter's GPU and PCI devices like Wireless LAN, and so on) require their own memory space. Since a 32-bit operating system cannot address more than 4 GB of memory, these system resources overlap the physical memory. It is a technical limitation that the overlapped memory is not available to the operating system. Even though some tools might display the actual physical memory built into your computer, the memory available to the operating system is still approximately 3 GB only.

Computers configured with a 64-bit operating system can address 4 GB or more of system memory.

Battery Life

Battery life might vary considerably depending on product model, configuration, applications, power management settings, and features utilized, as well as the natural performance variations produced by the design of individual components. Published battery life numbers are achieved on select models and configurations tested by TOSHIBA at the time of publication. Recharge time varies depending on usage. Battery might not charge while computer is consuming full power.

After going through many charge and discharge cycles, the battery loses its ability to perform at maximum capacity and needs to be replaced. This is a normal phenomenon for all batteries. To purchase a new battery pack, see the accessories information that is shipped with your computer.

Internal Storage Capacity

1 Gigabyte (GB) means 10^9 = 1,000,000,000 bytes using powers of 10. The computer operating system, however, reports storage capacity using powers of 2 for the definition of 1 GB = 2^{30} = 1,073,741,824 bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the product includes one or more pre-installed operating systems, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity might vary.

LCD

Over a period of time, and depending on the usage of the computer, the brightness of the LCD screen will deteriorate. This is an intrinsic characteristic of LCD technology.

Maximum brightness is only available when operating in AC power mode. Screen dims when the computer is operated on battery power and you might not be able to increase the brightness of the screen.

Graphics Processing Unit (GPU)

Graphics processing unit (GPU) performance might vary depending on product model, design configuration, applications, power management settings and features utilized. GPU performance is only optimized when

operating in AC power mode and might decrease considerably when operating in battery power mode.

Total Available Graphics Memory is the total of, as applicable, Dedicated Video Memory, System Video Memory and Shared System Memory. Shared System Memory varies depending on system memory size and other factors.

Wireless LAN

The transmission speed over the wireless LAN and the distance over which wireless LAN can reach might vary depending on surrounding electromagnetic environment, obstacles, access point design and configuration, and client design and software/hardware configurations.

The actual transmission speed is lower than the theoretical maximum speed.

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David Turner, Robert Wilhelm, and Werner Lemberg

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- freetype@nongnu.org

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