

Hibernation

NOTE: Make sure that the hibernation feature is enabled in the “When I press the power button,” “When I press the sleep button,” and “When I close the lid” of the **Power Options** → **System Settings Properties** from the **Control Panel** → **Mobile PC**.

Hibernation is a very useful feature. People frequently open many applications when they use computers. It takes some time to get all these applications open and running, and normally they all have to be closed before the computer can be turned off.

When you use the hibernation feature, you do not have to close the applications. The computer stores the state of your computer to a file on the hard disk and then shuts down. The next time you turn on your computer, you return to exactly where you left off.

Power-Saving Tips

Aside from enabling your computer's power saving mode (see previous section), you can do your part to maximize the battery's operating time by following these suggestions.

- Do not disable Power Management. Choose a power plan that saves power. A power plan is a collection of hardware and system settings that control how your computer manages power.
- Decrease the LCD brightness to the lowest comfortable level.
- Shorten the length of time before Windows turn off the display.
- Many USB devices use power just by being connected. If you use a USB mouse, you can save power by disconnecting the mouse and using the touchpad. If you use a USB flash drive, unplug it when you are not using it.
- If you work with an application that uses an ExpressCard, exit the application when you finish using it.
- If you have an ExpressCard installed, remove it when not in use. Some ExpressCards drain power even while they are inactive.
- Deactivate the wireless LAN function if you are not using it. (See Chapter 2.)
- Deactivate the *Bluetooth*[®] wireless function if you are not using it. (See Chapter 2.)
- Turn off the computer when you are not using it.

Expanding Your Computer

You can expand the capabilities of your computer by connecting other peripheral devices. When using a device, be sure to read the instructions accompanying the device together with the relevant section in this chapter.

This chapter gives guidelines on installing and using these devices:

- External monitor
- USB device
- ExpressCard
- Card Reader
- Port Replicator
- System memory

Connecting an External Monitor

If you want the benefits of a larger display screen with higher resolution, you can connect an external CRT monitor or LCD monitor to your computer. Follow this procedure to connect an external monitor:

1. Make sure that the computer is not turned on.
2. Plug the monitor's signal connector to the computer's VGA connector.



3. Plug one end of the monitor's power cord into the power socket on the monitor and the other end to an electrical outlet.
4. To use the monitor, turn on the monitor before turning on the computer.
5. The monitor should respond by default. If not, you can switch the display to the monitor or to both (simultaneous display), or to multi-display by pressing the Fn+F5 hot key. You can also change the display through the **Display Settings Properties**.
6. You can change display settings through your operating system. See your operating system documentation or online help for specific information.

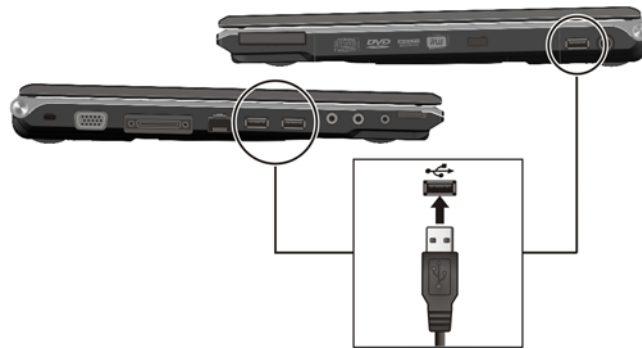
CAUTION: Do not disconnect the external monitor while the computer is in the Sleep mode or Hibernation mode. If no external monitor is connected when the computer resumes, the LCD might not display properly.

Connecting a USB Device

Your computer has three USB ports for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse.

The USB ports support transfer rates up to 12 MB/s for USB 1.1 devices and 480 MB/s for USB 2.0 devices.

To connect a USB device, simply plug the device cable to one of the USB ports.



Using ExpressCards

NOTE: The ExpressCard interface is not compatible with the PC card interface. You need optional adapters for using PC cards on your computer.

Your computer has an ExpressCard slot.

ExpressCard supports the PCI Express and USB 2.0 serial data interfaces (supporting speeds of up to 2.5 Gbps and 480 Mbps respectively), improving speed in data transfer while conserving power usage.

ExpressCard Type

The ExpressCard slot can accommodate a 34 mm (ExpressCard/34) wide ExpressCard. Typical ExpressCards support a very extensive range of applications including memory, wired and wireless communication cards, and security devices.

Shown next is the appearance of ExpressCard/34 for your reference.



Inserting and Removing an ExpressCard

To insert an ExpressCard:

1. Locate the ExpressCard slot on the computer.

2. Press the cover tray (❶) and pull it out (❷).




3. Slide the ExpressCard, with its label facing up, all the way into the slot until the rear connectors click into place.



4. When a new card is seated, the computer will detect it and try to install the appropriate driver. Follow the on-screen instructions to complete the process.

To remove an ExpressCard:

1. Double-click the **Safely Remove Hardware** icon  found on the Windows system tray and the **Safely Remove Hardware** window appears on screen.
2. Select (highlight) the ExpressCard from the list to disable the card.
3. Push the ExpressCard slightly to release the card.
4. Pull the card out of the slot.




Using the Card Reader

NOTE:

- To take advantage of the Card Reader, the Card Reader driver supplied with your computer must be installed. (See chapter 6 for details.)
- If your hard disk is divided into several drives, make sure that all drives have been formatted before using the Card Reader. Otherwise, you may encounter problems when using the Card Reader.
- You can use only storage cards. Your Card Reader does not support cards with I/O (input/output) functions such as a wireless network card or Bluetooth card.

Your computer has a Card Reader. The Card Reader is a small drive for reading from and writing to removable storage cards (or called memory cards). The Card Reader supports the MultiMediaCard (MMC), Secure Digital (SD), Memory Stick (MS) and Memory Stick PRO (MS PRO) cards.

Shown next are the appearance and size of each card type for your reference.

Type	MMC Card	SD Card	MS/MS PRO Card
Appearance			
Size	24×32×1.4 (mm)	24×32×2.1 (mm)	21.5×50×2.8 (mm)

To insert a storage card:

1. Locate the Card Reader slot on the front of the computer and remove the slot cover.



2. Align the card with its connector pointing to the slot and its label facing up. Slide the card into the slot until it reaches the end.



3. Windows will detect the card and assign it a drive name (typically E).

To remove a storage card:

1. Click **Start**, then **Computer**.
2. Right-click the drive with the card and select **Safely Remove**.
3. Pull the card out of the slot.

Using the Port Replicator (Optional)




A port replicator is available as an option. This device eliminates the hassles of having you connect and disconnect the various cables when carrying your computer around and allows a variety of peripherals to be connected including a headphone or microphone, etc.

The following table shows the external components of the port replicator and briefly describes the function of each component.

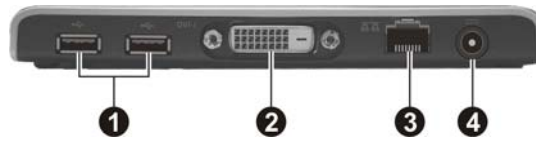
NOTE: Depending on the model you purchased, the appearance of your port replicator may not be exactly the same as those shown in this manual.

Front Components



Ref	Component	Description
①	Expansion Bus Connector	Connects to the computer via a port replicator cable.
②	USB Port 	Connects a USB device, such as a flash disk, printer, digital camera, joystick, and more.
③	Headphone Connector 	Connects a set of headphones, external speakers with amplifier, or an audio recording device.
④	Microphone-in Connector 	Connects an external microphone.

Rear Components



Ref	Component	Description
❶	USB Ports	Each of the two ports connects a USB device, such as a flash disk, printer, digital camera, joystick, and more.
❷	DVI-D Connector	Connects an external LCD monitor or digital CRT monitor.
❸	RJ-45 Connector	Connects the LAN cable.
❹	Power Connector	Connects the AC adapter.

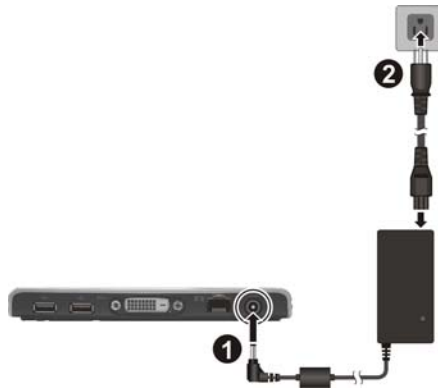
To start using the port replicator:

1. Connect one end of the port replicator cable to the expansion bus connector (❶) on the left side of your computer and the other end to the port replicator (❷).



2. Plug the DC cord of the AC adapter to the power connector on the port replicator (❹).

3. Plug the female end of the AC power cord to the AC adapter and the male end to an electrical outlet (2).





4. When the AC adapter is connected, power is being supplied from the electrical outlet to the AC adapter and onto your port replicator. Now, you are ready to connect various devices to your port replicator.

CAUTION:

- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the port replicator. A reverse procedure may damage the AC adapter or the port replicator.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

The following table shows the behavior of the computer's I/O (input/output) ports when connecting various devices to the I/O ports on the port replicator.

Component	Behavior of computer's I/O ports
USB Ports	All three ports on the computer and all three ports on the port replicator can be used at the same time.
Power Connector	The AC adapter on the computer supplies power to the computer while the AC adapter on the port replicator supplies power to the port replicator.
RJ-45 Connector	The system will automatically detect whether the LAN cable was first connected to the computer or port replicator and will use it.
DVI-D Connector	Display output to the computer's VGA port will be disabled.
Audio Output Connector 	The computer's audio output connector will be disabled.
Microphone Connector 	The computer's microphone connector will be disabled.

NOTE: The computer's S/PDIF connector will also be disabled when the port replicator is connected.

System Memory Upgrade

You can upgrade your computer by changing system memory to a maximum of 3 GB on the 800 MHz DDR2 SO-DIMM slot.

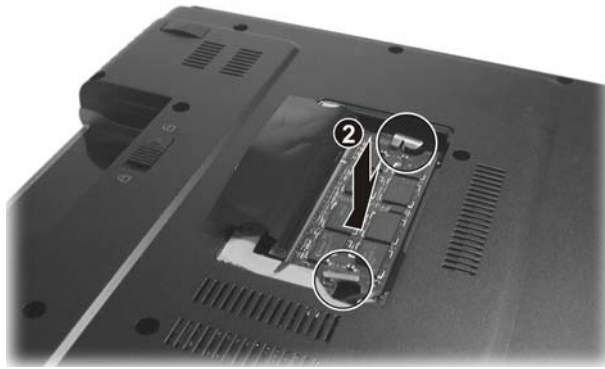
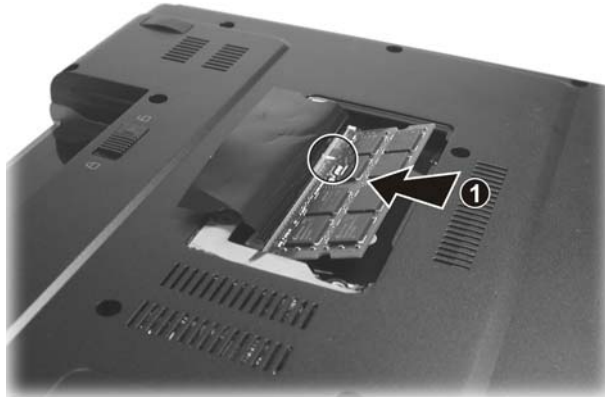
CAUTION: RAM modules are extremely sensitive to static electricity. There are cases where static electricity generated by the human body has adversely affected such modules. When inserting or removing a RAM module, do not touch the terminals or internal components, insert objects other than the module, or allow foreign particles to enter. Doing so has been known to cause damage, fire, or electrical shock.

To install the RAM module:

1. Remove the battery pack (see chapter 3) and make sure that the computer is not connected to AC power.
2. Carefully place the notebook computer upside down.
3. Remove the two screws to open the compartment cover.



4. To install the RAM module, match the module's notched part with the socket's projected part and firmly insert the module into the socket at a 20-degree angle (❶). Then push down until the retaining clips lock the module into position (❷).



CAUTION: If the RAM module is difficult to insert or difficult to push down, do not force it. Check once more to ensure that the module is positioned correctly.

5. Close the compartment cover and secure with two screws.

Using BIOS Setup

BIOS Setup Utility is a program for configuring the BIOS (Basic Input/Output System) settings of the computer.

BIOS is a layer of software, called firmware, that translates instructions from other layers of software into instructions that the computer hardware can understand. The BIOS settings are needed by your computer to identify the types of installed devices and establish special features.

This chapter tells you how to use the BIOS Setup program.

When and How to Use BIOS Setup

When to Use

You need to run BIOS Setup Utility when:

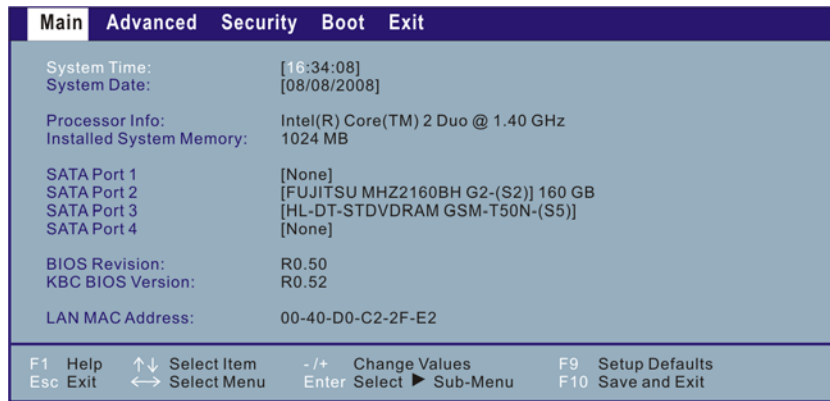
- You see an error message on the screen requesting you to run BIOS Setup Utility.
- You want to restore the factory default settings.
- You want to modify some specific settings according to the hardware.
- You want to modify some specific settings to optimize the system performance.

Starting BIOS Setup

NOTE:

- The BIOS Setup Utility screens shown in this chapter are for your reference only. The actual items or settings on your computer may differ.
- The BIOS Setup Utility program may have been updated after the publication of this manual.
- The settings you select in your operating system might override similar settings in BIOS Setup Utility.

To run BIOS Setup Utility, press the F2 key when the prompt appears on the screen during system startup. The prompt shows up on the screen for only a few seconds. You must press the F2 key quickly. The BIOS Setup Utility main screen appears as shown next.



The BIOS Setup Utility screen can be divided into three areas:

- On the top is the menu bar containing the titles of the available menus. Each menu title brings a specific menu.
- The left column of the menu displays the menu items.
- The top-right of the menu provides more detailed information when a menu item is highlighted.
- The bottom of the menu provides keyboard instructions for moving around and making selections.

Moving Around and Making Selections

You must go through two or three levels to complete the setting for an item. In most cases, there are three levels: menu title, pull-down menu, and submenu.

Use the keyboard to move around and make selections. Keyboard information can be found at the bottom of the screen. A brief description of keyboard usage is listed next:

Key	Function
← , →	Selects a menu title.
↑ , ↓	Selects an item or option.
Enter	1) Brings up the sub-menu when available. 2) Opens or closes the option window when an item is selected.
Esc	1) Exits BIOS Setup Utility. 2) Closes the option window if one is open.
F9	Loads setup defaults.
F10	Saves and exit the BIOS Setup Utility.

Main Menu

The Main menu contains the system date and time settings as well as shows the basic configuration of the system.

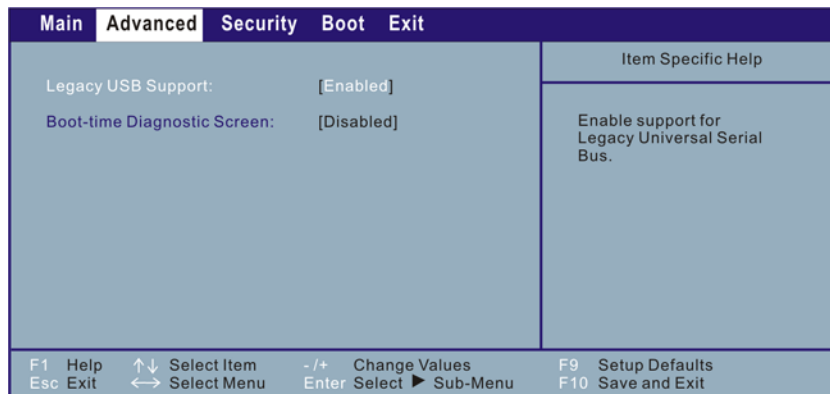
Main	Advanced	Security	Boot	Exit
System Time:	[16:34:08]			
System Date:	[08/08/2008]			
Processor Info:	Intel(R) Core(TM) 2 Duo @ 1.40 GHz			
Installed System Memory:	1024 MB			
SATA Port 1	[None]			
SATA Port 2	[FUJITSU MHZ2160BH G2-(S2)] 160 GB			
SATA Port 3	[HL-DT-STDVDRAM GSM-T50N-(S5)]			
SATA Port 4	[None]			
BIOS Revision:	R0.50			
KBC BIOS Version:	R0.52			
LAN MAC Address:	00-40-D0-C2-2F-E2			
F1 Help	↑↓ Select Item	-/+ Change Values	F9 Setup Defaults	
Esc Exit	←→ Select Menu	Enter Select	▶ Sub-Menu	F10 Save and Exit

System Time sets the system time.

System Date sets the system date.

Advanced Menu

The Advanced menu contains various system settings.



Legacy USB Support allows you to enable support for Legacy USB device in DOS mode.

Boot-time Diagnostic Screen allows you to display the diagnostic screen during system boot.

Security Menu

The Security menu contains the security settings, which safeguard your system against unauthorized use.

Main	Advanced	Security	Boot	Exit
Supervisor Password is: Clear User Password is: Clear				Item Specific Help
Set Supervisor Password [Enter] Set User Password [Enter]				Supervisor Password controls access to the Setup utility.
Password on boot: [Disabled]				
TPM Support: [Enabled]				
Current TPM State: Disabled and Deactivated				
Change TPM State: [No Change]				
F1 Help Esc Exit	↑↓ Select Item ←→ Select Menu	-/+ Change Values Enter Select	▶ Sub-Menu	F9 Setup Defaults F10 Save and Exit

Supervisor/User Password Is shows whether you have set the supervisor/user password or not for the system.

Set Supervisor/User Password sets the supervisor/user password. When typing the password, first make sure that Num Lock is off, and then type the password in the entry fields and press Enter. Confirm your password by typing it again and pressing Enter. You can set the supervisor/user password to be required for starting up the system and/or entering SCU.

NOTE:

- You can set the user password only when the supervisor password has been set.
- If both the administrator and user passwords are set, you can enter any of them for starting up the system and/or entering SCU. However, the user password only allows you to view/change the settings of certain items.

Password on Boot allows you to enable or disable the entering of password for booting up your system. Once the password is successfully set and this item is enabled, it is required for booting up the system.

TPM Support allows you to enable or disable TPM support. TPM is a component on your computer's mainboard that is specifically designed to enhance platform security above-and-beyond the capabilities of today's software by providing a protected space for key operations and other security critical tasks. Using both hardware and software, TPM protects encryption and signature keys at their most vulnerable stages – operations when the keys are being used unencrypted in plain-text form. TPM is specifically designed to shield unencrypted keys and platform authentication information from software-based attacks.

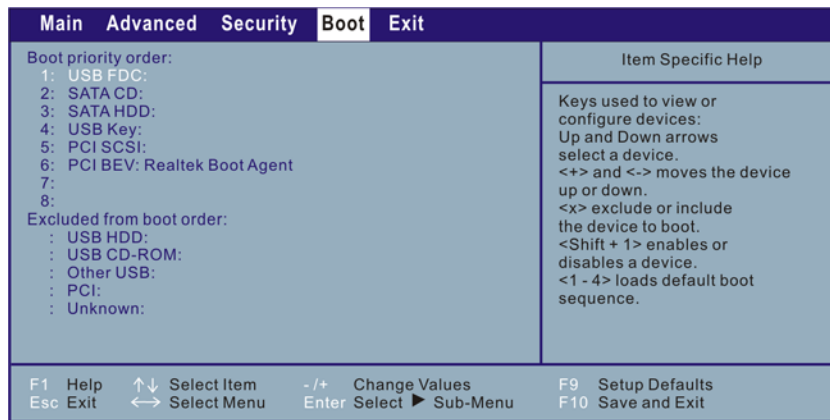
NOTE: Make sure to install the TPM driver before you can use the TPM feature (see chapter 6 for details).

Current TPM State shows the current TPM state.

Change TPM State allows you to select between *No Change*, *Clear*, *Deactivate & Disable*, and *Enable & Activate*.

Boot Menu

The Boot menu sets the sequence of the devices to be searched for the operating system.



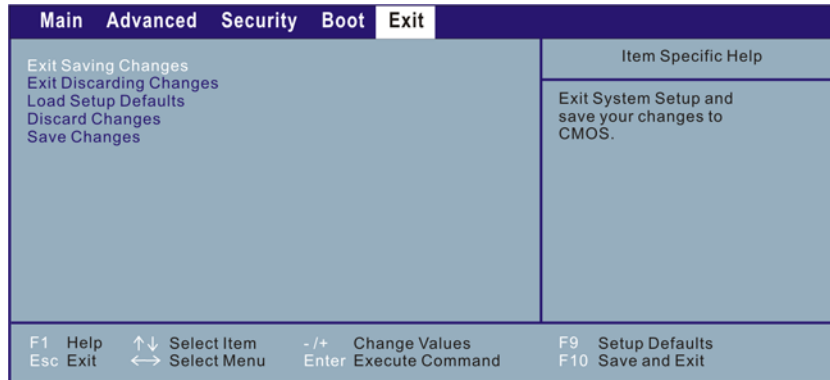
The bootable devices will be automatically detected during POST and shown here, allowing you to set the sequence that the BIOS use to look for a boot device from which to load the operating system.

A brief description of keyboard usage is listed next:

Key	Function
↑, ↓	Selects (highlight) a boot device.
+, -	Changes the boot sequence.
1 to 4	Loads the four default boot sequence.
Shift + 1	Enables or disables a device.
X	Moves the highlighted boot device from the “Boot priority order” list to the “Excluded from boot order” list, and vice versa.

Exit Menu

The Exit menu displays ways of exiting BIOS Setup Utility. After finishing with your settings, you must save and exit so that the changes can take effect.



Exit Saving Changes saves the changes you have made and exits BIOS Setup Utility.

Exit Discarding Changes exits BIOS Setup Utility without saving the changes you have made.

Load Setup Defaults loads the factory default values for all the items.

Discard Changes restores the previous values for all the items.

Save Changes saves the changes you have made.

Installing Software Drivers and Using the P1 Utility

To take full advantage of the unique features of your computer, some operating systems require custom software, known as drivers, to be installed.

If you purchased the computer with Windows pre-installed, your dealer may have already installed the drivers. If not, you need to install the drivers using the disc supplied with your computer.

Also, located on top of your keyboard is the P1 quick button. The quick button utility allows you to re-define (customize) the P1 quick button according to your needs.

This chapter describes how to install the drivers as well as use the P1 quick button utility.

How to Use the Driver Disc

NOTE:

- The drivers may have been updated after this manual was published. For driver upgrade, please contact your dealer.
- This disc supports Windows Vista only.
- The available items may differ according to your computer model.
- Do not remove the driver disc when installing the driver.

An autorun program is provided on the driver disc to help you easily install the drivers. As you insert the disc, the autorun program automatically starts. If you need to start the program manually, run the **Setup.exe** program from the **Wsetup** directory of the disc.

The main screen appears as shown next:



Click **NEXT** located on the right lower part of main screen to view the next screen as shown next.



Click **BACK** to return to the main screen.

Installing Drivers

To install the intended driver, click on the particular item and installation will start. The drivers are described next:


Name	Description
Chipset	Ensures the full function of the following drivers. Install this driver before installing the other device drivers.
VGA	Installs the video driver that allows you to select high-resolution displays with richer colors.
Audio	Installs the audio driver that allows you to take full advantage of the audio subsystem.
Card Reader	Installs the driver that allows the Card Reader to access MultiMediaCard (MMC), Secure Digital (SD), Memory Stick (MS) or Memory Stick PRO (MS PRO) card for removable storage media.
LAN	Installs the LAN driver that allows you to use the network function of the computer.
System Utility	Installs the system utility driver that allows you to use the hot keys with OSD (on-screen display) on the computer.
Touchpad	Installs the touchpad driver that allows you to take full advantage of the touchpad features.
Bluetooth (option)	Installs the Bluetooth driver and application program that allows you to use the Bluetooth feature.
WLAN (option)	Installs the WLAN driver and application program that allows you to use the computer's internal mini PCI-E WLAN card's network function. NOTE: The Windows Plug-and-Play capability may automatically detect the new device (mini PCI-E WLAN card) and display the wizard requesting for drivers. Click Cancel to bypass the wizard screen(s).
Fingerprint	Installs the driver that allows you to use the fingerprint module security verification system.
TPM	Installs the TPM driver, a hardware-based security feature that allows you to create and manage computer-generated digital certificates.

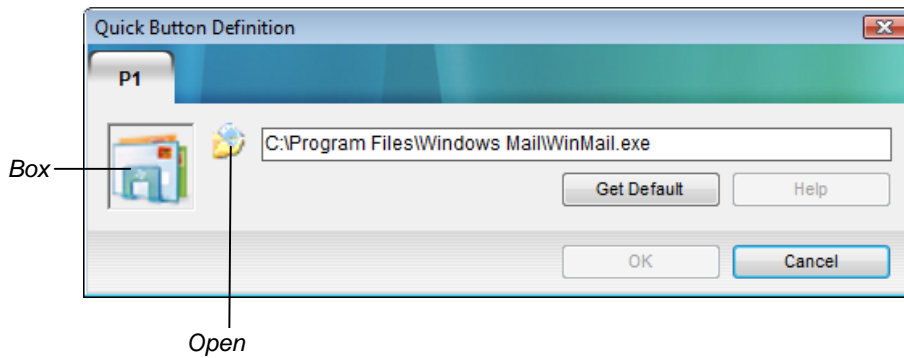
Name	Description
Turbo Memory (option)	Installs the Turbo Memory driver that allows you to use the computer's internal mini PCI-E Robson ES2 card for boosting system performance. NOTE: This icon would not appear if the mini PCI-E Robson ES2 card is not installed.
CCD (option)	Installs the web camera driver that allows you to use the computer's built-in camera function.
3G (option)	Installs the 3G driver that allows you to use the computer's 3G features.
Acrobat	Installs the Adobe Acrobat Reader program if you do not have it on your computer. You need Adobe Acrobat Reader to open the manual file supplied on this driver disc.
User's Manual	Allows you to view the User's Manual.
Exit	Allows you to exit driver installation (located on the right upper portion).

P1 Quick Button Utility

NOTE: Make sure to install the Quick Key driver to take advantage of the P1 quick launch key utility.

The quick launch key utility allows you to define the “P1” quick launch key.

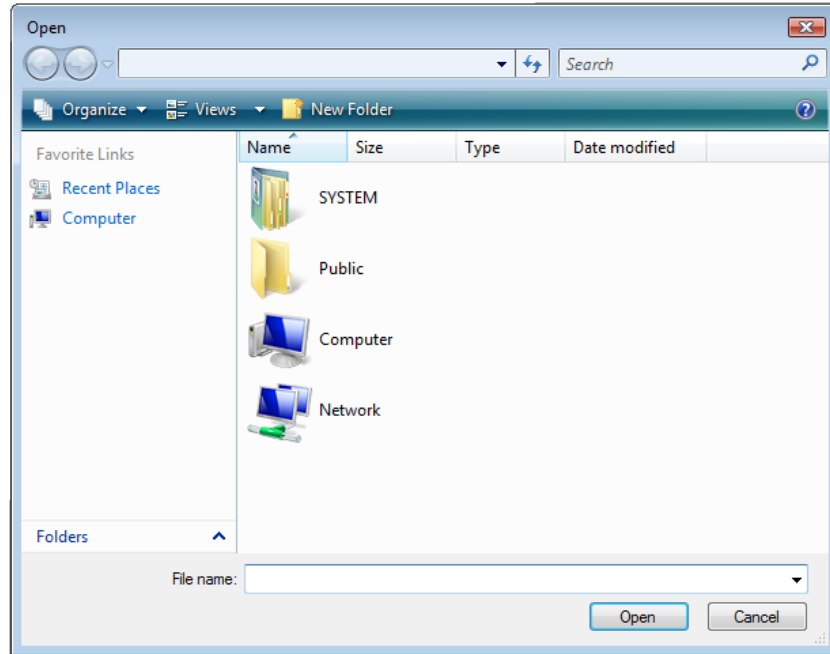
To start the utility, right-click the  icon and select the item **Quick Button Definition**. The following window appears as shown next.



Defining the buttons:

The box in the window represents the user-definable button.

To assign a program to a button, click the “Open” icon beside the box to pop up the **Open** dialog box as shown next and select the desired program. Then, click **Open** to complete the process.



The appropriate icon will then appear in the box. To launch the program, press the P1 quick launch key, or, if the **Quick Button Definition** window is open, click the box containing the icon.

Caring for the Computer

Taking good care of your computer will ensure a trouble-free operation and reduce the risk of damage to your computer.

This chapter gives you guidelines covering these areas of maintenance:

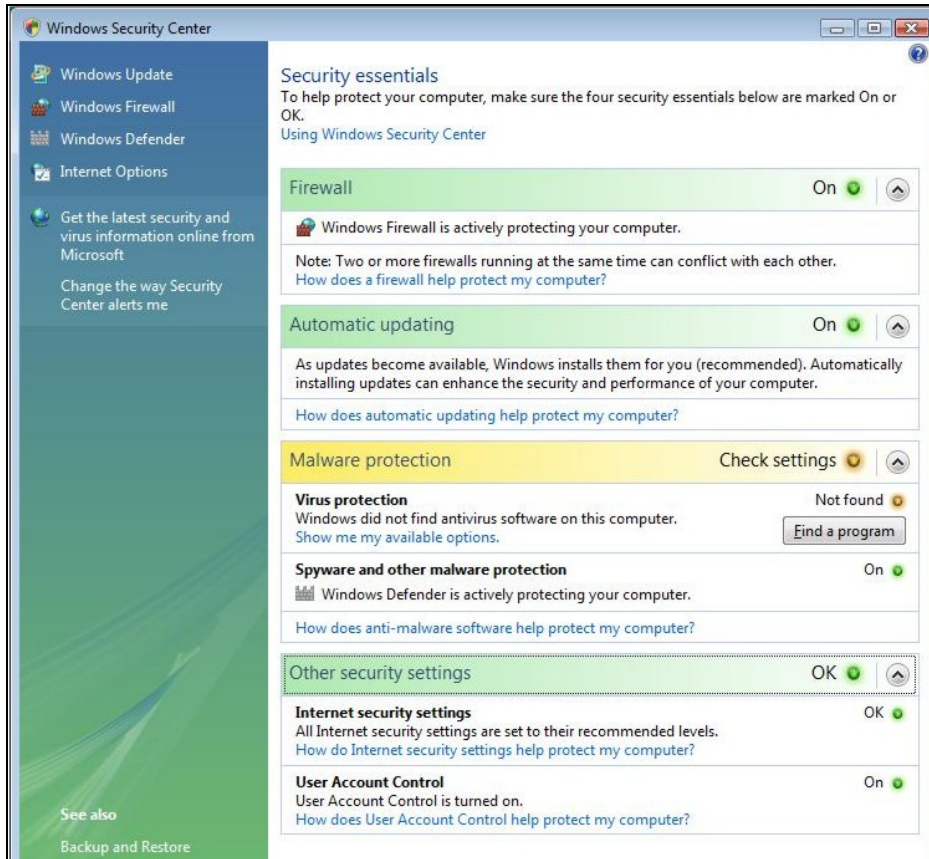
- How to protect the computer
- What to note when using and storing the computer
- How to clean the computer
- What to note when using the battery pack
- What to note when traveling with the computer

Protecting the Computer

To safeguard the integrity of your computer data as well as the computer itself, you can protect the computer in several ways as described in this section.

Using the Windows Security Center

Windows Security Center protects your computer against intrusion.



Windows Security Center alerts you to take action on the following security essentials:

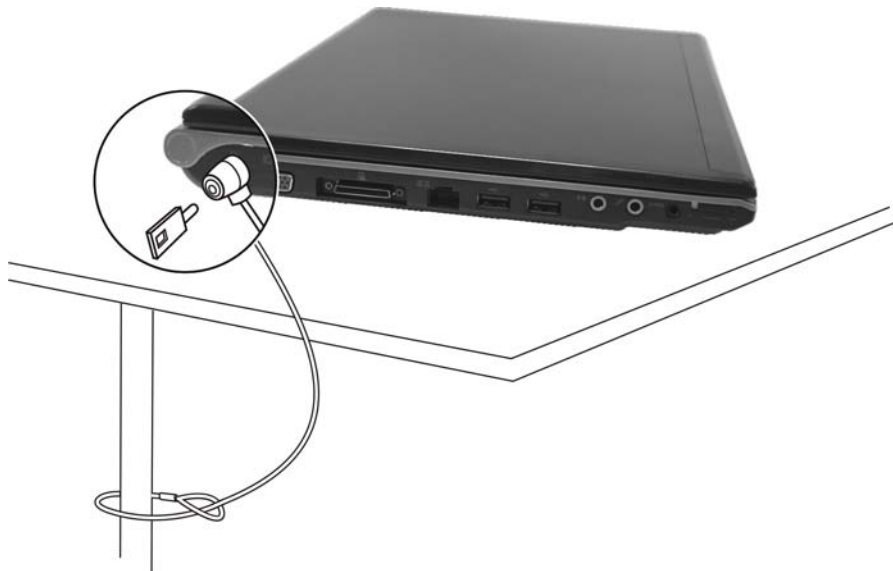
- Windows Firewall
- Windows Update
- Malware Protection (anti-virus, anti-spyware)
- Others (Internet security, user account control)

For detailed information on Windows Security Center, see Windows' Help.

Using the Cable Lock

You can use a Kensington-type cable lock to protect your computer against theft. The cable lock is available in most computer stores.

To use the lock, loop the lock cable around a stationary object such as a table. Insert the lock to the Kensington lock hole and turn the key to secure the lock. Store the key in a safe place.



Taking Care of the Computer

Location Guidelines

- Use the computer where the temperature is between 10 °C (50 °F) and 35 °C (95 °F).
- Avoid placing the computer in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust.
- Do not cover or block any ventilation openings on the computer. For example, do not place the computer on a bed, sofa, rug, or other similar surface. Otherwise, overheating may occur that results in damage to the computer.
- Keep the computer at least 13 cm (5 inches) away from electrical appliances that can generate a strong magnetic field such as a TV, refrigerator, motor, or a large audio speaker.
- Do not move the computer abruptly from a cold to a warm place. A temperature difference of more than 10 °C (18 °F) will cause condensation inside the unit, which may damage the storage media.
- Do not place the computer on an unsteady surface.

General Guidelines

- Wear protective gloves to prevent injury to your fingers when using the computer in higher than normal temperature.
- Do not place heavy objects on top of the computer when it is closed as this may damage the display.
- The screen surface is easily scratched. Do not use paper towels to clean the display. Avoid touching it with your fingers, pen, or pencil.
- To maximize the life of the backlight in the display, allow the backlight to automatically turn off as a result of power management.

Avoid using a screen saver or other software that prevents the power management from working.

Cleaning Guidelines

- Never clean the computer with its power on.
- Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the computer.
- Gently wipe the display with a soft, lint-free cloth. Do not use alcohol or detergent on the display.
- Dust or grease on the touchpad can affect its sensitivity. Clean the pad by using adhesive tape to remove the dust and grease on its surface.

Battery Pack Guidelines

- Recharge the battery pack when it is nearly discharged. When recharging, make sure that the battery pack is fully charged. Doing so may avoid harm to the battery pack.
- Operate the computer with the battery pack installed even when using external power. This ensures that the battery is fully charged.
- If you will not be using the computer for a long period of time (more than two weeks), remove the battery pack from the computer.
- If you remove the battery pack, make sure that the battery terminals do not contact any conductors such as metal objects or water. Otherwise, the battery may become unusable as a result of a short circuit.
- If you need to store the battery pack, store it in a cool, dry place. Never allow the temperature to exceed 60 °C (140 °F).
- Do not leave the battery pack in storage for more than 6 months without recharging it.

When Traveling

- Before traveling with your computer, make a backup of your hard disk data into flash disks or other storage devices. As an added precaution, bring along an extra copy of your important data.
- Make sure that the battery pack is fully charged.
- Make sure that the computer is turned off and the top cover is securely closed.
- Do not leave objects in between the keyboard and closed display.
- Disconnect the AC adapter from the computer and take it with you. Use the AC adapter as the power source and as a battery-charger.
- Hand-carry the computer. Do not check it in as luggage.
- If you need to leave the computer in the car, put it in the trunk of the car to avoid exposing the computer to excessive heat.
- When going through airport security, it is recommended that you send the computer and flash disks through the X-ray machine (the device you set your bags on). Avoid the magnetic detector (the device you walk through) or the magnetic wand (the handheld device used by security personnel).
- If you plan to travel abroad with your computer, consult your dealer for the appropriate AC power cord for use in your country of destination.

Troubleshooting

Computer problems can be caused by hardware, software, or both. When you encounter any problem, it might be a typical problem that can easily be solved.

This chapter tells you what actions to take when solving common computer problems. It is divided into three sections:

- Preliminary checklist
- Solving common problems
- Resetting the computer

Preliminary Checklist

Here are helpful hints to follow before you take further actions when you encounter any problem:

- Try to isolate which part of the computer is causing the problem.
- Make sure that you turn on all peripheral devices before turning on the computer.
- If an external device has a problem, make sure that the cable connections are correct and secure.
- Make sure that the configuration information is properly set in the BIOS Setup program.
- Make sure that all the device drivers are correctly installed.
- Make notes of your observations. Are there any messages on the screen? Do any indicators light? Do you hear any beeps? Detailed descriptions are useful to the service personnel when you need to consult one for assistance.

If any problem persists after you follow the instructions in this chapter, contact an authorized dealer for help.

Solving Common Problems

For easy reference, the problems are divided into these categories.

Problem Type	Go to
Battery Problems	P. 8-4
Bluetooth Wireless Problems	P. 8-4
DVD Drive Problems	P. 8-4
Display Problems	P. 8-5
ExpressCard Problems	P. 8-6
Hardware Device Problems	P. 8-6
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Keyboard, Mouse, and Touchpad Problems	P. 8-8
LAN Problems	P. 8-8
WLAN Problems	P. 8-9
Power Management Problems	P. 8-10
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Startup Problems	P. 8-12
Other Problems	P. 8-13

Battery Problems

The battery does not charge (Battery Charge indicator does not light amber).

- Make sure that the AC adapter is properly connected.
- Make sure that the battery is not too hot or cold. Allow time for the battery pack to return to room temperature.
- Make sure that the battery pack is installed correctly.
- Make sure that the battery terminals are clean.

The operating time of a fully charged battery becomes shorter.

- If you often partially recharge and discharge, the battery might not be charged to its full potential. Initialize the battery to solve the problem. (See “Initializing the Battery Pack” in Chapter 3 for instructions.)

The battery operating time indicated by the battery meter does not match the actual operating time.

- The actual operating time can be different from the estimated time, depending on how you are using the computer. If the actual operating time is much less than the estimated time, initialize the battery. (See “Initializing the Battery Pack” in Chapter 3 for instructions.)

Bluetooth Wireless Problems

I cannot connect to another Bluetooth-enabled device.

- Make sure that the Bluetooth card is correctly installed.
- Make sure that the Bluetooth driver is correctly installed.
- Make sure that both devices have activated Bluetooth.
- Make sure that the distance between the two devices are not over 10 meters or that there are no walls or other obstructions between the devices.
- Make sure that the other device is not in “Hidden” mode.

- Make sure that both devices are compatible.

DVD Drive Problems

The DVD drive cannot read a disc.

- Make sure that the disc is correctly seated in the tray, with the label facing up.
- Make sure that the disc is not dirty. Clean the disc with a disc cleaning kit, available in most computer stores.
- Make sure that the DVD drive driver is installed correctly.
- Make sure that the computer supports the disc or the files contained.

You cannot eject a disc.

- The disc is not properly seated in the drive. Manually release the disc following the method described next:
 1. Insert a small rod, such as a straightened paperclip, into the drive's manual eject hole and push firmly to release the tray.
 2. Pull the tray out until fully extended, and then remove the disc.



Display Problems

Nothing appears on the screen.

- Make sure that the VGA driver is installed properly.
- During operation, the screen may automatically turn off as a result of power management. Press any key to see if the screen comes back.

- The brightness level might be too low. Increase brightness by pressing the Fn+F7 hot key.
- The display output might be set to an external device. To switch the display back to the LCD, press the Fn+F5 hot key or change the display through the Display Settings Properties of Windows.

The characters on the screen are dim.

- Adjust the brightness and/or contrast.

Bad dots appear on the display at all times.

- A small number of missing, discolored, or bright dots on the screen are an intrinsic characteristic of TFT LCD technology. It is not regarded as a LCD defect.

The external monitor displays nothing.

- Make sure that the monitor is turned on.
- Make sure that the monitor's signal cable is properly connected.
- Switch the display to the monitor by pressing the Fn+F5 hot key or change the display through the Display Settings Properties of Windows.

Simultaneous display/multi-display does not work.

- Make sure that you turn on the external monitor before turning on the computer.
- Press the Fn+F5 hot key to toggle through the display options or through the Display Settings Properties of Windows.

ExpressCard Problems

The ExpressCard does not work.

- Make sure that the ExpressCard is correctly seated.
- If the card requires an IRQ (Interrupt ReQuest), make sure that there is one available.

The ExpressCard stops communicating properly.

- The application may have been reset when the computer is turned off or in Sleep mode. Exit and restart the application.

Hardware Device Problems

The computer does not recognize a newly installed device.

- The device may not be correctly configured in the BIOS Setup program. Run the BIOS Setup program to identify the new type.
- Make sure if any device driver needs to be installed. (Refer to the documentation that came with the device.)
- Make sure if the device needs any jumper or switch settings. (Refer to the documentation that came with the device.)
- Check the cables or power cords for correct connections.
- For an external device that has its own power switch, make sure that the power is turned on.

Hard Disk Drive Problems

The hard disk drive error message appears on the screen.

- The hard disk drive has defects. Ask your dealer for help.

The hard disk drive operations seem slow.

- The data files stored on the hard disk drive may be fragmented. Use a tool such as Window's **Disk Defragmenter** to defragment the files.

The hard disk drive in-use indicator glows without blinking.


- The data files stored on the hard disk drive may be fragmented. Use a tool such as Window's **Disk Defragmenter** to defragment the files.

Keyboard, Mouse, and Touchpad Problems

The keyboard does not respond.

- Try connecting an external keyboard. If it works, contact an authorized dealer, as the internal keyboard cable might be loose.

The numeric keypad is disabled.

- Make sure that the Num Lock is switched on. (Check if the Num Lock Indicator  glows or not.)

The external keyboard does not work.

- Make sure that the keyboard cable is properly connected.

The USB mouse does not work.

- Make sure that the mouse cable is properly connected.

The touchpad does not work, or the pointer is difficult to control with the touchpad.

- Make sure that the touchpad driver is correctly installed.
- Make sure that the touchpad is clean.

LAN Problems

I cannot access the network.

- Make sure that the LAN driver is correctly installed.
- Make sure that the LAN cable is properly connected to the RJ-45 connector and the network hub.
- Make sure that the network configuration is appropriate.
- Make sure that the user name or password is correct.

WLAN Problems

I cannot use the WLAN feature.

- Make sure that the mini PCI-E WLAN card is correctly installed.
- Make sure that the necessary driver(s) is correctly installed.
- Make sure that the WLAN feature is turned on.

Transmission quality is poor.

- Your computer may be in an out-of-range situation. Move your computer closer to the Access Point or another WLAN device it is associated with.
- Check if there is high interference around the environment and solve the problem as described next.

Radio interference exists.

- Move your computer away from the device causing the radio interference such as microwave oven and large metal objects.
- Plug your computer into an outlet on a different branch circuit from that used by the affecting device.
- Consult your dealer or an experienced radio technician for help.

I cannot connect to another WLAN device.

- Make sure that the WLAN feature is turned on.
- Make sure that the SSID setting is the same for every WLAN device in the network.
- Your computer is not recognizing changes. Restart the computer.
- Make sure that the IP address or subnet mask setting is correct.

I cannot communicate with the computer in the network when Infrastructure mode is configured.

- Make sure that the Access Point your computer is associated with is powered on and all the LEDs are working properly.

- If the operating radio channel is in poor quality, change the Access Point and all the wireless station(s) within the BSSID to another radio channel.
- Your computer may be in an out-of-range situation. Move your computer closer to the Access Point it is associated with.
- Make sure that your computer is configured with the same security option (encryption) to the Access Point.
- Use the Web Manager/Telnet of the Access Point to check whether it is connected to the network.
- Reconfigure and reset the Access Point.

I cannot access the network.

- Make sure that the necessary driver(s) is correctly installed.
- Make sure that the network configuration is appropriate.
- Make sure that the user name or password is correct.
- You have moved out of range of the network.
- Turn off power management.

Power Management Problems

The computer does not enter Sleep or Hibernation mode automatically.

- If you have a connection to another computer, the computer does not enter Sleep or Hibernation mode if the connection is actively in use.
- Make sure that the Sleep or Hibernation time-out is enabled.

The computer does not enter Sleep or Hibernation mode immediately.

- If the computer is performing an operation, it normally waits for the operation to finish.

The computer does not resume from Sleep or Hibernation mode.

- The computer automatically enters Sleep or Hibernation mode when the battery pack is empty. Do any one of the following:
 - Connect the AC adapter to the computer.
 - Replace the empty battery pack with a fully charged one.

The computer does not enter Hibernation mode with the Fn+F12 hot keys.

- Make sure that the Hibernation function is specified for the sleep button.
- You might be using an ExpressCard that prevents the computer from entering Hibernation mode. To enter the mode, stop the communication program and then remove the card or stop the card.

Software Problems

An application program does not work correctly.

- Make sure that the software is correctly installed.
- If an error message appears on the screen, consult the software program's documentation for further information.
- If you are sure the operation has stop, reset the computer. (See "Resetting the Computer" later in this chapter.)

Sound Problems

No sound is produced.

- Make sure that the volume control is not set too low.
- Make sure that the audio driver is correctly installed.
- Make sure that the computer is not in Sleep mode.
- If using an external speaker, make sure that the speaker is properly connected.

Distorted sound is produced.

- Make sure that the volume control is not set too high or too low. In most cases, a high setting can cause the audio electronics to distort the sound.

The sound system does not record.

- Adjust the playback or recording sound levels.

The external microphone or audio device does not work.

- Make sure that the microphone is connected to the proper connector on the computer.
- Make sure that your computer is equipped with the driver needed.
- Click the speaker symbol on the taskbar and check the Windows volume control.
- Check the volume control of your computer.

Startup Problems

When you turn on the computer, it does not respond.

- If you are using an external AC power, make sure that the AC adapter is correctly and securely connected. If so, make sure that the electrical outlet works properly.
- If you are using the battery power, make sure that the battery is not discharged.

When you turn on the computer, it stops after POST.

- Restart your computer.

The message “Operating system not found” appears on the screen after you turn on the computer.

- If this message appears when you are booting from the hard disk, insert a bootable disc in the DVD drive and check the condition of the hard disk.

The message “Invalid system disk” or “Disk error” appears on the screen after you turn on the computer.

- If you are deliberately trying to boot from a disc, replace the disc with a bootable one and press any key to continue booting.
- If this message appears when you are booting from the hard disk, insert a bootable disc in the DVD drive and check the condition of the hard disk.

Other Problems

The date/time is incorrect.

- Correct the date and time via the operating system or BIOS Setup program.
- After you have performed everything as described above and still have the incorrect date and time every time you turn on the computer, the RTC (Real-Time Clock) battery is at the end of its life. Call an authorized dealer to replace the RTC battery.

Resetting the Computer

You may have to reset (reboot) your computer on some occasions when an error occurs and the program you are using hangs up.

If the computer operation seems to hang up, first wait. It is possible that the computer is processing data. Periodically check the hard disk drive in-use indicator, if it flashes irregularly, the program may be accessing data and preventing you from using the keyboard. If you are sure the operation has stopped and you cannot use the “restart” function of the operating system, reset the computer.

Reset the computer by any one of these methods:

- Press Ctrl+Alt+Del.
- If the above action does not work, turn off the computer. Wait for at least five seconds and turn it on again.

| CAUTION: Resetting will cause any unsaved data to be lost.

Specifications

| NOTE: Specifications are subject to change without any prior notice.

Parts		Specifications
Durability	Spill-resistant	100 c.c. water on system cover
	Drop	45 cm height (operating and non-operating)
	Stress	120 kg on surface, 15 kg / 13 points on LCD housing
CPU		Intel® Mobile Penryn (ultra-low voltage) Montevina (small form factor) processor, 800 MHz FSB (Front Side Bus), Thermal specifications 10 W (maximum)
Chipset	NorthBridge	Intel® GS45
	SouthBridge	Intel® ICH9-E (small form factor)
ROM BIOS		2 MB EEPROM, Fingerprint and TPM security
RAM	System	Up to 3 GB, 200-pin, DDRII 800 MHz SO-DIMM, 1.25-inch height
Display	Panel	13.3-inch TFT, resolution up to 1280×800 WXGA
	Video controller	UMA
	Video ports	VGA port
Audio	Subsystem	Azalia interface, 2.1-channel analog output
	Ports	Three audio ports for Line-out / Mic-in / S/PDIF
	Speakers	2 × 1.5 Watt stereo
	Microphone	× 2 Mic array
Keyboard		Standard keys, numeric keypad, 12 function keys, a special Fn (Function) key and Windows keys
Quick keys		ECO (power saving), Microsoft® Internet Explorer®, and P1 (Program 1 – user customized) quick launch key
Pointing device		Glide touchpad without scroll bar and 2 buttons
Storage device	Hard disk drive	SATA interface, 4200/5400 rpm support, 9.5 mm height, 2.5-inch diameter
	Optical drive	DVD Super Multi, 9.5 mm height
Card slots		ExpressCard/34, Card Reader (SD / MS / MS Pro / MMC)

Parts		Specifications
I/O ports		Three USB ports (USB 2.0 support), RJ-45 port, port replicator
LAN		10/100/1000 based-T
Wireless LAN		One mini PCI-E slot for wireless LAN card, compliant with IEEE 802.11a/b/g/n
Bluetooth		Specification 2.1 module
3G		Sierra 8790 module, HSUPA
Camera		Webcam 1.3 M with Mic array
Security		Fingerprint sensor slide-type, TPM 1.2, Kensington lock
Power	AC adapter	Universal AC adapter 65 Watt; input: 100~240 Volt, output: 19 Volt
	Battery	3-cell Li-ion battery 2600 mAh / 14.8 V 6-cell Li-ion battery 5200 mAh / 11.1 V
Dimension (W×D×H)		321×228×20~29 mm (12.6×9×0.8~1.14 inch)
Weight		1.7 kg (3.75 lb)
Environment	Temperature	Operating: 0 °C (32 °F) to 35 °C (95 °F) Storage: -20 °C (-4 °F) to 60 °C (140 °F)
	Humidity	Operating: 10 % to 90 % non-condensing Storage: 5 % to 95 % non-condensing
Regulation	EMC	CE
	Safety	CB
Energy Star		Energy Star 4.0
Green Product Coverage		RoHS-compliant

Regulatory Information

This appendix provides regulatory statements and safety notices on your computer.

NOTE: Marking labels located on the exterior of your computer indicate the regulations that your model complies with. Please check the marking labels and refer to the corresponding statements in this appendix. Some notices apply to specific models only.

On the Use of the System

Class B Regulations

USA

Federal Communications Commission Radio Frequency Interference Statement

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Please note:

The use of a non-shielded interface cable with this equipment is prohibited.

Canada

Canadian Department of Communications Radio Interference Regulations Class B Compliance Notice

This Class B digital apparatus meets all requirements of the Canada Interference-Causing equipment regulations.

Cet appareil numérique de Classe B respecte toutes les exigences du Règlement Canadien sur le matériel brouilleur.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Safety Notices

About the Battery

Caution Texts Concerning Lithium Batteries

DANISH

ADVARSEL! Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

NORWEGIAN

ADVARSEL: Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

SWEDISH

WARNING: Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

FINNISH

VAROITUS: Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

ENGLISH

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

DEUTSCH

VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleich-wertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

FRENCH

ATTENTION: Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Attention (for USA Users)

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

About the AC Adapter

- Use only the AC adapter supplied with your computer. Use of another type of AC adapter will result in malfunction and/or danger.
- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.
- Allow adequate ventilation around the adapter when using it to operate the device or charge the battery. Do not cover the AC adapter with paper or other objects that will reduce cooling. Do not use the AC adapter while it is inside a carrying case.
- Connect the adapter to a proper power source. The voltage requirements are found on the product case and/or packaging.
- Do not use the adapter if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

On the Use of the RF Device

| NOTE: The information in this section applies to models with the wireless LAN module.

USA and Canada Safety Requirements and Notices

IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Radio Frequency Interference Requirements and SAR

The FCC with its action in ET Docket 93-62 has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC certified equipment. The wireless LAN module meets the Human Exposure limits found in OET Bulletin 65, 2001, and ANSI/IEEE C95.1, 1992. Proper operation of this radio according to the instructions found in this manual will result in exposure substantially below the FCC's recommended limits. The following safety precautions should be observed:

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.

Use in specific environments:

- The use of wireless devices in hazardous locations is limited by the constraints posed by the safety directors of such environments.
- The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).

- The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.

Antenna use:

- In order to comply with FCC RF exposure limits, low gain integrated antennas should be located at a minimum distance of 20 cm (8 inches) or more from the body of all persons.
- High-gain, wall-mount, or mast-mount antennas are designed to be professionally installed and should be located at a minimum distance of 30 cm (12 inches) or more from the body of all persons. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.

Explosive Device Proximity Warning

WARNING: Do not operate a portable transmitter (such as a wireless network device) near unshielded blasting caps or in an explosive environment unless the device has been modified to be qualified for such use.

Antenna Warning

WARNING: To comply with the FCC and ANSI C95.1 RF exposure limits, it is recommended that the antenna for this device be installed so as to provide a separation distance of at least 20 cm (8 inches) from all persons and that the antenna must not be co-located or operating in conjunction with any other antenna or radio transmitter. It is recommended that the user limit exposure time if the antenna is positioned closer than 20 cm (8 inches).

Use on Aircraft Caution

CAUTION: Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.

EMC Requirements

This device uses, generates and radiates radio frequency energy. The radio frequency energy produced by this device is well below the maximum exposure allowed by the Federal Communications Commission (FCC).

This device complies with the limits for a Class B digital device pursuant to Part 15 subpart C of the FCC Rules and Regulations. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

The FCC limits are designed to provide reasonable protection against harmful interference when the equipment is installed and used in accordance with the instruction manual and operated in a commercial environment. However, there is no guarantee that interference will not occur in a particular commercial installation, or if operated in a residential area.

If harmful interference with radio or television reception occurs when the device is turned on, the user must correct the situation at the user's own expense. The user is encouraged to try one or more of the following corrective measures:

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

CAUTION: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by the manufacturer could void the user's authority to operate this device.

Canada Radio Frequency Interference Requirements

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

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

European Union CE Marking and Compliance Notices

Statements of Compliance

English

This product follows the provisions of the European Directive 1999/5/EC.

Danish

Dette produkt er i overensstemmelse med det europæiske direktiv 1999/5/EC.

Dutch

Dit product is in navolging van de bepalingen van Europees Directief 1999/5/EC.

Finnish

Tämä tuote noudattaa EU-direktiivin 1999/5/EC määräyksiä.

French

Ce produit est conforme aux exigences de la Directive Européenne 1999/5/EC.

German

Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 1999/5/EC.

Greek

Το προϊόν αυτό πληροί τις προβλέψεις της Ευρωπαϊκής Οδηγίας 1999/5/EC.

Icelandic

Þessi vara stendst reglugerð Evrópska Efnahags Bandalagsins númer 1999/5/EC.

Italian

Questo prodotto è conforme alla Direttiva Europea 1999/5/EC.

Norwegian

Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 1999/5/EC.

Portuguese

Este produto cumpre com as normas da Diretiva Européia 1999/5/EC.

Spanish

Este producto cumple con las normas del Directivo Europeo 1999/5/EC.

Swedish

Denna produkt har tillverkats i enlighet med EG-direktiv 1999/5/EC.

Local Restrictions of 802.11a/b/g/n Radio Usage

802.11a wireless LAN devices: For operation within 5.15 ~ 5.25 GHz frequency range, it is restricted to indoor usage environments, and the antenna of this device must be integral.

CAUTION: Due to the fact that the frequencies used by 802.11a/b/g/n wireless LAN devices may not yet be harmonized in all countries, 802.11a/b/g/n products are designed for use only in specific countries or regions, and is not allowed to be operated in countries or regions other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries or regions for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country or region of use. Any deviation from permissible settings and restrictions in the country or region of use could be an infringement of local law and may be punished as such.

The European variant is intended for use throughout the European Economic Area. However, authorization for use is further restricted in particular countries or regions within countries, as follows:

General

European standards dictate maximum radiated transmit power of 100 mW Effective Isotropic Radiated Power (EIRP) and the frequency range 2400 – 2483.5 MHz.

Belgium and the Netherlands

In Belgium and the Netherlands, the product may not be used outdoors. See the instructions next under the heading “Turning Off the Wireless LAN Radio.”

France

Departments in Which the Wireless LAN Module Can Be Used (Indoors Only)

The wireless LAN module can currently be used indoors only in the following 38 departments of mainland France. Please turn off your wireless LAN radio when operating the device in areas/places other than the 38 departments listed:

01	Ain Orientales	36	Indre	66	Pyrénées
02	Aisne	37	Indre et Loire	67	Bas Rhin
03	Allier	41	Loir et Cher	68	Haut Rhin
05	Hautes Alpes	42	Loire	70	Haute Saône
08	Ardennes	45	Loiret	71	Saône et Loire
09	Ariège	50	Manche	75	Paris
11	Aude	55	Meuse	82	Tarn et Garonne
12	Aveyron	58	Nièvre	84	Vaucluse
16	Charente	59	Nord	88	Vosges
24	Dordogne	60	Oise	89	Yonne
25	Doubs	61	Orne	90	Territoire de Belfort
26	Drôme	63	Puy du Dôme	94	Val de Marne
32	Gers	64	Pyrénées Atlantique		

Departments in Which the Wireless LAN Module's Maximum EIRP Not Shown in the Previous Table

Frequency Ranges (MHz)	Indoors	Outdoors
2400 – 2446.5	10 mW	Not permitted
2446.5 – 2483.5	100 mW	100 mW on private property with Ministry of Defense approval

Turning Off the Wireless LAN Radio

NOTE: Turning the wireless LAN radio off is not the same as disabling the wireless LAN card. It is not necessary to disable the card to meet the regulatory requirements.

While operating the computer in those French departments that do not allow use of the wireless LAN equipment, the user of the equipment must turn off the wireless LAN radio in order to comply with local regulations (see Chapter 2 for more information).

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