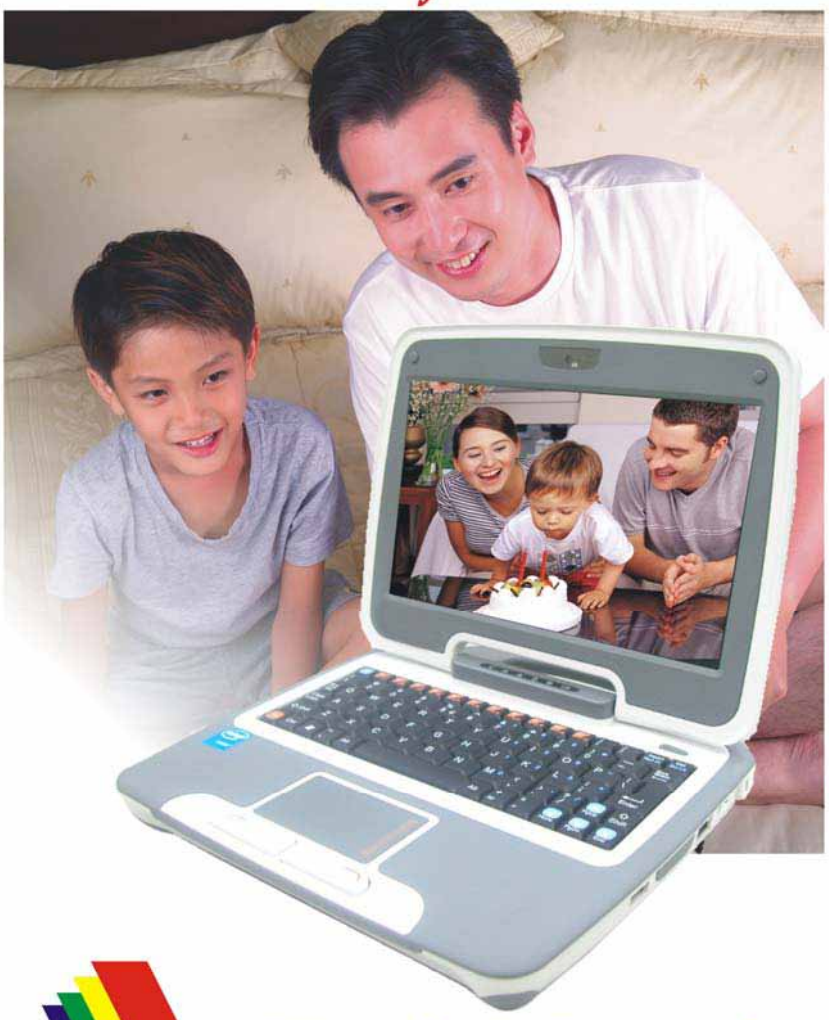
M&A Technology
Companion PC

Second Generation Intel-powered Classmate PC Refresh



User's Manual

Version 1.6

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Limitation of Liability

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Table of Content

Chapter 1

Attention: Teachers, Parents and Adult Supervisors

Please ensure that students understand the following:

- Emphasize to student that this device is an educational tool and not a toy. The computer, power supply, battery pack or power cord should not be dropped, crushed, stepped on or otherwise abused.
- This product is intended for school age children, ages 6 and up.
- Ensure students understand the safe and proper handling of power cord and power supply. Misuse could result in serious injury.

Use caution when using this computer around younger children. Keep power cords and small accessories away from younger children. If computer is damaged, keep any resulting small parts (such as a keyboard key) away from younger children and report damage or loose parts to their teacher, parent or adult supervisor, immediately.

- The teacher, parent or adult supervisor should periodically inspect the computer, power supply and power cord for damage and replace, if necessary.
- Students should report any damage or loose parts to their teacher, parent or adult supervisor, immediately.

- Caution students to avoid using device in wet conditions and to protect the unit when carrying in wet conditions.
- When cleaning the unit, clean only with a slightly damp soft cloth. Do not pour liquid onto the unit. Do not clean while computer is “on” or plugged into wall socket.
- Do not leave PC plugged in or “on” when enclosed in a non-vented container, such as a school backpack, as overheating may occur.
- It is recommended that students take a 5 minute break every 30 minutes of use.

Chapter 2

AGENCY REGULATORY NOTICES

Federal Communications Commission Notice

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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 or television technician for help.

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

Modifications

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

Connections to Peripheral Devices

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

SAR Exposure

Second generation Intel-powered classmate PC refresh has been tested for and found to be in compliance with FCC RF Exposure Limit. During extended periods of use the integrated antenna located at the top left corner of the display screen should be positioned at least 20cm from users or nearby persons.

Declaration of Conformity

This device complies with Part 15 the FCC 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.

European Notice

Products with the CE Marking comply with both the EMC Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC) and R&TTE Directive (1999/5/EC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN55022: 2006, CLASS B
- EN61000-3-2: 2006, CLASS D
- EN61000-3-3: 1995+A1: 2001+A2: 2005

- EN55024: 1998+A1: 2001+A2: 2003
- IEC61000-4-2: 2001 ED. 1.2
- IEC61000-4-3: 2006 ED. 3.0
- IEC61000-4-4: 2004 ED. 2.0
- IEC61000-4-5: 2005 ED. 2.0
- IEC61000-4-6: 2006 ED. 2.2
- IEC61000-4-8: 2001 ED. 1.1
- IEC61000-4-11: 2004 ED. 2.0
- EN 300 328-2, EN 300 328-1, EN 301 489-1, EN 301 489-17 (ETSI 300 328, ETSI 301 489) Electro-magnetic Compatibility and Radio Spectrum Matter.
- TBR21 (ETSI TBR21) Terminal Equipment.
- EN60950 (IEC60950) I.T.E. Product Safety

Canadian Notice

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le present appareil numerique nemet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de Classe B prescrites dans le reglement sur le brouillage radioelectrique edicte par le Ministere des Communications du Canada.

Attachment Limitations Statement

NOTICE.... This equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s).

This is confirmed by marking the equipment with the Industry Canada certification number. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company.

The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

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

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

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

Power Cord Requirement

The power cord supplied with the AC adapter should match the plug and voltage requirements for your local area. Regulatory approval for the AC adapter has been obtained using the power cord for the local area.

However, if you travel to a different area and need to connect to a different outlet or voltage, you should use one of the power cords listed below. To purchase a power cord (including one for a country not listed below) or a replacement AC adapter, contact your local dealer.

U.S. and Canada

- The cord set must be UL/ETL-Listed and CSA-Certified or UL/C-ETL Listed.
- The minimum specifications for the flexible cord are (1) No. 18 AWG, (2) Type SPT-2, and (3) 2-conductor.
- The cord set must have a rated current capacity of at least 7A.
- The attachment plug must be NEMA 1-15P (7A, 125V) configuration.

Japan

- All components of the cord set (cord, connector, and plug) must bear a “PSE” in accordance with the Japanese Dentori Law.
- The minimum specifications for the flexible cord are: (1) 0.75 mm^2 conductors, (2) Type VCT or VCTF, and (3) 3-conductor.
- The cord set must have minimum rated current capacity of 7 A.
- The attachment plug must be a two-pole, grounded type with a Japanese Industrial Standard C8303 (15 A, 125 VAC) configuration.

Other Countries

- The cord set fittings must bear the certification mark of the agency responsible for evaluation in a specific country. Acceptable agencies are:
  - CCC (China)
- The flexible cord must be of a HAR (harmonized) type HO5VV-F 3-conductor cord with a minimum conductor size of 0.03 square inches.
- The minimum specification for the flexible cord for Class II product are: (1) 2X0.75 mm^2 conductors, (2) 2-conductor cord.
- The cord set must have a current capacity of at least 10 A and a nominal voltage rating of 125 / 250 VAC.

NOTE.... This model is designed to use with the following AC Adapter model only
Manufacture: LI SHIN INTERNATIONAL ENTERPRISE CORP.
Model: 0225C2040 (2 Pin)
Manufacture: Delta
Model: ADP-40MH AD (2 Pin)

Battery Pack Safety

- The battery pack is intended to use only with this notebook.
- The battery pack should be replaceable by the end user. Only qualified service technicians should replace the battery pack.
- Do not disassemble the pack.

- Do not dispose of the battery pack in fire or water.

- To avoid risk of fire, burns, or damage to your battery pack, do not allow a metal object to touch the battery contacts.
- Handle a damaged or leaking battery with extreme care. If you come in contact with the electrolyte, wash the exposed area with soap and water. If it contacts the eye, flush the eye with water for 15 minutes and seek medical attention.
- Do not charge the battery pack if the ambient temperature exceeds 40℃ (113℉).
- To obtain a replacement battery, contact your local dealer.
- Do not expose the battery pack to high storage temperatures (above 60℃, 140℉).
- When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.
- Use only supplied AC Adapter for charging.

CAUTION... Danger of explosion if battery is incorrectly replaced. Only qualified service technicians should replace and discard the battery pack. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions or local laws.

VORSICHT... Explisionsgefahr bei unsachgernazen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ahnlichen Typ. Entsorgung gebrauchter Batterien navh Angaben des Herstellers.

Lithium battery warning / Bridge battery warning

This computer contains a lithium battery to power the clock and calendar circuitry.

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

Der Arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 betragt 70dB (A) oder weniger.

Zum Netzanschlua dieses Gerates ist eine geprufte Leitung zu verwenden. Fur einen Nennstrom bis 6A und einem Gerategewicht groBer 3kg ist eine Leitung nicht leichter als (1)H05VV-F, 3G, 0.75mm^2 (2)2X0.75 mm^2 conductors einzusetzen.

Die Steckdose muB nahe dem Gerat angebracht und leicht zuganglich sein.

This part is hot. Be careful.

Diese Flachewird sehr heiss.

When you see this symbol, be careful as this spot may be very hot.

When you see this symbol, be careful as this spot may be very hot.

Chapter 3

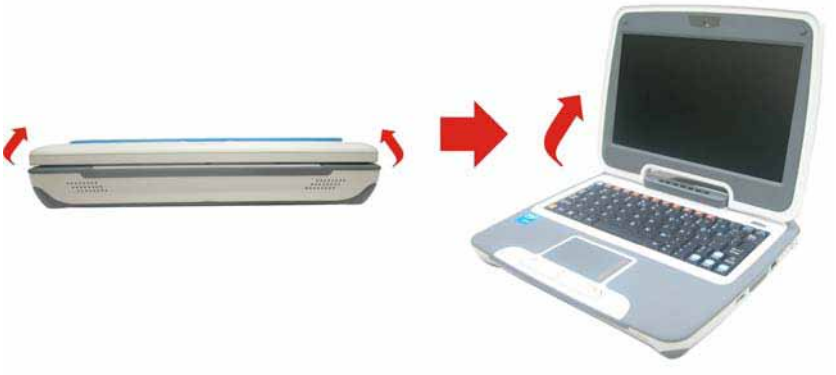
GETTING TO KNOW THE BASICS

Welcome to the Intel-powered Classmate PC

Congratulations on your purchase of Intel-powered classmate PC. Second generation Intel-powered classmate PC refresh features the latest advances in portable computing technology. Second generation Intel-powered classmate PC refresh modular design provides maximum expandability without compromising portability.

Getting to Know Your Computer

Opening the LCD Panel



WARNING.... **To avoid damage to the display panel:**

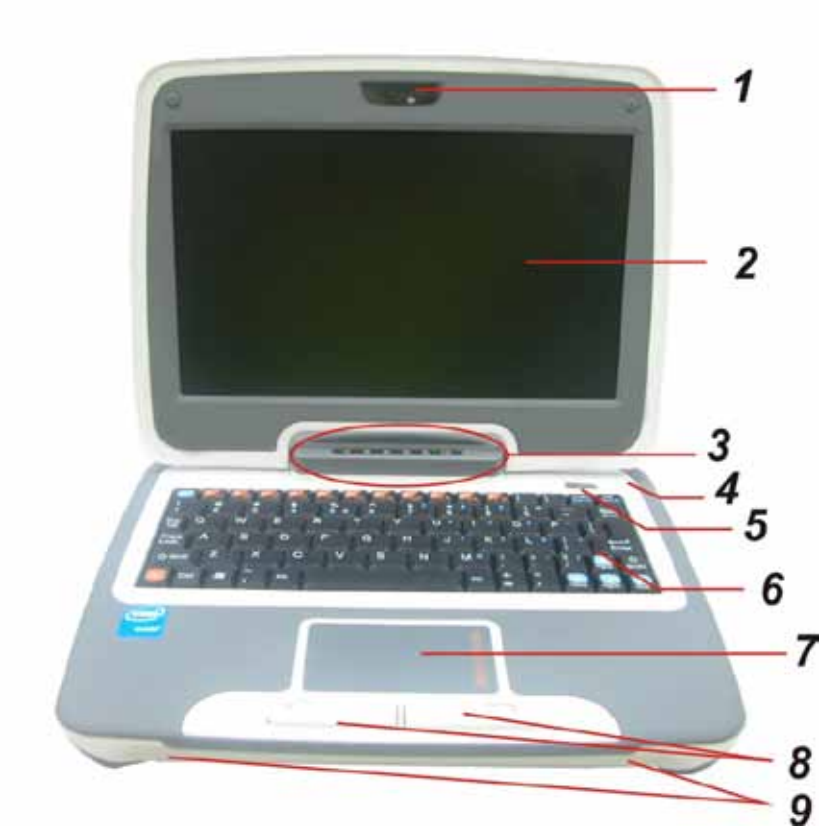
1. Try not to slam the display upon closing it.

2. Try not to place any object on top when it is closed or open.

3. Be sure the system is turned off or in suspend mode before you close the display panel.

With the LCD screen open, you will see several features important for operating your Intel-powered classmate PC.

Front View



1. **CCD Camera**
   Use this camera for any video conferencing application.
2. **LCD Display**
   The panel is where the system content is displayed.

3. LED Status Indicator

The LED Status Indicator displays the operating status of your Intel-powered classmate PC. When a certain function is enabled, a LED will light up. The following section describes the indication.

System & Power Status Indicators

LED Graphic Symbol	Indication
	Green light indicates the WLAN module is active.
	Green light indicates the numeric keypad is activated.
	Green light indicates the cap-lock is activated.
	Green light indicates the HDD is being accessed.
	Green light indicates the system is ON.
	The battery LED reflects according to the following status: ▪ No light indicates that the battery pack is not installed in your system. ▪ Orange light indicates the battery is being charged. ▪ Blinking Orange light indicates the battery power is low. ▪ Green light indicates the battery is full and the AC Adapter is plugged in. ▪ When the LED reflects this status: **green light ➔ off ➔ orange light ➔off ➔green light**, this indicates the battery's temperature is too high.

4. Built-in Microphone

The microphone jack (3.5 mm diameter) is where you connect a microphone.

5. **Power/Suspend Button**
   - Press momentarily to turn on the system.
   - Press and hold for at least 4 seconds to turn off the system.
   - Press the power/suspend button again to return from the suspend mode.
   - Persistent green light indicates the Power is ON
6. **Keyboard**
   The keyboard is used to enter data.
7. **Touch Pad**
   The touch pad is a built-in pointing device with functions similar to a mouse.

NOTE.... The touchpad is also equipped with a scroll bar so you can move around in a large document.

Scrolling Bar - Sliding a horizontal or vertical presentation of content, such as text, drawings, or images, across a screen or display window. It is often used to show large amounts of data that could not fit on the viewport all at the same time.

8. **Touchpad Buttons**
   Works like the two buttons on an ordinary mouse.
9. **Built-in Stereo Speakers**
   The built-in speakers output the sound in stereo.

Left Views

1. **Ventilation Grill**
   The fan grill is where air is exchanged to dissipate the internal heat. Do not completely block this airway.
2. **Stereo Headphone Jack**
   The stereo headphone jack (3.5 mm diameter) is where you connect the headphones or external speakers.

3. **Microphone Jack**
   The microphone jack (3.5 mm diameter) is where you connect a microphone.
4. **USB 2.0 Port**
   This port conforms to the latest USB2.0 plug-and-play standards.

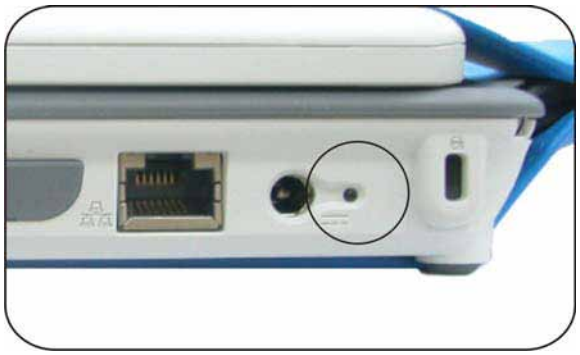
Right View

1. **USB 2.0 Ports**
   This port conforms to the latest USB2.0 plug-and-play standards.
2. **2 in 1 Card Reader**
   The 2-in-1 Card Reader supports SD Card and MMC Card. You need to remove the outer jacket to access the card reader slot on the right side of the computer.

3. **Ethernet / LAN Port**

NOTE.... **When using a LAN, please use an EMI Shielding Cable to minimize an inteference when transmitting.**

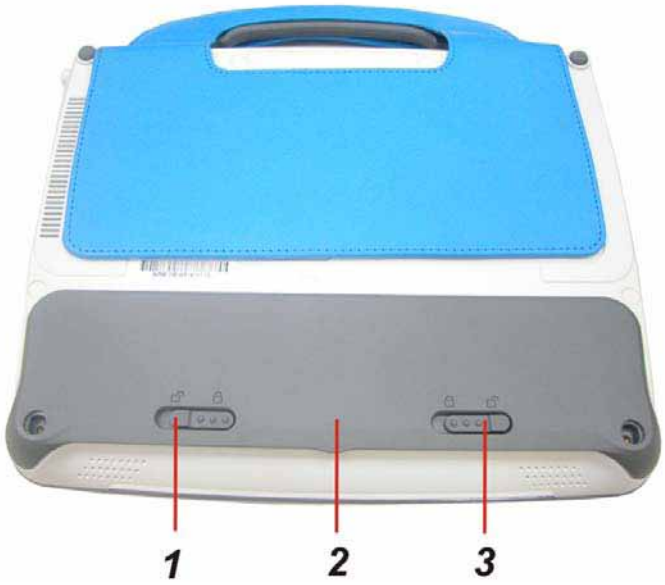
4. **Power Jack (DC-in)**
   The DC-out jack of the AC Adapter connects here and powers the computer.
5. **Power Indicator**
   This LED will blink in green color once the AC adapter is connected.



- Light off indicates there is no battery attached
- Green light indicates the battery is fully charged
- Fast blinking (1sec/cycle) indicates the battery temperature is high
- Blinking (2sec/cycle) indicates the battery is in charging mode

6. **Kensington Lock**
   This security lock provides the best options for physical security of computer in preventing the computer from being stolen.

Bottom View



1. **Battery Release Latch**
   Slide this latch to release the battery from its compartment.
2. **Battery Compartment**
   This compartment contains the battery pack of your system.
3. **Battery Lock/Unlock Latch**
   Slide this lock to lock or unlock the battery into its compartment.

Chapter 4

Getting Started

Connecting to a Power Source

Connecting the AC Adapter

A universal AC adapter is provided to supply your computer with power and also charge the computer's battery pack. The adapter's AC input voltage can range anywhere from 100 to 240 volts, covering the standard voltages available in almost every country. To connect the computer to an external power source:

WARNING.... Do not use inferior extension cords as this may result in damage to your Intel-powered classmate PC.
Second generation Intel-powered classmate PC refresh comes with its own AC adapter. Do not use a different adapter to power the computer and other electrical devices.

Whenever possible, keep the AC adapter plugged into the Intel-powered classmate PC and an electrical outlet to recharge the battery.

WARNING.... Never turn off or reset your Intel-powered classmate PC while the hard disk is in use; doing so can result in loss or destruction of your data. Always wait at least 5 seconds after turning off your Intel-powered classmate PC before turning it back on; turning the power on and off in rapid succession can damage the Intel-powered classmate PC's electrical circuitry.

Turning On Your Computer

Turn on your Intel-powered classmate PC by pressing the power button. Hold the button down for a second or two and release. The Power-On Self Test (POST) runs automatically.

After the POST is completed, the computer reads the operating system from the hard disk drive into computer memory (this is commonly referred to as "booting" a computer). If your OS (Operating System such as Windows Vista…. etc) is installed, it should start automatically.

To turn the Intel-powered classmate PC off, save your work and close all open applications, click on **Start**, then **Shut Down** and select **Shut down the computer** and click "**Yes**" or press the power button for 4-6 seconds.

Operating on Battery Power

Your computer comes with a rechargeable battery pack that lets you operate the computer without an external power source. When the battery pack is fully charged, you can operate the computer under the following conditions:

- The battery pack initially has a full charge.
- No peripheral devices are installed.

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

VORSICHT... Explisionsgefahr bei unsachgernazen Austausch der Batterie. Ersatz nur durch denselben oder

einem vom Hersteller empfohlenem ahnlichen Typ.

Entsorgung gebrauchter Batterien navh Angaben des Herstellers.

The Battery Pack

To Install the Battery Pack:

To Remove the Battery Pack:

Lithium-Ion Battery

Your Intel-powered classmate PC uses a Lithium-Ion battery pack that provides power when you don't have access to an AC outlet.

NOTE.... You must charge the battery pack for at least six hours before using it for the first time.
In the Standby Suspend mode, a fully charged battery loses its power in roughly 1/2 day or less.

When not being used, the battery's power will deplete in one to two months.
The battery pack in this system is replaceable by the end user.

Battery Low-Power Warning

1. Low Battery Warning

Low battery condition occurs when battery power is reduced to **10** percent. The orange battery status LED indicator blinks and the system beeps once every **16** seconds or so.

2. Very Low Battery Warning

Very Low battery condition occurs at **5** percent power remaining. The orange battery status LED indicator blinks and the system beeps at **4**-second interval.

When the Intel-powered classmate PC warns you of its low battery condition, you will have about three to five minutes to save your current work.

WARNING.... Do not expose battery packs to temperatures below 0 degree Celsius (32 degree F) or above 60 degree C (140 degree F). This may adversely affect the battery pack.

Charging the Battery and Charging Time

To charge the battery, plug the AC adapter into the Intel-powered classmate PC and an electrical outlet.

For a totally discharged battery, it will take approximately two hours to charge to 90% capacity, and approximately three hours to 100% capacity while Intel-powered classmate PC is powered off. It will take about 5 hrs to charge the battery to 100% capacity while Intel-powered classmate PC is powered on.

When the battery is fully charged, the battery charge indicator becomes green.

NOTE.... If system runs at heavy loads or in a high temperature environment, the battery may not be fully charged. You need to continue to charge it with the AC adapter plugged in until the charging LED turns green.

NOTE.... **System will not charge battery when temperature exceeds 40C.**

Checking the Battery Level

You can check the remaining battery power in Operating System battery status indicator.

Prolonging the Battery's Life and Usage Cycles

There are ways you can prolong the use of battery.

- Use the AC adapter wherever AC wall outlet is available. This will ensure uninterrupted computing.
- Store the battery pack in room temperature. Higher temperature tends to deplete the battery's power faster.
- Make good use of the power management function. Save To Disk (Hibernate) saves the most energy by storing current system contents in a hard disk space reserved for this function.
- The life expectancy of the battery is approximately 300 recharges.
- See the notices section in the beginning of the user manual on how to care for the battery pack.
- Use Function+F9 key to decrease the brightness of the screen.

NOTE.... **To achieve optimal battery performance, you may need to do a battery calibration at a 3-month interval. To do this:**

- Fully charge the battery.
- Then discharge the battery by entering the BIOS setup screen. (Press DEL key as soon as you turn on the computer. And let it remain at the setup screen until the battery runs out.
- Fully charge the battery again.

Using Power Options

Operating System Power Management provides basic power saving features. In the power configuration dialogue box, you may enter time-out values for display and hard disk drive.

Operating System power manager saves power by turning off hard drive after 1 minute of inactivity, for example.

NOTE.... Also consult Operating System user guide for more information on how to use Operating System power management functions. Actual dialogue box shown above may appear slightly different.

Suspend Mode

Standby Suspend

The system automatically enters this mode after a period of inactivity, which is set in the Power Schemes dialog box. In Standby mode, hardware devices, such as display panel and hard disk, are turned off to conserve energy.

Hibernate Suspend

In this mode, all system data are saved in the hard disk before powering down. When this mode is activated, all system state and contents are saved to the hard disk drive after a period of inactivity defined by the user.

No power or very little power is drawn from the battery module under this mode.

However, depending on how much RAM that has been installed on your computer, the amount of time the system requires to restore all its previous contents can range from five to 20 seconds.

Power Button Action

Second generation Intel-powered classmate PC refresh power button can be set to turn off the system or activate the suspend mode.

Chapter 5

Using Second Generation Intel-powered Classmate PC Refresh

Adjusting the LCD Screen Display

The LCD screen display can be adjusted by the following key combinations.

KEYS	FUNCTIONS
Fn + F9	Decreases Display Brightness.
Fn + F10	Increases Display Brightness.

LCD Care

LCD screens are delicate devices that need careful handling. Please pay attention to the following precautions:

- When you are not using the computer, keep the LCD screen closed to protect it from dust.
- If you need to clean your LCD screen, use a soft tissue to gently wipe the LCD surface.
- Do not put your fingers or sharp objects directly on the surface and never spray cleaner directly onto the display.
- Do not press on, or store any objects on the cover when it is closed. Doing so may cause the LCD to break.

Second Generation Intel-powered Classmate PC Refresh Hot Key Controls

Function Keys (Quick Keys)

Graphic Symbol	Action	System Control
	Fn + F1	Turns the Wired LAN module off or on. When the Wired LAN function is enabled, the LED status indicator shows green light.
	Fn + F2	Enables or Disables the Wire LAN function.
	Fn + F3	Enters the Suspend Mode. When the system is in Suspend Mode, the LED status indicator shows blinking in green light.
	Fn + F4	Mute the system audio.
	Fn + F5	Turns Speaker Volume down.
	Fn + F6	Turns Speaker Volume up.
Prt Sc	Fn + F7	Press this button to copy any graphic from the screen.
Pause	Fn + F8	Press this button to hold the operation.
	Fn + F9	Decreases Display Brightness.
	Fn + F10	Increases Display Brightness.

The TouchPad

The touchpad is a rectangular electronic panel located just below your keyboard. You can use the static-sensitive panel of the touchpad and slit it to move the cursor. You can use the buttons below the touchpad as left and right mouse buttons.

TouchPad Precautions

The TouchPad is a pressure sensitive device. Please take note of the following precautions.

- Make sure the TouchPad does not come into contact with dirt, liquids or grease.
- Do not touch the TouchPad if your fingers are dirty.
- Do not rest heavy objects on the TouchPad or the TouchPad buttons.

You can use the TouchPad with Microsoft Windows as well as non-Windows applications.

Resetting the System

After installing a software application package, you may be prompted to reset the system to load the changed operating environment.

To reset the system, or "**reboot**," press the **[Ctrl]+[Alt]+[Delete]** keys simultaneously. This is known as "**warm boot**." This key combination acts as "**software**" reset switch when you encounter hardware or software problems, which lock up the Intel-powered classmate PC.

If this key combination does not shut down the Intel-powered classmate PC, you can reset the computer by using the Intel-powered classmate PC's power button. Should the computer lock up for some reason, pressing this button powers the Intel-powered classmate PC off.

Chapter 6

BIOS SETUP AND SECURITY FEATURE

The Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System). It runs and maintains a variety of hardware functions. It is menu-driven software, which allows you to easily configure and change the settings.

The BIOS contains manufacture's default settings for the computer's standard operations. However, there are occasions when you may be required to modify the default settings in the BIOS.

The BIOS allows you to set up passwords to limit access to users. This is an important feature because a great deal of vital information is carried within the computer nowadays. Unauthorized access can be prevented. Later in this chapter, you will learn how to use this security feature.

Entering the BIOS Setup Screen

First turn on the power. When the BIOS performs the POST (Power-On Self Test), press DEL key quickly to activate the Setup Utility.

NOTE.... You may need to press DEL key fairly quickly. Once the system begins to load operating system, you may have to retry by cycle-power on again

Leaving the BIOS Setup Screen

When you have finished modifying the BIOS settings, exit the BIOS. It takes a few seconds to record changes in the CMOS.

BIOS Action Keys

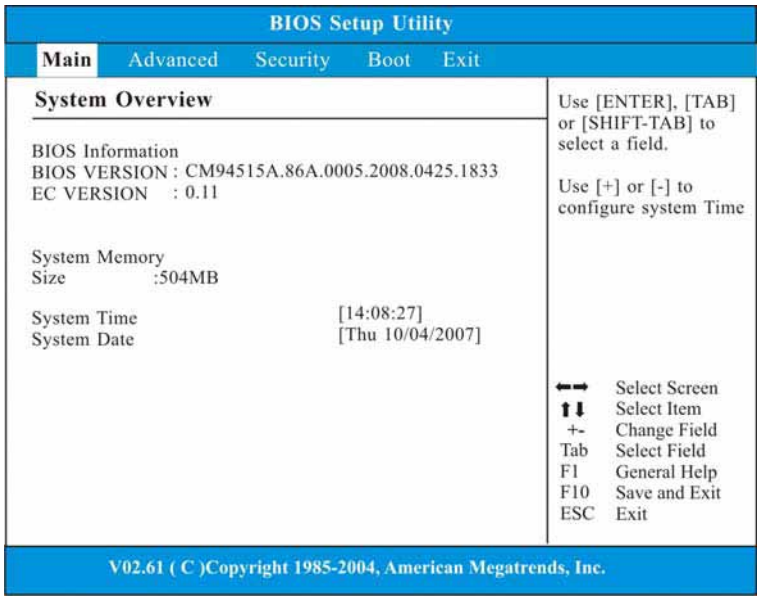
Legend Key	Alternate Key	Function
F1		Displays the General Help window. It can be enabled from anywhere in the BIOS.
Esc		Jumps to the Exit menu or returns to the Main menu from a submenu.
←		Selects the menu item to the left.
→		Selects the menu item to the right.
↑ or ↓	Keypad arrow keys	Moves the cursor up and down between fields.
Tab	Enter	Moves the cursor to the next position available in the field.
Minus key (-)		Scrolls backward through the values for the highlighted field.
Plus key (+)		Scrolls forward through the values for the highlighted field.
Home	PgUp	Moves the cursor to the field at the top of the window.
End	PgDn	Moves the cursor to the field at the bottom of the window.
F9		Sets the parameters for the current menu to their *default* values.
F10		Save and Exit.
Enter		Will select a sub menu or show a range of options for a field.

Modifying the BIOS Settings

The BIOS setup main menu is subdivided into sub-menus. Each menu item is described in this section.

Main Setup

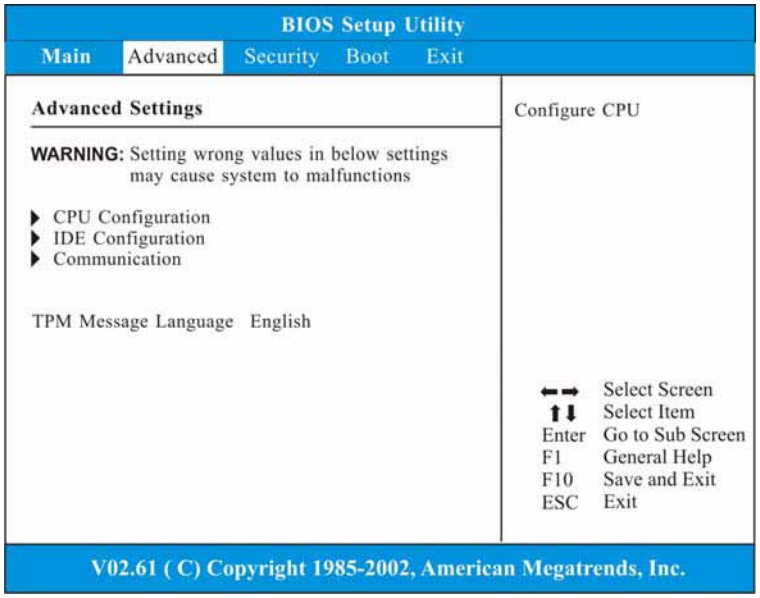
Under this menu, you may change time/date and view basic processor and system memory information.

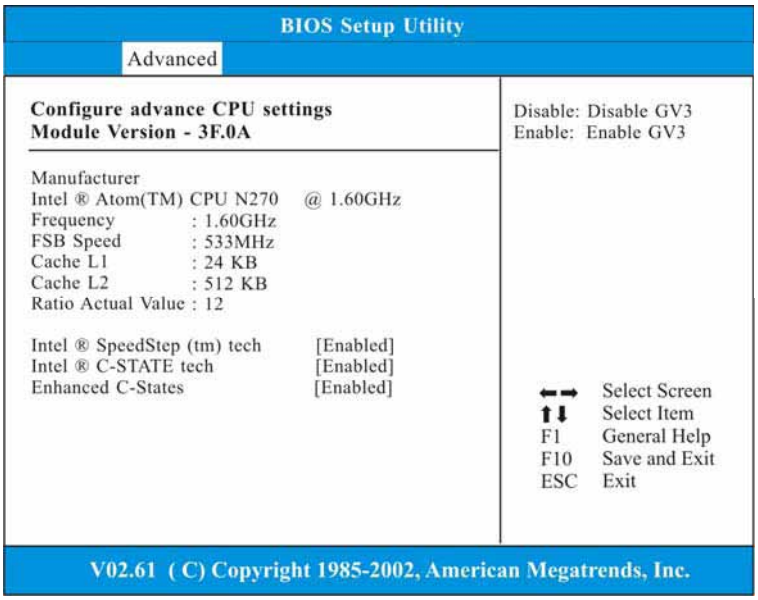


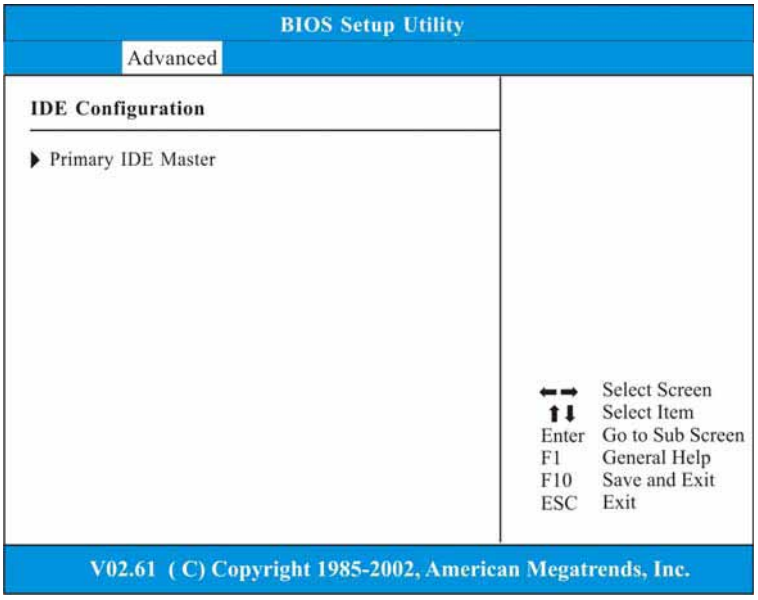
NOTE.... Due to various configurations on this model, your system may show different information.

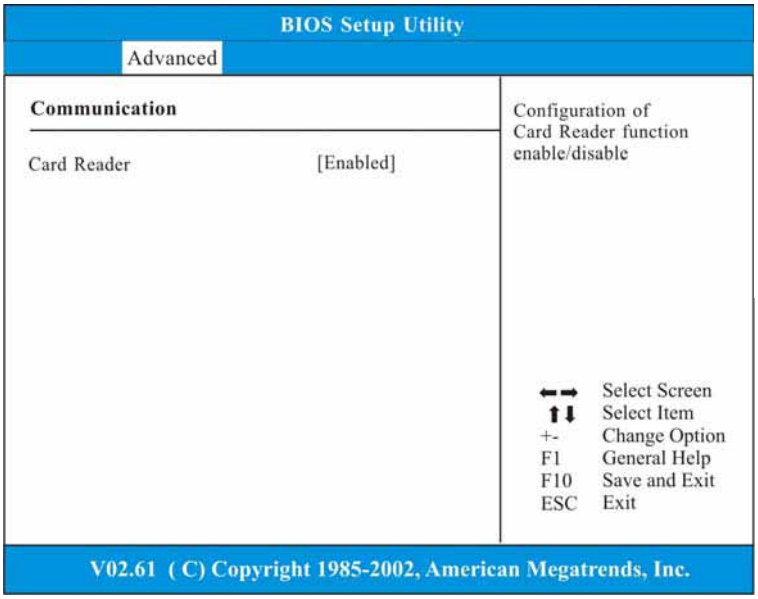
- System Time: Type in the current time, in HH:MM:SS format.
- System Date: Type in the current date, in MM/DD/YY format.

Advanced Setup



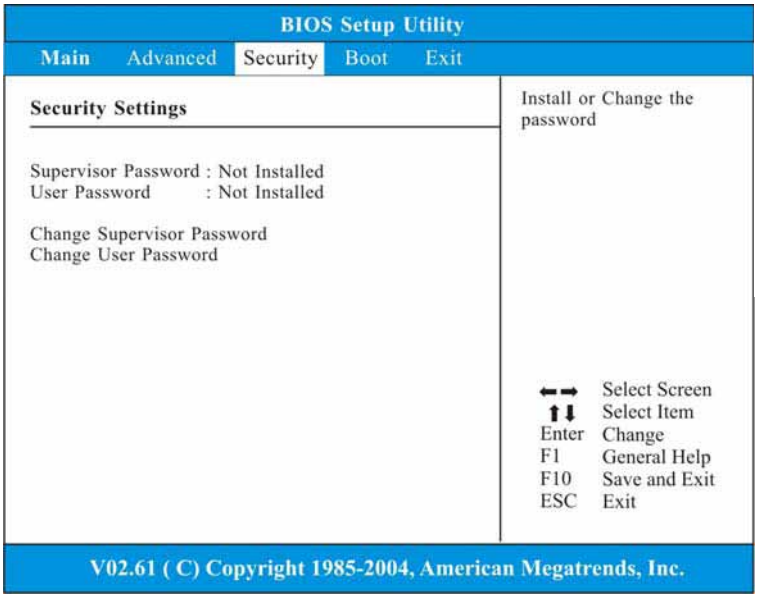



BIOS Setup Utility
Advanced
IDE Configuration
Primary IDE Master
Select Screen
Select Item
Enter Go to Sub Screen
F1 General Help
F10 Save and Exit
ESC Exit
V02.61 (C) Copyright 1985-2002, American Megatrends, Inc.

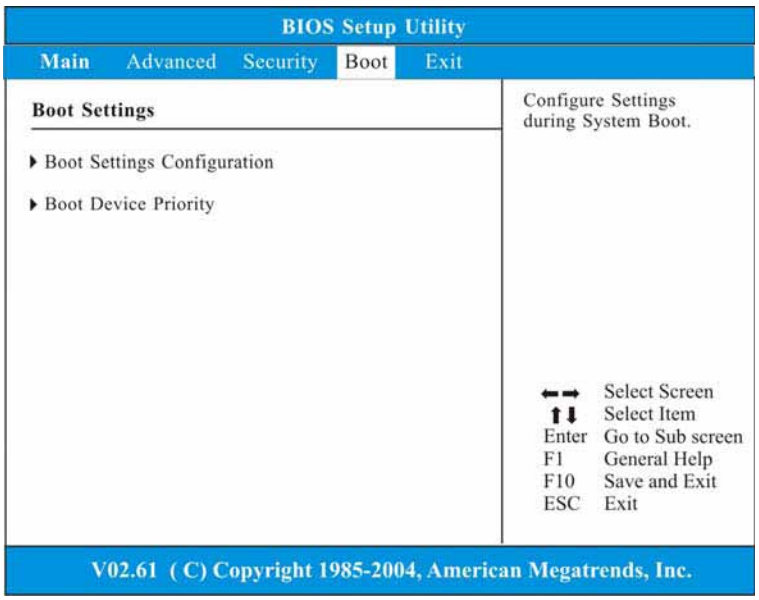

BIOS Setup Utility
Advanced
Communication
Card Reader [Enabled]
Configuration of Card Reader function enable/disable
Select Screen
Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
V02.61 (C) Copyright 1985-2002, American Megatrends, Inc.

Communication: See Below.

Item	Selections / Sub-menu	Description
Card Reader	Enable/Disable	Enable or disable the Card Reader function.



Security



- Supervisor Password: Install or Change the Password.
- User Password: Install or Change the Password.

Using Password Protection

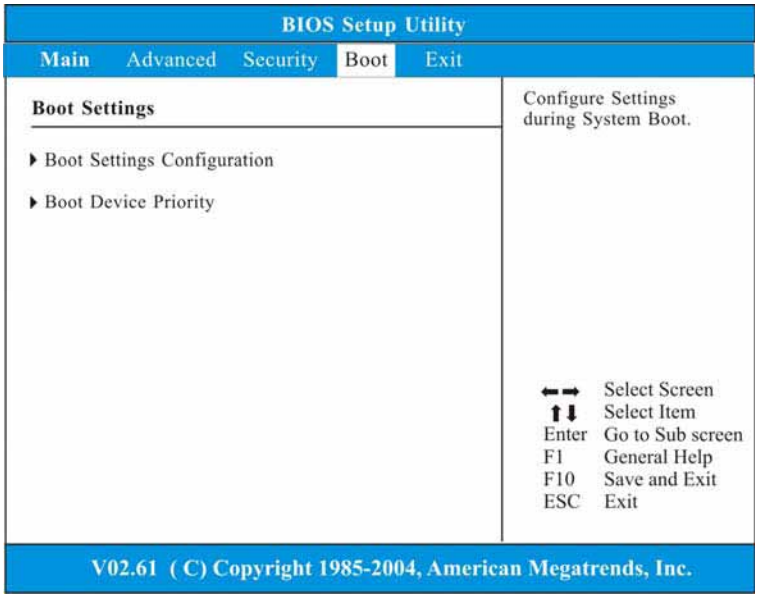
Two Levels of Password Protection are available. The BIOS provides both a Supervisor and a User password. If you try to activate both passwords, the Supervisor password must be set first.

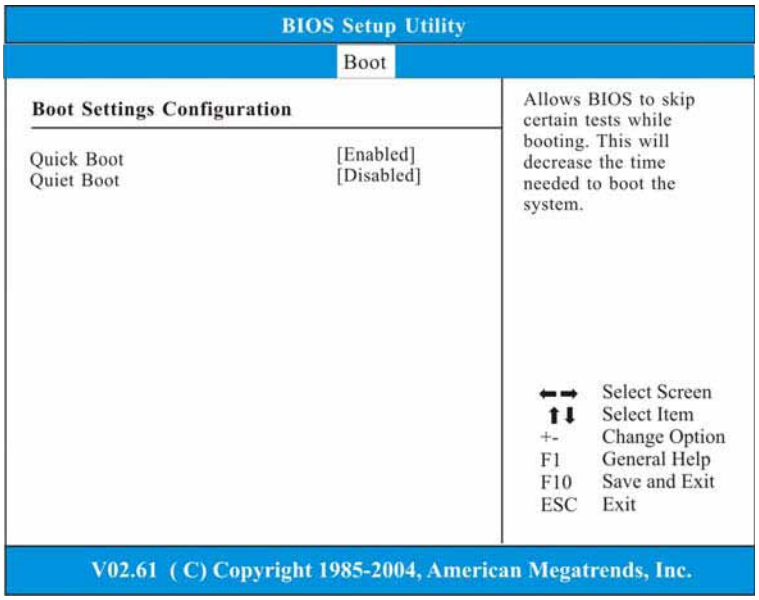
The passwords activate two different levels of protection:

1. System always asks for password every time it is powered on.
2. System asks for password only when you attempt to enter BIOS utility.

The passwords are encrypted and stored in NVRAM. Make sure you write them down or memorize them. If you loose the passwords, the computer may need to be sent back to the factory or to an authorized service dealer to reset the passwords.

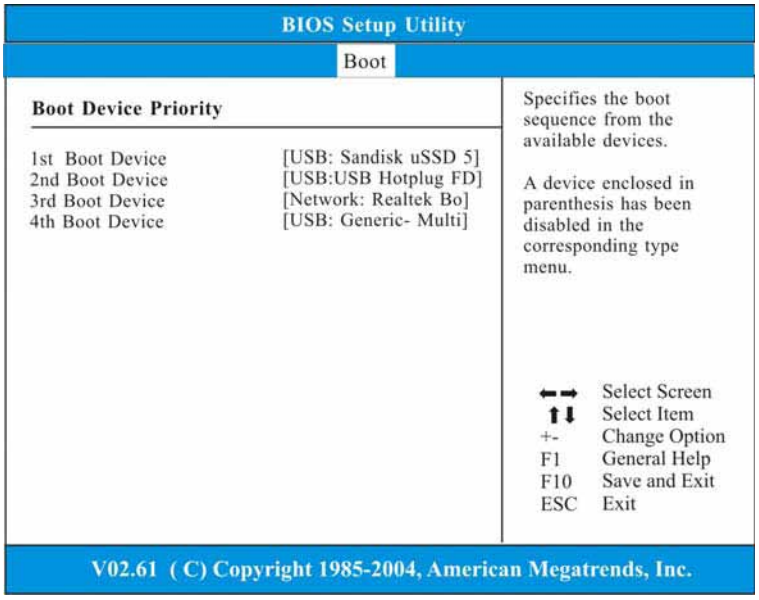
Boot Setup


BIOS Setup Utility
Main Advanced Security Boot Exit
Boot Settings
Boot Settings Configuration
Boot Device Priority
Configure Settings during System Boot.
Select Screen
Select Item
Enter Go to Sub screen
F1 General Help
F10 Save and Exit
ESC Exit
V02.61 (C) Copyright 1985-2004, American Megatrends, Inc.


BIOS Setup Utility
Boot
Boot Settings Configuration
Quick Boot [Enabled]
Quiet Boot [Disabled]
Allows BIOS to skip certain tests while booting. This will decrease the time needed to boot the system.
Select Screen
Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
V02.61 (C) Copyright 1985-2004, American Megatrends, Inc.

➢ Boot Settings Configuration: See Below.

Item	Selections / Sub-menu	Description
Quick Boot	Disabled Enabled	[Enabled]: The system skips certain tests while booting. This shortens the boot-up time. [Disabled]: The system performs full tests while booting.
Quiet Boot	Disabled Enabled	When Enabled, the system will display OEM logo instead of the POST messages. When Disabled, the system will display POST messages (i.e. devices information.)

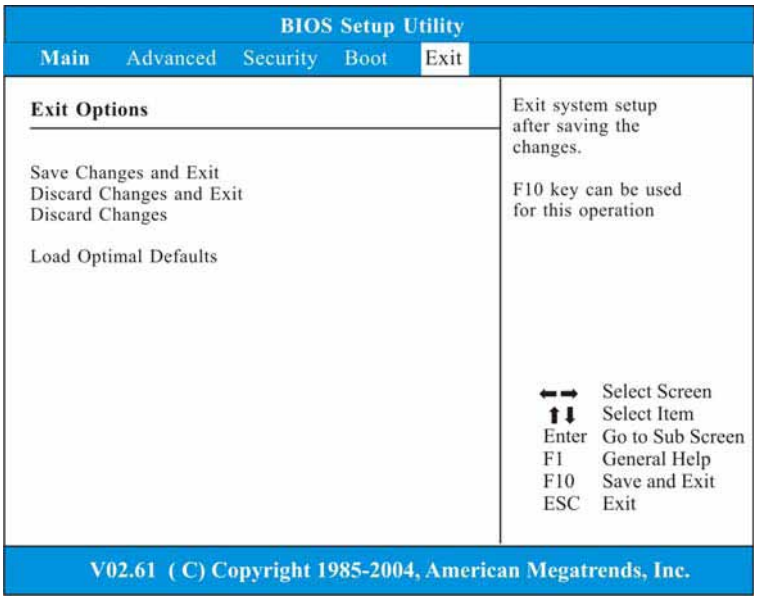


➢ Boot Device Priority: See Below.

Item	Selections/Sub-menu	Description
1st Boot Device	USB: Sandisk uSSD 5	Set the type of device for the third drive BIOS attempts to boot from.
2nd Boot Device	USB: USB Hotplug FD	Set the type of device for the third drive BIOS attempts to boot from.

3rd Boot Device	Network: Realtek Boot Agent	Set the type of device for the third drive BIOS attempts to boot from.
4th Boot Device	USB; Generic-Multi	Set the type of device for the third drive BIOS attempts to boot from.

Exit Setup



- Save Changes and Exit: After you have completed the BIOS settings, select this item to save all settings, exit BIOS Setup utility, and reboot. New system settings will take effect on next power-up. F10 key can be used for this operation.
- Discard Changes and Exit: Discards changes done so far to any of the setup questions and exit.
- Discard Changes: Discards changes done so far to any of the setup questions.
- Load Optimal Defaults: Load Optimal Default value for all the setup questions. F9 key can be used for this operation.

Chapter 7

Web Camera Application

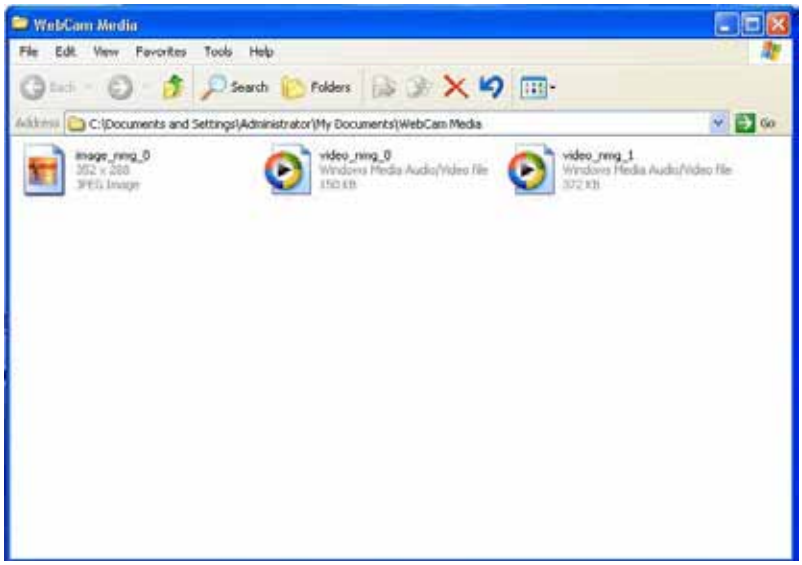
This application offers video conferencing capabilities to work and communicate in real-time with one or more participants through streaming video, from any location.

Web Camera Application

Press the "**Camera**" 

icon key to display the "**NMG Webcam**" screen display. Your image will immediately display on the small screen.

Open Folder



Click on this function to locate the files you captured image files or recorded video files.

Snapshot

Use this function to captured the image file of the other party when you on video conferencing.

Record

Use this function to start recording on the video files when you are starting a video conferencing.

Chapter 8

Troubleshooting

The trouble shooting activity should only be performed by an adult.

Your computer has been fully tested and complies with the system specifications before shipping. However, incorrect operations and/or mishandling may cause problems.

This chapter provides a reference for identifying and correcting common hardware and software problems that you may encounter.

When you encounter a problem, you should first try to go through the recommendations in this chapter. Instead of returning the computer and waiting for repair, you may easily solve the problems by considering the following scenarios and possible solutions. If the error continues, contact your reseller for service information.

Before taking further actions, consider the following suggestions:

- Check to see if the problem persists when all the external devices are removed.
- Check to see if the power cord is properly plugged into the wall outlet and to the computer.
- Check to see the power indicator of the computer is on.
- Check to see if your keyboard is operational by pressing and holding any key.
- Check for any incorrect or loose cable connections. Make sure the latches on the connectors latch securely on to the receptor end.
- Be sure you have not performed an incorrect setting on the hardware devices in the BIOS Setup utility. A faulty setting may cause the system to malfunction. If you are not sure of the changes you made, try to restore all the settings to factory

defaults.

- Be sure all the device drivers are installed properly. For example, without the audio driver properly installed, the speakers and microphone will not work.
- If external devices such as USB camera, scanner or printer do not function correctly when connected to the system, it is usually the device's own problem. Consult the device's manufacturer first.
- Some software programs, which have not gone through rigorous coding and testing, may cause problems during your routine use. Consult the software vendor for problem solving.
- Be sure to go to BIOS SETUP and load DEFAULT SETTING after BIOS re-flash.

Audio Problems

No speaker output

- Software volume control is turned down in Operating System's Sound System or is muted. Double-click the speaker icon on the lower right corner of the taskbar to see if the speaker has been muted or turned down all the way.
- Most audio problems are software-related. If your computer worked before, chances are software may have been set incorrectly.

Sound cannot be recorded

- Double-click the speaker icon on the lower right corner of the taskbar to see if the microphone has been muted.
- Click Options and select Properties.
- Select Recording and click the OK button.
- After clicking the OK button, the recording volume control panel will appear.

Hard Disk (Optional) Problems

The hard disk drive does not work or is not recognizable:

- If you had just performed a hard disk upgrade, make sure the hard drive connector is not loose and the hard disk drive is also correctly seated. Remove it and reinsert it firmly, and restart your PC. (Refer to Chapter 5 for details.)
- The new HDD may need to be partitioned and reformatted. O/S and drivers will need to be re-installed as well.

- Check the hard disk indicator LED. When you access a file, the LED lamp should light up momentarily.
- The new HDD may be defective or is not compatible.
- If your computer has been subjected to static electricity or physical shock, you may have damaged the disk drive.

The hard drive is making abnormal whining noises

- You should back up your files as soon as possible.
- Make sure the source of noise is indeed from the hard drive and not the fan or other devices.

The hard disk drive has reached its capacity

- Archive files or programs that you had no longer used by moving them to an alternative storage medium (card reader, etc.) or uninstall programs that are no longer used.
- Many browsers store files in the hard drive as a cache to speed up the performance. Check the program's Online Help for instructions on decreasing the cache size or on removing temporary Internet files.

The hard disk takes longer to read a file

- Interrupt requests or problems with other hardware devices may have occupied the CPU and therefore slows down the system performance.

Display Problems

The display panel is blank when the system is turned on

- Make sure the computer is not in the Standby or Hibernate suspend modes. The display is turned off to conserve energy in these modes.

The screen is difficult to read

- The display resolution should at least be set to at least 800x480 for optimal viewing.

The screen flickers

- It is normal if the display flickers a few times during shutting down or powering up processes.

Keyboard and Touchpad Problems

The built-in touch pad performs errotically

- Make sure there is no excess perspiration or moisture on your hand when using the touch pad. Keep the surface of the touch pad clean and dry.
- Do not rest your palm or wrist on the surface of the touch pad while typing or using the touch pad.

The built-in keyboard accepts no input

- If you are connecting an external keyboard to the system, the built-in keyboard may not work.
- Try restarting the system.

The characters on the screen repeat while I type.

- You may be holding the keys down too long while you're typing.
- Keep the keyboard clean. Dust and dirt under the keys could cause them to stick.

Memory Problems

The POST does not show an increased memory capacity when you have already installed additional memory

- Certain brands of memory module may not be compatible with your system. You should ask your vendor for a list of compatible DIMM.
- The memory module may be defective.

The O/S issues an insufficient memory error message during operation

- This is often a software or Operating System-related problem. A program is draining the memory resources.
- Close the application programs you're not using and restart the system.

Network Adapter / Ethernet Problems

The Ethernet adapter does not work

- Make sure the physical connections on both ends of the cable are good.
- The hub or concentrator may not be working properly.

Check to see if other workstations connected to the same hub or concentrator is working.

The Ethernet adapter does not appear to operate in the 100Mbps transmission mode

- Make sure the hub you are using supports 100Mbps operation.
- Make sure that your RJ-45 cable meets the 100Base-TX requirements.
- Make sure the Ethernet cable is connected to the hub socket that supports 100Base-TX mode. The hub may have both 10Base-TX and 100Base-T sockets.

Performance Problems

The computer becomes hot

- In a 35°C environment, the certain areas of the computer's back case are expected to reach 50 degrees.
- Make sure the air vents are not blocked.
- If the fan does not seem to be working at high temperature (50 degrees Celsius and up), contact the service center.
- Certain programs that are processor-intensive may increase the computer temperature to a degree where the computer automatically slows down its CPU clock to protect itself from heat damage.

The program appears stopped or runs very slowly

- Restart the computer.
- This may be normal for Operating System when it is processing other CPU-intensive programs in the background or when the system is accessing slow-speed devices such the floppy disk drive.
- You may be running too many applications. Try to close some applications or increase system memory for higher performance.
- The processor may have been overheated due to the system's inability to regulate its internal temperature. Make sure the computer's ventilation grills are not blocked.

USB2.0 Problems

The USB device does not work

- Make sure the cable is fully connected.
- Make sure you have installed the necessary device drivers.
- Contact the device vendor for additional support.

Appendix A

Specification

CPU

- Intel® ATOM N270 processor 1.6GHz
- 512K SLB73 FSB@533MHZ

Memory

- DDR2 400/533 SO-DIMM DRAM module
- 256, 512 MB and 1GB
- SO DIMM 200-pin socket * 1

Core Logic

- Intel® 945GSE
- ICH7-M

Audio Codec

- Realtek ALC662

Card reader (2 in 1)

- Support SD/MMC Memory Card.
- USB 2.0 interface

LAN Controller

- Supports 10 and 100 Mb/sec. Full and half Duplex operation

Wireless LAN

- Mini-card form factor

- Wi-Fi 802.11 b/g with open mesh support
- Single antenna

Keyboard

- Integrated QWERTY keyboard W/ Hot key 77 KEY K/B

Pointing Device

- PS/2 Touch Pad with Left and Right Click Button and scrolling Bar

Camera (Optional)

- USB2.0 interface
- 30fps @ 640x480, 0.3M
- Driver/AP support Windows XP/ Linux

Storage

Nand Flash

- 1G/2G/4G/8G Nand Flash
- USB interface 8G USSD 5000, Intel 8G PATA Flash

1.8" HDD

- Support PATA HDD, 4200rpm, H: 5mm
- Capacity: 30GB, 40GB and 60GB

LCD

- Color LCD TFT, LED Backlight
- 800x480; 1024X600, LVDS interface
- 7" with 800X480 resolution;
- 8.9" with 1024x600 resolution

Battery Pack

- 4 cell (2S2P) Li-ion battery pack
  7.4V/4400mAH (2S2P), 3.7V/2200mAH/ Samsung cell
  7.2V/4400mAH (2S2P), 3.6V/2200mAH/ LG cell
- 6 cell (2S3P) Li-ion battery pack
  7.4V /6600mAH (2S3P), 3.7V/2200mAH/Samsung cell
  7.2V /6600mAH (2S3P), 3.6V/2200mAH/LG cell

AC-Adapter

- Automatics Voltage adjustment between 100 and 240VAC 50/60Hz 40Watts

- 20V/40W
- Supports 2pin and 3 pin power cord

BIOS

- Support PnP & ACPI 2.0
- Support external USB flash memory card boot up.

Physical Outline

- Dimension: 241mm W x 198.5mm H x 40.5mm D (Without PU bag and without handle)
- Weight: (Without PU bag and without handle)
  7" W LCD/SSD/4cell battery pack: 1.29kg
  8.9" W LCD/HDD/ 4cell battery pack: 1.52kg

EMC

- CE
- FCC
- CCC

RF

- FCC/R&TTE

Safety

- UL/CB/ETL
- CCC
- WEEE
- RoHS (Restriction of Hazardous Substances, EU directive 2002/95/EC + amendments)