

Chapter 3

Setup Configuration Utility

3-1 Introduction

This chapter tells you how to configure your system using the SCU (Setup Configuration Utility).

The SCU allows you to enter the system configuration information. This information is needed by the system to identify the type of devices installed and to set up special features. Typical configuration information includes the date and time, the type of disk drives, and the amount of memory; special features include Power Saving and Security.

The configuration information is stored in a special kind of memory called CMOS (Complementary Metal Oxide Semiconductor) RAM. A RTC backup battery backs up CMOS RAM data.

You may need to run SCU when:

- You see an error message on the screen requesting you to run SETUP.
- You change factory default settings for some special features.
- You want to modify the configuration information.

3-2 Running SETUP and Moving Around

NOTE

1. All the SCU screens shown in this chapter are examples. Your actual settings may vary from those shown here.
2. The SCU program may have been updated after this manual was published.

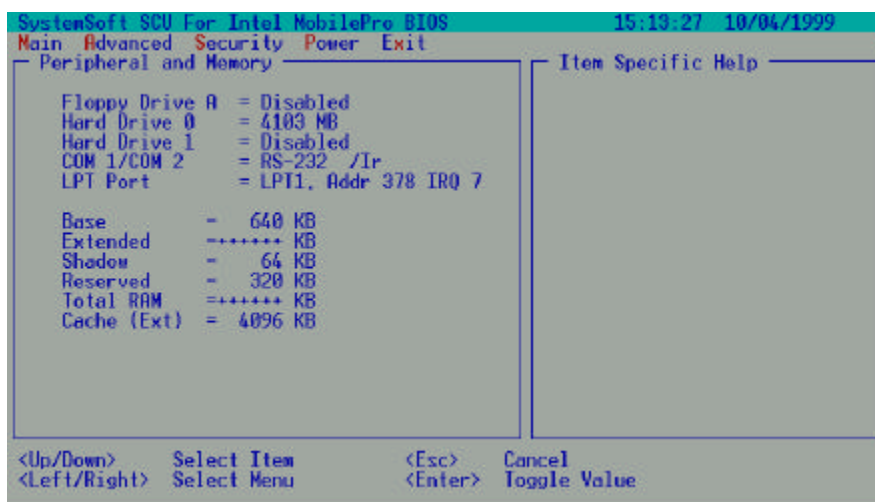
The SCU program is built into the system board. To run SETUP, press <F2> during POST only.

The SCU screens include five groups of many different functions:

- Main – Contains the system General SETUP parameter.
- Advanced – Contains Integrated peripherals and PCI Device setup parameter.
- Security – Contains the system security functions setup parameter.
- Power – Contains the system power management setup parameter.
- Exit – Contains various ways to exit the SETUP program.

Use the right & left Arrow keys & mouse to change display for each group.

Setup Menu



3-2.1 Main

This section describes the main items of the SETUP program.

The SCU screen can be divided into four areas:

- On the top line of the screen is the menu bar, which lists the titles of the available menus. Each menu title contains a pull-down menu, which displays items for setting.
- The left column of the screen displays the current configuration information of the system. If an item in the pull-down menu is selected which contains multiple choices, the left column displays the submenu where you can make your selections.
- The right column of the screen gives help information of the selected item.
- The bottom lines of the screen give keyboard instructions for moving around and making selections.

3-2.2 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.

To move around and make selections, you can use both the touchpad/mouse and keyboard.

You're advised to use the touchpad or mouse. It is more straight forward than using the keyboard.

For most items, simply move the pointer with the touchpad/mouse and click on your selection with the left button. To cancel your selection, click the right button. For a few items, you will need to use the keyboard for making selections.

Using the Keyboard

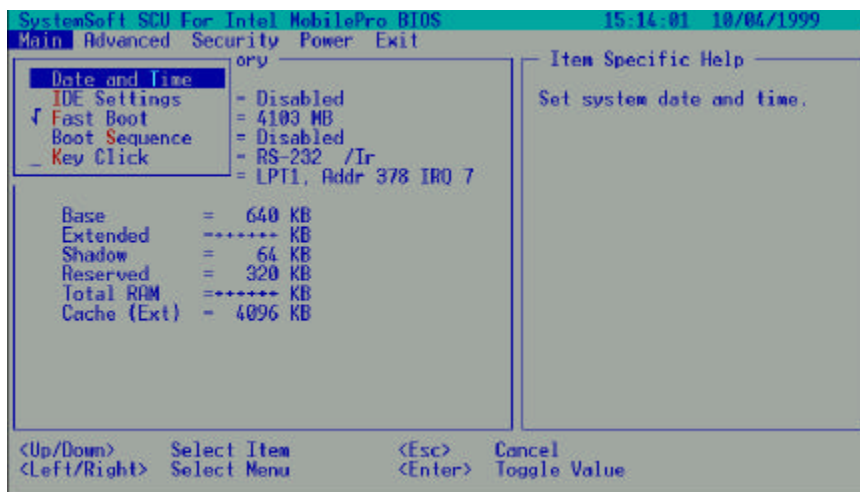
Keyboard information can be found at the bottom of the screen. You can also use shortcut key, which is highlighted by a different color on the screen.

Described below is the general procedure for using the keyboard to complete setting of an item:

1. Select a menu title with the left/right arrow key a press [Enter] to pull down the menu. You can also directly pull down a menu by pressing the shortcut key.
2. Inside the pull-down menu, select an item with the up/down arrow key and press [Enter] to access the submenu. You can also directly access the submenu by pressing The submenu displays the options you can select. If no submenu appears, simply press [Enter] to enable or disable the item.
3. Inside most submenus, press the [Tab] key to go to the entry field. Select your desired option with the up/down arrow key or the shortcut key. To complete the setting and leave the submenu, press [Enter] and select the "OK" button. To cancel your selection, press [Esc] or select the "Cancel" button.

3.2.2.1 Main Menu

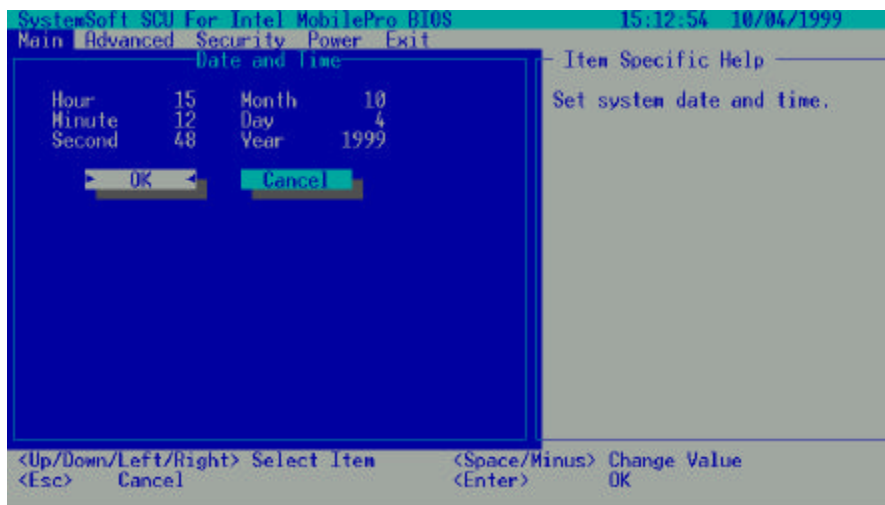
The Main pull-down menu, as shown below, contains the basic configuration settings of the system.



Date and Time

The “Date and Time” item sets the system date and time.

When this item is selected, the submenu will display as shown below.



IDE Settings

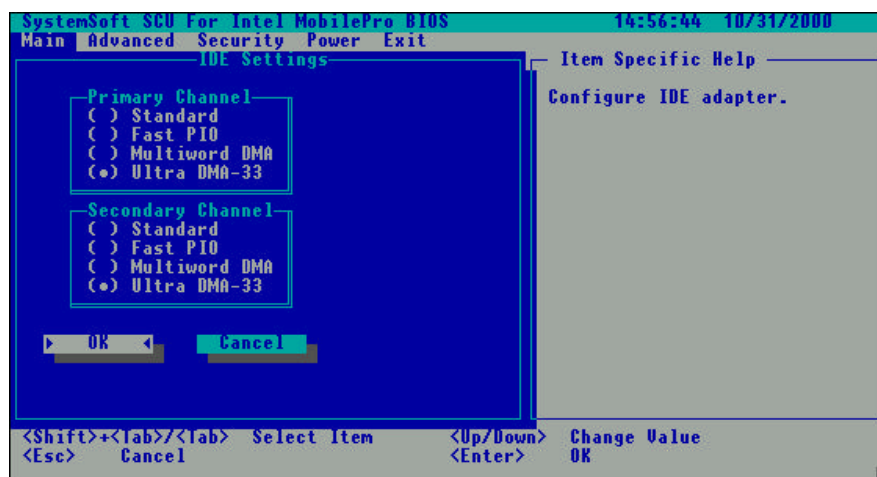
The “IDE Settings” item sets the type of the hard disk drive in your system.

When this item is selected, the submenu will display as shown below.

Select the highest timing which system will set for the IDE drive or select Standard to disable it.

If the drive cannot support this timing, system will choose available one.

Drive 0 is your primary and Drive 1 your secondary.



Fast Boot

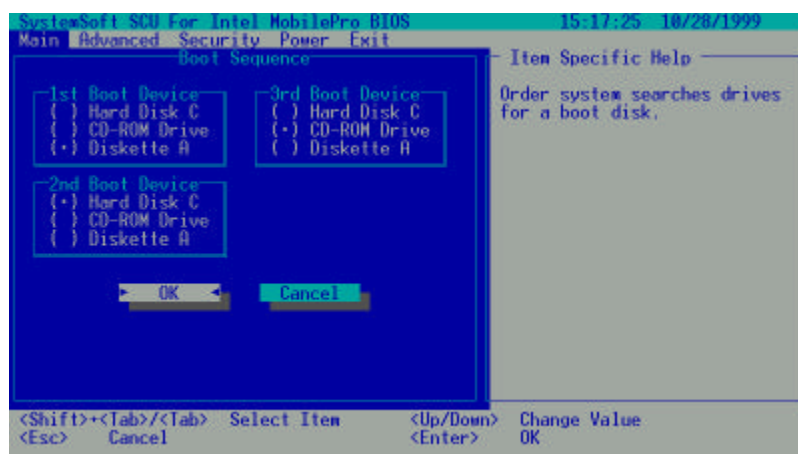
The “Fast Boot” item, when enabled, speeds up the booting procedure by bypassing the memory test.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled, an underline (_) indicates Disabled.

Boot Sequence

The “Boot Sequence” have three device item sets the sequence of booting.

When this item is selected, the submenu will display as shown below.



For Example: 1st Boot Device: Disk A
2nd Boot Device: Hard Disk C
3rd Boot Device: CD-ROM Drive

Descriptions of the available options are:

The system will try to boot from drive A then Hard Disk C then CD-ROM Drive.

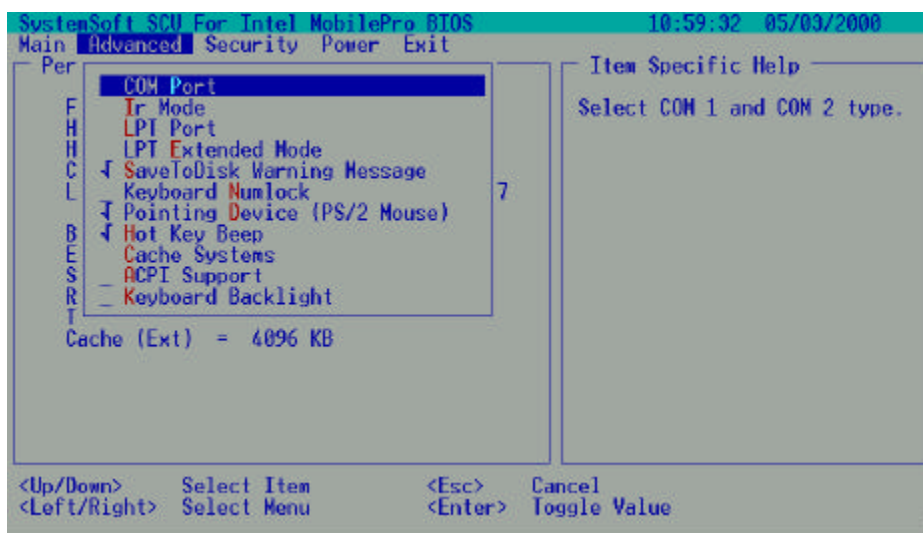
Key Click

The “Key Click” items sets if there will be a click sound whenever a key is pressed.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled; an underline () indicates Disabled.

3-2.2.2 Advanced Menu

The Advanced pull-down menu, as shown below, contains the I/O configuration settings of the system.



The followings describe in sequence all the items of the Advanced menu.

COM Port

The “COM Port” item allows you to assign COM1 and COM2 to specific functions that you wish to use. In general, COM1 can be assigned to RS-232 (the serial port) or touch screen ; COM2 can be assigned to IR or RS-232.

When this item is selected, the submenu will display as shown below. Select Disabled if you need the resources (3F8/IRQ4 of COM1 and 2F8/IRQ3 of COM2) for other devices.

User select the “TouchScn/Disabled” was assigned COM 1 to Touch Screen.

User select the “TouchScn/Ir” was assigned COM 1 to TouchScn; Ir is Enabled.

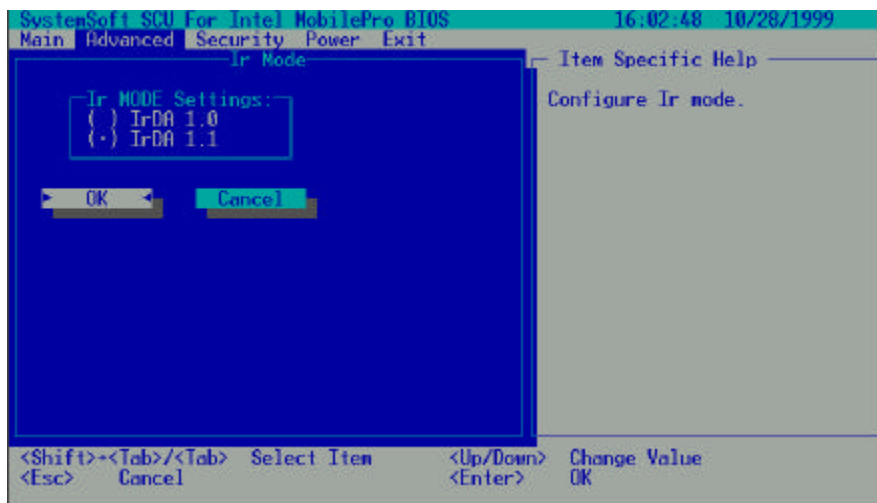
IR Mode

The “IR Mode” item sets the communications compatibility mode for the IR port.

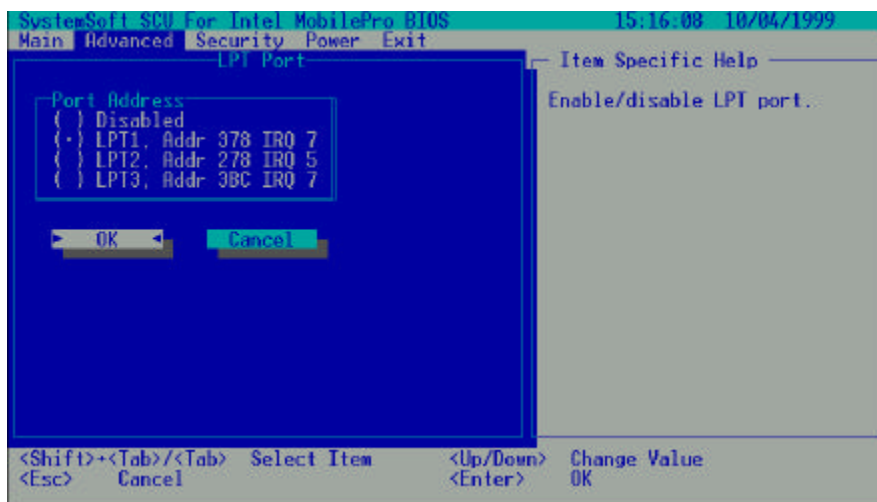
When this item is selected, the submenu will display as shown below.

Select according to the type of device with which the notebook is to communicate.

LPT Port



The “LPT Port” item sets the address for the LPT port (parallel port). When this item is selected, the submenu displays as shown below.

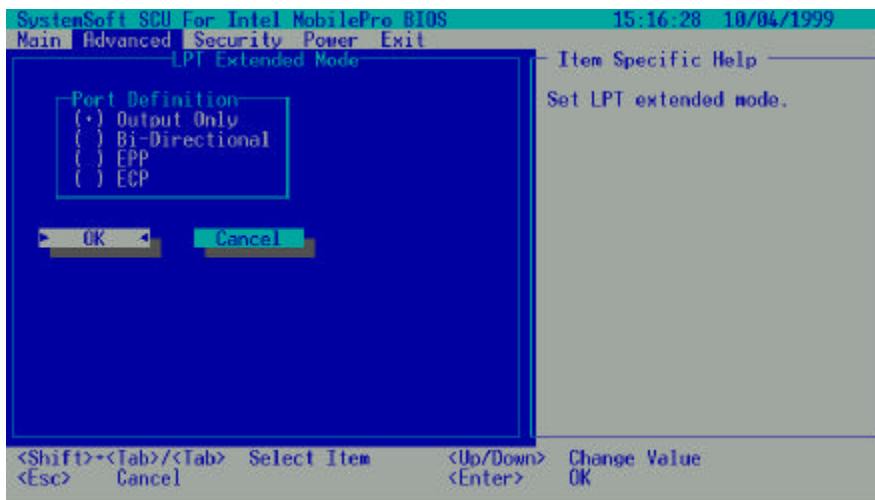


LPT Extended Mode

The “LPT Extended Mode” item sets the LPT (Parallel port) mode. Your system supports EPP (Enhanced Parallel Port) and ECP (Enhanced Capabilities Port)

standards, which turn the standard parallel port into a high-speed bi-directional peripheral port.

When this item is selected, the submenu will display as shown below. Select the mode supported by the parallel device you are using.



NOTE

If select “ECP” mode in LPT Extended Mode menu then IR mode IrDA 1.1 could disappear.

Save To Disk Warning Message

The “Save To Disk Warning Message” item sets if the warning message will appear after system power on when there is no Suspend-to-Disk partition on the hard disk.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled, an underline () indicates Disabled.

Keyboard Numlock

The “Keyboard Numlock” item sets if the Num Lock key will be automatically activated after system startup.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled, an underline (_) indicates Disabled.

Pointing Device (PS/2 Mouse)

The “Pointing Device (PS/2 Mouse)” item enables or disables the built-in touchpad or the PS/2 mouse.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled; an underline (_) indicates Disabled. Disable this option if you are using a serial mouse.

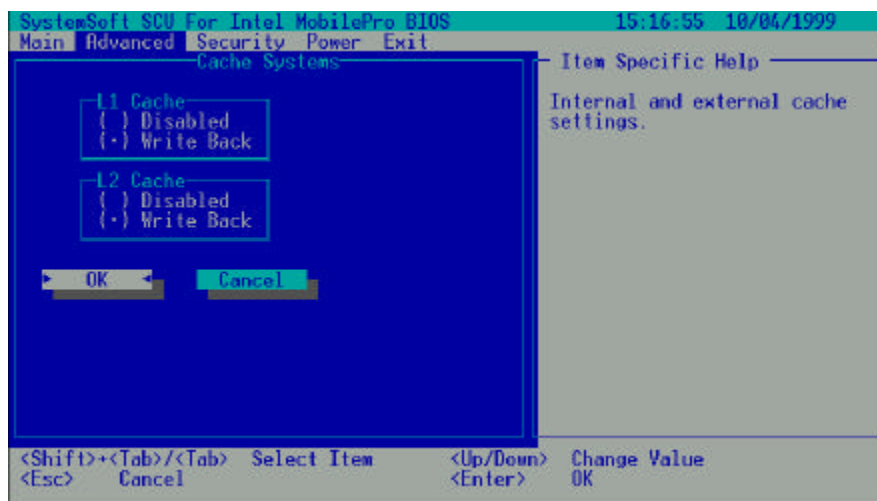
Hot Key Beep

The “Hot Key Beep” item enables or disables the beep sound when hot keys are pressed.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled; an underline (_) indicates Disabled.

Cache Systems

When this item is selected, the submenu will display as shown below.



The “Cache Systems” item Write Back (enables) the cache of your system: L1 cache (internal cache of CPU) and L2 cache (external 256KB or 512KB cache). The cache feature enhances system performance because the most frequently used data is accessed from and written to the high-speed cache memory.

ACPI Support

If user enable the ACPI field, the system will support ACPI function.

Keyboard Backlight

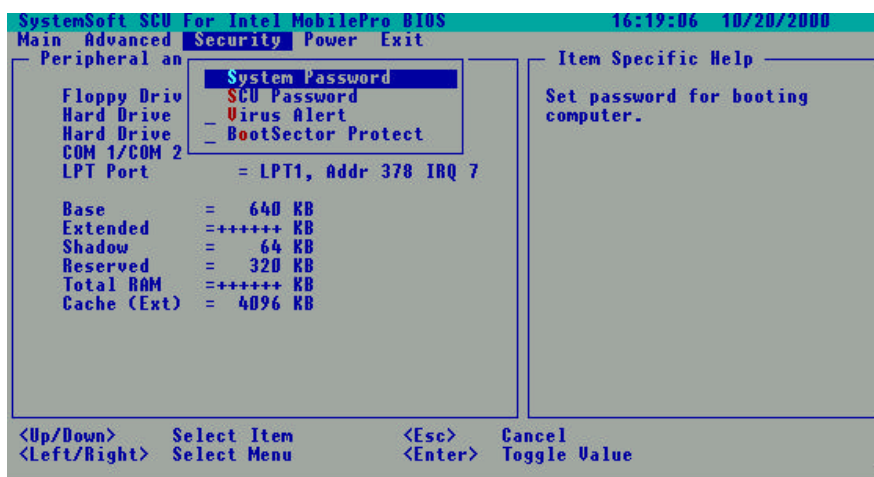
When the LED Keyboard Backlight need light at power on status, then select the “Keyboard Backlight “ setting is Enable.

When the LED Keyboard Backlight need dark at power on status, then select the “Keyboard Backlight “ setting is Disable.

The Fn+ F8 function can toggle Backlight of the keyboard light or dark, but Fn+F8 can't effect the CMOS Setup of the “Keyboard Backlight” item.

3-2.3 Security Menu

The Security pull-down menu, as shown below, contains the Security settings that safeguard your system against unauthorized use.



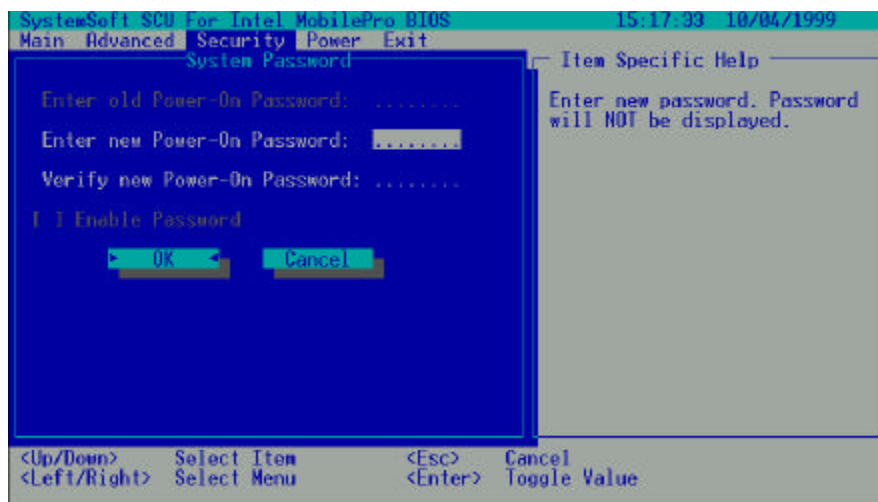
The followings describe in sequence all the items of the Security menu.

System Password

The “System Password” item allows you to set the password for your system. The password is required for starting up the system and running the SCU program.

When the item is selected, the submenu will display as shown below. When setting a password, first make sure that Num Lock is off, then type your password in the entry field and press [Enter]. Confirm your password by typing it again and pressing [Enter].

For the password to take effect, enable the “Enable Password” item.

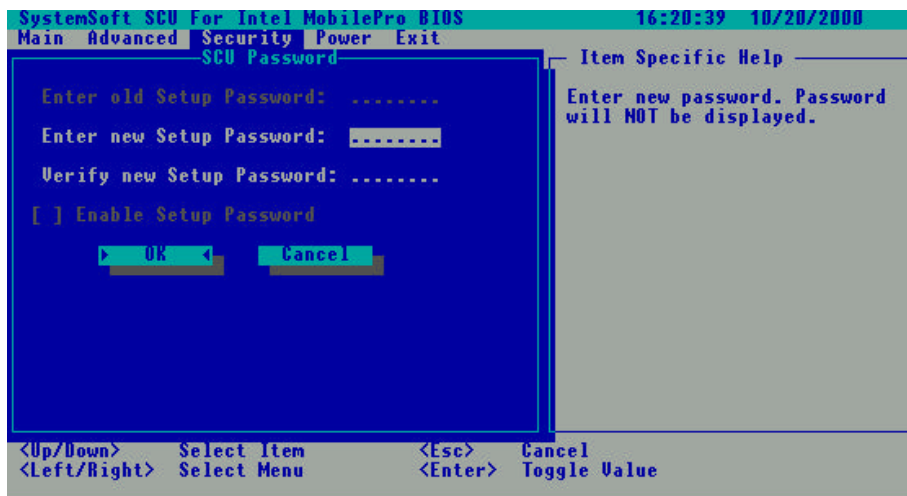


SCU Password

The "SCU Password" item allows you to set the password for your setting SCU program security.

When the item is selected, the submenu will display as shown below. When setting a password, first make sure that Num Lock is off, then type your password in the entry field and press [Enter]. Confirm your password by typing it again and pressing [Enter].

For the password to take effect, enable the "Enable Password" item.



Virus Alert

The “Virus Alert” item, when enabled, gives warning messages if the hard disk boot sector (partition table) has been changed.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled; an underline (_) indicates Disabled.

BootSector Protect

The “BootSector Protect” item helps prevent computer viruses by protecting the hard disk boots sectors (partition table) from any change.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled; an underline (_) indicates Disabled.

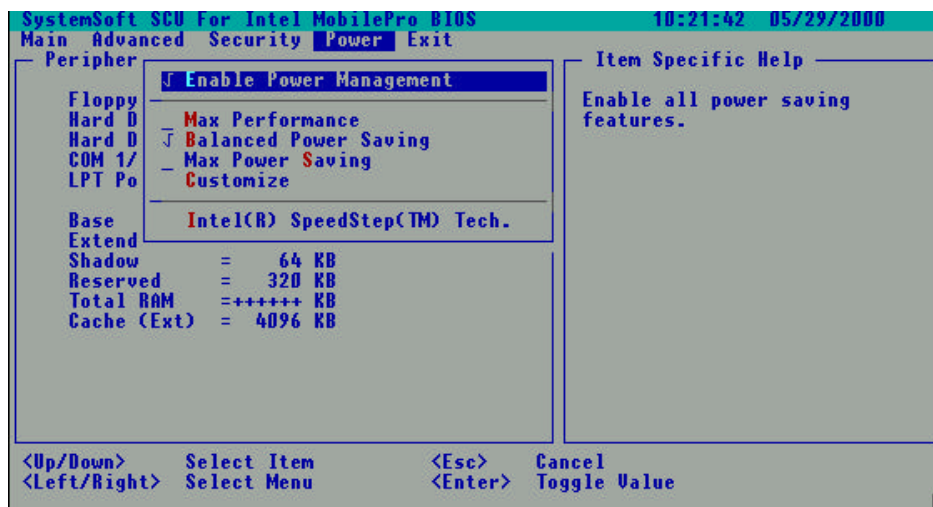
CAUTION

Disable this item before you install an operating system, otherwise, the installation will fail.

3-2.4 Power Menu

The Power Menu pull-down menu, as shown below, contains the Power Management settings that help save power.

The followings describe in sequence all the items of the Power menu.



Enable Power Management

The “Enable Power Management” item is the master control for the Power Management features.

When this item is selected, no submenu will display. A check mark (✓) indicates Enabled; an underline (_) indicates Disabled.

Max Performance/Balanced Power Saving/Max Power Saving/Customize

These four item are mutually exclusive options. You can select one of them. A check mark (✓) indicates Enabled; an underline (_) indicates Disabled.

Descriptions of the four options are:

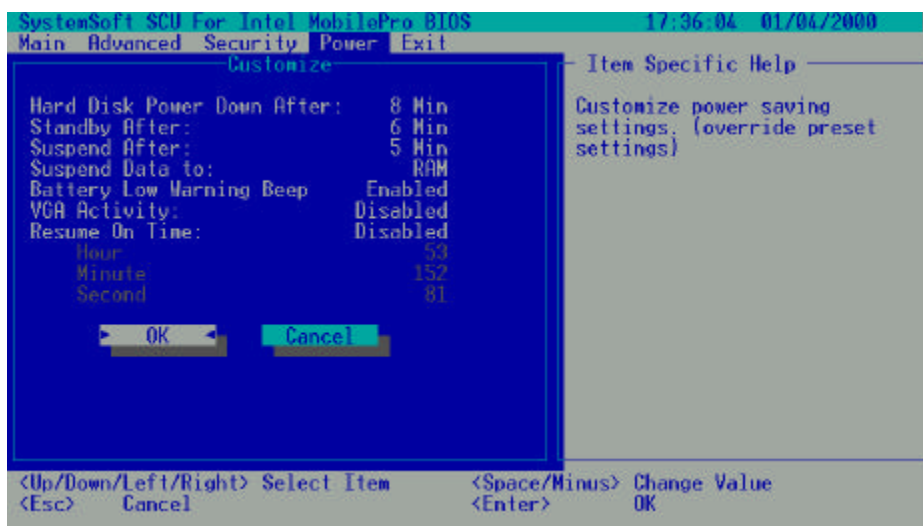
1. Max Performance: Select this option for the pre-defined settings that allow maximum performance but shortest battery life.
2. Balanced Power Saving: Select this option for the pre-defined settings that allow moderate performance and moderate battery life.
3. Max Power Saving: Select this option for the pre-defined settings that allow longest battery life but minimum performance.
4. Customize: Select this option for setting up your own performances.
When this option is selected, a submenu will appear. See the following subsection for information.

NOTE

To know the pre-defined settings for the above three options, you can select the next option to view the settings in the submenu.

Customizing Power Management Features

To customize Power Management features, select “Customize” from the Power pull-down menu. The submenu will display as shown below.



To move and select in this pull-down menu, go to an entry field using the arrow key and select an option using the Space/+/-key.

The following describe in sequence all the items of this submenu.

Hard Disk Time-Out

The “Hard Disk Time-Out ” item sets the time-out period for the hard disk to power down if it is not in use during the set period. The hard disk will power up again when next accessed.

The available options are Disabled, 1 Min, 2 Min, 4 Min, 8 Min, 10 Min, 15 Min and 20 Min.

Standby After

The “Standby After” item sets the time-out period for initiating Standby mode. If the notebook remains idle until the time-out period for Standby mode has been reached, the notebook enters Standby mode.

In Standby mode, several system components go into standby or off mode so that system power will be reduced. The system will wake up from Standby mode when any activity is detected.

Under DOS, this function will work to make the system go into the “Standby” mode, but will not change the status of the keyboard backlight. In other words, after enter “Standby”, the backlight status still keeps intact.

The “SCU\Power\Customize\Standby After” function is replaced by Windows 98, Windows 2000 and Windows NT4.0, so the setting here will not cause the system to enter “ Standby” mode.

The available options are Disabled, 1 Min, 2 Min, 4 Min, 6 Min, 8 Min, 12 Min and 16 Min.

Suspend After

The “Suspend After” item sets the time-out period for initiating Suspend mode. It works in conjunction with the previous item “Standby After”. After the notebook enters Standby mode, the Power Saving starts the time-out for the Suspend mode. If the notebook remains in Standby mode until the time-out period for Suspend mode has been reached, the notebook enters Suspend mode.

The Suspend mode is determined by the next item, “Suspend Data to.” It can be either Suspend-to-RAM or Suspend-to-Disk.

When Suspend mode is initiated, several system components go into standby or off mode so that system power will be reduced further. The system will wake up from Suspend- mode when a key is pressed on the internal keyboard.

“Resume On Time” and “Resume On Modem Ring”, if enabled in this submenu, can also wake up the system from Suspend-to-RAM mode.

When Suspend-to-Disk mode is initiated, the system preserves all the running application programs as a file in a “Suspend-to-disk partition” on the hard disk and then turns off automatically.

The available options are Disables, 1 Min, 2 Min, 5 Min, 10 Min and 15 Min.

Suspend Data to

The “Suspend Data to” item defines the Suspend mode of your system. The available options are RAM and Disk.

Battery Low Warning Beep

The “Battery Low Warning Beep” items enables or disables the low battery warning beep.

The available options are Enabled and Disabled.

VGA Activity

The “VGA Activity” items sets if obvious video activities (such as screen savers) will prevent Power Management modes.

Descriptions of the available options are:

1. Enabled: Power Management will not take effect if there are VGA activities.
2. Disabled: Power Management will ignore VGA activities.

Resume On Time

The “Resume On Time” item enables or disables the system waking up from Suspend-to-RAM mode at a time specified by the next three items.

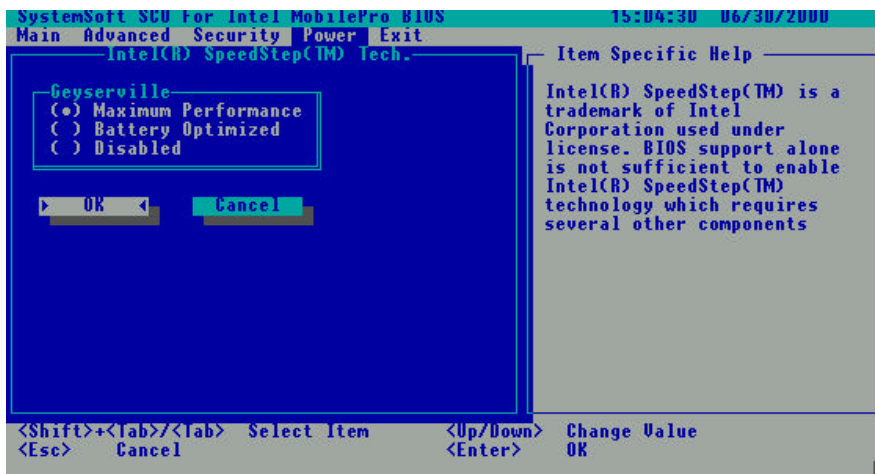
The available options are Enabled and Disabled. If you select Enabled, set the time for the next three items.

Hour/Minute/Second

The “Hour”, “Minute” and “Second” items work in conjunction with the previous item “Resume on Time”. It sets the alarm time for waking up the system from Suspend-to-RAM mode.

Enter the value in each field by typing the number.

Intel® SpeedStep



Maximum Performance:

The select "Maximum Performance" field then CPU setup high-speed mode.

Battery Optimized:

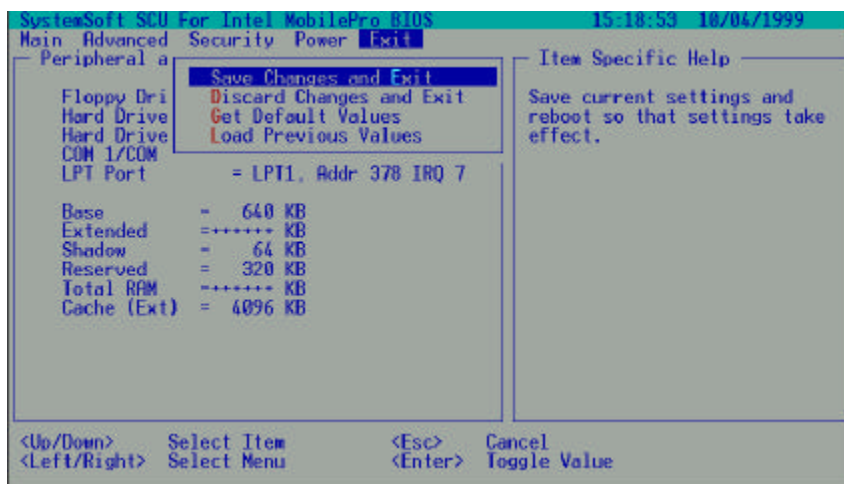
The select "Battery Optimized" field then CPU setup low speed mode.

Disabled:

The select "Disabled" field then CPU setup default speed mode but system willn't change speed mode.

3-2.5 Exit Menu

The Exit pull-down menu, as shown below, displays ways of exiting SCU. After finished with your settings, you must save and exit SCU so that the settings can take effect.



Descriptions of the Exit choices are:

1. Save Change and Exit: Save changes you have made and exit.
2. Discard Changes and Exit: Exit without saving the changes you has made.
3. Get Default Values: Load factory default values for all the items.
4. Load Previous Values: Restore previous values for all the items.

Chapter 4

Notebook Maintenance

4-1 Introduction

This chapter tells how to maintain the notebook in good working order.

4-2 Daily Use

For maximum reliability in the field, keep all access doors shut whenever possible.

4-3 Battery Maintenance

Maintaining and preserving the battery is a key to keeping the notebook productive in the field.

4-3.1 Conserving Power

Even though the notebook has several automatic power saving features, there are ways to maximize the battery life.

- Use the lowest brightness and contrast display settings.
- Avoid using "reverse video". The white text on a black background uses significantly less power than black on white.
- Develop good, consistent work habits. Set the power management features according to your style. For example, if you do not read from or write to the hard disk very often, set the hard disk time-out setting to a very short time.
- Plan each computing session ahead of time. Don't waste valuable time and power thinking about what to do.
- Disable the cache if you do not need it.

4-3.2 Changing the Battery Pack

To change the battery pack:

1. Loose two screws from battery pack of the two sides.
2. To pull handle from battery pack.
3. Take the battery pack out.
4. Put another battery pack back in the battery pack house and make sure that the removal strap is available for future changes.

4-4 Cleaning

Periodically clean the exposed notebook surfaces. Use a soft cloth and water or mild detergent to clean all surfaces. The glass cleaner is recommended for cleaning the display screen.