



# Fujitsu LifeBook

## P Series

## **BIOS Guide**

LifeBook P Series Model:  
P1610

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**FUJITSU COMPUTER SYSTEMS CORPORATION**

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# LifeBook P Series Notebook BIOS

## BIOS SETUP UTILITY

The BIOS Setup Utility is a program that sets up the operating environment for your notebook. Your BIOS is set at the factory for normal operating conditions, therefore there is no need to set or change the BIOS environment to operate your notebook.

The BIOS Setup Utility configures:

- Device control feature parameters, such as changing I/O addresses and boot devices.
- System Data Security feature parameters, such as passwords.

### Entering the BIOS Setup Utility

To enter the BIOS Setup Utility, do the following (or use the TrustedCore Menu, as detailed in the next section):

1. Turn on or restart your notebook.
2. Press [F2] once the Fujitsu logo appears on the screen. This will open the main menu of the BIOS Setup Utility with the current settings displayed.
3. Press the [RIGHT ARROW] or [LEFT ARROW] key to scroll through the other setup menus to review or alter the current settings.

### Using the TrustedCore Menu

When the Fujitsu logo appears on the screen, press the [Enter] key or click on the left mouse or touchpad button; the TrustedCore Menu will appear.

The TrustedCore Menu provides shortcuts to the following menus and information screens:

- BIOS Setup
- Diagnostic Screen
- Boot Menu
- Patent Information
- System Information
- Continue Booting

Clicking on any of the fields will invoke the screen, information, or action described.

The Boot Menu can also be invoked by pressing the [F12] key when the Fujitsu logo appears on the screen.

### Navigating through the Setup Utility

The BIOS setup utility consists of six menus: Main, Advanced, Security, Boot, Info and Exit. This document explains each menu and all submenus and setup items.

The following procedures allow you to navigate the setup utility menus:

1. To select a menu, use the cursor keys: [ ← ], [ → ].
2. To select a field within a menu or a submenu, use the cursor keys: [ ↑ ], [ ↓ ].



- Selecting a field causes a help message about that field to be displayed on the right-hand side of the screen.
- Pressing [Enter] with the highlight on a selection that is not a submenu or auto selection will cause a list of all options for that item to be displayed. Pressing the Enter key again will select the highlighted choice.

3. To select the different values for each field, press the [Spacebar] or [+] to change to the next higher selection and [F5] or [-] to go to the next lower selection.
4. To activate a submenu press [Enter].
5. To return to a menu from a submenu, press [Esc].
6. To go to Exit menu from another menu, press [Esc].
7. Pressing the [F9] key resets all items in the BIOS to the default values.
8. Pressing the [F10] key saves the current configuration and exits the BIOS Setup Utility. You will be asked to verify this selection before it is executed.
9. Pressing the [F1] key gives you a general help screen.

### Entering the Setup Utility After a Configuration Change or System Failure

If there has been a change in system configuration that does not match the parameter settings stored in your BIOS memory, or there is a failure in the system, the system beeps and/or displays an error message after the Power On Self Test (POST). If the failure is not severe, it will give you the opportunity to modify the settings of the setup utility, as described in the following steps:

1. When you turn on or restart the computer there is a beep and/or the following message appears on the screen:

```
Error message - please run SETUP  
program Press <F1> key to continue,  
<F2> to run SETUP
```

2. If an error message is displayed on the screen, and you want to continue with the boot process and start the operating system anyway, press the [F1] key.



If your settings require it, you may be asked for a password before the operating system will be loaded.

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3. If an error message is displayed on the screen, and you want to enter the setup utility, press the [F2] key.
4. When the setup utility starts with a fault present, the system displays the following message:  

```
Warning!  
Error message  
[Continue]
```
5. Press any key to enter the setup utility. The system will then display the Main Menu with current parameters values.

## MAIN MENU - SETTING STANDARD SYSTEM PARAMETERS

The Main Menu allows you to set or view the current system parameters. Follow the instructions for [Navigating through the Setup Utility](#) to make any changes.

The following tables show the names of the menu fields for the Main menu and its submenus, all of the options for each field, the default settings and a description of

the field's function and any special information needed to help understand the field's use.



System Time and System Date can also be set from your operating system without using the setup utility. Use the Date and Time icon on your Windows Control Panel.

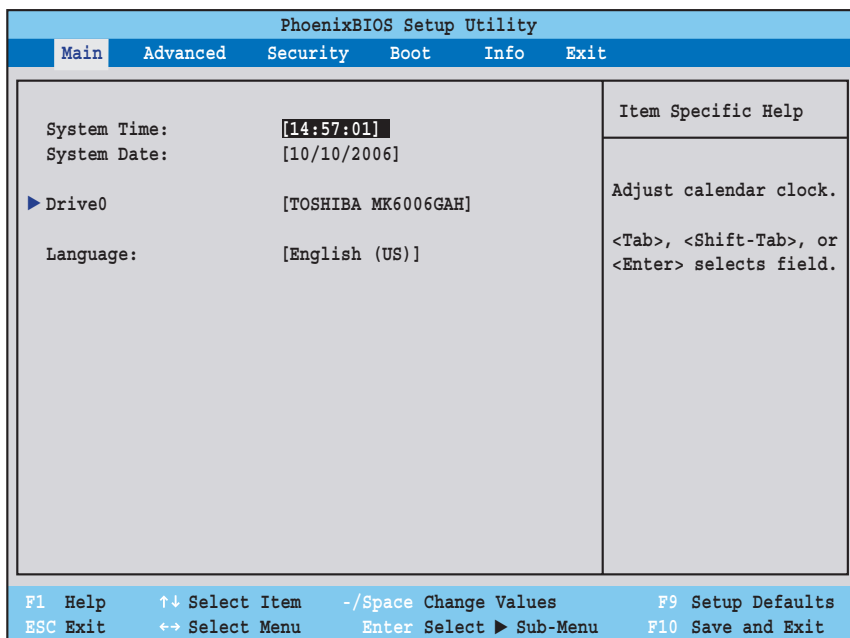


Figure 1. Main Menu

Table 1: Fields, Options and Defaults for the Main Menu

Menu Field	Option	Default	Description
System Time:	—	—	Sets and displays the current time. Time is in a 24 hour format of hours:minutes:seconds with 2 digits for each. (HH:MM:SS). Example: 16:45:57. You may change each segment of the time separately. Move between the segments with the [Tab] key and/or [Shift] + [Tab] keys.
System Date:	—	—	Sets and displays the current date. Date is in a month/day/year numeric format with 2 digits each for month and day and 4 digits for year. (MM/DD/YYYY) for example: 03/20/2006. You may change each segment of the date separately. Move between the segments with the [Tab] key and/or [Shift] + [Tab] keys.

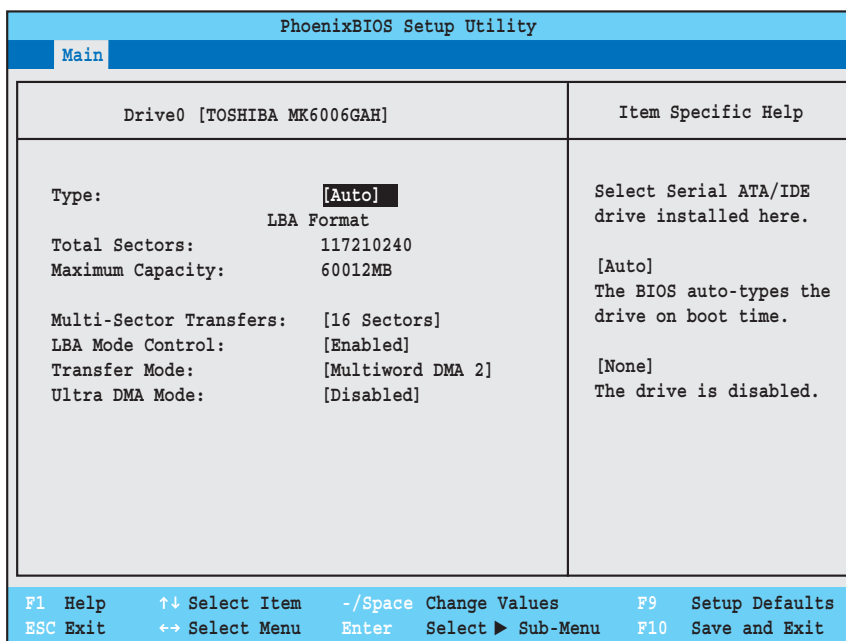
**Table 1: Fields, Options and Defaults for the Main Menu**

Menu Field	Option	Default	Description
Drive0:	Selects Primary Master submenu	—	Displays the type of device on this Serial ATA/IDE interface, if there is one. Pressing the Enter key selects the Drive0 submenu allowing additional device configuration options for this interface.
Language:	<ul style="list-style-type: none"><li>▪ English (US)</li><li>▪ Japanese (JP)</li></ul>	[English (US)]	The default setting differs between the US/European and the Japanese model. Selects the display language for the BIOS.

### Drive0 Submenu of the Main Menu

The Drive0 submenu identifies which ATA devices are installed.

**Note:** Actual hard drive label shown may vary. Depending on the drive type, information such as cylinders, heads and sectors may also be displayed.



**Figure 2. Drive0 Submenu**

Table 2: Fields, Options and Defaults for the Drive0 Submenu of the Main Menu

Menu Field	Options	Default	Description
Type:	<ul style="list-style-type: none"> <li>▪ Auto</li> <li>▪ None</li> </ul>	[Auto]	Selects the Serial ATA/IDE device type. Select Auto to have the type automatically identified by the BIOS at POST. If None is selected, all of the following Set-up items do not appear.
<b>LBA Format    Logical Block Addressing (LBA)</b>			
Total Sectors:	---	---	The total number of sectors on your hard disk
Maximum Capacity:	---	---	The maximum capacity of your hard disk
Multi-Sector Transfers:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ 2 Sectors</li> <li>▪ 4 Sectors</li> <li>▪ 8 Sectors</li> <li>▪ 16 Sectors</li> </ul>	[16 Sectors]	The best option is selected by the BIOS automatically when Auto is selected and cannot be selected by the user. Specifies the number of sectors per block for multiple sector transfer.

Table 2: Fields, Options and Defaults for the Drive0 Submenu of the Main Menu

Menu Field	Options	Default	Description
LBA Mode Control:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> </ul>	[Enabled]	The best option is selected by the BIOS automatically when Auto is selected and cannot be selected by the user. Enables or disables Logical Block Addressing in place of Cylinder, Head, Sector addressing.
Transfer Mode:	<ul style="list-style-type: none"> <li>▪ Standard</li> <li>▪ Fast PIO 1</li> <li>▪ Fast PIO 2</li> <li>▪ Fast PIO 3</li> <li>▪ Fast PIO 4</li> <li>▪ Multiword DMA 1</li> <li>▪ Multiword DMA 2</li> </ul>	[Multiword DMA 2]	The best option is selected by the BIOS automatically when Auto is selected and cannot be selected by the user. Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode.
Ultra DMA Mode:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Mode 0</li> <li>▪ Mode 1</li> <li>▪ Mode 2</li> <li>▪ Mode 3</li> <li>▪ Mode 4</li> <li>▪ Mode 5</li> </ul>	[Disabled]	The best option is selected by the BIOS automatically when Auto is selected and cannot be selected by the user. Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode.

### Exiting from Main Menu

When you have finished setting the parameters on this menu, you can either exit from the setup utility, or move to another menu. If you wish to exit from the setup utility, press the [Esc] key or use the cursor keys to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

## ADVANCED MENU - SETTING DEVICE FEATURE CONTROLS

The Advanced Menu allows you to:

- Configure your serial and parallel port configurations (Microsoft Windows XP Pro only).
- Turn NumLock on or off.
- Select between the display panel and an external CRT display.
- Enable or disable compensation for your display.
- Configure internal controllers.
- Configure CPU and USB features.

- Configure Miscellaneous features
- Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Advanced Menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

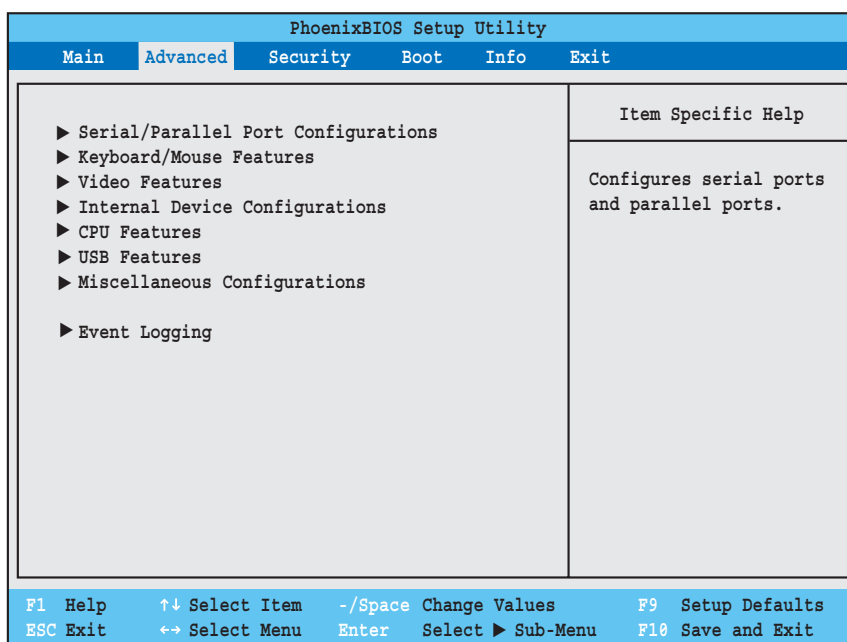


Figure 3. Advanced Menu

Table 3: Fields, Options and Defaults for the Advanced Menu

Menu Field	Description
Serial/Parallel Port Configurations	When selected, opens the Serial/Parallel Port Configurations submenu, which allows you to configure address and interrupt for the touch panel. Note that this submenu only appears when tMicrosoft Windows XP Pro is installed as the operating system. If it is set up for Tablet PC Edition, this submenu is not available.
Keyboard/Mouse Features	When selected, opens the Keyboard/Mouse Features submenu, which allows setting NumLock.
Video Features	When selected, opens the Video Features submenu, which allows setting of the display parameters, including routing of video signals to different displays.



**Table 3: Fields, Options and Defaults for the Advanced Menu**

Menu Field	Description
Internal Device Configurations	When selected, opens the Internal Device Configurations submenu, which allows enabling or disabling the IDE, LAN, and modem controllers.
CPU Features	When selected, opens the CPU Features submenu, which allows configuration of CPU performance features.
USB Features	When selected, opens the USB Features submenu, which allows enabling or disabling USB and SCSI Subclass support.
Miscellaneous Configurations	When selected, opens the Miscellaneous Configurations submenu, which allows you to change the power button, Wake Up On LAN, and Volume settings.
Event Logging	When selected, opens the Event Logging submenu which lets you view and enable the event log.

## Serial/Parallel Port Configurations Submenu of the Advanced Menu

The Serial/Parallel Port Configurations submenu is for setting the address and interrupt of the touch panel. Note that this submenu only appears when Microsoft Windows XP Pro is installed as the operating system. If Windows XP Tablet PC Edition is installed, this submenu is not available.

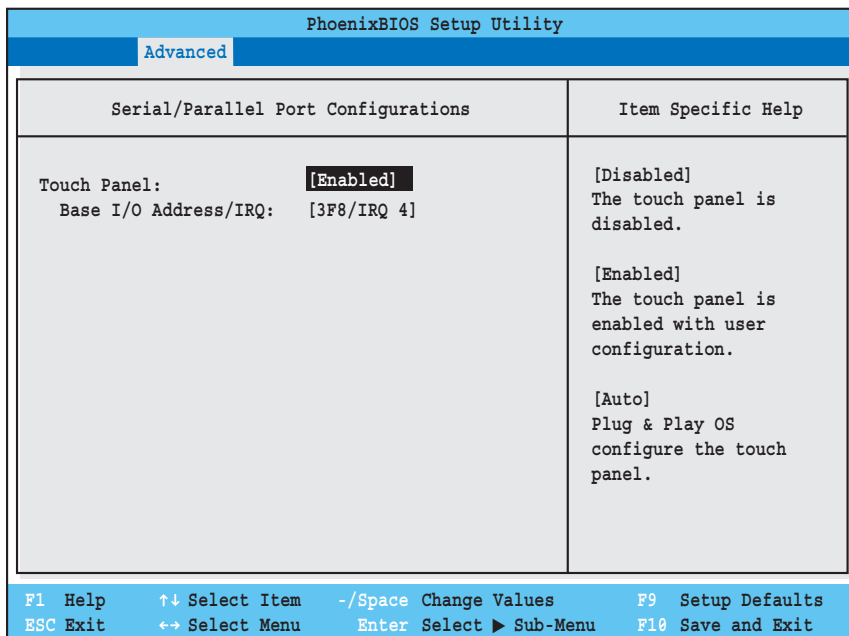


Figure 4. Serial/Parallel Port Configurations Submenu

Table 4: Fields, Options and Defaults for the Keyboard/Mouse Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Touch Panel:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> <li>▪ Auto</li> </ul>	[Enabled]	Enables or disables the system touch panel, or allows the Plug & Play OS to configure it.
Base I/O Address/IRQ:	<ul style="list-style-type: none"> <li>▪ 3F8/IRQ 4</li> <li>▪ 2F8/IRQ 3</li> <li>▪ 3E8/IRQ 4</li> <li>▪ 2E8/IRQ 3</li> </ul>	[3F8/IRQ 4]	Selects the base I/O address and interrupt for the touch panel port.

## Keyboard/Mouse Features Submenu of the Advanced Menu

The Keyboard/Mouse Features submenu is for setting the condition of the NumLock button.

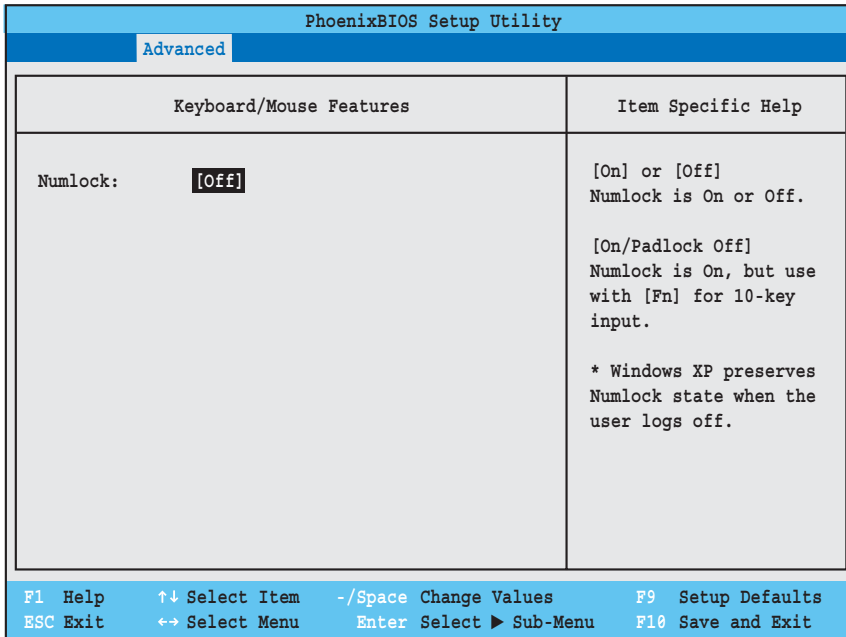


Figure 5. Keyboard/Mouse Features Submenu

Table 5: Fields, Options and Defaults for the Keyboard/Mouse Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Numlock:	<ul style="list-style-type: none"> <li>▪ On</li> <li>▪ Off</li> <li>▪ On/Padlock Off</li> </ul>	[Off]	Sets the NumLock function state when the computer completes booting.

## Video Features Submenu of the Advanced Menu

The Video Features Submenu is for setting the display parameters.

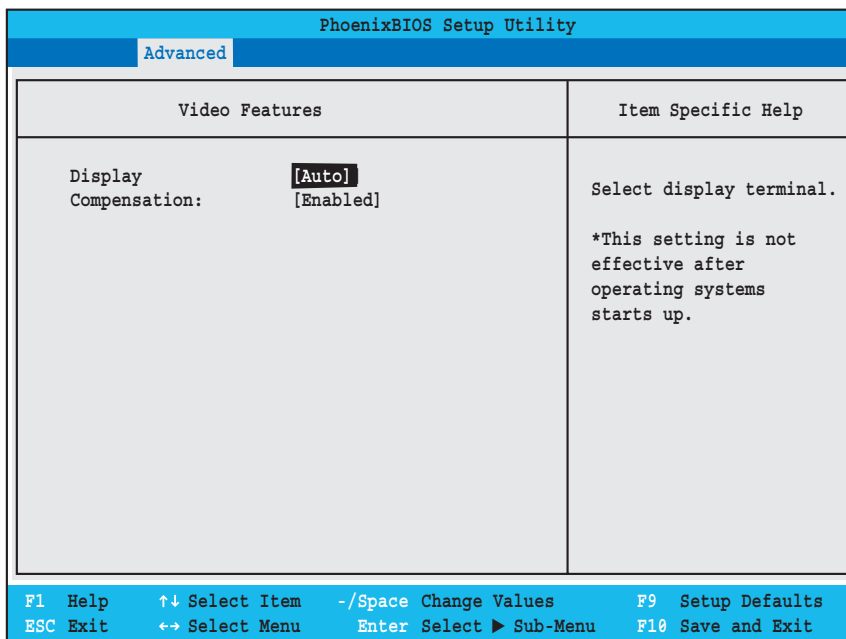


Figure 6. Video Features Submenu

Table 6: Fields, Options and Defaults for the Video Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Display:	<ul style="list-style-type: none"> <li>Internal Flat Panel</li> <li>External</li> <li>Auto</li> </ul>	[Auto]	Selects where the video signal will be routed. Note that once the system boots up, the settings for the Windows video driver take precedence over this setting.
Compensation:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Enables or disables compensation which controls spacing on the display. When enabled, displays with less than pixel resolution 800 x 600 will still cover the entire screen.

## Internal Device Configurations Submenu of the Advanced Menu

The Internal Device Configurations submenu allows the user to configure other internal devices.

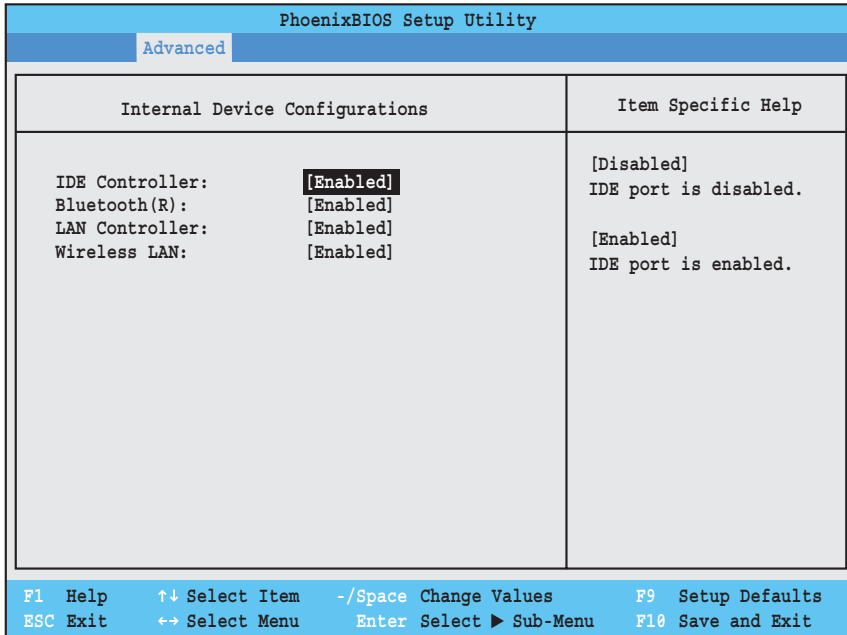


Figure 7. Internal Device Configurations Submenu

Table 7: Fields, Options and Defaults for the Internal Device Configurations Submenu of Advanced Menu

Menu Field	Options	Default	Description
IDE Controller:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Enables or disables selected IDE devices.
Bluetooth(R):	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Enables or disables the Bluetooth device.
LAN Controller:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Enables or disables the LAN controller.
Wireless LAN:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Enables or disables the wireless LAN device.

## CPU Features Submenu of the Advanced Menu

The CPU Features submenu configures certain features of the CPU in the system.

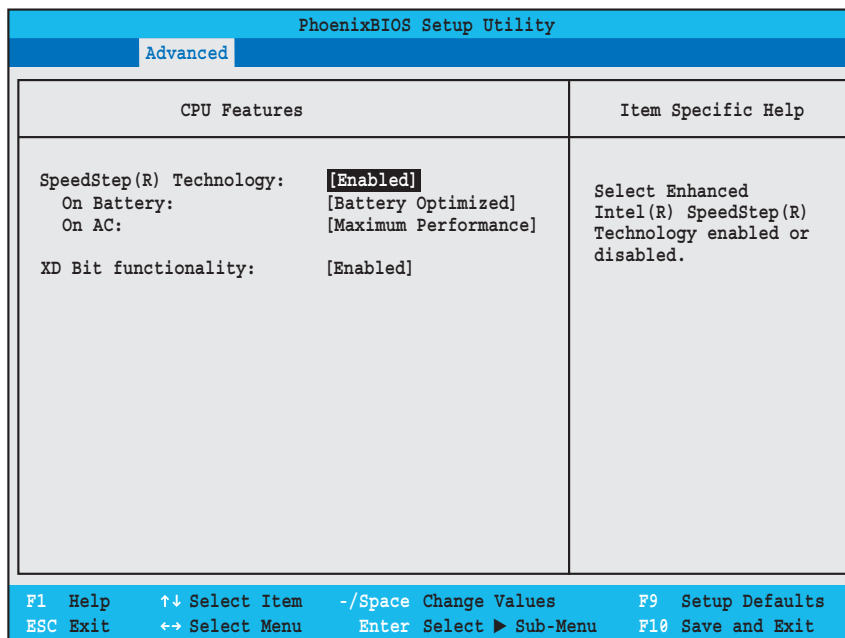


Figure 8. CPU Features Submenu

Table 8: Fields, Options and Defaults for the CPU Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
SpeedStep(R) Technology:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Enables or disables SpeedStep(R) Technology.
On Battery:	<ul style="list-style-type: none"> <li>Maximum Performance</li> <li>Battery Optimized</li> <li>Automatic</li> </ul>	[Battery Optimized]	Allows the user to select the power conditions when the system is running on battery power.
On AC:	<ul style="list-style-type: none"> <li>Maximum Performance</li> <li>Battery Optimized</li> <li>Automatic</li> </ul>	[Maximum Performance]	Allows the user to select the power conditions when the system is running on AC power.
XD Bit functionality:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Allows the user to enable and disable the Execute Disable Bit functionality. Execute Disable Bit allows the processor to classify areas in memory where application code can and cannot execute. In the event an internet worm attempts to insert code in the buffer, the processor disables code execution to prevent damage or worm propagation.

## USB Features Submenu of the Advanced Menu

The USB Features submenu configures the USB capabilities of the system.

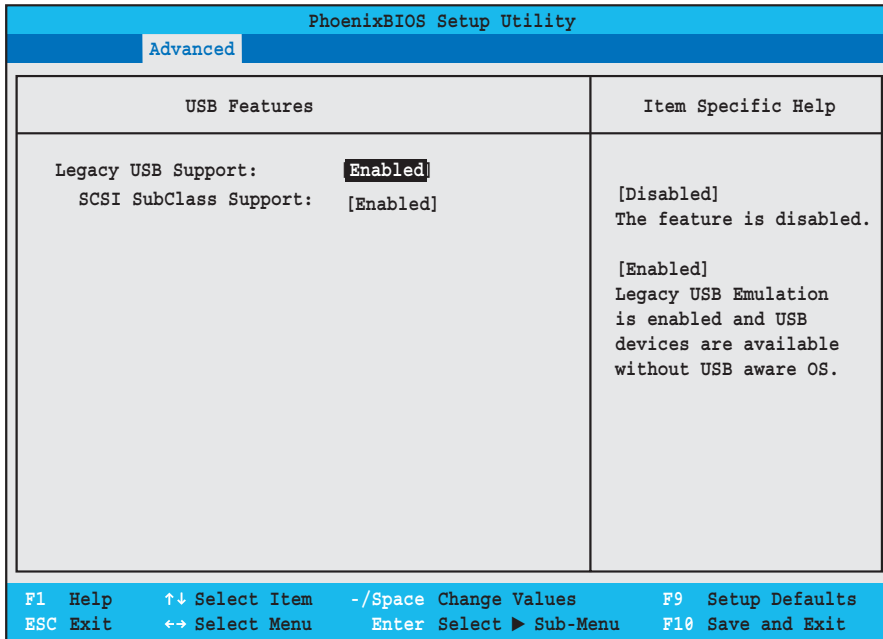


Figure 9. USB Features Submenu

Table 9: Fields, Options and Defaults for the USB Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Legacy USB Support:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	When Disabled is selected, legacy USB emulation is disabled. When Enabled is selected, legacy USB emulation is enabled and USB devices are available without USB-aware OS.
SCSI SubClass Support:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	When Enabled is selected, USB devices that belong to the SCSI sub-class in the mass storage class (e.g., USB Memory Key) are enabled. Note that enabling this feature may cause the system to hang during POST, depending on the device that is connected.

## Miscellaneous Configurations Submenu of the Advanced Menu

The Miscellaneous Configurations submenu configures several features of the system, including power button and volume settings, video memory size, and power management settings.

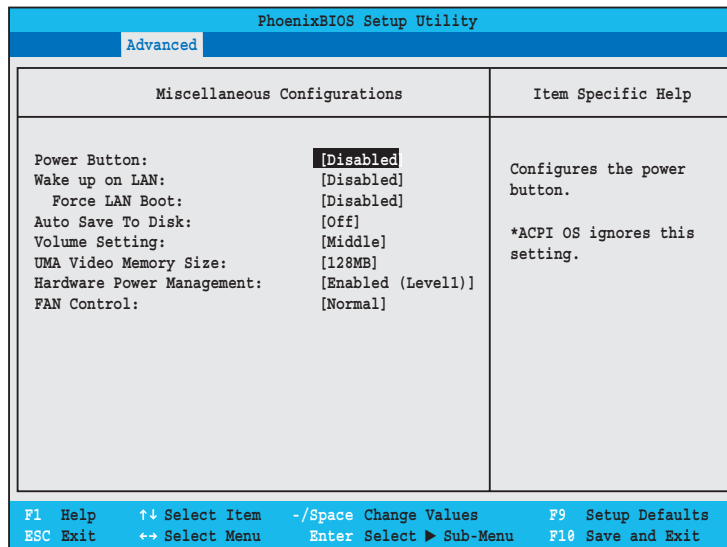


Figure 10. Miscellaneous Configurations Submenu

Table 10: Fields, Options and Defaults for the Miscellaneous Configurations Submenu

Menu Field	Options	Default	Description
Power Button:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Power Off</li> </ul>	[Disabled]	When Disabled is selected, pressing power button does not affect power. When Enabled is selected, pressing the button powers off the system.
Wake up on LAN:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Disabled]	When Enabled is selected, the system will wake up when the internal LAN receives a Magic Packet while it is powered off.
Force LAN Boot:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Disabled]	(Can only be selected when Wake Up On LAN is enabled.) When this is enabled, the system will first try to boot from the LAN before attempting to boot from any other device regardless of the BIOS priority settings or whether Preboot Execution Environment is disabled.
Auto Save To Disk:	<ul style="list-style-type: none"> <li>Off</li> <li>On</li> </ul>	[Off]	(This field is only available on systems that have Windows XP Tablet PC Edition installed as the operating system.) When turned On, when the battery becomes low and the system is in Suspend mode, the system will automatically save its state and then power off.
Volume Setting:	<ul style="list-style-type: none"> <li>Off</li> <li>Minimum</li> <li>Middle</li> <li>Maximum</li> </ul>	[Middle]	Allows you to set or disable the system volume level.
UMA Video Memory Size:	<ul style="list-style-type: none"> <li>64MB</li> <li>128MB</li> <li>224MB</li> </ul>	[128MB]	Select the maximum allocated shared video memory size. UMA memory is dynamically allocated as needed by Intel Dynamic Video Memory Technology (DVMT).



Table 10: Fields, Options and Defaults for the Miscellaneous Configurations Submenu

Menu Field	Options	Default	Description
Hardware Power Management:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled (Level1)</li> <li>▪ Enabled (Level2)</li> </ul>	[Enabled (Level1)]	This allows you to enable or disable the running of Hardware Power Management. Level1 is standard hardware management; Level2 is deeper than Level1.
Fan Control:	<ul style="list-style-type: none"> <li>▪ Normal</li> <li>▪ Silent</li> </ul>	[Normal]	When set to Normal, the fan runs at a normal level. When set to Silent, the fan is runs in silent mode.

## Event Logging Submenu of the Advanced Menu

The Event Logging submenu is for setting up the logs for DMI event logging.

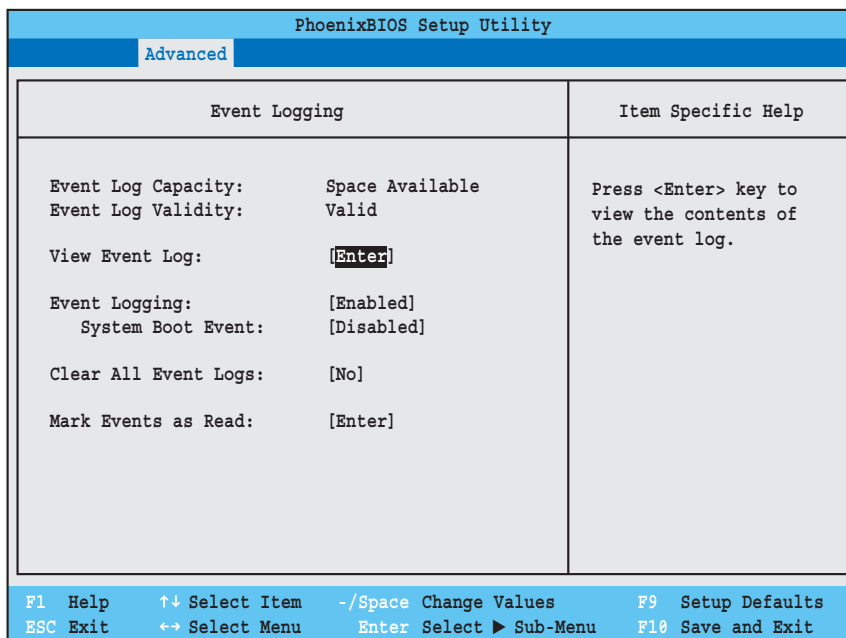


Figure 11. Event Logging Submenu

Table 11: Fields, Options and Defaults for the Event Logging Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Event Log Capacity:		Space Available	Display only
Event Log Validity:		Valid	Display only
View Event Log:	<ul style="list-style-type: none"> <li>Enter</li> </ul>	[Enter]	Allows you to view content of event log.
Event Logging:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Enabled]	Turns event logging on and off for all DMI events.
System Boot Event:	<ul style="list-style-type: none"> <li>Disabled</li> <li>Enabled</li> </ul>	[Disabled]	Turns event logging on and off for DMI system boot events.
Clear All Event Logs:	<ul style="list-style-type: none"> <li>No</li> <li>Yes</li> </ul>	[No]	When set to [Yes] all event logs will be cleared at next boot.
Mark Events as Read:	<ul style="list-style-type: none"> <li>Enter</li> </ul>	[Enter]	Allows you to mark events currently in the event log as read.

## SECURITY MENU - SETTING THE SECURITY FEATURES

The Security menu allows you to set up the data security features of your notebook to fit your operating needs and to view the current data security configuration. Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Security menu and its submenus, all the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use. The default condition is no passwords required and no write protection.



If you set a password, write it down and keep it in a safe place. If you forget the password you will have to contact your support representative to regain access to your secured functions and data.



- If you make an error when re-entering the password a [Warning] will be displayed on the screen. To try again, press the **Enter** key and then retype the password. Press the **Esc** key to abort the password setting process.
- Entering a password incorrectly three times in a row will cause the keyboard and mouse to be locked out and the warning [System Disabled] to be displayed. If this happens, restart the computer by turning off and on the power with the power switch and use the correct password on reboot.
- If the Password on Resume is Enabled and the Password on Boot is Disabled you will not have to type your password upon resuming the system from the Standby or Hibernate modes. Power Management Security will work only if Password on Boot is enabled.

PhoenixBIOS Setup Utility			
Main	Advanced	Security	Boot Info Exit
Supervisor Password Is:		Clear	<b>Item Specific Help</b>  Press <Enter> key to set Supervisor Password to enable any password features.  Then password entry is required to enter BIOS Setup.
User Password Is:		Clear	
Set Supervisor Password		[Enter]	
Set User Password		[Enter]	
Minimum User Password Length		[0]	
Password on Boot:		[Disabled]	
On Automatic Wake up:		[Disabled]	
KB Lock on Resume:		[Disabled]	
Boot from Removable Media:		[All]	
Flash Write:		[Enabled]	
▶ Hard Disk Security			
▶ Owner Information			
▶ Security Chip Setting			
Security Panel on Resume:		[Enabled]	
F1 Help	↑↓ Select Item	-/Space Change Values	F9 Setup Defaults
ESC Exit	↔ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit

Figure 12. Security Menu

**Table 12: Fields, Options and Defaults for the Security Menu**

Menu Field	Options	Default	Description
Supervisor Password is:	—	Clear	A display-only field. Set is displayed when the system supervisor password is set and Clear when it is not.
User Password is:	—	Clear	A display-only field. Set is displayed when the general user password is set, and Clear when it is not.
Set Supervisor Password	—	[Enter]	Sets, changes or cancels the Supervisor Password. The Supervisor Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the <b>Enter</b> key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Supervisor Password is set it must be used to access the BIOS setup utility.
Set User Password	—	[Enter]	<b>Can only be accessed if Supervisor Password is set.</b> Sets, changes or cancels User Password. User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press [Enter] key instead of entering characters in the Enter New Password and Re-enter New Password fields. When a User Password is set it must be used to access the BIOS utility.
Minimum User Password Length:	—	[0]	<b>Can only be accessed if Supervisor Password is set.</b> Set the minimum length for User Password.
Password on Boot:	<ul style="list-style-type: none"> <li>■ Disabled</li> <li>■ First Boot</li> <li>■ Every Boot</li> </ul>	[Disabled]	When Disabled, no password is required. When set to First Boot, password entry required only before first boot. When Every Boot is selected, password required whenever the system is booted.
On Automatic Wake Up:	<ul style="list-style-type: none"> <li>■ Disabled</li> <li>■ Enabled</li> </ul>	[Disabled]	When disabled, password entry is not required on automatic wake-up on LAN or RTC. When enabled, password entry is required on automatic wake-up on LAN or RTC.
KB Lock on Resume:	<ul style="list-style-type: none"> <li>■ Disabled</li> <li>■ Enabled</li> </ul>	[Disabled]	When Enabled, PS/2 keyboard or mouse inputs are locked out at Resume From Standby or Hibernate modes until entering password.
Boot from Removable Media:	<ul style="list-style-type: none"> <li>■ All</li> <li>■ Supervisor only</li> </ul>	[All]	When Supervisor Only is selected, only the Supervisor can boot from removable media. Only the user who enters the Supervisor Password before OS boot is treated as the Supervisor. When All is selected, boot from removable media is not restricted.
Flash Write:	<ul style="list-style-type: none"> <li>■ Disabled</li> <li>■ Enabled</li> </ul>	[Enabled]	When disabled, the BIOS Flash Memory is write-protected; when enabled, it is not.
Hard Disk Security:	—	—	When selected, opens the Hard Disk Security submenu, which allows you to configure hard disk security features.
Owner Information	—	—	When selected, opens the Owner Information submenu, which allows you to set Owner information.
Security Chip Setting	—	—	When selected, opens the Security Chip Settings submenu, which allows you to set settings for the security chip.
Security Panel on Resume:	<ul style="list-style-type: none"> <li>■ Disabled</li> <li>■ Enabled</li> </ul>	[Enabled]	When enabled, the Security Panel feature is enabled upon Resume from Suspend.

## Exiting from the Security Menu

When you finish setting the parameters on the Security Menu, you can either exit from setup utility or move to another menu. To exit from setup utility, press [Esc] key to go to Exit Menu. To move to another menu, use the cursor keys.

## Hard Disk Security Submenu of the Security Menu

The Hard Disk Security submenu is for configuring hard disk security features.

PhoenixBIOS Setup Utility	
Security	
Hard Disk Security	Item Specific Help
Drive0 Password Is:      Clear *Set Drive0 Password:    [Enter] Password Entry on Boot:   [Enabled] *Hard Disk Password cannot be set or changed if the system is rebooted from OS. Choose "Save Changes and Power Off" in Exit Menu to shut down the system, then Hard Disk Password can be set or changed on next boot.	When set to disabled, Hard Disk Password entry is not required before OS boot. The hard disk is still password-protected without password entry.
F1 Help    ↑↓ Select Item    -/Space Change Values    F9 Setup Defaults ESC Exit   ←→ Select Menu   Enter    Select ► Sub-Menu    F10 Save and Exit	

Figure 13. Hard Disk Security Submenu

Table 13: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Default	Description
Drive0 Password Is:	Clear	A display-only field. Set is displayed when the Drive0 Password is set and Clear when it is not.
Set Drive0 Password	[Enter]	Sets, changes or cancels Drive0 Password. The Drive0 Password may be up to seven characters long and include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Drive0 Password is set it must be used to access the hard disk. Data on the hard disk cannot be read on other systems.
Password Entry on Boot:	[Enabled]	When set to Disabled, it is not necessary to enter a Hard Disk Password before booting the OS. The hard disk is still password-protected without password entry.

## Owner Information Submenu of the Security Menu

The Owner Information submenu is for setting owner information.

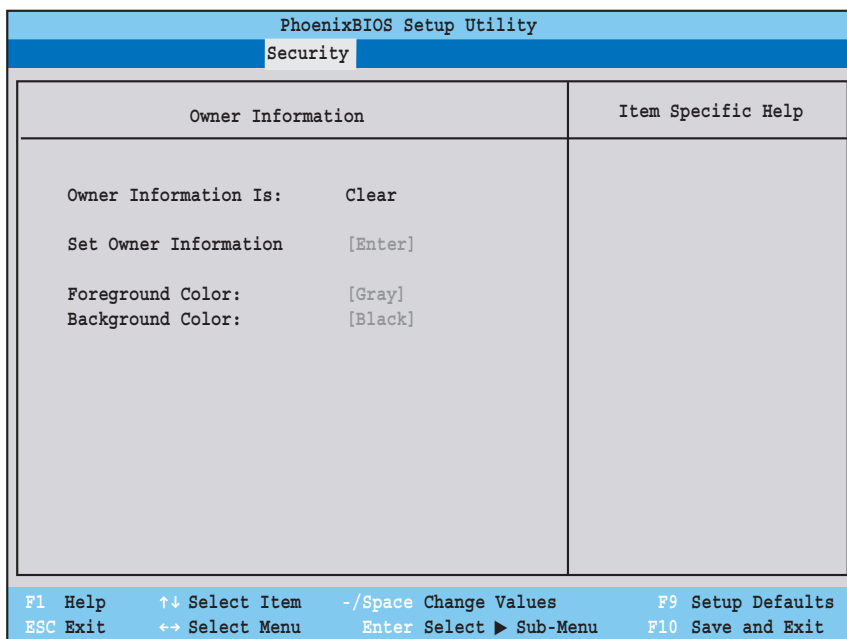


Figure 14. Owner Information Submenu

Table 14: Fields, Options and Defaults for the Owner Information Submenu of the Security Menu

Menu Field	Options	Default	Description
Owner Information Is:	—	Clear	Display only. (Will only be displayed if the Supervisor Password is set).
Set Owner Information:	—	[Enter]	Field to write owner information, i.e. name.
Foreground Color:	<ul style="list-style-type: none"> <li>▪ Black</li> <li>▪ Blue</li> <li>▪ Green</li> <li>▪ Cyan</li> <li>▪ Red</li> <li>▪ Magenta</li> <li>▪ Brown</li> <li>▪ White</li> <li>▪ Gray</li> <li>▪ Light Blue</li> <li>▪ Light Green</li> <li>▪ Light Cyan</li> <li>▪ Light Red</li> <li>▪ Light Magenta</li> <li>▪ Yellow</li> <li>▪ Bright White</li> </ul>	[Gray]	
Background Color:	<ul style="list-style-type: none"> <li>▪ Black</li> <li>▪ Blue</li> <li>▪ Green</li> <li>▪ Cyan</li> <li>▪ Red</li> <li>▪ Magenta</li> <li>▪ Brown</li> <li>▪ White</li> <li>▪ Gray</li> <li>▪ Light Blue</li> <li>▪ Light Green</li> <li>▪ Light Cyan</li> <li>▪ Light Red</li> <li>▪ Light Magenta</li> <li>▪ Yellow</li> <li>▪ Bright White</li> </ul>	[Black]	

## Security Chip Setting Submenu of the Security Menu

The Security Chip Setting Security submenu is for configuring security chip features.

PhoenixBIOS Setup Utility	
Security	
Hard Disk Security	Item Specific Help
Security Chip: <b>[Enabled]</b> Clear Security Chip <b>[Enter]</b>  Security Chip State: <b>Enabled</b> <b>Activated</b>	Select Security Chip enabled or disabled.  * A reboot is required after exit to configure Security Chip correctly. Clear Security Chip becomes selectable after the reboot.
F1 Help    ↑↓ Select Item    -/Space Change Values    F9 Setup Defaults ESC Exit   ← Select Menu   Enter Select ► Sub-Menu   F10 Save and Exit	

Figure 15. Table 16: Security Chip Setting Submenu

**Table 16: Fields, Options, and Defaults for the Security Chip Setting Submenu of the Security Menu**

**Note:** The fields on this submenu cannot be changed unless the Supervisor Password is set.

Menu Field	Options	Default	Description
Security Chip:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> </ul>	[Enabled]	Allows you to enable or disable the Security Chip. When disabled, the following field does not appear.
Clear Security Chip	—	[Enter]	Allows you to clear the security chip. Note that if you clear the security chip, you will not be able to access data that has already been encrypted.
Security Chip State:	—	Enabled Activated	Display only. Indicates the current state of the security chip.

## BOOT MENU - SELECTING THE OPERATING SYSTEM SOURCE

The Boot Menu is used to select the order in which the BIOS searches sources for the operating system. Follow the instructions for Navigating Through the Setup Utility to make any changes. The tables show the names of the menu fields for the Boot menu and its submenu, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

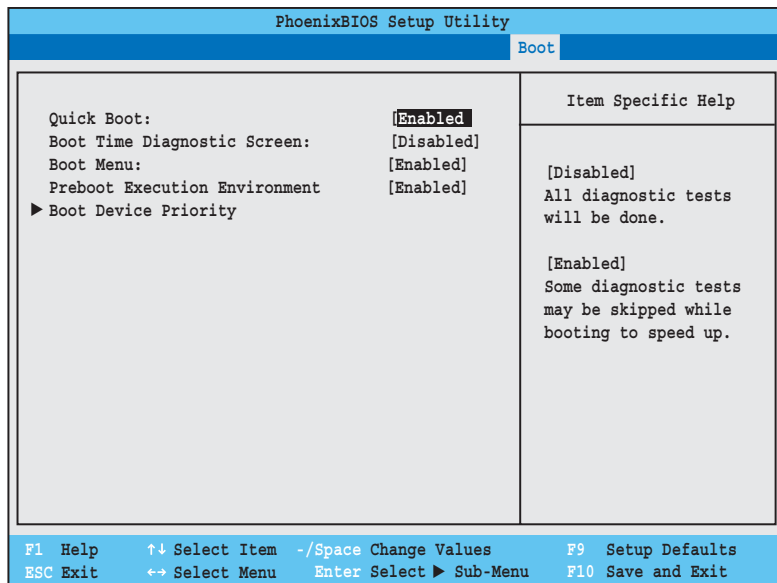


Figure 16. Boot Menu

Table 16: Fields, Options and Defaults for the Boot Menu

Menu Field	Options	Default	Description
QuickBoot:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> </ul>	[Enabled]	Turns on and off booting with a truncated set of Power On Self Test. (Fewer tests mean faster turn on.)
Boot-time Diagnostic Screen:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> </ul>	[Disabled]	Turns on and off display of test results instead of Fujitsu logo screen during Power On Self Test.
Boot Menu:	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> </ul>	[Enabled]	This field is not active unless the Supervisor's Password has been set. When disabled, access to the Boot Menu with the [F12] key is disabled. When enabled, the Boot Menu is enabled and the [F12] key will allow you to display it.
Preboot Execution Environment	<ul style="list-style-type: none"> <li>▪ Disabled</li> <li>▪ Enabled</li> </ul>	Enabled]	Turns off and on the preboot execution environment feature.
Boot Device Priority	<ul style="list-style-type: none"> <li>▪ Selects Boot Device Priority submenu</li> </ul>	—	This menu allows setting up the source for the operating system.



## Boot Device Priority Submenu of the Boot Menu

The Boot Device Priority submenu is for setting the order of checking of sources for the operating system.

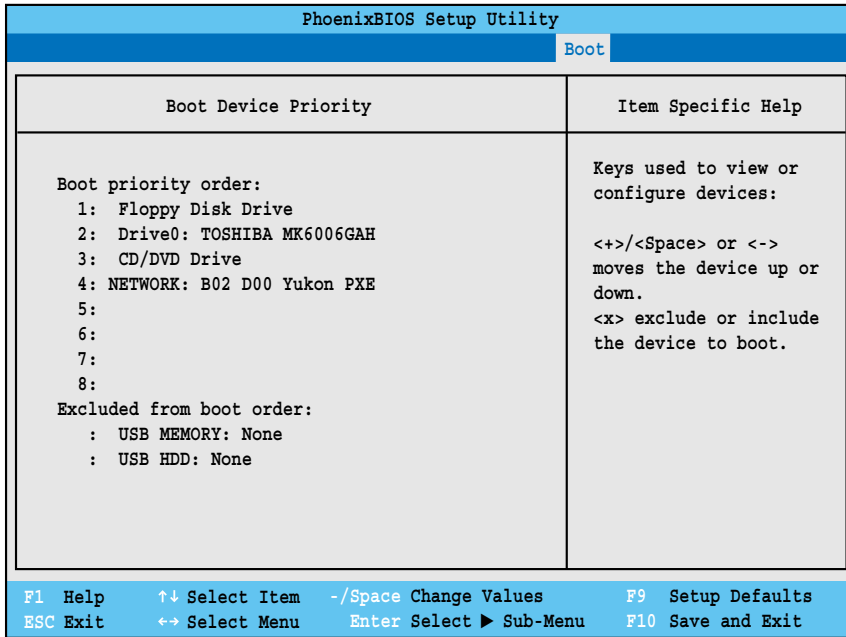


Figure 17. Boot Device Priority Submenu

Table 17: Fields, Options and Defaults for the Boot Device Priority Submenu of the Boot Menu

Menu Field	Description
Boot priority order: 1: Floppy Disk Drive 2: Drive0: 3: CD/DVD Drive 4: NETWORK: 5: 6: 7: 8: Excluded from boot order: : USB MEMORY: : USB HDD:	<p>The boot selections determine the order in which the BIOS searches for the operating system during a startup sequence. To change the order, highlight one source by using the [up] or [down] cursor keys and then press the [+] or [-] key to change the order number. Tapping [x] removes from the list a device that is not installed. Tapping [x] on an item in the Excluded list adds the device to the Boot priority list. Be sure to save your changed order when you exit the BIOS setup utility.</p> <p>NOTE: Be aware that if you use the CD-ROM drive as the first boot device, certain files may be overwritten, depending upon your operating environment.</p>

## Exiting from Boot Menu

When you have finished setting the boot parameters with the Boot menu, you can either exit from the setup utility or move to another menu. If you wish to exit from the setup utility press the [Esc] key to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

## INFO MENU - DISPLAYS BASIC SYSTEM INFORMATION

The Info menu is a display-only screen that provides the configuration information for your notebook.

The following table shows the names of the menu fields for the Info menu and the information displayed in those fields. These fields are for information purposes only, and are not editable.



The information displayed on this screen is variable according to the unit you purchased.

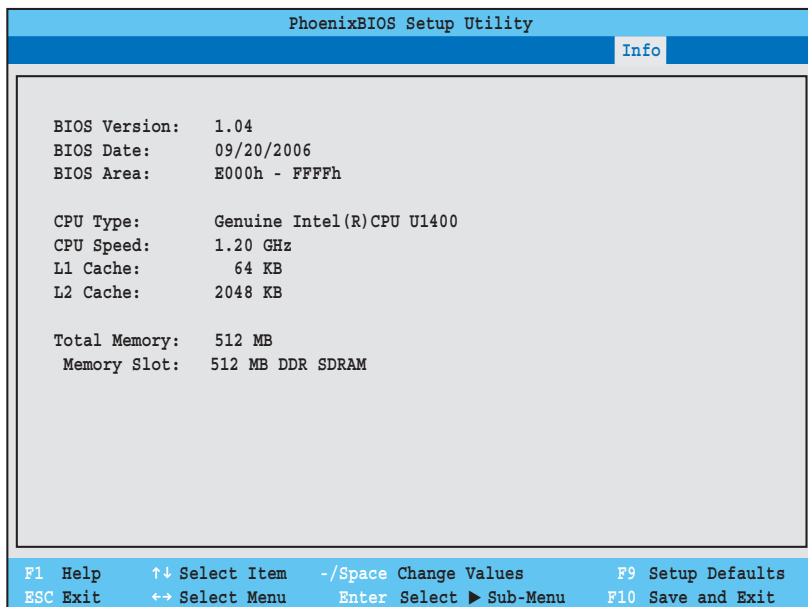


Figure 18. Info Menu

Table 18: Fields, Options and Defaults for the Info Menu

Menu Field	Default	Menu Field	Default
BIOS Version:	1.xx	L1 Cache:	64 KB
BIOS Date:	mm/dd/yyyy	L2 Cache:	2048 KB
BIOS Area:	E000h – FFFFh	Total Memory:	512 MB
CPU Type:	Genuine Intel(R) CPU U1400	Memory Slot:	512 MB DDR SDRAM
CPU Speed:	1.20 GHz		

## EXIT MENU - LEAVING THE SETUP UTILITY

The Exit Menu is used to leave the setup utility. Follow the instructions for [Navigating through the Setup Utility](#) to make any changes. The table shows the names of the menu fields for the Exit menu and a description of the field's function and any special information needed to help understand the field's use.

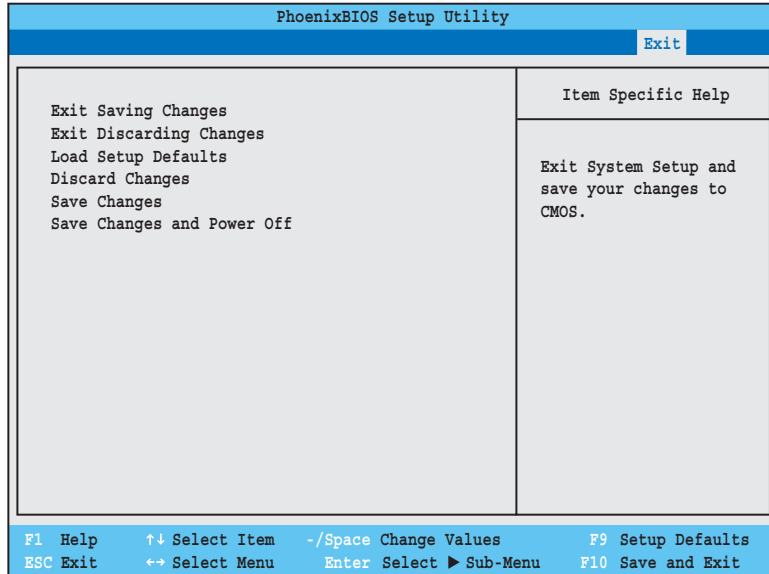


Figure 19. Exit Menu

Table 19: Fields, Options and Defaults for the Exit Menu

Menu Field	Description
Exit Saving Changes	Exit Saving Changes and Exit will store all the entries on every menu of the setup utility to the BIOS memory and then exit the setup utility. A confirmation message Save Configuration changes and exit now? [Yes] [No] will be displayed.
Exit Discarding Changes	Selecting Exit Discarding Changes and Exit will exit the setup utility immediately without writing to the BIOS memory and without displaying a confirmation screen. When the BIOS recognizes this selection it will load the operating system and begin operation.
Load Setup Defaults	Selecting Load Setup Defaults will load the factory preset default values for all menu fields, then display the message Load default configuration now? [Yes] [No]. When confirmed the setup utility will return to the Exit Menu. To return to another menu follow the directions in the <a href="#">Navigating through the Setup Utility</a> section.
Discard Changes	Selecting Discard Changes will load the previous values in BIOS memory for all menu fields. The message Load previous configuration now? [Yes] [No] will be displayed. When confirmed the setup utility will return to the Exit menu. To return to another menu, follow the directions in the <a href="#">Navigating through the Setup Utility</a> section.
Save Changes	Selecting Save Changes will cause the new settings in all menus to be written to the BIOS memory. The message Save configuration changes now? [Yes] [No] will be displayed. When confirmed, the setup utility will return to the Exit menu. To return to another menu, follow the directions in the <a href="#">Navigating through the Setup Utility</a> section.
Save Changes and Power Off	Selecting Save Changes and Power Off will cause the new settings in all menus to be written to the BIOS memory, then power the system off. The message Save configuration changes now and power off? [Yes] [No] will be displayed. When confirmed, the setup utility shut down the system.