FUJITSU

Fujitsu LifeBook

C Series

BIOS Guide

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C-6631

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FUJITSU PC CORPORATION

C Series 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:

1. Turn on or restart your notebook.
2. Press the [F2] key 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.

Navigating Through The Setup Utility

The BIOS setup utility consists of seven menus: Main, Advanced, Security, Power, Boot, Info, and Exit. This document explains each menu in turn, including 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: ⬆ ⬇
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 the [Enter] key.
5. To return to a menu from a submenu, press the [Esc] key.
6. To go to the Exit menu from any other menu, press the [Esc] key.

🔖 P O I N T S

▪ Selecting a field causes a help message about that field to be displayed on the right-hand side of the screen.
▪ Pressing the Enter key 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.

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 the 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 too 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.

🔖 P O I N T S

▪ If your notebook emits a series of beeps that sounds like a code and the display is blank, please refer to the Troubleshooting Section. The Troubleshooting Section includes a list of error messages and their meanings.

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

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. *(See Navigating Through The Setup Utility on page 2 for more information.)*

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.

✎ POINT

System Time and System Date can also be set from your operating system without using the setup utility. Use the calendar and time icon on your Windows Control panel or type time or date from the MS-DOS prompt.
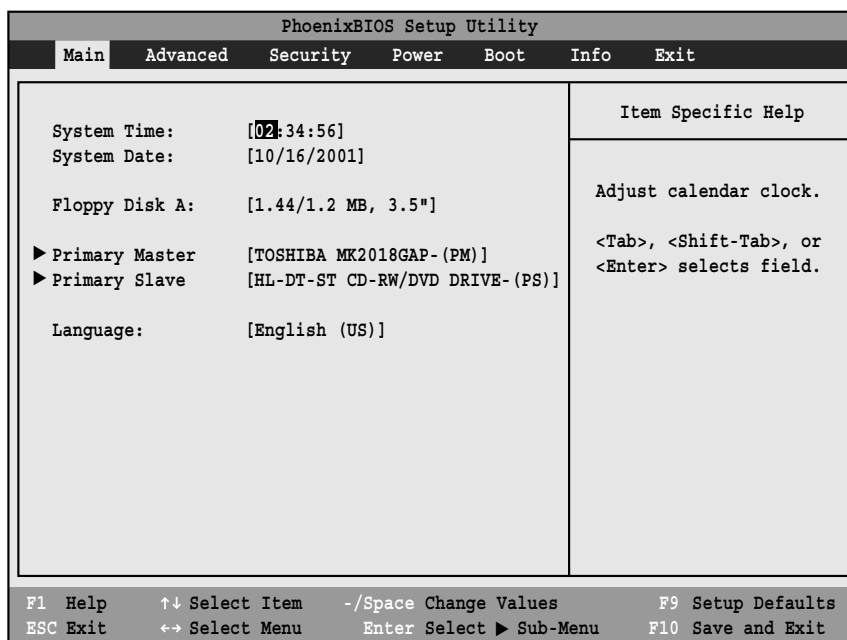
```
                      PhoenixBIOS Setup Utility
        Main    Advanced    Security    Power    Boot    Info    Exit

                                                  ┌─────────────────────────┐
                                                  │    Item Specific Help    │
      System Time:       [02:34:56]               │                         │
      System Date:       [10/16/2001]             ├─────────────────────────┤
                                                  │                         │
      Floppy Disk A:     [1.44/1.2 MB, 3.5"]      │  Adjust calendar clock. │
                                                  │                         │
    ▶ Primary Master     [TOSHIBA MK2018GAP-(PM)] │  <Tab>, <Shift-Tab>, or │
    ▶ Primary Slave      [HL-DT-ST CD-RW/DVD DRIVE-(PS)]  <Enter> selects field. │
                                                  │                         │
      Language:          [English (US)]           │                         │
                                                  │                         │
                                                  │                         │
                                                  │                         │
                                                  │                         │
                                                  │                         │
                                                  │                         │
                                                  └─────────────────────────┘

    F1  Help       ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
    ESC Exit       ←→ Select Menu       Enter Select ▶ Sub-Menu   F10 Save and Exit
```

Figure 1. Main Menu

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

Note that the parameters listed below may differ, as determined by your system configuration.

Menu Field	Options	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: 10/16/2001. 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

Note that the parameters listed below may differ, as determined by your system configuration.

Menu Field	Options	Default	Description
Floppy Disk A:	▪ Disabled ▪ [1.44/1.2 MB 3.5"]	[1.44/1.2 MB 3.5"]	Enables or disables a floppy disk drive.
Primary Master:	Selects Primary Master submenu	The product # of the Hard Drive	Display the type of device on this ATA/ATAPI interface, if there is one. Pressing the Enter key selects the Primary Master submenu allowing additional device configuration options for this interface.
Primary Slave:	Selects Secondary Master submenu	The product number of the CD-ROM	Display the type of device on this ATA/ATAPI interface, if there is one. Pressing the Enter key selects the Secondary Master submenu allowing additional device configuration options for this interface
Language:	▪ English (US) ▪ Japanese (JP)	[English (US)]	The default setting differs between the US/European and the Japanese model. Selects the display language for the BIOS.

Primary Master Submenu of the Main Menu

The Primary Master submenu identifies what ATA devices are installed.

*Note that actual hard drive label shown may vary. Depending on the drive type, information such as cylinders, heads and sectors may also be displayed.
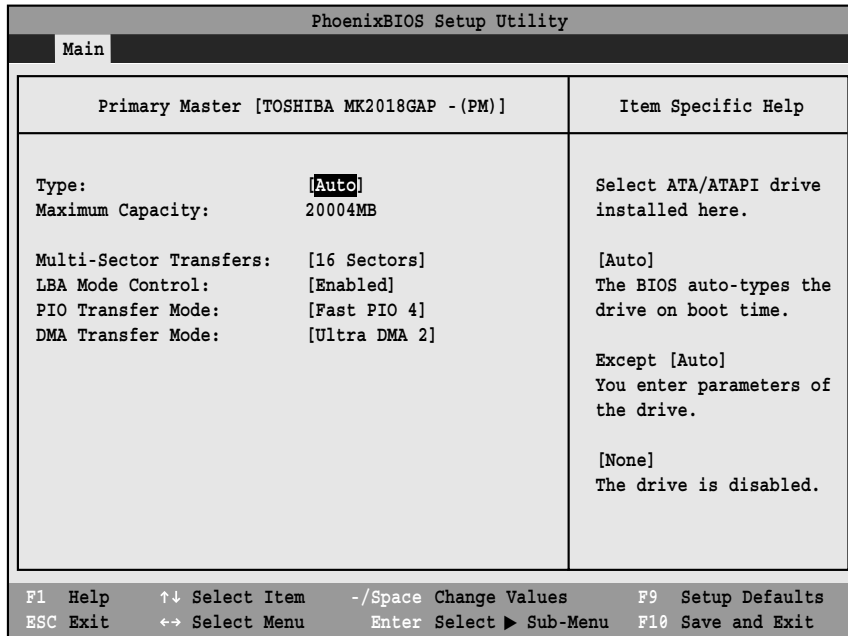
```
                    PhoenixBIOS Setup Utility
   ┌──────┐
   │ Main │
   └──────┘

        Primary Master [TOSHIBA MK2018GAP -(PM)]        Item Specific Help


   Type:                    [Auto]                Select ATA/ATAPI drive
   Maximum Capacity:        20004MB               installed here.

   Multi-Sector Transfers:  [16 Sectors]          [Auto]
   LBA Mode Control:        [Enabled]             The BIOS auto-types the
   PIO Transfer Mode:       [Fast PIO 4]          drive on boot time.
   DMA Transfer Mode:       [Ultra DMA 2]
                                                  Except [Auto]
                                                  You enter parameters of
                                                  the drive.

                                                  [None]
                                                  The drive is disabled.




   F1  Help      ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
   ESC Exit      ↔  Select Menu       Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 2. Primary Master Submenu

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

Menu Field	Options	Default	Description
Type:	▫ Auto ▫ None ▫ CD-ROM ▫ Hard Disk	[Auto]	Selects the ATA/ATAPI 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. Select CD-ROM if a CD-ROM drive is installed at this connection. If Hard Disk is selected, you must specify the number of Cylinders, Heads, and Sectors for the drive.
Cylinders:	▫ A number between 0 and 65,535	——	This item appears only when Hard Disk is selected. When Hard Disk is selected, you can change the value. This field is changed by incrementing (pressing the [Spacebar]) or by typing in the number.
Heads:	▫ A number between 1 and 16	——	This item appears only when Hard Disk is selected. When Hard Disk is selected, you can change the value. This field is changed by incrementing (pressing the [Spacebar]) or by typing in the number.
Sectors:	▫ A number between 0 and 63	——	This item appears only when Hard Disk is selected. When Hard Disk is selected, you can change the value. This field is changed by incrementing (pressing the [Spacebar]) or by typing in the number.

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

Menu Field	Options	Default	Description
Maximum Capacity:	▫ Display only	——	Displays the maximum capacity of the drive calculated from the parameters of the hard disk when Hard Disk is selected.
Multi-Sector Transfers:	▫ Disabled ▫ 2 Sectors ▫ 4 Sectors ▫ 8 Sectors ▫ 16 Sectors ▫ 32 Sectors ▫ 64 Sectors ▫ 128 Sectors	[16 Sectors]	This option cannot be changed when Auto is selected. Specify the number of sectors per block for multiple sector transfer. MAX refers to the size the disk returns when required.
LBA Mode Control:	▫ Disabled ▫ Enabled	[Enabled]	Enables or disables logical Block Addressing in place of Cylinder, Head, Sector addressing. This option cannot be changed when Auto is selected.
PIO Transfer Mode:	▫ Standard ▫ Fast PIO 1 ▫ Fast PIO 2 ▫ Fast PIO 3 ▫ Fast PIO 4	[Fast PIO 4]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected. Multi-word DMA is automatically set to mode 1 for Fast PIO 1, Fast PIO 2, Fast PIO 3, and set to mode 2 for Fast PIO 4 / DMA.
DMA Transfer Mode:	▫ Disabled ▫ Multiword DMA 1 ▫ Multiword DMA 2 ▫ Ultra DMA 0 ▫ Ultra DMA 1 ▫ Ultra DMA 2	[Ultra DMA 2]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected.

🔥 **C A U T I O N**

A bootable CD-ROM may have either a floppy disk format or a hard drive format. When the bootable CD-ROM is used, the drive allocations change automatically without changing the BIOS setup. If a floppy disk format CD-ROM is used, the CD-ROM becomes Drive A. The CD-ROM will only take Drive C: (hard drive format) if the internal hard drive is not present or is disabled. The bootable CD-ROM can never use a C: designation if a formatted internal hard drive is present, since the C: designator is always reserved for the internal hard drive. The boot sequence ignores the new drive designations; however, your application software will use the new designations.

🔥 **C A U T I O N**

Be careful of the operating environment when booting from a CD-ROM or you may overwrite files by mistake.

Primary Slave Submenu of the Main Menu

The Primary Slave submenu is for the internal CD-ROM drive. The drive type is displayed on this menu as well as the Main menu. Your notebook auto-senses the characteristics of the internal CD-ROM Drive installed. You

will not need to modify these settings, they are displayed for your reference.

Note that actual drive labels shown may vary.

```
                      PhoenixBIOS Setup Utility

        Main

    Primary Slave [HL-DT-ST CD-RW/DVD DRIVE -(PS)]          Item Specific Help


  Type:                    [Auto]                    Select ATA/ATAPI drive
                                                     installed here.
  Multi-Sector Transfers:  [Disabled]
  LBA Mode Control:        [Disabled]                [Auto]
  PIO Transfer Mode:       [Standard]                The BIOS auto-types the
  DMA Transfer Mode:       [Disabled]                drive on boot time.

                                                     Except [Auto]
                                                     You enter parameters of
                                                     the drive.

                                                     [None]
                                                     The drive is disabled.




  F1   Help      ↑↓ Select Item    -/Space Change Values    F9   Setup Defaults
  ESC  Exit      ←→ Select Menu      Enter Select ▶ Sub-Menu F10  Save and Exit
```

Figure 3. Primary Slave Submenu

Table 3: Fields, Options and Defaults for the Primary Slave Submenu of the Main Menu

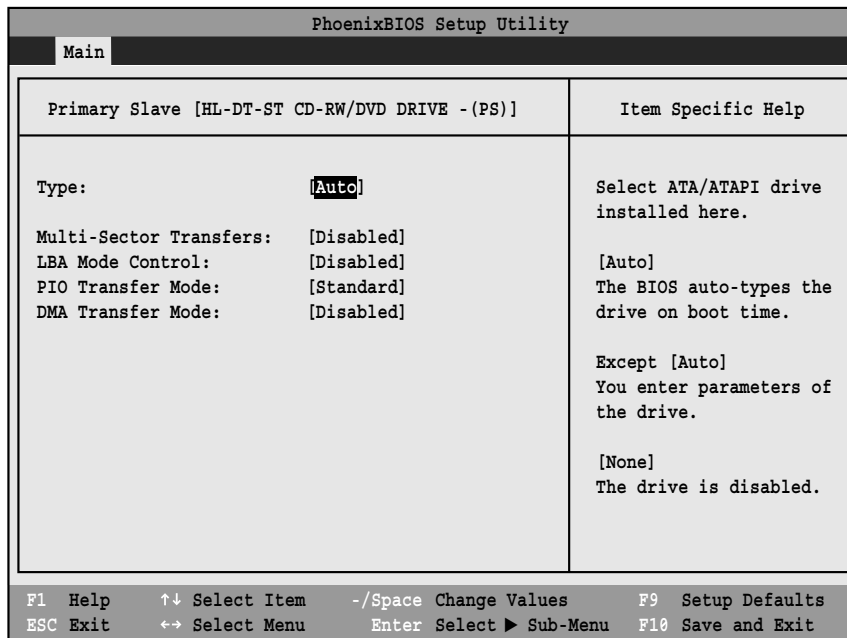| Menu Field	Options	Default	Description
Type:	▫ Auto ▫ None ▫ CD-ROM ▫ Hard Disk	[Auto]	Selects the ATA/ATAPI device type. Select Auto to have the type automatically identified by the BIOS at POST. If None is selected, all of the following Set-up items do not appear. Select CD-ROM or Hard Disk for appropriate drive type installed at this connection.
Multi-Sector Transfers:	▫ Disabled ▫ 2 Sectors ▫ 4 Sectors ▫ 8 Sectors ▫ 16 Sectors ▫ 32 Sectors ▫ 64 Sectors ▫ 128 Sectors	[Disabled]	This option cannot be changed when Auto is selected. Specify the number of sectors per block for multiple sector transfer.
LBA Mode Control:	▫ Disabled ▫ Enabled	[Disabled]	Enables or disables Logical Block Addressing in place of Cylinder, Head, Sector addressing. This option cannot be changed when Auto is selected.

Table 3: Fields, Options and Defaults for the Primary Slave Submenu of the Main Menu

Menu Field	Options	Default	Description
PIO Transfer Mode:	n Standard n Fast PIO 1 n Fast PIO 2 n Fast PIO 3 n Fast PIO 4	[Standard]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected. Multi-word DMA is automatically set to mode 1 for Fast PIO 1, Fast PIO 2, Fast PIO 3, and set to mode 2 for Fast PIO 4/DMA.
DMA Transfer Mode:	n Disabled n Multiword DMA 1 n Multiword DMA 2 n Ultra DMA 0 n Ultra DMA 1 n Ultra DMA 2	[Disabled]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected.

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:
▫ Enable or disable support for Plug & Play operating systems.
▫ Set the I/O addresses for the serial and parallel ports.
▫ Set the communication mode for the parallel and infrared ports.
▫ Set the features of the keyboard/mouse.
▫ Select between the display panel and an external CRT display.
▫ Enable or disable compensation for your display.
▫ Configure PCI devices in your system.
▫ Configure CPU features.
▫ Configure USB features.
▫ Configure DMI Event Logging.

Follow the instructions for Navigating Through the Setup Utility to make any changes.
(See Navigating Through The Setup Utility on page 2 for more information.)

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.

Note that not all fields appear in all configurations; the fields that appear are dependent upon the system CPU.

```
                     PhoenixBIOS Setup Utility
      Main    Advanced   Security   Power    Boot    Info    Exit
  ┌────────────────────────────────────────┬──────────────────────────┐
  │                                        │     Item Specific Help   │
  │                                        │                          │
  │                                        ├──────────────────────────┤
  │   Plug & Play O/S:            [No]     │  [No]                    │
  │   Protected Device Configurations: [No]│  The BIOS configures     │
  │                                        │  also non-boot devices.  │
  │ ▶ Serial/Parallel Port Configurations  │  Select if you are using │
  │ ▶ Keyboard/Mouse Features              │  a non-Plug & Play OS or │
  │ ▶ Video Features                       │  a non-ACPI OS.          │
  │ ▶ Internal Device Configurations       │                          │
  │ ▶ PCI Configuration                    │  [Yes]                   │
  │ ▶ CPU Features                         │  The BIOS configures     │
  │ ▶ USB Features                         │  only boot devices.      │
  │                                        │                          │
  │ ▶ Event Logging                        │                          │
  │                                        │                          │
  │                                        │                          │
  │                                        │                          │
  ├────────────────────────────────────────┴──────────────────────────┤
  │ F1  Help      ↑↓ Select Item   -/Space Change Values   F9  Setup Defaults │
  │ ESC Exit      ←→ Select Menu      Enter Select ▶ Sub-Menu  F10 Save and Exit │
  └────────────────────────────────────────────────────────────────────┘
```
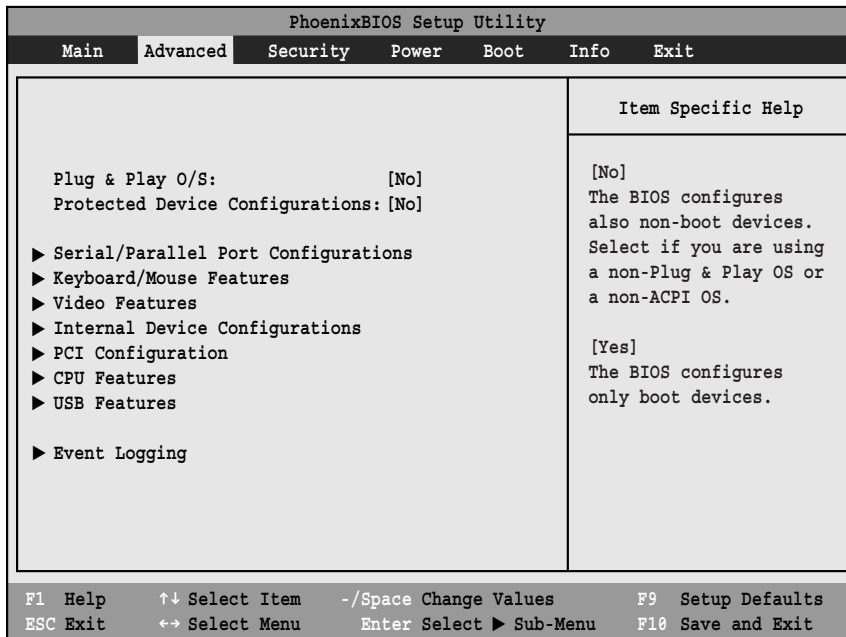
Figure 4. Advanced Menu

Table 4: Fields, Options and Defaults for the Advanced Menu

Menu Field	Options	Default	Description
Plug & Play O/S:	▪ No ▪ Yes	[No]	Select **Yes** if you are using a Plug & Play capable operating system. Select **No** if you need the BIOS to configure non-boot devices.
Protected Device Configurations:	▪ No ▪ Yes	[No]	**No:** allows Plug & Play operating system to change device system settings. **Yes:** prevents a Plug & Play operating system from changing system settings.
Serial/Parallel Port Configurations	——	——	When selected, opens the Serial/Parallel Port Configurations submenu which allows the user to modify settings for serial, infrared and parallel ports.
Keyboard/Mouse Features	——	——	When selected, opens the Keyboard/Mouse Features submenu, which allows setting external and internal keyboard and mouse parameters.
Video Features	——	——	When selected, opens the Video Features submenu, which allows setting of the display parameters, including routing of video signals to different displays.
Internal Device Configurations	——	——	When selected, opens the Internal Device Configuration submenu, which allows enabling or disabling the Floppy Disk and IDE Controllers.
PCI Configurations	——	——	When selected, opens additional menus to configure PCI devices.
CPU Features	——	——	When selected, opens the CPU Features submenu, which allows enabling or disabling of the processor serial number feature.
USB Features	——	——	When selected, opens the USB Features submenu, which allows enabling or disabling of Legacy Floppy Emulation.
Event Logging	——	——	When selected, opens the event logging submenu.

Serial/Parallel Port Configuration Submenu of the Advanced Menu

The Serial/Parallel Port Configuration submenu
provides the ability to set the I/O addresses and
interrupt levels for the serial, infrared, and parallel
ports of your notebook.

✍ CAUTION

I/O addresses, DMA channels, and Interrupt levels can
be entered in various ways, including via the BIOS setup
utility, the control software for the I/O device, or the
hardware. If any two ports or devices, serial or parallel,
have the same I/O address assigned, your notebook will
not function normally. Please keep a record of original
settings before making any changes in the event that a
restoration is required. See your hardware and software
documentation as well as the setup utility to determine
settings, limitations, etc.

📌 POINTS

▫ To prevent IRQ and address conflicts, avoid changing
the default settings. If you must change the settings,
you can call 1-800-8FUJITSU for technical assistance.

▫ The BIOS will warn you of a resource conflict by plac-
ing a yellow asterisk next to each device that is in
conflict.

▫ All I/O addresses in Table 5 are in hexadecimal.

```
                     PhoenixBIOS Setup Utility
              ┌──────────┐
              │ Advanced │
              └──────────┘

        Serial/Parallel Port Configurations         Item Specific Help

    Infrared Port:            [Enabled]            [Disabled]
       Mode:                  [FIR]                The port is disabled.
       I/O Address:           [2E8 - 2EF]
       Interrupt:             [IRQ 3]              [Enabled]
       I/O Address:           [118-11F]            The port is enabled
       DMA Channel:           [DMA 3]              with user configuration.
    Parallel Port:            [Enabled]
       Mode:                  [Bi-directional]     [Auto]
       I/O Address:           [378-37F]            The port is configured
       Interrupt:             [IRQ 7]              depending on 'Plug &
                                                   Play OS' setting.




    F1  Help      ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
    ESC Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 5. Serial/Parallel Port Configuration Submenu

**Table 5: Fields, Options and Defaults for the
Port Configuration Submenu of the Advanced Menu**

Menu Field	Options	Default	Description
Infrared Port:	▫ Disabled ▫ Enabled ▫ Auto	[Enabled]	Configures the infrared port using either no configuration (Disabled), a user defined configuration (Enabled), or by allowing the BIOS or OS to choose the configuration (Auto).
Mode:	▫ IrDA ▫ FIR	[FIR]	When the infrared port is enabled this option is available allowing the user to set the mode for the infrared port.
I/O Address:	▫ 3F8 - 3FF ▫ 2F8 - 2FF ▫ 3E8 - 3EF ▫ 2E8 - 2EF	[2E8 - 2EF]	Allows user to set the infrared port I/O address when the infrared port is Enabled.
Interrupt:	▫ IRQ 3 ▫ IRQ 4 ▫ IRQ 5	[IRQ 3]	Allows user to set the infrared port interrupt when the infrared port is Enabled.
I/O address:	▫ 100 - 107 ▫ 108 - 10F ▫ 110 - 117 ▫ 118 - 11F	[118 - 11F]	Allows user to set the infrared port I/O address when the infrared port is Enabled.
DMA Channel:	▫ DMA 1 ▫ DMA 3	[DMA 3]	Allows user to set the infrared port DMA Channel when the infrared port is Enabled.
Parallel Port:	▫ Disabled ▫ Enabled ▫ Auto	[Enabled]	Configures the parallel port using either no configuration (Disabled), a user defined configuration (Enabled), or by allowing the BIOS or OS to choose the configuration (Auto).
Mode:	▫ Output Only ▫ Bi-directional ▫ ECP	[Bi-directional]	When the parallel port is enabled this option is available allowing the user to set the mode for the parallel port. Bi-directional allows two-way transfer of information between your notebook and a connected parallel device. Output Only (Half Duplex) allows information to be transferred in only one direction, from your notebook to the printer or similar device. ECP Mode allows communication with the ECP class of parallel I/O devices.
I/O address:	▫ 378 - 37F ▫ 278 - 27F ▫ 3BC - 3BF	[378 - 37F]	Allows user to set the parallel port base I/O address when the parallel port is Enabled.
Interrupt:	▫ IRQ 5 ▫ IRQ 7	[IRQ 7]	Allows user to set the parallel port interrupt when the parallel port is Enabled.

Keyboard/Mouse Features Submenu of the Advanced Menu

The Keyboard/Mouse Features submenu is for setting
the parameters of the integrated and external mouse
and keyboard.

```
                    PhoenixBIOS Setup Utility
          Advanced

              Keyboard/Mouse Features                    Item Specific Help

    Numlock:                     [Off]                 Select power-on state
    Internal Pointing Device:    [Manual Setting]      for Numlock.

    F1  Help      ↑↓ Select Item    -/Space Change Values    F9   Setup Defaults
    ESC Exit      ←→ Select Menu     Enter  Select ▶ Sub-Menu  F10  Save and Exit
```
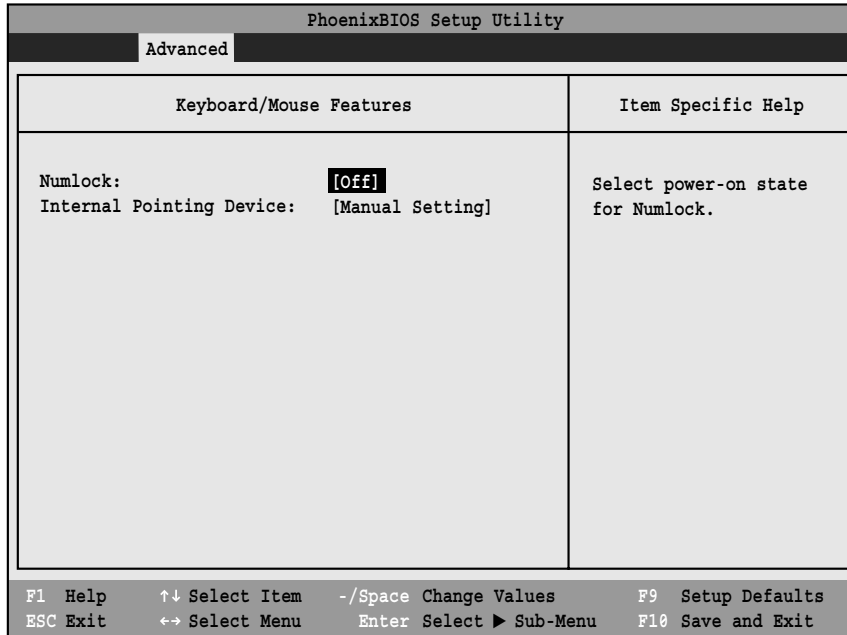
Figure 6. Keyboard/Mouse Features Submenu

Table 6: Fields, Options and Defaults for the Keyboard/Mouse Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Numlock:	▫ On ▫ Off	[Off]	Sets the NumLock function state when the computer completes booting.
Internal Pointing Device:	▫ Manual Setting ▫ Always Enabled ▫ Always Disabled	[Manual Setting]	Sets the device controlling the mouse cursor on the screen. Auto Disabled disables the internal pointing device when an external pointing device is connected to the PS/2 port. Manual Setting allows the device to be enabled or disabled by a Hot Key. Always Enabled makes the pointing device always enabled whether there is an external mouse or not. Always Disabled makes the pointing device always disabled whether there is an external mouse or not.

Video Features Submenu of the Advanced Menu

The Video Features Submenu is for setting the display parameters.

```
                    PhoenixBIOS Setup Utility
            Advanced
┌─────────────────────────────────────────┬──────────────────────────┐
│            Video Features                │    Item Specific Help    │
│                                          │                          │
│   Display:        [Internal Flat Panel]  │  Select display terminal.│
│   Compensation:   [Disabled]             │                          │
│                                          │                          │
│   TV Output:      [Disabled]             │                          │
│   TV Standard:    [NTSC]                 │                          │
│                                          │                          │
│                                          │                          │
│                                          │                          │
│                                          │                          │
│                                          │                          │
│                                          │                          │
│                                          │                          │
│                                          │                          │
├──────────────────────────────────────────┴─────────────────────────┤
│ F1  Help      ↑↓ Select Item   -/Space Change Values   F9  Setup Defaults │
│ ESC Exit      ←→ Select Menu       Enter Select ▶ Sub-Menu  F10 Save and Exit │
└─────────────────────────────────────────────────────────────────────┘
```
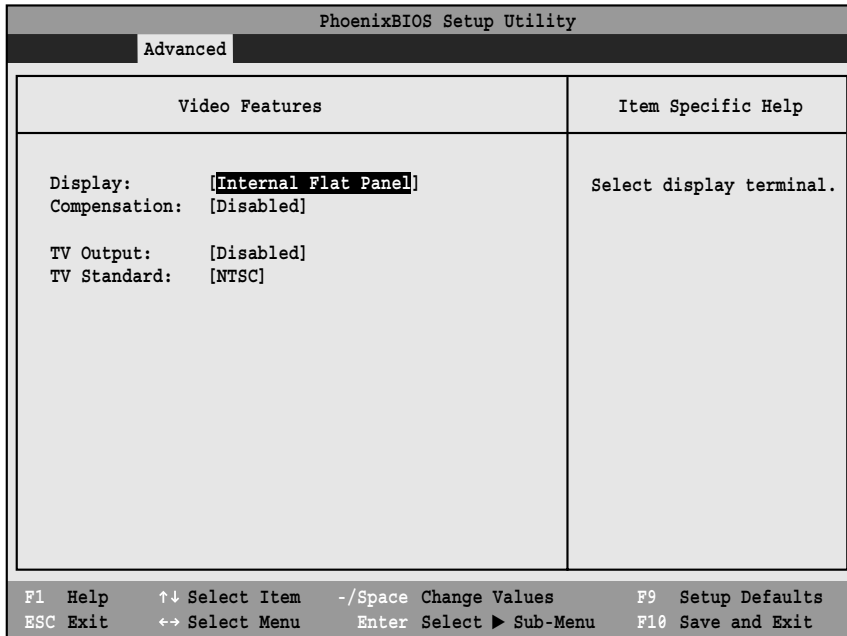
Figure 7. Video Features Submenu

Table 7: Fields, Options and Defaults for the Video Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Display:	▪ Internal Flat Panel ▪ External ▪ Simultaneous	[Internal Flat Panel]	Selects where the video signal will be routed.
Compensation:	▪ Disabled ▪ Enabled	[Disabled]	Enables or disables compensation which controls spacing on the display. When enabled, displays with less than pixel resolution 1024 x 768 will still cover the entire screen.
TV Output:	▪ Disabled ▪ Enabled	[Disabled]	Allows you to enable or disable TV output.
TV Standard:	▪ NTSC ▪ PAL	[NTSC]	Allows you to select a TV standard.

Internal Device Configuration Submenu of the Advanced Menu

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

```
                    PhoenixBIOS Setup Utility
      ┌──────────────┐
      │  Advanced    │
──────┴──────────────┴───────────────────────────────────────────
┌──────────────────────────────────────────┬─────────────────────┐
│        Internal Device Configurations     │  Item Specific Help │
├──────────────────────────────────────────┼─────────────────────┤
│                                           │                     │
│   Floppy Disk Controller: [Enabled]       │  [Disabled]         │
│   IDE Controller:         [Enabled]       │  Floppy disk drive is│
│                                           │  disabled.          │
│                                           │                     │
│                                           │  [Enabled]          │
│                                           │  Floppy disk drive is│
│                                           │  enabled.           │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
├──────────────────────────────────────────┴─────────────────────┤
│ F1  Help    ↑↓ Select Item   -/Space Change Values  F9  Setup Defaults │
│ ESC Exit    ←→ Select Menu      Enter Select ▶ Sub-Menu F10 Save and Exit │
└─────────────────────────────────────────────────────────────────┘
```

Figure 8. Internal Device Configuration Submenu

Table 8: Fields, Options and Defaults for the Internal Device Configuration Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Floppy Disk Controller:	▫ Disabled ▫ Enabled	[Enabled]	Enables or disables the Floppy Disk Drive.
IDE Controller:	▫ Disabled ▫ Enabled	[Enabled]	Enables or disables IDE controller.

PCI Configuration Submenu of the Advanced Menu

The PCI Configuration submenu allows the user to
reserve specific interrupts (IRQs) for legacy ISA devices,
and to enable or disable built in PCI device modules.

```
                     PhoenixBIOS Setup Utility
            Advanced

┌─────────────────────────────────────────┬───────────────────────┐
│            PCI Configuration             │   Item Specific Help  │
├─────────────────────────────────────────┼───────────────────────┤
│  ▶ IRQ Reservation                       │                       │
│                                          │   Reserve specific IRQs│
│                                          │   for use by legacy ISA│
│                                          │   devices.            │
│                                          │                       │
│                                          │                       │
│                                          │                       │
│                                          │                       │
│                                          │                       │
│                                          │                       │
│                                          │                       │
│                                          │                       │
├─────────────────────────────────────────┴───────────────────────┤
│  F1   Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults │
│  ESC  Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu F10 Save and Exit │
└──────────────────────────────────────────────────────────────────┘
```
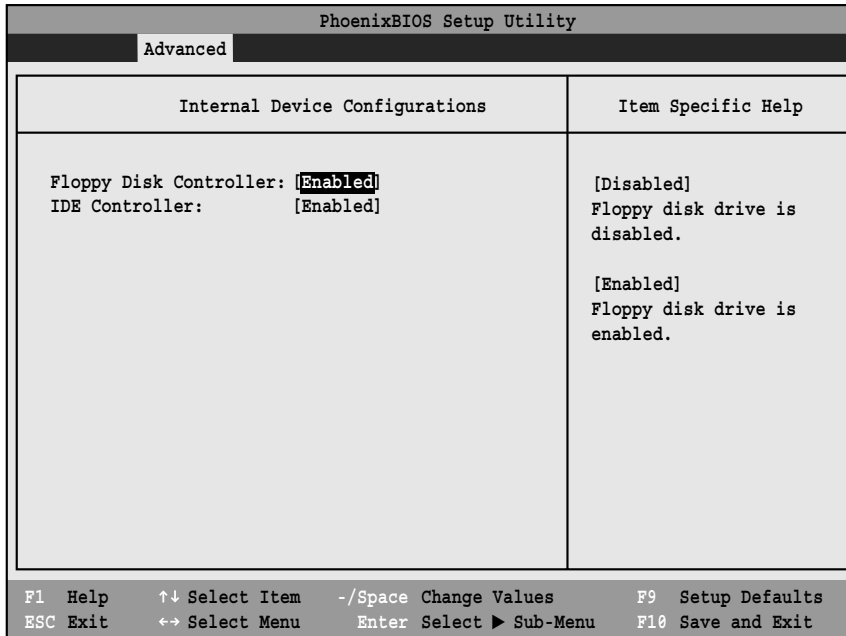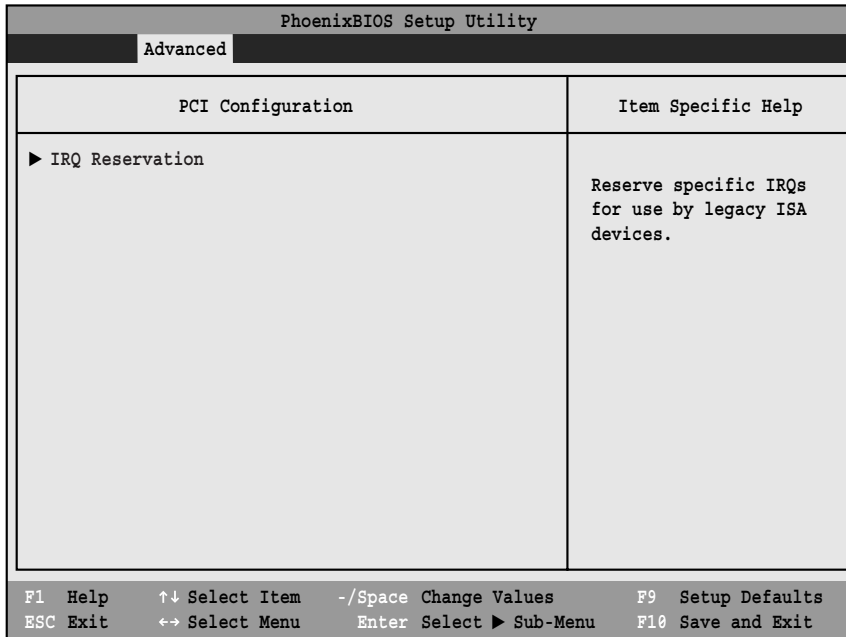
Figure 9. PCI Configuration Submenu

Table 9: Fields, Options and Defaults for the PCI Configuration Submenu of the Advanced Menu

Menu Field	Options	Default	Description
IRQ Reservation	——	——	Reserve specific IRQs for use by legacy ISA devices.

IRQ Reservation Submenu of the PCI Configuration Submenu

The IRQ Reservation submenu allows the user to mark various IRQs as reserved for use by legacy ISA devices. When an IRQ is reserved, the BIOS does not use it for embedded PCI or ISA devices.

⚠ CAUTION

Only IRQ's 9, 10, & 11 can be reserved without conflict.

```
                    PhoenixBIOS Setup Utility
          Advanced

            IRQ Reservation                      Item Specific Help

     IRQ 3:      [Available]                  Reserve the specified
     IRQ 4:      [Available]                  IRQ for use by legacy
     IRQ 5:      [Available]                  ISA devices.
     IRQ 7:      [Available]
     IRQ 9:      [Available]
     IRQ 10:     [Available]
     IRQ 11:     [Available]
     IRQ 15:     [Available]

 F1   Help      ↑↓ Select Item   -/Space Change Values    F9   Setup Defaults
 ESC  Exit      ←→ Select Menu     Enter  Select ▶ Sub-Menu  F10  Save and Exit
```

Figure 10. IRQ Reservation Submenu

Table 10: Fields, Options and Defaults for the IRQ Reservation Submenu of the PCI Configuration Submenu of the Advanced Menu

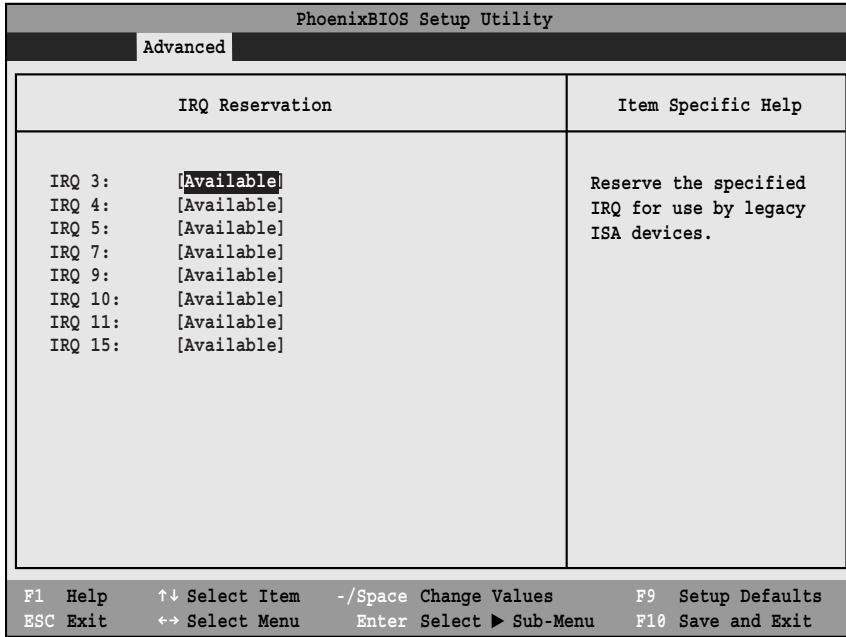| Menu Field	Options	Default	Description
IRQ 3:	▫ Available ▫ Reserved	[Available]	Reserves IRQ 3. If Reserved is selected, the BIOS reserves IRQ 3 for use by legacy ISA devices and does not use it for embedded PCI or ISA devices. IRQ 3 is removed from the IRQ bitmap in the PCI IRQ routing table.
IRQ 4:	▫ Available ▫ Reserved	[Available]	Reserves IRQ 4.
IRQ 5:	▫ Available ▫ Reserved	[Available]	Reserves IRQ 5.
IRQ 7:	▫ Available ▫ Reserved	[Available]	Reserves IRQ 7.

Table 10: Fields, Options and Defaults for the IRQ Reservation Submenu of the PCI Configuration Submenu of the Advanced Menu

Menu Field	Options	Default	Description
IRQ 9:	▪ Available ▪ Reserved	[Available]	Reserves IRQ 9.
IRQ 10:	▪ Available ▪ Reserved	[Available]	Reserves IRQ 10.
IRQ 11:	▪ Available ▪ Reserved	[Available]	Reserves IRQ 11.
IRQ 15:	▪ Available ▪ Reserved	[Available]	Reserves IRQ 15.

CPU Features Submenu of the Advanced Menu

The CPU Features Submenu configures the system processor.

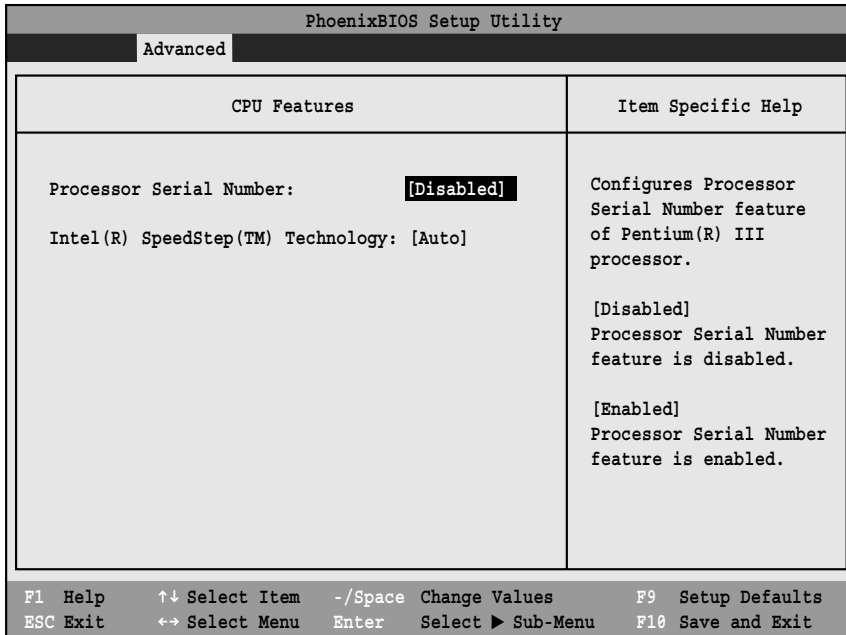Note that this submenu only appears in certain configurations, based upon the system CPU.

```
                    PhoenixBIOS Setup Utility
            Advanced

┌─────────────────────────────────────────┬──────────────────────────┐
│              CPU Features                 │    Item Specific Help    │
│                                           │                          │
│                                           │                          │
│   Processor Serial Number:    [Disabled]  │  Configures Processor    │
│                                           │  Serial Number feature   │
│   Intel(R) SpeedStep(TM) Technology: [Auto]│ of Pentium(R) III       │
│                                           │  processor.              │
│                                           │                          │
│                                           │  [Disabled]              │
│                                           │  Processor Serial Number │
│                                           │  feature is disabled.    │
│                                           │                          │
│                                           │  [Enabled]               │
│                                           │  Processor Serial Number │
│                                           │  feature is enabled.     │
│                                           │                          │
│                                           │                          │
│                                           │                          │
├───────────────────────────────────────────┴──────────────────────────┤
│ F1  Help     ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults │
│ ESC Exit     ←→ Select Menu    Enter  Select ▶ Sub-Menu F10 Save and Exit │
└───────────────────────────────────────────────────────────────────────┘
```

Figure 11. CPU Features Submenu

Menu Field	Options	Default	Description
Processor Serial Number	▪ Enabled ▪ Disabled	[Disabled]	Configures Processor Serial Number feature of Pentium(R) III processor.
Intel(R) SpeedStep(TM) Technology:	• Auto • Max. Perf. • Batt. Opt. • Disabled	[Auto]	When Auto is selected, the CPU speed is determined by the power source used. When Max. Perf. is selected, CPU speed is maximized. When Batt. Opt. is selected, CPU speed is optimized for battery operation. When Disabled is selected, CPU speed is fixed to battery optimized speed.

USB Features Submenu of the Advanced Menu

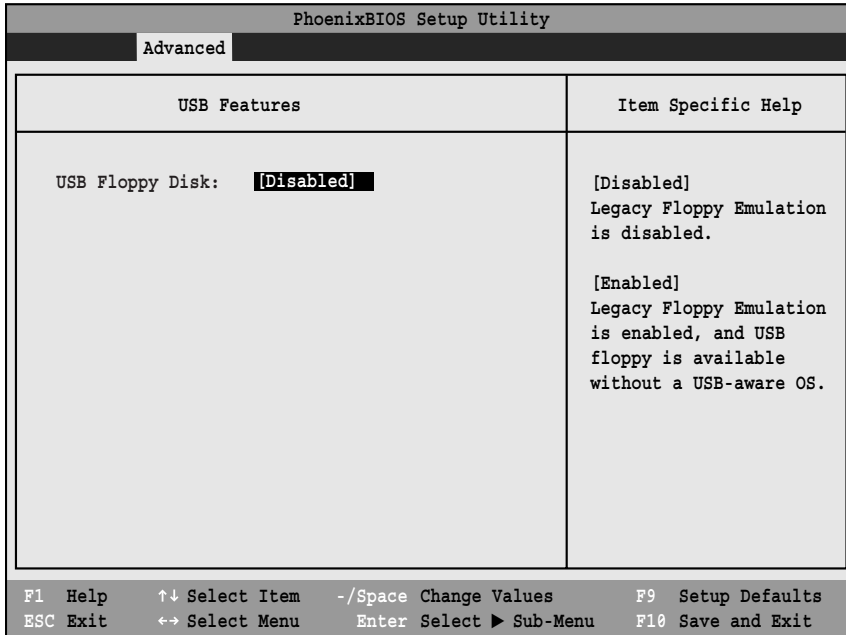The USB Features Submenu configures the system for use with a USB floppy drive.

```
                    PhoenixBIOS Setup Utility
            Advanced

                  USB Features                    Item Specific Help

        USB Floppy Disk:     [Disabled]
                                                [Disabled]
                                                Legacy Floppy Emulation
                                                is disabled.

                                                [Enabled]
                                                Legacy Floppy Emulation
                                                is enabled, and USB
                                                floppy is available
                                                without a USB-aware OS.




  F1   Help       ↑↓ Select Item   -/Space Change Values    F9   Setup Defaults
  ESC  Exit       ←→ Select Menu        Enter Select ▶ Sub-Menu   F10  Save and Exit
```

Figure 12. USB Features Submenu

Table 12: Fields, Options and Defaults for the USB Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
USB Floppy Disk:	▪ Disabled ▪ Enabled	[Disabled]	When Enabled is selected, Legacy Floppy Emulation is enabled and the USB floppy drive and bootable support are available without a USB-aware OS. When Disabled is selected, Legacy Floppy Emulation is disabled.

Event Logging Submenu of the Advanced Menu

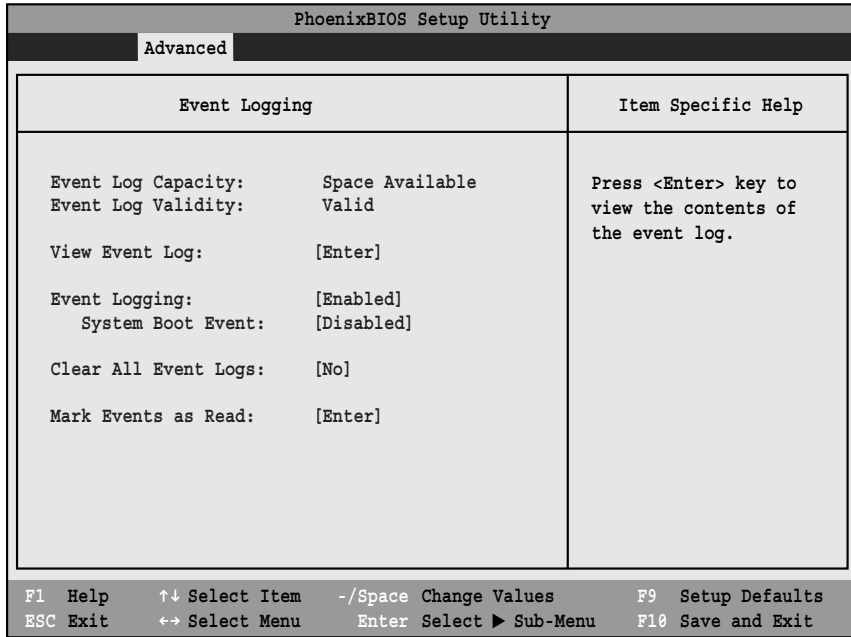The Event Logging Submenu configures event logging features for DMI events.

```
                  PhoenixBIOS Setup Utility
            Advanced

                Event Logging                      Item Specific Help

     Event Log Capacity:      Space Available     Press <Enter> key to
     Event Log Validity:      Valid               view the contents of
                                                  the event log.
     View Event Log:          [Enter]

     Event Logging:           [Enabled]
        System Boot Event:    [Disabled]

     Clear All Event Logs:    [No]

     Mark Events as Read:     [Enter]

  F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults
  ESC Exit      ↔  Select Menu     Enter Select ▶ Sub-Menu F10 Save and Exit
```

Figure 13. Event Logging Submenu

Table 13: 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:	▪ Enter	[Enter]	Allows you to view content of event log
Event Logging:	▪ Disabled ▪ Enabled	[Enabled]	Turns event logging on and off for all DMI events.
System Boot Event:	▪ Disabled ▪ Enabled	[Disabled]	Turns event logging on and off for DMI system boot events.
Clear All Event Logs:	▪ No ▪ Yes	[No]	When set to [Yes] all event logs will be cleared at next boot.
Mark Events as Read:	▪ Enter	[Enter]	Allows you to make all events currently in the event log as having been 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. *(See Navigating Through The Setup Utility on page 2 for more information.)*

The following tables show the names of the menu fields for the Security 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. The default condition is no passwords required and no write protection.

POINT

▫ 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.

▫ Entering a password incorrectly 3 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 the power off and on with the power switch and use the correct password on reboot.

POINTS

▫ 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.

▫ If Password On Resume is Enabled and Password On Boot is Disabled you will not have to type your password upon resuming the system from the Suspend or Save-to-Disk modes. Password On Resume will work only if Password On Boot is enabled.

▫ Boot sector protection must be set to [Normal] to install or upgrade an operating system.
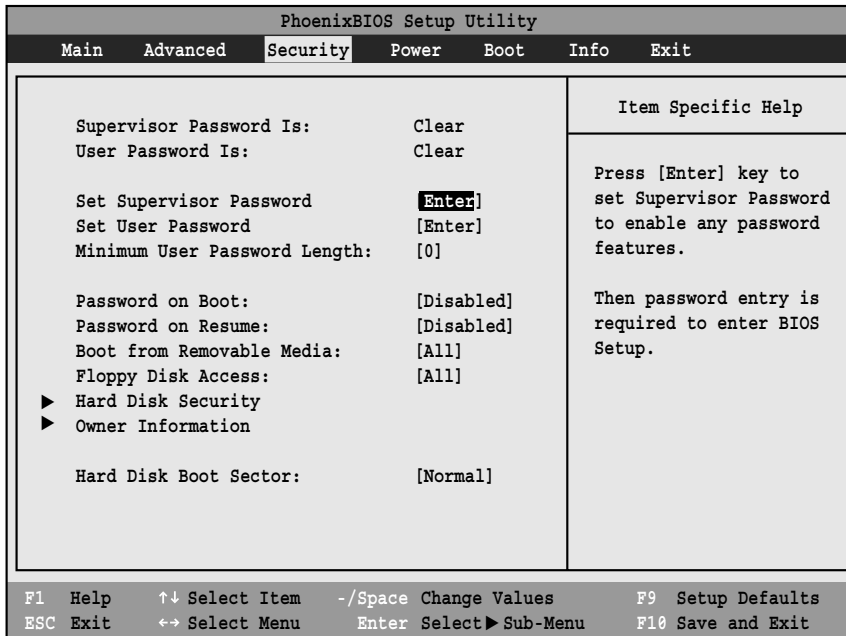
```
                        PhoenixBIOS Setup Utility
         Main    Advanced    Security    Power    Boot    Info    Exit

                                                    ┌──────────────────────┐
                                                    │   Item Specific Help │
            Supervisor Password Is:      Clear      │                      │
            User Password Is:            Clear      │                      │
                                                    │ Press [Enter] key to │
            Set Supervisor Password     [Enter]     │ set Supervisor Password│
            Set User Password           [Enter]     │ to enable any password│
            Minimum User Password Length: [0]       │ features.            │
                                                    │                      │
            Password on Boot:           [Disabled]  │ Then password entry is│
            Password on Resume:         [Disabled]  │ required to enter BIOS│
            Boot from Removable Media:  [All]       │ Setup.               │
            Floppy Disk Access:         [All]       │                      │
         ▶  Hard Disk Security                      │                      │
         ▶  Owner Information                       │                      │
                                                    │                      │
            Hard Disk Boot Sector:      [Normal]    │                      │
                                                    └──────────────────────┘

    F1  Help      ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
    ESC Exit      ←→ Select Menu     Enter Select▶Sub-Menu    F10 Save and Exit
```

Figure 14. Security Menu

Table 14: 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 Enter 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]	This field can only be accessed if the Supervisor Password is set. This field sets, changes or cancels the User Password. The 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 the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a User Password is set it must be used to access the BIOS setup utility.
Minimum User Password Length:	——	[0]	

Table 14: Fields, Options and Defaults for the Security Menu

Menu Field	Options	Default	Description
Password on Boot:	▫ Disabled ▫ First Boot ▫ Every Boot	[Disabled]	When set to DIsabled, no password is required. When set to First Boot, a password (User or Supervisor) is required after the Power On Self Test (POST) before the operating system will be read from a disk. If Every Boot is set, a password (User or Supervisor) is required after the Power On Self Test (POST) every time the system is booted (before the operating system is read from the disk).
Password on Resume:	▫ Disabled ▫ Enabled	[Disabled]	When set to Enabled, a password (User or Supervisor) is required before the operating system will resume. When set to Disabled no password is required. If no Supervisor Password is set this feature is not available and no password is required.
Boot from Removable Media:	▫ All ▫ Supervisor only	[All]	Enable password allows supervisor access only.
Floppy Disk Access:	▫ All ▫ Supervisor only	[All]	Enable password allows supervisor access only.
Hard Disk Security:	⎯⎯	⎯⎯	Configures hard disk security features
Owner Information:	⎯⎯	⎯⎯	Sets Owner information.
Hard Disk Boot Sector:	▫ Normal ▫ Write Protected	[Normal]	Sets protection mode for hard disk drive.

Hard Disk Security Submenu of the Security Menu

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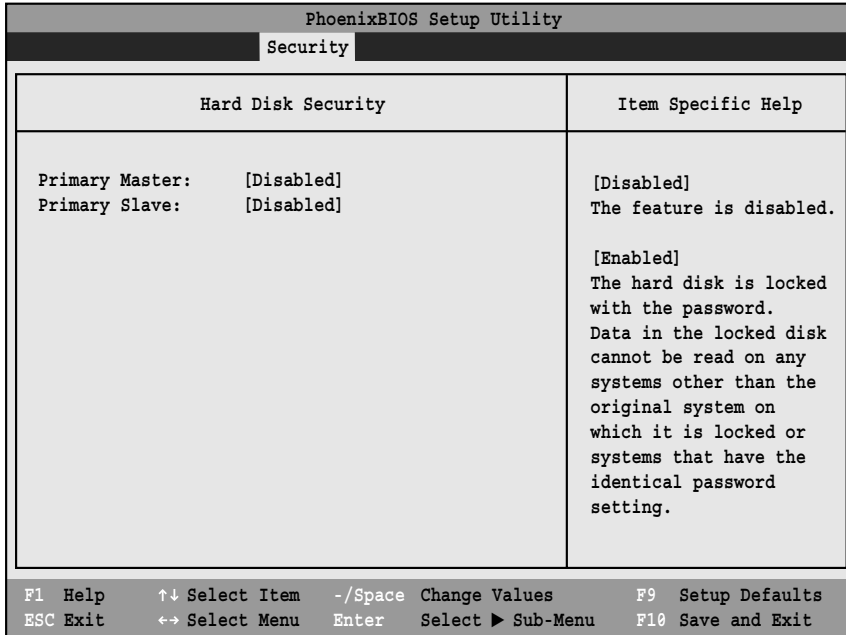hard disk security features.

```
                    PhoenixBIOS Setup Utility
                 Security

          Hard Disk Security                    Item Specific Help

   Primary Master:     [Disabled]                [Disabled]
   Primary Slave:      [Disabled]                The feature is disabled.

                                                 [Enabled]
                                                 The hard disk is locked
                                                 with the password.
                                                 Data in the locked disk
                                                 cannot be read on any
                                                 systems other than the
                                                 original system on
                                                 which it is locked or
                                                 systems that have the
                                                 identical password
                                                 setting.

   F1  Help      ↑↓ Select Item   -/Space Change Values      F9   Setup Defaults
   ESC Exit      ←→ Select Menu    Enter   Select ▶ Sub-Menu  F10  Save and Exit
```

Figure 15. Hard Disk Security Submenu

Table 15: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Options	Default	Description
Primary Master:	- Disabled - Enabled	[Disabled]	Disabled: No password protection. Enabled: The hard disk is locked with the password. Data in the locked disk cannot be read on any systems other than the original system on which it is locked or systems that have the identical password setting.
Primary Slave:	- Disabled - Enabled	[Disabled]	

Owner Information Submenu of the Security Menu

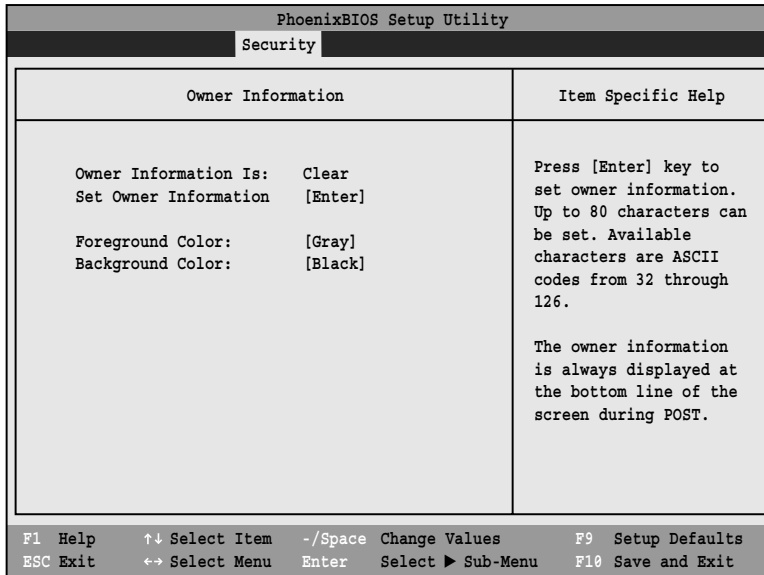The Owner Information Submenu is for setting owner information.

```
                    PhoenixBIOS Setup Utility
                 Security

         Owner Information                    Item Specific Help

                                          Press [Enter] key to
      Owner Information Is:    Clear       set owner information.
      Set Owner Information    [Enter]     Up to 80 characters can
                                          be set. Available
      Foreground Color:       [Gray]      characters are ASCII
      Background Color:       [Black]      codes from 32 through
                                          126.

                                          The owner information
                                          is always displayed at
                                          the bottom line of the
                                          screen during POST.




 F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults
 ESC Exit      ←→ Select Menu    Enter   Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 16. Owner Information Submenu

Table 16: Fields, Options and Defaults for the Owner Information Submenu of the Security Menu

Menu Field	Options			Default	Description
Owner Information Is:	——			Clear	Display only.
Set Owner Information:	——			[Enter]	Field to write owner information (i.e., name).
Foreground Color:	▫ Black ▫ Blue ▫ Green ▫ Cyan ▫ Red ▫ Magenta	▫ Brown ▫ White ▫ Gray ▫ Light Blue ▫ Light Green	▫ Light Cyan ▫ Light Red ▫ Light Magenta ▫ Yellow ▫ Bright White	[Gray]	Select a color for the foreground.
Background Color:	▫ Black ▫ Blue ▫ Green ▫ Cyan ▫ Red ▫ Magenta	▫ Brown ▫ White ▫ Gray ▫ Light Blue ▫ Light Green	▫ Light Cyan ▫ Light Red ▫ Light Magenta ▫ Yellow ▫ Bright White	[Black]	Select a color for the background.

Exiting from the Security Menu

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

POWER MENU – SETTING POWER MANAGEMENT FEATURES

The Power menu allows you to set and change the power management parameters. Follow the instructions for Navigating Through the Setup Utility to make any changes. *(See Navigating Through The Setup Utility on page 2 for more information.)*

The following tables show the names of the menu fields for the Power 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.

POINTS

▫ In ACPI operating systems Auto-suspend Timeout, Hard Disk Timeout, and Video Timeout features are available exclusively through the operating system.

▫ When resuming from a Save-to-Disk suspension there will be a delay while the contents of system memory and operating parameters are loaded from the hard drive.

CAUTIONS

▫ In Save-to-Disk mode there is no indication on the Status Indicator to let you know you are suspended rather than shut off from the power switch. You may want to make a habit of always trying the Suspend/ Resume button before using the power switch.

▫ Resume on Modem ring when enabled will draw power from the bridge battery alone when your system is running off battery power. This may potentially drain your bridge battery. Disabling Resume on Modem ring will prevent this from happening.
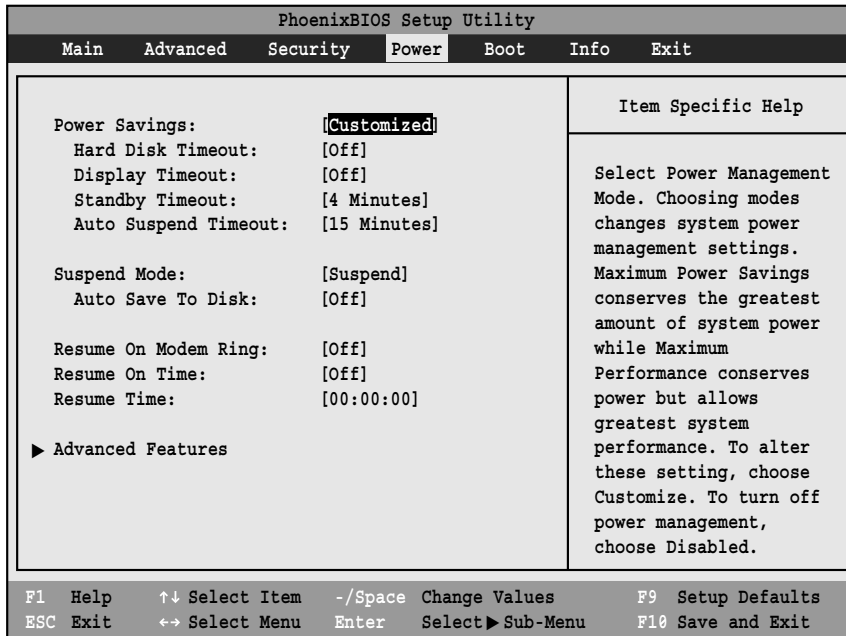
```
                    PhoenixBIOS Setup Utility
        Main    Advanced    Security    Power    Boot    Info    Exit

                                                  ┌─────────────────────┐
                                                  │   Item Specific Help │
        Power Savings:          [Customized]      │                     │
          Hard Disk Timeout:    [Off]             │                     │
          Display Timeout:      [Off]             │ Select Power Management│
          Standby Timeout:      [4 Minutes]       │ Mode. Choosing modes │
          Auto Suspend Timeout: [15 Minutes]      │ changes system power │
                                                  │ management settings. │
        Suspend Mode:           [Suspend]         │ Maximum Power Savings│
          Auto Save To Disk:    [Off]             │ conserves the greatest│
                                                  │ amount of system power│
        Resume On Modem Ring:   [Off]             │ while Maximum        │
        Resume On Time:         [Off]             │ Performance conserves│
        Resume Time:            [00:00:00]        │ power but allows     │
                                                  │ greatest system      │
      ▶ Advanced Features                         │ performance. To alter│
                                                  │ these setting, choose│
                                                  │ Customize. To turn off│
                                                  │ power management,    │
                                                  │ choose Disabled.     │
                                                  └─────────────────────┘

     F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults
     ESC Exit      ←→ Select Menu    Enter   Select▶Sub-Menu  F10 Save and Exit
```

Figure 17. Power Menu

Table 17: Fields, Options and Defaults for the Power Menu

Menu field	Options	Default	Description
Power Savings:	• Disabled • Customized • Maximum Power Savings • Maximum Performance	[Customized]	Sets the power savings parameters to a factory installed combination of parameters, a custom set of parameters set by you or no power saving features.
Hard Disk Timeout:	• Off • 30 seconds to 20 Minutes	[Off]	Sets the length of time that the hard drive can be inactive before your notebook automatically turns off the power to the hard drive controller and drive motor. If you choose a factory installed combination of parameters, this field will display the setting. If you choose to customize the parameters you will be able to set this yourself. The options available vary from Off, which has no inactivity shutoff, to 20 minutes.
Display Timeout:	• Off • 2 to 20 Minutes	[Off]	Sets the length of time without any user input device activity before the display is turned off. If you choose a factory combination of parameters, this field will display the setting. If you choose to customize the parameters, you will be able to set this yourself. Off has no inactivity shutoff.
Standby Timeout:	• Off • 1 to 16 Minutes	[4 Minutes]	Sets the length of time without any user input device activity before the CPU is set to half speed and the display and the hard drive are turned off. If you choose a factory combination of parameters, this field will display the setting. If you choose to customize the parameters you will be able to set this yourself.

Table 17: Fields, Options and Defaults for the Power Menu

Menu field	Options	Default	Description
Auto Suspend Timeout:	▪ Off ▪ 5 to 60 minutes	[15 Minutes]	Sets the length of time without any I/O activity before your notebook goes into Suspend mode. If you choose a factory combination of parameters this field will display that setting. If you choose to customize the parameters you will be able to set this yourself. Off has no inactivity suspension.
Suspend Mode:	▪ Suspend ▪ Save to Disk* *Note that Save to Disk is applicable to Windows 98 operating system only)	[Suspend]	Sets the state of suspension used. If you choose Suspend, operation will be suspended. Power will still be supplied to system memory, but everything else will be powered down or will enter a very low power state. If you choose Save-to-Disk, your notebook will save all of system memory and operating parameters to the hard drive before turning your notebook to the pseudo-off condition.
Auto Save to Disk:	▪ Off ▪ After 1 Hour	[Off]	When set to `After 1 Hour`, your notebook will automatically save all of system memory and the operating parameters to the hard drive, and go to the pseudo-off if you leave your notebook in Suspend mode for an hour.
Resume On Modem Ring:	▪ Off ▪ On	[Off]	Sets whether or not to Resume from a suspension state when a message is received by telephone line. This feature will not operate if the Save-to-Disk mode is enabled. This feature applies to internal and external modems.
Resume On Time:	▪ Off ▪ On	[Off]	Sets whether or not to resume from a suspension state at a designated time. This feature is available from either the Suspend mode or the Save-to-Disk mode.
Resume Time:	▪ 00:00:00 to 23:59:59	[00:00:00]	Sets the designated time, on a 24-hour clock, when the notebook is to automatically resume operation from the Suspend state. The format of the clock setting is hours:minutes:seconds. Each segment of the time is set separately, either by incrementing or by typing in the numbers. You move between the segments with the [Tab] key or the [Shift]+[Tab] keys. This only applies when Resume on Time is set to On.
Advanced Features:	——	——	When selected, opens the Advanced Features submenu which allows setting additional power saving parameters.

Factory Installed Values for Power Saving Profiles

	Hard Disk Timeout	Video Timeout	Standby Timeout	Auto Suspend Timeout
Customized:	Off	Off	4 Minutes	15 Minutes
Maximum Power Savings:	30 Seconds	2 Minutes	1 Minute	5 Minutes
Maximum Performance:	Off	Off	Off	15 Minutes
Disabled:	Off	Off	Off	Off
Sample Customized Profile: (To get even better battery life keep the display and volume settings as low as possible and use the sample customized profile.)	2 Minutes	1 Minute	1 Minute	5 Minutes

Advanced Features Submenu of the Power Menu

The Advanced Features submenu is for setting some
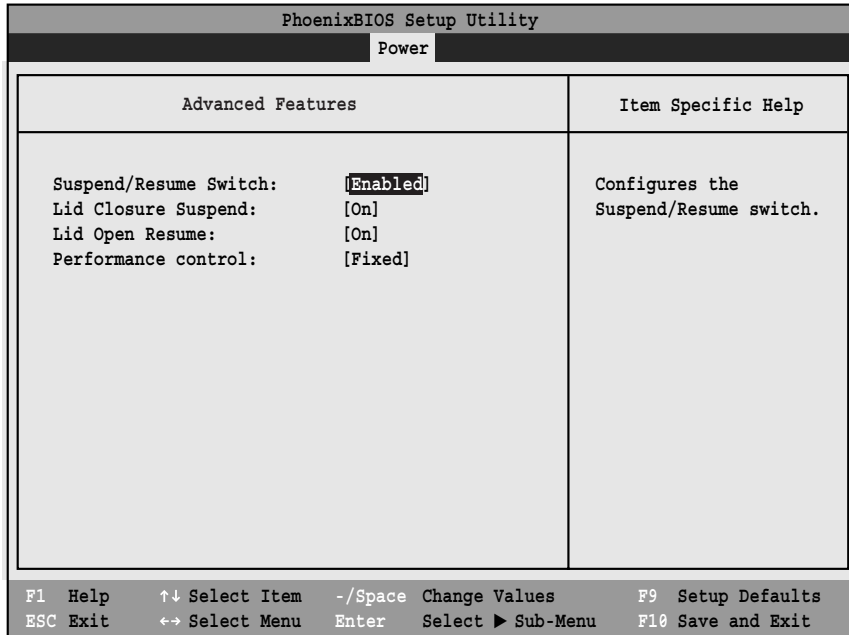non-time related power saving parameters.

```
                    PhoenixBIOS Setup Utility
                              Power
┌──────────────────────────────────────────┬─────────────────────┐
│          Advanced Features                │  Item Specific Help │
│                                           │                     │
│                                           │                     │
│  Suspend/Resume Switch:    [Enabled]      │  Configures the     │
│  Lid Closure Suspend:      [On]           │  Suspend/Resume switch.│
│  Lid Open Resume:          [On]           │                     │
│  Performance control:      [Fixed]        │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
│                                           │                     │
├──────────────────────────────────────────┴─────────────────────┤
│ F1  Help      ↑↓ Select Item  -/Space Change Values  F9  Setup Defaults │
│ ESC Exit      ←→ Select Menu   Enter  Select ▶ Sub-Menu  F10 Save and Exit │
└─────────────────────────────────────────────────────────────────┘
```

Figure 18. Advance Features Submenu

Table 18: Fields, Options and Defaults for the Advanced Features Submenu of the Power Menu

Menu Field	Options	Default	Description
Suspend/Resume Switch:	▪ Disabled ▪ Enabled	[Enabled]	Sets the function of the Suspend/Resume button when your notebook is in an active state. The resume function cannot be disabled as it works regardless of any other settings.
Lid Closure Suspend:	▪ Off ▪ On	[On]	Enables and disables your system from being put in Suspend mode whenever the cover is closed.
Lid Open Resume:	▪ Off ▪ On	[On]	Enables and disables having opening the Display panel act as an automatic resume.
Performance control:	▪ Auto ▪ Fixed	[Fixed]	Configures the ACPI Performance Control. When Auto is selected, power use is regulated by SpeedStep software. When FIxed is selected, the power use is not automatically regulated.

Exiting from Power Menu

When you have finished setting the boot parameters with
the Power 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.

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. *(See Navigating Through The Setup Utility on page 2 for more information.)*

The following 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.
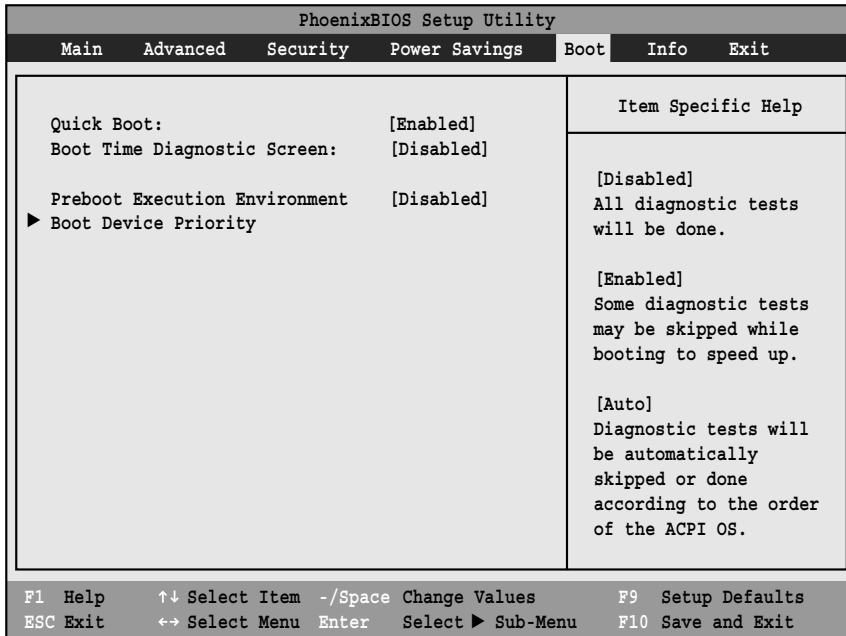
```
                    PhoenixBIOS Setup Utility
      Main    Advanced    Security    Power Savings    Boot    Info    Exit

                                              ┌──────────────────────┐
                                              │    Item Specific Help │
      Quick Boot:               [Enabled]     │                      │
      Boot Time Diagnostic Screen:  [Disabled]│  [Disabled]          │
                                              │  All diagnostic tests │
      Preboot Execution Environment [Disabled]│  will be done.       │
    ▶ Boot Device Priority                    │                      │
                                              │  [Enabled]           │
                                              │  Some diagnostic tests│
                                              │  may be skipped while │
                                              │  booting to speed up. │
                                              │                      │
                                              │  [Auto]              │
                                              │  Diagnostic tests will│
                                              │  be automatically    │
                                              │  skipped or done     │
                                              │  according to the order│
                                              │  of the ACPI OS.     │
                                              └──────────────────────┘

   F1  Help        ↑↓ Select Item   -/Space  Change Values      F9   Setup Defaults
   ESC Exit        ←→ Select Menu    Enter   Select ▶ Sub-Menu   F10  Save and Exit
```

Figure 19. Boot Menu

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

Menu Field	Options	Default	Description
QuickBoot Mode:	□ Disabled □ Enabled □ Auto	[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:	□ Disabled □ Enabled	[Disabled]	Turns on and off display of test results instead of Fujitsu logo screen during Power On Self Test.
Preboot Execution Environment	□ Disabled □ Enabled	[Disabled]	Turns on and off boot from network server options.
Boot Device Priority	□ Selects the Boot Device Priority submenu	—	This menu allows setting up the source for the operating system.

The 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.
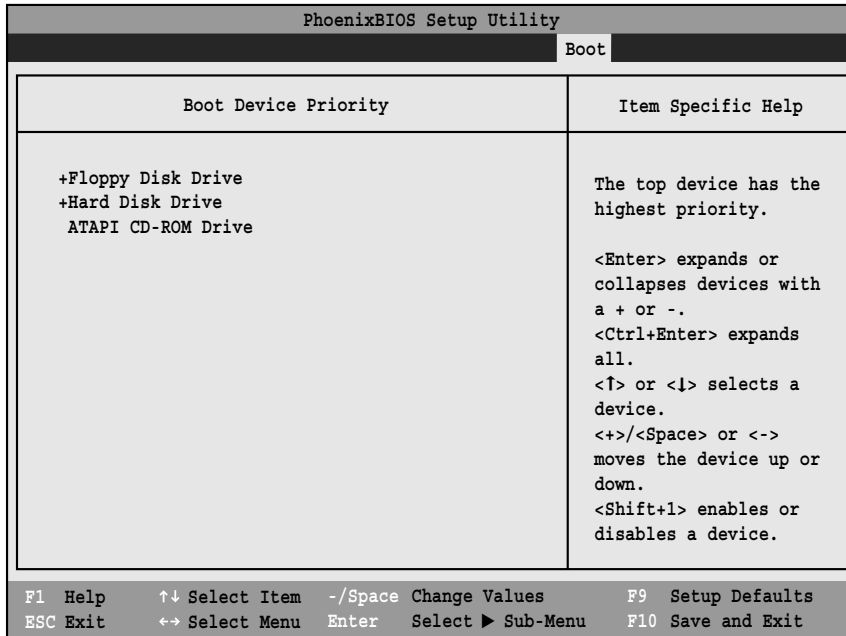
```
                    PhoenixBIOS Setup Utility
                                               Boot

          Boot Device Priority                 Item Specific Help

     +Floppy Disk Drive
     +Hard Disk Drive                   The top device has the
      ATAPI CD-ROM Drive                highest priority.

                                        <Enter> expands or
                                        collapses devices with
                                        a + or -.
                                        <Ctrl+Enter> expands
                                        all.
                                        <↑> or <↓> selects a
                                        device.
                                        <+>/<Space> or <->
                                        moves the device up or
                                        down.
                                        <Shift+1> enables or
                                        disables a device.

  F1  Help      ↑↓ Select Item   -/Space Change Values     F9   Setup Defaults
  ESC Exit      ←→ Select Menu   Enter   Select ▶ Sub-Menu  F10  Save and Exit
```

Figure 20. Boot Device Priority Submenu

Table 20: Fields, Options and Defaults for the Boot Device Priority Submenu of the Boot Menu

Menu Field	Options	Default	Description
+Floppy Disk Drive	——	——	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 for that source. Be sure to save your changed order when you exit the BIOS setup utility. 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.
+Hard Disk Drive	——	——	——
ATAPI CD-ROM Drive	——	——	——

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 cannot be modified by the user.

POINT

The information, including CPU type and speed, and total memory, displayed on this screen varies according to the unit you purchased.

```
                    PhoenixBIOS Setup Utility
      Main    Advanced   Security   Power Savings   Boot   Info   Exit

                                              Item Specific Help
      BIOS Version:    1.02
      BIOS Date:       09/03/2001
      BIOS Area:       E400h - FFFFh

      CPU Type:        Pentium(R) III processor
      CPU Speed:       1.00 GHz
      L1 Cache:         32 KB
      L2 Cache:        256 KB

      Total Memory:    128 MB
      Onboard Memory:  128 MB SDRAM
        Memory Slot:   None



      F1  Help      ↑↓ Select Item   -/Space Change Values   F9   Setup Defaults
      ESC Exit      ←→ Select Menu   Enter   Select ▶ Sub-Menu  F10  Save and Exit
```
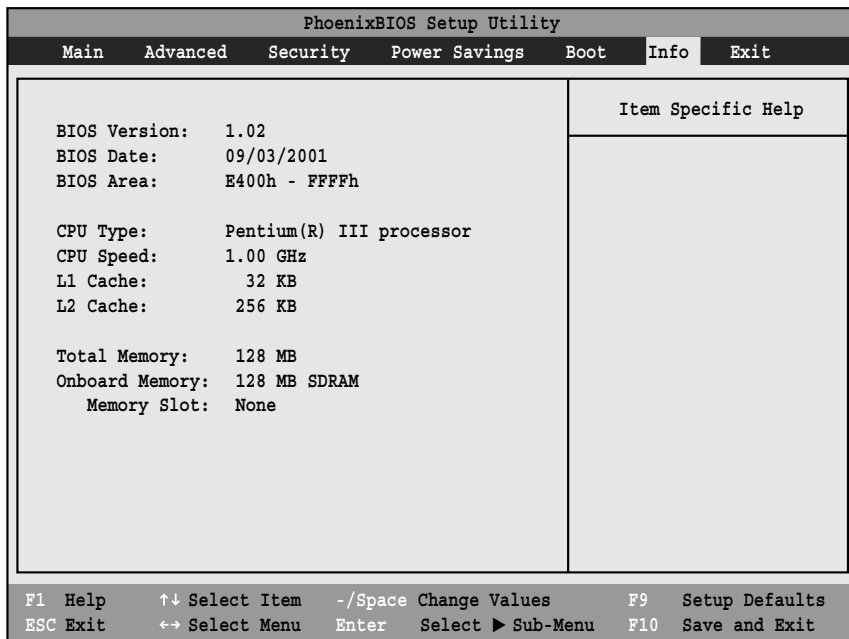
Figure 21. Info Menu

Table 21: Fields, Options and Defaults for the Info Menu
Note that some of the parameters reflected below may be different from those on your screen, depending upon system configuration.

Menu Field	Default	Menu Field	Default
BIOS Version:	1.02	L1 Cache:	32 KB
BIOS Date:	09/03/2001	L2 Cache:	256 KB
BIOS Area:	E400h – FFFFh	Total Memory:	128 MB
CPU Type:	Pentium(R) III processor	Onboard Memory	128 MB SDRAM
CPU Speed:	1.00 GHz	Memory Slot	None

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. *(See Navigating Through The Setup Utility on page 2 for more information.)*

The following table shows the names of the menu fields for the Exit menu, the default settings and a description of the field's function and any special information needed to help understand the field's use.
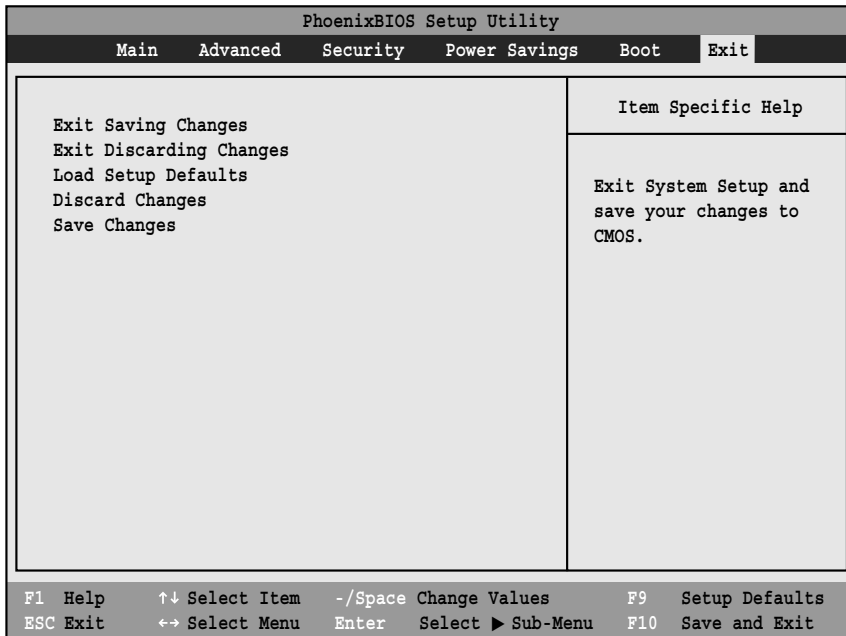
```
                        PhoenixBIOS Setup Utility
        Main      Advanced    Security    Power Savings    Boot    Exit

                                                    Item Specific Help

     Exit Saving Changes
     Exit Discarding Changes
     Load Setup Defaults               Exit System Setup and
     Discard Changes                   save your changes to
     Save Changes                      CMOS.




  F1  Help        ↑↓ Select Item    -/Space Change Values    F9   Setup Defaults
  ESC Exit        ←→ Select Menu    Enter   Select ▶ Sub-Menu F10  Save and Exit
```

Figure 22. Exit Menu

Table 22: Fields, Options and Defaults for the Exit Menu

Menu Field	Optional Keyboard Shortcut	Default	Description
Exit Saving Changes	Press F10 key	——	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 with out writing to the BIOS memory. A setup warning message Configuration has not been saved! Save before exiting? [Yes] [No] will be displayed when your settings have changed. When the BIOS recognizes the Exit Discarding Changes selection it will load the operating system and begin operation.

Table 22: Fields, Options and Defaults for the Exit Menu

Menu Field	Optional Keyboard Shortcut	Default	Description
Load Setup Defaults	Press F9 key	——	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 Navigating Through the Setup Utility 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 Navigating Through the Setup Utility 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 Navigating Through the Setup Utility section.