

4 The BIOS Setup Utility

Configuration

After the LPX54 system board and all hardware is installed, the system is ready for configuration. Before turning on the computer, make sure all cables are correctly connected and all jumpers are correctly set.

It is recommended you keep the computer cover off the first time you boot the system. If you have any difficulties, they will be easier to correct.

Initial Boot Up

Power up the LPX54. If the system doesn't properly boot, check all your cables and peripherals for bad connections. You may also get beep codes or error messages. If this occurs, consult Appendices A and/or B for a guide to possible solutions.

After the system properly boots, it is ready to be configured. The following pages explain the proper procedures for BIOS configuration.

Setup

The Setup program is used to configure the computer's BIOS (Basic Input/Output System). The computer's BIOS is responsible for configuring the system board and providing hardware information to the operating system. In order for the computer to run properly, run the Setup procedure after first installing the system board and whenever you make a hardware change to the system.

After the system is turned on and goes through a memory test, the Power-Up Screen (Figure 4-1) will appear on your monitor:

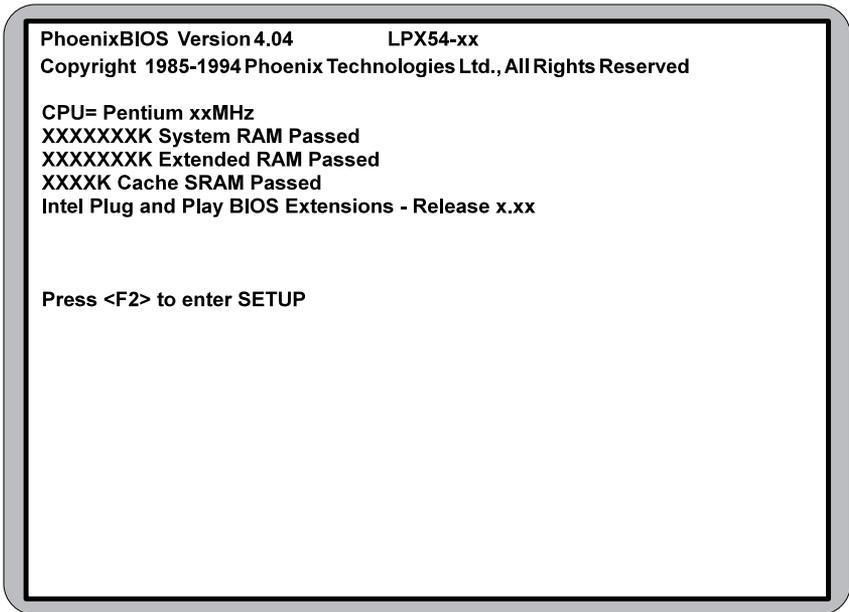


Figure 4-1 Power-Up Screen

When “Press <F2> to enter SETUP” appears at the bottom of the screen, press the <F2> key to begin the Setup procedure. The CMOS Main Screen (Figure 4-2) should appear and the prompt should be on the time line. The Setup procedure can only be activated during the boot sequence.

Running the Setup Procedure

The LPX54 system board has four primary CMOS configuration screens: the Main Screen (Figure 4-2), the Advanced Screen (Figure 4-8), the Security Screen (Figure 4-10), and the Exit Screen (Figure 4-12). To toggle between the screens, press the right arrow <→> and the left arrow <←> keys.

Setting the Main Screen

The CMOS Main Screen (Figure 4-2) is used to set the time and date, to set the floppy drive types, to configure the hard disks, and to configure the video. This section explains how to configure each of these categories. To move between the categories, use the up arrow <↑> and the down arrow <↓>.

PhoenixBIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.			
Main	Advanced	Security	Exit
System Time: [HH:MM:SS] System Date: [MM/DD.YYYY] Diskette A: [1.44 MB, 3 1/2"] Diskette B: [Not Installed]			Item Specific Help <Tab>, <Shift-Tab>, or <Enter> selects field.
▶IDE Device 0 Master: [None] ▶IDE Device 0 Slave: [None] ▶IDE Device 1 Master: [None] ▶IDE Device 1 Slave: [None]			
Video System: [EGA/VGA] Video BIOS: [Shadowed]			
▶Boot Sequence: [A: then C:] Cache: [Both]			
System Memory: 640 KB Extended Memory: xxx MB DRAM Parity: [Enabled]			
F1 Help	↑↓ Select Item	-/+ Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select Sub-Menu	F10 Previous Values

Figure 4-2 CMOS Main Screen

System Time and Date

To set the time, use the <-> key to decrease the number and the <+> key to increase the number. To move the prompt forward, use the <Tab> key; to move the prompt backward, use the <Shift-Tab> key. To set the date, use the

up and down arrows<↑/↓> to highlight the System Date and follow the same procedure used to set the time.

Diskette A or B

To configure a floppy drive added to or removed from your computer, use the up and down arrow keys <↑/↓> to select the drive you wish to set. Use the <+/-> keys to change the setting until it matches the floppy drive you have installed. The BIOS supports 2.88MB, 1.44MB, 1.2MB, 720KB, and 360KB floppy drives.

IDE Devices (Hard Disk Setup)

If you are setting up a SCSI hard disk, you will need to select [None] in the IDE Device parameters (see you SCSI card manual for more details).

To install an IDE device, select the device you wish to configure and press <Enter>. An IDE Device submenu will appear. (Figure 4-3).

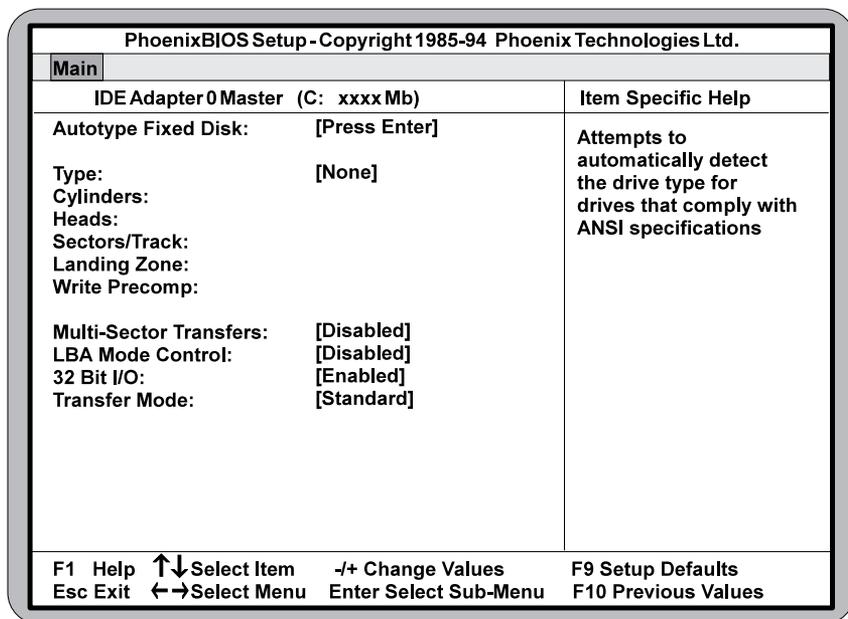


Figure 4-3 IDE Device Submenu

The easiest way to set your IDE devices is to let the BIOS do it for you. When the IDE Device submenu first appears, the Autotype Fixed Disk selection will be highlighted. Simply press <Enter>, and the remaining information will automatically be entered.

Do not adjust the rest of the settings unless absolutely necessary. The BIOS will automatically enter the correct settings.

Video System

This sets the type of video board installed into the system. You may choose from: VGA/SVGA (default), CGA 80x25, MONO, and Not Installed.

Video BIOS

The Video BIOS Option allows you to Shadow, Shadow & Cache, or Disable the BIOS Shadow on the system board. Choosing SHADOWED copies the system's video BIOS into RAM for faster execution. Choosing SHADOWED & CACHED caches the shadowed video BIOS for even higher performance.

Boot Options Submenu

Move the prompt to Boot Sequence and press <Enter>. The following screen (Figure 4-4) will appear.

PhoenixBIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.		
Main		
Boot Options		Item Specific Help
Boot Sequence:	[A: then C:]	Order system searches drives for a boot disk.
SETUP Prompt:	[Enabled]	
POST Errors:	[Enabled]	
Floppy Check:	[Disabled]	
Numlock:	[Auto]	
F1 Help	↑↓ Select Item	-/+ Change Values
Esc Exit	←→ Select Menu	Enter Select Sub-Menu
		F9 Setup Defaults
		F10 Previous Values

Figure 4-4 Boot Options Submenu

Boot Sequence

This category selects the order the system searches for a boot disk and can be set for:

A: then C:

C: then A:

C: only

SETUP Prompt

When enabled, this category allows the system to display the “Press <F2> to enter SETUP” message during boot.

Post Errors

When enabled, this category allows the system to display the “Press <F1> to resume, <F2> to SETUP” and pause if errors occur during boot. If disabled, the system will ignore any errors and will always attempt to boot.

Floppy Check

When enabled, this category verifies the floppy drive is installed on boot. For faster booting, select DISABLED (default).

Numlock:

Setting this to Enabled will activate Numlock upon boot. Setting this to Auto will activate Numlock if the BIOS detects a numeric keyboard. It may also be disabled.

System Memory

The System Memory category identifies the size of the base memory. It cannot be changed.

Extended Memory

The Extended Memory category automatically detects the amount of memory installed above the amount in the System Memory category. Because the BIOS automatically calculates the amount of memory installed in your system, you cannot change this category without adding or removing memory.

Setting the Advanced Screen

To move to the Advanced Screen, use the left and right arrow keys <<-/->> keys until you see the screen below (Figure 4-5).

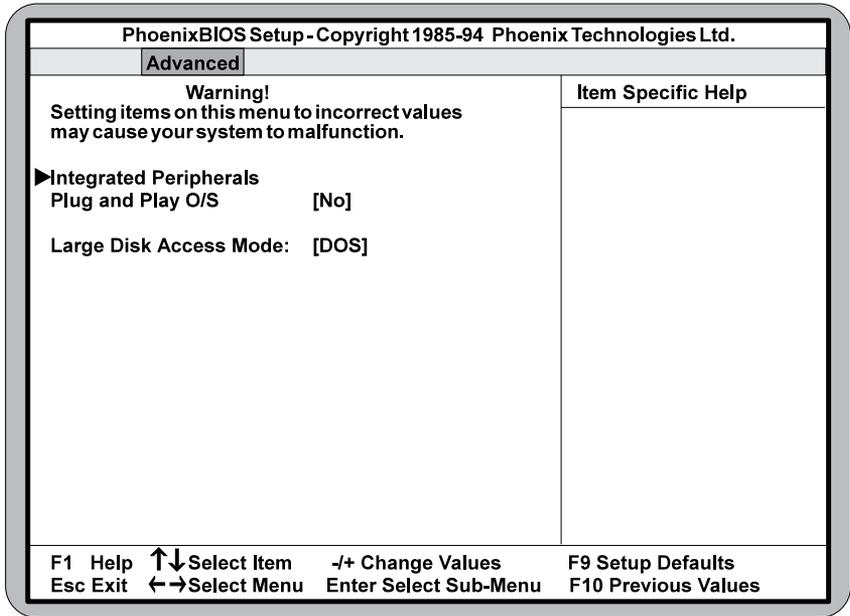


Figure 4-5 Advanced Screen

Integrated Peripherals Submenu

The Integrated Peripherals submenu (Figure 4-6) allows you to individually enable or modify the drives, I/O ports, and other settings. Use the up and down arrow keys <↑/↓> to select a category and the plus and minus keys <+/-> to change the settings.

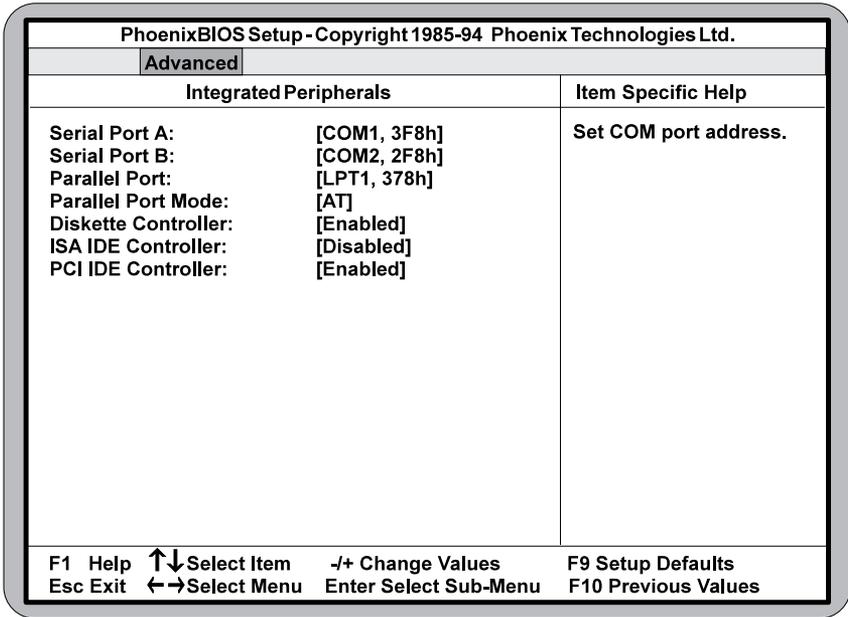


Figure 4-6 Integrated Peripherals Submenu

Serial Port A

Serial Port A may be set for COM1 (default), COM3, or may be disabled.

Serial Port B

Serial Port B may be set for COM2 (default), COM4, or may be disabled.

Parallel Port

The parallel port may be set for LPT1 (default), LPT2, or may be disabled.

Parallel Port Mode

The parallel port may be set for output mode (AT), bidirectional mode (PS/2), or may be disabled.

Diskette Controller

The on board floppy disk controller may be enabled or disabled.

ISA IDE Controller

The secondary ISA IDE controller may be enabled or disabled.

ECP

The LPX54's parallel port is compatible with the Extended Capabilities Parallel Port standard developed by Hewlett Packard and Microsoft. You should set this for disabled (default) unless your peripheral requires it.

Integrated IDE Controller

The on board PCI IDE controller may be enabled or disabled.

Large Disk Access Mode

If you are using the DOS operating system, set this to DOS. If you are using anything else, set this to OTHER.

Security Screen

The Security Screen (Figure 4-7) controls access to the computer. The security screen allows for settings of two passwords. The Supervisor Password allows access to the system and Setup. The User Password will allow access to the system, but not to all Setup features.

PhoenixBIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.			
Main	Advanced	Security	Exit
Supervisor Password is	Disabled		Item Specific Help Press <Enter> to set a new supervisor level password. The setup will then be password protected. The supervisor password can only be changed by the supervisor. Once a password is entered the password feature will be enabled. The password feature can not be disabled. Please write down the password in a safe place.
User Password is	Disabled		
Set Supervisor Password	[Press Enter]		
Set User Password	Press Enter		
Password on Boot:	[Disabled]		
Diskette access:	[User]		
Fixed disk boot sector:	[Normal]		
F1 Help	↑↓ Select Item	-/+ Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select Sub-Menu	F10 Previous Values

Figure 4-7 Security Setup Screen

Supervisor Password is

If a Supervisor Password has been set up for the system, it will read “Supervisor Password is ENABLED.” If the password has not been set up, it will be disabled (default).

User Password is

If a User Password has been set up for the system, it will read “User Password is ENABLED.” If the password has not been set up, it will be disabled (default).

Set Supervisor Password

Press the <Enter> key to enter the Supervisor Password submenu (Figure 4-8).

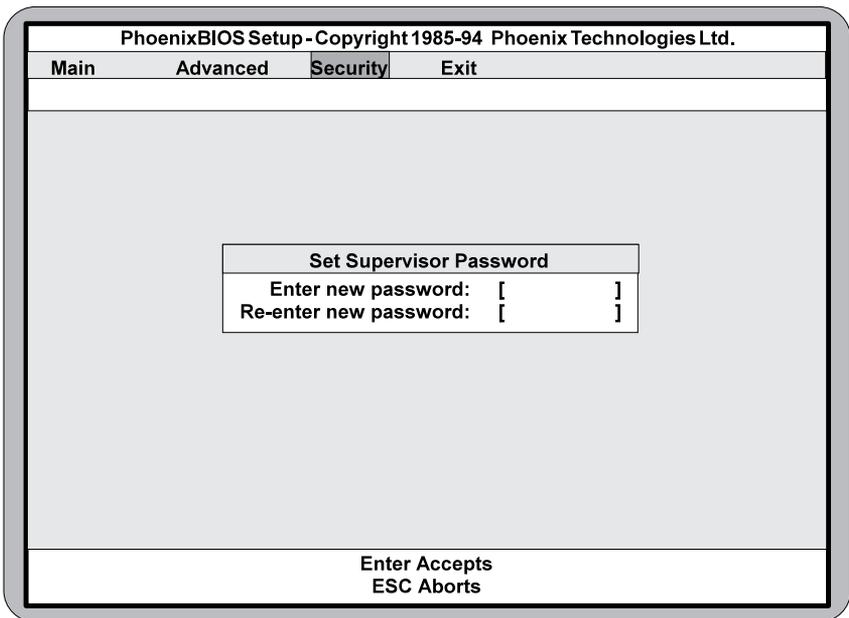


Figure 4-8 Supervisor Password Submenu

Type the password and press the <Enter> key. Retype the password and press the <Enter> key again. Write down the password somewhere safe so it will not be forgotten. The password may be disabled by setting the new password to nothing (pressing the <Enter> key without first typing a password).

Warning:

If you forget the Supervisor Password, it cannot be disabled without discharging the CMOS.

Set User Password

Follow the same procedure used to set the Supervisor Password.

Note:

When a password has been entered, it is saved immediately. All other changes may still be discarded (see Exit Screen).

Password on Boot

When enabled, the system will require a password to be entered upon boot. Either the Supervisor or User Password may be entered.

Diskette Access

This category allows floppy disk access with an option of the supervisor or user. Selecting Supervisor will give floppy disk access to the supervisor only. Selecting User (default) will give floppy disk access to both the user and the supervisor. If the passwords are enabled, this option may only be changed by the supervisor.

Fixed Disk Boot Sector

This category allows the boot sector of the fixed disk to be write protected. The default setting is Normal. When set for Write Protect, it serves as a form of virus protection. If the passwords are enabled, this option may only be changed by the supervisor.

Power Screen

The Power Screen controls the power management functions or the “Green Section” of the system. To move to the Advanced Screen, use the left and right arrow keys <←/→> keys until you see the screen below (Figure 4-9) .

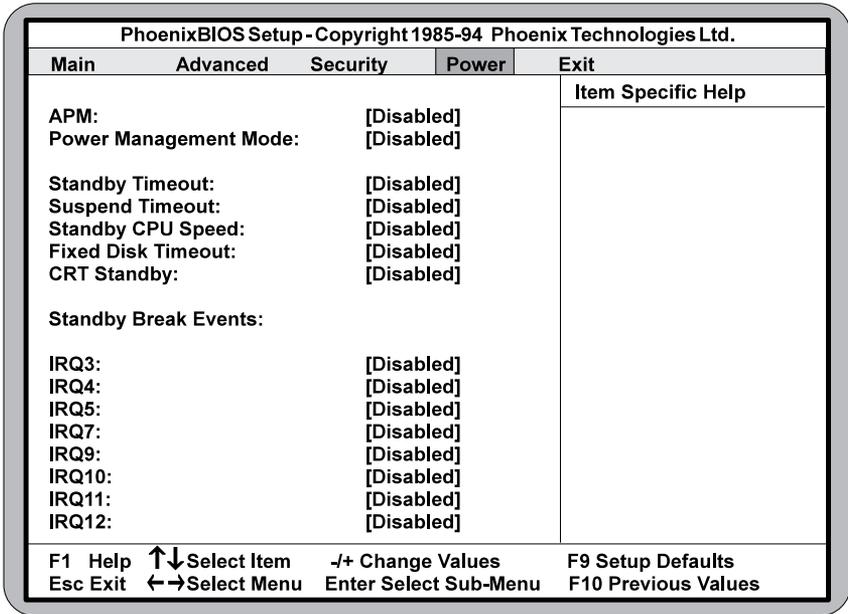


Figure 4-9 Power Screen

APM

When enabled the power management features are active. The default setting is Disabled. If you enable this category, you must also set the other power management options below.

Power Management Mode

This category may be set for Maximum Power Savings, Medium Power Savings, Minimum Power Savings, Customized, or Disabled (default). If you set this category for Maximum, Medium, or Minimum power savings, you do not need to make any more adjustments. If you select Customized, you must set the following five categories.

Standby Timeout

The Standby Timeout category is used to set the amount of time that must elapse for the system to enter the power saving mode. The options are

Disabled (default), 1 min., 15 min., 30 min., 45 min., 60 min., 2 Hr., 3 Hr., or 4 Hr.. Before making changes, “Customized” must be selected in the Power Management Mode category.

Suspend Timeout

The Suspend Timeout category is used to set the amount of time that must elapse after the Standby Timer is activated. The options are Disabled (default), 1 min., 15 min., 30 min., 45 min., 60 min., 2 Hr., 3 Hr., and 4 Hr.. Before making changes, “Customized” must be selected in the Power Management Mode category.

Standby CPU Speed

This category is used to set the CPU speed during power saving mode. The options are Maximum, Medium, Minimum, and Slowest (default). Before making changes, “Customized” must be selected in the Power Management Mode category.

Fixed Disk Timeout

This category is used to set the amount of time which must elapse before the IDE drive enters spin-down mode to conserve power. The options are Disabled (default), 1 min., 2 min., 5 min., 10 min., or 15 min. Before making changes, “Customized” must be selected in the Power Management Mode category.

Note:

Do not enable this category unless your IDE drive supports spin-down mode.

CRT Standby

Selecting Enabled will power down the display while the system is in power saving mode. The default setting is disabled. Before making changes, “Customized” must be selected in the Power Management Mode category.

Exit Screen

After you have completed configuring the BIOS, select the Exit Screen (Figure 4-10).

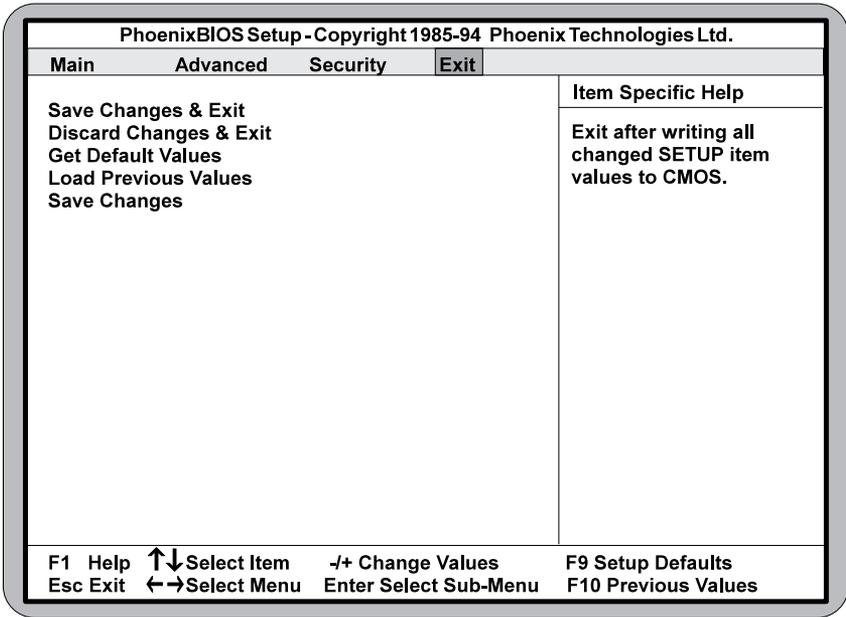


Figure 4-10 Exit Screen

Choose “Save Changes and Exit” and reboot the computer. The computer is ready for use.

