

# iDOT.computers

LX Systems  
User's Handbook

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iDOT.com  
Building 6, Suite 100  
9715 Burnet Road  
Austin, Texas 78758 USA  
512-684-5000  
www.idot.com

## **FCC Declaration of Conformity**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions related to the EMC performance of this product, contact:

iDOT.com  
Building 6, Suite 100  
9715 Burnet Road  
Austin, Texas USA 78758 USA

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit other than the one to which the receiver is connected.



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## Package checklist

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In addition to this book, your iDOT.com™ LX system package should include the items listed below. If any item is damaged or missing, contact the iDOT.com Customer Service Department at 888-315-9563.

- setup instructions (fold-out poster)
- LX computer
- mouse
- keyboard
- power cable
- speakers
- Microsoft® Windows® 95 or Windows NT™ CD-ROM, documentation, and *Certificate of Authenticity*.

### Note

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The Product ID number, which you'll need to set up your system, is on the *Certificate of Authenticity*.

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- modem cable (if your system includes a modem)
- monitor (if you ordered a monitor)

## Contacting iDOT.com

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For the most up-to-date information about your LX system and for sales or technical support, go to the iDOT.com Web site at [www.idot.com](http://www.idot.com). You can also contact iDOT.com at these numbers:

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Customer Service	888-315-9563
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Sales	888-388-4368
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Technical Support	888-316-6302
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# Working with LX System Hardware

# 1

This chapter provides instructions for changing or upgrading LX system hardware.

## **Warning**

*Static electricity can damage integrated circuits. Before handling any computer component outside its protective packaging, use one of these methods to discharge static electricity in your body:*

- *After you turn off the main switch on the back of the computer and remove the chassis cover, touch a metal computer component (such as the power supply).*

*or*

- *Wear a static wrist strap that is connected to a natural earth ground.*

*Do not handle add-on cards by their “gold finger” connectors. Fingers have oils and other contaminants that can prevent connectors from making an electrical connection, which may cause errors or other malfunctions. Handle all system components by their mounting brackets or other edges.*

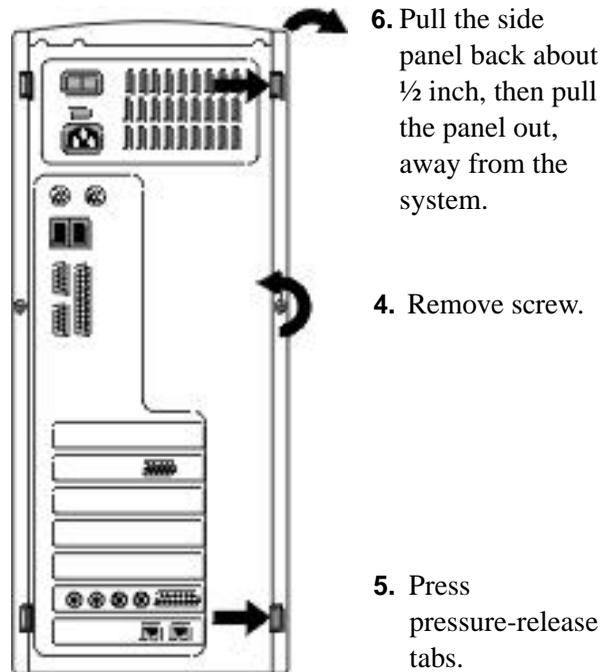
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## Removing the chassis cover

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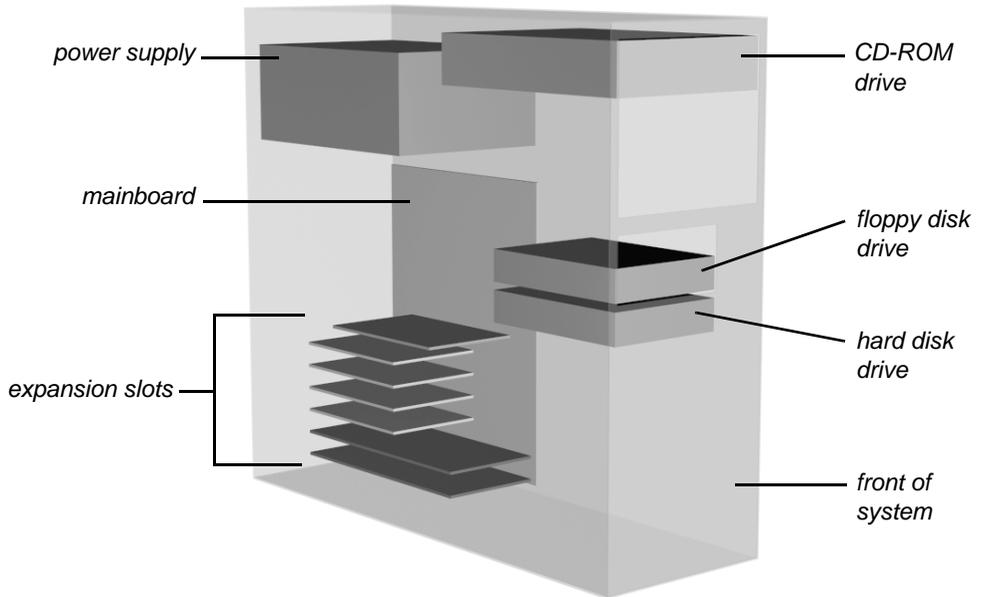
1. Turn off all peripheral devices connected to the system.
2. Turn off the primary power switch on the back of the system.
3. Unplug the system's power cord.

Follow the steps shown in the illustration:



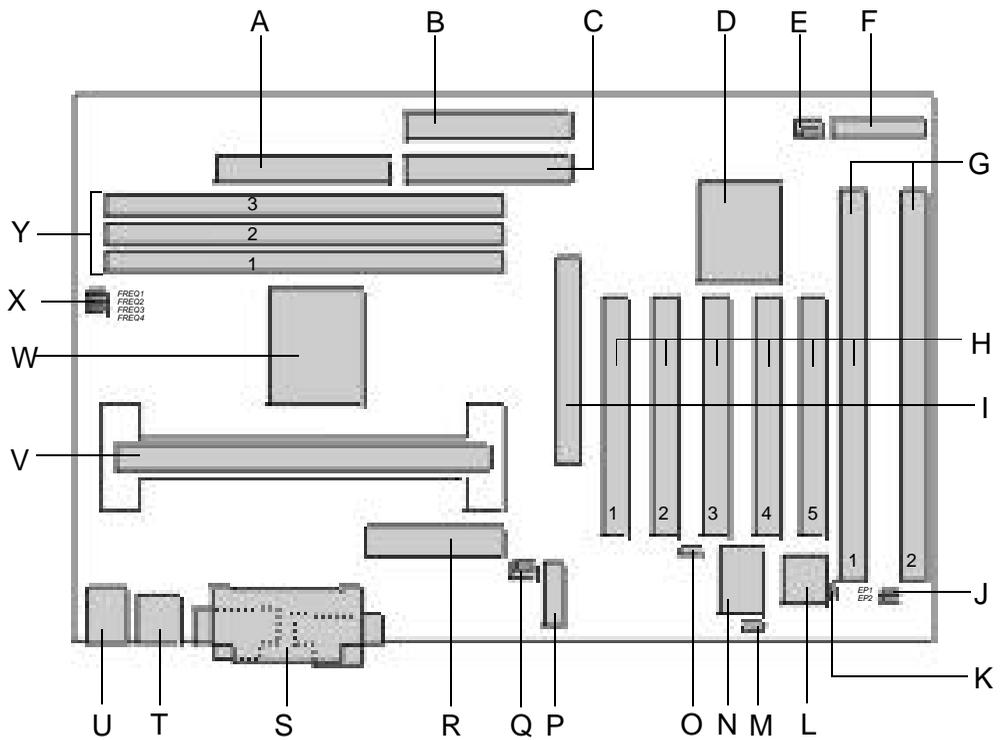
## Location of main system components

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## Mainboard layout

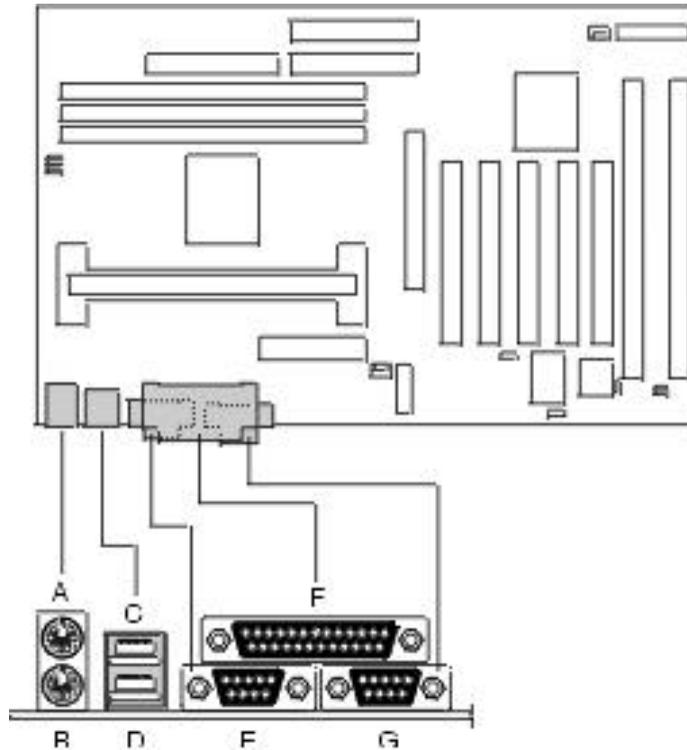
The following diagram shows the layout of the LX mainboard. Refer to it as necessary when you work with system hardware components.



A	floppy drive connector	N	W83977TF-A
B	primary IDE connector	O	chassis open alarm connector
C	secondary IDE connector	P	infrared connector
D	Intel™ PCIset FW82371AB	Q	fan 1 connector (CPU)
E	fan 2 connector (chassis)	R	ATX power supply connector
F	front panel block connector (See "Front panel block connector: F_PNL" on page 7.)	S	serial and parallel ports (See "Back panel I/O connectors" on page 6.)
G	ISA slots	T	USB ports (See "Back panel I/O connectors" on page 6.)
H	PCI slots	U	PS/2® keyboard and mouse ports (See "Back panel I/O connectors" on page 6.)
I	Accelerated Graphics Port (AGP) connector	V	slot 1 connector (for Pentium® CPU card)
J	EPROM type selection jumpers	W	Intel FW82443LX
K	remote wakeup connector	X	CPU/bus frequency ration jumpers
L	BIOS (PLCC)	Y	DIMM sockets
M	clear password jumper		

## Back panel I/O connectors

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A PS/2 keyboard or mouse

---

B PS/2 keyboard or mouse

---

C USB port 1

---

D USB port 2

---

E serial port 1 or COM port 1

---

F parallel port

---

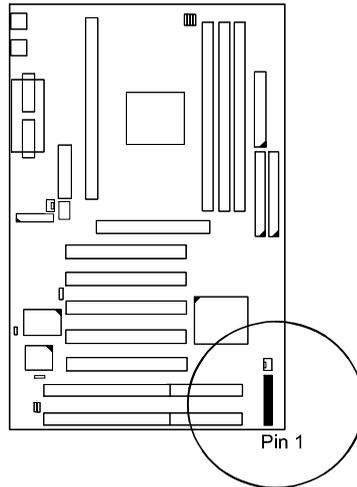
G serial port 2 or COM port 2

---

## Front panel block connector: F\_PNL

---

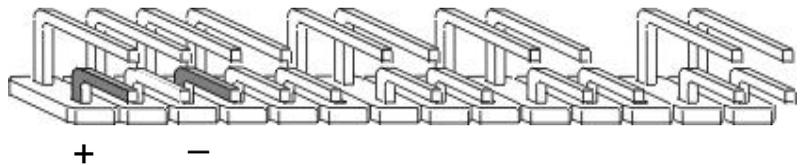
The following diagram shows the location of the front panel block connector:



The following diagrams identify the pins on the block connector:

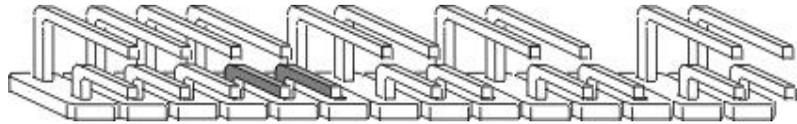
### PW\_LED

Indicates system power status.

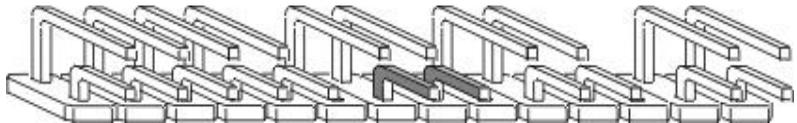


**KB\_LOCK**

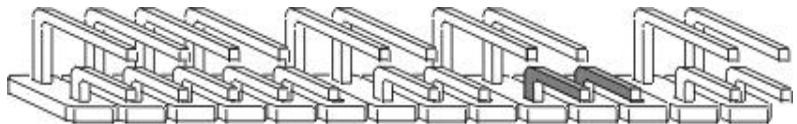
Enables the keyboard to access the system.

**TB\_LED**

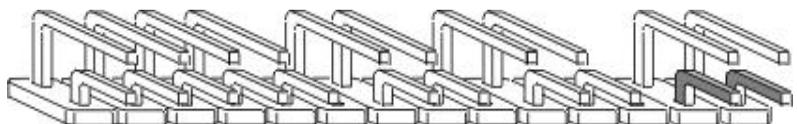
Indicates system speed: normal or turbo.

**SP\_SW**

Suspend mode switch.

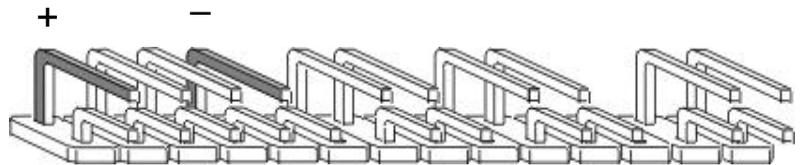
**SP\_LED**

LED *on* indicates that the system is in Suspend mode.



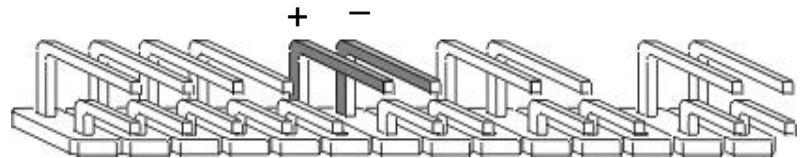
**SPK**

Connects to speaker.



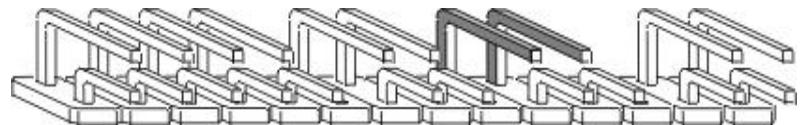
**IDE\_LED**

LED on indicates IDE HDD I/O access.



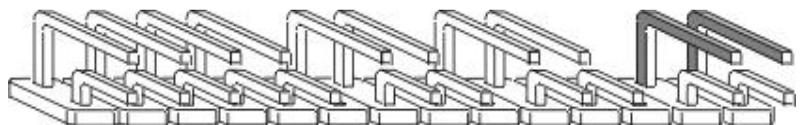
**RPW\_SW**

Remote power switch.



**RST**

Enables system reset.



## Installing and removing RAM

---

The mainboard includes three sockets for 168-pin, 3.3-volt SDRAM DIMMs. You can install 32MB, 64MB, or 128MB DIMMs. The maximum total memory supported is 384MB.

The mainboard supports DIMMs with latency times of 10ns, 12ns and 15ns. (iDOT.com recommends that you use 10ns DIMMS.) ECC memory and parity check are also supported, but not required.

### Notes

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See Appendix A, "Optional Extras," for memory specifications. Check the iDOT.com Web site for qualified memory suppliers.

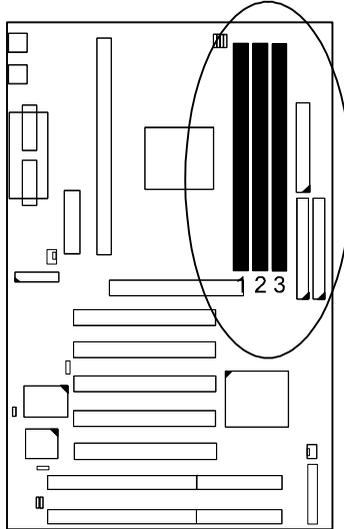
Before making DRAM upgrades, verify the type and speed of currently installed RAM. Installing mixtures of RAM types other than those described in this manual will have unpredictable results.

---

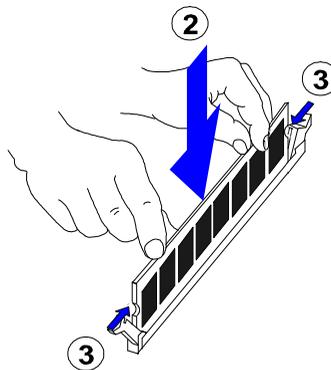
## Installing DIMMs

---

1. Locate the DIMM slots on the mainboard.



2. Use both hands to press the DIMM straight down into the DIMM socket.



When the DIMM is properly seated, the clips of the socket snap in place to hold the DIMM on either side.

## Removing DIMMs

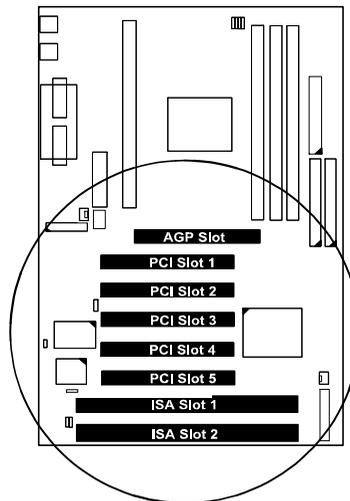
---

Gently press down both clips on each side of the DIMM to remove the DIMM.

## Installing expansion cards

---

Your LX system features one 32-bit AGP bus, one ISA bus, four PCI bus, and one shared ISA/PCI bus expansion slots.



### **Caution**

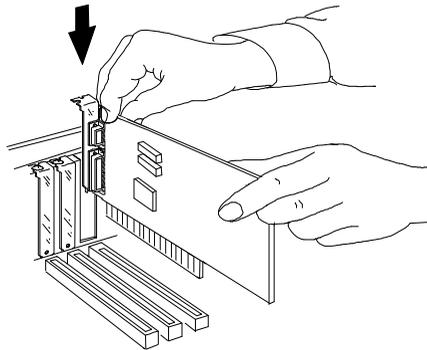
*Turn off the primary system power switch on the back of the computer before installing or removing any device.*

*Observe static electricity precautions. See the warnings on page 1.*

---

See "Removing the chassis cover" on page 2.

1. Remove the chassis cover.
2. Select an empty expansion slot and remove the corresponding slot cover. Keep the slot cover mounting screw nearby.
3. Holding the edge of the expansion card, carefully align the edge connector with the expansion slot.



4. Push the card firmly into the slot by pushing down on one end of the card, then the other. Use this rocking motion until the card is firmly seated in the slot.
5. Secure the board with the mounting screw you removed in step 2.
6. Make sure the card has been placed evenly and completely into the expansion slot.

## Replacing the battery

---

Your LX computer uses a 3-volt lithium battery, which should last about seven years. If you need to replace the battery, replace it with an equivalent battery. To purchase a new battery, check a local store such as Radio Shack or Home Depot. Ask for a battery with a part number that includes the identification code *CR2032*.

### **Warning**

*There is a danger of explosion if you install the wrong battery.*

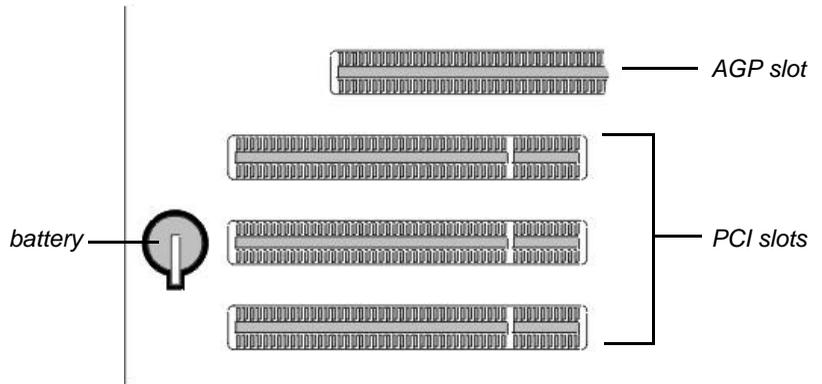
*Discard used batteries according to the manufacturer's instructions.*

---

To replace the battery, follow these steps:

1. Observe the precautions described on page 1.
2. Turn off all peripheral devices connected to the system. Turn off the computer's primary power switch on the back of the system.
3. Remove the chassis cover. (See "Removing the chassis cover" on page 2.)

4. Locate the battery on the mainboard.



5. With a medium flat-bladed screwdriver, gently pry the battery out of its socket. Note the orientation of the + and – on the battery.
6. Place the new battery in the socket, orienting the + and – correctly.
7. Replace the chassis cover.



# Using the CMOS Setup Utility

# 2

The mainboard comes with a BIOS chip that contains the ROM setup information for your system. This chip serves as an interface between the processor and the rest of the mainboard's components. This chapter explains the information contained in the Setup program and tells you how to modify the settings.

## Accessing the CMOS Setup Utility

---

To run the CMOS Setup Utility, press the **Delete** key at system startup, as the system runs the power-on self test.

## Main menu

---

```

AMIBIOS EASY SETUP UTILITIES Ver. 1.12
(C)1997 American Megatrends, Inc. All Rights Reserved
Main  Advanced  Security  Exit

System Date  Fri Aug 22 1997
System Time  13:09:58

Floppy Drive A  1.44 MB 3½
Floppy Drive B  Not Installed

Primary IDE Master  Auto
Primary IDE Slave   Auto
Secondary IDE Master  Auto
Secondary IDE Slave  Auto

Auto-Detect Hard Disks  [ Enter ]

Boot Sector Virus Protection  Disabled

<<< Setup Help >>>

Secondary IDE Slave
Configuration

↑ Previous Item
↓ Next Item
↔ Select Menu

Esc:Exit  Enter:Select  F5:Setup Defaults  F6:Original Values  F10:Save & Exit

```

The Main setup screen lets you change the system date and time, IDE hard disk drive, and floppy disk drive types for drives A and B.

### Auto-Detect Hard Disks

---

Allows the system BIOS to automatically detect all hard disk parameters.

### Boot Sector Virus Protection

---

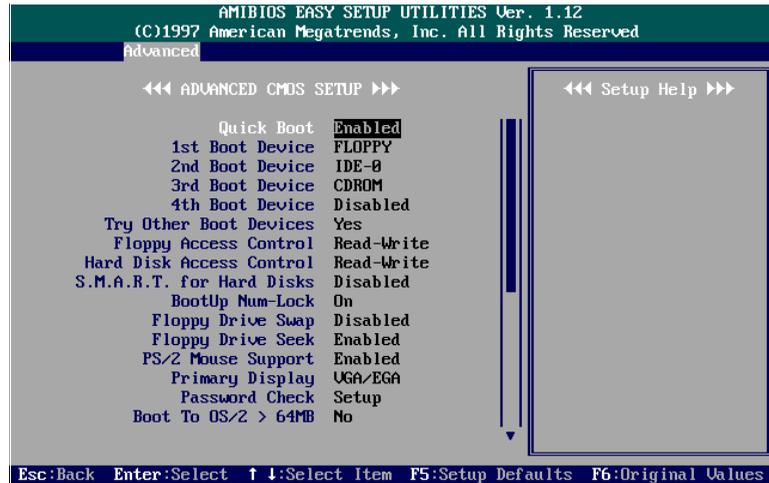
When enabled, the system warns you when any program or virus tries to modify the boot sector of a hard disk drive.

## Advanced menu



This section describes the options available when you select the **Advanced** menu.

## Advanced CMOS Setup options



## Advanced CMOS Setup options

Feature	Options	Description
Quick Boot	Disabled, Enabled (default)	Set this option to <i>Enabled</i> to instruct AMI BIOS to boot quickly when the computer is powered on.
1st Boot Device	Disabled, IDE-0, IDE-1, IDE-2, IDE-3, FLOPPY (default), FLOPTICAL, CDROM, SCSI, NETWORK	Sets the first drive for booting the system.
2nd Boot Device	Disabled, IDE-0 (default), FLOPTICAL	Sets the second drive for booting the system.
3rd Boot Device	Disabled, FLOPTICAL, CDROM (default)	Sets the third drive for booting the system.
4th Boot Device	Disabled (default), FLOPTICAL	Sets the fourth drive for booting the system.

## Advanced CMOS Setup options (continued)

Feature	Options	Description
Try Other Boot Devices	Yes (default), No	<i>Yes</i> : The BIOS boots the system from other boot devices if all selected boot devices fail to boot. <i>No</i> : The BIOS boots the system from only the selected devices.
Floppy Access Control	Read-Write (default), Read-Only	Effective only if the floppy disk drive is accessed through the BIOS INT40H function.
HDD Access Control	Read-Write (default), Read-Only	Effective only if the hard disk drive is accessed through the BIOS INT40H function.
S.M.A.R.T. for Hard Disks	Disabled (default), Enabled	S.M.A.R.T (Self-Monitoring, Analysis and Reporting Technology). If enabled, assists you in preventing some (but not all) system down time due to hard disk drive failure.
Bootup Num-Lock	On (default), Off	Set this option to <i>Off</i> to turn the Num Lock key off when the computer boots so you can use the arrow keys on both the numeric keypad and the keyboard.
Floppy Drive Swap	Disabled (default), Enabled	When enabled, drives A and B can be swapped.
Floppy Drive Seek	Disabled, Enabled (default)	Set this option to <i>Enabled</i> to specify that floppy drive A will perform a Seek operation at system startup.
PS/2 Mouse Support	Disabled, Enabled (default)	When <i>Enabled</i> is selected, the system can support a PS/2-type mouse.
Primary Display	Absent, VGA/EGA (default), CGA40x25, CGA80x25, or Mon	Specifies the type of display monitor and adapter in the computer.
Password Check	Setup (default), Always	<i>Always</i> : A user password prompt appears every time the computer is turned on. <i>Setup</i> : A user password prompt appears only when you attempt to run the CMOS Setup utility.
Boot To OS/2 > 64MB	Yes, No (default)	Yes enables the system BIOS to run with the IBM™ OS/2™ operating system.

## Advanced CMOS Setup options (continued)

Feature	Options	Description
CPU MicroCode Update	Disabled, Enabled (default)	When enabled, technicians can use a dedicated utility to update CPU microcode.
Internal Cache	Disabled, WriteBack (default), WriteThru	Specifies the caching algorithm used for L1 internal cache memory. <i>Disabled:</i> L1 is disabled. <i>WriteThru:</i> The write-through caching algorithm is used. <i>WriteBack:</i> The write-back caching algorithm is used.
System BIOS Cacheable	Disabled, Enabled (default)	If enabled, allows the contents of the F0000h system memory segment to be read from or written to L2 cache memory. Contents of the F0000h memory segment are always copied from BIOS ROM to system RAM for faster execution.
C000,16K Shadow; C400,16K Shadow; C800,16K Shadow; CC00,16K Shadow; D000,16K Shadow; D400,16K Shadow; D800,16K Shadow; DC00,16K Shadow	Disabled, Enabled, Cashed.  The default setting for <i>C000, 16K Shadow</i> and <i>C400, 16K Shadow</i> is <i>Cashed</i> .  The default for all others is <i>Disabled</i> .	These options control the location of ROM contents from the beginning of the specified memory location. If no adapter ROM is using the named ROM area, this area is available to the local bus.  <i>Disabled:</i> Video ROM is not copied to RAM. Video ROM contents are not read from or written to cache memory.  <i>Enabled:</i> The contents of C0000h - DC00h are written to the same address in system memory (RAM) for faster execution.  <i>Cashed:</i> If an adapter ROM uses the named ROM area, contents of the named ROM area are written to the same address in system memory (RAM) for faster execution. Also, contents of the RAM area can be read from and written to cache memory.

## Advanced Chipset Setup options

```

AMIBIOS EASY SETUP UTILITIES Ver. 1.12
(C)1997 American Megatrends, Inc. All Rights Reserved
Advanced

<<< ADVANCED CHIPSET SETUP >>>

Auto Configure EDO DRAM Timing Enabled
  EDO DRAM Speed (ns) 60
    EDO Read Burst Timing x222
    EDO Write Burst Timing x222
    EDO RAS Precharge Timing 3 Clocks
    EDO RAS to CAS Delay 3 Clocks
    MA Wait State Slow
***** SDRAM Timing *****
  SDRAM RAS to CAS Delay 2 Clks
  SDRAM CAS Latency 3 Clks
  SDRAM RAS Precharge Time 2 Clks
  DRAM Integrity Mode Non ECC
  Fixed Memory Hole Disabled
  USWC Write I/O Post Disabled
  Read Around Write Enabled
  AGP Aperture Size 64MB

<<< Setup Help >>>

Esc:Back Enter:Select ↑ ↓:Select Item F5:Setup Defaults F6:Original Values

```

```

AMIBIOS EASY SETUP UTILITIES Ver. 1.12
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Advanced

<<< ADVANCED CHIPSET SETUP >>>

  EDO RAS Precharge Timing 3 Clocks
  EDO RAS to CAS Delay 3 Clocks
  MA Wait State Slow
***** SDRAM Timing *****
  SDRAM RAS to CAS Delay 2 Clks
  SDRAM CAS Latency 3 Clks
  SDRAM RAS Precharge Time 2 Clks
  DRAM Integrity Mode Non ECC
  Fixed Memory Hole Disabled
  USWC Write I/O Post Disabled
  Read Around Write Enabled
  AGP Aperture Size 64MB
  PIIX4 Delayed Transaction Disabled
  CPU/PCI Clock Selection (Mhz) 66.80/33.40
  USB Function Disabled
  USB Keyboard Legacy Support Disabled

<<< Setup Help >>>

Esc:Back Enter:Select ↑ ↓:Select Item F5:Setup Defaults F6:Original Values

```

## Advanced Chipset Setup options

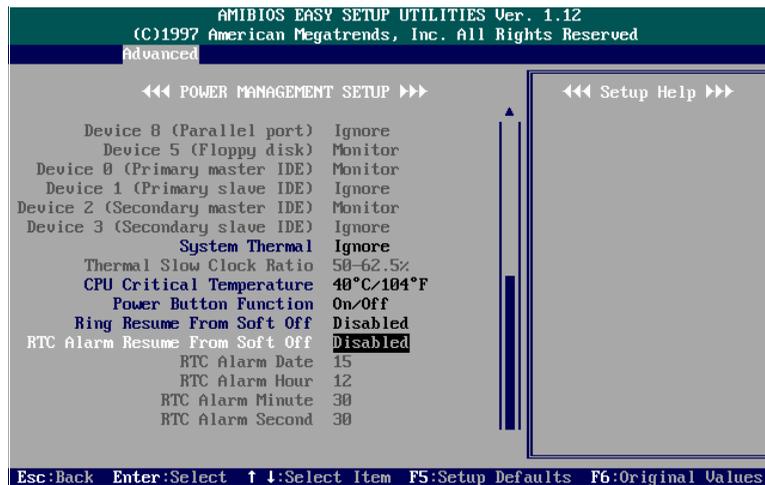
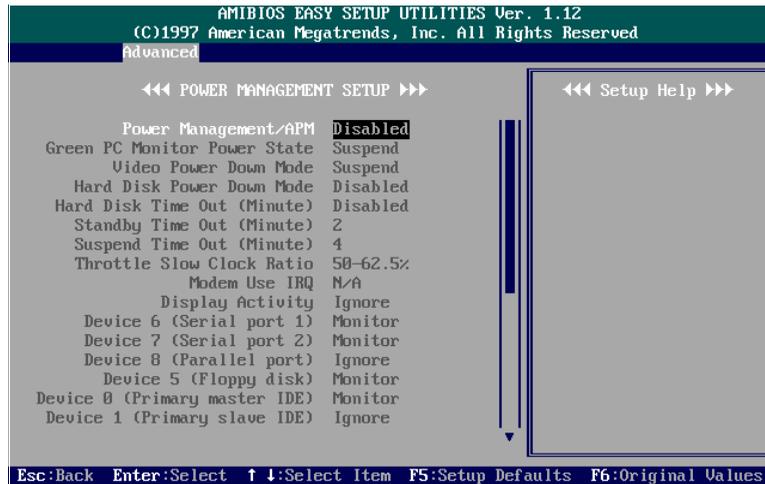
Feature	Options	Description
Auto Configure EDO DRAM Timing*	Disabled, Enabled (default)	When disabled, lets you configure EDO timing options.
EDO DRAM Speed (ns)*	50ns, 60ns, (default) 70ns.	Sets the DRAM speed.
EDO Read Burst Timing*	x333 or x222 (default) (depending on the CPU frequency and DRAM type)	When <i>Auto Configure EDO DRAM Timing</i> is set at <i>Disabled</i> , defines the DRAM read burst timing.
EDO Write Burst Timing*	x333 or x222 (default) (depending on the CPU frequency and DRAM type).	When <i>Auto Configure EDO DRAM Timing</i> is set at <i>Disabled</i> , defines the DRAM write burst timing.
EDO RAS Precharge Timing*	4 Clocks, 3 Clocks (default)	Sets the DRAM RAS# Precharge Time.
EDO RAS to CAS Delay*	2 Clocks, 3 Clocks (default) (depending on the CPU frequency and DRAM type)	When <i>Auto Configure EDO DRAM Timing</i> is set at <i>Disabled</i> , defines the delay between the DRAM RAS# active to CAS# active.
MA Wait State	Slow (default), Fast	Sets the memory address wait state.
SDRAM RAS to CAS Delay	2 Clocks (default) (depending on the CPU frequency and DRAM type), 3 Clocks	When <i>Auto Configure EDO DRAM Timing</i> is set at <i>Disabled</i> , defines the delay between the DRAM RAS# active to CAS# active.
SDRAM CAS Latency	2 Clocks, 3 Clocks (default)	If DIMMs are installed, sets the CAS latency.
SDRAM RAS Precharge Timing	2 Clocks (default), 3 Clocks	Sets the SDRAM RAS# Precharge time.
DRAM Integrity Mode	Non-ECC (default), EC-only, ECC.	Sets the DRAM interface mode of operation. <i>ECC</i> : ECC generation and checking/correction <i>EC-only</i> : error checking only

\* The LX system includes SDRAM only.

## Advanced Chipset Setup options (continued)

Feature	Options	Description
Fixed Memory Hole	Disabled (default), 512KB-640KB, 15MB-16MB	<i>Enabled:</i> The memory hole at the 15MB address is relocated to the 15-16MB address range of the ISA cycle when the processor accesses the 15-16MB address area. <i>Disabled:</i> The memory hole at the 15MB address is treated as a DRAM cycle when the processor accesses the 15-16MB address area.
USWC Write I/O Post	Disabled (default), Enabled	Allows the system to reduce the access times of CPU write to I/O data to speed up performance.
AGP Aperture Size	4MB, 8MB, 16MB, 32MB, 64MB (default), 128MB, 256MB	Sets the main memory frame size for AGP use.
PIIX4 Delayed Transaction	Disabled, Enabled (default)	When enabled, forces the current PCI bus master to retry the current PCI bus master cycle, to accept the new PCI master request, to reaccept the original PCI bus master, and return the PCI data to the original PCI master. Enhances system performance.
CPU/PCI Clock Selection (MHz)	0.00/25.00, 75.00/32.00, 83.00/41.05, 68.5/34.25, 55.00/27.50, 75.00/37.50, 60.00/30.00, 66.80/33.40 (default)	Sets the ratio of the CPU external clock to the PCI bus clock.
USB Function	Disabled, Enabled (default)	Enables or disables the Universal Serial Bus (USB) feature.
USB Keyboard/Mouse Support	Disabled (default), Enabled	If you use a USB keyboard or mouse, set at <i>Enabled</i> . Otherwise, use the default setting ( <i>Disabled</i> ).

## Power Management Setup options



## Power Management Setup options

Feature	Options	Description
Power Management/APM	Enabled, Disabled (default).	Enables or disables power management and APM (Advanced Power Management) features.
Green PC Monitor Power State	Suspend (default), Off, Blank, Standby	Specifies the power management state that the Green PC-compliant video monitor enters after the specified period of system inactivity has expired.
Video Power Down Mode	Disabled, Standby, Suspend (default)	Specifies the power management state the video subsystem enters after the specified period of system inactivity has expired.
Hard Disk Power Down Mode	Disabled, Standby, Suspend (default)	Specifies the power management state the hard disk drive enters after the specified period of system inactivity has expired.
Hard Disk Time Out (Minute)	Disabled (default), 1 Min (minute), and all one-minute intervals up to and including 15 Min.	Specifies the period of hard disk inactivity. When this period expires, the hard disk drive enters the power-conserving mode selected for the <i>Hard Disk Power Down Mode</i> feature described above.
Standby Time Out (Minute)	Disabled, 1 Min (minute), 2 Min (default), and all one-minute intervals up to and including 15 Min.	Specifies the length of time the system is inactive when the computer is in Full-On mode before the computer goes into Standby mode.
Suspend Time Out (Minute)	Disabled, 1 Min (minute), 2 Min, and all one-minute intervals up to and including 15 Min. The default is 4 Min.	Specifies the length of time the system is inactive when the computer is already in Standby mode before the computer goes into Suspend mode. (In Suspend mode, nearly all power use is curtailed.)
Throttle Slow Clock Ratio	0-12.5 %, 12.5 - 25 %, 25-37.5 %, 37.5-50 %, 50-62.5 % (default), 62.5 - 75%, 75-87.5 %	Sets the speed at which the system clock runs in power saving modes. Settings are expressed as a ratio between the normal clock speed and the power down clock speed.
Modem Use IRQ	NA (default), 3, 4, 5, 7, 9, 10, 11	Reserves an IRQ# for an add-in modem.

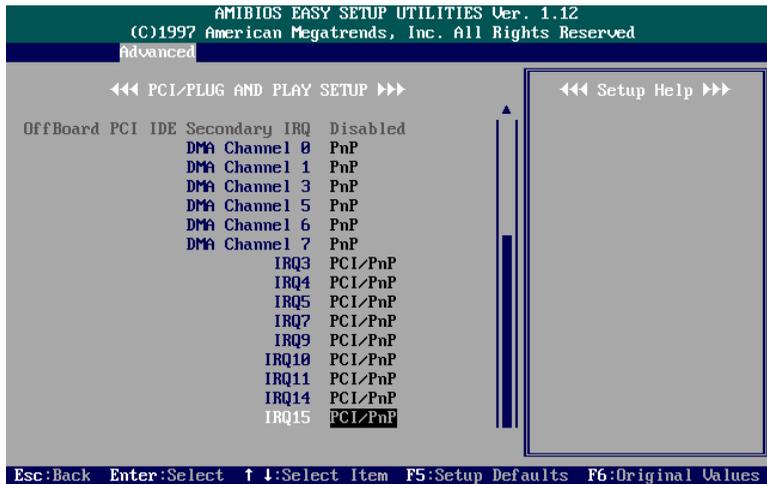
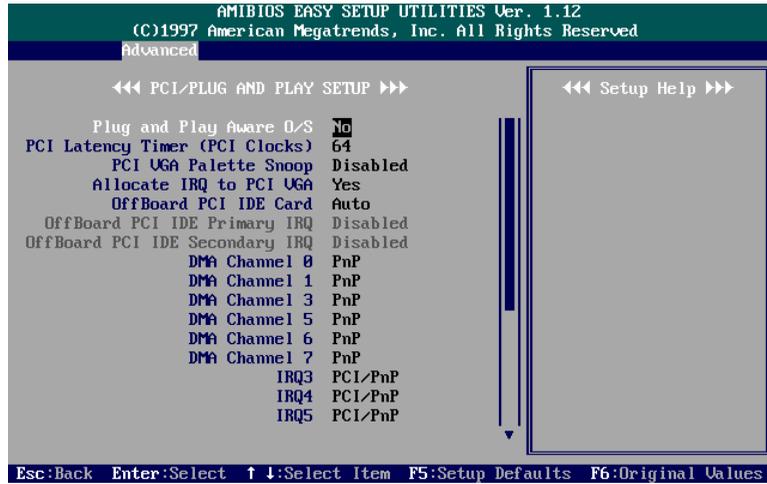
## Power Management Setup options (continued)

Feature	Options	Description
Display Activity, Device 6 (Serial port 1), Device 7 (Serial port 2), Device 8 (Parallel port), Device 5 (Floppy disk), Device 0 (Primary master IDE), Device 1 (Primary slave IDE), Device 2 (Secondary master IDE), Device 3 (Secondary slave IDE)	Ignore, Monitor.  The default for Display Activity, Device 8, Device 1, and Device 3 is <i>Ignore</i> .  The default for Device 6, 7, 5, 0, and 2 is <i>Monitor</i> .	Devices connected to the system via these channels or ports can be set at <i>Monitor</i> for waking up the system when the system is in Suspend mode.
System Thermal	Ignore (default), Monitor	If your system includes an ATX power supply and this feature is set at <i>Monitor</i> , the system fan starts if the temperature detected by the thermal sensor located under the CPU is over 65° C or 149° F.
Thermal Slow Clock Ratio	0-12.5 %, 12.5 - 25 %, 25-37.5 %, 37.5-50 %, 50-62.5 % (default), 62.5 - 75%, 75-87.5 %	Sets the percentage range of the CPU internal clock to prevent the CPU from overheating. A higher percentage may cause the CPU to more easily overheat.
CPU Critical Temperature	Disabled, 30°C/86°F, 35°C/95°F, 40°C/104°F (default), 45°C/113°F, 50°C/122°F, 55°C/131°F, 60°C/186°F	Sets the temperature that the system implements CPU overheat-critical procedures, such as CPU slowdown.
Power Button Function	ON/OFF (default), Suspend	Sets the Power Button usage. <i>ON/OFF</i> : Pressing the Power Button turns the system power on or off. <i>Suspend</i> : Pressing the Power Button puts the system into Suspend mode. Keeping the button pressed for 4 seconds puts the system into Power Off mode.

**Power Management Setup options (continued)**

Feature	Options	Description
RTC Alarm Resume From Soft Off	Disabled (default), Enabled	When enabled, lets you set the time the system is to be turned on from the system power-off status.
RTC Alarm Data	Every Day, 1, 2, 3, ..., 31 day. The default setting is 15.	If the <i>RTC Alarm Resume From Soft Off</i> feature is enabled, sets the day the alarm starts.
RTC Alarm Hour	0, 1, 2, ..., 23 hours. The default setting is 12.	If the <i>RTC Alarm Resume From Soft Off</i> feature is enabled, sets the hour the alarm starts.
RTC Alarm Minute	0, 1, 2, ..., 59 minutes. The default setting is 30.	If the <i>RTC Alarm Resume From Soft Off</i> feature is enabled, sets the minute the alarm starts.
RTC Alarm Second	0, 1, 2, ..., 59 seconds. The default setting is 30.	If the <i>RTC Alarm Resume From Soft Off</i> feature is enabled, sets the second the alarm starts.

## PCI/Plug and Play Setup options



**PCI/Plug and Play Setup options**

Feature	Options	Description
Plug and Play Aware O/S	No, Yes (default)	Set this option to <i>Yes</i> if the operating system installed in the computer is Plug and Play compatible (Windows 95 or Windows NT). Set this option to <i>No</i> if the operating system (such as DOS, OS/2, Windows 3.x) does not support Plug and Play.
PCI Latency Timer (PCI Clocks)	32 (default), 64, 96, 128, 160, 192, 224, 248	Sets the latency of all PCI devices on the PCI bus. The settings are in units equal to PCI clocks.
PCI VGA Palette Snoop	Disabled (default), Enabled	If an ISA adapter card installed in the system requires VGA palette snooping, this option must be set to <i>Enabled</i> .
Allocate IRQ to PCI VGA	Yes (default), No	When set at <i>Yes</i> , allows the system to keep ESCD (Extended System Configuration Data).
OffBoard PCI IDE Card	Auto (default), Slot1, Slot2, Slot3, Slot5, Slot6	Specifies if an offboard PCI IDE controller adapter card is used. You must also specify the PCI slot where the card is installed. (If an offboard PCI IDE controller is used, the onboard IDE controller is disabled.)
OffBoard PCI IDE Primary IRQ	Disabled (default), INTA, INTB, INTC, INTD, Hardwired	Sets the IRQ if you use an offboard primary PCI IDE card.
OffBoard PCI IDE Secondary IRQ	Disabled (default), INTA, INTB, INTC, INTD, Hardwired	Sets the IRQ if you use an offboard secondary PCI IDE card.
DMA Channel 0, 1, 3, 5, 6, 7	PnP (default), ISA/EISA	Specifies the bus type that the named DMA channels are used on.

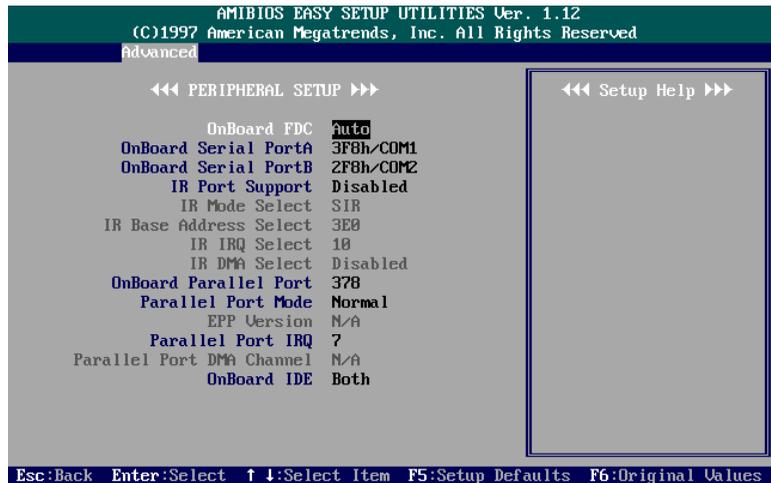
**PCI/Plug and Play Setup options (continued)**

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Feature	Options	Description
IRQ3, 4, 5, 7, 9, 10, 11, 14, 15	PCI/PnP (default), ISA/EISA	Specifies the bus on which the named IRQs are used. Lets you specify IRQs for use by legacy ISA adapter cards. You can use these options to cause IRQs to be unavailable for use by BIOS-configurable devices. If IRQs must be removed from the pool of available IRQs, you can use these PCI/PnP Setup options to remove the IRQ by assigning the option to the ISA/EISA setting. Onboard I/O is configurable by the BIOS. The IRQs used by onboard I/O are configured as PCI/PnP.

---

## Peripheral Setup options



### Peripheral Setup options

Feature	Options	Description
Onboard FDC	Auto (default), Enabled, Disabled	Enables the floppy drive controller on the mainboard.
Onboard Serial PortA	Auto, Disabled, 3F8h/COM1 (default), 2F8h/COM2, 3E8h/COM3, 2E8h/COM4	Enables serial port 1 on the mainboard and specifies the base I/O port address for serial port 1.
Onboard Serial PortB	Auto, Disabled, 3F8h/COM1, 2F8h/COM2 (default), 3E8h/COM3, 2E8h/COM4	Enables serial port 2 on the mainboard and specifies the base I/O port address for serial port 2.
IR Mode Support	Disabled (default), Enabled	Lets you set the IR port for the second serial port.
IR Mode Select	SIR (default), ASKIR, FIR	Sets IR modes.
IR Base Address Select	3E0 (default), 2E0, 3E8, or 2E8	Sets the IR address.

## Peripheral Setup options (continued)

Feature	Options	Description
IR IRQ Select	3, 4, 10 (default), 11	Sets the IR IRQ.
IR DMA Select	Disabled (default), 0, 1, 3	Sets the IR DMA.
Onboard Parallel Port	378h (default), 278h, 3BCh, Auto, Disabled	Enables the parallel port on the mainboard and specifies the parallel port base I/O port address.
Parallel Port Mode	Normal, Bi-Dir, EPP, ECP (default)	Sets the mode of the parallel port.
EPP Version	1.9 (default), 1.7	Sets the EPP version.
Parallel Port IRQ	5, 7 (default)	Sets the IRQ of the parallel port.
Parallel Port DMA Channel	1, 3 (default)	Sets the DMA channel of the parallel port.
OnBoard IDE	Disabled, Primary, Secondary, Both (default)	Set this option to <i>Enabled</i> to specify that the IDE controller on the PCI local bus has bus-mastering capability.

## Hardware Monitor Setup screen

---

```
AMIBIOS EASY SETUP UTILITIES Ver. 1.12
(C)1997 American Megatrends, Inc. All Rights Reserved
Advanced
<<< HARDWARE MONITOR SETUP >>>
--= System Hardware Monitor =--
Current CPU Temperature  0°C/32°F
Current System Temperature 39°C/102°F
Current CPU Fan Speed    16875 RPM
Current Chassis Fan Speed 16463 RPM
Vcore 0.512 V
Vio 0.544 V
+ 5.000V 0.941 V
+12.000V 2.304 V
-12.000V -2.055 V
- 5.000V -0.925 V
<<< Setup Help >>>
Esc:Back  Enter:Select  ↑↓:Select Item  F5:Setup Defaults  F6:Original Values
```

This feature can help technicians monitor data provided by the mainboard's LDCM function.

### Note

The LX system does not use this feature.

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## Security menu

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See "Main menu" on page 18.

To access security options, select the **Security** menu.

### Setting supervisor and user passwords

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When you select **Supervisor** or **User**, you are prompted to enter a password. Enter a 1- to 6-character password.

#### Note

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You must set the Supervisor password before you can set the User password.

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If you do not use a password, press **Enter** when the password prompt appears.

See page 21.

The Password Check feature is one of the Advanced CMOS Setup options. If you select **Always** the password prompt appears every time you turn on the system. If you select **Setup** the password prompt appears only when you attempt to run the CMOS Setup utility.

### Changing your password

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1. Enter the new password and press **Enter**.
2. Retype the new password as prompted and press **Enter**.
3. Return to the Main setup screen.

## If you forget your password

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If you forget your password, follow these steps to disable the password and enter a new one:

1. Turn off all peripheral devices connected to the system.
2. Turn off the primary power switch on the back of the system.
3. Unplug the system's power cord..

### **Warning**

*Static electricity can damage integrated circuits. Before handling any computer component outside its protective packaging, use one of these methods to discharge static electricity in your body:*

- *After you turn off the main switch on the back of the computer and remove the chassis cover, touch a metal computer component (such as the power supply).*

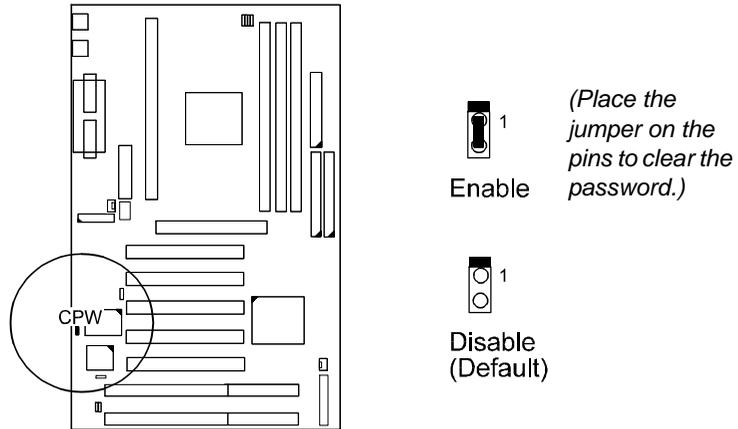
*or*

- *Wear a static wrist strap that is connected to a natural earth ground.*

See "Removing the chassis cover" on page 2.

4. Remove the chassis cover.

5. Place the jumper on the CPW jumper pins.



6. Replace the chassis cover.
7. Turn on the system and run the CMOS Setup Utility. (You will not be asked for the password to run the utility.)
8. Enter a new password. (See “Changing your password” on page 36.)
9. Turn off all peripheral devices connected to the system.
10. Turn off the primary power switch on the back of the system.
11. Unplug the system's power cord.
12. Remove the chassis cover.
13. Enable the CPW jumper by removing the jumper from the pins.
14. Replace the chassis cover.

## Exiting the CMOS Setup Utility

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### ***Exit Saving Changes***

Write the current settings to CMOS and exit the CMOS Setup Utility.

### ***Exit Discarding Changes***

Exit without writing the current settings to CMOS.

### ***Load Optimal Settings***

Load settings that provide the best system performance.

### ***Load Fail Safe Settings***

Load settings that let you diagnose system problems. If the system will not boot, select this option and try to diagnose the problem after the computer boots. (These settings do not provide optimal performance.)

### ***Load Original Values***

This option recalls the most recently saved settings. This option is convenient if you change settings and then decide you want to return to the previous settings.



# Optional Extras

# A

For complete information about options and replacement parts available for your LX system, see the iDOT.com Web site: [www.idot.com](http://www.idot.com).

## Ordering a network card

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A variety of network cards are available from iDOT.com. Check out the iDOT.com Web site ([www.idot.com](http://www.idot.com)) for more information about available network cards and for ordering information.

## Memory specifications and ordering information

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Your LX system uses 3.3-volt synchronous SDRAM DIMMs, unbuffered, for a 66MHz bus. The system supports DIMMs with latency times of 10ns, 12ns, and 15ns. (iDOT.com recommends that you use 10ns DIMMs.)

The following table shows DIMM configurations:

32MB	4M x 64
64MB	8M x 64
128MB	16M x 64

Provided the DIMMs match the specifications above, you can mix and match DIMMs of different memory sizes and you can install them in any DIMM slot.

