EXP8051
ALI 1449+1451
USER'S MANUAL

TABLE OF CONTENTS

RMA FORM

CHAPTER 1
INTRODUCTION

1.1 OVERVIEW

The **EXP8051** is complemented by a 1MB <u>second level</u> Write-Back cache providing workstation level computing performance , and SIMM sockets support up to 128MB of DRAM.

The **EXP8051** motherboard offers outstanding I/O capabilities .Four PCI Local Bus slots provide a high bandwidth data path for data-movement intensive function such as Graphics . Four ISA slots complete the I/O mix .

The **EXP8051** Baby-AT motherboard provides the foundation for cost effective , high performance , highly expandable platforms.

1.2 SYSTEM FEATURES

❑ Supports INTEL PENTIUM
❑ Supports 4 MASTER 32-bit PCI Bus
❑ Supports L1/L2 Write Back/ Write Through Cache Feature
❑ Supports 256KB/512KB/1MB Cache Size
❑ Supports 72pin SIM MODULES

1.3 SYSTEM SPECIFICATIONS

Processor :   INTEL PENTIUM
CPU Clock :   60/66 MHz CPU
Memory :   2MB to 128MB
SRAM Configuration :   256KB/512KB/1MB
BIOS Subsystem :   PHOENIX/AWARD BIOS
Additional BIOS Feature : Set Program Resides in ROM
I/O Subsystem No. Slot : Four 16-bit ISA Bus & Four PCI 32-bit
Bus

Additional Features

Miscellaneous Connectors :   Reset Button, Internal Battery
Board Design :   4-layer Implementation for Low Noise
Operation

1.4 SYSTEM PERFORMANCE

SOFTWARE CPU TYPE	LANDMARK V2.0	POWER METER V1.8 MIPS	NORTON V8.0 CPU SPEED
60MHz	346.43MHz	28.4MIPS	190.1
66MHz	383.20MHz	32 MIPS	210.3

1.5 EXP8051 BOARD LAYOUT

9
10
1
1
JP1
3
JP1
8
JP1
6
JP1
4
JP1
7
JP1
5

■
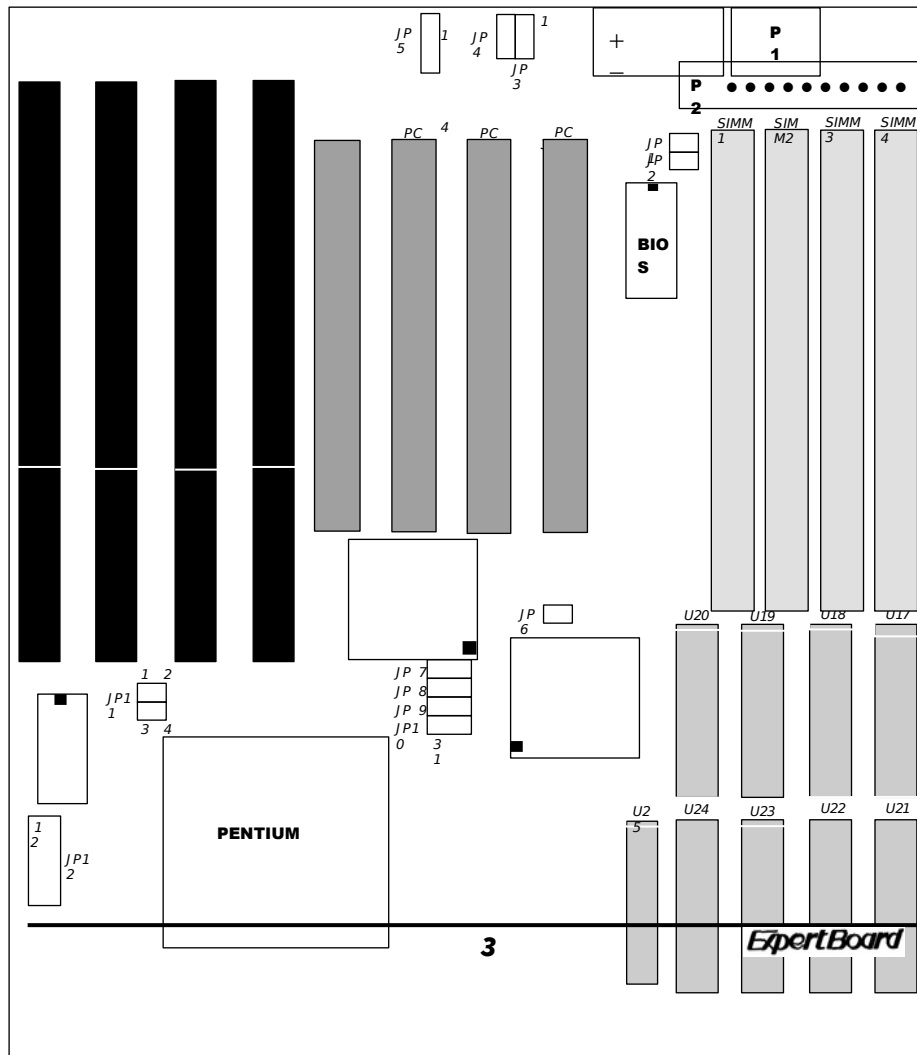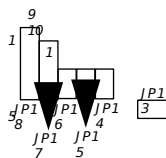
CHAPTER 2
INSTALLATION

Before the system is ready to operate, the hardware must be set up for various functions of the system. To set up the **EXP8051** main board is a simple task. The user only has to set a few jumpers, connectors and sockets.

2.1 DRAM INSTALLATION

ν The board layout below shows the locations of the DRAM memory banks :

SIMM 1 SIMM 2 SIMM 3 SIMM 4
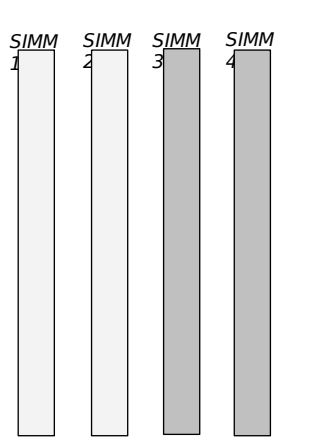
📄 | SIMM1+SIMM2 + SIMM3+SIMM4 = TOTAL |

Each group includes two SIMMs, each SIMM size can be 1,2,4,8,16,32MB,
please install the same DRAM size in one group.

2.2 SRAM INSTALLATION
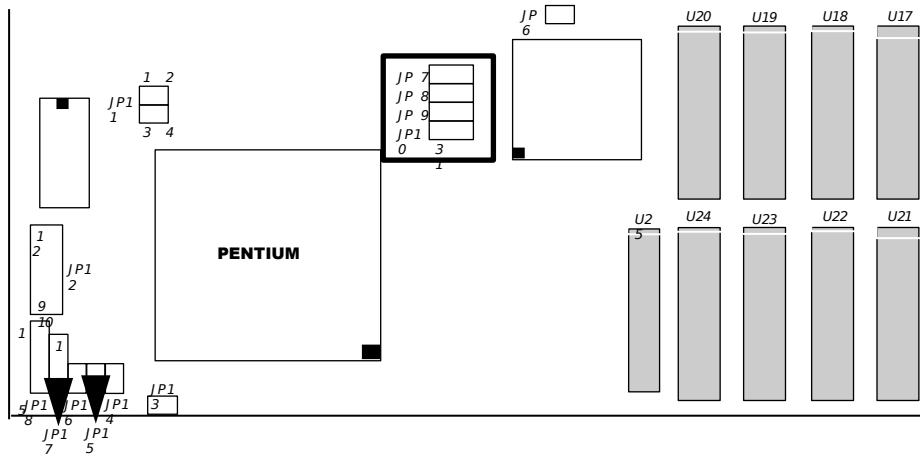
CACHE SIZE CONFIGURATION

256K *		512K		1M	
TAG RAM U25 8KX8	DATA RAM U17~U24 32KX8	TAG RAM U25 32KX8	DATA RAM U17~U24 64KX8	TAG RAM U25 32KX8	DATA RAM U17~U24 128KX8
JP7 3 2 1 $\bullet\bullet$		JP7 3 2 1 $\bullet\bullet$		JP7 3 2 1 $\bullet\bullet$	
JP8 3 2 1 $\bullet\bullet$		JP8 3 2 $\bullet\bullet$		JP8 3 2 1 $\bullet\bullet$	
JP9 3 2 1 $\bullet\bullet$		JP9 3 2 $\bullet\bullet$		JP9 3 2 1 $\bullet\bullet$	
JP10 3 2 1		JP10 3 2 1 $\bullet\bullet$		JP10 3 2 1 $\bullet\bullet$	

* : Default Setting

2.3 CPU INSTALLATION

CPU FREQUENCY SETTING

PENTIUM 50.0 MHz	PENTIUM 60.0 MHz	PENTIUM 66.6 MHz
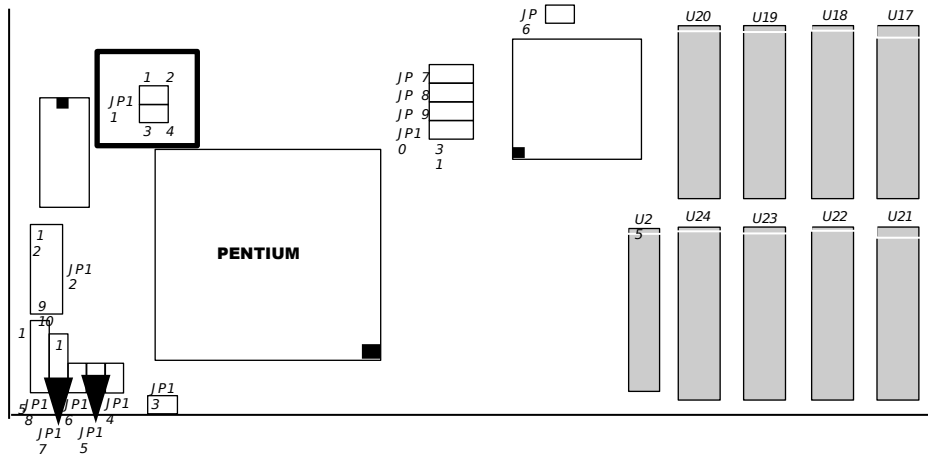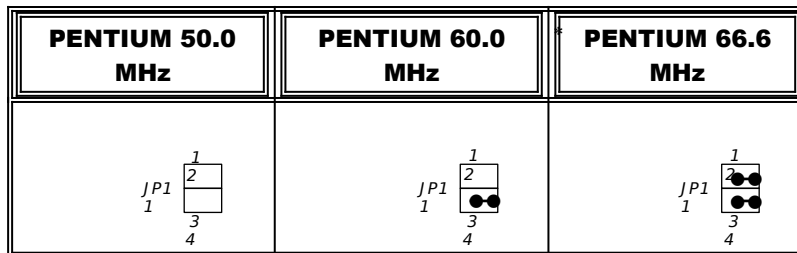
2.4 OTHER JUMPER & CONNECTOR SETTING

JP 5   1   JP 4   1   + −   **P 1**

JP 3

P 2 • • • • • • • • • •

4

PC 3   PC 2   3 PC 1   SIMM 1   SIM M2   SIMM 3   SIMM 4

PC4

JP 1   JP 2

BIO S

JP 6

1 2   JP1 2

9 10

1   1

JP1 3   **OTHER JUMPER DESCRIPTION**

PENTIUM

5 P1 8   JP1 6   P1   JP1 4

JP1 7   JP1 5
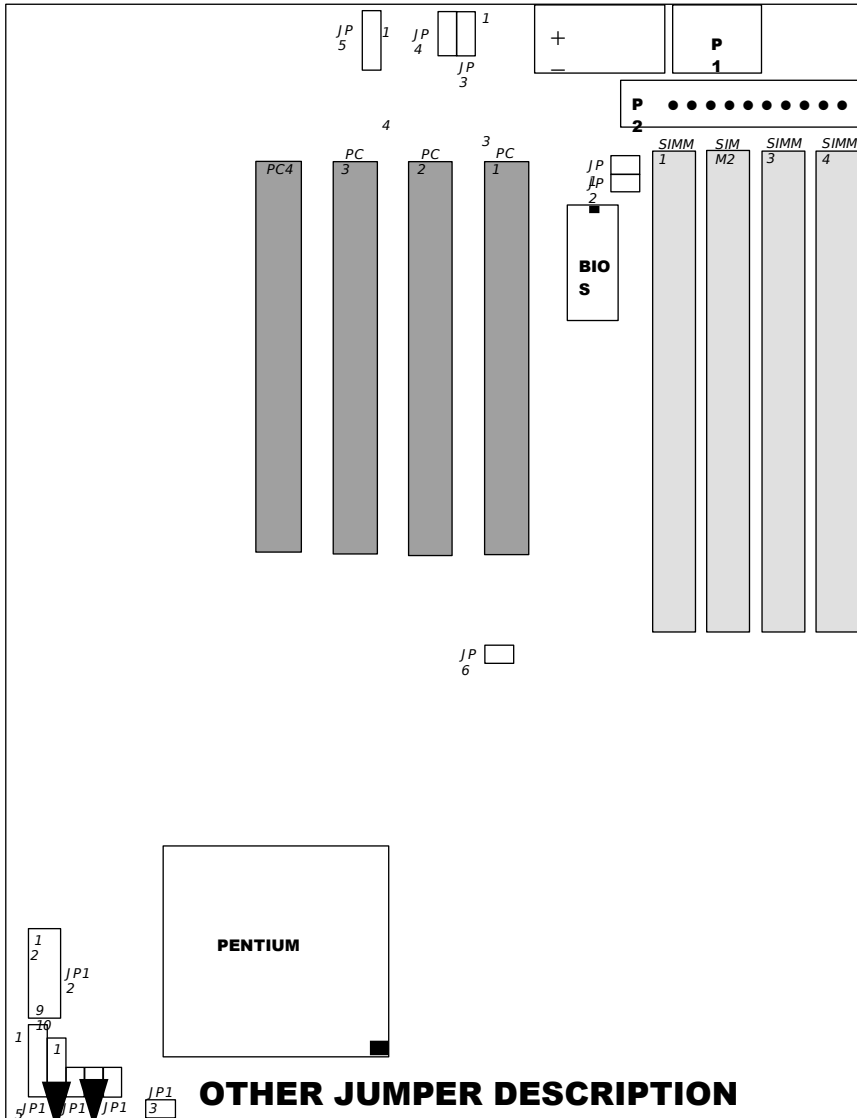
JUMPER	DESCRIPTION			
JP 1		NORMAL		
JP 2	● ●	BUILT IN BATTERY	☐	USE EXTERNAL BATTERY *
JP 3	1 2 / 3 ●	POWER SUPPLY *	1 2 / 3 ●	LM 393
JP 4	● / 1 2 / 3 ●	FLASH ROM	● / 1 ● 2 / 3	NORMAL ROM *
JP 6	● / ☐	NORMAL*	● / ● / ●	DELAY ADS#
JP13	EXTERNAL SUSPEND SWITCH			

* : Default Setting

CONNECTOR DESCRIPTION

CONNECTOR	PIN OUT	SIGNAL NAME		
JP18 : **KEY LOCK**	1 2 3 4 5	LED POWER NOT USED GROUND KEYBOARD INHIBITOR GROUND		
JP17 : **SPEAKER**	1 2 3 4	+ 5V DATA OUT DATA OUT DATA OUT		
JP16: **RESET**	1 2	GROUND RESET IN		
P1: **KEYBOARD** **CONNECTOR**	1 2 3 4 5	KEYBOARD CLOCK KEYBOARD DATA SPACE GROUND + 5V DC		
P2 : **POWER** **CONNECTOR**	1 2 3 4 5,6,7,8 9 10,11,12	POWER GOOD + 5V DC +12V DC - 12V DC GROUND - 5V DC + 5V DC		
JP12: **PERIPHERAL** **POWER** **CONTROL** **CONNECTOR**	1,2 3,4 5,6 7,8 9,10	POWER	FOR V-SYNC FOR H-SYNC FOR MONITOR FOR POWER FAN RESERVED	
JP 5	EXTERNAL BATTERY 1-2 OR 1- 4 (PIN 1 is GROUND)			

CHAPTER 3
SYSTEM BIOS SETUP

PHOENIX BIOS SYSTEM CONFIGURATION SETUP

Use the **EXP8051** to record changes in your hardware and to control it's special features. The setup program uses a number of menus in which you can specify changes to your hardware and turn the special features on or off.

1. To start the **EXP8051** setup program, take the following steps:

    Press <DEL> to enter setup while turning on or rebooting your system.

    The Phoenix BIOS for **EXP8051** *displays this message:*

2. The Main Menu which looks like this appears:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
•   System Setup
•   Fixed Disk Setup
•   Advanced System Setup
•   Boot Options
•   Security and Anti-Virus
•   Green PC Features
Load ROM Default Values
Load Values from CMOS

```
┌─────────────────────────────────────────────────┐
│              Save Values to CMOS                  │
├─────────────────────────────────────────────────┤
│ ↓  Move              Enter  Select                │
│  F1  Help            ESC  Exit          F10   Save  & │
│ Exit                                              │
└─────────────────────────────────────────────────┘
```

3. Select an option by moving the highlight with your up-and-down arrow keys and press. <Enter>.

4. After making your changes, select Save Values to CMOS to make them operative. Press <Esc> to exit the setup program. The following pages describe each one of these selections.

3.1 SYSTEM SETUP

Selecting **"*System Setup*"** on the Main Menu displays this menu:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

```
┌─────────────────────────────────────────────────┐
│                 SYSTEM SETUP                      │
├─────────────────────────────────────────────────┤
│                                                   │
│   System Time:            [14:29:46]              │
│   System Date:            [10/19/1994]            │
│                                                   │
│   Video System:           [EGA / VGA]             │
│                                                   │
│   System Memory:          [640 KB]                │
│   Extended Memory:        [7MB]                   │
│                                                   │
│   Diskette Drive A:       [1.44 MB, 3.5"]         │
│   Diskette Drive B:       [Not Installed]         │
│     Keyboard:             [Not Installed]         │
│                                                   │
└─────────────────────────────────────────────────┘
```

```
↓ Move  ESC  Exit                    PgUp  Previous Value
        F5  Previous Configuration
        F1  Help  PgDn  Next Value  F6  Default
Configuration
```

3.2 FIXED DISK SETUP

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
• System Setup • Fixed Disk Setup • Advanced System Setup • Boot Options • Security and Anti-Virus • Green PC Features Load ROM Default Values Load Values from CMOS Save Values to CMOS
↓ Move   Enter Select F1 Help   ESC Exit   F10   Save & Exit

Selecting **"Fixed Disk Setup"** on the Main Menu displays this menu:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

FIXED DISK SETUP
IDE Adapter 0   Master   (C: 541MB) IDE Adapter 0   Slave   (None) Large Disk Access Mode: [DOS]
↓ Move   Enter Select F1 Help   ESC Exit   F10   Save & Exit

Selecting either option and pressing <Enter> displays a menu like this:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

IDE ADAPTER 0 MASTER (C: 541MB)	
Autotype Fixed Disk:	[Press Enter]
Type:	[User] 541 MB
Cylinders:	[1120]
Heads:	[16]
Sectors / Track:	[59]
Write Precomp:	[None]
Multi-Sector Transfers:	[Disabled]
LBA Mode Control:	[Disabled]
32 Bit I / O:	[Disabled]
Transfer Mode:	[Standard]

↓ Move   Enter Select
F1 Help   ESC Exit   F10   Save &
Exit

3.3 ADVANCED SYSTEM SETUP

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
• System Setup
• Fixed Disk Setup
• Advanced System Setup
• Boot Options
• Security and Anti-Virus
• Green PC Features
Load ROM Default Values

```
                    Load Values from CMOS
                    Save Values to CMOS
 ↓  Move              Enter  Select
 F1  Help             ESC  Exit              F10   Save & Exit
```

Selecting *"Advanced System Setup"* from the Main Menu displays the following menu:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

```
┌──────────────────────────────────────────────────────┐
│              ADVANCED SYSTEM SETUP                     │
├──────────────────────────────────────────────────────┤
│                      Warning!                          │
│            Items on this menu, if set incorrectly,     │
│            could cause your system to malfunction.     │
│              •    Memory Cache                          │
│              •    Memory Shadow                         │
│              •    Advanced Chipset  Control             │
│              •    PCI Devices                           │
├──────────────────────────────────────────────────────┤
│  ↓  Move              Enter  Select                    │
│  F1  Help             ESC  Exit          F10    Save  &│
│  Exit                                                  │
└──────────────────────────────────────────────────────┘
```

Choose an option and press <Enter>. See the following pages for a description of each feature and its options.

3.3.1 Memory Cache

Selecting "*Memory Cache*" from the Advanced Setup menu displays a menu like the one shown here. The actual features displayed depend on the capabilities of your system's hardware.

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MEMORY CACHE	
External Cache:	[Enabled]
External Cache Method:	[Write-Back]
External Cache Write Timing:	[Normal]
External Cache Read Timing:	[Normal]
Cache Hit Sampling Time:	[Normal]
PCI FEATURES	
PCI Master Cycles:	[Normal]

↓ Move	ESC Exit	PgUp	Previous
Value	F5 Previous Configuration		
	F1 Help PgDn Next Value	F6	Default
Configuration			

3.3.2 Memory Shadow

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

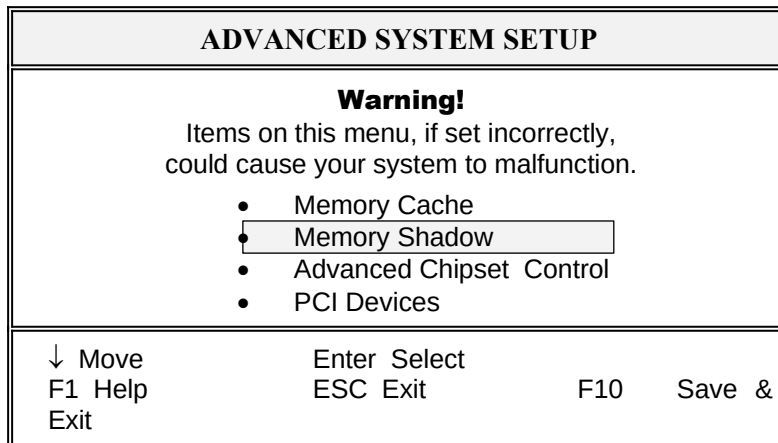| ADVANCED SYSTEM SETUP |
|---|
| **Warning!**
Items on this menu, if set incorrectly,
could cause your system to malfunction.
• Memory Cache
• Memory Shadow
• Advanced Chipset Control
• PCI Devices |
| ↓ Move   Enter Select
F1 Help   ESC Exit   F10   Save &
Exit |

Selecting **"Memory Shadow"** from the Advanced Setup menu displays a menu like the one shown here. The actual features displayed depend on the capabilities of your system's hardware.

MEMORY SHADOW

System Shadow: [Enabled]
Video Shadow: [Enabled]

Shadow Memory Regions:

C800 - CBFF:
[Disabled]
CC00 - CFFF:
[Disabled]
D000 - D3FF:
[Disabled]
D400 - D7FF:
[Disabled]
D800 - DBFF:
[Disabled]
DC00 - DFFF:
[Disabled]
E000 - E3FF:
[Disabled]
E400 - E7FF:
[Disabled]
E800 - EBFF:
[Disabled]
EC00 - EFFF:
[Disabled]

↓ Move   ESC Exit   PgUp Previous Value   F5   Previous
Configuration
          F1 Help   PgDn Next Value   F6   Default
Configuration

3.3.3 Advanced Chipset Control

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

ADVANCED SYSTEM SETUP
Warning! Items on this menu, if set incorrectly, could cause your system to malfunction. •   Memory Cache •   Memory Shadow •   Advanced Chipset Control •   PCI Devices
↓ Move   Enter Select F1 Help   ESC Exit   F10   Save & Exit

Selecting "*Advanced Chipset Control* " from the Advanced Setup menu displays a menu like the one shown here.

Technicians use this menu to change the values in the chipset registers and optimize your system's performance.

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

ADVANCED CHIPSET CONTROL
DRAM Timing: [Normal] DRAM Refresh Period: [2048 us] DRAM Hidden Refresh: [Disabled] CPU Piped Address: [Disabled]
↓ Move   ESC Exit PgUp Previous Value   F5   Previous Configuration   F1 Help   PgDn Next Value   F6 Default Configuration

ADVANCED CHIPSET CONTROL

PCI FEATURES

CPU/PCI Write Buffer:	[Enabled]
CPU/PCI Write-Byte-Merge:	[Enabled]
CPU/PCI Write-Fast:	[Disabled]
CPU/PCI Write-Burst:	[Disabled]
CPU/PCI Read Buffer:	[Disabled]
PCI Read-Line Command:	[Disabled]
CPU/PCI Burst Read:	[Disabled]
PCI/CPU Write Buffer:	[Enabled]
PCI/CPU Read Buffer:	[Disabled]
PCI Cycle Decoding:	[Normal]
PCI/CPU Wait State:	[1 ws]
Burst on Non-Bufferable Cycle:	[Disabled]
Flash PCI/CPU Buffer:	[Enabled]

BRIDGE FEATURES

DMA Line Buffer:	[Disabled]
ISA Line Buffer:	[Disabled]
PCI Posted Write Buffer:	[Disabled]
Arbiter Bus Lock:	[Disabled]
Arbiter Bus Park:	[Enabled]
DMA Write Cycle Timing:	[Normal]
ISA Clock Select:	[CLK2/8]
I/O Recovery:	[Disabled]
I/O Recovery Period:	[1 us]
ISA I/O Cmd Wait Count:	[Normal]
ISA Memory Cmd Wait Count:	[Normal]
Refresh Period:	[15 us]

↓ Move ESC Exit PgUp Previous Value   F5   Previous Configuration

F1 Help   PgDn Next Value   F6 Default Configuration

NOTE: The contents of this menu depends on the chipset installed on your motherboard, and chipsets vary widely. Consult your dealer or the <F1> help screens before changing the items on this menu. Incorrect settings can cause your system to malfunction.

3.3.4 PCI Devices

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

ADVANCED SYSTEM SETUP
Warning! Items on this menu, if set incorrectly, could cause your system to malfunction. •   Memory Cache •   Memory Shadow •   Advanced Chipset Control •   PCI Devices
↓ Move   Enter Select F1 Help   ESC Exit   F10   Save & Exit

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

PCI DEVICES	
Base I/O Address:	[3000]
Base Memory Address:	[008000000]
Multimedia Mode:	[Disabled]
Parity:	[Disabled]
PCI Interrupt INTB#:	[None]
PCI Interrupt INTC#:	[None]
PCI Interrupt INTD#:	[None]
PCI INT-1 Level/Edge Selection:	[Edge]
PCI INT-2 Level/Edge Selection:	[Edge]
PCI INT-3 Level/Edge Selection:	[Edge]
PCI INT-4 Level/Edge Selection:	[Edge]

```
    PCI INT-5 Level/Edge Selection:          [Edge]
    PCI INT-6 (INTB#) Level/Edge Selection:    [Edge]

↓ Move   ESC  Exit  PgUp  Previous Value      F5     Previous
Configuration
         F1  Help    PgDn  Next Value    F6              Default
Configuration
```

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

```
┌──────────────────────────────────────────────────────────────┐
│                         PCI DEVICES                            │
├──────────────────────────────────────────────────────────────┤
│    PCI INT-7 (INTC#) Level/Edge Selection:   [Edge]       ▲    │
│    PCI INT-8 (INTD#) Level/Edge Selection:   [Edge]       ║    │
│    PCI Device, Slot #1:                                   ║    │
│        Enable Device:                    [Disabled]       ║    │
│        Enable Master:                    [Disabled]       ║    │
│        Use Default Latency Timer Value:  [Yes]            ║    │
│        Latency Timer Value:              [0040]           ║    │
│        IRQ Line:                         [None]           ║    │
│    PCI Device, Slot #2:                                   ║    │
│        Enable Device:                    [Disabled]       ║    │
│        Enable Master:                    [Disabled]       ║    │
│        Use Default Latency Timer Value:  [Yes]            ║    │
│        Latency Timer Value:              [0040]           ║    │
│        IRQ Line:                         [None]           ▼    │
├──────────────────────────────────────────────────────────────┤
│ ↓ Move   ESC  Exit  PgUp  Previous Value      F5    Previous   │
│ Configuration                                                  │
│          F1  Help    PgDn  Next Value   F6            Default  │
│ Configuration                                                  │
└──────────────────────────────────────────────────────────────┘
```

PCI DEVICES

PCI Device, Slot #3:
    Enable Device: [Disabled]
    Enable Master: [Disabled]
    Use Default Latency Timer Value: [Yes]
    Latency Timer Value: [0040]
    IRQ Line: [None]

PCI Device, Slot #4:
    Enable Device: [Disabled]
    Enable Master: [Disabled]
    Use Default Latency Timer Value: [Yes]
    Latency Timer Value: [0040]
    IRQ Line: [None]

↓ Move ESC Exit PgUp Previous Value   F5   Previous Configuration
          F1 Help   PgDn Next Value   F6   Default Configuration

NOTE: The number of PCI device slots depends on motherboard specifications.   When you   install PCI IDE card on any PCI slot, you must set that slot's
          IRQ line [14] and [Enabled Device] [Enable Master] items must set Enable.

3.4 BOOT OPTIONS

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
• System Setup
• Fixed Disk Setup
• Advanced System Setup
• Boot Options
• Security and Anti-Virus
• Green PC Features
Load ROM Default Values
Load Values from CMOS
Save Values to CMOS
↓ Move   Enter Select
F1 Help   ESC Exit   F10   Save & Exit

Selecting "**Boot Options**" from the Main Menu displays this menu:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

BOOT OPTIONS
Boot Sequence: [A:then C:]
↓ Move ESC Exit PgUp Previous Value   F5   Previous Configuration
F1 Help   PgDn Next Value   F6   Default Configuration

3.5 SECURITY AND ANTI-VIRUS

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
• System Setup
• Fixed Disk Setup
• Advanced System Setup
• Boot Options
• Security and Anti-Virus
• Green PC Features
Load ROM Default Values
Load Values from CMOS
Save Values to CMOS

↓ Move	Enter Select	
F1 Help	ESC Exit	F10 Save & Exit

Selecting "**Security and Anti-Virus**" from the Main Menu displays a menu like this:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

SECURITY AND ANTI-VIRUS	
Supervisor Password is:	Disabled
User Password is:	Disabled
Set Supervisor Password:	[Press Enter]
Set User Password:	[Press Enter]
Password on Boot:	[Disabled]
Diskette Access:	[Supervisor]

Fixed Disk Boot Sector:	[Normal]
↓ Move ESC Exit PgUp Previous Value	F5 Previous Configuration
F1 Help PgDn Next Value F6	Default Configuration

"Supervisor Password is" shows whether supervisor password is set or not. **"User Password is"** shows whether user password is set or not. Setting Supervisor Password requires a password on entering Setup. The passwords are not case sensitive. Pressing <Enter> at either Set Supervisor Password or Set User Password displays a dialog box like this:

SET SUPERVISOR PASSWORD
Enter New Password: [   ] Re-enter New Password: [   ]
Enter Accept

SET USER PASSWORD
Enter New Password: [   ] Re-enter New Password: [   ]
Enter Accept

NOTICE
Changes have been saved. [Continue]

3.6 GREEN PC FEATURES

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
• System Setup
• Fixed Disk Setup
• Advanced System Setup
• Boot Options
• Security and Anti-Virus
• Green PC Features
Load ROM Default Values
Load Values from CMOS
Save Values to CMOS
↓ Move   Enter Select
F1 Help   ESC Exit   F10   Save & Exit

Selecting "**Green PC Features**" on the main menu displays an information window like this:

GREEN PC FEATURES

Power Saving Mode: [Enabled]
  System Doze Timer: [10 sec]
  System Standby Timer: [10 sec]
  System Suspend Timer: [10 sec]
     Wakeup System During Suspend: [Disabled]
        Wakeup Time at (hour):   [0 hr]
        Wakeup Time at (minute):   [0 min]
Hard Disk Standby Timer: [Disabled]

Video Standby Timer: [Disabled]
          VGA With Power Down Feature: [None]

           Advanced Power Management Setup
    System Enters Power Down/Wakeup Modes By:
VGA Access Event: [Off]
IRQ 1   (Keyboard):
     [On]
IRQ 3   (COM2):   [On]
IRQ 4   (COM1):   [On]
IRQ 5   (Alt Printer):
     [On]
IRQ 6   (Diskette):   [On]
IRQ 7   (Printer):   [On]
IRQ 9   (IRQ2 Redir):
     [On]
IRQ10   (Reserved):
     [On]
IRQ11   (Reserved):
     [On]
IRQ12   (PS/2 Mouse):
     [On]
IRQ14   (Fixed Disk):
     [On]
IRQ15   (Reserved):

```
        [On]
   DMA1(LAN Card) :                    [On]
   DMA3(LAN Card) :                    [On]
   LPT IO Address:                     [On]
   PCI Master Event:                   [Off]
```

↓ Move ESC Exit PgUp Previous Value   F5   Previous Configuration

F1 Help   PgDn Next Value   F6   Default Configuration

3.7 LOAD ROM DEFAULT VALUES

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU

- System Setup
- Fixed Disk Setup
- Advanced System Setup
- Boot Options
- Security and Anti-Virus
- Green PC Features

Load ROM Default Values
Load Values from CMOS

Save Values to CMOS

↓ Move   Enter Select
F1 Help   ESC Exit   F10 Save & Exit

Selecting " **Load ROM Default Values** " on the Main Menu displays this menu:

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

NOTICE
Default values have been loaded.
[Continue]

3.8 LOAD VALUES FROM CMOS

MAIN MENU
• System Setup • Fixed Disk Setup • Advanced System Setup • Boot Options • Security and Anti-Virus • Green PC Features Load ROM Default Values Load Values from CMOS Save Values to CMOS
↓ Move   Enter Select F1 Help   ESC Exit   F10 Save & Exit

Selecting " *Load Values from CMOS* " on the Main Menu displays this menu:

NOTICE
Previous values have been loaded.   [Continue]

3.9 SAVE VALUES TO CMOS

Phoenix BIOS Setup - Copyright 1985-94 Phoenix Technologies Ltd.

MAIN MENU
• System Setup   • Fixed Disk Setup   • Advanced System Setup   • Boot Options   • Security and Anti-Virus   • Green PC Features   Load ROM Default Values   Load Values from CMOS   Save Values to CMOS
↓ Move   Enter Select   F1 Help   ESC Exit   F10   Save & Exit

Selecting " **Save Values to CMOS** " on the Main Menu displays this menu:

NOTICE
Changes have been saved.
[Continue]

RMA FORM

When the motherboard can not work well, please fill this form to describe related situations. If the space is not enough to use, you can attach separate paper.

MODEL :   **MODEL NO :**

HARDWARE

CPU: Brand _____, Model _____, Speed _____ MHz

CO-PROCESSOR: Brand _____, Model _____, Speed _____ MHz

SIMM: Brand _____, Speed _____ ns, Q'ty _____ pcs, Total _____ MB

CACHE: Brand _____, Speed _____ns, Total _____K

TAG RAM: Brand _____, Speed _____ns

BIOS DATE CODE: _____

SYSTEM SPEED RUNNING _____ MHz

VIDEO CARD: Chip _____, RAM _____, Masker _____
                VGA Mode_____   _____, Bus_   (ISA ,VESA or PCI)

OTHER ADD-ON CARDS :

SOFTWARE

OPERATION SYSTEM _____ VERSION _____
SOFTWARE PROGRAM _____
BIOS SETUP: DRAM wait _____ CACHE wait _____
If you change BIOS SETUP, please describe the changes:

<A> ERROR

   ☐ HANG UP   ☐ NO SCREEN   ☐ FLOPPY R/W ERROR
   ☐ HARD DISK R/W ERROR   ☐ PARITY MEMORY ERROR
   ☐ OTHER _____

<B> ERROR MESSAGES ON YOUR SCREEN (PLEASE SHOW US THE WHOLE SENTENCE)

<C> PROBLEM DESCRIPTION