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Static Electricity Precautions

1. Don't take this motherboard and components out of their original static-proof package until you are ready to install them.
2. While installing, please wear a grounded wrist strap if possible. If you don't have a wrist strap, discharge static electricity by touching the bare metal of the system chassis.
3. Carefully hold this motherboard by its edges. Do not touch those components unless it is absolutely necessary. Put this motherboard on the top of static-protection package with component side facing up while installing.

Pre-Installation Inspection

1. Inspect this motherboard whether there are any damages to components and connectors on the board.
2. If you suspect this motherboard has been damaged, do not connect power to the system. Contact your motherboard vendor about those damages.

Table of Contents

Notice:

1. Owing to Microsoft's certifying schedule is various to every supplier, we might have some drivers not certified yet by Microsoft. Therefore, it might happen under Windows XP that a dialogue box (shown as below) pops out warning you this software has not passed Windows Logo testing to verify its compatibility with Windows XP. Please rest assured that our RD department has already tested and verified these drivers. Just click the "Continue Anyway" button and go ahead the installation.

2. USB 2.0 Driver Limitations:
2-1. The USB 2.0 driver only supports Windows XP and Windows 2000.
2-2. If you connect a USB 2.0 hub to the root hub, plugging USB devices into this hub, the system might not successfully execute certain USB devices' connection because it could not recognize these devices.

Chapter 1 Introduction

This motherboard has a **Socket AM2** supporting the newest and advanced **AMD Athlon 64 FX/Athlon 64 X2 Dual-Core/Athlon 64/Sempron** with **HyperTransport Technology** processors.

This motherboard integrates the **NVIDIA™ nFORCE3 250**, which is a single-chip, highly integrated, high performance HyperTransport™ peripheral controller, unmatched by any other single chip-device controller. It supports the **Serial ATA** interface for high-performance and mainstream desktop PCs, and the built-in **USB 2.0** providing higher bandwidth. It implements **single USB 2.0 EHCI** and **dual USB 1.1 OHCI.**.

It supports 6-channel **AC'97 Audio Codec** and provides one **IDE Ultra DMA 133**/100/66 channel. It has five 32-bit **PCI** slots and one **AGP 8x** slot, and supports the onboard **10Base-T/100Base-TX/1000Base-T Network** interface. In addition, this motherboard has a full set of I/O ports including two PS/2 ports for mouse and keyboard, one serial port, one parallel port, one LAN port (optional), four back-panel **USB 2.0** ports, and three audio jacks for microphone, line-in and line-out. Onboard USB header(s) can provide extra ports by connecting the Extended USB Module to the motherboard.

This motherboard is an **ATX size** motherboard and has power connectors for an ATX power supply.

Key Features

The key features of this motherboard include:

Socket AM2 Processor Support

- Supports AMD **Athlon 64 FX/Athlon 64 X2 Dual-Core/Athlon 64/ Sempron** processors

Note: HyperTransport Technology is a point-to-point link between two devices, it enables integrated circuits to exchange information at much higher speeds than currently available interconnect technologies.

Chipset

There is an **NVIDIA™ nFORCE3 250** single chip in this chipset in accordance with an innovative and scalable architecture with proven reliability and performance.

- HyperTransport link to the AMD Athlon 64 FX/Athlon 64 X2 Dual-Core/ Athlon 64/Sempron CPU
- AGP 3.0 8X interface at 533 MT/s
- PCI 2.3 interface supporting up to six PCI slots

1

- AC'97 2.3-compliant interface which is integrated to communicate to external AC' 97 audio and modem codecs.
- Dual Fast ATA-133 IDE controllers
- Single USB 2.0 EHCI and Dual USB 1.1 OHCI, supporting up to eight ports
- IEEE 802.3 NVIDIA MAC for 1000Base-T/100Base-TX/10Base-T Gigabit/Fast Ethernet/Ethernet
- Two separate SATA controllers with integrated PHYs, each supporting two drives in master mode

Memory Support

- Two 240-pin DIMM sockets for DDR2 SDRAM dual channel memory modules
- Supports **DDR2 800**/667/533/400 memory bus
- Maximum installed memory is 16 GB

Expansion Slots

- One AGP 8x slot
- Five 32-bit PCI slots

Onboard IDE channels

- Two IDE Connectors
- Supports PIO (Programmable Input/Output) and DMA (Direct Memory Access) modes
- Supports IDE Ultra DMA bus mastering with transfer rates of **133**/100/66 MB/sec

Serial ATA

- Two Serial ATA Connectors
- Transfer rate exceeding best ATA (~1.5 Gb/s) with scalability to higher rates
- Low pin count for both host and devices

AC'97 Codec

- Compliant with AC'97 2.3 specification
- 16-bit Stereo full-duplex CODEC with independent and variable sampling rate
- Support for 3.3v digital, 5v analog power supply and low power consumption management
- Three analog line-level stereo inputs with 5-bit volume control: LINE_IN, CD, AUX
- Front-Out, Surround-Out, MIC-In and LINE-In Jack Sensing
- Two analog line-level mono input
- Standard 48-Pin LQFP

Onboard I/O Ports

- Two PS/2 ports for mouse and keyboard
- One serial port
- One parallel port
- Four back-panel USB2.0 ports
- One LAN port (optional)
- Audio jacks for microphone, line-in and line-out

Fast Ethernet LAN (optional)

- Supports MII and 7-wire SNI (Serial Network Interface)
- 10/100 Mb/s Auto-Negotiation operation
- Full/half duplex operation
- IEEE 802.3/802.3u compliant

USB 2.0

- Compliant with Universal Serial Bus Specification Revision 2.0
- Compliant with Intel's Enhanced Host Controller Interface Specification Revision 1.0
- Compliant with Universal Host Controller Interface Specification Revision 1.1
- PCI multi-function device consists of two **UHCI Host Controller** cores for full-/low-speed signaling and one **EHCI Host Controller** core for high-speed signaling
- Root hub consists 4 downstream facing ports with integrated physical layer transceivers shared by **UHCI** and **EHCI** Host Controller, up to eight functional ports
- Support PCI-Bus Power Management Interface Specification release 1.1
- Legacy support for all downstream facing ports

BIOS Firmware

This motherboard uses Award BIOS that enables users to configure many system features including the following:

- Power management
- Wake-up alarms
- CPU parameters and memory timing
- CPU and memory timing

The firmware can also be used to set parameters for different processor clock speeds.

Dimensions

- ATX form factor of 305 x 210 mm

Note: Hardware specifications and software items are subject to change without notification.

Package Contents

Your motherboard package ships with the following items:

- ❑ The motherboard
- ❑ The User's Guide
- ❑ One diskette drive ribbon cable (optional)
- ❑ One IDE drive ribbon cable
- ❑ The Software support CD

Optional Accessories

You can purchase the following optional accessories for this motherboard.

- ❑ The Extended USB module
- ❑ The Serial ATA cable
- ❑ The Serial ATA power cable

Note: You can purchase your own optional accessories from the third party, but please contact your local vendor on any issues of the specification and compatibility.

Chapter 2 Motherboard Installation

To install this motherboard in a system, please follow these instructions in this chapter:

- ❑ Identify the motherboard components
- ❑ Install a CPU
- ❑ Install one or more system memory modules
- ❑ Make sure all jumpers and switches are set correctly
- ❑ Install this motherboard in a system chassis (case)
- ❑ Connect any extension brackets or cables to headers/connectors on the motherboard
- ❑ Install peripheral devices and make the appropriate connections to headers/connectors on the motherboard

Note:

1. Before installing this motherboard, make sure jumper JCMOS1 is under Normal setting. See this chapter for information about locating JCMOS1 and the setting options.
2. Never connect power to the system during installation; otherwise, it may damage the motherboard.

Motherboard Components
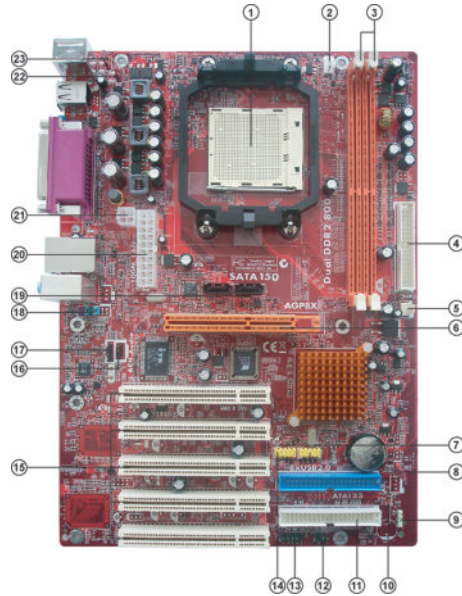
ITEM	LABEL	COMPONENTS
1	CPU Socket	Socket AM2 for AMD Athlon 64 FX/Athlon 64 X2 Dual-Core/Athlon 64/Sempron CPUs
2	CPU_FAN	CPU Fan connector (4 PIN)
3	DIMM1~2	240-pin DDR2 SDRAM sockets
4	FDD1	Floppy Disk Drive connector
5	JSFAN2	System Fan connector
6	AGP1	Accelerated Graphics Port
7	JUSBV3	Power Source header
8	JCMOS1	Clear CMOS jumper
9	SPK1	Speaker header
10	IDE1	Primary IDE connector
11	IDE2	Secondary IDE connector
12	IR1	Infrared header
13	SW1	Front Panel Switch/LED header
14	JUSB1~2	Front Panel USB headers
15	PCI1-5	32-bit PCI slots
16	JSPDIF_OUT	SPDIF out header
17	JCDIN1	Analog Audio Input header
18	JAUDIO1	Front Panel Audio header
19	JSATA4~5	Serial ATA connectors
20	JATXPWR2	Standard 20-Pin ATX Power connector
21	PWR1	Standard 4-Pin ATX Power connector
22	JUSBV1	Power Source header
23	JKBMSV1	Power Source header

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I/O Ports

The illustration below shows a side view of the built-in I/O ports on the motherboard.
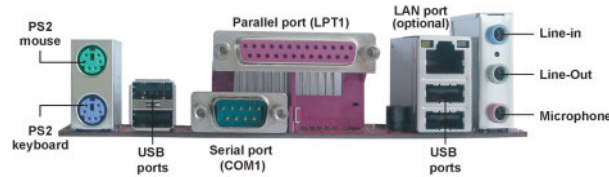
PS/2 Mouse	Use the upper PS/2 port to connect a PS/2 pointing device.
PS/2 Keyboard	Use the lower PS/2 port to connect a PS/2 keyboard.
Parallel Port (LPT1)	Use the Parallel port to connect printers or other parallel communications devices.
Serial Port (COM1)	Use the COM port to connect serial devices such as mice or fax/modems. COM1 is identified by the system as COM1.
LAN Port (optional)	Connect an RJ-45 jack to the LAN port to connect your computer to the Network.
USB Ports	Use the USB ports to connect USB devices.
Audio Ports	Use these three audio jacks to connect audio devices. The first jack is for stereo Line-In signal, the second jack for stereo Line-Out signal, and the third jack for Microphone.

Installing the Processor

This motherboard has a socket AM2 processor socket. When choosing a processor, consider the performance requirements of the system. Performance is based on the processor design, the clock speed and system bus frequency of the processor, and the quantity of internal cache memory and external cache memory.

CPU Installation Procedure

Follow these instructions to install the CPU:
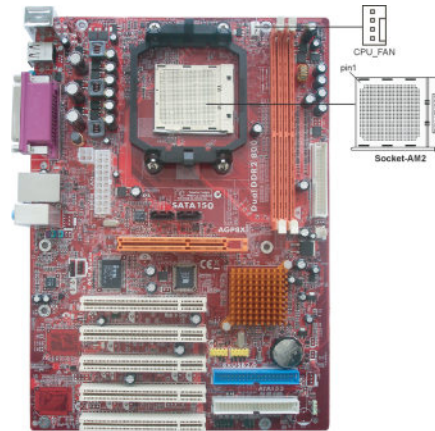
1. Unhook the locking lever of the CPU socket. Pull the locking lever away from the socket and raising it to the upright position.
2. Match the pin1 corner marked as the beveled edge on the CPU with the pin1 corner on the socket. Insert the CPU into the socket. Do not use force.
3. Push the locking lever down and hook it under the latch on the edge of socket.
4. Apply thermal grease to the top of the CPU.
5. Install the cooling fan/heatsink unit onto the CPU, and secure them all onto the socket base.
6. Plug the CPU fan power cable into the CPU fan connector (CPU_FAN) on the motherboard.

Note: To achieve better airflow rates and heat dissipation, we suggest that you use a high quality fan with 4800 rpm at least. CPU fan and heatsink installation procedures may vary with the type of CPU fan/heatsink supplied. The form and size of fan/heatsink may also vary.

Installing Memory Modules

This motherboard accommodates two 240-pin DIMM sockets (Dual Inline Memory Module) for unbuffered **DDR2 800/**667/533/400 memory modules (Double Data Rate SDRAM), and maximum 16 GB installed memory.

Over its predecessor, DDR-SDRAM, DDR2-SDRAM offers greater bandwidth and density in a smaller package along with a reduction in power consumption. In addition, DDR2-SDRAM offers new features and functions that enable a higher clock rate and data rate operations of 400 MHz, 533 MHz 667 MHz and 800 MHz. DDR2 transfers 64 bits of data twice every clock cycle.
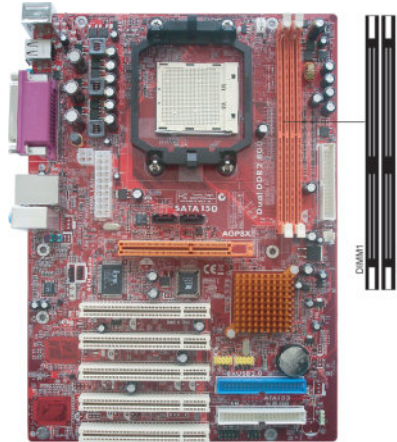
Memory Module Installation Procedure

These modules can be installed with up to 16 GB system memory. Refer to the following to install the memory module.

1. Push down the latches on both sides of the DIMM socket.
2. Align the memory module with the socket. There is a notch on the DIMM socket that you can install the DIMM module in the correct direction. Match the cutout on the DIMM module with the notch on the DIMM socket.
3. Install the DIMM module into the socket and press it firmly down until it is seated correctly. The socket latches are levered upwards and latch on to the edges of the DIMM.
4. Install any remaining DIMM modules.
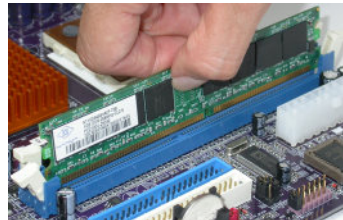
Jumper Settings

Connecting two pins with a jumper cap is SHORT; removing a jumper cap from these pins, OPEN.
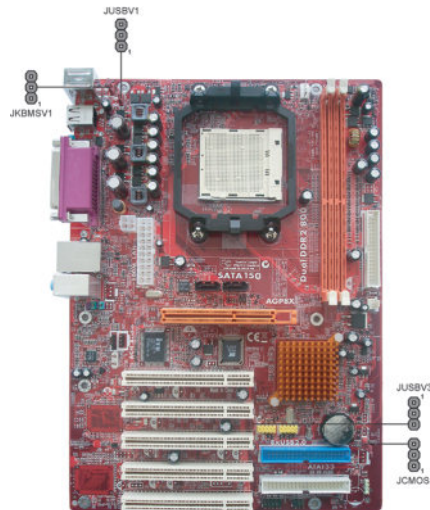
JCMOS1: Clear CMOS Jumper

Use this jumper to clear the contents of the CMOS memory. You may need to clear the CMOS memory if the settings in the Setup Utility are incorrect and prevent your motherboard from operating. To clear the CMOS memory, disconnect all the power cables from the motherboard and then move the jumper cap into the CLEAR setting for a few seconds.

Function	Jumper
Normal	Short Pins 1-2
Clear CMOS	Short Pins 2-3

Note: To avoid the system unstability after clearing CMOS, we recommend users to enter the main BIOS setting page to "Load Optimized Defaults" and then "Save & Exit Setup".

JUSBV1/JUSBV3/JKBMSV1: Power Source Jumpers

Function	Jumper
+5V	Short Pins 1-2
+5V Standby Voltage	Short Pins 2-3

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Install The Motherboard

Install the motherboard in a system chassis (case). The board is an ATX size motherboard. You can install this motherboard in an ATX case. Make sure your case has an I/O cover plate matching the ports on this motherboard.

Install the motherboard in a case. Follow the case manufacturer's instructions to use the hardware and internal mounting points on the chassis.
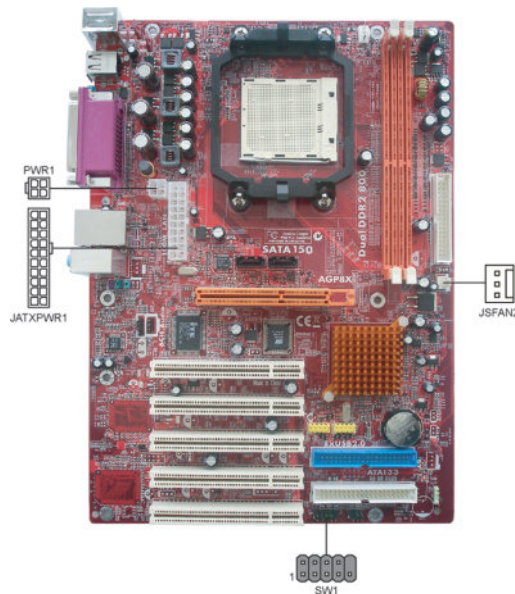
Connect the power connector from the power supply to the **TATXPWR1** connector on the motherboard. **PWR1** is a +12V connecotr for CPU Vcore power.

If there is a cooling fan installed in the system chassis, connect the cable from the cooling fan to the **JSFAN2** fan power connector on the motherboard.

Connect the case switches and indicator LEDs to the **SW1** header.

Pin	Signal	Pin	Signal
1	HD_LED_P(+)	2	FP PWR/SLP(+)
3	HD_LED_N(-)	4	FP PWR/SLP(-)
5	RESET_SW_N(-)	6	POWER_SW_P(+)
7	RESET_SW_P(+)	8	POWER_SW_N(-)
9	RSVD_DNU	10	KEY

Connecting Optional Devices

Refer to the following for information on connecting the motherboard's optional devices:
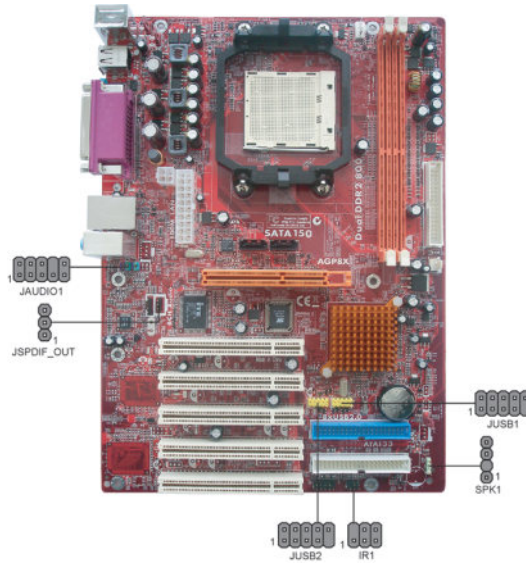
SPK1: Speaker Header

Connect the cable from the PC speaker to the SPK1 header on the motherboard.

Pin	Signal
1	+5V
2	NC
3	GND
4	SPKR

JAUDIO1: Front Panel Audio Header

This header allows the user to install auxiliary front-oriented microphone and line-out ports for easier access.

Pin	Signal	Pin	Signal
1	AUD_MIC	2	AUD_GND
3	AUD_MIC_BIAS	4	AUD_VCC
5	AUD_FPOUT_R	6	AUD_RET_R
7	HP_ON	8	KEY
9	AUD_FPOUT_L	10	AUD_RET_L

JUSB1~2: Front Panel USB Headers

The motherboard has USB ports installed on the rear edge I/O port array. Additionally, some computer cases have USB ports at the front of the case. If you have this kind of case, use auxiliary USB headers JUSB1~2 to connect the front-mounted ports to the motherboard.

Here is a list of USB pin assignments.

Pin	Signal	Pin	Signal
1	VERG_FP_USBPWR0	2	VERG_FP_USBPWR0
3	USB_FP_P0(-)	4	USB_FP_P1(-)
5	USB_FP_P0(+)	6	USB_FP_P1(+)
7	GROUND	8	GROUND
9	KEY	10	GROUND

1. Locate the JUSB1~2 headers on the motherboard.
2. Plug the bracket cable onto the JUSB1~2 headers.
3. Remove a slot cover from one of the expansion slots on the system chassis. Install an extension bracket in the opening. Secure the extension bracket to the chassis with a screw.

IR1: Infrared Port Header

The infrared port allows the wireless exchange of information between your computer and similarly equipped devices such as printers, laptops, Personal Digital Assistants (PDAs), and other computers.

Pin	Signal	Pin	Signal
1	NC	2	KEY
3	+5V	4	GND
5	IRTX	6	IRRX

1. Locate the infrared port-**IR1** header on the motherboard.
2. If you are adding an infrared port, connect the ribbon cable from the port to the IR1 header and then secure the port to an appropriate place in your system chassis.

JSPDIF_OUT: SPDIF out Header

This is an optional header that provides an S/PDIF (Sony/Philips Digital Interface) output to digital multimedia device through optical fiber or coaxial connector.

Pin	Signal
1	SPDIF
2	(+)5VA
3	GND

Install Other Devices

Install and connect any other devices in the system following the steps below.
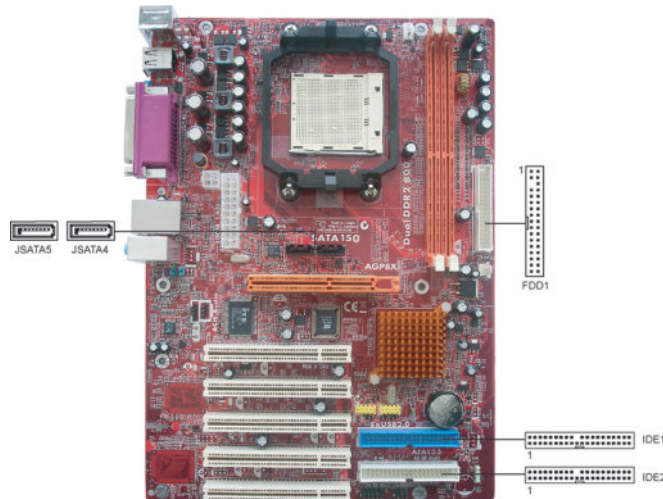
Floppy Disk Drive

The motherboard ships with a floppy disk drive cable that can support one or two drives. Drives can be 3.5" or 5.25" wide, with capacities of 360K, 720K, 1.2MB, 1.44MB, or 2.88MB.

Install your drives and connect power from the system power supply. Use the cable provided to connect the drives to the floppy disk drive connector **FDD1**.

IDE Devices

IDE devices include hard disk drives, high-density diskette drives, and CD-ROM or DVD-ROM drives, among others.

The mainboard ships with an IDE cable that can support one or two IDE devices. If you connect two devices to a single cable, you must configure one of the drives as Master and one of the drives as Slave. The documentation of the IDE device will tell you how to configure the device as a Master or Slave device. The Master device connects to the end of the cable.

Install the device(s) and connect power from the system power

supply. Use the cable provided to connect the device(s) to the Primary IDE channel connector **IDE1** on the motherboard.

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If you want to install more IDE devices, you can purchase a second IDE cable and connect one or two devices to the Secondary IDE channel connector **IDE2** on the motherboard. If you have two devices on the cable, one must be Master and one must be Slave.

Serial ATA Devices

The **Serial ATA (Advanced Technology Attachment)** is the standard interface for the IDE hard drives, which is designed to overcome the design limitations while enabling the storage interface to scale with the growing media rate demands of PC platforms. It provides you a faster transfer rate of **1.5 Gb/s**. If you have installed a Serial ATA hard drive, you can connect the Serial ATA cables to the Serial ATA hard drive or the connector on the motherboard.

On the motherboard, locate the Serial ATA connectors **JSATA4-5**, which support new Serial ATA devices for the highest data transfer rates, simpler disk drive cabling and easier PC assembly.

It eliminates limitations of the current Parallel ATA interface, but maintains register compatibility and software compatibility with Parallel ATA.

Analog Audio Input Header

If you have installed a CD-ROM drive or DVD-ROM drive, you can connect the drive audio cable to the onboard sound system.
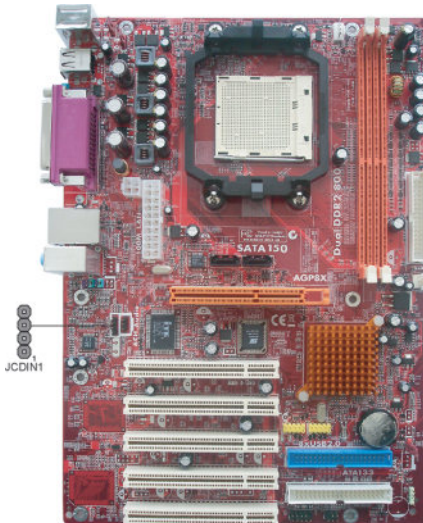
When you first start up your system, the BIOS should automatically detect your CD-ROM/DVD drive. If it doesn't, enter the Setup Utility and configure the CD-ROM/DVD drive that you have installed. On the motherboard, locate the 4-pin header **JCDIN1**.

Here is a list of JCDIN1 pin assignments.

Pin	Signal
1	CD IN L
2	GND
3	GND
4	CD IN R

Expansion Slots

This motherboard has one AGP and five 32-bit PCI slots.
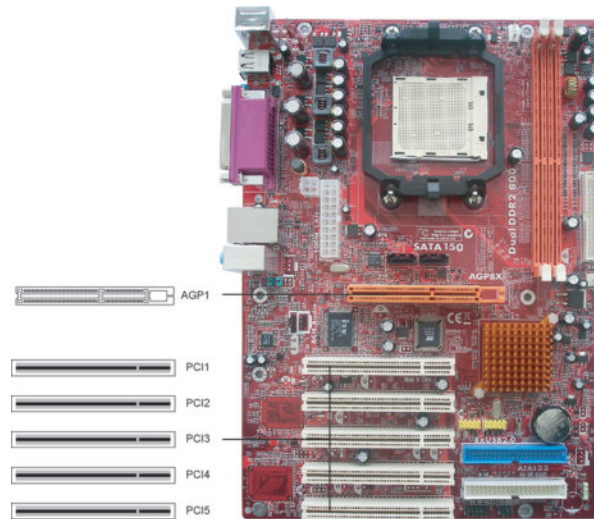
Follow the steps below to install an AGP/PCI expansion card.

1. Locate the AGP or PCI slots on the mainboard.
2. Remove the blanking plate of the slot from the system chassis.
3. Install the edge connector of the expansion card into the slot. Ensure the edge connector is correctly seated in the slot.
4. Secure the metal bracket of the card to the system chassis with a screw.
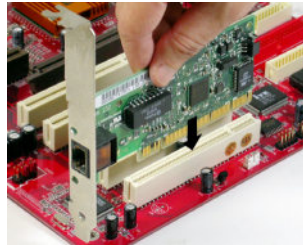
AGP Slot

You can install a graphics adapter that supports the 8x AGP specification and has an 8x AGP edge connector in the AGP slot.

PCI Slots

You can install the 32-bit PCI interface expansion cards in the slots.

Memo

Chapter 3 BIOS Setup Utility

Introduction

The BIOS Setup Utility records settings and information of your computer, such as date and time, the type of hardware installed, and various configuration settings. Your computer applies the information to initialize all the components when booting up and basic functions of coordination between system components.

You can run the setup utility and manually change the configuration. You might need to do this to configure some hardware installed in or connected to the motherboard, such as the CPU, system memory, disk drives, etc.

Running the Setup Utility

Every time you start your computer, a message appears on the screen before the operating system loading that prompts you to "*Hit <DEL>if you want to run SETUP*". Whenever you see this message, press the **Delete** key, and the Main menu page of the Setup Utility appears on your monitor.

```
┌─────────────────────────────────────────────────────────────────────┐
│         Phonex-Award WorkstationBIOS CMOS Setup Utility             │
│                                                                     │
│  ▶ Standard CMOS Features          Load Fail-Safe Defaults          │
│  ▶ Advanced BIOS Features          Load Optimized Defaults          │
│  ▶ Advanced Chipset Features       Set Supervisor Password          │
│  ▶ Integrated Peripherals          Set User Password                │
│  ▶ Power Management Setup           Save & Exit Setup                │
│  ▶ PnP/PCI Configurations          Exit without Saving              │
│  ▶ PC Health Status                                                 │
│                                                                     │
│  Esc: Exit                    ↑↓←→    : Select Item                 │
│  F10: Save & Exit Setup                                             │
│                                                                     │
│              Time, Date, Hard Disk Type...                          │
└─────────────────────────────────────────────────────────────────────┘
```

You can use cursor arrow keys to highlight anyone of options on the main menu page. Press **Enter** to select the highlighted option. Press the **Escape** key to leave the setup utility. Press +/-/ to modify the selected field's values.

Some options on the main menu page lead to tables of items with installed values that you can use cursor arrow keys to highlight one item, and press **PgUp** and **PgDn** keys to cycle through alternative values of that item. The other options on the main menu page lead to dialog boxes requiring your answer OK or Cancel by selecting the **[OK]** or **[Cancel]** key.

If you have already changed the setup utility, press **F10** to save those changes and exit the utility. Press **F1** to display a screen describing all key functions. Press **F9** to install the setup utility with a set of default values.

Standard CMOS Features Page

This page displays a table of items defining basic information about your system.

```
          Phonex-Award WorkstationBIOS CMOS Setup Utility
                      Standard CMOS Features

  Date (mm:dd:yy)              Wed, Jan. 1  2006        Help Item
  Time (hh:mm:ss)             0  :  15  : 47

▶ IDE Channel 0 Master        [None]             Menu Level    ▶
▶ IDE Channel 0 Slave         [None]
▶ IDE Channel 1 Master        [None]             Change the day, month, year and
▶ IDE Channel 1 Slave         [None]             century

  Drive A                     [1.44M, 3.5 in.]
  Drive B                     [None]

  Video                       [EGA/VGA]
  Halt On                     [All Errors]

  Base Memory                 640K
  Extended memory             523264K
  Total Memory                524288K


  ↑↓←→ : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help
           F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

System Date & System Time

These items set up system date and time.

IDE Channel 0/1 Master & IDE Channel 0/1 Slave

Use these items to configure devices connected to the Primary/Secondary IDE channels. To configure an IDE hard disk drive, choose *Auto*. If the *Auto* setting fails to find a hard disk drive, set it to *User*, and then fill in the hard disk characteristics (Size, Cyls, etc.) manually. If you have a CD-ROM drive, select the setting *CDROM*. If you have an ATAPI device with removable media (e.g. a ZIP drive or an LS-120), select *Floptical*.

Drive A/Drive B

This item define the characteristics of any diskette drive attached to the system. You can connect one or two diskette drives.

Video

This item defines the video mode of the system. The motherboard has a built-in VGA graphics system; you must leave this item at the default value.

Halt On

This item defines the operation of the system POST (Power On Self Test) routine. You can use this item to select which types of errors in the POST are sufficient to halt the system.

Base Memory, Extended Memory, and Total Memory

These items are automatically detected by the system at start up time. These are display-only fields. You cannot make changes to these fields.

Advanced BIOS Features Page

This page sets up more advanced information about your system. Handle this page with caution. Any changes can affect the operation of your computer.

```
            Phonex-Award WorkstationBIOS CMOS Setup Utility
                        Advanced BIOS Features
  ►  CPU Feature               [Press Enter]          Help Item
  ►  Removable Device Priority  [Press Enter]
  ►  Hard Disk Boot Priority    [Press Enter]      Menu Level    ►
  ►  CD-ROM Boot Priority       [Press Enter]
     CPU Internal Cache         [Enabled]
     External Cache             [Enabled]
     Quick Power On Self Test   [Enabled]
     First Boot Device          [Removable]
     Second Boot Device         [Hard Disk]
     Third Boot Device          [CDROM]
     Boot Other Device          [Enabled]
     Swap Floppy Drive          [Disabled]
     Boot Up Floppy Seek        [Disabled]
     Boot Up NumLock Status     [On]
     Gate A20 Option            [Fast]
     Typematic Rate Setting     [Disabled]
  X  Typematic Rate (Chars/Sec)  6
  X  Typematic Delay (Msec)     250
     Security Option            [Setup]
     APIC Mode                  [Enabled]
     OS Select For DRAM > 64 MB [None-OS2]
     Small Logo (EPA) Show      [Disabled]

  ↑↓←→ : Move  Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help
       F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

►CPU Feature (Press Enter)

Scroll to this item and press <Enter> to view the following screen:

```
┌─────────────────────────────────────────────────────────────────┐
│          Phonex-Award WorkstationBIOS CMOS Setup Utility          │
│                           CPU Feature                             │
├───────────────────────────────────────┬───────────────────────────┤
│                                        │         Help Item         │
│  NPT Fid Control              [Auto]   ├───────────────────────────┤
│  NPT Vid Control              [Auto]   │  Menu Level      ►►        │
│  AMD K8 Cool & Quiet control  [Auto]   │                           │
│                                        │                           │
│                                        │                           │
│                                        │                           │
│                                        │                           │
├────────────────────────────────────────┴──────────────────────────┤
│  ↑↓←→ : Move  Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help │
│        F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults             │
└─────────────────────────────────────────────────────────────────┘
```

NPT Fid Control

This item allows users to adjust the CPU frequency; the range will be varied accoeding to the different CPUs. We stronly recommend you leave this item at its default value.

NPT Vid Control

This item allows users to adjust the CPU voltage. We stronly recommend you leave this item at its default value.

AMD K8 Cool&Quiet control

This item allows users to adjust the AMD K8 Cool & Quiet control function.

Press <Esc> to return to Advanced BIOS Features page.

► Removable Device Priority (Press Enter)

Scroll to this item and press <Enter> to view the following screen:

```
┌─────────────────────────────────────────────────────────────────┐
│          Phonex-Award WorkstationBIOS CMOS Setup Utility          │
│                     Removable Device Priority                     │
├───────────────────────────────────────┬───────────────────────────┤
│                                        │         Help Item         │
│    1. Floppy Disks                     ├───────────────────────────┤
│                                        │  Use < ↑> or <↓ > to select a device, │
│                                        │  then press <+> to move it up, or <-  │
│                                        │  > to move it down the list.  Press   │
│                                        │  to exit this menu.                   │
│                                        │                           │
│                                        │                           │
├────────────────────────────────────────┴──────────────────────────┤
│  ↑↓←→ : Move  Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help │
│        F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults             │
└─────────────────────────────────────────────────────────────────┘
```

Press <Esc> to return to Advanced BIOS Features page.

▶ Hard Disk Boot Priority (Press Enter)

Scroll to this item and press <Enter> to view the following screen:

```
                    Phonex-Award WorkstationBIOS CMOS Setup Utility
                              Hard Disk Boot Priority
+-------------------------------------------------+----------------------------+
|                                                 |        Help Item           |
|   1. Ch2 M       : WDCWD1600JS-22MHB0           +----------------------------+
|   2. Bootable Add-in Cards                      | Use <↑> or < ↓ > to select |
|                                                 | a device, then press <+> to|
|                                                 | move it up, or <->         |
|                                                 | > to move it down the list.|
|                                                 | Press  to exit this menu.  |
|                                                 |                            |
+-------------------------------------------------+----------------------------+
   ↑↓←→ : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help
          F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

Press <Esc> to return to Advanced BIOS Features page.

▶ CD-ROM Boot Priority (Press Enter)

Scroll to this item and press <Enter> to view the following screen:

```
                    Phonex-Award WorkstationBIOS CMOS Setup Utility
                              CD-ROM Boot Priority
+-------------------------------------------------+----------------------------+
|                                                 |        Help Item           |
|   1. Ch0 M       : PIONEER DVD-ROM DVD-126P     +----------------------------+
|                                                 | Use < ↑ > or < ↓ > to      |
|                                                 | select a device, then press|
|                                                 | <+> to move it up, or <->  |
|                                                 | > to move it down the list.|
|                                                 | Press to exit this menu.   |
|                                                 |                            |
+-------------------------------------------------+----------------------------+
   ↑↓←→ : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help
          F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

Press <Esc> to return to Advanced BIOS Features page.

CPU Internal Cache

All processors that can be installed in this motherboard use internal level 1 (L1) cache memory to improve performance. Leave this item at the default value for better performance.

External Cache

Most processors that can be installed in this system use external level 2 (L2) cache memory to improve performance. Leave this item at the default value for better performance.

Quick Power On Self Test

Enable this item to shorten the power on testing (POST) and have your system start up faster. You might like to enable this item after you are confident that your system hardware is operating smoothly.

First/Second/Third Boot Device

Use these three items to select the priority and order of the devices that your system searches for an operating system at start-up time.

Boot Other Device

When enabled, the system searches all other possible locations for an operating system if it fails to find one in the devices specified under the First, Second, and Third boot devices.

Swap Floppy Drive

If you have two floppy diskette drives in your system, this item allows you to swap the assigned drive letters so that drive A becomes drive B, and drive b Becomes drive A.

Boot Up Floppy Seek

If this item is enabled, it checks the size of the floppy disk drives at start-up time. You don't need to enable this item unless you have a legacy diskette drive with 360K capacity.

Boot Up NumLock Status

This item defines if the keyboard Num Lock key is active when your system is started.

Gate A20 Option

This item defines how the system handles legacy software that was written for an earlier generation of processors. Leave this item at the default value.

Typematic Rate Setting

If this item is enabled, you can use the following two items to set the typematic rate and the typematic delay settings for your keyboard.

- Typematic Rate (Chars/Sec): Use this item to define how many characters per second are generated by a held-down key.
- Typematic Delay (Msec): Use this item to define how many milliseconds must elapse before a held-down key begins generating repeat characters.

Security Option

If you have installed password protection, this item defines if the password is required at system start up, or if it is only required when a user tries to enter the Setup Utility.

APIC Mode

This item allows you to enable or disable the APIC (Advanced Programmable Interrupt Controller) mode. APIC provides symmetric multi-processing (SMP) for systems, allowing support for up to 60 processors.

OS Select For DRAM > 64 MB

This item is only required if you have installed more than 64 MB of memory and you are running the OS/2 operating system. Otherwise, leave this item at the default.

Small Logo (EPA) Show

Enables or disables the display of the EPA logo during boot.

Advanced Chipset Features Page

These items define critical timing parameters of the motherboard. You should leave the items on this page at their default values unless you are very familiar with the technical specifications of your system hardware. If you change the values incorrectly, you may introduce fatal errors or recurring instability into your system.

```
┌─────────────────────────────────────────────────────────────────────────┐
│              Phonex-Award WorkstationBIOS CMOS Setup Utility              │
│                      Advanced Chipset Features                            │
├─────────────────────────────────────────────────┬───────────────────────┤
│  ▶ DRAM Configuration            [Press Enter]   │     Help Item         │
│    CPU OverClock in MHz          [200]           │                       │
│    AGP OverClock in MHz          [60]            │                       │
│    AGP Aperture Size (MB)        [128M]          ├───────────────────────┤
│    AGP 3.0 Speed                 [Auto]          │  Menu Level    ▶      │
│    AGP 2.0 Speed                 [Auto]          │                       │
│    AGP Fast Write                [Auto]          │                       │
│    Clock Spread Spectrum         [Disabled]      │                       │
│    HT Frequency                  [4x]            │                       │
│    System BIOS Cacheable         [Disabled]      │                       │
│    CPU Voltage                   [Default]       │                       │
│    DDR2 Voltage                  [Default]       │                       │
│                                                  │                       │
│                                                  │                       │
├─────────────────────────────────────────────────┴───────────────────────┤
│  ↑↓←→ : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help │
│       F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults │
└─────────────────────────────────────────────────────────────────────────┘
```

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▶ **DRAM Configuration (Press Enter)**

Scroll to this item and press <Enter> to view the following screen:

Phonex-Award WorkstationBIOS CMOS Setup Utility DRAM Configuration		
Timing Mode **[Auto]** X *Memory Clock value or Limi DDR2*		**Help Item**
		Menu Level ▶▶ *Auto, no user limit MaxMemClk,* *limit by Memory Clock value*
↑↓←→ : Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fial-Safe Defaults F7: Optimized Defaults		

Timing Mode

This item allows you to set up the DRAM timing nanually or automatically.

Memory Clock value or Limi DDR2

When DDR2 Timing Setting by is set to Manual, use this item to set the DRAM frequency.

Press <Esc> to return to Advanced Chipset Features   page.

CPU OverClock in MHz

This item lets you select the CPU clock, the range is from 200MHz to 250MHz.

AGP OverClock in MHz

This item lets you select the AGP clock, the range is from 66MHz to 100MHz.

AGP Aperture Size (MB)

This item defines the size of the aperture if you use an AGP graphics adapter. The AGP aperture refers to a section of the PCI memory address renge used graphics memory. We recommend that you leave this item at default value.

AGP 2.0/3.0 Speed

This item lets you automatically and manually set AGP 2.0/3.0 speed.

AGP Fast Write

This item lets you enable or disable the caching of display data for the video memory of the processor. Enabling this item can greatly improve the display speed. Disable this item if your graphics display card does not support this feature.

Clock Spread Spectrum

If you enable spread spectrum, it can significantly reduce the EMI (Electro-Magnetic interface) generated by the system.

HT Frequency

This item enables users to manually set up the HyperTransport frequency, ranging from 1x, 2x, 3x, and 4x.

System BIOS Cacheable

This item enables users to enable or disable the system BIOS cache.

CPU Voltage

This item enables users to manually set up the CPU Voltage.

DDR2 Voltage

This item enables users to manually set up the DDR2 Voltage.

Integrated Peripherals Page

These options display items that define the operation of peripheral components on the system's input/output ports.

```
          Phonex-Award WorkstationBIOS CMOS Setup Utility
                      Integrated Peripherals

   ►   IDE Function Setup              [Press Enter]      Help Item
   ►   RAID Config                     [Press Enter]
   ►   Onboard Device                  [Press Enter]   Menu Level    ►
   ►   Super IO Device                 [Press Enter]
       Init Display First              [PCI Slot]
       IDE HDD Block Mode              [Enabled]




   ↑↓←→ : Move   Enter: Select   +/-/PU/PD: Value   F10: Save   Esc: Exit   F1: General Help
          F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

▶ **IDE Function Setup (Press Enter)**

Scroll to this item and press <Enter> to view the following screen:

```
                Phonex-Award WorkstationBIOS CMOS Setup Utility
                              IDE Function Setup

    OnChip IDE Channel 0              [Enabled]
    Primary Master PIO               [Auto]              Help Item
    Primary Slave PIO                [Auto]
    Primary Maste UDMA               [Auto]
    Primary Slave UDMA               [Auto]            Menu Level ▶▶
    OnChip IDE Channel 1             [Enabled]
    Secondary Master PIO             [Auto]
    Secondary Slave PIO              [Auto]
    Secondary Master UDMA            [Auto]
    Secondary Slave UDMA             [Auto]
    IDE DMA transfer access          [Enabled]
    Serial-ATA                       [All Enabled]
    SATA DMA transfer                [Enabled]
    IDE Prefetch Mode                [Enabled]

    ↑↓←→ : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help
             F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

OnChip IDE Channel 0/1

Use these items to enable or disable the PCI IDE channels that are integrated on the motherboard.

Primary/Secondary Master/Slave PIO

Each IDE channel supports a master device and a slave device. These four items let you assign the kind of PIO (Programmed Input/Output) was used by the IDE devices. Choose Auto to let the system auto detect which PIO mode is best, or select a PIO mode from 0-4.

Primary/Secondary Master/Slave UDMA

Each IDE channel supports a master device and a slave device. This motherboard supports UltraDMA technology, which provides faster access to IDE devices.

If you install a device that supports UltraDMA, change the appropriate item on this list to Auto. You may have to install the UltraDMA driver supplied with this motherboard in order to use an UltraDMA device.

IDE DMA transfer access

This item allows you to enable the transfer access of the IDE DMA then burst onto the PCI bus and nonburstable transactions do not.

Serial-ATA

This item allows you to enable or disable the onboard SATA controller.

SATA DMA transfer

This item allows you to enable or disable the function of DMA transfer with the onboard Serial-ATA device.

IDE Prefetch Mode

The onboard IDE drive interface supports IDE prefetching, for faster drive access. If you install a primary and secondary add-in IDE interface, set this field to Disabled if the interface does not support prefetching.

Press <Esc> to return to the Integrated Peripherals page.

▶ **RAID Config (Press Enter)**

Scroll to this item and press <Enter> to view the following screen:

Phonex-Award WorkstationBIOS CMOS Setup Utility		
RAID Config		
IDE RAID	**[Disabled]**	**Help Item**
x *IDE Channel 0 Master RAID*	*Disabled*	
x *IDE Channel 0 Slave RAID*	*Disabled*	*Menu Level ▶ ▶*
x *IDE Channel 1 Master RAID*	*Disabled*	
x *IDE Channel 1 Slave RAID*	*Disabled*	
SATA Primary Master RAID	*Disabled*	
SATA Secondary Master RAID	*Disabled*	
↑↓←→ : Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help		
F5: Previous Values F6: Fial-Safe Defaults F7: Optimized Defaults		

IDE RAID

This item allows you to enable or disable the onboard RAID function of RAID supporting devices.

- ***IDE Channel 0/1 Master/Slave RAID (Disabled):*** These four items enable or disable the IDE Primary/Secondary RAID.
- ***SATA Primary/Secondary Master RAID (Disabled):*** These two items enable or disable the SATA Primary/Secondary RAID.

Press <Esc> to return to the Integrated Peripherals page.

▶ **Onboard Device (Press Enter)**

Scroll to this item and press <Enter> to view the following screen:

Phonex-Award WorkstationBIOS CMOS Setup Utility Onboard Device		
OnChip USB	[V1.1 + V2.0]	**Help Item**
USB Legacy Support	[Enabled]	
AC97 Audio	[Auto]	**Menu Level** ▶▶
Onboard LAN Device	[Enabled]	
Onboard Lan Boot ROM	[Disabled]	
↑↓←→ : Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fial-Safe Defaults F7: Optimized Defaults		

OnChip USB

This item enables users to enable or disable the onchip USB function, setting it to be USB1.1 or USB2.0 compatible.

USB Legacy Support

This item lets you enable or disable the USB Keyboard/Storage device support.

AC97 Audio

Enables and disables the onboard audio chip. Disable this item if you are going to install a PCI audio add-in card.

Onboard Lan Device

Enables or disables the Onboard Lan device.

Onboard Lan Boot ROM

This item enables or disables LAN Boot ROM.

Press <Esc> to return to the Integrated Peripherals page.

▶ **SuperIO Device (Press Enter)**

Scroll to this item and press <Enter> to view the following screen:

Phonex-Award WorkstationBIOS CMOS Setup Utility SuperIO Device		
Onboard FDC Controller	[Enabled]	**Help Item**
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
UART Mode Select	[Normal]	**Menu Level** ▶▶
x UR2 Duplex Mode	Half	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
x ECP Mode Use DMA	3	
↑↓←→ : Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fial-Safe Defaults F7: Optimized Defaults		

Onboard FDC Controller

This option enables the onboard floppy disk drive controller.

Onboard Serial Port 1/2

This option is used to assign the I/O address and interrupt request (IRQ) for onboard serial port 1/2.

UART Mode Select

This field is available if the Onboard Serial Port 2 field is set to any option but Disabled. . UART Mode Select enables you to select the infrared communication protocol-IrDA, ASKIR or SCR.

UR2 Duplex Mode

This field is available when UART Mode is set to either ASKIR or IrDA. This item enables you to determine the infrared function of the onboard infrared chip. The options are Full and Half (default). Full-duplex means that you can transmit and send information simultaneously. Half-duplex is the transmission of data in both directions, but only one direction at a time.

Onboard Parallel Port

This option is used to assign the I/O address and interrupt request (IRQ) for the onboard parallel port.

Parallel Port Mode

Enables you to set the data transfer protocol for your parallel port. There are four options: SPP (Standard Parallel Port), EPP (Enhanced Parallel Port), ECP (Extended Capabilities Port) and ECP+EPP.

SPP allows data output only. Extended Capabilities Port (ECP) and Enhanced Parallel Port (EPP) are bi-directional modes, allowing both data input and output. ECP and EPP modes are only supported with EPP- and ECP-aware peripherals.

ECP Mode Use DMA

When the onboard parallel port is set to ECP mode, the parallel port can use DMA 3 or DMA 1.

Press <Esc> to return to the Integrated Peripherals page.

Init Display First

This item allows you to choose the primary display card.

IDE HDD Block Mode

Enable this field if your IDE hard drive supports block mode. Block mode enables BIOS to automatically detect the optimal number of block read and writes per sector that the drive can support and improves the speed of access to IDE devices.

Power Management Setup Page

This option lets you control system power management. The system has various power-saving modes including powering down the hard disk, turning off the video, suspending to RAM, and software power down that allows the system to be automatically resumed by certain events.

```
          Phonex-Award WorkstationBIOS CMOS Setup Utility
                     Power Management Setup

   Video Off Method          [DPMS Support]
   Soft-Off by PBTN          [Instant-Off]                 Help Item
   Resume By PCI PME         [Enabled]
   Resume By WOM/Ring        [Disabled]                  Menu Level  ►
   Power-On by Alarm         [Disabled]
 X Day of Month Alarm         0
 X Time (hh:mm:ss) Alarm      0 : 0 : 0
   PWRON After PWR-Fail      [Off]


    ↑↓←→ : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help
          F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults
```

Video Off Method

This item defines how the video is powered down to save power. This item is set to DPMS (Display Power Management Software) by default.

Soft-Off by PBTN

Under ACPI (Advanced Configuration and Power management Interface) you can create a software power down. In a software power down, the system can be resumed by Wake Up Alarms. This item lets you install a software power down that is controlled by the power button on your system. If the item is set to Instant-Off, then the power button causes a software power down. If the item is set to

Resume by PCI PME

This system can be turned off with a software command. If you enable this item, the system can automatically resume if there is an incoming call on the PCI Modem card or PCI LAN card. You must use an ATX power supply inorder to use this feature. Use this item to do wake-up action if inserting the PCI card.

Resume by WOM/Ring

An input signal on the serial Ring indicator (RI) line (in other words, and incoming call on the modem)/LAN awakens the system from a soft off state.

Power-On by Alarm

This item allows users to enable or disable the alarm to wake up the system. If set to Enabled, users can specify the specific day of month and the exact time to power up the system.

Power On After PWR-Fail

This item enables your computer to automatically restart or return to its last operating status.

PnP/PCI Configurations Page

These options configure how PnP (Plug and Play) and PCI expansion cards operate in your system. Both the the ISA and PCI buses on the motherboard use system IRQs (Interrup ReQuests) and DMAs (Direct Memory Access). You must set up the IRQ and DMA assignments correctly through the PnP/PCI Configurations Setup utility for the motherboard to work properly. Selecting PnP/PCI Configurations on the main program screen displays this menu:

Phonex-Award WorkstationBIOS CMOS Setup Utility PnP/PCI Configurations		
Resources Controlled By	[Auto (ESCD)]	**Help Item**
X IRQ Resources	Press Enter	Menu Level ▶
PCI/VGA Palette Snoop	[Disabled]	Default is Disabled. Select Enabled to reset Extended System Configuration Data ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the OS cannot boot
↑↓←→ : Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fial-Safe Defaults F7: Optimized Defaults		

Resource Controlled By Auto

You should leave this item at the default Auto (ESCD). Under this setting, the system dynamically allocates resources to Plug and Play devices as they are required.

If you cannot get a legacy ISA (Industry Standard Architecture) expansion card to work properly, you might be able to solve the problem by changing this item to Manual, and then opening up the IRQ Resources submenu.

- **IRQ Resources**: In the IRQ Resources submenu, if you assign an IRQ to Legacy ISA, then that Interrupt Request Line is reserved for a legacy ISA expansion card. Press <Esc> to close the IRQ Resources submenu.
  In the Memory Resources submenu, use the first item Reserved Memory Base to set the start address of the memory you want to reserve for the ISA expansion card. Use the section item Reserved Memory Length to set the amount of reserved memory. Press <Esc> to close the Memory Resources submenu.

PCI/VGA Palette Snoop

This item is designed to overcome problems that can be caused by some nonstandard VGA cards. This board includes a built-in VGA system that does not require palette snooping so you must leave this item disabled.

PC Health Status Page

On motherboards that support hardware monitoring, this item lets you monitor the parameters for critical voltages, temperatures and fan speeds.

```
                  Phonex-Award WorkstationBIOS CMOS Setup Utility
                                 PC Health Status
┌──────────────────────────────────────────────────┬──────────────────────┐
│                                                    │      Help Item       │
│  Shutdown Temperature              [Disabled]      │                      │
│  CPU Tcontrol                          44°C        │                      │
│  CPU Fan Speed                       2678 RPM      │   Menu Level      ►  │
│  NB Fan Speed                          0 RPM       │                      │
│  CPU Vcore                            1.34V        │                      │
│  5VSB                                 5.10V        │                      │
│  + 5.0V                               4.97V        │                      │
│  +12.0V                              11.90V        │                      │
│  + 3.3V                               3.28V        │                      │
│  VBAT                                 2.99V        │                      │
│                                                    │                      │
├──────────────────────────────────────────────────┴──────────────────────┤
│  ↑↓←→  : Move   Enter: Select  +/-/PU/PD: Value  F10: Save  Esc: Exit  F1: General Help │
│           F5: Previous Values  F6: Fial-Safe Defaults  F7: Optimized Defaults          │
└──────────────────────────────────────────────────────────────────────────┘
```

Shutdown Temperature

Enables you to set the maximum temperature the system can reach before powering down.

System Component Characteristics

These fields provide you with information about the systems current operating status. You cannot make changes to these fields.

- CPU Tcontrol
- CPU Fan Speed
- NB Fan Speed
- CPU Vcore
- 5VSB
- + 5.0V
- +12.0V
- + 3.3V
- VBAT

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Load Fail-Safe Defaults

This option opens a dialog box that lets you install fail-safe defaults for all appropriate items in the Setup Utility:

Press <Y> and then <Enter> to install the defaults. Press <N> and then <Enter> to not install the defaults. The fail-safe defaults place no great demands on the system and are generally stable. If your system is not functioning correctly, try installing the fail-safe defaults as a first step in getting your system working properly again. If you only want to install fail-safe defaults for a specific option, select and display that option, and then press <F6>.

Load Optimized Defaults

This option opens a dialog box that lets you install optimized defaults for all appropriate items in the Setup Utility. Press <Y> and then <Enter> to install the defaults. Press <N> and then <Enter> to not install the defaults. The optimized defaults place demands on the system that may be greater than the performance level of the components, such as the CPU and the memory. You can cause fatal errors or instability if you install the optimized defaults when your hardware does not support them. If you only want to install setup defaults for a specific option, select and display that option, and then press <F7>.

Set Supervisor/User Password

When this function is selected, the following message appears at the center of the screen to assist you in creating a password.

ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

PASSWORD DISABLED

If you have selected "System" in "Security Option" of "BIOS Features Setup" menu, you will be prompted for the password every time the system reboots or any time you try to enter BIOS Setup.

If you have selected "Setup" at "Security Option" from "BIOS Features Setup" menu, you will be prompted for the password only when you enter BIOS Setup.

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled.

Save & Exit Setup

Highlight this item and press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility. When the Save and Exit dialog box appears, press <Y> to save and exit, or press <N> to return to the main menu.

Exit Without Saving

Highlight this item and press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility. When the Exit Without Saving dialog box appears, press <Y> to discard changes and exit, or press <N> to return to the main menu.

Note: If you have made settings that you do not want to save, use the "Exit Without Saving" item and press <Y> to discard any changes you have made.

This concludes Chapter 3. Refer to the next chapter for information on the software supplied with the motherboard.

Chapter 4 Software & Applications

Introduction

This chapter describes the contents of the support CD-ROM that comes with the motherboard package.

The support CD-ROM contains all useful software, necessary drivers and utility programs to properly run our products. More program information is available in a README file, located in the same directory as the software.

To run the support CD, simply insert the CD into your CD-ROM drive. An Auto Setup screen automatically pops out, and then you can go on the auto-installing or manual installation depending on your operating system.

If your operating system is Windows 2000/XP, it will automatically install all the drivers and utilities for your motherboard.

Installing Support Software

    1   Insert the support CD-ROM disc in the CD-ROM drive.
    2   When you insert the CD-ROM disc in the system CD-ROM drive, the CD automatically displays an Auto Setup screen.
    3   The screen displays three buttons of **Setup**, **Browse CD** and **Exit** on the right side, and three others **Setup**, **Application** and **ReadMe** at the bottom. Please see the following illustration.

The **Setup** button runs the software auto-installing program as explained in next section.

The **Browse CD** button is a standard Windows command that you can check the

contents of the disc with the Windows file browsing interface.

The **Exit** button closes the Auto Setup window. To run the program again, reinsert the CD-ROM disc in the drive; or click the CD-ROM driver from the Windows Explorer, and click the Setup icon.

The **Application** button brings up a software menu. It shows the bundled software that this mainboard supports.

The **ReadMe** brings you to the Install Path where you can find out path names of software driver.

Auto-Installing under Windows 2000/XP

If you are under Windows 2000/XP, please click the **Setup** button to run the software auto-installing program while the Auto Setup screen pops out after inserting the support CD-ROM:

1   The installation program loads and displays the following screen. Click the **Next** button.

2   Select the items that you want to setup by clicking on it (the default options are recommended). Click the **Next** button to proceed.
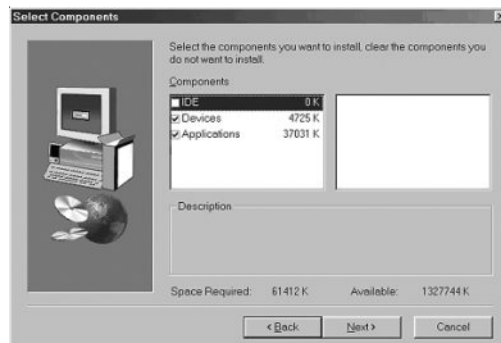
3   The support software will automatically install.

Once any of the installation procedures start, software is automatically installed in sequence. You need to follow the onscreen instructions, confirm commands and allow the computer to restart as few times as needed to complete installing whatever software you selected. When the process is finished, all the support software will be installed and start working.

Bundled Software Installation

All bundled software available on the CD-ROM is for users' convenience. You can install bundled software as follows:

1   Click the **Application** button while the Auto Setup screen pops out after inserting the support CD-ROM.
2   A software menu appears. Click the software you want to install.
3   Follow onscreen instructions to install the software program step by step until finished.

Memo