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This User's Guide is for assisting system manufacturers and end users "in setting up and installing the mainboard. Information in this guide has been carefully checked for reliability; however, no guarantee is given as to the correctness of the contents. The information in this document is subject to change without notice.

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1 Introduction

The 82430FX / P54C PCI mainboard is a high-performance system board that supports Pentium P54CX family CPUs. You can install 256K to 512K of external cache memory on the ma inboard. The mainboard is fully compatible with industry standards, and adds many technical enhancements,

Key Features

- Supports P54CX family CPUs running at 75/90/100/120/125/133/150/166/180/200 MHz speeds; and Cyrix 6x86 CPUS running at 100/120/133 MHz speeds.
- Supports SOCKET 7 &VRM for upgrade (option)
- Integrated Second Level (L2) Cache Controller
  - Write Back Cache Modes
  - Direct Mapped Organization
  - **On-board** 256K **Pipeline** Burst SW **Cache and upgrade slot supports**
- Integrated DRAM Controller
  - Concurrent Write Back
  - CAS#-before-RAS# Transparent DRAM Refresh
  - 512K, 1M, 2M, or 4M x N 70ns Fast Page (both symmetrical and asymmetrical addressing) and EDO DRAM (72-pin SIMM)
  - on-board memory configurations from 4 to 128 Mbytes
- Shadow RAM in Increments of 16 Kbytes
- Supports Pentium / P54C SMM Mode
- **Supports** CPU Stop Clock
- Supports "Table-Free" DRAM configuration
- Compliant to PCI specifications v2.0
- Four 32-bit PCI slots (Masters) and Four ISA slots, 4-layer PCB . .
- System BIOS built-in NCR81O SCSI Card BIOS and "**Plug and** Play" function
- On-board built-in PCI Master IDE controller and floppy controller
- On-board supports for two high speed UARTS (w/i 16550 FIFO) and Multimode parallel port for Standard, Enhanced (EPP) and high speed (ECP) modes, PS/2 mouse function
- on-board supports FLASH Memory for easy **upgrade** BIOS
- On-board **supports** PS/2 mouse function.

Unpacking the Mainboard

The mainboard package contains:

- The 82430FX / P54C Mainboard
- This User's Guide

Note: Do not unpack *the mainboard until you are ready* to install it.

Follow the precautions below while unpacking the mainboard.

1. Before handling the mainboard, ground yourself by grasping an unpainted portion of the system's metal chassis.
2. Remove the mainboard from its anti-static packaging and place it on a grounded surface, component side up.
3. **Check** the mainboard for damage. If any chip appears loose, press carefully to seat it firmly in its socket.

Do not apply power if the mainboard appears damaged. If there is damage to the board contact your dealer immediately.

Electrostatic Discharge Precautions

Make sure you ground yourself before handling the mainboard or other system components. Electrostatic discharge can easily damage the components. Note that you must take special precaution when handling the mainboard in dry or air-conditioned environments.

Take these precautions to protect your equipment from electrostatic discharge:

- Do not remove the anti-static packaging until you are ready to install the mainboard and other system components.
- Ground yourself before removing any system component from its protective anti-static packaging. To ground yourself grasp the expansion slot covers or other unpainted portions of the computer chassis.
- Frequently ground yourself while working, or use a grounding strap.
- Handle the mainboard by the edges and avoid touching its components.

Mainboard Layout w/ default settings

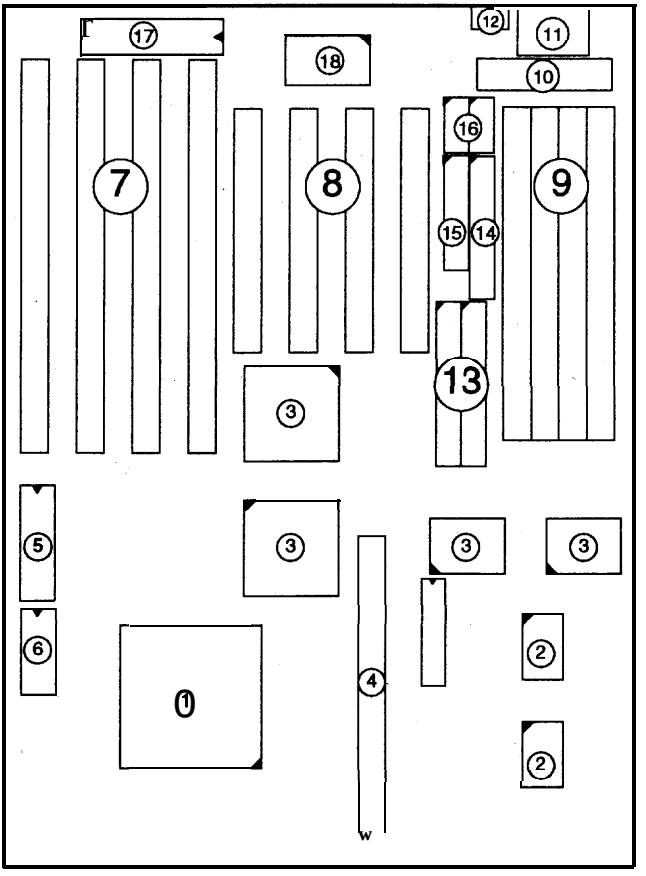


Figure 1-2. *Mainboard Layout*

1, P54C/6x86 in ZIP socket 7
2. Pipelined Burst SRAM
3. 82430 FX Chipset
4. Pipelined Burst SRAM Module Slot
5. PnP FLASH BIOS
6. Real Time Clock (RTC)
7. ISA Slots
8. PCI Slots
9. SIMM Memory Bank
10. 5V DC Power Connector
11. Keyboard Connector
12. PS/2 Mouse Connector
13. IDE1/IDE2 Connector
14, Floppy Connector
15. Parallel Port Connector
16. COM1/COM2 Connector
17, Keyboard BIOS
18. Super 1/0 Chipset

Default settings are as follows: Pentium 100MHz CPU, 256K W/B Pipelined Burnt cache, Address Pipeline Enabled, On-board Local Bus IDE Enabled, FDC Enabled, 2 high speed UARTS Enabled (W/ 16550 FIFO), 1 EPP/ECP port (ECP + EPP mode).

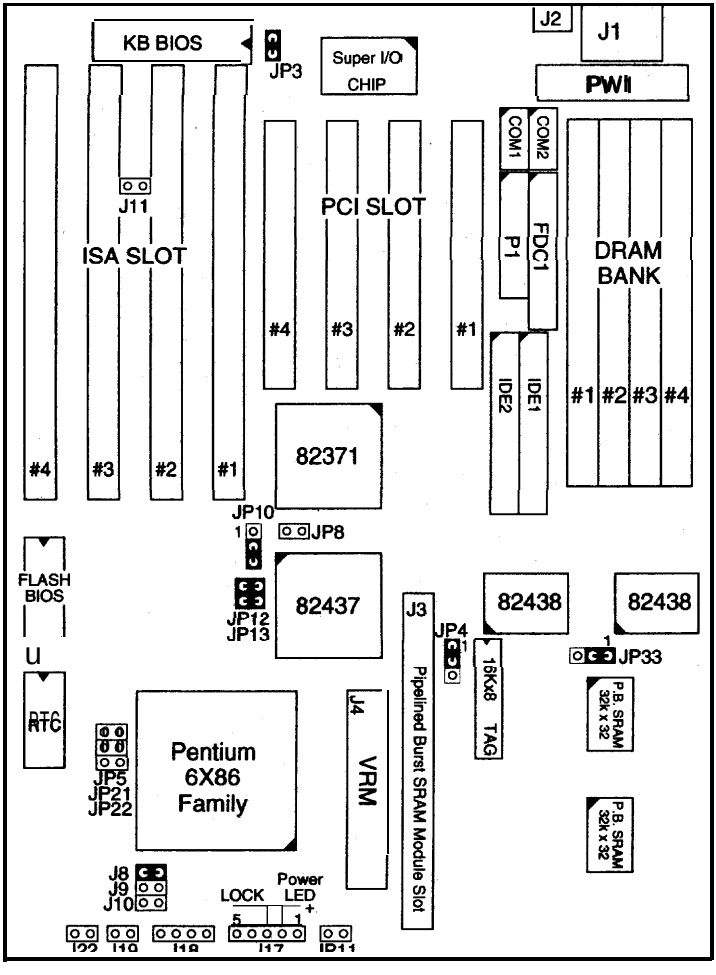


Figure 1-2. Mainboard Default Setting

***Important:** Make sure the system is well ventilated to prevent overheating and ensure system stability. Unpacking the Mainboard*

2 Hardware Setup

This chapter explains how to configure the mainboard's hardware. After you install the mainboard, you can set jumpers, install memory on the mainboard, and make case connections. Refer to this chapter whenever you upgrade or reconfigure your system,

CAUTION: Turn off power to the mainboard, system chassis, and peripheral devices before performing any work on the mainboard or system

Jumpers

Factory Set Jumpers

The following jumpers are set at the factory as below.

Jumpers	Factory settings
J5, JP9, JP15~JP19	Reserved
JP6, JP7,JP14,JP30	Factory fixed at 1-2
JP2, JP23~JP26	**Factory fixed.**

JP3: Display Type

Set JP3 to configure the mainboard for use with either a color or monochrome monitor.

Monitor Type	JP3
Monochrome	 1 2
EGA/VGA (default)	 1 2

JP8: Sleep Switch Connector Enabie/Disable

Toggle this jumper to force the system into power saving (Green) mode. Any hardware IRQ signal makes the system wakeups.

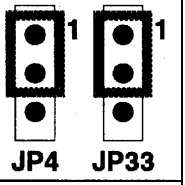
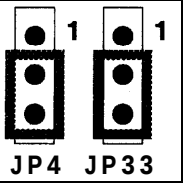
JPIO: AT Bus Clock Select

This jumper sets the AT Bus clock for use with different CPUs.

clock	JP10
Pentium -75 MHz CPU Pentium -125 MHz CPU	**(divided by 3)**  **3 2 1**
Other Pentium CPUS (Default)	(divided by 4)  3 2 1

JP4, JP33: Pipelined Burst SRAM Size Select

These two jumpers set the size of Pipelined Burst SRAM for use with different size cache SRAM.

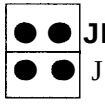
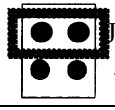
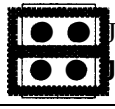
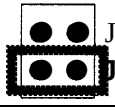
Cache Siza	JP4, JP33
256 KB (default)	 **1 1** **JP4 JP33**
512 KB	 **1 1** **JP4 JP33**

Important: ***Due*** *to the various&sign, contact the supplier for Pipelined Burst upgrade module when you* ***want*** *to upgrade your 5TE.*

JP21, JP22: Bus Fraction Core/Bus Ratio Select

Set this jumper accroding to your CPU clock,

Note: For Pentium X / Y Mhz, X stands for CPU core clock, Y stands for bus clock.

Ratio	P54CX Family	JP21, JP22
3/2 (Default)	Pentium - (100/66, 90/60, 75/50)MHz	
2/1	Pentium - (100/50)MHz Pentium - (120/60, 133/66)MHz	
5/2	Pentium - (150/60)MHz Pentium - (166/66) MHz	
3/1	Pentium - (180/60] MHz Pentium - (200/66) MHZ	

JP5: CMOS Clear Jumper

Clear the CMOS memory by momentarily shorting this jumper; then open the jumper to retain new settings.

CMOS Setting	JP5
Retain CMOS data (default)	
Clear CMOS data	

J4: VRM (Voltage Regulator Module) Socket (Reserved)

VRM socket is dedicated for 2,5V CPU to use. It converts 3.3V to 2,5V for the advance high speed P54CX.

JII: PS/2 Mouse Function Jumper

Set PS/2 mouse function enabled or disabled.

PS/2 Mouse Function	JII
Disabled (default)	1 2
Enabled	1 2

Note: *The IRQ12 is dedicated to PS/2 mouse when choose enabled of PS/2 - Mouse Function.*

CPU Type Configuration

Set the mainboard's CPU jumpers JP12, JP13, JP21, and JP22 according to CPU type as described below, and then setJ8~J1l for the proper voltage of the CPU,

Pentium - 75*/90*/100* CPU Settings (1.5x clock)
AMD 5k86 - P75/P90/PIOO/P120/P133 (1.5 X clock)

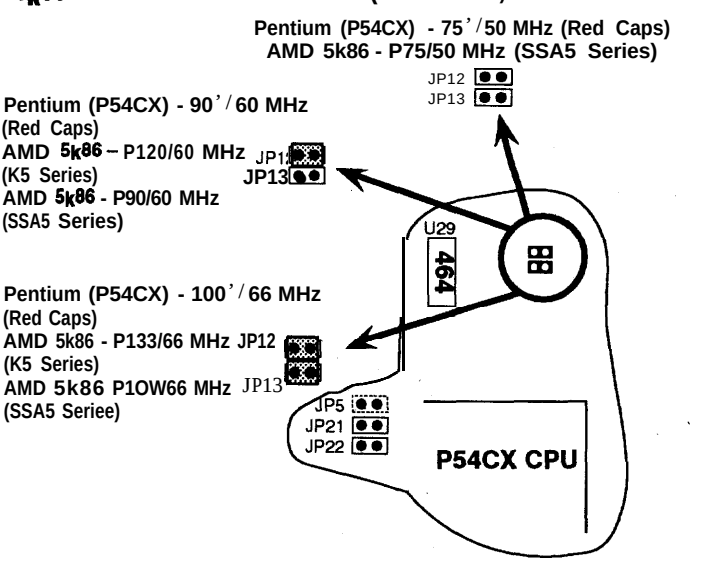


Figure 2-1-1, CPU Jumper Settings

Note: ***AMD CPU (SSA5/R5) voltage is based on VRE spec. Settings for J8 toJIO should be modified (refer to page 12).***

Pentium - 100*/120*/133* CPU Settings (2.0x clock)

Cyrix 6x86- P120+/P150+/P166+ CPU Settings (2.0x clock)

AMD 5k86 - 120/133 CPU Settings (2.0x clock)

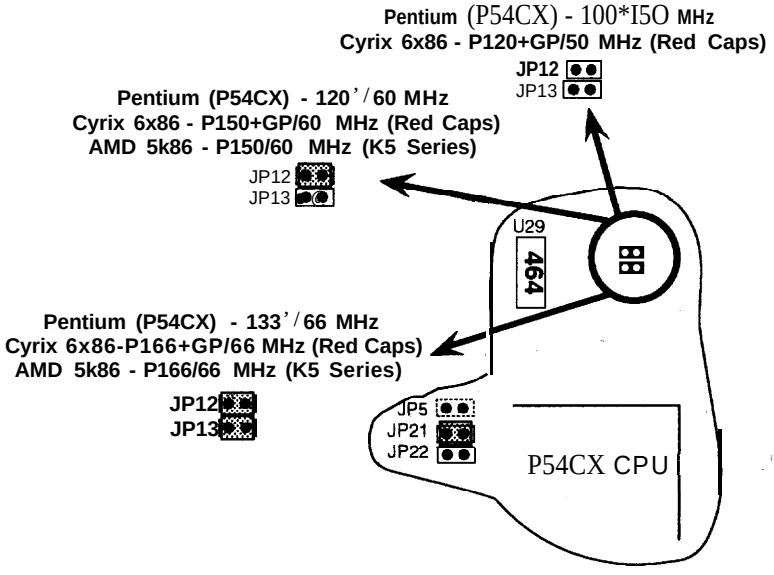


Figure 2-1-2. CPU Jumper Settings

Note: **AMD** ***CPU*** **(SSA5/R5)** ***voltage is based on VRE spec. Settings for J8 toJIO should be modified (refer to page 12).***

Pentium -150*' CPU Settings (2.5x clock)

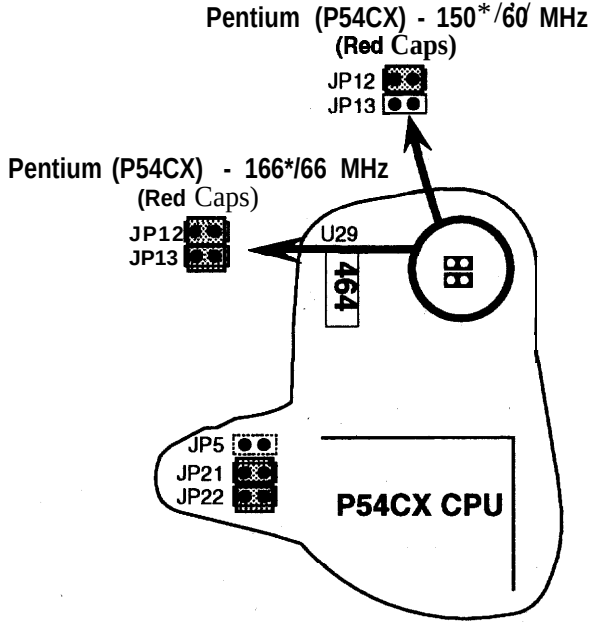


Figure 2-1-3. CPUJumper Settings

***You must equip the CPU with a fan and heat sink for system stability.**

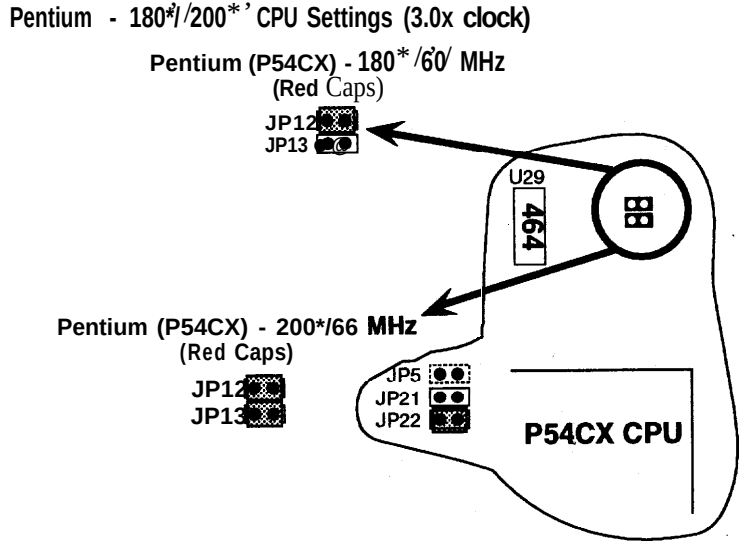
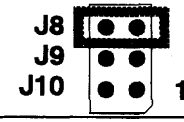
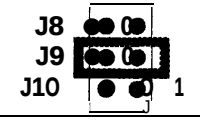
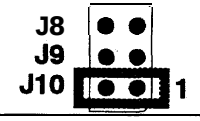


Figure 2-1-4. CPU Jumper Settings

J8, J9, JIO: CPU Voltage Select

Set J8-J1O to configure the proper voltage for the installed CPU,

CPU Typo Voltage	J8~J10
Standard and VR P54CX CPU (3.3V + 5%) (Default)	
VRE P54CX CPU (3.45v - 3.6v)	
Reserved	

Note: *Check with your CPU vendor to make sure of the CPU type voltage,*

Memory Configuration

The mainboard supports eight banks of 72-pin SIMM or EDO DRAM (with or without parity). The mainboard requires SIMM of at least 80ns access time.

single-side SIMM	Double-side SIMM
4MB = lMB X **36(32)**	**2MB = 512K** X 36(32)
16MB = 4MB X **36(32)**	8MB = 2MB X 36(32)
64MB = 16MB x 36(32)	32MB = 8MB x 36(32)

The mainboard supports from 4 to 128 Mbytes with no other restrictions on memory configurations, You can install DRAM in any combination without having to rely on a memory configuration table. Memory configuration is thus **"T"Table-Free."**

Multi I/0 Port Addresses

Default settings for multi-I/O port addresses are shown in the table below.

Port	I/O Address	IRQ	status
LPT1*	378H	7	ECP + EPP
COM1	3F8H	4	
COM2	2F8H	3	

* If default 1/0 port addresses conflict with other 1/0 cards (e.g. sound cards or 1/0 cards), you must adjust one of the 1/0 addresses to avoid address conflict. (You can adjust these 1/0 addresses from the BIOS,

Note: *Some sound cards have a default IRQ setting for IRQ7, which may* conflict *with printing-functions. If this occurs do not use sound card functions at the same time you print.*

Connectors

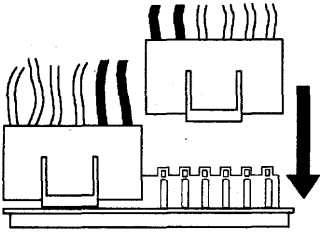
Attach the mainboard to case devices, or an external battery, via connectors on the mainboard. Refer to Figure 1-1 for connector locations and connector pin positions.

JI - keyboard Connector

A five-pin female DIN keyboard connector is located at the rear of the board. Plug the keyboard jack into this connector,

PW1 - Power Supply Connectors

The mainboard requires a power supply with at least 200 watts and a ‘"powergood" signal. PW1 has two six-pin male header connectors. Plug the dual connectors from the power directly onto the board connector while making sure the black leads are in the center,



J17 - Keylock & Power LED Connector

J17 is a connector for a lock that may be installed on the system case for enabling or disabling the keyboard. J17 also attaches to the case's Power LED, (Pin 1-2 for power LED, pin3-5 for keylock.)

J18 - Speaker Connector

Attach the system speaker to connectorJ18.

J19 - Hardware Reset Control

Attach the Reset switch to J19, Closing the Reset switch restarts the system.

J2 - PS/2 Mouse Connector

Attach PS/2 mouse cable to this connector.

J22 - Turbo LED Connector

Attach the turbo LED to J22. The LED lights when the system is in Turbo mode.

IDE1/IDE2 - On-board Primary/Secondary IDE HDD Connectors

Attach on-board hard disk drives to these connectors.

JPII - HDD LED Connectors

Attach on-board hard disk drive LEDs to this connector. The LED lights when an HDD is active.

COM1/COM2 Connectors

Attach COM1/COM2 cable to these connectors.

FDCI Connector

Attach floppy cable to this connector.

Parallel Port Connector

Attach parallel port cable to this connector.

J3 - Pipelined Burst SRAM Module Slot

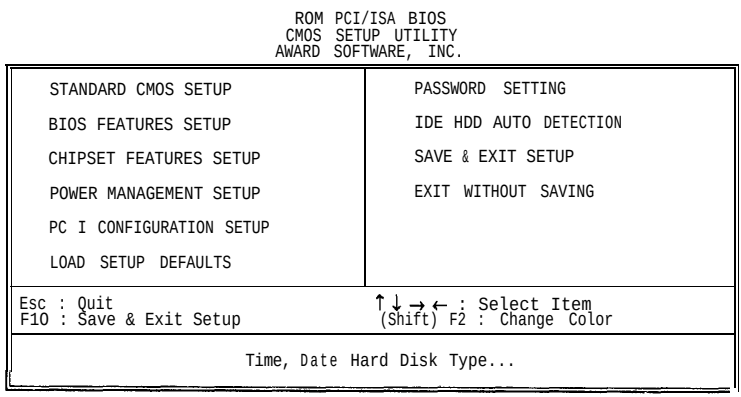
Contact your supplier for Pipelined Burst SRAM upgrade module to upgrade your on-board cache SRAM up to 512KB. Make sure Jp4 and JP33 are set for the right size hen you upgrade your cache SRAM.

3 BIOS Setup

The mainboard's BIOS setup program is the ROM PCI/ISA BIOS from Award Software Inc. Enter the Award BIOS program's Main Menu as follows:

1. Turn on or reboot the system, After a series of diagnostic checks, you are asked . to press DEL to enter Setup.

2. Press the <DEL> key to enter the Award BIOS program and the main screen appears:



3. Choose an option and press <Enter> .Modify the system parameters to reflect theoptionsinstalled in the system. (seethe follwing sections.)

4. Press <ESC>at anytime to return to the MainMenu,

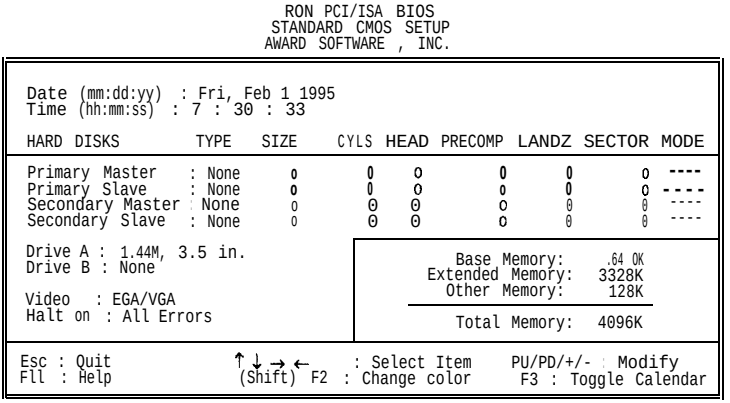
5. In the Main Menu, choose "SAVEANDEXIT SETUP"tosave your changes and reboot the system, Choosing 'EXIT WITHOUT SAVING" ignores your changes and exits the program.

The Main Menu options of the Award BIOS are described in the sections that follow.

Standard CMOS Setup

Run the Standard CMOS Setup as follows.

1. Choose "STANDARD CMOS SETUP" from the Main Menu. A screen appears.



2. Use arrow keys to move between items and select values. Modify selected fields using PgUp/PgDn/+/- keys. some fields let you enter values directly,

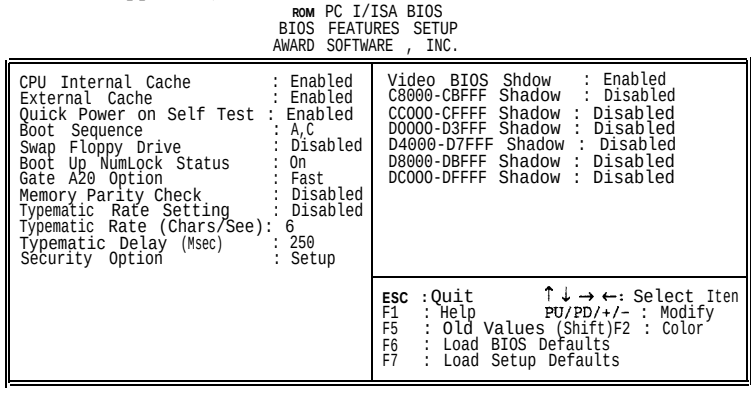
Date (mm/dd/yy)	Type the current date,
Time(hh:mm:ss)	Type the current time
Primary(Secondary) Master &Slave	Choosefromthestandardharddisktypesl to 46.Type 47 is user definable. If a hard disk is not installed choose "Not installed," (default)
Drive A&B	Choose 360KB ,5 1/4 in., 1.2MB,51/4 in., 720KB,31/2 in., 1.4M, 3 1/2 in.(default), 2.88 MB, 3 1/2 in. or Not installed
video	Choose Monochrome, Color 40x25, VGA/EGA (default), Color 80x25

3. When you finish, press the <ESC> key to return to the Main Menu,

BIOS Features Setup

Run the BIOS Features Setup as follows.

1, Choose "BIOS FEATURES SETUP" from the Main Menu and a screen with a list of items appears, (The screen below shows the BIOS default **settings.**)



2. Use the arrow keys to move between item and to select values, Modify the selected fields using thePgUp/PgDn/+/- keys. <F> keysare explainedbelow

<Fl>: "Help" gives options available for each item.

Shift <F2>: Change color,

<F5>: Get the old values. These values are the values with which the user started the current session.

<F6>: Load all options with the BIOS Setup default values.

<F7>: Load all options with the Power-Ondefault values.

A short description of screen items follows:

CPU Internal Cache	This option enables/disables the CPU's internal cache. (The Default setting is Enabled.)
External Cache	This option enables/disables the external cache memory. (The Default setting is Enabled.)
Quick Power On Self Test	Enabled provides a fast POST at boot-up,
Boot Sequence	The default setting attempts to first boot from drive A: and then from hard disk C:, You can reverse this sequence with "C:A:", but then drive A: cannot boot directly,
Swap Floppy Drive	Enabled changes the sequence of the A: and B: drives, (The Default setting is Disabled.)
Boot Up Num Lock status	Choose On or Off, On puts numeric keypad in Num Lock mode at boot-up. Off puts this keypad in arrow key mode at boot-up.
Gate A20 Option	Choose Fast (default) o Normal. Fast allows RAM accesses above lMB using the fast gate A20 line. -
Memory Parity check	Choose Enabled or Disabled (default). This item enables/disables the Memory Parity check option. Do not enable this setting if SIMM modules are without parity RAM.
Typematic Rate setting	Enable this option to adjust the keystroke repeat rate,
Typematic **Rate** *(Chars/sec)*	Choose the rate a character keeps repeating.
Typematic Delay (Msec)	Choose how long after you press a key that a character begins repeating,

security option	Choose Setup or System. Use this feature to prevent unauthorized system boot-up or use of BIOS Setup. "System" - Each time the system is booted the password prompt appears. "Setup" - If a password is set, the password prompt only appears if you attempt to enter the Setup program.
Video or Adaptor BIOS Shadow	BIOS shadow copies BIOS code from slower ROM to faster RAM. BIOS can then execute from RAM. These 32K segments can be shadowed from ROM to RAM. BIOS is shadowed in a 32K segment if it is enabled and it has BIOS present,

3. After you have finished with the BIOS Features Setup program, press the <ESC> key and follow the screen instructions to save or disregard your settings.

Chipset Features Setup

The Chipset Features Setup option changes the values of the chipset registers. These registers control system options in the computer,

Note: *Change these* settings only *if you are familiar with the Chipset.*

Run the Chipset Features Setup as follows.

1, Choose "CHIPSET FEATURES SETUP" from the Main Menu and the following screen appears. (The screen below shows default settings.)

```
                    ROM PCI/ISA BIOS
                CHIPSET FEATURES SETUP
                AWARD SOFTWARE, INC.

DRAM RAS Precharge Time    :4          PCI Concurrency          : Enabled
DRAM R/W Leadoff Timing    : 8/6       PCI Streaming            : Enabled
DRAM RAS to CAS Delay      :3          PCI Bursting             : Enabled
DRAM Read Burst Timing     : x2222     Onboard FDC Control      : Enabled
DRAU Write Burst Timing    : x3333     Onboard Serial Port 1    : COM1/3F8
System BIOS Cacheable      : Disabled  Onboard Serial Port 2    : COM2/2F8
Video BIOS Cacheable       : Disabled  Onboard Parallel Port    : 378H/IRQ7
8 Bit I/0 Recovery Time    : 1         Onboard Printer Mode     : ECP + EPP
16 Bit I/0 Recovery Time   : 1         ECP Mode Use DMA Select  :1
Memory Hole At 15M-16M     : Disabled
IDE HDD Block Mode         : Enabled
IDE Primary Master PIO     : Auto
IDE Primary Slave PIO      : Auto
IDE Secondary Master PIO   : Auto      ESc : Quit      ↑ ↓ → ←: Select Item
IDE Secondary Slave PIO    : Auto      F1  : Help      PU/PD/+/-  : Modify
On-chip Primary PCI IDE    : Enabled   F5  : Old Values (Shift)F2 : Color
On-chip Secondary PCI IDE: Enabled     F6  : Load BIOS Defaults
PCI Slot IDE 2nd Channel : Enabled     F7  : Load Setup Defaults
```

2. Usethearrowkeysto move between items and select values. Modify selected fields using the PgUp/PgDn/+/- keys,

A short description of screen items follows:

DRAM RAS Precharge Time Use the default setting,

DRAM R/W lead off Timing Use the default setting.

DRAM RAS to CAS Delay Use the default setting.

DRAM Read Burst Timing Usethedefauksetting.

DRAM Write Burst Timing Use the default setting

System BIOS Cacheable	Disabled: The ROM area FOOOOH-FFFFFH is not cached. Enabled: The ROM area FOOOOH-FFFFFH is cacheable if cache controller is enabled.
Video BIOS Cacheable	Disabled: The video BIOS COOOOH-C7FFFH is not cached. Enabled: The video BIOS COOOOH-C7FFFH is cacheable if cache controller is enabled.
Memory Hole At 15M-16M	Choose Enabled or Disabled (default). Some interface cards will map their ROM address to this area. If this occurs, you should select Enabled, otherwise use Disabled.
IDE HDD Block Mode	Choose Enabled (default) or Disabled. Enabled invokes multi-sector transfer instead of one setter per transfer. Not all HDDs support this function.
IDE Primary Master PIO IDE Primary Slave PIO IDE secondary Master PIO IDE Secondary Slave PIO	Choose Auto (default) or mode 0-4, Mode O is the slowest speed, and HDD mode ***4*** is the fastest speed. For better performance and stability, we suggest you use the Auto setting to set the HDD control timing.
On-chip Primary PCI IDE	Enabled: Use the on-board IDE (default)
On-chip Secondary PCI IDE	Disabled: Turn off the on-board IDE
PCI Slot IDE 2nd Channel	Choose Enabled (default) or Disabled. When Enabled is set, IRQ15 is dedicated for secondary IDE use. When Disabled is set, IRQ15 is released for other devices.
PCI Concurrency	Use the default setting,
PCI streaming	Use the default setting.

PCI Bursting	**Use** the default setting,
Onboard FDC Control	Enabled: Use the on-board floppy controller (default), Disabled: Turn off the on-board floppy controller.
onboard serial Port 1 Onboard *serial* Port 2	Choose serial port 1 & 2's 1/0 address, Do no set port 1 & 2 to the same value except for Disabled. COM 1/3F8H | COM3/3E8H COM 2/2F8H | COM4/2E8H (default) |
Onboard Parallel Port	Choose the printer 1/0 address: 378H/IRQ7 (default), 3BCH/IRQ7, 278H/IRQ5
Onboard Printer Mode	Choose ECP + EPP (default), SPP or EPP, ECP mode, The mode depends on your external device that connects to this port.
ECP Mode DMA Select	Choose DMA1 (default) or DMA3, This setting only works when the Onboard Printer Mode is set at the ECP mode,

3. After you have finished with the Chipset Features Setup, press the <ESC> key and follow the screen instructions to save or disregard your settings.

Power Management Setup

The Power Management Setup option sets the system's power saving functions.

Run the Power Management Setup as follows.

1, Choose "POWER MANAGEMENT SETUP" from the Main Menu and a screen with a list of items appears.

ROM PcIIISA BIOS
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC .

```
Power Management      : Disabled
PM Control by APM     : No
Video Off Method      : V/H SYNC +Blank

Doze Mode             : Disabled
Standby Mode          : Disabled
Suspend Mode          : Disabled
HDD Power Down        : Disabled

IRQ3 (Wake-Up Event): ON
IRQ4 (Wake-Up Event): ON
IRQ8 (Wake-Up Event): ON
IRQ12 (Wake-Up Event): ON

Power Down Activities
COM   Ports Accessed : ON
LPT   Ports Accessed : ON
Drive Ports Accessed : ON
```

```
IRQ 3 (COM 2)         : ON
IRQ 4 (COM 1)         : ON
IRQ 5 (LPT 2)         : ON
IRQ 6 (FIoPPY Disk)   : ON
IRQ 7 (LPT 1)         : ON
IRQ 8 (RTC Alarm)     : OFF
IRQ 9 (IRQ2 Redir)    : ON
IRQ 10 (Reserved)     : ON
IRQ 11 (Reserved)     : ON
IRQ 12 (PS/2 mouse)   : ON
IRQ 13 (Coprocessor)  : ON
IRQ 14 (Hard Disk)    : ON
IRQ 15 (Reserved)     : ON

ESC : Quit        ↑ ↓ → ←: Select Item
F1  : Help        PU/PD/+/- : Mcdify
F5  : Old Values (Shift)F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
```

2. Use the arrow keys to move between items and to select values. Modify the selected fields using the PgUp/PgDn/+/- keys.

A short description of selected screen items follows:

Power Management Options are as follows:

User Define Let's you define the HDDand system powerdowntimes.

Disabled Disables the Green PC Features.

Min Saving Dozetimer=lHour
Standbytimer=l Hour
Suspend timer =lHour
HDDPowerDown= 15Min

Max Saving Doze timer=lMin
Standbytirner=lMin
Suspendtimer=lMin
HDD Power Down= lMin

PM Control byAPM	Choose Yes or No (default). APM stands for Advanced Power Management, To use APM you must run "power.exe" under DOS v6,0 or later version,
Video Off Method	Choose V/H Sync+ Blank (default), Blank screen, or DPMS for the selected PM mode.
Doze Mode	When the set time has elapsed, the BIOS sends a command to the system to enter doze mode (system clock drops to 33MHz), Time is adjustable from 1 Min to 1 Hour.
Standby **Mode**	The default is Disabled, Time is adjustable from 1 Min to 1 Hour.
Suspend Mode	The default is Disabled. Only an SL-Enhanced (or SMI) CPU can enter this mode, Time is adjustable from 1 Min to 1 Hour, Under Suspend mode, the CPU stops completely (no instructions are executed.)
HDD Power Down	When the set time has elapsed, the BIOS sends a command to the HDD to power down, which turns off the motor. Time is adjustable from 1 to 15 minutes. The default setting is Disabled, Some older model HDDs may not support this advanced function,
IRQx (Wake-Up Events)	The BIOS monitors these items for activity. If activity occurs from the Enabled item the system wakes up.
Power Down Activities	The BIOS monitors these items for no activity. If no activity occurs from the Enabled item the system will enter power saving mode (Doze/Standby/Suspend/ HDD Power Down mode).

3. **After** you have finished with the Power Management Setup, press the <Esc> key to return to the Main Menu.

PCI Configuration Setup

This option sets the mainboard's PCI Slots, Run this option as follows:

1. Choose "PCI CONFIGURATION SETUP" from the Main Menu and the following screen appears. (The screen below shows default settings.)

```
                    ROM PCI/ISA. BIOS
                 PC I CONFIGURATION SETUP
                  AWARD SOFTWARE, INC.

PnP BIOS Auto Con fig        : Disabled
SLOT 1 Using INT #           : AUTO
SLOT 2 Using INT #           : AUTO
SLOT 3 Using INT #           : AUTO
SLOT 4 Using INT #           : AUTO

1st Available IRQ*           :9
2nd Available IRQ*           : 10
3rd Available IRQ*           : 11
4th Available IRQ*           : 12
PCI IRQ Activated By         : Level
PCI IDE IRQ Map To           : PCI-AUTO
 Primary IDE INT#            :A
 Secondary IDE INT#          :B

ESC  : Quit          ↑ ↓ → ←: Select Item
F1   : Help          PU/PD/+/-  Modify
F5   : Old Values (Shift)F2  : Color
F6   : Load BIOS Defaults
F7   : Load Setup Defaults
```

*: These items will disappear when PnP BIOS Auto Config, is enabled.

2. Use the arrow keys to move between items and select values. Modifi selected fields using the PgUp/PgDn/+/- keys.

A short description of screen items follows:

PnP BIOS Auto Config.	Disabled: BIOS doesn't manage ISA PnP card (i.e. IRQ) but PCI card, Enabled: BIOS auto manage PCI and ISA PnP card.
slot 1 (2) (3) (4) Usitlg INT#	Choose AUTO or assign PCI IN#' number A, B, C, or D. The default setting is AUTO.
1st (2nd) (3rd) (4th) Available IRQ	If slot 1~4 is set to AUTO in the item above, then the BIOS automatically routes the INT# to the specified IRQ following the 1st (2nd) (3rd) (4th) IRQ order you assign,
PCI IRQ **Activated By**	Choose Edge or Level. Most PCI trigger signals are Level. This setting must match the PCI card.
PCI IDE IRQ Map To	Select PCI-AUTO, ISA, or assign a PCI SLOT number (depending on which slot the PCI IDE is inserted), The default setting is PCI-AUTO. If PCI-AUTO does not work, then assign an individual PCI SLOT number.
Primary **IDE INT#**	Choose INTA#, INTB#, INTC#, or INTD#. The default setting is INTA#.
Secondary IDE INT#	Choose INTA#, INTB#, INTC#, or INTD#. The default setting is INTB#,

3. After you have finished with the PCI Slot Conjuration, press the <ESC> key and follow the screen instructions to save or disregard your settings.

Load Setup Defaults

This item loads the system values you have previously saved. Choose this item and the following message appears:

"Load SETUP Defaults (Y/N)? N"

To use the SETUP defaults, change the prompt to "Y" and press <Enter>,

This item is recommended if you need to reset the system setup.

Password Setting

This Main Menu item lets you configure the system so that a password is required every time the system boots or an attempt is made to enter the Setup program, Change the password as follows:

1. Choose """PASSWORD SETTING"" in the Main Menu and press <Enter>. The following message appears:

"Enter Password:"

2. Enter a password and press <Enter>,

(If you do not wish to use the password function, you can just press <Enter> and a "Password disabled" message appears,)

3. After you enter your password, the following message appears prompting you to confirm the new password:

‘""Confirm Password”

4. Reenter your password and then Press <ESC> to exit to the Main Menu,

Important: If you forget or lose the password, the only way to access the system is to Set jumper JP32 to clear the CMOS RAM AI**Setup** information is lost and you must run the BIOS setup program **again.**

IDE HDD Auto Detection

This Main Menu item automatically detects the hard disk type and configures the STANDARD CMOS SETUP accordingly.

Note: *This only valid for IDE hard disks.*