

Super 7 Systems
User's Handbook

iDOT.computers

FCC Declaration of Conformity

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

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

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

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

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

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Welcome

Package checklist.	7
Ordering options and replacement parts	8
Contacting iDOT.com	8

1 Working with Super 7 System Hardware

Removing the chassis cover.	10
Location of main system components	11
Back panel connections	12
Serial port COM1, COM2	13
Parallel port PRT	13
PS/2 keyboard	13
PS/2 mouse	13
Universal Serial Bus USB1/USB2	13
Installing DIMMs	14
Removing DIMMs	15
Memory Configuration.	16
Installing IDE devices (HDD, CD-ROM)	16
Installing floppy disk drives	17
Installing expansion cards	18
Replacing the battery	20

2 Using the CMOS Setup Utility

Running the CMOS Setup utility.	21
Selecting items	22
Modifying selected items	22
Hot keys	22
Saving settings and exiting.	23
Exiting without saving settings	23
Standard CMOS Setup menu.	23
Date and time	24
Hard disks type and mode	24
Floppy drives	25
Video	25
Halt on	25
BIOS Features Setup menu	26
Virus warning.	27
Cache memory options.	27
System boot control settings	28
Typematic settings	29
Other control options.	30
Chipset Features Setup menu.	32
Power Management Setup menu	35
PM timers	37
PM events.	38
PNP/PCI Configuration Setup menu	40
PNP/PCI configuration controls.	41
PNP/PCI configuration setup.	42
Load setup defaults	43
Load BIOS defaults	43

Integrated Peripherals menu	44
IDE device controls	45
FDC controls	46
Onboard serial ports	47
Onboard parallel ports	48
Supervisor password	49
User password	50
IDE HDD auto detection	51

A Super 7 System Mainboard

Mainboard features	54
Mainboard layout	55
Front panel connections	58
Power LED and KeyLock	59
Reset	59
Speaker	59
Turbo LED	59
IDE LED	59
ATX power on/off switch	60
CPU voltage setting (JP30 and JP4)	60
CPU frequency setting (SW1)	64
SDRAM frequency (JP8, JP9, JP10)	71
Wake-On-LAN (WOL)	72
Infrared (IR)	73
CPU cooling fan	73
Chassis cooling fan	74
ATX power supply	75
CPU voltage Smart-Detect (JP4)	76

Clear CMOS (JP5) 77
Multi-I/O addresses 77
Cache configuration 78

Package checklist

In addition to this book, your iDOT.com™ Super 7 system package should include the items listed below. If any item is damaged or missing, contact the iDOT.com Customer Service Department at 888-315-9563.

- setup instructions (fold-out poster)
- Super 7 computer
- mouse
- keyboard
- power cable
- modem cable (if your system includes a modem)
- monitor (if you ordered a monitor)
- Microsoft® Windows® 98 documentation, and *Certificate of Authenticity*.

Note

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

Ordering options and replacement parts

For complete information about options and replacement parts available for your Super 7 system, see the iDOT.com Web site: www.idot.com.

Contacting iDOT.com

For the most up-to-date information about your Super 7 system and for sales or technical support, go to the iDOT.com Web site at www.idot.com. You can also contact iDOT.com at these numbers:

Customer Service	888-315-9563
Sales	888-388-4368
Technical Support	888-316-6302

Working with Super 7 System Hardware

1

This chapter provides instructions for changing or upgrading Super 7 system hardware.

Warning

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

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

or

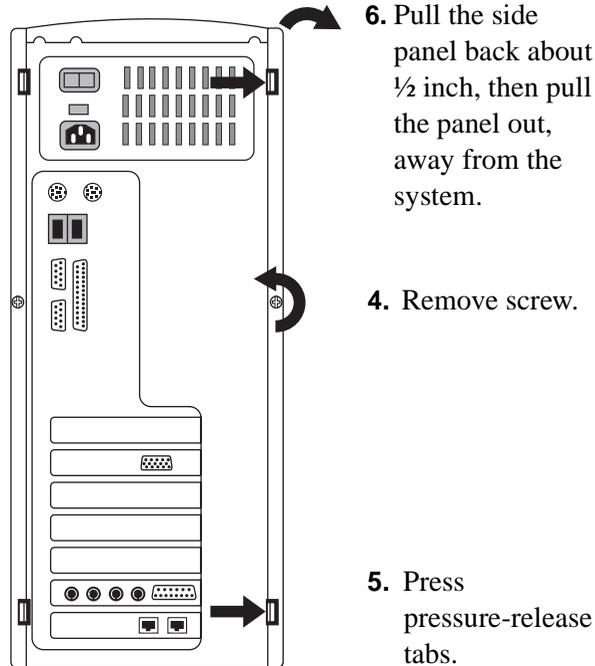
- *Wear a static wrist strap that is connected to a natural earth ground.*

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

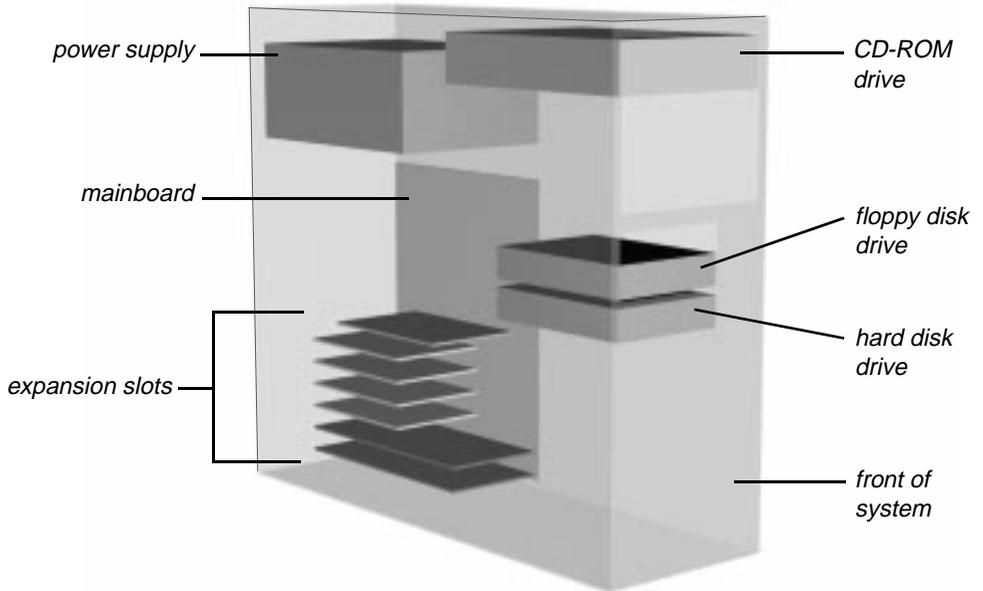
Removing the chassis cover

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

Follow the steps shown in the illustration:

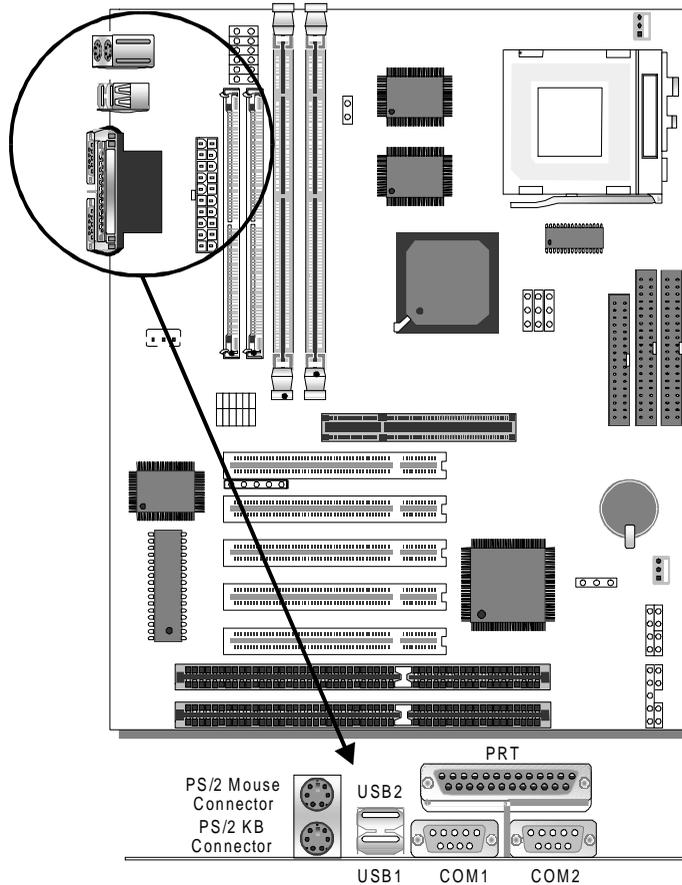


Location of main system components



Back panel connections

When connecting an external device, use the following figure to locate and identify which back panel connector to use.



Serial port COM1, COM2

Plug the serial device cable into the COM1 or COM2 9-pin connector located at the rear panel of the mainboard.

Parallel port PRT

Plug the parallel device cable into the 26-pin connector located at the rear panel of the mainboard.

PS/2 keyboard

Plug the keyboard jack directly into the 6-pin PS/2 keyboard connector located at the rear panel of the mainboard.

PS/2 mouse

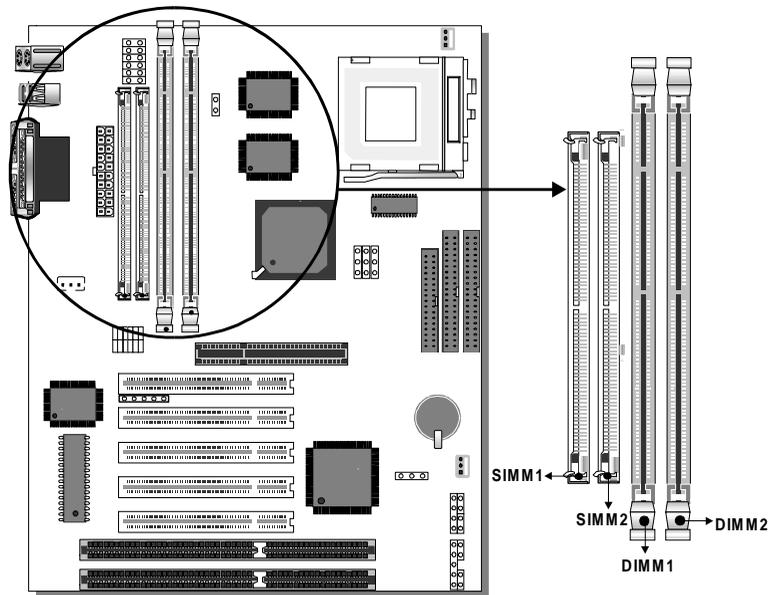
Plug the mouse jack into the 6-pin PS/2 mouse connector.

Universal Serial Bus USB1/USB2

The mainboard includes two USB ports. Plug the USB device jack into USB connector USB1 or USB2.

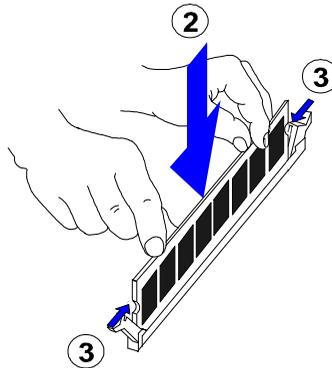
Installing DIMMs

This mainboard supports two strips of 72-pin 5V FPM/EDO DRAM (SIMM) from 4 to 64 MB and two strips 168-pin 3.3V/5V unbuffered DIMMs from 8 to 256 MB. The mainboard requires SIMMs of at least 70ns access time. The Super 7 mainboard supports both EDO and SDRAM memory modules.



1. Locate the DIMM slots on the mainboard.

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



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

Removing DIMMs

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

Memory Configuration

Your board has two DIMM sockets and two SIMM sockets, providing support for up to 512MB of main memory using DIMM modules from 8MB to 256MB and SIMM modules from 4MB to 64MB. For 66MHz host bus CPUs use 12ns or faster DIMM modules; for 83MHz or faster host bus CPUs use 8ns modules.

	Bank 1, 2	DIMM 1	DIMM 2
RAM Type	FPM/EDO/ BEDO	EDO/SDRAM	EDO/SDRAM
Single RAM module size (MB)	4/8/16/32/64	8/16/32/64/128/ 256	8/16/32/64/128/ 256

Notes

You must install two SIMM modules to complete the SIMM bank.

Do not use EDO DIMMs in combination with SDRAM DIMMs.

Installing IDE devices (HDD, CD-ROM)

The mainboard offers two primary and secondary IDE device connectors (IDE1, IDE2.) It can support up to four high-speed hard disk drives or CD-ROM drives.

Connect one end of the 40-pin flat cable to the IDE device (HDD or CD-ROM). Connect the other end to the primary (IDE1) or secondary (IDE2) directionally keyed IDE connector on the mainboard.

Installing floppy disk drives

The mainboard can support two floppy disk drives.

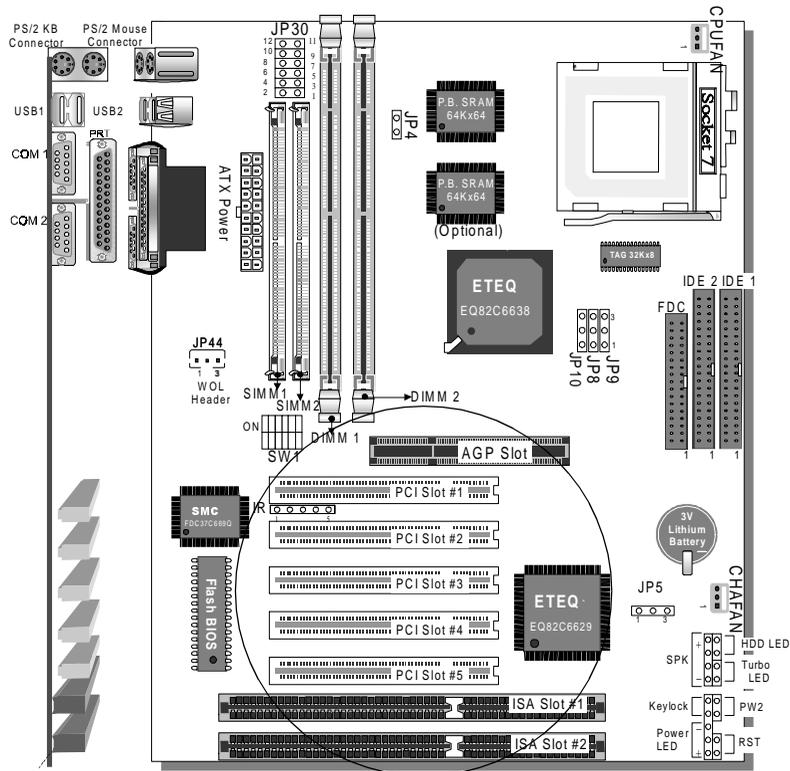
The system supports 5 types of floppy disk drives: 720 KB, 1.2 MB, 1.44 MB, 2.88 MB, and LS-120. In addition, the mainboard supports a 3-mode (720KB/1.25MB/1.44MB) floppy commonly used in Japan.

Connect one end of the 34-pin flat cable to the floppy disk drive. Plug the other end to the floppy drive connector on the mainboard.

Installing expansion cards

Your Super 7 system features either:

- one 32-bit AGP bus slot
 - two ISA bus slots
 - five PCI bus slots
- or
- one 32-bit AGP bus slot
 - four PCI bus slots
 - one shared PCI/ISA bus slot
 - one ISA bus slot



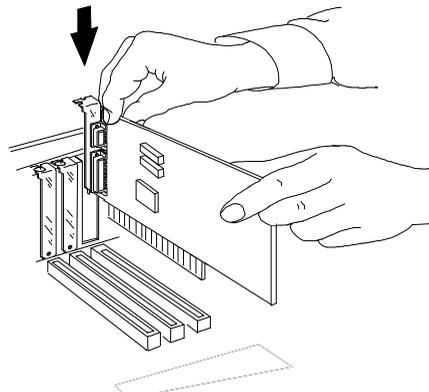
Caution

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

Observe static electricity precautions. See the warnings on page 9.

See "Removing the chassis cover" on page 10.

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



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

Replacing the battery

Your Super 7 computer uses a 3-volt lithium battery, which should last about seven years. If you need to replace the battery, replace it with an equivalent battery. To purchase a new battery, check a local store such as Radio Shack or Home Depot. Ask for a battery with a part number that includes the identification code *CR2032*.

Warning

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

Discard used batteries according to the manufacturer's instructions.

To replace the battery, follow these steps:

1. Observe the precautions described on page 9.
2. Turn off all peripheral devices connected to the system. Turn off the computer's primary power switch on the back of the system.
3. Remove the chassis cover. (See "Removing the chassis cover" on page 10.)
4. Locate the battery on the mainboard. (See the illustration on page 18.)
5. With a medium flat-bladed screwdriver, gently pry the battery out of its socket. Note the orientation of the + and – on the battery.
6. Place the new battery in the socket, orienting the + and – correctly.
7. Replace the chassis cover.

Using the CMOS Setup Utility

2

This chapter explains how to use the CMOS Setup utility to modify system settings.

Note

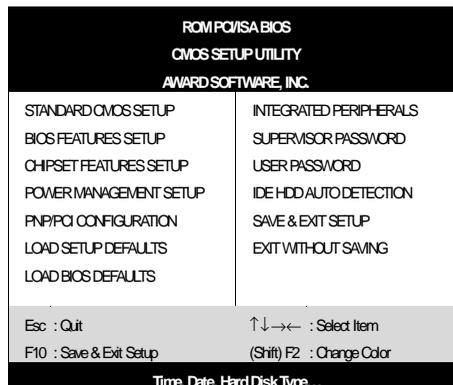
For reference purposes, write down the current Setup settings. When you make changes to the settings, update this record.

This mainboard's BIOS setup program uses the ROM PCI/ISA BIOS program from Award Software, Inc.

Running the CMOS Setup utility

To display the Award BIOS program's Main Menu:

1. Turn on or reboot the system.
2. After the diagnostic checks, press the **Delete** key to enter the Award BIOS Setup Utility.



Selecting items

Use the arrow keys to move between items and select fields.

From the Main Menu press arrow keys to enter the selected submenu.

Modifying selected items

Use the Up and Down keys to modify values within the selected fields. Some fields let you enter values directly.

Hot keys

Function keys give you access to a group of commands throughout the BIOS utility.

Function	Command	Description
F1	Help	Gives the list of options available for each item.
Shift F2	Color	Changes the color of the display window.
F5	Old values	Restores old values. These are the values that the user started the current session with.
F6	Load BIOS Defaults	Loads all options with the BIOS Setup default values.
F7	Load Setup Defaults	Loads all options with the Power-On default values.
F10	Save & Exit Setup	Saves your changes and reboots the system.
[Esc]	Quit	Lets you return at anytime and from any location to the Main Menu.

Saving settings and exiting

Select the **Save & Exit Setup** option from the Main Menu to save data to CMOS and exit the setup utility. This option saves all your changes and causes the system to reboot.

Press **Y** to save the changes and exit or **N** to return to the Main Menu and keep current values.

Exiting without saving settings

Select the **Exit Without Saving** option to exit setup without saving changes.

Type **Y** to abandon changes and exit or **N** to return to the Main Menu and keep current values.

Standard CMOS Setup menu

Select the **Standard CMOS Setup** option from the Main Menu and press **Enter**.

ROM PCI/ISA BIOS								
STANDARD CMOS SETUP								
AWARD SOFTWARE, INC.								
Date (mm:dd:yy)	:	Fri, May 29 1998						
Time (hh:mm:ss)	:	9 : 42 : 43						
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	: AUTO	0	0	0	0	0	0	AUTO
Primary Slave	: None	0	0	0	0	0	0	----
Secondary Master	: None	0	0	0	0	0	0	----
Secondary Slave	: None	0	0	0	0	0	0	----
Drive A	:	1.44M, 3.5 in.						
Drive B	:	None						
Floppy 3 Mode Support	:	Disabled						
Video	:	EGA/VGA						
Halt On	:	All Errors						
					Base Memory: 640K			
					Extended Memory: 3328K			
					Other Memory: 128K			
					Total Memory: 4096K			
Esc	:	Quit	↑ ↓ → ←	:	Select Item	PU/PD/+/-	:	Modify
F1	:	Help	(Shift) F2	:	Change Color	F3	:	Toggle Calendar

This screen lets you modify the basic CMOS settings.

After you have completed the changes, press **Esc** to return to the Main Menu.

Date and time

	Display	Setting	Note
Date	mm/dd/yyyy	Type the current date.	You can also use the Page Up/Page Down keys to toggle.
Time	hh:mm:ss	Type the current time.	24-hour clock format 3:15 PM is displayed as 15:15:00.

Hard disks type and mode

Choose the type and mode for the hard disks that are installed.

Hard disk drive	Setting	Description	Note
Type	Auto	BIOS detects hard disk type automatically.	Default
	1-47	Selects standard hard disk type.	
	User	User defines the type of hard disk.	
Mode	Auto	BIOS detects hard disk mode automatically.	Default
	Normal	Normal IDE hard disk	<528MB
	LBA	Enhanced IDE hard disk	>528MB
	Large	Large IDE hard disk (for certain hard disk)	

Floppy drives

Parameter	Setting	Description	Note
Drives A & B	360KB, 5.25 in.		
	1.2MB, 5.25 in.		
	720KB, 3.5 in.		
	1.44MB, 3.5 in.		Default
	2.88MB, 3.5 in.		
	None	Not installed	
Floppy 3-Mode Support	Disabled		Default
	Drive A Drive B Both	Supports 3-mode floppy diskette: 740KB/1.25MB/1.44MB on selected disk drive.	Disk drive commonly used in Japan

Video

Select the video mode: EGA/VGA (Default), CGA 40, CGA 80, Mono (Monochrome).

Halt on

When the BIOS detects system errors, this function will stop the system. Select which type of error will cause the system halt: All Errors (Default), No Errors, All But Diskette, All But Keyboard, All But Disk/Key.

BIOS Features Setup menu

Select the **BIOS Features Setup** option from the Main Menu and press **Enter**.

ROM PCI/ISA BIOS BIOS FEATURES SETUP AWARD SOFTWARE, INC.		
Virus Warning	: Disabled	Video BIOS Shadow : Enabled
CPU Internal Cache	: Enabled	C8000-CBFFF Shadow : Disabled
External Cache	: Enabled	CC000-CFFFF Shadow : Disabled
Quick Power On Self Test	: Enabled	D0000-D3FFF Shadow : Disabled
Boot Sequence	: A, C, SCSI	D4000-D7FFF Shadow : Disabled
Swap Floppy Drive	: Disabled	D8000-DBFFF Shadow : Disabled
Boot Up NumLock Status	: On	DC000-DFFFF Shadow : Disabled
Gate A20 Option	: Fast	
Memory Parity /ECC Check	: Enabled	
Typematic Rate Setting	: Disabled	
Typematic Rate (Chars/Sec)	: 6	
Typematic Delay (Msec)	: 250	
Security Option	: Setup	
IDE Second Channel Control	: Enable	
PCI/VGA Palette Snoop	: Disabled	
OS Select For DRAM > 64MB	: Non-OS2	
Report No.FDD For WIN.95	: No	
		ESC : Quit ↑ ↓ → ← : Select Item
		F1 : Help PU/PD/+/- : Modify
		F5 : Old Values (Shift) F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

After you have completed the changes, press **Esc** and follow the instructions on your screen to save your settings or exit without saving.

Virus warning

Parameter	Setting	Description	Note
Virus Warning	Disabled		Default
	Enabled	Enable this option to protect the boot sectors and partition tables of your hard disk. Any attempt to write to them causes the system to halt and display a warning message.	

Cache memory options

	Setting	Description	Note
CPU Internal Cache	Disabled		
	Enabled	Enables the CPU's internal cache.	Default
External Cache	Disabled		
	Enabled	Enables the external memory.	Default

System boot control settings

System boot control settings

Parameter	Setting	Description	Note
Quick Power On Self Test	Disabled		
	Enabled	Provides a fast POST at boot-up.	Default
Boot Sequence	A, C, SCSI	Sets the boot sequence.	
	C, A, SCSI		
	C, CD-ROM, A		
	CD-ROM, C, A		
	D, A, SCSI		
	E, A, SCSI		
	F, A, SCSI		
	SCSI, A, C		
	SCSI, C, A		
	C only		
Swap Floppy Drive	Disabled		Default
	Enabled	Changes the sequence of A and B drives.	
Boot Up NumLock Status	On	Puts numeric keypad in NumLock mode at boot-up.	Default
	Off	Puts numeric keypad in arrow key mode at boot-up.	

System boot control settings (continued)

Gate A20 Option	Normal		
	Fast	Allows RAM access above 1MB using the fast gate A20 line.	Default
Memory Parity Check/ ECC Check	Enabled	Enables redundancy check on the parity bit in the data strings. Used for error detection when parity is not found.	Default

Typematic settings

Parameter	Setting	Description	Note
Typematic Rate Setting	Disabled		Default
	Enabled	Enables adjustment of the keystroke repeat rate.	

The following Typematic Rate and Typematic Delay fields are active only if the **Typematic Rate Setting** option is set to **Enabled**.

Typematic Rate (Chars/Sec)	6 (Char/sec) 8 (Char/sec) 10 (Char/sec) 12 (Char/sec) 15 (Char/sec) 20 (Char/sec) 24 (Char/sec) 30 (Char/sec)	Choose the rate at which a character is repeated when holding down a key.	Default
Typematic Delay (Msec)	250 (msec) 500 (msec) 750 (msec) 1000 (msec)	Choose how long after you press a key the character begins repeating.	Default

Other control options

Other control options

Parameter	Setting	Description	Note
Security Option	Setup	Use this feature to prevent unauthorized system boot-up or use of BIOS Setup. If a password is set, the password prompt only appears if you attempt to run the Setup program.	Default
	System	Each time the system is booted the password prompt appears.	
IDE Second Channel Control	Disabled	Turn off the on-board IDE.	
	Enabled	Use a PS/2 mouse.	Default
PCI/VGA Palette Snoop	Disabled		Default
	Enabled	The color of the monitor may be altered when using an MPEG card. Enable this option to restore the monitor's normal color.	
OS Select for DRAM>64MB	OS2	When using an OS2 operating system.	
	Non-OS2	When using another, non-OS2 operating system.	Default
Report No FDD For WIN 95	No	Windows will reserve INT 6 for your FDD, whether it is disabled or not.	Default
	Yes	Windows will release IRQ 6 (normally used by the floppy disk drive) after you disable the on-board FDD and set this field to Yes.	

Other control options (continued)

Video or Adapter BIOS Shadow	Disabled	
	Enabled	Default
<hr/>		
<p>The BIOS is shadowed in a 16K segment if it is enabled and if it has BIOS present.</p> <p>These 16 segments can be shadowed from ROM to RAM. BIOS shadow copies BIOS code from slower ROM to faster RAM. BIOS can then execute from RAM.</p>		
<hr/>		

Chipset Features Setup menu

Caution: *Change these settings only if you are already familiar with the chipset.*

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

ROM PCI/ISA BIOS CHIPSET FEATURES SETUP AWARD SOFTWARE, INC.		
Bank 0/1 DRAM Timing	: FP/EDO/60ns	
Bank 2/3 DRAM Timing	: FP/EDO/60ns	
Bank 4/5 DRMA Timing	: FP/EDO/60ns	
DRAM Read Pipeline	: Enabled	
Cache Rd+ CPU Wt Pipeline	: Disabled	
Linear Burst	: Disabled	
Video BIOS Cacheable	: Enabled	
System BIOS Cacheable	: Enabled	
Memory Hole At 15Mb Addr.	: Disabled	
AGP Aperture Size	: 64M	
AGP 2x Mode	: Disabled	
On Chip USB	: Enable	
USB Keyboard Support	: Disabled	
Spread Spectrum Modulated	: Disabled	
		F1 : Help PU/PD/+/- : Modify
		F5 : Old Values (Shift) F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

After you have completed the changes, press **Esc** and follow the instructions on your screen to save your settings or exit without saving.

The following table describes each field in the Chipset Features Setup menu and explains how to configure each parameter.

Chipset features setup

Parameter	Setting	Description	Note
Bank 0/1 DRAM Timing	FP/EDO 70ns	Use the default setting.	Default
Bank 2/3 DRAM Timing	Normal Medium Fast, Turbo	Choose DRAM Timing.	
Bank 4/5 DRAM Timing			
DRAM Read Pipeline	Disabled		
	Enabled	Enhances system performance.	Default
Cache Rd+CPU Wt Pipeline	Disabled		
	Enabled	Enhances system performance.	Default
Linear Burst	Disabled	Use the default setting.	Default
	Enabled	Linear mode SRAM support for Cyrix CPUs.	
Video BIOS Cacheable	Disabled		
	Enabled	The ROM area A0000- BFFFF is cacheable.	Default
System BIOS Cacheable	Disabled		
	Enabled	The ROM area F0000H- FFFFFH is cacheable.	Default
Memory Hole 15Mb Addr.	Disabled	Some interface cards map their ROM address to this area.	Default
AGP Aperture Size	64M 4-256M	AGP can use the DRAM as its video RAM. Choose the DRAM size you want to allocate as video RAM.	Default
AGP-2X Mode	Disabled		Default
	Enabled	Enable only if your AGP card supports 2x mode (faster).	
OnChip USB	Disabled		
	Enabled	Enable if you use a separate USB controller card.	Default

Chipset features setup (continued)

USB Keyboard Support	Disabled		Default
	Enabled	Enabled if you use a USB keyboard.	
Spread Spectrum Modulated	Disabled	Use the default setting.	Default
	Enabled	When using Spread Spectrum Modulated 1.5% or 6% for FCC or DOC testing.	
	V	Show the current voltage.	

Power Management Setup menu

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

ROM PCI/ISA BIOS POWER MANAGEMENT SETUP AWARD SOFTWARE, INC.			
ACPI function	: Disabled	Primary INTR	: ON
Power Management	: User Define	IRQ3 (COM2)	: Primary
PM Control by APM	: Yes	IRQ4 (COM1)	: Primary
Video Off Option	: Suspend ->Off	IRQ5 (LPT2)	: Primary
Video Off Method	: V/H SYNC+ Blank	IRQ6 (Floppy Disk)	: Primary
Modem Use IRQ	: 3	IRQ7 (LPT1)	: Primary
Sof-Off by PWR-BTTN	: Instant Off	IRQ8 (RTC Alarm)	: Disabled
** PM Timers **		IRQ9 (IRQ2 Redir)	: Secondary
HDD Power Down		IRQ10 (Reserved)	: Secondary
Doze Mode	: Disabled	IRQ11 (Reserved)	: Secondary
Suspend Mode	: Disabled	IRQ12 (PS/2 Mouse)	: Primary
** PM Events **	: Disabled	IRQ13 (Coprocessor)	: Primary
VGA		IRQ14 (Hard Disk)	: Primary
LPT & COM	: OFF	IRQ15 (Reserved)	: Disabled
HDD & FDD	: LPT/COM		
DMA/ master	: ON		
Modem Ring Resume	: OFF		
RTC Alarm Resume	: Disabled		
	: Disabled		
		ESC : Quit	↑↓ → ← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

After you have completed the power management setup, press **Esc** to return to the Main Menu.

Menu item	Setting	Description	Note
ACPI function	Disabled		Default
	Enabled	Enabled if you use Windows 98 and want to use ACPI.	
Power Management	User Define	Lets you define the HDD and system power down times.	
		Doze timer Standby timer Suspend timer	
	Min Saving	40 Min 40 Min 40 Min	
	Max Saving	20 Sec 20 Sec 20 Sec	
PM Control by APM	Yes	To use Advanced Power Management (APM) you must run [power.exe] under DOS V6.0 or later version.	Default
Video Off Option	Suspend ->Off	The monitor will be switched off in suspend mode.	Default
	All Modes ->Off	The monitor will be switched off in all power saving modes.	
	Always On		
Video Off Method	V/H SYNC+Blank	Selects the method by which the monitor is blanked.	Default
	Blank screen		
	DPMS Supported		
Modem Use IRQ	3	Assigns an IRQ# to the modem device.	Default
	3-11, NA		
Soft-Off by PWRBTN	Instant - Off	Select the Power Button mode. Instant Off : One push off.	Default
	Delay 4 Sec	Push for 4s to switch off.	

PM timers

Parameter	Setting	Description	Note
HDD Power Down	Disable		Default
	1-15Min	When the set time has elapsed, BIOS sends a command to the HDD to power down. This turns off the HDD motor.	Some older model HDDs may not support this advanced function.

The following **Doze Mode** parameter can be configured only if **Power Management** is set to **User Define**.

Doze Mode	Disable		Default
	10sec- 1Hour	When the set time has elapsed, BIOS sends a command to the system to enter Doze Mode.	System clock drops to 33MHz.

The following **Suspend Mode** parameter can be configured only if **Power Management** is set to **User Define**.

Suspend Mode	Disable		Default
	10sec- 1Hour	In Suspend mode, the CPU stops completely (no instructions are executed.)	Only an SL-Enhanced (or SMI) CPU can enter this mode.

PM events

PM events

Parameter	Setting	Description	Note
VGA	ON	Enables power management.	
	OFF		Default
LPT & COM	LPT/COM	Enables the power management timer.	Default
	COM		
	LPT NONE		
HDD & FDD	ON	Enables power management timers when an event is detected on a hard disk drive or floppy disk drive.	Default
	OFF		
DMA/master	ON	The SIM signal does not function until the master stops.	
	OFF		Default
Modem Ring Resume	Disabled	The modem rings only when the computer is on. The system remains active when the modem is ringing.	Default
	Enabled	The system will not be active when the modem is ringing.	
RTC Alarm Resume	Disabled	The system ignores the alarm.	Default
	Enabled	Set alarm to wake up the system either by the date (1-31) or time (hh:mm:ss). If the date is set to 0, the system wakes up by the alarm every day.	
Primary INTR	ON	Use the default setting.	Default
	OFF		

PM events (continued)

IRQ#	Primary	IRQ3 (COM2), IRQ4 (COM1), IRQ5 (LPT2), IRQ6 (floppy disk), IRQ7 (LPT1), IRQ12 (PS/2 mouse), IRQ13 (coprocessor), IRQ14 (hard disk)
	Secondary	IRQ9 (IRQ2 Redir), IRQ10 (Reserved), IRQ11 (Reserved)
	Disabled	IRQ8 (RTC Alarm), IRQ15 (Reserved)

PNP/PCI Configuration Setup menu

This option sets the mainboard's PCI slots.

ROM PCI/ISA BIOS PNP/PCI CONFIGURATION SETUP AWARD SOFTWARE, INC.			
PNP OS Installed	: No	CPU to PCI Write Buffer	: Enabled
Resources Controlled By	: Manual	PCI Master Broken Timer	: Disabled
ACPI I/O Device Node	: Disabled	PCI IRQ Activated By	: Level
IRQ-3 assigned to	: Legacy ISA	Assign IRQ For USB	: Enabled
IRQ-4 assigned to	: Legacy ISA	Assign IRQ For VGA	: Enabled
IRQ-5 assigned to	: PCI/ISA PnP	Assign IRQ For ACPI	: IRQ10
IRQ-7 assigned to	: PCI/ISA PnP		
IRQ-9 assigned to	: PCI/ISA PnP		
IRQ-10 assigned to	: PCI/ISA PnP		
IRQ-11 assigned to	: PCI/ISA PnP		
IRQ-12 assigned to	: PCI/ISA PnP		
IRQ-14 assigned to	: PCI/ISA PnP		
IRQ-15 assigned to	: PCI/ISA PnP		
DMA-0 assigned to	: PCI/ISA PnP		
DMA-1 assigned to	: PCI/ISA PnP		
DMA-3 assigned to	: PCI/ISA PnP		
DMA-5 assigned to	: PCI/ISA PnP		
DMA-6 assigned to	: PCI/ISA PnP		
DMA-7 assigned to	: PCI/ISA PnP		
		ESC : Quit	↑ ↓ → ← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values (Shift) F2	: Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Note

Starred (*) items will disappear when the **Resources Controlled By** option is set to **Auto**.

After you have completed the PCI Slot Configuration, press **Esc** and follow the instructions on your screen to save your settings or exit without saving.

PNP/PCI configuration controls

Parameter	Setting	Description	Note
PNP OS Installed	Yes	Use the default setting	Disabled
	No		
Resources Controlled By	Manual	BIOS does not manage PCI/ISA PnP card IRQ assignment. Assign IRQ # and DMA # to PCI or ISA PnP manually. IRQ-3,4,5,7,9,10,11,12,14,15 assigned to: _____ DMA-0,1,3,5,6,7 assigned to: _____	
	Auto	The Plug-and-Play BIOS manages PCI/ISA PnP card IRQ assignment automatically.	Recommended
Reset Configuration Data	Disabled	Retain PnP configuration data in BIOS.	Default
	Enabled	Reset PnP configuration data in BIOS.	
ACPI I/O Device Node	Disabled	Use the default setting.	Default
	Enabled		

PNP/PCI configuration setup

Note

In order to use the settings described in the following table, the **Resources Controlled By** menu item must be set to **Manual**.

Parameter	Setting	Description	Note
IRQ-# and DMA-# assigned to:	PCI/ISA PnP	Choose IRQ-# and DMA-# assigned to PCI/ISA PnP card.	IRQ-3,4,5,7,9,10, 11,12,14,15 DMA-0,1,3,5,6,7
	Legacy ISA	Choose IRQ-# and DMA-# assigned to Legacy ISA card.	IRQ-3,4,5,7,9,10, 11,12,14,15 DMA-0,1,3,5,6,7
CPU to PCI write Buffer	Disabled		
	Enabled	CPU writes to the PCI bus.	Default
PCI Master Broken Timer	Disabled		Default
	Enabled	Enable to allow for slow PCI masters.	
Assign IRQ For USB	Disabled		
	Enabled	Enable RSB IRQ.	Default
Assign IRQ For VGA	Disabled		
	Enabled	Enable if your VGA card needs an interrupt.	Default
Assign IRQ For ACPI	IRQ10	If you enable ACPI on your system, set this item to a free interrupt for ACPI to use.	Default
	IRQ11 IRQ9		

Load setup defaults

Select the **Load Setup Defaults** option from the Main Menu to load the system values you have previously saved. Use this option if you need to reset the system setup and retrieve the old values.

To use the setup defaults, press **Y** followed by **Enter**, or press **N** to return to the Main Menu and keep current values.

Load BIOS defaults

To use the setup defaults, press **Y** followed by **Enter**, or press **N** to return to the Main Menu and keep current values.

Note

If problems occur after you load BIOS defaults, load the *setup defaults* for stable performance.

Integrated Peripherals menu

The **Integrated Peripherals** menu changes the values of the chipset registers. These registers control the system options in the computer.

Note

Change these settings only if you are already familiar with the chipset.

The following screen shows default settings.

ROM PCI/ISA BIOS INTEGRATED PERIPHERALS AWARD SOFTWARE, INC.			
OnChip IDE First Channel	: Enabled	Onboard Parallel Port	: 378
OnChip IDE Second Channel	: Enabled	Parallel Port Mode	: Normal
IDE Prefetch Mode	: Enabled	ECP Mode Use DMA	: 3
IDE HDD Block Mode	: Enabled	Parallel Port EPP Type	: EPP1.9
IDE Primary Master PIO	: Auto		
IDE Primary Slave PIO	: Auto		
IDE Secondary Master PIO	: Auto		
IDE Secondary Slave PIO	: Auto		
IDE Primary Master UDMA	: Auto		
IDE Primary Slave UDMA	: Auto		
IDE Secondary Master UDMA	: Auto		
IDE Secondary Slave UDMA	: Auto		
Init Display First	: PCI Slot		
Onboard FDC Controller	: Enabled		
Onboard UART 1	: 3F8/IRQ4		
Onboard UART 2	: 2F8/IRQ3		
Onboard UART 2 Mode	: Standard		
		ESC	: Quit
		↑ ↓ → ←	: Select Item
		F1	: Help
		PU/PD/+/-	: Modify
		F5	: Old Values (Shift) F2
		F6	: Load BIOS Defaults
		F7	: Load Setup Defaults

The following tables describe each field in the Integrated Peripherals menu and provide instructions on how to configure the IDE controls, FDC controls, and the onboard serial and parallel ports.

IDE device controls

IDE device control options

Parameter	Setting	Description	Note
Onchip IDE Primary Channel	Disabled	Use the On-board IDE channel.	
	Enabled		Default
Onchip IDE Second Channel	Disabled	Turn off the On-board IDE channel.	
	Enabled		Default
IDE Prefetch Mode	Disabled		
	Enabled	Enable to enhance system performance.	Default
IDE HDD Block Mode	Disabled		
	Enabled	Invokes multi-sector transfer instead of one sector per transfer. Not all HDDs support this function.	Default

The following fields can be configured only if **Internal PCI/IDE** is set to **Both**, **Primary**, or **Secondary**.

IDE Primary Master PIO Primary Slave PIO	Mode 0-4	0 is the slowest speed 4 is the fastest speed	
Secondary Master PIO Secondary Slave PIO	Auto	For better performance and stability, we suggest you use the Auto setting to set the HDD control timing.	Default
IDE Primary Master UDMA Primary Slave UDMA Secondary Master UDMA Secondary Slave UDMA	Disabled		

IDE device control options (continued)

Auto	Select Auto to enable Ultra DMA Mode support.	Default
------	---	---------

The following field can be configured only if **Internal PCI/IDE** is set to **Both, Primary, or Secondary**.

Init Display First	PCI Slot	Select the VGA card that connects to the primary monitor.	Default
	AGP		

FDC controls

Parameter	Setting	Description	Note
Onboard FDC controller	Disabled	Turn off the on-board floppy disk drive controller.	
	Enabled	Use the on-board floppy disk drive controller.	Default

Onboard serial ports

Parameter	Setting	Description	Note
Onboard UART 1	Disabled		
Onboard UART 2	3F8/IRQ4	Choose the I/O address for serial port 1 and 2. Do not set port 1 and 2 to the same address except for Disabled or Auto.	Default (port 1)
	2F8/IRQ3		Default (port 2)
	3E8/IRQ4		
	2E8/IRQ3		
	Auto		
Onboard UART 2 Mode	Standard	Supports a serial infrared IrDA.	Default
	HPSIR	Supports HP serial infrared interface format.	
	ASKIR	Supports a Sharp serial interface format.	

Onboard parallel ports

Parameter	Setting	Description	Note
IR Duplex mode	Half	Select the IR mode your IR module supports.	Default
	Full		
Use IR Pins	IR-RX2TX2		Default
	IR-RX TX		
Onboard Parallel Port	378	Choose the printer I/O address.	Default
	Disabled		
	3BC		
	278		
Parallel Port Mode	ECP + EPP	The mode depends on your external device that connects to this port.	
	Normal		Default
	EPP		
	ECP		
If Parallel Port Mode is set to ECP or ECP+EPP :			
ECP Mode Use DMA	3	Choose DMA3	Default
	1	Choose DMA1	
If Parallel Port Mode is set to EPP or ECP+EPP :			
Parallel Port EPP Type (EPP Version)	EPP1.9	Choose EPP Ver. 1.9.	Default
	EPP1.7	Choose EPP Ver. 1.7.	

Supervisor password

Depending on the **Security Option** setting you have made in the BIOS Features Setup menu, the password prevents access to the system or the setup program by unauthorized users. Follow this procedure to set a new password or disable the password:

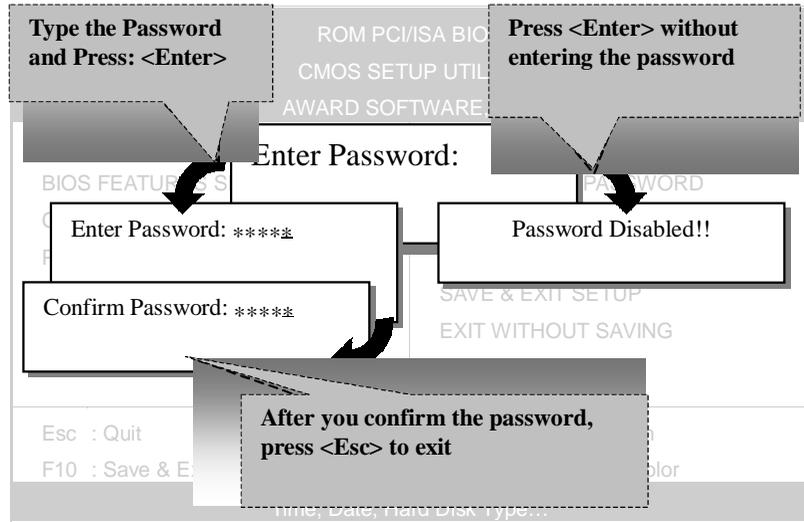
1. Select **BIOS Features Setup** from the Main Menu and press **Enter**.
2. Select the **Security Options** item and set the field to:
 - **System:** The password is required every time the system is booted. This means only a person who knows the password can use this computer.
 - or
 - **Setup:** The password is required only when you attempt to enter the BIOS Setup program.
3. Select Supervisor Password from the Main Menu and press **Enter**. The following message appears:

Warning: If you forget or lose the password, the only way to access the system is to set jumper JP5 to clear the CMOS RAM. All setup information is lost and you must run the BIOS setup program again.

If you do not want to use a password, press **Enter**.

4. Enter your new password and press **Enter**.
5. Re-enter your password and then press **Enter** to exit to the Main Menu.

This diagram outlines the password selection procedure:



User password

When the user password option is on, you cannot change any setting in the CMOS Setup Utility except for the user's password.

The password setting procedure is similar to that for the supervisor password. See “Supervisor password” on page 49.

IDE HDD auto detection

This Main Menu function automatically detects the hard disk type and configures the Standard CMOS Setup accordingly.

ROM PCI/ISA BIOS CMOS SETUP UTILITY AWARD SOFTWARE, INC.								
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	: AUTO	0	0	0	0	0	0	AUTO
Primary Slave	: None	0	0	0	0	0	0	----
Secondary Master	: None	0	0	0	0	0	0	----
Secondary Slave	: None	0	0	0	0	0	0	----

Do you accept this drive C (Y/N)? _

ESC : Skip

Note

This function is valid only for IDE hard disk drives.

Super 7 System Mainboard



This appendix lists the mainboard's features, and describes how to change mainboard settings.

Warning

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

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

or

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

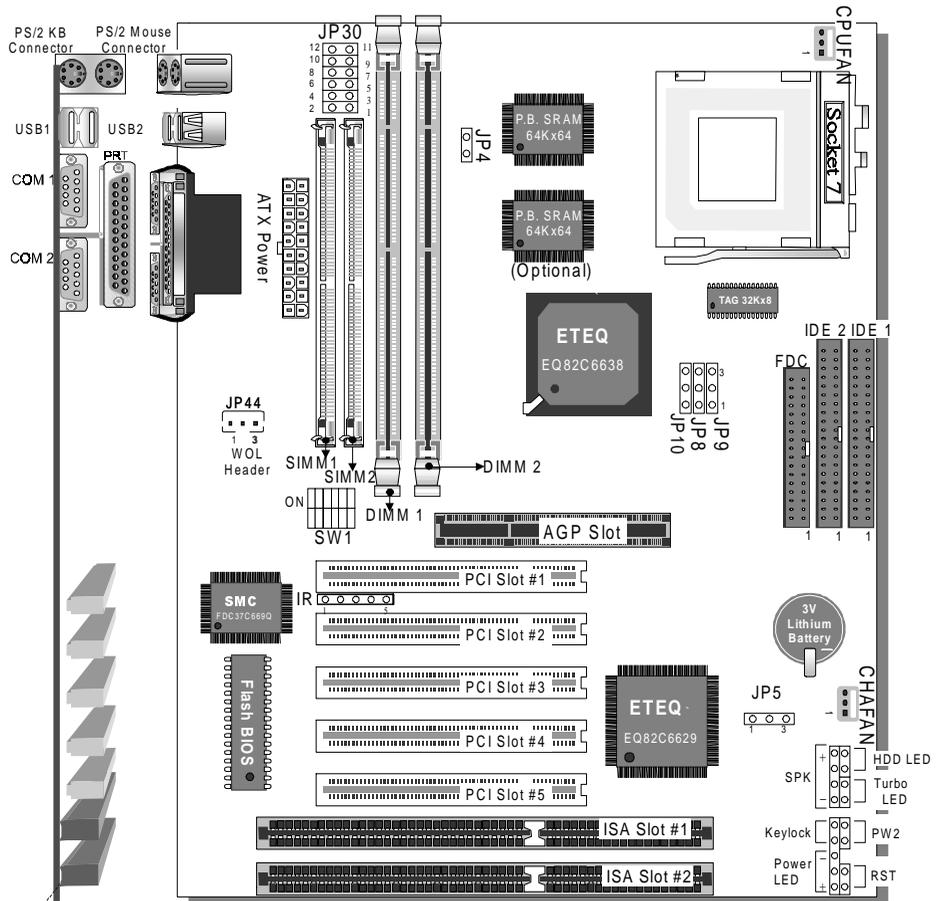
Do not handle add-on cards by their "gold finger" connectors. Fingers have oils and other contaminants that can prevent connectors from making an electrical connection, which may cause errors or other malfunctions. Handle all system components by their mounting brackets or other edges.

Mainboard features

- CPU
 - Supports Intel® Pentium® P54C/P55C CPUs featuring speeds of 100-233 MHz.
 - Supports Cyrix™ 6x86™/6x86L/6x86 MX™ CPUs with PR150-PR266 speeds, and the Cyrix M II™-300-350 CPU.
 - Supports PR100-PR166 MHz AMD™ K5™ CPUs, 166-300 MHz AMD K6™ CPUs, and 266-350 MHz AMD K6-2 CPUs.
 - Features Socket 7 for easy CPU upgrade.
 - Supports P54C/P55C series SIMM mode and CPU stop clock.
- L2 cache controller
 - On-board 512KB(5EMA/5) or 1MB(5EMA) level 2 pipeline burst SRAM cache.
- DRAM controller
 - Supports strips of 2 168-pin SDRAM unbuffered DIMMs.
 - Two 168-pin DIMM banks support 8/16/32/64/128/256 MB unbuffered DIMMs.
 - Supports 2 strips of 72-pin FPM/EDO 2 x 72-pin SIMMs.
 - SIMM banks support 8/16/32/64 MB SIMMs.
 - System memory: 8MB to 512MB with EDO/SDRAM

Mainboard layout

The following diagram shows the layout of the Super 7 mainboard. Each feature is described in the table on the next page.



Mainboard features

Component	Description
Socket 7	Socket for Pentium CPU with host bus frequency of 66/100 MHz. Supports: <ul style="list-style-type: none"> Intel Pentium processors P54C/P55C (100-233 MHz) Cyrix 6x86 (PR166+-PR200+), Cyrix 6x86 MX (PR166-PR266) and Cyrix M II (300-350) AMD K5 (PR100-PR166), and AMD K6 (166-300) and AMD K6-2 (266-350)
Chipset	ETE82C663 PCI/AGP bus chipset
ATX Power	20-pin male connector
CPUFAN	3-pin CPU cooling fan connector
CHAFAN	3-pin chassis cooling fan connector
DIMM banks (DIMM1 and DIMM2)	168-pin unbuffered EDO/SDRAM DIMMs <ul style="list-style-type: none"> Supports 8~256MB DIMM in each bank Supports ECC configuration
SIMM banks (SIMM1 and SIMM2)	Supports two 8-64MB 72-pin SIMMs
BIOS	System BIOS built-in, Award BIOS <ul style="list-style-type: none"> APM, ACPI and Plug-and-Play function Supports multiple-boot function DMI utility
PCI Slots	5 x 32-bit bus mastering slots
ISA slots	2 x 16-bit ISA slots
IDE1, IDE2	2 x 40-pin bus mastering E-IDE/ATAPI ports; supports Ultra DMA/33 <ul style="list-style-type: none"> IDE1: primary IDE device connector IDE2: secondary IDE device connector
FDC 1	Floppy disk drive (FDD) port (Supports 1.2MB/1.44MB/2.88MB and LS120/3-mode FDD.)
SIR	5-pin Serial Infrared Device connector
Keylock	5-pin keylock connector

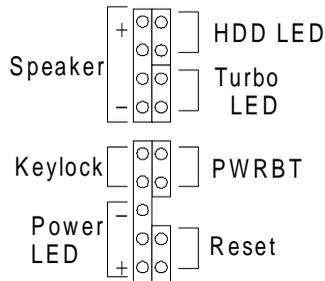
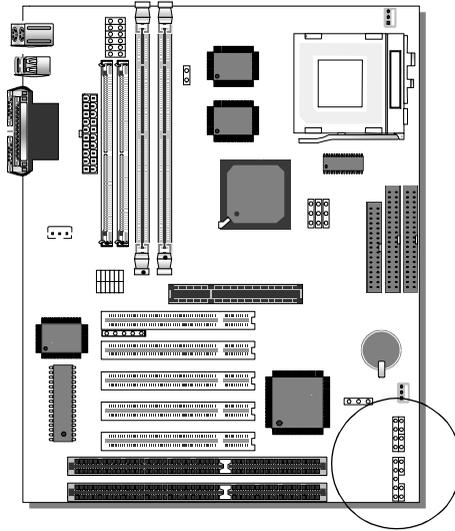
Mainboard features (continued)

Component	Description
Reset	2-pin reset switch connector
Speaker	4-pin PC speaker connector
TB_LED	2-pin turbo LED connector
HDD_LED	2-pin IDE device LED connector
PWRBT	2-pin ATX power on/off switch connector
JP4	CPU voltage smart-detect jumper
JP5	CMOS clear jumper
JP8	CPU bus clock frequency jumper
JP9, JP10	SDRAM frequency jumpers
JP30	CPU voltage selection jumper
JP44	3-pin WOL (Wake-On-LAN) connector
SW1	CPU frequency settings jumper

Back panel features

PRT	26-pin female parallel printer port
COM1, COM2	RS-232 serial ports
PS/2 KB	PS/2 keyboard connector
PS/2 Mouse	PS/2 mouse connector
USB1, USB2	USB (Universal Serial Bus) connectors

Front panel connections



Power LED & KeyLock

Plug the Power LED cable into the 5-pin Keylock connector.

Some systems feature a KeyLock function with a front panel switch for enabling or disabling the keyboard. In this case, connect the KeyLock switch to the 5-pin Keylock connector on the mainboard.

Pin assignments are: pins 1 and 3 are for Power LED; pins 4 and 5 are for Keylock.

Reset

Plug the Reset push-button cable into the 2-pin Reset connector on the mainboard. Pushing the Reset button on the front panel causes the system to restart the boot sequence.

Speaker

Attach the 4-pin PC speaker cable from the case to the Speaker connector on the mainboard.

Turbo LED

Connecting the 2-pin Turbo LED cable to the corresponding Turbo LED connector will cause the LED to light when the system is in Turbo mode. (The mainboard is permanently set to Turbo mode.)

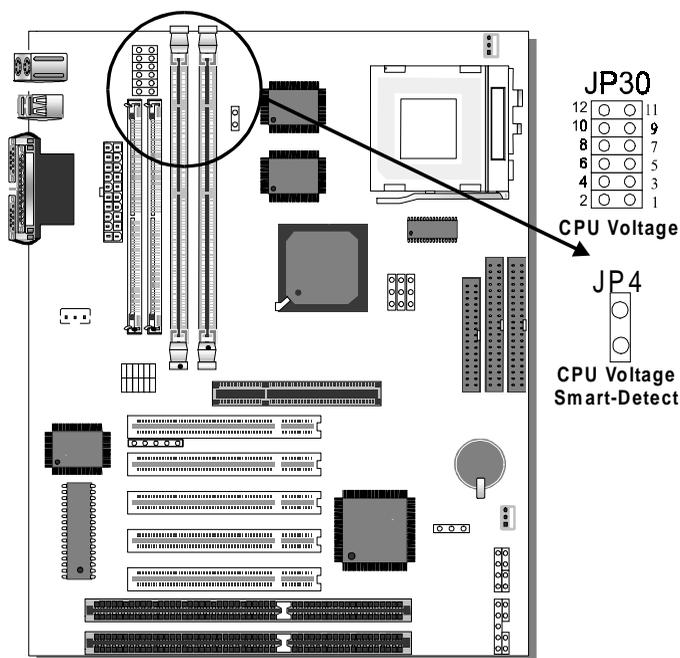
IDE LED

Connect the 2-pin IDE device LED cable to the corresponding IDE LED connector on the mainboard. This causes the LED to light when an IDE (HDD, CD-ROM) device is active.

ATX power on/off switch

Connect the 2-pin momentary type switch to the PWRBT connector for turning the ATX power supply on and off.

CPU voltage setting (JP30 and JP4)



JP30 and JP4 are the only jumpers you need to set for the CPU voltage on this mainboard. There are two types of CPU voltage:

- Single voltage (CPU: P54C, AMD-K5, Cyrix 6x86)
- Dual voltage (CPU: P55C, AMD-K6, AMD-K6-2, Cyrix 6x86L, Cyrix 6x86MX, Cyrix M II)

Caution

Always make sure you know the type of CPU on your mainboard and adjust the settings on JP30 correctly for that CPU.

The mainboard supports CPU voltages from 2.0 to 3.52V in 0.1V increments. Use the following tables to set the CPU voltage jumpers JP30 to match the voltage value of your CPU:

CPU voltage setting: JP30

Voltage	1-2	3-4	5-6	7-8	9-10	11-12
3.5V*	close	open	open	open	open	close
3.3V	close	open	open	open	close	open
3.2V	close	open	open	close	open	open
3.1V	close	close	close	open	open	open
3.0V	close	close	open	open	open	open
2.9V	close	open	close	open	open	open
2.8V	close	open	open	open	open	close
2.7V	open	close	close	close	open	open
2.6V	open	close	open	close	open	open
2.5V	open	open	close	close	open	open
2.4V	open	open	open	close	close	open
2.3V	open	close	close	open	open	open
2.2V	open	close	open	open	close	open
2.1V	open	open	close	open	close	open
2.0V	open	open	open	open	open	open

Voltage settings for various processors

Processor voltage setting	Voltage value: JP30
---------------------------	---------------------



VCORE:3.3V
VI/O:3.3V

Intel P54C - P100
Intel P54C - P133



VCORE:3.5V
VI/O:3.5V

Intel P54C - P166
Intel P54C - P200



VCORE:2.8V
VI/O:3.3V

Intel P55C - P166
Intel P55C - P200
Intel P55C - P233



VCORE:3.5V
VI/O:3.5V

AMD K5 - PR100
AMD K5 - PR133
AMD K5 - PR166



VCORE:2.9V
VI/O:3.3V

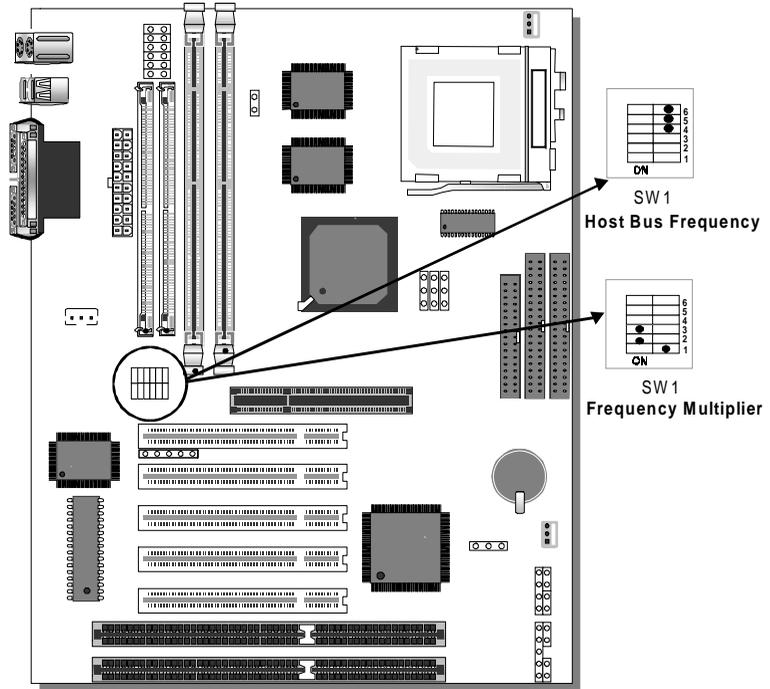
AMD K6 166
AMD K6 200

Voltage settings for various processors (continued)

Processor voltage setting	Voltage value: JP30
	VCORE:3.2V VI/O:3.3V
AMD K6 233	
	VCORE:2.2V VI/O:3.3V
AMD K6 266 AMD K6 300 AMD K6-2 266 AMD K6-2 300 AMD K6-2 333 AMD K6-2 350	
Cyrix 6x86(L) PR166+ Cyrix 6x86(L) PR200+	There are several versions of the Cyrix 6x86(L), with different voltages. Ask your dealer for the correct voltage.
	VCORE:2.9V VI/O:3.3V
Cyrix 6x86MX-PR166* Cyrix 6x86MX-PR200* Cyrix 6x86MX-PR233* Cyrix 6x86MX-PR266* Cyrix M II 300* Cyrix M II 333* Cyrix M II 350*	

* Set the proper CPU voltage according to the marking on the CPU.

CPU frequency setting (SW1)



Configure the SW1 jumpers to the settings that match your CPU speed. Refer to the following table to set the frequency multiplier and host bus frequency of your CPU. See the table on page 62 for more information.

Frequency Multiplier				Host Bus Frequency			
Multiplier	1	2	3	Host Bus Frequency	4	5	6
1.5/3.5x	off	off	off	66MHz	off	off	off
2.0x*	on	off	off	75MHz	off	on	off
2.5x	on	on	off	83MHz	on	on	off
3.0x	off	on	off	95MHz	on	off	on
4.0x	on	off	on	100MHz	off	off	on
4.5x	on	on	on	112MHz	off	on	on
5.0x	off	on	on	124MHz	on	off	off

For example, for a 350MHz AMD K6-2 CPU, select Multiplier 3.5x and Host Bus Frequency 100MHz.

Frequency settings for Intel processors

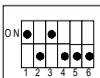
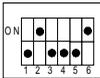
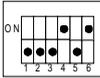
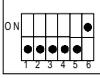
Processor Frequency Setting	Ratio	Bus Clock	AGP Clock	PCI Clock
 Intel P54C - P100	1.5 x	66MHz	66MHz	33MHz
 Intel P54C - P133	2.0 x	66MHz	66MHz	33MHz
 Intel P54C - P166	2.5 x	66MHz	66MHz	33MHz
 Intel P54C - P200	3.0 x	66MHz	66MHz	33MHz
 Intel P55C - P166	2.5 x	66MHz	66MHz	33MHz
 Intel P55C - P200	3.0 x	66MHz	66MHz	33MHz
 Intel P55C - P233	3.5 x	66MHz	66MHz	33MHz

* Set the proper CPU frequency according to the marking on the CPU.

Frequency settings for AMD processors

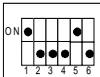
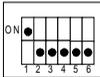
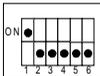
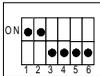
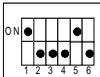
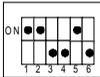
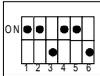
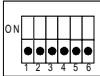
Processor Frequency Setting	Ratio	Bus Clock	AGP Clock	PCI Clock
 AMD K5 - PR100	1.5 x	66MHz	66MHz	33MHz
 AMD K5 - PR133	2.0 x	66MHz	66MHz	33MHz
 AMD K5 - PR166	2.5 x	66MHz	66MHz	33MHz
 AMD K6 - 166	2.5 x	66MHz	66MHz	33MHz
 AMD K6 - 200	3.0 x	66MHz	66MHz	33MHz
 AMD K6 - 233	3.5 x	66MHz	66MHz	33MHz
 AMD K6 - 266	4.0 x	66MHz	66MHz	33MHz
 AMD K6 - 300	4.5 x	66MHz	66MHz	33MHz

Frequency settings for AMD processors (continued)

Processor Frequency Setting	Ratio	Bus Clock	AGP Clock	PCI Clock
 AMD K6-2 266	4.0 x	66MHz	66MHz	33MHz
 AMD K6-2 300	3.0 x	100MHz	66MHz	33MHz
 AMD K6-2 333	3.5 x	95MHz	63.4MHz	31.7MHz
 AMD K6-2 350	3.5 x	100MHz	66MHz	33MHz

* Set the proper CPU frequency according to the marking on the CPU.

Frequency settings for Cyrix processors

Processor Frequency Setting	Ratio	Bus Clock	AGP Clock	PCI Clock
	2.0 x	66MHz	66MHz	33MHz
				
Cyrix 6x86 - PR166+				
Cyrix 6x86 - PR200+	2.0 x	75MHz	75MHz	37.5MHz
	2.0 x	66MHz	66MHz	33MHz
Cyrix MX - PR166**				
	2.5 x	66MHz	66MHz	33MHz
Cyrix MX - PR200**				
	2.0 x	75MHz	75MHz	37.5MHz
Cyrix MX - PR200**				
	2.5 x	75MHz	75MHz	37.5MHz
Cyrix MX - PR233**				
	2.5 x	83MHz	55MHz	27.5MHz
Cyrix MX - PR266**				
	3.5 x	66MHz	66MHz	33MHz
Cyrix M II - 300**				

Frequency settings for Cyrix processors

Processor Frequency Setting	Ratio	Bus Clock	AGP Clock	PCI Clock
 Cyrix M II - 300**	3.0 x	75MHz	75MHz	37.5MHz
 Cyrix M II - 333**	4.0 x	66MHz	66MHz	33MHz
 Cyrix M II - 333**	3.5 x	75MHz	75MHz	37.5MHz
 Cyrix M II - 333**	3.0 x	83MHz	55MHz	27.5MHz
 Cyrix M II - 333**	2.5 x	100MHz	66MHz	33MHz
 Cyrix M II - 350**	3.0 x	100MHz	66MHz	33MHz

** Set the proper CPU frequency according to the marking on the CPU.
Over specification is not guaranteed.

SDRAM frequency (JP8, JP9, JP10)

JP8 sets the frequency of the CPU bus clock to the ETEQ chipset. JP9 and JP10 set the SDRAM to the frequency of the CPU bus clock or the AGP clock.

Note

Your Super 7 system warranty is voided if you set the frequency too high.

CPU BUS Clock	AGP BUS Clock	JP10	JP8	JP9	SDRAM Clock
66MHz	66MHz	1-2	2-3	2-3	66MHz
75MHz	75MHz	1-2	2-3	2-3	75MHz
83MHz	55MHz	2-3	1-2	1-2	55MHz
		1-2	1-2	2-3	83MHz
95MHz	63.4MHz	2-3	1-2	1-2	63.4MHz
		1-2	1-2	2-3	95MHz
100MHz	66MHz	2-3	1-2	1-2	66MHz
		1-2	1-2	2-3	100MHz
112MHz	75MHz	2-3	1-2	1-2	75MHz
		1-2	1-2	2-3	112MHz
124MHz	82.6MHz	2-3	1-2	1-2	82.6MHz
		1-2	1-2	2-3	124MHz

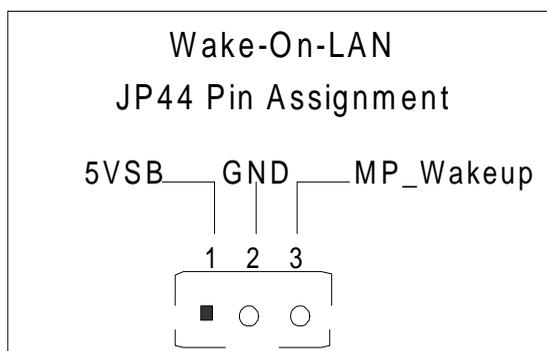
Note

Use 8ns or faster SDRAM modules (PC100 compliant) when SDRAM is set to run at the frequency of 95/100 MHz.

Wake-On-LAN (WOL)

Connect the 3-pin connector from the LAN board that supports the Wake-On-LAN (WOL) function to the JP44 connector on the mainboard. This WOL function lets you wake up the connected computer from the LAN card.

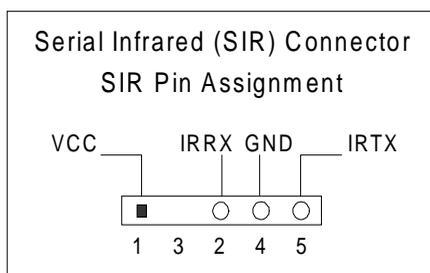
Pin assignments are as follows:



Infrared (IR)

Plug the 5-pin infrared device cable to the IR connector. This will enable the infrared transfer function. The mainboard meets both the ASKIR and HPSIR specifications.

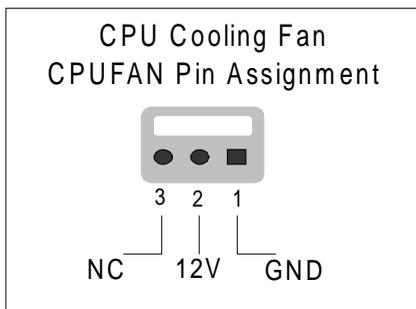
Pin assignments are as follows:



CPU cooling fan

With the CPU cooling fan seated properly on the processor, connect the 3-pin fan cable to the CPUFAN connector on the mainboard.

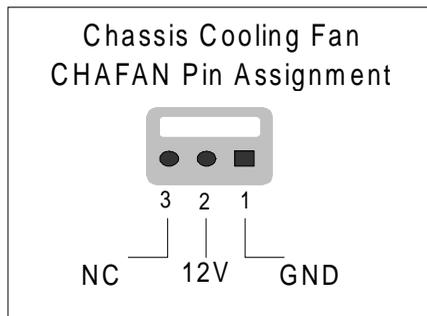
Pin assignments are as follows:



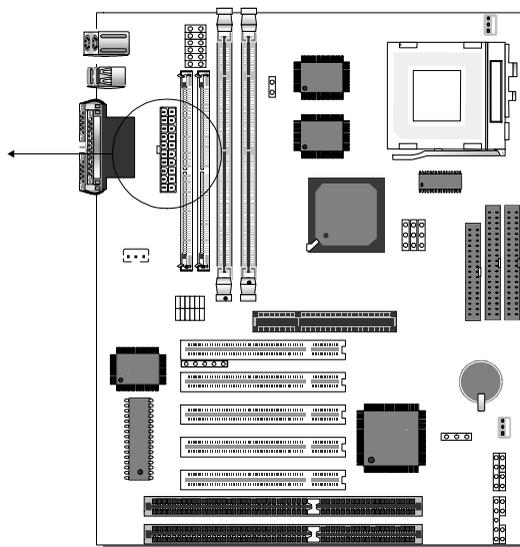
Chassis cooling fan

After you have seated the Chassis cooling fan properly on the processor, attach the 3-pin fan cable to the CHAFAN connector on the mainboard.

Pin assignments are as follows:



ATX power supply

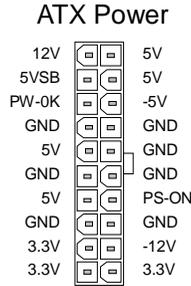


Caution: Follow these precautions to preserve your mainboard from any remnant currents when connecting to ATX power supply:

Turn off the power supply and unplug the power cord of the ATX power supply before connecting to ATX PW connector.

The mainboard requires a power supply with at least 200 Watts and a "power good" signal. Make sure the ATX power supply can take at least 10 mA mp* load on the 5V Standby lead (5VSB) to meet the standard ATX specification. If you use the Wake-On-LAN (WOL) function, make sure the ATX power supply can support at least 720 mAmp on the 5V Standby lead (5VSB).

Pinouts are as follows:



Note

Pay special attention to the orientation of the pins.

CPU voltage Smart-Detect (JP4)

The mainboard automatically detects and adjusts the CPU voltage to the proper value for Intel P54C/P55C and Cyrix 6x86(L) CPUs. For some older CPUs, voltage cannot be detected correctly, and you must remove the jumper to disable the Smart-Detect function.

If you do not know the dual or single voltage setting of your CPU, set JP4 to short (enable) and follow the CPU voltage-setting procedure in “CPU voltage setting (JP30 and JP4)” on page 60, to set the CPU operating voltage to a correct value in order to avoid CPU damage.

CPU Voltage Smart-Detect	Disabled	Enabled
JP4 Setting	Open JP4 to disable Smart-Detect function	Short JP4 to enable Smart-Detect function

Clear CMOS (JP5)

After you have turned off your computer, clear the CMOS memory by momentarily shorting pins 2-3 on jumper JP5 for a few seconds. Then restore JP5 to the initial 1-2 jumper setting in order to recover and retain the default settings.

CMOS clearing	Clear CMOS data	Retain CMOS data
 JP5 Setting	Short pin 2-3  clear the CMOS	Short pin 1-2 to retain new settings

Note

You must unplug the ATX power cable from the ATX power connector when performing the CMOS clear operation.

Multi-I/O addresses

Default settings for multi-I/O addresses are as follows:

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

Note

If a default I/O address conflicts with other I/O cards such as a sound card, use the BIOS Setup utility to change one of the I/O addresses.

Cache configuration

The mainboard has a built-in 512KB(5EMA/5) or 1MB(5EMA) level 2 pipelined burst cache.

The cache size and RAM locations are as follows:

Cache size	Cache RAM	TAG RAM	Cacheable range
512 KB 5EMA/5	64K x 64 on U2	16K x 8 on U5	WT: 64 MB WB: 128MB
1 MB 5EMA	64K x 64 on U2,U3	32K x 8 on U5	WT: 256 MB WB: 128MB
