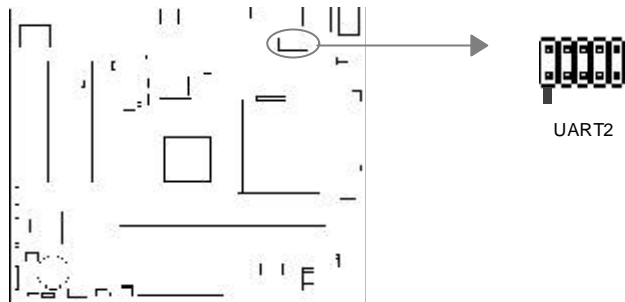




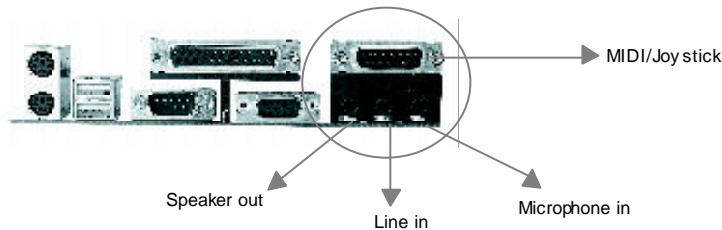
The serial port UART2 is not available on the back panel. Therefore, we provide a 9-pin ribbon cable with bracket for UART2 port. (manufacturing option)



### Line-in jack, Microphone-in jack, Speaker-out jack and MIDI/Joystick connector

The Line-in jack can be connected to devices such as a cassette or minidisc player for playback or recording. The Microphone-in jack can be connected to a microphone for voice input. The Speaker-out jack allows you to connect speakers or headphones for audio output from the internal amplifier.

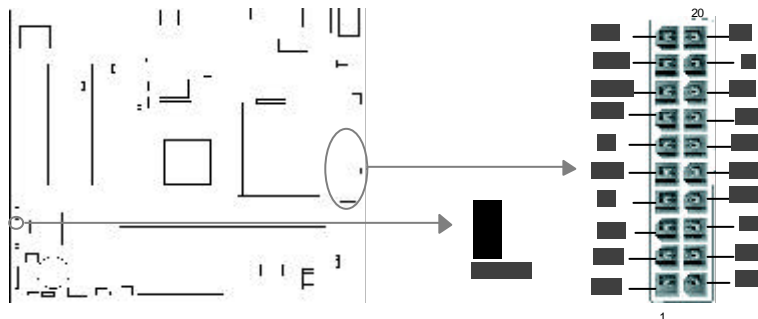
The MIDI/Joystick connector allows you to connect a game joystick or a MIDI device.



### ATX Power Supply Connector & Power Switch (POWER)

Be sure to connect the power supply plug to this connector in its proper orientation. The power switch (POWER) should be connected to a momentary switch. When powering up your system, first turn on the mechanical switch of the power supply (if provided), then push the power switch once. When powering off the system, you needn't turn off the mechanical switch, just ***Push once*** the power switch.

ATX Power Supply Connector



**Note:**

If you change “Soft-off by PWR-BTN” from default “Instant-off” to “Delay 4 Secs” in the “POWER MANAGEMENT SET UP” section of the BIOS, the power switch should be pressed for more than 4 seconds before the system powers down.

**Hard Disk LED Connector (HDLED)**

The connector connects to the case's IDE indicator LED indicating the activity status of IDE hard disk. The connector has an orientation. If one way doesn't work, try the other way.

**Reset Switch (RESET)**

The connector connects to the case's reset switch. Press the switch once, the system resets.

**Speaker Connector (SPEAKER)**

The connector can be connected to the speaker on the case.

**Power LED Connector (PWR\_LED)**

The power LED has two status. When the system is in power-off status, the LED is off. When the system is powered up, the LED is on. The connector has an orientation.

**Key-Lock Connector (KEY\_L)**

The connector can be connected to the keyboard lock switch on the case for locking the keyboard.

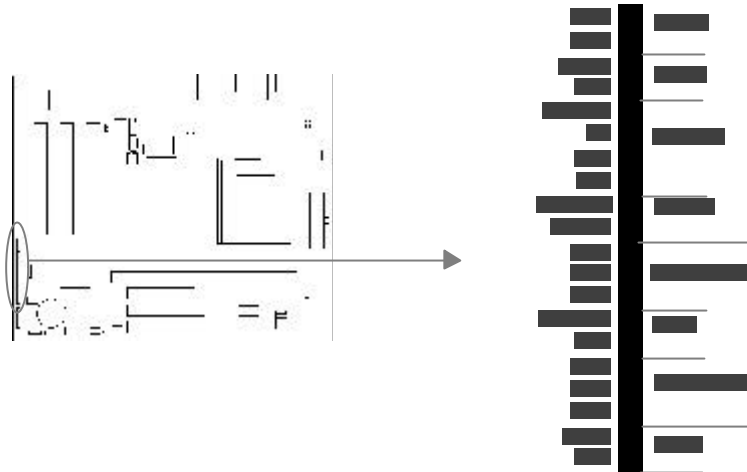
**ACPI LED Connector (GREEN\_LED)**

The ACPI LED has four status. When the system is in power-off status, the LED is off. When first time plug in the 220V power supply, the LED is dimmish. When the system is powered up, the LED is on. When the system enters suspend mode(including Suspend to RAM status), the LED will flash. The connector has an orientation.

**Hardware Green Connector (SLEEP)**

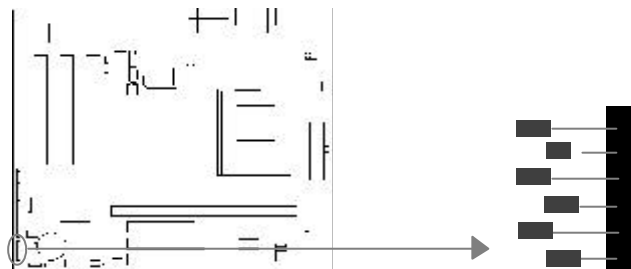
Push once the switch connected to this header, the system enters suspend mode.





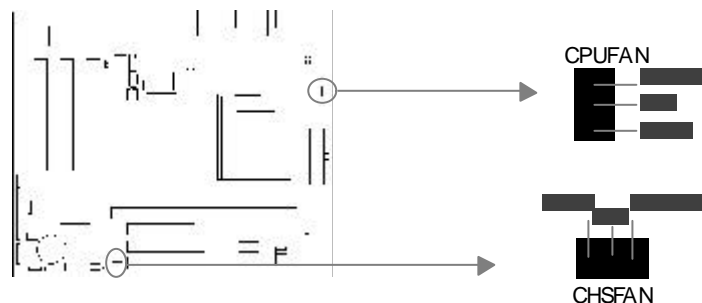
### Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. When using this function, configure the settings for IR Address, IR Mode and IR IRQ from the "INTEGRATED PERIPHERALS" section of the BIOS.



### Fan Connector (CPUFAN, CHSFAN)

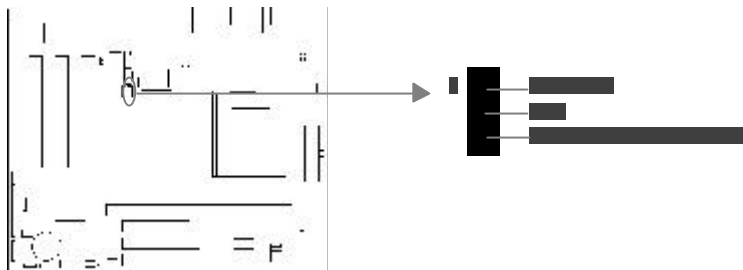
The fan speed of these two fans can be detected and viewed in "PC Health" section of the BIOS. These two fans will be automatically turned off after the system enters suspend mode.





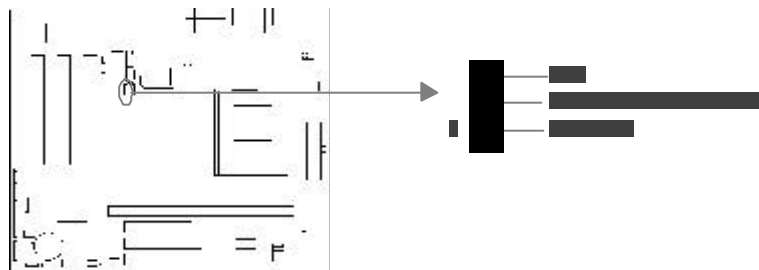
### Wake-Up On LAN (WOL)

Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. If this function is to be used, please be sure an ATX 2.01 power supply of which 5VSB line is capable of delivering 720mA, and a LAN adapter which supports this function is used. Then connect this header to the relevant connector on the LAN adapter, set "Wake-Up by LAN/Ring" as Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



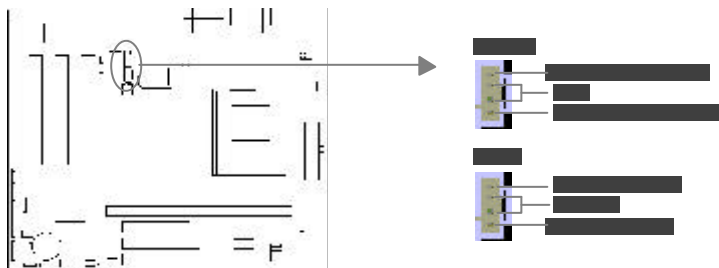
### Wake-Up On Internal Modem (WOM)

Through the Wake-Up On Internal Modem function, the system which is in the power-off status can be powered on by a ring signal received from the internal modem. If this function is to be used, be sure an internal modem card which supports this function is used. Then connect this header to the relevant connector on the modem card, set "Wake-Up by LAN/Ring" to Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



### Audio Connector (CDLIN, MODEM)

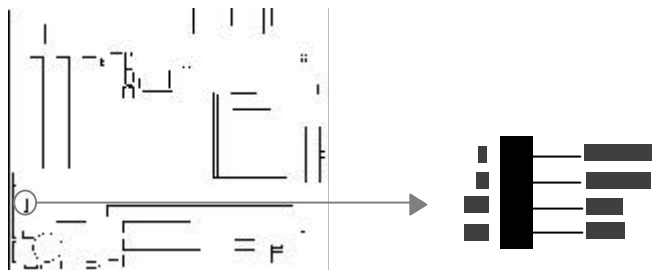
CDLIN is a Sony standard CD audio connector, it can be connected to a CD-ROM drive through a CD audio cable. The MODEM connector allows the onboard audio to interface with a voice modem card with a similar connector. It also allows the sharing of mono\_in (such as a phone) and mono\_out (such as a speaker) between the onboard audio and the voice modem card.





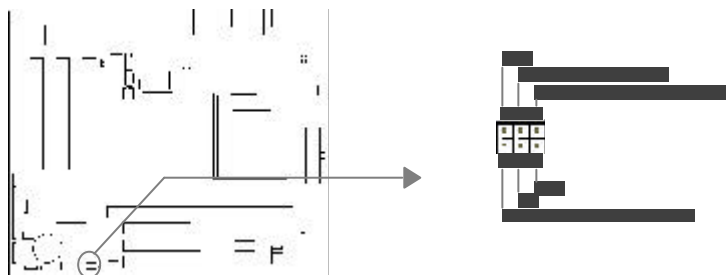
#### 4 pin SMBus Connector(SMBUS)

This connector allows you to connect SMBus devices. SMBus devices communicate by means of the SMBus with an SMBus host and/or other SMBus devices. The SMBus or System Management Bus is a specific implementation of an I<sup>2</sup>C bus, which is a multi-master bus, that is, multiple chips can be connected to the same bus and each one can act as a master by initiating data transfer.



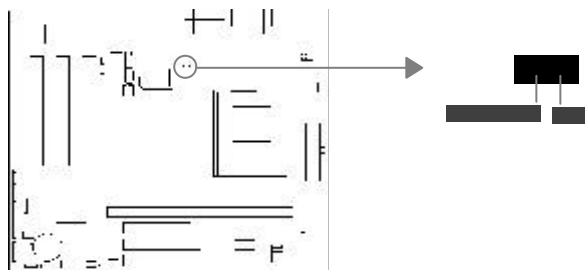
#### Sound Connector (PC-PCI)

This connector provides a bridge between the mainboard and PCI sound card to deliver sound compatibility under DOS real-mode environment.



#### Chassis Security Switch (CHSSEC)

The connector connects to the chassis security switch on the case. The system can detect the chassis intrusion through the status of this connector. If the connector has been closed once, the system will record the status and indicate the chassis has been opened. You can receive this information from QDI ManageEasy software.





### Audio/Modem Riser Interface Connector (AMR)

The AMR Interface Connector is the interface between the mainboard and the Audio/Modem Riser card. The connector provides all necessary signals which supports several different configurations of audio and modem in the system, such as audio and modem on the Riser, audio on the mainboard and modem on the Riser, or no audio with modem on the Riser. WinneX 1E mainboard provides you with audio onboard solution, onboard audio can be enabled/disabled. Either AMR (Audio/Modem Riser) card or MR (Modem Riser) card can be used on this system. If you choose to use the audio on AMR card, the onboard audio can be set as disabled. This software configurable AC'97 audio and modem system gives customers an advanced, multimedia solution at an extremely low price.



### Expansion Slots & I/O Ports description

Slot / Port	Description
PCI 1	First PCI slot.
PCI 2	Second PCI slot.
PCI3	Third PCI slot.
IDE 1	Primary IDE port.
IDE 2	Secondary IDE port.
AMR	AMR slot.
FLOPPY	Floppy Drive Port.

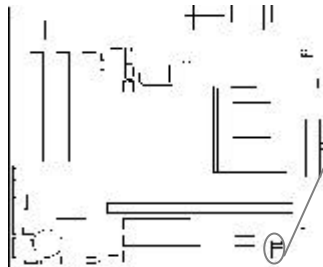
### Jumper Settings

Jumpers are located on the mainboard, they represent, clear CMOS jumper JCC, enable keyboard password power-on function jumper JKB, and enable/disable onboard audio jumper JSD etc. Pin 1 for all jumpers are located on the side with a thick white line (Pin1 → ), referring to the mainboard's silkscreen. Jumpers with three pins will be shown as to represent pin1 & pin2 connected and to represent pin2 & pin3 connected. For default jumper settings, please refer to the following table:

JFS0	1-2 (Auto)	JKB	1-2 (Enable KB Power-on)
JFS1	2-3 (Auto)	JUSB/JFUSB	1-2 (Enable USB Wake-Up)
JCC	2-3 (Normal Status)	JSB	Closed (Connect PCI 3.3Vsb)
JSD	2-3 (Enable Audio)	JAV	Open (Enable Flash BIOS)

### Overclocking Jumper Setting (JFS0, JFS1)

Jumpers labeled JFS0 and JFS1 are located on the mainboard providing users with CPU overclocking feature. The host bus speed can be set as 66/100/133MHz or AUTO select. Refer to the chart below for the location of these jumpers, and the table for information on how to set them.



CPU FSB	66MHz	100MHz	133MHz	AUTO
JFS1	1-2	1-2	OPEN	2-3
JFS0	2-3	OPEN	OPEN	1-2

' 1-2' represents pin1 & pin2 closed.


' 2-3' represents pin2 & pin3 closed.

If CPU FSB is set as default setting Auto, the system detects the CPU front side bus automatically. If CPU FSB is set as 100MHz, the system will run at 100MHz even if a processor with 66MHz or 133MHz FSB is installed. Setting up to 133MHz using processors with 100MHz bus speed is also supported. However, whether or not the system can be overclocked depends on your processor's capability. Whether the processor is bus ratio locked or unlocked should also be taken into account. For bus ratio unlocked processor, this overclocking feature can be implemented by setting CPU FSB as 100/133MHz, meanwhile adjusting the bus ratio(multiplier) lower in "CPU SpeedEasy Setup" in AWARD BIOS CMOS Setup. We do not guarantee the overclocking system to be stable.

### Clear CMOS (JCC)

If you want to clear CMOS, unplug the AC power supply first, close JCC (pin1 & pin2) once, set JCC back to the normal status with pin2 & pin3 connected, then power on the system.



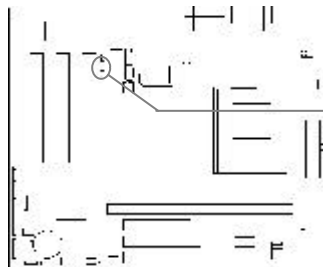
Normal status:  JCC


Clear CMOS:  JCC


(Unplug the AC power supply)

### Enable/Disable on-board audio(JSD)

If you want to use the on-board audio, set JSD with pin2 & pin3 closed (default). Otherwise, set JSD with pin1 & pin2 closed for disabling this function.



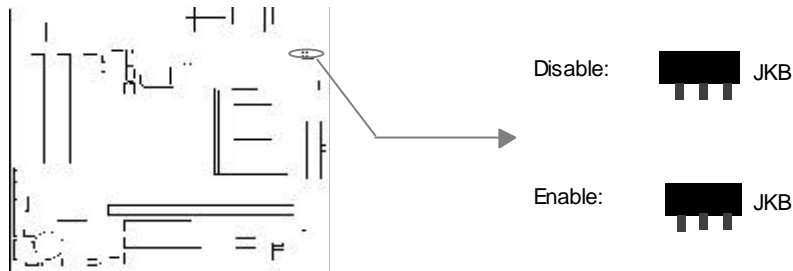
Enable on-board audio:  JSD

Disable on-board audio:  JSD



### Enable keyboard password power-on function (JKB)

The mainboard provides the advanced keyboard password power-on function. Before using this function, set JKB with pin1 & pin2 closed. Otherwise, set JKB with pin2 & pin3 closed for disabling.

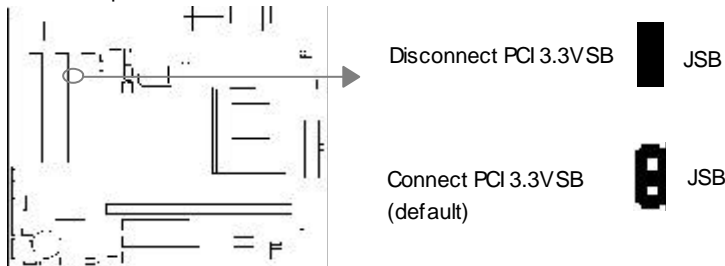


Furthermore in order to implement this function, set "POWER ON Function" to Password and enter the keyboard power-on password in the "INTEGRATED PERIPHERALS" section of the BIOS. Save and exit, then power off your system. In this case, the power button's power-on function has been disabled.

- Note:**
1. If using this function, 5VSB line of the power supply should be capable of delivering enough current (eg. 200mA) for all the devices connected to the keyboard port, if not, you will be unable to power up the system using the keyboard.
  2. If you set JKB with pin2 & pin3 closed, set "POWER ON Function" to **BUTTON ONLY**, don't set it to Password, or you'll be unable to power up your system by the keyboard or the power button.
  3. If you encounter the above problems, clear CMOS and set the jumper and BIOS option again.

### Connector PCI 3.3VSB Voltage Jumper (JSB)

Setting JSB open can disconnect the 3.3VSB voltage to PCI slots. This can prevent the mainboard from being damaged if you add or remove expansion cards without unplugging the AC power supply. However, if you want to use the PCI 2.2 specification compliant expansion cards to wake up the system, for example, a network card which supports wake-up on LAN function but without the WOL header or if you want to use an AMR card, set JSB as closed, meanwhile set "Wake-Up by PCI card" as enabled in "Power Management Setup" section of the BIOS.



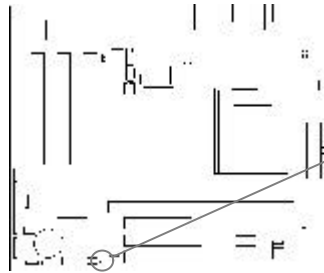
**Note:** If AMR card is used, this jumper must be set as default setting closed.





### FWH Protection Jumper (JAV)

The BIOS of the mainboard is inside the FWH. If the jumper JAV is set as closed, you will be unable to flash the BIOS to the mainboard. However in this status, the system BIOS is protected from being attacked by serious virus such as CIH virus.



Flash Write Disabled



JAV

Flash Write Enabled



JAV

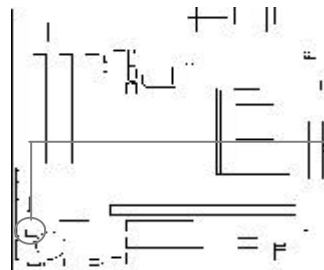
Setting the jumper JAV as open (default), meanwhile disabling the "Flash Write Protect" item in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the flash ROM in FWH.

The DMI (Desktop Management Interface) system information such as the CPU type/speed, memory size, and expansion cards will be detected by the onboard BIOS and stored in the flash ROM in FWH. Whenever the system hardware configuration is changed, DMI information will be updated automatically. However, setting jumper JAV as closed makes flashing BIOS and updating DMI information impossible.

Refer to page 4 for the two choices to implement FWH Protection function.

### Front/Back Panel USB Enable (JP26, JP27)

Set JP26&27 as pin2&pin3 closed to enable front panel USB, if they are set as pin1&pin2 closed, the upper port of the back panel USB is enabled. In any case, the lower one of the back panel USB is always enabled.



Front Panel USB Enable:



JP26  
JP27

Back Panel USB Enable:



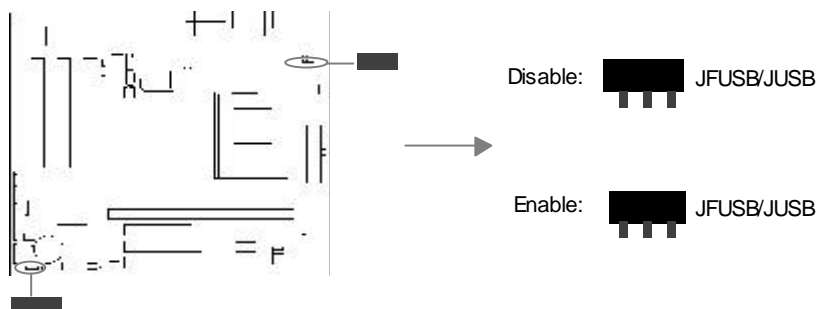
JP26  
JP27



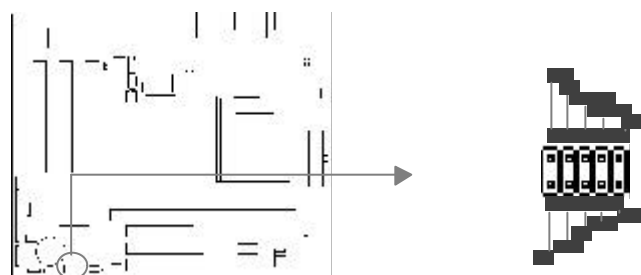


### Enable Front/Back Panel USB Device Wake-up Function (JFUSB/JUSB)

The mainboard provides the advanced USB device wake-up function. The system can be waken up from its power saving status including ACPI S3 by activating USB devices. Before using this function, set JFUSB/JUSB with pin1 & pin2 closed. Otherwise, set JFUSB/JUSB with pin2 & pin3 closed for disabling.



### Front Panel USB Port (JP25)





## Installation of All Drivers

A QDIMainboard Utility CD-ROM is supplied with each mainboard. All drivers can be installed from this CD-ROM. Before installing all the drivers, check the system requirements such as the enough system memory (at least 32MB for Windows 95/98 system or 64MB for Windows 2000 system) and enough disk space. Windows 95 or Windows 98 must be fully installed and running on the system. All running applications should be closed before installing these drivers.

### 1. Install INF File for Intel® 810E Chipset

The INF Files for Intel® Chipset 810E contains Windows device installation (\*.INF) files that outline to the operating system how the chipset components shall be configured for the proper functionality. Under Windows 95/98, run \ChipDrv\Intel\Whitney\inf\Setup.exe for installation. Please refer to README.TXT in the directory \ChipDrv\Intel\Whitney\inf\ for more information.

### 2. Install INF Utility Files for Intel® 810E Chipset

Under Windows 95/98, run \ChipDrv\Intel\Whitney\inf utility\Setup.exe for installation. Please refer to README.TXT in the directory \ChipDrv\Intel\Whitney\inf utility\ for more information.

### 3. Install VGA Drivers

Under Windows 95/98 English version, run \ChipDrv\Intel\Whitney\Display\win9x\Graphics\Setup.exe for installation.

Under Windows 95/98 Chinese version, the VGA driver should be installed manually from the **Display Properties** Window. Locate the directory to \ChipDrv\Intel\Whitney\Display\win9x\Graphics\Win9x when prompted.

Please refer to README.TXT in the directory \ChipDrv\Intel\Whitney\Display\win9x for more information.

Under Windows NT 4.0, run \ChipDrv\Intel\Whitney\Display\NT40\Graphics\Setup.exe for installation.

Please refer to README.TXT in the directory \ChipDrv\Intel\Whitney\Display\NT40\ for more information.

Under Win2000, the VGA driver should be installed manually. For installation guide, refer to README.TXT in the directory \ChipDrv\Intel\Whitney\Display\win2k.

### 4. Install Sound Drivers

Under Windows 95, run \DevDrv\Codec\ad1881\95\driver\Setup.exe for installation.

For WaveSynth MIDI function under Windows 95, ich.inf contained in the directory \DevDrv\Codec\ad1881\95\95synth should be installed. (Point to the file ich.inf --- Right click the mouse --- select install).

Under Windows 98, run \DevDrv\Codec\ad1881\98\Setup.exe for installation.

Under Windows NT 4.0, run \DevDrv\Codec\ad1881\nt40\driver\Setup.exe for installation.

Regarding the WaveSynth MIDI function under Windows NT 4.0, please refer to README.TXT in the directory \DevDrv\Codec\ad1881\nt40\MIDI.





### **PC-cillin 98**

New viruses are appearing frequently; the chance of your PC being infected increases; antivirus softwares are becoming a must. PC-cillin 98 offers you full-time active virus protection as well as manual scans, plus virus clean capability. Keeping up to date on the latest threats and updating significant files are crucial in keeping antivirus software effective. PC-cillin 98 provides Free Virus Pattern File Updates from the Trend Micro Website:

<http://www.trend.com/download/pattern.htm> or

<http://www.antivirus.com/download/pattern.htm>.

#### **Installation of PC-cillin 98**

For Windows 95/98 English version, run Setup.exe for installation from the utility CD directory \Pccillin\Win9x.

For Windows 95/98 Chinese version, run Setup.exe for installation from the utility CD directory \Pccillin\PWin9x.

For Windows NT 4.0, run Setup.exe for installation from the utility CD directory \Pccillin\WinNT4.0.

S/N is PN EF-9991-6558-5857-5535.

### **QDI ManageEasy**

It is well known that guaranteeing the computer's security and reliability is essential. Especially today, effectively managing and monitoring the computer's hardware is even more important; because processing and exchanging critical data through computer and network are happening everyday. Along with the computer's development, the system of the computer will become more and more complex; at the same time, the control of computer's hardware will be strengthened. Today, it is possible to monitor and manage your complex hardware from Windows 9X and Windows NT. QDI ManageEasy is a system tool, like a bridge between the complex hardware and OS, used to access hardware status and to execute some control functions. It supports stronger functions for Windows 9X and Windows NT. These functions enable you to view more than one hundred of the basic information about your computer and monitor some key reference data about computer health in real time. QDI ManageEasy also helps you to use remote access and control computers in your local area network. With QDI ManageEasy, you can improve your management level.

#### **Installation of QDI ManageEasy V2.0**

Run Setup.exe from the utility CD directory \QME2 to install the QDI ManageEasy V2.0. The QDI ManageEasy Setup Wizard will guide you through the installation process.

For detailed information on how to use QDI ManageEasy V2.0, please refer to the QDI ManageEasy V2.0 online help.

### **Additional Information**

When you change a new CPU, whose bus ratio has not been locked, and is lower than that of the previous one, be sure to clear CMOS once before boot up, otherwise the previous CPU's higher bus ratio saved in CMOS will still take effect, and the new CPU may not work at that high speed.





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## Chapter 3

### BIOS Description

#### Utility Support:

##### AWDFLASH.EXE

This is a flash memory write/read utility used for the purpose of upgrading your BIOS when necessary. Before doing so, please note:

- **We strongly recommend you only upgrade BIOS when encounter problems.**
- **Before upgrading your BIOS, review the description below to avoid making mistakes, destroying the BIOS and resulting in a non-working system.**

When you encounter problems, for example, you find your system does not support the latest CPU released after our current mainboard, you may therefore upgrade the BIOS, please don't forget to set JAV as open (refer to page 16) and disable the "Flash Write Protect" item in AWARD BIOS CMOS Setup first (refer to page 28).

Follow the steps exactly for a successful upgrade.

1. Create a bootable system floppy diskette by typing Format A:/s from the DOS prompt under DOS6.xx or Windows 9x environment.
2. Copy AWDFLASH.EXE (version>7.07) from the directory \Utility located on QDI Mainboard Utility CD onto your new bootable diskette.
3. Download the updated BIOS file from the Website (<http://www.qdigrp.com>). Please be sure to download the suitable BIOS file for your mainboard.
4. Uncompress the file download, copy the BIOS file (xx.bin) onto the bootable diskette, and note the checksum of this BIOS which is located in readme file.
5. Reboot the system from the bootable diskette created.
6. Then run the AWDFLASH utility at the A:\ prompt as shown below:

```
A:\AWDFLASH xxxx.bin
```

Follow the instruction through the process. Don't turn off power or reset the system until the BIOS upgrade has been completed.

If you require more detailed information concerning AWDFLASH Utility, for example, the different usage of parameters, please type A:\>AWDFLASH/?

**Note: AWDFLASH.EXE** (version>7.07) utility must be used to upgrade the WinneX 1E mainboard BIOS instead of QDI flash utility. So far QDI flash utility — **FLASH.EXE (V1.3)** does not support the Flash EPROM on WinneX 1E mainboard.





## AWARD BIOS Description

### Entering Setup

Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press <Del> key or simultaneously press the <Ctrl> + <Alt> + <Esc> keys, to enter the AWARD BIOS CMOS Setup Utility.

#### Press <Del> to enter SETUP

Once you have entered, the Main Menu (Figure 1) appears on the screen. The main menu allows you to select from eleven setup functions and two exit choices. Use the arrow keys to select among the items and press the <Enter> key to accept or enter the sub-menu.



Figure-1 Main Menu

### Load Optimized Defaults

The Optimized Defaults are common and efficient. It is recommended users load the optimized defaults first, then modify the needed configuration settings.

### Standard CMOS Features Setup

The basic CMOS settings included in “Standard CMOS Features” are Date, Time, Hard Disk Drive Types, Floppy Disk Drive Types, and VGA etc. Use the arrow keys to highlight the item, then use the <PgUp> or <PgDn> keys to select the value desired in each item.



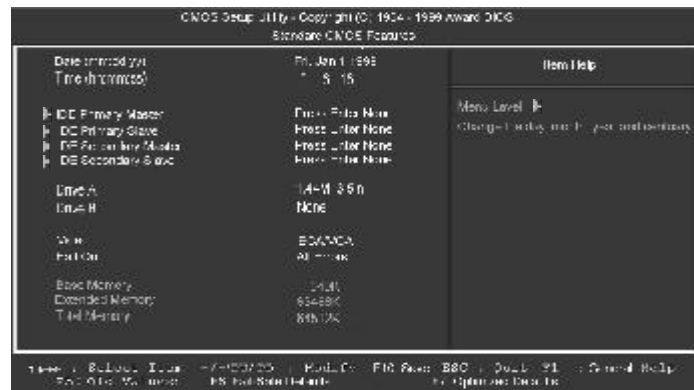


Figure-2 Standard CMOS Setup Menu

For the items marked, press enter, a window will pop up as shown below. You can view detailed information or make modifications.

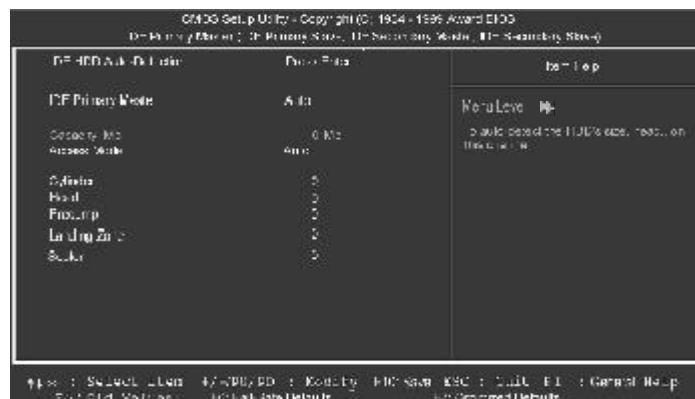


Figure-2-1 IDE Primary Master Setup Menu

## Hard Disk

### Primary Master/Primary Slave/Secondary Master/Secondary Slave

These categories identify the HDD types of 2 IDE channels installed in the computer system. There are three choices provided for the Enhanced IDE BIOS: None, Auto, and User. 'None' means no HDD is installed or set; 'Auto' means the system can auto-detect the hard disk when booting up; by choosing 'user', the related information should be entered regarding the following items. Enter the information directly from the keyboard and press <Enter>:

CYLS	number of cylinders	HEAD	number of heads
PRECOMP	write pre-compensation	LANDZ	landing zone
SECTOR	number of sectors	MODE	HDD access mode





The Award BIOS supports 3 HDD modes: NORMAL, LBA and LARGE.

### **NORMAL**

Generic access mode in which neither the BIOS nor the IDE controller will make any transformation during accessing. The maximum number of cylinders, heads and sectors for NORMAL mode are 1024, 16 and 63.

If the user sets his HDD to NORMAL mode, the maximum accessible HDD size will be 528 megabytes even though its physical size may be greater than that.

### **LBA (Logical Block Addressing) mode**

A new HDD accessing method to overcome the 528 Megabyte bottleneck. The number of cylinders, heads and sectors shown in setup may not be the number physically contained in the HDD.

During HDD accessing, the IDE controller will transform the logical address described by sector, head and cylinder number into its own physical address inside the HDD.

### **LARGE mode**

Some IDE HDDs contain more than 1024 cylinder without LBA support (in some cases, users do not want LBA). The Award BIOS provides another alternative to support these kinds of HDD.

BIOS tricks DOS (or other OS) into dividing the number of cylinders is less than 1024 by dividing it by 2. At the same time, the number of heads is multiplied by 2. A reverse transformation process will be made inside INT13h in order to access the right HDD address.

If using Auto detect, the BIOS will automatically detect the IDE hard disk mode and set it as one of the three modes.

### **Remark**

To support LBA or LARGE mode of HDDs, there must be some softwares involved which are located in Award HDD Service Routine (INT13h). It may fail to access a HDD with LBA (LARGE) mode selected if you are running under an Operating System which replaces the whole INT 13h.





## Video

Set this field to the type of video display card installed in your system.

EGA/ VGA	Enhanced Graphics Adapter / Video Graphic Array. For EGA, VGA, SEGA, SVGA, or PGA monitor adapters.
CGA 40	Color Graphic Adapter, powering up in 40 column mode.
CGA 80	Color Graphic Adapter, powering up in 80 column mode.
MONO	Monochrome adapter, including high resolution monochrome adapters.

## Halt On

This category determines whether or not the computer will stop if an error is detected during powering up.

No errors	The system boot will not stop for any errors that may be detected.
All errors	Whenever the BIOS detects a non-fatal error, the system will stop and you will be prompted.
All, But Keyboard	The system boot will not stop for a keyboard error; but it will stop for all other errors.
All, But Diskette	The system boot will not stop for a disk error; but it will stop for all other errors.
All, But Disk/Key	The system boot will not stop for a keyboard or disk error, but it will stop for all other errors.

## Memory

This is a Display-Only Category, determined by POST (Power On Self Test) of the BIOS.

Base Memory	The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.
Extended Memory	The BIOS determines how much extended memory is presented during the POST.
Other Memory	This is the memory that can be used for different applications. Shadow RAM is most used in this area.
Total Memory	Total memory of the system equals the sum of the above memory.



## CPU SpeedEasy Setup

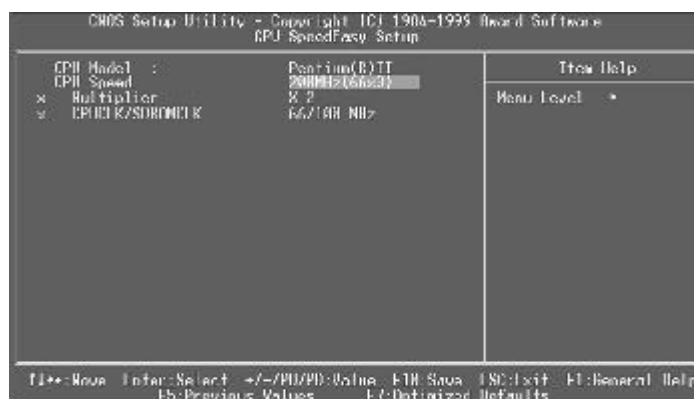


Figure-3 CPU SpeedEasy Setup Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
● CPU Speed	<i>Jumper Emulation</i>	This item is only for users who understand all the CPU parameters, i.e. system bus frequency, “66/75/100/112/133/140/150MHz” and multiplication of processor core frequency for system bus frequency “x3, x3.5, x4, x4.5, x5, x5.5, x6, x6.5, x7, x7.5, x8”.
	200MHz(66x3)	Selects the CPU speed according to your CPU brand and type.
	233MHz(66x3.5)	
	■	
	■	
	.	
	533MHz(66x8)	
	300MHz(100x3)	
	350MHz(100x3.5)	
	■	
	■	
	.	





## Advanced BIOS Features Setup



Figure-4 Advanced BIOS Features Menu

The following indicates the options for each item and describes their meaning.

Item	Option	Description
• ChipAwayVirus On Guard	<i>Enabled</i>	Guards against boot virus threats early in the boot cycle, before they have a chance to load into your system, ensuring your computer boots to a clean operating system.
	<i>Disabled</i>	Disables this function.
• CPU Internal Cache	<i>Enabled</i>	Enabling this option speeds up memory access.
• External Cache	<i>Disabled</i>	How ever, it depends on CPU/chipset design.
	<i>Enabled</i>	Enables external L2 cache. This allow s better performance.
• CPU L2 Cache ECC Checking	<i>Disabled</i>	Disables external cache.
	<i>Enabled</i>	Enables CPU L2 Cache ECC (Error Checking and Correction) function.
• Quick Power On Self Test	<i>Disabled</i>	Disables CPU L2 Cache ECC function.
	<i>Enabled</i>	Allow s the system to skip certain tests w hile booting. This w ill decrease the time needed to boot the system.
	<i>Disabled</i>	Normal POST.
• First (Second, Third) Boot Device	<i>Disabled</i>	Select Your Boot Device Priority. It could be Disabled, Floppy, LS/ZIP, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, LAN.
• Boot Other Device	<i>Floppy</i>	



## BIOS Description

• Swap Floppy Drive	<i>Enabled</i> <i>Disabled</i>	If the system has two floppy drives, choose enable to assign physical drive B to logical drive A and vice-versa.
• Boot Up Floppy Seek	<i>Enabled</i> <i>Disabled</i>	Tests floppy drives to determine whether they have 40 or 80 tracks.
• Boot Up NumLock Status	<i>On</i> <i>Off</i>	Select power on state for NumLock.
• Gate A20 Option	<i>Normal</i> <i>Fast</i>	Lets chipset control GateA20 and Normal - a pin in the keyboard controller controls GateA20. Default is Fast.
• Typematic Rate Setting	<i>Enabled</i> <i>Disabled</i>	Keystrokes repeat at a rate determined by the keyboard controller - when enabled, the typematic rate and typematic delay can be selected.
• Typematic Rate (chars/sec)	6-30	The rate at which character repeats when you hold down a key.
• Typematic Delay (Msec)	250-1000	The delay before keystrokes begin to repeat.
• Security Option	<i>Setup</i> <i>System</i>	Select whether the password is required every time the system boots or only when you enter setup.
• OS Select For DRAM > 64MB	<i>Non-OS2</i> <i>OS2</i>	Select OS2 only if you are running OS/2 operating system with more than 64MB of RAM.
• Flash Write Protect	<i>Enabled</i> <i>Disabled</i>	Does not allow flash program. Flash program is allowed.
• Report NO FDD for WIN 95	<i>Yes</i> <i>No</i>	Reports NO Floppy Disk Drive for WIN 95 to release IRQ6. Does not report No Floppy Disk Drive for WIN 95.

