Chapter 1
Introduction

Overview

The WinneX 5 green mainboard utilizes Intel's first generation integrated graphics chipset — Intel®810 Whitney Chipset, providing a fully compatible, high performance and cost-effective PC/ATX platform. The new integrated technologies, together with software configurable AC'97 audio and modem system give customers an advanced, multimedia solution at an extremely low price. It provides 66MHz and 100 MHz system bus support for all the Intel®Celeron PPGA 370 Processors. 100MHz SDRAMs are supported up to 512MB. It also provides advanced features such as Wake-Up On LAN, Wake-Up On Internal/External Modem and Keyboard Password Power-on functions. Suspend to RAM, the optimal implementation of the Advanced Configuration and Power Interface (ACPI) specification, makes the PC's power consumption drop to the lowest possible level and enable quick wakeup. ManageEasy, our system management application is also supplied to enable remote monitoring and configuration of the system.

Flexibility in Designing Cost-effective System

The Intel®810 Chipset is a high-integration chipset which consists of a Graphics and Memory Controller Hub (GMCH) Host Bridge and an I/O Controller Hub (ICH) Bridge. There are two versions of GMCH (GMCH0/GMCH). The Intel®810 Chipset System provides added flexibility in designing cost-effective solutions by using different combinations of GMCH and ICH.

The following describes the two kinds of Intel®810 chipset combination and their added features. Please identify which kind of mainboard you purchased.

1. **Intel®810 DC-100**: GMCH (Intel®82810-DC100) + ICH (Intel®82801AA)
   Added features:
   - Includes 4MB, 32-bit 100MHz Display Cache.
   - Supports Ultra ATA/66.

2. **Intel®810**: GMCH0 (Intel®82810) + ICH (Intel®82801AA)
   Added features:
   - Supports Ultra ATA/66.

All information contained in this manual applies to both kinds of system, unless otherwise specified.

Key Features

Form factor

- ATX form factor of 305mm x 190mm.

Microprocessor

- Supports Intel® Celeron PPGA 370 Processor at 300A/333/366/400/433/466MHz with 66MHz bus speed.
- The CPU core voltage adjustable from 1.3V to 3.5V automatically through onboard switching voltage regulator with VID(Voltage ID).
- Provides onboard 1.5V, 1.8V, 2.5V and 3.3V standby regulator.

System memory

- Provides two 168 pin 3.3V unbuffered DIMM sockets.
- Supports 64-bit wide DIMM modules with 100MHz SDRAM devices.
- Supports 8MB to 512MB SDRAM using 16Mb/64Mb technology.
- Supports 512MB SDRAM using 128Mb technology.
- Supports Suspend to RAM.

Onboard IDE

- Supports two PCI PIO and Bus Master IDE ports.
- Two fast IDE interfaces supporting four IDE devices including IDE hard disks and CD-ROM drives.
- Supports up to PIO Mode 4 timing.
- Supports "Ultra ATA/33" Synchronous DMA modes, transferring data up to 33MB/s.
- Supports "Ultra ATA/66" Synchronous DMA modes, transferring data up to 66MB/s.
- Integrated 16x32bit buffer for IDE PCI Burst Transfers.

Onboard I/O

- Winbond W83627HF LPC I/O chip.
- One floppy port supporting up to two 3.5" or 5.25" floppy drives with 360K/720K/ 1.2M/1.44M/2.88M format.
- Two high speed 16550 compatible UART (COM1/COM2/COM3/COM4 selective) with 16-byte send/receive FIFOs.
- USB host interface supporting 2 USB ports.
- One joystick port.
- Infrared interface.
- All I/O ports can be enabled/disabled in the BIOS setup.

Onchip AGP
- Integrated 2D/3D Graphics Controller.
- Integrated H/W Motion Compensation Engine.
- Provides 4MB SDRAM Display Cache (for Intel®810 DC-100 only).

Onboard Sound
- Intel AC' 97 2.1 Specification Compliant.
- 18bit stereo codec.
- Multiple stereo input mixer.
- Mono and stereo volume control.
- Provides onboard Line-in Jack, Microphone-in Jack, Speaker-out Jack and MIDI/ Joystick Connector.

Advanced features
- PCI 2.2 Specification Compliant.
- Provides ChipAway Anti-Virus On Guard.
- Supports Windows 95/98 software power-down.
- Supports Wake-Up On LAN and Wake-Up On Internal/External Modem.
- Supports Keyboard Password Power-on function.
- Onboard I/O Winbond 83627HF supports system monitoring (monitors CPU and system temperatures, system voltages, chassis intrusion and fan speed).
- Supports management applications such as LDCM (LANDesk Client Manager) or ManageEasy. (manufacturing option)
- Provides onboard 3.3V regulator to support ATX power supply without 3.3V output.
- System status resumes after AC power failure.
- Supports QDI' s innovation such as SpeedEasy, InstallEasy, SecurityEasy and RecoveryEasy.
- Protects the system BIOS from being attacked by severe virus such as CIH.
- Supports Suspend to RAM.
- Supports system shut down/alarm when the CPU temperature reaches the shut down/warning temperature presetting from "PC Health Status" in AWARD BIOS CMOS Setup.
- Supports overclocking feature, the system can be overclocked to 100/133MHz.

BIOS
- Licensed advanced AWARD BIOS, supports Firmware Hub (FWH) with 4M-bits flash memory, plug and play ready.
- Supports IDE CD-ROM or SCSI boot up.

Green function

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management).
- Supports four ACPI power states: Full-on, Stop Grant, Suspend to RAM, and soft-off.

Expansion slots

- 6 PCI slots.
- 1 AMR.

Introduction to New Features

FWH(Firmware Hub) Protection

The BIOS of the mainboard is located inside the FWH. Severe viruses such as CIH virus are so dangerous that it may overwrite the BIOS. If the BIOS has been damaged, the system will be unable to boot. We provide both hardware and software solution which protects the system BIOS from being attacked by such viruses.

Here are two choices which implements this function:

1. Set the jumper (JAV) as closed, the BIOS can not be overwritten.
2. Set the jumper (JAV) as open, meanwhile set "Flash Write Protect" as Enabled in AWARD BIOS CMOS Setup. In this way, the BIOS can not be overwritten, but DMI information can be updated.
   Refer to page **16** for detailed information on jumper setting, and page **26** for related BIOS setting.

Suspend to RAM

Suspend to RAM is a cost-effective, optimal implementation of the Advanced Configuration and Power Interface (ACPI) 1.0 specification, which makes a PC's power consumption drop to the lowest possible level and enables quick wakeup. When the system is in Suspend-to-RAM status, the system context is maintained in system memory, the system consumes only a small fraction of the power used for full operation. Instead of shutting down the system to save power when not in use and then having to reboot later, Suspend-to-RAM solution enables the system to quickly wake up, restoring all applications and features, enabling operation in a few seconds.

To implement this function, the following requirments are essential:

1. Power supply requirements: The current of 5VSB line of the power supply should be more than 0.75A.

2. The BIOS option "ACPI function" should be enabled, and "ACPI Suspend Type" should be set as S3 in AWARD BIOS CMOS setup. Refer to page **28** for detailed information.

3. An ACPI-enabled operating system such as Windows 98 or Windows 2000 family is needed. In order to install ACPI-enabled Windows 98 operating system, the setup command should be typed as shown below:

    D:\SETUP /P J

    For the operating system already installed, enable ACPI function through the Microsoft HCT (Hardware Compatibility Test) installation process.

4. Two ways to enter Suspend-to-RAM status:
    *   Under Windows 98/Windows 2000, clicking Start —Shut down —Standby enables the system to enter Suspend-to-RAM status.
    *   Under Windows 98/Windows 2000, from Power Management Properties in Control Panel, set the continuous idle time before suspend, the system will enter Suspend-to-RAM status when time out.

The same ways used to power up the system can be used to wake up the system from Suspend-to-RAM status. For example, pushing the power button, through the Wake-Up On LAN, Wake-Up On Internal/External Modem function or RTC Alarm. If the keyboard password power-on function is enabled, the keyboard password should be used to wake up the system instead of pushing the power button.

Ultra ATA/66

According to the previous ATA/IDE hard drive data transfer protocol, the signaling way to send data was in synchronous strobe mode by using the rising edge of the strobe signal. The Ultra ATA/33 protocol doubles the burst transfer rate from 16.6MB/s to 33.3MB/s, by using both the rising and falling edges of the strobe signal, this time Ultra ATA/66 doubles the Ultra ATA burst transfer rate once again (from 33.3MB/s to 66.6MB/s) by reducing setup times and increasing the strobe rate. The faster strobe rate increases EMI, which cannot be eliminated by the standard 40-pin cable used by ATA and Ultra ATA. To eliminate this increase in EMI, a new 40-pin, 80-conductor cable is needed. This cable adds 40 additional ground lines between each of the original 40 ground and signal lines. The additional 40 lines help shield the signal from EMI, reduce crosstalk and improve signal integrity.

Ultra ATA/33 introduced CRC (Cyclical Redundancy Check), a new feature of IDE that provides data integrity and reliability. Ultra ATA/66 uses the same process. The CRC value is calculated by both the host and the hard drive. After the host-request data is sent, the host sends its CRC to the hard drive, and the hard drive compares it to its own CRC value. If the hard drive reports errors to the host, then the host retries the command containing the CRC error.

Ultra ATA/66 technology increases both performance and date integrity. However there are basically five requirements for your system to run in Ultra ATA/66 mode:

1. The system board must contain a special Ultra ATA/66 detect circuit, such as WinneX 5 mainboard.
2. The system BIOS must also support Ultra ATA/66.
3. The operating system must be capable of DMA transfers. Win95 (OSR2) and Win98 are capable.
4. A capable Ultra ATA/66 , 40-pin, 80-conductor cable is required.
5. Ultra ATA/66 compatible IDE device such as a hard drive or CD-ROM drive.

Chapter 2

Installation Instructions

This section covers External Connectors and Jumper Settings. Refer to the mainboard layout chart for locations of all jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pin assignments for your reference. The particular state of the jumpers, connectors and ports are illustrated in the following figures. Before setting the jumpers or inserting these connectors, please pay attention to the directions.

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, otherwise your mainboard and expansion cards might be seriously damaged.

External Connectors

PS/2 Keyboard Connector, PS/2 Mouse Connector

PS/2 keyboard connector is for the usage of PS/2 keyboard. If using a standard AT size keyboard, an adapter should be used to fit this connector. PS/2 mouse connector is for the usage of PS/2 mouse.

PS/2 Mouse Connector
PS/2 Keyboard Connector
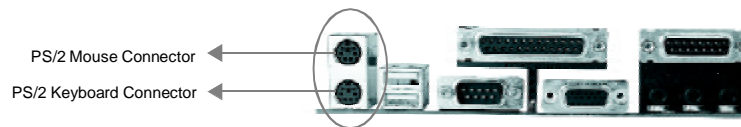
USB1, USB2

Two USB ports are available for connecting USB devices.

USB1
USB2

Parallel Port Connector and Serial Port Connector (UART1, UART2)

The parallel port connector can be connected to a parallel device such as a printer, while the serial port connectors can be connected to serial port devices such as a serial port mouse. You can enable/disable them and choose the IRQ or I/O address in " Integrated Peripherals" from AWARD BIOS SETUP.

Parallel Port
UART1

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)

1

UART2

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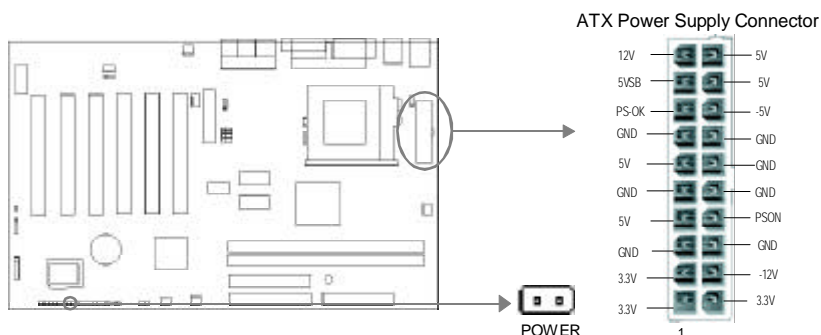## MIDI/Joystick connector

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.

MIDI/Joystick

Speaker out

Line in

Microphone in
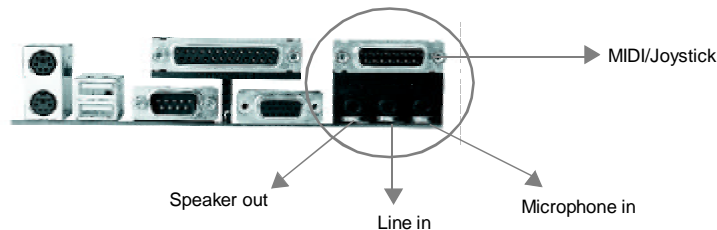
ATX Power Supply Connector & Power Switch (POWER)

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 one is provided), then push once the power switch. When powering off the system, you needn' t turn off the mechanical switch, just ***Push once***' the power switch.

ATX Power Supply Connector

12V	5V
5VSB	5V
PS-OK	-5V
GND	GND
5V	GND
GND	GND
5V	PSON
GND	GND
3.3V	-12V
3.3V	3.3V

POWER

1

Note:

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

Hard Disk LED Connector (HD_LED)

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 or suspend to RAM 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)

If the operating system or the BIOS does not enable ACPI, push once the switch connected to this header, the system enters APM suspend mode.
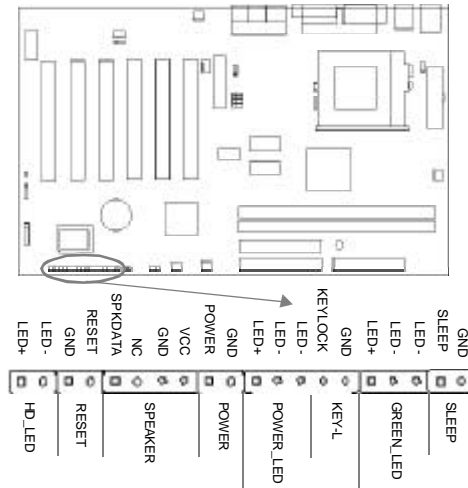
Infrared Header (IrDA)

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.

VCC
NC
IRRX
GND
IRTX
VCC

Fan Connector (CPUFAN, CHSFAN, POWFAN)

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

+12V
FAN GND | SENSE
POWFAN

CPUFAN
FAN GND
+12V
SENSE

SENSE +12V FAN GND
CHSFAN
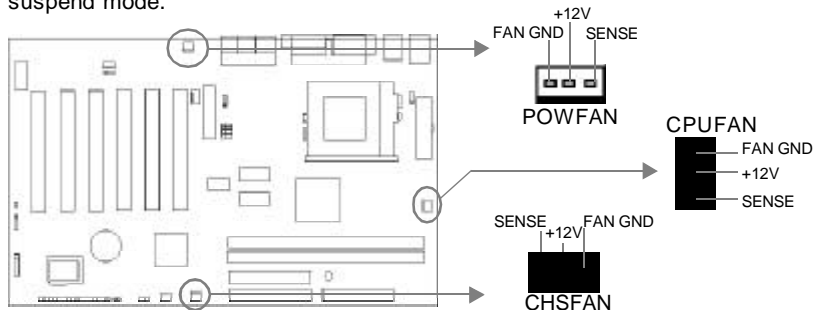
Wake-Up On LAN (WOL)

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.

1

GND

+5V standby   Signal for waking up (active high)
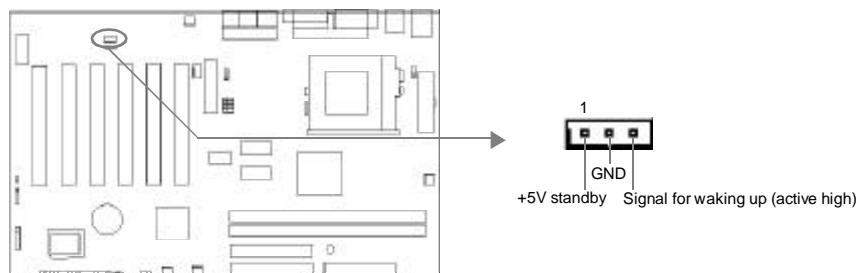
Wake-Up On Internal Modem (WOM)

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.

1

+5V standby   GND

Signal for waking up (active low)

Digital Audio Connector (CDLIN1)

CDLIN1 is a Sony standard CD audio connector, it can be connected to a CD-ROM drive through a CD audio cable.

CDLIN1

CD Right Channel
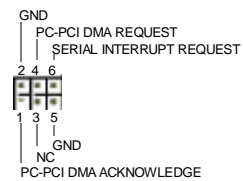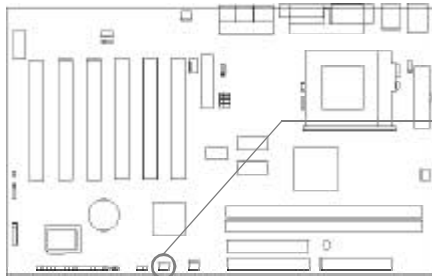GND

GND
CD Left Channel

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^2C 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.

```
1 ——— SMBDATA
2 ——— SMBCLK
3 ——— GND
4 ——— 5VSB
```
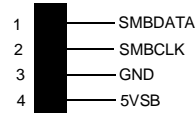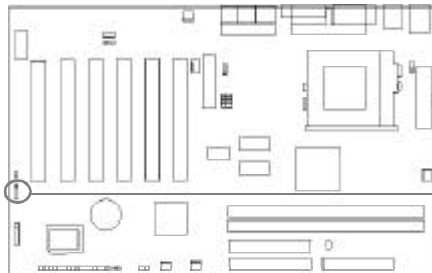
Sound Connector (PC-PCI)

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

```
        GND
         | PC-PCI DMA REQUEST
         |  | SERIAL INTERRUPT REQUEST
        2 4 6
        1 3 5
         |  | GND
         | NC
        PC-PCI DMA ACKNOWLEDGE
```

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.

```
——— GND
——— Indicate signal
```
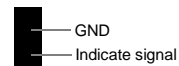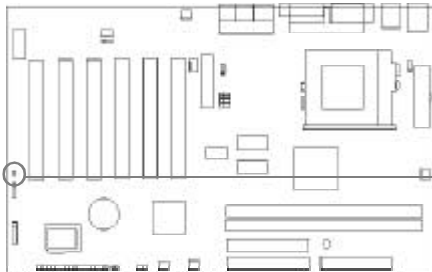
Audio/Modem Riser Interface Connector (AMR)

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 5 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 CODEC can be disabled by setting jumper JSD with pin1 & pin2 closed. This software configurable AC' 97 audio and modem system gives customers an advanced, multimedia solution at an extremely low price. The AC' 97 audio and modem system can be enabled/disabled from " Integrated Peripherals" in AWARD BIOS CMOS Setup.
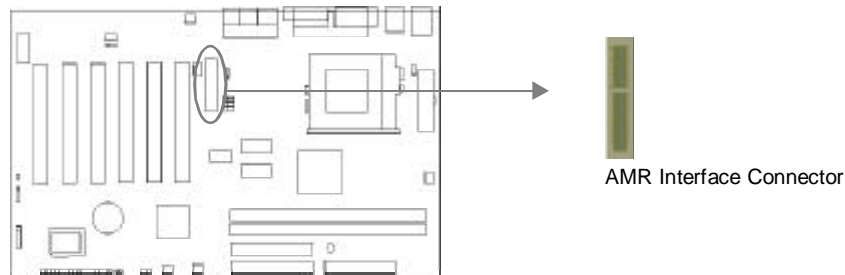
AMR Interface Connector

Expansion Slots & I/O Ports description

| Slot / Port	Description
PCI 1	First PCI slot.
PCI 2	Second PCI slot.
PCI 3	Third PCI slot.
PCI 4	Fourth PCI slot.
PCI 5	Fifth PCI slot.
PCI 6	Sixth PCI slot.
DIMM1	First DIMM slot.
DIMM2	Second DIMM 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.

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.
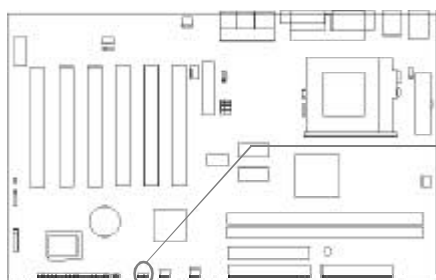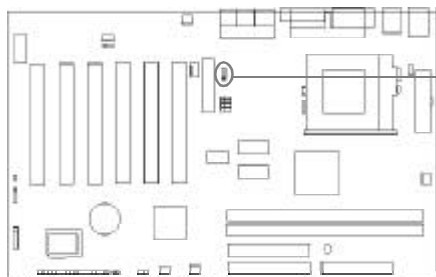
Normal status: JCC
3   2   1

Clear CMOS: JCC
3   2   1

(Unplug the AC power supply)

Enable/Disable on-board audio CODEC (JSD)

If you want to use the on-board audio CODEC, set JSD with pin2 & pin3 closed (default). Otherwise, set JSD with pin1 & pin2 closed for disabling this function.
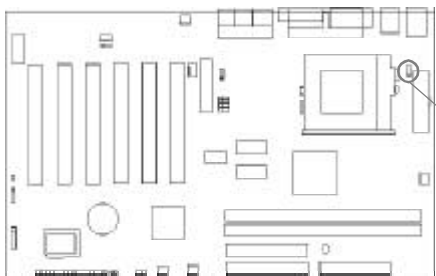
Disable on-board audio: 3 2 1   JSD

Enable on-board audio: 3 2 1   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.

Disable: 3 2 1   JKB

Enable: 3 2 1   JKB

Furthermore in order to implement this function, set "POWER ON Function" to Password and set 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.**

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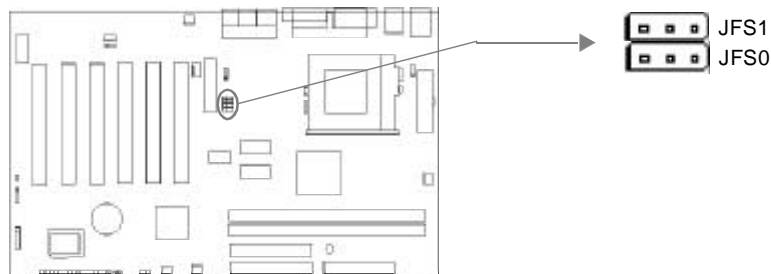
CPU FSB	66MHz	100MHz	133MHz	AUTO
JFS0	2-3	OPEN	OPEN	1-2
JFS1	1-2	1-2	OPEN	2-3

'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 FSB is installed. Setting up to 133MHz FSB 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 Seup. We do not guarantee the overclocking system to be stable.

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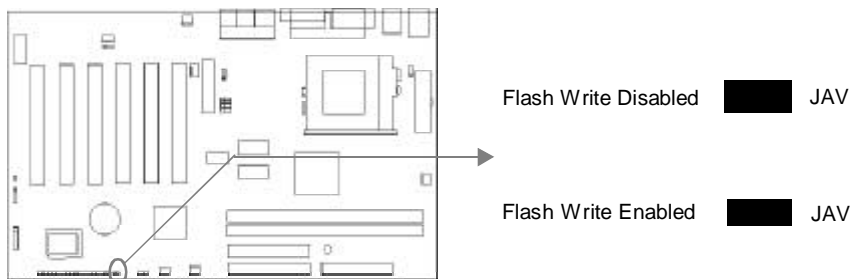
Setting the jumper JAV as open, meanwhile disabling the "Flash Write Protect" item in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the flash ROM in FWH.

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. Therefore, set JAV as open when changing the system hardware configuration, or the error message "Unknown Flash Type" will be displayed on the screen, and DMI information update will fail while updating DMI.

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

Installation of All Drivers

A QDI Mainboard Utility CD-ROM is supplied with each mainboard. All drivers can be installed from this CD-ROM. Before installing all the drivers, check system requirements such as system memory (at least 32MB for Windows 95/98 system or 64MB for Windows 2000 system) and 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 810 Chipset

The INF Files for Intel®Chipset 810 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. Locate destination directory to C:\Program Files\Intel\IntelINF in adding new hardware wizard. Please refer to README.TXT in the directory \ChipDrv\Intel\Whitney\inf\ for more information.

2. Install INF Utility Files for Intel 810 Chipset

Under Windows 95/98, run \ChipDrv\Intel\Whitney\inf utility\Setup.exe for installation. Locate destination directory to C:\Program Files\Intel\InfInst in adding new hardware wizard. Please refer to README.TXT in the directory \ChipDrv\Intel\Whitney\inf utility\ for more information.

3. Install VGA Drivers

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

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 is 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 with 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 every day.

Moving 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 control functions. It supports stronger functions for Windows 9X and Windows NT. These functions enables you to view more than one hundred of the basic information about their 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.

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 first(refer to page 16).

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 included 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

   We suggest you not turn off the power or reset the system until the BIOS upgrade has been completed.

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

Note: AWDFLASH.EXE (version>7.07) utility must be used to upgrade the WinneX 5 mainboard BIOS instead of QDI flash utility. QDI flash utility —**FLASH.EXE (V1.3)** does not support the flash memory on WinneX 5 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.
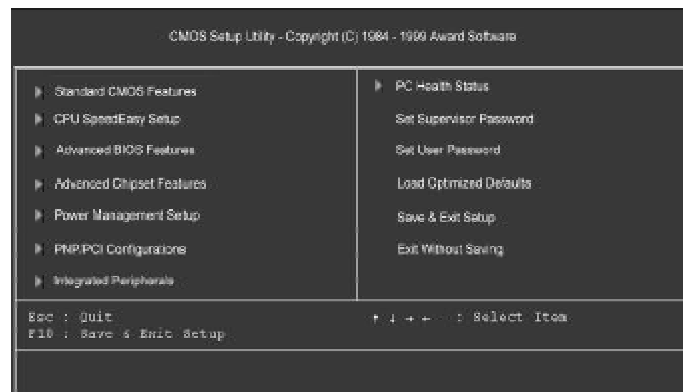

Figure-1 Main Menu

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.