Declaration of conformity

$C\epsilon$

QUANTUM DESIGNS(HK) LTD.
5/F Somerset House, TaiKoo Place 979 Kings Road,
Quarry Bay, Hong Kong

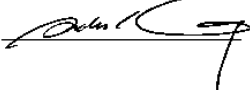declares that the product

Mainboard

Advance 10E

is in conformity with

(reference to the specification under which conformity is declared in

accordance with 89/336 EEC-EMC Directive)

☑ EN 55022   Limits and methods of measurements of radio disturbance
                        characteristics of information technology equipment
☑ EN 50081-1   Generic emission standard Part 1:
                        Residential, commercial and light industry
☑ EN 50082-1   Generic immunity standard Part 1:
                        Residential, commercial and light industry

European Representative:
QDI COMPUTER (UK) LTD   QDI COMPUTER (SCANDINAVIA) A/S
QDI SYSTEM HANDEL GMBH   QDI COMPUTER (NETHERLANDS) B. V.
QDI COMPUTER (FRANCE) SARL   QDI COMPUTER HANDELS GMBH
QDI COMPUTER (ESPANA) S.A.   QDI COMPUTER (SWEDEN) AB

Signature :   . Place / Date :   HONG KONG/2000

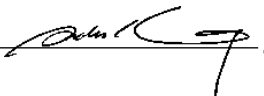Printed Name :   Anders Cheung   Position/ Title :   President

Declaration of conformity

FC

Trade Name:	QDI Computer (U. S . A.) Inc.
Model Name:	Advance 10E
Responsible Party:	QDI Computer (U. S. A.) Inc.
Address:	41456 Christy Street
	Fremont, CA 94538
Telephone:	(510) 668-4933
Facsimile:	(510) 668-4966
Equipment Classification:	FCC Class B Subassembly
Type of Product:	Mainboard
Manufacturer:	**Quantum Designs (HK) Inc.**
Address:	5/F, Somerset House, TaiKoo Place
	979 Kings Road, Quarry Bay, HONG
	KONG

Supplementary Information:

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.

Signature : _____.   Date : _____2000_____

CONTENTS

CONTENTS

SpeedEasy Quick Setup

Procedures :

1. Correctly insert the Intel® Celeron™ PPGA370 or Intel FC-PGA Pentium®III processor.

2. Plug in other configurations and restore the system.

3. Switch on power to the system and press the <Del> key to enter BIOS Setup.

4. Enter "SpeedEasy CPU SETUP" menu to set up the CPU speed.

5. Save and exit BIOS Setup, your system will now boot successfully.

SpeedEasy CPU Setup Menu

Select <SpeedEasy CPU SETUP> item from the main menu and enter the sub-menu:
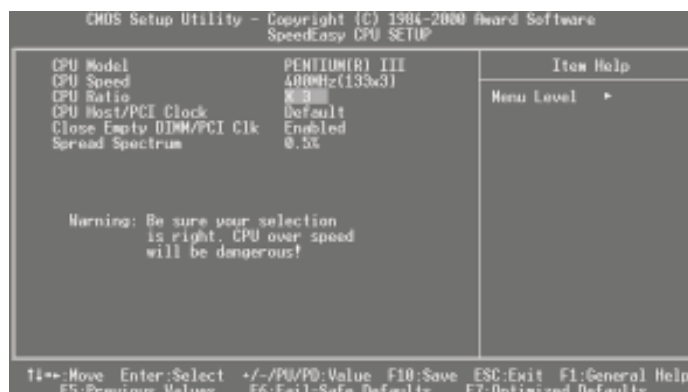
Figure - 1 SpeedEasy CPU Setup Menu

BIOS provides you with a set of basic values for your processor selection instead of the jumper settings. The processor speed can be manually selected from the "SpeedEasy CPU SETUP" menu screen.

⚠ **Warning:**

Do not set CPU frequency higher than its working frequency. If you do, we will not be responsible for any damages caused. Whether or not the system can be overclocked depends on the processor's capability. We do not guarantee the overclock system to be stable.

Users are provided with CPU overclock feature through "Jumper Emulation". The host bus speed can be set as 66/75/83/100/103/105/112/115/124/133/140/150MHz. The multiplier can be chosen from 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8. However the multiplier setting will not function for bus ratio locked processor, only bus ratio unlocked processor.

SpeedEasy 快速安装指南

程序：

1. 正确地插入 Intel® Celeron™PPGA370 或者 Intel® FC-PGA Pentium®III 中央处理器。

2. 插入其他配置，组装成完整的微机系统。

3. 开启系统电源，并且按住<Del>键，进入 BIOS 设置程序。

4. 进入"SpeedEasy CPU SETUP"菜单，以调节中央处理器的速度。

5. 存储设定值，退出 BIOS，系统就可以按你设定的速度运行了。

SpeedEasy 中央处理器设定菜单

从主设置菜单中选择 <SpeedEasy CPU SETUP> 项，然後进入次菜单：

图－1 SpeedEasy 中央处理器设定项目单

BIOS 为你的中央处理器提供一组基本选项， 以代替传统的跳线 (jumper) 方式，使你可以在 "SpeedEasy CPU SETUP" 菜单上，为中央处理器选择正确的工作频率。

⚠ 警告：

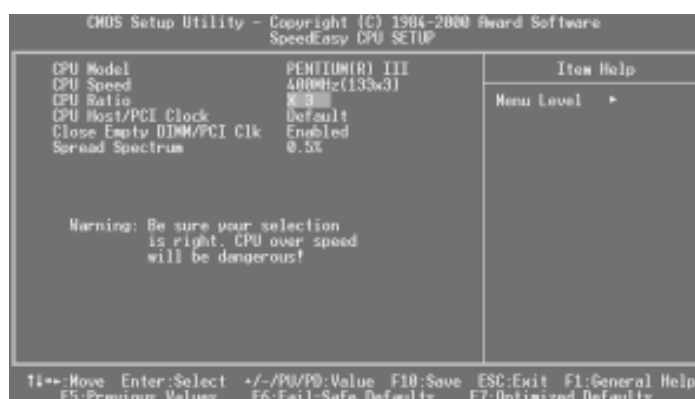请勿将中央处理器的频率调节至高於其正常工作频率，否则本公司将不会负责由此而产生的任何损毁．系统能否超频工作亦取决於 CPU 的工作能力，我们不保证超频工作的系统稳定．

通过 "Jumper Emulation"，我们还给用户提供 CPU 超频功能．系统总线速度可以设置为66/75/83/100/103/105/112/115/124/133/140/150MHz.倍频数可设置为3/3.5/4/4.5/5/5.5/6/6.5/7/7.5/8．然而对于倍频数锁死的 CPU，此项设置无效，倍频数设置仅对未锁死倍频数的 CPU 有效．

Installation de la carte mère Advance 10E

1. Assurez-vous que votre ensemble est complet: carte mère, câbles IDE et FLOPPY, notice d'utilisation et CD-ROM d'installation.
2. Vérifiez que l'alimentation est débranchée et reliez-vous à la terre par une courroie à votre poignet. A défaut, maintenez le contact de vos deux mains avec un objet lui-même relié à la terre, ou une partie en métal de votre système.
3. Fixez la carte mère dans le boîtier grâce aux vis fournies avec celui-ci.
4. Si votre carte mère est munie de cavaliers, placez les en fonction des options que vous souhaitez utiliser: réglage de la fréquence du processeur si votre carte n'est pas SpeedEasy, fonction allumage par saisie du mot de passe…(voir le manuel, rubrique «configuration des cavaliers»)
5. Insérez le processeur dans son logement avec son ventilateur que vous brancherez au connecteur «CPUFAN».
6. Insérez la/les barrette(s) mémoire dans les slots DIMM.
7. Installez vos éventuelles cartes PCI et AMR dans les slots prévus à cet effet (voir page centrale du manuel).
8. Branchez vos périphériques IDE et FLOPPY sur les connecteurs prévus à cet effet grâce aux nappes fournies avec la carte. Vérifiez que le sens de branchement est correct (liseré rouge du câble sur la broche 1 du connecteur).
9. Reliez les câbles du boîtier aux connecteurs prévus à cet effet (Connecteur d'alimentation, LED de marche/arrêt, disque dur, haut-parleur…). Refermez le boîtier.
10. Branchez les périphériques externes sur les sorties du fond de panier: clavier, souris PS/2, périphériques USB, moniteur, imprimante…
11. Lorsque tous les éléments du système sont installés physiquement, rebranchez l'unité centrale.

Installation du système.

1. Démarrez votre système en pressant le bouton «POWER».
2. Pressez la touche «Suppr» pour entrer dans le setup du BIOS.
3. Dans le menu «SpeedEasy CPU Setup», réglez la vitesse de votre processeur (ATTENTION: il est recommandé de ne pas sélectionner une fréquence supérieure à celle de votre processeur, nous déclinons toute responsabilité pour les dommages qui en résulteraient)
4. Effectuez les autres réglages du BIOS selon votre configuration (nous vous conseillons fortement de maintenir les réglages par défaut afin d'éviter toute manipulation hasardeuse pouvant résulter en un dysfonctionnement). Pour plus d'informations sur les fonctions du BIOS, vous pouvez consulter la version française du manuel sur le CD-ROM.
5. Pressez la touche F10 ou choisissez «Save and exit» pour enregistrer vos paramètres et relancer la machine.

6. Installez votre système d'exploitation
7. Après installation, assurez-vous qu'il ne subsiste aucun conflit ou périphérique inconnu dans votre système.
8. Installation des pilotes:

1. Chipset:

Les pilotes des chipsets VIA du répertoire \ChipDrv\Via peuvent être utilisés sur cette carte mère.

Insérez le CD-ROM dans votre lecteur et cliquez sur « Chipset Driver » pour installer les pilotes

2. Logiciel PC-cillin 98:

Pour Windows 95/98, version anglaise, dans le répertoire \Pccillin\Win9X. Lancez setup.exe pour l'installation.

Pour Windows NT version anglaise, il se trouve dans le répertoire \Pccillin\Winnt40, lancez setup.exe.

Numéro de série: PNEF-9991-6558-5857-5535.

3. QDI ManageEasy:

Lancez le setup.exe du répertoire \QME pour installer le ManageEasy. Pour des informations détaillées sur le ManageEasy, référez-vous au manuel ManageEasy du répertoire \Doc.

N'oubliez pas de redémarrer votre système pour que les changements soient pris en compte.

4. RecoveryEasy

RecoveryEasy™, la dernière innovation de QDI, permet de protéger le système des destructions en créant une «partition miroir» de la partition courante du disque dur et en sauvegardant toutes les données dans ce «miroir».

Cette utilitaire fournit partition du disque, récupération/sauvegarde des données, récupération/sauvegarde des réglages du CMOS et fonctions multi-boot.

RecoveryEasy permet également la protection du système contre les divers types de virus de boot tels que CIH. Dans le cas où le système est perdu soit par erreur, soit à cause d'un virus, il peut être récupéré depuis la partition miroir. Cette innovation utilise la technologie du Bios intégré qui n'occupe ni l'espace disque, ni la mémoire du système. C'est la solution idéale pour l'utilisateur.

Il faut presser les touches Ctrl + Bksp et F12 pour entrer dans les interfaces «Recovery» et «Partition» durant le démarrage du Bios.

ATTENTION : lisez attentivement le manuel du RecoveryEasy traduit sur le CD-ROM QDI avant d'installer cette fonction.

Très important : n'oubliez pas votre mot de passe, faute de quoi vous n'auriez plus accès au RecoveryEasy, même après avoir effectué un Clear CMOS.

Le menu SpeedEasy

I.	Insérez le processeur correctement.
II.	Connectez les autres éléments du système (voir Installation).
III.	Au démarrage du système, pressez la touche <Suppr> pour entrer dans le Bios
IV.	Entrez dans le menu «CPU SpeedEasy setup»

Note: si vous ne déterminez pas la vitesse de votre unité centrale, votre système fonctionnera par défaut (200MHz pour les CPU avec une fréquence de Bus de 100MHz et 133MHz pour les CPU à 66MHz).

V.	Sauvegardez et quittez le Bios.

CMOS Setup Utility – Copyright©1984-1999 Award Software

SpeedEasy CPU Setup

CPU Model	: Intel® Celeron™	Item Help
CPU Speed	: 433 Mhz (66x6.5)	
X Multiplier	X2	Menu Level >
X Bus Clock	66MHz	
Spread Spectrum	Disabled	

Prévenir :

Le menu SpeedEasy vous fournit un ensemble de valeurs. Vous pouvez sélectionner manuellement la vitesse de CPU dans ce menu soit en mode «SpeedEasy» soit en mode «Jumper Emulation» (voir manuel).

ATTENTION: Ne pas sélectionner une fréquence de fonctionnement du CPU supérieure à celle indiquée par le constructeur. Nous déclinons toute responsabilité pour tout dégât qui en résulterait.

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Chapter 1
Introduction

Overview

The Advance 10E green mainboard utilizes the Apollo Pro 133A chipset and provides high performance and cost-effective PC/ATX platform. The VIA®VT82C694X chipset and VIA® VT82C686A chipset provides new features with Intel Celeron™ PPGA370 &Pentium®III FC-PGA processors, Cyrix-III processor , AGP 4X mode, and UltraDMA66. Equipped with three memory module sockets to support PC66/PC100/PC133MHz SDRAM, 66MHz EDO DIMMs, 66/100/133MHz VCM SDRAM. It also provides advanced features such as Suspend to RAM, wake-up on LAN, wake-up on internal/external modem and keyboard password power-on function. The green function is in compliance with the ACPI specification.

Key Features

Form factor
- ATX form factor of 305mm x210mm.

Microprocessor
- Supports all Intel Pentium®III FC-PGA processors at 500E/533EB/550E/600E/600EB/ 650/667/700/733/750/800/800EB MHz and future processors
- Supports all Intel®Celeron™ PPGA 370 processors at 300A/333/366/400/433/466/ 500/533A/566/600/633 MHz and future processors.
- Supports later processors Cyrix-III at PR433/466/500/533MHz and future processors
- Supports 66/100/133MHz host bus speed, can overclock to 150MHz.
- CPU core frequency = Bus speed x3, x3.5, x4, x4.5, x5, x5.5, x6, x6.5, x7, x7.5, x8.
- On-board 1.5V, 2.5V regulators and 3.3V switching power supply.

Chipset
- Apollo Pro 133A chipset: VT82C694X, VT82C686A.

System memory
- Provides three 168 pin 3.3V buffered/unbuffered 66/100/133MHz DIMM sockets.
- Supports both 66/100/133MHz SDRAM, 66/100/133MHz VCM(Virtual Channel Memory)SDRAM and 66MHz EDO DIMMs.

- Minimum memory size is 8MB, maximum memory size is 1.5G MB.
- SDRAM 64 bit data interface with ECC support.

On-board 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 mode 4 timing.
- Supports "Ultra DMA/33"Synchronous DMA mode transferring up to 33 Mbytes/sec.
- Supports "Ultra DMA/66"Synchronous DMA mode transferring up to 66 Mbytes/sec.
- Integrated 16x32bit buffer for IDE PCI Burst Transfers.

On-chip I/O

- 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 fast compatible UARTs(COM1/COM2/COM3/COM4 selective) with 16-byte send/receive FIFOs.
- One enabled parallel port at the I/O address 378H/278H/3BCH with additional bi-direction I/O capability and multi-mode as SPP/EPP/ECP (IEEE 1284 compliant).
- Circuit protection provided, preventing damage to the parallel port when a connected printer is powered up or operates at a higher voltage.
- Supports LS-120 floppy disk drive and Zip drive.
- All I/O ports can be enabled/disabled in the BIOS setup.

On-chip Audio

- Build in VIA® 82C686A

AGP SLOT

- Supports 4X mode & AGP 2.0 compliant.

Advanced features

- PCI 2.2 Specification compliant.
- Provides Trend ChipAwayVirus® On Guard and PC-Cillin software with killing virus function.
- Provides four USB ports, on-board PS/2 mouse and PS/2 keyboard ports.
- Provides infrared interface.
- Support PC99 color- coding connector Specification
- Supports Windows 98/Windwos 2000 software power-down.
- Supports wake-up on LAN and wake-up on internal/external modem.
- Supports auto fan off when the system enters suspend mode.

- Provides on-board 3.3V regulator to support ATX power supply without 3.3V output.
- supports system monitoring (monitors system temperature, CPU temperature, voltages, chassis intrusion and fan speed).
- Provides management application such as ManageEasy.
- Protects the system BIOS from being attacked by severe virus such as CIH, by enabling "Flash Write Protect" in CMOS setup or closing the Jumper "JAV".

BIOS

- Licensed advanced AWARD BIOS, supports flash ROM with 2M bit memory size, 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 three green modes: Doze, Standby and Suspend.
- Supports ACPI power status: S0, S1, S3(STR), S5(Soft-off).

Expansion slots

- 1 ISA slots and 5 PCI slots.
- 1 AGP Slot.
- 1 AMR Slot.

Features

BIOS-ProtectEasy

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

There 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 opened, meanwhile set "Flash Write Protect" as Enabled in AWARD BIOS CMOS Setup. In this way, the BIOS can not be overwritten, but the DMI information can be updated.

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 improves 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 have a special Ultra ATA/66 detect circuit, such as Advance 10E mainboard.
2.   The system BIOS must also support Ultra ATA/66.
3.   The operating system must be capable of DMA transfers. Win95 (OSR2) , Win98 and WindowsNT are capable.
4.   An Ultra ATA/66 capable, 40-pin, 80-conductor cable is required.
5.   Ultra ATA/66 compatible IDE device such as a hard drive or CD-ROM drive.

PC-133 Memory

PC133 SDRAM Unbuffered DIMM defines the electrical and mechanical requirements for 168-pin, 3.3 Volt, 133MHz, 64/72-bit wide, Unbuffered Synchronous DRAM Dual In-Line Memory Modules (SDRAM DIMMs). Relatively , the peak bandwidth of PC-133 memory is the 33% higher than PC-100 memory. These latest SDRAMs are necessary to meet the enhanced 133MHz bus speed requirement.

Advance 10E mainboard based on VIA Apollo Pro 133(694X) chipset to adopt the PC-133 technology.

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. Set the Jumper JSTR with pin2&pin3 closed. Refer to page 24 for detail.

3. 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 35 for detail

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

    D:\SETUP /P J

    (This manual assumes that your CD-ROM device driver letter is D:).

5. Three ways to enter Suspend-to-RAM status under ACPI-enabled Windows 98:
    - Click Start -> Shut down -> Standby to enable the system to enter Suspend-to-RAM status.
    - Click Start -> Setup -> Control Panel -> Power Management -> Advanced and choose Standby item, the system will enter Suspend-to-RAM status when you press power button.
    - From Power Management Properties in Control Panel, set the latency time in System Standby, 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-on-LAN, Wake-on-Modem function or RTC Alarm.

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Chapter 2

Installation Instructions

This section covers External Connectors, Jumper Settings and Memory Configuration. 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.
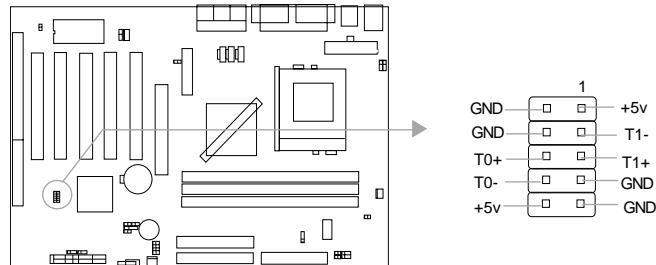
PS/2 Mouse Connector

PS/2 Keyboard Connector

USB1, USB2

Two USB ports are available for connecting USB devices.

USB1

USB2

USB3, USB4

Two USB ports are not available on the back panel. Therefore, we provide a 10-pin ribbon cable with bracket to connect Built-in on-board USB header. (manufacturing option)

		1		
GND		□	□	+5v
GND		□	□	T1-
T0+		□	□	T1+
T0-		□	□	GND
+5v		□	□	GND

## 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 connector can be connected to a serial port device 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

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
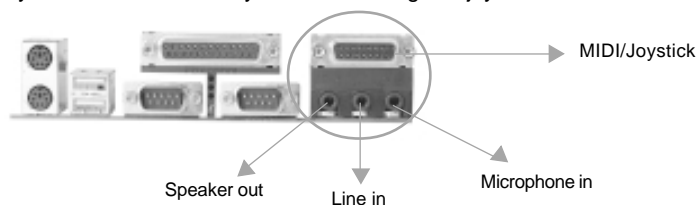
ATX Power Supply Connector & Power Switch (POWER)

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 (power button). When powering up your system, first turn on the mechanical switch of the power supply (if one is provided), then push once the power button. When powering off the system, you needn't turn off the mechanical switch, just ***Push once**** the power button.

ATX Power Supply Connector

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

1

20

3.3V -12V GND PSON GND GND GND -5V 5V 5V
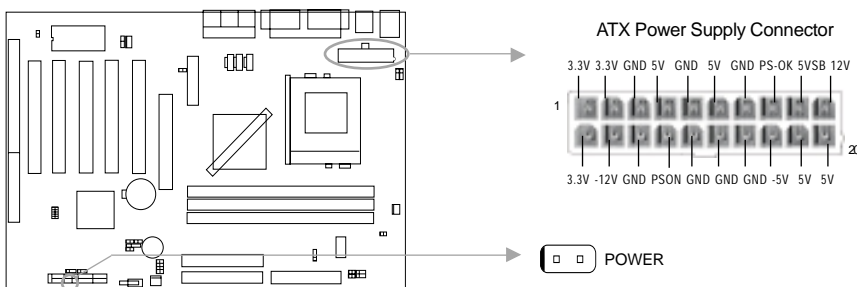
POWER

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 button 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 (PWRLED)

The power LED has four status. When the system is in power up status, the LED is on. When the system is in suspend status, the LED is blink. When the system is in Suspend to RAM, the LED is off. When the system is in Soft-Off status, the LED is off. The connector has an orientation.

ACPI LED Connector (ACPI_LED)(Reserved)

The ACPI LED is double-color lights with three pins. Pin1&Pin2 drive different color lights. If Pin1 drives orange light , Pin2 drives green light, the following status will come out. When the system is in power up status, the LED is green on. When the system is in suspend status, the LED is green blink. When the system is in suspend to RAM status, the LED is orange on. When the system is in soft-off status, the LED is off.

GREEN LED Connector (GREEN_LED)

The GREEN LED has four status. When the system is in three status (including power up, suspend, soft-off), the LED is off. When the system is in suspend to RAM status, the LED is on.

Hardware Green Connector (SLEEP)

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

| HDDLED	SPEAKER					RESET			Green_LED			KEY_L	
	HDDLED	VCC	GND	NC	SPKDATA	RESET	GND	EMPTY	LED	LED-	LED-	GND	KEYLOCK
HDDLED	HDDLED +	LED1-	LED2-	LED+(VCC)	POWER	GND	EMPTY	EMPTY	SLEEP	GND	LED+	LED-	LED-
		ACPI LED		Power					SLEEP		POWER LED		
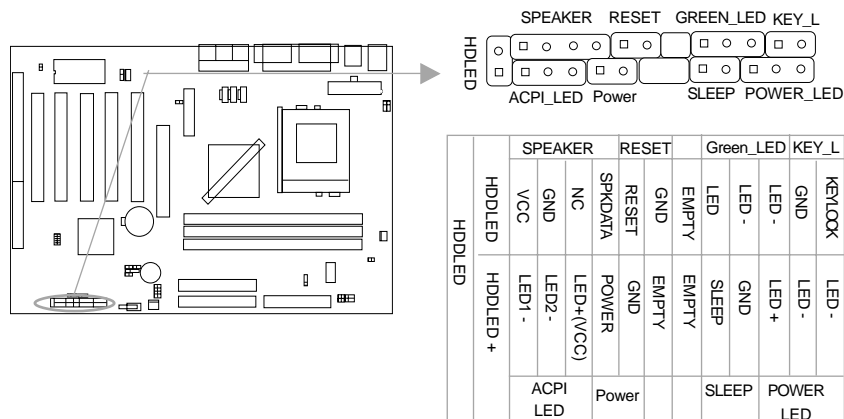
Fan Connector (CPUFAN, CHSFAN)

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

CPUFAN
FAN GND
+12V
SENSE

SENSE FAN GND
+12V

CHSFAN
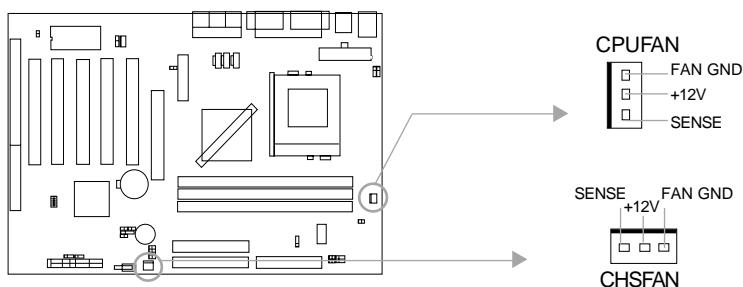
Wake-Up On LAN (WOL)

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 are used. Then connect this header to the relevant connector on the LAN adapter, set "PowerOn by Ring/LAN" 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.

Signal for waking up (active high)
GND
+5V standby
1
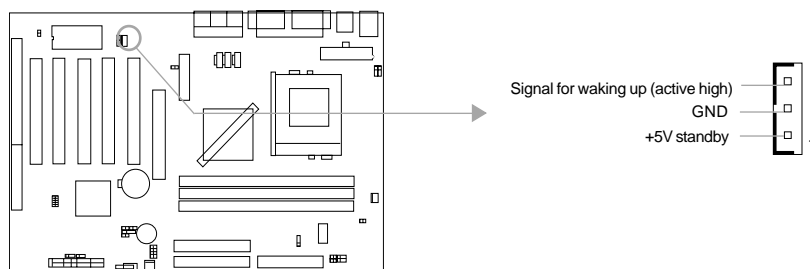
Wake-Up On Internal Modem (WOM)

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 the function is used. Then connect this header to the relevant connector on the modem card, set " PowerOn by Ring/ LAN " 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.

+5V standby 1
Signal for waking up (active low)
GND
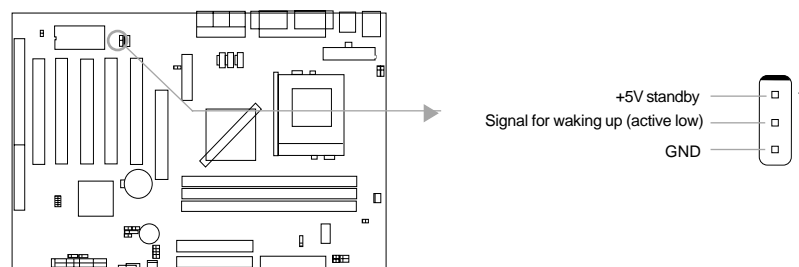
Internal Audio Connectors (AUX, CDLIN, MODEM)

AUX and CDLIN connectors allow you to receive stereo audio input from such sound sources as a CD-ROM, TV tuner, or MPEG card. 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.

Left Audio Channel
GND
Right Audio Channel
AUX IN

Phone-In (from Modem)
GND
Mono-Out (to Modem)
MODEM

CD Left Channel
Common
CD Right Channel
CDLIN
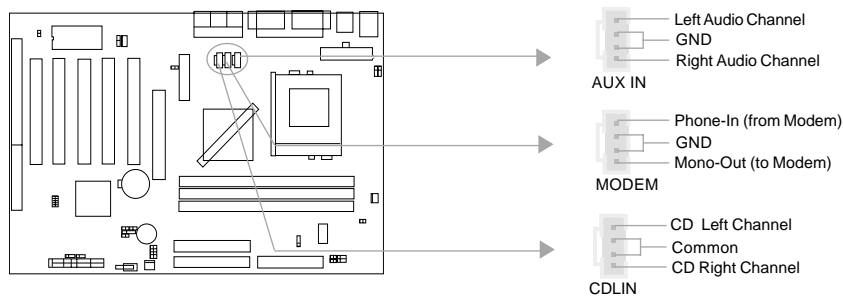
Audio/Modem Riser Interface Connector (AMR)
& AMR Sound Option(J4)

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. Advance 10E 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. 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 in "Integrated Peripherals" in AWARD BIOS CMOS Setup.

AMR Interface Connector

J4
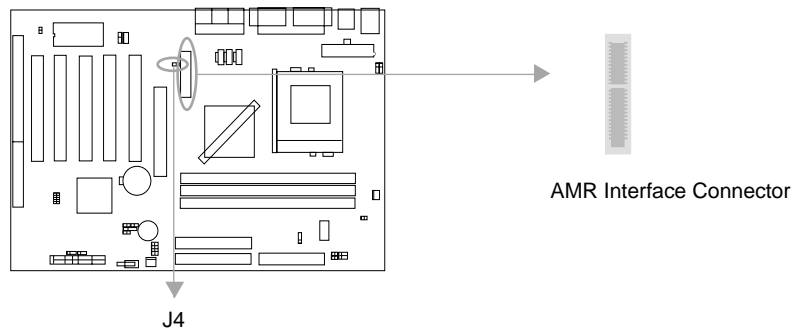
Enable AMR Sound   J4

Disable AMR Sound   J4

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
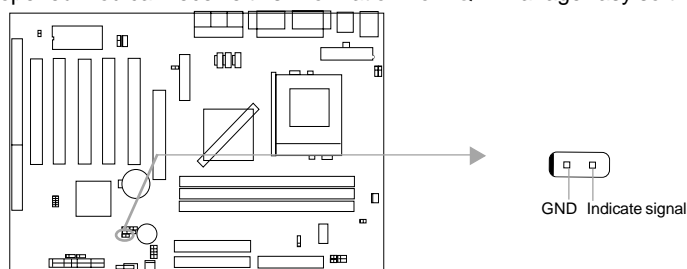
Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. If using this function, set "UART 2 Mode" to HPSIR or ASKIR and configure the settings from the "INTEGRATED PERIPHERALS" section of the BIOS.

VCC NC   GND   VCC

IRRX   IRTX
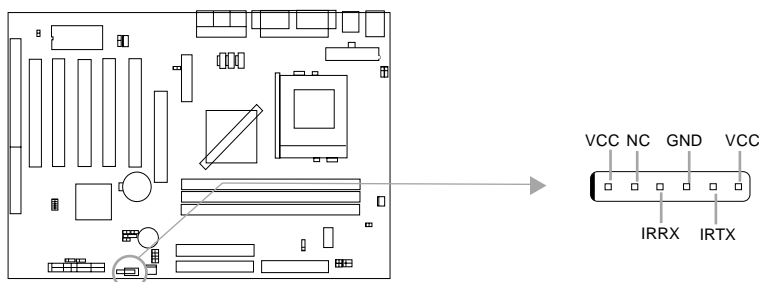
Expansion Slots & I/O Ports description

| 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.
DIMM1	First DIMM slot.
DIMM2	Second DIMM slot.
DIMM3	Third DIMM slot.
IDE 1	Primary IDE port.
IDE 2	Secondary IDE port.
AMR	AMR slot.
AGP	AGP 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 etc. Pin 1 for all jumpers are located on the side with a thick white line (Pin1→ [□ □ □]), refer to the mainboard's silkscreen . Jumpers with three pins will be shown as [■ ■ □] to represent pin1 & pin2 connected and [□ ■ ■] to represent pin2 & pin3 connected.

Processors Selection(JCPU2)

Advance 10 mainboard supports Intel® processors and Cyrix-III processors. If you use Intel® processors , set the jumper JCPU2 as opened. If your use Cyrix-III processors, set the jumper JCPU2 as closed.
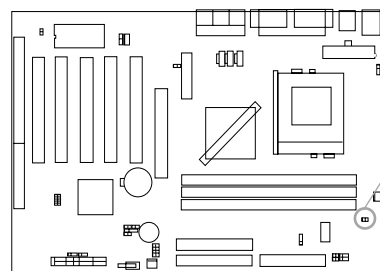
Supports Cyrix-III processors — [■ ■] JCPU2

Supports Intel processors — [□ □] JCPU2

FSB Frequency Selection(JFSB1, JFSB2)

The jumper labeled JFSB1 and JFSB2 are located on the mainboard providing users with FSB frequency selection. If it is set as Auto with JFSB1 and JFSB2 closed, the system detects the CPU front side bus automatically. If it is set as Jumper setting with JFSB1 and JFSB2 opened, the CPU front side bus can be set manually. For more FSB frequency selection, you could check it in AWARD BIOS CMOS Setup and set the proper frequency that you need.
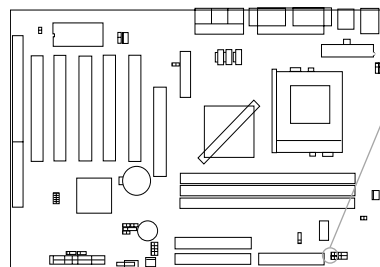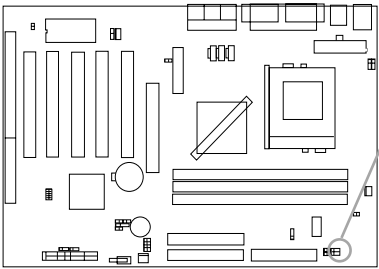
[□ □] JFSB1
[□ □] JFSB2

| FSB Selection	JFSB1	JFSB2
Auto	Close	Close
Jumper Set	Open	Open

Overclocking Jumper Setting (JCLK1, JCLK2)

Jumpers labeled JCLK1, JCLK2 are located on the mainboard providing users with CPU overclocking feature. The host bus speed can be set as 66/100/133MHz. Refer to the chart below for the location of these jumpers, and the table for information on how to set them.

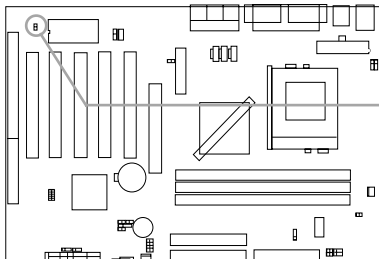1 [□ □ □] JCLK1

1 [□ □ □] JCLK2

CPU FSB	JCLK1	JCLK2
66MHz	Pin2&Pin3 closed	Pin2&Pin3 closed
100MHz	Pin1&Pin2 closed	Pin2&Pin3 closed
133MHz	Pin1&Pin2 closed	Pin1&Pin2 closed

If CPU FSB is set as 66MHz, the system only run at 66MHz front side bus even if a processor with 100MHz or higher. If CPU FSB is set as 100MHz, the system can run at 100MHz front side bus even if a processor with 66MHz FSB is installed. Setting up to 133MHz FSB is also supported. However, whether or not your 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 JFSB1 and JFSB2 as all opened, meanwhile respectively adjusting the bus clock higher and the bus ratio (Multiplier) lower in "SpeedEasy CPU Setup" in AWARD BIOS CMOS Setup. We do not guarantee the overclocking system to be stable.

BIOS-ProtectEasy Jumper (JAV)

The BIOS of the mainboard is contained inside the Flash ROM. 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 Enabled   □ □ JAV

Flash Write Disabled   ▮ JAV

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

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. 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 closed when changing the system hardware configuration, or the error message "Unkown Flash Type" will be displayed on the screen, and DMI information update will be fail.

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

Setting the jumper JAV as closed, the Pentium® III Processor Number can be not readable whatever disabling or enabling "Processor Number Feature" item from "BIOS Features Setup" in AWARD BIOS CMOS Setup.

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)
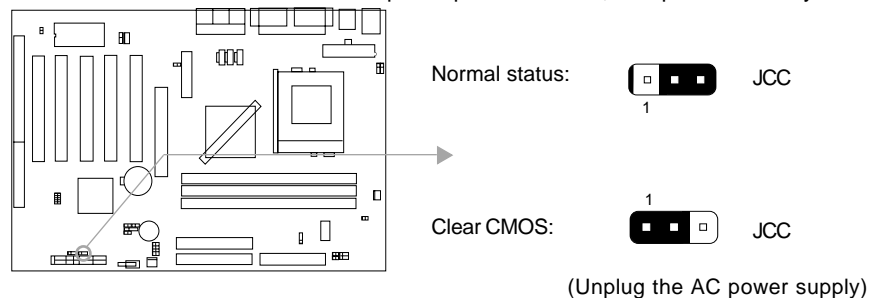
## Enable USB KeyDevice Wake-up Function (JUSB1, JUSB2)

The mainboard provides the advanced USB keyDevice wake-up function. The system can be waken up from its power saving status including ACPI S3 by activating USB keyDevice. When using this function, set JUSB1&JUSB2 with pin1 & pin2 closed. Otherwise, set JUSB1&JUSB2 with pin2 & pin3 closed for disabling.

Disable: JUSB1   JUSB2

Enable: JUSB1   JUSB2
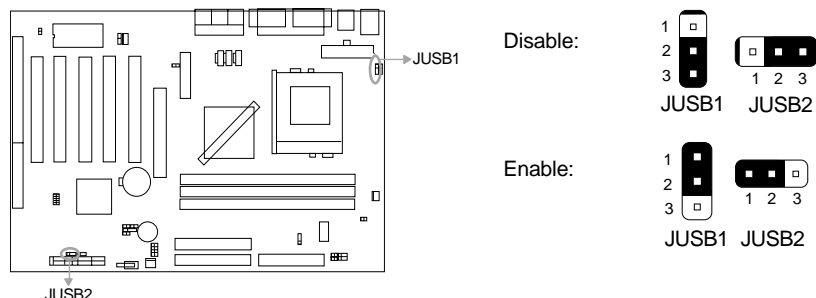
AC97&MC97 Selection (JMC1, JMC2, JAC1)

Advance 10 mainboard is compatible with AC97 and MC97specification. Refer to the table for information on how to set them.
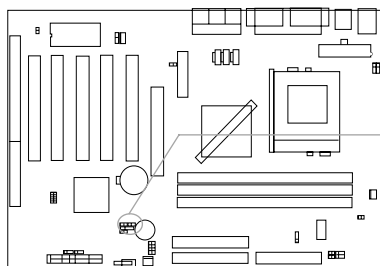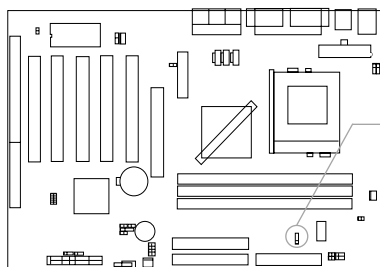
Jumper Function	JMC1	JMC2
AC97 Only	1-2	1-2
AC97+MC97	1-2, 3-4	Open

'1-2' represents pin1 &pin2 closed.

'2-3' represents pin2 & pin3 closed.

Suspend to RAM Switch (JSTR)

If you want to Disable Suspend to RAM function, set JSTR with pin1&pin2 closed, otherwise, set JSTR with pin2&pin3 closed for implementing this function.

Enable STR   JSTR

Disable STR   JSTR

Memory Configuration

This mainboard provides three 168 pin 3.3V PC133 un-buffered/buffered DIMM sockets to support a flexible memory size ranging from 8MB up to 1.5GB for SDRAM or from 8MB up to 768MB for EDO memory. PC66/PC100/PC133MHz SDRAM with SPD , 66MHz EDO DIMMs and later memory VCM (Virtual Channel Memory) SDRAM are supported, The following set of rules allows optimum configurations.

● Possible SDRAM DIMM memory sizes are 16MB, 32MB, 64MB, 128MB, 256MB, 512MB in each DIMM socket.

● Possible EDO DIMM memory sizes are 16MB, 32MB, 64MB, 128MB, 256MB in each DIMM socket.

● Processor with 66MHz FSB should be paired with PC66, PC100, PC133 SDRAM processor with 100MHz FSB should be paired with either PC100 or PC133 SDRAM, processor with 133MHz FSB should be paired only with PC133 SDRAM.

● supports Suspend to RAM.

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 close and disable the "Flash Write Protect" item in AWARD BIOS CMOS Setup first .

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 /?

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.
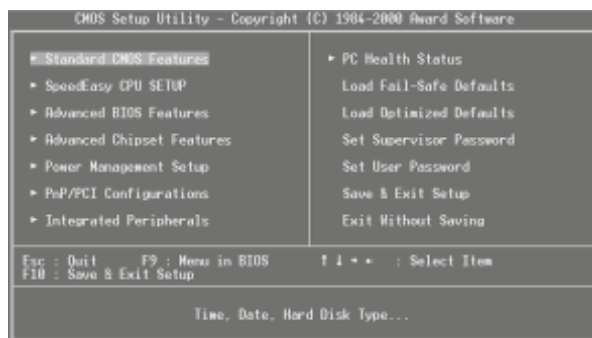

Figure-1 Main Menu

Load Fail-Safe Defaults
The Fail-Safe Defaults are secure and useful for system. It is recommended users load the Fail -Safe Defaults when the system is in trouble.

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.