



SETUP DELLA SCHEDA SPEEDEASY

Procedura di installazione:

1. Inserite il microprocessore Pentium®/Intel® Celeron™ come da istruzioni.
2. Modificate la configurazione del computer e ripristinate il sistema.
3. Premete il tasto e accendete il computer per entrare nel setup BIOS.
4. Entrate nel menu "SpeedEasy CPU* SETUP" per regolare la velocità del microprocessore. ¹

Nota: se non regolate la velocità del microprocessore, il sistema funzionerà con le regolazioni standard (Microprocessore da 200MHz con velocità di "host bus" da 100MHz e microprocessore da 133MHz con velocità di "host bus" da 66MHz).

5. Salvate e uscite dal Setup BIOS, e fate ripartire il computer.

*CPU= microprocessore



Menu del Setup del Microprocessore SpeedEasy

Selezionare <SpeedEasy CPU SETUP> dal menu principale ed entrare nel seguente sottomenu:

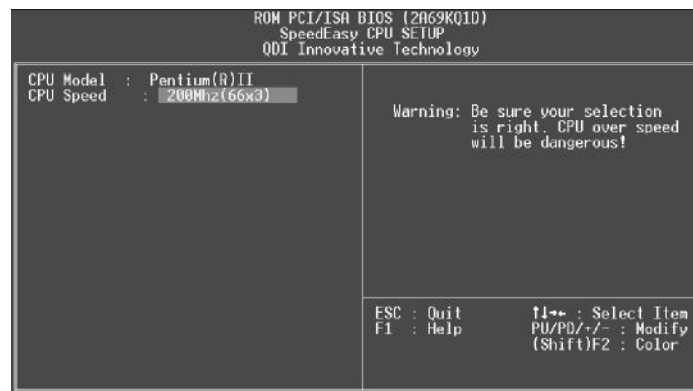


Figure -1 Menu del Setup del Microprocessore SpeedEasy

Il sistema BIOS Vi fornirà una serie di valori base per la selezione del microprocessore al posto della regolazione jumper (dell' accoppiamento). Potete selezionare manualmente la velocità del microprocessore sulla schermata "SpeedEasy CPU SETUP".



Avvertenza:

non dovete regolare la frequenza del microprocessore più alta di quella predisposta, altrimenti la casa produttrice non si farà carico di eventuali danni al microprocessore.



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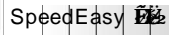
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100MHz İ CPU, İ 200MHz İ

66MHz İ CPU, İ 133MHz İ

5. İ İ BIOS İ





SpeedEasy ; İ Ü ¢ Ö Ä İ

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SpeedEasy

SpeedEasy



<SpeedEasy CPU SETUP>



⌂



¼ 1 SpeedEasy

BIOS



(jumper) ½ ⌂



SpeedEasy CPU SETUP"



¾ ⌂





Chapter 1

Introduction

Overview

The P6I440BX/B1S green motherboard utilizes the Intel®440BX AGPset and provides a highly integrated solution for fully compatible, high performance PC/ATX platform. It provides 66MHz and 100MHz system bus support for all Intel Pentium®II and Celeron™ processors. Both 66MHz/100MHz SDRAM with SPD and 66MHz EDO DIMMs are supported. It also provides advanced features such as wake-up on LAN, wake-up on internal/external modem and keyboard password power-on function. ManageEasy, our system management application is supplied to enable remote monitoring and configuration of the system. The green function is in compliance with the ACPI specification. With the everlasting innovations of QDI such as SpeedEasy, LogoEasy and SecurityEasy technologies, you get a powerful corporate system.

Key Features

Form factor

- ATX form factor of 305mm x 190mm.

Microprocessor

- Supports all Intel Pentium®II processors at 233/266/300/333MHz with 66MHz bus speed and 350/400/450MHz with 100MHz bus speed.
- Supports all Intel®Celeron™ processors at 266/300/333 MHz with 66MHz bus speed.
- Supports 66MHz and 100MHz host bus speed.
- CPU core frequency = Bus speed x2.5, x3, x3.5, x4, x4.5, x5, x5.5
- CPU core supply voltage adjustable from 1.3V to 3.5V through on- board switching voltage regulator with VID(Voltage ID).

Chipset

- Intel®440BX AGPset: 82443BX, 82371EB (PIIX4E)

System memory

- Provides three 168 pin 3.3V unbuffered DIMM sockets.
- Supports both 66MHz/100MHz SDRAMs with SPD and 66MHz EDO DIMMs.
- Minimum memory size is 8MB, maximum memory size is 768MB.
- 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.
- Integrated 16x32bit buffer for IDE PCI Burst Transfers.

On-board I/O

- Use Winbond W83977EF super 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 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.
- All I/O ports can be enabled/disabled in the BIOS setup.

Advanced features

- Provides Trend ChipAwayVirus® On Guard.
- Provides on-board PS/2 mouse and PS/2 keyboard ports.
- Two USB ports supported.
- Provides infrared interface.
- Supports Windows 95/98 software power-down.
- Supports external modem ring power-on.
- Supports wake-up on LAN and wake-up on internal modem.
- Supports auto fan off when the system enters suspend mode.
- On-board LM80 supports system monitoring (monitors system temperature, voltages, chassis intrusion and fan speed) (manufacturing option).
- On-board MAXIM1617 monitors the CPU temperature. (manufacturing option)
- Provides management application such as ManageEasy and LDCM(LANDesk® Client Manager) (manufacturing option).
- Supports keyboard password power-on function.
- Supports SecurityEasy function (manufacturing option)
- System status resumes after AC power failure.

**BIOS**

- Licensed advanced AWARD BIOS, supports flash ROM BIOS with 2MB 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.

Expansion slots

- 3 ISA slots and 4 PCI slots.
- 1 AGP Slot



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Chapter 2

Installation Instructions

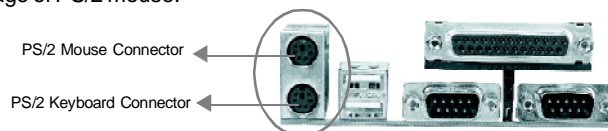
This section covers External Connectors, Jumper Settings and Memory Configuration. Refer to the motherboard layout chart for locations of all the jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pin assignments for your reference. The particular 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 motherboard and expansion cards might be seriously damaged.

External Connectors

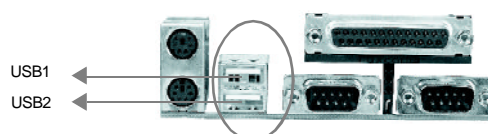
PS/2 Keyboard Connector, PS/2 Mouse Connector

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.



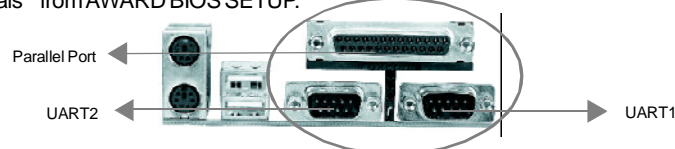
USB1, USB2

Two USB ports are available for connecting USB devices.



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

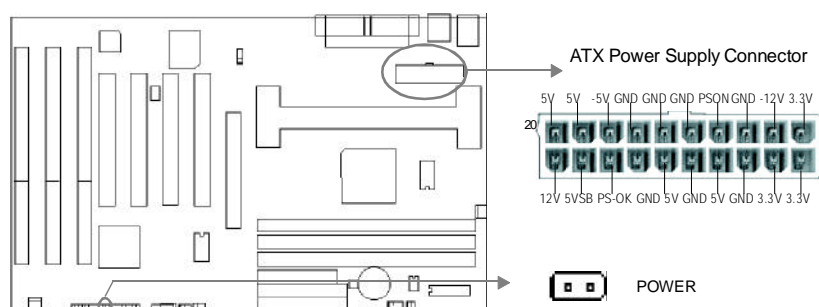
The parallel port connector can be connected to a parallel device such as a printer, while the serial port connectors can be connected to serial port devices such as a serial port mouse. You can enable/disable them and choose the IRQ or I/O address in "Integrated Peripherals" from AWARD BIOS SETUP.





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 button. When powering off the system, you needn't turn off the mechanical switch, just **Push once** the power button.



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.

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 three status. When no AC power supply is present, the LED is off. When the system is in soft power-down status, the LED glows dimly. When the system is powered up, the LED is on.

Key-Lock Connector (KEY_L)

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



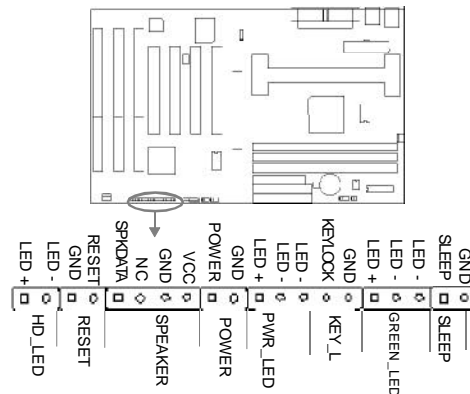
Green LED Connector (GREEN_LED)

The LED connected to this header shows the status of the system as described below:

LED Status	System Status
Off	No AC power supply.
On	The system is in power-up status.
Flashing at a frequency of about 1.5Hz	The system is in soft power-down status.
Flashing at a frequency of about 0.5Hz	The system is in Green Mode.
Flashing at a frequency of about 1/6Hz	The system is in Lock status.

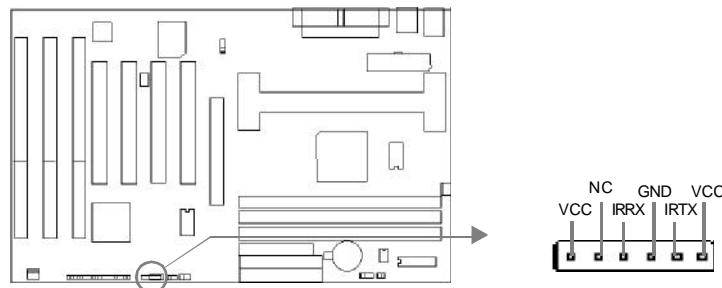
Hardware Green Connector (SLEEP)

If the SecurityEasy function is enabled, push once the switch connected to this header and the system will enter lock status. If the lock function is disabled, push once the switch, the system enters suspend mode.



Infrared Header (IrDA)

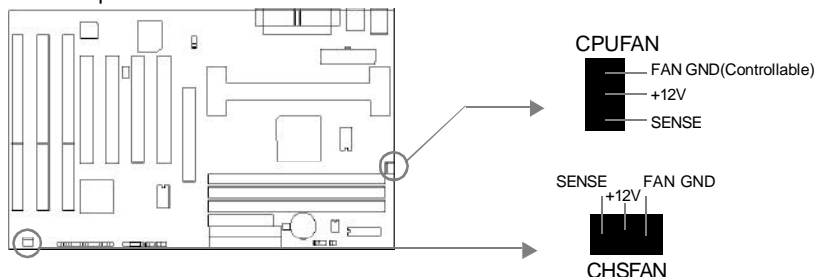
This connector supports wireless transmitting and receiving. If using this function, set 'Serial Port2 Mode' to IrDA or ASKIR and configure the settings from the 'INTEGRATED PERIPHERALS' section of the BIOS.





Fan Connector (CPUFAN, CHSFAN)

These two fans are controllable. They will be automatically turned off after the system enters suspend mode. You also can choose not to turn the CPUFAN off by setting "CPUFAN Off In Suspend" as Disabled in the "POWER MANAGEMENT SETUP" section of the BIOS.



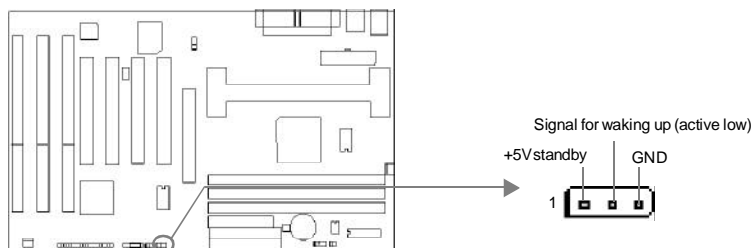
Wake-Up On LAN (WOL)

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 "Wake Up On 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.



Wake-Up On Internal Modem (WOM)

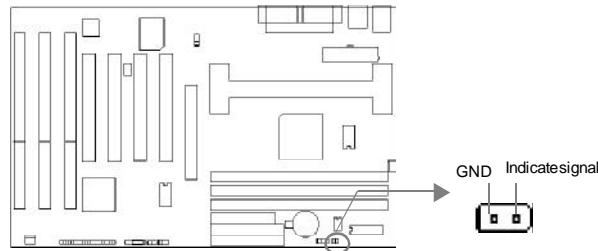
Through the Wake-Up On Internal Modem function, the system which is in the power-off status can be powered on by a ring signal received from the internal modem. If this function is to be used, be sure an internal modem card which supports the function is used. Then connect this header to the relevant connector on the modem card, set "Resume by 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.





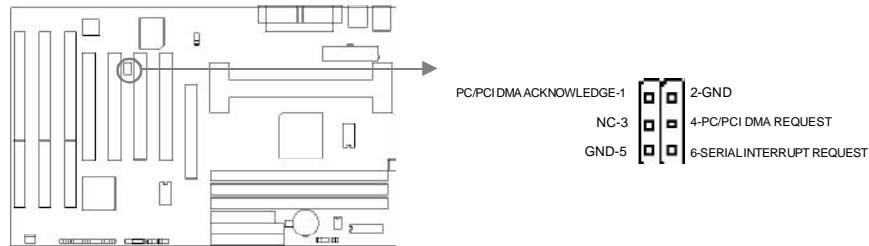
Chassis Security Switch (CHSSEC)

If the switch is off, this indicates the chassis is closed. Otherwise, it indicates the chassis is opened.



Sound Connector (PC-PCI)

This connector is for the usage of PCI sound card.






Expansion Slots & I/O Ports description

Slot/ Port	Description
ISA 1	First ISA slot.
ISA 2	Second ISA slot.
ISA 3	Third ISA slot.
PCI1	First PCI slot.
PCI2	Second PCI slot.
PCI3	Third PCI slot.
PCI4	Fourth PCI slot.
IDE1	Primary IDE port.
IDE2	Secondary IDE port.
FLOPPY	Floppy Drive Port.
AGP	Accelerated Graphics Port

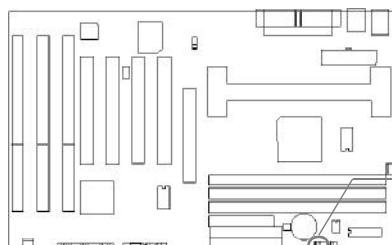


Jumper Settings

There are some jumpers on the motherboard, they represent, clear CMOS jumper JCC, enable keyboard password power-on function jumper JP2. Pin 1 for all jumpers are located on the side with a thick white line (Pin1→ ), referring to the motherboard'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.

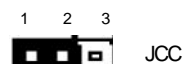


Normal status:



JCC

Clear CMOS:

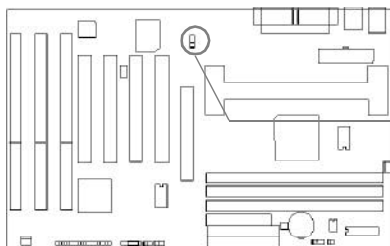


JCC

(Unplug the AC power supply)

Enable keyboard password power-on function (JP2)

The motherboard provides the advanced keyboard password power-on function. When wanting to use this function, set JP2 with pin1 & pin2 closed. Otherwise, set JP2 with pin2 & pin3 shortened for disabling this function.



Disable:



3
2
1

Enable:



3
2
1

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. The only way to power up the system is to enter the correct password. If you forget the password, clear CMOS and set it again. Refer to BIOS description on page 44 for detailed information.



Note: 1.If wanting to use 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, or you can't power up the system using the keyboard.

2.If you set JP2 with pin2&pin3 closed, set "POWER ON Function" to BUTTON ONLY, don't set it to Password, or this will prevent you from powering up your system.

3. If you encounter problems above, clear CMOS and set the jumper and BIOS option properly again.

Memory Configuration

This motherboard provides three 168 pin 3.3V un-buffered DIMM sockets to support a flexible memory size ranging from 8MB/384MB for SDRAM or from 8MB/768MB for EDO memory. Both 66MHz/100MHz SDRAM with SPD and 66MHz EDO DIMMs are supported. The following set of rules allows for optimum configurations.

Rules for populating a 440BX memory array:

- Processors with 100MHz front-side bus should be paired only with 100MHz SDRAM. Processors with 66MHz front-side bus can be paired with either 66MHz or 100MHz SDRAM.
- Using the serial presence detect (SPD) data structure, programmed into an E²PROM on the DIMM, the BIOS can determine the SDRAM's size and speed.
- The DRAM Timing register, which provides the DRAM speed grade control for the entire memory array, must be programmed to use the timing of the slowest DRAMs installed.
- Possible SDRAM DIMM memory sizes are 8MB, 16MB, 32MB, 64MB, 128MB in each DIMM socket.
- Possible EDO DIMM memory sizes are 8MB, 16MB, 32MB, 64MB, 128MB, 256MB in each DIMM socket.



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Chapter 3

SecurityEasy

There are two ways to prevent unauthorized entry or use of the system:
System Password and SecurityEasy.

System Password

Set system password in the "PASSWORD SETTING" section of the BIOS, and set the "Password Setting" to **System** in the "BIOS FEATURES SETUP" section. You will be prompted for the password every time the system boots or any time you try to enter BIOS Setup. If the "Password Setting" is set as **Setup**, you will be prompted for the password only when entering BIOS Setup.

SecurityEasy

The P6I440BX/ B1S provides additional SecurityEasy function to protect the system from unauthorized entry or use. There are two ways to enter the lock status.

- Push once the button connected to the two-pin header SLEEP after enabling the lock function in BIOS Setup. If the lock function is disabled, this button is used as SLEEP button.
- 'Keyboard Inactive Timer' is counted to the preset value-from 1 minute to 1 hour set in the BIOS Setup.

In the lock status, the power switch and reset buttons are unresponsive, PS/2 mouse is locked, and the keyboard is locked except for the SecurityEasy password entering. You can preset the Video as blank in the lock status. The only way to exit the lock status is to enter SecurityEasy password using the keyboard. This means if you set the lock function as enabled, you must also set the SecurityEasy password.

Please read the notes below thoroughly.

Note 1: The green function and the lock function can not be enabled at the same time.

Note 2: If lock function is enabled, the SecurityEasy password should be set, no more than six characters.

Note 3: When entering the SecurityEasy password to exit the lock status, use the <Enter> key located on the alphabetic pad and not the <Enter> key located on the numericpad.

Note 4: If there is no SLEEP button on your case, your system still can enter lock status through our lock application. Refer to Appendix A (item 4) for details.

Note 5: See also chapter 4 'BIOS Description'.



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Chapter 4

BIOS Description

Utility Support:

FLASH.EXE

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

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

When you are encountering problems, for example, you find your system doesn't support the new CPU which is released after our current motherboard, you may therefore update the BIOS.

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 FLASH.EXE from the directory \Utility on the QDI Motherboard 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 motherboard.
4. Uncompress the file download, copy the BIOS file (xx.bin) onto the bootable diskette, and write down the checksum of this BIOS which is included in readme file.
5. Reboot the system from the bootable diskette which you have created.
6. Then run the FLASH utility at the A:\ prompt. During the process, the system will prompt: 'Do you want to save the BIOS(Y/N)'. If you type 'Y', the system will prompt for the BIOS name. The system will also display the checksum which should be exactly the same as the checksum you copied from the readme file. Don't turn off power or reset the system until the BIOS upgrade has been completed.

Concerning how to run the FLASH utility, please refer to the following descriptions:

Usage: FLASH [BIOSfile] [/c[<command...>]][/n]

FLASH [BIOSfile] [/g]

/c: Flashing memory will clear previous settings. Default allows settings to remain.

<command> function definition:

c: clear CMOS;

p: clear PnP;

d: clear DMI.



/n: programs BIOS without prompting. If this option is chosen:

Be sure your new BIOS is compatible with your MB. If not, the system will be damaged.

/g: Retrieves BIOS file from BIOS ROM.

Examples:

A:\FLASH.EXE BIOSfile.bin

A:\FLASH.EXE BIOSfile.bin /cdpc/n

A:\FLASH.EXE BIOSfile.bin /g

Note: FLASH utility runs incorrectly at Windows DOS prompt.



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 key or simultaneously press the <Ctrl> + <Alt> + <Esc> keys, to enter the AWARD BIOS CMOS Setup Utility.

Press to enter SETUP

Once you have entered, the Main Menu (Figure 1) appears on the screen. The main menu allows you to select from twelve 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.

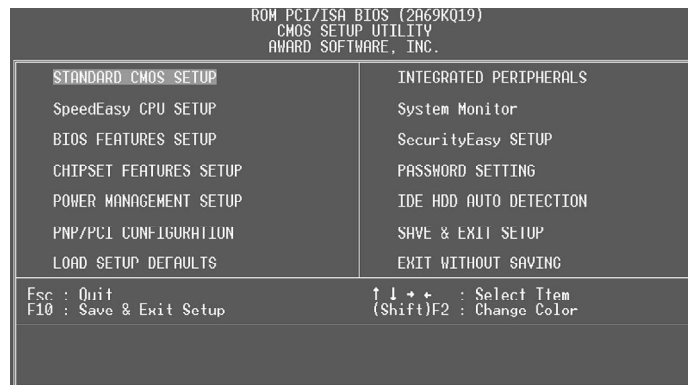


Figure-1 Main Menu

Note:The 'System Monitor' item will not be displayed if there is no LDCM supporting chips on the motherboard.

Load Setup Defaults

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

Standard CMOS Setup

The basic CMOS settings included in 'Standard CMOS Setup' 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 you want in each item.