Schnell-Installation durch SpeedEasy

Vorgehensweise der Installation:

1. Legen sie die Pentium®II/ Pentium®III/ Intel® Celeron™ im Slot 1 mit Hilfe der mitgelieferten halterung.

2. Vervollständigen Sie das System mit den weiteren erforderlichen Coputerkomponenten

3. Drücken Sie die Taste < Entf > und schalten Sie das System an um das BIOS-setup zu gelangen.

4. Steigen Sie in das Menü "SpeedEasy CPU SETUP" ein, um die Geschwindigkeit einzustellen.

ACHTUNG:Falls Sie die Taktfrequenz der CPU nicht setzen, arbeitet Ihr System mit den Standardwerten für die CPU. (200MHz für den CPU mit 100MHz Host Bus Speed, 133MHz für den CPU mit 66MHz Host Bus Speed).

5. Speichern Sie die Einstellungen und verlassen Sie das BIOS, um die auvor eingestellte Taktfrequenz zu aktivieren.

SpeedEasy CPU Installationsmenü

Wählen Sie < SpeedEasy CPU SETUP> aus dem Hauptmenü und öffnen Sie das untergeordnete Menü

Abb. 1 SpeedEasy CPU Installationsmenü

Das BIOS stellt Ihnen eine Reihe von Grundeinstellungen für Ihren CPU zur Verfügung, anstelle von "jumper setting". Sie können manuell die Geschwindigkeit des CPU innerhalb des "SpeedEasy CPU SETUP" einstellen

warnung:

Bitte Setzen Sie die Taktfrequenz dor CPU nicht höber als die tats‰chliche freigegebene Taktfrequenz, ansonsten Kann QDI für rechtliche Anspruche nicht herangezogen werden.

SpeedEasy Instalación rápida

Procedimiento:

1. Introduzca correctamente el Pentium®II/ Pentium® III/ Intel® Celeron™

2. Finalize el proceso de ensamblaje de su equipo.

3. Presione la tecla <Supr> y encienda el sistema, para entrar en BIOS.

4. Entre al menu "SpeedEasy CPU SETUP" para establecer la velocidad de su CPU.

Nota: Si no establece la velocidad del CPU, su sistema funcionará a la velocidad minima por defecto (200MHz para CPU con velocidad de bus de 100MHz, 133MHz para CPU con velocidad de bus de 66MHz)

5. Salve y salga de BIOS, luego su sistema arrancará a la velocidad por Ud. seleccionada.

Menu del SpeedEasy CPU

Seleccione el item <SpeedEasy CPU SETUP> desde el menu principal, y entre en el submenu:

Figura-1 Menu del CPU SpeedEasy

BIOS le proporcionará unos valores básicos para la elección de su CPU, en vez de tener que configurar jumpers. Ud. puede seleccionar manulmente la velocidad de CPU en el menu "SpeedEasy CPU SETUP".

Aviso

No es recommendable selecclonar una frecuencia de trabajo super • or a la cual esta dise¤ada su CPU. De otra manera, no seremos responsables de los da¤os que esto pudiera ocasionar.

Facilité de vitesse Initialisation

Procédure:

1. Ins, rez le Pentium® II/ Pentium® III/ Intel® Celeron™ correctement.

2. Connectez les autres configurations et restaurez le systšme.

3. Appuyez sur la touche <Del> et mettez le systšme sous tension pour entrer dans l' initialisation BIOS.

4. Entrez le menu "SpeedEasy CPU SETUP" (=initialisation de la facilit, de vitesse dans l' unit, centrale) pour d, terminer la vitesse de l' unite centrale.

Note: Si vous ne déterminez pas la vitesse de votre unité centrale, votre système fonctionnera par défaut (200MHz pour le CPU avec vitesse bus d' hõte de 100MHz, 133MHz pour le CPU avec vitesse bus d' hõte de 66MHz).

5. Sauvegardez et sortez de la position BIOS. Le système pourra alors démarrer avec le succès auquel vous vous attendez.

Menu d' initialisation de "SpeedEasy" dans l' unité centrale.

Sèlectionnez la rubrique <SpeedEasy CPU SETUP> dans le menu principal et entrez le sous-menu:

Figure-1 Menu d' nitialisation de "SpeedEasy" dansl' unité centrale

BIOS fournira un jeu de valeurs de base pour votre s,lection de CPU au lieu de positions cavaliers. Vous pouvez s,lectionner manuellement la vitesse de CPU dans l'affichage du menu "SpeedEasy CPU SETUP ".

Avertissement:

Ne vous laissez pas aller à installer une fr, uence à l' unité centrale sup, ieure à sa fr, uence de travail. Sinon nous d, linerons toutes responsabilit, s en ce qui concerne les d, gƒ s qui en r, sulteraient.

SETUP DELLA SCHEDA SPEEDEASY

Procedura di installazione:

1. Inserite il microprocessore Pentium® II/ Pentium® III/ Intel® Celeron™ come da istruzioni.

2. Modificate la configurazione del computer e ripristinate il sistema.

3. Premete il tasto <Del> e accendete il computer per entrare nel setup BIOS.

4. Entrate nel menu "SpeedEasy CPU* SETUP" per regolare la velocit..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

I1 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 pi– alta di quella predisposa, altrimenti la casa produttrice non si farà carico di eventuali danni al micorprocessore.

Chapter 1
Introduction

Overview

The Advance 5/133E green mainboard utilizes the Apollo Pro 133 chipset and provides a highly integrated solution for fully compatible, high performance and cost-effective PC/ATX platform. It provides 66/100/133MHz system bus support for all Intel Pentium®II, Pentium® III(including Coppermine CPU) and Celeron™ Slot 1 processors. Both PC66/PC100/PC133MHz 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, the green function is in compliance with ACPI specification.The A5/133E mainboard implements the QDI innovations of SpeedEasy, LogoEasy, ManageEasy, BIOS-Protect Easy and Recovery Easy to improve the system security, safety and manageability.

Key Features

Form factor

- ATX form factor of 305mm x 193mm.

Microprocessor

- Supports all Intel® Pentium III processors from 450MHz to 733MHz and future with 100/133MHz host bus speed.
- Supports all Intel Pentium®II processors at 233/266/300/333MHz with 66MHz host bus speed and 350/400/450MHz with 100MHz host bus speed.
- Supports Intel®Celeron™ Slot 1 processors at 266/300/333/366/400/433MHz with 66MHz host bus speed.
- Supports 66/100/133MHz host bus speed, can overclock to 155MHz
- CPU core frequency = Bus speed x2, x2.5, x3, x3.5, x4, x4.5, x5, x5.5, x6, x6.5, x7, x7.5, x8.
- CPU core supply voltage adjustable from 1.3V to 3.5V through on- board switching voltage regulator with VID(Voltage ID).

Chipset

- Apollo Pro 133 chipset: VT82C693A system controller
  VT82C596B PCI to ISA bridge

System memory

- Provides three 168 pin 3.3V unbuffered 66/100/133MHz DIMM sockets.
- Supports both 66/100/133MHz 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/66" Synchronous DMA mode transferring up to 66 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.

AGP SLOT

- Supports an 2X AGP card with 133MHz

Advanced features

- PCI 2.2 Specification compliant.
- Provides Trend ChipAwayVirus®On Guard and PC-Cillin software with killing virus function.
- Provides two USB ports, on-board PS/2 mouse and PS/2 keyboard ports.
- Provides infrared interface.
- Support PC99 color- coding connector Specification
- Supports Windows 95/98 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.

- 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.
- Protects the system BIOS from being attacked by severe virus such as CIH, by enabling "Flash Write Protect" in CMOS setup.

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.

Expansion slots

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

Introduction to New 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.

Refer to page 25 for detailed information on jumper setting, and page 37 for related BIOS setting.

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 Superb 1 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.

A5/133E mainboard based on VIA Apollo Pro 133(693A) chipset which is the first chipset to adopt the PC-133 technology.

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.

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 (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.

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 (PWR_LED)

The power LED has two status. When the system is in power-off status, the LED is off glows dimly. 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 three status. When the system is in power-off status, the LED is off. When the system is powered up, the LED is on. When the system enters suspend mode, the LED will flash.

Hardware Green Connector (SLEEP)

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

Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. If using this function, set "Serial Port 2 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 "CPU FAN In Suspend" as On 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 " Modem Ring Resume" 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.

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 to the customer that the chassis has been opened. You can either get this information from "System Monitor" of the BIOS (optional) or QDI ManageEasy software.

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

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

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→), 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: 1 2 3 JCC

Clear CMOS: 1 2 3 JCC

(Unplug the AC power supply)

Overclocking Jumper Setting (JFSB1, JFSB2, JCLK)

Jumpers labeled JFSB1, JFSB2 and JCLK 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.

JFSB1
JFSB2
JCLK

JFSB1	JFSB2	JCLK	CPU FSB
CLOSE	CLOSE	1-2	66/100MHz Auto
OPEN	CLOSE	1-2	100MHz FSB
NA	OPEN	2-3	133MHz FSB

If CPU FSB is set as default setting 66/100MHz AUTO, the system detects the CPU front side bus (66/100MHz) automatically. 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 CPU FSB as 100/133MHz, meanwhile adjusting the bus ratio (Multiplier) lower in "SpeedEasy CPU Setup" in AWARD BIOS CMOS Setup. We do not guarantee the overclocking system to be stable.

Enable keyboard password power-on function (JKB)

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

In order to implement this function, it is necessory to set the keyboard power-on password in the "INTEGRATED PERIPHERALS" section of the BIOS. For detailed information, see the explantions of " INTERGATED PERIPHERALS" of BIOS Part.

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 devices connected to the keyboard port, or you can't power up the system using the keyboard.
2.If you set JKB with pin2 & pin3 closed, set "POWER ON Function" to Button only or Password/Button, don't set it to Password, or this will prevent you from powering up your system.
3. If you encounter the above problems, clear CMOS and reset the jumper and BIOS option.

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.

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 opened 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.

Refer to page 17 for the two choices to implement BIOS ProtectEasy.

Memory Configuration

This mainboard provides three 168 pin 3.3V un-buffered DIMM sockets to support a flexible memory size ranging from 8MB up to 512MB for SDRAM or from 8MB up to 768MB for EDO memory. Both PC66/PC100/PC133MHz SDRAM with SPD and 66MHz EDO DIMMs are supported. The following set of rules allows optimum configurations.

- Using the serial presence detect (SPD) data structure, programmed into an E^2PROM 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 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.