

APPENDIX G
: USER'S MANUAL

A-300 user's manual

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CHAPTER1

System Description

Sections include :

- Getting Started
- Software operation and Setup

1. Getting Started

This chapter provides the essentials needed to get your A-300 computer up and running quickly. But It can be changeable without prior notice for the reason of upgrade, replacement, any other unpredictable reasons.

1) Unpacking

The A-300 box contains the following items

<A-300 >, <AC/DC Adapter and AC Power Cord>, <Manual CD(User's Guide)>, <Prop>, <Y cable>

Option Units

- One PCMCIA Card Bus, Type II Slot.
- Two RS-232 Serial Ports. One Parallel port, bi-directional centronics compatible.

2) Connecting the AC Adapter

Use the following steps to connect AC power to this product.

- (1) Unwrap the AC/DC Adapter and AC power cord.

(2) Connect the AC/DC Adapter to the AC power cord.

(3) Connect the DC power plug into the Power connector on the back of the A-300.

(4) Insert the plug end of the power cord into a grounded AC wall outlet.

3) Turning on the A-300

The power switch is located to the right of the front. Push power button to turn the A-300 on. After a few seconds, the screen is displayed.

When you turn the power on, the A-300 automatically performs a POST(Power On Self Test). When the test completes successfully, the A-300 loads the operation system from the HDD, Compact Flash, etc.

4) Turning off the A-300

Use the following steps to turn off the A-300.

Warning Failure to perform the following steps may result in lost data

1. Save all data and Exit your current application.
2. Click the start button located in the lower left corner of the windows screen, and then click on shut down.
3. If you forget to save changes to documents, windows prompts you to save changes before shutting down.
4. If you are sure you want to shut down the computer, the A-300 turns off automatically.

You can manually turn off the computer in MS-DOS mode or Windows 3.1 by pressing the power switch. But, you need to shut down Windows 98 SE before you turn off or restart your computer.

Warning

To avoid damaging files in Windows 98 SE, always shut down Windows before you turn off the A-300. If you want to turn on the power again, wait at least 10 seconds after power off.

5) Indicators and connectors

The following section contains figures and corresponding tables detailing the connectors and indicators on each side of A-300.

2. Software operation and Setup

The following software and drivers can be pre-installed and are provided on your A-300. But, This Operation System Windows 98 SE or Windows XP is optional.

- Microsoft Windows 98 SE or Microsoft Windows XP
- VIA VGA Driver
- LAN Driver
- Audio Driver
- Chipset Patch

The following sections will explain how you can optimize this software for Windows 98SE and Windiws XP. Please refer to the enclosed Windows 98 SE or Windows XP manual for more detailed information on use and optimization of Windows 98 SE or Windows XP.

1) Windows 98 SE

The following describes how to install drivers for VIA chipset, AC97 audio, VGA and Realtek 8139C fast ethernet controller, and the basic system requirements for driver installation. To install the drivers correctly, you must install VIA chipset driver prior to other drivers.

2) Installing VIA VGA Driver

To install the VGA Driver in Windows 98 SE, perform the following. Double click the left button of mouse on the My Computer and Search the setup file to install VGA Driver.

(1) Click the Setup file.

(2) Click the next button.

(3) Click the next.

Then, Program executes "file copy" automatically. Please wait until copy is done.

(4) Click the Finish button.

Now you are ready to use VGA driver. After restarting system, you need to change display properties to use the higher resolution of display.

(1) Double Click the My Computer icon, Click the control panel icon and Display icon.

(2) Click the Settings menu.

(3) Adjust the resolution of display.

(4) Click the Apply button and Click the OK button.

(5) Click the Yes button.

3) Installing LAN Driver

To install the LAN Driver in Windows 98 SE, perform the following. Click the right button of mouse on the My Computer icon and click the properties.

(1) Select Device Manager and Select PCI Ethernet Controller and click the Properties.

(2) Click Reinstall Drivers.

(3) Click the Next button.

(4) Click the Next button.

(5) Click the Specify a location item and click the Browse button..

(6) Select the correct driver file and click OK button.

(7) Click the Next button.

(8) Click the Next button.

(9) Click the Finish.

(10) Click the Finish.

If it is finished correctly, system displays a icon on the Desktop.

(1) Click the right button of mouse on the Network Neighborhood icon and click the properties.

(2) Select Client for Microsoft Network on the BOX menu and click the Properties button.

(3) Check Log on to Windows NT domain and write your domain on the box and click the OK button.

(4) Check the TCP/IP menu and click the Properties.

(5) Select IP address and write the correct IP address and Subset Mask.

(6) Select the DNS configuration and write correct DNS configuration.

(7) Select the Gateway and write correct Gateway and click OK button.

(8) Select the Identification and write correct information.

(9) Select the Configuration and Check the Primary Network Logon and click OK.

After restarting your system, Windows 98 SE request user name, password. If you write correct information, system log on the Network. But you done access the internet. You need additionally to assign some information for internet.

(1) Click the right button on the mouse and click the Properties.

(2) Click the Connections menu.

(3) Click the Setup menu.

(4) Check the third menu, LAN, and click the Next button.

(5) Check the second menu, LAN, and click the Next button.

(6) Uncheck all items and click the Next button.

(7) If you wish to assign e-mail, check Yes. And click the Next button.

(8) Click the Finish button.

Now, you will be able to contact to internet.

4) Installing VIA Audio Driver

To install the Audio Driver in Windows 98 SE, perform the following; Double click the left button of mouse on the My Computer and Search the setup file to install Audio Driver.

(1) Click the Next button.

(2) Click the Next button.

(3) Click the Finish button.

Now you got the sound. After restarting the system, system shows speaker the right corner like below picture.

Notice

1) Turn off system power before removing the AC adapter.

2) Use only the quality & safety-approved AC/DC adapter.

3) Disconnect the power plug from the AC outlet when the product is not in use

for a long period of time.

4) Done expose this product to extremely hot, cold or humid environments during operation

5) Done expose this product to area susceptible to dust, moisture or water.

6) Done expose this product to direct sunlight

CHAPTER 2

BOARD INFORMATION

This chapter provides background information for A-300 Board

Sections include :

- Board specifications

1. SPECIFICATIONS

Standard SBC Functions

CPU : Via Cyrix CIII 800MHz

Chipset : VIA PLE VT 8606 , VIA VT 82C686B

Memory : Onboard one SODIMM socket up to 256MB

Enhanced IDE :

Supports up to two IDE devices

Supports Ultra DMA/33 mode with data transfer rate 33MB/sec.

KB/Mouse : Supports PS2 Keyboard/Mouse

IDE Port : HDD, CF Card

USB : Two USB connector

Battery : Lithium Battery for data retention of up to 10 years

CRT Interface

Display Memory : supports up to 32MB Linear Frame buffer

Display Type : CRT display

Resolution : Up to 1600 X 1200, 32bit high color

Ethernet Interface

Chipset : One Ethernet RTL8139C (10/100M)

Ethernet Interface : Onboard 10/100 Base-T RJ-45 connector

Audio Interface

AD1819B AC97 codec chip.

1 Mono MIC Input, 1 Stereo LINE level output.

SSD Interface

One CF Card connector

CHAPTER 3

BOARD INSTALLATION

This chapter explains set up procedures for A-300 Board hardware, including instructions on setting jumpers and connecting peripherals, switches and indicators. Be sure to read all safety precautions before you begin the installation procedure.

1. SETTING JUMPER

You configure your board to match the needs of your application by setting jumpers.

A jumper is the simplest kind of electric switch.

It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them.

To "close" a jumper you connect the pins with the clip.

To "open" a jumper you disconnect the pins with the clip.

To "open" a jumper you remove the clip.

Some-times a jumper will have three pins, labeled 1, 2 and 3.

In this case you would connect either pins 1 and 2 or 2 and 3.

2. SAFETY PRECAUTIONS

Warning

Always completely disconnect the power cord from your chassis whenever you are working on it. Do not make connections while the power is on because sensitive electronic components can be damaged by the sudden rush of power. Only experienced electronics personnel should open the PC chassis.

Caution

Always ground yourself to remove any static charge before touching the CPU board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static – dissipative surface or in a static - shielded bag when they are not in the chassis.

CHAPTER 4

BIOS Setup

This chapter describes how to configure the BIOS for the Board.

1. Starting Setup

This document described Award BIOS Setup utility built into the ROM BIOS. The Setup program allows users to modify the basic system configuration. This information is stored in battery-backed RAM so that it retains the Setup information when the power is turned off.

During POST, when the message below appears on the screen, press key to enter Setup.

Hit DEL if you want to run SETUP

2. Setup Keys

These keys helps you navigate in Setup;

Key	Description
Up Arrow	Move to the previous item
Down Arrow	Move to the next item
Left Arrow	Move to the item in the left hand
Right Arrow	Move to the item in the right hand
Enter	Select the item
Esc	Jumps to the Exit menu or returns to the main menu from a submenu
+, Page Down	Increase the numeric value or make changes
-, Page Up	Decrease the numeric value or make changes
F1	General help, only for Status Page Setup Menu

F5	Restore the previous CMOS value from CMOS
F6	Load the fail-safe defaults from BIOS default table
F7	Load the optimized defaults
F10	Save all the CMOS changes and exit

After entering the Setup utility, the first screen you see is the Main Menu. The Main Menu allows you to select from several setup functions and two exit choices. Use the arrow keys to select among the items and press to accept and enter the sub menu.

3. Main Menu

Standard CMOS Features

This setup page includes all the items in a standard compatible BIOS.

Advanced BIOS Features

This setup page includes all the items of BIOS special enhanced features.

Advanced Chipset Features

This setup page includes all the items of chipset special features.

Integrated Peripherals

This section page includes all the items of IDE hard drive and Programmed Input/Output features.

Power Management Setup

This setup page includes all the items of power management features.

PnP/PCI Configurations

This setup page includes IRQ Setting by user define or default.

PC Health Status

This setup page is the System auto detect Temperature, voltage, fan speed.

Load Fail-Safe Defaults

Use this menu to load the BIOS default values for the minimal/stable performance of your PC.

Load Optimized Defaults

Use this menu to load the default factory settings for BIOS for optimal system performance.

Supervisor Password

Use this menu to set Supervisor Password.

User Password

Use this menu to set User Password.

Save & Exit Setup

Save changes to CMOS and exit setup.

Exit Without Saving

Abandon all changes and exit setup.

1) Standard CMOS Setup

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the or keys to select the value you want in each item.

Date

This allows you to set the system to the date that you want (usually the current date). The format is day, month, date, year.

Time

This allows you to set the system time that you want (usually the current time). The time format is hour, minute, second.

IDE Primary Master/Primary Slave/Secondary Master/Secondary Slave
Press +/PgUp or -/PgDn to select the hard disk drive type. The specification of hard disk drive will show up on the right hand according to your selection.

Video

The item sets the type of video adapter used for the primary monitor of the system . Available options: EGA/VGA , CGA 40, CGA 80 and Mono.

Halt On

The item determines whether the system will stop if an error is detected at boot. Available options are:

All Errors The system stops when any error is detected.

Menu	Description
All Errors	The system stops when any error is detected.
No Errors	The system doesn't stop for any detected error.
All, But Keyboard	The system doesn't stop for a keyboard error.
All, But Diskette	The system doesn't stop for a disk error.
All, But Disk/Key	The system doesn't stop for either a disk or a keyboard error.

2) Advanced BIOS Features

Virus Warning

This option allows you to choose the VIRUS Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempts to write data into this area, BIOS will show a warning message on screen and alarm beep.

Menu Description

Menu	Description
Disabled (default)	No warning message appears when anything attempts to access the boot sector or hard disk partition table.
Enabled	Activates automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector of hard disk partition table.

CPU Internal Cache

Cache memory is additional memory that is much faster than conventional DRAM (system memory). When the CPU requests data, the system transfers requested data from main DRAM into cache memory, for even faster access by the CPU. The settings enable/disable the internal cache (also known as L1 or level 1 cache).

External Cache

These fields allow you to Enable or Disable the CPU level 2/secondary cache.

CPU L2 Cache ECC Checking

This allows you to enable or disable the ECC (Error-Correcting Code) feature for error detection and correction when data passes through L2 cache memory.

Quick Power On Self Test

This category speeds up Power on Self-Test(POST) after you power up the computer. If it is set to Enable, BIOS will shorten or skip some check items during POST.

First/Second/Third Boot Device

The items allow you to set the sequence of boot devices where BIOS attempts to load the disk operating system. The settings are;

Menu	Description
Floppy	The system will boot from floppy drive.
LS120	The system will boot from LS-120 drive.
HDD-0	The system will boot from the first HDD.
SCSI	The system will boot from the SCSI.

Menu	Description
CDROM	The system will boot from the CD-ROM.
HDD-1	The system will boot from the second HDD.
HDD-2	The system will boot from the third HDD.
HDD-3	HDD-3 The system will boot from the fourth HDD.
ZIP	The system will boot from ATAPI ZIP drive.
LAN	The system will boot from the Network drive.
Disabled	Disable this sequence.

Boot Other Device

This allows the system to try to boot from other device if the system fails to boot from the 1st/2nd/3rd boot device.

Swap Floppy Drive

If the system has two floppy drives, you can swap the logical drive name assignments.

Boot Up Floppy Seek

This setting causes the BIOS to search for floppy disk drives at boot time. When enabled, the BIOS will activate the floppy disk drives during boot process: the drive activity light will come on and the head will move back and forth once.

Boot Up NumLock Status

This item is to set the Num Lock status when the system is powered on. Setting to On will turn on the Num Lock key when the system is powered on. Setting to Off will allow end users to use the arrow keys on the numeric keypad.

Gate A20 Option

This item is to set the Gate A20 status. A20 refers to the first 64KB of extended memory. When the default value Fast is selected, the Gate A20 is controlled by Port92 or chipset specific method resulting in faster system performance. When Normal is selected, A20 is controlled by a keyboard controller or chipset hardware.

Typematic Rate Setting

This item is used to enable or disable the typematic rate setting including Typematic Rate & Typematic Delay.

Security Option

This specifies the type of BIOS password protection that is implemented. Setting options are described below;

Menu	Description
Setup	The password prompt appears only when end users try to run Setup.
System	A password prompt appears every time when the computer is powered on or when end users try to run Setup.

OS Select for DRAM > 64MB

This allows you to run the OS/2 operating system with DRAM larger than 64MB.

When you choose Non-OS2, you cannot run the OS/2 operating system with DRAM larger than 64MB. But it is possible if you choose OS2.

Video BIOS Shadow

This fields allow you to change the video BIOS location from ROM to RAM. Relocating to RAM enhances system performance, as information access is faster than the ROM.

C8000-CBFFF/CC000-CFFFF/D0000-D3FFF/D4000-D7FFF/D8000-DBFFF/DC000-DFFFF Shadow

These fields are used for shadowing other expansion card ROMs. If you install other expansion cards with ROMs on them, you will need to know which addresses the ROMs use to shadow them specifically. Shadowing a ROM reduces the memory available between 640K and 1024K by the amount used for this purpose.

3) Advanced Chipset Features

DRAM Clock

The chipset supports synchronous and asynchronous mode between host clock and DRAM clock frequency. The settings are;

Menu	Description
Host CLK	The DRAM clock will be equal to the Host Clock.
HCLK-33M	The DRAM clock will be equal to the Host Clock minus 33MHz. For example, if the Host Clock is 133MHz, the DRAM clock will be 100MHz.
HCLK+33M	The DRAM clock will be equal to the Host Clock plus 33MHz. For example, if the Host Clock is 100MHz, the DRAM clock will be 133MHz.

DRAM Timing By SPD

Selects whether DRAM timing is configured by reading the contents of the SPD (Serial Presence Detect) device on the DRAM module. Setting to Enabled makes both SDRAM cycle length and DRAM Clock automatically determined by BIOS according to the configurations on the SPD.

Memory Hole

This fields allow you to reserve an address space for ISA devices that require it.

P2C/C2P Concurrency

This field enables or disables the PCI to CPU and CPU to PCI concurrency feature, which allows synchronous data transmission from PCI to CPU and vice versa.

Fast R-W Turn Around

This is used to control the fast read/write turn around feature for DRAM timing.

System BIOS Cacheable

System BIOS ROM at F000h-F0000h is always copied to RAM for faster execution.

Video RAM Cacheable

Selecting Enabled allows caching of the video memory (RAM) at A0000h-AFFFFh, resulting in better video performance. However, if any program writes to this memory area, a memory access error may result.

Frame Buffer Size

Frame Buffer is the video memory that stores data for video display (frame). This field is used to determine the memory size for Frame Buffer. Larger frame buffer size increases video performance.

AGP Aperture Size

Selects the size of the Accelerated Graphics Port (AGP) aperture. Aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation.

OnChip USB

This is used to enable or disable the USB ports.

USB Keyboard Support

Set to Enabled if your need to use an USB keyboard in the operating system hat does not support or have any USB driver installed, such as DOS and SCO Unix.

OnChip Sound

Auto allows the mainboard to detect whether an audio device is used. If the device is detected, the onboard audio controller will be enabled; if not, the controller is disabled. Disable the controller if you want to use other controller cards to connect an audio device.

OnChip Modem

Auto allows the mainboard to detect whether a modem is used. If a modem is detected, the onboard modem controller will be enabled; if not, the controller is disabled. Disable the controller if you want to use other controller cards to connect modems.

CPU to PCI Write Buffer

Stores CPU data in buffers before writing to PCI.

PCI Dynamic Bursting

When Enabled, every write transaction goes to the write buffer. Then burstable transactions burst on the PCI bus and nonburstable transactions do not.

PCI Master 0 WS Write

When Enabled, writes to the PCI bus are executed with zero wait state.

PCI Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles so that transactions to and from ISA bus are buffered and PCI bus can perform other transactions while ISA transaction is underway.

PCI #2 Access #1 Retry

When Disabled, PCI#2 will not be disconnected until access finishes. When Enabled, PCI#2 will be disconnected if max retries are attempted without success.

AGP Master 1 WS Write

When Enabled, writes to the AGP bus are executed with one wait state inserted.

AGP Master 1 WS Read

When Enabled, one wait state is inserted in the AGP read cycle.

Memory Parity/ECC Check

User can set the field to Enabled for memory checking if the type of DRAM installed in your system is Parity or ECC (Error-Correcting Code) DRAM.

4) Integrated Peripherals

OnChip IDE Channel0/1

The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select Enabled to activate each channel separately.

IDE Prefetch Mode

The onboard IDE drive interfaces supports IDE prefetching for faster drive accesses. If you install a primary and/or secondary add-in IDE interface, set this field to Disabled if the interface does not support prefetching.

Primary/Secondary Master/Slave PIO

The IDE PIO fields let you set a PIO mode(0-4) for each of the IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

Primary/Secondary Master/Slave UDMA

Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA drive. If your hard drive and your system software both support Ultra DMA/33, select Auto to enable BIOS support.

Init Display First

This item allows you decide to active whether PCI Slot or on-chip VGA first.

IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block mode(most new drives do0, select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support.

Onboard FDD Controller

This is to enable or disable the onboard Floppy controller. Set to Enabled if you have a floppy disk drive installed on the mainboard and want to use it.

Onboard Serial Port 1/Port 2

Select an address and corresponding interrupt for the first and second serial ports.

UART 2 Mode

This item allows you to determine which Infra Red(IR) function of onboard I/O chip.

Onboard Parallel Port

This item allows you to determine access onboard parallel port controller with which I/O address.

Parallel Port Mode

Select an operating mode for the onboard parallel (printer) port, normal EPP, ECP, ECP+EPP.

Onboard Legacy Audio

The item enables or disables the onboard audio features of the mainboard and the following audio options in the BIOS.

Sound Blaster

Hardware SoundBlaster Pro for Windows DOS box and real-mode DOS legacy compatibility.

SB I/O Base Address

Change the SoundBlaster Pro Base I/O Address settings.

SB IRQ Select

Change the SoundBlaster Pro interrupt signal.

SB DMA Select

Change the SoundBlaster Pro direct memory access setting.

MPU-401

Enable or Disable MPU-401 option.

MPU-401 I/O Address

Change the SoundBlaster Pro MPU-401 I/O address.

Game Port (200-207H)

Change the joystick connect port address.

5) Power Management Setup

ACPI function

This item is to activate the ACPI (Advanced Configuration and Power Management Interface) Function. If your operating system is ACPI-aware, such as Windows 98SE/2000/ME, select Enabled.

Power Management

This category allows you to select the type of power saving and is directly related to the following modes; HDD Power Down, Doze Mode, Suspend Mode.

Menu	Description
MinSaving	Minimum power management. Doze Mode = 1hr. Standby Mode = 1hr, Suspend Mode = 1hr, and HDD Power Down = 15 min.
MaxSaving	Maximum power management. Doze Mode = 1min Standby Mode = 1min, Suspend Mode = 1min, and HDD Power Down = 1min.
User Define	Allows you to set each mode individually. When not disabled, each of the ranges are from 1 min to 1 hr, except for HDD Power Down which ranges from 1min to 15 min and disable.

ACPI Suspend Type

This item specifies the power saving modes for ACPI function. If your operating system supports ACPI, such as Windows 98SE, Windows ME and Windows 2000, you can choose to enter the Standby mode in S1(POS) or S3 (STR) fashion through the setting of this field. Options are:

Menu	Description
S1(POS)	The S1 sleep mode is a low power state. In this state, no system context is lost (CPU or chipset) and hardware maintains all system context.
S3(STR)	The S3 sleep mode is a power-down state in which power is supplied only to essential components such as main memory and wake-capable devices, and all system context is saved to main memory. The information stored in main memory will be used to restore PC to previous state when an "Wake up" event occurs.

PM Control by APM

Setting to Yes will activate an Advanced Power Management (APM) device to enhance Max Saving mode and stop CPU internal clock.

Video Off Option

The settings are Always On, Suspend and All Modes. This option is for choosing the setting in which the monitor will turn off.

Menu	Description
Always On	Always turn on.
Suspend -> Off	During Suspend mode, the monitor will be turned off.
All Modes -> Off	The monitor is turned off during Doze, Standby or Suspend mode.

Video Off Method

This determines the manner in which the monitor is blanked.

Menu	Description
V/H SYNC+Blank	This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video
DPMS Support	Initial display power management signaling.

MODEM Use IRQ

This determines the IRQ in which the MODEM can use. (3, 4, 5, 7, 9, 10, 11, A)

Soft-Off by PWRBTN

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has "hung".

Wake Up Events

Press to enter the sub-menu and Screen shows items:

VGA, LPT & COM, HDD & FDD, PCI Master, PowerOn by PCI Card, Wake Up On LAN/Ring

These items specify whether the system will be awakened from power saving modes when activity or input signal of the specified hardware peripheral or component is detected.

RTC Alarm Resume

This is to enable or disable the feature of booting up the system on a scheduled time/date.

Date (of Month)

Specifies the date for RTC Alarm Resume.

Resume Time (hh:mm:ss)

Specifies the time for RTC Alarm Resume. Format is hour, minute, second.

IRQs Activity Monitoring

Press to enter the sub-menu and the following screen appears;

Primary INTR

When this is set to ON, any event occurring will wake up the system which has been powered down.

IRQ3~IRQ15

Enables or disables the monitoring of the specified IRQ line. If set to Enabled, the activity of the specified IRQ line will prevent the system from entering power saving modes or awaken it from power saving modes.

6) PnP/PCI Configurations

PnP OS Installed

When set to YES, BIOS will only initialize the PnP cards used for booting(VGA, IDE, SCSI), The rest of the cards will be initialized by the PnP operating systems, like Windows 95. When set to NO, BIOS will initialize all the PnP cards. Therefore for non-PnP operating system, this option must set to “NO”

Reset Configuration Data

The system BIOS supports the PnP feature so the system needs to record which resource is assigned and proceeds resources from conflict. Every peripheral device has a node, which is called ESCD. This node records which resources are assigned to it. The system needs to record and update ESCD to the memory locations. These locations are reserved at the system BIOS. If Disabled(default) is chosen, the system’s ESCD will update only when the new configuration varies from the last one. If Enabled is chosen, the system is forced to update ESCDs and then is automatically set to the “disabled” mode. Legacy is the term, which signifies that a resource is assigned to the ISA Bus and provides for non-PnP ISA add-on cards. PCI/ISA PnP signifies that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

Resources Controlled By

By Choosing “Auto” the system BIOS will detect the system resources and automatically assign the relative IRQ and DMA channel for each peripheral. By Choosing “Manual” the user will need to assign IRQ & DMA for add-on cards. Be sure that there are no IRQ/DMA and I/O port conflicts.

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

DMA Resources

When resources are controlled manually, assign each system DMA channel a

type, depending on the type of device using the DMA channel.

PCI/VGA Palette Snoop

Choose Disabled or Enabled. Some graphic controllers which are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.

However the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the Write access to the VGA palette and registers the snoop data. In PCI based systems, where the VGA controller is on the PCI bus and a non-VGA graphic controller is on an ISA bus, the Write Access to the palette will not show up on the ISA bus if the PCI VGA controller responds to the Write.

In this case, the PCI VGA controller should not respond to the Write, it should only snoop the data and permit the access to be forwarded to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above situation, you should disable this option.

Assign IRQ for VGA/USB

Set to Enabled allows BIOS to assign an IRQ to VGA card/USB device. Choose Disabled if you want to release the IRQ.

7) PC Health Status

Show H/W Monitor in POST

If your computer contain a monitoring system, it will show PC health during POST stage. The item offers several delay time to select you want.

Current CPU FAN Speed

These fields display the current speed of up to CPU and System fans, if your computer contains a monitoring system.

Current System FAN Speed

These fields display the current speed of up to CPU and System fans, if your computer contains a monitoring system.

Current Vcore, +2.5V, +3.3V, +5.0V, +12.0V

Detects System Voltage automatically.

8) Load Fail-Safe/Optimized Defaults

The two options on the main menu allow users to restore all of the BIOS settings to the default Fail-Safe or Optimized values. The Optimized Defaults are the default values set by the mainboard manufacturer specifically for the optimal performance of the mainboard. The Fail-Safe Defaults are the default values set by the BIOS vendor for the stable system performance. When you select Load Fail-Safe Defaults, a message as below appears:

Pressing Y loads the BIOS default values for the most stable, minimal system performance. When you select Load Optimized Defaults, a message as below appears:

Pressing Y loads the default factory settings for optimal system performance.

9) Set Supervisor/User Password

When you select this function, a message as below will appear on the screen;

Type the password, up to eight characters in length, and press "Enter" The password typed now will clear any previously set password from CMOS memory. You will be prompted to confirm the password. Retype the password and press "Enter" You may also press "Esc" to abort the selection and not enter a password.

To clear a set password, just press “Enter” when you are prompted to enter the password. A message will show up confirming the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup without entering any password.

When a password has been set, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Additionally, when a password is enabled, you can also have BIOS to request a password each time the system is booted. This would prevent unauthorized use of your computer. The setting to determine when the password prompt is required is the Security Option of the Advanced BIOS Features menu. If the Security Option is set to System, the password is required both at boot and at entry to Setup. If set to Setup, password prompt only occurs when trying to enter Setup.

10) Save & Exit Setup

When you want to quit the Setup menu, you can select this option to save the changes and quit. A message as before will appear on the screen. Typing Y will allow you to quit the Setup Utility and save the user setup changes to RTC CMOS. Typing N will return to the Setup Utility.

11) Exit Without Saving

When you want to quit the Setup menu, you can select this option to abandon the changes. A message as below will appear on the screen:

Typing Y will allow you to quit the Setup Utility without saving any changes to RTC CMOS. Typing N will return to the Setup Utility.

CHAPTER 5

FCC Notice

This equipment has been tested and found to comply with the limit for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

NOTE : The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.