User's Manual

EPIA-LT

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FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits 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 when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his personal expense.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with the emission limits.



Tested To Comply With FCC Standards FOR HOME OR OFFICE USE

Safety Instructions

- 1. Always read the safety instructions carefully.
- 2. Keep this User's Manual for future reference.
- 3. Keep this equipment away from humidity.
- 4. Lay this equipment on a reliable flat surface before setting it up.
- The openings on the enclosure are for air convection hence protects the equipment from overheating. DO NOT COVER THE OPENINGS.
- Make sure the voltage of the power source and adjust properly 110/220V before connecting the equipment to the power inlet.
- 7. Place the power cord in such a way that people cannot step on it. Do not place anything over the power cord.
- 8. Always unplug the power cord before inserting any add-on card or module.
- 9. All cautions and warnings on the equipment should be noted.
- 10. Never pour any liquid into the opening. Liquid can cause damage or electrical shock.
- 11. If any of the following situations arises, get the equipment checked by a service personnel:
 - The power cord or plug is damaged
 - Liquid has penetrated into the equipment
 - The equipment has been exposed to moisture
 - The equipment has not work well or you cannot get it work according to User's Manual.
 - The equipment has dropped and damaged
 - If the equipment has obvious sign of breakage
- 12. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, OR IN A STORAGE TEMPERATURE ABOVE 60°C (140°F). THE EQUIPMENT MAY BE DAMAGED.

CAUTION: Explosion or serious damage may occur if the battery is incorrectly replaced. Replace only with the same or equivalent battery type recommended by the manufacturer.

BOX CONTENTS

- One VIA Mini-ITX mainboard
- One ATA-133/100 IDE ribbon cable
- One driver and utilities CD
- One IO bracket

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Specifications

The ultra-compact and highly integrated VIA EPIA-LT uses the Mini-ITX mainboard form-factor developed by VIA Technologies, Inc. as part of the company's open industry-wide total connectivity initiative. The mainboard enables the creation of an exciting new generation of small, ergonomic, innovative and affordable embedded systems. Through a high level of integration, the Mini-ITX occupy 66% of the size of FlexATX mainboard form factor. The mainboard comes with an embedded VIA Processor, boasting of ultra-low power consumption, cool and quiet operation.

MAINBOARD SPECIFICATIONS

CPU

• VIA C7[®] 1.5GHz / 1.0GHz NanoBGA2 Processor

Chipset

• VIA CX700 Advanced All-in-One system processor

Graphics

• Integrated UniChrome[™] Pro II 3D/2D AGP graphics with MPEG-2 video decoding acceleration

Audio

• VIA VT1708A High Definition Audio Codec

Memory

• 1 x DDR2 533 DIMM slot (up to 1 GB)

Expansion Slot

• 1 x PCI slot

IDE

• 1 x UltraDMA 133/100/66 connector

Serial ATA

• 2 x SATA connectors

LAN

- VIA VT6107 10/100 Mbps Fast Ethernet Controller
- VIA VT6107 10/100 Mbps Fast Ethernet Controller or VIA VT6122 Gigabit LAN Controller (Manufacturing Option)

Back Panel I/O Ports

- 1 x PS/2 mouse port and 1 x PS/2 keyboard port
- 2 x RJ45 LAN port
- 1 x VGA port
- 1 x COM port
- 4 x USB 2.0 ports
- 3 x Audio jacks: Line-out, Line-in and Mic-in

Onboard I/O Connectors

- 3 x Serial port pin headers for COM2/3/4 (with 5V/12V select jumper)
- 1 x Digital I/O pin header
- 1 x USB pin header for 2 USB 2.0 ports
- 1 x LPC connector
- 1 x SMBus & Security pin header
- 1 x Front Panel Audio pin header
- 1 x Parallel Port pin header
- 1 x LVDS Module connector
- 1 x LVDS Panel Power Selector pin header
- 1 x LVDS Inverter pin header
- 1 x CIR pin header (Convertible to KB/MS)
- 2 x Fan connector for CPU fan & SYS fan
- 1 x Front Panel connector
- 1 x ATX Power connector
- 1 x TV-out pin header (Manufacturing Option with CX700M2)

BIOS

• AMI BIOS with LPC 2/4/8Mbit flash memory capacity

Form Factor

- Mini-ITX (6 layers)
- 17 cm X 17 cm

MAINBOARD LAYOUT



BACK PANEL LAYOUT





Installation

This chapter provides you with information about hardware installation procedures. It is recommended to use a grounded wrist strap before handling computer components. Electrostatic discharge (ESD) can damage some components.

CPU

The VIA EPIA-LT Mini-ITX mainboard includes an embedded VIA C7 V4 Bus Processor. The VIA C7 V4 Bus Processor requires only a heatsink to provide sufficient cooling.



Chapter 2

CPU Fan and System Fan: CPUFAN and SYSFAN

The CPUFAN (CPU fan) and SYSFAN (system fan) run on +12V and maintain system cooling. When connecting the wire to the connectors, always be aware that the red wire is the Positive and should be connected to the +12V. The black wire is Ground and should always be connected to GND.

CPUFAN

| Pin | Signal |
|-----|--------|
| 1 | NC |
| 2 | +12V |
| 3 | GND |



SYSFAN

| Pin | Signal |
|-----|--------|
| 1 | NC |
| 2 | +12V |
| 3 | GND |



MEMORY MODULE INSTALLATION

The VIA EPIA-LT Mini-ITX mainboard provides one 240-pin DIMM slot for DDR2 533 SDRAM memory modules and supports the memory size up to 1GB.

DIMM

DDR SDRAM Module Installation Procedures

- Locate the DIMM slot in the motherboard.
- Unlock a DIMM slot by pressing the retaining clips outward.
- Align a DIMM on the socket such that the notch on the DIMM matches the break on the slot.
- Firmly insert the DIMM into the slot until the retaining clips snap back in place and the DIMM is properly seated.

Available DDR SDRAM Configurations

Refer to the table below for available DDR SDRAM configurations on the mainboard.

| Slot | Module Size | Total |
|---------------------------------|--------------------------------|----------|
| DIMM | 64MB, 128MB, 256MB, 512MB, 1GB | 64MB-1GB |
| Maximum supported system memory | | 64MB-1GB |

CONNECTING THE POWER SUPPLY

The VIA EPIA-LT Mini-ITX mainboard supports a conventional ATX power supply for the power system. Before inserting the power supply connector, always make sure that all components are installed correctly to ensure that no damage will be caused.

ATX 20-Pin Power Connector

To connect the ATX power supply, make sure the power plug is inserted in the proper orientation and the pins are aligned. Then push down the plug firmly into the connector.

| Pin | Signal |
|-----|-----------------|
| 1 | +3.3V |
| 2 | +3.3V |
| 3 | GND |
| 4 | +5V |
| 5 | GND |
| 6 | +5V |
| 7 | GND |
| 8 | Power Good |
| 9 | +5V Standby |
| 10 | +12V |
| 11 | +3.3V |
| 12 | -12V |
| 13 | GND |
| 14 | Power Supply On |
| 15 | GND |
| 16 | GND |
| 17 | GND |
| 18 | -5V |
| 19 | +5V |
| 20 | +5V |
| | |



BACK PANEL PORTS

The back panel has the following ports:



PS2 Mouse



PS2 Keyboard

Serial port: COM

for a PS/2 keyboard.

Mouse and Keyboard

The 9-pin COM port is for pointing devices or other serial devices.

The connector above is for a PS/2 mouse, and the one below is

VGA Port

The 15-pin female VGA connector can be used to connect to any analog VGA monitor.





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RJ45 10/100 LAN and USB Connectors

The mainboard provides a standard RJ-45 and USB 2.0 ports. These ports allow connection to a Local Area Network (LAN) through a network hub and USB 2.0 devices.

Audio Port

The Line-Out jack is for connecting to external speakers or headphones. The Line-In jack is for connecting to an external audio device such as a CD player, tape player, etc. The Mic jack is for connecting to a microphone.

Note:

The audio ports can be switched to Smart 5.1 8-channel audio output. You can enable the function by clicking the "Vinyl Audio" icon on your desktop after installing the audio driver.

After completing the previous installation, connect the speakers to the 3-jack connectors on the back panel.



RJ-45 ports



Line-Out Line-In Mic-In

CONNECTORS

Hard Disk Connectors: IDE1

The mainboard has a 32-bit Enhanced IDE and Ultra DMA 133/100/66 controller that provides PIO mode $0 \sim 4$, Bus Master, and Ultra DMA 133/100/66 functions. You can connect up to four hard disk drives, CD-ROM and other devices.



Serial ATA Connectors: SATA1 and SATA2

These next generation connectors support the thin Serial ATA cables for primary internal storage devices. The current Serial ATA interface allows up to 150MB/s data transfer rate, faster than the standard parallel ATA with 133 MB/s (Ultra DMA).



SATA1-2

USB Pin Connector: USB

The mainboard provides one USB pin header, allowing up to 2 additional USB2.0 ports up to maximum throughput of 480 Mbps. Connect each 2-port USB cable into this pin header. This port can be used to connect high-speed USB interface peripherals such as USB HDD, digital cameras, MP3 players, printers, modem and the like.

| Pin | Signal | Pin | Signal |
|-----|----------|-----|----------|
| 1 | VUSBO | 2 | VUSB0 |
| 3 | USBD_T0- | 4 | USBD_T1- |
| 5 | USBD_T0+ | 6 | USBD_T1+ |
| 7 | GND | 8 | GND |
| 9 | Кеу | 10 | GND |



Case Connector: F_PANEL

The F_PANEL pin header allows you to connect the power switch, reset switch, power LED, sleep LED, HDD LED and the case speaker.

F PANEL

| Pin | Signal | Pin | Signal | 1 | |)2 |
|-----|----------|-----|------------|----|--------|----------|
| 1 | +PWR_LED | 2 | +HD_LED | - | |) |
| 3 | +PWR_LED | 4 | -HD_LED | - | | Ì |
| 5 | -PWR_LED | 6 | PW_BN | | | Ś |
| 7 | SPEAK+ | 8 | GND | | | <u>,</u> |
| 9 | NC | 10 | RST_SW | - | | J |
| 11 | NC | 12 | GND | | |) |
| 13 | SPEAK- | 14 | +SLEEP_LED | | |) |
| 15 | Кеу | 16 | -SLEEP_LED | 15 | \geq | 16 |
| | | | | 15 | | 10 |

Power Switch (PW_BN)

Connect to a 2-pin power button switch. Pressing this button will turn the system power on or off.

Reset Switch (RST_SW)

The reset switch is used to reboot the system rather than turning the power ON/OFF. Avoid rebooting the system, if the HDD is still working. Connect the reset switch from the system case to this pin.

Power LED (-PLED)

The LED will light when the system is on. If the system is in S1 (POS - Power On Suspend) or S3 (STR - Suspend To RAM) state, the LED will blink.

HDD LED (HD_LED)

HDD LED shows the activity of a hard disk drive. Avoid turning the power off when the HDD LED still has a lit. Connect the HDD LED from the system case to this pin.

Speaker

The speaker from the system case is connected to this pin.

F AUDIO

Front Panel Audio Connector: F_AUDIO

This is an interface for the VIA front panel audio cable that allow convenient connection and control of audio devices. By default, the pins labeled LINE_OUT_R/NEXT_R and the pins LINE_OUT_L/NEXT_L are shorted with jumper caps. Remove the caps only when you are connecting the front panel audio cable.

| Pin | Signal | Pin | Signal | 1 (□ □) 2 |
|-----|----------------|-----|-----------|-----------|
| 1 | MICIN_L | 2 | AUD_GND | |
| 3 | MICIN_R | 4 | -PRESENSE | |
| 5 | HPOUT_R | 6 | AUD_RET_R | |
| 7 | FRONT_IO_SENSE | 8 | Кеу | |
| 9 | HPOUT_L | 10 | AUD_RET_L | 9(□ □)10 |

Note:

If you don't want to connect to the front audio header, pins 5 & 6, 9 & 10 have to be jumpered in order to have signal output directed to the rear audio ports. Otherwise, the Line-Out connector on the back panel will not function.

Consumer Infrared Module / PS2 Header: CIR / KBMS

The mainboard provides a CIR pin header. It is also convertible to a KBMS pin header which is to attach a PS/2 keyboard and mouse.

| Pin | Signal | Pin | Signal | CIR/KBMS |
|-----|-----------|-----|------------|----------|
| 1 | +5VDUAL | 2 | GND | |
| 3 | KB_CLK | 4 | KB_DATA | |
| 5 | EXT_KBCLK | 6 | EXT_KBDATA | |
| 7 | MS_CLK | 8 | MS_DATA | |
| 9 | EXT_MSCLK | 10 | EXT_MSDATA | |
| | · · | - | | - 9 10 |

Note: When the pin header is not in use, please short pin 3&5, pin 4&6, pin 7&9, and pin 8&10.

Chapter 2

Serial Port Connectors: COM2, COM3, and COM4

COM2/3/4 pin headers can be used to attach additional ports for serial mouse or other serial devices.

| Pin | Signal | Pin | Signal |
|-----|--------|-----|--------|
| 1 | DCD | 2 | RXD |
| 3 | TXD | 4 | DTR |
| 5 | GND | 6 | DSR |
| 7 | RTS | 8 | CTS |
| 9 | RI | 10 | Key |

Digital I/O Connector: DIO

General purpose input and output for POS systems.

| Pin | Signal | Pin | Signal | 1(□ □ | <u>)</u> 2 |
|-----|--------|-----|---------|--------|------------|
| 1 | 5V_DIO | 2 | 12V_DIO | |) |
| 3 | GPO_21 | 4 | GPI_44 | | 5) |
| 5 | GPO_22 | 6 | GPI_45 | | 7 |
| 7 | GPO_32 | 8 | GPI_46 | | X |
| 9 | GPO_33 | 10 | GPI_47 | | 1 |
| 11 | GND | 12 | GND | 11(□ □ | J)12 |

LPC Connector: LPC

This pin connector is for LPC devices.

| Pin | Signal | Pin | Signal | 1 🗆 🗆 2 |
|-----|----------|-----|------------|-----------|
| 1 | LAD1 | 2 | LPC_33_CLK | |
| 3 | -PCIRSTX | 4 | GND | |
| 5 | LAD0 | 6 | SIO_48_OSC | |
| 7 | LAD2 | 8 | -LFRAME | |
| 9 | SERIRQ | 10 | LAD3 | |
| 11 | -LDRQ1 | 12 | -EXTSMI | |
| 13 | +5V | 14 | +3.3V | |
| 15 | +5V | 16 | +3.3V | |
| 17 | GND | 18 | GND | |
| 19 | GND | 20 | Кеу | |
| | | | | 19 (□) 20 |



DIO

LPC

System Management Bus Connector: SMBus

This pin header allows you to connect SMBus (System Management Bus) devices. Devices communicate with an SMBus host and/or other SMBus devices using the SMBus interface.

| Pin | Signal |
|-----|--------|
| 1 | SMBCK |
| 2 | SMBDT |
| 3 | GND |



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LPT Connector: LPT

The mainboard provides a 26-pin connector to be able to connect a 25-pin female external connector for LPT (parallel port). A parallel port is a standard printer port that supports Enhanced Parallel Port (EPP) and Extended Capabilities Parallel Port (ECP) modes.

| Pin | Signal | Pin | Signal | 1 | |
|-----|---------|-----|----------|----|-------------------|
| 1 | -LP_STB | 2 | -LP_AFD | - | |
| 3 | LP_D0 | 4 | -LP_ERR | | |
| 5 | LP_D1 | 6 | -LP_INIT | | |
| 7 | LP_D2 | 8 | -LP_SLIN | | 느 |
| 9 | LP_D3 | 10 | GND | | |
| 11 | LP_D4 | 12 | GND | | |
| 13 | LP_D5 | 14 | GND | | |
| 15 | LP_D6 | 16 | GND | | |
| 17 | LP_D7 | 18 | GND | | |
| 19 | -LP_ACK | 20 | GND | | |
| 21 | LP_BUSY | 22 | GND | | |
| 23 | LP_PE | 24 | GND | | |
| 25 | LP_SLCT | 26 | Кеу | - | |
| | | | | 25 | $\overline{\Box}$ |

LVDS Panel Connector: PANEL

The LVDS Panel connector allow you to connect the panel's LVDS cable directly to support LVDS panel without any need of a daughter card.

| Pin | Signal | Pin | Signal | | \mathbb{L} | |
|-----|--------|-----|---------|----|--------------|-----|
| 1 | -LD2C4 | 2 | PVDD | 2 | ٢٠٠ | 1 |
| 3 | +LD2C4 | 4 | PVDD | | | |
| 5 | GND | 6 | GND | _ | | |
| 7 | -LD2C5 | 8 | GND | | | |
| 9 | +LD2C5 | 10 | -LD1C0 | _ | | |
| 11 | GND | 12 | +LD1C0 | _ | | |
| 13 | -LD2C6 | 14 | GND | | | |
| 15 | +LD2C6 | 16 | -LD1C1 | _ | | |
| 17 | GND | 18 | +LD1C1 | _ | | |
| 19 | -LCLK2 | 20 | GND | - | | |
| 21 | +LCLK2 | 22 | -LD1C2 | _ | | |
| 23 | GND | 24 | +LD1C2 | _ | | |
| 25 | -LD2C7 | 26 | GND | _ | | |
| 27 | +LD2C7 | 28 | -LCLK1 | _ | | |
| 29 | NC | 30 | +LCLK1 | _ | | |
| 31 | NC | 32 | GND | _ | | |
| 33 | NC | 34 | -LD1C3 | _ | | |
| 35 | NC | 36 | +LD1C3 | _ | | |
| 37 | NC | 38 | SMB_DAT | 40 | | 30 |
| 39 | NC | 40 | SMB_DAT | 40 | | 100 |
| | | - | | | \vee | |

Inverter Connector: INVERTER

The mainboard provides an inverter for supplying power to the backlight of the LCD panel.

| Pin | Signal |
|-----|---------|
| 1 | IVDD |
| 2 | IVDD |
| 3 | BLON |
| 4 | NC |
| 5 | BLON |
| 6 | BR_CNTR |
| 7 | GND |
| 8 | GND |



MFX

MFX Pin connector

This pin connector is for MFX-01 add-on cards.

| Pin | Signal | Pin | Signal | 1 🗆 🗆 2 |
|-----|--------|-----|---------|---------|
| 1 | +5V | 2 | +5VSUS | |
| 3 | PW_BN | 4 | SMB_CLK | () |
| 5 | NC | 6 | SMB_DAT | |
| 7 | NC | 8 | GND | |
| 9 | GND | 10 | Кеу | 9()10 |

TV Connector: TV

This pin connector allows you to conneco to a TV set.

| Pin | Signal | Pin | Signal | 1 |
|-----|--------------|-----|--------|---------|
| 1 | Y (Y, G) | 2 | GND | |
| 3 | Pr (C, R) | 4 | Key | |
| 5 | Pb (CVBS, B) | 6 | GND | 5(□ □)6 |
| 5 | 10 (0003, 0) | 0 | UND | |

JUMPERS

The mainboard provides jumpers for setting some mainboard functions. This section will explain how to change the settings of the mainboard functions using the jumpers.

Clear CMOS: CLEAR_CMOS

The onboard CMOS RAM stores system configuration data and has an onboard battery power supply. To reset the CMOS settings, set the jumper on pins 2 and 3 while the system is off. Return the jumper to pins 1 and 2 afterwards. Setting the jumper while the system is on will damage the mainboard.

| | | | | | Ciedi |
|-----------------|-------------|------------|----------|--------------|-------------------------|
| Setting | | 1 | 2 | 3 | |
| Clear CMOS sett | ing | OFF | ON | ON | 1 2 3 |
| Keep CMOS sett | ing | ON | ON | OFF | Кеер |
| | | | | | |
| | | | | | 1 2 3 |
| WARNIN | G: Except | t when c | learing | the RTC | RAM, never remove the |
| cap on C | LEAR_CM | OS jump | er defau | ult position | . Removing the cap will |
| cause sys | stem boot f | failure. / | Avoid cl | earing the | CMOS while the system |
| is on; it w | ill damage | the mair | nboard. | | |

Voltage Selector for COM Connectors: J1/2/3

This VCC selector is to determine the input voltage of each COM connector.

| Setting | 1 | 2 | 3 |
|---------|-----|----|-----|
| +5V | ON | ON | OFF |
| +12V | OFF | ON | ON |
| +12V | OFF | ON | ON |



Inverter Selector: IVDD_SEL

IVDD is the VCC selector jumper to determine the input voltage of the panel inverter for panel's back-light.



| Panel Power Selector: | PVDD_SEL |
|-----------------------|----------|
|-----------------------|----------|

PVDD is the VCC selector jumper to determine the panel's signal voltage.



| Setting | 1 | 2 | 3 | 4 | 5 | 6 |
|---------|-----|-----|-----|-----|-----|-----|
| +12V | ON | ON | OFF | OFF | OFF | OFF |
| +5V | OFF | OFF | ON | ON | OFF | OFF |
| +3.3V | OFF | OFF | OFF | OFF | ON | ON |

SLOTS

Peripheral Component Interconnect: PCI

The PCI slot allows you to insert PCI expansion card. When adding or removing expansion card, unplug first the power supply. Read the documentation for the expansion card if any changes to the system are necessary.

PCI Interrupt Request Routing

The IRQ (interrupt request line) are hardware lines over which devices can send interrupt signals to the microprocessor. The "PCI & LAN" IRQ pins are typically connected to the PCI bus INT $A\# \sim INT D\#$ pins as follows:

| | Order 1 | Order 2 | Order 3 | Order 4 |
|------------|---------|---------|---------|---------|
| PCI Slot 1 | INT B# | INT C# | INT D# | INT A# |



BIOS Setup

This chapter gives a detailed explanation of the BIOS setup functions.

ENTERING SETUP

Power on the computer and press <Delete> during the beginning of the boot sequence to enter the BIOS setup menu. If you missed the BIOS setup entry point, you may restart the system and try again.

CONTROL KEYS

| Keys | Description |
|-------------|---|
| Up Arrow | Move to the previous item |
| Down Arrow | Move to the next item |
| Left Arrow | Move to the previous tab |
| Right Arrow | Move to the next tab |
| Enter | Select the item |
| Escape | Jumps to the Exit menu or returns to the main menu from a |
| | submenu |
| + | Increase the numeric value |
| - | Decrease the numeric value |
| F1 | General help, only for Status Page Setup Menu and Option |
| | Page Setup Menu |
| F7 | Discard Changes |
| F9 | Load Optimized defaults |
| F10 | Save all the changes and exit |

GETTING HELP

The BIOS setup program provides a "General Help" screen. You can display this screen from any menu/sub-menu by pressing $\langle F1 \rangle$. The help screen displays the keys for using and navigating the BIOS setup. Press $\langle Esc \rangle$ to exit the help screen.

MAIN MENU

| | BIOS S | ETUP UTILITY | | |
|---|---------------------|-----------------------|-------------------------|---|
| Main Advanced | PCIPnP Boot | Security | Chipset | Exit |
| System Overview AMIBIOS Version :100 (TV) | | | Use or D sele | CENTERI, CTABI SHIFT-TABI to ct a field. |
| Build Date:04/17/0 ID :1ADEL00 | 17 17 | | Use conf | [+] or [-] to igure system Time. |
| ProcessorType:UIA C7Speed:1500MHzCount:1 | Processor 1500MHz | | | |
| System Memory Size :448MB | | | + 11 +- | Select Screen Select Item Change Field |
| System Time System Date | L e : Dion | 53:20] 02/25/2002] | Tab F1 F10 ESC | Select Field General Help Save and Exit Exit |
| v02.59 | (C) Comuniaht 1985- | 2005, American | n Megatren | ds. Inc. |

AMIBIOS

BIOS version number and related information.

Processor

CPU information.

System Memory

Memory size.

System Time

Use the key "+" or "-" to configure system time. The time format is [Hour : Minute : Second].

System Date

Use the key "+" or "-" to configure system Date. The date format is [Day, Month, Date, Year].

Advanced Settings

| | and the second second | BIOS SE | TUP UTILITY | | |
|---|--|-----------------------------|----------------------|------------------|---------------------------------------|
| Hain Advanced | PCIPnP | Boot | Security | Chipset | |
| Advanced Settings | | | | Confi | igure CPU. |
| WARNING: Setting may caus • CPU Configurati • IDE Configurati • SuperIO Configu • Hardware Health • ACPI Configurati • APM Configurati • Remote Access C • USB Configuration | wrong value e system to on cation Configurat ion on on figuratio on | s in bela malfunc ion | ow sections tion. | ÷ Ti Ti | Select Screen Select Item |
| | | | | F1 F10 ESC | General Help Gaue and Exit Exit |
| v02.59 | (C) Conur inh | 1985-26 | 05. America | n Megatrends | s. Inc. |

CPU Configuration

IDE Configuration

Super I/O Configuration

Hardware Health Configuration

ACPI Configuration

APM Configuration

Remote Access Configuration

USB Configuration

CPU CONFIGURATION

| BIOS SETUP UTILITY Advanced | |
|--|---|
| Configure advanced CPU settings Module Version:3F.00 | If you want to install WindowsNT 4.0 you must |
| Manufacturer:UIA UIA C7 Processor 1500MHz Frequency :1.50GHz FSB Speed :400MHz Cache L1 :128 KB Cache L2 :128 KB Ratio Actual Value:15 | — disable it. |
| CMPXCHG8B instruction support [Enabled] VIA Processor Power Management [Disabled] | Select Screen Select Item Change Option F1 General Help F10 Save and Exit ESC Exit |
| u02 59 (C) Comunicati 1985-2005 American | Merstrende Inc |

CMPXCHG8B instruction support

Settings: [Enabled, Disabled]

VIA Processor Power Management

| Setting | Description |
|----------|--|
| Enabled | This selection enables CPU speed to be adjustable according to |
| | system loads in order to lower power consumption. |
| Disabled | Disable the function and CPU will be working in high speed. |

IDE CONFIGURATION

| B | IOS SETUP UTILITY | |
|--|--|--|
| Advanced | | |
| IDE Configuration | | While entering setup, BIOS auto detects the |
| Parallel ATA IDE devices > Primary IDE Haster > Primary IDE Slave > Secondary IDE Master > Secondary IDE Slave | : [Not Detected] : [Not Detected] : [Not Detected] : [Not Detected] | presence of IDE devices. This displays the status of auto detection of IDE devices. |
| Parallel ATA IDE Controller Hard Disk Write Protect IDE Detect Time Out (Sec) ATA(PI) 80Pin Cable Detection | (Both) Disabled) [15] [Host] | Select Screen Select Item Enter Go to Sub Screen F1 General Help F10 Save and Exit ESC Exit |
| v02.59 (C) Copuright | 1985-2005, American Me | gatrends, Inc. |

Parallel ATA IDE Controller

Settings: [Disabled, Primary, Secondary, Both]

Hard Disk Write Protect

Settings: [Enabled, Disabled]

IDE Detect Time Out (Sec)

Settings: [0, 5, 10, 15, 20, 25, 30, 35]

ATA(PI) 80Pin Cable Detection

Settings: [Host & Device, Host, Device]

IDE DRIVES

| I | BIOS SETUP UTILITY | |
|--|---|--|
| Advanced | | |
| Primary IDE Master | | Select the type |
| Device :Not Detected | | to the system. |
| Tupe LDA/Large Mode Block (Multi-Sector Transfer) PIO Mode DMA Mode S.M.A.R.T. 32Bit Data Transfer | lAutol [Auto] [Auto] [Auto] [Auto] [Auto] [Enab]ed] | |
| | | Select Screen Select Item Change Option General Help Save and Exit ESC Exit |
| v02.59 (C) Comuniant | 1985-2005 American | Merratrends Inc |

Туре

Settings: [Not Installed, Auto, CD/DVD, ARMD]

LBA/Large Mode

Settings: [Disabled, Auto]

Block (Multi-Sector Transfer)

Settings: [Disabled, Auto]

PIO Mode

Settings: [Auto, 0, 1, 2, 3, 4]

DMA Mode

Settings: [Auto]

S.M.A.R.T.

Self Monitoring Analysis and Reporting Technology, a monitoring system for hard disks.

Settings: [Auto, Enabled, Disabled]

32Bit Data Transfer

Settings: [Enabled, Disabled]

SUPERI/O CONFIGURATION

| Advanced | BIOS SETUP UTILITY | |
|--|--|---|
| Advanced Configure SCH3114 Super IO Serial Port1 Address Serial Port2 Address Serial Port2 IRQ Serial Port2 Mode Serial Port3 Address Serial Port3 Address Serial Port4 Address Serial Port4 Address Serial Port4 Address Parallel Port Address Parallel Port Mode Parallel Port IRQ WATCH-DOG | Chipset (3F8) (22F8) (3) (Norma1) (A80) (3) (A88) (3) (A88) (3) (A98) (3) (A97) (1) (2) (2) (2) (2) (2) (2) (2) (2 | Allows BIOS to Select Serial Port1 Base Addresses. * Select Screen * Select Item * Change Option F1 General Help F10 Save and Exit |
| u02.59. (C) Commit | | ESU EXIT |

Serial Port1 Address

Settings: [Disabled, 3F8, 3E8, 2E8]

Serial Port1 IRQ

Settings: [3, 4, 10, 11]

Serial Port2 Address

Settings: [Disabled, 2F8, 3E8, 2E8]

Serial Port2 IRQ

Settings: [3, 4, 10, 11]

Serial Port2 Mode

Settings: [Normal, IrDA, ASK IR]

Chapter 3

Serial Port3 Address Settings: [Disabled, A80, A88, A90, A98, AA0, AA8]

Serial Port3 IRQ Settings: [3, 4, 10, 11]

Serial Port4 Address Settings: [Disabled, A80, A88, A90, A98, AA0, AA8]

Serial Port4 IRQ Settings: [3, 4, 10, 11]

Parallel Port Address Settings: [Disabled, 378, 278, 3BC]

Parallel Port Mode Settings: [Normal, SPP (Bi-Dir), EPP+SPP, ECP, ECP+EPP]

Parallel Port IRQ Settings: [IRQ5, IRQ7]

WATCH-DOG Settings: [Disabled, Enabled]

HARDWARE HEALTH CONFIGURATION

| Advanced | BIOS SETUP UTILITY | |
|--|--|--|
| Hardware Health Configu | ration | Enables Hardware |
| H/W Health Function | Function [Enabled] Health Monit Device. | |
| SySten Temperature CPU Temperature vcore +5Uin +12Uin +3.3Uin | :41°C/105°F :33°C/91°F :1.048 U :5.104 V :12.250 V :3.265 U | Select Screen Select Item Change Option General Help Save and Exit ESC Exit |

Hardware Health Configuration

This item is used to enable or disable hardware health monitoring device.

Settings: [Enabled, Disabled]

ACPI SETTINGS

| BIOS SETUP UTILITY Advanced | Y |
|---|---|
| ACPI Settings General ACPI Configuration Advanced ACPI Configuration | General ACPI Configuration settings |
| Hovancea Herr Configuration Chipset ACPI Configuration | |
| | |
| | ← Select Screen ↑↓ Select Item Enter Go to Sub Screen F1 General Help F10 Save and Exit ESC Exit |
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General ACPI Configuration

This menu contains ACPI (Advanced Configuration and Power Management Interface) options.

Advanced ACPI Configuration

Chipset ACPI Configuration

GENERAL ACPI CONFIGURATION

| BIOS | SETUP UTILITY |
|---|--|
| Havanced | |
| General ACPI Configuration | Select the ACPI |
| Suspend mode EAu Repost Video on S3 Resume ENo | tol System Suspend. |
| | Select Screen tl Select Item Change Option F1 General Help F10 Save and Exit ESC Exit |
| v02.59 (C)Copyright 1985 | -2005, American Megatrends, Inc. |

Suspend mode

Select the ACPI state used for system suspend.

| Setting | Description |
|---------|--|
| S1(POS) | S1/Power On Suspend (POS) is a low power state. In this state, |
| | no system context (CPU or chipset) is lost and hardware |
| | maintains all system contexts. |
| S3(STR) | S3/Suspend To RAM (STR) is a power-down state. In this state, |
| | power is supplied only to essential components such as main |
| | memory and wakeup-capable devices. The system context is |
| | saved to main memory, and context is restored from the |
| | memory when a "wakeup" event occurs. |
| Auto | Depends on the OS to select the state. |
| | |

Repost Video on S3 Resume

To determine whether to invoke VGA BIOS post on S3/STR resume or not.

Settings: [No, Yes]

ADVANCED ACPI CONFIGURATION

| Advanced | BIOS SETUP UTILITY | |
|---|--|---|
| Advanced ACPI Configuration | | Enable RSDP pointers |
| ACPI 2.0 Features ACPI APIC support AMI DEMB table Headless mode | No] Enabled] Enabled] Disabled] | to 64-bit Fixed System Description Tables. Select Screen Select Item Change Option F1 General Help F10 Save and Exit ESC Exit |
| u02.59 (C) Comu | right 1985-2005, Americ | an Megatrends, Inc. |

ACPI 2.0 Features

To enable RSDP pointers to 64-bit Fixed System Description Tables.

Settings: [No, Yes]

ACPI APIC support

To include ACPI APIC table pointer to RSDT pointer list.

Settings: [Enabled, Disabled]

AMI OEMB Table

To include OEMB table pointer to R(X)SDT pointer lists.

Settings: [Enabled, Disabled]

Headless Mode

To enable or disable headless operation mode through ACPI.

Settings: [Enabled, Disabled]

CHIPSET ACPI CONFIGURATION

| Advanced | | | |
|----------------------------|-----------------|-------------|--|
| USB Device Wakeup Function | (Enab led) | | Options Disabled Enabled |
| | | | Select Screen Select Item Change Option General Help Save and Exit ESC Exit |
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USB Device Wakeup Function

Settings: [Enabled, Disabled]

APM CONFIGURATION

| | BIOS SETUP UTILITY | |
|--------------------------------|----------------------------|-------------------|
| Advanced | | |
| | | Options |
| Power Management/APM | LEnabled | Disabled |
| Power Button Mode | [On/Off] | Enabled |
| Suspend Power Saving Type | [C3] | |
| Restore on AC/Power Loss | [Last State] | |
| Standhu Tino Aut | Dicabled | |
| Standby Time Out | Disabled | |
| Suspend Time Out | LD1Sabled1 | |
| Hard Disk Time Uut (Minute) | LUisabledJ | |
| Green PC Monitor Power State | [Suspend] | |
| lides Deven Deven Mode | [Suppond] | 6 Salact Scroon |
| Video Fower Down Houe | touspenus reasonal | tl Calast Itan |
| nara Disk Power Down Hode | ranshenar | Change Ontion |
| Advanced Monitor Events Contro | ls | F1 General Help |
| Display Activity | IImorel | F10 Save and Exit |
| Monitor TR03 | [Monitor] | ESC Exit |
| Monitor IR04 | IImorel | |
| Monitor INC | IIgnorel | |
| HOLLEDT TRØ3 | righties . | |
| uA2 59 (C) Comunicati | 1985-2005, American Me | watrends, Inc. |
| | 1503 20035 Thild I toan no | |
| B | IOS SETUP UTILITY | |
| Advanced | | |
| | | Disable/Enable |

| | | ▲ Disable/Enable | |
|-------------------------------|-------------------------|-------------------|--|
| Advanced Monitor Events Contr | RTC to generate | | |
| Display Activity | ivity Elgnorel | | |
| Monitor IRQ3 | [Monitor] | | |
| Monitor IRQ4 | Elgnorel | | |
| Monitor IRQ5 | [Ignore] | | |
| Monitor IRQ7 | Elgnorel | | |
| Monitor IRQ9 | IIgnorel | | |
| Monitor IRQ10 | IIgnorel | | |
| Monitor IRQ11 | Ilynorel | | |
| Monitor IRQ13 | IIgnorel | | |
| Monitor IRQ14 | [Monitor] | | |
| Monitor IRQ15 | [Ignore] | ← Select Screen | |
| | | ↑↓ Select Item | |
| Advanced Resume Events Contro | ls | +- Change Option | |
| Resume On PCI | [Disabled] | F1 General Help | |
| Resume On KBC | [\$3] | F10 Save and Exit | |
| Wake-Up Key | [Any Key] | ESC Exit | |
| Resume On PS/2 Mouse | [\$3] | | |
| Resume On RTC Alarm | | T | |
| | | | |
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Power Management / APM

Settings: [Disabled, Enabled]

Power Button Mode

Settings: [On/Off, Standby, Suspend]

Suspend Power Saving Type

Settings: [C3, S1]

Restore on AC / Power Loss

The field defines how the system will respond after an AC power loss during system operation.

| Setting | Description |
|------------|---|
| Power Off | Keeps the system in an off state until the power button is pressed. |
| Power On | Restarts the system when the power is back |
| Last state | Save in last state |

Standby Time Out

Settings: [Disabled, 1/2/4/8/10/20/30/40 minutes]

Suspend Time Out

Settings: [Disabled, 1/2/4/8/10/20/30/40 minutes]

Hard Disk Time Out

Settings: [Disabled, 1/2/3/4/5/6/7/8 minutes]

Green PC Monitor Power State

Settings: [Standby, Suspend, Off]

Video Power Down Mode

Settings: [Disabled, Standby, Suspend]

Hard Disk Power Down Mode

Settings: [Disabled, Standby, Suspend]

Display Activity

Settings: [Ignore, Monitor]

Monitor IRQ3~15

Enables or disables the monitoring of the specified IRQ line.

Settings: [Ignore, Monitor]

NOTE: IRQ (Interrupt Request) lines are system resources allocated to I/O devices. When an I/O device needs to gain attention of the operating system, it signals this by causing an IRQ to occur. After receiving the signal, when the operating system is ready, the system will interrupt itself and perform the service required by the IO device.

Resume on PCI

Settings: [Disabled, Enabled]

Resume on KBC Settings: [Disabled, S3, S3/S4/S5]

Wake-up Key Settings: [Any Key, Specific Key]

Resume on PS/2 Mouse

Enables any mouse activity to restore the system from the power saving mode to an active state.

Settings: [Disabled, S3, S3/S4/S5]

Resume on RTC Alarm

Sets a scheduled time and/or date to automatically power on the system.

REMOTE ACCESS CONFIGURATION



Remote Access

To select Remote Access type.

USB CONFIGURATION

| BIOS Advanced | SETUP UTILITY |
|--|--------------------------------------|
| Ndvanced USB Configuration Module Version - 2.24.0-11.4 USB Devices Enabled : None USB 1.1 Ports Configuration USB 2.0 Ports Enable Legacy USB Support Port 64/60 Emulation USB 2.0 Controller Mode | Enables 1.1 USB host controllers. |
| | -2005 American Menatrends, Inc. |

USB 1.1 Ports Configuration

To enable USB 1.1 host controllers.

Settings: [Disabled, USB 2 ports, USB 4 ports, USB 6 ports]

USB 2.0 Ports Enable

To enable USB 2.0 host controllers.

Settings: [Disabled, Enabled]

Legacy USB Support

To enable support for legacy USB.

Settings: [Disabled, Enabled, Auto]

Port 64/60 Emulation

To enable I/O port 60h/64h emulation support.

USB 2.0 Controller Mode

To configure the USB 2.0 controller in HiSpeed (480Mbps) or FullSpeed (12Mbps).

Settings: [HiSpeed, FullSpeed]

Advanced PCIPnP Settings

| BIOS SETUP UTILITY | | | | |
|--|--|--|--|--|
| Main Advanced PCIP | n <mark>P Boot Security</mark> | l Chipset Exit | | |
| Advanced PCI/PnP Settings | 5 | Clear NVRAM during | | |
| WARNING: Setting wrong va may cause system | alues in below section n to malfunction. | is agreem moor. | | |
| Clear NURAH Plug & Play D/S PCI Latency Timer Allocate IRQ to PCI UGA Palette Snooping PCI IDE BusMaster IRQ3 IRQ4 IRQ5 IRQ7 IRQ9 IRQ10 IRQ11 IRQ11 | Diol Diol Diol [64] [Yes] [Disabled] [Disabled] [Available] [Available] [Available] [Available] [Available] [Available] [Available] | Select Screen fi Select Item Change Option Fi General Help Fi0 Save and Exit ESC Exit | | |

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| BIOS SETUP UTILITY | | | | | | |
|---------------------|--------------|-------------|--------------|-----------|-----------------------|--|
| | PCIPnP | Boot | Security | Chi | pset Exit | |
| | | | | ALCONT OF | | |
| PCI IDE BusMaster | | Disa | bledl | A | Size of memory block | |
| | | FA - | | | to reserve for legacy | |
| IRQ3 | | LAvai | lablel | | 15H devices. | |
| IRQ4 | | LAvai | lablel | | | |
| IRQ5 | | LAvai | lablel | | | |
| IRQ7 | | LAvai | lablel | | | |
| IRQ9 | | lAvai | lablel | | | |
| IRQ10 | | lAvai | lablel | | | |
| IRQ11 | | [Ava i | lablel | | | |
| IRQ14 | | [Available] | | | | |
| IRQ15 | | LAva i | lablel | | | |
| | | | | | | |
| DMA Channel 0 | | [Ava i | lablel | | ← Select Screen | |
| DMA Channel 1 | | [Available] | | | 11 Select Item | |
| DMA Channel 3 | | [Available] | | | +- Change Option | |
| DMA Channel 5 | | [Available] | | | F1 General Help | |
| DMA Channel 6 | | [Available] | | | F10 Save and Exit | |
| DMA Channel 7 | | [Ava i | lablel | | ESC Exit | |
| | | | | | | |
| Reserved Nenory Siz | | | | T | | |
| | | | | | | |
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NOTE: This section covers some very technical items and it is strongly recommended to leave the default settings as it is unless you are an experienced user.

Clear NVRAM

To clear NVRAM during system boot.

Settings: [No, Yes]

Plug & Play O/S

Settings: [No, Yes]

PCI Latency Timer

Value in units of PCI clocks for PCI device latency timer register.

Settings: [32, 64, 96, 128, 160, 192, 224, 248]

Allocate IRQ to PCI VGA

Settings: [No, Yes]

Palette Snooping

Settings: [Disabled, Enabled]

PCI IDE BusMaster

Settings: [Disabled, Enabled]

IRQ3~15

Settings: [Available, Reserved]

DMA Channel 0~7

Settings: [Available, Reserved]

Reserved Memory Size

To decide the size of memory block to reserve for legacy ISA devices.

Settings: [Disabled, 16k, 32k, 64k]

BOOT SETTINGS



Boot Settings Configuration

Configuration settings during system boot.

Boot Devices Priority

Specifies the boot device priority sequence.

BOOT SETTINGS CONFIGURATION

| Allows BIOS to skip certain tests while booting. This will decrease the time needed to boot the system. | |
|--|--|
| | |
| | |

Quick Boot

Settings: [Disabled, Enabled]

Quiet Boot

Settings: [Disabled, Enabled]

AddOn ROM Display Mode

Settings: [Force BIOS, Keep Current]

Bootup Num-Lock

To select power-on state for Num-Lock.

Settings: [Off, On]

PS/2 Mouse Support

BOOT DEVICE PRIORITY

| Boot Device Priority | | Specifies the boot | |
|------------------------------------|--|---|--|
| 1st Boot Device 2nd Boot Device | [Network:VIA BootAg] [Network:VIA BootAg] | A device enclosed in parenthesis has been disabled in the corresponding type menu. | |
| | | Select Screen Select Item Change Option F1 General Help F10 Save and Exit ESC Exit | |

1st Boot Device

To specifies the boot sequence from the available devices. The available boot devices are detected dynamicly according to real situation and variable options will be provided.

Settings: [Network:VIA BootAgent, Disabled]

2nd Boot Device

Settings: [Network:VIA BootAgent, Disabled]

SECURITY SETTINGS

| | 1.12 | BIOS SE | TUP UTILITY | | |
|---|---|--------------------------|-------------|-------------------------------------|--|
| | | Boot | Security | Chipset | Exit |
| Security Settings | | | | Inst nass | all or Change the |
| Supervisor Password User Password Change Supervisor P Change User Passwor Boot Sector Virus P | Not Inst: Not Inst: Assword d rotection | talled talled Disa | bled] | | |
| | | | | ¢ ↑↓ Ente F1 F10 ESC | Select Screen Select Item er Change General Help Save and Exit Exit |
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Change Supervisor Password

This option is for setting a password for entering BIOS Setup. When a password has been set, a password prompt will be displayed whenever BIOS Setup is run. This prevents an unauthorized person from changing any part of your system configuration.

When a supervisor password is used, the BIOS Setup program can be accessed and the BIOS settings can be changed.

Change User Password

When a user password is used, the BIOS Setup program can be accessed but the BIOS settings cannot be changed.

Boot Sector Virus Protection

ADVANCED CHIPSET SETTINGS

| BIOS SETUP UTILITY | |
|--|--|
| Main Advanced PCIPnP Boot Security Ch | ipset Exit |
| Advanced Chipset Settings | Options for VIA CX700 |
| WARNING: Setting wrong values in below sections may cause system to malfunction. | |
| NorthBridge VIA CX700 Configuration SouthBridge VIA CX700 Configuration | |
| | ← Select Screen |
| | 71Select ItemEnter Go to Sub ScreenF1General HelpF10Save and ExitESCExit |
| v02.59 (C)Copyright 1985-2005, American Me | gatrends, Inc. |

WARNING: The Advanced Chipset Settings menu is used for optimizing the chipset functions. Do not change these settings unless you are familiar with the chipset.

NorthBridge VIA CX700 Configuration

SouthBridge VIA CX700 Configuration

NORTHBRIDGE VIA CX700 CONFIGURATION



Top Performance

Settings: [Disabled, Enabled]

Software Reset E2 issue

Settings: [Patch, Escape Patch]

ONCHIP VGA CONFIGURATION

| OnChip UGA Configuration Chipset | | | | | |
|---|----------------------------------|--|--|--|--|
| UGA Frame Buffer Size[64MB]CPI Direct Access Frame BufferEnabled]Select Display DeviceICRT+LCD]Panel Type(02)Outport PortID10]DitheringDisabled]TV H/V LayoutDefault]TV JypeINTSCJTV Output ConnectorICUBS (Composite)HDTV TypeHDTV 1080P]HDTV ConnectorIR/6/B] | Options 32NB 64HB 12BMB | | | | |

VGA Frame Buffer Size

Settings: [32MB, 64MB, 128MB]

CPU Direct Access Frame Buffer

Settings: [Disabled, Enabled]

Select Display Device

Settings: [CRT, LCD, TV, HDTV, CRT+LCD, LCD+TV]

Panel Type

Settings: [02]

Outport Port

Settings: [DI0, DI1]

Dithering

TV H/W Layout

Settings: [Default, Composite+S-Video, S-Video+S-Video, Comp.+R/G/B, Comp.+Y/Cb/Cr, Comp.+SDTV-R/G/B, Comp.+SDTV-Y/Pb/Pr, Composite, S-Video]

ТV Туре

Settings: [NTSC, PAL/PAL B/PAL G/PAL H, PAL M, PAL N, PAL Nc, PAL I, PAL D, NTSC Japan]

TV Output Connector

Settings: [CVBS (Composite), S-Video 0 (Y/C), R/G/B, Cr/Y/Cb, SDTV-R/G/B, SDTV-Pr/Y/Pb, S-Video 1 (Y/C)]

HDTV Type

Settings: [SDTV 5251/4801 NTSC, SDTV 6251/5761 PAL, HDTV 480P/525P NTSC, HDTV 576P/625P/ PAL, HDTV 720P, HDTV 10801, HDTV 1080P]

HDTV Connector

Settings: [R/G/B, Pr/Y/Pb]

SOUTHBRIDGE VIA CX700 CONFIGURATION

| SouthBridge UIA CX700 Configuration Chipset | | | | | |
|---|---------------------------|-------------|--|--|--|
| • Serial ATA IDE Controller • MC'97 Modem • High Definition Audio | (IDE) [Auto] [Auto] | | Options IDE RAID | | |
| | | | Select Screen Select Item Change Option General Help F10 Save and Exit ESC Exit | | |
| v02.59 (C) Copyright | 1985-2005, A | merican Meg | atrends, Inc. | | |

Serial ATA IDE Controller

Settings: [IDE, RAID]

MC'97 Modem

Settings: [Disabled, Auto]

High Definition Audio

Settings: [Disabled, Auto]

EXIT OPTIONS

| BIOS SETUP UTILITY | | | | | | | |
|--|---|------------|--------------|------------------|--|--|--|
| Main Advance | d PCIPnP | Boot | Security | Chipset | Exit | | |
| Exit Options | | | | Exit | Exit system setup | | |
| Save Changes and Exit Discard Changes and Exit Discard Changes | | | | chai | changes. F10 key can be used for this operation. | | |
| | | | | F10 for | | | |
| Load Optimal De Load Failsafe D | Load Optimal Defaults Load Failsafe Defaults | | | | | | |
| | | | | | | | |
| | | | | | 9-1 | | |
| | | | | †1 Ente | Select Screen Select Item er Go to Sub Screen | | |
| | | | | F1 F10 ESC | General Help Save and Exit Exit | | |
| | | | | | | | |
| v02.59 |) (C) Copyrigh | t 1985-200 | 95, American | Megatrer | ids, Inc. | | |

Save Changes abd Exit

Exit system setup after saving the changes, or press "F10".

Discard Changes abd Exit

Exit system setup without saving any changes, or press "Esc".

Discard Changes

Discard changes which have been done so far to any of the setup questions, or press "F7".

Load Optimal Defaults

Load optimal default values for all the setup items, or press "F9". The default optimized values are set by the mainboard manufacturer to provide a stable system with optimized performance.

Load Failsafe Defaults

Load fail-safe default values for all the setup items, or press "F8". The values are set by the mainboard manufacturer to provide basic system performance.



Driver Installation

This chapter gives you brief descriptions of each mainboard driver and application. You must install the VIA chipset drivers first before installing other drivers such as audio or VGA drivers. The applications will only function correctly if the necessary drivers are already installed.

DRIVER UTILITIES

Getting Started

The Driver Utilities CD contains the driver utilities and software for enhancing the performance of the mainboard.

Note: The driver utilities and software are updated from time to time. The latest updated versions are available at <u>http://www.viaembedded.com./</u>

Running the Driver Utilities CD

To start using the CD, insert the CD into the CD-ROM or DVD-ROM drive. The CD should run automatically after closing the CD-ROM or DVD-ROM drive. The driver utilities and software menu screen should then appear on the screen. If the CD does not run automatically, click on the "Start" button and select "Run..." Then type: "D:\Setup.exe".

NOTE: D: might not be the drive letter of the CD-ROM/DVD-ROM in your system.

CD CONTENT

- ☑ VIA 4in1 Drivers: Contains VIA ATAPI Vendor Support Driver (enables the performance enhancing bus mastering functions on ATA-capable Hard Disk Drives and ensures IDE device compatibility), AGP VxD Driver (provides service routines to your VGA driver and interface directly to hardware, providing fast graphical access), IRQ Routing Miniport Driver (sets the system's PCI IRQ routing sequence) and VIA INF Driver (enables the VIA Power Management function).
- VIA Graphics Driver: Enhances the onboard VIA graphic chip.
- VIA Audio Driver: Enhances the onboard VIA audio chip.
- VIA USB 2.0 Driver: Enhances VIA USB 2.0 ports.
- VIA LAN Driver: Enhances the onboard VIA 10/100M LAN chip.
- VIA RAID Driver: Support for SATA RAID devices.

Note:

EPIA-LT does not support video outputs of HDTV (YPbPr) and LCD. Please DO NOT enable these functions in this system.