HS-2606

ULV Intel® Celeron® processor Embedded Engine Board • CompactFlash • PCMCIA • Mini PCI • • CRT/Panel • TV-Out • LAN • Audio • • ATA/33/66/100 • 4 COM • USB2.0 • WDT •

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Table of Contents

Chapte	r 1 General Description1
1.1	
1.2	Specifications
1.3	Board Dimensions 4
Chapte	r 2 Unpacking5
	Opening the Delivery Package
2.2	Inspection
Chapte	r 3 Hardware Installation7
3.1	Before Installation
3.2	Board Layout
3.3	Jumper List
3.4	Connector List
3.5	Configuring the CPU
3.6	System Memory 10
3.7	CMOS Data Clear
3.8	Power and Fan Connectors
3.9	System Front Panel Control 11
	VGA Controller
	TV-Out Connector
	Ethernet Connector
	Audio Connectors 15
	PCI E-IDE Drive Connector
	Serial Port Connectors 17
	USB Connector
	Keyboard/Mouse Connectors 18
	Watchdog Timer
	GPIO Function
	Mini PCI Slot
	CompactFlash™ Connector
3.22	PCMCIA Connector

Chapter 4 AMI BIOS Setup	21
4.1 Starting Setup	. 21
4.2 Using Setup	. 22
4.3 Main Menu	
4.4 Standard CMOS Setup	. 24
4.5 Advanced CMOS Setup	
4.6 Advanced Chipset Setup	
4.7 Power Management Setup	
4.8 PCI / Plug and Play Setup	
4.9 Peripheral Setup	
4.10 Auto-Detect Hard Disks	. 30
4.11 Change Supervisor/User Password	. 31
4.12 Auto Configuration with Optimal Settings	. 32
4.13 Auto Configuration with Fail Safe Settings	
4.14 Save Settings and Exit	
4.15 Exit Without Saving	
Chapter 5 Software Utilities	.37
5.1 VGA Driver Installation	
5.2 LAN Driver Installation	
5.3 Audio Driver Installation	
5.4 USB2.0 Driver Installation	

Safety Instructions

Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:

- Do not remove boards or integrated circuits from their anti-static packaging until you are ready to install them.
- Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This helps to discharge any static electricity on your body.
- Wear a wrist-grounding strap, available from most electronic component stores, when handling boards and components. Fasten the ALLIGATOR clip of the strap to the end of the shielded wire lead from a grounded object. Please wear and connect the strap before handle the product to ensure harmlessly discharge any static electricity through the strap.
- Please use an anti-static pad when putting down any components or parts or tools outside the computer. You may also use an anti-static bag instead of the pad. Please inquire from your local supplier for additional assistance in finding the necessary anti-static gadgets.
- **NOTE:** DO NOT TOUCH THE BOARD OR ANY OTHER SENSITIVE COMPONENTS WITHOUT ALL NECESSARY ANTI-STATIC PROTECTIONS.

Chapter 1

General Description



The HS-2606 is a 100/133MHz FSB VIA CLE266/VT8235 chipset-based board designed for Mini PCI Local Bus ULV Intel® Celeron® processor 400/650MHz. These features combine and make the HS-2606 and ideal all-in-one industrial single board computer. Additional features include and enhanced I/O with CF, PCMCIA, CRT/Panel, audio, LAN TV-Out, 4 COM, and USB2.0 interfaces.

Its onboard ATA/33/66/100 to IDE drive interface architecture allows the HS-2606 to supports data transfers of 33, 66 or 100MB/sec. To one IDE drive connection. Designed with the VIA CLE266/VT8235 core logic chipset, the board supports VIA Eden 1GHz Embedded CPU. The VIA CLE266 integrated S3 3D supports CRT display up to 1400 x 1050 @ 60Hz, and panel display up to 1400 x 1050.

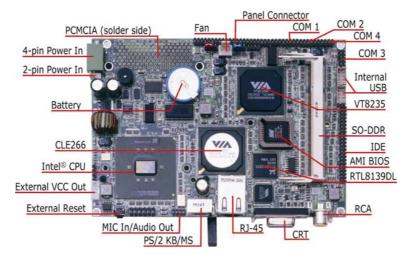
HS-2606 offers PCMCIA connector and CompactFlash reader in addition. +10~+30V wide range single DC power in can make HS-2606 suitable for all kinds of environments even more.



System memory is also sufficient with the one 200-pin SO-DDR socket that can supports up to 1GB.

Additional onboard connectors include 4 USB2.0 port providing faster data transmission. And one external RJ-45 connector for 10/100 Based Ethernet use.

1.1 Major Features



The HS-2606 comes with the following features:

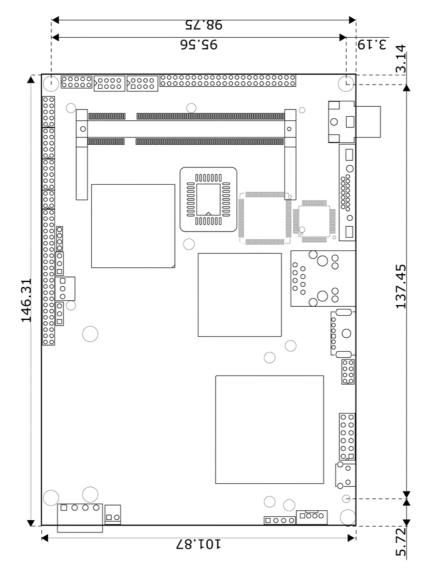
- ULV Intel® Celeron® embedded 400/650MHz
- One SO-DDR socket with a max. capacity of 1GB
- VIA CLE266/VT8235 chipset
- ▶ Winbond W83697UF super I/O chipset
- > VIA CLE266 graphics controller
- RealTek RTL8139DL Ethernet controller
- AC97 3D audio controller
- Fast PCI ATA/33/66/100 IDE controller
- > CF, PCMCIA, 4 COM, 4 USB2.0
- TV-Out function
- ➤ +10~+30V wide range single DC power in



1.2 Specifications

- CPU: ULV Intel® Celeron® processor 400/650MHz
- Memory: One SO-DDR socket supports up to 1GB
- Chipset: VIA CLE266/VT8235
- I/O Chipset: Winbond W83697UF
- CompactFlash: One, Type I/II IDE interface adapter
- PCMCIA: Two PC Card or CardBus slots
- PCI Slot: One, Type I mini PCI slot
- VGA: VIA CLE266 integrated S3 3D supports AGP Bus and Hardware MPEG-2
- **TV-Out:** Supports PAL or NTSC TV system
- Ethernet: RealTek RTL8139DL 10/100 Based LAN
- Audio: AC97 3D audio controller
- IDE: One 2.0-pitch 44-pin IDE connector
- Serial Port: 16C550 UART-compatible RS-232 x 4 serial ports with 16-byte FIFO
- **USB:** 4 internal USB2.0 ports
- Keyboard/Mouse: PS/2 6-pin Mini DIN
- BIOS: AMI PnP Flash BIOS
- Watchdog Timer: Software programmable time-out intervals from 1~255 sec.

- **CMOS:** Battery backup
- Power In: +7~+26V wide range single DC power in
- Temperature: 0~+60°C (operating)
- Dimensions: 14.5(L) x 10.2(W) cm



1.3 Board Dimensions

Chapter 2

Unpacking

2.1 Opening the Delivery Package

The HS-2606 is packed in an anti-static bag. The board has components that are easily damaged by static electricity. Do not remove the anti-static wrapping until proper precautions have been taken. Saftey instructions in front of this manual describe anti-static precautions and procedures.

2.2 Inspection

After unpacking the board, place it on a raised surface and carefully inspect the board for any damage that might have occurred during shipment. Ground the board and exercise extreme care to prevent damage to the board from static electricity.

Integrated circuits will sometimes come out of their sockets during shipment. Examine all integrated circuits, particularly the BIOS, processor, memory modules, ROM-Disk, and keyboard controller chip to ensure that they are firmly seated. The HS-2606 delivery package contains the following items:

- HS-2606 Board x 1
- Utility CD Disk x 1
- Cables Package x 1
- Jumper Bag x 1
- User's Manual



Cables Package				
NO. Description				
1	4-pin power cable x 1			
2	MIC/Audio cable x 1			
3	8-pin USB split type cable x 1			
4	PS/2 KB/MS transfer cable x 1			
5	RS-232 cable x 4			
6	IDE flat cable x 1			

It is recommended that you keep all the parts of the delivery package intact and store them in a safe/dry place for any unforeseen event requiring the return shipment of the product. In case you discover any missing and/or damaged items from the list of items, please contact your dealer immediately.

Chapter 3

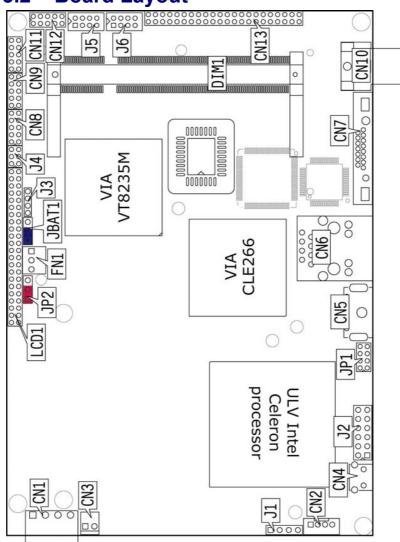
Hardware Installation

This chapter provides the information on how to install the hardware using the HS-2606. This chapter also contains information related to jumper settings of switch, and watchdog timer selection etc.

3.1 Before Installation

After confirming your package contents, you are now ready to install your hardware. The following are important reminders and steps to take before you begin with your installation process.

- 1. Make sure that all jumper settings match their default settings and CMOS setup correctly. Refer to the sections on this chapter for the default settings of each jumper.
- 2. Go through the connections of all external devices and make sure that they are installed properly and configured correctly within the CMOS setup. Refer to the sections on this chapter for the detailed information on the connectors.
- 3. Keep the manual and diskette in good condition for future reference and use.



3.2 Board Layout

3.3 Jumper List

Jumper	Default Setting	Setting	Page
JBAT1	Clear CMOS: Normal Operation	Short 1-2	10
JP2	Panel Voltage Select: +3.3V	Short 1-2	12

3.4 Connector List

Connector	Definition	Page
CN1	4-pin Power In Connector	10
CN2	External VCC Out Connector	10
CN3	2-pin ATX Power In Connector	10
CN4	External Reset Button	10
CN5	PS/2 6-pin Mini DIN KB/MS Connector	18
CN6	RJ-45 Connector	14
CN7	15-pin CRT Connector	12
CN8/CN9/CN12/CN11	COM 1~COM 4 Connector (5x2 header)	17
CN10	TV-Out Connector	14
CN13	IDE Connector	16
CN14	CompactFlash Connector	20
DIM1	SO-DDR Socket	10
FN1 Fan Power In Connector		10
J1	Line In Connector	15
J2	System Front Panel Control	11
J3	GPIO Connector	19
J5/J6	USB Connector	17
JP1	MIC In/Audio Out Connector	15
LCD1	44-pin Panel Connector	12
U32	PCMCIA Connector	20
PC1	Mini PCI Connector	20

3.5 Configuring the CPU

The HS-2606 v2.0 embedded with a ULV Intel® Celeron® processor 400/650MHz. User don't need to adjust the frequently and check speed of Intel® processor.



3.6 System Memory

The HS-2606 provides one 200-pin SO-DDR socket at locations *DIM1*. The maximum capacity of the onboard memory is 1GB.

3.7 CMOS Data Clear

The HS-2606 has a Clear CMOS jumper on JBAT1.

• JBAT1: Clear CMOS

Options	Settings	
Normal Operation (default)	Short 1-2	0
Clear CMOS	Short 2-3	

IMPORTANT: Before you turn on the power of your system, please set JBAT1 to Short 1-2 for normal operation.

3.8 Power and Fan Connectors

HS-2606 provides one 4-pin power connector at *CN1*. And one 2-pin ATX power in at *CN3*.

+10~+30V wide range single DC power in can make HS-2606 suitable for all kinds of environments even more.

• CN1: 4-pin DC Power In Connector

PIN	Description	ľ
1	+7~+26V	
2	GND	$\Box 0 0 0$
3	GND	1 4
4	+7~+26V	

• CN2: External VCC Out Connector

PIN	Description	
1	VCC	
2	GND	
3	GND	
4	VCC	

• CN3: 2-pin ATX Power In Control

PIN	Description	
1	PS_ON	
2	5VSB	

• CN4: External Reset Button

PIN	Description	
1	RST_SW	
2	GND	
3	GND	
4	GND	

• FN1: Fan Power In Connector

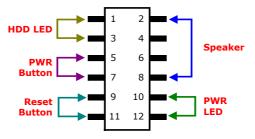
PIN	Description	
1	GND	1 0 0 3
2	+5V	
3	N/C	

3.9 System Front Panel Control

• J2: System Front Panel Control

PIN	Description	PIN	Description
1	330 Ω Pull +5V	2	Speaker
3	HDD LED	4	N/C
5	PW Button	6	GND
7	GND	8	330 Ω Pull +5V
9	Reset Switch	10	330 Ω Pull +5V
11	GND	12	PW_LED

Connector J2 Orientation



3.10 VGA Controller

The HS-2606 provides two connection methods of a VGA device. *CN7* offers a single standard CRT connector while *LCD1* is the 44-pin panel connector. VIA CLE266 VGA chipset shared main memory 8/16/32MB, and provides high quality DVD video playback. HS-2606 also provides Hardware MPEG-2.

CRT resolution is up to 1400 x 1050 @60Hz, Panel resolution is up to 1400 x 1050. And LCD at 32bpp is not supported with SXGA + Panel.

PIN	Description	PIN	Description	
1	Red	2	Green	
3	Blue	4	N/C	6 11
5	GND	6	GND	
7	GND	8	GND	888
9	N/C	10	GND	888
11	N/C	12	SDA	000 5 ¹⁰ 15
13	HSYNC	14	VSYNC	5 15
15	SCL			

• CN7: 15-pin CRT Connector

PIN	Description	PIN	Description	
1	N/C	2	N/C	
3	GND	4	GND	
5	V _{LCD}	6	ENAVDD	
7	ENPVEE	8	GND	
9	GFPD0	10	GFPD1	100 2 00
11	GFPD2	12	GFPD3	
13	GFPD4	14	GFPD5	00
15	GFPD6	16	GFPD7	
17	GFPD8	18	GFPD9	
19	GFPD10	20	GFPD11	00
21	GFPD12	22	GFPD13	00
23	GFPD14	24	GFPD15	
25	GFPD16	26	GFPD17	
27	GFPD18	28	GFPD19	00
29	GFPD20	30	GFPD21	
31	GFPD22	32	GFPD23	00
33	N/C	34	N/C	43 00 44
35	SHFLCK	36	GFPVS	
37	GFPDEN	38	GHPHS	
39	GND	40	FPBKLP	
41	N/C	42	N/C	
43	N/C	44	N/C	

• LCD1: 44-pin Panel Connector

NOTE: *Please set the proper voltage of your panel use JP2 before proceeding on installing it.*

The HS-2606 has an onboard jumper that selects the working voltage of the flat panel connected to the system. Jumper *JP2* offers two voltages setting for the user.

• JP2: Panel Voltage Select

Options	Settings	
+3.3V (default)	Short 1-2	<u> </u>
+5V	Short 2-3	03

3.11 TV-Out Connector

The HS-2606 can supports TV-Out function which input could be up to 800 x 600 graphics resolutions. World Wide Video standards are supported including NTSC-M (North America, Taiwan), NTSC-J (Japan), PAL-B, D, G, H, I (Europe Asia), PAL-M (Brazil), PAL-N (Uruguay, Paraguay) and PAL-NC (Argentina).

• CN10: RCA Connector (for TV-Out function)

PIN	Description
1	TVCVB
2	GND
3	GND
4	GND

3.12 Ethernet Connector

The HS-2606 provides two external RJ-45 interface connectors. Please refer to the following for its pin information.

• CN6: RJ-45 Connector

PIN	Description	
1	TX+	
2	TX-	
3	R/C GND	
4	N/C	
5	N/C	
6	R/C GND	
7	RX+	
8	RX-	

3.13 Audio Connectors

The HS-2606 has an onboard AC97 3D audio controller. The following tables list the pin assignments of the Line In/Audio Out connector.

• JP1: MIC In/Audio Out Connector

PIN	Description	PIN	Description
1	AOUTL	2	AOUTR
3	GND	4	GND
5	MIC IN	6	N/C
7	GND	8	GND

• J1: Line In Connector

PIN	Description	PIN	Description
1	LINE R	2	GND
3	GND	4	LINE L

3.14 PCI E-IDE Drive Connector

CN13 is a standard 44-pin 2.0-pitch connector daisy-chain driver connector serves the PCI E-IDE drive provisions onboard the HS-2606. A maximum of two ATA/33/66/100 IDE drives can be connected to the HS-2606 via CN11.

PIN	Description	PIN	Description
1	Reset	2	GND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GND	20	N/C
21	PDREQ	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	PIORDY	28	GND
29	RPDACK-	30	GND
31	Interrupt	32	N/C
33	RPDA1-	34	PATA66
35	RPDA0-	36	RPDA2-
37	RPCS1-	38	RPCS3-
39	HDD Active	40	GND
41	VCC	42	VCC
43	GND	44	N/C
4	3 <u>0000000000</u>	00000	00000001

• CN13: IDE Connector

3.15 Serial Port Connectors

The HS-2606 offers NS16C550 compatible UARTs with Read/ Receive 16-byte FIFO serial ports and internal 10-pin headers.

• CN8/CN9/CN12/CN11: COM 1~COM 4 Connector (5x2 Header)

PIN	Description	PIN	Description	
1	DCD	2	DSR	
3	RXD	4	RTX	9
5	TXD	6	CTX	000
7	DTR	8	RI	10
9	GND	10	N/C	

3.16 USB Connector

The HS-2606 provides two 8-pin connectors, at location J4 and J5, for four USB2.0 ports to the HS-2606.

• J5/J6: USB2.0 Connector

PIN	Description	PIN	Description
1	VCC	2	VCC
3	BD2-/ BD0-	4	BD3-/BD1-
5	BD2+/ BD0+	6	BD3+/BD1+
7	GND	8	GND

3.17 Keyboard/Mouse Connectors

The HS-2606 offers two possibilities for keyboard/mouse connections. The connections are via CN3 for an external PS/2 type keyboard/mouse OR CN13 for 6-pin header.

• CN5: PS/2 6-pin Mini DIN KB/MS Connector

PIN	Description	
1	Keyboard Data	
2	Mouse Data	6 5
3	GND	4
4	+5V	2 0 0 1
5	Keyboard Clock	
6	Mouse Clock	

3.18 Watchdog Timer

Once the Enable cycle is active a Refresh cycle is requested before the time-out period. This restarts counting of the WDT period. When the time counting goes over the period preset of WDT, it will assume that the program operation is abnormal. A System Reset signal will restart when such error happens.

The following sample programs show how to enable, disable and refresh the watchdog timer:

;Enter the	WDT function	on mode, interruptible double-write
MOV MOV OUT OUT	DX, 4EH AL, 87H DX, AL DX, AL	
, ;Configura	ation logical	device 8, configuration register CRF30
; MOV MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT MOV OUT	DX, 4EH AL, 07H DX, AL DX, 4FH AL, 08H DX, 4EH AL, 08H DX, 4EH AL, 30H DX, 4FH AL, 01H DX, AL DX, 4FH AL, 73H DX, 4FH AL, 00H DX, 4EH AL, F4H DX, 4EH AL, 55H DX, 4FH AL, 05H DX, AL	<pre>;point to Logical Device Number Reg. ;select logical device 8 ;select CRF30 ;update CRF30 with value 01H ;select CRF3 (select WDTO count mode) ;update CRF3 with value 00H (bit 2:0=second; 1=minute) ;select CRF4 (WDTO Time-out value) ;update CRF4 with value 05H put2:0:00 Time out Displad</pre>
		Bit[7:0] = 00 Time-out Disabled 01 Time-out occurs after 1 second/minute 02 Time-out occurs after 2 second/minute

. ff Time-out occurs after 255 second/minute

3.19 GPIO Function

The HS-2606 offers four general purpose I/O ports with the following capabilities:

- I2C/SMB Support
- Thermal Detect
- Notebook Lid Open/close Detect
- Battery Low Detect

• J3: GPIO Connector

PIN	Description	PIN	Description
1	GPIO8	2	GPIO9
3	GPIO10	4	GPIO11

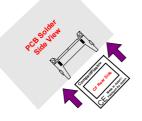
3.20 Mini PCI Slot

HS-2606 supports a mini PCI connector at location *PC1*. The peripheral component with standard Typel mini PCI can be used. For particular requirement, please refer to "BOSER Mini PCI Series" product on website or contact with us.

3.21 CompactFlash™ Connector

The HS-2606 also offers a Type I/II CompactFlashTM connector which is IDE interface located at the solder side of the board (beneath the SO-DIMM connector). The designated *CN14* connector, once soldered with an adapter, can hold CompactFlashTM cards of various sizes. Please turn off the power before inserting the CF card.

Inserting a CompactFlash[™] card into the adapter is not a difficult task. The socket and card are both keyed and there is only one direction for the card to be completely inserted. Refer to the diagram on the following page for the traditional way of inserting the card.



3.22 PCMCIA Connector

HS-2606 built-in two CardBus/PCMCIA interface connector at location *U32*.

Chapter 4

AMI BIOS Setup

The HS-2606 uses AMI BIOS for the system configuration. The AMI BIOS setup program is designed to provide the maximum flexibility in configuring the system by offering various options that could be selected for end-user requirements. This chapter is written to assist you in the proper usage of these features.

4.1 Starting Setup

The AMI BIOS is immediately activated when you first power on the computer. The BIOS reads the system information contained in the CMOS and begins the process of checking out the system and configuring it. When it finishes, the BIOS will seek an operating system on one of the disks and then launch and turn control over to the operating system.

While the BIOS is in control, the Setup program can be activated in one of two ways:

- 1. By pressing immediately after switching the system on, or
- 2. By pressing the key when the following message appears briefly at the bottom of the screen during the POST (Power On Self Test).

Press DEL to enter SETUP.

If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will be asked to...

PRESS F1 TO CONTINUE, DEL TO ENTER SETUP



4.2 Using Setup

In general, you use the arrow keys to highlight items, press <Enter> to select, use the <PageUp> and <PageDown> keys to change entries, and press <Esc> to quit. The following table provides more detail about how to navigate in the Setup program using the keyboard.

1	Move to previous item	
↓	Move to next item	
←	Move to previous item	
\rightarrow	Move to previous item	
Esc key	Main Menu Quit and not save changes into CMOS	
	Status Page Setup Menu and Option Page Setup Menu	
	Exit current page and return to Main Menu	
PgUp key	Decrease the numeric value or make changes	
PgDn key	Increase the numeric value or make changes	
+ key	Increase the numeric value or make changes	
- key	Decrease the numeric value or make changes	
F1 key	Reserved	
F2 key	Change color from total 8 colors. F2 to select color forward	
F3 key	F2 to select color backward	
F4 key	Reserved	
F5 key	Reserved	
F6 key	Reserved	
F7 key	Reserved	
F8 key	Reserved	
F9 key	Reserved	
F10 key	Save all the CMOS changes, only for Main Menu	

4.3 Main Menu

Once you enter the AMI BIOS CMOS Setup Utility, the Main Menu will appear on the screen. 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 <Enter> to enter the sub-menu.

AMIBIOS HIFLEX SETUP UTILITY – VERSION x.xx (C)2001 American Megatrends, Inc. All Rights Reserved
Standard CMOS Setup Advanced CMOS Setup Advanced Chipset Setup Power Management Setup PCI / Plug and Play Setup Peripheral Setup Hardware Monitor Setup Auto-Detect Hard Disks Change User Password Change Supervisor Password Auto Configuration with Optimal Settings Auto Configuration with Fail Safe Settings Save Settings and Exit Exit Without Saving
ESC:Exit $\Lambda \Psi$:Sel F2/F3: Color F10: Save & Exit

NOTE: *A brief description of the highlighted choice appears at the bottom of the screen.*

4.4 Standard CMOS Setup

The Standard Setup is used for the basic hardware system configuration. The main function is for Data/Time and Floppy/Hard Disk Drive settings. Please refer to the following screen for the setup. When the capacity of the IDE hard disk drive is larger than 528MB, you must set the HDD mode to **LBA** mode. Please use the IDE Setup Utility in BIOS SETUP to install the HDD correctly.

AMIBIOS SETUP – STANDARD CMOS SETUP (C)2001 American Megatrends, Inc. All Rights Reserved				
Date (mm/dd/yyyy) Tim (hh/mm/ss) e			Base Memory Extd Memory	
Type Pri Master : Auto Pri Slave : Auto Sec Master : Auto Sec Slave : Auto	Size Cyln He	ad WPcom Sec	LBA Blk Mode Mode	PIO 32Bit Mode Mode ON ON ON ON
Boot Sector Virus Prote	ection : Disabled			
Month: Jan - Dec Day: 01 - 31 Year: 1980 - 2099			ESC:Exit PgUp/PgD F1:Help	↑↓:Sel n:Modify F2/F3:Color

4.5 Advanced CMOS Setup

This section allows you to configure your system for the basic operation. You have the opportunity to select the system's default speed, boot-up sequence, keyboard operation, shadowing and security.

AMIBIOS SETUP – ADVANCED CMOS SETUP (C)2001 American Megatrends, Inc. All Rights Reserved			
Quick Boot	Enabled		Available Options:
1st Boot Device	Disabled		
2nd Boot Device	Disabled		
3rd Boot Device	Disabled		
Try Other Boot Devices	Yes		
S.M.A.R.T. for Hard Disks	Disabled		
BootUp Num-Lock	On		
PS/2 Mouse Support	Enabled		
Primary Display	VGA/EGA		
Password Check	Setup		
Ask HDD Password on Every boot	Yes		
Boot To OS/2	No		
CPU MicroCode Updation	Enabled		
CPU Serial Number	Disabled		
L1 Cache	Enabled		
L2 Cache	Enabled		
System BIOS Cacheable	Enabled		
C000,32k Shadow	Cached		
C800,16k Shadow	Disabled		
CC00,16k Shadow	Disabled		
D000,16k Shadow	Disabled		
D400,16k Shadow	Disabled		ESC:Exit ↑↓:Sel
D800,16k Shadow	Disabled		PgUp/PgDn:Modify
DC00,16k Shadow	Disabled	▼	F1:Help F2/F3:Color



4.6 Advanced Chipset Setup

This section allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds and the access to the system memory resources, such as DRAM and the external cache. It also coordinates the communications between the conventional ISA and PCI buses. It must be stated that these items should never be altered. The default settings have been chosen because they provide the best operating conditions for your system. You might consider and make any changes only if you discover that the data has been lost while using your system.

AMIBIOS SETUP – ADVANCED CHIPSET SETUP (C)2001 American Megatrends, Inc. All Rights Reserved				
******* DRAM Timing *******		Available Options:		
Configure SDRAM Timing by SPD	Enabled	▶ Disabled		
DRAM Frequency	Auto	Enabled		
SDRAM CAS# Latency	2.5			
SDRAM Bank Interleave	Disabled			
SDRAM Command Rate	2T			
Memory Hole	Disabled			
Auto Prechrage for TLB/WB	Disabled			
Write Recovery time	2T			
AGP Mode	4x			
AGP Read Synchronization	Disabled			
AGP Fast Write	Disabled			
AGP Comp. Driving	Auto			
Manual AGP Comp. Driving	CB			
AGP Aperture Size	64MB			
AGP Master 1 W/S Write	Disabled			
AGP Master 1 W/S Read	Disabled			
Search for MDA Resources	Yes			
PCI Delay Transaction	Enabled			
USB Controller	4 USB Ports			
USB Device Legacy Support	All Device	ESC: Exit ↑↓: Sel		
V-Link Data 2X Support	Disabled	PgUp/PgDn: Modify F2/F3: Color		

4.7 Power Management Setup

AMIBIOS SETUP - PC (C)2001 American Megat	I / PLUG AND rends, Inc. All	PL Ri	AY SETUP ghts Reserved
ACPI Aware O/S	Yes		Available Options:
ACPI Standby State	S1/POS		▶ No
USB Device Wakeup Function	Enabled		Yes
Re-Call VGA BIOS at S3 Resuming	Enabled		
Power Management / APM	Enabled		
Video Power Down Mode	Suspend		
Hard Disk Power Down Mode	Stand By		
Standby Time Out (Minute)	Disabled		
Suspend Time Out (Minute)	Disabled		
Throttle Slow Clock Ratio	50%~56.25%		
Display Activity	Ignore		
IRQ3	Monitor		
IRQ4	Monitor		
IRQ5	Ignore		
IRQ7	Monitor		
IRQ9	Ignore		
IRQ10	Ignore		
IRQ11	Ignore		
IRQ12	Ignore		
IRQ13	Ignore		
IRQ14	Monitor		
IRQ15	Ignore		
Power Button Function	On / Off		
Restore on AC / Power Loss	Last State		
Wake-Up Key	Any Key		
Wake-Up Password	N/A		
Resume On PS/2 Mouse	Disabled		
Resume On RTC Alarm	Disabled		
RTC Alarm Date	15		
RTC Alarm Hour	12		ESC: Exit ↑↓: Sel
RTC Alarm Minute	30		PgUp/PgDn: Modify
RTC Alarm Second	30	▼	F2/F3: Color

4.8 PCI / Plug and Play Setup

This section describes configuring the PCI bus system. PCI, or Personal Computer Interconnect, is a system that allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

AMIBIOS SETUP – P (C)2001 American Mega		
Plug and Play Aware O/S	No	Available Options:
Clear NVRAM	No	▶ No
OnChip VGA Frame Buffer Size	16MB	Yes
PCI Latency Timer (PCI Clocks)	32	
Primary Graphics Adapter	PCI	
Boot Device Select	CRT	
TV Type	NTSC	
TV Output Connector	Composite	
LCD Panel Type	00	
TV Layout	Default	
Dithering	Disabled	
PCI IDE Bus Master	Disabled	
OffBoard PCI IDE Card	Auto	
OffBoard PCI IDE Primary IRQ	Disabled	
OffBoard PCI IDE Secondary IRQ	Disabled	
DMA Channel 0	PnP	
DMA Channel 1	PnP	
DMA Channel 3	PnP	
DMA Channel 5	PnP	
DMA Channel 6	PnP	
DMA Channel 7	PnP	
IRQ3	PCI/PnP	
IRQ4	PCI/PnP	
IRQ5	PCI/PnP	
IRQ7	PCI/PnP	
IRQ9	PCI/PnP	
IRQ10	PCI/PnP	
IRQ11	PCI/PnP	
IRQ14	PCI/PnP	ESC: Exit ↑↓: Sel
IRQ15	PCI/PnP	PgUp/PgDn: Modify F2/F3: Color

4.9 Peripheral Setup

The IDE hard drive controllers can support up to two separate hard drives. These drives have a master/slave relationship that is determined by the cabling configuration used to attach them to the controller. Your system supports two IDE controllers--a primary and a secondary--so you can install up to four separate hard disks.

PIO means Programmed Input/Output. Rather than having the BIOS issue a series of commands to affect the transfer to or from the disk drive, PIO allows the BIOS to tell the controller what it wants and then let the controller and the CPU perform the complete task by them. This is much simpler and more efficient (also faster).

AMIBIOS SETUP – PERIPHERAL SETUP (C)2001 American Megatrends, Inc. All Rights Reserved				
OnBoard Serial Port 1	3F8/COM1	Available Options:		
OnBoard Serial Port 2	2F8/COM2	► Auto		
Serial Port2 Mode	Normal	Disabled		
IR Pin Select	IRRX/IRTX	Enabled		
OnBoard Serial Port 3	3E8/COM3			
Serial Port3 IRQ	10			
OnBoard Serial Port 4	2E8/COM4			
Serial Port4 IRQ	11			
OnBoard IDE	Both			
OnBoard AC'97 Audio	Enabled			
		ESC: Exit ↑↓: Sel		
		PgUp/PgDn: Modify		
		F2/F3: Color		

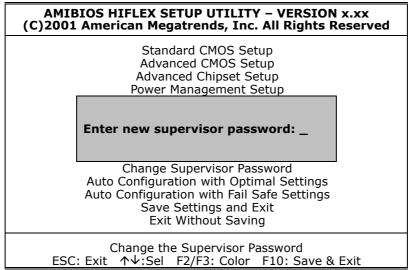
4.10 Auto-Detect Hard Disks

This option detects the parameters of an IDE hard disk drive, and automatically enters them into the Standard CMOS Setup screen.

Up to four IDE drives can be detected, with parameters for each appearing in sequence inside a box. To accept the displayed entries, press the "Y" key; to skip to the next drive, press the "N" key. If you accept the values, the parameters will appear listed beside the drive letter on the screen.

AMIBIOS HIFLEX SETUP UTILITY – VERSION x.xx (C)2001 American Megatrends, Inc. All Rights Reserved						
Standard CMOS Setup						
Advanced CMOS Setup						
Advanced Chipset Setup						
Power Management Setup						
PCI / Plug and Play Setup						
Peripheral Setup						
Hardware Monitor Setup						
Auto-Detect Hard Disks						
Change User Password						
Change Supervisor Password						
Auto Configuration with Optimal Settings						
Auto Configuration with Fail Safe Settings						
Save Settings and Exit						
Exit Without Saving						
Auto-detect all hard disk parameters						
ESC: Exit $\wedge \psi$: Sel F2/F3: Color F10: Save & Exit						

4.11 Change Supervisor/User Password



You can set either supervisor or user password, or both of them. The differences are:

- supervisor password: can enter and change the options of the setup menus.
- **user password:** just can only enter but do not have the right to change the options of the setup menus.

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

ENTER PASSWORD:

Type the password, up to eight characters in length, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To disable a password, just press <Enter> when you are prompted to enter the password. A message will confirm the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.



PASSWORD DISABLED.

When a password has been enabled, 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 require the BIOS to request a password every time your system is rebooted. This would prevent unauthorized use of your computer.

You determine when the password is required within the BIOS Features Setup Menu and its Security option (see Section 3). If the Security option is set to "System", the password will be required both at boot and at entry to Setup. If set to "Setup", prompting only occurs when trying to enter Setup.

4.12 Auto Configuration with Optimal Settings

When you press <Enter> on this item you will get a confirmation dialog box with a message shown below. This option allows you to load/restore the BIOS default values permanently stored in the BIOS ROM. Pressing 'Y' loads the BIOS default values for the most stable.

AMIBIOS HIFLEX SETUP UTILITY – VERSION x.xx (C)2001 American Megatrends, Inc. All Rights Reserved
Standard CMOS Setup Advanced CMOS Setup Advanced Chipset Setup Power Management Setup
Load high performance settings (Y/N) ? <u>N</u>
Change Supervisor Password Auto Configuration with Optimal Settings Auto Configuration with Fail Safe Settings Save Settings and Exit Exit Without Saving
Load configuration settings giving highest performance ESC:Exit $\Lambda \Psi$:Sel F2/F3: Color F10: Save & Exit

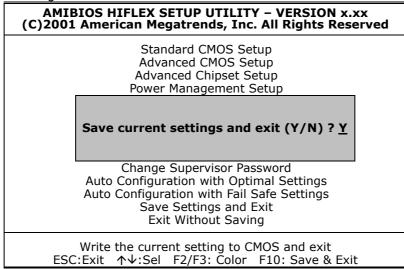
4.13 Auto Configuration with Fail Safe Settings

When you press <Enter> on this item you get a confirmation dialog box with a message similar to the figure below. This option allows you to load/restore the default values to your system configuration, optimizing and enabling all high performance features. Pressing 'Y' loads the default values that are factory settings for optimal performance system operations.

AMIBIOS HIFLEX SETUP UTILITY – VERSION x.xx (C)2001 American Megatrends, Inc. All Rights Reserved
Standard CMOS Setup Advanced CMOS Setup Advanced Chipset Setup Power Management Setup
Load failsafe settings (Y/N) ? <u>N</u>
Change Supervisor Password Auto Configuration with Optimal Settings Auto Configuration with Fail Safe Settings Save Settings and Exit Exit Without Saving
Load failsafe configuration settings ESC:Exit ↑↓:Sel F2/F3: Color F10: Save & Exit

4.14 Save Settings and Exit

Pressing <Enter> on this item asks for confirmation:



Pressing "Y" stores the selections made in the menus in CMOS – a special section of memory that stays on after you turn your system off. The next time you boot your computer, the BIOS configures your system according to the Setup selections stored in CMOS. After saving the values the system will be restarted again.

4.15 Exit Without Saving

Pressing <Enter> on this item asks for confirmation:

Quit without saving (Y/N)?

This allows you to exit Setup without storing in CMOS any change. The previous selections remain in effect. This exits the Setup utility and restarts your computer.

AMIBIOS HIFLEX SETUP UTILITY – VERSION x.xx (C)2001 American Megatrends, Inc. All Rights Reserved
Standard CMOS Setup Advanced CMOS Setup Advanced Chipset Setup Power Management Setup
Quit without saving (Y/N) ? <u>N</u>
Change Supervisor Password Auto Configuration with Optimal Settings Auto Configuration with Fail Safe Settings Save Settings and Exit Exit Without Saving
Exit without saving the current setting ESC:Exit ↑↓:Sel F2/F3: Color F10: Save & Exit
Abandon all Data & Exit Setup

This page is the blank page.

Chapter 5

Software Utilities

The chapter contains the detailed information of VGA, LAN, audio, and USB2.0 driver installation procedures.

The drivers are located in the following directories of the utility disk:

- VGA Driver: \VGA\WIN98_ME or \VGA\XP_2K
- LAN Driver: \LAN
- ◆ Audio Driver: \AC97
- USB2.0 Driver: \USB20\2K or \USB\XP

5.1 VGA Driver Installation

5.1.1 WIN95/98

1. With the Utility CD Disk still in your CD-ROM drive, open the File Manager and then select the VGA driver folder.





2. Select the operation system of your computer to proceed with the installation process.



3. Click on the "Setup.exe" and to go setup.





 Once the Welcome screen appears on the screen, make sure to close applications that are running and then click the <u>Next></u> button.



5. When the display below appears on your screen, Setup is already ready to install and copy the related files onto your hard drive. Click on the Next button to proceed.

Start Copying Files	
	Setup has enough information to start copping the program files. If you want to review or change any settings, click Back. If you are saturited with the settings: click Next to begin copying files. Current Settings: The VIA/53G UniChrome Graphics Win3k Driver Installer will begin copy driver files: A progress log will be recorded in: C:\WINDGW/5\s3setup.log
	< <u>B</u> ack <u>Next></u> Cancel



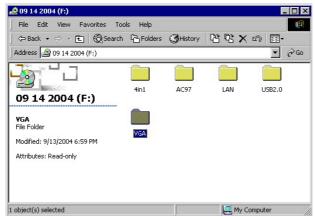
6. After the installation finishes, you will be prompted to restart your system. We recommend you to reboot your computer to allow the new settings to take effect. Click on the Finish button to reboot.



5.1.2 VGA Driver Installation for WIN2K/XP

NOTE: Please make sure you have already installed Service Pack 6.0.

1. With the Utility CD Disk still in your CD ROM drive, open the File Manager and then select the VGA driver folder.





- SVGA 📉 _ 🗆 × File Edit View Favorites Tools Help ⇔Back • ⇒ → 🖻 @Search ParFolders @History Par Par 🗙 🗠 🗐 Address 🧰 VGA WIN98_ME XP_2K VGA XP_2K File Folder Modified: 9/13/2004 6:59 PM Attributes: Read-only 🖳 My Computer 1 object(s) selected
- 2. Select the operating system of your computer to proceed with the installation process.

3. Click on the "Setup.exe" and to go setup.

🚔 XP_2K				_ 0	X
File Edit View Favorites To	ols Help				1
← Back ▾ ⇒ ▾ 🔁 @Search	Folders	CHistory	8 8 × 10) ==-	
Address XP_2K				• 🔗 G	o
	_user1	cleviagi	DATA.TAG	data1	
				HOT	
XP_2K	lang	layout	os	s3hotkey	
SETUP Application	lang	ayout	03	sonockey	
Modified: 9/13/2004 6:59 PM		ر کی	5		
Size: 59.0 KB	s3setup	SETUP	SETUP	setup	
Attributes: Read-only					
	1	1	*		
	setup.iss	setup.lid	vtdisp.dll	VTDispl2.cfg	•
Type: Application Size: 59.0 KB		59.0 KB	🖳 My Comp	uter	_//



4. Once the Welcome screen appears on the screen, make sure to close applications that are running and then click the Next button.



5. When the display below appears on your screen, Setup is already ready to install and copy the related files onto your hard drive. Click on the Next button to proceed.

Start Copying Files	X Setup has enough information to start copying the program files.
	Pipou vanit to enview or change any setting, icki Badi. U pipu are satiled with the estings, icki Nen to begin copying lies: Current Settings: The VAVAS3 Unic/trans ISP Win3X-XPP Draw Installer will ⊥ A regions lay will be recorded ri: C/WIN3Y1/sathap log
	s Stack Need Cancel



6. After the installation finishes, you will be prompted to restart your system. We recommend you to reboot your computer to allow the new settings to take effect. Click on the **Finish** button to reboot.



5.1.3 VGA Driver Installation for WIN NT4.0

1. Click the **Start** button on the lower left hand corner of your screen, then select **Setting**. Choose **Control Panel** and double-click on the **Display** icon to launch its **Display Properties** window.

Display Properties	? ×
Background Screen Saver Appear	ance Plus! Settings
Color Palette	Desktop Area
16 Colors	Less J More
	640 by 480 pixels
Eont Size	Befresh Frequency
Small Fonts	Use hardware default setting
List All Modes T	est Display Type
0	K Cancel Apply





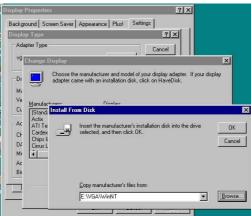
2. Click on the **Settings** tab, and then choose **Display Type**.

3. In the **Change Display Type** window, click on **Have Disk**.

	?×
Background Screen Saver Appearance	ce Plus! Settings
Display Type	?×
Adapter Type	Cancel
^{vg} Change Display	×
	irer and model of your display adapter. If your display installation disk, click on HaveDisk.
Ve Manufacturers:	Display:
Actix ATI Technologies	VGA compatible display adapter
CH Cardex Chips & Technologies D4 Cirrus Logic V	
Me 4	
Ac Bic	Have Disk
	OK Cancel



4. Specify the path of the new driver and then press on **Enter**. (If in driver E:, type E:\Vga\WinNT)

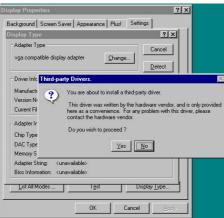


5. Select VIA/S3G UniChrome Graphics, then click OK or press Enter.

Display Proper	ties			? ×	
Background	Screen Saver 🖡	Appearance Plus!	Settings		
Display Type	•		?		
Adapter Typ	be		Cancel		
vg Change	e Display				×
	Change Displa	у			×
Pr 😓	Choo	se the manufacturer a	and model of your	display adapter.	If your display
Ma	dap adap	ter came with an insta	llation disk, click (on HaveDisk.	
Ve <u>M</u> ar					
CL (St	Display:				
Ac Ac	VIA/S3G UniC	hrome Graphics			
Cr Ca Ch					
D/ Cir					
Mt I					
Bic					
				OK	Cancel



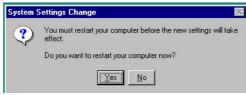
6. You will see warning panel about **Third Party Drivers**. Click on **Yes** to finish the installation.



7. Once the installation is completed, you must shut down the system and restart for the new driver to take effect.

isplay Properties	?×
Background Screen Saver Appearance Plust Settings	
Display Type	× I
Adapter Type vga compatible display adapter Cancel	
Manufact Installing Driver	
Manufact Introduce protect Version N Current F Adapter I Chip Type DAC Type	
bite type Memory Stee: (unavailable) Adapter String: (unavailable) Bios Information: (unavailable) List All Modes Igst Utiplay_type	
OK Cancel App	براه

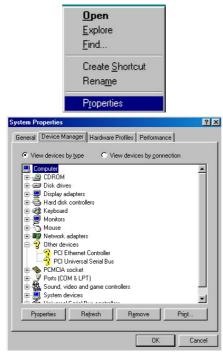
8. Press on the **OK** button as soon as you have located the path of your driver.



5.2 LAN Driver Installation

5.2.1 LAN Driver Installation for WIN95/98/2K

1. With the Utility CD Disk still in your CD ROM drive, right click on My Computer icon from the Windows menu. Select on System Properties and then proceed to the Device Manager from the main menu.



2. Select on PCI Ethernet Controller from Other devices list, right-click and then select on Properties.

System Pi	roperties				?)
General	Device Manager	Hardware Pro	ofiles Per	formance	
• Vie	ew devices by type	C View	devices b	y <u>c</u> onnection	r
		s Pontrollet Refresh Remove Pri <u>n</u> t	Remove	e F	▲ ■ Prigt
]				OK	Cancel

3. The PCI Ethernet Controller Properties screen then appears, allowing you to reinstall the driver. Select Driver from the main menu to proceed.



- 4. The window then displays the current status of your LAN driver. Press on Update Driver button to continue.
- 5. The program will then launch the Update Device Driver Wizard window that will install your device driver. Click on the Next button to proceed to the next step.

	PCI Ethernet Controller A device driver is a software program that makes a hardware device work.
	Upgrading to a newer version of a device driver may improve the performance of your hardware device or add functionality.
~	

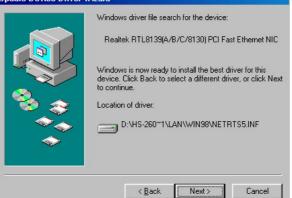
- 6. The Update Device Driver Wizard will then ask you to specify, by ticking, the path of the new driver. Tick on the open boxes where you require the program to search for the device driver then click on the Browse button to manually specify the path. (If in E:, type E:\HS-2606 Driver\LAN\/w/in98)
- 7. Update Device Driver Wizard will ask are you sure to updated driver, tick on update, and then press Next to continue.





8. Once the program detects the device driver (*.inf) file from your specified location, it will automatically copy the files into your hard drive.

Update Device Driver Wizard



9. The program then copies the necessary files from your Windows installation disk to complete the driver setup process. Once the driver is completely installed, the following message appears on your display. Click on the Finish button to proceed.





10. Restart your computer to make the new system settings take effect. Click on the Yes button when the screen below appears and your LAN Driver for Win95 and Win98 are now completely installed.

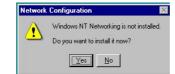


5.2.2 LAN Driver Installation for WIN NT4.0

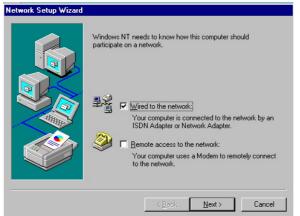
1. With the Utility CD Disk still in your CD ROM drive, right click on Network Neighborhood icon from the Windows menu. Select on Properties.



2. The system automatically detects the absence of Windows NT Networking. Click on the Yes button to start installation.



3. Tick on the "Wired to Network" once the following screen appears. Click on the Next to proceed.

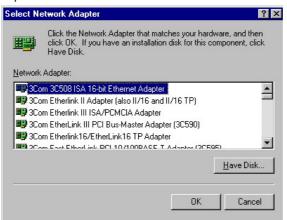


4. Click on the Start Search button for the program to locate the Network Adapter.

Network Setup Wizard	To have setup start searching for a Network Adapter, click Start Search button.
	Start Search Network <u>A</u> dapters:
	Select from list
	Cancel



5. Once setup finishes the search, it will list a number of adapters for you to choose from. Press on the Have Disk button to assign the driver path location.



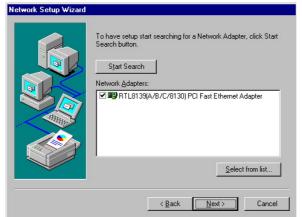
6. Setup now asks you for the location of the driver. When you have entered the new driver path, press on the OK button to continue.

nsert Di	sk	×
#	Insert disk with software provided by the software or hardware manufacturer. If the files can be found at a different location, for example on another drive type a new path to the files below.	OK Cancel
	D:\LAN	

7. When Setup finds the information it needs about the new driver, it will display the device it found on the following screen. Press on the OK button to accept and proceed.

S	elect OEM Option	×
	Choose a software supported by this hardware manufacturer's disk.	
	RTL8139(A/B/C/8130) PCI Fast Ethernet Adapter	1
	OK Cancel <u>H</u> elp	

8. Setup then returns to Network Setup Wizard screen and displays your new Network Adapter. Click on Next to continue.

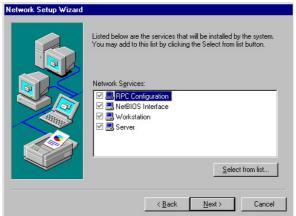


9. The Network Setup Wizard then allows you to set the Network Protocols on your network. Select the appropriate protocol and then click on Next to continue.

Network Setup Wizard	Select the networking protocols that are used on your network. If you are unsure, contact your system administrator.
	Network <u>Protocols</u>
	Select from list



10. The Network Setup Wizard then allows you to set the Network Services on your Network, then click on Next to continue.



11. Before Setup starts installing the components found and the settings you made, it will give you the option to proceed or go back for changes from the following screen. Click on the Next button once you are sure of your devices.

Network Setup Wizard	
	Windows NT is now ready to install networking components that you selected and others required by the system. This process will allow individual components to install themselves and raise dialogs so that they may install correctly.
	Click Next to install selected components. Click Back to make changes to your selections.
	< Back Next > Cancel



12. Windows NT Setup will then need to copy files necessary to update the system information. Specify the path then press Continue.

Windows NT Setup				
đ	Setup needs to copy some Windows NT files. Setup will look for the files in the location specified below. If you want Setup to look in a different place, type the new location. When the location is correct, click Continue.	Continue Cancel		
	G:\i386			

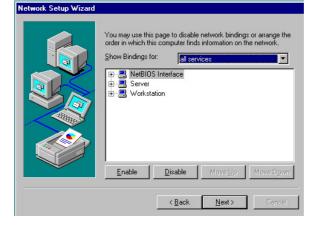
13. Once it finishes copying the files, Setup will now allow you to choose the Duplex Mode of your LAN controller. Press on the Continue button after making your selection.



14. When Setup asks if you wish to change the TCP/IP settings of your system, select the appropriately. The default choice is No.



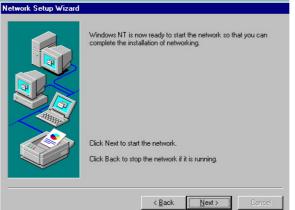
15. When the screen below appears, click on Next to continue.





16. Setup then prompts you that it is ready to start the network. You may complete the installation thereafter. Click on Next to continue.



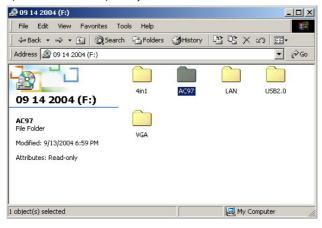


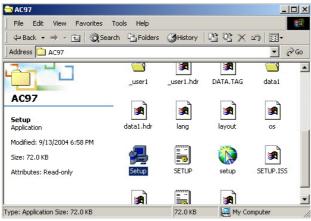
17. Restart your computer. The LAN driver installation for WIN NT4.0 is now complete.

5.3 **Audio Driver Installation**

5.3.1 Audio Driver Installation for WIN98/2K/XP

With the Utility CD Disk still in your CD ROM drive, open the File 1. Manager and then select the driver folder. (If in E:, type E:\HS-2606 Driver\AC97)





2. Press "Setup.exe" and to go setup.

3. Once the Welcome screen appears on the screen, make sure to close applications that are running and then click the Next button.



4. The Select Components dialog box is now displayed. Select on Install driver and then click on Next.



5. After the audio driver installation finishes, select the Finish button to complete the installation process.

Setu	p Complete	Setup has limithed copping files to your computer.
		Sendo real manetal organizations in your computer. Before you can use the program, you must restart Windows or your computer.
		P ² Yee, I want to restart my computer now C No.1 will restart my computer later.
	3	Remove any disks from their drives, and then click Finish to complete refug.
		CBreak Fridh



5.3.2 Audio Driver Installation for WINNT

1. With the Utility CD Disk still in your CD ROM drive, open the File Manager and then select the driver folder. (If in E:, type E:\HS-2606 Driver\AC97)

20	9 14 :	2004 (G:)		_ 🗆 ×
<u>F</u> ile	<u>E</u> dit	⊻iew	<u>H</u> elp		
(4in1		Ac97	Lan	
	Jsb2.0		Vga		
1 obj	ect(s) :	selected	ł		

2. Press "Setup.exe" and to go setup.







3. Once the Welcome screen appears on the screen, make sure to close applications that are running and then click the Next button.

4. The Select Components dialog box is now displayed. Select on VT8233/VT8235 and then click on Next.

IA Technologies, IA Al ^{Select Components}	Instal/Uninstall Windows NT Audin driver	
	 C 686A/686B/6231/6231A ○ VT8223X/T62265 ○ Intel ICH/ICH0/ICH3/ICH4 Driver C 5/6 363 Driver 	
	<back next=""> Cancel</back>	



5. After the audio driver installation finishes, select restart computer now, and click the Finish button to complete the installation process.





5.4 USB2.0 Driver Installation

5.4.1 Win 98

1. With the Utility CD Disk still in your CD ROM drive, right click on "**My Computer**" icon from the Windows menu. Select on System Properties and then proceed to the Device Manager from the main menu.



2. Select on Other Devices from the list of devices then double-click on PCI Universal Serial Bus.

ystem Properties	? ×
General Device Manager Hardware Profiles Performance	
View devices by type C View devices by connection	
Compute C	
Properties Refresh Remove Print	
OK Ca	ancel



3. The PCI Universal Serial Bus Properties screen then appears, allowing you to re-install the driver. Select Driver from the main menu to proceed.



4. When the dialog box below appears, make sure you close all other Windows applications then click on the **Next >** button to proceed.

Jpdate Device Driver	
	This wizard searches for updated drivers for: PCI Universal Serial Bus
	A device driver is a software program that makes a hardware device work.
	Upgrading to a newer version of a device driver may improve the performance of your hardware device or add functionality.
	< Back Next > Cancel



5. Tick on the "Search for a better driver" once the following screen appears. Click on the **Next** to proceed.



 Once the program returns to the Add New Hardware Wizard screen, your specified location will appear. Press on the <u>Next</u> button to continue.

Update Device Driver	Wizard
	Windows will search for updated drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
	Eloppy disk drives
	CD-ROM drive
	■ Microsoft Windows Update
	🔽 Specify a location:
	D:\HS-2606 Driver\USB2.0\2K\WIN98&ME
	Browse
	•
	< <u>B</u> ack Next > Cancel



 When Setup finds the information it needs about the new driver, it will display the device it found on the following screen. Press on the <u>Next</u> button to accept and proceed.

Update Device Driver Wizard



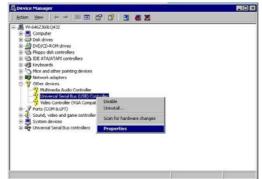
8. Once the InstallShield Wizard completes the operation and update of your USB2.0 driver. Click on the **<u>F</u>inish** button to complete the installation process.

Jpdate Device Driver V	√izard
	VIA PCI to USB Enhanced Host Controller
	Windows has finished installing an updated driver for your hardware device.
8.8	
	< Back Finish Cancel



5.4.2 Win 2000

- With the Utility CD Disk still in your CD ROM drive, right click on "My Computer" icon from the Windows menu. Select on System Properties and then proceed to the Device Manager from the main menu.
- 2. Select on Other Devices from the list of devices then double-click on PCI Universal Serial Bus.



3. The PCI Universal Serial Bus Properties screen then appears, allowing you to re-install the driver. Select Driver from the main menu to proceed.

niversal	Serial Bus (USB)	Controller Proper	ties	? ×
General	Driver Resource	es		
P	Universal Serial B	us (USB) Controller		
	Driver Provider:	Unknown		
	Driver Date:	Not available		
	Driver Version:	Not available		
	Digital Signer:	Not digitally signed	ł	
this dev	rice, click Update D			
Ļ	Driver Details	Uninstall	Update	Driver
			ок 1	Cancel



4. When the dialog box below appears, make sure you close all other Windows applications then click on the **<u>Next</u> >** button to proceed.



5. Tick on the "Search for a suitable driver" once the following screen appears. Click on the **<u>Next</u>** to proceed.

nstall Hardware Device Drivers A device driver is a software program that an operating system.	enables a hardware device to work with
This wizard upgrades drivers for the follow	ving hardware device:
Universal Serial Bus (USB) Cont	roller
	driver may add functionality to or improve the
performance of this device.	
What do you want the wizard to do?	
	device (recommended)
What do you want the wizard to do?	device (recommended) for this device so that I can choose a specific
 What do you want the wizard to do? Search for a suitable driver for my o Display a list of the known drivers f 	

 Once the program returns to the Add New Hardware Wizard screen, your specified location will appear. Press on the <u>Next</u> button to continue.



7. Choose sisusb2.inf and press on the **Open** button to accept and proceed.

Locate File					? ×
Look in:	🔄 WIN2K		•	🗢 🗈 💣 🎟 •	
History Desktop My Documents My Computer	割 sisusb2 副 usb2				
	File name:	sisusb2.inf		-	Open
My Network P	Files of type:	Setup Information (".inf)		*	Cancel



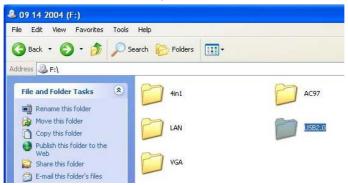
8. Once the InstallShield Wizard completes the operation and update of your USB2.0 driver. Click on the **<u>F</u>inish** button to complete the installation process.

Update Device Driver Wizard



5.4.3 Win XP

 With the Utility CD Disk still in your CD ROM drive, open the File Manager and then select the driver folder. (If in E:, type E:\HS-2606 Driver\USB2.0)







2. Click on "Setup.exe" and to go setup.

3. When the dialog box below appears, make sure you close all other Windows applications then click on the **<u>Next</u> >** button to proceed.

Walcome	8
	Welcome to the VM USB 2.8 Driver Tethap program. This program will entited VA USB 2.9 Driver on your computer.
	This storage reconversed of the post out all Windows programs before named this Sing program.
	Click Cancell to gat Setup and then observary programs your News serving. Click Neet to continue with the Setup program.
2	WARNING. This program is potential by copyright law and international brades.
-	Unsublication reproduction or distribution of the program, or any potion of it, may anali in prevent role and colored parallels, and the preservated to the susainum analistic provide used in terms
	Ned> Cancel

- VIA Technologies, Inc. VIA USB 2-0 Driver - Version 2-58 (Lite) VIA WINXP-SPI USB 2-0 INF file (Version 5.1.2600.1106)
- 4. The programs starts to install the USB2.0 driver when you click the Next> button on the screen below.

5. Once the InstallShield Wizard completes the operation and update of your USB2.0 driver. Click on the **Yes** button to restart computer to complete the installation process.

	111	
(2)	Warning message: In order to complete the entire (triver installation
4	this setup program will restart y	
		Jui system automaticali
	Do you want to continue?	
	Do you want to continue?	
	Do you want to continue?	

