HS-6036

Socket 370 Celeron™/ Coppermine™/Tualatin™

• VGA • 133MHz FSB • ATA/33/66 • LAN •
• PC/104 • IrDA • USB • WDT • H/W Monitor •
• PICMG Industrial Single Board Computer •

HS-6036V

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Chapter-1

General Information

The HS-6036 is a 100MHz FSB PICMG Bus System that also supports 133MHz clock. It features Socket 370 for Intel® Celeron™/Coppermine™/ Tualatin™ Industrial Single Board CPU Card and functions that make it an ideal all-in-one industrial single board computer. HS-6036 uses the Intel 440BX chipset that offers better stability than other 133MHz FSB based systems in the ISA bus and software compatibility.

With onboard ATA/33/66 and Mode 3/4 IDE disk drive interface architecture, HS-6036 supports a maximum of 33/66MB/sec in data transfer rating with two IDE disk drive connections.

The onboard 16MB SiS 305 display controller provides up to 1280 x 1024 x 16M colors resolution and high performance 3D acceleration.

The advanced PICMG Bus add on connection of HS-6036 allows users to easily obtain both ISA's 16bit and PCI's 32-bit full set signals from a full-size PICMG slot for suitable plug-in to systems with 8/16/32-bit ISA and PCI slots. The HS-6036 provides four DIMM sockets supporting up to 1GB of main system memory.

A single Flash chip holds the system BIOS, and you can easily update the Flash BIOS by the Utility Update software. Advanced USB and IR ports also provide for faster data transmission. You can also use the DOS version of the DiskOnChip™ socket by issuing commands from the DOS prompt without the need of other software to support up to 288MB.

The HS-6036 features also include Realtek RTL8100 10/100 Based LAN design on board. One RJ-45 connector provide a easy connections to user for LAN applications.

If a program unexpectedly causes a halt, the on board Watchdog Timer will automatically Reset the COU or generate an interrupt. The Watchdog is designed with hardware only and doesn't need any arithmetical functions of a real-time clock chip. This ensures the reliability in an unmanned or stand-alone system.

1.1 Major Features

- ✓ Socket 370 for Intel® Celeron™/Coppermine™/Tualatin™ 266MHz~1.2GHz CPU
- ✓ Intel 82443BX/SMSC SLC90E66 system chipset
- ✓ 100MHz FSB provides up to 133MHz FSB
- ✓ Four DIMM sockets with a max. capacity of 1GB
- ✓ Winbond W83977 super I/O chipset
- ✓ Fast PCI ATA/33/66 IDE controller
- ✓ Two RS-232 serial ports
- ✓ PC/104 Bus connector
- ✓ SiS 305 3D display controller
- ✓ Realtek RTL8100 10/100 Based LAN
- ✓ DiskOnChip socket supporting memory sizes of up to 288MB
- ✓ Supports ATX power function
- ✓ Supports Hardware Monitor function

1.2 Specifications

- ✓ **CPU：**Socket 370 for Intel® Celeron™/Coppermine™/Tualatin™ 266MHz~1.2GHz CPU
- ✓ **Bus Interface：**PICMG Bus
- ✓ **Bus Clock Rate：**100MHz FSB up to 133MHz FSB
- ✓ **Memory：**Four DIMM sockets provides up to 1GB
- ✓ **Chipset：**Intel® 82443BX/SMSC SLC90E66
- ✓ **I/O Chipset：**Winbond W83977
- ✓ **VGA：**SiS 305 with 16MB memory support hardware DVD
- ✓ **IDE：**Four IDE disk drives support ATA/33/66 and with transfer rates of up to 33/66MB/sec
- ✓ **Floppy：**Support up to two floppy disk drives
- ✓ **Parallel Port：**One enhanced bi-directional parallel port supporting SPP/ECP/EPP
- ✓ **LAN：**Realtek RTL8100 10/100 Based LAN
- ✓ **Serial Port：**16C550 UART-compatible RS-232 x 2 serial ports with 16-byte FIFO
- ✓ **PC/104：**PC/104 connector for 16-bit ISA Bus
- ✓ **IrDA：**One IrDA TX/RX header
- ✓ **USB：**Two USB connectors
- ✓ **Keyboard：**PS/2 6-pin Mini DIN or 5-pin connector
- ✓ **Mouse：**PS/2 6-pin Mini DIN or 4-pin header
- ✓ **DiskOnChip：**DiskOnChip socket with memory sizes of up to 288MB
- ✓ **BIOS：**Award PnP Flash BIOS

- ✓ **Watchdog Timer**：Set 1, 2, 10, 20, 110, 220 seconds activity trigger with Reset or NMI
- ✓ **CMOS**：DS12C887 or equivalent device
- ✓ **DMA Channels**：7
- ✓ **Interrupt Levels**：15
- ✓ **Maximum Power Consumption**：+5V@8A(933MHz)、+12V@120mA、-12V@50mA
- ✓ **Operating Temperature**：0~60°C
- ✓ **Hardware Monitor**：Winbond W83783S
- ✓ **Board Size**：33.6 x 12.1 cm

1.3 Delivery Package

The delivery package of HS-6036 includes all following items:

- One HS-6036 Industrial Single Board Computer
- One Printer Ports Bracket Flat Cable
- One com port Bracket Flat Cable
- Two IDE port Flat Cable
- One FDD port Flat Cable
- Utility CD
- User's Manual

Please contact your dealer if any of these items are missing or damaged when purchasing. And please keep all parts of the delivery package with packing materials in case of you want to ship or store the product in feature.

Chapter-2

Hardware Installation

This chapter provides the information on how to install the hardware of HS-6036. First, proceed with sections 1.3, 2.1 and 2.2 to check the delivery package. Then, proceed with the jumpers setting of switches, Watch-Dog Timer and the DiskOnChip™ address selection etc.

Please be advised that we have upgrade HS-6036 v2.1 to support Tualatin CPU by selecting JP10. Please refer Jumper Setting P.14.

2.1 Caution of Static Electricity

The HS-6036 has been well packaged with an anti-static bag to protect sensitive computer components and circuitry from the damage of static electric discharge.

Note: DO NOT TOUCH THE BOARD OR ANY OTHER SENSITIVE COMPONENTS WITHOUT ALL NECESSARY ANTI-STATIC PROTECTION.

Follow the steps below to protect the board in against the static electric discharge whenever you handle the board:

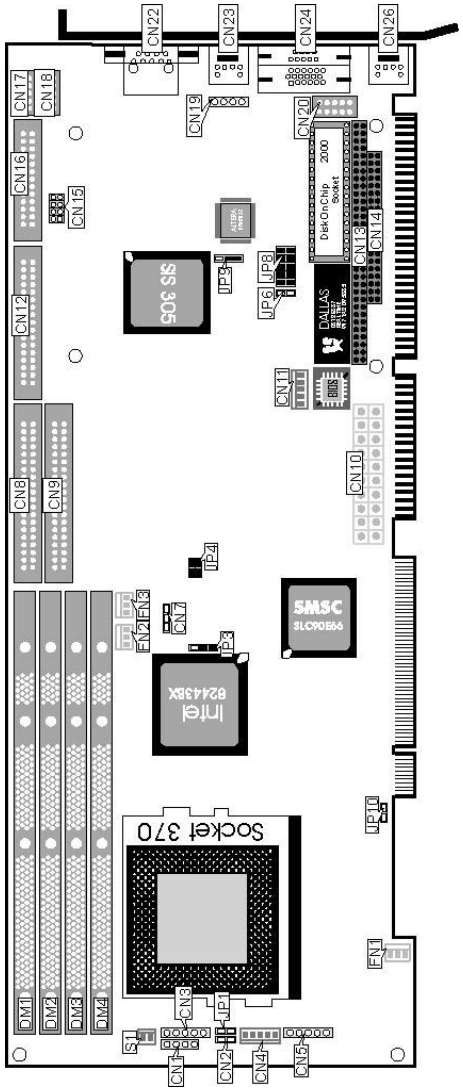
1. Use a grounding wrist strap in handling the HS-6036. Clip the ALLIGATOR clip of the strap to the end of the shielded wire lead from a grounded object. Please put on and connect the strap before handle the HS-6036 for harmlessly discharge any static electricity through the strap.
2. Use an anti-static pad to place any components or parts or tools on whenever working on them outside the computer. You may also in use the anti-static bag instead the pad. Please ask from your local supplier for your needs on anti-static requirement.

2.2 Caution on Unpacking and Before Installation

First, follow all the necessary steps of section 2.1 to protect the HS-6036 from electricity discharge. Refer to section 1.3 to check the delivery package again with following steps:

1. Unpack the HS-6036, Store well all packing materials, manual and diskette, etc.
2. Are there any components missing or disconnected from the board? DO NOT INSTALL IF THIS HAPPENED.
3. Is there any visual damage ob the board? DO NOT INSTALL IF THIS HAPPENED.
4. Check the optional parts (i.e. CPU, SRAM, DRAM, ROM-Disk etc.) to completely set all necessary jumpers settings and CMOS setup correctly. Refer to all information on jumpers setting in this manual.
5. Check the needed external devices (i.e. Add-On-Card, Driver Type etc.) to complete add-in or connection and CMOS setup correctly. Refer to all information of connector connection in this manual.
6. Keep all necessary manual and diskette in good condition for re-installation purposes in the future if you change your Operating System or when need arises.

2.3 HS-6036's Layout



2.4 Quick Listing of Jumpers

2.5 Quick Listing of Connectors

2.6 Jumper Setting Description

A jumper pin-set is **ON** as a shorted circuit with a plastic cap inserted over two pins. A jumper pin-set is **OFF** as a open circuit with a plastic cap inserted over one or no pin(s) between pins. The below figure 2.2 shows the examples of different jumper pin-set setting as **ON** or **OFF** in this manual.

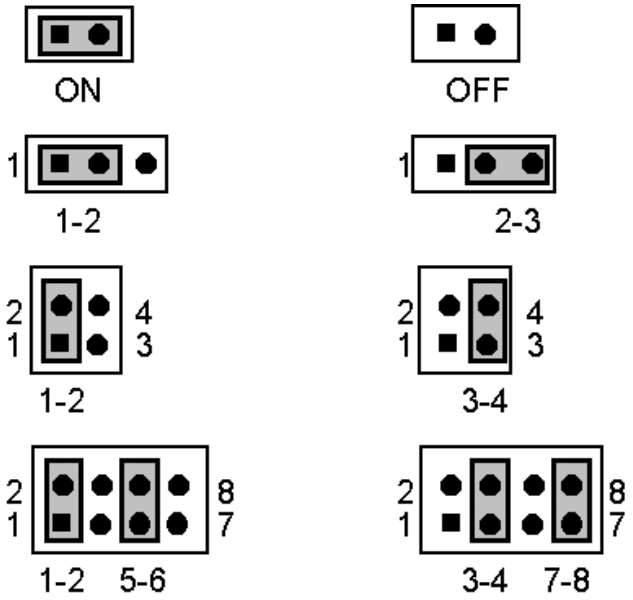


Figure 2.2

All jumper pin-set already has its default setting with the plastic cap inserted as ON, or without the plastic cap inserted as OFF. The default setting may reference in this manual with a " * " symbol in front of the selected item.

2.7 Setting the CPU Host Clock Frequency

The HS-6036 provides all necessary by jumper setting in using Bus Clock frequency as the system bus clocking with JP3 & JP4 setting as follows:

- **Setting the AGP VGA Clock of JP3 :**

AGP VGA Clock	JP3
66MHz	1-2
*** 100MHz**	**1-2**
133MHz	2-3

- **Setting the CPU Host Clock of JP4 :**

Host Clock	1-2	3-4
***Auto**	**ON**	**ON**
BIOS Setting	OFF	OFF

- **Coppermine or Tualatin CPU Select of JP10：**

CPU Type	JP10
***Tualatin**	**ON**
Coppermine	OFF

2.8 Setting the RTC Configuration

The HS-6036 provides a setting for the selection of the RTC Clear Jumper by JP6 setting as follows:

- **CMOS Setting of JP6(Only for DS12B887)：**

CMOS Clear Jumper	JP6
Normal	*** OFF**
Clear CMOS	ON

2.9 System Memory DRAM

The HS-6036 provides a wide SDRAM memory support with four DIMM sockets request the access time should meet PC-133 standard (if use 133MHz FSB). The maximum capacity of the on board memory is 1GB. Use memory module of the same brand and size to avoid instability due to different access time.

2.10 Watchdog Timer

There are three access cycles of Watchdog Timer which are Enable, Refresh and Disable. The Enable cycle should proceed by READ PORT 443H. The Disable cycle should proceed by READ PORT 045H. A continue Enable cycle after a first Enable cycle means Refresh.

Once if the Enable cycle activity, a Refresh cycle is request before the time-out period for restart counting the Watch-Dog Timer period. Otherwise, it will assume that the program operation is abnormal when the time counting over the period preset of Watchdog Timer. A System Reset signal to start again or a NMI cycle to the CPU comes if over.

The JP9 is using for select the active function of Watchdog Timer in disable the Watchdog Timer, or presetting the Watchdog Timer activity at the reset trigger, or presetting the Watchdog Timer activity at the NMI trigger.

JP9 : Watchdog Active Type Setting

JP9	DESCRIPTION
1-2	Active NMI
***2-3**	**System Reset**
OFF	Disable Watch-Dog Timer

The Watchdog Timer is disabled after the system Power-On. The Watchdog Timer can be enabled by a Enable cycle with reading the control port (443H), a Refresh cycle with reading the control port (443H) and a Disable cycle by reading the Watchdog Timer disable control port (045H). After a Enable cycle of Watchdog Timer, user

must constantly proceed a Refresh cycle to Watchdog Timer before its period setting comes ending of every 1, 2, 10, 20, 110 or 220 seconds which pre-setting by JP8(5-10). If the Refresh cycle does not active before Watchdog Timer period cycle, the on board Watchdog Timer architecture will issue a Reset or NMI cycle to the system.

- **JP8 (5-10) : Watchdog Timer - Out Period**

PERIOD	JP8(5-6)	JP8(7-8)	JP8(9-10)
***1 sec**	**ON**	**ON**	**ON**
2 sec	OFF	ON	ON
10 sec	ON	OFF	ON
20 sec	OFF	OFF	ON
110 sec	ON	ON	OFF
220 sec	OFF	ON	OFF

The Watchdog Timer is control by two I/O ports.

443H	I/O Read	The Enable cycle.
443H	I/O Read	The Refresh cycle.
045H	I/O Read	The Disable cycle.

The following sample programs showing how to Enable, Disable and Refresh the Watchdog Timer:

```
WDT_EN_RF       EQU     0443H
WDT_DIS         EQU     0045H
WT_Enable       PUSH    AX                  ; keep AX DX
                PUSH    DX
                MOV     DX,WDT_EN_RF        ; enable the watch-dog timer
                IN      AL,DX
                POP     DX                  ; get back AX, DX
                POP     AX
                RET
WT_Rresh        PUSH    AX                  ; keep AX, DX
                PUSH    DX
                MOV     DX,WDT_ET_RF        ; refresh the watch-dog timer
                IN      AL,DX
                POP     DX                  ; get back AX, DX
                POP     AX
                RET
WT_DISABLE      PUSH    AX
                PUSH    DX
                MOV     DX,WDT_DIS          ; disable the watch-dog timer
                IN      AL,DX
                POP     DX                  ; get back AX, DX
                POP     AX
                RET
```

2.11 VGA Controller

The HS-6036 provides three possible VGA connections. One uses a standard DB15 internal VGA connector, CN24 (see below). Another header is 5X2 internal VGA connector, CN20.

The HS-6036 has built-in a SiS 503 VGA controller with on chip 16MB memory that supports resolutions up to 1024x768x16M colors.

CN20 : VGA connector (5x2 Header)

PIN NO.	Description	PIN NO.	Description
1	RED	2	GND
3	GREEN	4	GND
5	BLUE	6	GND
7	HSYNC	8	GND
9	VSYNC	10	GND

- **CN24 : VGA connector (DB15)**

PIN NO.	Description	PIN NO.	Description
1	RED	2	GREEN
3	BLUE	4	NC
5	GND	6	GND
7	GND	8	GND
9	NC	10	GND
11	NC	12	DDC Data
13	HSYNC	14	VSYNC
15	DDC CLK		

2.12 DiskOnChip™ Address Setting

The HS-6036 provides a U17 socket for install the DiskOnChip™ module.

A JP8(1-4) may select the starting memory address of the DiskOnChip™ (D.O.C.) to avoid the mapping area with any other memory devices. If you have another extra memory devices in the system with the same memory, neither the HS-6036 nor the extra memory devices will function normally. Please set both at different memory address mapping.

- **JP8(1-4) : DiskOnChip™ Address Select**

Memory Address Mapping	1-2	3-4
D000	**ON**	**ON**
D800	OFF	ON
E000	ON	OFF
E800	OFF	OFF

*) : default setting

The D.O.C. function allows the system to run without FDD nor HDD. The D.O.C. may be used as drive C: or drive A: User may also easily use the DOS's commands such as FORMAT, SYS, COPY, XCOPY, DISCOPY and DISKCOMP etc. This means that the D.O.C. may be used as drive A if the system is without FDD-A for ambient application. Please contact your supplier for different D.O.C. module sizes.

Chapter-3

Connection

This chapter gives all necessary information of the peripheral connections, switches and indicators.

3.1 Power and FAN Connectors

The HS-6036 provides three 3pin FAN out connector - CN6, FN2, FN3.

S1 is the ATX Power Switch, CN10 is the ATX Power Connector, CN11 is the 5pin ATX Power Connector.

- **CN6 : 3pin FAN Connector**

PIN NO.	Description
1	FAN ON/OFF
2	+12V
3	FAN Speed

- **S1 : ATX Power Function Switch**

PIN NO.	Description
1	3VSB
2	Power On Signal

- **CN11 : 5pin ATX Power Connector**

PIN NO.	Description
1	VCC (+5V)
2	5VSB
3	+12V
4	SUSC (ATX Power ON/OFF Signal)
5	GND

The HS-6036 supports ATX Power function by CN10. The connector of CN11 can control the 5pin ATX Power via the extension cable from the Backplane.

CN10	Description	CN10	Description
1	3V	11	3V
2	3V	12	-12V
3	GND	13	GND
4	+5V	14	PS_ON
5	GND	15	GND
6	+5V	16	GND
7	GND	17	GND
8	PG	18	-5V
9	5VSB	19	+5V
10	+12V	20	+5V

- **FN2, FN3 : 3pin FAN Connector**

PIN NO.	Description
1	GND
2	+12V
3	FAN Speed

3.2 IDE's LED, Keylock and Reset Button

The HS-6036 has one LED indicates out power-on status. And the following provides the pin information for IDE's LED indicator, Keylock and Reset Button connections from CN2, CN3 and JP1. If user doesn't need keylock function, CN3 could be use for power led connect pin-1 + pin-3 OR pin-1 + pin-5.

- **CN2 : IDE LED Connector**

PIN NO.	Description
1	HDD ACTIVE#
2	+5V (with 330resist)

- **CN3 : Keylock**

PIN NO.	Description
1	VCC (with 330 resist)
2	N.C.
3	GND
4	Keylock-
5	GND

- **JP1 : Reset Button**

PIN NO.	Description
1	GND
2	External Reset

3.3 External Speaker

The HS-6036 has an on-board buzzer (BZ1). And it also provides the CN1 to allow user to connecting to the external speaker.

- **CN1 : Speaker Connector**

PIN NO.	Description	PIN NO.	Description
1	Speaker Signal	3	GND
2	NC	4	+5V

3.4 PCI E-IDE Drive Connector

Two standard 40pin header daisy chain drive connectors provide as CN8 and CN9 with following pin assignment. A total four IDE disk (Integrated Device Electronics) drivers may be connected.

- **CN8: Primary IDE Connector**

PIN NO.	Description	PIN NO.	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	NC
21	NC	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	NC	28	BALE - DEFAULT
29	NC	30	GND# -DEFAULT
31	Interrupt	32	IOCS16#-DEFAULT
33	SA 1	34	NC
35	SA 0	36	SA 2
37	HDC CS0	38	HDC CS1#
39	HDD ACTIVE	40	GND

- **CN9: Secondary IDE Connector**

PIN NO.	Description	PIN NO.	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	NC
21	NC	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	NC	28	BALE - DEFAULT
29	NC	30	GND# -DEFAULT
31	Interrupt	32	IOCS16#-DEFAULT
33	SA 1	34	NC
35	SA 0	36	SA 2
37	HDC CS0	38	HDC CS1#
39	HDD ACTIVE	40	GND

3.5 Parallel Connector

A standard 26pin flat cable driver connector is provided as CN16 with the following pin assignment for connection to parallel printer.

- **CN16: Parallel Connector**

PIN NO.	Description	PIN NO.	Description
1	Strobe	2	DATA 0
3	DATA 1	4	DATA 2
5	DATA 3	6	DATA 4
7	DATA 5	8	DATA 6
9	DATA 7	10	Acknowledge
11	Busy	12	Paper Empty
13	Printer Select	14	Auto Form Feed
15	ERROR#	16	Initialize
17	Printer Select LN#	18	GND
19	GND	20	GND
21	GND	22	GND
23	GND	24	GND
25	GND	26	GND

3.6 The Floppy Disk Drive Connector

A standard 34pin header daisy-chain drive connector is provided as CN12 with following pin assignment. A total two FDD drivers may be connected.

- **CN12 : FDD Connector**

PIN NO.	Description	PIN NO.	Description
1	GND	2	Reduce Write
3	GND	4	NC
5	GND	6	NC
7	GND	8	Index#
9	GND	10	Motor Enable A#
11	GND	12	Drive Select B#
13	GND	14	Drive Select A#
15	GND	16	Motor Enable B#
17	GND	18	Direction#
19	GND	20	Step#
21	GND	22	Write Data#
23	GND	24	Write Data#
25	GND	26	Track 0#
27	GND	28	Write Protect#
29	GPI 21	30	Read Data#
31	GND	32	Side1 Select
33	GND	34	Disk Change#

3.7 Serial Ports Connectors

The HS-6036 offers two high speeds 16C550 compatible UART with Read/Receive 16byte FIFO serial ports with two internal 10pin header.

- **CN17, CN18 : COM1, COM2 Connector (5x2 Header)**

PIN NO.	Description	PIN NO.	Description
1	DCD	2	DSR
3	RXD	4	RTX
5	TXD	6	CTX
7	DTR	8	RI
9	GND	10	NC

3.8 Keyboard Connectors

The HS-6036 offers two possibilities for keyboard connections to external PS/2 type keyboard at CN26 or an internal 5pin header at CN4.

- **CN4: 5pin Keyboard Connector**

PIN NO.	Description
1	Keyboard Clock
2	Keyboard Data
3	NC
4	GND
5	+5V

- **CN26 : 6pin Mini Din Keyboard Connector**

PIN NO.	Description
1	Keyboard Data
2	NC
3	GND
4	+5V
5	Keyboard Clock
6	NC

3.9 PS/2 6pin Mini Din Mini Connector

The HS-6036 provides an external PS/2 mouse connector at CN23 and 4pin connector at CN19.

- **CN23 : PS/2 6pin Mini Din Mouse Connector**

PIN NO.	Description
1	Data
2	NC
3	GND
4	+5V
5	CLK
6	NC

- **CN19 : 4pin Mouse Connector**

PIN NO.	Description
1	CLK
2	Data
3	VCC
4	GND

3.10 IrDA Connector

The HS-6036 provides a 5pin internal IrDA communication connector as following CN5 pin information.

- **CN5 : IrDA Connector**

PIN NO.	Description
1	VCC
2	FIRRX
3	IRRX
4	GND
5	IRTX

3.11 USB Ports Connector

The HS-6036 provides two internal 8pin USB ports connectors. Please refer to the following detail pin information.

- **CN15：USB Connector**

PIN NO.	CN15	PIN NO.	CN15
1	VCC	2	VCC
3	BD0-	4	BD1-
5	BD0+	6	BD1+
7	GND	8	GND

3.12 LAN Interface Connector

The HS-6036 provides RJ-45 10/100 Based LAN interface connector. Please refer to the following detail of pin information.

- **CN22 : RJ-45 Connector**

PIN NO.	CN22
1	TX+
2	TX-
3	RX+
4	R/C GND
5	R/C GND
6	RX-
7	R/C GND
8	R/C GND
9	GND

3.13 I^2C Bus Interface Connector

HS-6036 provides a set of external I^2C Bus signals with the use of CN7.

- **CN7 : I^2C Bus Signal**

PIN NO.	Description
1	Data
2	Clk
3	GND

3.14 PC/104 Bus Connection

The HS-6036's PC/104 expansion bus allows you to connect all kind of PC/104 modules. The PC/104 bus has already become the industrial embedded 16bit PC standard bus. You can easily install over thousands type of PC/104 modules from hundreds of vendors in the world. The detailed pin assignment of the PC/104 expansion bus connectors CN13 and CN14 are specified as following tables:

Note : The PC/104 connector allows to directly plug-in Stack-thru PC/104 modules without the PC/104 mounting kit.

- **CN13&CN14 : PC/104 Expansion Bus**

(CN13 = 64pin female connector; CN14 = 40pin female connector.)

Pin No.	CN13 Row A	Pin No.	CN13 Row B
1	IOCHECK*	33	0V
2	SD7	34	RESETDRV
3	SD6	35	+5V
4	SD5	36	IRQ9
5	SD4	37	-5V
6	SD3	38	DRQ2
7	SD2	39	-12V
8	SD1	40	NOW*
9	SD0	41	+12V
10	IOCHRDY	42	(KEY)
11	AEN	43	SMEMW*
12	SA19	44	SMEMR*
13	SA18	45	IOW*
14	SA17	46	IOR*
15	SA16	47	DACK3*
16	SA15	48	DRQ3
17	SA14	49	DACK1*
18	SA13	50	DRQ1
19	SA12	51	REFRESH*
20	SA11	52	SYSCLK
21	SA10	53	IRQ7
22	SA9	54	IRQ6
23	SA8	55	IRQ5
24	SA7	56	IRQ4
25	SA6	57	IRQ3
26	SA5	58	DACK2*
27	SA4	59	TC
28	SA3	60	BALE
29	SA2	61	+5V
30	SA1	62	OSC
31	SA0	63	0V
32	0V	64	0V

Pin No.	CN14 Row D	Pin No.	CN14 Row C
1	0V	21	0V
2	MEMCS16*	22	SBHE*
3	IOSC16*	23	LA23
4	IRQ10	24	LA22
5	IRQ11	25	LA21
6	IRQ12	26	LA20
7	IRQ15	27	LA19
8	IRQ14	28	LA18
9	DACK0*	29	LA17
10	DRQ0	30	MEMR*
11	DACK5*	31	MEMW*
12	DRQ5	32	SD8
13	DACK6*	33	SD9
14	DRQ6	34	SD10
15	DACK7*	35	SD11
16	DRQ7	36	SD12
17	+5V	37	SD13
18	MASTER*	38	SD14
19	0V	39	SD15
20	0V	40	(KEY)

Chapter-4

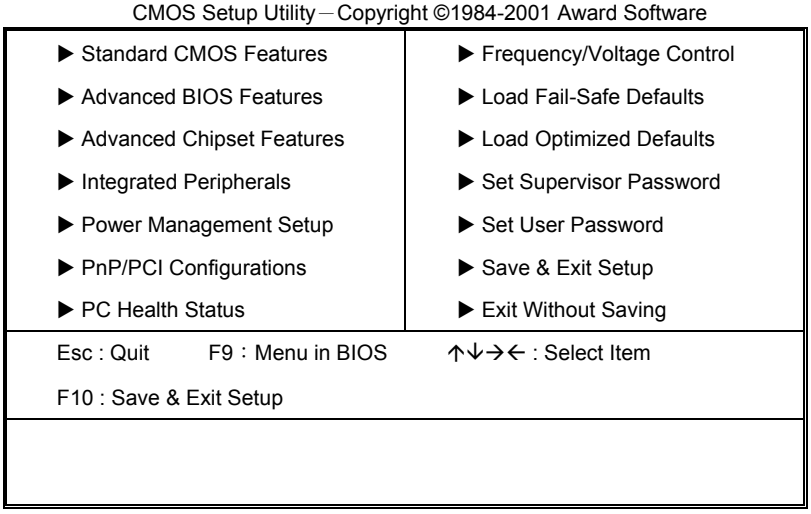
AWARD BIOS Setup

The HS-6036 uses the Award PCI/ISA BIOS for the system configuration. The Award BIOS setup program is designed to provide the maximum flexibility in configuring the system by offering various options which could be selected for end-user requirements. This chapter is written to assist you in the proper usage of these features.

To access AWARD PCI/ISA BIOS Setup program, press <Del> key. The Main Menu will be displayed at this time.

4.1 Main Menu

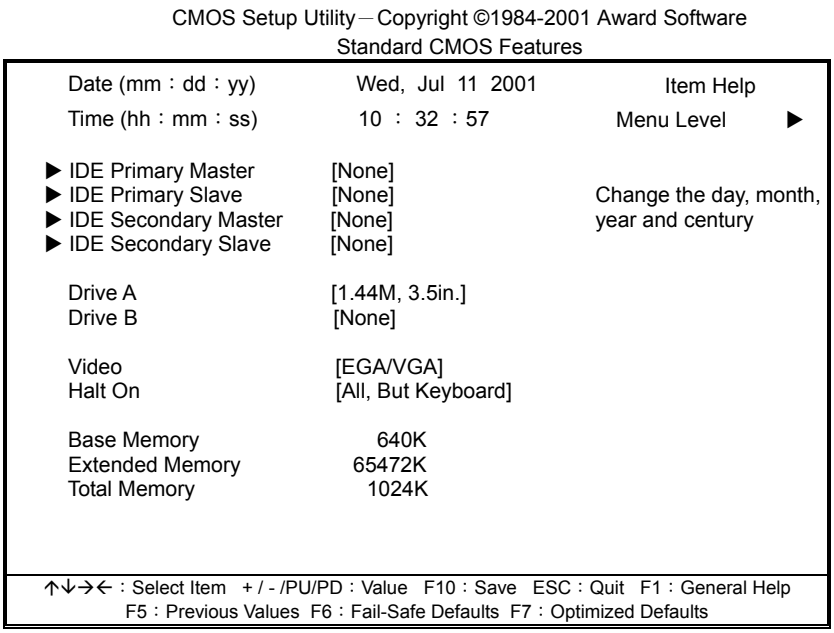
Once you enter the Award BIOS CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions and two exit choices. Use the arrow keys to select among the items and press <Enter> to enter the sub-menu.



Note that a brief description of each highlighted selection appears at the bottom of the screen.

4.2 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 IDE hard disk drive you are using is larger than 528MB, please set the HDD mode to **LBA** mode. Please use the IDE Setup Utility in BIOS SETUP to install the HDD correctly.



4.3 BIOS Features 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.

CMOS Setup Utility－Copyright ©1984-2001 Award Software
Advanced CMOS Features

		Item Help
Virus Warning	[Disabled]	Menu Level ▶
CPU Internal Cache	[Enabled]	
External Cache	[Enabled]	
CPU L2 Cache ECC Checking	[Enabled]	Allows you to choose
Processor Number Feature	[Enabled]	the VIRUS warning
Quick Power On Self Test	[Disabled]	feature for IDE Hard
First Boot Device	[Floppy]	Disk boot sector
Second Boot Device	[HDD-0]	protection. If this
Third Boot Device	[LS-120]	function is enabled
Boot Other Device	[Enabled]	and someone attempt to
Swap Floppy Drive	[Disabled]	write data into this
Boot Up Floppy Seek	[Enabled]	area, BIOS will show
Boot Up NumLock Status	[On]	a warning message on
Gate A20 Option	[Fast]	screen and alarm beep
Typematic Rate Setting	[Disabled]	
Typematic Rate(Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	[Setup]	
OS Select For DRAM > 64MB	[Non-OS2]	
Report No FDD For WIN 95	[No]	
Video BIOS Shadow	[Enabled]	
C8000-CBFFF Shadow	[Disabled]	
CC000-CFFFF Shadow	[Disabled]	
D000-D3FFF Shadow	[Disabled]	
D4000-D7FFF Shadow	[Disabled]	
D8000-DBFFF Shadow	[Disabled]	
DC000-DFFFF Shadow	[Disabled]	
Small Logo (EPA) Show	[Enabled]	

↑↓→←：Move Enter：Select + / - /PU/PD：Value F10：Save ESC：Quit F1：General Help
F5：Previous Values F6：Fail-Safe Defaults F7：Optimized Defaults

4.4 Chipset Features 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.

CMOS Setup Utility－Copyright ©1984-2001 Award Software
Advanced Chipset Features

		Item Help
SDRAM RAS-to CAS Delay	[3]	Menu Level ▶
SDRAM RAS Precharge Time	[3]	
SDRAM CAS latency Time	[3]	
SDRAM Precharge Control	[Enabled]	
DRAM Data Integrity Mode	[Non-ECC]	
System BIOS Cacheable	[Enabled]	
Video BIOS Cacheable	[Enabled]	
Video RAM Cacheable	[Enabled]	
8 Bit I/O Recovery Time	[3]	
16 Bit I/O Recovery Time	[2]	
Memory Hole At 15M-16M	[Disabled]	
AGP Aperture Size (MB)	[64]	
Power-Supply Type	[Auto]	

↑↓→←：Move Enter：Select + / - /PU/PD：Value F10：Save ESC：Quit F1：General Help
F5：Previous Values F6：Fail-Safe Defaults F7：Optimized Defaults

4.5 Integrated Peripherals

The IDE hard drive controllers can support up to two separate hard drives. These drives have a master/slave relationship which 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).

CMOS Setup Utility－Copyright ©1984-2001 Award Software
Integrated Peripherals

		Item Help
IDE Primary Master PIO	[Auto]	Menu Level ▶
IDE Primary Slave PIO	[Auto]	
IDE Secondary Master PIO	[Auto]	
IDE Secondary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	
IDE Primary Slave UDMA	[Auto]	
IDE Secondary Master UDMA	[Auto]	
IDE Secondary Slave UDMA	[Auto]	
On-Chip Primary PCI IDE	[Enabled]	
On-Chip Secondary PCI IDE	[Enabled]	
USB Keyboard Support	[Enabled]	
Init Display First	[PCI Slot]	
IDE HDD Block Mode	[Enabled]	
KBC input clock	[8 MHz]	
Onboard FDC Controller	[Enabled]	
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
UART Mode Select	[Normal]	
UART2 Duplex Mode	[Half]	
RxD, TxD Active	[Hi,Lo]	
IR Transmission delay	[Enabled]	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
ECP Mode Use DMA	[3]	
EPP Mode Select	[EPP1.7]	

↑↓→←：Move Enter：Select + / - /PU/PD：Value F10：Save ESC：Quit F1：General Help
F5：Previous Values F6：Fail-Safe Defaults F7：Optimized Defaults

4.6 Power Management Setup

The Power Management Setup allows user to configure the system for saving energy in a most effective way while operating in a manner consistent with his own style of computer use.

CMOS Setup Utility－Copyright ©1984-2001 Award Software

Power Management Setup

		Item Help
ACPI function	[Enabled]	Menu Level ▶
Power Management	[User Define]	
PM Control by APM	[Yes]	
Video Off Method	[V/H SYNC+Blank]	
Video Off After	[Standby]	
MODEM Use IRQ	[3]	
Doze Mode	[Disable]	
Standby Mode	[Disable]	
Suspend Mode	[Disable]	
HDD Power Down	[Disable]	
Throttle Duty Cycle	[62.5%]	
VGA Active Monitor	[Disabled]	
Soft-Off by PWR-BTTN	[Instant-Off]	
PowerOn by Ring	[Enabled]	
IRQ 8 Break Suspend	[Disabled]	
** Reload Global Timer Events**		
IRQ[3-7, 9-15], NMI	[Disabled]	
Primary IDE 0	[Disabled]	
Primary IDE 1	[Disabled]	
Secondary IDE 0	[Disabled]	
Secondary IDE 1	[Disabled]	
Floppy Disk	[Disabled]	
Serial Port	[Enabled]	
Parallel Port	[Disabled]	

↑↓→←：Move Enter：Select + / - /PU/PD：Value F10：Save ESC：Quit F1：General Help
F5：Previous Values F6：Fail-Safe Defaults F7：Optimized Defaults

4.7 PnP/PCI Configuration Setup

In this section, the PnP/PCI configuration setup allows you to configure the ISA and PCI devices installed in your system by manually or auto.

CMOS Setup Utility－Copyright ©1984-2001 Award Software
PnP/PCI Configurations

		Item Help
PNP OS Installed	[Yes]	Menu Level ▶
Reset Configuration Data	[Disabled]	
Resources Controlled By	[Auto(ESCD)]	Select Yes if you are using a plug and play capable operating system. Select No if you need the BIOS to configure non-boot devices
IRQ Resources	Press Enter	
DMA Resources	Press Enter	
Memory Resources	Press Enter	
PCI/VGA Palette Snoop	[Disabled]	

↑↓→←：Move Enter：Select + / - /PU/PD：Value F10：Save ESC：Quit F1：General Help
F5：Previous Values F6：Fail-Safe Defaults F7：Optimized Defaults

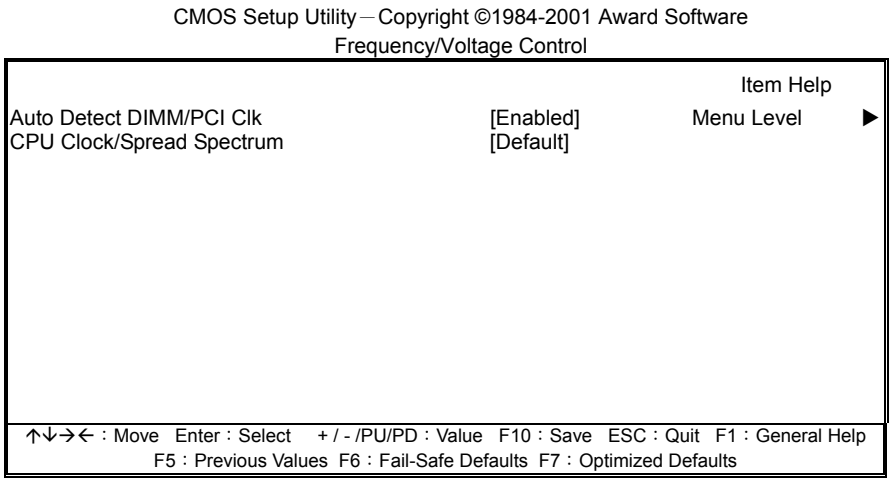
4.8 PC Health Status

CMOS Setup Utility－Copyright ©1984-2001 Award Software
PC Health Status

		Item Help
CPU Warning Temperature	[Disabled]	Menu Level ▶
Current System Temp.		
Current CPU1 Temperature		
Current CPUFAN1 Speed		
Current CPUFAN2 Speed		
Current CPUFAN3 Speed		
Vcore		
+3.3V		
+5 V		
+12 V		
-12 V		
Shutdown Temperature	[Disabled]	

↑↓→←：Move Enter：Select + / - /PU/PD：Value F10：Save ESC：Quit F1：General Help
F5：Previous Values F6：Fail-Safe Defaults F7：Optimized Defaults

4.9 Frequency/Voltage Control



Chapter-5

Software Utilities

This chapter provides the detailed information of VGA、LAN and SMSC DMA66 function. How to install the configuration is also included.

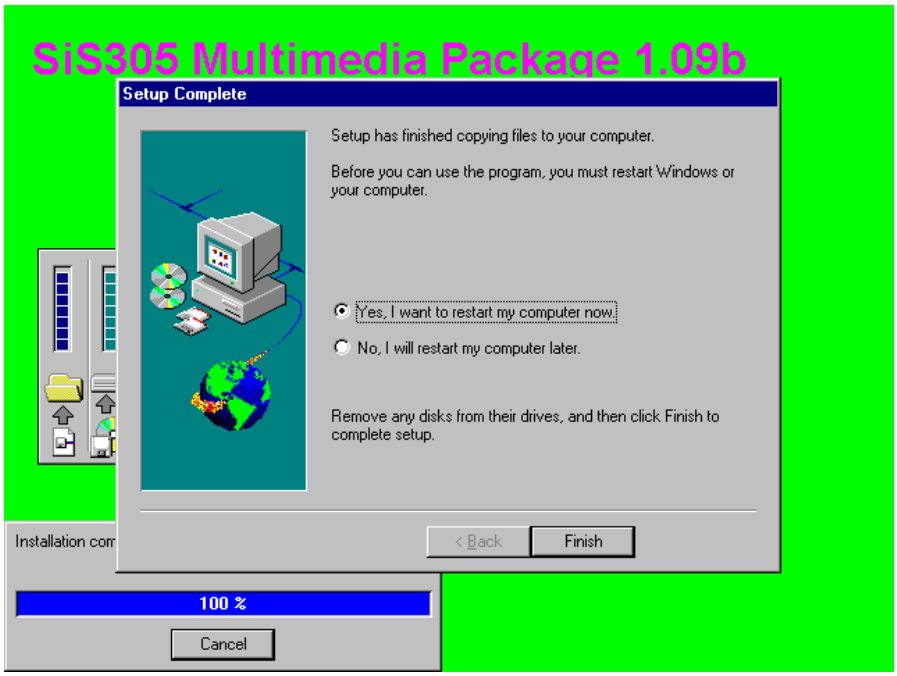
Section include:

- VGA DRIVER INSTALLATION
- NETWORK DRIVER INSTALLATION
- SMSC DRIVER INSTALLATION

5.1 VGA DRIVER INSTALL FOR WIN95&98

1. Enter Explorer and move to source location
2. Execute “Setup”
3. Follow the installation procedure
4. Re-start Computer and driver will be properly installed


My Computer
My Documents
Internet Explorer
Recycle Bin
Setup MSN Internet A...
Online Services
Win9x
File Edit View Go Favorites Help
Back Forward Up Cut Copy Paste
Address D:\WIN9X
Win9x
Setup.exe
Application
Modified: 11/4/96 1:04 PM
Size: 44KB
5600agp.pci
Disk1.id
Instdrv
Setup
Setup
Setup
Setup
Setup.iss
Setup.pkg
My Computer
Start
Win9x
5:37 AM


SiS305 Multimedia Package 1.09b
Setup Complete
Setup has finished copying files to your computer.
Before you can use the program, you must restart Windows or your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Installation com
100 %
Cancel

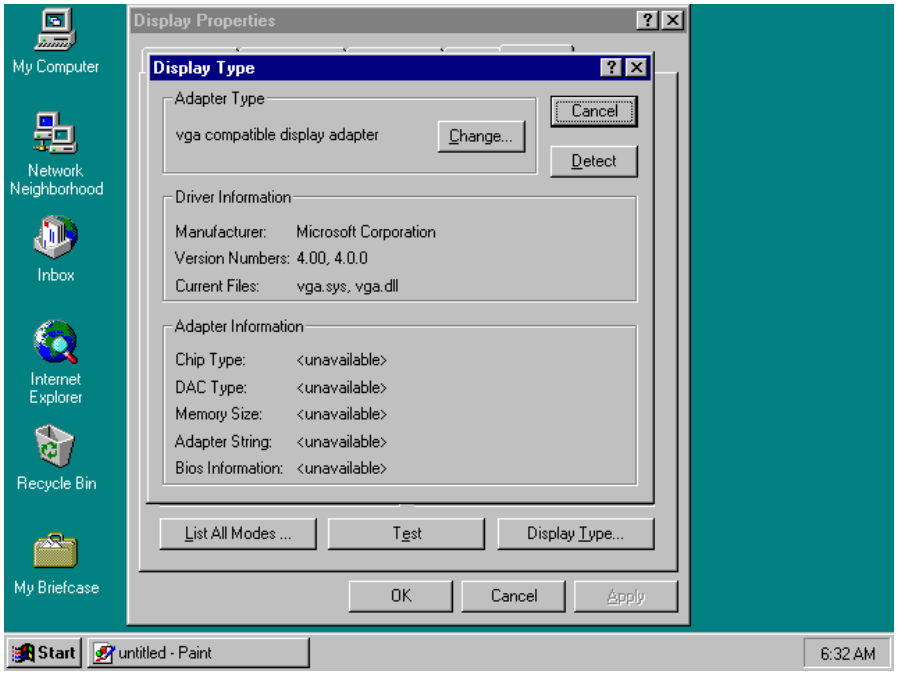
5.2 VGA DRIVER INSTALL FOR WIN NT4.0

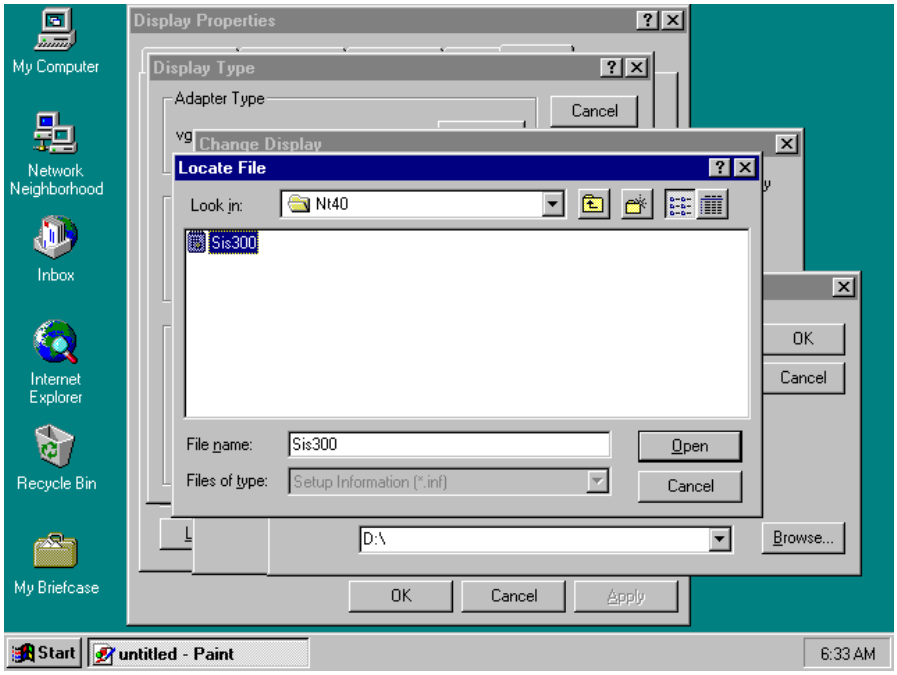
1. Click the Start button, then go to Setting and click on Control Panel.
2. Click on Display icon to start the Display Properties Window.
3. Click on the Settings tab, and then click on Display Type.
4. In the Change Display Type window, click on “Have Disk”.
5. Specify the path to the new driver and press the <ENTER>key.

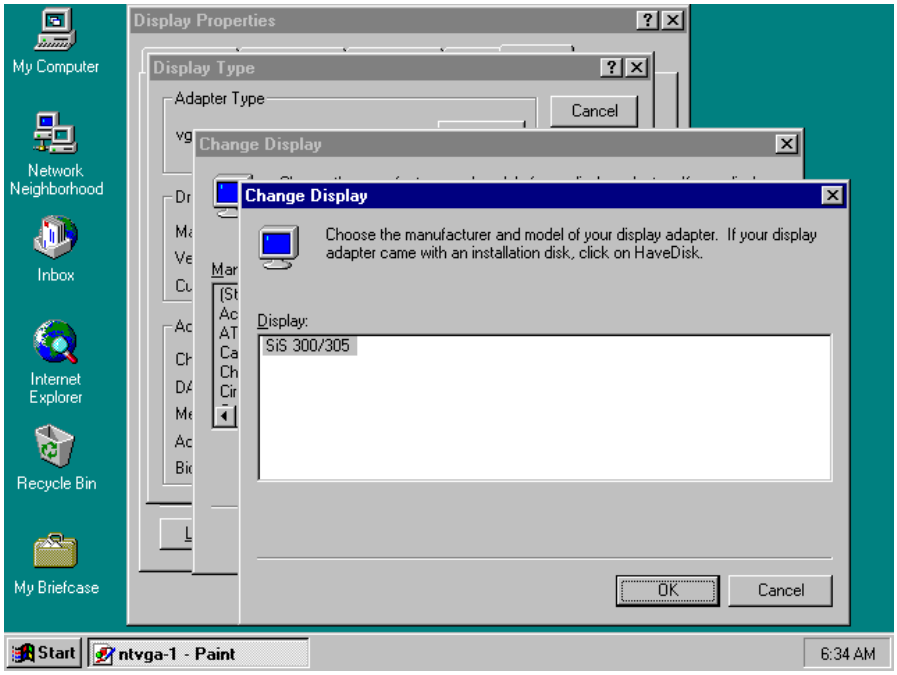
   (if in driver A:, type a:\nt40)

   Select SiS 300/305
6. Click OK or press Enter
7. You will see warning panel about Third Party Drivers. Click on Yes to finish the installation.
8. Once the installation is completed, the system must shut down and restart for the new driver to take effect.
9. After restart, checking on the VGA driver, the properties of the driver should look similar to the following figure.

Note：Install Service Pack 6 First


My Computer
Network Neighborhood
Inbox
Internet Explorer
Recycle Bin
My Briefcase
Display Properties
Display Type
Adapter Type
vga compatible display adapter
Change...
Cancel
Detect
Driver Information
Manufacturer: Microsoft Corporation
Version Numbers: 4.00, 4.0.0
Current Files: vga.sys, vga.dll
Adapter Information
Chip Type: <unavailable>
DAC Type: <unavailable>
Memory Size: <unavailable>
Adapter String: <unavailable>
Bios Information: <unavailable>
List All Modes ...
Test
Display Type...
OK
Cancel
Apply
Start
untitled - Paint
6:32 AM


My Computer
Network Neighborhood
Inbox
Internet Explorer
Recycle Bin
My Briefcase
Display Properties
Display Type
Adapter Type
Cancel
Change Display
Locate File
Look in:
Nt40
Sis300
File name:
Sis300
Open
Files of type:
Setup Information (*.inf)
Cancel
D:\
Browse...
OK
Cancel
Apply
OK
Cancel
Start
untitled - Paint
6:33 AM


My Computer
Network Neighborhood
Inbox
Internet Explorer
Recycle Bin
My Briefcase
Display Properties
Display Type
Adapter Type
Cancel
Change Display
Change Display
Choose the manufacturer and model of your display adapter. If your display adapter came with an installation disk, click on HaveDisk.
Display:
SiS 300/305
OK
Cancel
Start
ntvga-1 - Paint
6:34 AM

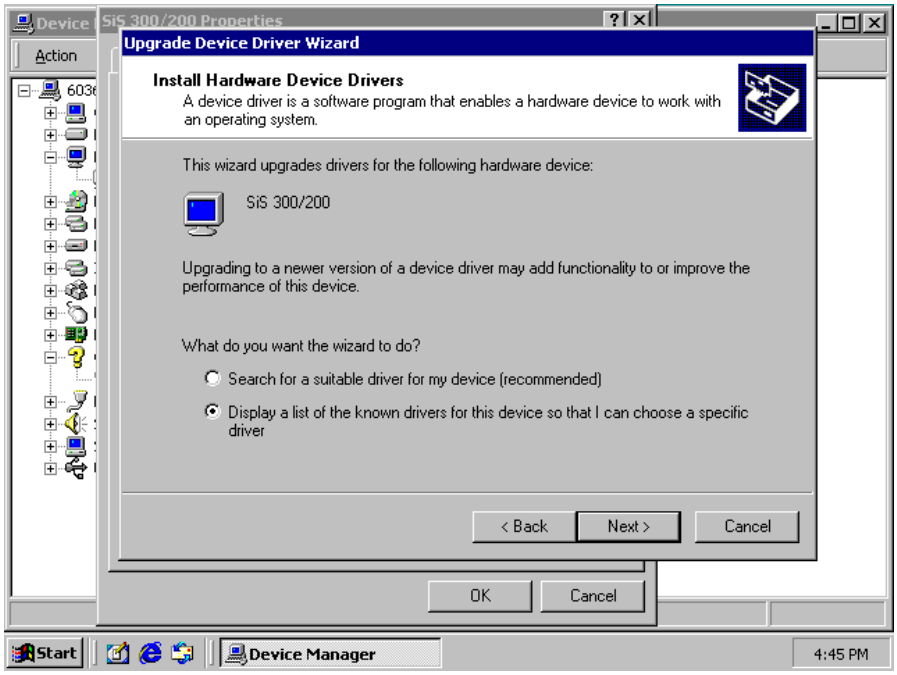
5.3 VGA DRIVER INSTALL FOR WIN 2000

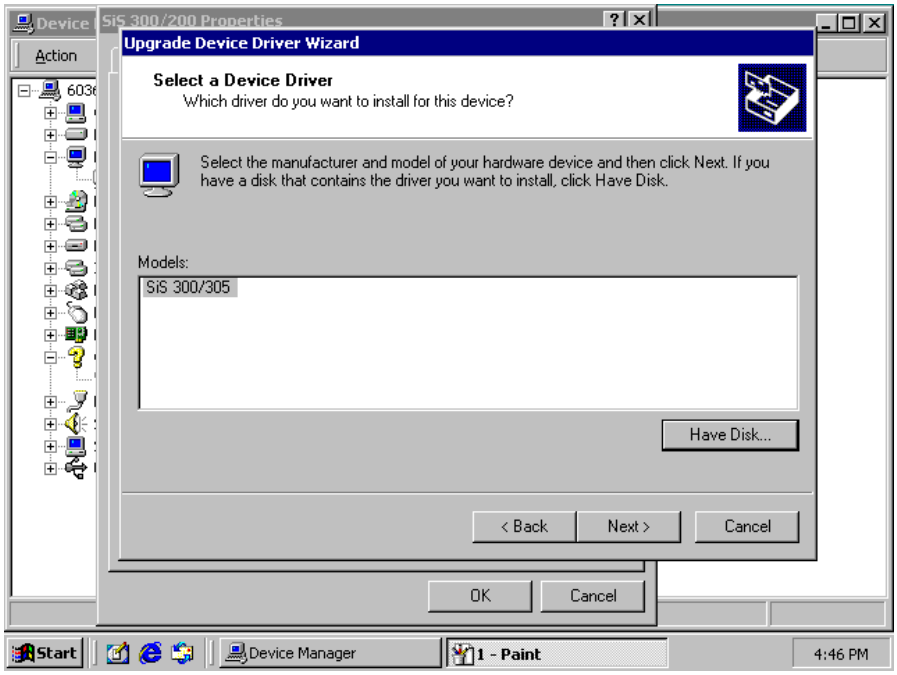
1. Click the Start button, then go to Setting and click on Control Panel.
3. Click on Display icon to start the Display Properties Window.
4. Click on the Settings tab, and then click on Display Type.
5. In the Change Display Type window, click on “Have Disk”.
6. Specify the path to the new driver and press the <ENTER>key.

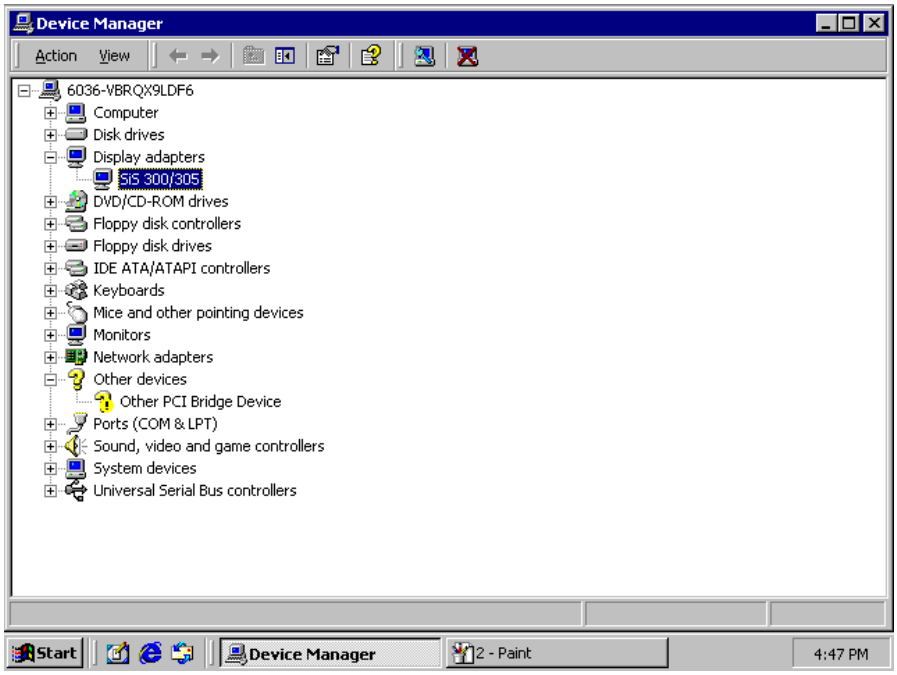
   (if in driver A:, type a:\nt40)

   Select SiS 300/305
7. Click OK or press Enter
8. You will see warning panel about Third Party Drivers. Click on Yes to finish the installation.
9. Once the installation is completed, the system must shut down and restart for the new driver to take effect.

After restart, checking on the VGA driver, the properties of the driver should look similar to the following figure.


Device
Action
SiS 300/200 Properties
Upgrade Device Driver Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard upgrades drivers for the following hardware device:
SiS 300/200
Upgrading to a newer version of a device driver may add functionality to or improve the performance of this device.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel
OK
Cancel
Start
Device Manager
4:45 PM


Device
Action
SiS 300/200 Properties
Upgrade Device Driver Wizard
Select a Device Driver
Which driver do you want to install for this device?
Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Models:
SiS 300/305
Have Disk...
< Back
Next >
Cancel
OK
Cancel
Start
Device Manager
1 - Paint
4:46 PM


Device Manager
Action View
6036-VBRQX9LDF6
Computer
Disk drives
Display adapters
SiS 300/305
DVD/CD-ROM drives
Floppy disk controllers
Floppy disk drives
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Other devices
Other PCI Bridge Device
Ports (COM & LPT)
Sound, video and game controllers
System devices
Universal Serial Bus controllers
Start
Device Manager
2 - Paint
4:47 PM

5.4 NETWORK DRIVER INSTALL FOR WIN98

1. Click Start, then Settings, in the “Setting” select Control panel.
2. Start the network applet program.
3. In the Network window, click Add.
4. In the Select Network Component Type, select Adapter then click Add.
5. Specify the path the new driver and press <ENTER> key.

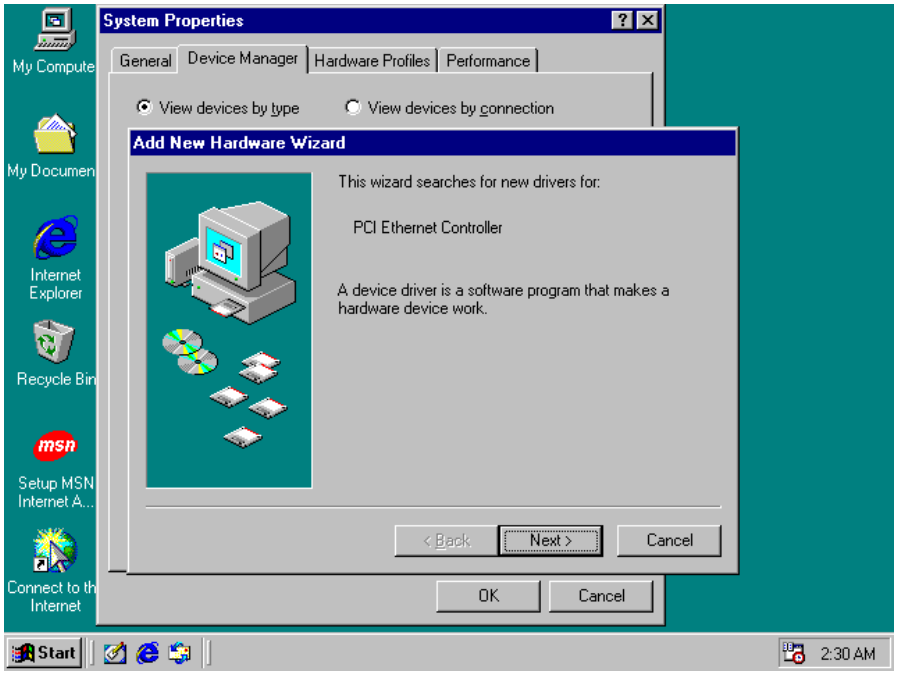
   (If in driver a:, type a:\)

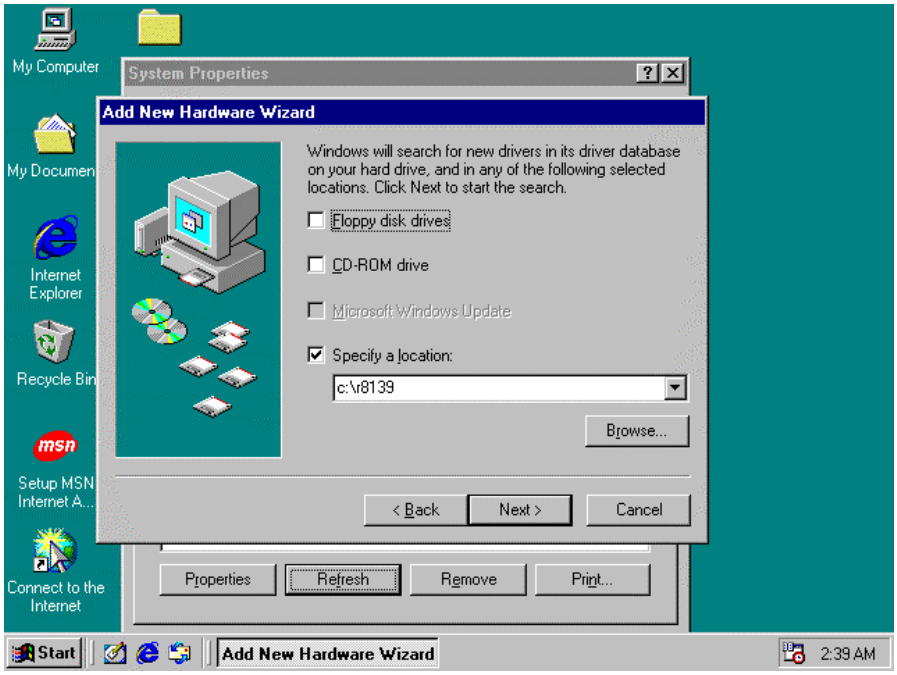
   (If you’re not sure exactly where the drivers are, choose the “Browse” button and find it)

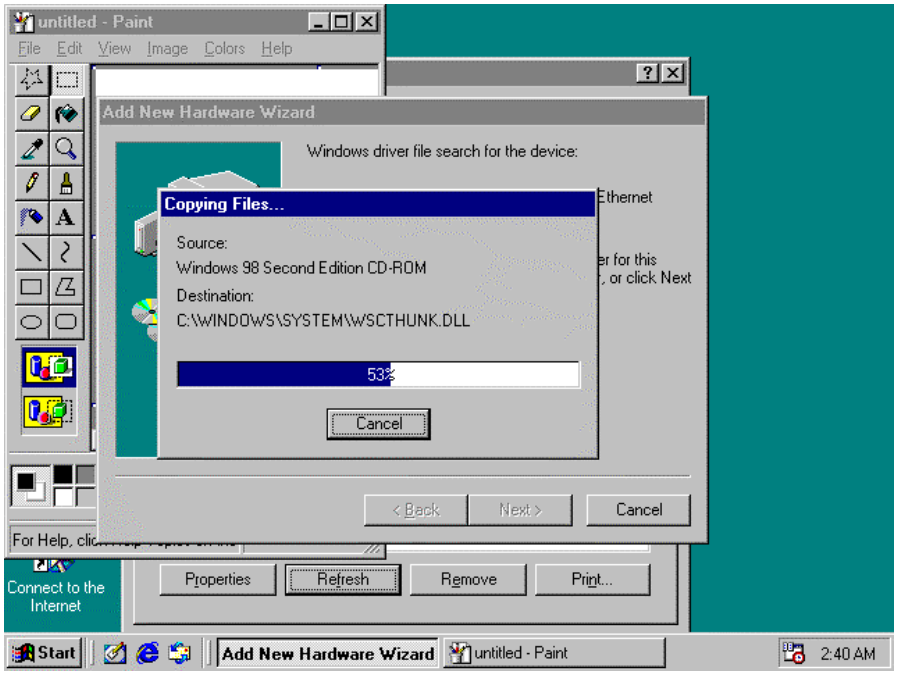
   Select RTL8139 Fast Ethernet Adapter

6. Click OK. Windows 95 will copy the network drivers to the proper directories on your system.
7. Continue choosing “OK”, util asked to restart your system.
8. After restarting, checking on the network driver, the Properties of the driver should look similar to the following figure.

NOTE：RTL8139 Driver is the same as RTL8100


My Compute
My Documen
Internet Explorer
Recycle Bin
Setup MSN Internet A...
Connect to th Internet
System Properties
General
Device Manager
Hardware Profiles
Performance
View devices by type
View devices by connection
Add New Hardware Wizard
This wizard searches for new drivers for:
PCI Ethernet Controller
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel
OK
Cancel
Start
2:30 AM


My Computer
My Documen
Internet Explorer
Recycle Bin
Setup MSN Internet A...
Connect to the Internet
System Properties
Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
c:\r8139
Browse...
< Back
Next >
Cancel
Properties
Refresh
Remove
Print...
Start
Add New Hardware Wizard
2:39 AM

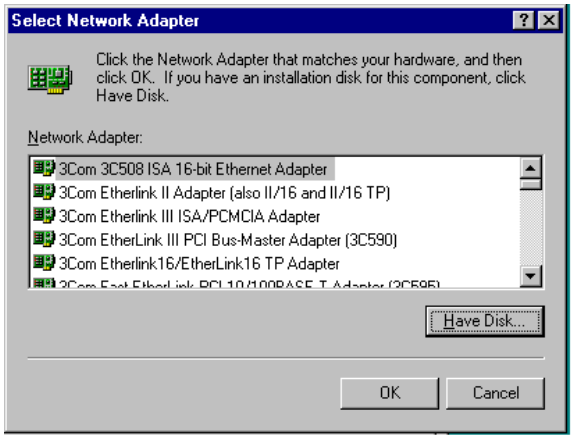

untitled - Paint
File Edit View Image Colors Help
Add New Hardware Wizard
Windows driver file search for the device:
Copying Files...
Source:
Windows 98 Second Edition CD-ROM
Destination:
C:\WINDOWS\SYSTEM\WSCTHUNK.DLL
53%
Cancel
< Back
Next >
Cancel
Properties
Refresh
Remove
Print...
Connect to the Internet
Start
Add New Hardware Wizard
untitled - Paint
2:40 AM

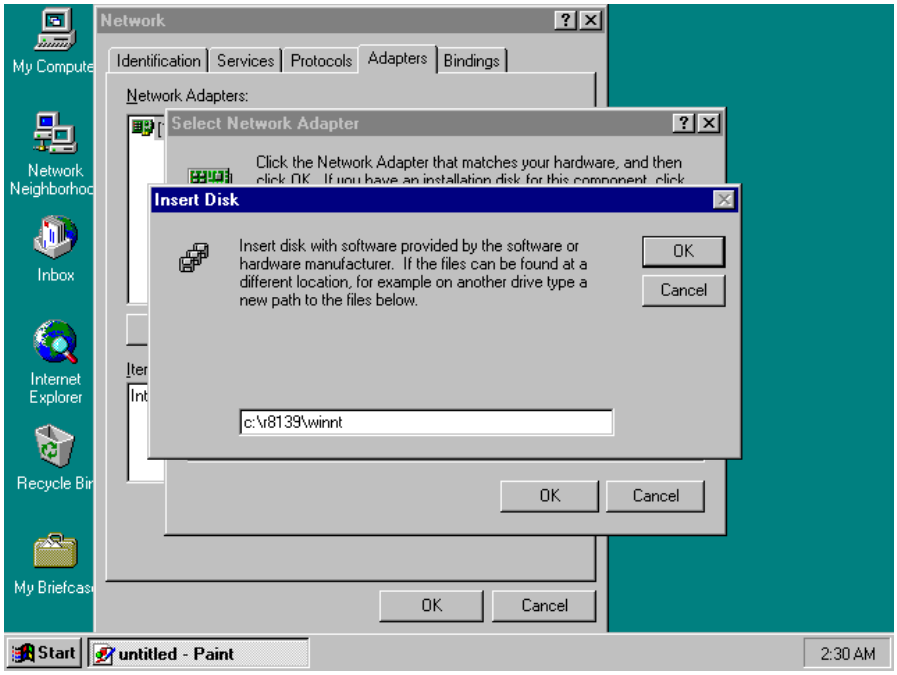
5.5 NETWORK DRIVER INSTALL FOR WIN NT4.0

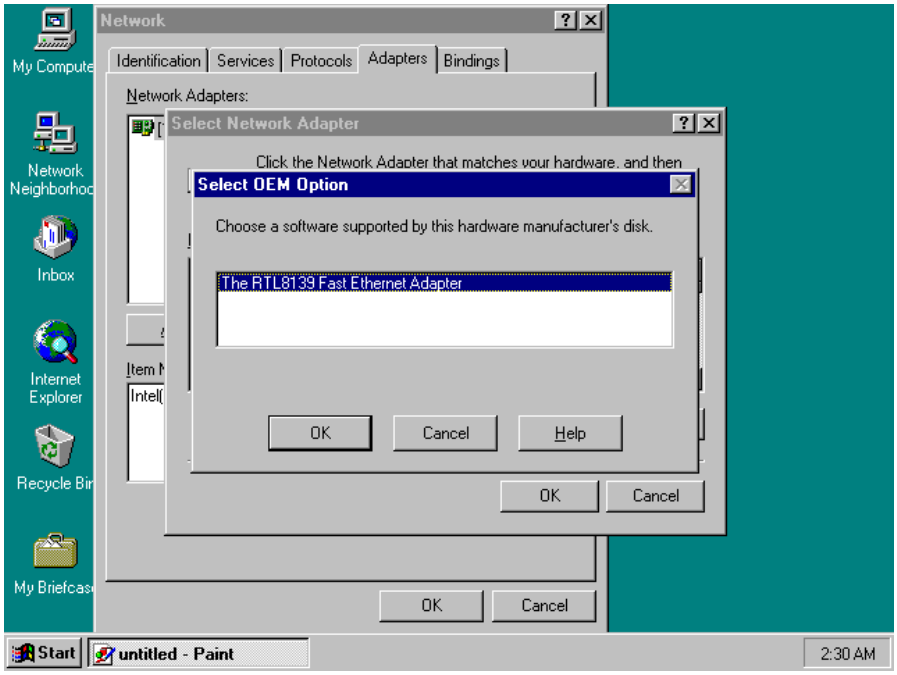
1. Click the Start button, then go to Settings and click on Control Panel.
2. Click on the Network icon to start the Network window. Click on the Adapters tab, and then click on Add.
3. In the Select Network Adapter window, click on Have Disk.
4. This will bring up the Insert Disk window.
5. Supply the directory where the Windows NT driver file are located.
   (If in driver a:, type a:\)
6. The Select OEM Option window will show up.

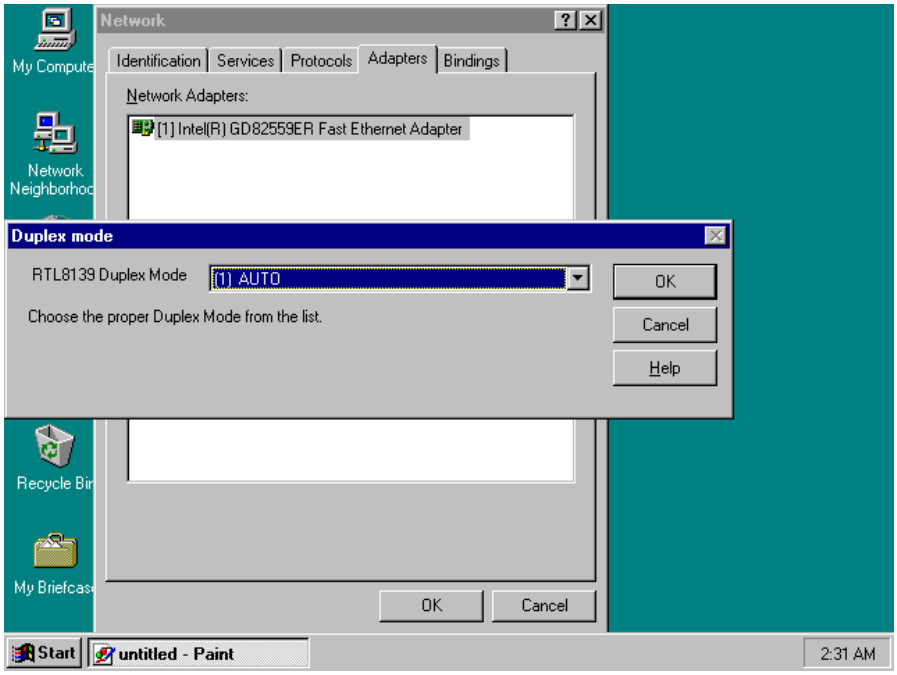
   Select RTL8139 Fast Ethernet Adapter
7. Click OK to finish the install.
8. Once the installation is complete, the system must be shut down and restarted for the new driver to take effect.
9. After restart, checking on the Network driver, the Properties of the driver should look similar figure.

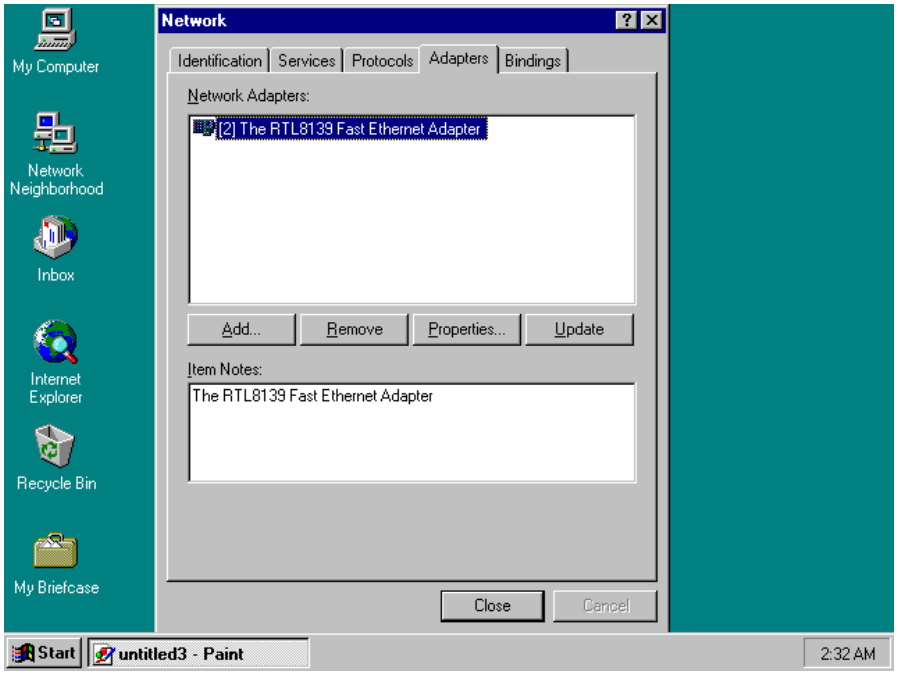
NOTE：RTL8139 Driver is the same as RTL8100

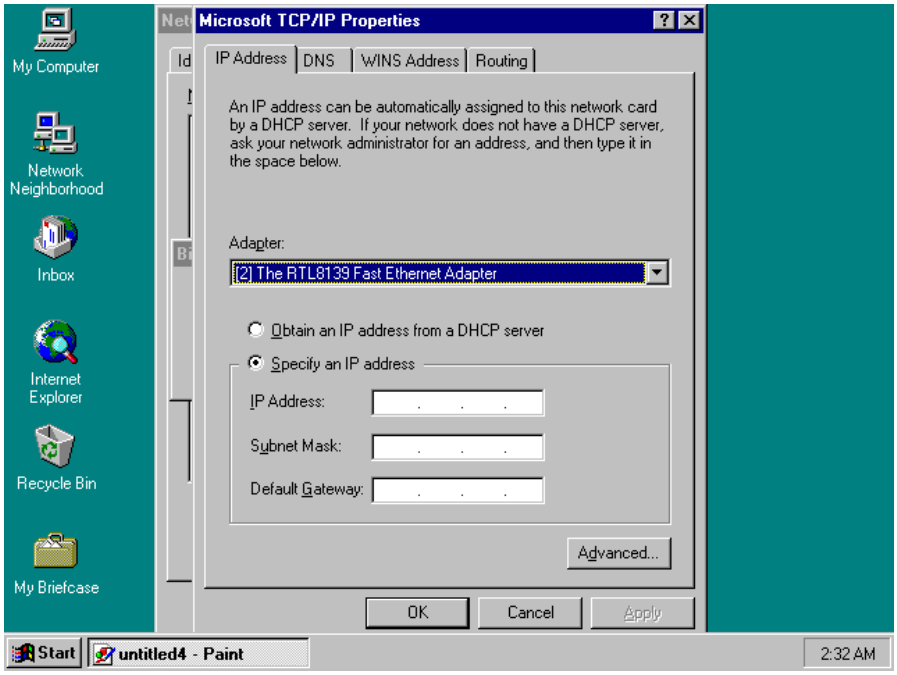

Select Network Adapter
Click the Network Adapter that matches your hardware, and then click OK. If you have an installation disk for this component, click Have Disk.
Network Adapter:
3Com 3C508 ISA 16-bit Ethernet Adapter
3Com Etherlink II Adapter (also II/16 and II/16 TP)
3Com Etherlink III ISA/PCMCIA Adapter
3Com EtherLink III PCI Bus-Master Adapter (3C590)
3Com Etherlink16/EtherLink16 TP Adapter
Have Disk...
OK
Cancel

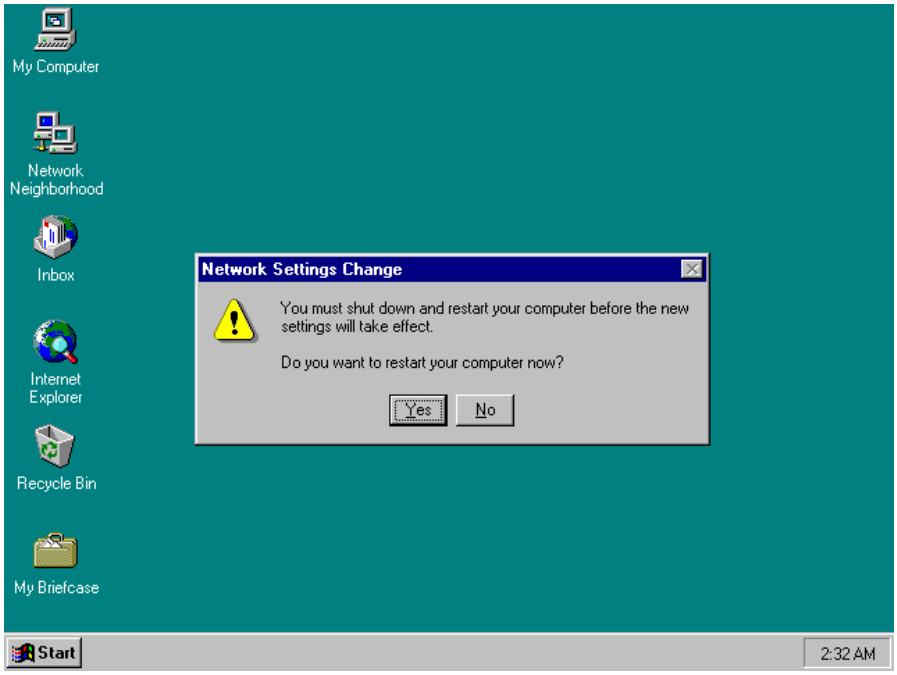

Network
Identification
Services
Protocols
Adapters
Bindings
Network Adapters:
Select Network Adapter
Click the Network Adapter that matches your hardware, and then
Insert Disk
Insert disk with software provided by the software or hardware manufacturer. If the files can be found at a different location, for example on another drive type a new path to the files below.
OK
Cancel
c:\r8139\winnt
OK
Cancel
OK
Cancel
My Compute
Network Neighborhoc
Inbox
Internet Explorer
Recycle Bir
My Briefcas
Start
untitled - Paint
2:30 AM


Network
Identification
Services
Protocols
Adapters
Bindings
Network Adapters:
Select Network Adapter
Click the Network Adapter that matches your hardware, and then
Select OEM Option
Choose a software supported by this hardware manufacturer's disk.
The RTL8139 Fast Ethernet Adapter
OK
Cancel
Help
OK
Cancel
OK
Cancel
My Compute
Network Neighborhoc
Inbox
Internet Explorer
Recycle Bir
My Briefcas
Start
untitled - Paint
2:30 AM


Network
Identification
Services
Protocols
Adapters
Bindings
Network Adapters:
[1] Intel(R) GD82559ER Fast Ethernet Adapter
OK
Cancel
Duplex mode
RTL8139 Duplex Mode
[1] AUTO
Choose the proper Duplex Mode from the list.
OK
Cancel
Help
Start
untitled - Paint
2:31 AM

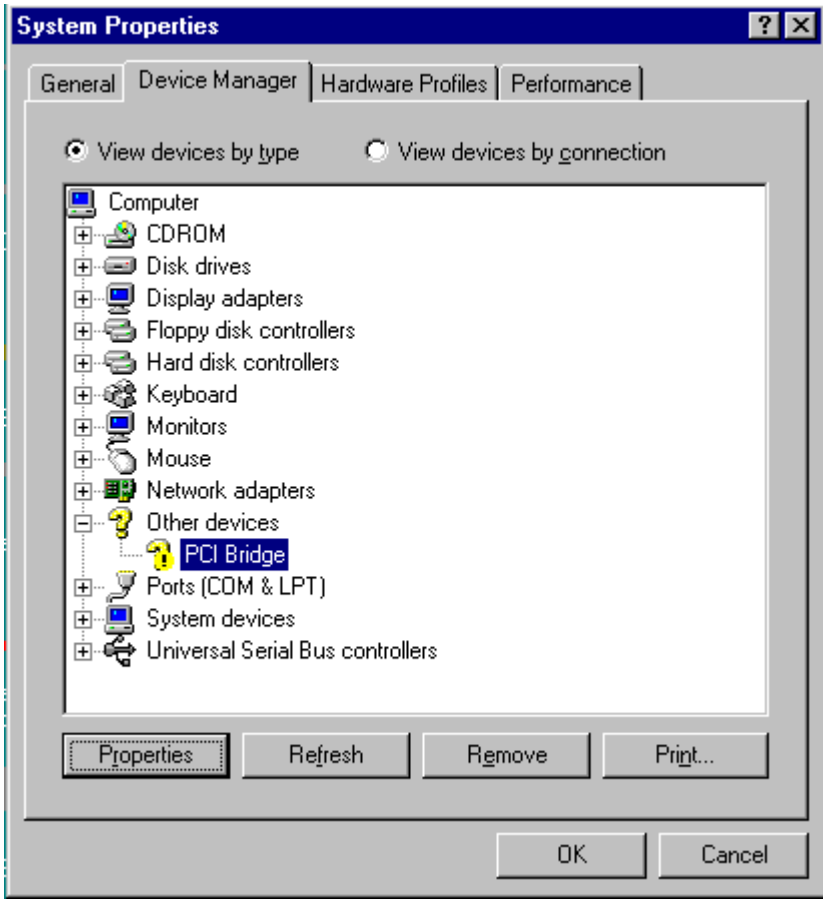

My Computer
Network Neighborhood
Inbox
Internet Explorer
Recycle Bin
My Briefcase
Network
Identification
Services
Protocols
Adapters
Bindings
Network Adapters:
[2] The RTL8139 Fast Ethernet Adapter
Add...
Remove
Properties...
Update
Item Notes:
The RTL8139 Fast Ethernet Adapter
Close
Cancel
Start
untitled3 - Paint
2:32 AM

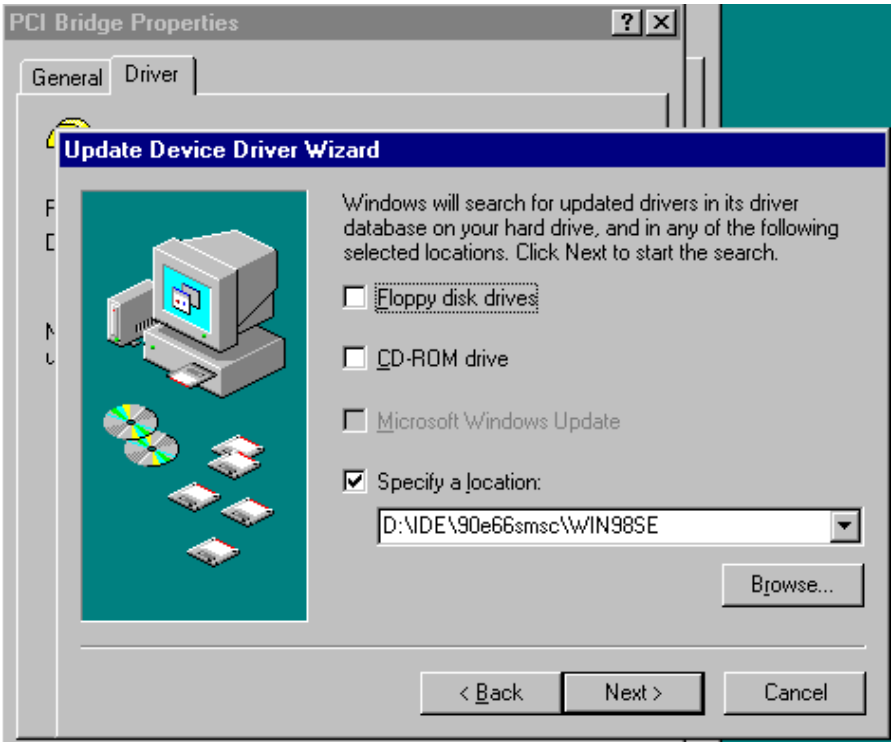

My Computer
Network Neighborhood
Inbox
Internet Explorer
Recycle Bin
My Briefcase
Microsoft TCP/IP Properties
IP Address
DNS
WINS Address
Routing
An IP address can be automatically assigned to this network card by a DHCP server. If your network does not have a DHCP server, ask your network administrator for an address, and then type it in the space below.
Adapter:
[2] The RTL8139 Fast Ethernet Adapter
Obtain an IP address from a DHCP server
Specify an IP address
IP Address:
Subnet Mask:
Default Gateway:
Advanced...
OK
Cancel
Apply
Start
untitled4 - Paint
2:32 AM

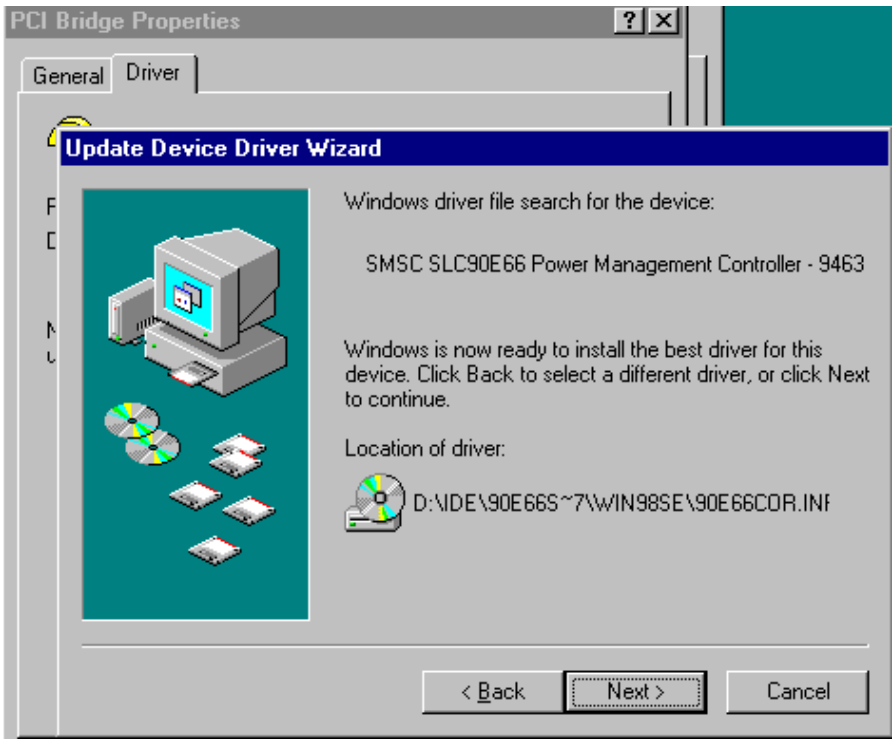

My Computer
Network Neighborhood
Inbox
Internet Explorer
Recycle Bin
My Briefcase
Network Settings Change
You must shut down and restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No
Start
2:32 AM

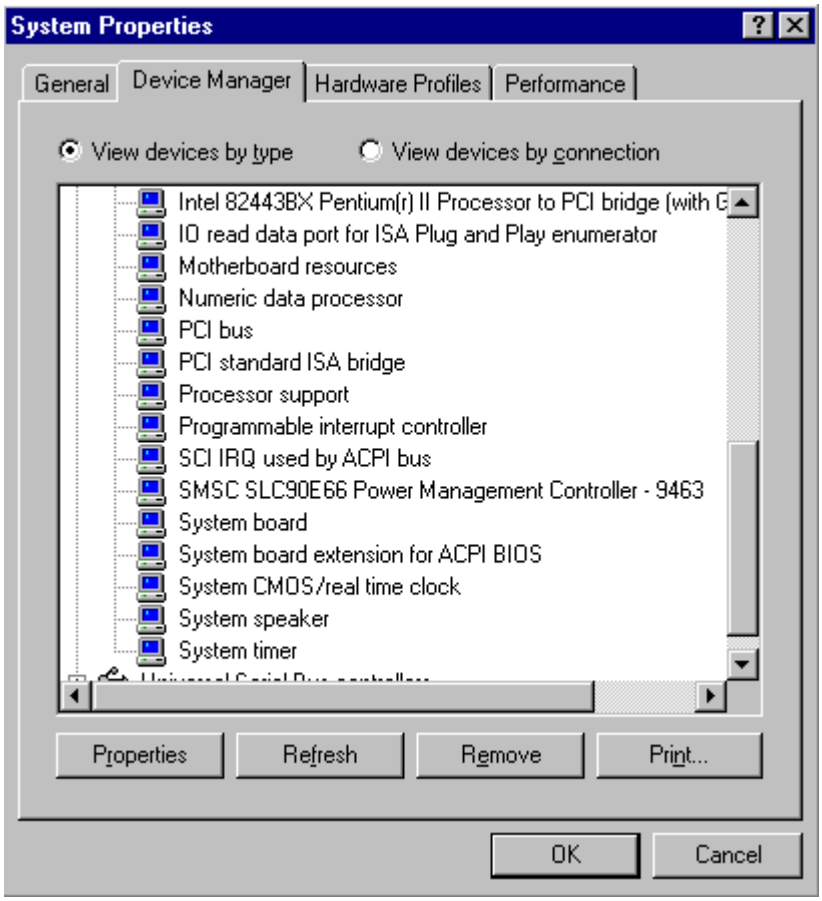
5.6 SMSC INSTALL FOR WIN95 & WIN98

1. Click Start, then Setting, in the “Setting” select system
2. Select PCI Bridge, run properties
3. Select update device driver
4. Select specify a location (if in driver D:\IDE)
5. After restart, check on the SMSC driver, the properties of the driver should look similar to the following figure


System Properties
General
Device Manager
Hardware Profiles
Performance
View devices by type
View devices by connection
Computer
CDROM
Disk drives
Display adapters
Floppy disk controllers
Hard disk controllers
Keyboard
Monitors
Mouse
Network adapters
Other devices
PCI Bridge
Ports (COM & LPT)
System devices
Universal Serial Bus controllers
Properties
Refresh
Remove
Print...
OK
Cancel

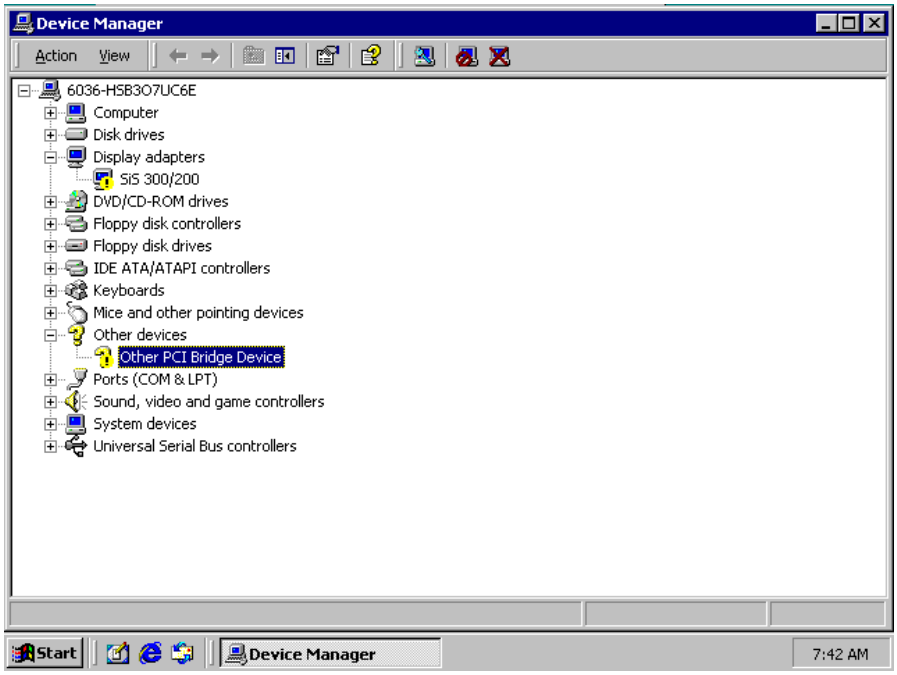

PCI Bridge Properties
General
Driver
Update Device Driver Wizard
Windows will search for updated drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
D:\IDE\90e66smsc\WIN98SE
Browse...
< Back
Next >
Cancel


PCI Bridge Properties
General
Driver
Update Device Driver Wizard
Windows driver file search for the device:
SMSC SLC90E66 Power Management Controller - 9463
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
D:\IDE\90E66S~7\WIN98SE\90E66COR.INF
< Back
Next >
Cancel

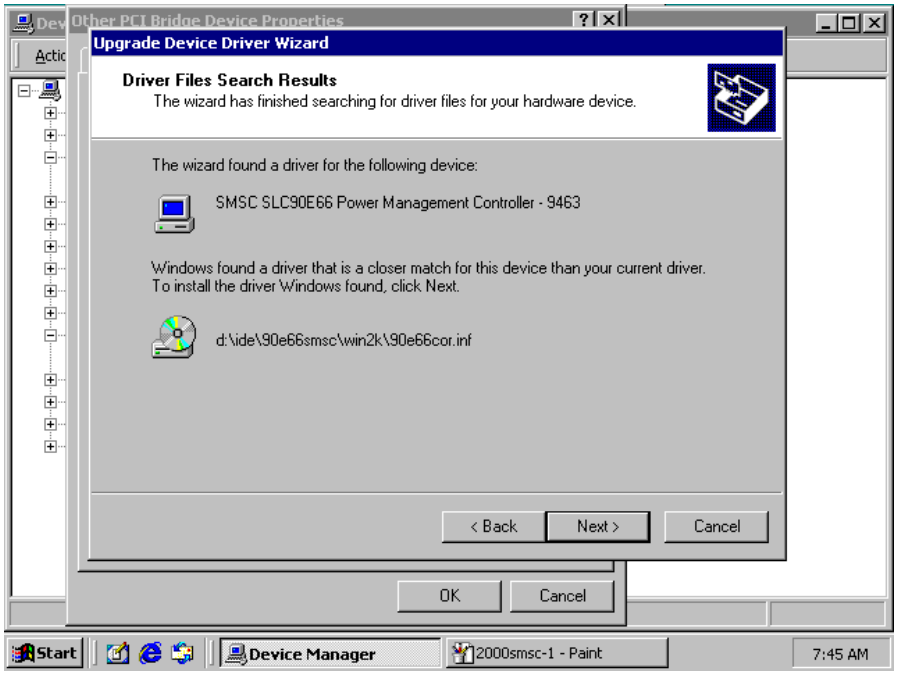

System Properties
General
Device Manager
Hardware Profiles
Performance
View devices by type
View devices by connection
Intel 82443BX Pentium(r) II Processor to PCI bridge (with G
IO read data port for ISA Plug and Play enumerator
Motherboard resources
Numeric data processor
PCI bus
PCI standard ISA bridge
Processor support
Programmable interrupt controller
SCI IRQ used by ACPI bus
SMSC SLC90E66 Power Management Controller - 9463
System board
System board extension for ACPI BIOS
System CMOS/real time clock
System speaker
System timer
Properties
Refresh
Remove
Print...
OK
Cancel

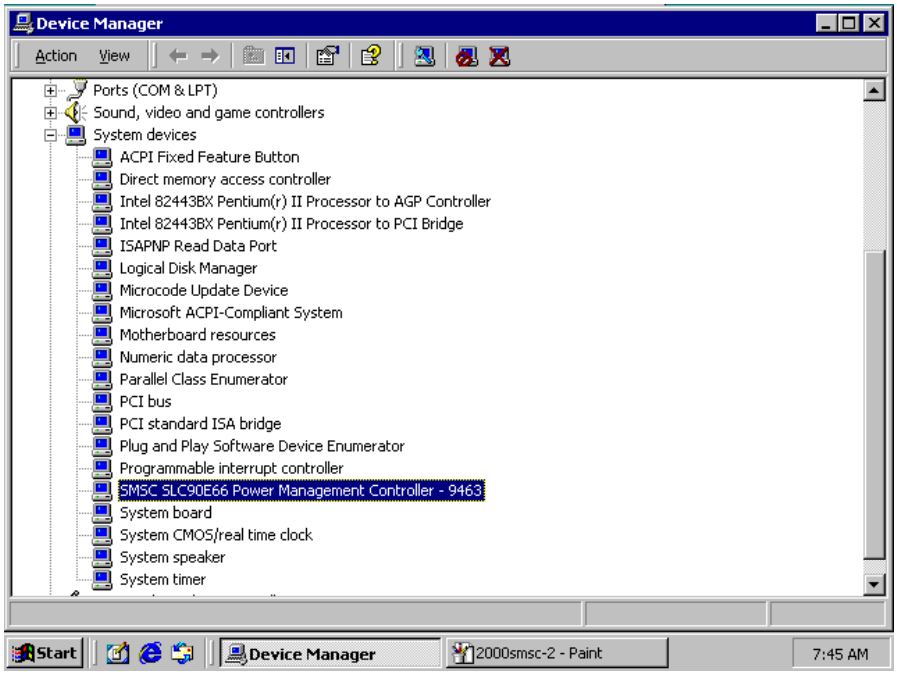
5.7 SMSC INSTALL FOR WIN2000

1. Select My Computer, type mouse right butter, click device
2. Click other PCI Bridge Device, upgrade new driver
3. Enter source path and select “90E66USB”
4. Re-start system and driver will be properly installed


Device Manager
Action View
6036-HSB3O7UC6E
Computer
Disk drives
Display adapters
SiS 300/200
DVD/CD-ROM drives
Floppy disk controllers
Floppy disk drives
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Other devices
Other PCI Bridge Device
Ports (COM & LPT)
Sound, video and game controllers
System devices
Universal Serial Bus controllers
Start
Device Manager
7:42 AM


Other PCI Bridge Device Properties
Upgrade Device Driver Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Locate File
Look in:
WIN2K
90E66COR
90E66IDE
90E66USB
History
Desktop
My Documents
My Computer
My Network P...
File name:
90E66USB
Files of type:
Setup Information (*.inf)
Open
Cancel
OK
Cancel
Start
Device Manager
2000smsc - Paint
7:44 AM


Other PCI Bridge Device Properties
Upgrade Device Driver Wizard
Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
SMSC SLC90E66 Power Management Controller - 9463
Windows found a driver that is a closer match for this device than your current driver.
To install the driver Windows found, click Next.
d:\ide\90e66smsc\win2k\90e66cor.inf
< Back
Next >
Cancel
OK
Cancel
Start
Device Manager
2000smsc-1 - Paint
7:45 AM


Device Manager
Action View
Ports (COM & LPT)
Sound, video and game controllers
System devices
ACPI Fixed Feature Button
Direct memory access controller
Intel 82443BX Pentium(r) II Processor to AGP Controller
Intel 82443BX Pentium(r) II Processor to PCI Bridge
ISAPNP Read Data Port
Logical Disk Manager
Microcode Update Device
Microsoft ACPI-Compliant System
Motherboard resources
Numeric data processor
Parallel Class Enumerator
PCI bus
PCI standard ISA bridge
Plug and Play Software Device Enumerator
Programmable interrupt controller
SMSC SLC90E66 Power Management Controller - 9463
System board
System CMOS/real time clock
System speaker
System timer
Start
Device Manager
2000smsc-2 - Paint
7:45 AM