



6IDM
User's Manual

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Memo

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Part I English Edition

Chapter 1

Introduction

1-1 Product Specifications :

□ CPU

- Support full series of Intel Pentium® Pro processors, up to 200MHz.
- Support future P6T OverDrive processor
- System Clock 50/55/60/66 MHz.
- ZIF Socket 8 with VRM header 8

□ Main Memory

- 72-Pin SIMM Socket x 4 (4/8/16/32/64MB 32/36-bit 70-ns (or faster) SIMM acceptable)
- Support BEDO/EDO/FP type DRAM
- Maximum 256MB on board
- Support parity/ECC capability

□ I/O Slots

- 16-bit ISA Bus x 4
- 32-bit PCI Bus x 4 (All are Master Modes, PCI 2.1 compliant)

□ Size

- 220mm x 330mm, 4-layer PCB

□ BIOS

- Award System BIOS
- 1Mb Flash ROM
- Support PnP, APM & CD-ROM booting features
- Built in NCR SCSI BIOS

□ Chipset

- Intel 82440FX three chips PCIset

On Board Ultra I/O

- SMC(or UMC) I/O chip
- 1FD+2S+1P
- Meet SPP/EPP/ECP parallel port spec.
- 16550A compatible, high speed UART
- Support IrDA IR function, up to 115.2kbps
- Meet designed for Windows 95 logo requirements (Plug & Play v1.0a compliant)

Dual Bus Master IDE Ports

- Support Fast ATA Spec., up to 4 devices, PIO mode 3/4 and Multi-word DMA 1/2.
- Bus Master Drivers for all well-known Multi-tasking OS.

Green PC

- Meet EPA Green PC standard : power consumption under 30W on Doze, Standby or Suspend mode.



Intel Pentium® Pro processor

Check speeds : 166~200MHz with 512KB L2 Cache;
150~200MHz with 256KB L2 Cache.

Check memory : Integrated 256KB/512KB L2 Cache

Design style : Four-issue RISC core

Die size : 196 mm² (0.35micron)

Up next : Klamath (2H97)

The Pentium Pro processor are especially suited for server, high-end desktop and workstation applications running under advanced 32-bit operation systems. These application include multimedia content creation, business computation and CAD/CAM.

1-2 Product Contents

This product comes with the following components:

- Mainboard x 1
- 9-pin serial port & 25-pin parallel port ribbon cable with bracket x 1 (Figure 1-1)
- 25-pin serial port ribbon cable with bracket x 1 (Figure 1-2A), or adding a PS/2 mouse connector for optional (Figure 1-2B)
- 40-pin IDE connector ribbon cable x 1 (Figure 1-4)
- 34-pin floppy disk drive ribbon cable x 1 (Figure 1-3)
- User's Manual x 1
- Flash EPROM Utility & Bus Master IDE Drivers Diskette x 1**
- VRM (Voltage Regulation Module)

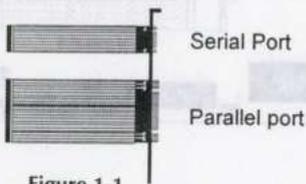


Figure 1-1

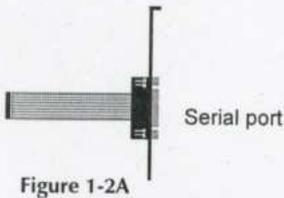


Figure 1-2A

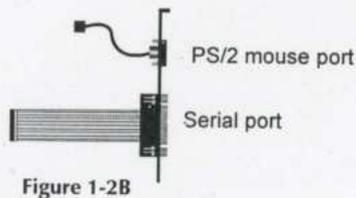


Figure 1-2B

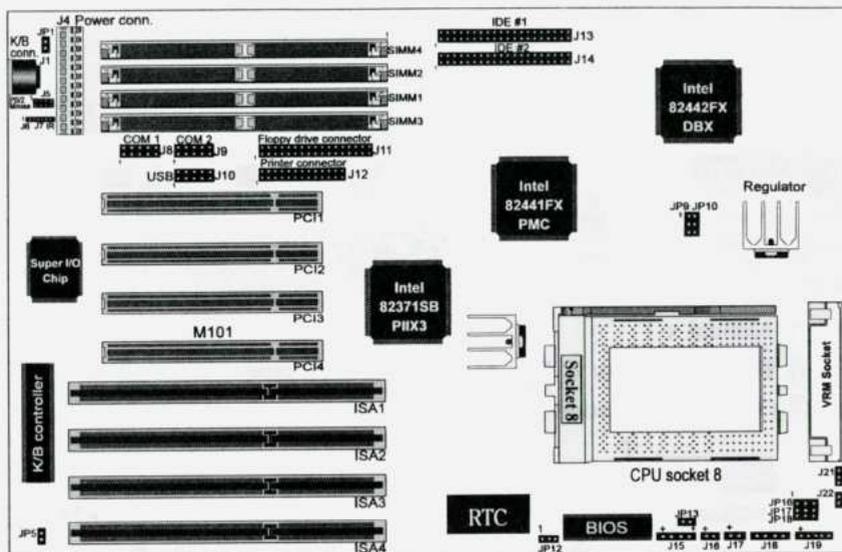


Figure 1-3



Figure 1-4

1-3 Main Board Layout



Jumper and Connector Ref. page

Jumper & Connector No.	Function	Ref. page
JP1	Keyboard grounding setting jumper	P.13
JP5	PS/2 mouse enable/disable setting jumper	p.14
JP9,JP10	System frequency setting jumper	P.12
JP16,JP17,JP18	CPU internal speed setting jumper	P.12
JP12	Flash type select jumper	P.16
JP13	Green switch header	P.15
J1	Keyboard connector	P.13
J4	Power supply connector	P.13
J5	PS/2 mouse header	P.14
J6/J7	Infra-red header	P.16
J15	Hard Disk LED header	P.16
J16	Green LED header	P.15
J17	Turbo LED header	P.15
J18	Speaker header	P.15
J19	Keyboard lock & power-good LED header	P.14
J21	CPU cooling fan header	P.16
J22	System reset switch header	P.14

MIO Connector

Connector No.	Function	Ref. Page
J8	COM1 connector	--
J9	COM2 connector	--
J11	Floppy drive connector	--
J12	Printer port connector	--
J13	Primary IDE connector	--
J14	Secondary IDE connector	--
J10	Dual channel USB port	P.17

1-4 How to Set Jumper

Jumper switch is used to select between various operating modes. A jumper switch consists of two or three gold pins, which stretch out from the system board. By using the cap to cover two pins, it means that those pins are shorted. If the cap is not placed on any pins at all, it indicates the pins are open.

This section will discuss the functions and settings for all of the user-configurable jumpers on the main board. Refer to the diagram below, you will find the location of the various jumpers on the main board.

Pin No.	Function	Setting
J12	Flash BIOS select jumper	
J13	Green LED header	
J14	Keyboard	
J15	Power connector	
J16	PS/2 mouse header	
J17	ATA-133	
J18	Front Disk LED header	
J19	Front Disk LED header	
J20	Front LED header	
J21	System reset switch header	
J22	CPU cooling fan header	
J23	Keyboard lock & power-good LED header	
J24	Speaker header	
J25	ATA-133	
J26	ATA-133	
J27	ATA-133	
J28	ATA-133	
J29	ATA-133	
J30	ATA-133	
J31	ATA-133	
J32	ATA-133	
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J92	ATA-133	
J93	ATA-133	
J94	ATA-133	
J95	ATA-133	
J96	ATA-133	
J97	ATA-133	
J98	ATA-133	
J99	ATA-133	
J100	ATA-133	

3 Pin Jumper

1-2: Pin 1 and Pin 2 short together

MIO Connector

Connector No.	Function	Page
J10	Dual channel USB port	P.17
J14	Secondary IDE connector	--
J15	Primary IDE connector	--
J16	Printer port connector	--
J17	Floppy drive connector	--
J18	COM2 connector	--
J19	COM1 connector	--

Main Board Setup

2-1 Installing a PGA type CPU in a ZIF Socket

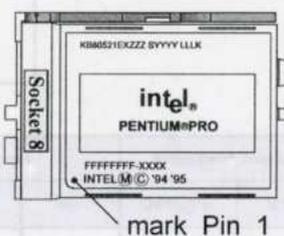
The Intel Socket 8, incorporated in the mainboard specifications, is specially designed for the Pentium Pro processor. While inserting the Pentium pro processor into Socket 8, certain precautionary steps must be followed. The following diagrams of illusion and explanation are worthy of your note.

1. Locate the dot and notch at one of the processor's corners. These markings indicate Pin 1 of the processor.

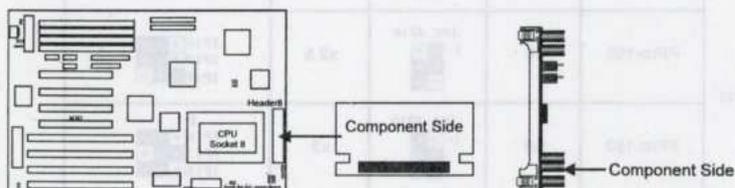
Dot and notch
mark Pin 1



2. When the socket handle is up, insert the Pentium Pro CPU in a similar fashion shown below.



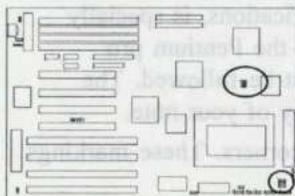
3. Plug the VRM into Header 8



 A cooling fan is strongly recommended when installing Pentium Pro processor due to possible overheat.

2-2 Configuration the mainboard for different Pentium® Pro class CPUs

The mainboard supports Intel Pentium Pro PPro-150/166/180/200 MHz. If you install the CPU on this board, you must set the System frequency (JP9,JP10), and Frequency ratio (CPU frequency = System frequency x Frequency ratio (JP16, JP17, JP18) to meet variable CPU specifications.



System frequency (MHz)	JP9, JP10	Frequency ratio	JP16, JP17, JP18
50	JP9, JP10 	x2	
55	JP9, JP10 	x2.5	
60	JP9, JP10 	x3	
66	JP9, JP10 	x3.5	
		x4	

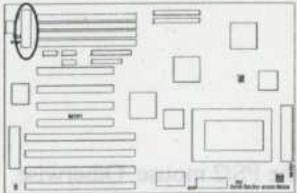
See below chart for details :

CPU-type		System frequency		Frequency ratio	
		MHz	JP9,JP10	rate	JP16,JP17,JP18
Intel	PPro-150	60	JP9, JP10 	x2.5	
	PPro-166	66	JP9, JP10 	x2.5	
	PPro-180	60	JP9, JP10 	x3	
	PPro-200	66	JP9, JP10 	x3	

2-3 Connector and Jumper Settings

Connectors are used to link the system board with other parts of the system, including the power supply, the keyboard, and the various controllers on the front panel of the system case. When connecting connect-wires to the connectors, you should remember that some of them must be aligned in a specific way in order to have proper functions.

Power Supply Connector (J4)



1	POWER GOOD	Orange
2	+5V	Red
3	+12V	Yellow
4	-12V	Blue
5	GROUND	Black
6	GROUND	Black
1	GROUND	Black
2	GROUND	Black
3	-5V	White
4	+5V	Red
5	+5V	Red
6	+5V	Red

The mainboard requires a power supply with 200 watts at least. While installing the board, the power supply connector is usually the last one to be connected. **Before connecting the power supply, please make sure it is not connected to power source.**



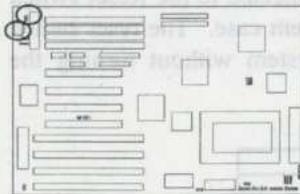
Most power supplies have two sets of six-wire connectors. Plug the dual connectors onto the board connector and make sure the black leads are in the center.



Power supply requirement :

Output voltage	Regulation tolerance
+5 Vdc	± 5%
-5 Vdc	± 10%
+12 Vdc	± 5%
-12 Vdc	± 10%

Keyboard Connector (J1)



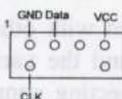
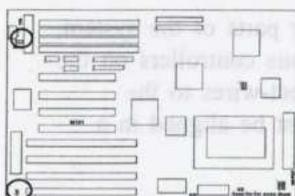
Pin	Definition
1	Keyboard Clock
2	Keyboard Data
3	(None)
4	Ground
5	+5V DC

Keyboard Connector / Pin Definitions

Keyboard Grounding Setting Jumper(JP1)

In order to decrease the EMI radiation, we suggest you open this header after finishing the system assembly.

PS/2 Mouse Header(J5)



You can attach a PS/2 mouse adapter (8-pin mini-DIN with bracket for Optional) to this header directly.

PS/2 Mouse Enable/Disable Header(JP5)

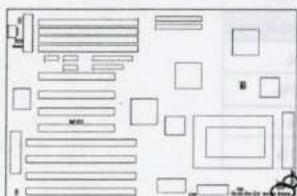
■ PS/2 mouse enable (default)

○ PS/2 mouse disable



If a PS/2 mouse is used, you should assign IRQ12 to the PS/2 mouse. Otherwise, the IRQ12 will be available for other adapters. (Disable PS/2 mouse function from BIOS <P.36> & open the JP5).

Front Panel Header Set



Keyboard Lock Header (J19)

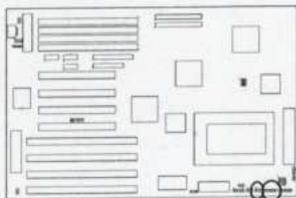
Pin	Definition
1	+5VDC
2	No Connect
3	Ground
4	Keylock
5	Ground

Power Good LED

System Reset Switch Header (J22)

This connector should be connected to the Reset switch on the front panel of the system case. The reset switch allows you to restart the system without turning the power off.

Pin	Definition
1	System
2	GND



Speaker Header (J18)

An external speaker mounted inside the case can be connected to the main board via this connector.

Pin	Definition
1	Speaker Signal
2	GND
3	GND
4	+5V DC

Turbo LED Header (J17)

The turbo LED connector is connected to a turbo LED on the front panel of the system case. If connected, the turbo LED will light on when the system is running at a high speed mode.



LED On : System running in power saving.

LED Off : System running in normal mode.

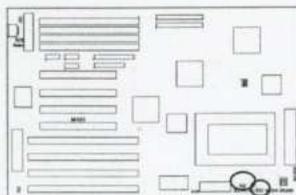
Changed Speed by keyboard

CTRL-ALT- "-" : Set to low speed

CTRL-ALT- "+" : Set to high speed

➤ ***This mainboard has no hardware Turbo/De-turbo function.***

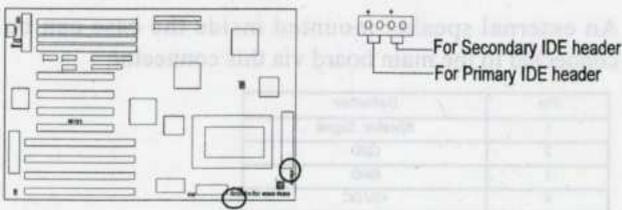
If you connect a case-mounted Turbo LED, the LED will light while the system is turned on.



Green Switch Header(JP13) / Green LED Header(J16)

This allows the user to manually place the system into suspend (green) mode where system will make CPU clock down to zero MHz. the system will be wake up while the keyboard or mouse be touched (The system resume events can be defined in the POWER MANAGEMENT SETUP screen of the BIOS)

Hard Disk LED Header(J15)

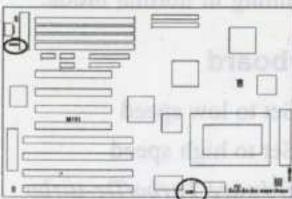


CPU Cooling Fan Header(J21)

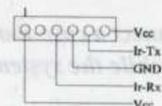
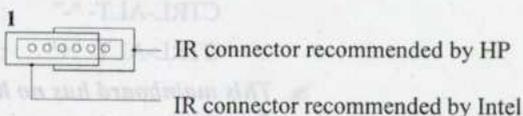


This adder connector would allow the fan to draw its power from the baseboard installed of the disk drive connector (some systems have all the disk drive power connectors in use).

Infra-red Header (J6,J7)



If you set the BIOS's item "**Infra Red(IR) Function**", to "**HP SIR**" or "**ASK IR**", the COM2 port will switch to support IR function.



Flash ROM Type Select Jumper (JP12)

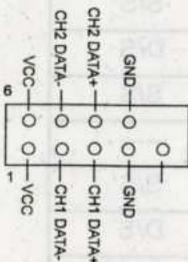
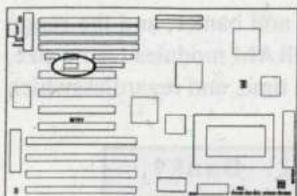


For 12V Flash ROM use



(default) For 5V Flash ROM use

USB(Universal Serial Bus) Connector (J10)



USB is an open industry standard, providing a simple and inexpensive way to connect up to 125 devices to a single computer port. Keyboards, mice, tablets, digitizers, scanners, bar-code readers, modems, printers and many more can all run at the same time.

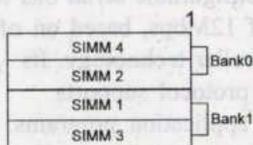
USB is a dynamically reconfigurable serial bus with an elementary data rate of 12Mbps, based on off the shelf, low cost micro-controller technology. Its modular layered software protocol supports sophisticated devices and application programs.

This board contains a USB Host controller and includes the root hub with two USB ports (meet USB Rev 1.0 spec.), which permits the connection of two USB peripherals or hub devices directly.

 Now under testing of compatibility with different peripherals.

2-4 Main Memory Configuration

The DRAM memory system on board consists of bank0 and bank1, and the range memory size is 8 ~ 256 MBytes. You must install 2 pcs DRAM modules (same size, same speed, either single or double side) for each bank at a time, and regardless which bank you install first.



"S/S" - Single side
 "D/S" - Double side
 "---" - no use

Bank0	Bank1
S/S	----
S/S	S/S
S/S	D/S
----	S/S
D/S	----
D/S	S/S
D/S	D/S
----	D/S

DRAM Specifications :

- DRAM type : FP(Fast Page) DRAM, EDO(Extended Data Output) or Burst EDO type DRAM
- Module size : single-sided - 4/16 MBytes.
Double-sided - 8/32 MBytes.
- DRAM speed : 70-ns or faster for system clock 50 or 60MHz,
60-ns for system clock 66MHz.
- Parity : Either parity or non-parity.



64MB SIMM is still testing now.

Award BIOS Setup Program

The system BIOS has built-in BIOS for PCI NCR810 and Adaptec AHA-7850. In case one of these PCI cards is installed, the system BIOS will auto-scan the ROM address and install the BIOS in the first available address.

Award's BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This content of information is stored in CMOS RAM so that it can retain the Setup information when the power is turned off.

To turn on (or reboot) the system and press the [DEL] key to enter the Award BIOS setup screen as following.

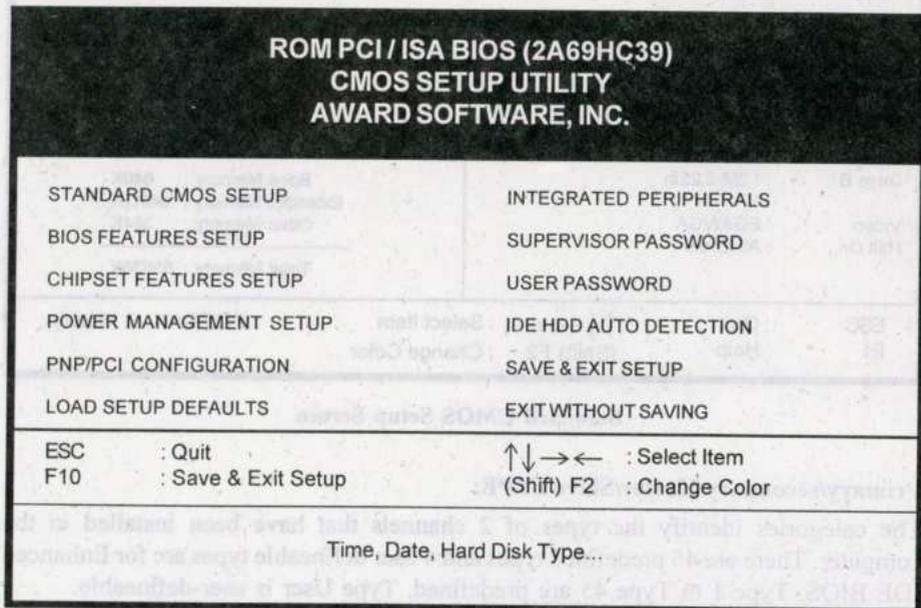


Figure 3-1 Setup Program Initial Screen

3-1 Standard CMOS Setup

To choose the "STANDARD CMOS SETUP" option from the "CMOS SETUP UTILITY" menu (Figure 3-1) and the below screen is displayed. This standard Setup Menu allows users to configure system components such as date, time, hard disk drive, floppy disk drive, display and memory. When a field is highlighted, on-line help information is displayed in the left bottom of the Menu screen.

ROM PCI / ISA BIOS (2A69HC39)									
STANDARD CMOS SETUP									
AWARD SOFTWARE, INC.									
Date (mm : dd : yy) : Sat, Sep 9 2000									
Time (hh : mm : ss) : 9: 14: 43									
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE	
Primary Master	: Auto	0	0	0	0	0	0	LBA	
Primary Slave	: None	0	0	0	0	0	0	-----	
Secondary Master	: None	0	0	0	0	0	0	-----	
Secondary Slave	: None	0	0	0	0	0	0	-----	
Drive A	: 1.44M, 3.5 in.								
Drive B	: 1.2M, 5.25 in.								
Video	: EGA/VGA								
Halt On	: All Errors								
						Base Memory : 640K			
						Extended Memory : 64512K			
						Other Memory : 384K			
						Total Memory : 65536K			
ESC	: Quit	↑↓→←			: Select Item		PU/PD/+/-		: Modify
F1	: Help	(Shift) F2			: Change Color				

Standard CMOS Setup Screen

Primary/secondary Master/Slave TYPE:

The categories identify the types of 2 channels that have been installed in the computer. There are 45 predefined types and 4 user defineable types are for Enhanced IDE BIOS. Type 1 to Type 45 are predefined. Type User is user-defineable.

Press PgUp or PgDn to select a numbered hard disk type or type the number and press <Enter>. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for category. If your hard disk drive type is not matched or listed, you can use Type "User" to define your own drive type manually.

If you select Type "User", you will need to know the information listed below. Enter the information directly from the keyboard and press <Enter>. This information should be included in the documentation from your hard disk vendor or the system manufacturer.

TYPE	drive type
CYLS.	number of cylinders
HEADS	number of heads
PRECOMP	write precom
LANDZONE	landing zone
SECTORS	number of sectors
MODE	mode type

If you select Type "Auto", BIOS will Auto-Detect the HDD & CD-ROM Drive at the POST stage and showing the IDE for HDD & CD-ROM Drive.

If the controller of HDD interface is **ESDI** the selection shall be "**Type 1**".

If the controller of HDD interface is **SCSI** the selection shall be "**None**".

If a hard disk has not been installed select "**None**" and press <Enter>.

Write Pre compensation - The size of a sector gets progressively smaller as the track diameter diminishes, but each sector must still hold 512byte. Write Pre compensation circuitry on the hard disk compensates for the physical difference in sector size by boosting the write current for sectors on inner track.

Landing Zone - The cylinder location where the heads will normally park when the system is shut down.

Capacitor = (Number of heads) x (Number of cylinders) x (Number of sectors per track) x (512 Bytes per sector)

Mode:

For IDE hard drives, the BIOS provides three modes to support both normal IDE hard disks and also drives larger than 528MB:

Normal mode - for IDE drives smaller than 528MB.

LBA mode - provide LBA (Large Block Addressing) function for mass capacity hard disk that larger than 528MB and up to 8.4GB (Giga Bytes).

Large mode - some mass capacity hard disk operate in large mode and does not support LBA function for above mass capacity hard disk. Large mode is new specifications which may not be fully supported by all operation systems (MS-DOS is OK right now, but is uncommon.)

3-2 BIOS Features Setup

By choosing the "BIOS FEATURES SETUP" option from the "CMOS SETUP UTILITY" menu(Figure 3-1), the screen below is displayed. This sample screen contains the manufacturer's default values for the mainboard.

ROM PCI / ISA BIOS (2A69HC39)			
BIOS FEATURES SETUP			
AWARD SOFTWARE, INC.			
Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU Internal Cache	: Enabled	C8000 - CBFFF Shadow	: Disabled
External Cache	: Enabled	CC000 - CFFFF Shadow	: Disabled
Boot Sequence	: A,C	D0000 - D3FFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	D4000 - D7FFF Shadow	: Disabled
Boot Up Floppy Seek	: Enabled	D8000 - DBFFF Shadow	: Disabled
Boot Up NumLock Status	: On	DC000 - DFFFF Shadow	: Disabled
Boot Up System Speed	: High		
Typematic Rate Setting		: Disabled	
Typematic Rate (Chars/Sec)		: 6	
Typematic Delay (Msec)		: 250	
Security Option		: Setup	
PCI/VGA Palette Snoop		: Disabled	
OS Select (For DRAM>64MB):		Non-OS2	
ESC	: Quit	↑↓→←	: Select Item
F1	: Help	PU/PD/+/-	: Modify
F5	: Old Values	(Shift) F2	: Change Color
F7	: Load Setup Defaults		

BIOS Features Setup Screen

A. Virus Protection

Virus Warning

When enabled, will monitor the boot sector and partition table of the hard disk drive for any attempt at modification.

B. Cache Control

CPU Internal Cache/External Cache

These fields allow you to enable or disable the CPUs "Level 1" built-in cache and "Level 2" secondary cache.

C. Boot Up Features

After power on the system, BIOS will perform a series of device initializations and diagnostic tests.

Quick Power On Self Test

If it set to Enabled, BIOS will skip some check items during POST.

Boot Sequence

This option sets the sequence of boot drives (either floppy drive A: or hard disk drive C:) that BIOS attempts to boot from after POST completes.

- ⊗ CD-ROM driver is becoming a standard device on computer systems, It has a large storage capacity advantage to store different operating system on it and will need boot-up of the system via CD-ROM. Now, we provides CD-ROM boot-up function that allows the user to select booting from A:, C: or CD-ROM. No matter if the CD-ROM is IDE or SCSI, the system will look for the first available bootable device for the operating system.

Swap Floppy Drive

Enabled - The system will swap the floppy drive assignment so that drive A will function as drive B, drive B will function as drive A.

Boot Up Floppy Seek

During POST, BIOS will determine if the floppy disk drive installed is 40 or 80 tracks. (360K type drive is 40 tracks and the 720K, 1.2M and 1.44M are 80 tracks)

Boot Up NumLock Status

Define the keyboard as number keys or arrow keys.

Boot Up System Speed

This option selects the speed of CPU at system boot time.

D. Keyboard Interface

Typematic Rate Setting

When enabled, you can set the following two typematic control items.

Typematic Rate (Chars/Sec)

The typematic rate is sets the rate at which characters on the screen repeat when a key is pressed and held down.

Typematic Delay (Msec)

Choose how long after you press a key that a charactor begins repeating.

E. Security Option

System: When entering wrong password, the system will not boot and deny to access the BIOS Setup.

Setup: When entering wrong password, the system can boot, but deny any access to the BIOS Setup.

F. PCI/VGA Palette Snoop

A system may have two display devices present in the system : a VGA-compatible interface and another graphics controller. In this case, both devices implement the color palette registers at the same I/O addresses. The configuration software must program one of the devices to actively act as the target, while the other device is programmed to quietly "snarf" the write data from the bus as it flies by on its way to the other device.

- Some non-standard VGA cards or MPEG video cards may not show colors properly, You can leave this setting to **Enable** that could correct this problem.

G. OS Select (For DRAM > 64MB)

If you system DRAM is large than 64MB and running OS/2, please select "OS/2" as the item value. If running other operating system, please set the item value to "Non-OS/2".

H. Shadow Memory

BIOS can copy adapter's ROM from address C0000h through DFFFFh to RAM for faster execution. Shadow setting are chipset specific and dependent on system hardware.

3-3 Chipset Features Setup

By choosing the "CHIPSET FEATURES SETUP" option from the "CMOS SETUP UTILITY" menu (Figure 3-1), the screen below is displayed. This sample screen contains the manufacturer's default values for the mainboard.

ROM PCI / ISA BIOS (2A69HC39)			
CHIPSET FEATURE SETUP			
AWARD SOFTWARE, INC.			
AUTO Configuration	: Enabled	8 Bit I/O Recovery Time	: 3
DRAM Speed Selection	: 70ns	16 Bit I/O Recovery Time	: 2
DRAM RAS# Precharge Time	: 3	Memory Hole At 15M-16M	: Disabled
MA Additional Wait State	: Disabled		
RAS# To CAS# Delay	: Disabled		
DRAM Read Burst (B/E/F)	: x2/3/4		
DRAM Write Burst (B/E/F)	: x3/3/4		
ISA Bus Clock	: PCICLK/4		
DRAM Refresh Queue	: Enabled		
DRAM RAS Only Refresh	: Disabled		
Memory Parity Check	: Disabled		
ECC Checking/Generation	: Disabled		
Fast Dram Refresh	: Disabled		
Read-Around-Write	: Enabled		
PCI Burst Write Combine	: Disabled		
PCI-To-DRAM Pipeline	: Enabled		
CPU-To-DRAM Write Post	: Enabled		
CPU-To-PCI IDE Posting	: Enabled		
System BIOS Cacheable	: Disabled		
Video RAM Cacheable	: Disabled		
		ESC : Quit	↑↓→← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2 : Change Color
		F7 : Load Setup Defaults	

Chipset Features Setup Screen

 Above all the entries on the screen are optional settings for this mainboard and you should NOT change them unless necessary.

 If professional engineers or customers would make some adjustments to gain even better system stability and performance, please visit URL://www.award.com to search for helpful relative information.

A. 8-bit I/O Recovery Time & 16-bit I/O recovery Time

This category is used to add additional recovery delay between CPU or PCI master 8-bit (or 16-bit) I/O cycles to the ISA Bus. The options are 1 to 8(to 4 for 16-bit I/O) and N/A.

B. Memory Parity Check

This item allow you to support parity or non-parity type SIMM. If you use non-parity type SIMM, please **Disable** this function.

C. ECC Checking/Generation

This board provides single bit ECC or parity checking capability. If you use parity type SIMM and **Enable** the Memory parity check function, this item allow you to select ECC function.

D. Memory Hole at 15M-16M

Enabling this features reserves 15MB to 16MB memory address space to ISA expansion cards that specifically this memory space.

3-4 Power Management Setup

This section provides informations of functioning the Green PC power management features. For enabling the power management function, please select "**POWER MANAGEMENT SETUP**" option from the "**CMOS SETUP UTILITY**" menu (Figure 3-1).

ROM PCI / ISA BIOS (2A69HC39) POWER MANAGEMENT SETUP AWARD SOFTWARE, INC.			
Power Management	: Disabled	** Power Down & Resume Events**	
PM Control by APM	: Yes	IRQ3 (COM 2)	: ON
Video Off Method	: V/H SYNC+Blank	IRQ4 (COM 1)	: ON
MODEM Use IRQ	: 3	IRQ5 (LPT 2)	: ON
Doze Mode	: Disable	IRQ6 (Floppy Disk)	: OFF
Standby Mode	: Disable	IRQ7 (LPT 1)	: ON
Suspend Mode	: Disable	IRQ8 (RTC Alarm)	: OFF
HDD Power Down	: Disable	IRQ9 (IRQ2 Redir)	: ON
** Wake Up Events In Doze & Standby **		IRQ10 (Reserved)	: ON
IRQ3 (Wake-Up Event)	: ON	IRQ11 (Reserved)	: ON
IRQ4 (Wake-Up Event)	: ON	IRQ12 (PS/2 Mouse)	: ON
IRQ8 (Wake-Up Event)	: ON	IRQ13 (Coprocessor)	: ON
IRQ12 (Wake-Up Event)	: ON	IRQ14 (Hard Disk)	: ON
		IRQ15 (Reserved)	: ON
		ESC : Quit	↑ ↓ → ← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2 : Change Color
		F7 : Load Setup Defaults	

Power Management Setup Screen

A. Selecting "Power Management" Mode:

Power Management

User Defined - User can configure their own power management function

Disabled - Disable the power management features.

Min. Saving - All timers are in their min value.

Doze - 1hr, Standby - 1hr, suspend- 1hr.

Max. Saving - all timers are in their max value.

Doze - 1min, Standby - 1min, suspend- 1min.

PM Control by APM

Support the Intel and Microsoft INT 15h Advanced Power Management BIOS function which creates and interface to allow the OS to communicate with the SMM code. If APM is not installed, this option has no effect.

☒ APM(Advanced Power Management) should be installed to keep the time updated when the computer enters suspend mode activated by the BIOS Power Management. For DOS environments, you need to add DEVICE=C:\DOS\POWER.EXE. For Windows 3.1x and Windows 95, you need to install Windows using the APM feature.

Video Off Method

Blank -BIOS will only blanks off the screen when disabling video.

V/H SYNC+Blank - BIOS will blanks off the screen and turn off V/H SYNC signals to turn off the V-SYNC and H-SYNC signals from VGA cards to monitor.

☒ If Green monitors detect the V/H-SYNC signals turned off, it cuts the electron gun to save power consumption.

B. Modem Use IRQ

While modem ring up, that will wake up the system from green mode (Certainly, you should connect the Modem to COM2 (default INT=3) and turn on the resume event in green mode.

C. PM Timer

The following four modes are green PC power saving functions which are only user configurable when **User Defined** Power Management has been selected.

Doze Mode

If System no any PM events happened and the Doze timer expires, system will enter CPU to Doze mode.

Standby Mode

If System run in Doze mode and the Standby timer expires, system will enter CPU to Standby mode (CPU speed = CPUCLK / 3 MHz) from Doze mode.

⊗ The CPUCLK (external CPU clock) means system clock mentioned in this manual.

Suspend Mode

If there is no any activity continued and the Suspend is time-out, the system will stop the CPU clock (CPU speed = 0 MHz).

⊗ Within Standby or Suspend, system may also turn off the video signal and power down the hard disk driver (depend on "HDD Power Down" setting).

HDD Power Down

When the HDD idle time has elapsed, the BIOS sends a command to the hard disk to enter sleep mode (turn off the motor). This function is only valid for IDE HDDs that support power saving function.

D. PM Events Mask Control

Individual IRQ wake up Event :

If an interrupt request is generated by using a device , it will wake up the system to normal mode. (support by any green modes)

Power Down Activities:

the system runs at Suspend mode:

If any event happened, the system will return to normal mode.

the system runs at Doze or Standby mode:

If any event happened, the timer will recounting from zero.

3-5 PNP/PCI CONFIGURATION

ROM PCI / ISA BIOS (2A69HC39) PNP/PCI CONFIGURATION AWARD SOFTWARE, INC.			
Resources Controlled By	: Manual	PCI IRQ Activated By	: Level
Reset Configuration Data	: Disabled	PCI IDE IRQ Map To	: ISA
IRQ-3 assigned to	: Legacy ISA		
IRQ-4 assigned to	: Legacy ISA		
IRQ-5 assigned to	: PCI/ISA PnP		
IRQ-7 assigned to	: PCI/ISA PnP		
IRQ-9 assigned to	: PCI/ISA PnP		
IRQ-10 assigned to	: PCI/ISA PnP		
IRQ-11 assigned to	: PCI/ISA PnP		
IRQ-12 assigned to	: PCI/ISA PnP		
IRQ-14 assigned to	: PCI/ISA PnP		
IRQ-15 assigned to	: PCI/ISA PnP		
DMA-0 assigned to	: PCI/ISA PnP		
DMA-1 assigned to	: PCI/ISA PnP		
DMA-3 assigned to	: PCI/ISA PnP		
DMA-5 assigned to	: PCI/ISA PnP		
DMA-6 assigned to	: PCI/ISA PnP		
DMA-7 assigned to	: PCI/ISA PnP		
		ESC : Quit	↑ ↓ → ← : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2 : Color
		F7 : Load Setup Defaults	

Figure A-6 PCI & ONBOARD I/O Setup Screen

A. Resource Control

Manual : The system BIOS will not refer to the ESCD for IRQ & DMA information. Instead, it will refer to these items in the setup menu for assigning IRQ & DMA.

Auto : The system BIOS will reference the ESCD all legacy information.

⊗ ESCD(Extended System Configuration Data) provides a detailed format of the configuration data structures stored in flash memory. Each data structure defines the resources used by a device or a card in the system. This includes legacy and PCI/ISA PnP devices.

B. Reset Configuration Data

Enable : The system BIOS will clear/reset the ESCD during the POST.



After clearing the ESCD, the BIOS will then change this item's value to "Disabled", otherwise, the ESCD data will become useless.

C. IRQ#/DMA# assign to

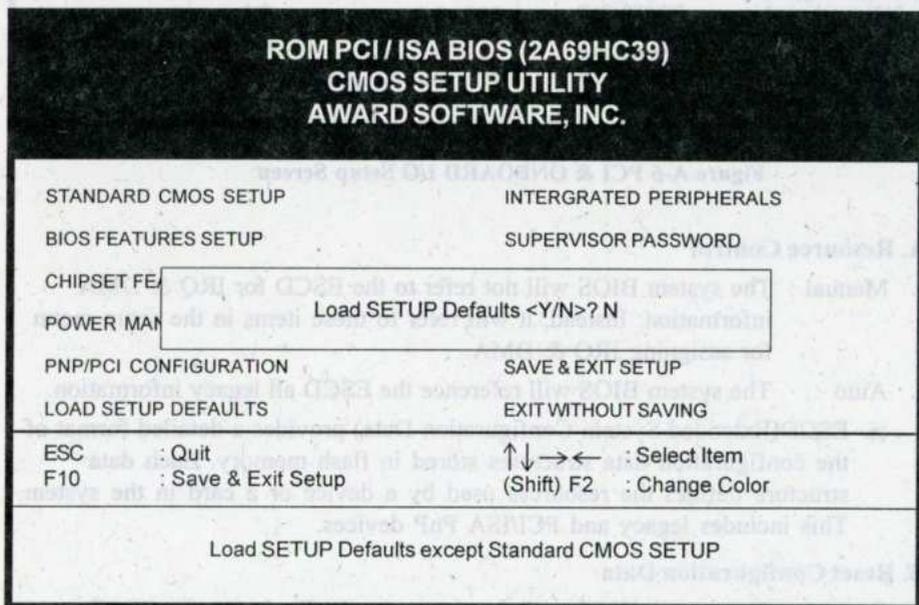
When resource are controlled manually, you can assign each system interrupt & DMA channel for "Legacy ISA" or "PCI/ISA PnP" card used.

⚠ While using **Legacy ISA Card**(non-PnP ISA card), please set its necessary corresponding resources (INT#, DMA#) from "PCI/ISA PnP" to "Legacy ISA".

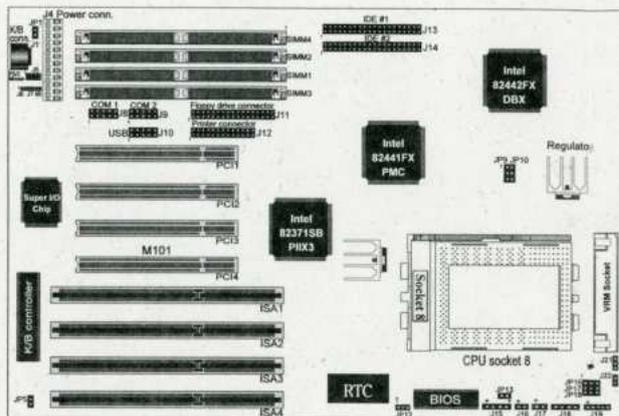
✎ IRQ-3/4/7/12/14/15 have been set as default for on board devices (COM2, COM1, PS/2 mouse, Printer port, IDE1 and IDE2).

3-6 Load Setup Defaults

"LOAD SETUP DEFAULTS" loads the default system values directly from "CMOS SETUP UTILITY" menu (Figure3-1). If the stored record created by the setup program becomes corrupted (and therefore unusable), these defaults will be loaded automatically when you turn the computer on.



Load Setup Defaults Screen



J5: PS/2 Mouse connector



J6, J7: IR connector



IR connector recommended by Intel

IR connector recommended by HP

J15: Hard disk LED header

J16: Green LED header

J17: Turbo LED header

J18: Speaker header

J19: Keyboard lock & power good LED header

J21: CPU cooling fan header



J22: System reset switch header

JP1: Keyboard grounding setting jumper.

To decrease the EMI radiation, we suggest you open this header after finishing the system assembly.

JP5: PS/2 mouse enable/disable setting jumper
Short : PS/2 mouse enable (default)
Open : PS/2 mouse disable

JP12: Flash type select jumper

1-2 short : for 12V flash ROM use
2-3 short : for 5V flash ROM use (default)

JP13: Green switch header

CPU-type	System frequency		Frequency ratio	
	MHz	JP9, JP10	rate	JP16, JP17, JP18
Intel PPro-150	60	JP9, JP10 1	x2.5	1 JP16 JP17 JP18
	66	JP9, JP10 1	x2.5	1 JP16 JP17 JP18
	60	JP9, JP10 1	x3	1 JP16 JP17 JP18
	66	JP9, JP10 1	x3	1 JP16 JP17 JP18

System frequency (MHz)	JP9, JP10
50	JP9, JP10 1
55	JP9, JP10 1
60	JP9, JP10 1
66	JP9, JP10 1

Frequency ratio	JP16, JP17, JP18
x2	1 JP16 JP17 JP18
x2.5	1 JP16 JP17 JP18
x3	1 JP16 JP17 JP18
x3.5	1 JP16 JP17 JP18
x4	1 JP16 JP17 JP18

3-7 INTERGRATED PERIPHERALS

ROM PCI / ISA BIOS (2A69HC39)		INTEGRATED PERIPHERALS	
AWARD SOFTWARE, INC.			
IDE HDD Block Mode	: Enabled	USB Controller	: Disabled
IDE Primary Master PIO	: Auto		
IDE Primary Slave PIO	: Auto		
IDE Secondary Master PIO	: Auto		
IDE Secondary Slave PIO	: Auto		
On-Chip Primary PCI IDE	: Enabled		
On-Chip Secondary PCI IDE	: Enabled		
PCI Slot IDE 2nd Channel	: Enabled		
Onboard FDD Controller	: Enabled		
PS/2 Mouse Function	: Enabled		
Onboard Serial Port 1	: COM1/3F8		
Onboard Serial Port 2	: COM2/2F8		
Infra Red (IR) Function	: Disabled		
Onboard Parallel Port	: 378H/IRQ7	ESC : Quit	↑ ↓ → ← : Select Item
Onboard Parallel Mode	: ECP	F1 : Help	PU/PD/+/- : Modify
ECP Mode Use DMA	: 3	F5 : Old Values	(Shift) F2 : Color
		F7 : Load Setup Defaults	

PCI & ONBOARD I/O Setup Screen

A. On Board IDE Control**IDE HDD Block Mode**

Specifies the maximum number of sector that can be transferred at a time.

IDE Primary/Secondary Master/Slave PIO

The four IDE PIO (programmed Input/Output) filed let you set a PIO mode (0-4) for each IDE devices that the internal PCI IDE interface supports.

Modes 0 through 4 provide successively increased performance.

In Auto mode, the system automatically determines the best mode for each device.

On-chip Primary/Secondary PCI IDE

You might choose to disable the On-chip IDE controller, if you were to add a higher performance IDE board.

PCI Slot IDE 2nd Channel

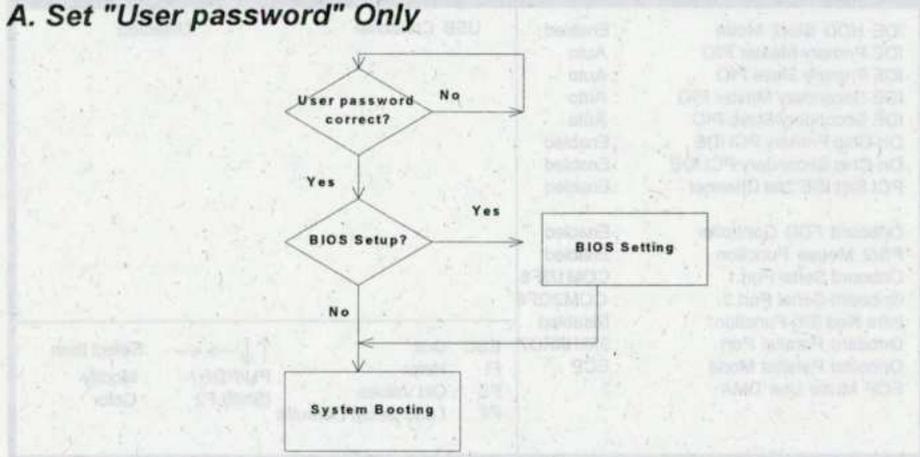
If you designate a higher performance IDE board into the physical PCI slot (certainly, you must disable On-chip IDE controller), this item allows you to turn on the 2nd channel of this external board.

B. Infrared (IR) Function

To enable this function, the COM2 port will redirected to support to support IR function.

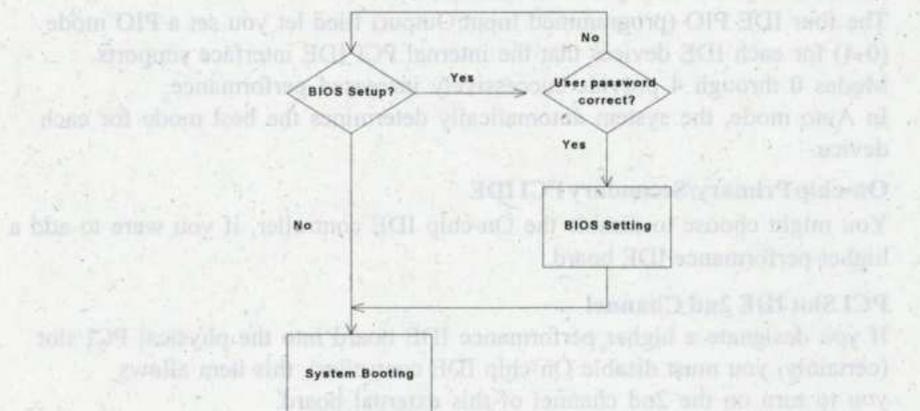
3-8 Supervisor Password & User Password Setting

A. Set "User password" Only

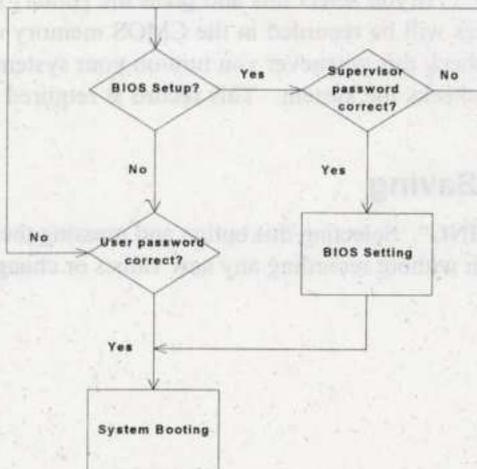


.If "Security Option" (BIOS features setup select item) is set to "System"

If "Security Optional" is set to "Setup"



B. Set both "Supervisor password" and "User password"



3-9 IDE HDD Auto Detection

This utility can AUTO DETECT IDE hard disk type.

ROM PCI / ISA BIOS (2A69HC39) CMOS SETUP UTILITY AWARD SOFTWARE, INC.

HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
------------	------	------	------	------	---------	-------	--------	------

Primary Master :

Primary Slave :

Secondary Master:

Secondary Slave :

Select Secondary Slave Option (N=Skip) : Y

OPTIONS	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
1(Y)	0	0	0	0	0	0	NORMAL

Note: Some Oses (like SCO-UNIX) must use "NORMAL" for installation

ESC: Skip

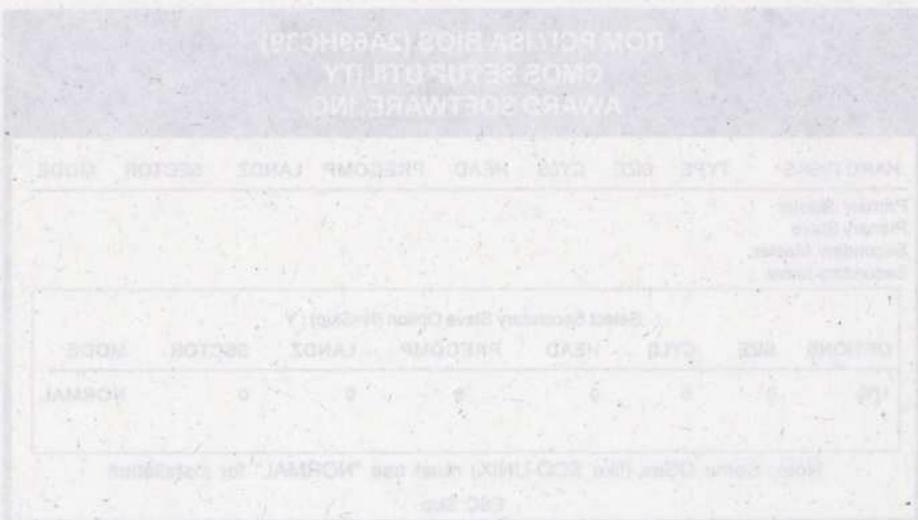
IDE HDD Auto Detection Screen

3-10 Save and Exit Setup

"SAVE & EXIT SETUP". If you select this and press the [Enter] key, the values entered in the setup utilities will be recorded in the CMOS memory of the chip set. The microprocessor will check this whenever you turn on your system, and compare this to what it finds as it checks the system. This record is required for the system operation.

3-11 Exit Without Saving

"EXIT WITHOUT SAVING". Selecting this option and pressing the [Enter] key let you exit the Setup program without recording any new values or changing old ones.



Software Drivers Brief Guide

4-1 Bus Master / PIO IDE Drivers Quick Installation

-  This board offers two E-IDE (Enhanced IDE) connectors, each of which can take two devices. Please set the primary channel for E-IDE hard disks and set the secondary channel for slow throughput ATAPI compliant peripherals. (such as ATAPI CD-ROM)
-  If you are installing a secondary E-IDE drive, you may have difficult getting the two drivers to work together since some brands of E-IDE drivers won't work on the same bus as another brand. You will have to designate one drivers as master and another as a slave.
-  If you want to get decent performance from you CD-ROM drive. You'll need to load SmartDrive (V5.0 or later version) to cache your CD. Please load the CD-ROM driver and MSCDEX before loading SmartDrive so the CD-ROM can cache.

1. Windows NT3.5

- 1) Unpack & copy drivers into C:\PIIXIDE
 1. Boot up Windows NT.
 2. Insert the "Bus Master IDE Drivers Diskette" into drive A(or B).
 3. In Windows program manager screen, choose "File" item.
 4. In "File Item List", choose "RUN" item.
 5. In "**Run**" screen, key in "A(or B):\WinNT\Setup.EXE" and <Return>
 6. Follows the directions appeared on the screen to unpack the drivers files into C:\PIIXIDE directory.
- 2) Install the Bus Master Drivers
 1. Form the **Program Manager**, double click on "**Windows NT Setup**" in the Main group.
 2. Select "**Options/Add/Remove SCSI Adapters...**"
 3. Click on **Add**.
 4. The "Select SCSI Adapter Option" dialog will appear; select "**Other (Requires a disk from a hardware manufacturer)**" from the "Adapter:" list box.

5. Next, the "Insert Diskette" dialog box will appear and type in "C:\PIIXIDE" and click "OK".
6. Next, the "Select OEM Option" dialog box will appear; select "PIIX Bus Mastering IDE Driver" and click "OK".
7. Next, the "Select SCSI Adapter Option" dialog box will appear; click on the "Install" button in the dialog box.
8. Next, the "Windows NT Setup" screen will appear prompting for the path of the installation files, type in "C:\PIIXIDE" and click on "Continue" button. If installation is successful, the "SCSI Adapter Setup" dialog box will reappear, and "PIIX Bus Mastering IDE Driver" will be listed. That means the driver is installed.
9. **Reboot** your system to load the driver.
After installation, the PIIXIDE.SYS file is stored in the C:\<Win NT directory>\System32\Drivers directory.

2. Windows 95

The installation procedures described here were based on the Windows 95 Final Beta Release version.

- 1) Insert the floppy disk containing the driver file into drive A(or B).
- 2) Run the installation utility in drive A(or B).
 1. Double click the "My Computer" icon on the Desktop screen.
 2. Double click the drive A(or B) icon.
 3. Run the INSTALL.EXE applet in drive A (or B):\Win95
 4. Follow the advise showed on the screen to complete the installation.
- 3) When system prompted to reboot Windows95, select "Yes".
- 4) Restart Windows95 will detect Intel 82371SB PCI IDE Controllers and install the primary and secondary Bus Master IDE Drivers by sequence.
- 5) Restart Windows95 again.
 - ⊗ The IDEATAPI.MPD driver will be installed and used as long as the PIIXIDE interface is enabled. After installation, the IDEATAPI.MPD file is stored in the C:\<Windows 95 directory>\System\IOSubSys directory.
 - ⊗ The IDEATAPI.INF information on the install floppy is integrated into the Windows 95 device database for automatic support of the PIIX Bus Master IDE driver and is stored in the C:\<Windows 95 directory>\INF directory as one of the file named OEM<x>.INF (name varies with system).

3. OS/2 2.0 and WARP 3.X

- 1) **Run** the install utility (INSTALL.EXE) in drive A(or B):\OS2
INSTALL.EXE will copies PIIXIDE.ADD from the source directory (A (or B):\OS2) to the target directory and changes the CONFIG.SYS file to install it.
 - 2) **Reboot the system.**
- ☞ For more information (like parameter settings, driver de-installation, Supported Devices...etc.), please refer to the README.TXT file on the diskette.



4-2 Update your system BIOS

System provided the Flash ROM which allow users to update the BIOS of newer version without changing components.

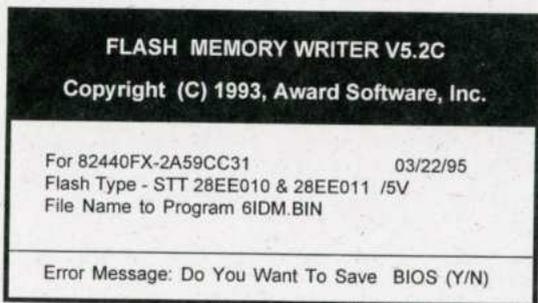


Please remove (or remark) any installed Memory Management Utility (such as EMM386.EXE, QEMM.EXE...,etc.) in the CONFIG.SYS files, before running this utility.

1. Insert the Flash Utility Diskette in drive A(or B).
2. Type "A(or B):\AWDFLASH" at DOS command line and press [Enter] key.
3. You will see the following setup on screen.
4. Please key in **BIOS file name** . (The filename will be released from your dealer when a new up-date BIOS is released).



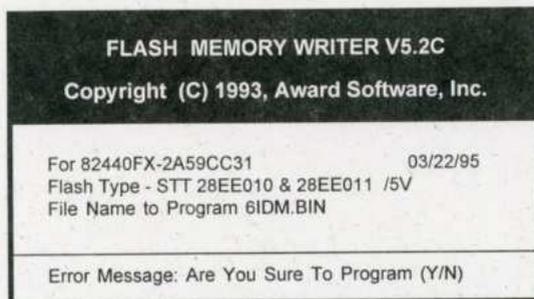
5. If you don't want to save the previous BIOS data to the diskette , please key in [N] .



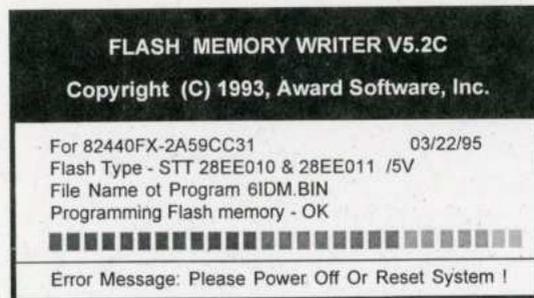
If you want to save the previous BIOS data to the diskette, please key in [Y].



6. Type [Y], then you will start program.

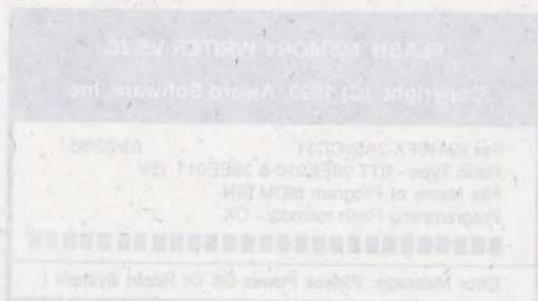
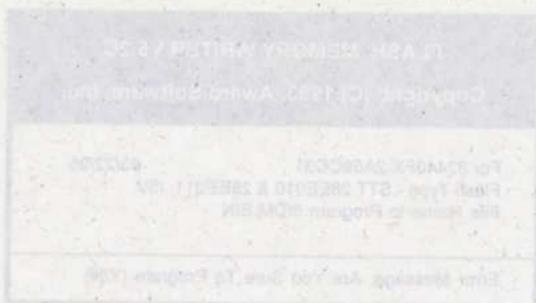
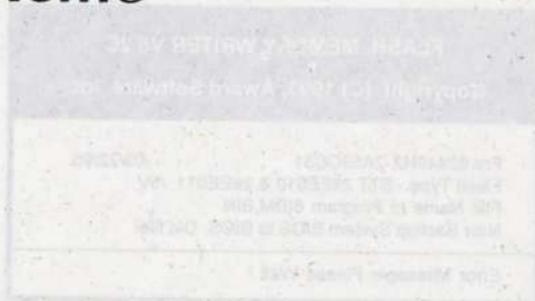


7. As programming finished, the system will auto Restart.





Memo



PART II German Edition

Chapter 1

1-1 Technische Daten :

CPU

- Volle Unterstützung der Intel Pentium® Prozessoren bis 200 MHz
- Systemtakt 50/55/60/66 MHz
- ZIF Buchse 8 mit VRM-Kopf 8

Hauptspeicher

- 72-Pin SIMM-Buchse x 4(4/8/16/32/64MB 32/36-Bit 70 ns (oder schneller))
- Unterstützt DRAM vom Typ BEDO/EDO/FP
- Maximal 256 MB eingebaut
- Unterstützt Paritäts/ECC Eigenschaften

I/O Steckplätze

- 4 x 16-bit ISA Bus
- 4 x 32-bit PCI Bus (Alle im Master-Modus, passend zu PCI 2.1)

Größe

- 220mm x 330mm, vierlagiges PCB

BIOS

- Award System BIOS
- 1Mb Flash ROM
- Unterstützt PnP, APM & CD-ROM Booteigenschaften
- Eingebauter NCR SCSI BIOS

Chipsatz

- Intel 82440FX PCI Satz mit drei Chips

Eingebautes Ultra I/O

- SMC(UMC) I/O Chip
- 1FD+2S+1P
- Passend für Eigenschaften von SPP/EPP/ECP Parallelschnittstellen
- Kompatibel mit 16550A, Hochgeschwindigkeits-UART
- Unterstützt IrDA IR Funktion bis 115.2 kbps

Duale Bus Master IDE Schnittstellen

- Unterstützt Fast ATA Spezifikationen bis zu 4 Geräten, PIO-Modus 3/4 und Multiword DMA 1/2.
- Bus Master Treiber für alle bekannten Multitasking Betriebssysteme

Green PC

- Entspricht EPA Green PC Standard: Stromverbrauch unter 380 Watt unter Doze-Standby- und Wartemodus.



Intel Pentium® Pro Prozessor

Checkgeschwindigkeiten : 166~200MHz mit 512KB L2 Cachespeicher;
150~200MHz mit 256KB L2 Cachespeicher.

Cachespeicher : Integrierter 256KB/512KB L2 Cachespeicher

Design typ : Four-issue RISC-Kern

Gußgröße : 196 mm² (0.35Mikrometer)

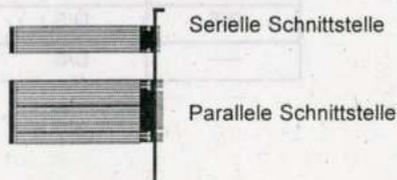
Nächste : Klamath (2H97)

Die Pentium Pro Prozessoren sind besonders geeignet für Anwenderprogramme in Servern, Hochleistungs-Desktops und Workstations, die mit fortgeschrittenen 32-Bit Betriebssystemen arbeiten. Diese Programme schließen Multimedia-Erstellung, Geschäftscomputing und CAD/CAM ein.

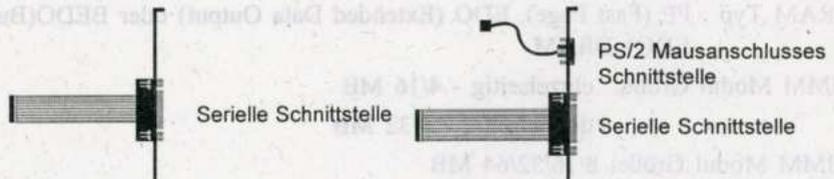
1-2 Produktinhalt

Dieses Produkt wird zusammen mit den folgenden Komponenten geliefert:

- Hauptplatine
- 9-Pin serielle Schnittstelle und 25-Pin Parallelschnittstellen-Bandkabel mit Anschlu_ (Figur 1-1)
- 25-Pin Bandkabel für serielle Schnittstelle mit Klammer (Figur 1-2A), oder Zusatz eines PS/2 Mausanschlusses für Optional (Figur 1-2B)
- 40-Pin IDE Anschlu_ bandkabel (Figur 1-4)
- 34-Pin Bandkabel für Floppydiskettenlaufwerk (Figur 1-3)
- Benutzerhandbuch
- Diskette mit Flash EPROM und Bus Master IDE Treibern.
- VRM (Voltage Reduction Module)



Figur 1-1



Figur 1-2A

Figur 1-2B



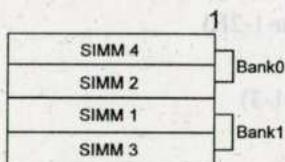
Figur 1-3



Figur 1-4

1-3 Hauptspeicherkonfiguration für diese Platine.

Das DRAM systeminterne Speichersystem besteht aus Bank0 und Bank1, und die Speichergröße reicht von 8 bis 256 Megabytes. Sie müssen 2 DRAM Module installieren (selbe Größe und Geschwindigkeit, entweder einzel- oder doppelseitig) für jeweils eine Bank, egal welche Bank zuerst.



S/S - Einzelseite
 D/S - Doppelseite
 "—" - Ungenutzt

Bank0	Bank1
S/S	----
S/S	S/S
S/S	D/S
----	S/S
D/S	----
D/S	S/S
D/S	D/S
----	D/S

DRAM Daten:

DRAM Typ : FP (Fast Page), EDO (Extended Data Output) oder BEDO(Burst EDO) DRAM

SIMM Modul Größe: einseitig - 4/16 MB
 doppelseitig - 8/32 MB

DIMM Modul Größe: 8/16/32/64 MB

DRAM Geschwindigkeit: 70-ns für Systemtakt 50 oder 60 MHz,
 60-ns für Systemtakt 66 MHz.

Parität: Entweder paritätisch oder nicht- paritätisch.

1-4 Schnellinstallation für Bus Master/PIO IDE Treiber

Diese Platine bietet zwei E-IDE (Enhanced IDE) Anschlüsse, welche beide je zwei Geräte aufnehmen können. Bitte stellen Sie den Primärkanal auf E-IDE Festplatten ein, und den Sekundärkanal auf ATAPI-kompatible Zusatzteile mit langsamen Durchlaß (wie ATAPI CD-ROM).

Wenn Sie ein zweites E-IDE Laufwerk einbauen, kann es schwierig werden, die beiden Treiber zusammen ans Laufen zu bekommen, da einige E-IDE Treibermarken nicht mit anderen Marken auf dem selben Bus arbeiten. Sie müssen dann einen Treiber als Master und den anderen als Slave einstellen.

- ☞ Wenn Sie anständige Leistung von Ihrem CD-ROM Laufwerk wollen, müssen Sie SmartDrive (Version 5.0 oder später) laden, um Ihr CD Laufwerk zu cachen.

Bitte laden Sie die DCD-ROM Treiber und MSCDEX vor SmartDrive, so daß die CD-ROM cachen kann.

1.Windows NT 3.5

- 1) Packen Sie die Treiber aus und kopieren Sie sie nach C:/PIIXIDE.
 1. Booten Sie Windows NT.
 2. Schieben Sie die "Bus Master IDE Drivers" Diskette in Laufwerk A oder B.
 3. Wählen Sie "Datei" unter Windows Programmanager.
 4. Wählen Sie "Ausführen" in "Dateiliste".
 5. Unter "Ausführen", geben Sie A(oder B):/WinNT/setup.exe ein, dann Eingabe.
 6. Folgen Sie den Anweisungen auf dem Bildschirm, um die Treiberdateien in das Verzeichnis C:/PIIXIDE auszupacken
- 2) Installation der Bus Master Treiber
 1. Im Programmanager, doppel-klicken Sie auf Windows NT Einstellung in der Hauptgruppe.
 2. Wählen Sie Optionen/Hinzufügen/Entfernen SCSI Adapter
 3. Klicken Sie Hinzufügen.
 4. Die Dialogbox "SCSI Adapter Option Wählen" erscheint, wählen Sie "Andere" (hierzu brauchen Sie eine Diskette vom Hardwarehersteller) von der Liste "Adapter".

5. Nun erscheint die Dialogbox "Diskette einschieben", geben Sie C:/PIIXIDE ein und klicken Sie OK.
6. Dann erscheint die Dialogbox "OEM Option Auswahl", wählen Sie "PIIX Bus Mastering IDE Treiber" und klicken Sie OK.
7. Nun erscheint die Dialogbox "SCSI Adapter Option auswählen", klicken Sie auf die Fläche "Installieren".
8. Nun erscheint der Schirm "Windows NT Einstellung" und fragt nach dem Pfad für die Installationsdateien. Geben Sie "C:/PIIXIDE" 3ein und klicken Sie OK. Wenn die Installation erfolgreich ist, wird die Dialogbox "SCSI Adapter Einstellung" wieder erscheinen, und "PIIX Bus Mastering IDE Treiber" wird aufgelistet sein. Dies bedeutet, daß der Treiber installiert ist.
9. Rebooten Sie Ihr System, um den Treiber zu laden.
Nach der Installation ist die Datei PIIXIDE.SYS im Verzeichnis C:/WinNT/Szstem32/Treiber gespeichert.

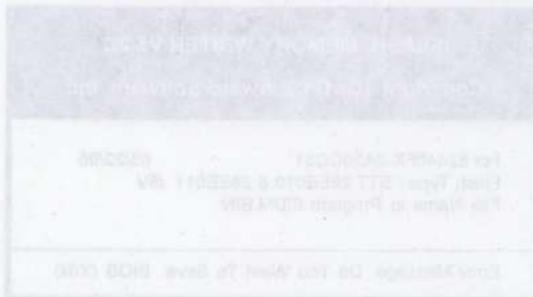
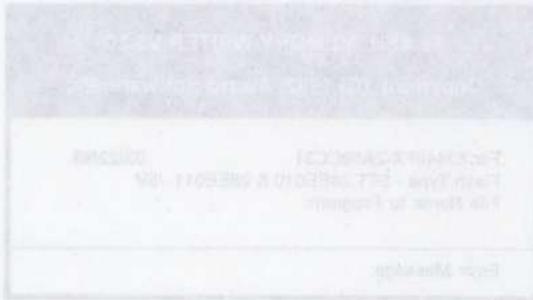
2. Windows 95

Die Installationsprozeduren, die hier beschrieben sind, basieren auf der Windows 95 Final Beta Version.

- 1) Schieben Sie die Diskette mit der Treiberdatei ins Laufwerk A (oder B).
 - 2) Führen Sie das Installationsprogramm auf Laufwerk A (oder B) aus.
 1. Doppelklicken Sie auf "Mein Computer" auf der Desktopoberfläche.
 2. Doppelklicken Sie die Schaltfläche für Laufwerk A (oder B).
 3. Führen Sie das Programm INSTALL.EXE in Laufwerk A (oder B) aus:
A(B):/Win95
 4. Folgen Sie den Anweisungen auf dem Bildschirm, um die Installation zu beenden.
 - 3) Wenn das System Sie fragt, ob Sie rebooten möchten, wählen Sie "Ja".
 - 4) Ein Neustart von Windows95 wird die Intel 82371HSB PCI Controller entdecken und den primären sowie den sekundären Bus Master Treiber in Reihenfolge installieren.
 - 5) Starten Sie Windows95 erneut.
- ⊗ Der IDEATAPI.MPD Treiber wird installiert und benutzt, so lange die PIIXIDE Oberfläche aktiv ist. Nach der Installation wird die Datei IDEATAPI.MPD im Verzeichnis C:/Windows95/System/IOSubsys.
Die IDEATAPI.INF Information auf de Installationsdiskette ist in die Wndows95 Gerätedatenbank integriert, zur automatischen Unterstützung des PIIX Bus Master Treibers, und ist im Verzeichnis C:/Windows95/INF als eine der Dateien namens OEMx.INF (Namen variieren mit jeweiligem System)

3. OS/2 und WARP 3.x

- 1) Führen Sie das Installationsprogramm im Laufwerk A (oder B) aus: A(B):/OS2 INSTALL.EXE wird PIIXIDE.ADD aus dem Quellverzeichnis (A oder B:/OS2) ins Zielverzeichnis kopieren und zur Installation Änderungen in der CONFIG.SYS Datei vornehmen.
 - 2) Rebooten Sie das System.
- ☞ Für mehr Information (wie Parameterzeilen, Re-installation von Treibern, Unterstützte Geräte etc.) sehen Sie bitte die README.TXT Datei auf der Diskette.



1-5 Rsten Sie Ihr BIOS auf

Das System bietet Flash ROM, welches dem Benutzer erlaubt, das BIOS einer neueren Version aufzursten, ohne Komponenten auszuwechseln.

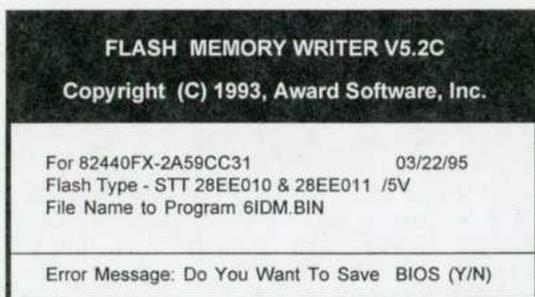


Bitte entfernen Sie alle installierten Speichermanagementeinheiten (wie EMM386.EXE, QEMM.EXE etc.), bevor Sie diese Programm ausfhren.

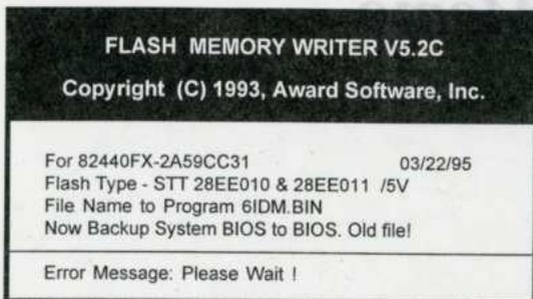
1. Geben Sie "AWDFLASH" an der DOS Befehlszeile ein und drcken Sie Eingabe.
2. Sie werden das Folgende auf dem Bildschirm sehen:
3. Geben Sie den BIOS Dateinamen ein (Der Dateiname wird vom Hndler ausgegeben, wenn eine neue Version auf den Markt kommt).



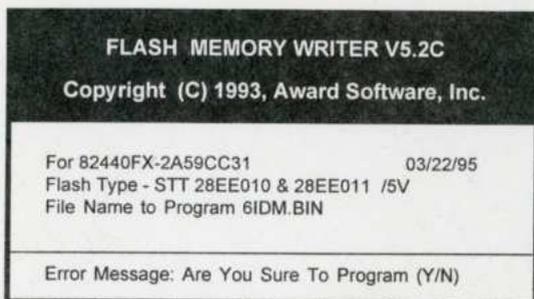
4. Falls Sie die alten BIOS Daten nicht auf Diskette speichern wollen, geben Sie bitte N ein.



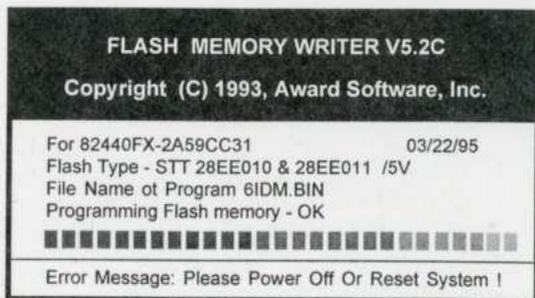
Falls Sie die alten BIOS Daten auf Diskette speichern wollen, geben Sie bitte J ein.



5. Geben Sie J ein, um das Programm zu starten.

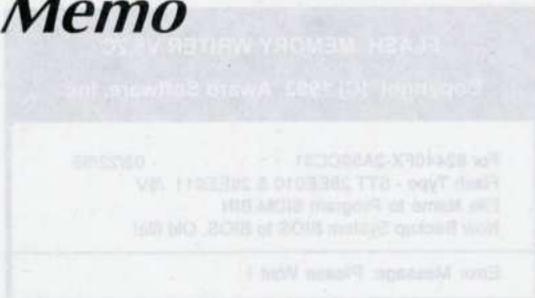


6. Wenn das Programm beendet ist, startet das System von neuem.

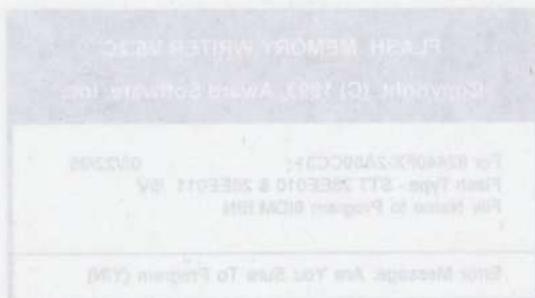




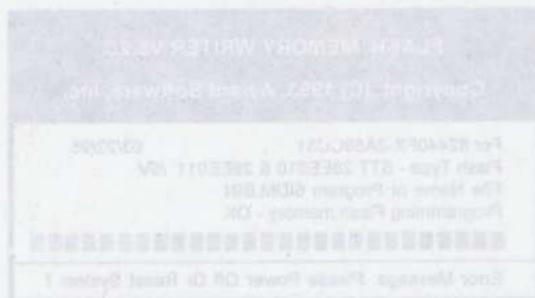
Memo



Öffnen Sie 1 ein, um das Programm zu starten.



Wenn das Programm beendet ist, startet das System von neuem.



Appendix I

ON BOARD I/O ADDRESS & IRQ MAPS

System Resource	IRQ	I/O Address
1. Timer	IRQ0	040~043
2. Keyboard	IRQ1	060~064
3. Programmable INT Controller	IRQ2	0020~0021, 00A0~00A1
4. COM2	IRQ3	2F8~2FF
5. COM1	IRQ4	3F8~3FF
6. Floppy	IRQ6	3F0~3F7
7. LPT1	IRQ7	378~37F
8. Real Time Clock	IRQ8	070~07F
9. PS/2 Mouse	IRQ12	
10. Math coprocessor	IRQ13	0F8~0FF
11. IDE 1	IRQ14	1F0~1F8
12. IDE 2	IRQ15	170~178

✎ IRQ 5, 9, 10 and 11 will be available for other interface card.



Memo

IO Address	IO	System Resource
040-043	IRQ0	1. Timer
080-084	IRQ1	2. Keyboard
0020-0021	IRQ2	3. Programmable INT Controller
00A0-00A1		
278-27F	IRQ3	4. COM2
378-37F	IRQ4	5. COM1
3F0-3F7	IRQ6	6. Floppy
378-37F	IRQ7	7. LPT1
070-07F	IRQ8	8. Real Time Clock
	IRQ12	9. PS/2 Mouse
0F8-0FF	IRQ13	10. Math coprocessor
1F0-1F8	IRQ14	11. IDE1
170-178	IRQ15	12. IDE2

IO 2, 9, 10 and 11 will be available for other interface cards.



P / N : 9411620020
Code : 6IDM0.2