

PRM-68I

High Performance
Socket370 PCI Mainboard
User's Guide



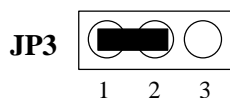
Edition 1.01
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P/N: 155100-8848



WARNING

For the system to operate normally, please make sure JP3 of the mainboard is set as below. Refer to Fig. 2 in this manual for the location JP3.



If JP3 is shorted to 2-3, no CMOS data can be retained.

CAUTION

The motherboard is an electrostatic sensitive device. Don't open or handle except at a static-free workstation.

Be sure to unplug the power code of the system when installation or upgrade with any devices for the system.

POWER OFF

It needs to hold the power switch 4 seconds to turn off the power, if "Delay 4 sec" selected in Power Management Setup of BIOS and ATX type power supply installed.

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CHAPTER 1

INTRODUCTION

Preface

The motherboard is a 4 layers, LPX form factor high performance PCI mainboard. It includes Intel 810 system chipset, Winbond W83627HF LPC I/O controller, Realtech RTL8139A Ethernet Controller.

Features

- Intel® Accelerated Hub Architecture Increased I/O performance allows better concurrency for richer multimedia applications.
- Integrated graphics/AC97 controller BOM cost savings, more flexibility and better audio quality.
- Intel® 3D graphics with Direct AGP Vivid 2D and 3D graphics, BOM cost savings, efficient use of system memory for graphics, O/S and applications
- Optional 4MB of dedicated display cache video memory enables SKU differentiation with increased 3D graphics performance improvement over Direct AGP.
- Low-power sleep modes Energy Savings, Suspend to DRAM (3 Watts), and On Now in 10 seconds approx..
- One software driver code base more stable platform, higher quality graphics, reduced OEM support costs.
- Intel® Random Number Generator (RNG) enables ISV's to strengthen security products.
- Digital Video Out port allows connection of traditional TV or new digital flat panel displays; compatible with DVI specification.
- Soft DVD MPEG 2 playback with Hardware Motion Compensation Life-like video and audio.
- 100MHz System Bus capable Flexibility for performance headroom.
- 2 USB ports Plug and Play.
- 10/100M BPS EtherNet Controller on board supported (optional).

Processor

- Intel PPGA S370 series.
- The mainboard can run with following speeds:
300A, 333, 366, 400, 433, 466, 500 or 533MHz
- Jumperless CPU HOST frequency

Chapter 1

Chipset

- Intel 810 chipsets
- Winbond W83627HF LPC I/O Controller
- Winbond W83628/9 PCI-ISA Bridge
- Realtech RTL8139A Ethernet Controller

Main Memory

- Memory configurations up to 512MB SDRAM
- DIMM socket for SDRAM (3.3V unbuffered).
- Support both Synchronous DRAM and Extended Data Output (EDO) Mode DRAM Modules.
- ECC Function ensure data correction and integrity.

Multi I/O

- On board Multi-I/O supports two serial, one parallel ports and floppy drive controller.
- Serial ports are 16550 Fast UART compatible.
- Parallel port has EPP and ECP capabilities.
- PS/2 keyboard and PS/2 mouse connector is provided.
- Keyboard /mouse wake-up by programmable buttons.
- Programmable AC Power Failure Recovery.
- IrDA supported.
- USB supported.

PCI IDE

- On board supports PCI Master IDE Controller, two connectors support up to four IDE devices such as HDD, CD ROM drive and Tape Back-up drives, etc.
- PCI Master IDE controller supports PIO Mode 3 and 4 devices, I/O data transfer rate can be up to 16.6MB/s.
- Ultra DMA Mode supported. Transfer rate can be up to 66MB/s.

Ethernet Controller

- 10/100MHz PCI Ethernet controller on board.

System BIOS

- Award BIOS (4M FWH).

Slots

- One EISA slot, expandable to 3 PCI & 2 ISA max.

Form Factor

- LPX Form Factor Size (270mm x 205mm) 4 Layers

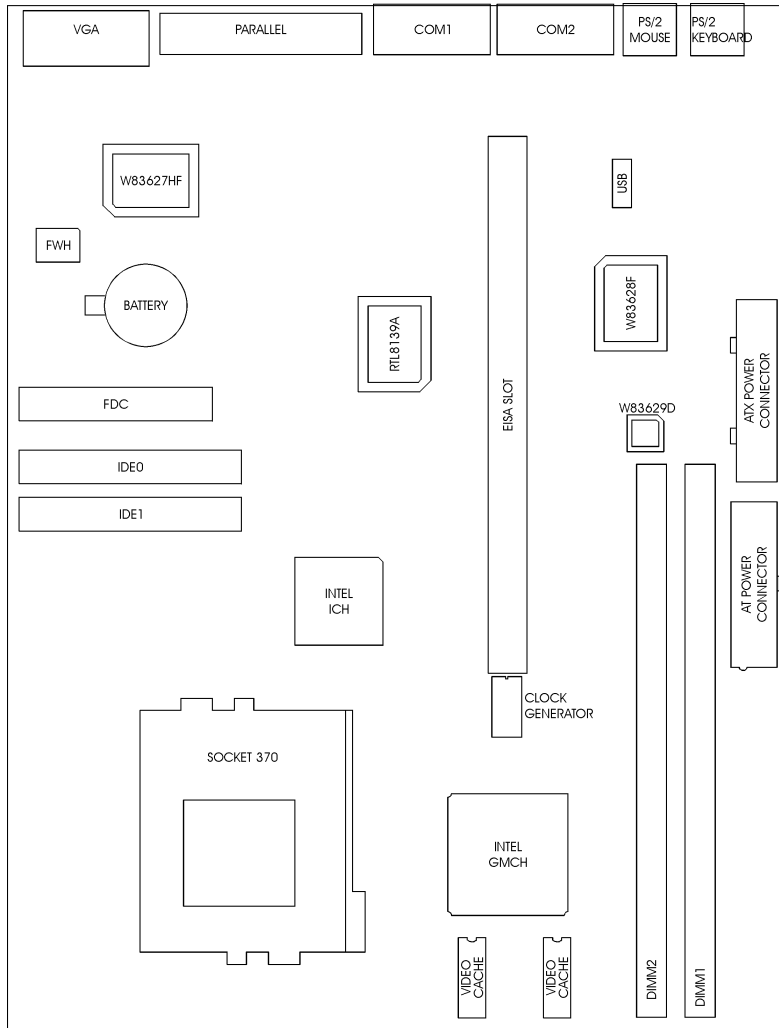
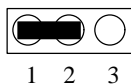


Fig. 1 Key Components of the Mainboard

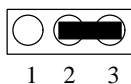
CHAPTER 2

JUMPER SETTINGS

2.1 JUMPERS PRESENTATION



Pins 1 and 2 are shorted with a jumper cap.



Pins 2 and 3 are shorted with a jumper cap.



The jumper is shorted when the jumper cap is placed over the two pins of the jumper.



The jumper is open when the jumper cap is removed from jumper.

2.2 GRAPHICAL DESCRIPTION OF JUMPER SETTINGS

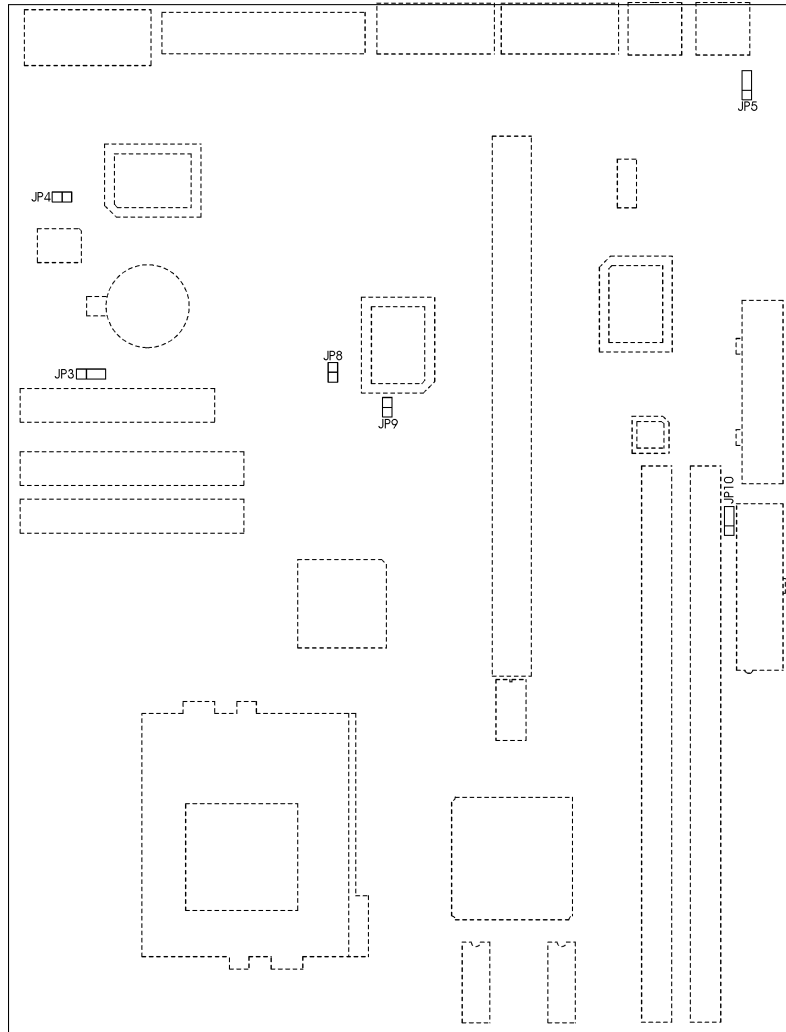


Fig. 2 Jumper Location of the mainboard

2.3 CPU SPEED

The table below summaries the CPU frequency and settings of each jumper of the motherboard.

CPU Type	Freq.	Bus Freq.	Bus Ratio
PPGA S370 Celeron	300MHz	66MHz	4.5x
	333MHz		5.0x
	366MHz		5.5x
	400MHz		6.0x
	433MHz		6.5x
	466MHz		7.0x
	500MHz		7.5x
	533MHz		8.0x

Table 1

2.4 JP3 - CLEAR CMOS DATA

JP3 is used to clear the content of the CMOS Data in the RTC (build in PIIX4 chip).

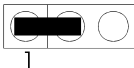

JP3	Description
 <p style="text-align: center;">1</p>	Normal
 <p style="text-align: center;">1</p>	Clear CMOS Data

Table 2

2.5 JP4 – BIOS LOCK/UNLOCK SELECT



JP4	Description
	Unlock (Default)
	Lock

Table 3

2.6 JP5 – KEYBOARD/MOUSE POWER SELECT

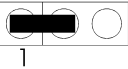
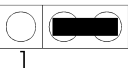
JP5	Description
 1	VCC
 1	VCC5SBY for Keyboard Wake-up (Default)

Table 4

2.7 JP8, JP9 – ONBOARD ETHERNET SELECT



JP8, JP9	Description
	Enable (Default)
	Disable

Table 5

2.8 JP10 – POWER SUPPLY SELECT

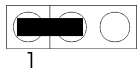

JP10	Description
 1	AT Power (Default)
 1	ATX Power

Table 6

2.9 MEMORY CONFIGURATION

The mainboard lets user upgrade system memory via DIMM sockets on the mainboard. On board memory is located in four banks: Bank 0 - 3. Two DIMM sockets are provided for EDO DRAM or Synchronous DRAM. Table 7 provides the typical memory configurations supported by the mainboard.

Bank 0/1 (DIMM1)	Bank 2/3 (DIMM2)
Installed	None
None	Installed
Installed	Installed

Table 7

The maximum memory size is up to 512MB (SDRAM). The size of each DIMM can be 32MB, 64MB, 128MB, 256MB and 512MB.

CHAPTER 3

CONNECTOR CONFIGURATION

Once the mainboard has been fastened into system case, the next step is to connect the internal cables. The internal cables are wire leads with plastic female connectors that attach to the connectors. The mainboard connectors have varying numbers of pins and are the points of contact between the mainboard and other parts of the computer.

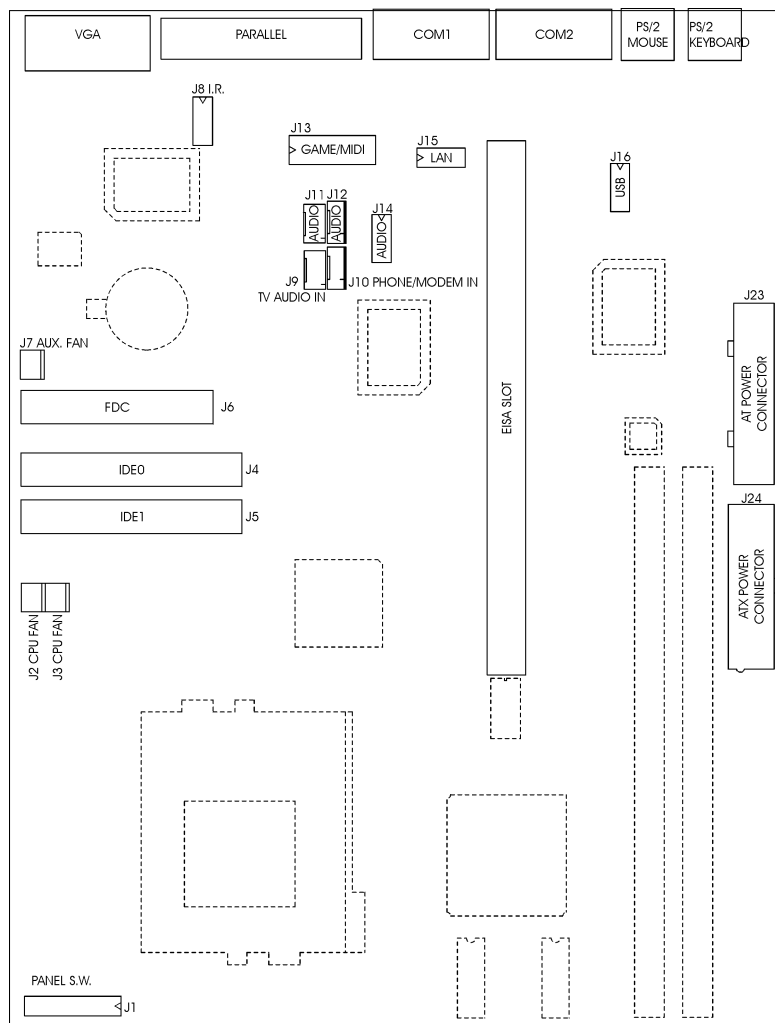


Fig 3 Connector Location

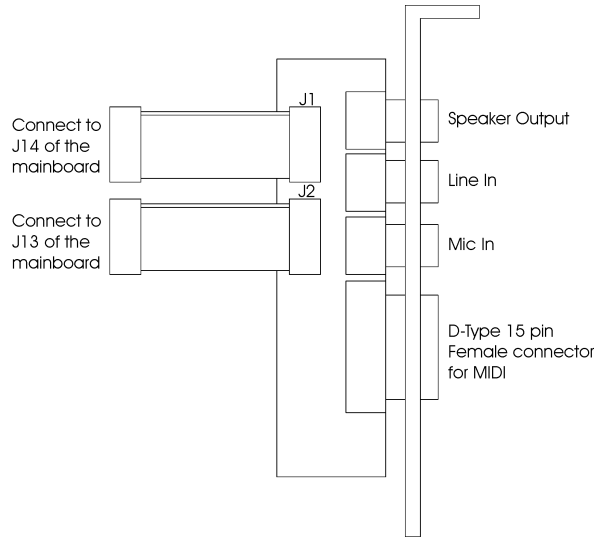


Fig. 4a Optional GOI-660 Extension Card

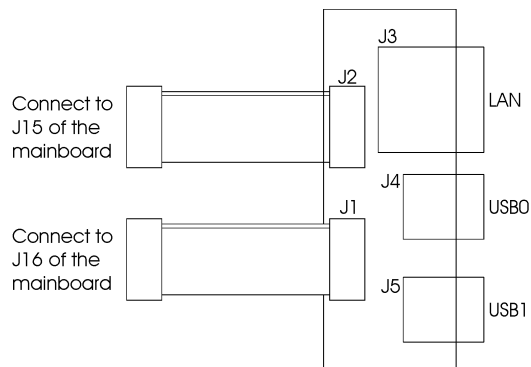


Fig. 4b Optional GOI-611 Extension Card

3.1 J1 – MULTIPLE FUNCTION JUMPER

J1 is a front panel multi-function jumper includes speaker, reset, keylock, harddisk, LED, ACPI (suspend) LED and power button (suspend switch). The pin definition is following figure.

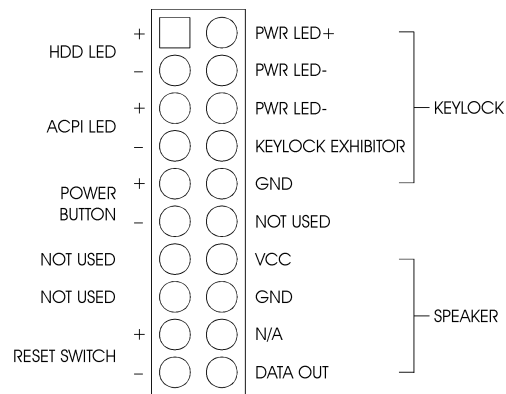


Fig. 5 Multiple Function Jumper

3.2 J2, J3 – CPU FAN CONNECTOR

J2, J3 are three-pin connectors, which are used to connect with the CPU Fan, Or the Case Fan which will be monitored by the on board hardware doctor, And controlled the Fan speed.

3.3 J4, J5 –PRIMARY /SECONDARY IDE CONNECTORS

These connectors support the provided IDE hard disk ribbon cable. After connecting the single end to the board, connect the two plugs on the other end to your hard disk or other device.

3.4 J6 - FLOPPY DRIVE CONTROLLER

This connector supports the floppy drive ribbon cable. After connecting the single end to the board, connect the two plugs on the other end to the floppy drive.

3.5 J7 – AUX. FAN CONNECTOR

This Auxiliary Fan connector is always power supplied except power off.

3.6 J8 – CUSTOMER IR CONNECTOR

J8 is a ten-pin connector for the IrDA/ASKIR/Customer Infrared device. The pin definition is listed as follows:

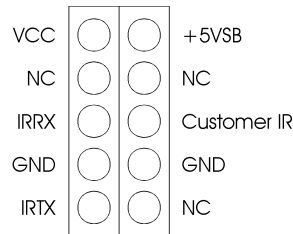


Fig. 6 Customer IR Connector

3.7 J9 – TV AUDIO IN CONNECTOR

J9 is an input and used for the Audio source from TV tuner card or capture card.

3.8 J10 – PHONE/MODEM IN CONNECTOR

J12 is an input and used for the Audio source from Modem cards.

3.9 J11 – CD-ROM AUDIO CONNECTOR (SONY)

J11 is a four-pin connector, which is used to connect with the Sony CD-ROM audio output. This pin definition is as following:

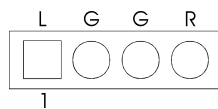


Fig. 7 CD-ROM Audio Connector

3.10 J12 – CD-ROM AUDIO CONNECTOR (MISUMI/PANASONIC)

J12 is four-pin connector, which is used to connect with the Panasonic or Misumi CD-ROM audio output. The pin definition is as following:

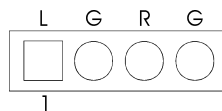


Fig. 8 CD-ROM Audio Connector

3.11 J13 – GAME/MIDI PORT CONNECTOR

Use the 15-way cable to connect the J13 with J2 of GOI-660.

3.12 J14 – AUDIO CONNECTOR

Use the 9-way cable to connect the J14 with J1 of GOI-660.

3.13 J15 – ETHERNET CONNECTOR

J15 is extension connector of 10/100M EtherNet LAN supported, and connected with GOI-611 cable module to a RJ-45 connector of EtherNet jack plug. Please reference to Fig. 4b.

3.14 J16 – USB CONNECTOR

These connectors are two five-pin connectors, which are used to connect with the USB (Universal Serial Bus) cable.

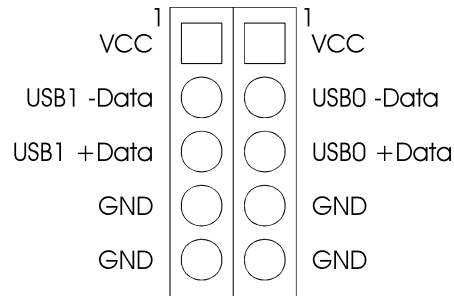


Fig. 9 USB Connector

3.15 J23 – AT POWER SUPPLY CONNECTOR

J23 is a 12 pin male connector. Plug the power connector of AT power supply onto the connector.

Pin	Description	Pin	Description
1	Power Good (Orange)	7	Ground (Black)
2	+5 VDC (Red)	8	Ground (Black)
3	+12 VDC (Yellow)	9	-5 VDC (White)
4	-12 VDC (Blue)	10	+5 VDC (Red)
5	Ground (Black)	11	+5 VDC (Red)
6	Ground (Black)	12	+5 VDC (Red)

Table 8: AT Power Connector

3.16 J24 - ATX POWER SUPPLY CONNECTOR

J24 is a 2x10 pin male connector. Plug the power connector of the ATX power supply onto the connector.

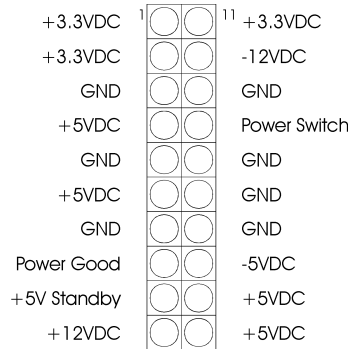


Fig. 10 ATX Power Supply Connector

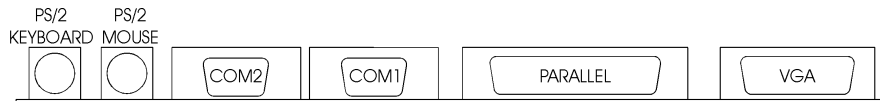


Fig. 11 Feature Connector

3.17 J17 – VGA CONNECTOR

This is a D-Type 15-pin male connector for monitor.

3.18 J18 – PARALLEL PORT CONNECTOR

This is a D-Type 25-pin female connector for parallel line printer.

3.19 J19, J20 – SERIAL PORT COM1 & COM2

This is a D-Type 9-pin male connector for pointing devices or other serial devices.

3.20 J21 – PS/2 MOUSE CONNECTOR

This connector is a six-pin female mini DIN connector using a PS/2 plug. Plug the jack on the PS/2 mouse cable into this connector.

3.21 J22 – PS/2 KEYBOARD CONNECTOR

This connector is a six-pin female mini DIN connector using a PS/2 plug. If a standard AT size keyboard plugs, you may use the DIN to mini DIN adaptor.

CHAPTER 4

AWARD BIOS

If the first time installation of this system board, please press the “DEL” key to get into the BIOS Setup while Power-on memory testing, and select “Load Optimized Defaults”, and then select the Frequency/Voltage Control to choose the proper “CPU Clock Ratio” for the CPU installed. For example, X6 should be selected for Celeron 400MHz CPU, and the default “CPU Host/PCI Clock” is 66/33MHz, don’t over specification selected. Actually, the currently Celeron 66MHz based CPU, always locked the CPU Clock Ratio inside. So the Ratio selected is not take in effect, the Optimized defaults loaded is enough for this jumperless mainboard. Don’t change any setting in the “Advance Chipset Features” which are important factors for the stability of this system. If an incorrect setting caused the system can not boot, just turn off the power, and then press “INS” key until the power turned on again and the BIOS Title displayed. It’s a safe mode to recover the system.

The detail BIOS description for this I810 system, Please reference to the \awardbios\i810bios.rtf on All-in-one Multimedia CD-ROM.

CHAPTER 5

DRIVER INSTALLATION

The ALL-IN-ONE Multimedia CD-ROM will auto execute with a menu displayed when put into CD-ROM Drive. Then the correct product needs to be selected, and the Drivers list will be showed on the right side of the screen: The 810 Drivers, Utility files, Manual & Catalog. Click the **810 Drivers** for the drivers of system must be installed. For example, in Windows 98 or 95 system, the “**Intel 82810 Win9x VGA Drivers**”, **Intel 82810 Win9x IDE Driver**”, and the “**AD1881 AC97 Audio Drivers for Win9x**” are minimum drivers must be installed for proper system operation. If the CD-ROM can not auto execute with Menu prompt, the “Explore this CD” can be selected to browse the CD-ROM, and click “Autotrun.exe” in root directory, or follow the descriptions as below to install the drivers step by step.

5.1 VGA ON BOARD DRIVERS INSTALLATION

I. Win9x VGA drivers installation:

Browse the All-in-one Multimedia CD-ROM to the directory **\\Intel\82810\vga\win9x\graphics** and click *setup.exe*.

II. WinNT VGA drivers installation:

Browse the All-in-one Multimedia CD-ROM to the directory **\\Intel\82810\vga\winNT\graphics** and click *setup.exe*.

III. Win2000 VGA drivers installation:

Browse the All-in-one Multimedia CD-ROM to the directory **\\Intel\82810\vga\win2000\graphics** and click *setup.exe*.

5.2 IDE DRIVERS INSTALLATION

INF files enable the Intel® 810 and Intel® 820 Chipsets to be recognized by listed operating systems. This installer will unpack updated .INF files into a specified folder.

Supported operating system: Microsoft Windows* 95 OSR2.1+ and Windows* 98 operating system
Chipset: Intel® 810 and Intel® 820 Chipsets

Browse the All-in-one Multimedia CD-ROM to the directory `\Intel\82810\IDEinf\` and click `setup.exe`.

5.3 AUDIO/AC97 ON BOARD DRIVERS INSTALLATION

I. AD1881 AC97 Audio Drivers for Win98

1. Run `\AD\1881\WDM\SETUP.EXE`, then restart to take effect
2. The system will search for new drivers for **PCI Multimedia Audio Device**. Click *Next*, then *finish* to have an **unknown?** device
3. Then get into **Control Panel -> System -> Device Manager -> Other Device -> PCI Multimedia Audio Device -> Driver -> Update Drivers -> Next**
4. Select **Display a list of all drivers -> Sound, Video and Game controller -> Analog Device Inc. -> Next -> Yes**
5. Select **Next** again, then browse the Win98 installation CD-ROM to `\Win98` directory, then click *OK* to finish the drivers installation

II. AD1881 AC97 Audio Drivers for WinNT

Run `\AD1881\WINNT\SETUP.EXE` and follow the instructions to complete the drivers installation.

5.4 LAN DRIVERS INSTALLATION

Please reference to the directory Realtech on All-In-One CD-ROM drivers and execute the HELP8139 to get a help menu of the drivers installation.

CHAPTER 6

FLASH AND DMI UTILITY

6.1 AWARD FLASH UTILITY

This section will provide instructions to guide you through updating your old BIOS. The file name we use to program here is *test.bin*, and the file name to save old BIOS is *2A69JD1J.OLD*. Please note that those file names are not absolute. They are only examples to let you have a more clear understanding of the updating process.

How to Begin

1. Please type "**awdf**lash" and press the **ENTER** key to begin the updating process.
2. Once you enter, you will see a main menu displaying:

FLASH MEMORY WRITER V6.XX (C) Award Software 1998 All Rights Reserved	
For i440LX-W977EF-2A69JD1JC-0	DATE: 12/03/98
Flash Type	
File Name to Program:	
Error Message:	

Fig. 12

3. Type the program name "*test.bin*", and then press the **ENTER** key.
4. At the bottom of the menu, you will be requested to answer:

"Do You Want to Save BIOS (Y/N)?"

If you do not wish to save the old BIOS:

5. Please type “N”, and then press the ENTER key.
6. Then you will be request to answer:

“Are You Sure to Program?”

7. Answer “N” if you do not want to program, and then it will exit.

To save the old BIOS:

8. Please respond “Y”, and then press the ENTER key.
9. Move the cursor to “File Name to Save:”
10. Type file name “**2A69JD1J.OLD**”, and then press the ENTER.
(Your old BIOS will be saved in the file name you create. In this case, the old BIOS is saved in the file name, 2A69JD1J.OLD).
11. Then you will be requested to answer:

“Are You Sure to Program (Y/N)?”

12. Type “Y” to begin programming, and press the ENTER key.
13. When the programming is finished, the showing message will appear:

“Programming Flash Memory - 3FF00 0K



Message: Please Power off or Reset System”

14. Once you see the showing message “**Power Off or Reset System**”, please re-start your system.
15. When you power on the computer again, you will find your old BIOS has already been successfully updated.

Warning

Please note that Award Flash Utility cannot run under EMM386 or QEMM. Thus, when executing the command “*awdf*lash”, and error message will appear:

“Error Message: Fail - Due to EMM386 or QEMM!”

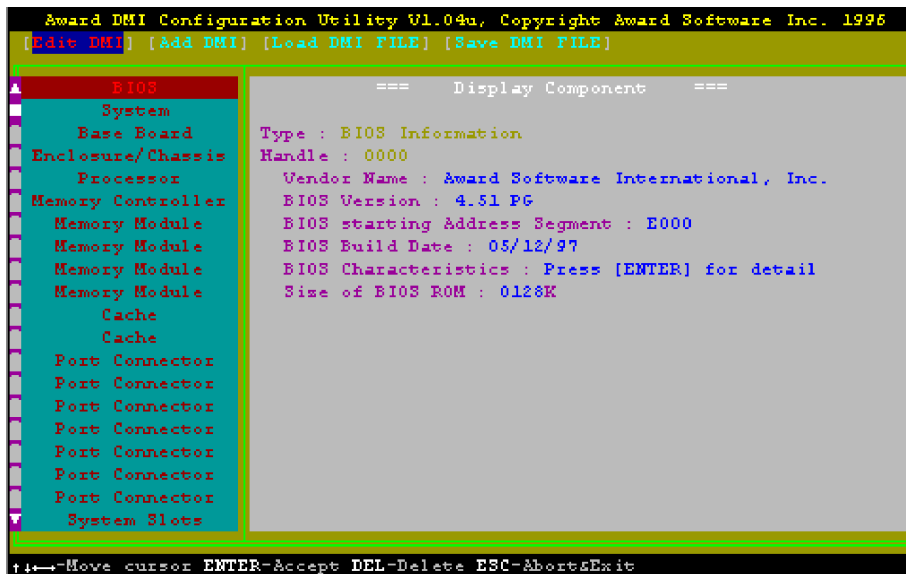
6.2 DESKTOP MANAGEMENT INTERFACE (DMI) OVERVIEW

This motherboard can support DMI within the BIOS level. DMI is able to auto-detect and record information pertinent to a computer's system such as the CPU type, CPU speed, and internal/external frequencies, and memory size. The onboard BIOS will detect as many system information as possible and store those collected information in a 4KB block in the motherboard's flash EPROM and allow the DMI to retrieve data from this database.

The DMI Configuration Utility (DMICFG.EXE) must be used in real mode in order for the program to run the base memory must be at least 180K. Memory managers like HIMEM.SYS (required by windows) must not be installed. You can boot up from a system diskette without AUTOEXEC.BAT and CONFIG.SYS files, "REM" HIMEM.SYS in the CONFIG.SYS, or press <F5> during bootup to bypass your AUTOEXEC.BAT and CONFIG.SYS files.

Using the DMI Configuration Utility

Edit DMI

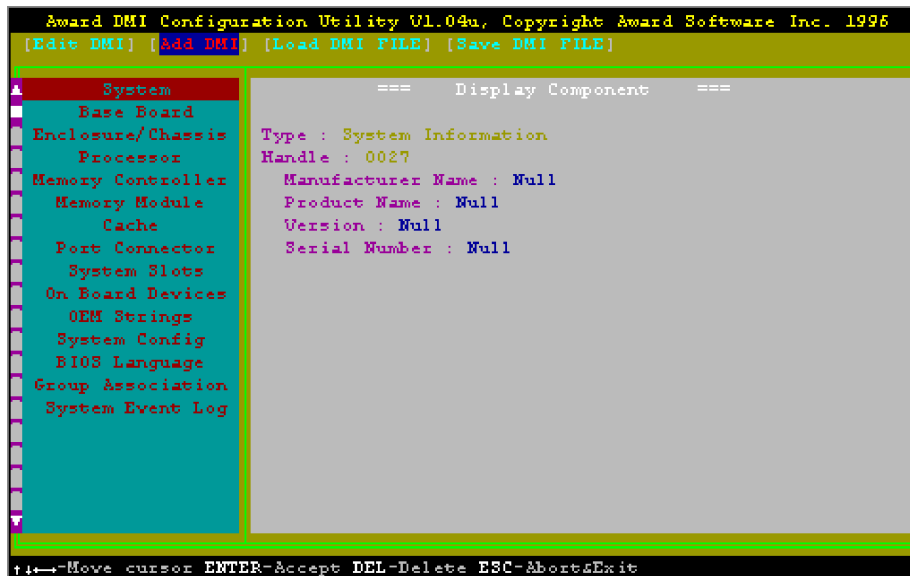


Flash and DMI Utility

Use the ←→ (left-right) cursors to move the top menu items and the ↑↓ (up-down) cursor to move between the left hand menu items. The bottom of the screen will show the available keys for each screen. Press enter at the menu item to enter the right hand screen for editing. “Edit component” appears on top. The reversed color field is the current cursor position and the blue text are available for editing. The orange text shows auto-detected information and are not available for editing. The blue text “Press [ENTER] for detail” contains a second pop-up menu is available, use the + - (plus-minus) keys to change the settings. Enter to exit and save, ESC to exit and not save.

If the user has made changes, ESC will prompt you to answer Y or N. Enter Y to go back to the left-hand screen and save, enter N to go back to left-hand screen and not save. If editing has not been made, ESC will send you back to the left hand menu without any messages.

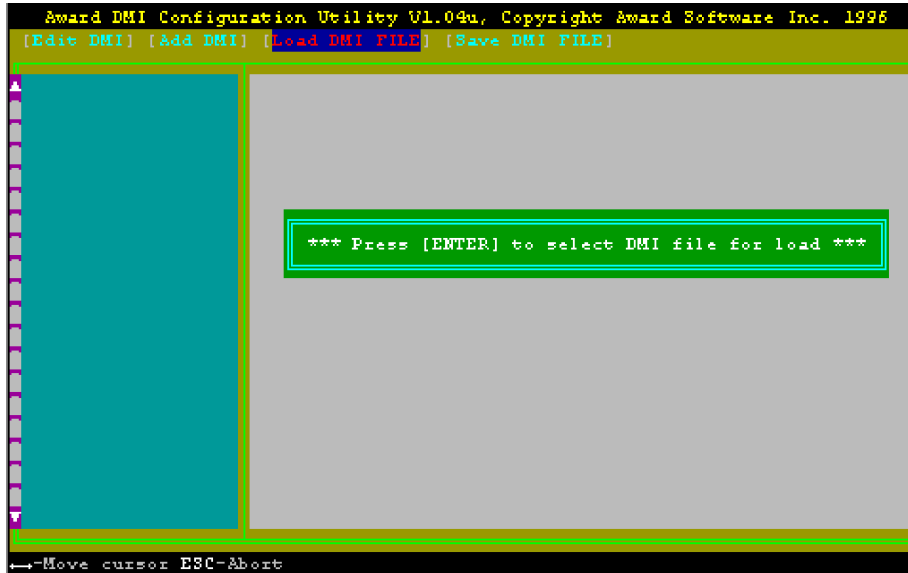
Add DMI



This DMI Configuration Utility also allows the system integrator or end user to add additional information into the DMI database such as serial numbers, housing configurations, and vendor information. Those information not detected by the motherboard BIOS and has to be manually entered through the DMI Configuration Utility and updated into the DMI database.

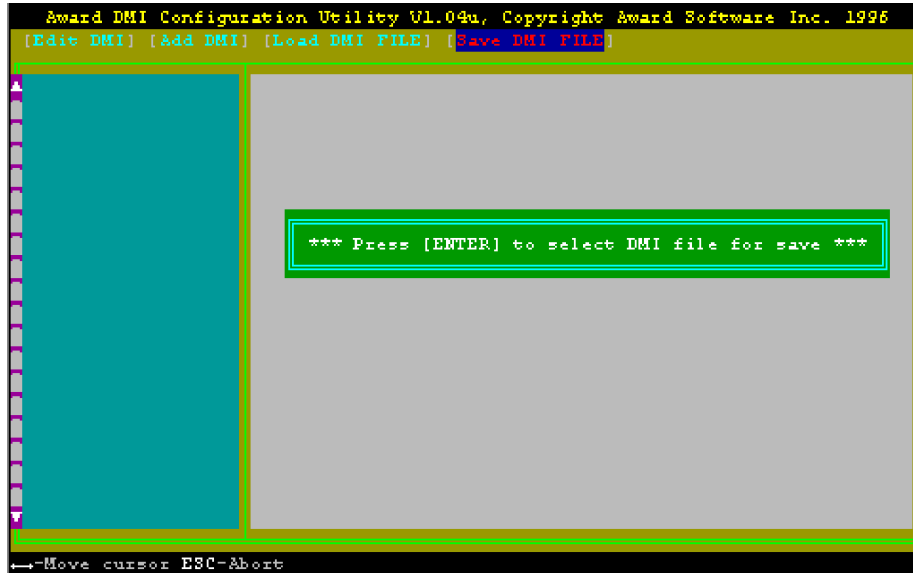
Chapter 6

Load DMI File



You can load the disk file to memory by entering a drive and path and file name here.

Save DMI File



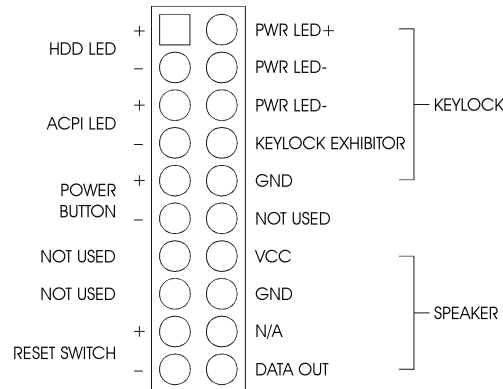
You can save the DMI (normally only saved to flash ROM) to a file by entering the drive and path here. If you want to cancel save, you may press ESC and a message "Bad File Name" appears here to show it was not saved.

APPENDIX A QUICK GUIDE

I) The table below summarizes the functions and settings of each jumper of the motherboard.

Function		Jumper Settings
Clear CMOS Data	Normal (Default)	JP3: 1-2 short
	Clear CMOS	JP3: 2-3 short
BIOS WR Select	Unlock (Default)	JP4: short
	Lock	JP4: open
Keyboard/ Mouse Power Select	VCC	JP5: 1-2 short
	VCC5SBY for Keyboard Wake-Up (Default)	JP5: 2-3 short
Onboard Ethernet Select	Enable (Default)	JP8,JP9: short
	Disable	JP8,JP9: open
Power Supply Select	AT Power (Default)	JP10: 1-2 short
	ATX Power	JP10: 2-3 short

II) J1 – Multiple Function Jumper



III) BIOS Setup

If the first time installation of this system board, please press the “DEL” key to get into the BIOS Setup while Power-on memory testing, and select “Load Optimized Defaults”, and then select the Frequency/Voltage Control to choose the proper “CPU Clock Ratio” for the CPU installed. For example, X6 should be selected for Celeron 400MHz CPU, and the default “CPU Host/PCI Clock” is 66/33MHz, don’t over specification selected. Actually, the currently Celeron 66MHz based CPU, always locked the CPU Clock Ratio inside. So the Ratio selected is not take in effect, the Optimized defaults loaded is enough for this jumperless mainboard. Don’t change any setting in the “Advance Chipset Features” which are important factors for the stability of this system. If an incorrect setting caused the system can not boot, just turn off the power, and then press “INS” key until the power turned on again and the BIOS Title displayed. It’s a safe mode to recover the system.

APPENDIX B

PIN ASSIGNMENTS OF EISA SLOT

SIGNAL NAME	PIN	PIN	SIGNAL NAME
GND	B1	A1	IOCHK
GND	F1	E1	GND
BRSTDV	B2	A2	SD7
GND	F2	E2	GND
VCC	B3	A3	SD6
PIRQB-	F3	E3	PIRQD-
IRQ8	B4	A4	SD5
PIRQC-	F4	E4	PIRQA-
-5V	B5	A5	SD4
VCC	B6	E5	VCC
DRQ2	B6	A6	SD3
-12V	K4	K1	SD2
VCC	B7	E7	VCC
ZEROWS-	B8	A8	SD1
PCLK2	F8	E8	PCIRST-
+12V	B9	A9	SD0
GND	F9	E9	GNT0-
GND	B10	A10	IOCHRDY
GNT1-	F10	E10	REQ0-
SMEMW-	B11	A11	SEN
GND	F11	E11	GND
SMEMR-	B12	A12	SA19
REQ1-	F12	E12	PCLK1
IOW-	B13	A13	SA18
AD31	F13	E13	GND
IOR-	B14	A14	SA17
AD29	F14	E14	AD30
DACK3-	B15	A15	SA16
VCC	F15	E15	VCC
DRQ3	B16	A15	SA15
	K5	K2	
DACK1-	B17	A17	SA14
VCC	F17	E17	VCC
DRQ1	B18	A18	SA13
AD27	F18	E18	AD28
REFRESH-	B19	A18	SA12
AD26	F19	E19	AD28
SYCLK	B20	A20	SA11
C_BE3	F20	E20	AD24
IRQ7	B21	A21	SA10
AD25	F21	E21	AD22
IRQ6	B22	A22	SA9
AD21	F22	E22	AD20
IRQ5	B23	A23	SA8
AD19	F23	E23	AD18
IRQ4	B24	A24	SA7
VCC	F24	E24	VCC
IRQ3	B25	A25	SA6
	K6	K3	
DACK2-	B26	A26	SA5
AD24	F26	E26	AD23
TC	B27	A27	SA4
AD17	F27	E27	AD16
SALE	B28	A28	SA3
RIRDY-	F28	E28	RFRAME-
VCC	B29	A29	SA2
RDEVSEL-	F29	E29	C_BE2
OSC1	B30	A30	SA1
PLOCK-	F30	E30	RTRDY-
GND	B31	A31	SA0
PERR-	F31	E31	RSTOP-
	H1	G1	SDONE
SERR-	H2	G2	SBO-
AD15	D1	C1	SBHE-
MEMCS16-	H3	G3	C_BE1
AD14	D2	C2	LA23
IOCS16-	H4	G4	PAR
AD12	D3	C3	LA22
IRQ10	H5	G5	GND
GND	H5	G5	GND
IRQ11	D4	C4	LA21
	K9	K7	
IRQ12	D5	C5	LA20
GND	H7	G7	GND
IRQ15	D6	C6	LA19
AD10	H8	G8	AD13
IRQ14	D7	C7	LA18
AD8	H9	G9	AD11
DACK0-	D8	C8	LA17
AD7	H10	G10	AD8
DRQ0	D9	C9	MEMR-
AD5	H11	G11	C_BE0
DACK5-	D10	C10	MEMW-
AD3	H12	G12	AD6
DRQ5	D11	C11	SD8
AD1	H13	G13	AD4
DACK6-	D12	C12	SD9
AD0	H14	G14	AD2
DRQ6	D13	C13	SD10
	K10	K8	
DACK7-	D14	C14	SD11
VCC	H16	G16	VCC
DRQ7	D15	C15	SD12
VCC	H17	G17	GNT2-
VCC	D18	C16	SD13
PCLK3	H18	G18	REQ2-
RMASTER-	D17	C17	SD14
GND	H19	G19	GND
GND	D18	C18	SD15

PCI 2 ID

PCI 1 ID