

Quick User's Guide

**VIA P4M800 mainboard
for Intel Socket 775 processor**

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1. Specification

● **Processor Support**

- ◆ Socket LGA775 for Intel® Celeron D® 3xx series, Intel® Pentium 4® 5xx/6xx series up to 3.4GHz
- ◆ Support Intel Pentium® with Dual core processor up to 2.8GHz
- ◆ Support 533/800 MHz front-side bus

● **Chipset**

- ◆ VIA P4M800ce + 8237R Plus AGPset with VIA Unichrome Pro Graphics core

● **Main Memory**

- ◆ Two 184-pin DDR SDRAM DIMM sockets
- ◆ Support single-sided or double-sided 2.5v DDR-266/333/400 DIMMs in 64/128/256/512Mb/1Gb technologies
- ◆ Support up to 2GB memory size

● **Expansion Slots**

- ◆ Three PCI connectors compliant with PCI v2.2
- ◆ One 1.5v AGP-8X connector compliant with AGP v3.0
- ◆ One CNR (Communication & Networking Riser) slot for V.92 analog Modem in Secondary mode

● **IDE**

- ◆ Two IDE interfaces (up to 4 IDE devices) with UDMA-33, ATA-66/100/133 support from chipset IDE controller

● **USB**

- ◆ Eight USB connectors compliant with USB2.0 from embedded USB controller (4 connectors at rear panel)

● **S-ATA**

- ◆ Two S-ATA ports with up to 150MB/s bandwidth with RAID 0, 1, JBOD support

● **LAN**

- ◆ Integrates 10/100Mbps Fast Ethernet controller with onboard VIA 6103L PHY LAN

● **I/O**

- ◆ Fintek LPC IO controller with PS/2 keyboard&mouse, floppy, printer, serial and CIR/SIR interface
- ◆ Support Hardware Monitoring function
- ◆ Intelligent fan speed control for CPU-fan (PWM) for quiet operation

● Audio

- ◆ Onboard Realtek ALC-655 selectable 2 or 6-CH audio CODEC
 - AC'97 v2.3 compliant
 - Supports CD-In, Aux-In
 - Supports automatic “jack-sensing”
 - Rear panel audio jacks configuration:

Audio Jack Color	2 channel	6 channel
Light Blue	Line-in	Rear stereo-out
Lime	Line-out	Front stereo-out
Pink	Mic-in	Center&Subwoofer

● BIOS

- ◆ Flash EEPROM with Award Plug & Play BIOS
- ◆ Support ACPI S3 (Suspend To RAM) mode in ACPI compliant O/S
- ◆ Support **EZ Boot** for fast bootable device selection
- ◆ Support **Magic Health** for system hardware status report during system boot-up

● Special Features

- ◆ Support KBPO function – Keyboard power on, turn on the computer from keyboard
- ◆ Support Wake-On-LAN by PME
- ◆ Support USB resume in S3
- ◆ **PowerBIOS** for excellent overclocking features:
 - Programmable FSB Clock output frequency with 1MHz fine tuning
 - Support BIOS adjustable CPU multiplier, FSB clock settings

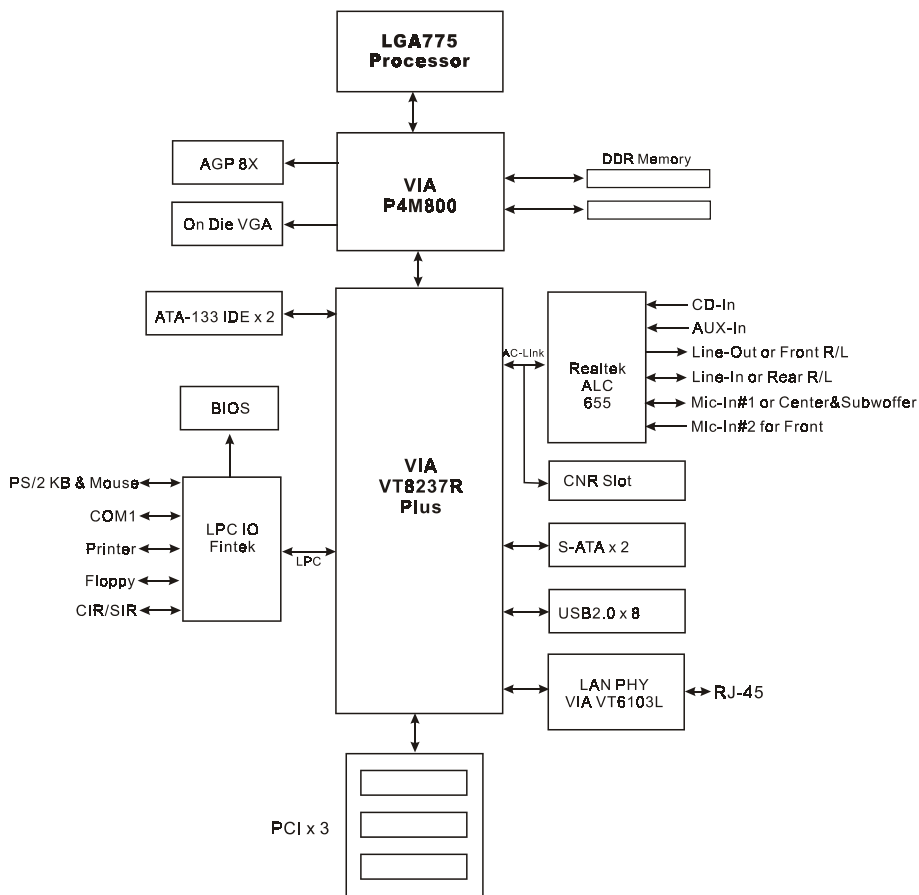
● Form Factor

- ◆ 245mm x 230 mm Micro-ATX size

● Supported O/S

- ◆ Windows 98SE/ Windows 2000/Windows XP

1.2 Block Diagram



2. Setting up the mainboard

Before assembling the mainboard into the PC case we recommend you to do the following:

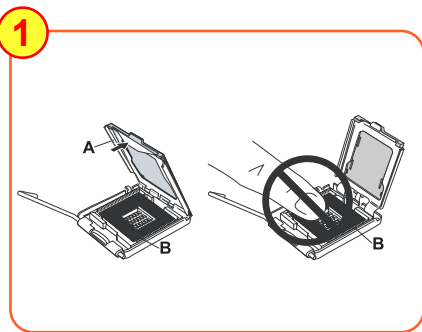
1. CPU Installation
2. DDR Memory Insertion

After the mainboard is fitted into the case, you may

3. Install Add-on VGA or PCI cards (Optional)
4. Connect the internal cables and wires
5. Connect your external peripherals to the rear I/O port

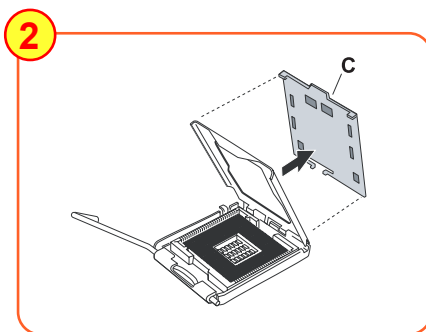
3. Installation

3.1 CPU Installation



Step 1

Open load plate (A), DO NOT touch socket contacts (B).



Step 2

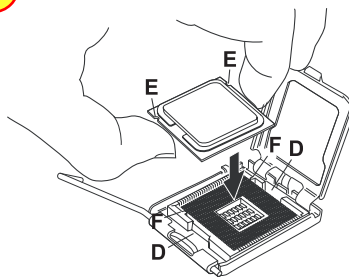
Remove protective cover (C) from load plate. Please do not discard the protective cover. Always replace the protective cover if the processor is removed from the socket.

3

**Step 3**

Remove the processor from the protective cover. Do not touch the bottom of the processor. The processor cover should not be discarded. Always replace the processor cover if the processor is removed from the socket.

4

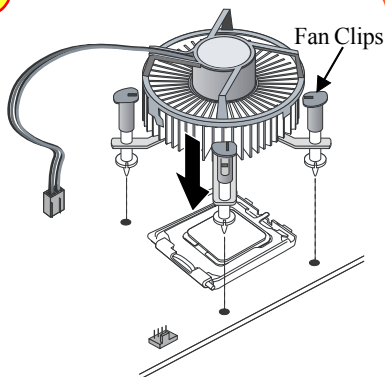
**Step 4**

Hold the processor with thumb and index fingers as shown. Ensure fingers align to the socket cutouts (D), processor notches (E) align to socket convexes (F). Place the processor straight down without tilting or sliding in the socket.



The CPU is keyed to prevent incorrect insertion, do not force the CPU into the socket. If it does not go in easily, check for mis-orientation.

5

**Step 5**

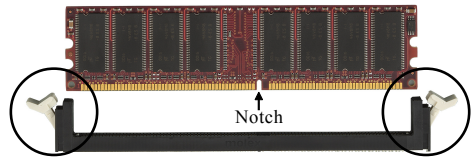
Place the fan heatsink onto the mainboard with the fasteners align to the holes. Be care not to damage the thermal interface material attached to the bottom of the heatsink. Rotate the clips 90 degrees to lock the CPU cooler in place. Connect the fan cable to the mainboard header JCPU_FAN.

3.2 DDR Memory Insertion

The mainboard accommodates two PC2100/PC2700/PC3200 184-pin DIMMs (Dual In-line Memory Modules):

- Supports up to 2.0GB of 266/333/400MHz DDR SDRAM.
- Supports unbuffered non-ECC DIMMs.
- DDR SDRAM supports 64, 128, 256, 512MB and 1GB DIMM modules.
- Supports DRAM configurations defined in the JEDEC DDR DIMM specification.

- ❶ To install, align the notch on the DIMM module with the connector.
- ❷ Press straight down as shown in the figure until the white clips close and the module fits tightly into the DIMM socket.

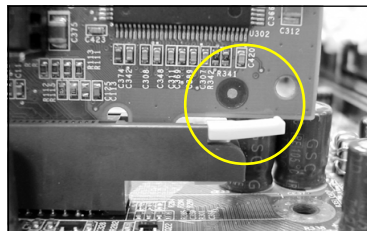


3.3 VGA and PCI card installation

This mainboard is equipped with on-chip graphics engine, you may connect a VGA monitor directly to its rear port. However, if you need to install VGA card follow the steps below.

To install a VGA card into the AGP slot or a PCI expansion card:

1. Remove the bracket (on the PC case) for the slot you intend to use.
2. Firmly press down the card into the slot until it is completely seated. For an AGP card ensure the AGP slot clicker is locked as shown in the picture below.

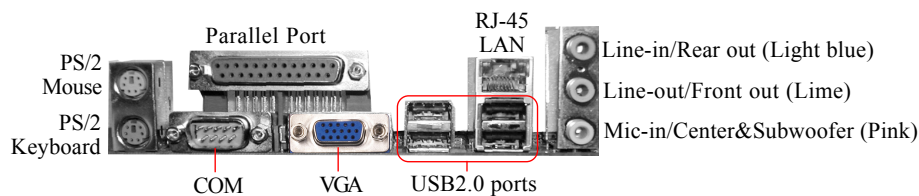


3. Secure the card's bracket to the PC case with a screw.

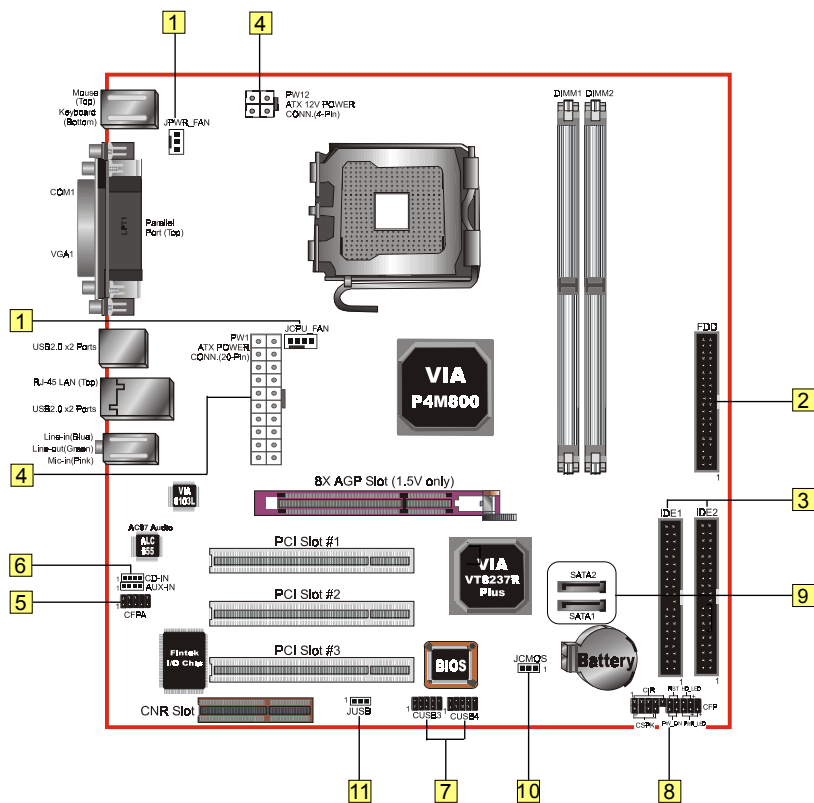


The AGP slot supports only newer VGA cards with 1.5V specifications.

3.4 Rear IO Port



3.5 Internal Connectors



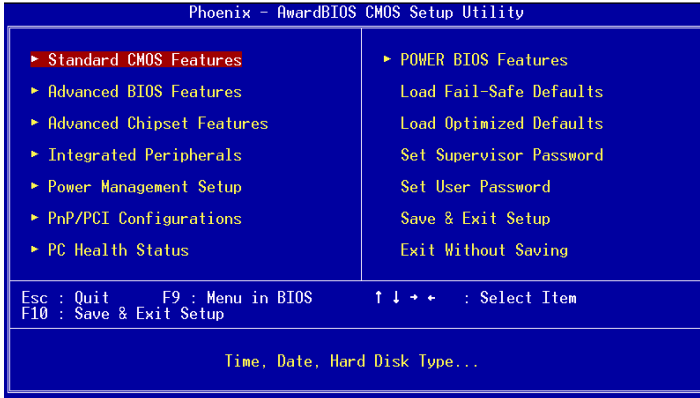
Connectors	Figure	Discriptions
1 JCPU_FAN JPWR_FAN		CPU / Power Fan Power Connectors JCPU_FAN: Connect the CPU fan to this connector. JPWR_FAN: Use this connector if you are installing an additional fan in the unit.
2 FDD		Floppy Drive Connector
3 IDE1 Primary IDE IDE2 Secondary IDE	 	Primary/Secondary IDE Connector Connects to the IDE device, i.e. HDD and CD-ROM device.
When using two IDE drives on the same connector, one must be set to Master mode and the other to Slave mode. Refer to your disk drive user's manual for details.		
4 PW1 PW12		PW1: 20-pin ATX Power Connector PW12: 4-pin ATX12V Power Connector The plugs of the power cables are designed to fit in only one orientation.
The PW1 and PW12 Power Connector must be used simultaneously.		
5 CFPA		CFPA: Front Panel Audio Connector This connector is used only if the speaker and microphone needs to be plugged at the front of the PC case. Otherwise, leave the jumpers at the default position.
6 CD-IN AUX-IN		CD-IN/AUX-IN: CD Audio-in connectors These connectors are used to receive audio from a CD-ROM drive, TV tuner or MPEG card.

Connectors	Figure	Discriptions
7 CUSB3 CUSB4		CUSB3/CUSB4: Four USB2.0 header This mainboard includes 4 additional onboard USB ports. To use these additional USB ports, a USB bracket is required. Please contact your retailer for details.
8 CFP		CFP: Case Front Panel Connector ♦ HD_LED This LED indicates hard drive activity. ♦ PWR_LED Connects to the power indicator on the PC case. ♦ RST Connects to the RESET switch on the PC case. ♦ PW_ON Connects to the Power button on the PC case, to turn on the system. To turn off the system, press the power button for 4 seconds.
CIR		CIR: IR connector For connection to an IrDA receiver unit.
CSPK		CSPK: Speaker Connects to the case's speaker for PC beeps.
9 SATA1 SATA2		SATA1 / SATA2: Two Serial ATA Connectors These connectors enable you to connect Serial ATA HDDs or optical drives type.
10 JCMOS	Settings: 1-2: Normal (Default) 2-3: Clear CMOS	JCMOS: Clear CMOS data Jumper This resets the BIOS CMOS data back to the factory default values. Recommend to leave at Normal (default) postion.
11 JUSB	Settings: 1-2: Connect (S3 enabled) 2-3: Disconnect (No S3)	JUSB: USB S3 Wake up Jumper This jumper disconnects 5V standby voltage to USB devices. This means USB devices will not be able to wake-up the system from S3 (Suspend to RAM) power saving mode.

4. BIOS

BIOS Setup

When you start up the computer for the first time you need to enter the BIOS CMOS Setup Utility. Power on the computer and press key during POST (Power On Self Test). The BIOS CMOS SETUP UTILITY opens as shown below:



< CMOS Setup Utility >

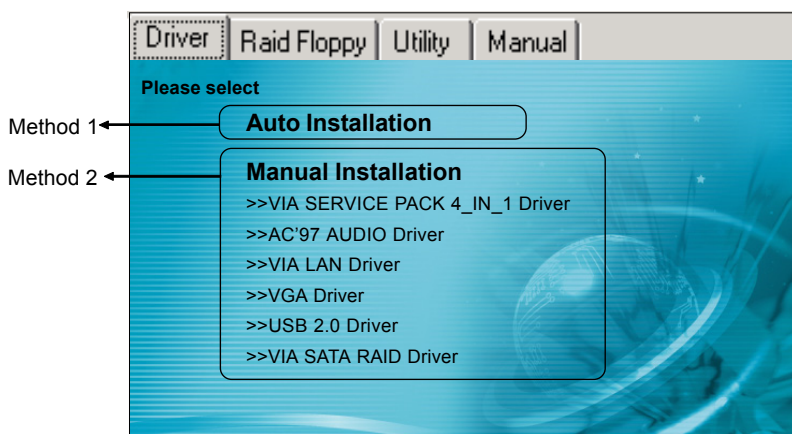
Select and enter "Load Optimized Defaults" page. This page loads the factory settings for optimal system performance. Follow the simple on-screen instructions to complete this procedure. Press "ESC" to exit and select "Save & Exit Setup" to continue to boot.



For more information regarding BIOS settings refer to the complete manual in the bundled CD.

5. Driver Installation

Once the operating system has been installed, you need to install the drivers for the mainboard.



Insert the bundled CD into the CD-ROM and the main menu screen will appear. The main menu displays links to the supported drivers, utilities and software.

► **Method 1**

This item installs all drivers automatically.

► **Method 2**

This item allows you to install the drivers selectively.

Step 1 : Click “**VIA SERIES 4_IN_1 Driver**” to install chipset driver.

Step 2 : Click “**AC'97 AUDIO Driver**” to install audio driver.

Step 3 : Click “**VIA LAN Driver**” to install LAN driver.

Step 4 : Click “**VGA Driver**” to install onboard graphics driver.

Step 5 : Click “**USB V2.0 Driver**” to install USB 2.0 driver.

Step 6 : Click “**VIA SATA RAID Driver**” to install Serial ATA driver.

6. Flashing the BIOS



Do NOT flash the system BIOS unless it is really necessary.

Updating and flashing the BIOS content risks BIOS data corruption which may cause system unable to power-on.

Download the xxxxx.EXE file corresponding to your model from our website to an empty directory on your hard disk or floppy. Run the downloaded xxxxx.EXE file and it will self extract. Copy these extracted files to a bootable floppy disk.

Note: The floppy disk should contain NO device drivers or other programs.

1. Type "A:\AWDFLASH and press <Enter> Key.
2. You will see the following setup screen.
3. Please key in the xxxxx.bin BIOS file name.
4. If you want to save the previous BIOS data to the diskette, please key in [Y], otherwise please key in [N].

```

FLASH MEMORY WRITER V7.88
(C)Award Software 2000 All Rights Reserved
ForXXXX-W83627-6A69LPA9C-0  DATE: 05/11/2000
Flash type - 
File Name to Program : 
Error Message:
  
```

```

FLASH MEMORY WRITER V7.88
(C)Award Software 2000 All Rights Reserved
ForXXXX-W83627-6A69LPA9C-0  DATE: 05/11/2000
Flash type - XXXXX E82802AB /3.3V
File Name to Program : xxxxx.bin
Error Message: Do You Want To Save Bios (Y/N)
  
```

5. Key in File Name to save previous BIOS to file.
6. To confirm and proceed, please key in [Y] to start the programming.

```

FLASH MEMORY WRITER V7.88
(C)Award Software 2000 All Rights Reserved
ForXXXX-W83627-6A69LPA9C-0  DATE: 05/11/2000
Flash type - XXXXX E82802AB /3.3V
File Name to Program : xxxxx.bin
File Name to Save : xxxxx.bin
Error Message:
  
```

```

FLASH MEMORY WRITER V7.88
(C)Award Software 2000 All Rights Reserved
ForXXXX-W83627-6A69LPA9C-0  DATE: 05/11/2000
Flash type - XXXXX E82802AB /3.3V
File Name to Program : xxxxx.bin
Checksum : 9884H
File Name to Save : xxxxx.bin
Error Message: Are you sure to program (y/n)
  
```

7. The BIOS update is finished.

```

FLASH MEMORY WRITER V7.88
(C)Award Software 2000 All Rights Reserved
ForXXXX-W83627-6A69LPA9C-0  DATE: 05/11/2000
Flash type - XXXXX E82802AB /3.3V
File Name to Program : xxxxx.bin
Checksum : 4804H
Verifying Flash Memory - 7FE00 OK
Write OK No Update Write Fail
F1: Reset F10: Exit
  
```

8. Keep this BIOS floppy disk for future use.