

# **M7VIW**

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## **Motherboard Description**

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# **English**

## **M7VIW Features**

- ✧ Use North Bridge: VIA KT266/A, South Bridge: VT8235 Chipset, ITE I/O IT8705 and LAN Chip- VT6103.
- ✧ Contains on board I/O facilities, which include two serial ports, a parallel port, a PS/2 mouse port, a PS/2 keyboard port, audio ports, USB ports and a game port.
- ✧ Supports Single Socket-A for an AMD Athlon/ Duron Family processor, running at 200/266 MHz Front Side Bus frequency.
- ✧ The AMD Athlon/ Duron system bus supports the 200/266 MHz high-speed, split-transaction AMD Athlon/ Duron system bus interface.
- ✧ Supports Ultra DMA 33/66/100/133 Bus Master Modes, PIO Mode 4, Master Mode, and high performance hard disk drives.
- ✧ Supports 2 DDR 200/266 MHz (without ECC) devices, maximum memory size up to 2GB.
- ✧ Supports 2 SDR 100/133 MHz (without ECC) devices, maximum memory size up to 2 GB.
- ✧ Supports USB2.0 6 ports High Speed Device, 2 ports in Rear Panel and 4 ports in Front Panel.
- ✧ Supports one CNR Slot (Type B only), one AGP 4X Slot and five 32-bit PCI Bus slots.
- ✧ Complies with PC ATX form factor specifications.
- ✧ Supports popular operating systems such as Windows NT, Windows 98 SE, Windows 2000, Windows ME, Windows XP and LINUX.
- ✧ CPU over temperature protection.
- ✧ Intel® AC'97 2.2 compatible. High S/N ratio meets PC 99 requirements.
- ✧ 2-Channel AC97 Codec.
- ✧ Support Front Audio pin head functions.
- ✧ Support case open detection function.

## ***Motherboard Description***

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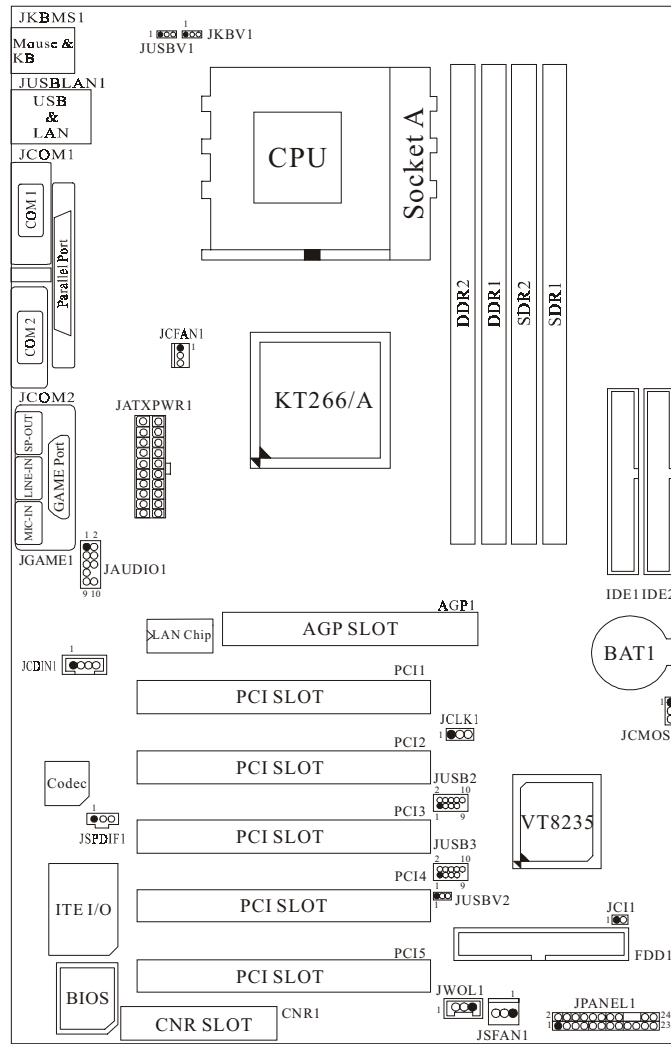
- ✧ Support SPDIF-Out functions.
- ✧ LAN Chip-VT6103- Fast EtherNet 10/ 100 1-Port PHY/ Transceiver:
  - \* Dual Speed- 100/ 10 Mbps.
  - \* Half and Full Duplex.
  - \* MII Interface to Ethernet Controller.
  - \* Auto Negotiation: 10/ 100, Full/ Half Duplex.
  - \* Meet all applicable IEEE 802.3, 10Base-T and 100Base-Tx Standards.
  - \* Baseline Wander Correction.

### **Package contents**

- ✧ HDD Cable X 1
- ✧ FDD Cable X 1
- ✧ Fully Setup Driver CD X 1
- ✧ Flash Memory Writer for BIOS update X 1
- ✧ USB Cable X 2 (Optional)
- ✧ Rear I/O Panel for ATX Case X 1 (Optional)
- ✧ SPDIF Out Cable X1 (Optional)

## Motherboard Description

### Layout of M7VIW

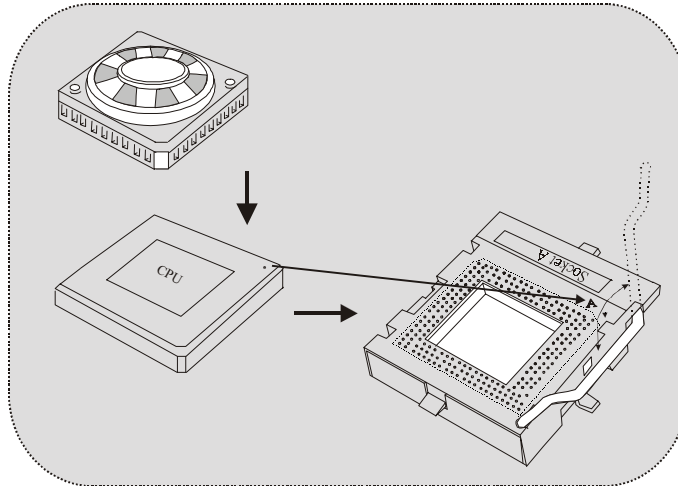


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## Motherboard Description

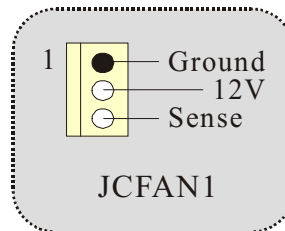
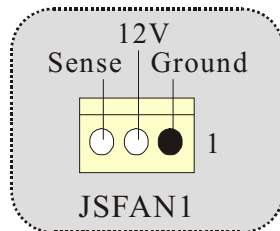
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### CPU Installation



1. Pull the lever sideways away from the socket then raise the lever up to 90-degree angle.
2. Locate Pin A in the socket and lock for the white dot or cut edge in the CPU. Match Pin A with the white dot/cut edge then insert the CPU.
3. Press the lever down. Then Put the fan on the CPU and buckle it and put the fan's power port into the JCFAN1, then to complete the installation.

### CPU/ System Fan Headers: JCFAN1/ JSFAN1



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## Motherboard Description

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### DDR DIMM Modules: DDR1-2

DRAM Access Time: 2.5V Unbuffered/ Registered DDR 200 MHz (PC1600)/ DDR 266 MHz (PC2100) Type required.  
DRAM Type: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM Module (184 pin)

DIMM Socket Location	DDR Module	Total Memory Size (MB)
DDR 1	64MB/128MB/256MB/512MB/1GB *1	Max is 2GB
DDR 2	64MB/128MB/256MB/512MB/1GB *1	

- The list shown above for DRAM configuration is only for reference.

### SDR DIMM Modules: SDR1-2

DRAM Access Time: 3.3V Unbuffered SDR 100 MHz (PC100)/ SDR 133 MHz (PC133) Type required.  
DRAM Type: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM Module (168 pin)

DIMM Socket Location	SDR Module	Total Memory Size (MB)
SDR 1	64MB/128MB/256MB/512MB/1GB *1	Max is 2GB
SDR 2	64MB/128MB/256MB/512MB/1GB *1	

- The list shown above for DRAM configuration is only for reference.

⚡ When you use DDR SDRAM, the memory voltage will automatically set to 2.5V.

⚡ When you use SDRAM, the memory voltage will automatically set to 3.3V.

⚡ For the above settings, you can only use one kind of memory on this motherboard. It is forbidden to insert both kind of memory simultaneously. You must insert only DDR or SDRAM.

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## Motherboard Description

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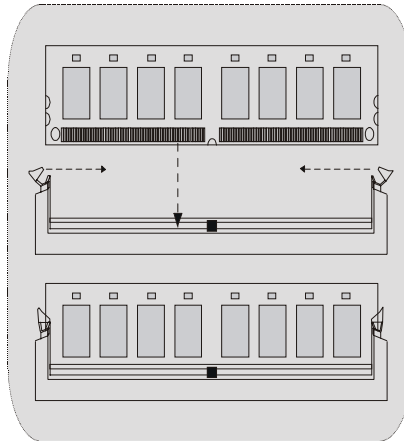
### How to install a DIMM Module

#### DDR DIMM Module

1. The DIMM socket has a “Plastic Safety Tab”, and the DIMM memory module has an “Asymmetrical notch”, so the DIMM memory module can only fit into the slot in one direction.

2. Push the tabs out. Insert the DIMM memory modules into the socket at a 90-degree angle, then push down vertically so that it will fit into the place.

3. The Mounting Holes and plastic tabs should fit over the edge and hold the DIMM memory modules in place.

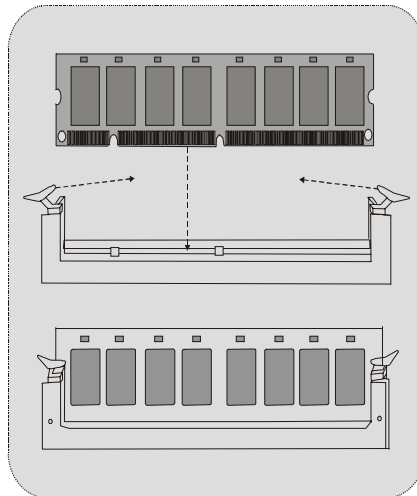


#### SDRAM DIMM Module

1. The DIMM socket has a “Plastic Safety Tab”, and the DIMM memory module has an “Asymmetrical notch”, so the DIMM memory module can only fit into the slot in one direction.

2. Push the tabs out. Insert the DIMM memory modules into the socket at a 90-degree angle, then push down vertically so that it will fit into the place.

3. The Mounting Holes and plastic tabs should fit over the edge and hold the DIMM memory modules in place.





## ***Motherboard Description***

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### **Jumpers, Headers, Connectors & Slots**

#### **Hard Disk Connectors: IDE1/ IDE2**

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0-4, Bus Master, and Ultra DMA 33/ 66/ 100/ 133 functionality. It has two HDD connectors IDE1 (primary), IDE2 (secondary) and IDE3.

The IDE connectors can connect a master and a slave drive, so you can connect up to four hard disk drives. The first hard drive should always be connected to IDE1.

#### **Floppy Disk Connector: FDD1**

The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.

#### **Accelerated Graphics Port Slot: AGP1**

Your monitor will attach directly to that video card. This motherboard supports video cards for PCI slots, but it is also equipped with an Accelerated Graphics Port (AGP). An AGP card will take advantage of AGP technology for improved video efficiency and performance, especially with 3D graphics.

#### **Communication Network Riser Slot: CNR1**

The CNR specification is an open Industry Standard Architecture, and it defines a hardware scalable riser card interface, which supports audio, network and modem only.

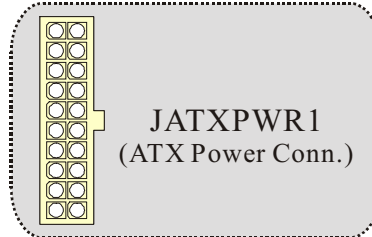
#### **Peripheral Component Interconnect Slots: PCI1-5**

This motherboard is equipped with 5 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards, which has, supplanted the older ISA bus standard in most ports. This PCI slot is designated as 32 bits.

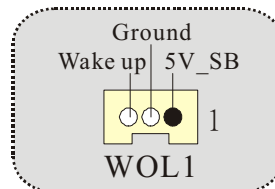
## **Motherboard Description**

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### **Power Connectors: JATXPWR1**



### **Wake On LAN Header: JWOL1**



### **Front USB Header: JUSB2/3**

JUSB2/ 3

Pin	Assignment	Pin	Assignment
1	+5V	2	+5V
3	Data (-)	4	Data (-)
5	Data (+)	6	Data (+)
7	Ground	8	Ground
9	Key	10	NA

### **5V/ 5VSB Selection for USB/KB: JUSBV1/JUSBV2/ JKBV1**

JUSBV1/2

JKBV1

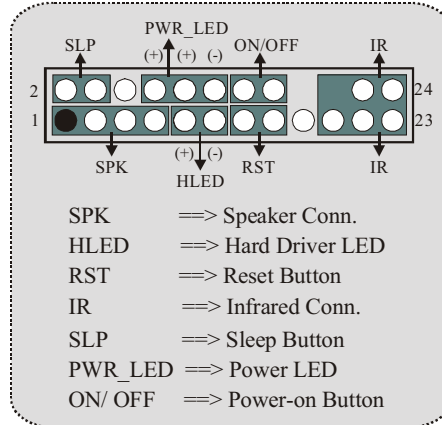
Pin 1-2 on ==> 5V (For Normal Function)

Pin 2-3 on ==> 5V\_SB (For S3 Wake-up Function)

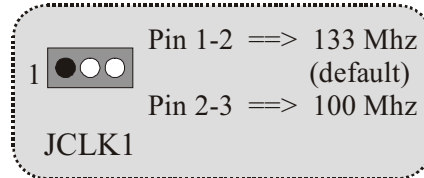
## **Motherboard Description**

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### **Front Panel Connector: JPANEL1**

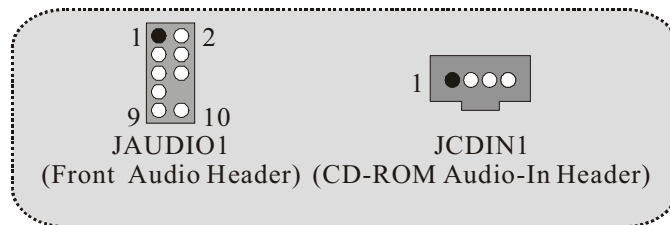


### **CPU Clock Selection: JCLK1**



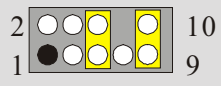
### **Audio Subsystem: JAUDIO1/ JCDIN1**

- JAUDIO1 with 10 pins only support Codec 2CH, VIA VT1612A



## Motherboard Description

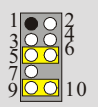
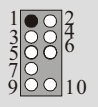
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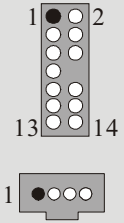
**JAUDIO1**

Pin	Assignment	Pin	Assignment
1	Mic In	2	Ground
3	Mic Power	4	Audio Power
5	RT Line Out	6	RT Line Out
7	Reserved	8	NC
9	LFT Line Out	10	LFT Line Out

*Front Panel Audio Connector/ Jumper Block*

<i>Jumper Setting</i>	<i>Configuration</i>
 <p>Pin 5 and 6 Pin 9 and 10</p>	<p>Audio line out signals are routed to the back panel audio line out connector.</p>
 <p>No jumpers installed</p>	<p>Audio line out and mic in signals are available for front panel audio connectors.</p>

- JAUDIO1 with 14 pins only support Codec 6CH, CMI9739A/9760 (Optional)**

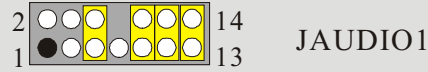


**JAUDIO1**  
(Front Audio Header)

**JCDIN1**  
(CD-ROM Audio-In Header)

## Motherboard Description

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Pin	Assignment	Pin	Assignment
1	Mic In	2	Ground
3	Mic Power	4	Audio Power
5	RT Line Out	6	RT Line Out
7	Reserved	8	NC
9	LFT Line Out	10	LFT Line Out
11	RT Line In	12	RT Line In
13	LFT Line In	14	LFT Line In

### Front Panel Audio Connector/Jumper Block

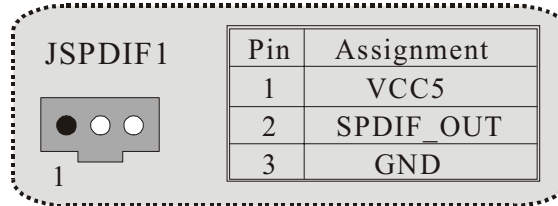
Jumper Setting	Configuration
<p>Pin 5 and 6 Pin 9 and 10 Pin 11 and 12 Pin 13 and 14</p>	<p>Audio line out signals are routed to the back panel audio line out connector.</p>
<p>No jumpers installed</p>	<p>Audio line out and mic in signals are available for front panel audio connectors.</p>

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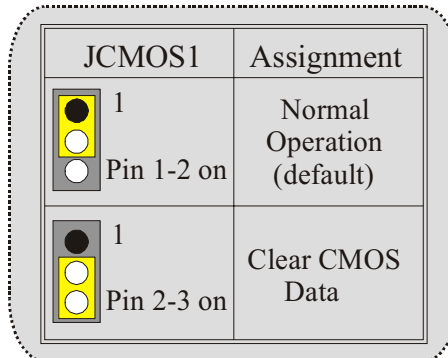
## Motherboard Description

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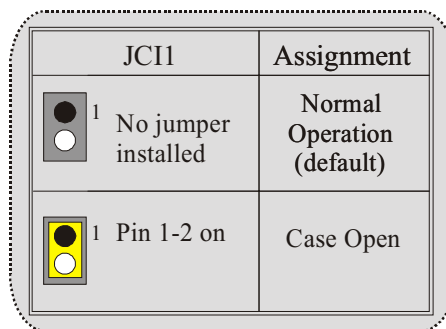
### Digital Audio Output Connector: JSPDIF1



### Clear CMOS Jumper: JCMOS1



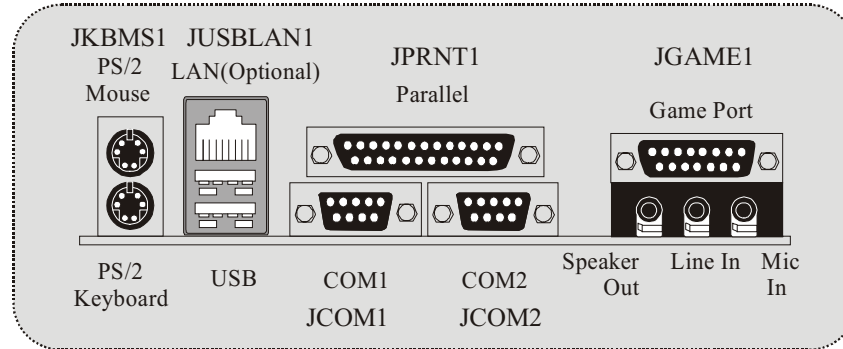
### Case Open Connector: JCI1



## Motherboard Description

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### Back Panel Connectors



## **Motherboard Description**

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### **Trouble Shooting**

<b>PROBABLE</b>	<b>SOLUTION</b>
No power to the system at all Power light don't illuminate, fan inside power supply does not turn on. Indicator light on keyboard does not turn on	<ul style="list-style-type: none"> <li>* Make sure power cable is securely plugged in</li> <li>* Replace cable</li> <li>* Contact technical support</li> </ul>
<b>PROBABLE</b>	<b>SOLUTION</b>
System inoperative. Keyboard lights are on, power indicator lights are lit, hard drive is spinning.	<ul style="list-style-type: none"> <li>* Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.</li> </ul>
<b>PROBABLE</b>	<b>SOLUTION</b>
System does not boot from hard disk drive, can be booted from CD-ROM drive.	<ul style="list-style-type: none"> <li>* Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup.</li> <li>* Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.</li> </ul>
<b>PROBABLE</b>	<b>SOLUTION</b>
System only boots from CD-ROM. Hard disk can be read and applications can be used but booting from hard disk is impossible.	<ul style="list-style-type: none"> <li>* Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks.</li> </ul>
<b>PROBABLE</b>	<b>SOLUTION</b>
Screen message says "Invalid Configuration" or "CMOS Failure."	<ul style="list-style-type: none"> <li>* Review system's equipment . Make sure correct information is in setup.</li> </ul>
<b>PROBABLE</b>	<b>SOLUTION</b>
Cannot boot system after installing second hard drive.	<ul style="list-style-type: none"> <li>* Set master/slave jumpers correctly.</li> <li>* Run SETUP program and select correct drive types. Call drive manufacturers for compatibility with other drives.</li> </ul>



## ***Motherboard Description***

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2003/02/14