

## Mainboard Diagram



### M2GTM-4VP

- NVIDIA nForce™4-4X MCH Chipset
- Support Socket AM2 64-bit Dual core AMD Athlon™64 X2 processor
- Support HTT 1000MHz
- Dual Channel DDR2 800 Memory DIMMs
- Support 4 Serial ATA Devices with RAID 0, 1, 0+1
- Support NV Firewall
- Ethernet LAN Supported
- AC'97 6 Channel Audio CODEC
- CPU Vcore 7-Shift
- Micro ATX Form Factor



## Features and Benefits

### Socket AM2 64-bit AMD Athlon™ 64 Processor with HyperTransport™ Technology

AMD64, a revolutionary technology allowing the processor to run 32-bit applications at full speed while enabling a new generation of powerful 64-bit software applications. Hyper-Transport™ technology can increase overall system performance by removing I/O bottlenecks, increasing system bandwidth, and reducing system latency.

### NVIDIA nForce™4-4X MCP / PCI Express MCPs for AMD Platforms

NVIDIA nForce4-4X based PCs feature the latest PCI-Express™ bus technology and deliver high performance, single-chip, low latency architecture of the NVIDIA nForce4-4X MCPs offer one of the industry's advanced core-logic solutions with qualified performance and the latest technologies—PCI Express, secure high-speed networking, and high-performance storage—and ensures that your PC stays ready for the newest games, future applications, and next-generation PC specifications.

### CPU Thermal Throttling / The Anti-superheated CPU protection Technology

To prevent the increasing heat from damaging of CPU while the activation of the Bi-turbo technology, the CPU Thermal Throttling Technology will make CPU be idling from 87.5% to 12.5% by manually preset CPU operating temperature from 40°C to 90°C. When the system senses the climbing operating temperature of CPU over the value preset, CPU Thermal Throttling Technology will narrow the operating bandwidth of CPU actively to low down the temperature to the value preset as the perfect protection system of hardware dynamic over-clocking technology.

### Serial ATA with RAID

Serial ATA is an evolutionary replacement for the Parallel ATA physical storage interface. Users of the Serial ATA interface benefit from greater speed, simpler upgradeable storage devices and easier configuration. Integrated Serial ATA controller of high-speed data transfers at up to 150 MB/s for each port and optional available on different model is RAID 0, 1 and 0+1 support.

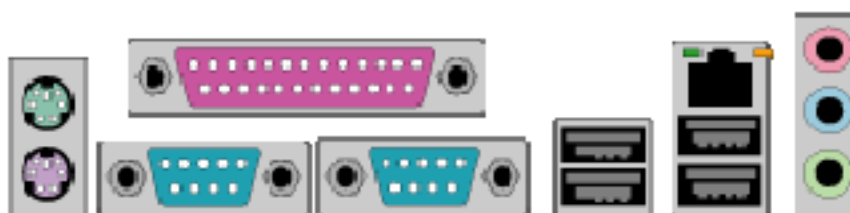
### CPU Smart Fan / The Noise Restrained System

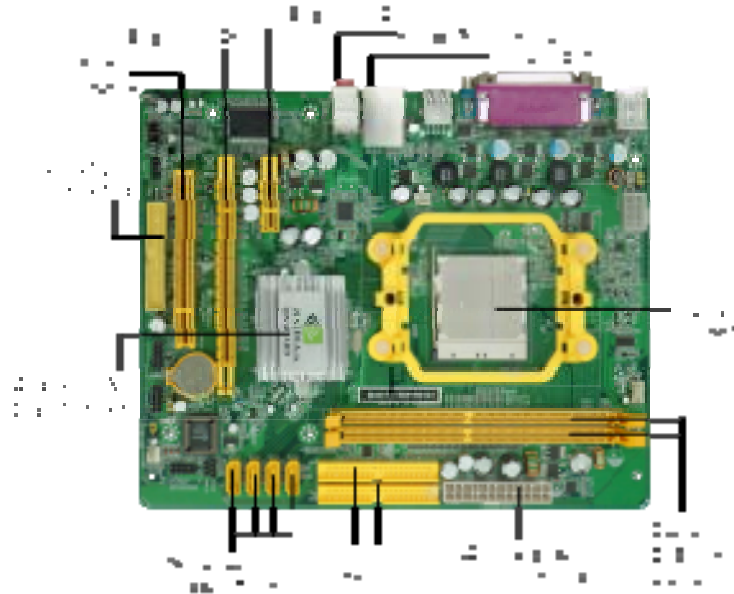
It's never been a good idea to sacrifice the sound effects for gaining the performance you need. CPU Smart Fan Noise Restrained System is the answer to all the noise restrained needed high performance computing system, the system will automatically increase the fan speed when CPU operating loading is high, after the CPU is in normal operating condition, the system will low down the fan speed for the silent operating environment. The system can provide the much longer life cycle for both CPU and the system fans for game use and business requirements

### CPU Vcore 7-Shift / Shift\_to the scalabilities and flexibilities

The adjustable voltage for CPU Vcore can be upgraded in seven stages for the precisely hardware dynamic over-clocking of demanding computing performance.

## Rear I / O





## **Mainboard Specifications**

<ul style="list-style-type: none"> <li>■ <b>CPU</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Socket AM2 HTT 1000 MHz AMD® Athlon™64 With HyperTransport Technology</li> <li>■ Compatible with 64-bit Dual Core AMD® Athlon™64 X2 Processor</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Chipset</b></li> </ul>	<ul style="list-style-type: none"> <li>■ nForce™4-4X MCH Chipset</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Memory</b></li> </ul>	<ul style="list-style-type: none"> <li>■ 2 * 240-pin DIMM Sockets for unbuffered Dual DDR2 800 SDRAM up to 4 GB</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Expansion Slots</b></li> </ul>	<ul style="list-style-type: none"> <li>■ 1 * 32-bit PCI Slots / 1 * PCI EXPRESS x1 / 1 * PCI EXPRESS x16 Slots</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Storage</b></li> </ul>	<ul style="list-style-type: none"> <li>■ 4 * Ultra DMA 100 / 66 / 33 IDE Devices Support</li> <li>■ Embedded nForce™4-4X Single Chipset Supports 4 Serial ATA HDDs with RAID Functions.</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Audio</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Realtek ALC655 AC'97 6-Channel Audio CODEC</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Ethernet LAN</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Marvell 88E3016 10 / 100 PCI LAN PHY</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>USB</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Embedded 8 * High Speed USB @ 480 Mbit / s</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Special Features</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Advanced Power Design that supports the latest Socket-AM2 K8 CPU</li> <li>■ "IMAGE IT!" System Backup Software and "ProMagicPLUS!" System Recovery System</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Rear Panel I / O</b></li> </ul>	<ul style="list-style-type: none"> <li>■ 4 * High Speed USB Connectors @ 480 Mbit / s</li> <li>■ 2 * Serial Ports</li> <li>■ 1 * Parallel Connector</li> <li>■ 1 * PS / 2 Mouse &amp; 1 * PS/2 Keyboard</li> <li>■ 1 * RJ45 Connector</li> <li>■ 1 * Audio I / O</li> <li>■ 1 * FDD Connector</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Internal I / O</b></li> </ul>	<ul style="list-style-type: none"> <li>■ 2 * High Speed USB Connectors @ 480 Mbit / s for 4 USB 2.0 Ports</li> <li>■ CPU / Chassis Fan Connectors; 25-pin Parallel connector</li> <li>■ 1 * 12V 4-pin ATX Power Connector and 1 * 24-pin ATX Power Connector</li> <li>■ CD / AUX Audio in</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>BIOS</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Award 4 MB Flash ROM</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Form Factor</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Micro ATX Form Factor</li> </ul>