

Chapter 1

INTRODUCTION

The ATX mainboard is a high-performance personal computer mainboard based on the Intel® Socket 370 processor and Cyrix® processor. The Intel® Socket 370 processor supports MMX™ (Multimedia Extension) technology.

The mainboard uses the highly integrated VIA VT82C693A chipset to support to provide the Host/AGP bridge. The VIA VT82C596B chipset integrates all system control functions such as ACPI (Advanced Configuration and Power Interface). The ACPI provides more Energy Saving Features for the OSPM(OS Direct Power Management) function. The VIA VT82C596B chipset also improves the IDE transfer rate by supporting Ultra DMA/33/66 IDE that transfers data at the rate of 33/66MB/s.

The mainboard also supports the System Hardware Monitor Controller. Its functions include: CPU /power supply/chassis fan revolution detect, CPU/ system voltage monitor, chassis intrusion detect and TOP TECH III as an optional function.

1.1 Mainboard Features

CPU

- Socket 370 for Intel® Celeron™, Pentium® III, and Cyrix® Joshua processors.
- Supports 300MHz, 333MHz, 366MHz, 400MHz, 433MHz, 466MHz, 500MHz and faster.

Chipset

- VIA VT82C693A/VT82C596B.

FSB (Front Side Bus)

- 66MHz, 100MHz and 133MHz are supported.

Main Memory

- Supports four memory banks using three 168-pin unbuffered DIMM.
- Supports a maximum memory size of 1GB (16M x 4) registered DIMM only.
- Supports 3.3v SDRAM DIMM.

Slots

- One AGP slot.
 - AGP specification compliant
 - AGP 66/133MHz 3.3v device support
- Five 32-bit Master PCI Bus slots and two 16-bit ISA Bus slots (wherein one PCI/ISA slot is shared).
*See Chapter 2-30 for further details on PCI slots.
- Supports 3.3v/5v PCI bus Interface.

On-Board IDE for Ultra 66/33

- An IDE controller on the VT82C596B PCI Chipset provides IDE HDD/CD-ROM with PIO, Bus Master Ultra DMA/33, and Ultra DMA/66 operation modes.
- Can connect up to four IDE devices.

On-Board Peripherals

- On-Board Peripherals include:
 - 1 floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
 - 2 serial port (COM A) + (COM B)
 - 1 parallel port supports SPP/EPP/ECP mode
 - 2 USB ports
 - 1 IrDA connector for SIR.

BIOS

- The mainboard BIOS provides “Plug & Play” BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface(DMI) function which records your mainboard specifications.
- ACPI(Advanced Configuration and Power Interface) feature.
- Anti-BIOS Virus function.

Dimension

- ATX Form Factor : 30cm(L) x 19.2cm(W) x 4 layers PCB

Mounting

- 6 mounting holes.

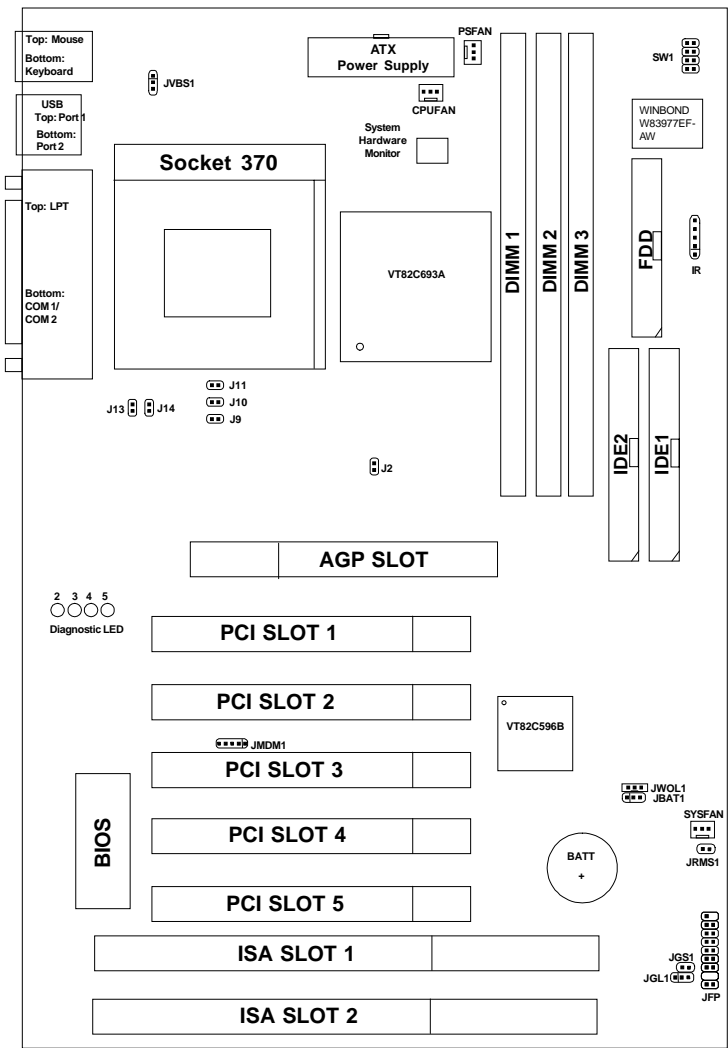
System Hardware Monitor

- CPU/Power Supply/Chassis Fan Revolution Detect
- CPU Fan Control detects the CPU temperature, then determine the FAN SPEED, which utilizes PC Alert program (the fan will automatically stop when the system enters suspend mode)
- System Voltage Detect
- 5VSB and Battery Voltage Detect
- CPU Overheat Warning.
- Display Actual Current Voltage
- Chassis Intrusion

Other Features

- Keyboard Password Wake-Up
- LAN Wake-Up
- Internal/External Modem Wake-Up

1.2 Mainboard Layout



MS-6153VA ATX Mainboard