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# *Introduction*

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The MS6382 MICRO ATX mainboard is a high performance computer mainboard based on **KT266/VT8366 and VT8233** chipset. The KT266 chipset is ideal for high quality and high integration desktop and notebook AGP/PCI/LPC computer systems based on Socket A processors.

The VT8366 Host system controller provides superior performance between CPU, DRAM, AGP bus, and V-Link bus with pipelined, burst, and concurrent operation. The VT8233 V-Link Client controller is a highly integrated PCI/LPC controller. It supports five PCI slots of arbitration and decoding for all integrated functions and LPC bus.

For sophisticated power management, the Apollo KT266 chipset provides independent clock stop control for the CPU/SDRAM, PCI, and AGP buses and Dynamic CKE control for powering down of the SDRAM. A separate suspend-well plane is implemented for the SDRAM control signals for the Suspend-to-DRAM operation.

Chapter 1 contains the following topics:

Mainboard Specifications	1-2
Mainboard Layout	1-4
Quick Components Guide	1-5
Key Features	1-6
MSI Special Features	1-6

## **Mainboard Specifications**

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### **CPU**

- Socket A for AMD® Duron™/Athlon™ processor.
- Support 600MHz up to 1.5GHz processor

### **Chipset**

- VIA® VT8366 chipset. (552 BGA)
  - FSB @200/266MHz
  - AGP 4x and high bandwidth Vlink host controller
  - Advanced memory controller support PC200/266 DDR technology
- VIA® VT8233 chipset. (376 BGA)
  - High bandwidth Vlink client controller
  - Integrated faster Ethernet controller
  - Direct sound ready AC97 digital audio controller
  - Ultra DMA 33/66/100 master mode EIDE controller
  - Support both ACPI and legacy APM power management

### **Clock Generator**

- 100MHz/133MHz clocks are supported.

### **Main Memory**

- Support four memory banks using two 184-pin DDR DIMM
- Support a maximum memory size of 2GB

### **Slots**

- One (Accelerated Graphics Port) AGP slot.
  - AGP specification compliant
  - Support AGP 2.0 1x/2x/4x
- One CNR (Communication Network Riser) slot.
- Three 32-bit Master PCI Bus slots
- Supports 3.3v/5v PCI bus Interface.

### **On-Board IDE**

- Dual Channel master mode IDE controller on the VIA® VT8233 Chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 33/66/100 operation modes.
- Can connect up to four IDE devices.

### **Audio**

- Chip Integrated
  - Direct Sound AC97 Audio
- CT5880 Hardware Audio (Option)

### **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 ports (COMA + COM B)
  - 1 parallel port supports SPP/EPP/ECP mode
  - 6 USB ports (2 Rear Connectors/ 2 USB Front Pin Headers - 4 ports)
  - 1 IrDA connector for SIR/ASKIR/HPSIR.
  - 1 Audio/Game port

### **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.

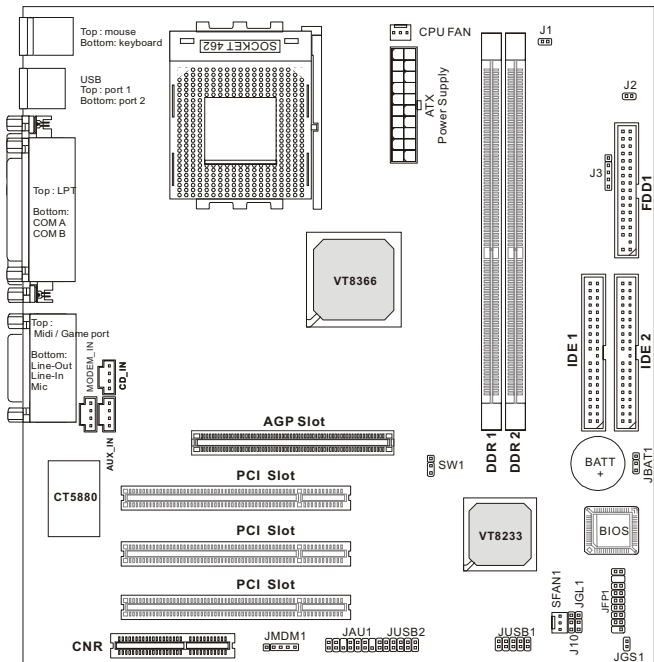
### **Dimension**

- ATX Form Factor: 24.3cm x 23.4cm

### **Mounting**

- 6 mounting holes.

# Mainboard Layout



MS-6382 MICRO ATX Mainboard

## Quick Components Guide

Component	Function	Reference
Socket 462	Installing CPU	p. 2-2
DDR1~2	Installing memory module	p. 2-4
ATX Power Supply	Installing power supply	p. 2-6
FDD1	Connecting to floppy disk drive	p. 2-11
J2	Inserting thermistor	p. 2-11
IDE1 & IDE2	Connecting to HDD drive	p. 2-12
JFP1	Connecting to case	p. 2-13
JMDM1	Connecting to modem card	p. 2-14
J1	Connecting to chassis intrusion switch	p. 2-14
CPUFAN	Connecting to processor fan	p. 2-15
SYSFAN	Connecting to system fan	p. 2-15
JUSB1 & 2	Connecting to USB devices	p. 2-17
JAU1	Connecting to Front Panel Audio	p. 2-18
JGL1	Connecting to powering saving LED	p. 2-19
JGS1	Connecting to power saving switch	P. 2-20
J3	Connecting to IR module	p. 2-20
JBAT1	Setting clear CMOS	P. 2-21
SW1	Setting CPU FSB	P. 2-22
J10	Setting Beep on Buzzer or Speaker	p. 2-22
AGP	Inserting AGP graphics card	p. 2-23
PCI Slot	Inserting expansion cards	p. 2-23
CNR	Inserting CNR card	p. 2-23

## **Key Features**

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- Micro ATX Form Factor with PC99 color connector
- Support Accelerated Graphic Port (AGP) Add-On Card
- Support AMD® PGA Socket A Duron/Athlon processors at 200/266MHz System Bus Frequencies
- Chip Integrated Audio (CT5880 hardware option)
- PC Alert System Hardware Monitor
- Support DMI (Desktop Management Interface) through BIOS
- LAN Wake Up Function
- Modem (Internal/External) Ring Wake Up Function
- Support PCI 2.2
- Suspend to RAM/Disk

## **MSI Special Features**

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The MSI special features are designed by MSI R&D which are only available in MSI mainboards. The 6382 mainboard is equipped with PC Alert™ III.



## **PC Alert™ III**

The PC Alert™ III is a utility you can find in the CD-ROM. The utility is just like your PC doctor that can detect the following PC hardware status during real time operation:

- \* monitor CPU & system temperature
- \* monitor fan speed
- \* monitor system voltage
- \* monitor chassis intrusion

If one of the items above is abnormal, the program main screen will be immediately shown on the screen, with the abnormal item highlighted in red. This will continue to be shown until user disables warning.

### **Features:**

- Network Management
  - Monitoring & remote control
- Basic System Utilities
  - Scandisk & Defragment to maintain your HDD
- 3D Graphics Design
  - Enables a more friendly user interface
- Software Utilities
  - SoftCooler Optimized Cooling
  - Doctor Y2K diagnoses Y2K problems
  - BusRacing function adjusts F.S.B under Windows 95/98
  - MoSpeed speeds up your modem transmission