
Introduction

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The MS-6368 Micro-ATX mainboard is a high-performance computer mainboard based on VIA Apollo PLE133 (ProMedia II) chipset and designed for the Intel® Celeron™ or Pentium !!! (FC-PGA) processor for inexpensive business/personal desktop markets.

The Apollo PLE133 chipset consists of the VT8601A North Bridge controller and the VT82C686A/686B South Bridge controller. The VT8601A integrates rich AGP2X graphics capabilities for 2D/3D software and internet multimedia applications. It supports Intel® Pentium !!!, Celeron™ and VIA Cyrix® III running at a variety of FSB frequencies from 66 to 133 MHz; and provides bandwidth and performance for internet and 3D graphics needs by supporting advanced memory technologies PC133 SDRAM and VC133 RAM (Virtual Channel RAM) up to 1.0GB.

The VIA® VT82C686A/686B Super I/O PCI integrated Peripheral Controller (PSIPC) includes PCI-to-ISA bridge controller, 10/100 BaseT Ethernet controller, AC'97 audio and MC'97 modem (for AMR slot). In addition, it supports dual bus-master IDE with Ultra DMA 33/66 (686B also supports Ultra DMA100), four USB ports, system hardware monitoring and enhanced power management capabilities.

The Apollo PLE133 chipset allows the MS-6368 mainboard to meet specific needs of internet multimedia and 3D graphics applications.

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Mainboard Specification

CPU

- Support Socket 370 for Intel® Celeron™ /Pentium !!! (FC-PGA) processor and VIA Cyrix® III processor
- Support CPU frequencies at 333/350/400/450/500/533/550/667/700/750/800/850/933/950MHz, 1GHz or above

Chipset

- VIA® VT8601A chipset (510 BGA)
 - FSB @ 133MHz
 - Integrated Trident Blade 2D/3D video accelerator
 - PCI advanced high performance memory controller
 - Support PC100/133 SDRAM, VCM & ESDRAM technology
- VIA® VT686A/686B chipset (352 BGA)
 - Enhanced Power Management Features
 - Integrated Super I/O (FDC, LPT, COM 1/2 and IR)
 - Dual bus Master IDE Ultra DMA 33/66 (686B supports up to Ultra DMA 100)
 - Integrated Hardware Soundblaster
 - Direct Sound AC97 Audio
 - ACPI

Clock Generator

- Support 66/100/133MHz clocks

Main Memory

- Support four memory banks using 168-pin unbuffered DIMM
- Support a maximum memory size of 1GB (256 MB DRAM technology)
- Support 3.3V SDRAM DIMM

Slots

- One AMR (Audio Modem Riser) slot (for PCB 1.0 only)
- One CNR (Communication Network Riser) slot (for PCB 2.0 only)
- Three 32-bit Master PCI Bus slots
- One ISA slot (for PCB 1.0 only)
- Support 3.3V/5V PCI bus Interface

On-Board IDE

- An IDE controller on the VIA® VT82C686A/686B chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 33/66 operation modes (686B can support up to Ultra DMA 100)
- Can connect up to four IDE devices

Audio

- Audio controller integrated in 686A/686B chipset
- Software audio codec ALC100
 - Onboard Front Audio Pin Header (optional)

Network

- Realtek 8139C

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 (COM1 + COM2) (COM2 is optional)
 - 1 parallel port supporting SPP/EPP/ECP mode
 - 4 USB ports (2 rear connectors and 1 USB front pin header- 2 ports)
 - 1 IrDA connector for SIR/CIR/FIR/ASKIR/HPSIR
 - 1 VGA port
 - 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.

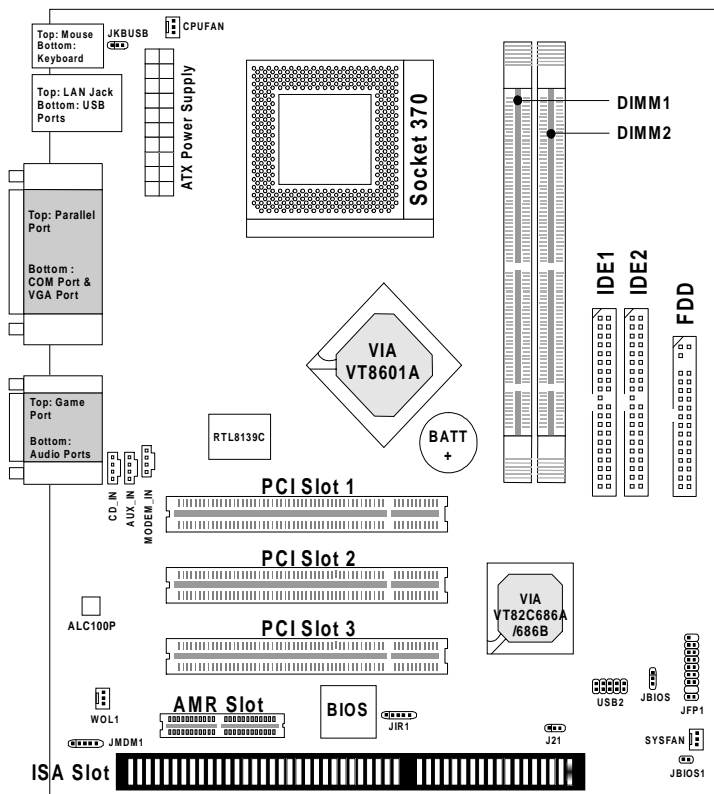
Dimension

- Micro-ATX Form Factor: 24.3cm (L) x 20.3cm (W)

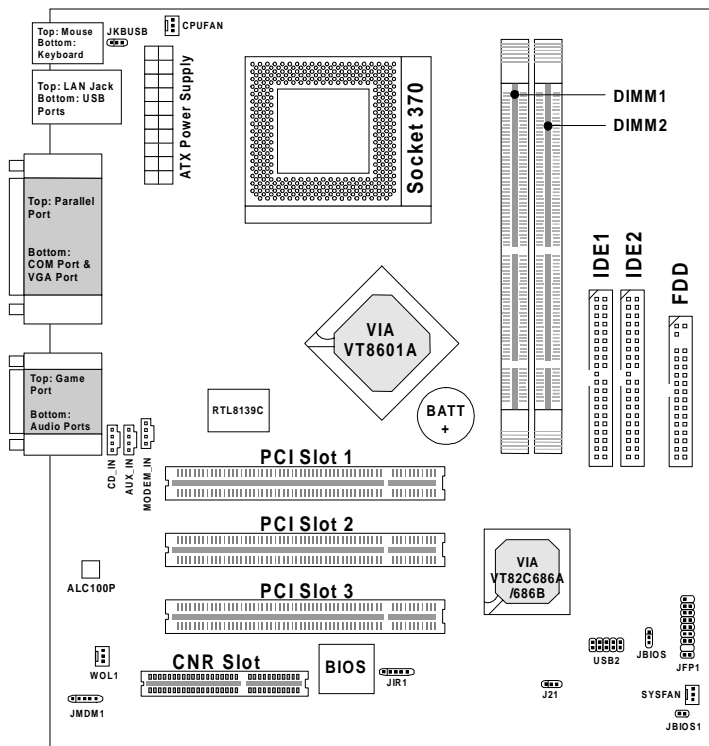
Mounting

- 6 mounting holes

Mainboard Layout



**MS-6368 Micro-ATX VA Mainboard
(PCB 1.0)**



MS-6368 Micro-ATX VA Mainboard (PCB 2.0)

Quick Components Guide

Component	Function	Reference
DIMM 1~2	Installing memory modules	See p. 2-4~2-5
Socket 370	Installing CPU	See p. 2-2~2-3
CPUFAN	Connecting to CPUFAN	See p. 2-18
SYSFAN	Connecting to SYSFAN	See p. 2-18
ATX Power Supply	Installing power supply	See p. 2-6
IDE1 & IDE2	Connecting to IDE hard disk drive	See p. 2-14
FDD1	Connecting to floppy disk drive	See p. 2-13
USB2	Connecting to USB interfaces	See p. 2-13
PCI Slot 1~3	Installing expansion cards	See p. 2-25
ISA Slot	Installing ISA cards (PCB 1.0 only)	See p. 2-26
AMR Slot	Installing expansion cards (PCB 1.0 only)	See p. 2-25
CNR Slot	Installing expansion cards (PCB 2.0 only)	See p. 2-26
JFP1	Connecting to the case	See p. 2-15
JMDM1	Connecting to a modem card	See p. 2-17
WOL1	Connecting to an LAN card	See p. 2-17
JIR1	Connecting to IrDA infrared module	See p. 2-20
JBIOS	Clearing CMOS data	See p. 2-22
JKBUSB & J21	Setting keyboard wake-up function	See p. 2-23
JBIOS1	Setting BIOS flash function	See p. 2-22

Key Features

- Microsoft® PC99 compliant
- T.O.P Tech™ - Thermal Overheat Protection Technology
- PC Alert™ III system hardware monitor
- CPU: Socket 370 for Intel® Celeron™/Pentium !!! Processor
- Micro-ATX Form Factor
- Clock: 66/100/133MHz
- Audio integrated in chipset
- Memory: 2 SDRAM DIMMs
- LAN Wake up Function
- Modem (External/Internal) Ring Wake up Function
- I/O: 2 serial ports, 1 parallel port, 4 USB ports, 1 floppy port, 1 IrDA connector, 1 Audio/Game port
- Slot: 1 ISA slot, 1 AMR slot, 3 PCI slots (for PCB 1.0)
- Slot: 1 CNR slot, 3 PCI slots (for PCB 2.0)

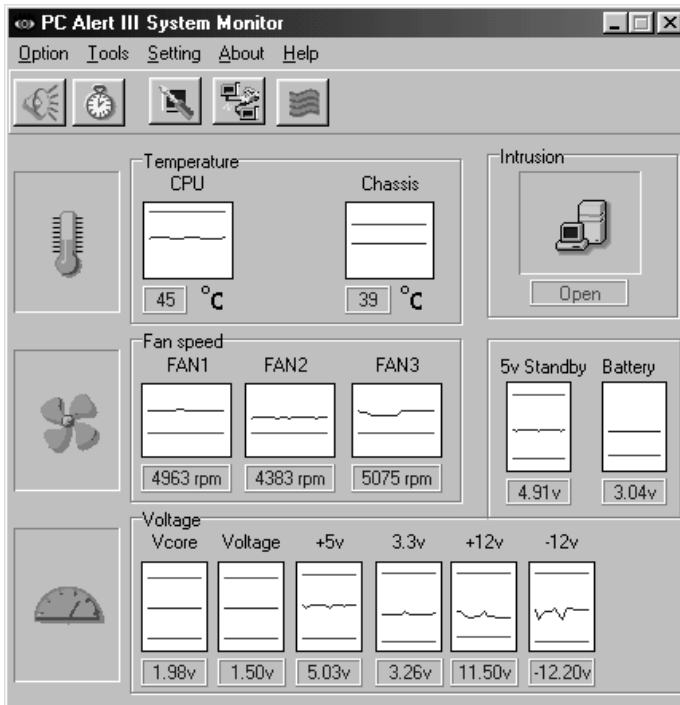
MSI Special Features

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 the 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