

Chapter 1

INTRODUCTION

The MS-6340M Micro-ATX VA mainboard is a high-performance computer mainboard based on VIA® KM133/KM133A chipset. The MS-6340M is designed for the AMD® Socket processor for inexpensive business/personal desktop markets.

The KM133/KM133A chipset consists of the VT8365/VT8365A system controller (552 pin BGA) and the VT82C686B PCI to ISA bridge (352 pin BGA). The system controller provides superior performance between the CPU, DRAM, AGP bus, and PCI bus with pipelined burst, and concurrent operation.

The VT82C686B integrates all system control functions such as ACPI (Advances Configuration and Power Interface). The ACPI provides more Energy Saving Features for the OSPM (OS Direct Power Management) function. The VT82C686B chipset also improves the IDE transfer rate by supporting Ultra DMA-33/66/100 IDE that transfers data at the rate 33/66/100MB/sec.

This mainboard which supports KM133/KM133A chipset coupled with VT8365/VT8365A and VT82C686B is ideal for high performance, high quality, high energy efficient and high integration desktop AGP/PCI/ISA computer systems.

1.1 Mainboard Features

CPU

- Socket A for AMD® PGA Duron/Athlon processor.
- Support 550~1.2GHz or higher processor. (Standard product support up to 1GHz. 1.2GHz will be implemented upon request.)

Chipset

- VIA® KM133 VT8365/KM133A VT8365A chipset. (552 BGA)
 - FSB @200MHz/266MHz
 - AGP 4x and PCI Advanced high performance memory controller
 - Support PC100/133 SDRAM, & VCM technology
- VIA® VT82C686B chipset. (352 BGA)
 - Enhanced Power Management Features
 - Integrated Super I/O (FDC, LPT, COM 1/2, and IR)
 - Dual bus Master IDE Ultra DMA33/66/100
 - Integrated Hardware Sound Blaster
 - Direct Sound AC97 Audio
 - ACPI
 - Support 4 USB Ports

Clock Generator

- 100MHz/133MHz clocks are supported. (200MHz/266MHz Internal System Bus)

MainMemory

- Support four memory banks using two 168-pin unbuffered DIMM.
- Support a maximum memory size of 1GB (32M x 8).
- Support 3.3v SDRAM DIMM.

Slots

- One AGP(Accelerated Graphics Port) 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.
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On-Board IDE

- An IDE controller on the VIA® VT82C686B 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.

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) or 1 serial port with 1 VGA port.
 - 1 parallel port supports SPP/EPP/ECP mode
 - 4 USB ports (2 Rear Connectors/USB Front Pin Header)
 - 1 IrDA connector for SIR/CIR/FIR/ASKIR/HPSIR.
 - 1 Audio/Game port

Audio

- Chip Integrated
 - Direct Sound AC97 Audio.
- Creative® CT5880 (Optional)
 - PCI 2.2 compliant.
 - 3D audio effects.
 - 32-voice XG wave table synthesizer.
 - Direct Sound/Music Hardware Accelerator.
 - Full-Duplex stereo.

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.

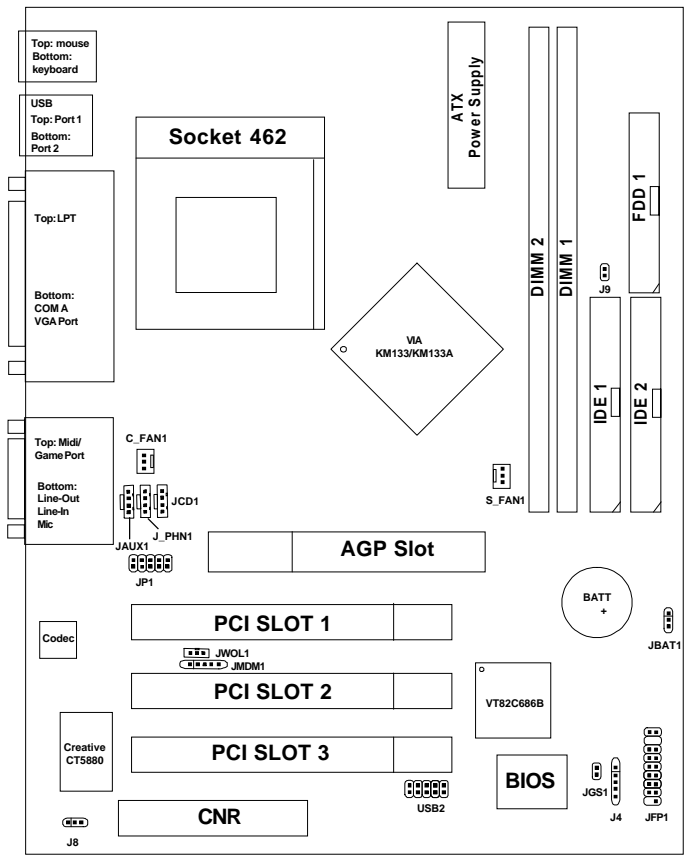
Dimension

- Micro ATX Form Factor: 20.8cm x 24.3cm.

Mounting

- 6 mounting holes.

1.2 Mainboard Layout



MS-6340M Micro-ATX VA Mainboard