Introduction

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The K7T Turbo (MS-6330 v3.0) mainboard is a high-performance computer mainboard based on VIA® KT133A chipset. The K7T Turbo (MS-6330 v3.0) is designed for the AMD® Socket processor for inexpensive business/personal desktop markets.

The KT133A chipset consists of the VT8363A system controller (552 pin BGA) and the VT82C686B (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 VT8363 supports six banks of DRAM's up to 1.5 GB and full AGP v2.0 capability for maximum bus utilization including 1x, 2x and 4x mode transfers, SBA (SideBand Addressing), Flush/Fence commands, and pipelined burst. The chip also supports enhanced PCI bus commands such as Memory-Read-Line, Memory-Read-Multiple and Memory-Write-Invalid commands to minimize snoop overhead.

The VT82C686B 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 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 KT133A chipset coupled with VT8363A and VT82C686B is ideal for high performance, high quality, high energy efficiency and high integration desktop AGP/PCI computer systems.

Chapter 1 contains the following topics:

Mainboard Specifications

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

Chipset
- VIA® KT133A chipset. (552 BGA)
  - AGP 4x and PCI Advanced high performance memory controller
  - Support PC100/133 SDRAM, & VCM technology
- VIA® 686B 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 Soundblaster
  - Direct Sound AC97 Audio
  - ACPI

Clock Generator
- 100MHz/133MHz clocks are supported.

Main Memory
- Support six memory banks using three 168-pin unbuffered DIMM.
- Support a maximum memory size of 1.5GB (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.
● Six 32-bit Master PCI Bus slots.
● Supports 3.3v/5v PCI bus Interface.

On-Board IDE
● An IDE controller on the VIA® 686B 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.

Promise 20265R On-Board (Optional)
● Support IDE RAID 0 or 1
● Can connect up to four IDE devices.

Audio (Optional)
● Chip Integrated
  - Direct Sound AC97 Audio

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
        - 4 USB ports (2 Rear Connectors/USB Front Pin Header)
        - 1 IrDA connector for SIR/CIR/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.
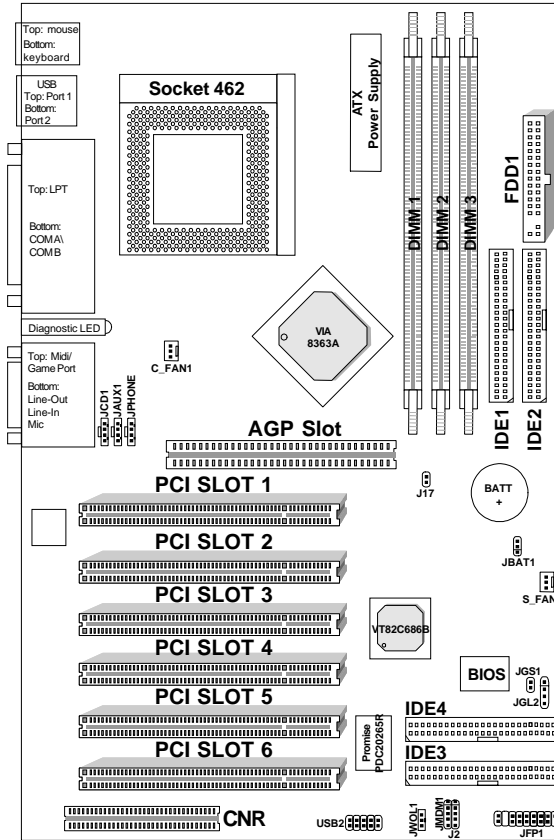
Dimension
- ATX Form Factor: 30.4cm x 23cm

Mounting
- 6 mounting holes.

Mainboard Layout

K7T Turbo (MS-6330 v3.0) Mainboard

Key Features

- ATX Form Factor
- Support Accelerated Graphic Port (AGP) Add-On Card
- Support Duron processors at 200/266MHz System Bus Frequencies
- Chip Integrated Audio (optional)
- 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
- Live BIOS
- Fuzzy Logic III
- Promise 20265R Onboard (optional)