

Chapter 1

Introduction

The MS-6330 Lite ATX VA mainboard is a high-performance computer mainboard based on VIA® KT133 chipset. The MS-6330 Lite is designed for the AMD® Socket processor for inexpensive business/personal desktop markets.

The KT133 chipset consists of the VT8363 system controller (552 pin BGA) and the VT82C686A/686B 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 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 VT82C686A/686B 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 VT82C686A/686B chipset also improves the IDE transfer rate by supporting Ultra DMA-33/66 IDE that transfers data at the rate 33/66MB/sec. The optional VT82C686B can support Ultra DMA-100 IDE that transfers data at the rate 100MB/sec.

This mainboard which supports KT133 chipset coupled with VT8363 and VT82C686A/686B is ideal for high performance, high quality, high energy efficiency and high integration desktop AGP/PCI computer systems.

Mainboard Features

CPU

- Socket A for AMD® PGA Duron/Athlon processor.
- Support 500MHz, 550MHz, 600MHz, 650MHz up to 1.2GHz.

Chipset

- VIA® KT133
 - FSB @200MHz
 - AGP 4x and PCI Advanced high performance memory controller
 - Support PC100/133 SDRAM,
- 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 DMA33/66
 - Dual bus Master IDE Ultra DMA100 (for VT686B only)
 - Integrated Hardware Soundblaster
 - Direct Sound AC97 Audio
 - ACPI

Clock Generator

- 100MHz clocks are supported (200MHz Internal System Bus)

MainMemory

- 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.
- Five 32-bit Master PCI bus slots
- Supports 3.3v/5v PCI bus Interface.

On-Board IDE

- An IDE controller on the VIA® VT686A/686B Chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 33/66 operation modes. (The optional VT686B can support up to Ultra DMA 33/66/100 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)
 - 1 parallel port supports SPP/EPP/ECP mode
 - 2 USB ports
 - 1 IrDA connector for SIR/ASKIR/HPSIR.
 - 1 Audio/Game port

Audio

- Chip Integrated
 - Direct Sound AC97 Audio

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.

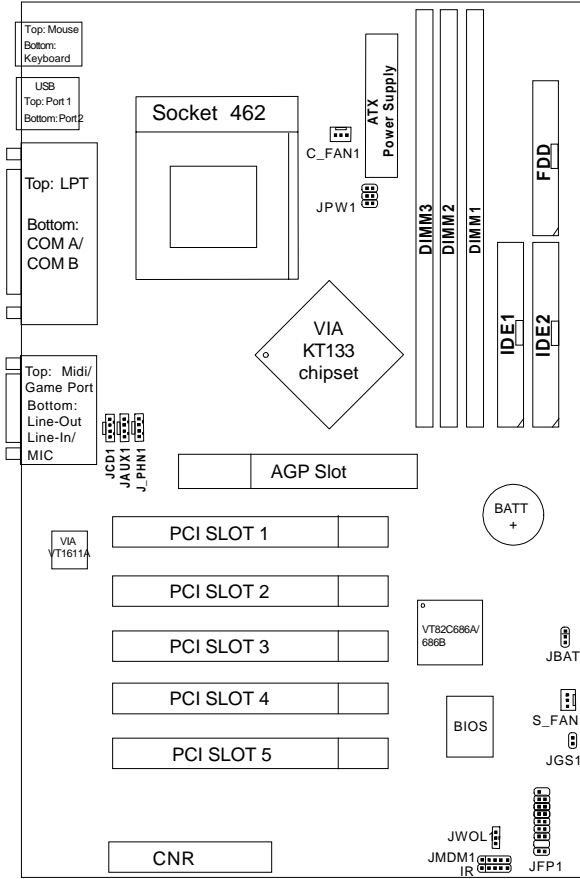
Dimension

- ATX Form Factor: 30.4cm x 20.3cm

Mounting


- 6 mounting holes.


Mainboard Layout






MS-6330 Lite ATX VA Mainboard

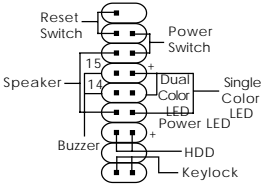
Jumper & Connector Description


JPW1  To supply the mainboard with 3.3V power, the jumper must be short. Otherwise, the mainboard will not have any power and cannot work.
Always short

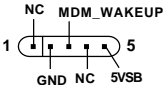
JBAT1  A battery must be used to retain the mainboard configuration in CMOS RAM. Short 1-2 pins of JBAT1 to store the CMOS data.


 **Keep Data**  **Clear Data**


JGS1  Attach a power saving switch to **JGS1**. When the switch is pressed the system immediately goes into suspend mode.


JFP1  The Keylock (reserved), Power Switch, Reset Switch, Power LED, Speaker, and HDD LED are all connected to the JFP1 connector block.
Note: There are two types of LED:
a. 3-pin single color LED connect to pin 4, 5, & 6.
b. 2-pin dual color LED connect to pin 5 & 6. (ACPI request)

JWOL1  The JWOL1 connector is use for LAN add-on cards that supports Wake Up on LAN function.

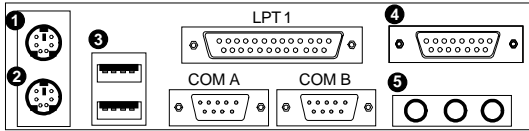
JMDM1  The JMDM1 connector is for use with Modem add-on card that supports the Modem Wake Up function.

IR  This connector is for optional wireless transmitting and receiving infrared module.

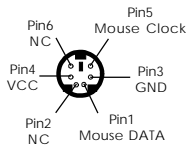
JAUX1  This connector is for DVD Add on Card with Line In connector.

JCD1  This connector is for CD-ROM audio connector.

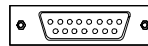
Mainboard Connectors



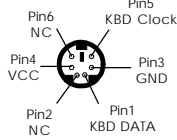
1 Mouse Connector



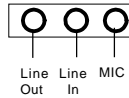
4 Joystick/MIDI



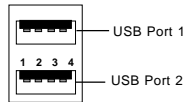
2 Keyboard Connector



5 Audio Ports



3 USB Ports



PIN	SIGNAL
1	VCC
2	-Data
3	+Data
4	GND