

# Chapter 1 Specification

## Introduction

This mainboard features an integration of the powerful AMD processors Athlon/Athlon XP/Duron and the North Bridge VIA Apollo KT400 plus South Bridge VT8235, with which the whole system performance supports 333/266/200 MHz system bus.

VIA Apollo KT400 plus VT8235 supports on-board AMD processors to implement the 333/266/200MHz Front Side Bus, the AGP 8X/4X interface, the LPC Super I/O, the DDR \*400/333 MHz SDRAM, the 2-channel AC'97 Audio interface, the USB 2.0 interface and ATA 133/100/66 data transfer rate. This chapter is to introduce to users every advanced function of this high performance integration.

**Topics included in this chapter are:**

**1-1 Mainboard Layout**

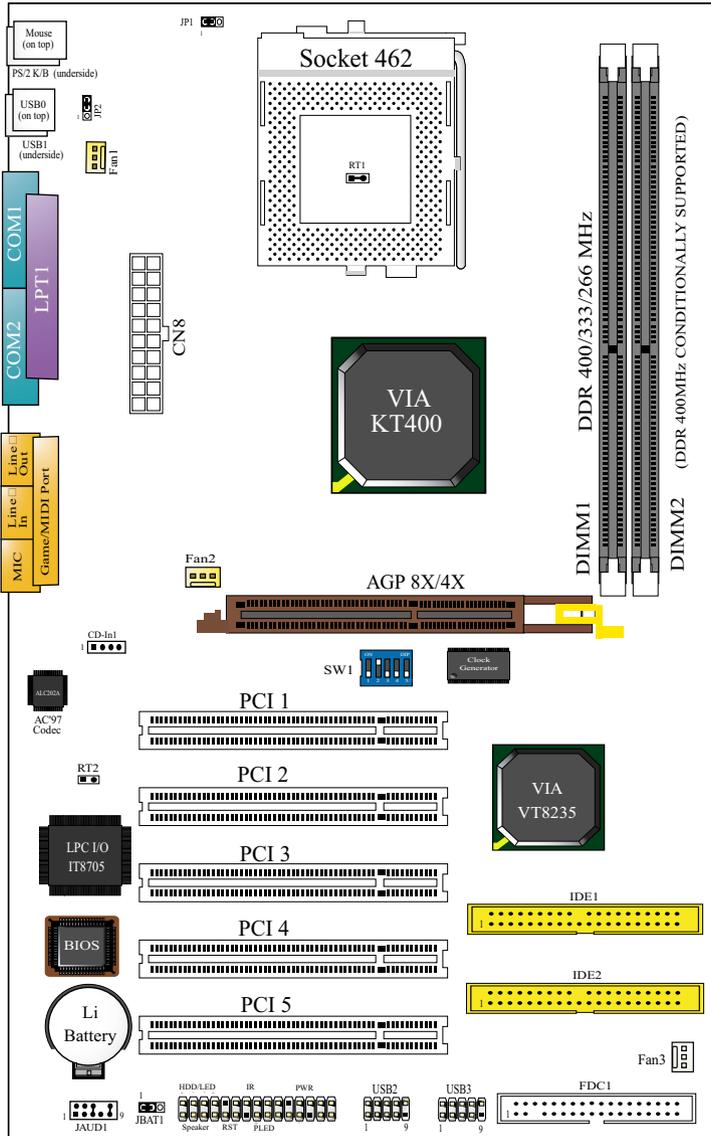
**1-2 Mainboard Specifications\*\***

**1-3 Mainboard Specification Table**

**1-4 Chipset System Block Diagram**

**\*\* If any difference is found between this manual and the Mainboard you are using, please look up the ERRATA/UPDATE Slip enclosed inside for the correction or updated information, or else contact the Mainboard Dealer or visit our Web Site for the latest manual update.**

# 1-1 KT400-C Mainboard Layout\*\*



## **1-2 Mainboard Specifications**

### **1-2.1 CPU Socket**

CPU Socket 462 (Socket A) on board, supporting AMD Athlon, Athlon XP and Duron processors and implementing 333/266/200MHz system bus

### **1-2.2 System Chipsets**

- North Bridge VIA KT400 for managing and supporting 333/266/200MHz system Bus, AGP 8X/4X interface and DDR 333/266MHz Memory Interface \*with an enhanced support of DDR 400MHz Memory Module which should have passed Soltek DDR 400 Memory Module Validation.
- South Bridge VIA VT8235 working with North Bridge KT400 supporting the V-Link, LPC Super I/O, PCI interface, ATA133 interface, USB V2.0 interface, as well as AC'97 Audio 2-channel interface.

### **1-2.3 Memory**

2 DDR DIMM 184-pin slots on board :

- Supporting unregistered, non-ECC \*DDR 400/333/266/200 SDRAM up to 2 GBs (DDR 400 Module supported conditionally)
- Supporting installation of mixed volumes yet same type of DDR SDRAM modules
- \* Soltek Computer Inc. typically runs a DDR 400 Memory Module Validation Program for Chipset VIA KT400/P4X400A. Detailed information is available in Soltek Web Site: [www.soltek.com.tw](http://www.soltek.com.tw)

### **1-2.4 BIOS**

- Supporting Plug & Play V1.0
- Flash Memory for easy upgrade
- Supporting BIOS Writing Protection and Year 2000 compliant
- Supporting BIOS Setup (See Chapter 4 BIOS Setup)

### **1-2.5 Accelerated Graphics Port (AGP) Interface**

AGP Controller embedded on board, supporting:

- 1.5V(8X/4X) power mode only, 1 AGP Slot supported
- 8X 66MHz AD and SBA signaling; AGP pipelined split-transaction longburst transfers up to 2GB/sec.
- AGP 8X/4X supported, AGP V3.0 compliant

### **1-2.6 Advanced System Power Management**

Advanced Configuration and Power Interface incorporated in BIOS for reducing power consumption :

- ACPI 1.0 compliant (Advanced Configuration and Power Interface)
- APM V1.2 compliant (Legacy Power Management)
- ACPI Suspend function supported
- PS/2 Keyboard & Mouse Power On
- Real Time Clock (RTC) with date alarm, month alarm, and century field

### **1-2.7 Multi-I/O Functions**

- PCI EIDE Controller, supporting:
  - 2 ATA 133 / 100 / 66 IDE connectors supporting up to 4 IDE devices
- Dedicated IR Functions:
  - 1x5 IR connector dedicated to IR function with Infrared-IrDA (HPSIR) and ASK (Amplitude Shift Keyed) IR
- Multi-mode parallel data transfer:
  - Standard mode, high speed mode ECP and enhanced mode EPP
- Floppy Drive Connector:
  - 1 FDD connector supporting 2 floppy drives with drive swap support
- Universal Serial Bus Transfer Mode:
  - USB V2.0 compliant, 480 Mb/s USB Bus, supporting Win 98 and later operating systems; USB drivers provided in Support CD for installation
  - 2 built-in USB connectors and 2 more USB pin-headers which require 2 optional USB cables to provide 4 more USB ports
- PS/2 Keyboard and PS/2 Mouse
- UARTs (Universal Asynchronous Receiver / Transmitter):
  - 2 complete serial ports (COM1 & COM2) on board

### **1-2.8 Expansion Slots**

- 5 PCI Bus Master slots
- 1 AGP 8X/4X slot
- 2 DDR DIMM slots

### **1-2.9 AC'97 Audio Codec on board**

AC'97 Audio Codec on board, 2-channel interface compliant

### **1-2.10 Hardware Monitor on board**

- Hardware Monitor integrated in LPC I/O IT8705F, providing monitoring functions on hardware voltage, temperatures and fan speeds.
- Utility Software SmartGuardian for displaying monitor status is enclosed in Support CD for user's installation.

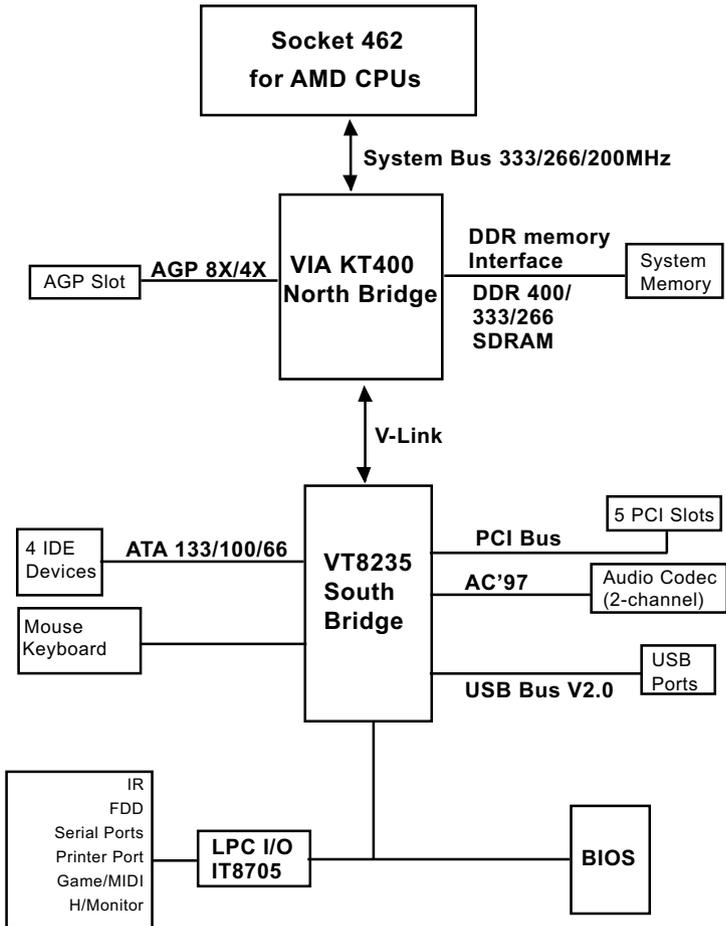
### **1-2.11 Form Factor**

- ATX form factor, ATX power supply
- Mainboard size: 305mm x 190mm

### 1-3 Mainboard Specification Table

<b>KT400-C Specifications and Features</b>	
CPU	Socket 462 for AMD Athlon, Athlon XP, Duron CPU
North Bridge	VIA KT400, supporting 333/266/200 MHz FSB
South Bridge	VT8235
BIOS	AMI BIOS
Memory	Supporting DDR *400/333/266 SDRAM, up to 2GB in 2 DDR SDIMM slots
I/O Chip	ITE IT8705F with Hardware Monitor
AGP interface	AGP 8X/4X mode only
Audio	AC'97 Audio Codec, 2-channel compliant
IDE Interface	2 ATA 133/100/66 IDE
VGA	Not integrated on board
PCI Slots	5 PCI Master slots on board
I/O Connectors	6 USB V2.0, 1 FDD port, 2 COM ports, 1 LPT, 1 IrDA, 1 PS/2 K/B, 1 PS/2 Mouse
Other common features	BIOS Writing Protection; Keyboard/ Mouse Power On; ATX Power Supply; ATX form factor

### 1-4 Chipset System Block Diagram



Socket 462 + VIA KT400 + VIA VT8235 Diagram