

Chapter 1

Introduction

1-1 Product Specifications

❑ Processor

- Supports AMD Socket A Duron and Athlon processors
- Supports 133MHz (266MHz Internal System Bus)

❑ Chipset

- VIA KT266 VT8366/VT8233 dual chip AGPset

❑ DRAM Memory

- Three 184-pin DDR DIMM sockets support up to 3GB
- Supports PC1600/PC2100 DDR SDRAM

❑ Expansion Slots

- One **CNR** slot (v1.0 compliant) for low cost modem solution.
- One Universal-AGP slot for both 2X/4XAGP at 3.3v or 1.5v (v2.0 compliant)
- Five 32-bit PCI slots (Rev 2.2 compliant)
- One **ACR** slot

❑ 2Mb Boot-Block Flash ROM

- Award System BIOS, supports PnP, APM, DMI, **ACPI** & Multi-device booting features i.e. floppy, LS120, CD-ROM, HDD(IDE, SCSI), ZIP-ATAPI etc.
- Includes Trend **ChipAway Virus** protection for virus-free boot and virus free operating system
 - 🔗 Trend ChipAway Virus is a rule-based anti-virus technology and does not require periodical updates of virus code

❑ Embedded Ultra DMA-100 PCI IDE controller

- Supports two IDE ports up to 4 ATAPI devices
- Supports up to PIO Mode 4 up to 16.6MBps, Multi Mode 4 up to 66MBps and Multi Word Mode 5 up to 100MBps with bus mastering
- Bus Mastering software drivers for common multi-task operating systems

❑ Onboard Ultra I/O

- ITE 8705 chip with keyboard controller
- Three UARTs support two serial ports and IR function for HPSIR and ASKIR
- One parallel supports SPP/ECP/EPP
- One floppy disk drive connector supports up to 2.88MB

❑ **Double Stack Back-Panel I/O Connectors**

- PC99 Compliant color connectors
- PS/2 Mini-DIN keyboard and mouse port
- Two USB ports
- Two 9-pin D-SUB male Serial port
- One 25-pin D-SUB female Printer port
- Audio Line-in/out and Mic-in jacks
- One 15-pin D-SUB female Game/MIDI port

❑ **Onboard PCI Audio Subsystem** (optional)

- CMedia 8738 audio chip w/ legacy audio SB16/Pro compatible
- Advanced 64-voice wavetable synthesizer
- Programmable independent sample rate from 4KHz to 48KHz for recording and playback
- Full-duplex operation for simultaneous recording and playback
- Supports MS DLS (Downloadable sample) level-1 technology with limitless variety of instrument samples using PC RAM
- Supports HRTF 3D positional audio with MSDS, DS3D, DirectMusic, Aural A3D and Creative EAX (Environment Audio Extensions), C3DX APIs
- 4 or 6 (optional) channel speaker audio support is easy to build up a Home Theater environment
- (Optional) supports Fiber Optic module for Internet music, PC, and MD connections
- Supports MIDI and dual game ports

❑ **Audio Subsystem via AC-link** (optional)

- AC'97 V2.1 compliant CODEC

❑ **Embedded System Monitor Hardware**

- 8 external voltage inputs for Vcore, +/-12v, +5v, 2.5v and 3.3v (internal detecting), 1.5v, vcc5sby
- 1 temperature sensor with thermistor for CPU
- 2 Fan speed (CPU and System) monitoring

❑ **Embedded USB Controller**

- UHCI compliant USB host controller with Root Hub
- Four USB ports (UHCI v1.0 compliant)
- Optional USB riser with additional 2 USB ports

❑ **Board Dimensions**

- ATX form factor, 305mm x 242mm, 4 Layers

❑ Advanced Management Features

- Poly-fuse protection for USB and keyboard circuitry
- Complete Data Security:
 - * **Flash BIOS write protection** against unauthorized access
 - * **Trend ChipAway Virus** for a 100% virus free system boot-up
 - * **Embedded Flash Utility** to ease BIOS upgrade and eliminate in compatibility with the flash utility version.
- Advanced Management Features:
 - * Power-on events:
 - WOL(Wake-on-LAN) network card, Modem ring, RTC Alarm
 - * Software power-off control for Win9x
 - * Over-ride power button
 - * Three states advanced Power-failure recovery: Always On, Always Off, Last state

❑ Switching Power Supply Requirement

Output Voltage	Max. Regulation Requirement	Min. Current Requirement (Amps)
+12V	+/- 5%	5.5
+5V	+/- 5%	20
+3.3V	+/- 5%	15
-5V	+/- 10%	0.5
-12V	+/- 10%	0.5
+5VSB	+/- 5%	0.75

Table 1-1



3.3V at 15Amps is necessary too guarantee full loading operation because some AGP cards and memory modules have high current consumption.

1-2 Package Contents

This product comes with the following components:

- ❑ One mainboard
- ❑ One 40-pin (80-wire) UDMA-66/100 IDE connector ribbon cable (Figure 1-1)
 - * **Color coded connection for UDMA-66/100 cable**
 - Blue to mainboard, Gray to Master and Black to slave
- ❑ One 34-pin floppy disk drive ribbon cable (Figure 1-2)
- ❑ Optional 6 Channel Audio Adapter card with cable (Figure 1-3)
- ❑ One User's Manual
- ❑ One CD-ROM that includes
 - Acrobat Reader
 - Award Flash Utility
 - Award DMI Utility for DOS
 - VIA audio driver and utility for DOS/Win9x/NT
 - VIA LAN driver for DOS/Win9x/Win2000/NT
 - VIA Service Pack for Win9x/WinNT including Bus Master IDE drivers, AGP VxD and etc.
 - Optional **Value Pack 2001** software group including Norton AntiVirus, AutoSave, ADOBE ActiveShare, Acrobat Reader, Imagemore, X-stop, Appio and Ewalla.



Figure 1-1 UDMA-66/100 IDE cable

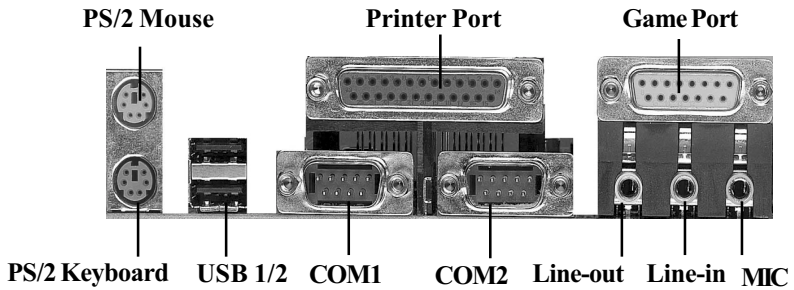
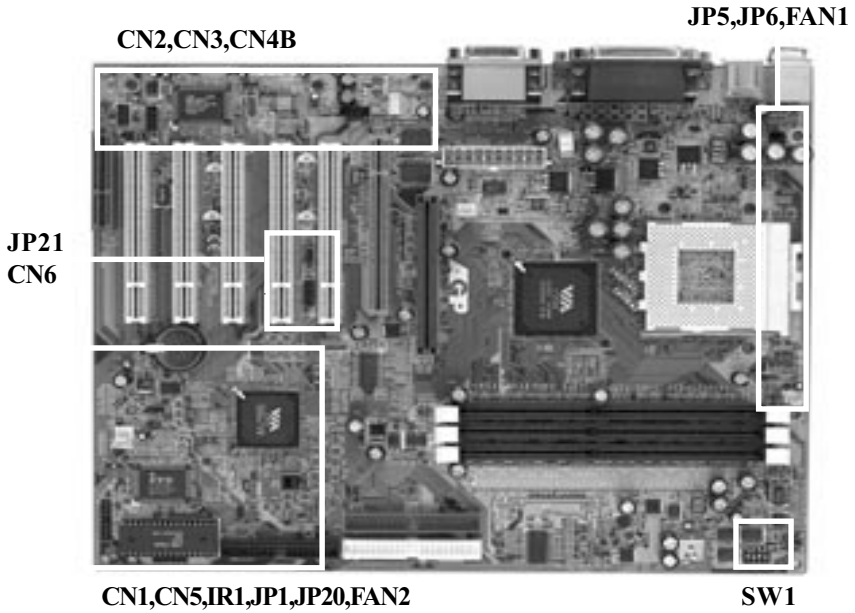


Figure 1-2 Standard Floppy cable



Figure 1-3 (Optional) 6 Channel
Audio Adapter card

1-3 Mainboard Layout



1-4 Connector and Jumper Reference Chart

Jumper & Connector No.	Function	Page
JP1	Clear CMOS Data	13
JP5	PS/2 Keyboard Power-on Function	13
JP6/JP21	USB 0/1 & 2/3 Device Power On Function	13
JP20	CPU Bus Frequency	14
CN1	Over Ride Power Button Connector	11
	Power Indicator LED Connector	11
	System Reset Switch Connector	12
	Speaker Connector	12
	Green Switch Connector	12
	IDE Activity LED Connector	12
CN2	CD-ROM Audio-in	14
CN3	Auxiliary Audio-in	14
CN4B	Bass/Center and Rear L/R Speaker(optional)	14
CN5	WOL (Wake-on-LAN) Connector	15
USB1/CN6	USB Ports and USB 3/4 Connector	15
IR1	IR connector	16
SW1	Frequency Ratio Setting	16
PT1	PS/2 Mouse and Keyboard Ports	16
FAN1/FAN2	CPU/System Cooling Fan Connectors	17
PW1	ATX Power supply Connector	10