# Chapter 1

## Introduction

## 1-1 Product Specifications

#### □ Processor

- Supports Intel Pentium 4 Socket 478 processors
- Support system bus at 400MHz

## □ Chipset

- Intel 845 + ICH2 chipset

#### □ DRAM Memory

- Two 184-pin DDR DIMM sockets support up to 2 GB
- Supports PC-1600/2100 DDR SDRAM Modules

## **■** Expansion Slots

- One Universal-AGP slot for both 2X/4XAGP at 1.5v (v2.0 compliant)
- Five 32-bit PCI slots (Rev 2.2 compliant)
- One CNR slot for modem, audio and LAN riser

This motherboard support only 1.5v AGP electricals. AGP card using 3.3v or other voltages may result in system boot up failure, malfunction, etc.

#### **☐** Boot-Block Flash ROM

- Award System BIOS, supports PnP, APM, DMI, ACPI & Multi-device booting features i.e. floppy, LS120, CD/DVD-ROM, HDD(IDE, SCSI), ZIP-ATAPI etc.

## ☐ 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 Super I/O Controller

- ITE 8712 LPC with system monitoring hardware
- 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
- Integrated smart card reader function and interface

## □ Embedded System Monitor Hardware

- 8 external voltage inputs
- 2 temperature sensor with thermistor for CPU and System
- 2 Fan speed monitoring with ON/OFF control in suspend

#### **□** Embedded USB Controller

- Support up to 4 USB ports (UHCI v1.0 compliant)
- Optional USB riser with additional 2 USB ports

#### **□** Double Stack Back-Panel I/O 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

- CMedia 8738 audio chip w/legacy audio SB16/Pro compatible
- Full-duplex operation for simultaneous recording and playback

## ☐ Audio Subsystem via AC-link (optional)

- AC"97 V2.1 compliant CODEC with integrated SRC

## 1-2 Package Contents

	This	product	comes	with	the	following	component
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- ☐ One mainboard
- ☐ One 40-pin (80-wire) UDMA-100 IDE connector ribbon cable (Figure 1-1)

## \* Color coded connection for UDMA 100 cable

Blue to mainboard, Gray to Master and Black to slave

- ☐ One 34-pin floppy disk drive ribbon cable (Figure 1-2)
- Optional USB adaptor
- ☐ One User's Manual

#### ☐ One CD-ROM that includes

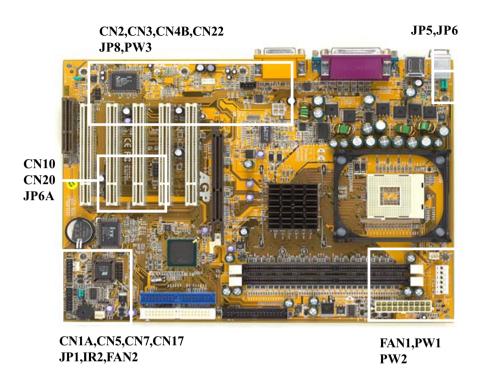
- Acrobat Reader
- Award Flash Utility
- Award DMI Utility for DOS
- Audio driver and utility for Win9x, ME, 2000 and NT4.0
- Intel Service Pack for Win9x/WinNT including Bus Master IDE drivers, AGP VxD and etc.
- Optional **Value Pack 2001** software group including Norton AntiVirus, AutoSave, ADOBE ActiveShare, Acrobat Reader, Imagemore, X-stop, Appio and Ewalla.
- See the Readme.txt file in the CD-ROM's root directory for installation instructions of all driver and software utilities.

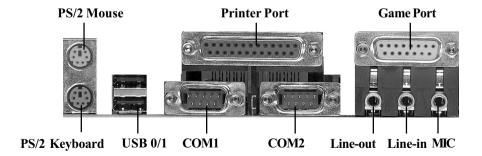


Figure 1-1 UDMA 100 IDE cable

Figure 1-2 Standard Floppy cable

## 1-3 Mainboard Layout





# 1-4 Connector and Jumper Reference Chart

Jumper & Connector No.	Function	
JP1	Clear CMOS Data Jumper	
JP5	Power On By Keyboard	8
JP6/JP6A	JP6/JP6A Power On By USB 0/1 and 2/3	
JP8	IP8 Onboard Audio	
	Over ride Power Button Connector	7
	Power Indicator LED Connector	
CN1A	Green Button/LED Connector	
CNIA	System Reset Switch Connector	
	Speaker Connector	
	IDE Activity LED Connector	1
CN2	CD-ROM Audio in Connector	8
CN3	Auxiliary Audio-in Connector	8
CN4	Optional Audio Mono-in/out Connector	9
CN4B	AC3 Surround/Center + Bass Connector	9
CN5	WOL (Wake-on-LAN) Connector	9
CN7	Smart Card Reader Connector	9
CN10	Alert On LAN Connector	9
CN17	Blue LED Connector	9
USB1/CN20	USB 0/1 Ports andUSB 2/3 Connector	9
CN22	CN22 Front Panel Audio Connector	
IR2	IR/CIR Connector	10
FAN1/FAN2	CPU/System Cooling Fan Connector	10
PW1/PW2/PW3	ATX/ATX12V Power Supply Connector	6