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)
- Three 32-bit PCI slots (Rev 2.2 compliant)
- One CNR slot supports 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
- 1 temperature sensor with thermistor for CPU
- 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

❒ **Audio Subsystem via AC-link**
  - AC"97 V2.1 compliant CODEC with integrated SRC

1-2 Package Contents

This product comes with the following components:
❒ 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.
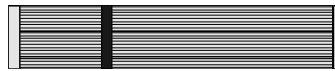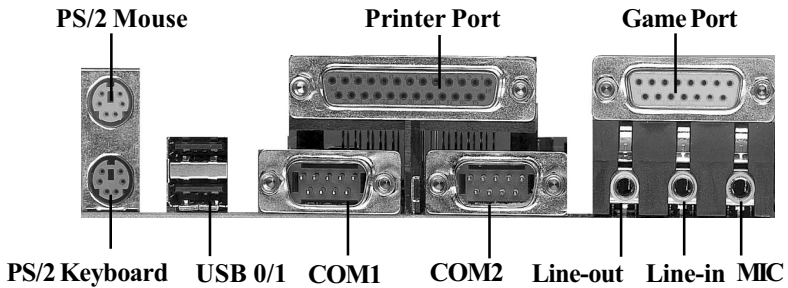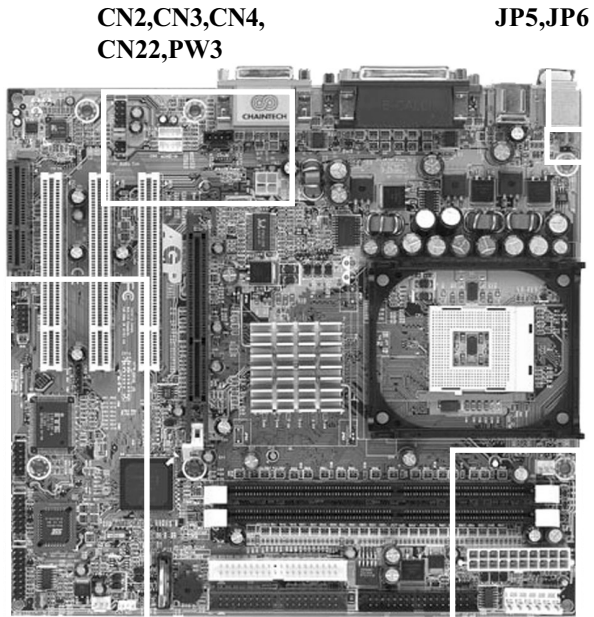

Figure 1-1   UDMA 100 IDE cable

Figure 1-2   Standard Floppy cable

1-3 Mainboard Layout

CN2,CN3,CN4,
CN22,PW3   JP5,JP6

CN1A,CN5,CN7,CN10,CN17   PW1,PW2,FAN1
CN20,JP1,JP6A,FAN2,IR2

PS/2 Mouse   Printer Port   Game Port

PS/2 Keyboard   USB 0/1   COM1   COM2   Line-out Line-in MIC

1-4 Connector and Jumper Reference Chart

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