Chapter 1

Introduction

1-1 Product Specifications

❒ **Processor**
- Supports Intel Pentium 4 Socket 478 processors
- System bus 400MHz

❒ **Chipset**
- SiS 645 + SiS 961 Chipset

❒ **DRAM Memory**
- Three 184-pin DDR DIMM sockets support up to 3GB
- Supports PC1600/PC2100/PC2700 DDR SDRAM

❒ **Expansion Slots**
- 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)

❒ **Boot-Block Flash ROM**
- Award 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

❒ **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 W83L518D Smart @ I/O Function (optional)**
- Integrates smart card reader function and interface, to be qualified for meeting PC/SC standard
- Supports flash memory card (Memory Stick and SD Memory interface

❒ **Onboard Ultra I/O**
- ITE 8705F 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

❒ **Embedded USB Controller**
- UHCI compliant USB host controller with Root Hub
- Support up to six USB ports (UHCI v1.0 compliant)
- Optional USB adapter for 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 CMedia 8738Audio Subsystem** (optional)
- Full-duplex operation for simultaneous recording and playback
- 6 channel speaker audio support

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

❒ **Onboard High Performance 1394 Link-Layer Controller (optional)**
- Serial bus data rates at 100,200 and 400Mbps
- IEEE P1394a compliant and IEEE std. 1394-1995
- Programmable ATA/ATAPI interface supporting PIO/DMA/ULTRA DMA modes 0-4

❒ **Embedded System Monitor Hardware**
- 8 external voltage inputs
- 2 temperature sensor with thermistor for CPU and system
- 2 Fan speed (CPU and System) monitoring

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: Blue to mainboard, Gray to Master and Black to slave
❒ One 34-pin floppy disk drive ribbon cable (Figure 1-2)
❒ One User's Manual
❒ One CD-ROM that includes
- Award Flash Utility and Award DMI Utility for DOS
- SiS audio drivers and utilities for Win9x/2000/NT/XP
- SiS Service Pack for Windows OS including Bus Master IDE drivers, AGP VxD and etc.
❒ Optional **Value Pack 2001** software pack 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 in- structions of all driver and software utilities.
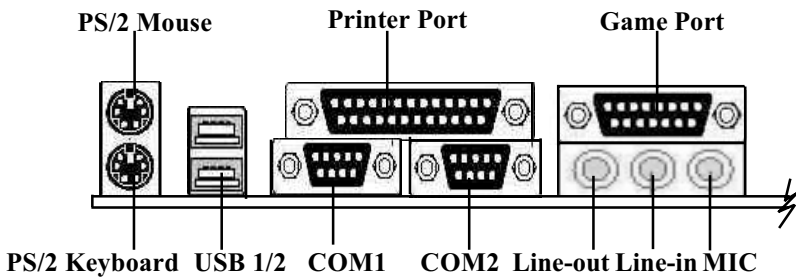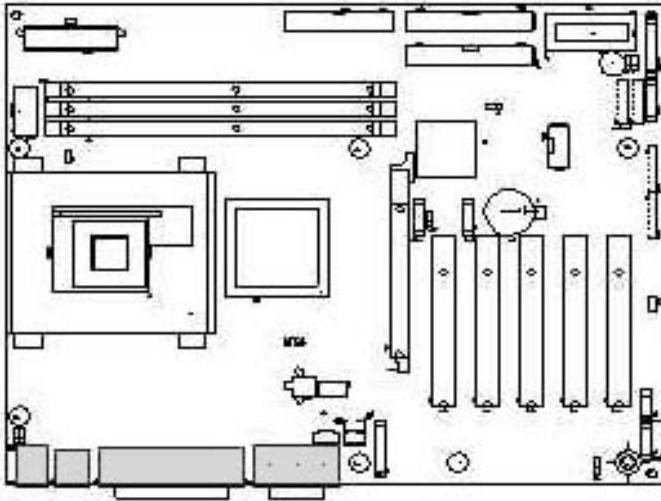

Figure 1-1 UDMA-100 IDE cable

Figure 1-2 Standard Floppy cable

1-3 Mainboard Layout

PS/2 Mouse   **Printer Port**   **Game Port**

PS/2 Keyboard USB 1/2 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 1/2 and 3/4	8
JP8	Optional Onboard Audio	8
JP24 or SW1	External Clock Frequency	8
CN1A	Over ride Power Button Connector Power Indicator LED Connector Green Button Switch/LED Connector System Reset Switch Connector Speaker Connector IDE Activity LED Connector	7
CN2	CD-ROM Audio in Connector	9
CN3	Auxiliary Audio-in Connector	9
CN4	Audio Mono-in/out Connector	9
CN4B	AC3 Surround/Center + Bass Connector	9
CN4C	Optional S/PDIF-in/out Connector	9
CN5	WOL (Wake-on-LAN) Connector	9
CN7A/B/C	Optional Smart@I/O Reader Connectors	9
CN17	Blue LED Connector	10
USB1/CN20	USB 1/2 Ports and USB 3/4 Connector	10
CN22	Front Panel Audio Connector	10
CN23/CN24	Optional Wafer1394 Connectors	10
IR2	IR/CIR Connector	10
FAN1/FAN2/FAN3	CPU/System/Case Cooling Fan Connector	10
PT1	PS/2 Mouse and Keyboard Ports	11
PW1/PW3/PW4	ATX/ATX12V Power Supply Connector	6