

Chapter 1

Introduction

1-1 Product Specifications

❑ Processor

- Supports up to 333 MHz Intel **Pentium® II** processors and **Celeron®** processors
- Slot 1 CPU socket with retention mechanism
- High efficiency **Switching Power Module** (1.8v ~ 3.5v, 0.1v increments)
- Supports 60/66 MHz system clock speeds
- Innovative **SeePU** technology (software CPU installation with no jumper settings)



Supports 68 (Turbo mode), 75/83 MHz system clock for over-clocking possibility. (see section 2-3 "Overclocking")

❑ Chipset

- Intel **82440EX** two chip PCIs

❑ DRAM Memory

- Two 3.3V 168-pin DIMM sockets support up to 256 MB
- Supports 16/32/64/128MB, 64/72-bit unbuffered Synchronous DIMM modules



Because 128MB unbuffered DIMM modules are not yet mainstream, their compatibility can not be 100% guaranteed. (See Section 2-5 for details.)

❑ Expansion Slots

- Three 32-bit PCI slots (Rev 2.1 compliant)
- One 16-bit ISA slots (one PCI/ISA shared slot)

❑ BIOS

- Award System BIOS, supports PnP, APM, DMI & 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
 - ✎ The Trend ChipAway Virus is a rule-based anti-virus technology and does not require periodical updates of virus code

❑ Two Ultra DMA-33 PCI IDE Ports

- Supports up to PIO Mode 4, Multi-word Mode 2 and Ultra DMA-33 timings
- Bus Mastering software drivers for all well known multi-task operating systems

❑ On-board Ultra I/O

- ITE8671 I/O chip (built-in AMI KBC software and RTC)
- One Parallel (SPP/ECP/EPP) and two Serial (16550A compliant) ports
- One floppy disk drive connector supports up to 2.88MB, Japanese 3-Mode, and 1Mbps transfer rates
- IrDA IR function supports up to 115.2Kbps

❑ On Board Audio Subsystem

- ESS PCI audio Solo-1(1938) controller
- Up to 48KHz programmable sample rate for record and playback
- Legacy audio compatible
- Advance wavetable synthesizer using wavedata on the system memory
- External audio connectors for Line-in, Line-out, Mic jack and Game/MIDI port

❑ On-board 3D AGP VGA

- **ATI RAGE- IIC**(Rage Pro Optional) chip for mainstream graphic performance
- **4MB SGRAM** onboard
- Supports proprietary feature connector for TV-out module (Optional)

❑ Two Channel USB Ports



Now under compatibility testing with different peripherals

❑ Board Dimensions

- Micro-ATX form factor, 244mm x 210mm, 4 Layers
- Six mounting holes

❑ Advanced Management Features

- Software power off control, Over-ride power button, Power-on by modem, Power on by alarm, Power-on by keyboard, Chassis intrusion detection, Power failure recovery, **Wake Up On LAN**, etc.
- **Poly-fuse** over-current protection for USB and keyboard
- Flash BIOS protect via BIOS
- Supports **SB-link** header for Creative PCI audio cards
- On-board Management Extension Hardware and includes system monitoring software to streamline PC management

- Meets EPA Green PC standard: power consumption under 30W in Doze, Standby, and Suspend modes
- **ACPI** features ready when ACPI-enabled O/S is available

❑ Switching Power Supply Requirement (at least 200 Watts)

Output Voltage	Max. Regulation Requirement	Min. Current Requirement (Amps)
+12V	+/- 5%	0
+5V	+/- 5%	1
+3.3V	+/- 5%	10*
-5V	+/- 10%	0
-12V	+/- 10%	0
+5VSB	+/- 5%	0.75

Table 1-1



3.3V at 10Amps is necessary to 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
- ☐ On-board Slot 1 universal retention mechanism and two bridges
- ☐ One 40-pin IDE connector ribbon cable (Figure 1-1)
- ☐ One 34-pin floppy disk drive ribbon cable (Figure 1-2a) or (Figure 1-2b)
- ☐ One User's Manual
- ☐ One plastics Stub for ATX chassis installation
- ☐ One CD-ROM that includes
 - Intel Bus Master IDE drivers for Win95, WinNT, and OS/2
 - Sound Driver and Utility for Win95 and WinNT
 - Graphics Accelerator Driver and Utility for Win95 and WinNT
 - Award Flash EPROM Utility, Award DMI Utility
 - Exclamation Mark Remover Utility
 - Shepherd Utility--System Health Monitoring Software
 - Trend **PC-cillin** Anti-virus v3.0(OEM version) Utility in eight different languages



Figure 1-1

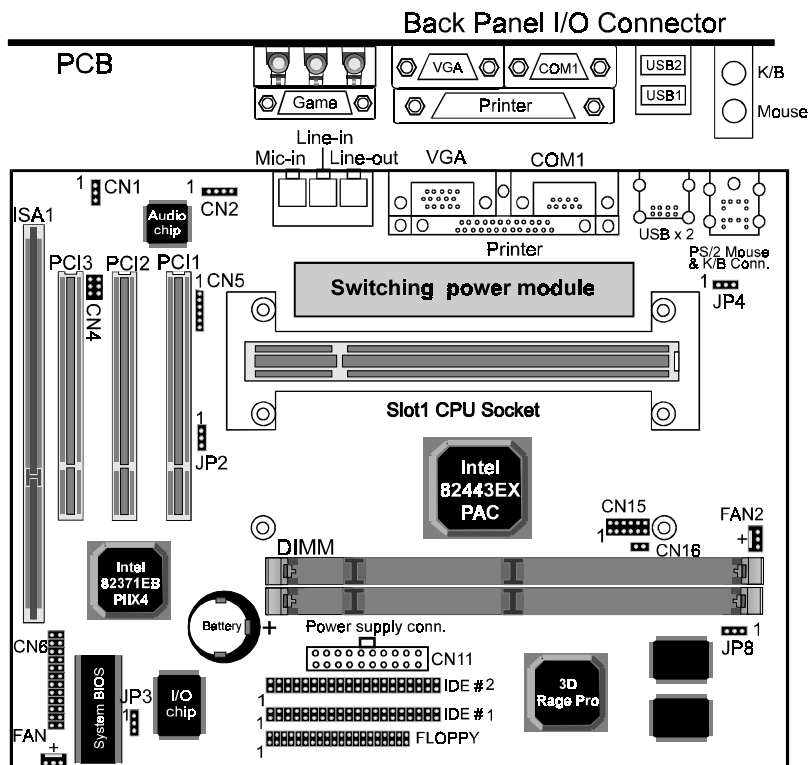


Figure 1-2a Standard Floppy cable



Figure 1-2b Optional 5.25 in. floppy cable

1-3 Mainboard Layout



1-4 Connector and Jumper Reference Chart

Jumper & Connector No.	Function	Page
CN1	WOL (Wake on LAN) Connector	14
CN2	CD-ROM audio in Connector	15
CN4	Creative's SB-LINK connector	15
CN5	Infrared connector	14
CN6	Keyboard lock & Power indicator LED connector	12
	System reset switch connector	13
	Speaker connector	13
	Green switch & Green LED connector	13
	Turbo LED connector	13
	IDE activity LED connector	13
	Over-ride power button connector	12
CN11	ATX Power supply connector	11
FAN1	System cooling fan connector	14
FAN2	CPU cooling fan connector	14
J P2	On board Audio enable/disable jumper	15
J P3	Clear CMOS data jumper	15
J P4	Power on by keyboard enable/disable jumper	16
J P8	On board VGA enable/disable jumper	17
Ports	PS/2 mouse and keyboard ports	16
Ports	USB (Universal Serial Bus) ports	17