
SECTION 1.

PRODUCT INFORMATION

Thanks for purchasing EX/LX Pentium II mainboard.

This user's manual contains all the information and features that show you how to use the EX/LX mainboard. Please take a moment to familiarize yourself with the design and organization of this manual.

1-1 Manual Features

This manual is divided into the following four sections:

Section 1: Product Information

A brief overview of what comes in the mainboard package, the mainboard layout and the specification it appears.

Section 2: Hardware Installation

Tell you the usage of the mainboard jumpers and the connectors.

Section 3: CMOS Setup Utility

A summary of the mainboard CMOS (BIOS) Setting.

Section 4: BIOS/Software Utility

Introductions of mainboard BIOS flash utility.

Section 5: Audio Driver & Utility Installation

Install Audio Driver & Utility

1-2 Package Check List

This EX/LX mainboard package contains the following items. Please inspect the package contents and confirm that everything is there. If

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anything is missing or damaged, call your vendor for instructions before operating.

The package includes:

- One EX/LX Mainboard
- One Pentium II Retention Module
- One Floppy Interface Cable
- One IDE Interface Cable
- One CD Title including Bus Master IDE Driver and Utilities
- One User' s Manual
- One serial port bracket
- One parallel port & PS/2 Mouse bracket

1-3 Mainboard Specifications

Form Factor	<ul style="list-style-type: none">● Baby AT form factor
Board Size	<ul style="list-style-type: none">● 22 cm x 22 cm
CPU	<ul style="list-style-type: none">● Supports Pentium II/Celeron CPU up to 333 MHz
System Memory	<ul style="list-style-type: none">● For LX mainboard, DIMM 168-pin x 3 , SDRAM added maximum up to 384MB For EX mainboard, DIMM 168-pin x 2 , SDRAM added Maximum up to 256MB● Supports 64M-bit SDRAM technology
Chipset	<ul style="list-style-type: none">● Intel 440LX/EX AGP Chipset
Expansion Slots	<ul style="list-style-type: none">● 1 x AGP bus● 2 x ISA bus● 3 x PCI bus with Bus master/slave mode
Serial Port	<ul style="list-style-type: none">● Two serial ports UART 16C550 compatible● Sets serial port 2 to operate in normal mode , IrDA or ASKIR
Parallel Port	One parallel port supports :

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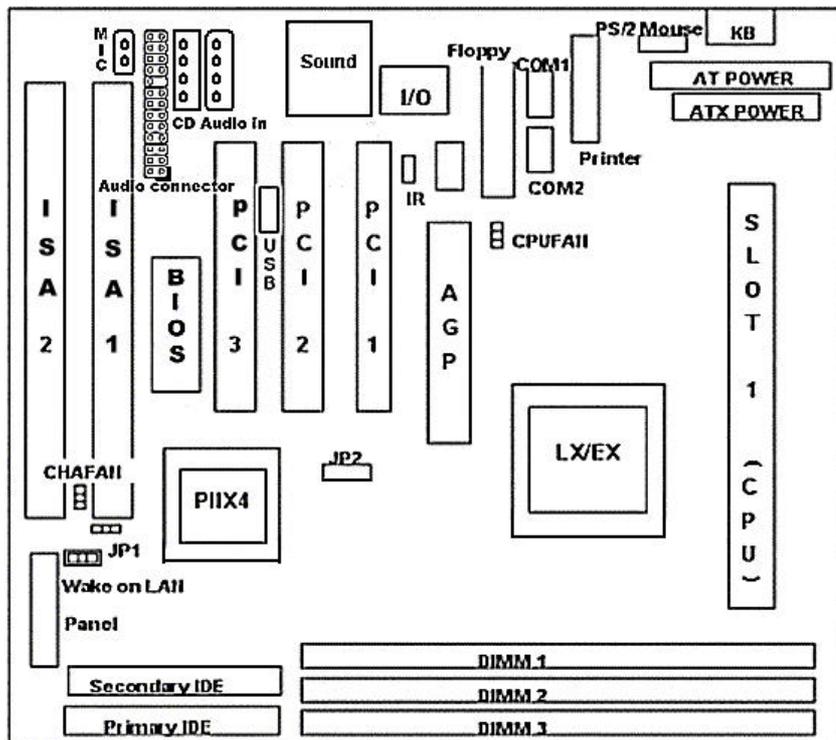
	<ul style="list-style-type: none"> ● SPP-standard parallel port ● EPP-enhanced parallel port ● ECP-extended capabilities port
Floppy Interface	Supports drives inches/format with: <ul style="list-style-type: none"> ● 3.5 inches-720KB/1.44MB/2.88MB ● 5.25 inches-360KB/1.2MB
IDE Interface	<ul style="list-style-type: none"> ● Dual PCI IDE interface support up to 4 x IDE HDD or CDROM ● Supports PIO mode 4 , DMA mode 2 and Ultra DMA 33
USB Interface	<ul style="list-style-type: none"> ● Two USB ports supported ● USB legacy keyboard function supported
PS/2 Mouse	<ul style="list-style-type: none"> ● PS/2 mouse supported by connector onboard
Keyboard	<ul style="list-style-type: none"> ● AT keyboard onboard connector supported ● PS/2 keyboard connector (optional)
Fuse	<ul style="list-style-type: none"> ● Supports recoverable fuse for USB and KB/Mouse
RTC and Battery	<ul style="list-style-type: none"> ● RTC build in chipset (south bridge PIIX4) ● Lithium (CR-2032) battery
Wake up function	<ul style="list-style-type: none"> ● Modem ring wake up ● LAN wake up ● RTC Alarm wake up
Synchronous Switching Regulator	<ul style="list-style-type: none"> ● High efficient synchronous switching regulator for CPU core voltage from 2.0V to 3.5V ● Supports over-voltage / over-current protection function
Hardware Monitor (Optional)	<ul style="list-style-type: none"> ● Fan speed monitor--Two fan connectors , warning when CPU or Housing fan is malfunction ● Voltage monitor--Warning when system voltage (5V,12V,3.3V,VCORE) are abnormal ● CPU and system thermal monitor--Warning when CPU and system temperature is higher than a predefined value
Sound Function	<ul style="list-style-type: none"> ● Integrated sound controller compatible with:

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	<ul style="list-style-type: none">- Sound Blaster Pro- Adlib- Microsoft Windows System
Power connector	<ul style="list-style-type: none">● Supports ATX(20-pin) power connector● Supports AT(12-pin) power connector
BIOS	<ul style="list-style-type: none">● Award BIOS● Year 2000 Compliance● PCI 2.1 Compliance● PnP BIOS v1.0a Compliance● APM v1.2 Compliance● DMI 2.0 compliance● Flash/Upgrade BIOS protection● Supports ACPI (Advanced Configuration and Power Interface) and OS Directed Power Management● Supports SOFT power● Virus warning supported● Floppy drive swapping function supported
LED Indicator	<ul style="list-style-type: none">● System power LED● HDD activity LED● System Suspend LED

1-4 Mainboard Layout

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Jumpers

1. JP1 Clear CMOS (Real Time Clock)
2. JP2 CPU Clock Ratio & CPU Type

Expansion Sockets

1. DIMM 1 to DIMM 3 Support DIMM Memory

Expansion Slots

1. CPU Slot 1 for supporting Pentium II/Celeron CPU

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2. **ISA Slot 1 & Slot 2** 16-bit ISA Bus Expansion Slot
3. **PCI Slot 1 to Slot 3** 32-bit PCI Bus Expansion Slot

Connectors

1. **KB** AT Keyboard Connector (6 pins)
2. **PS/2 Mouse** PS/2 Mouse Connector (6 pins)
3. **USB** Universal Serial BUS Port 1 and Port 2 (10 pins)
4. **COM1/COM2** Serial Port 1 / Serial Port 2 (9 pins)
5. **PRINTER** Printer (Parallel) Port Connector (25 pins)
6. **ATX POWER** ATX Mainboard Power Connector (20 pins)
7. **AT POWER** Baby AT Mainboard Power Connector (12 pins)
8. **CPUFAN** Pentium II CPU 1 Fan Connector (3 pins)
9. **CHAFAN** Chassis Fan Connector (3 pins)
10. **Floppy** Floppy Drive Connector (34 pins)
11. **Primary IDE** Primary IDE Connector (40 pins)
12. **Secondary IDE** Secondary IDE Connector (40 pins)
13. **IR** Infrared Port Connector (5 pins)
14. **Wake on LAN** LAN wake Up Connector(3 pins)
15. **Audio connector** Audio input/output connector
16. **CD audio in** CD audio in connector
17. **Mic in** Microphone in connector
18. **Panel:**
 - **PWR LED** Power LED Connector (3 pins)
 - **KBLCK** Keyboard Lock Switch Connector (2 pins)
 - **SLP** Suspend Switch Connector (2 pins)
 - **SPEAKER** Chassis Speaker Connector (4 pins)
 - **GRN LED** Green Status LED Connector (3 pins)
 - **HDD LED** HDD LED Connector (4 pins)
 - **RESET** Reset Switch Connector (2 pins)
 - **PWR ON** Power Switch Connector (2 pins)