

# Chapter 1: Introduction

## Welcome

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Congratulations on your purchase of the P6BX-A+ mainboard. This mainboard delivers workstation-level performance by supporting the latest and most powerful Intel Pentium-II processors. In addition, it adopts the new Advanced Graphics Port (AGP) and can be installed with a large capacity of fast SDRAM memory modules.

This chapter contains the following information:

- **About the Manual** explains how the information in this manual is organized
- **Checklist** comprises a list of the standard and optional components that are shipped with this mainboard,
- **Features** highlights the functions and components that make this one of the best value mainboards on the market

## About the Manual

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The manual consists of the following chapters:

### *Introduction*

Use the **Introduction** chapter to learn about the features of the mainboard, and the checklist of items that are shipped with the package.

### *Installation*

Use the **Installation** chapter to learn how to install the mainboard and get your system up and running.

### *Setup*

Use the **Setup** chapter to configure the mainboard for optimum performance.

### *Software*

Use the **Software** chapter to learn how to use the software drivers and support programs that are provided with this mainboard.

## Checklist

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Compare the contents of your mainboard package with the standard checklist below. If any item is missing or appears damaged, please contact the vendor of your mainboard package.

### **Standard Items**

- ✓ 1 x P6BX-A+ Mainboard
- ✓ 1 x Cable/Bracket Pack
  - Diskette drive ribbon cable
  - IDE drive ribbon cable
  - Retention Module (for Pentium-II Cartridge)
- ✓ This User's Manual
- ✓ Software Support CD-ROM Disk or diskettes
  - IDE driver
  - LANDesk Client Management Software (optional)

### **Optional Items**

- ✓ System Hardware Monitor IC chip (W83871D)

## Features

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The key features of the P6BX-A+ mainboard are the high-level of performance and the system support for the latest technologies in personal computing. The P6BX-A+ supports the most powerful processors and graphics sub-systems so that it challenges the performance levels of UNIX-based graphics workstations.

The mainboard also supports state-of-the-art network management software and system monitoring hardware. A P6BX-A+ based system can easily provide an energy efficient workstation or client file server.

### ***High-Performance Processing***

The processor Slot-1 (plus the retention module) supports the latest high-performance Pentium-II processors from Intel. The mainboard uses the latest 440BX Pentium-II support logic chips. This chipset also supports a 100 MHz host and memory bus.

### ***Configuration without Jumpers***

The P6BX-A+ uses the system BIOS to set the processor clock and voltage so that system configuration for all supported processors can be made using firmware.

### ***Ultra-fast Graphics***

The mainboard has a built-in Advanced Graphics Port (AGP) so that you can optionally install any of the new generation of AGP cards. The system meets the AGP 1.0 standard with support for 1X/2X speed transfers and BIOS control of the memory display buffer.

### ***High-capacity Memory Support***

The P6BX-A+ has three DIMM (dual in-line memory module) sockets. The sockets can be installed with 3.3 Volt unbuffered SDRAM modules. Each memory module can have up to 128 MB of memory so a maximum of 384 MB can be installed. We recommend that you use 100 MHz SDRAMs with PC/100 specification for maximum performance.

### ***Energy-saving Features***

This mainboard uses an ATX power supply and supports ACPI (advanced configuration and power interface). The system BIOS supports automatic wake-up for network and modem calls. Therefore a P6BX-A+ based system can be always online for critical network and other applications yet still meet important energy saving targets.

### ***Maximum Expansion Potential***

The P6BX-A+ has seven free expansion slots. Two slots are available for 16-bit ISA cards, and 5 slots support 32-bit PCI card. (one PCI slot and one ISA slot are shared. You can install an ISA card or a PCI card, but not both together.) In addition, there is an AGP slot for the optional installation of an AGP graphics card.

### ***Full Set of I/O Ports***

The mainboard has a full range of standard I/O ports;

- Two enhanced IDE channels each supporting two devices
- One floppy diskette connector supporting up to two drives
- One parallel port and two serial ports
- Two USB (universal serial bus) ports
- Two PS/2 ports, one for keyboard and one for pointing device.

### ***Keyboard Power On Switch***

Using firmware, you can install your system with power on hot-keys so that you can turn on the system from the keyboard. See the Setup chapter for the procedure to install this feature.