

## Overview

The new 1stMainboard® AT31 is a Micro ATX sized motherboard supporting the latest generation of AMD®processors at industry leading speeds. By utilizing DDR ( Double Data Rate ) transfer rate the 100/133 MHz system bus effectively reaches Front Side Bus speeds of 200/266 MHz. The board provides users with an ATA100 data transaction for hard drives and allows up to 2 GB memory totally by 2 PC1600/PC2100 (DDR200/266) DIMM sockets.

The AT31 is based around the high performance ATI IGP320 core chip as a North Bridge and VIA VT82686B as a South Bridge. The virtual AGP4x functions supported by ATI IGP320 that ideal for Windows 2000 provides you with a photo-realistic 3D experience suitable for the most 3D games and software environments. AC97 Codec that embedded in VIA 686B, ensures high quality sound effect.

The mainboard also comes equipped with the new NOVUS® range of innovative features that assist in the installation and maintenance. The features include *Easy Key*, which provides instant keyboard access to the BIOS for adjustments to Clock and Default settings and *LogoGenie*, which allows you to create your own customized logo to be displayed during system boot up. The *BIOS Guardian* is an Anti Virus utility that prevents viruses from damaging your system BIOS and rendering your system inoperative.

Expansion is provided by 1 AGP 4X and 3 PCI slots. In addition, the 1stMainboard is equipped standard I/O connections include 2 serial ports (1 by pinheader), 1 parallel port, 1 VGA port, 1 PS/2 mouse and keyboard connector, 4 USB ports (2 by pinheader), 1 IR port by pinheader, and 1 media connector (Line-In, Line-Out, Mic-In, 1 front audio, 1 game port).

## Package Checklist

If you discover any item below was damaged or lost, please contact your vendor.

- The mainboard       This user manual
- One FDD cable       CD software
- One ATA100 cable
- TV Out Paddle Card (Giftbox only)

### IMPORTANT: AMD CPU HEAT SINK INSTALLATION



*Be ware finish heat sink install. Before you boot system, please check the heat sink is complete contact with die of CPU.*

The poor contact will bring about over heat, it may damage your processor.

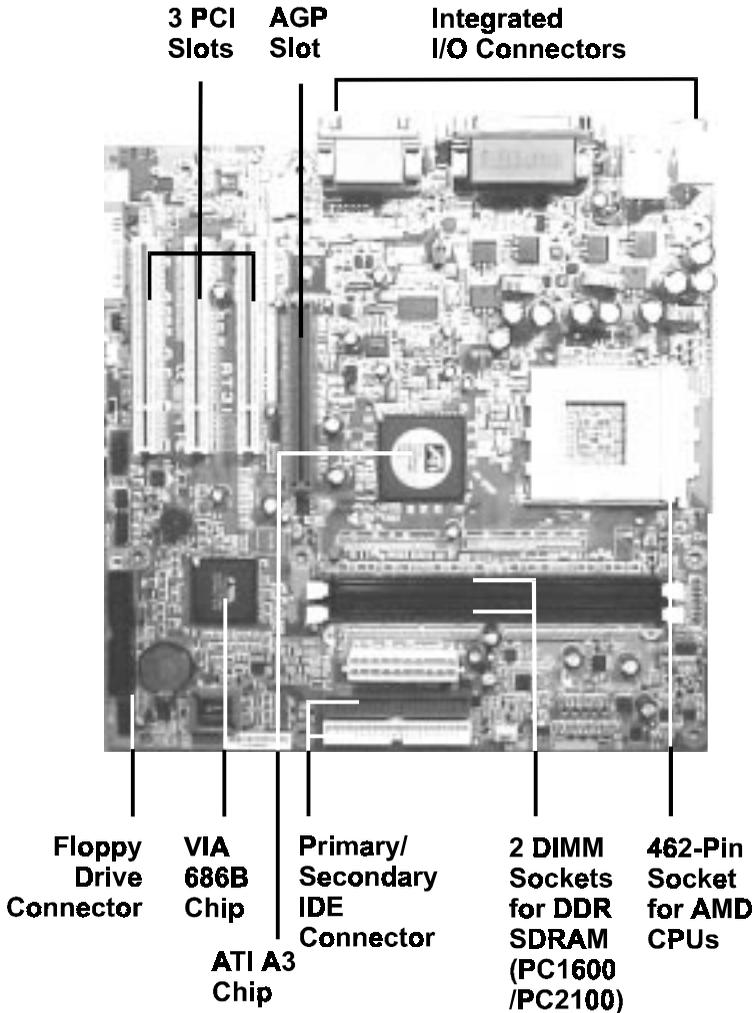
It is strongly recommended that at least a 250-watt ATX power pupply be used for this motherboard. Make sure that your ATX power supply can supply at least 20 amperes on teh +5-Volt lead and 10mA on the +5-Volt standby lead (+5VSB). Your system may become unstable / unreliable and may experience difficulty in powering up if your power supply is inadequate.



**NOTE: CD Pro** that contains patch files, onboard video/audio chip drivers, related online help and other useful information can be found in your mainboard package.

*Please install it right after your Windows operating system installation is done.* Place your CD Pro in the drive, an operating menu will appears in your monitor. Please select *Auto Installation*. It will automatically detect which software tools (patch files, drivers) that the mainboard needs. Press **OK** button to go through the whole installation procedure in a very straight forward and easy way. It also provides you with a custom way to select wanted patch files and software drivers that for onboard chips use. **The top menu of the CD Pro lists all the functions that allowed by this board.**

## The AT31 Mainboard



## Main Features

### ■ Easy Installation

BIOS with support for Plug and Play, auto detection of IDE hard drives, LS-120 drives, IDE ZIP drives. *The mainboard supports Windows 2000, Windows XP only.*

### ■ Leading Edge Chipset

ATI IGP320 is a North Bridge with integrated 2D/3D graphics accelerator. The chip is designed for offering a reliable, effective, and excellent performance. It contains internal AGP controller, concurrent PCI bus controller, advanced DRAM controller, and power management support.

### ■ Versatile Main Memory Support

Accepts up to total 2 GB DRAM using two DDR DIMMs from 256 MB to 2 GB with support for lightening-fast PC1600/PC2100 (DDR200/266) DDR SDRAM.

### ■ AMD Processors Support

Athlon: 900 MHz to 1.4 GHz and up\* at 200 MHz FSB/  
1.1 GHz to 1.4 GHz at 266 MHz FSB; *(1.2 GHz not included)*  
Athlon XP: 1500+ to 2100+ and up\* at 266 MHz FSB;  
Duron: 900 MHz to 1.3 GHz and up\* at 200 MHz FSB  
*(1.0, 1.2 GHz not included)*

(\*: not tested yet)

### ■ Enhanced PCI Bus Master IDE Controller with Ultra DMA 33/66/100 Support

Integrated Enhanced PCI Bus Master IDE controller features two dual-channel connectors that up to four Enhanced IDE devices, including CD-ROM and Tape Backup Drives, as well as Hard Disk Drives supporting the new Ultra DMA 100 protocol. Standard PIO Mode 3, PIO Mode 4, DMA Mode 2, DMA Mode 4, UltraDMA-100 Mode 5 devices are also supported.

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- **AGP and PCI Expansion Slots**

One AGP and three PCI Bus expansion slots provided the room to install a full range of add-on cards.

*(For supported AGP cards, please refer to the approval sheet on FIC web site.)*

- **Integrated Audio Subsystem**

Embedded audio features in the VIA 686B provide hardware Sound BlasterPro for Windows DOS box and real mode DOS legacy compatibility, dual full-duplex Direct Sound channels between system memory and AC97 link.

- **Super Multi Input/Output (I/O) Support**

Integrated super I/O controller in the VIA 686B features two high-speed UART serial ports, one multi-mode (standard/ECP/EPP) parallel port, one IR port, and one FDD connector.

- **Convenient Rear Panel USB Connection Support**

Two USB ports integrated in the rear I/O panel with two extra USB pin-heads for either front or rear panel connections to the growing number of USB compliant peripheral devices on the market.

- **LAN Support (optional)**

One RJ45 LAN jack on the rear panel and onboard LAN controller allows you to connect with network system in a very easy way.

- **TV Out Support (optional)**

Support both NTSC and PAL TV with an optional TV out bracket and a cable.

## FIC Unique Innovation for Users (NOVUS) - Enhanced Mainboard Features and System Support

- LogoGenie

A user friendly GUI supporting Windows 95/98/98SE (not Windows 2000/NT/ME/XP), LogoGenie allows you to customize, create or select a Logo which will be displayed when the system is booting.



**NOTE:**

Please read Page 3-7 for detail information.

- BIOS Guardian

BIOS Guardian effectively acts as a fire-wall against viruses that can attack the BIOS while the system is running and by default is enabled.



**WARNING:**

BIOS Guardian must be disabled before reflash BIOS.



**NOTE:**

Please read Page 3-7 for detail information.

- Easy Key

Instead of completing the multi-layered BIOS setup process these 3 Easy Key functions provide direct access to Sub-Menu when completing BIOS settings adjustments.

Easy-Keys are as follows:

**Ctrl + c:** To enter clock settings menu.

**Ctrl + p:** To load Performance Default settings and restart.

**Ctrl + f:** To load Fail-Safe Default settings and restart.