

Overview

CW33 Mainboard

The 1stMainboard CW33 is a microATX sized Socket 370 Mainboard supporting the Intel® Celeron™ PPGA 300A-500 MHz processor. A highly integrated and feature rich Mainboard it offers the very latest in cutting edge onboard features. Based around the advanced architecture of the new Intel® 810 chipset, the 1stMainboard CW33 is equipped with high quality onboard audio and video capabilities.

The onboard video function benefits significantly from the state of the art *Dynamic Video Memory Technology* (DVMT), which ensures more efficient use of the system memory. The DVMT feature builds upon AGP technology to automatically size video memory to meet the appropriate functional and performance requirements of any application.

With the advanced new *Suspend to RAM* function (must run an operating system which allows ACPI, such as Windows 98), all data is stored to the DRAM when the system goes to suspend mode- greatly reducing the system's power consumption. When the system is woken from the suspend mode, all data is instantly available, meeting the user-friendly requirements of the 1stMainboard *Instantly Available PC*. The CW33 also supports the Ultra DMA33/66* protocol and its high-speed interface, which significantly improves hard drive performance and data transfer speeds. This is especially the case for long sequential data transfers typically associated with audio/visual applications.

The 1stMainboard CW33 boasts a complete range of standard I/O connections including the new Audio Modem Riser Card connection, TV-Out pin-header, Digital Flat Panel pin header, VGA connector and Media connector. Other advanced features include Auto Power Failure Recovery and Keyboard/Mouse Power On. The 1stMainboard CW33 has 3 PCI expansion slots, 2 DIMM for up to 512 MB of SDRAM, and is PC98 and Y2K compliant. The 1stMainboard CD Pro provides users with easy 'one-touch' access to the latest advanced onboard drivers.

CW33+ Mainboard

The 1stMainboard CW33+ is a microATX sized Socket 370 Mainboard supporting the Intel® Celeron™ PPGA 333-500 MHz processor. A highly integrated and feature rich Mainboard it offers the very latest in cutting edge onboard features. Based around the advanced architecture of the new Intel® 810 chipset, the 1stMainboard CW33+ is equipped with high quality onboard audio and video capabilities. Onboard video comes with an impressive 4 MB display cache. With the advanced new *Suspend to RAM* function (must run an operating system which allows ACPI, such as Windows 98), all data is stored to the DRAM when the system goes to suspend mode- greatly reducing the system's power consumption. When the system is woken from the suspend mode, all data is instantly available, meeting the user-friendly requirements of the 1stMainboard *Instantly Available PC*. The CW33+ also supports the Ultra DMA/66 protocol and its high-speed interface, which significantly improves hard drive performance and data transfer speeds. This is especially the case for long sequential data transfers typically associated with audio/visual applications.

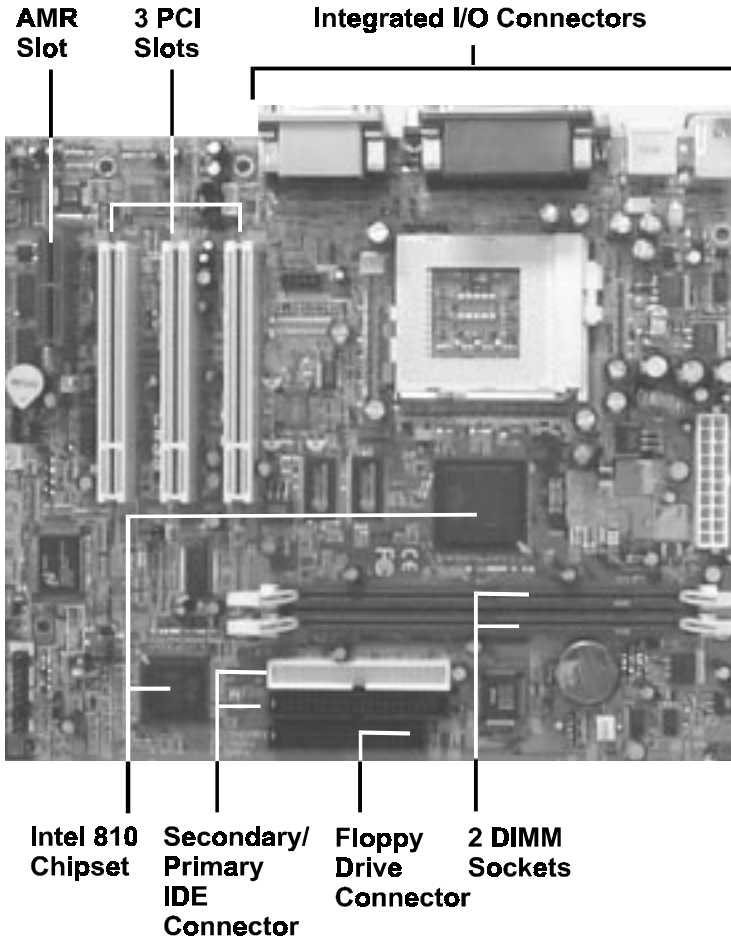
The 1stMainboard CW33+ boasts a complete range of standard I/O connections including the new Audio Modem Riser Card connection, TV-Out pin-header, Digital Flat Panel pin header, VGA connector and Media connector. Other advanced features include Auto Power Failure Recovery and Keyboard/Mouse Power On. The 1stMainboard CW33+ has 3 PCI expansion slots and one AMR slot, 2 DIMM for up to 512 MB of SDRAM, and is PC98 and Y2K compliant. The 1stMainboard CD Pro provides users with easy 'one-touch' access to the latest advanced onboard drivers.

Package Checklist

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

- The mainboard
- This user manual
- One floppy disk drive ribbon cable
- One IDE ribbon cable
- Software utilities

The Mainboard



Main Features

■ Easy Installation

BIOS with support for Plug and Play, auto detection of IDE hard drives, LS-120 drives, IDE ZIP drives, Windows 95, Windows 98, Windows NT, and OS/2.

■ Leading Edge Chipset

Intel 810 chipset includes a CPU interface controller, integrated memory controller, integrated power management unit, concurrent PCI (PCI v.2.0, 2.1, 2.2), 3D video, IDE and ISA bus controller.

■ Flexible Processor Support

Onboard Socket 370 supports leading-edge processors:
Celeron™ PPGA processors 333/366/400/433/466/500 MHz and up.

■ Various External Bus and CPU/Bus Frequency Ratio Support

The board supports the Bus frequency of 66 / 75 / 83 / 90 / 95 / 100 / 112 / 124 / 133MHz and the CPU/Bus frequency ratio of 2x / 2.5x / 3x / 3.5x / 4x / 4.5x / 5x / 5.5x / 6x / 6.5x / 7x / 7.5x / 8x by a switching voltage regulator which accepts 1.8V to 2.8V. (Please read **Install the CPU** in Chapter 2 for more information).

■ Versatile Main Memory Support

Accepts up to 512MB (total) RAM using two DIMMs of 8, 16, 32, 64, 128, 256MB with support for lightning-fast SDRAM (66/100MHz).

■ PCI Expansion Slots and AMR Slot

Three 32-bit PCI Bus expansion slots provide the room to install a full range of add-on cards and an AMR slot for modem riser card.

■ Onboard IrDA Connector

An IrDA connector for wireless infrared connections is available.

- **Enhanced PCI Bus Master IDE Controller with Ultra DMA/33 and Ultra DMA/66 Support (CW33 optional support)**

Integrated Enhanced PCI Bus Master IDE controller features two dual-channel connectors that accept up to four Enhanced IDE devices, including CD-ROM and Tape Backup Drives, as well as Hard Disk Drives supporting the new Ultra DMA/66 protocol (CW33 optional support). Standard PIO Mode 3, PIO Mode 4, DMA Mode 2/4 devices are also supported.
- **USB Support**

Two USB jacks for rear panel connection and one pinhead for front panel connection provide you with convenient, high-speed Plug and Play connections (up to four USB ports) to the growing number of USB compliant external peripheral devices on the market.
- **Remote Wake-Up Support**

One LAN wake-up connector, WOL, supports LAN cards equipped for remote wake-up functionality; also, an additional Wake-On-Ring connector, WOR, awakes the system while the ring signal via modem.
- **Super Multi Input/Output (I/O) Support**

Integrated Plug and Play multi-I/O chipset features two high-speed UART 16550 compatible serial ports, one IR connector, one EPP/ECP capable parallel port, and one FDD connector.
- **Advanced Suspend to RAM Function for Saving Power Consumption**

If your operating system supports ACPI, such as Windows 98, this feature allows all data to be kept in the DRAM to make sure all data instantly available for reducing the system power consumption.
- **Compact ESS Solo-1 Audio Subsystem for Sound and Game (optional)**

The onboard audio provides DirectMusic accelerator. It also provides OPL3, Sound Blaster Pro, MPU401 UART mode and Joystick function for various PC games on real DOS mode that without software drivers. The board came with three audio jacks: MIC_IN, LINE_IN, LINE_OUT; and one connector for joystick with MIDI interface.

Intelligent Properties

This mainboard comes equipped with the most advanced new features that not only optimize the performance of the latest processors but also enhance the manageability, power management capabilities, and user-friendliness of your system. This section provides detailed information on these features, and how they are implemented on the mainboard.

■ Advanced Multi-Media Properties of Intel 810 Chipset

The built-in audio and video features of the Intel chipset 810 on the mainboard CW33 and CW33+ (with 4MB display cache) provides better visual performance with the Dynamic Video Memory Technology (DVMT) properties.

■ Optimized Celeron® PPGA Processor Performance

The mainboard utilizes the advanced features of the Intel 810 chipset to optimize the unrivaled performance of the [Celeron® PPGA](#) processor with MMX® technology, allowing you to enjoy a richer video, audio, digital imaging and communications experience from the latest generation of multimedia software.

■ Using TV as Monitor (optional)

The connector, RGB_OUT, makes use of a television as a monitor for software games and other tasks by a cable from the mainboard to your TV.

ACPI Ready

This mainboard fully implements the new ACPI (Advanced Configuration and Power Interface) 1.0 Hardware and BIOS requirement. If you install ACPI aware operating system, such as Windows 98, you fully utilized the power saving under ACPI.

It is compatible with all other none ACPI operating systems. If you want to setup ACPI feature under Windows 98, please follow the description below: Run Windows 98 setup by using **setup/p j** on the command line for installing Windows 98 with the ACPI control feature.

If you type **setup** without the parameter **/p j**, Windows 98 will be installed as APM, PnP mode, no ACPI will be used.

For more detail information, please visit the web site of Microsoft. Its address is: www.microsoft.com/hwtest/.

The major features of ACPI were listed as follows:

■ Soft-Off Support

The mainboard's Soft-Off feature allows you to turn off your computer using the operating system. This feature requires a power supply with a soft-off power controller.

■ Remote Ring-On

The Remote Ring-On function allows your computer to be turned on remotely via a modem while it is in sleep mode. This feature is particularly usefully when you are expecting a fax late night and leave only your modem on to minimize power consumption. As soon as possible the phone rings, the modem automatically turn on the system, which answers the phone and downloads the fax. Then the computer shuts off again, thereby minimizing its consumption of power. The Remote Ring-On function requires a power supply with a soft-off power controller.

■ RTC Alarm

The RTC alarm feature allows you to preset the computer to wake-up at a certain time allowing you to implement a number of useful functions, such as automatically sending out a fax late at night.

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