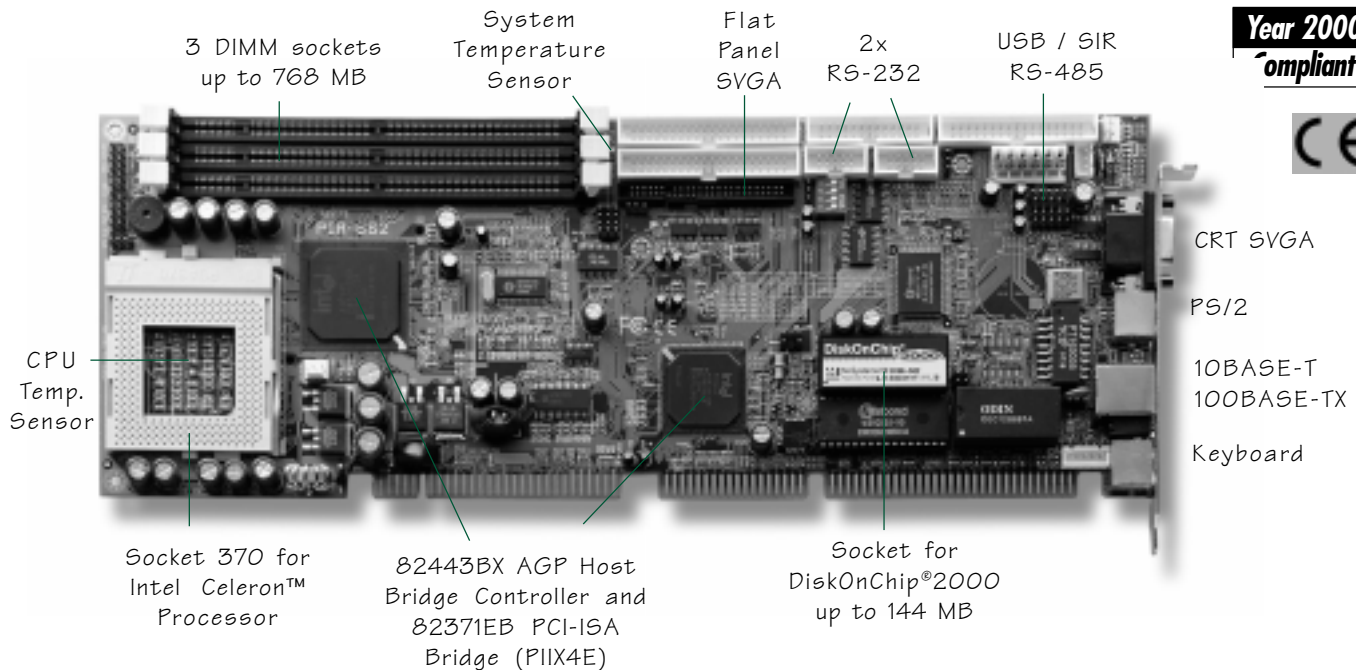


# PIA-662

## All-in-One PCI/ISA Socket 370 Celeron CPU Card with Flat Panel / CRT AGP SVGA, Fast Ethernet and DiskOnChip



Year 2000  
compliant



### Special Features

- **Socket 370 for Intel Celeron™ Processor**
- **69000 HiQVideo™ Accelerator with 2 MBytes of SDRAM**
- **Intel® 440BX AGPset : 82443BX AGP Host Bridge Controller and 82371EB PCI-ISA Bridge (PIIX4E)**
- **100BASE-TX/10BASE-T Ethernet**
- **Ultra DMA up to 33 MB/sec**
- **DiskOnChip® 2000 socket for Flash disk of up to 144 MB**
- **Extensive monitoring and alarm functions build-in**
- **Watchdog Timer**

The PIA-662 is All-in-One single board computer with a Flat Panel / CRT controller, a Fast Ethernet interface and a socket 370 for a Intel Celeron™ CPU.

The socket 370 Celeron™ processor features 128KB of integrated L2 cache that operates at the same speed as the processor. The Celerons additional MMX technology helps dramatically enhance the performance of embedded products that need to run software applications for transaction terminals, imaging and video processing.

### FLAT PANEL / CRT DISPLAY

The CHIPS C&T69000 is a highly integrated graphics/flat panel controller integrating 2MB of SDRAM, graphics, flat panel, and CRT control logic on the same die. The C&T69000 delivers superb 2D video performance and consumes minimal power

### 10/100 MBPS NETWORKING

A PCI 10BASE-T/100BASE-TX Ethernet interface is included for high speed networking.

### MONITORING AND ALARM

The PIA-662 includes a multitude of monitoring and alarm functions to protect your board from high temperatures or over voltage exposure.

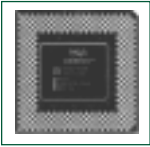
### DISKONCHIP®2000

The PIA-662's SSD socket accommodates a DiskOnChip® 2000, a new generation of high performance single-chip Flash Disks up to 144 MB.

### WATCHDOG TIMER

A 6-level Watchdog Timer can invoke an Active NMI or RESET the CPU when your application loses control over the system.

## Specifications



- **CPU** : Intel\* Celeron Pentium-II Processor at 333/366/400/433 MHz using Socket 370 in a PPGA (Plastic Pin Grid Array) package. Socket 370 provides the same form factor as the Socket 7 (Pentium processor)
- **Chipset** : 82443BX AGP Host Bridge Controller and 82371EB PCI-ISA Bridge (PIIX4E)
- **BIOS** : Y2K compliant AWARD Flash supports NCR SCSI, Green&Soft Off function, LS120 and Multiple boot-up,
- **Green Function** : power saving options supported in BIOS. DOZE / STANDBY / SUSPEND modes, ACPI & APM
- **Secondary Cache** : 64-bit wide non-blocking 128K second level (L2) cache supports Speed supported is full CPU core frequency. Integrated on Celeron processor
- **DRAM Memory** : up to 768 MB of SDRAM in three 168-pin DIMM sockets
- **Bus Interface** : PCI and ISA, complies with PICMG standard
- **Data Bus** : PCI - 32-bit, ISA - 16 bit
- **Bus Speeds** : PCI - 33.3 MHz, ISA - 8.3 MHz
- **DMA Controllers** : 8237 x 2 (7-channels)
- **Interrupt Controllers** : 8259 x 2
- **Interrupt Levels** : 15
- **PCI Enhanced IDE with Ultra DMA** : supports two ports and up to four hard drives or Enhanced IDE devices. Supports PIO mode 3/4 and Bus-Master. Ultra DMA transfer rates of 33 MB/sec, Multiword DMA Mode 2 transfer
- **Watchdog Timer** : generates a system RESET or Active NMI when your application loses control over the system. The timer interval is: 1, 2, 10, 20, 110 and 220 seconds .
- **Real-time Clock** : ODIN 12B887A (or compatible) with lithium battery backup for 10 years of data retention. CMOS data backup of BIOS setup and BIOS default.
- **Keyboard and Mouse Connectors** :  
6-pin mini DIN for PS/2 mouse,  
6-pin mini DIN for Keyboard  
5-pin internal header for AT Keyboard

## HIGH SPEED MULTI I/O

- **Chipset** : Winbond W83977TF-AW
- **Serial Ports** : one internal/external high speed RS-232 port COM1 (for DVL version only internal connector), one internal high speed RS-232/485 port COM2 (jumper selectable). Both with 16C550 UART and 16 byte FIFO.
- **USB** : two onboard USB ports (12 Mb/s and 1.5 Mb/s)
- **SIR Interface** : 5-pin IrDA TX/RX header
- **Floppy Disk Drive Interface** :  
up to two floppy drives, 5¼" (360 KB or 1.2 MB) and 3½" (720 KB, 1.44 MB or 2.88 MB). BIOS enabled/disabled
- **Bi-directional Parallel Port** : SPP, EPP and ECP mode.

## AGP/PCI 3D GRAPHICS ACCELERATOR

- **Chipset** : CHIPS C&T69000 HiQVideo™ Accelerator with 2 MB integrated SDRAM on chip
- **BIOS** : combined with system BIOS
- **Display Type** : CRT, TFT, DSTN, SSTN, EL, Plasma Quarter VGA, VGA, SVGA, XGA and SXGA
- **Display Mode**

Resolution	Colors	Refresh Rate
280x1024	8 bpp	60,75 Hz
1024x768	16 bpp	60,75,85 Hz
800x600	24 bpp	60,75,85 Hz
640x480	24 bpp	60,75,85 Hz

- **Connectors** : external 15-pin D-type female for CRT and internal 50-pin box header for Flat Panel display

## 10BASE-T/100BASE-TX PCI ETHERNET

- **Chipset**: Realtek RTL8139A
- **Type** : 10BASE-T / 100BASE-TX
- **Connector** : external RJ-45

## FLASH DISK DISKONCHIP®2000

- **Package** : Single Chip Flash Disk in 32-pin DIP JEDEC
- **Capacity** : 1-144 MByte
- **Data Reliability** : ECC/EDC error correction
- **Memory Window** : 8 KByte

## ENVIRONMENTAL AND POWER

- **Power Requirements** : +5 V (4.75 ~5.25 V) @ 12 A (300 MHz CPU), ±12 V @ 20 mA
- **CPU Power** : onboard PWM switching power supply for autodetects CPU core voltage
- **System Monitoring and Alarm**: CPU and System temperature, system voltage and cooling fan RPM.
- **Board Dimensions** : 338 mm x 122 mm
- **Board Weight** : 0.45 Kg.
- **Operating Temperature**: 0 to 55°C

## Ordering

- PIA-662DVL** : All-in-One PCI/ISA CeleronCPU Card with Flat Panel/CRT SVGA, Fast Ethernet and DiskOnChip socket
- PIA-662DV** : All-in-One PCI/ISA CeleronCPU Card with Flat Panel/CRT SVGA and DiskOnChip socket