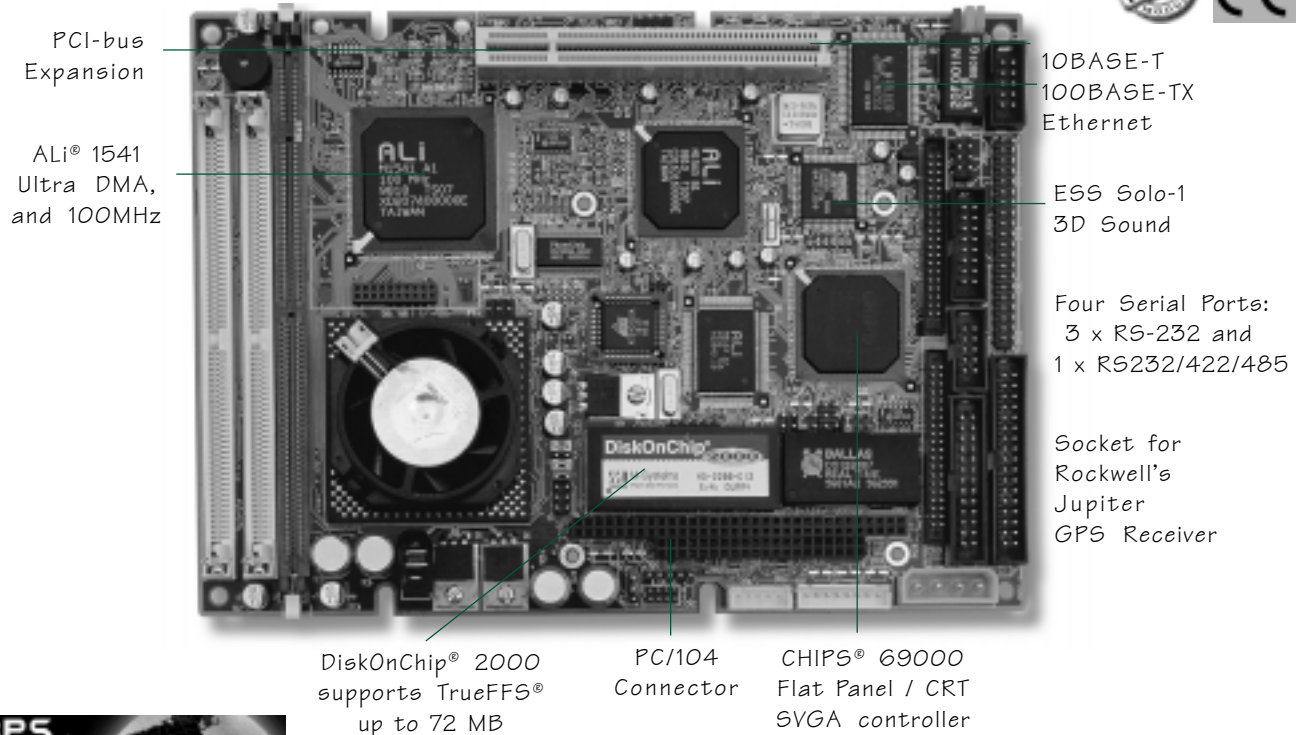


# PIM-581

## All-in-One Pentium MiniBoard Computer

with Flat Panel VGA, Ethernet, Sound, 4 Serial Ports and GPS socket



### Special Features

- AMD K5, K6, Cyrix M1, M2 and up to 350 MHz Intel MMX support
- Socket for Rockwell's Jupiter GPS Receiver
- PCI IDE with Ultra DMA/33 up to 33 MB/sec transfer
- PCI SVGA C&T® 69000 Flat Panel / CRT controller
- 100BASE-TX/10BASE-T Ethernet
- ESS® Solo-1 3D Sound Interface
- DiskOnChip® 2000 socket for Flash disk of up to 72 MB
- Watchdog Timer
- PCI-bus expansion slot
- PC/104 connector

The PIM-581 is an all-in-one single board Pentium computer with onboard PCI Flat Panel / CRT SVGA controller, PCI 10BASE-T/100BASE-TX Ethernet, GPS and DiskOnChip®2000 sockets, Audio interface and 4 serial ports.

### GPS SOCKET

For GPS applications you can mount a Rockwell Jupiter GPS Receiver on a 20-pin internal header.

### MULTI I/O (4 X SERIAL)

Also included are four serial ports (3x RS-232 and 1x RS-232/422/485), a parallel port, an enhanced IDE interface (for up to two drives), a floppy-drive controller and a keyboard/PS/2 mouse interface.

### 10/100 MBPS NETWORKING

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

### FLAT PANEL/CRT SVGA

The PIM-581 includes a PCI-based C&T69000 controller that supports simultaneous use of CRT and Flat Panel

### AUDIO INTERFACE

The Solo-1™ ES1938 PCI AudioDrive solution implements a single-chip PCI audio solution, providing high-quality audio processing while maintaining full legacy DOS compatibility

### DISKONCHIP®2000

The PIM-581's SSD socket accommodates a DiskOnChip®2000, a new generation of high performance single-chip Solid State Disks, that supports Flash Disks up to 72 MB.

### WATCHDOG TIMER

The Watchdog Timer can invoke an interrupt or reset the CPU when your application loses control over the system.

## Specifications

- **CPU:** AMD K5, K6, Cyrix/IBM/SGS 6x68 100~166, M2 Intel Pentium 75-233 MHz and Intel MMX
- **Chipset:** ALi M1541, M1543 (internal bus 100 MHz)
- **BIOS:** AMI Flash
- **Green Function :** power saving options supported in BIOS. DOZE / STANDBY / SUSPEND modes
- **Secondary Cache :** 512 KB pipeline burst
- **DRAM Memory :** up to 384 MB of SDRAM, BEDO, EDO or FP DRAM in two 72-pin SIMM sockets, one DIMM socket
- **Bus Interface :** PCI and PC/104
- **Data Bus :** 32-bit
- **Bus Speeds :** PCI - 33,3 MHz, PC/104 - 8,3 MHz
- **DMA Controllers :** 8237 x 2
- **DMA Channels :** 7
- **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 supports transfer rates of 33 MB/sec
- **RTC and Battery backup :** DS12B887 with internal lithium battery backup, or equivalent.
- **Watchdog Timer :** generates a system reset or interrupt when your application loses control over the system. Time interval : 1, 2, 10, 20, 110 and 220 sec.
- **Keyboard and Mouse Connectors :** onboard 5-pin header for PC/AT keyboard  
onboard 8-pin header for PS/2 keyboard or PS/2 mouse

## HIGH SPEED MULTI I/O

- **Chipset :** Winbond 83977TF
- **Floppy Disk Drive Interface :** supports 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
- **Serial Ports :** 3 serial RS-232 port and 1 serial RS-232/422/485 port. All with 16C550 UARTs and 16-byte FIFO.
- **Bi-directional Parallel Port :** supports SPP, EPP and ECP mode. BIOS enabled/disabled

## PCIAUDIO INTERFACE

- **Chipset:** ESS Solo-1 ES-19385, 3D Sound onboard
- **Connectors:** AUXA, AUXB, Mic/Speaker

## GPS (GLOBAL POSITIONING SYSTEM)

- **Socket for :** Rockwell Jupiter GPS Receiver
- **Software Support :** LabMon demo kit

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

- **Chipset:** Realtek RTL8139
- **Bus :** 32-bit
- **Type :** 10BASE-T / 100BASE-TX
- **Connector :** 10-pin header for RJ-45

## PCI FLAT PANEL / CRT VGA

- **Chipset :** C&T 69000
- **Memory :** 2 MB
- **Display :** CRT and Flat Panel Mono/TFT/DSTN/EL
- **Connectors :** 16-pin header for CRT monitor and 50-pin header for Flat Panel

## FLASH DISK "DISKONCHIP®"

- **Package :** Single Chip FlashDisk in 32-pin DIP JEDEC
- **Capacity :** 1-72 MByte capacity (future capacities: 144 MByte and up)
- **Data Reliability :** ECC/EDC error correction
- **Memory Window :** 8 KByte
- **Software Support :**  
Built-in TrueFFS® which provides full hard disk read/write compatibility.  
Operates with FLite™ (FAT-FTL/Lite) in O/S-less environments  
DiskOnChip O/S support  
DOS, Windows, Windows95, Windows CE, Windows NT.  
Additional support : pSOS+, QNX , VxWorks

## EXPANSION SLOTS

- **PC/104:** 104-pin connector for a 16-bit bus
- **PCI:** one standard 32-bit PCI bus expansion connector

## ENVIRONMENTAL AND POWER

- **Power Requirements:** + 5V @ 6A , ±12 V @ 20 mA
- **Board Dimensions :** 203 mm x 146 mm
- **Board Weight :** 0.40 Kg
- **Operating Temperature:** 0 to 55°C
- **Humidity:** 5~95%, non-condensing

## Ordering

- ❑ **PIM-581:** All-in-One Pentium MiniBoard Computer with Flat Panel /CRT SVGA, Ethernet, Sound, 4 Serial Ports, GPS socket and DiskOnChip socket