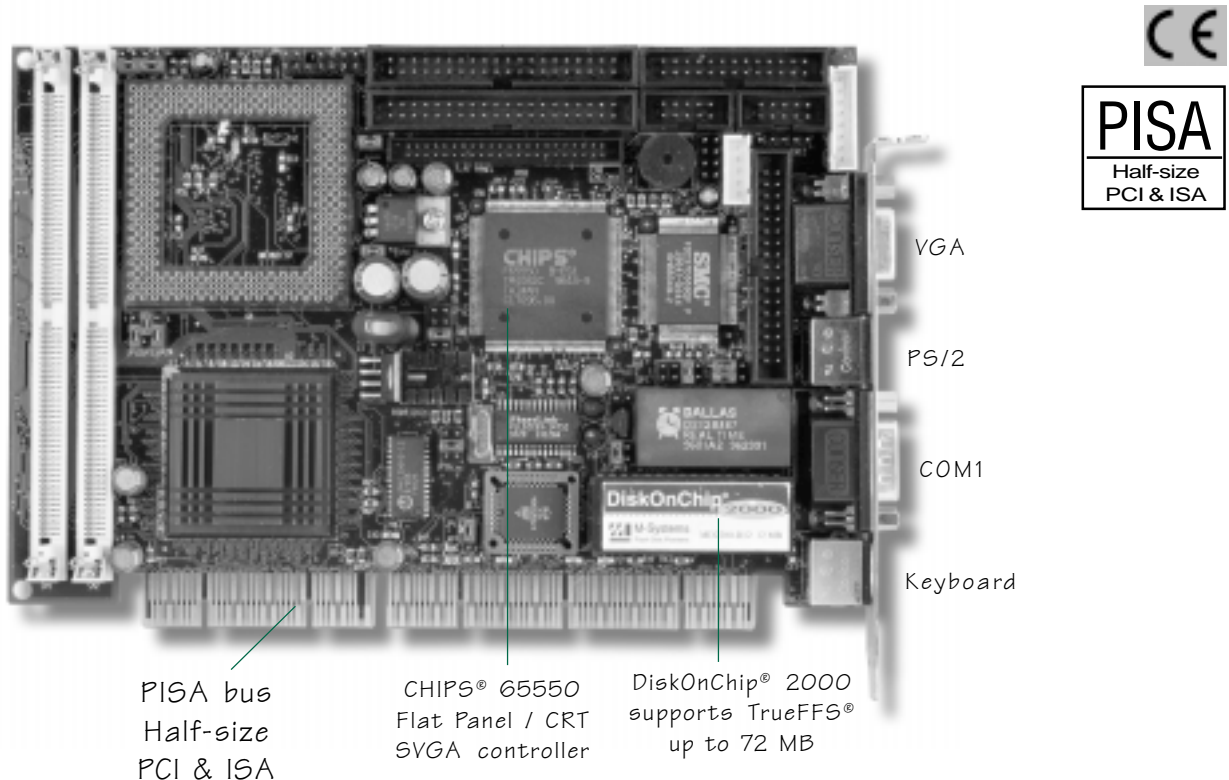


## Half-size PISA-bus All-in-One Pentium CPU Card with Flat Panel / CRT SVGA interface and DiskOnChip Flash Disk socket



PISA bus  
Half-size  
PCI & ISA

CHIPS® 65550  
Flat Panel / CRT  
SVGA controller

DiskOnChip® 2000  
supports TrueFFS®  
up to 72 MB

### Special Features

- PISA bus support  
Half-size card PCI/ISA
- Accepts AMD K5 and K6,  
Intel MMX, and Cyrix M1/M2
- CPU temperature control  
and alarm function
- PCI SVGA controller for  
Flat Panel / CRT SVGA display
- DiskOnChip® 2000 socket for  
Flash disk of up to 72 MB
- 512 KB pipeline burst cache
- Watchdog Timer

The PISA-651 is a half-size PCI/ISA Pentium single board computer. It includes onboard support for Flat Panel or CRT SVGA displays and has a DiskOnChip® 2000 socket for Flash Disks of up to 72 MB. The PISA-651 includes special circuitry to stabilize CPU temperature and send an audible alarm when the CPU overheats.

### ENHANCED IDE, HIGH-SPEED I/O

The card's Enhanced IDE controller supports mode 4 HDD operation and allows connection of drive sizes up to 8.4 GB. Besides HDD drives, the EIDE interface supports connection of other ATAPI IDE devices such as CDROMs, tape drives, optical drives, etc. In addition, the PISA-651 has 2 RS-232 ports with 16C550 and 16-Byte FIFO and one bi-directional printer port that supports SPP, ECP and EPP modes. For enhanced data transfer, USB and IrDA ports are available.

### FLAT PANEL / CRT SVGA

The PISA-651 includes a CHIPS® embedded SVGA controller that supports CRT and LCD panels simultaneously.

### DISKONCHIP®2000

The SSD socket accommodates a DiskOnChip® 2000, a new generation of high performance single-chip Flash Disks. This unique data storage solution offers a better, faster and more cost-effective Flash Disk for applications with limited space and modest disk capacity requirements

### WATCHDOG TIMER

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

## Specifications

- **CPU** : AMD K5 and K6, Cyrix 6x86 and M2 Intel 75~200 MHz and Intel MMX
- **Chipset** : SIS 5571
- **BIOS** : AMI Hiflex system BIOS
- **Green Function** : power saving options supported in BIOS. DOZE / STANDBY / SUSPEND modes
- **Secondary Cache** : 512 KB pipeline burst
- **DRAM Memory** : 128 MB of BEDO, EDO or FP DRAM two 72-pin SIMM sockets
- **Bus Interface** : PCI and ISA, complies with PISA standard
- **Data Bus** : 64-bit
- **Bus Speeds** : PCI - 33 MHz, ISA - 8 MHz
- **DMA Controllers** : 8237 x 2
- **DMA Channels** : 7
- **Interrupt Controllers** : 8259 x 2
- **Interrupt Levels** : 15
- **PCI Enhanced IDE** : supports two ports, and up to four hard drives or Enhanced IDE devices. Supports PIO mode 4 and Bus-Master. BIOS enabled/disabled
- **Watchdog Timer** : generates a system reset or interrupt when your application loses control over the system. The 6-level timer interval is configurable from 0 to 220 seconds by jumper setting.
- **Real-time Clock** : Dallas DS-12887A (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 connector for PC/AT keyboard  
6-pin mini DIN connector for PS/2 mouse or keyboard  
Onboard 5-pin header connector for PC/AT keyboard

## HIGH SPEED MULTI I/O

- **Chipset** : SMC FDC37C669QF
- **Serial Ports** :  
one external high speed RS-232 port, one internal high speed RS-232; both with 16C550 UART and 16-byte FIFO.
- **USB** : two onboard USB ports
- **IR interface** : IrDA TX/RX header
- **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
- **Bi-directional Parallel Port**: IRQ 5/7/9 or disabled supports SPP, EPP and ECP. BIOS enabled/disabled

## FLAT PANEL/CRT PCI SVGA INTERFACE

- **Chipset** : C&T 65550
- **BIOS** : combined with system BIOS
- **Memory** : 1.5 MB (including 0.5 MB frame buffer)
- **Bus** : 32-bit PCI local bus
- **Display** : CRT and Flat Panel Mono/TFT/DSTN/EL (simult.)
- **Connectors** : 15-pin external connector for CRT monitor and 44-pin internal connector for Flat Panel

## FLASH DISK DISKONCHIP®2000

- **Package** : Single Chip Flash Disk 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 environment  
Broad O/S support  
DOS, Windows, Windows95, Windows CE, Windows NT.  
Additional support : pSOS+, QNX , VxWorks and others

## ENVIRONMENTAL AND POWER

- **Power Requirements**:  
+5 V (4.75 ~5.25 V) @ 6 A max,  
±12 V @ 20 mA max
- **CPU Temperature Management**:  
temperature detection with voltage adjustment to maintain constant CPU temperature
- **CPU Temperature Alarm**: audible alarm when CPU temperature exceeds 60°C (±5°C)
- **Board Dimensions** : 185 (L) x 122 (W) mm.
- **Board Weight** : 0.25 Kg
- **Operating Temperature**: 0 to 55°C

## Ordering

- ☐ **PISA-651DV** : Half-size PISA-bus Pentium CPU Card with Flat Panel / CRT SVGA and DiskOnChip Flash Disk socket