



### DESCRIPTION

The MCSI PHV-158 PCISA Pentium/MMX All-In-One Single Board Computer (SBC) contains all the basic elements found in a high-performance IBM PC/AT compatible desktop computer system. The unique feature of this board is that when used with a PCISA compatible passive backplane, it enables ISA/PCI systems to be configured using half-size boards. The most outstanding features include: an optional 32MB PROMDISK-Chip™ Disk Emulator, a PCI EIDE hard disk port to support 2 EIDE drives, a high performance PCI VGA Video controller and graphics accelerator, a high performance multi-I/O controller, a WatchDog timer, and a 1K-bit E<sup>2</sup>Key memory for user data. The board uses the SIS-5598 Chipset with integral VGA controller and graphics accelerator. The multi-I/O controller includes: dual 16C550 UARTs, a floppy port, and an SPP/EPP/ECP multi-mode bi-directional parallel port. The optional PROMDISK-Chip™ Disk Emulator comes complete with ROM-DOS version 6.22, making it ideal for embedded diskless applications. The 1K-bit E<sup>2</sup>Key memory is a non-volatile memory that is useful for storing user data, such as: critical system parameters, terminal address, etc. The WatchDog timer is ideal for controlling critical processes where unattended operation is essential. The PHV-158 Pentium SBC was specifically designed to operate in extreme industrial environments, and has an operating temperature range of 0° to 60°C.

The PHV-158 SBC is fully compatible with the IBM PC/AT PCISA Bus which means virtually all the software written for the IBM PC/AT will run on the PHV-158 SBC.

### FEATURES

- PCISA Passive Backplane Architecture
- Supports up to 233MHz Pentium/MMX and 300MHz AMD K6 & Cyrix 6x86 type CPUs
- 128M-Byte FPM or EDO DRAM System Memory (2)72-pin SIMMs
- Includes 512KB of Pipeline Burst Mode Cache
- SIS-5598 ChipSet with Integral PCI VGA Controller and Graphics Accelerator
- AWARD Plug-n-Play Flash BIOS
- Optional 32MB PROMDISK-Chip™ Disk Emulator
- AT (PS/2) Compatible Keyboard Port (not required for booting)
- Two 16C550 Compatible RS-232 Serial Ports
- PS/2 Compatible Bi-directional Parallel Port
- Dual Floppy Disk Port Supports Drives with Capacities up to 2.88M-bytes
- PCI Extended EIDE Hard Disk Port Supports up to Two Drives
- Universal Serial Bus and Infrared Data Ports for Future Applications
- WatchDog Timer and Power Monitor
- 1Kb E<sup>2</sup>Key Memory for Storing User Data
- Y2K Compliant

# PHV-158 SBC

## SPECIFICATIONS

<b>CPU:</b>	Supports: Intel Pentium/MMX up to 233MHz, and AMD K6 & Cyrix 6x86MX up to 300MHz.
<b>Co-processor:</b>	Internal to the Pentium Chip
<b>Memory:</b>	System Memory: Expandable to 128M-bytes. Supports: 256Kx36,512Kx36,1Mx36,2Mx36, 4Mx36,8Mx36, or 16Mx36 SIMMs using (2) 72-pin SIMM sockets. Both standard fast page-mode (FPM) and high performance extended data output (EDO) DRAM is supported. On-board Cache Memory: 512K-bytes of High Speed pipelined burst mode Cache Memory.
<b>BIOS:</b>	AWARD Plug-n-Play BIOS Flash EPROM.
<b>PCISA Bus:</b>	PCISA compatible to Jump PISA version 1.07
<b>DMA:</b>	7 Channels (4 8-bit and 3 16-bit)
<b>Timers:</b>	3 Programmable
<b>Interrupts:</b>	16
<b>Reset:</b>	Controlled by on-board power detector and optional reset switch
<b>I/O Ports:</b>	2 - RS-232 Serial Ports 1 - Parallel Printer Port 1 - AT (PS/2) Compatible Keyboard Port 1 - 3.5"/5.25" Dual Floppy Disk Port 1 - EIDE PCI Hard Disk Port 1 - PS2 Compatible Mouse Port 1 - WatchDog Timer: 1, 2,10, 20, 110, or 220 seconds 1 - Speaker Port with on-board speaker 1 - Keylock & Power LED Port 1 - Universal Serial Bus Port 1 - IrDA Infrared Data Port 1 - E <sup>2</sup> Key 1Kb Non-volatile memory port
<b>PROMDISK<sup>®</sup>:</b>	1 - 32-pin socket supports MCSI PROMDISK-Chip <sup>™</sup>
<b>VGA Port:</b>	Chipset: SIS-5598 Video Controller Bus:PCI Local Bus VRAM: Shares System DRAM (up to 4MB) Resolution:1280x1024 256 colors, 1024x768 64K colors, 800 x 600,full color CRT Video:15-pin D connector
<b>Speed:</b>	100-300MHz jumper selectable
<b>Battery:</b>	Lithium for CMOS RAM & Clock/Calendar
<b>Size:</b>	Half Size AT-type board 7.08" L X 4.8" H
<b>Power:</b>	+5VDC @ 4A, ±12VDC@ 0.07A

## ORDERING INFORMATION

The PHV-158 SBC can be ordered in the following configurations:

Part Number	Description	Part Number	Description
88900	PHV-158 without CPU	88950	PHV-158/200MHz
88920	PHV-158/133MHz	88960	PHV-158/233MHz
88940	PHV-158/166MHz	88970	PHV-158/266MHz
		88980	PHV-158/300MHz

## WARRANTY

All MCSI products carry a two-year unconditional warranty. Contact MCSI headquarters for OEM quantity purchase ordering information.

Specifications Subject to Change without Notice



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