



## DESCRIPTION

The MCSI ILH-386V Single Board Computer is an IBM PC/AT Compatible Plug-in Processor Board designed to be used in a passive backplane for a wide variety of embedded systems applications. The ILH-386V SBC contains all the basic elements found in a standard IBM PC/AT compatible desktop computer system. The most outstanding features include: an on-board VGA display controller, an optional PROMDISK-Chip™ Disk Emulator, four serial ports, a PC/104 Interface Port, a WatchDog timer, and a 1K-bit E<sup>2</sup>Key memory for storing user data. The VGA controller supports a CRT as well as most popular flat panel displays. The optional PROMDISK disk emulator comes complete with the ROM-DOS version 6.22 operating system and emulates a bootable hard disk drive with capacities up to 32M-bytes. 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. Serial Port 3 can be configured as RS-422/485 as well as RS-232. These unique features make the board ideally suited for embedded industrial applications. The ILH-386V SBC operates on a single +5VDC supply, and has an external power connector which allows direct connection to an external power supply making it ideally suited for stand alone applications.

The ILH-386V SBC was specifically designed to operate in extreme industrial environments, and has an operating temperature range of 0° to 60°C.

## FEATURES

- 100% IBM PC/AT Compatible Computer
- Includes ALI 6117 ChipSet with integral 80C386SX-40MHz Microprocessor
- Supports up to 32M-bytes of System DRAM
- Optional 32MB PROMDISK-Chip™ Disk Emulator
- VGA Controller with CRT/Flat Panel Display Interface with 1M-byte Video Memory
- AT (PS/2) Compatible Keyboard Port (not required for booting)
- PS/2 Compatible Mouse Port
- Four 16C550 Compatible RS-232 Serial Ports, Port 3 Can Be Configured as RS-422/485
- PS/2 Compatible Bi-directional Parallel Port
- Dual Floppy Disk Port Supports up to Two 3.5" or 5.25" Drives with Capacities up to 2.88MB
- IDE Hard Disk Port
- Clock/Calendar with Battery Back-up
- Operates on Single 5V Supply (7.5 Watts Max)
- Half Size AT-type Multilayer Plug-in Board
- WatchDog Timer and Power Monitor
- 1K-bit E<sup>2</sup>Key Memory for Storing User Data
- Y2K Compliant

# ILH-386V SBC

## SPECIFICATIONS

<b>CPU:</b>	80C386SX-40MHz (internal to ALI 6117 Chip)
<b>Co-processor:</b>	None
<b>Memory:</b>	System Memory: Expandable to 32MB (1) 72-pin SIMM Socket which supports 1MB, 2MB, 4MB, 8MB, 16 MB, or 32MB single-sided SIMMs
<b>BIOS:</b>	AMI with Internal Setup
<b>I/O Bus:</b>	ISA compatible bus (62-pin & 36-pin Edge Connectors)
<b>PC/104:</b>	PC/104 Bus (64-Pin & 40-Pin Connectors)
<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>	4 - RS-232 Serial Ports; Serial Port 3 can be configured as RS-422/485 1 - Parallel Printer Port 1 - AT (PS/2) Compatible Keyboard Port 1 - 3.5"/5.25" Dual Floppy Disk Port 1 - IDE Hard Disk Port 1 - PS/2 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 - External Power Connector 1 - 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/FP Port:</b>	Chipset: HMC HM86508 Video Controller VRAM: 1MB Shared System Memory Resolution: 1280x1024 16 colors, 1024x768 256 colors CRT Video:15-pin D connector Flat Panel:44-pin LCD connector
<b>Speed:</b>	8-40MHz 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 @ 1.5A

## ORDERING INFORMATION

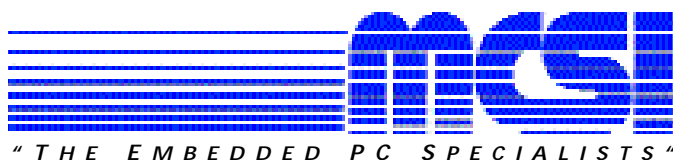
The ILH-386V SBC can be ordered in the following configurations:

Part Number	Description
72900	ILH-386V 386SX-40 SBC with VGA & FP Support

## 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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