PIM-381

- 16-bit DIO
- 4 Serial Ports RS-232C
- RS-485
- ALi® M6117D = 386SX-40 CPU + M1217B Chipset + Watchdog
- Single +5 V operation
- PC/104 Connector
- Flat Panel SVGA
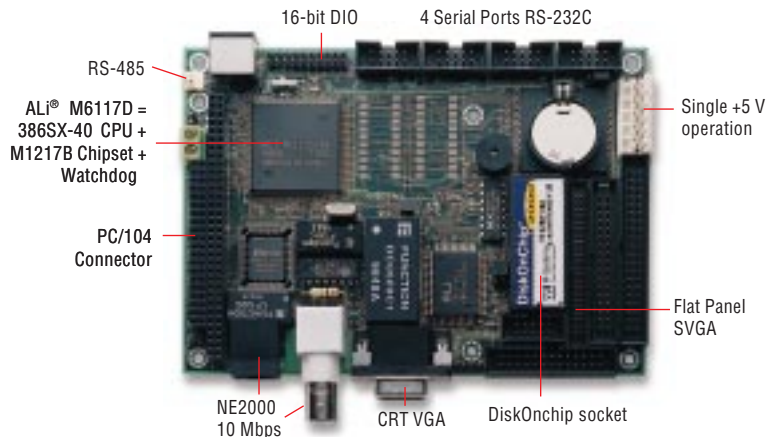- NE2000 10 Mbps
- CRT VGA
- DiskOnchip socket

CPU ALi M6117D = Intel compatible 386SX-40 core + M1217B chipset

LCD / CRT HMC HM86508

Network 10 Mbps

16-bit Digital I/O

3½" 386SX-40 Miniboard with LCD/CRT, Ethernet, Digital I/O and 4 Serial Ports

General specifications

CPU + Chipset
ALi M6117D is an implementation of an INTEL compatible 386SX-40 CPU a watchdog timer and ALi's M1217B chipset

BIOS
Y2k Compliant AMI system BIOS

DRAM Memory
4~8 MB EDO RAM (4 MB standard onboard, 2 sockets for optional 2 MB SOJ)

Bus Interface
ISA and PC/104

Bus Speed
PC/104 and ISA - 8.3 MHz,

DMA Controllers/Channels
8237 x 2, 7 channels

Interrupt Controllers/Levels
8259 x 2 / 15

Enhanced IDE
supports one port and up to two hard drives or Enhanced IDE devices of PIO mode 4. BIOS enabled/disabled

Watchdog Timer
generates a system RESET or NMI when your application loses control over the system. Optionally the watchdog can trigger a user specified IRQ. The watchdog is configurable from 30.5 µs to 512 seconds (in 30.5 µs segments)

Real-time Clock
included in M6117D with onboard lithium battery for 10 years of data retention. CMOS data backup of BIOS setup and BIOS default.

Digital I/O

16-bit GPIO, 8 independent GPI and 16 independent GPO programamble by software.

High Speed Multi I/O

Chipset
ALi 5113

Serial ports
3 high speed RS-232C ports (COM1, COM3, COM4), 1 high speed RS-232C/485 port (COM2) jumper selectable. All with 16C550 UART and 16 byte FIFO. BIOS enabled/disabled

Floppy Disk Drive Interface
supports 2 floppy disk drives, 5¼" (360 KB or 1.2 MB) and 3½" (720 KB, 1.44 MB). BIOS enabled/disabled

Bi-directional Parallel Port
supports SPP, EPP and ECP mode. BIOS enabled/disabled

Keyboard and Mouse Connectors
mini DIN connector for consecutive us of AT-keyboard and PS2 Mouse

Flash Disk DiskOnChip®2000

Package
Single Chip FlashDisk in 32-pin DIP JEDEC

Capacity
2-288 MByte capacity

Data Reliability
ECC/EDC error correction

Memory Window
8 KByte

Network Interface

Chipset
Realtek 8019AS single chip

Type
10BASE-T, NE2000 compatible

Connectors
onboard RJ-45 and BNC connectors

Monitoring LEDs
10BASE-T indicator, activity indicator

Display Function

Chipset
TP 6508IQ or compatible

Memory
1 MB onboard

System Bus
16-bit ISA bus

Panel Data Bus
24-bit

Display
CRT and Flat Panel Mono/TFT/DSTN/EL

Compatibility
IBM VGA hardware

Environmental and Power

Power Requirements
single voltage +5 V @ 900 mA with 4 MB EDO RAM and 2 MB DiskOnChip installed

Board Dimensions
145 (L) x 102 (W) mm.
(same formfactor as a 3½" FDD drive)

Board Weight
0.18 Kg

Operating Temperature
-20 ~ +60°C (-4 ~ 140°F)

Ordering

PIM-381/8 : 3½" Embedded 386SX Miniboard with Flat Panel / CRT Display Controller, Ethernet interface, 16-bit Digital I/O, 4 Serial Ports, socket for DiskOnChip®2000 and 8 MB EDO RAM installed

PIM-381/4 : same as above with 4 MB EDO RAM installed