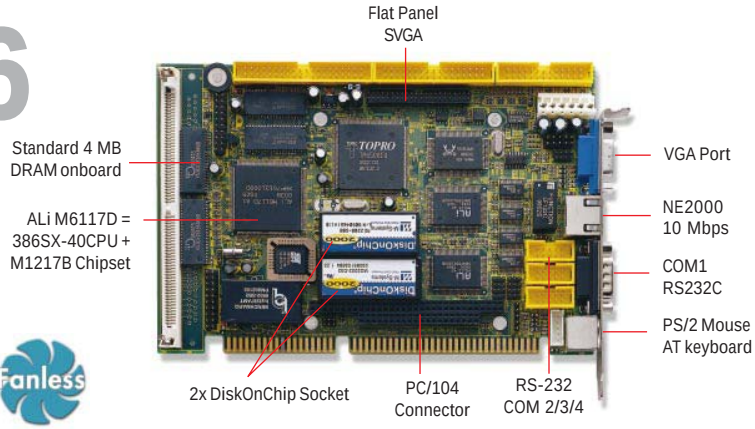
EmCORE-i316

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

LCD / CRT
Top pro H6508

LAN 10 Mbps
Realtek 8109A

16-bit
Digital I/O



Embedded 386SX-40 | Flat Panel / CRT SVGA, Ethernet, Digital I/O and 4 Serial

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
Award system BIOS

DRAM Memory
4 MB up to 20 MB of EDO RAM, Single side 4 MB EDO RAM onboard, 1 socket for a 72-pin single sided 16 MB SIMM

Bus Interface
ISA and PC/104 (speed 8.3 MHz)

DMA Channels
7 channels

Interrupt Levels
15

Enhanced IDE
supports 1 port and up to 2 ATAPI devices,
PIO mode 4 and Bus-Master,
Ultra DMA transfer rates 33 MB/sec

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
Dallas DS-12887 or compatible with lithium battery backup for 10 years of data retention. CMOS data backup of BIOS setup and BIOS default.

High Speed Multi I/O

Chipset
ALi 5113 x 2

Serial ports
3 high speed RS-232C ports (COM1, COM3, COM4), 1 high speed RS-232C/485/422 port (COM2) jumper selectable. Both with 16C550 compatible UART and 16 byte FIFO.

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

Bidirectional Parallel Port
supports SPP, EPP and ECP mode.BIOS enabled/disabled

Keyboard and Mouse Connectors
external PS/2 Keyboard/Mouse port (2-in-1 mini DIN), Onboard AT keyboard port (5-pin box header)

Digital I/O

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

Flash DiskOnChip®2000

Package
Dual Chips FlashDisk in 32-pin DIP JEDEC

Capacity
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
RJ-45 on bracket

Display Function

Chipset
TP 6508IQ or compatible

Memory
1 MB onboard

System Bus
16-bit ISA bus

Panel Data Bus
24-bit

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

Compatibility
IBM VGA hardware

Environmental and Power

Power Requirements
single voltage +5 V @ 800 mA with 4 MB DRAM and 1 MB Flash disk installed

Board Dimensions
185 x 122 mm.

Board Weight
0.24 Kg

Operating Temperature
0 ~ +60°C (32 ~ 140°F)

Ordering

EmCORE-i316DVL: Half-size 386SX-40 CPU Card with Flat Panel Display Controller, Ethernet and DiskOnChip socket, 4 Serial Ports and 16-bit Digital I/O Port including 4 MB EDO RAM onboard

EmCORE-i316DV : Same as above without Ethernet

EmCORE-i316D : Same as above without Flat Panel Display Controller and Ethernet (OEM only)

Note : all specifications are subject to change without notice