

# EmCORE-i315



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



Dual LAN  
10 Mbps

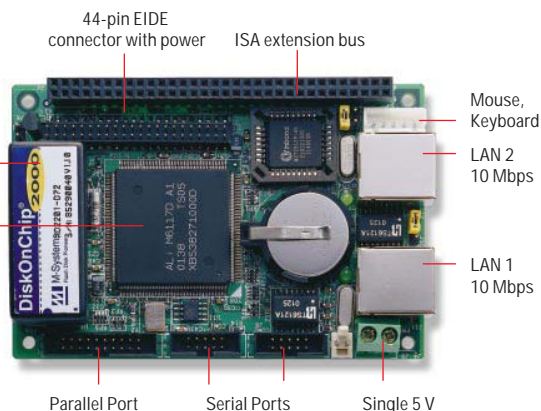


16-bit  
Digital I/O



Socket for  
DiskOnChip

Ali® M6117D =  
386SX-40 CPU  
+ M1217B Chipset  
+ Watchdog



## 386SX-40 Tinyboard

## Ultra Low Power Device with Dual LAN and Digital I/O

### 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 MB EDO RAM (4 MB standard onboard)

#### Bus Interface

PC/104

#### Bus Speed

PC/104 (ISA) - 8.3 MHz,

#### DMA Controllers/Channels

8237 x 2

#### 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 one 44-pin IDE connector for 2.5" (laptop-size) HDD/Flash IDE drive including power

#### 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  $\mu$ s to 512 seconds (in 30.5  $\mu$ s 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 programmable by software.

### High Speed Multi I/O

#### Chipset

Ali 5113

#### Serial ports

One high speed RS-232 port, one high speed RS-232/485 port. Both with 16C550 UART and 16 byte FIFO, two onboard 10-pin headers

#### Bi-directional Parallel Port

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

#### Keyboard and Mouse Connectors

onboard 5-pin header for PS/2-keyboard  
onboard 5-pin header for PS/2-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

### Dual Network Interface

#### Chipset

2x Realtek 8019AS single chip

#### Type

10BASE-T, NE2000 compatible

#### Connectors

two RJ-45 connectors

#### Monitoring LEDs

two 10BASE-T indicator, activity indicator

### Environmental and Power

#### Power Requirements

single voltage +5 V @ 400 mA

#### Board Dimensions

100 (L) x 66 (W) mm.

#### Board Weight

80 g

#### Extended Operating Temperature

0 ~ +60°C (32 ~ 140°F)

### Ordering

#### EmCORE-i315DL2 :

386SX-40 2½" Tinyboard with  
Dual 10Mbps Ethernet and DiskOnChip socket  
(includes 4 MB of onboard EDO)