




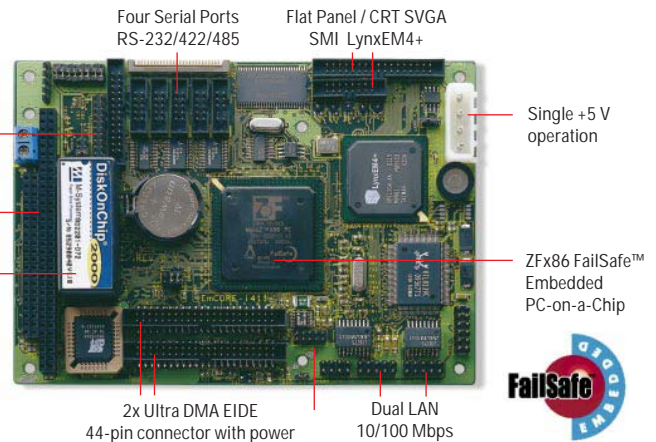


EmCORE-i411

	ZFx86 FailSafe™ Embedded PC-on-a-Chip
	Dual LAN 10/100 Ms
	CRT SVGA LynxEM4+
	16-bit Digital I/O
	LCD Panel LynxEM4+



ZFx86 586 FailSafe™

Flat Panel/CRT , Dual Ethernet, DI/O, 4S, SSD socket

General Specifications

Embedded CPU + Chipset

ZFx86 Failsafe 586 32-bit CPU core operating at 133, 100, 66 and 33 MHz with 32-bit 33MHz PCI rev 2.1 compliant "Northbridge" and "Southbridge"

FailSafe internal Boot ROM that allows execution of multiple instruction sets: DRAM clear, Flash erase, executable load and run, Provides permanent and fail-safe mechanism

External BIOS

Phoenix Embedded PC BIOS with RS-232 console redirection for headless BIOS access

DRAM Memory

32 MB Synchronous DRAM on board

Bus Interfaces

ISA bus - 8.3 MHz (PC/104)

PCI 32 bit 33MHz rev. 2.1 compliant (internal)

Enhanced IDE

supports two ports and up to four ATAPI devices with Ultra DMA (ATA-4) support two 44-pin IDE connector for 2.5" (laptop-size) HDD/Flash IDE drive including power

Watchdog Timer

Embedded application Dual Watchdog Timer (WDT) with SW and HW control of the WDT event 16 bit counter primary watchdog connected to SW IRQ/NMI/SMI reset by Watch Dog Timer Input (WDI). Second 8 bit counter output connected to H/W reset line enabled by primary counter output

Real-time Clock

Built-in chipset with lithium battery backup for 10 years of data retention.

Digital I/O

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

Dual Network Controller

Chipset

Dual RTL8139C, 10/100 Mbps, autoswitching

Connector

two 10-pin onboard headers

High Speed Multi I/O

Serial Ports

three high speed RS-232C ports (COM1/3/4) and one jumper selectable RS-232C/422/485 (COM2) with 16C550 compatible UART and 16 byte FIFO, all provide jumper selectable +5V/ +12V DC power

USB

2 ports USB 1.1 and OpenHCL compl.

Floppy Disk Drive Interface

supports one 3½" floppy disk drive

Bi-directional Parallel Port

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

Keyboard and Mouse Connectors

onboard 10-pin mini header for AT Keyboard and PS2 Mouse

Flash Disk DiskOnChip® 2000

Package

Single Chip Flash Disk in 32-pin DIP JEDEC

SSD Interface

SSD Type

One compact flash Socket supports Type I/II Compact flash Cards (CFC)

VGA Interface

Chipset

SMI SM712G4AA LynxEM4+ 33 MHz PCI bus with 4 MB memory on dye

Display Type

CRT, TFT, DSTN, SSTN, EL, Plasma Quarter VGA, VGA, SVGA, XGA and SXGA

Environmental and Power

Power Requirements

based on 32 MB DRAM and 8 MB Flash disk

33 Mhz -> 5 V @ 0.9 A

66 Mhz -> 5 V @ 0.95 A

100 Mhz -> 5 V @ 1 A (default)

133 Mhz -> 5 V @ 1.2 A (over-clocked)

Board Dimensions

145 x 102 mm.

Board Weight

0.24 Kg

Operating Temperature

0 to 60°C (32 to 140°F)

OS Compatibility

Linux, DOS, VxWorks, many RTOS, Windows CE, Windows 9x, and Windows NT

Ordering

EmCORE-i411DVL2:

3½" Embedded ZFx86 Miniboard with Flat Panel Display Controller, Dual Ethernet, DiskOnChip socket and CompactFlash socket (includes 32 MB onboard SDRAM)

Inside the ZFx86 Chip

