Note: keyboard & mouse not included

Network-ready Virtual Embedded Target System

Features

- ZFx86-based ATX motherboard
- 10/100Base-T Ethernet card
- VGA/XGA/SVGA/SXGA graphics display controller card
- Peripheral connections at rear (2 USB 1.1, 2 serial, 1 parallel, PS2 Keyboard & mouse, Ethernet, video)
- Three PCI expansion slots & two ISA expansion bus slots on main board
- PS/2 keyboard and mouse
- Floppy disk drive
- IDE disk drive
- DVD/CD ROM disk drive
- OS software and utilities including OS and development tools (some are full distributions and some are evaluations.*

The ZF Integrated Development System is a network and video-ready, full-function ATX size evaluation system that includes a 10/100Base-T Ethernet (PCI) card and display controller (PCI) card to create an evaluation and development environment for OEM designers to test their application on the target ZFx86 processor with their own proprietary hardware and software.
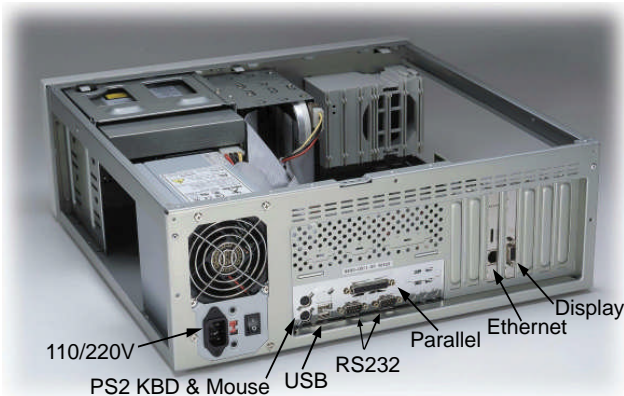
Complete Feature Set

The ZFx86 Integrated Development System incorporates all the functionality of a standard PC motherboard with a number of enhancements and added features. The motherboard inside includes peripheral I/O and device headers, user-available flash, ISA and PCI expansion bus connectors, and an AT-compatible BIOS.

Our IDS systems also include an ATX power supply, hard drive (preloaded with Linux OS and other software tools), floppy drive, DVD/CD-ROM drive, keyboard, mouse, and cables all configured to facilitate the development engineer's bring-up task.

Speed Up Your Design Cycle

Easily integrate the widest selection of embedded hardware peripherals by attaching ISA or PCI expansion cards directly to the board via the sockets provided.

The PC/AT ROM-BIOS and OS enable you to develop software on your desktop PC and then easily transfer your development work to the embedded system with little or no modification. Or you can develop your application software directly on the ZFx86-Family Integrated Development System.

110/220V
PS2 KBD & Mouse
USB
RS232
Parallel
Ethernet
Display

ZF Micro Solutions, Inc.
1000 Elwell Court, Ste. 134, Palo Alto, CA 94303 USA
Tel: +1-650-965-3800   www.zfmicro.com

Just Like a PC...
But powered by the ZFx86 PC-on-a-Chip

The Integrated Development System environment is ideal for evaluating just how a target system based on a ZFx86-Family chip will perform. Designed for engineering flexibility, most standard PC interfaces are built right into the ZFx86 chip. Outboard features are implemented via ISA or PCI interface cards using slots provided on the IDS motherboard.

Included in the system are a PCI Video board and a PCI Network board. You can use the extra board slots to add additional peripheral adapter cards having the same chips as the intended product, thus characterizing your ZF-based products behavior.

Working with a ZFx86 Development System is very similar to working with a standard personal computer. one . Each IDS has a standard ATX form factor motherboard where the motherboard chipset is the ZF SOC itself, so adding standard OEM peripheral cards becomes an easy matter.

Open chassis with three available slots, PCI graphics and Ethernet boards, FDD, HDD, DVD/CD ROM drive and
ZFx86 SOC chipset
Connect a display, keyboard and mouse and start your project development on the target CPU in minutes!

Note: enclosure style & color may vary.

System Power and Cabling

All internal cables are supplied with the Integrated Development System. The chassis has a switchable power supply for 220V 50Hz or 117 VAC at 60Hz (factory setting) and ships with a US-style power cable.

Switches and Jumpers

The system ships pre-configured with as many features enabled as possible, configured in a typical PC manner. However, you can access internal switches and jumpers that configure many ZFx86 chip and system features, including support for multiple clocking schemes. Complete documentation is provided on CD for easy configuration and reference.

Inside the IDS System

Designed expressly for embedded applications, the IDS offers powerful PC motherboard functions and ZF's FailSafe System circuitry.

Designing ZF-powered products allows you to take advantage of the lowest x86 BOM cost in the embedded market. With more functions in the ZF chips, you can focus on peripherals and software. ZF-Logic in the ZFx86 allows easy access to the x86 system architecture.

Included Software and Tools

A variety of included operating systems and utilities provide a rich test and development environment. A bootable DVD facilitates quick SW loading on the hard disk.

The software tools included help evaluate which operating system your target product should use. IDS systems provide interfaces and software for easy flash programming. IDS systems also include the Z-tag* port and programming tool for on-board programming upgrades at a speed of 2,500,000 bits per second.

Installed Operating Systems: **Slackware Linux 10.2**, **WinCe™ 5.0** with Windows CE Platform Builder Evaluation Disk‡, and **Datalight ROM-DOS™ 7.1‡**.

BIOS: Executable image of the ZFx86 BIOS based on the Phoenix 4.0 BIOS kernel .

Tools: To Get You Started Fast, the IDS includes:
⬩ PC Certify **PC Diag Burn-In™** for ZFx86 V 1.3.16
⬩ ZF's proprietary SW utilities.
   - Z-tag* programming tool & manager software
   - ZEB BIOS customization software
⬩ Reference design package for the ZFx86-based ATX motherboard with schematics, Gerber files, assembly drawings and BOM.

* Z-TAG Note: limited Z-Tag functionality on initial shipments.

Ordering Information:

ZFx86IDS-K-01: ZFx86 Integrated Development System with SCX-MZP-Q-01 ATX board, ATX chassis, HD, DVD/CD, S/W license images, manuals, reference design and CAD files. Commercial Temperature (0-70C), 100MHz (110V/220V)

‡ **NOTE**: Customers of ZF products are responsible for obtaining any required OS licenses to support their specific applications.

Local representative:

PN DS-0002-1SEP06