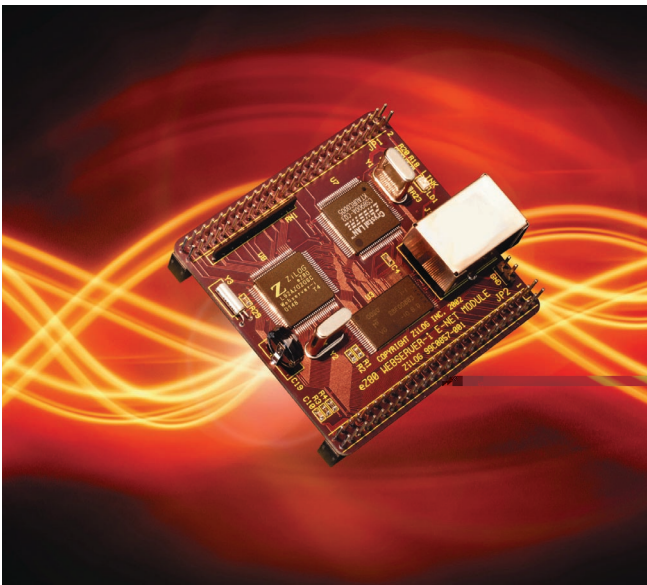# eZ80® Webserver-i E-NET Module

eZ80™ Webserver-i E-NET Module features

• 48MHz eZ80L92 Webserver-i MPU

• 1MB, 70ns Flash memory, hardware write-protect

  pin available to user

• 512KB, 35ns high-speed SRAM

• 10BaseT 802.3 Ethernet controller with integrated

  PHY and 8KB SRAM for Tx/Rx FIFOs

• IrDA SIR transceiver (115Kbps) with

  power-down control

• 2 x 50-pin system expansion interface with full

  MPU bus/control signals

• RJ-45 Ethernet connector

• LED indicating network link status

• TCP/IP stack and OS

• Standard operating temperature: 0ºC to +70ºC

• Power supply: 3.3V@125mA

Connects your application in record time

The eZ80™ Webserver-i E-NET Module is a compact, high-performance Ethernet module. It is designed for development and deployment in embedded systems requiring control and connectivity. Its small size, 63.5mm x 63.5mm x 25.4mm, and complete peripheral set accelerate system integration. Within weeks you can connect your application to a LAN or WAN.

Introduces the eZ80 Webserver-i

ZiLOG's newest addition to the eZ80™ family, eZ80™ Webserver-i, offers a power-efficient, optimized pipeline architecture that runs the E-NET Module. Unlike most 8-bit microprocessors which can only address 64 KB, the eZ80 can address 16 MB without a Memory Management Unit. This, in addition to the ample on-board memory, allows you to serve web pages over a TCP/IP network, enables easy system monitoring and control, and makes processor code updates effortless. This solution enables any browser with access to your network the ability to control and monitor a network application.

Features IrDA capabilities

The built-in IrDA SIR transceiver on the E-NET Module allows users wireless IrDA connectivity at 115Kbps. The transceiver combines an IRED emitter, a PIN photodiode detector, a digital AC coupled IRED driver, and a fully differential receiver/decoder. This allows easy data transfer and the ability to quickly send email.

Includes royalty-free TCP/IP stack and OS

ZiLOG's TCP/IP stack includes all of the protocols you need for connectivity including TCP, UDP, IP, HTTP, ICMP, IGMP, ARP, RARP, DHCP/BOOTP, DNS, TIMEP, Telnet, SMTP, SNMP, TFTP, and PPP. The stack meets all relevant and latest approved RFCs. Also provided are Ethernet and serial device drivers. A set of well-documented OS and network services APIs allow you to remain focused on application development.

ZiLOG

eZ80 Webserver-i E-NET Module

Provides total support in one kit

The eZ80™ Webserver-i Development Kit includes everything you need to start working on your application. The kit contains the E-NET Module, development board with modem interface, ZPAK emulator, ZiLOG Developer's Studio IDE, C-Compiler, TCP/IP stack and OS, Flash code, power supplies, and cables. The system is completely documented in the Programmer's Manual enabling you to serve a web page in minutes.

eZ80™ Webserver-i features

- Power management features including SLEEP/HALT modes and peripheral power-down controls
- 2 UARTs, 1 SPI, and 1 I^{2}C, each with independent baud rate generators
- IrDA compatible Infrared Encoder/Decoder
- New DMA-like eZ80™ instructions
- Glueless external memory interface with 4 Chip Selects
- Interrupt controller supports internal and external maskable interrupts as well as a non-maskable input
- Real-time clock with on-chip 32KHz oscillator
- Six 16-bit Counter/Timers
- Watchdog Timer
- 24 General-purpose I/O pins
- JTAG and ZiLOG Debug Interface
- 3.0-3.6V supply voltage with 5V tolerant inputs

Practical for a wide range of embedded applications

The E-NET Module allows almost any serial device to be networked enabled including security, point-of-sale terminals, kiosks, automation and gaming equipment, industrial control devices, and measurement and data collection devices.

Part Number	Item	Description
eZ80L925048MOD	eZ80™ Webserver-i E-NET Module	48MHz Ethernet Module with 512KB SRAM
eZ80L920210ZCO	eZ80™ Webserver-i Development Kit	Complete Development kit with C-Compiler, development board, ZPAK emulator, and E-NET Module

eZ80™ Webserver-i E-NET Module Block Diagram

eZ80L92 Webserver-i MPU (48MHz)

- 2 UARTs 1x SPI 1x I^{2}C
- 1MB FLASH
- 512KB SRAM
- 6 PRT, WDT
- GPIO, JTAG
- Real-Time Clock
- 10 Base T Ethernet + RJ-45 Connector
- IrDA Transceiver (SIR)

System Interface Connectors

www.zilog.com

FL000402-1102