

## eZ80<sup>™</sup> Webserver-i features

- 50MHz processor (20MHz version available)
- Power Management features including SLEEP/HALT modes and peripheral power-down controls
- 2 UARTs, SPI, and I<sup>2</sup>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
- 100-pin LQFP package
- 3.0-3.6V supply voltage with 5V tolerant inputs
- Standard temperature range: 0° C to 70° C
- Extended temperature range: -40° C to 105° C



## Introducing the eZ80<sup>™</sup> Webserver-i

ZiLOG's newest addition to the eZ80<sup>™</sup> family, Webserver-i, offers a power-efficient, optimized pipeline architecture. Unlike most 8-bit microprocessors that can only address



64 KB, the eZ80<sup>™</sup> can address 16 MB without a Memory Management Unit. With the eZ80's 50MHz clock speed and processor efficiency, its processing power rivals the performance of 16-bit microprocessors.

## Features IrDA capabilities

The IrDA Encoder/Decoder supports the IrDA SIR format. It operates seamlessly with the on-chip UART at 115Kbps. The Encoder/Decoder interfaces with IrDA compliant transceivers that allow you to develop applications where you can easily transfer data or send email.

## **Connects to LANs and WANs**

Designed for connectivity applications, this solution allows you to serve web pages over a TCP/IP network, enables easy system monitoring and control, and makes remote software updates effortless. It enables any browser with access to your network the ability to control and monitor a network application.

## Includes royalty-free TCP/IP stack and OS

ZiLOG's TCP/IP stack includes all of the protocols you will need for connectivity including TCP, UDP, IP, HTTP, ICMP, IGMP, ARP, RARP, DHCP/BOOTP, DNS, Telnet, TIMEP, 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.

## Provides everything in one kit

The eZ80<sup>™</sup> Webserver-i Development Kit includes everything you need to start working on your application the first day. The kit contains the eZ80<sup>™</sup> Webserver-i 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 making it possible for you to serve a web page in minutes.





## Supports a wide variety of applications

Embedded webservers are well suited for applications that require fast time to market, low system cost, and connectivity to LANs and WANs. They allow almost any application to be networked enabled including security, point-of-sale terminals, kiosks, building and factory automation equipment, gaming, industrial control devices, and measurement and data collection devices.

#### eZ80<sup>™</sup> Webserver-i Software Features

ТСР	IP	UDP	ARP
RARP	ICMP	IGMP	PPP
HTTP	DHCP/BOOTP	DNS	SNMP
SMTP	Telnet	TFTP	TIMEP
<u> </u>	<i>.</i>		

- Stack configuration utility
- · Ethernet and serial device drivers
- 0S

#### eZ80<sup>™</sup> Webserver-i Software Tools

- C-Compiler
- ZPAK Emulator

**Ordering Information** 

- ZDS IDE
- Web file to C-Conversion Utility

#### DHCP TFTP Trivial File Transfer Time DNS Domain Name System SMTP SNMP

тср

ARP

Fthernet

ICMP

Socket Interface

IP

UDP

IGMP

PPP

Serial

# eZ80<sup>™</sup> Webserver-i Block Diagram

WDT	eZ80 CPU		
6 PRT	Bus Controller		
24-Bit GPIO	2 UARTs	Infrared Encoder/ Decoder	
JTAG	I <sup>2</sup> C		
ZDI	SPI	Real-Time Clock	

ltem	Part Number	Description
eZ80 <sup>™</sup> Webserver-i	eZ80L92AZ020SC	100 pin LQFP, 20MHz, standard temperature
	eZ80L92AZ020EC	100 pin LQFP, 20MHz, extended temperature
	eZ80L92AZ050SC	100 pin LQFP, 50MHz, standard temperature
	eZ80L92AZ050EC	100 pin LQFP, 50MHz, extended temperature
eZ80 <sup>™</sup> Webserver-i E-NET Module	eZ80L925048MOD	48MHz Ethernet module with 512K SRAM
Development Kit	eZ80L920210ZCO	Complete Development kit with E-NET module,
		C-Compiler, development board, ZPAK emulator

and TCP/IP Stack and OS

HTTP Web

For additional support documentation: www.zilog.com/eZ80



#### eZ80<sup>™</sup> Webserver-i Protocol Stack Diagram