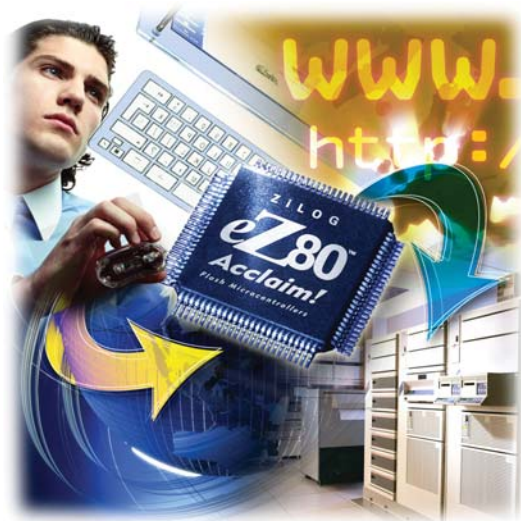# ZiLOG Full-Feature TCP/IP Software Suite

A COMPLETE EMBEDDED INTERNET SOLUTION

ZiLOG's eZ80Acclaim!™ embedded network solution combines a high-performance microcontroller with a turnkey, Flash-based TCP/IP software suite, ZTP. Our TCP/IP solution works in conjunction with the eZ80Acclaim!™ MCU's extensive on-chip network interfaces to provide standard network connectivity in a wide range of applications, such as industrial control, automation, facility management, and remote systems communication. The ZiLOG integrated solution delivers an interoperable network protocol stack, allowing you to concentrate on building your Internet-enabled embedded control applications.

FEATURE-RICH TCP/IP STACK

ZiLOG's TCP/IP software suite is optimized for low-cost systems. Powered by ZiLOG's new real-time kernel RZK, ZTP offers full-feature operating services in addition to network services while occupying little program memory.

ZTP combines a pre-emptive multitasking operating system with the various protocols. Device drivers for Ethernet and serial PPP operations are standard in this comprehensive, field proven package.

The suite's HTTP server can be used to transfer HTML, Java applets/scripts, graphics, and almost any web object in either static or dynamically generated web pages. The HTTP server operates on the eZ80Acclaim!™ platform giving users the ability to monitor and control network-connected appliances and devices. When implemented as an embedded system feature, users can conduct software maintenance and upgrades remotely via a simple browser interface.

ZiLOG TCP/IP STACK FEATURES

- Industry standard, RFC compliant protocols
- Core protocols: IPv4, TCP, UDP, ICMP and ARP
- Additional protocols: HTTP/HTTPS, TFTP, SNMP, TELNET, SMTP, DNS, TIMEP, DHCP/BOOTP, IGMP, RARP, and FTP
- Optional SSL server
- Embedded Flash file system supporting multiple disk volumes and works on available Flash and RAM
- Local or remote runtime debugging OS command shell
- Ethernet, UART, I2C, SPI, RTC, and protocol drivers like PPP and HDLC
- Based on ZiLOG's real-time kernel, RZK with inter-thread communication and synchronization
- Built on ZiLOG's Integrated Development Environment, ZDS II – IDE

APPLICATIONS

- Industrial Control, Facility Automation, Energy Management
- Communication, Embedded Networking Appliances
- POS terminals, Security Panels, Meter and Card Readers

ADVANTAGES

Small Memory Footprint
The full-featured TCP/IP software suite occupies very little program memory. Memory footprint for basic ZTP core protocols is less than 45KB.

Modular, Scalable, and Configurable
The modular design of ZTP enables the user to include only library objects required by the application, thus saving memory space.

High Performance and Fast Context Switching
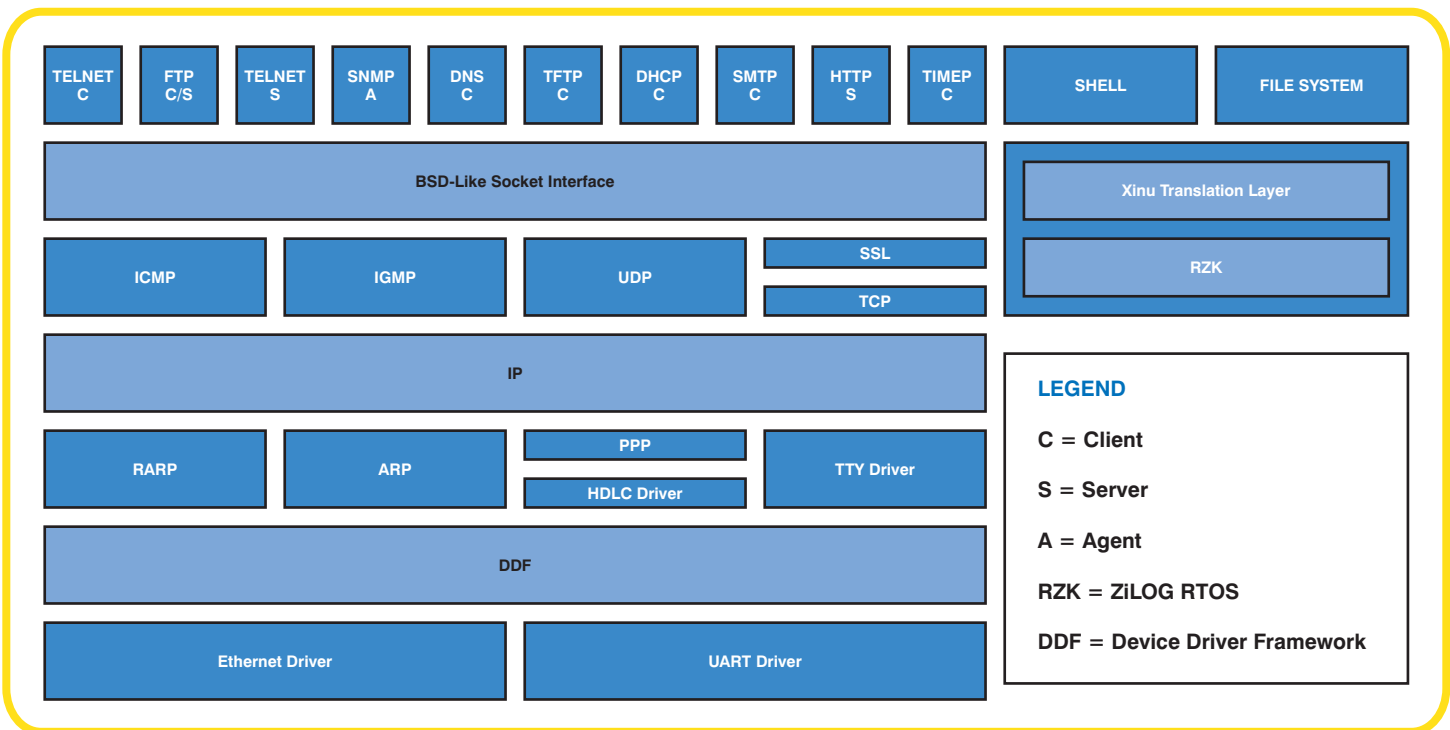ZTP is powered by RZK, which can perform a context switch between threads in less than 12.5 us.

Portable
ZTP applications can be easily migrated to a custom eZ80Acclaim!™-based hardware platform.

Easy to Use and Royalty-Free
User applications can be integrated with ZTP via easy-to-use and well documented Application Programming Interface (API).
- accelerate development time
- shorten the learning process
- maintain backward-compatibility of APIs with previous ZTP releases

TELNET C	FTP C/S	TELNET S	SNMP A	DNS C	TFTP C	DHCP C	SMTP C	HTTP S	TIMEP C	SHELL	FILE SYSTEM

BSD-Like Socket Interface — Xinu Translation Layer

ICMP — IGMP — UDP — SSL / TCP — RZK

IP

RARP — ARP — PPP / HDLC Driver — TTY Driver

DDF

Ethernet Driver — UART Driver

LEGEND

C = Client

S = Server

A = Agent

RZK = ZiLOG RTOS

DDF = Device Driver Framework

ORDERING INFORMATION

Part Number	Description
eZ800000100STO	ZiLOG TCP/IP (ZTP) Object Code
eZ800000100STS	ZiLOG TCP/IP (ZTP) Source Code
eZ800000100PSS	ZTP Network Security SSL Plug-in Option (SSL, HTTPS, US Version)
eZ800000100PTS	ZTP Network Security SSL Plug-in Option (SSL, HTTPS, International Version)
eZ800000100KRO	ZiLOG Real-Time Kernel (RZK) Object Code
eZ800000100KRS	ZiLOG Real-Time Kernel (RZK) Source Code

Order your ZiLOG Development Kits at http://www.zilog.com to get your applications to market in record time.