

EZ-System

Network Processor Based Platform with Ten 1-Gigabit Ports for Software Applications Vendors

Product Brief

Overview

EZ-System is a compact hardware/software platform based on the EZchip 20-Gigabit network processor. The system is provided in a stand-alone, self-contained box that can be tailored by software vendors to a wide variety of networking applications to deliver unmatched performance levels. EZ-System is based on the NP-2 network processor (NPU) for programmable packet processing with ten 1-Gigabit ports (or a 10-Gigabit port) and a control-plane CPU in a compact 1.5U box.

At the core of EZ-System is EZchip's field-proven network processor which offers fully-programmable packet classification, modification, forwarding and policing at wire speed. EZ-System utilizes the NPU to accelerate software solutions that typically run on available off-the-shelf hardware.

The combination of the EZchip network processor and a general purpose CPU provide a complete data plane and control plane solution. Through software programming, vendors can use EZ-System to implement a wide range of applications at unprecedented speed and price points. These include firewall, intrusion detection, load balancing, network management, VOIP gateways, content inspection and traffic analysis.

A comprehensive software environment with support for the Linux® and VxWorks® operating systems is provided. EZchip also provides customers with a broad library featuring tested source code for a wide range of applications. These include Metro Ethernet switch, MPLS, VPLS and Draft Martini, IPv4, IPv6, ACL (Access Control Lists) and Network Address Translation (NAT).

EZ-System is compliant with commonly recognized safety and EMC standards. There are no specific markings on the chassis and a vendor-specific logo and name may be appended.

Features

- EZchip NP-2 20-Gigabit network processor
- Pentium® III 800 MHz control CPU
- Ten 1-Gigabit Ethernet fiber-optic ports (SFP) or one 10-Gigabit port (X2)
- Serial and 10/100 Mbps Ethernet remote management ports
- Linux® or VxWorks® operating system
- Software support packages
- Full system diagnostics during power-up and run-time
- Event logging
- Single 110/220V AC or dual feed 48V DC power supplies
- Compact 1.5U stand-alone or rack-mountable chassis

EZ-System Software

EZ-System contains the Linux® operating system, EZchip software to support application development, EZchip sample applications and diagnostic software. These software components are pre-installed on the system's flash memory. EZ-System also supports the Wind River VxWorks® operating system.

The software components enable EZ-System to operate as-is on power up as well as provide the necessary components for the development of custom networking applications utilizing the EZchip network processor.

A Telnet server, FTP client and NFS client are pre-installed on EZ-System. A supplied utility enables binary executable files to be transferred to EZ-System for execution after reboot.



Figure 1. EZ-System chassis



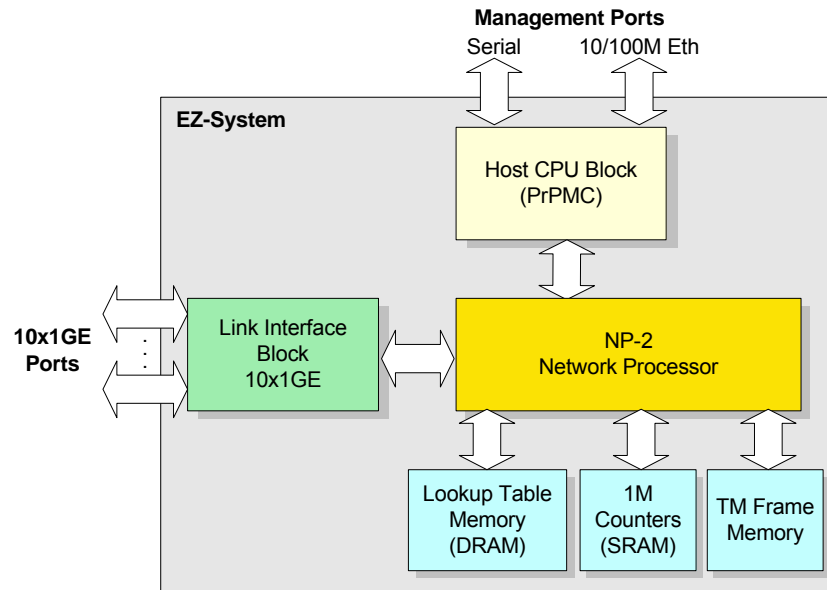


Figure 2. EZ-System 10x1GE board logical block diagram

Main Components

EZchip NPU:	NP-2/10 network processor with integrated search engines and traffic managers
SRAM:	Memory for NPU providing counters for statistics collection or per-flow traffic policing. 1M x 36-bit counters with ECC support.
DDR DRAM:	Memory for NPU forwarding, routing, classification and all other lookup tables. 128 MB RLDRAM II for external lookup tables; 256 MB RLDRAM II for TM frame memory; 64 MB RLDRAM II for TM control memory
RadiSys® PrPMC:	Host CPU: Intel® Pentium® III 512 MB 800 MHz (P/N: EPC-6315-800-512-R)

Physical and Electrical Specifications

Size:	438 mm (W) x 67 mm (H) x 280 mm (D)
Weight:	5 kilograms
Operating Temperature:	0°C to +40°C
Humidity:	10% to 90% non condensing

About EZchip

EZchip is a fabless semiconductor company that provides Ethernet network processors. EZchip provides its customers with solutions that scale from 1-Gigabit to 100-Gigabit per second with a common architecture and software across all products. EZchip's network processors provide the flexibility and integration that enable triple-play data, voice and video services in access, metro and edge systems that make up the new Carrier Ethernet networks. Visit our web site at www.ezchip.com.



Email: ezsupport@ezchip.com • Web: www.ezchip.com

EZchip Technologies Inc. • 900 E Hamilton Ave, Suite 100, Campbell, CA 95008, USA • Tel: (408) 879-7355, Fax: (408) 879-7357

EZchip Technologies Ltd. • 1 Hatamar Street, PO Box 527, Yokneam 20692, Israel • Tel: +972-4-959-6666, Fax: +972-4-959-4166

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