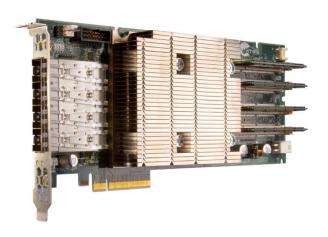
PCIE-RLCN6880-4x1GE/10GE

OVERVIEW

A PCIe Gen2.0 x8 Smart Network Accelerator supporting hot plugging between quad 1GE and 10GE SFP+/SFP interfaces. The board incorporates the best-in-class Cavium OCTEON® II 6880 processor

The smart Network Accelerator's primary purpose is to offload x86 server processors to maintain data throughput and enhance efficiency. The board can be used as an offload engine for deep packet inspection and analysis, content inspection and protection, and crypto engine to accelerate SSL and IPsec

Rhino Health Monitor (RHM) is a unique onboard Health Monitoring tool providing continuous monitoring of CPU cores, board peripherals, and host processor via heartbeats, voltage, and temperature checkpoints



KEY BENEFITS



Rhino's Health Management (RHM) Tool

Proprietary onboard circuitry and logic providing programmable board and CPU Health Monitoring and Failure Management to ensure optimal network operation and availability



1GE / 10GE Hot-Plugging

Auto-detection and hot-plugging between 1GE and 10GE SFP+/SFP interfaces



Cavium OCTEON II 6880 Processor

Cavium OCTEON family of Multi-Core MIPS64 processors is the industry's most scalable, highest-performance, and lowest-power solution for intelligent networking applications ranging from 100Mbps to 100Gbps



Enhanced Memory

Quad Channels of up to 32 GB DDR3 with ECC at 1333MHz



Made in the U.S.A

Rhino products are designed and manufactured locally at our facility in the Silicon Valley, California



Smart NIC 4x1GE / 4x10GE

PCIE-RLCN6880-4x1GE/10GE

Product Brief

FEATURES

Combines Cavium OCTEON II 6880 along with all memories, quad 10GE ports, health monitoring, power distribution, clock, and reset circuitry.

- > 32 MIPS64 cores @1.2GHz
- Quad Channels of 4 or 8 GB DDR3 with ECC at 1333MHz
- 128Mbit NOR parallel Flash
- Onboard interfaces:
 - Quad 1GE and 10GE copper and optical interfaces One USB host
 - ⇒ PCIe Gen 2.0 x 8 lanes
- Auto detect and hot switch between 1GE and 10GE SFP+/SFP
- > Typical Power Consumption:
 - Less than 90W with 32 core device running at 1.2GHz
- > Rhino Health Monitoring (RHM) Tool
 - Continuous monitoring of CPU cores, board peripherals, and host processor via heartbeats, voltage, and temperature checkpoints
 - ⇒ Programmatic health alerts and failure points
 - ⇒ Hold-on power (up to 150msec) feature for failure response and Onboard Failure Logging (OBFL)

SOFTWARE

- Rhino U-boot
- Linux SDK

Part Ordering

PCIE-RLCN6880-2-13-4-08-40

ABOUT RHINO LABS

Rhino Labs Inc. is a leading provider of high-performance networking and data infrastructure solutions

Our products are used by a growing base of OEM customers in applications focused on Cyber Security, Network Monitoring and Traffic Management. Our standard and customized products include Intelligent Bypass NICs, Smart NICs, and a variety of network, security, and storage appliances. We are a privately held company headquartered in Santa Clara, CA with a local engineering and manufacturing facility and a high volume manufacturing facility in Malaysia.

BLOCK DIAGRAM

