



Smart NIC 7130 Quad 1GE

RL-PCIE-7130-4x1GE

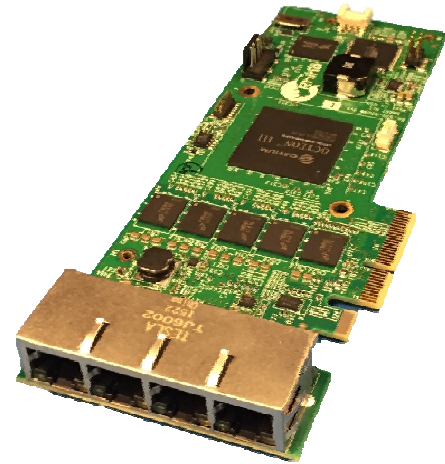
Product Brief

OVERVIEW

A PCIe Gen3.0 Smart Network Accelerator supporting quad 1GE copper interfaces. The board incorporates the state of the art Cavium OCTEON® III 71xx processor.

The smart Network Accelerator's primary purpose is to offload x86 server processors to maintain data throughput and enhance efficiency and performance. 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.

The board incorporates the Rhino Health Monitoring (RHM) tool, providing continuous monitoring of the on board 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



Enhanced Memory

up to 8GB DDR3 with ECC at 1333MHz



Cavium OCTEON III 7130 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



Made in The U.S.A

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

FEATURES

Combines Cavium OCTEON III CN7130 along with all memories, quad 1GE ports, Rhino Health Monitoring (RHM), power distribution, clock, and reset circuitry

- Quad MIPS64 cores @1.6GHz
- Single Channels of 4 or 8 GB DDR3 with ECC at 1333MHz
- On board 4GB eMMC device for local storage
- Onboard interfaces:
 - ⇒ Quad 1GE Copper
 - ⇒ One USB2.0 host
 - ⇒ PCIe Gen 3.0 x 4 lanes
- Typical Power Consumption:
 - ⇒ Less than 18.5W with 8 core device running at 1.6GHz
- Mechanical Size: L=6.60" x H=2.731inc (full height)
- 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

RL-PCIE-7130-4x1GE

PCIe Gen3.0 Smart NIC incorporating 4MIPS64 CPUs, AAP,1.6GHz, 8GB DDR3 with ECC, 4GB eMMC, 4x1GE copper ports

BLOCK DIAGRAM

