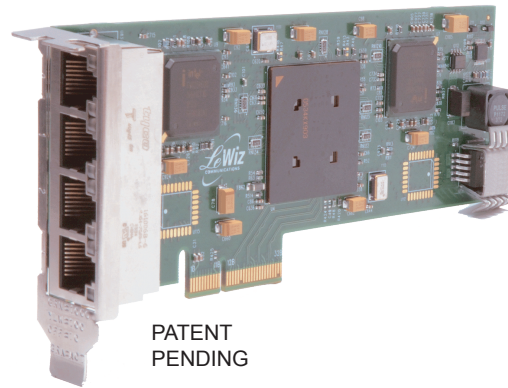




## PCI-Express, 4-Port, 8 Gbps, Low Profile, Tiny NIC



PATENT  
PENDING

LeWiz's TALON3008™ is a PCI-Express (PCIe) network interface card (NIC) with 4 ports of 1Gbps Ethernet but in a PCIe low profile form factor. It's designed to target the small space, heat sensitive servers, storage and security systems markets. This quad port board is suitable for high performance high connectivity networked systems such as blade servers, storage and networked appliances. The TALON3008™ plugs directly into the systems x1, x4, x8, or x16 PCIe slot. With all 4 ports active in bi-directional mode, LeWiz's Talon3008™ PCIe board can transmit and receive up to 8Gbps or 4Gbps in each direction. The board has TCP/IP assist functions to reduce the work load for the system CPUs. Both low profile and standard height PCI-Express brackets are available.

The 4 independent ports allow users to implement fail-over fault-tolerant capability using quad redundancy or dual redundancy that can be switched over 2 different networks ensuring the system can always be up and running even during an outage of the primary network. For higher performance, the 4 GigE ports can also be bonded together to form a single pipe achieving the performance of most 10Gbps NIC cards in the market but at a fraction of the cost – yet still allowing the users to use the proven, low cost GigE network equipments.

The board is a plug-n-play for many systems. It readily supports Windows2000/2003 Server, Solaris10/Express, Linux2.4/2.6, and Redhat or SuSE Enterprise operating systems. It has been tested on both AMD Opteron and Intel Xeon platforms both in 32 and 64 bit configurations.

Storage application such as iSCSI stack, and Web server Apache applications are readily available. Existing applications would run on this board without modification or recompilation.

Designed for maximum wire rate throughput across the ports. The TALON3008™ is ideal for network intensive environments such as file serving, network attached storage (NAS), high performance technical computing, high-end backup and restore, IP storage, and video serving.

### Features

- Performs 8Gbps full duplex
- Low Power consumption
- Supports fail-over protection (alternate pathing)
- Supports port aggregation, bonding
- Qualified across multiple host platforms from Dell™, HP™, SUN™, TYAN™, and others
- Supports all CPU types: Opteron™, Pentium™, Xeon™, PowerPC™, SPARC™, MIPS™, and others
- Board size: Low profile PCIe NIC (2.535" x 6.6")

### Applications

- Servers (application servers, Web/DNS/e-mail/file servers, etc.)
- Storage (iSCSI, SAN/NAS, etc.)
- iSCSI NIC, initiator or target
- Security appliances (firewalls, load balancers, etc.)
- Network appliances
- Compression systems
- Streaming Multimedia

### Benefits

- Lowers overall network cost
  - 4 bi-directional ethernet ports
  - Increases throughput in existing systems
  - Better reliability, less downtime
- Non-intrusive to system hardware and software
- Easy plug-n-play installation



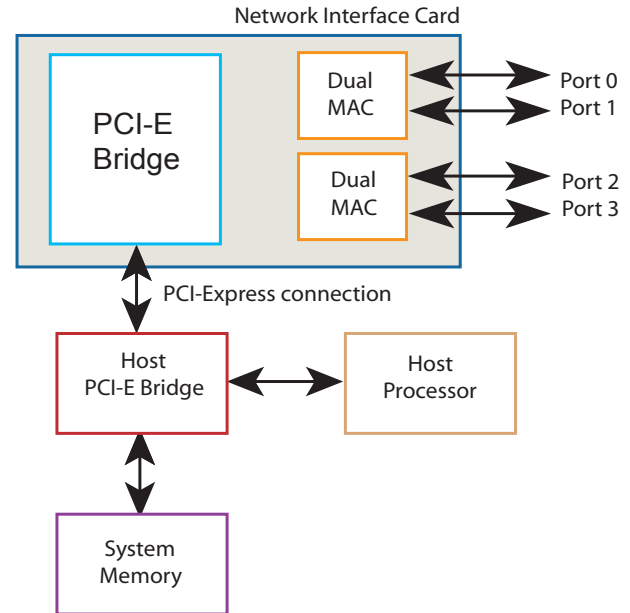
Linux  
2.6/2.4  
Redhat/  
SuSE



# TALON3008™

## Feature Details

- PCI-E 1.1 x1, x4, x8, x16 compatible
- 8 Gbps
- 4 Ethernet ports of 1 Gbps each
- All ports can function simultaneously
- Full wire-rate for the ports
- Small form factor - low profile. Suitable for small 1U systems
- Low power - 7.7W typical/ 9.2W max with all ports active
- TCP/IP assist functions:
  - TX and RX checksum offload
  - TCP segmentation (IPv4 and IPv6)
  - Packet filtering based on checksum
  - Support for various address filtering modes (16 exact matches, etc.)
  - IPv6 checksum offload for IP/TCP/UDP receive
  - IPv6 WAKE-up filter
- VLAN support (IEEE802.1q)
- SNMP and RMON statistic counters
- Packet length up to 16k Byte
- Interrupt coalescing and throttling to control interrupt rate and improves CPU utilization
- SMBus-based management port
- Support pre-boot execution environment (PXE)
- Remote boot capability with iSCSI
- Little endian support for 32/64-bit system
- Big endian support for 64-bit system
- Low power modes:
  - ACPI register set and power down functionality
  - Supports WAKE-on-LAN
  - Supports PCI-E WAKE# capability
- Supports Auto-negotiation and Link Setup
- Supports Fail-over and port aggregation capability
- Each port can be 10, 100, or 1000 Mbps speed
- Loadable device driver
- Supports various 32/64 bit Windows, Linux, Solaris, and other operating systems



### Quad Gigabit TALON3008™ Low Profile PCI-E NIC

Ordering Part #:

- Talon3008-s (standard PCI-e bracket)
- Talon3008-l (low profile PCI-e bracket)



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