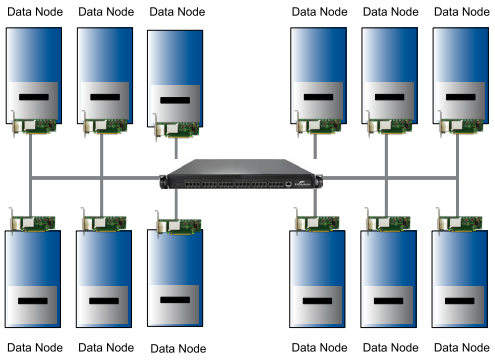
PCIe Cluster

High Performance Networking



eXpressWare Software enables the deployment of a very low latency PCIe fabric. This fabric can connect nodes ranging from just two for high speed replication to over 100 for networking applications.

eXpressWare software supports multiple protocols for clustering including TCP/IP, Sockets, and the SISCI API for low latency shared memory. These various methods of communication can be used for processor to processor communication. The advantage of PCI Express is based on using PIO and DMA transfers that can be as low as 540ns and can be combined with throughput levels of 13GT/s. Our Gen3 products include support for copper and fiber cables. The fiber connections can be as long as 100 meters.

Benefits

- Extremely low latency communication at <1µs host to host
- Performance scaling with PCI Express without changing application
- Support for standard APIs such as sockets and TCP/IP
- Low latency shared memory API for custom applications

Features

Shared memory API for clusters and SMP's	Distributed shared memory
Easy deployment of DMA transfers	Direct remote CPU load and stores, memcpy()
Create and trigger remote application level interrupts	Caching and error checking support
Events and callbacks	Windows, RTX, VxWorks and Linux OS support