



Chelsio Communications is a leading provider of 1 and 10 Gigabit Ethernet adapters, delivering protocol-offload and acceleration technology to improve application performance and communications bandwidth for high-performance servers and storage systems.

High Performance Computing

Chelsio's 10Gb Ethernet Solutions For High Performance Computing

High Performance Computing cluster architectures are moving away from proprietary and expensive networking technologies towards Ethernet as the performance/latency of TCP/IP continues to drive forward. iWARP, also called RDMA over Ethernet, is a robust, proven low latency solution for HPC applications, and it is backed by many of the 10 Gigabit Ethernet adapter companies.

There are a wide range of high performance computing applications, including:

- Geological analysis for oil and gas exploration
- Bioscience and genome mapping
- Nanotechnology research and development
- Financial analysis
- Fluid dynamics
- DoD testing and simulation
- Weather forecasting
- Data mining/predictive optimization

High Frequency Trading

Chelsio offers customers the lowest latency networking solutions for high frequency trading and other financial services applications with its high-performance 10GbE server adapters and OpenOnload application acceleration middleware. These products enable customers to leverage their existing Ethernet and IP infrastructures while achieving the absolute lowest latency with no need to modify applications.

Data Centre Networks

With the proliferation of massive data centers, equipment density and power consumption are more critical than ever. At the same time cloud computing and server virtualization are driving the need for more uniform designs than traditional three-tier data-center architectures offer. The concept of network convergence around 10Gb Ethernet has been envisioned for a long time.

Storage Networking

10 Gigabit Ethernet, enhanced with Chelsio's communication-protocol acceleration technology, boosts storage bandwidth and facilitates the move to IP SANs, providing the benefit of unifying the datacenter to a single networking technology.

- Applications
- Messaging
- On-line Transaction Processing
- Decision Support Systems
- Video Editing
- High-Performance
- Cloud Networking and Virtualization

Cloud networking and Server virtualization

Cloud networking and server virtualization today require more than just the ability to support server consolidation. To meet customer requirements, cloud and virtualization solutions must scale in performance, protect data integrity, and support service level agreements, all while supporting the broad set of virtualization and virtual cloud features available from the virtual OS providers: VMware, Citrix XenServer, Microsoft Hyper V and Linux KVM. Whether building a private, public, or hybrid cloud, IT departments must deliver secure services at near-native application performance with minimal perceived latency.