BROCADE HOST BUS ADAPTER TECHNOLOGY LEADERSHIP

SERVER CONNECTIVITY

Twice the Performance for Next-Generation Data Centers

HIGHLIGHTS

- With over ten years of Fibre Channel ASIC design hertitage embedded in multiple CPU offload engines, Brocade has the processing power to handle more Virtual Machines (VMs) without sacrificing on-demand and sustainable scalability
- In conjunction with fabric-wide Quality of Service (QoS) features, this performance level can guarantee Service Level Agreements (SLAs) in dynamic IT environments
- Brocade has provided the most reliable SAN solutions and industry-leading support since the advent of the Fibre Channel protocol over a decade ago
- Brocade HBAs support all the standard features of Fibre Channel connectivity—including performance and scalability

The Brocade® 815 and 825 8 Gbit/sec Fibre Channel-to-PCIe Host Bus Adapters (HBAs) provide a new level of scalable server connectivity through unmatched hardware capabilities and unique software configurability. This new class of HBA is designed to help IT organizations deploy and manage true end-to-end Storage Area Network (SAN) services across next-generation data centers. This paper highlights the benchmark results obtained by Finisar Medusa Labs Test Services.

BROCADE HBAS DELIVER DOUBLE THE IOPS

Recent benchmarking of the Brocade 815 Fibre Channel HBA clearly demonstrates 2x performance leadership in the 8 Gbit/sec HBA category.

The level of I/O performance confirmed by Medusa Labs Testing Service[1] is unique to Brocade or Brocade's OEM solutions. In the virtualized data center with consolidation of physical servers, only Brocade FC HBAs can ensure that your data center fabric provides the scalability needed to meet virtualization requirements.

MAXIMIZING INVESTMENTS

Brocade and its partners offer complete solutions to meet a wide range of technology and business requirements. These solutions include education and training, support, and services to help optimize data center investments.

For more information, contact an authorized Brocade sales partner or your Brocade representative at hbasales@brocade.com, or visit www.brocade.com

1. Performance comparison based on vendor-published performance information, not certified by Finisar Medusa Labs Test Services.

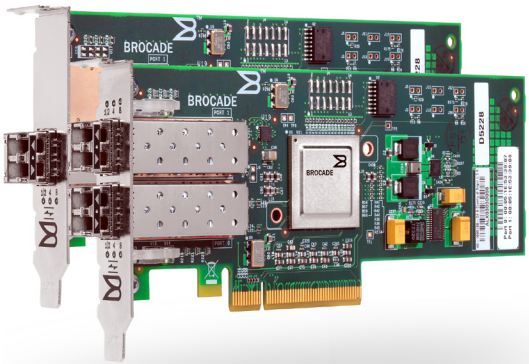

Figure 1.
The Brocade 815 and 825 8 Gbit/sec Fibre Channel-to-PCIe Host Bus Adapters.

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Benchmarking Configuration

- **Host Server:**
  Supermicro, Intel 5460 3.167 GHz single Quad Core CPU, 4 GB of RAM; Windows 2008 Server x64
- **Fibre Channel HBA:**
  Brocade 815 FC HBA, Rev C, driver version 1.0.0 GA
- **Fibre Channel Switch:**
  Brocade 300 Switch
- **Storage Target:**
  ThirdIO Iris storage target with 10 8Gbit/sec ports, 4 LUNs each (40 LUNs total). The ThirdIO Iris storage target is used to permit highest HBA performance by removing storage I/O constraints.
- **Testing Platform:**
  Medusa Labs Test Tool Suite, version 2.5.4

Finisar Medusa Labs Test Services is an independent third-party service used to test products in an enterprise environment ensuring that products will survive the rigorous demands of mission-critical applications. The Finisar Medusa Labs Test Tool Suite performs data integrity testing, performance analysis, signal aggravation, and enterprise application simulation. The specific testing performed on the Client's product(s) or the Client's test results as described in this document in no manner implies an endorsement by Finisar of the Client's product(s) or the Client's company.

BROCADE 815 RESULTS SUMMARY

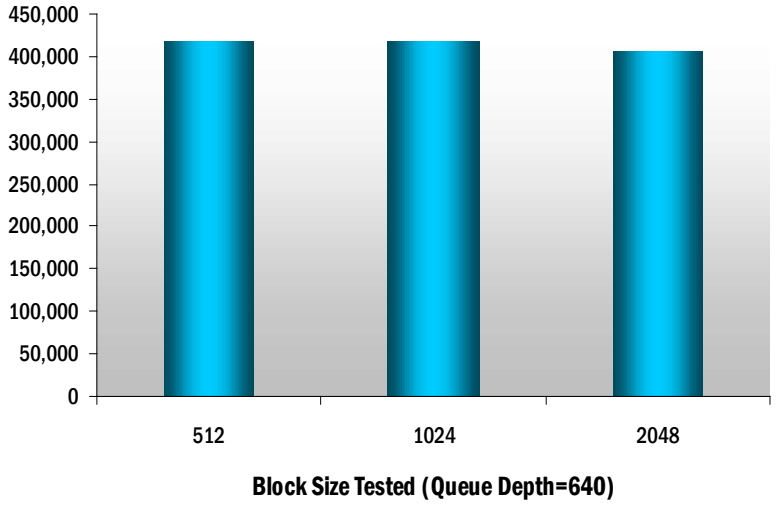
Maximum IOPS

Test Pattern	Queue Depth	Transaction Block Size	IOPS
50/50 Read/Write	640	512 Bytes	418,629
50/50 Read/Write	640	1,024 Bytes	419,323
50/50 Read/Write	640	2,048 Bytes	409,372

Maximum Throughput

Test Pattern	Queue Depth	Transaction Block Size	MB/sec
50/50 Read/Write	160	262,144 Bytes	1,561

IOPS by Transaction Block Size



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