

OVERVIEW

Organizations are challenged to scale their file transfer capabilities to meet increasing business demands while assuring integrity and security of the movement of data. Advances in 16Gb/s Gen 5 Fibre Channel technology allows data centers to reduce capital and operating expenses while dramatically improving file transfer rates. ATTO Celerity™ 16Gb/s Fibre Channel host bus adapters (HBAs) are engineered to meet and exceed the growing data demands within business environments, allowing organizations to maximize efficiency and productivity.

Performance testing in a Windows server environment was conducted to obtain comparative benchmarks of the ATTO Celerity and QLogic® 16Gb/s HBAs. IOMeter measurement tool was used to capture the data presented in this comparison testing. Both HBAs were tested in 16Gb/s Fibre Channel mode in the PCIe 3.0 slot of an Intel® server running Windows 2012. The benchmarks were performed at transfer sizes ranging from 512B to 32KB to represent the various file sizes servers need to manage I/O within corporate and departmental data centers.

CONFIGURATION

TEST TOOL

- IOMeter server I/O performance storage measurement tool

SERVER MACHINE

- Intel Server Platform
- 64GB Memory

- PCIe 3.0
- ATTO Celerity FC-161E or QLogic QLE2671

STORAGE

- (8) 16Gb Fibre Channel ports running in Target Mode with 1 LUN per port

OPERATING PLATFORM

- Windows Server 2012

CONNECTION

- ATTO FibreConnect™ 1612 16Gb/s Fibre Channel Switch
- ATTO Celerity FC-161E (default settings)
- Qlogic QLE2671 (default settings)

RESULTS

ATTO outperformed the competition in a high volume, small transactional Windows 2012 Server environment across a full range of transfer sizes by a sizable margin.

SUMMARY AND CONCLUSIONS

ATTO's Celerity 16Gb/s Gen 5 Fibre Channel HBA delivers significantly higher IOPS and MBPS across a full range of transfer sizes in Windows 2012 Server applications when compared to competitive HBAs. Designed for interoperability with a wide range of multigenerational Fibre Channel infrastructure vendors, end-users can be confident that ATTO Celerity HBAs will plug and play with your existing data center. Coupled with MultiPath Director™, Celerity HBAs allow you to manage multiple paths between heterogeneous workstations, servers

and enterprise-class storage networks, ensuring continuous availability of your data.

ATTO 16Gb/s Fibre Channel connectivity supports larger server virtualization deployments, faster backups, scalable cloud initiatives, as well as performance to match new multi-core processors and faster PCIe 3.0 server host bus architectures. To take advantage of these features for a complete end-to-end connectivity solution, be sure to choose ATTO when configuring your server and storage infrastructures.

Figure 1 - Celerity 16Gb/s HBA vs QLogic 16Gb/s HBA (100% Sequential Reads)

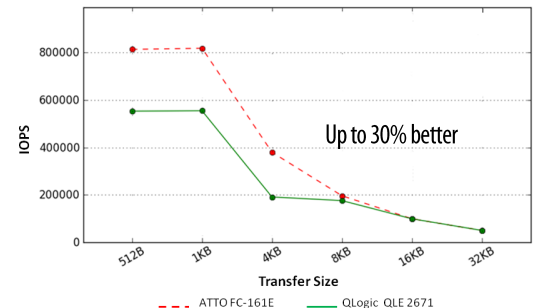


Figure 2 - Celerity 16Gb/s HBA vs QLogic 16Gb/s HBA (100% Sequential Reads)

