BENCHMARK

ATTO Celerity™ Fibre Channel HBAs

Why ATTO?

Industry Leading Performance

ATTO Celerity™ 32Gb and 16Gb Gen 6 host bus adapters (HBAs) were designed to meet the ever-growing performance needs of a scalable storage area network (SAN). Today’s SANs require increased performance to support the data request loads put forth by common enterprise applications such as email, online transaction processing (OLTP), data warehousing and web applications. This load, measured in IOPS, directly affects productivity, efficiency and revenue. Using a high-performance HBA is even more critical when used in virtual environments where multiple virtual machines (VMs) are sharing the same HBA.

Celerity HBAs have an advantage over the leading competitor embedded in the processor’s architecture. The ATTO controller has multiple cores, providing full IOPS performance to a single port in “active standby” mode on dual-port HBA. If a port, cable or SFP fails, a port on the ATTO adapter can support up to 2.5X as many IOPS as the competitive HBA. ATTO Celerity HBAs allow sustained maximum performance, enabling users to continue to meet service level agreements.

With data centers moving to all-flash arrays, the need to drive greater performance to more solid-state drives (SSDs) is becoming critical. ATTO Celerity HBAs support up to 2X the number of outstanding commands than the competition. This is very important for high-transaction environments because Celerity can keep more commands in flight at any point in time, resulting in lower latency. Celerity optimizes CPU interrupts using ATTO algorithms, which allow the server applications to process more data in a given period of time. This results in overall higher IOPS performance which means you can connect and sustain performance to more SSDs than the competition.

Celerity HBAs make it possible to have longer distances between your servers and storage. Featuring 5X more buffer credits than the competition, Celerity HBAs support more data in-flight allowing you to extend your connection to storage up to 10 km, without degrading throughput for demanding long-distance applications such as a stretch cluster.

About ATTO

For over 30 years, ATTO Technology, has been a global leader across the IT and media & entertainment markets, specializing in network and storage connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO works with partners to deliver end-to-end solutions to better store, manage and deliver data.

All trademarks, trade names, service marks and logos referenced herein belong to their respective companies.
### ATTO and QLogic Gen 6 Product Line Comparisons

<table>
<thead>
<tr>
<th>Subject</th>
<th>ATTO</th>
<th>QLogic</th>
<th>ATTO Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOPS (Single Port)</td>
<td>1.6M</td>
<td>650K</td>
<td>ATTO provides 2.5X better performance</td>
</tr>
<tr>
<td>Commands in Flight</td>
<td>128</td>
<td>64</td>
<td>ATTO provides faster throughput</td>
</tr>
<tr>
<td>Buffer Credits</td>
<td>80</td>
<td>16</td>
<td>ATTO supports more data in flight</td>
</tr>
</tbody>
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### IOPS: Sequential Reads

![IOPS: Sequential Reads](attachment:image1.png)

### IOPS: Sequential Writes

![IOPS: Sequential Writes](attachment:image2.png)