



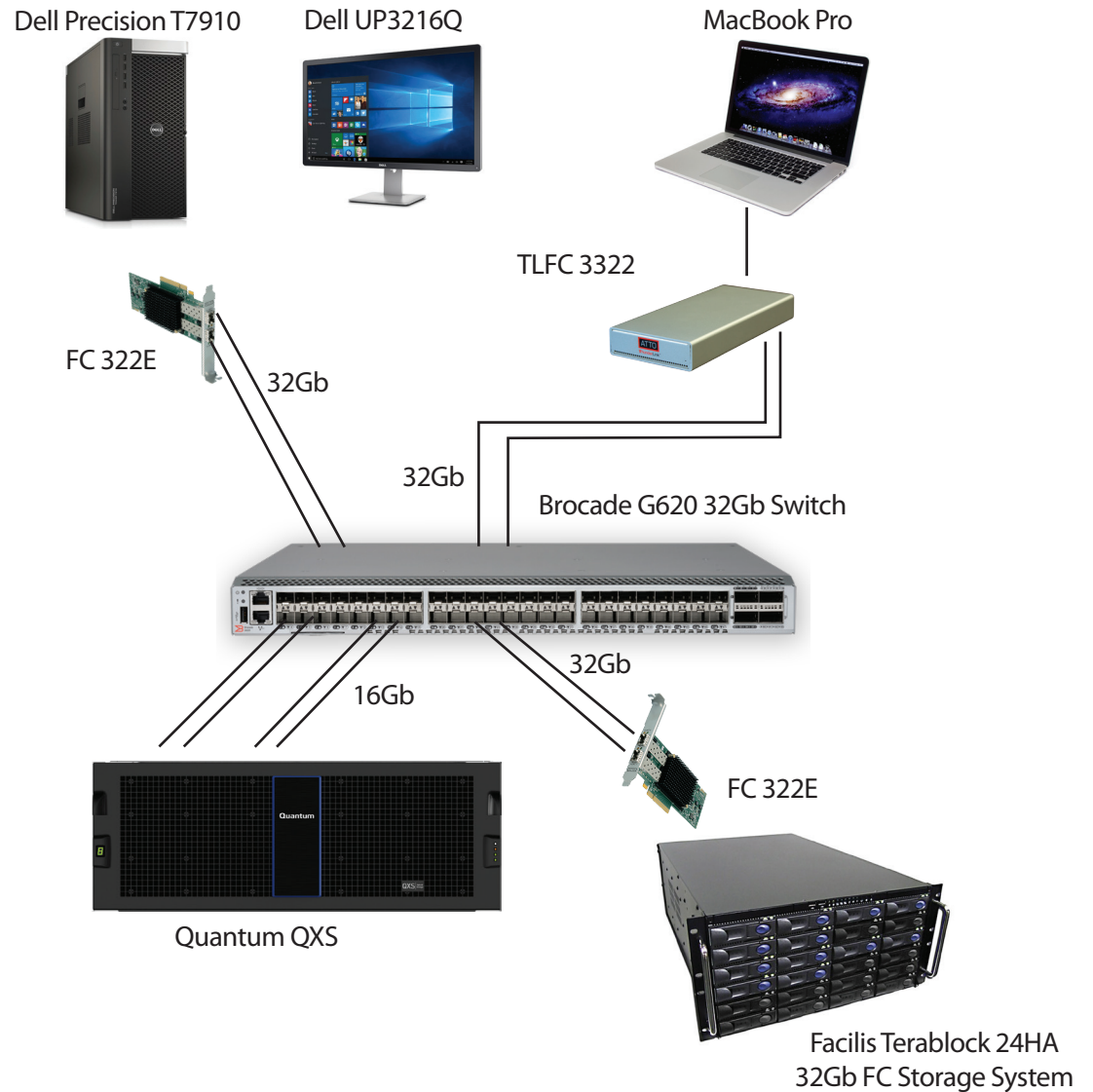
The Power Behind the Storage

## ATTO's ThunderLink® devices and Celerity™ HBAs

Create storage area networks using the latest Gen 6 Fibre Channel connectivity

### Solution Benefits

- ATTO's Celerity™ host bus adapters and ThunderLink® Thunderbolt™ devices support the latest Gen 6 Fibre Channel technology, ensuring the lowest latency and highest throughput available to meet the real-time streaming demands for 4K and 8K applications
- ATTO's exclusive MultiPath Director™ enables servers and workstations to connect to enterprise-class storage, providing a completely redundant, high-availability, high performance storage solution
- ATTO provides the only solution that allows Windows® Linux® and Mac® workstations to work together in a heterogeneous SAN



Whatever your workflow, ATTO powers storage connectivity for 4K, 8K and beyond | [www.atto.com/tradeshaw/NAB](http://www.atto.com/tradeshaw/NAB) | +1.716.691.1999

# ATTO Celerity™ Host Bus Adapters

Product Features	324E (Gen6)	322E (Gen 6)	321E (Gen 6)	164P (Gen 6)	162P (Gen 6)	161P (Gen 6)
Part Number	Available 2017	CTFC-322E-000	CTFC-321E-000	CTFC-164P-000	CTFC-162P-000	CTFC-161P-000
Fibre Channel Ports	4	2	1	4	2	1
Max. Data Rate	32Gb/s	32Gb/s	32Gb/s	16Gb/s	16Gb/s	16Gb/s
Max. Transfer Rate	9600MB/s	6400MB/s	3200MB/s	6400MB/s	3200MB/s	1600MB/s
Bus Type	PCIe 3.0 x16	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8
Auto Negotiation	32Gb, 16Gb, 8Gb	32Gb, 16Gb, 8Gb	32Gb, 16Gb, 8Gb	16Gb, 8Gb, 4Gb	16Gb, 8Gb, 4Gb	16Gb, 8Gb, 4Gb
Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC
Max. Cable Length (OM3)	100m - 16Gb 50m - 32Gb	100m - 16Gb 50m - 32Gb	100m - 16Gb 50m - 32Gb	150m - 8Gb 100m - 16Gb	150m - 8Gb 100m - 16Gb	150m - 8Gb 100m - 16Gb
Low-Profile Form Factor	No	Yes	Yes	Yes	Yes	Yes
Developer's Kit <sup>1)</sup> (Target Mode API)	Yes	Yes	Yes	Yes	Yes	Yes
Warranty	3 year	3 year	3 year	3 year	3 year	3 year

Product Features	164E <sup>1)</sup>	162E	161E
Part Number	CTFC-164E-000	CTFC-162E-000	CTFC-161E-000
Fibre Channel Ports	4	2	1
Max. Data Rate	16Gb/s	16Gb/s	16Gb/s
Max. Transfer Rate	6400MB/s	3200MB/s	1600MB/s
Bus Type	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8
Auto Negotiation	16Gb, 8Gb, 4Gb	16Gb, 8Gb, 4Gb	16Gb, 8Gb, 4Gb
Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC
Max. Cable Length (OM3)	150m - 8Gb 100m - 16Gb	150m - 8Gb 100m - 16Gb	150m - 8Gb 100m - 16Gb
Low-Profile Form Factor	No	Yes	Yes
Developer's Kit <sup>1)</sup> (Target Mode API)	Yes	Yes	Yes
Warranty	3 year	3 year	3 year

Product Features	84EN	82EN	81EN
Part Number	CTFC-84EN-000	CTFC-82EN-000	CTFC-81EN-000
Fibre Channel Ports	4	2	1
Max. Data Rate	8Gb/s	8Gb/s	8Gb/s
Max. Transfer Rate	3200MB/s	1600MB/s	800MB/s
Bus Type	PCIe 2.0 x8 <sup>2)</sup>	PCIe 2.0 x8 <sup>2)</sup>	PCIe 2.0 x8 <sup>2)</sup>
Auto Negotiation	8Gb, 4Gb, 2Gb	8Gb, 4Gb, 2Gb	8Gb, 4Gb, 2Gb
Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC
Max. Cable Length (OM3)	500m - 2Gb 380 m - 4Gb 150 m - 8Gb	500m - 2Gb 380 m - 4Gb 150 m - 8Gb	500m - 2Gb 380 m - 4Gb 150 m - 8Gb
Low-Profile Form Factor	No	Yes	Yes
Developer's Kit <sup>1)</sup> (Target Mode API)	Yes	Yes	Yes
Warranty	3 year	3 year	3 year

<sup>1)</sup> Available for qualified OEM sales only. Please contact your ATTO representative.

<sup>2)</sup> Cross-compatible with PCIe 3.0