Superior Performance

The Liqid Element LQD4500 PCIe Add-In-Card (AIC) features high storage capacity and extreme performance for mission critical and performance-demanding workloads. It is an ultra-thin, standard form factor full-height full-length (FHFL) card that works seamlessly with systems that have existing PCIe slots. This makes the Element LQD4500 ideal for deployment in data center and enterprise applications.

The Element LQD4500 offers a Gen 4.0 x16 PCIe interface, which enables high throughput and low latency transactions and utilizes the latest NVMe protocol in order to deliver increased performance and efficiency from a single device. The LQD4500 outperforms legacy architectures by delivering up to 4 M IOPS of random performance, and over 24 GB/s of throughput, and ultra-low transactional latency of 20 us.

The Element LQD4500 innovative design enables multiple drive configurations ranging from maximum performance to maximum redundancy. The LQD4500 also features enterprise-class power failure protection for increased reliability to prevent data loss and ensure uninterrupted work in case of power failure.

> Ultra Fast PCIe Gen 4.0 x16 Interface

> Performance of 4 M IOPS and 24 GB/s

> High-capacity NVMe SSD, up to 32 TB

> Enterprise-class Power Failure Protection

Key Features

- High Performance PCIe SSD
- Ultra Fast PCIe 4.0 x16 Interface
- NVMe 1.2.1 Protocol Supported
- High Capacity Design, up to 32 TB
- Standard Form Factor SSD
- Low Profile FHFL Card
- Plug-n-Play Compatibility
- UEFI Boot Support
- Enterprise Grade Reliability
- Power Loss Data Protection

- Active Thermal Throttling
- Active Power Management
- Advanced ECC and Data Protection
- Advanced Error Recovery
- Active Telemetry Monitoring
- Low Overhead Architecture
- No Host CPU or DRAM Off Load
- RAID on Card Supported Data Protection

Specification	Model: Element LQD4500 PCIe AIC SSD
Raw Capacity	Up to 32 TB
NAND Type	TLC 3D NAND
Read Bandwidth (GB/s)	~24
Write Bandwidth (GB/s)	~24
Ran. Read IOPS (4k)	~4,000,000
Ran. Write IOPS (4k)	~4,000,000
Ran. Write IOPS (4k) (SS)	~600,000
Read Access Latency	~80 µs
Write Access Latency	~20 µs
Protocol	NVMe 1.2.1
Bus Interface	PCI Express 4.0 x16
Endurance	Up to 61.53 PBW*
Security	AES Data Encryption
Weight	20 oz
Warranty	3 years or maximum endurance used
Form Factor	Standard Form Factor FHFL Card
Temperature	Op: 0 to 55 deg C
	Non-Op: -40 to 75 deg C
Power	Active: ~65 W Typical
	Input: 12 V Only (optional aux power cable)
Air Flow	Min 400 LFM
Humidity	5% to 95% (non-condensing)
Altitude	0 ft to 10,000 ft
Operating Environments	Windows, Windows Server 2012, 2012 R2
	RHEL; SLES; CentOS, Solaris, SUSE, VMware
Agency & Safety	UL, CB, CE, CCS, KCC, HF, BSMI, VCCI, FCC Class B and CISPR Class B, JEDEC

*PBW table per capacity/configuration available upon request

Data Center Selection

LQD-E2DPNBD08M007T68
7.68TB, 983, NVMe PCIe Gen 4.0 x16 FHFL AIC SSD

LQD-E2DPNBD08M015T36
15.36TB, 983, NVMe PCIe Gen 4.0 x16 FHFL AIC SSD

LQD-E2DPNBD08M030T72
30.72TB, 983, NVMe PCIe Gen 4.0 x16 FHFL AIC SSD

Enterprise Selection

LQD-E2DPNBD08M006T40
6.40TB, 983, NVMe PCIe Gen 4.0 x16 FHFL AIC SSD

LQD-E2DPNBD08M012T80
12.80TB, 983, NVMe PCIe Gen 4.0 x16 FHFL AIC SSD

LQD-E2DPNBD08M025T60
25.60TB, 983, NVMe PCIe Gen 4.0 x16 FHFL AIC SSD

Please contact your sales rep for more information and to determine which configuration is best for use. Specification subject to change without notice.

Contact Information

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About Liqid

A leader in composable infrastructure, Liqid enables users to configure and manage physical, bare-metal server systems in seconds. Storage, compute, networking and graphics processing devices are interconnected over PCI-Express fabric to deliver dynamically configurable bare-metal servers perfectly sized with the exact physical resources required by the application being deployed.