

Superior Performance

The Liquid Element 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 half-height half-length (HHHL) card that works seamlessly with systems that have existing PCIe slots. This makes the Element AIC ideal for deployment in data center and enterprise applications.

The Element AIC offers a Gen 3.0 x8 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 AIC outperforms legacy architectures by delivering 1.25 M IOPS of random performance, over 7 GB/s of throughput, and ultra-low transactional latency of 20 us.

The Element AIC's innovative design enables multiple drive configurations ranging from maximum performance to maximum redundancy. The AIC 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 3.0 x8 Interface
- > Performance of 1.25 M IOPS and 7 GB/s
- > High-capacity NVMe SSD, up to 16 TB
- > Enterprise-class Power Failure Protection

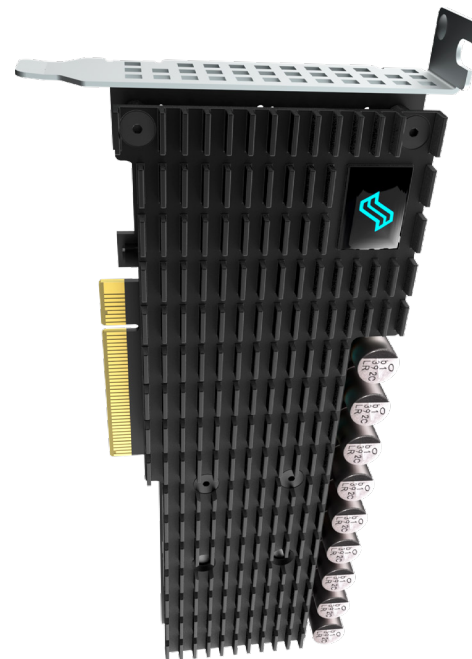
Key Features

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|-------------------------------------|------------------------------------|
| - High Performance PCIe SSD | - Active Thermal Throttling |
| - Ultra Fast PCIe 3.0 x8 Interface | - Active Power Management |
| - NVMe 1.2 Protocol Supported | - Advanced ECC and Data Protection |
| - High Capacity Design, up to 16 TB | - Advanced Error Recovery |
| - Standard Form Factor SSD | - Active Telemetry Monitoring |
| - Low Profile HHHL Card | - Low Overhead Architecture |
| - Plug-n-Play Compatibility | - No Host CPU or DRAM Off Load |
| - UEFI Boot Support | - RAID on Card Supported |
| - Enterprise Grade Reliability | - Data Protection |
| - Power Loss Data Protection | |

Specification

Model: Element PCIe AIC SSD

Raw Capacity	Up to 16 TB
NAND Type	MLC or TLC
Read Bandwidth (GB/s)	~7.0
Write Bandwidth (GB/s)	~6.3
Ran. Read IOPS (4k)	~1,250,000
Ran. Write IOPS (4k)	~900,000
Ran. Write IOPS (4k) (SS)	~275,000
Read Access Latency	~80 µs
Write Access Latency	~20 µs
Protocol	NVMe 1.2
Bus Interface	PCI Express 3.0 x8
Endurance	1-3 DW/Day (configurable)
Security	AES Data Encryption
Weight	6-10 oz
Warranty	3 years or maximum endurance used
Form Factor	Standard Form Factor HHHL Card
Temperature	Op: 0 to 55 deg C Non-Op: -40 to 75 deg C
Power	Active: ~25 W Typical, 45 W max (Drive Dependent) 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



Data Center Selection

LQD-E1APA04M960G00

960 GB AHCI PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APA04M001T92

1.92 TB AHCI PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M003T84

3.84 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M007T68

7.68 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M015T40

15.4 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

Enterprise Selection

LQD-E1APN04M800G00

800 GB NVMe PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M001T60

1.60 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M003T20

3.20 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M006T40

6.40 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

LQD-E1APN04M012T80

12.80 TB NVMe PCIe Gen 3.0 x8 HHHL AIC

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.

Contact Information

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