



## Blistering Pace

The Liqid Element 2.5" U.2 NVMe SSD features high storage capacity and extreme performance for mission-critical and performance-demanding workloads. It is a standard form factor 2.5" 15 mm design that works seamlessly with systems that have existing 2.5" U.2 NVMe slots. This makes the Element U.2 ideal for deployment in data center and enterprise applications.

The Element U.2 offers a hot pluggable Gen 3.0 PCIe interface with single- and dual-port configurations, which enables high throughput and high availability and utilizes the latest NVMe protocol in order to deliver increased performance and efficiency from a single device. The U.2 outperforms legacy architectures by delivering 850 K IOPS of random performance, over 3.60 GB/s of throughput, and ultra-low transactional latency of 20 us.

The Element U.2's innovative design enables multiple drive configurations ranging from maximum performance to maximum redundancy. The U.2 also features enterprise-class power failure protection for increased reliability to prevent data loss and ensure uninterrupted work in case of power failure.

- > NVMe PCIe Gen 3.0 x4 Interface
- > x4 Single-Port or x2 x2 Dual-Port
- > High-capacity NVMe SSD, up to 8 TB
- > Enterprise-class Power Failure Protection

### Key Features

- High Performance PCIe SSD
- NVMe 1.2.1 Protocol Supported
- High Capacity Design, up to 8 TB
- Standard Form Factor SSD
- 2.5" U.2 Form Factor
- Plug-n-Play Compatibility
- UEFI Boot Support
- Enterprise Grade Reliability
- Power Loss Data Protection
- Dual Port (x2 x2 Active/Active)
- Single-Port (x4)
- Hot Plug
- 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 PCIe U.2 SSD
Raw Capacity	Up to 8 TB
NAND Type	TLC 3D NAND
Read Bandwidth (GB/s)	~3.60
Write Bandwidth (GB/s)	~3.60
Ran. Read IOPS (4k)	~850,000
Ran. Write IOPS (4k)	~850,000
Ran. Write IOPS (4k) (SS)	~275,000
Read Access Latency	~80 µs
Write Access Latency	~20 µs
Protocol	NVMe 1.2.1
Bus Interface	PCI Express 3.0 x4 or x2 x2
Endurance*	884 - 30,765 Terabytes Written (TBW)
Security	AES Data Encryption
Redundancy	x2 x2 Dual Port (Active/Active)
Warranty	3 years or maximum endurance used
Form Factor	2.5" U.2 Form Factor
Temperature	Op: 0 to 55 deg C Non-Op: -40 to 75 deg C
Power	Active: ~25 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

\*TBW table per capacity/configuration available upon request

## About Liquid

A leader in composable infrastructure, Liquid 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.

329 Interlocken Pkwy., Ste 200, Broomfield, CO 80021 office: +1 303.500.1551 email:sales@liquid.com

## Data Center Selection

### Single-Port:

LQD-E1EPNAA04M960G00-N1

Liquid Element 960GB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M001T92-N1

Liquid Element 1.92TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M003T84-N1

Liquid Element 3.84TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M007T68-N1

Liquid Element 7.68TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

### Dual-Port:

LQD-E1EPNAA04M960G00-M202-N1

Liquid Element 960GB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M001T92-M202-N1

Liquid Element 1.92TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M003T84-M202-N1

Liquid Element 3.84TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M007T68-M202-N1

Liquid Element 7.68TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

## Enterprise Selection

### Single-Port:

LQD-E1EPNAA04M800G00-N1

Liquid Element 800GB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M001T60-N1

Liquid Element 1.60TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M003T20-N1

Liquid Element 3.20TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M006T40-N1

Liquid Element 6.40TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

### Dual-Port:

LQD-E1EPNAA04M800G00-M202-N1

Liquid Element 800GB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M001T60-M202-N1

Liquid Element 1.60TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M003T20-M202-N1

Liquid Element 3.20TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M006T40-M202-N1

Liquid Element 6.40TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

\* U.2 version available in dual-port 2x2. Part numbers above with "-M202" signifies this version. Ex., LQD-E1EPNAA04M006T40-M202-N1

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