



Blistering Pace

The Liqid Element 2.5" U.2 NVMe SSD features high dense 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. It 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 μ s.

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 LQD3250 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* | Up to 30.76 PBW* |
| Security | 256 Bits 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 |

*PBW table per capacity/configuration available upon request

Data Center Selection
LQD3250 (Single-Port):

LQD-E1EPNAA04M960G00-S104-N1
 960GB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M001T92-S104-N1
 1.92TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M003T84-S104-N1
 3.84TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M007T68-S104-N1
 7.68TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD3250d (Dual-Port):

LQD-E1EPNAA04M960G00-M202-N1
 960GB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M001T92-M202-N1
 1.92TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M003T84-M202-N1
 3.84TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M007T68-M202-N1
 7.68TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

Enterprise Selection
LQD3250 (Single-Port):

LQD-E1EPNAA04M800G00-S104-N1
 800GB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M001T60-S104-N1
 1.60TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M003T20-S104-N1
 3.20TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD-E1EPNAA04M006T40-S104-N1
 6.40TB, TN, NVMe PCIe Gen 3.0 x4 single-port 1x4 U.2 SSD

LQD3250d (Dual-Port):

LQD-E1EPNAA04M800G00-M202-N1
 800GB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M001T60-M202-N1
 1.60TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M003T20-M202-N1
 3.20TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

LQD-E1EPNAA04M006T40-M202-N1
 6.40TB, TN, NVMe PCIe Gen 3.0 x4 dual-port 2x2 U.2 SSD

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

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.

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