



LITE-ON SSDs Simplify Your Storage Solutions

Increase Datacenter Efficiency In Hyperscale Environments,
While Lowering Your Total Cost Of Ownership

FAST CONSISTENT PERFORMANCE

LITE-ON's EPX Series Enterprise Solid-State Drives with the NVMe M.2 PCIe 3D NAND interface are compact, power-efficient solid-state solutions that fit directly into the server's PCIe bus to increase server application performance while delivering fast and reliable access to data without burdening host CPU and memory resources.

3D NAND TECHNOLOGY

LITE-ON's EPX is an addition to the enterprise SSD product portfolio. Utilizing the latest 3D NAND technology allows for greater density, increased performance, and lowers power consumption to meet today's increasing need for data center storage growth. The EPX SSD is the ultimate solution for enterprise users.

END-TO-END DATA PROTECTION

LITE-ON SSDs give you peace of mind. From the instant data is stored on a LITE-ON SSD, its integrity is checked and rechecked on multiple points along the data path. This End-to-End Data Protection guards against corruption to ensure that data is error-free, so you can be worry free. LITE-ON End-to-End Data Protection conforms to the industry standard of T10 DIFF to protect against silent bit error.

POWER LOSS PROTECTION

Power outages are a nightmare, but LITE-ON reduces the loss of data from this universal problem by including a Power Loss Protection circuit within each of its solid-state drives. In the event of an unsafe power failure, this circuit enables the drive to save all cached data before shutting down.

REDUNDANT ARRAY OF INDEPENDENT FLASH ELEMENTS

LITE-ON's Redundant Array of Independent Flash Elements (R.A.I.F.E) enables the next generation of error correction and data protection. Every data that is entered through the SSD will be protected by parity, so data can be recovered beyond standard ECC protection.

FIRST GENERATION MACHINE LEARNING – INTELLIGENT READ RETRY

LITE-ON is the first SSD vendor to productize the power of machine learning into SSD flash management. Our first generation of machine learning is Intelligent Read Retry. Standard read retry algorithm does read retry from the lowest setting to the highest setting in a sequential fashion. LITE-ON's Intelligent Read Retry is improved with machine learning. Intelligent Read Retry uses the best settings first, as determined by the machine learning algorithms, to most likely recover the data. The Intelligent Read Retry will keep the SSD latency low and throughput high unlike competitor SSD.

FEATURES

- END TO END DATA PROTECTION
- RELIABLE CONSISTENCY
- ULTRA LOW LATENCIES
- POWER LOSS PROTECTION
- LOW POWER CONSUMPTION
- CUSTOMIZED FIRMWARE
- AVAILABLE IN 960 GB AND 1920 GB CAPACITY
- NAND RAID IMPLEMENTED WITH RAIFE TECHNOLOGY
- STREAM DIRECTIVE
- TCG OPAL 2.0
- MACHINE LEARNING: INTELLIGENT READ RETRY

APPLICATION WORKLOADS

- ON-LINE TRANSACTION PROCESSING (OLTP)
- FINANCIAL TRANSACTIONS
- E-COMMERCE
- SQL LOGGING
- E-MAIL/MESSAGING SERVER



EPX Series Enterprise Solid-State Drives | NVMe M.2 PCIe 3D NAND

Technical Specifications		
Model Name	EPX-KB 960	EPX-KB 1920
Capacity	960 GB	1920 GB
Performance		
Sequential Read/Write ¹	1700/750 MB/s	1800/800 MB/s
4K Random Read/Write ¹	32K/30K IOPS	35K/30K IOPS
Latency Read/Write ¹	100/40 µs	100/40 µs
Compatibility		
Host Interface	NVMe PCIe Gen 3x4 3D NAND	
Form Factor	M.2 22110: 110.0mm x 22.0mm x 4.5 mm @ 16g Max	
Reliability		
UBER ²	1 error in 10 ¹⁷ bits transferred	
End-to-End Protection	Supported	
Power Loss Protection	Supported	
MTBF ³	2 million hours	
Endurance		
DWPD ⁴	Up to 3 Drive Writes per Day for 3 Years	
Data Retention	1 Year Power-off Retention	
Power Consumption		
Idle	< 2.4 watts	
Active	< 8.25 watts	
Environment		
Operating Temperature	0 to 40° C	
Non-operating Temperature	-40 to 85° C	

1. Based on internal testing, performance, may vary depending on host device, OS and application

2. UBER - Unrecovered Bit Error Rate

3. MTBF - Mean Time Between Failures based on parts stress analysis

4. Standard 3 year warranty



For more information, please visit
liteonssd.com



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LITE-ON Storage is a Strategic Business Group (SBG) of LITE-ON Technology Corporation.

LITE-ON Storage is a global leader in the design, development, and manufacturing of Solid State Drives (SSDs) and Optical Disc Drives (ODDs).

LITE-ON Storage offers customized solutions and superior firmware to PC Client, Industrial Solutions, Automotive, Enterprise, and Cloud Computing environments. All LITE-ON SSDs are designed and developed 100% in-house at their state-of-the art facilities in Taiwan.

Specifications and data are subject to change without notice.

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