



6Gb/s SAS Enterprise 2.5" SSDs

Lightning® Mixed-Use SAS SSDs

An enterprise solution that provides vital data transfer within milliseconds

Features

- End-to-End Data Protection
- Capacitor-Backed Cache
- Reliability: 2M hour MTBF
- UBER: <1 sector 10¹⁷ bits read
- 5-Year Warranty⁴

Benefits

- Predictable Performance
- Trusted Reliability
- Cost-Effective I/O

Application Workloads

- On-Line Transaction Processing (OLTP) Databases
- Financial Transactions
- E-Commerce
- Data Warehousing
- E-Mail/Messaging
- Virtual Desktop
- Collaboration

The challenges for predictable performance and increased storage capacity are ever present in today's data centers. Since not all data centers are created equal, the key to achieving increased data and system performance is in understanding the specific application workload. Lightning Mixed-Use 6Gb/s (SAS) SSDs offer solid I/O cost-to-performance benefits where quick access to data is vital.

Available in 200GB, 400GB and 800GB² SLC capacities and delivers random read/write performance of up to 110K/11K-16K and sequential read/write data throughput rates of up to 385-450/220 MB/s¹. Lightning Mixed-Use SSDs provide an I/O pattern designed predominately for application workloads such as On-Line Transaction Processing (OLTP) Databases, E-mail/Messaging, Virtual Desktop, and Collaboration, with a typical workload comprised of a 70/30 read/write mix.

Lightning Mixed-Use SSDs are designed with an advanced innovative controller that uses a parallel processing architecture to deliver proven and tested superior reliability for storage and server environments. Lightning SSDs have been specifically designed for demanding, mission-critical, 24/7 applications.

Lightning SAS SSDs are certified on the following hardware compatibility lists.

	WI	MU	RI
LSI RAID/HBA	•	•	•
Windows Certification	•	•	•
VMware Flash Ready Cache		400GB/ 800GB	
VMware Virtual SAN		400GB/ 800GB	
Nexenta		•	•
Intel Server Systems (All)	•	•	•

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SanDisk®

At SanDisk, we're expanding the possibilities of data storage. For more than 25 years, SanDisk's ideas have helped transform the industry, delivering next generation storage solutions for consumers and businesses around the globe.

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Lightning Mixed-Use 2.5" SAS Enterprise SSDs Product Specifications

	LB 206M	LB 406M	LB 806M
Performance/IOPS			
Data Throughput (Sequential Read/Write) ¹	385/220 MB/s	385/220 MB/s	450/220 MB/s
Total IOPS (Random Read)	100,000 IOPS	100,000 IOPS	100,000 IOPS
Random Write 4KB – 70/30 (single port)	11,000 IOPS	11,000 IOPS	16,000 IOPS
Random Write 8KB – 70/30 (single port)	17,000 IOPS	17,000 IOPS	21,000 IOPS
Interface, Capacity, and Memory Technology			
Host Interface	6Gb/s SAS		
Interface Ports	Dual (2) full-duplex		
Form Factor	2.5 inch		
SLC User Capacities ²	200GB	400GB	800GB
Sector Sizes Supported	512, 520 or 528 bytes/sector		
Reliability			
Unrecovered Bit Error Rate (UBER)	<1 sector in 10 ¹⁷ bits read		
End-to-End Data Protection	No performance impact		
Patrol Read (automatic)	No performance impact		
Power-on Hours	8760 hours per year		
MTBF ³	2 million hours		
Warranty ⁴	Lesser of 5 years or maximum endurance used		
Physical Dimensions			
Height (max)	15.0 mm		
Width (max)	70.1 mm		
Length (max)	100.45 mm		
Weight	0.238 Kg		
Power Consumption			
Idle	3.9 watts		
Typical	5.9 watts		
Environment			
Operating Temperature (ambient)	0 to 60° C		
Non-operating Temperature	-40 to 85° C		
Start-up Time (Power-on to Ready)	<15 seconds		

Specifications subject to change without notice.

¹ Based on internal testing, performance may be lower depending upon host device, OS and application.

² 1 gigabyte (GB) = 1 billion bytes. Some capacity not available for data storage.

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

⁴ The earlier of (I) five (5) years or (II) the time at which such Product unit's total cumulative data recorded on such unit at its S.M.A.R.T. attribute (log page 2Fh, parameter 25) or log page 11h, parameter 1 (Percentage Used Endurance Indicator) reaches 100% of the Product unit's endurance value. For more warranty information, please visit kb.sandisk.com.

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