SAMSUNG
Solid State Drive

Samsung SATA SSD 883 DCT

Optimized for data center demands

Coming in a 2.5-inch form factor and 6 Gb/s SATA interface with storage capacities up to 3.84TB, the 883 DCT meets the demands of server storage systems, with added reliability for critical data thanks to end-to-end data protection.

Performance fit for mixed workloads

The 883 DCT is designed to achieve optimal performance with a high level of QoS (quality of service) under the SATA interface. The sequential read/write speeds of up to 560/520 MB/s and random read/write speeds of up to 98K/28K IOPS are ideal for handling massive amounts of data.

Secure critical data

Data integrity is critical to data center SSD. The 883 DCT is safeguarded with end-to-end data protection to ensure consistency over the entire data transfer path and prevents data corruption in case of power failure with power loss protection.

Enhanced operations efficiency

Accomplish far more with less. Achieve higher efficiency and performance compared to legacy storage systems, with fewer servers, reduced power and cooling, and lower TCO, all with efficient maintenance from the advanced Samsung SSD Toolkit.

Samsung reliability and quality

Experience the superior SSD quality and reliability of in-house production using Samsung built components. Empower your 24/7 business to run faster, more efficiently, and at reduced costs with world-class dependability with a limited 5-year warranty or 0.8 Drive Writes Per Day (DWPD).

Efficiency and reliability, redefined.

		MZ - 7LH3T8NE	MZ - 7LH1T9NE	MZ - 7LH960NE	MZ-7LH480NE	MZ-7LH240NE
Capacity[1]		3,840GB	1,920GB	960GB	480GB	240GB
Form Factor		2.5" 7mmT				
Dimensions (WxDxH)		Max. 100.2 x 69.85 x 6.8 (mm)				
Weight		Max. 70g				
NAND type		Samsung V-NAND				
Interface		SATA 6.0 Gbps				
Performance[2]	Seq. Red (128KB)	up to 560 MB/s				
	Seq. Write (128KB)	up to 520 MB/s				up to 320 MB/s
	Rand. Read (4KB, QD32)	up to 98,000 IOPS				
	Rand. Write (4KB, QD32)	up to 28,000 IOPS			up to 24,000 IOPS	up to 14,000 IOPS
	QoS Read (99.99%, 4KB, QD1)	up to 0.5 ms				
	QoS Write (99.99%, 4KB, QD1)	up to 0.3 ms				
Encryption Support		AES 256-bit Encryption Engine				
Average Power Consumption[3]		Active Read (Typ.) up to 3.6W, Active Write (Typ.) up to 2.3W, Idle up to 1.3W				
Allowable Voltage		5.0V ± 5%				
MTBF [4]		2,000,000 Hours				
UBER [5]		1 sector per 10^{17} bits read				
Operating Temperature		0-70°C				
Shock		1500G, duration 0.5 ms, Half Sine Wave				
Warranty		5-year limited warranty, or 0.8 DWPD, whichever comes first				

1. 1GB = 1 Billion bytes by IDEMA. Actual usable capacity may be less (due to formatting, partitioning, operating system, applications or otherwise).

2. Actual performance may vary depending on use conditions and environment.

· Performance measured using FIO 2.7 with queue depth 32, Z170 Intel SATA 6G port.

· Measurements are performed on whole LBA range.

· Write cache enabled.

· 1MB/sec = 1,048,676 bytes/sec was used in sequential performance.

3. Actual power consumption may vary depending on system hardware & configuration. Active write power is measured on 128KB sequential write and active read power is measured on 4KB random read.

4. MTBF is Mean Time Between Failure. By definition, Mean Time between Failures (MTBF) is the estimated time between failures occurring during SSD operation.

5. Uncorrectable Bit Error Rate (UBER) is a metric for the rate of occurrence of data errors, equal to the number of data errors per bits read as specified in the JESD218 document of JEDEC standard. For enterprise applications, JEDEC recommends that UBER should be below 10-16.

*Comparisons are based on internal test results with 2.5-inch 7200 RPM SATA HDDs.

For more information about the Samsung SSD, visit **samsung.com/business** or **samsungssd.com.**