Samsung SATA SSD 860 DCT

Data center SSDs, advanced V-NAND

Keep your critical business running 24/7. Attain optimal performance, value, and reliability with advanced V-NAND technology SSDs produced in-house and designed for server systems.

Optimal performance

The 860 DCT is designed to achieve optimal and sustained performance. Boost performance with faster sequential and random read/write speeds and high IOPS consistency, ideal for server storage systems including content delivery network systems.
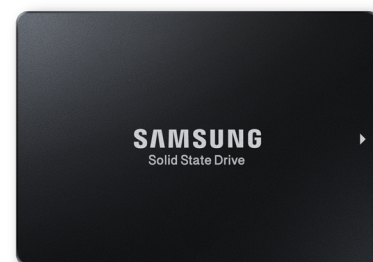
Enhanced operations efficiency

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

Keep going with less downtime. Experience the superior SSD quality and reliability of in-house production using Samsung built components. Empower your business to run faster, more efficiently, and with reduced costs from world-class dependability.

SAMSUNG

Engineered for optimal performance.

			MZ - 76E3T8E	MZ - 76E1T9E	MZ-76E960E
Capacity[1]			3,840GB	1,920GB	960GB
Form Factor			2.5" 7mmT		
Dimensions (WxDxH)			Max. 100.2 x 69.85 x 6.8 (mm)		
Weight			Max. 60g		
NAND type			Samsung V-NAND		
Interface			SATA 6.0 Gbps		
Performance[2]	Seq. Red (128KB)		up to 550 MB/s		
	Seq. Write (128KB)		up to 520 MB/s		
	Rand. Read (4KB, QD32)		up to 98,000 IOPS		
	Rand. Write (4KB, QD32)		up to 19,000 IOPS		
	IOPS Consistency	Rand. Read (4KB, QD32)	100%		
		Rand. Write (4KB, QD32)	90%		
Encryption Support			AES 256-bit Encryption Engine		
Average Power Consumption[3]			Active Read (Typ.) up to 1.9W, Active Write (Typ.) up to 2.9W, Idle up to 1.05W		
Allowable Voltage			5.0V ± 5%		
MTBF [4]			1,500,000 Hours		
UBER [5]			1 sector per 10^{15} bits read		
Operating Temperature			0-70°C		
Shock			1500G, duration 0.5 ms, Half Sine Wave		
Warranty			5-year limited warranty, or 0.2 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. 2.18 with queue depth 32, Z270 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.**