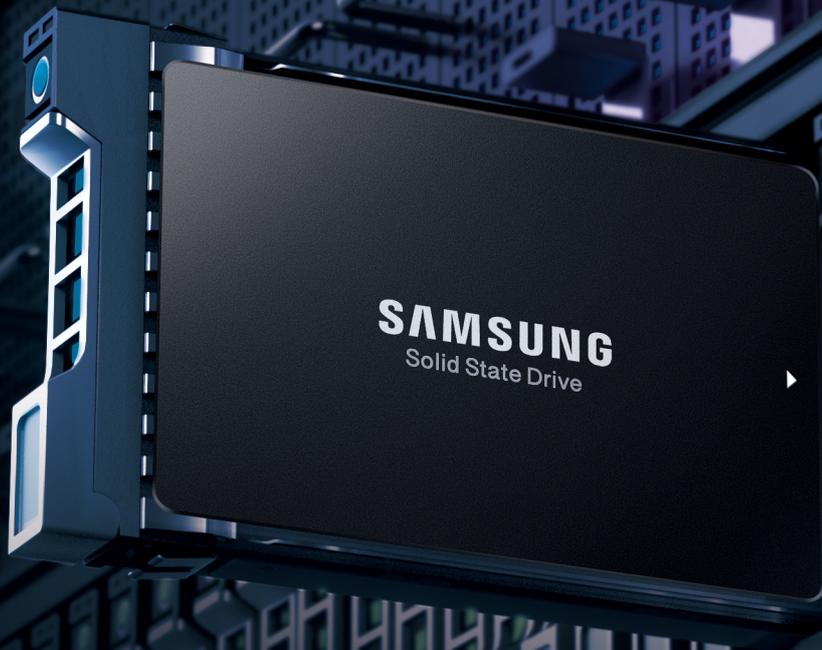


SAMSUNG

Accelerate your business with Samsung Data Center SSDs.



The Samsung Data Center SSD lineup is powered by advanced V-NAND technology and produced with our expertise in top OEM data centers and the consumer SSD market. From caching to storage, these SSDs offer efficient, reliable solutions for a full range of data center demands.

A pioneer in innovation, the Samsung Data Center SSD lineup is engineered for efficient and reliable performance specifically for SMB and IT professionals. Optimized for virtually any data demands, the 860 DCT, 883 DCT, and 983 DCT SSDs as well as the ultra-low latency SSD 983 ZET offer high capacities up to 3.84TB with reduced TCO and streamlined maintenance—making this lineup the simplest path to powerful data centers.



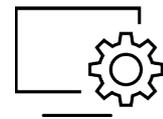
Samsung V-NAND



Fast Performance



Low TCO



Samsung SSD Toolkit



860 DCT—Enhanced value and reliability

The SATA 2.5-inch 860 DCT was developed to excel in and sustain performance for applications such as content delivery systems, or for server operators looking to upgrade from legacy storage.



883 DCT—Optimized for efficiency

The 883 DCT offers unrivaled reliability in addition to smooth performance. With features like power loss protection and end-to-end data protection, the SATA 2.5-inch SSD secures data in capacities up to 3.84TB. The ideal solution for mainstream data server systems.



983 DCT—High speed, high responsiveness

Managing big data requires an SSD with enhanced performance. Together with V-NAND technology, the NVMe™ interface, and Samsung Phoenix controller, the 983 DCT delivers blazing-fast speeds and high responsiveness on M.2 and 2.5-inch form factors.



983 ZET—The ultra-low latency SSD

Ideal for the challenges of AI and IoT, the NVMe AIC 983 ZET offers a powerful combination of cutting-edge low-latency V-NAND technology and an NVMe interface for applications like hybrid caching and database servers. The 983 ZET enhances endurance and reliability, even at breakneck speeds.

Manage big data with powerful and reliable SSDs

Performance in action

Samsung provides high-speed data center storage that reliably sustains high IOPS and takes performance to the next level. Each SSD in the Data Center lineup is ideal for improved energy and flexibility—particularly 983 DCT for phenomenal speeds and 983 ZET's sophisticated low-latency V-NAND technology.

SATA SSD	860 DCT	883 DCT				
Capacity	960/1,920/3,840GB	3,840GB	1,920GB	960GB	480GB	240GB
Sequential Read	up to 550 MB/s	up to 560 MB/s				
Sequential Write	up to 520 MB/s	up to 520 MB/s				up to 320 MB/s
Random Read (4KB, QD32)	up to 98,000 IOPS	up to 98,000 IOPS				
Random Write (4KB, QD32)	up to 19,000 IOPS	up to 28,000 IOPS			up to 24,000 IOPS	up to 14,000 IOPS

NVMe SSD	983 DCT				983 ZET	
Form Factor	2.5" 7mmT (U.2)		M.2 (22110)		Half-height Half-length (HHHL)	
Capacity	1,920GB	960GB	1,920GB	960GB	960GB	480GB
Sequential Read	up to 3,400 MB/s	up to 3,300 MB/s	up to 3,000 MB/s	up to 3,000 MB/s	up to 3,400 MB/s	
Sequential Write	up to 2,200 MB/s	up to 1,300 MB/s	up to 1,430 MB/s	up to 1,200 MB/s	up to 3,000 MB/s	
Random Read (4KB, QD32)	up to 580,000 IOPS	up to 440,000 IOPS	up to 480,000 IOPS	up to 400,000 IOPS	up to 750,000 IOPS	
Random Write (4KB, QD32)	up to 52,000 IOPS	up to 46,000 IOPS	up to 42,000 IOPS	up to 38,000 IOPS	up to 75,000 IOPS	up to 60,000 IOPS

Around-the-clock data reliability

Preventing data corruption is vital to maintaining stable business operations. Data integrity is enforced with end-to-end data protection along the entire transfer path, and power loss protection secures data in the event of power failure. To maximize data security, the Data Center SSD lineup also boasts AES-256 bit hardware encryption and TCG/Opal compliance.*

*TCG/Opal supported only in 983 DCT and 983 ZET.

Maintenance, simplified

SSD maintenance is streamlined with the Samsung SSD Toolkit. Providing firmware updates, data erasure, over-provisioning setup, and information about disk status, the SSD Toolkit software allows users to view and monitor S.M.A.R.T. attributes.

Built for innovation

Samsung-engineered SSD components ensure first-class quality. Samsung's DRAM, V-NAND, controller, and firmware are all designed and produced in-house, built on a foundation of vast expertise in OEM data center technology. An influencer in global memory storage trends, Samsung constantly researches and develops to bring innovation to new heights.

Technical Specifications

		860 DCT	883 DCT	983 DCT	983 ZET
Interface		SATA 6Gbps	SATA 6Gbps	PCIe Gen 3.0 x4, NVMe™ 1.2	PCIe Gen 3.0 x4, NVMe™ 1.2
Form Factor		2.5-inch 7mmT	2.5-inch 7mmT	2.5-inch 7mmT (U.2) M.2 (22110)	HHHL (half height, half length)
Hardware	NAND	Samsung V-NAND	Samsung V-NAND	Samsung V-NAND	Samsung Low Latency V-NAND
	Controller	MARU	MARU	Phoenix	Phoenix
	DRAM	4GB LPDDR4 (3.84TB) 2GB LPDDR4 (1.92TB) 1GB LPDDR4 (960GB)	4GB LPDDR4 (3.84TB) 2GB LPDDR4 (1.92TB) 1GB LPDDR4 (960GB) 512MB LPDDR4 (480/240GB)	3GB LPDDR4 (1.92TB) 1.5GB LPDDR4 (960GB)	1.5GB LPDDR4
Capacity¹		3.84TB, 1.92TB, 960GB	3.84TB, 1.92TB, 960GB, 480GB, 240GB	1.92TB, 960GB	960GB, 480GB
Seq. Read/Write²		Up to 550/520 MB/s	Up to 560/520 MB/s (480GB-3.84TB) Up to 560/320 MB/s (240GB)	Up to 3,400/2,200 MB/s (2.5-inch 1.92TB) Up to 3,300/1,300 MB/s (2.5-inch 960GB) Up to 3,000/1,430 MB/s (M.2 1.92TB) Up to 3,000/1,200 MB/s (M.2 960GB)	Up to 3,400/3,000 MB/s
Power Loss Protection		Not provided	Provided	Provided	Provided
Data encryption		Class 0 (AES 256)	Class 0 (AES 256)	Class 0 (AES 256), TCG/Opal	Class 0 (AES 256), TCG/Opal
Total Bytes Written³		Up to 1,396TB (3.84TB) Up to 698TB (1.92TB) Up to 349TB (960GB)	Up to 5,466TB (3.84TB) Up to 2,733TB (1.92TB) Up to 1,366TB (960GB) Up to 683TB (480GB) Up to 341TB (240GB)	Up to 2,733TB (1.92TB) Up to 1,366TB (960GB)	Up to 17.52PB (960GB) Up to 7.44PB (480GB)
Warranty		Up to 5-year limited warranty	Up to 5-year limited warranty	Up to 5-year limited warranty	Up to 5-year limited warranty
Drive Writes Per Day		0.2	0.8	0.8	10 (960GB) 8.5 (480GB)

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

2) For test conditions, please refer to the Samsung SSD website (samsungssd.com) or the respective product brief.

3) 5 years or TBW, whichever comes first.

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

Copyright © 2018 Samsung Electronics Co., Ltd. All rights reserved. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Specifications and designs are subject to change without notice. Nonmetric weights and measurements are approximate. All data were deemed correct at time of creation. Samsung is not liable for errors or omissions. All brand, product, service names and logos are trademarks and/or registered trademarks of their respective owners and are hereby recognized and acknowledged.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.

The NVMe Express® design mark is a registered trademark of NVMe Express, Inc.

Samsung Electronics Co., Ltd.

129 Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Korea www.samsung.com 2018-08