Western Digital.

PC SN5000S NVMe™ SSD

High performance, strong endurance, and uncompromising reliability with QLC.

Stop choosing between performance and reliability for QLC with the Western Digital® PC SN5000S NVMe™ SSD. This device is equipped with Western Digital's next-generation 3D NAND, the latest in-house controller, and a fully integrated firmware solution. Boasting PCIe® Gen4x4 technology and read speeds up to 6,000MB/s[1], it's the all-in-one solution for handling demanding workloads efficiently. Seamlessly transfer data with nCache™ 4.0 dynamic SLC technology and help protect your most critical data with a dedicated boot partition. Opt for the self-encrypted version built with TCG Opal 2.02 to help secure your data. This device is offered in capacities ranging from 512GB to 2TB[2], in both the M.2 2280 and M.2 2230 form factors, and delivers an exceptional experience through compliance with Project Athena. Update your PC storage confidently with this cost-efficient and high-performance SSD solution.

Highlights

- **QLC WITHOUT COMPROMISE**
  Get cost-efficient QLC with higher performance and strong reliability — without choosing between the two

- **OPTIMIZE YOUR WORKFLOW**
  Move large files and other content with reliable nCache™ 4.0 dynamic SLC technology — that enables a performance boost without sacrificing endurance, regardless of the workload

- **PERFORMANCE FOR INTENSE WORKLOADS**
  Power through intense workloads with mighty PCIe® Gen4x4 technology and up to 6,000MB/s[1] read speeds — thanks to NVMe™ 2.0 technology

- **CRITICAL DATA IN THE RIGHT HANDS**
  Choose the self-encrypted option to arm this drive with reliable TCG Opal 2.02 security, ensuring your critical data remains in the right hands. The upgrades of RSA-3K and SHA-384 help add an extra layer of protection, and the built-in dedicated boot partition grants more peace of mind

- **GET MORE FROM YOUR DRIVE**
  Improve your device's power efficiency during active usage by up to 20% over the previous generation[3]. Enjoy an exceptional experience with a product designed to support Project Athena

Features

- Fast sequential reads up to 6000MB/s[1]

- Western Digital 3D NAND BiCS6 QLC

- PCIe® Gen4x4 with NVMe™ 2.0[4]

- Fully integrated solution which includes our new in-house controller, 3D NAND, and firmware

- nCache™ 4.0 with Hybrid SLC and endurance monitoring to ensure reliability

- TCG OPAL 2.02, ATA security

- RSA-3K, SHA-384 (upgraded)

- RPMB, Boot Partition

PC SN5000S NVMe™ SSD

High performance, strong endurance, and uncompromising reliability with QLC.

	512GB[2]	1024GB[2]	2048GB[2]
Product specifications			
Interface M.2 2280	PCIe® Gen4 16Gb/s, up to 4 Lanes		
Performance			
Sequential Read up to (MB/s)[1] (Queues=32, Threads=1)	6,000		
Sequential Write up to (MB/s)[1] (Queues=32, Threads=1)	4,200	5,400	5,600
Random Read 4KB IOPS up to (Queues=32, Threads=16)[5]	500K	750K	750K
Randpm Write 4KB IOPS up to (Queues=32, Threads=16)[5]	850K	900K	900K
Endurance[6] (TBW)	150	300	600
Power			
Average Active Power[7]	95mW	100mW	100mW
(Sleep) PS5[8]	3.0mW		
Peak Power[7]	6.1W	6.5W	6.9W
Reliability			
MTTF[9]	1.75M hours		
Country Code			
Origin	Product of China or Product of Malaysia		
Regulatory			
ROHS compliant[10]	Yes		
Environmental			
Operating Temperature[11]	32°F to 176°F (0°C to 80°C)		
Non-Operating Temperature[12]	-40°F to 185°F (-40°C to +85°C)		
Operating Vibration	5 gRMS, 10 to 2,000Hz. 3 axes		
Non-Operating Vibration	4.9 gRMS, 7 to 800Hz. 3 axes		
Shock	1,500G @0.5 ms half sine		
Certifications	Windows HLK, FCC, CAN, CECM, RFE, RCM, KC, BSMI, VCCI, CB-S, UL, TUV		
Limited Warranty[13]	5 years		
Physical Dimensions			
Length	M.2 2280: 80mm ± 0.10mm, M.2 2230: 30mm ±0.10mm		
Width	22mm ± 0.10mm		
Height	2.38mm		
Weight	M.2 2280: 5.4g ±0.5g, M.2 2230: 2.8g ±0.5g		
Ordering Information			
M.2 2280 Security Type: Non-SED	SDEPNSJ-512G	SDEPNSJ-1T00	SDEPNSJ-2T00
M.2 2280 Security Type: SED	SDEQNSJ-512G	SDEQNSJ-1T00	SDEQNSJ-2T00
M.2 2230 Security Type: Non-SED	SDEPTSJ-512G	SDEPTSJ-1T00	SDEPTSJ-2T00
M.2 2230 Security Type: SED	SDEQTSJ-512G	SDEQTSJ-1T00	SDEQTSJ-2T00

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Solid State Drives - SSD *category:*

Click to view products by SanDisk *manufacturer:*

Other Similar products are found below :

MTFDDAC512MAM-1K1 MX30LF4G18AC-XKI SM668GE4-AC P0122 SDUFD33-016G SD7SN6S-128G-1122 MTFDDAA120MBB-2AE1ZABYY SM668GXB-ACS O1118 SDSDAA-016G SDINADF4-64G-H MTFDDAA240MBB-2AE1ZABYY SQF-SDMM2-256G-S9E 2403291 MTFDKBA1T0TFH-1BC1AABYY SFSA032GM2AK1TB-I-EB-51K-STD SFSA064GM2AK2TB-I-EB-51K-STD SFSA960GS2AK2TB-C-XC-21E-STD SFSA032GM2AK1TB-I-EB-11K-STD SFSA160GM2AK1TB-I-XC-11K-STD SFSA480GM2AK1TB-C-XC-11E-STD SFSA960GM2AK2TB-I-XC-21E-STD SFSA064GV2AK2TB-I-EB-21K-STD SFSA480GS2AK4TB-I-EB-21E-STD SFSA960GM2AK2TB-C-XC-51E-STD SFSA032GV2AK1TB-I-EB-21K-STD SFSA320GV2AK2TB-I-XC-21K-STD SFSA480GS2AK4TB-C-EB-21E-STD SFSA960GM2AK2TB-I-XC-51E-STD SFSA960GS2AK2TB-I-XC-21E-STD MTFDKBA1T0TGE-1BK1AABYY MTFDDAK480TGB-1BC15TAYY SQF-S25Z4-256GDSDE SQF-SMSZ2-64GDSDE SQF-S25Z1-64GDSDE 79700-G12801TC14-RS VTPM24CECI240-0011 VTPM24CECI120-0011 VTPM28CECI480-0011 VTPM28CECI240-0011 AF1TSTIC-ZH1 SFSA160GV2AK4TB-I-EB-21K-STD SFSA064GM2AK2TB-I-EB-21K-STD SFSA960GM2AK2TB-C-XC-21E-STD SFSA160GM2AK4TB-I-EB-61K-STD SFSA480GM2AK4TB-I-EB-61E-STD SFSA320GM2AK2TB-I-XC-51K-STD SFSA480GM2AK1TB-I-XC-11E-STD SFSA480GM2AK4TB-C-EB-61E-STD SFSA320GM2AK2TB-I-XC-21K-STD SQF-SMSZ2-64GDSDC AF240GSTJA-8BCIP