

**SANDISK™**

"DATA SHEET"

SN670 SSD



(→) SANDISK® SN670 SSD Enterprise NVMe™ Drive

Expanding the capacities of data storage

Experience the difference with the new SANDISK® SN670 NVMe™ solid state drive. Built using the latest UltraQLC™ technology and BiCS8 NAND, the SANDISK® SN670 SSD offers exceptional performance and power efficiency while greatly expanding capacities up to 122.8TB¹. Optimized for the Data Ingest, Preparation, and New Content Generation stages of the AI Data Lifecycle, the SANDISK® SN670 SSD provides improved storage Total Cost of Ownership (TCO) on a converged and scalable platform. The SANDISK® SN670 SSD is also up to date on the latest industry standards complying with NVMe™ 2.0, NVMe™ MI 1.2c, and OCP 2.5 guidelines expanding the capacities of data storage.

Highlights

- Experience exceptional PCIe® Gen5 enterprise class performance in greatly expanded capacities up to 122.8TB¹, ideal for capacity intensive workloads
- Achieve optimized solutions with the latest UltraQLC™ and BiCS8 NAND technology, boosting performance and power efficiency while reducing overall costs
- Utilizes a converged and scalable platform allowing for backwards compatibility to enhance accessibility for past, present, and future products
- E1.L and E3 form factors available soon, ensuring scalability and flexibility to meet your storage needs
- Benefit from enterprise-class features including Power Loss Protection, End-to-End Data Protection, SE, ISE, and TCG Opal security and encryption, backed with a 5-year limited warranty⁶

Applications/Environments

- AI Data Lifecycle – Data Ingest, Preparation, Faster Data Lakes, and New Content Generation
- Hyperscale Cloud and Enterprise Data Centers
- Capacity Intensive Applications and Workloads
- Big Data, Data Analytics, Data Modeling, Predictive Analysis

Features

Designed for High-Capacity Storage Solutions

Expanded capacities up to 122.8TB¹ redefine the limits of large-scale data storage applications and workloads.

Leading UltraQLC™ Technology and BiCS8 NAND

Experience the latest technological breakthroughs in the NAND memory and density offering enhanced performance and power benefits.

Built on a Converged and Scalable Platform

Developed with complete vertical integration enabling backwards compatibility for convenient plug and play solutions across product generations.

Improving Storage Total Cost of Ownership (TCO)

Take advantage of the latest technological advancements to reduce operational costs without compromising performance.

Future Ready Data Infrastructure

Engineered to meet the latest industry standards with NVMe™ 2.0, NVMe™ MI 1.2c, and OCP 2.5 compliance for enhanced scalability and efficiency.

Rich Enterprise Features

Benefit from additional enterprise-class features including Power Loss Protection, End-to-End Data Protection, SE, ISE, and TCG Opal security and encryption helping ensure data integrity and security.

**Product Specifications (projected)**

Capacity ¹	30.72TB	61.44TB	122.88TB
NAND Technology	BICS8 1Tb, 4P QLC		BICS8 2Tb, 4P QLC
Endurance ²	0.35 DWPD		
Security	SE, ISE, TCG Opal		
Form Factor	U.2		
Interface	PCIe® Gen5 1x4		
NVMe™ Specification (Compliant)	NVMe™ 2.0, NVMe™ MI 1.2c, OCP 2.5		

Performance (projected)

Read Throughput (max MB/s, Seq 128KiB) ³	13,700	13,700	13,700
Write Throughput (max MB/s, Seq 128KiB) ³	3,500	3,300	3,600
Read IOPS (max, Rnd 4KiB) ³	2,300K	2,300K	2,300K
Write IOPS (max, Rnd 16KiB) ³	55K	55K	55K
Read Latency (µs, avg.) ⁴	250	250	250
Write Latency (µs, avg.) ⁴	15	15	15

Reliability

MTTF ⁵ (hours, projected)	2.5M
Uncorrectable Bit Error Rate (UBER)	1 in 10 ¹⁷
Annualized Failure Rate ⁵ (AFR, projected)	0.35%
Limited Warranty ⁶	5 Years

Power Management (projected)

Requirement (DC, +/- 10%)		+12v	
Default Power Consumption (avg. max)	20W	20W	25W
Idle (avg.)		<5W	

Physical Size

z-height (mm)	15mm
Dimensions (width × length, mm)	69.85mm × 100.45mm

Environmental

Operating Temperature (Ambient) ⁷	0°C to 70°C
Non-operating Temperature ⁸	-40°C to 85°C

Ordering Information

	Security	30.72TB ¹	61.44TB ¹	122.88TB ¹
Part Number	SE	SDS7B031THSA1Y1G	SDS7B061THSA1Y1G	SDS7C123THSA1Y1G
Model Number	SE	SN670U2015031TSEG	SN670U2015061TSEG	SN670U2015123TSEG
Part Number	ISE	SDS7B031THSA1Y3G	SDS7B061THSA1Y3G	SDS7C123THSA1Y3G
Model Number	ISE	SN670U2015031TISG	SN670U2015061TISG	SN670U2015123TISG
Part Number	TCG Opal	SDS7B031THSA1Y7G	SDS7B061THSA1Y7G	SDS7C123THSA1Y7G
Model Number	TCG Opal	SN670U2015031TTOG	SN670U2015061TTOG	SN670U2015123TTOG

1. One terabyte (TB) is equal to 1,000GB (one trillion bytes). Actual user capacity may be less due to operating environment.

2. NAND Endurance.

3. Based on internal testing. Performance will vary by capacity point, or with the changes in useable capacity. Consult product manual for further details.

All performance measurements are in full sustained mode and are peak values. IOPS = input/output operations per second. Subject to change.

4. Average random latency at 16KiB, QD=1

5. Projected values. Final MTTF and AFR specifications will be based on a sample population and are estimated by statistical measurements and acceleration algorithms

under typical operating conditions for this drive model. MTTF and AFR ratings do not predict an individual drive's reliability and do not constitute a warranty.

6. The warranty for the product will expire on the earlier of (i) the date when the flash media has reached one-percent (1%) of its remaining life or (ii) the expiration of 5 years.

7. Composite temperature reading

8. Values are based on ambient temperature. Avoid non-operational exposure to temperatures in excess of 40°C for periods exceeding three months.