

> SG5 SERIES CLIENT SSD

> KEY FEATURES

- Capacities up to 1024GB
- 3-bit-per-cell NAND Flash Memory
- SATA 6.0 Gbit/s interface
- 2.5-inch and M.2 2280 form factor options
- Toshiba Proprietary Quadruple Swing-By Code (QSBC) ECC

SSD



> APPLICATIONS

- Desktop PCs
- Notebook PCs

> MAIN SPECIFICATIONS

		2.5-inch Case (7.0 mmH)	M.2 2280-D2 (Double-sided)	M.2 2280-S2 (Single-sided)
Model Number/ Formatted Capacity	1024 GB	THNSNK1T02CS8	THNSNK1T02DN8	-
	512 GB	THNSNK512GCS8	-	THNSNK512GVN8
	256 GB	THNSNK256GCS8	-	THNSNK256GVN8
	128 GB	THNSNK128GCS8	-	THNSNK128GVN8
Connector Type		Standard SATA	M.2 B-M	
Memory Type		TLC		
Interface		ACS-3, SATA revision 3.2 (6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s)		
Interface Speed		6.0 Gbit/s Max.		
Performance	Sequential Read	Up to 545 MB/s { 520 MiB/s }		
	Sequential Write	Up to 388 MB/s { 370 MiB/s }		
Supply Voltage	Allowable Voltage	5.0 V ± 5%	3.3 V ± 5%	
Power Consumption (active)		5.6 W typ.	5.5 W typ.	4.0 W typ.
Power Consumption (Idle)		65 mW typ.		

Model Number	SG5
MTTF	1,500,000 hours

> MECHANICAL SPECIFICATIONS

Model Number	2.5-inch Case (7.0 mmH)	M.2 2280-D2 (Double-sided)	M.2 2280-S2 (Single-sided)
Height	7.0 mm	3.58 mm	2.23 mm
Width	69.85 mm	22.0 mm	
Length	100.0 mm	80.0 mm	
Weight	48 to 51 g typ.	8.7 g typ.	7.0 g typ.

> ENVIRONMENTAL LIMITS

Item		2.5-inch Case (7.0 mmH)	M.2 2280-D2 (Double-sided)	M.2 2280-S2 (Single-sided)
Temperature	Operating	0 to 70 °C (Case Temperature)		0 to 80 °C (Components Temperature)
	Non-Operating	-40 °C to 85 °C		
Shock	Operating/ Non-Operating	14.7 km/s ² { 1500 G } (0.5 ms)		
Vibration	Operating/ Non-Operating	196 m/s ² { 20 G } (Peak, 10 to 2,000 Hz)		

Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2³⁰ = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

A kibibyte (KiB) means 2¹⁰, or 1,024 bytes, a mebibyte (MiB) means 2²⁰, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰, or 1,073,471,824 bytes.

Energy Consumption Efficiency: Energy consumption efficiency is calculated based on power consumption divided by formatted capacity, as defined by Japanese law.

MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF.

Read and write speed may vary depending on the host device, read and write conditions, and file size.