STORAGE

VORTIQ E21SKIB5 SATA



SPECIFICATIONS

Model Name	VORTIQ E21SKIB5 SATA					
Capacity	480GB	960GB	1.92TB	3.84TB	7.68TB	12.8TB
Controller	S12DC					
Flash Memory	3D NAND					
DRAM Cache	0.5GB DDR4	1GB DDR4	2GB DDR4	4GB DDR4	8GB DDR4	8GB DDR4
Form Factor	2.5 inch					
Interface	SATA Gen3					
Compatibility	SATA Gen3 / Gen2 / Gen1					
Dimensions	100mm (L) x 69.85mm (W) x 7.00mm (H)					
Latency Read	140 µs	120 µs	120 µs	130 µs	160 µs	155 µs
Latency Write	50 µs	40 µs	30 µs	35 µs	45 µs	30 µs
Sequential Read up to (MB/s)	530					
Sequential Write up to (MB/s)	360	500	500	500	500	500
Random Read 4KB up to (IOPS)	92K IOPS	98K IPOS	98K IPOS	98K IPOS	97K IPOS	98K IPOS
Random Write 4KB up to (IOPS)	20K IOPS	33K IOPS	40K IOPS	30K IOPS	23K IOPS	26K IOPS
Maximum Operating Power (W)	2.6	3.0	2.7	3.3	3.7	4.4
Idle Power PS3 (mW)	1.3	1.3	1.4	1.5	1.7	1.9
Operating Temperatures	0°C – 70°C					
Storage Temperatures	-40°C – 85°C					
Terabytes Written (TBW)	876	1752	3504	7008	14016	49843
Mean Time Between Failure (MTBF)	Up to 2.0 Million Hours					
Limited Warranty	5 Years, or the coverage for the maximum TBW as stated, whichever comes first.					
Advanced Features	Hardware-based Power Loss Protection – prevents data corruption during unexpected power failures Thermal Throttling Mechanism for temperature control End-to-End Data Path Protection – ensures data integrity throughout the transfer path TCG Opal 2.0 – complies with self-encrypting drive security standards					

FEATURES

HIGH ENDURANCE GUARANTEE

Features 1 DWPD (Drive Writes Per Day), specifically engineered for enterprise read/write mixed-use scenarios.

Comprehensive Data Protection

Supports End-to-End Data Path Protection to guarantee data integrity throughout the entire transmission process.

Hardware-Level Power Protection

Integrated Power Loss Data Protection (PLDP) prevents data loss during sudden power outages.

Industrial-Grade Vibration Resistance

Tested to withstand up to 1500G (non-operating shock), adapting to the most demanding physical environments.

3D NAND Flash

3D NAND flash technology brings dense storage in a compact design and allows storage capacities up to 960GB.

Security & Reliability

Built-in data security and error-correction capabilities extend the longevity of the NAND flash storage.

Low Latency Gaming

Enjoy minimal latency in smooth gameplay and loading games with optimized high-performance bandwidth and throughput.

MSI Center

Monitor SSD health status and key performance metrics in real time via MSI Center for stable and reliable system performance.

TEST CONFIGURATION

Sequential and random performance, and power consumption were measured with the system configurations listed below. All performance data was tested with the SSD as a secondary drive.

Interface	SATA Gen3
Operating System	Ubuntu 20.04.2 LTS
CPU	AMD Ryzen 5 7600X 6-Core Processor
Motherboard	ASUSTeK COMPUTER INC. ROG STRIX X670E-E GAMING WIFI
Kernel	Linux version 5.10.32-pim-20211006
RAM	32064652 kB

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