DEPOLAMA

SPATIUM M580 PCIe 5.0 NVMe M.2



SPECIFICATIONS

Model Name	SPATIUM M580 PCIe 5.0 NVMe M.2		
Capacity	1TB	2TB	4TB
Controller	PHISON E26		
Flash Memory	3D NAND		
DRAM Cache	2GB LPDDR4	4GB LPDDR4	8GB LPDDR4
Form Factor	M.2 2280		
Interface	PCIe Gen5x4, NVMe 2.0		
Compatibility	PCIe Gen5 / Gen4 / Gen3 / Gen2 / Gen1		
Dimensions	80.00mm (L) x 22.00mm (W) x 2.15mm (H)		
Sequential Read up to (MB/s)	13,700	14,600	14,100
Sequential Write up to (MB/s)	10,300	12,700	12,600
Random Read 4KB up to (IOPS)	1400K		
Random Write 4KB up to (IOPS)	1400K		
Maximum Operating Power (W)	11.5		
Idle Power PS3 (mW)	144		
Low Power L1.2 (mW)	85		
Operating Temperatures	0°C – 70°C		
Storage Temperatures	-40°C – 85°C		
Terabytes Written (TBW)	700	1400	3000
Mean Time Between Failure (MTBF)	Up to 1,600,000 Hours		
Limited Warranty	5 Years, or the coverage for the maximum TBW as stated, whichever comes first.		
Advanced Features	TRIM (Performance Optimization, OS Support required) SMART (Self-Monitoring, Analysis and Reporting Technology) LDPC (Low Density Parity Check) ECC Algorithm End to End Data Path Protection APST (Autonomous Power State Transition) AES256/OPAL 2.0 (Encryption, Data Security)		

FEATURES

Supercharged with Gen 5

The PCIe Gen 5 controller empowers next-level storage transfer rates faster than previous-gen SSDs by up to 1.8 times.

3D NAND

3D NAND flash technology brings dense storage in a compact design and allows storage capacities up to 4TB.

Multiple Security

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.

Nonstop Creativity Booster

Keep up nonstop productivity by opening up images, movies, documents, and heavy-duty applications at lightning speeds.

MSI Center

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

Optimal M.2 SSD

22 x 80

Designed in the M.2 2280 form factor, MSI SSDs are easy to install into external enclosures, desktops, or laptops.

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	PCIe GEN5X4
Operating System	Windows 11 Pro 23H2
CPU	AMD Ryzen 9 7950X 16-Core @4.50 GHz
Memory	Kingston DDR5-4800 16G x2
Chipset	MSI MPG X670E CARBON WIFI
Test Program	Crystal Diskmark 8.0.4, ATTO Disk Benchmark V4.01.0f1, IO Meter v1.1.0

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