STORAGE

SPATIUM M480 PCIe 4.0 NVMe M.2



SPECIFICATIONS

Model Name	SPATIUM M480 PCIe 4.0 NVMe M.2		
Capacity	500GB	1TB	2TB
Controller	PHISON E18		
Flash Memory	3D NAND		
DRAM Cache	512MB DDR4	1GB DDR4	2GB DDR4
Form Factor	M.2 2280		
Interface	PCIe Gen4x4, NVMe 1.4		
Compatibility	PCIe Gen4 / Gen3 / Gen2 / Gen1		
Dimensions	80.00mm (L) x 22.00mm (W) x 2.15mm (H)		
Sequential Read up to (MB/s)	6500	7000	7000
Sequential Write up to (MB/s)	2850	5500	6800
Random Read 4KB up to (IOPS)	170,000	350,000	650,000
Random Write 4KB up to (IOPS)	600,000	700,000	700,000
Maximum Operating Power (W)	6.0	6.6	8.2
Idle Power PS3 (mW)	10	14	22
Low Power L1.2 (mW)	3		
Operating Temperatures	0°C – 70°C		
Storage Temperatures	-40°C – 85°C		
Terabytes Written (TBW)	350	700	1400
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/Pyrite (Encryption, Data Security)		

FEATURES

Blazing Speeds

Optimized for the PCIe Gen4 interface.

3D NAND Flash

3D NAND Flash technology brings dense storage in a compact design and allows storage capacities up to 2TB.

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.

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 Gen4x4
Operating System	Windows 11 Pro 22H2 OS Build 22621.1105
CPU	AMD Ryzen 9 7950X 16-Core @4.50 GHz
Memory	Kingston DDR5-4800 16G x2
Chipset	MSI MEG X670E ACE
Test Program	Crystal Diskmark 8.04c, ATTO Disk Benchmark V4.01.0f1, IO Meter v1.1.0

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