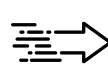




## FEATURES



### 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

Migrate data with backup & restore functionality, monitor drive health and performance metrics in real-time in MSI Center.



### Optimal M.2 SSD

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



### 5 Years Warranty

MSI stands by the quality and reliability of their SSD's with a 5 year limited warranty.

## SPECIFICATIONS

<b>Model Name</b>	SPATIUM M450 PCIe 4.0 NVMe M.2 V1	
<b>Capacity</b>	1TB	2TB
<b>Controller</b>	PHISON E19T	
<b>Flash Memory</b>	3D NAND	
<b>Form Factor</b>	M.2 2280	
<b>Interface</b>	PCIe Gen4x4, NVMe 1.4	
<b>Compatibility</b>	PCIe Gen4 / Gen3 / Gen2 / Gen1	
<b>Dimensions</b>	80.00mm (L) x 22.00mm (W) x 2.15mm (H)	
<b>Sequential Read up to (MB/s)</b>	3400	3300
<b>Sequential Write up to (MB/s)</b>	2400	2500
<b>Random Read 4KB up to (IOPS)</b>	500,000	440,000
<b>Random Write 4KB up to (IOPS)</b>	550,000	560,000
<b>Maximum Operating Power (W)</b>	3.7	3.8
<b>Idle Power PS3 (mW)</b>	35	
<b>Low Power L1.2 (mW)</b>	5	
<b>Operating Temperatures</b>	0°C - 70°C	
<b>Storage Temperatures</b>	-40°C - 85°C	
<b>Terabytes Written (TBW)</b>	350	700
<b>Mean Time Between Failure (MTBF)</b>	Up to 1,500,000 Hours	
<b>Limited Warranty</b>	5 Years, or the coverage for the maximum TBW as stated, whichever comes first.	
<b>Advanced Features</b>	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) Pyrite (Encryption, Data Security)	

## 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.

<b>Interface</b>	PCIe Gen4x4
<b>Operating System</b>	Windows 11 Pro 21H2 OS Build 22000.258
<b>CPU</b>	11 <sup>th</sup> Gen Intel Core i7-11700KF @3.6GHz
<b>Memory</b>	Crucial DDR4-2400 8G x2
<b>Chipset</b>	MSI MPG Z590 GAMING CARBON WIFI
<b>Test Program</b>	Crystal Diskmark 8.01, ATTO Disk Benchmark V4.01.0f1, IO Meter v1.1.0