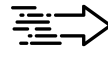




## SPECIFICATIONS

|   |  |         |         |         |
|---|--|---------|---------|---------|
| <b>Model Name</b>                       | SPATIUM M450 PCIe 4.0 NVMe M.2   |         |         |         |
| <b>Capacity</b>                         | 250GB  | 500GB   | 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>     | 3500   | 3600    | 3600    | 3300    |
| <b>Sequential Write up to (MB/s)</b>    | 1200   | 2300    | 3000    | 3000    |
| <b>Random Read 4KB up to (IOPS)</b>     | 150,000  | 300,000 | 420,000 | 380,000 |
| <b>Random Write 4KB up to (IOPS)</b>    | 300,000  | 550,000 | 550,000 | 540,000 |
| <b>Maximum Operating Power (W)</b>      | 3.4  | 3.4     | 4.0     | 4.5     |
| <b>Idle Power PS3 (mW)</b>              | 40   |         |         |         |
| <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>          | 150  | 300     | 600     | 1200    |
| <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)<br>SMART (Self-Monitoring, Analysis and Reporting Technology)<br>LDPC (Low Density Parity Check) ECC Algorithm<br>End to End Data Path Protection<br>APST (Autonomous Power State Transition)<br>Pyrite (Encryption, Data Security) |         |         |         |

## FEATURES



### Blazing Speeds

Optimized for the PCIe Gen4 interface.



### Security & Reliability

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



### 5 Years Warranty

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



### MSI Center

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



### 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.



### 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.



### 3D NAND Flash

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

## 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 |