



## Join the SOLID storage revolution. Because spinning media is winding down.

There's an easy way to speed up business-critical workloads that cripple hard drives: The Micron® 5200 series of SATA SSDs. Engineered on industry-leading 64-layer 3D NAND, the Micron 5200 SSD delivers best-in-class performance and capacity on the same proven architecture as the 5100 series.\*

Designed for virtualized workloads that power your business, such as OLTP, BI/DSS, VDI, block/object, media streaming and more, the low-latency Micron 5200 series of SSDs eliminates storage bottlenecks with fast, consistent performance — and a lower total cost of ownership.

A *single* Micron SSD allows you to get 3X more performance than an entire shelf of 24 10K RPM hard drives.\*\* Imagine the impact — across your entire data center.

## Key Benefits

### Leading Performance

Industry-leading sequential reads/writes paired with 95,000 IOPS random reads and best-in-class random writes up to 75,000 deliver a compelling performance advantage over hard drives and competing SATA SSDs.†

### Leading Capacity and TCO

Capacities up to nearly 8TB — all on industry-leading, 64-layer 3D NAND for a cost-optimized SATA platform that's uniquely competitive against hard drives.

### Leading Reliability

Improved reliability with the industry's highest published MTTF and lowest annualized drive failure rate for SATA enterprise SSDs according to data sheet specifications.‡

### Same Trusted, Proven Architecture

Same controller. Same components. New NAND. The result is easy quals, better performance and better value.

## Target Workloads & Applications



**VIRTUALIZATION  
& VDI**



**CLOUD STORAGE**



**OLTP**



**BI/DSS**



**MEDIA  
STREAMING**

\* The Micron 5200 was the first enterprise SSD available to purchase with 64-layer 3D NAND. Performance comparison based on public data sheet specifications for GB/s throughput and random write IOPS performance for comparable enterprise SATA 2.5-inch product family as of the date of this document's publication. Actual performance may vary.

\*\* Based on IOPS performance of 24 hard drives (300GB, 10K RPM, SAS) compared to a single 960GB Micron 5100 PRO SSD in an OLTP workload environment. Results do not reflect differences in capacity and hard drives were not short-stroked. Actual performance may vary. For conceptual purposes only.

† Based on maximum data sheet specifications (steady state) across the Micron 5200 product line. Performance varies by model and capacity. Visit the Micron 5200 product page for additional product details.

‡ Per public data sheet specifications, the Micron 5200 SSD has a mean time to failure (MTTF) of 3 million device hours, compared to 2 million hours for SATA enterprise SSDs. Converting these numbers to annualized failure rates gives the Micron 5200 a 0.29% annualized failure rate versus 0.44% for competing drives. Enhanced reliability is the foundation for consistent, predictable performance.



## Why Micron for SATA SSDs

### Better SSDs come from better NAND

From silicon to system, we create the memory and flash storage that powers the data center and makes your workloads faster, more reliable, more efficient, and more cost-effective.

### Flex Capacity: Simple storage that scales

Our unique Flex Capacity feature allows you to adjust the drive's endurance, performance, and capacity to meet evolving workload needs – and manage fewer products.

### Fast. Trusted. Easy. Secure.

Built on the proven architecture of our award-winning 5100 series that's been qualified and used by top OEMs, hyperscalers and data centers, the Micron 5200 series of SSDs is easy to qual and install.



| Base Part Numbers |                         |          |             |
|-------------------|-------------------------|----------|-------------|
| Model             | Standard Part           | Capacity | Form Factor |
| 5200 ECO          | MTFDDAK480TDC-1AT1ZABYY | 480GB    | 2.5"        |
|                   | MTFDDAK960TDC-1AT1ZABYY | 960GB    | 2.5"        |
|                   | MTFDDAK1T9TDC-1AT1ZABYY | 1.92TB   | 2.5"        |
|                   | MTFDDAK3T8TDC-1AT1ZABYY | 3.84TB   | 2.5"        |
| 5200 PRO          | MTFDDAK960TDD-1AT1ZABYY | 960GB    | 2.5"        |
|                   | MTFDDAK1T9TDD-1AT1ZABYY | 1.92TB   | 2.5"        |
|                   | MTFDDAK3T8TDD-1AT1ZABYY | 3.84TB   | 2.5"        |
| 5200 MAX          | MTFDDAK240TDN-1AT1ZABYY | 240GB    | 2.5"        |
|                   | MTFDDAK480TDN-1AT1ZABYY | 480GB    | 2.5"        |
|                   | MTFDDAK960TDN-1AT1ZABYY | 960GB    | 2.5"        |
|                   | MTFDDAK1T9TDN-1AT1ZABYY | 1.92TB   | 2.5"        |

### Key Specifications

|                                |   | 5200 ECO<br>Read-Intensive<br>≤1 DWPD                                 |       |        |        |        | 5200 PRO<br>Read-Intensive<br><2 DWPD |        |        | 5200 MAX<br>Mixed-Use<br>5 DWPD |       |       |        |
|--------------------------------|---|---|-------|--------|--------|--------|---------------------------------------|--------|--------|---------------------------------|-------|-------|--------|
| Capacity <sup>1</sup>          |   | 480GB   | 960GB | 1.92TB | 3.84TB | 7.68TB | 960GB                                 | 1.92TB | 3.84TB | 240GB                           | 480GB | 960GB | 1.92TB |
| Performance                    | Sequential Reads (MB/s) <sup>2</sup>  | 540   | 540   | 540    | 540    | 540    | 540                                   | 540    | 540    | 540                             | 540   | 540   | 540    |
|                                | Sequential Writes (MB/s) <sup>2</sup>   | 385   | 520   | 520    | 520    | 520    | 520                                   | 520    | 520    | 310                             | 460   | 520   | 520    |
|                                | Random Reads (K IOPS) <sup>3</sup>  | 81  | 95    | 95     | 95     | 95     | 95                                    | 95     | 95     | 88                              | 93    | 95    | 95     |
|                                | Random Writes (K IOPS) <sup>3</sup>   | 33  | 28    | 22     | 17     | 9.5    | 32                                    | 32     | 24.5   | 53                              | 70    | 75    | 70     |
| Endurance (TBW in PB)          |   | 0.87  | 1.75  | 3.5    | 7.7    | 8.4    | 2.27                                  | 5.95   | 17.6   | 2.2                             | 4.38  | 8.76  | 17.52  |
| Basic Attributes               | Interface   | SATA 6 Gb/s   |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Form Factor   | 2.5-inch, 7mm   |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | NAND  | Micron 64-layer 3D TLC NAND   |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Encryption  | AES 256-bit (TCG Enterprise options available)                        |       |        |        |        |                                       |        |        |                                 |       |       |        |
| Reliability                    | MTTF  | 3 million device hours  |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | UBER  | <1 sector per 10 <sup>17</sup> bits read                              |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Warranty  | 5 years   |       |        |        |        |                                       |        |        |                                 |       |       |        |
| Environmental Characteristics  | Power Consumption   | Sequential write: 3.6W MAX<br>Sequential read: 3.0W MAX<br>Idle: 1.5W |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Temperature (operating)   | 0–70°C  |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Shock (operating)   | 1500G, duration 0.5ms   |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Vibration (operating)   | 5–800Hz at 3.13g  |       |        |        |        |                                       |        |        |                                 |       |       |        |
| Physical Characteristics       | Size (L x W x H)  | 100.45mm x 69.85mm x 7.00mm   |       |        |        |        |                                       |        |        |                                 |       |       |        |
|                                | Weight  | <70g  |       |        |        |        |                                       |        |        |                                 |       |       |        |
| Advanced Features <sup>4</sup> | Flex Capacity, AES 256-bit encryption, TCG Enterprise configurability, power loss protection for data in-flight, end-to-end enterprise data path protection, secure firmware, adaptive thermal monitoring, easy to install (hot pluggable), Storage Executive SSD management tool, RAIN |   |       |        |        |        |                                       |        |        |                                 |       |       |        |

1. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.

2. 128KB transfer size, steady state.

3. 4KB transfer size, steady state.

4. No hardware, software or system can provide absolute security under all conditions. Micron assumes no liability for lost, stolen or corrupted data arising from the use of any Micron products, including those products that incorporate any of the mentioned security features.

[micron.com/ssd](http://micron.com/ssd)

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