



## Crucial® MX300 Solid State Drive

### Instant performance that lasts.

Increase the speed, durability, and efficiency of your system for years to come with the Crucial® MX300 SSD. Boot up in seconds and fly through the most demanding applications with an SSD that fuses the latest 3D NAND flash technology with the proven success of previous MX-series SSDs. Your storage drive isn't just a container, it's the engine that loads and saves everything you do and use. Get more out of your computer by boosting nearly every aspect of performance.

#### PRODUCT HIGHLIGHTS

- Sequential reads/writes up to 530 / 510 MB/s on all file types<sup>1</sup>
- Random reads/writes up to 92k / 83k on all file types<sup>1</sup>
- Over 90x more energy efficient than a typical hard drive<sup>2</sup>
- Accelerated by Micron® 3D NAND technology
- Dynamic Write Acceleration delivers faster saves and file transfers
- More durable than a hard drive – no small moving parts that are prone to failure
- Best-in-class hardware encryption keeps data safe and secure
- Exclusive Data Defense guards against data corruption
- Adaptive Thermal Protection allows for adaptive cooling
- Power Loss Protection completes write commands even if power is lost<sup>4</sup>
- Includes free Acronis® True Image™ HD software for easy data migration
- Compatible with the Crucial® Storage Executive tool for easy drive maintenance
- 3 year limited warranty



#### Instantly improve system performance

The Crucial MX300 reaches read speeds up to 530 MB/s and write speeds up to 510 MB/s<sup>1</sup> on all file types so you can boot up almost instantly, reduce load times, and accelerate demanding applications with ease. Plus, our Dynamic Write Acceleration technology uses an adaptable pool of high-speed, single-level cell flash memory to generate blistering speeds throughout the drive's long life.



#### Over 90x more energy efficient than a typical hard drive<sup>2</sup>

Extreme Energy Efficiency technology within the Crucial MX300 reduces the amount of active power usage that's consumed by the drive. The Crucial MX300 extends your laptop's battery life by using only 0.075W of power, compared to a typical hard drive which uses 6.8W.



#### Entrust your files to a drive that lasts

With an endurance rating of up to 400TB total bytes written, the Crucial MX300 is engineered with Micron® 3D NAND to deliver years of fast performance. The 3D NAND leverages larger NAND cells to improve performance and prolong endurance.



#### Keep your system cool

In addition to lower active power usage, Adaptive Thermal Protection technology dynamically adjusts storage component activity. This helps keep your system cool and minimizes the risk of damage caused by overheating.



#### Boost drive performance by up to 10x with Crucial Storage Executive<sup>3</sup>

This downloadable tool is easy to use and helps monitor and enhance the performance of your Crucial MX300 – update to the latest firmware and enable the Momentum Cache feature in Storage Executive to instantly improve burst performance. Download the latest version at [www.crucial.com/usa/en/support-storage-executive](http://www.crucial.com/usa/en/support-storage-executive).

# Crucial® MX300 SSD

## Form Factors

- 2.5"
- M.2 Type 2280

## Endurance

- **275GB drive:** 80TB Total Bytes Written (TBW), equal to 43GB per day for 5 years
- **525GB drive:** 160TB Total Bytes Written (TBW), equal to 87GB per day for 5 years
- **1TB drive:** 360TB Total Bytes Written (TBW), equal to 197GB per day for 5 years
- **2TB drive:** 400TB Total Bytes Written (TBW), equal to 219GB per day for 5 years

## Life Expectancy (MTTF)

1.5 million hours

## Warranty

Limited three-year warranty

## Operating Temperature

0°C to 70°C

## Firmware

User-upgradeable firmware

## Support

For installation & warranty information, visit [crucial.com/support](http://crucial.com/support)

## Hardware Encryption

- AES 256-bit encryption
- TCG Opal 2.0-compliant
- IEEE-1667-compliant
- Compatible with Microsoft® eDrive®

## Data Transfer Software

Includes Acronis® True Image™ HD software for free data transfer

## Compliance

CE, FCC, BSMI, C-Tick, VCCI, Kcc, RoHS, China RoHS, WEEE, TUV, UL, SATA-IO

## Advanced Features

- Dynamic Write Acceleration
- Redundant Array of Independent NAND
- Multistep Data Integrity Algorithm
- Adaptive Thermal Protection
- Power Loss Protection<sup>4</sup>
- Data Path Protection
- Active Garbage Collection
- TRIM Support
- Self-Monitoring and Reporting Technology (SMART)
- Error Correction Code (ECC)
- Device Sleep Support

CAPACITY	PART NUMBER	BOX CONTENTS	SEQUENTIAL READ MB/s <sup>1</sup>	SEQUENTIAL WRITE MB/s <sup>1</sup>	RANDOM READ IOPS <sup>1</sup>	RANDOM WRITE IOPS <sup>1</sup>	DYNAMIC WRITE ACCELERATION
<b>2.5" (7mm) SSD</b>							
275GB	CT275MX300SSD1	2.5" (7mm) SSD, 7mm to 9.5mm spacer, Acronis® True Image™ HD certificate	530	500	55k	83k	•
525GB	CT525MX300SSD1	2.5" (7mm) SSD, 7mm to 9.5mm spacer, Acronis® True Image™ HD certificate	530	510	92k	83k	•
1TB	CT1050MX300SSD1	2.5" (7mm) SSD, 7mm to 9.5mm spacer, Acronis® True Image™ HD certificate	530	510	92k	83k	•
2TB	CT2050MX300SSD1	2.5" (7mm) SSD, 7mm to 9.5mm spacer, Acronis® True Image™ HD certificate	530	510	92k	83k	•
<b>M.2 Type 2280 SSD</b>							
275GB	CT275MX300SSD4	M.2 Type 2280 SSD, mounting screws Acronis® True Image™ HD certificate	530	500	55k	83k	•
525GB	CT525MX300SSD4	M.2 Type 2280 SSD, mounting screws Acronis® True Image™ HD certificate	530	510	92k	83k	•
1TB	CT1050MX300SSD4	M.2 Type 2280 SSD, mounting screws Acronis® True Image™ HD certificate	530	510	92k	83k	•

## Micron® quality — a higher level of reliability.



As a brand of Micron, one of the largest flash storage manufacturers in the world, the Crucial MX300 is backed by the same quality and innovation that has produced some of the world's most advanced memory and storage technologies. With over a thousand hours of prerelease validation testing and hundreds of SSD qualification tests, the Crucial MX300 has been thoroughly tried, tested, and proven. You'll notice the difference.

Note: 1GB equals 1 billion bytes. Actual useable capacity may vary. Not all capacities available at initial launch.

1. Based on the published specs of the 525GB model. Speeds based on internal testing. Actual performance may vary.

2. Active average power use comparison based on published specs of the 750GB Crucial MX300 SSD and the 1TB Western Digital® Caviar Blue™ WD10EZEX internal hard drive, which, as of January 2016, is one of the industry's top-selling internal hard drives. All other capacities of the Crucial MX300 SSD have comparable active average power consumption specs, with the exception of the 2050GB version of the drive, which consumes 0.15W.

3. Validated by testing included in the "Enhance Burst Performance on Micron and Crucial SSDs Using Momentum Cache" whitepaper, available at [www.crucial.com/usa/en/support-storage-executive](http://www.crucial.com/usa/en/support-storage-executive).

4. Refers to data at rest only.