

# CRUCIAL® MX500 SOLID STATE DRIVE



# IT'S WORTH IT.

Every time you turn on your computer, you're using your storage drive. It holds all your irreplaceable files and it loads and saves almost everything your system does. Join more and more people who are keeping their family videos, travel photos, music, and important documents on an SSD, and get the near-instant performance and lasting reliability that comes with solid state storage. Upgrade with the Crucial® MX500 SSD, a drive built on quality, speed, and security that's all backed by helpful service and support. Even if you've never installed an SSD, don't sweat it – our step-by-step guide walks you through the process to make installation easy. It's worth it.



Start your system in seconds







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### Fly through everything you do

Start your system in seconds, load files almost instantly, and accelerate the most demanding applications with the Crucial MX500. Our Dynamic Write Acceleration technology uses an adaptable pool of high-speed, single-level cell flash memory to generate blistering speeds.



### Store up to 2TB of data

Save massive amounts of photos, music, and videos comfortably and securely. With fast access to your media, creations, and designs, you're ready to share at the speed of your life.



### Enjoy the efficiency of next-gen Micron® 3D NAND

Our cutting-edge components are engineered from start to finish for efficiency. As a result, the Crucial MX500 uses only a minimal amount of power and still delivers a high price-to-performance ratio – without needing a financing plan to pay for it. Experience a faster, cooler, and quieter computer in your home or business. You'll wonder how you ever put up with a hard drive.



### Install with confidence

For many people, opening a computer and transferring data seems terrifying. That's why we've made it easy in the step-by-step Crucial SSD Install Guide. Check it out before you buy, then install your own SSD quickly with everything transferred over successfully and hassle-free.

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### Upgrade with a drive you can count on

With thousands of hours of pre-release validation, dozens of SSD qualification tests, and a heritage of award-winning SSDs, the Crucial MX500 has been thoroughly tried, tested, and proven. Secure your most important files on a drive with established dependability and the advanced features MX-series SSDs are known for.

#### Crucial® MX500 SSD advanced features



**Hardware-based encryption:** Keep personal files and confidential data restricted from hackers and thieves with AES 256-bit encryption that meets all industry standards, including Microsoft<sup>®</sup> eDrive, IEEE-1667, and TCG Opal 2.0.



**Integrated Power Loss Immunity:** Avoid unintended data loss when the power unexpectedly goes out. This built-in feature of our new NAND protects your data swiftly and efficiently, so if your system suddenly shuts down, you keep all your saved work.



**Exclusive Data Defense:** Prevent your photos, music, videos, and other files from becoming corrupted and unusable with layers of error correction and adaptive read technology.



**Redundant Array of Independent NAND:** Protect your data at the component level with an SSD that automatically provides parity protection for your data. This high-end feature works similarly to how RAID is used with multiple hard drives and maintains the integrity of your data, especially for intense users.



**Built-in durability:** Because SSDs don't use moving parts that wear out over time (unlike hard drives), your files are less susceptible to a crash. SSDs are better equipped to survive physical trauma, like getting dropped, because they don't rely on mechanical parts.



#### Micron<sup>®</sup> quality – a higher level of reliability.

As a brand of Micron, one of the largest flash storage manufacturers in the world, the Crucial MX500 is backed by the same quality and engineering innovation that has produced some of the world's most advanced memory and storage technologies for more than 35 years. Split-second speeds, lasting reliability, and a decades-long legacy – upgrading with the Crucial MX500 gives you the best combination of quality, performance, and security. It's worth it.

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#### Life Expectancy (MTTF)

1.8 million hours

#### Endurance

250GB drive: 100TB Total Bytes Written (TBW), equal to 54GB per day for 5 years

500GB drive: 180TB Total Bytes Written (TBW), equal to 98GB per day for 5 years

1TB drive: 360TB Total Bytes Written (TBW), equal to 197GB per day for 5 years

2TB drive: 700TB Total Bytes Written (TBW), equal to 383GB per day for 5 years

#### **Data Transfer Software**

Acronis® True Image™ for Crucial® cloning software

## **Operating Temperature**

0°C to 70°C

#### **Firmware**

User-upgradeable firmware

#### Compliance

CE, FCC, BSMI, C-Tick, VCCI, KCC RRL, RoHS, China RoHS, WEEE, TUV, UL, IC, Morocco, Halogen Free, SATA-IO

#### **Advanced Features**

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

#### Warranty

Limited five-year warranty

#### Installation

For easy-to-follow instructions and our step-by-step guide, visit crucial.com/ssd-install

#### Support

For more resources and warranty information, visit crucial.com/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>
Crucial® MX500 2.5-inch Solid State Drive						
250GB	CT250MX500SSD1	2.5-inch 7mm SSD SATA 6Gb/s, 7mm to 9.5mm spacer, Acronis® True Image™ for Crucial cloning software and installation instructions	560	510	95K	90K
500GB	CT500MX500SSD1	2.5-inch 7mm SSD SATA 6Gb/s, 7mm to 9.5mm spacer, Acronis® True Image™ for Crucial cloning software and installation instructions	560	510	95K	90K
1TB	CT1000MX500SSD1	2.5-inch 7mm SSD SATA 6Gb/s, 7mm to 9.5mm spacer, Acronis® True Image™ for Crucial cloning software and installation instructions	560	510	95K	90K
2TB	CT2000MX500SSD1	2.5-inch 7mm SSD SATA 6Gb/s, 7mm to 9.5mm spacer, Acronis® True Image™ for Crucial cloning software and installation instructions	560	510	95K	90K
Crucial® MX500 M.2 Type 2280 Solid State Drive						
250GB	CT250MX500SSD4	M.2 Type 2280 SSD, mounting screws, Acronis® True Image™ for Crucial cloning software	560	510	95K	90K
500GB	CT500MX500SSD4	M.2 Type 2280 SSD, mounting screws, Acronis® True Image™ for Crucial cloning software	560	510	95K	90K
1TB	CT1000MX500SSD4	M.2 Type 2280 SSD, mounting screws, Acronis® True Image™ for Crucial cloning software	560	510	95K	90K

Note: 1TB = 1 billion bytes. Actual useable capacity may vary. Not all capacities and form factors may be available at product launch.

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<sup>1.</sup> Based on the published specs of the 1TB model. Speeds based on internal testing. Actual performance may vary.