

crucial®

M550



PRODUCT HIGHLIGHTS

- Load files and programs almost instantly
- Boot up almost immediately
- Accelerate demanding applications
- Download massive files in seconds rather than minutes
- Manage power so your battery lasts longer
- Encrypt and protect personal data against loss or theft
- Achieve top speeds without sacrificing reliability
- Store lots of data – available in capacities up to 1TB

Crucial® M550 Solid State Drive

Do more. Faster. Longer.

A breakthrough in innovation, the Crucial® M550 SSD is **over 20 times faster than a typical hard drive*** and **consumes significantly less power**. It enables your computer to boot up almost immediately, load files and programs almost instantly, accelerate demanding applications, and manage power more efficiently so your battery lasts longer. Backed by the most advanced feature set available – Native Write Acceleration, RAIN (Redundant Array of Independent NAND) technology, Adaptive Thermal Protection, hardware-based encryption, and our exclusive data integrity algorithm – the Crucial M550 delivers a complete performance gain that's measured by far more than just specs.

Consistently fast speeds. No exceptions.



Every manufacturer has ideas about how to deliver better performance. Some use file compression schemes, but those don't help video, audio, or graphic files that are already compressed. Some steal system memory to improve a slow drive. The Crucial M550 treats all files the same, regardless of whether they're compressed or uncompressed, so the specs we advertise are the same ones you'll see in real world use: true 550 MB/s sequential reads across all file types.

Save on power costs and enjoy longer battery life.



Run your system longer than ever before – and use less power. Based on published specs, a common laptop hard drive uses 2.5 watts of power on an average workload, compared to 0.15 watts on the Crucial M550 (which is up to 94% more energy efficient).** In everyday terms, this means significantly more battery life and substantial savings on power costs.

Secure and protect your data – with no loss in performance.



You probably save lots of sensitive and personal information on your computer – encrypt it and keep it safe. As a self-encrypting drive, the Crucial M550 incorporates the highest level of hardware encryption into the controller, allowing the drive to operate at full speed without the performance loss associated with software-based encryption. The Crucial M550 is one of the only drives on the market to meet the rigorous requirements of TCG Opal 2.0, IEEE-1667, and Microsoft® eDrive®.

Micron® quality – a higher level of reliability.

As a brand of Micron, one of the largest flash storage manufacturers in the world, the Crucial M550 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 M550 has been thoroughly tried, tested, and proven for the most demanding applications.



Crucial® M550 Solid State Drive

Type

- SATA 6Gb/s (SATA 3Gb/s compatible)
- 2.5-inch (7mm), mSATA, and M.2 Type 2280

NAND Flash

- 20nm Micron MLC NAND

Life Expectancy (MTTF)

- 1.5 million hours

Endurance

- 72TB total bytes written (TBW)
- Equal to 40GB per day for 5 years

Warranty

- Limited three year warranty

Operating Temperature

- 0°C to 70°C

Firmware

- User upgradeable firmware

Support

- For install and warranty information visit:
crucial.com/support

Hardware Encryption

- AES 256-bit
- TCG Opal 2.0 compliant
- IEEE-1667 compliant
- Microsoft® eDrive® compatible

Advanced Features

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

Compliance

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

CAPACITY	PART NUMBER	BOX CONTENTS	SEQUENTIAL READ MB/S	SEQUENTIAL WRITE MB/S	RANDOM READ IOPS	RANDOM WRITE IOPS
128 GB	CT128M550SSD1	2.5" (7mm), 9.5mm adapter	550	350	90k	75k
256 GB	CT256M550SSD1	2.5" (7mm), 9.5mm adapter	550	500	90k	80k
512 GB	CT512M550SSD1	2.5" (7mm), 9.5mm adapter	550	500	95k	85k
1 TB	CT1024M550SSD1	2.5" (7mm), 9.5mm adapter	550	500	95k	85k
128 GB	CT128M550SSD3	mSATA, mounting screws	550	350	90k	75k
256 GB	CT256M550SSD3	mSATA, mounting screws	550	500	90k	80k
512 GB	CT512M550SSD3	mSATA, mounting screws	550	500	95k	85k
128 GB	CT128M550SSD4	M.2 Type 2280, mounting screws	550	350	90k	75k
256 GB	CT256M550SSD4	M.2 Type 2280, mounting screws	550	500	90k	80k
512 GB	CT512M550SSD4	M.2 Type 2280, mounting screws	550	500	95k	85k

Note: All trademarks are property of their respective owners. 1 GB = 1 billion bytes. Actual usable capacity may vary.

*Performance level based on averaged PCMark Vantage HDD test scores of five leading hard drives compared to the Crucial M550 SSD. Actual performance level may vary based on benchmark used and individual system configuration. Test setup: 256GB Crucial M550 SSD (firmware MU03), 2TB Western Digital® WD20EURS 7200RPM hard drive, 2TB Seagate® ST2000DM001 7200 RPM hard drive, 1TB Western Digital WD10EZEX 7200RPM hard drive, 750GB Seagate ST3750640AS 7200RPM hard drive, and 500GB Western Digital WD5000AVDS 7200RPM hard drive, all tested on an Intel® DZ87KLT-75K motherboard, Intel i7-4770K 3.50GHz processor, BIOS Rev. 0446, and Windows® 8 Pro 64-bit operating system using PCMark Vantage HDD test suite. Benchmark testing conducted December 2013.

**Hard drive active average power use based on published specs of 500GB Seagate® Momentus® 7200RPM internal hard drive for laptops. According to NPD data published in September 2013, this was one of the most popular hard drives available and an accurate reflection of a common internal hard drive for laptops.