



# SSD 2.5" Solid State Drive

Serial ATA 6Gb/s

PX-256M2P

256GB SSD

The Plextor M2P SATA 6Gb/s SSD series provides best-in-class performance, with read/write speeds of up to 500/440 MB/s in sequential mode and up to 70,000/65,000 IOPS in random mode. Powered by the exclusive True Speed technology, they deliver sustained high performance and consistent read/write speeds, even after intensive use and periods of continuous operation. For end users, True Speed means high transfer speeds in any real-world computing environment and consistent performance levels in the long term, without the severe write speed degradation that can occur with SSDs. Plextor's full range of True Speed SSD products feature the best server-grade controller chip with support for the latest SATA III 6GB/standard and high-quality Toggle NAND flash from industry leader Toshiba. Data transfer speeds are optimized by the exclusive firmware, which supports advanced functions including Instant Restore, Global Wear Leveling, and Bad Block Management.

Plextor's SSD products are built with maximum attention to quality and service. Before leaving the factory, each drive goes through the most rigorous tests in the industry, including a 20-hour high temperature burn-in test and strenuous simulations of real-world working environments. Reflecting its commitment to excellence, Plextor's SSDs have an average annual failure rate of 0.5%, the lowest in the industry.

The Plextor M2P series is designed for users who demand high performance in actual use and expect their SSD to continue to deliver that performance throughout its long lifetime. Drives are available in 128GB and 256GB capacities.

### Innovative True Speed Technology

- True Speed means consistent high performance, in every real-life situation and for the entire lifetime of the product. Leveraging the power of advanced firmware and best in class hardware, True Speed ensures that the SSD works at its full potential even after prolonged usage when data is heavily fragmented.
- True Speed's sustained performance sets Plextor's SSDs apart from other products, many of which see a sharp drop in read/write speeds after just a few days of intensive utilization.

### High Quality Components for Maximum Performance

- Server-grade Marvell 88SS9174 controller for read/write speeds of up to 500MB/s and 440 MB/s in sequential mode, and 70,000 and 65,000 IOPS for random read/write operations at 4K file size.
- Fully supports SATA 6Gb/s and is compatible with SATA 3Gb/s and SATA 1.5Gb/s. Data is transferred faster and product lifetime is extended with the 512MB DDR3 DRAM cache.
- The latest synchronous MLC NAND flash modules from industry-leader Toshiba provides reliability and extended product life. You can be sure that the SSD will work flawlessly, even after years of usage.

### Consistent Speed Levels Even After Intensive Usage

- Smart firmware combines three advanced technologies to keep performance at sustained levels. Bad Block Management and Global Wear Leveling optimize the way data is written on the drive, while the unique Instant Restore technique overcomes the problem of declining speed after a period of usage.

- Supports advanced functions, such as S.M.A.R.T. failure prediction, the TRIM command, NCQ optimization, and superior Garbage Collection, further increasing performance and reliability.

### Rigorous quality control for maximum user satisfaction

- The lowest failure rate in the industry; made possible by the strictest quality control. Every Plextor drive is tested before it leaves the factory against precise standards. The tests include an enterprise-grade over twenty hours high temperature burn-in test and intense accelerated simulation of real working conditions.

### Backed by Plextor's legendary service

- Full technical support and information from local helplines, websites and forums staffed by trained Plextor technicians. With regular software and firmware updates providing constant improvement.

### Continuous Plextor backing—Three-year ironclad warranty

- Three-year ironclad warranty giving complete reassurance, backed by an extensive network of dealers and repair centers for quick turnaround times.

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Performances	
Capacity	256 GB
Buffer	512MB DDR3 Cache
Read/Write Speed (Under Windows NTFS)	
Sequential Read	Up to 500 MB/s
Sequential Write	Up to 440 MB/s
Random Read (IOPS 4K)	70,000 maximum
Random Write (IOPS 4K)	65,000 maximum
Power Consumption	7W (Active); 0.1W (Idle) typical
Environment and Reliability	
Temperature	0 to 70 °C (Operating)
Shock	1,500G/0.5 msec
Vibration	7~800Hz, 2.17G (RMS, Operation)
MTBF	1.5 million hour
Warranty	3 year Plextor's Fast Warranty Service

Form Factor and Connectors	
Form Factor	2.5-inch form factor
Power Connector	15-pin SATA connector for DC 5V input
Data Connector	7-pin SATA connector
Dimensions and Weight	
Dimensions (W/H/D)	2.75 x 0.3 x 4.0 inch / 69.85 x 9.5 x 100 mm
Weight	2.54 oz / 75 g

Package Contents	
Drive	256GB SSD drive
Software	Image software included
Accessory	3.5" bracket
Document	Quick installation guide Users manual and warranty statement

Compatibility:	
Operating System Supported:	Microsoft Windows Family Linux Mac OS
Agency Approval	UL, CE, BSMI, WHQL, RoHS
Command Set Support:	TRIM, SMART, NCQ, ATA/ATAPI-8
DATA Encryption	Supported
SATA Interface:	SATA Revision 3.0 compliant, support SATA 6/3/1.5 Gb/s
Firmware Upgrade:	Supported

System Requirements (For Bundled Software)	
CPU	Pentium 4 1.3GHz and higher
Memory (RAM)	512 MB RAM or higher
Interface	SATA (Serial ATA)
Operating System	Microsoft Windows® 7 Microsoft Windows® Vista SP1 Microsoft Windows® XP SP3 / XP-Pro (x64) SP2
Other	CD-RW/DVD-RW drive for bootable media creation Internet connection recommended for updates

