

DURABILITY THAT MATTERS



M7V Series 2.5-inch Solid State Drive SATA 6Gb/s



**Worried about Durability of Entry-level SSDs? Worry no more.
Plextor Beats Same Grade SSDs in Speed and Durability**

Product Feature

- Durable TLC SSD
- Equipped with PlexNitro, the performance optimizing buffering technology
- Uses the latest LDPC technology to guarantee data accuracy
- Random read/write up to 98 K/84K IOPS
- Supports PlexTurbo, PlexCompressor, and PlexVault
- Available in 128, 256, and 512 GB capacities
- TBW up to 80 TB/160 TB/320 TB

Latest Generation of High-End TLC SSD

The M7V series is the newest generation of mainstream SSD tailored to the needs of general users, providing due performance and incomparable data transfer rate. The M7V series also has a longer service life compared to other products of the same grade by using optimum components and developing exclusive firmware, combined with advanced manufacturing technology.

High-Grade Components for Utmost Performance and Durability

The M7V is equipped with the latest controller from Marvell, a leading SSD controller chip manufacturer. It includes the most recent LDPC technology to guarantee data accuracy as well as provide fast and reliable performance. The M7V series also features Toshiba's highest level of 15nm TLC NAND flash that delivers up to 2000 P/E cycles, surpassing competition. In addition, with the exclusive PlexNitro firmware, drive performance can be optimized in SLC mode without taking up any space on the SSD; expanding its performance to the extreme.

Exclusive SSD Software Applications

M7V series is the first Plextor entry-level SSD that supports all three smart exclusive SSD software applications. PlexTurbo Smart Cache Technology can effectively reduce the number of write accesses to extend the service life of SSD. PlexCompressor Smart Compression Technology automatically compresses files that have not been used for more than 30 days to increase the SSD's available space. A secure storage area provided by PlexVault allows your private/sensitive data to be hidden on a shared computer.

Plextor's Superior Quality

All Plextor SSDs pass rigorous inspections with the most advanced SSD testing equipment in the world; not a single error or fault is allowed (Zero Error) in order to provide users with the highest level of quality and stability. Through professional simulation of actual read/write conditions, the M7V series, like all Plextor SSDs, offers MTBF of up to 1.5 million hours, significantly improving the reliability in long-term use and ensuring the security of valuable data.

Specification			
Model	PX-128M7VC	PX-256M7VC	PX-512M7VC
Capacity	128 GB	256 GB	512 GB
Cache	256MB DDR3	512MB DDR3	768MB DDR3
Controller	Marvell 88SS1074B1		
NAND Flash	TOSHIBA 15nm T LC with Toggle mode		
Performance (Under Windows NTFS)			
Sequential Read Speed (MB/s)*	Up to 560	Up to 560	Up to 560
Sequential Write Speed (MB/s)*	Up to 500	Up to 530	Up to 530
Random Read Speed (IOPS)*	Up to 97,000	Up to 98,000	Up to 98,000
Random Write Speed (IOPS)*	Up to 51,000	Up to 84,000	Up to 84,000
Environment and Reliability			
Power Requirement	DC 5V 1.0A (Max.)	DC 5V 1.5A (Max.)	DC 5V 2.0A (Max.)
Temperature	0°C ~ 70°C / 32°F ~ 158°F (Operating)		
Shock	1500G (Max.) , at 1 msec half-sine		
Vibration	7 ~ 800Hz, 2.17Grms (Operating)		
MTBF	1,500,000 Hours		
Endurance (TBW)	80	160	320
Warranty	3 years		
Compatibility			
Operating System Supported	Microsoft Windows OS / Linux OS / Mac OS		
Agency Approval	UL, TUV, FCC, CE, BSMI, VCCI, RCM, KCC, EAC, ROHS, WHQL		
Command Set Support	TRIM, S.M.A.R.T., NCQ, ATA/ATAPI-8		
Interface	SATA 6.0 Gb/s, compatible with SATA 3.0/1.5Gb/s		
Firmware Upgrade	Supported		
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		
Dimension and Weight			
Dimension (L/W/H)	100 x 69.85 x 6.8 mm / 3.94 x 2.75 x 0.27 inch		
Weight	60g / 2.12oz (Max.)		
Package Content			
Drive	128GB / 256GB / 512GB SSD		
Documents	Quick Installation Guide		

Specifications subject to change without notice.

Actual performance may vary based on hardware, software, and overall system configuration.

* Performance measured using CrystalDiskMark ver.3, IOMETER with queue depth set to 32.

Test Platform: Motherboard: ASUS Z97-Delux (Windows 8.1 x64)



For more information, please visit
www.PLEXTOR.com

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