

Enterprise SATA M.2 2280 SSD

Product Specifications

Interface	SATA 3.2				
Edition	Standard				
Capacity	480GB	960GB	1920GB	3840GB	7680GB
PN	M2S480GS3S200	M2S960GS3S200	M2S1T92S3S200	M2S3T84S3S200	M2S7T68S3S200
Controller	Marvell 88SS1074 / 88SS1080				
Flash Type	3D TLC				
DRAM	DDR3 / DDR4				
Sequential Read (128KB)	530 MB/s	545 MB/s	545 MB/s	540 MB/s	550 MB/s
Sequential Write (128KB)	515 MB/s	520 MB/s	520 MB/s	520 MB/s	525 MB/s
Random Read (4KB)	80,000 IOPS	92,000 IOPS	94,000 IOPS	97,000 IOPS	77,000 IOPS
Random Write (4KB)	12,000 IOPS	17,000 IOPS	17,000 IOPS	18,000 IOPS	10,000 IOPS
TBW	520 TB	1,040 TB	2,080 TB	4,160 TB	8,320 TB
Operating Temperature	0–70 °C				
Storage Temperature	-40–85 °C				
Power Supply Voltage Range	3.3 V ± 5%				
MTBF	2,000,000 hours				
UBER	<1 sector per 10 ¹⁷				
Compatibility	Windows/Windows Server/CentOS, Fedora, FreeBSD, openSUSE, Red Hat, Ubuntu, VMware ESXi, Citrix, KVM				
DWPD	0.6				
Mechanical Form Factor	Mechanical form factor 80 mm x 22 mm x 3.8 mm				

Key Product Features

- SATA 3.2 compatible with 6/3/1.5 Gb/s rates
- ATA/ATAPI ACS3 command set compliant
- NCQ: Up to 32 Queue Depth
- Enhance SMART ATA feature set
- Data set management TRIM command
- OS aware host hot plug / removal
- Security erase and Cryptographic firmware image signing
- AES-256 encryption
- RAID ECC for exceptional reliability and stability
- Advanced LDPC error correction
- UBER: <1 sector per 10^{17} bits read
- MTBF: 2.0 million hours
- Advanced flash management and global wear leveling algorithm that extend drive life
- End-to=End Data path protection
- Hardware and firmware-based power loss protection reducing risk of data corruption and device failure

Physical Dimension Diagram

