

# Improve your data center fast. Really fast.

Get blazing-fast speed and performance while safeguarding critical data. Samsung PM9A3 SSD features an enhanced in-house controller and NVMe technology for significantly faster read/write speeds.

Available in U.2 form factor and capacities of 960GB, 1.92TB, 3.84TB, and 7.68TB, Samsung PM9A3 SSD is a simple way to transform your business, while also realizing high quality of service (QoS), power loss protection and end-to-end data protection.



1) 1MB = 1,000,000 Bytes, 1GB = 1,000,000,000 Bytes, unformatted Capacity. User accessible capacity may vary depending on operating environment and formatting. 2) Based on PCI Express Gen3 x4, Random performance measured using FIO 2.1.3 in CentOS6(Kernel 3.14) with 4KB (4,096 bytes) of data transfer size in queue depth 32 by 4 workers and Sequential performance with 128KB (131,072 bytes) of data transfer size in queue depth 32 by 1 worker. Actual performance may vary depending on use conditions and environment. 3) 1 MB/sec = 1,000,000 bytes/sec was used in sequential performance. 4) Active power is measured using IOMeter2006 on Windows Server 2012. 5) TBW is measured while running 100 % random 4 KB writes across the entire SSD. (TBW = DWPD x 365 x 5 x User capacity). 6) Warranty 5 years or TBW, whichever comes first.

- 960GB** MZ-QL296000 | MZQL2960HCJR-00W07 | 887276642055
- 1.92TB** MZ-QL21T900 | MZQL21T9HCJR-00W07 | 887276642161
- 3.84TB** MZ-QL23T800 | MZQL23T8HCLS-00W07 | 887276642154
- 7.68TB** MZ-QL27T600 | MZQL27T6HBLA-00W07 | 887276642147

## Key Features

### Data Center SSDs, Advanced V-NAND



Keep your business running 24/7. Attain high performance, value and reliability with advanced Samsung V-NAND technology SSDs. They're produced in-house to stringent standards and are designed to achieve high responsiveness in data centers requiring accelerated performance.

### PCIe® 4.0 speed for powerful data centers



The new generation of performance. PCIe® 4.0 SSD reaches soaring speeds and handles extreme traffic for smooth data center operations.

### End-to-End Data Protection



End-to-end data protection ensures consistency over the entire data transfer path, greater reliability and peace of mind.

### Protection from Power Loss



In the event of power failure, Samsung SSD includes power loss protection to prevent data corruption.

### Enhanced Operations Efficiency



Accomplish far more with less. Achieve higher efficiency and performance compared to legacy storage systems, with fewer servers, reduced power and cooling, and lower TCO. Maintenance is more efficient, too, with the provided Samsung SSD Toolkit software.

### Samsung Quality and Reliability



Keep going with less downtime. In-house production utilizing our own Samsung-built components allows us greater quality control and manufacturing efficiencies, to produce SSDs of superior quality and reliability. Empower your business to run faster, more efficiently, and with the reduced costs that come from world-class dependability.



## Specifications

Interface	PCI Express Gen4 x4	
Form Factor	2.5" U.2	
Hardware	NAND Samsung VNAND 3bit MLC	
Dimensions (L x W x H)	3.94" x 2.75" x 0.27"	
Weight	Up to 90 g	
Sequential Read/Write, (MB/s)	PCIe Gen3	Up to 3,500/3,000 MB/s <sup>3</sup>
	PCIe Gen4	Up to 6,900/4,100 MB/s <sup>3</sup>
Random Read / Write (IOPS) <sup>2</sup>	PCIe Gen3	Up to 800K/200K IOPS
	PCIe Gen4	Up to 1100K/200K IOPS
Power Consumption <sup>4</sup>	Active Read/Write	Idle
	9.5W / 8.0W (960GB)	3.5W
	10.0W / 12.5W (1920GB)	
	11.0W / 13.5W (3840GB)	
11.0W / 13.5W (7680GB)		
Shock (Non-Operating)	1500G, Duration 0.5m/sec, Half-Sine Wave	
Total Bytes Written <sup>5</sup>	Up to 1752 TBW (960GB)	
	Up to 3,504 TBW (1920GB)	
	Up to 7,008 TBW (3840GB)	
	Up to 14,016 TBW (7680GB)	
Warranty <sup>6</sup>	Limited 5-year	

960GB

1.92TB

3.84TB

7.68TB

## PM9A3 Solid State Drives

