

SAMSUNG

990 PRO PCIe Gen4 NVMe M.2 SSD

Blistering performance

Reach max performance of PCIe® 4.0¹. Experience longer-lasting, opponent blasting speed. The in-house controller's smart heat control delivers top power efficiency while maintaining ferocious speed and performance, to always keep you at the top of your game.



- 1TB** MZ-V9P1T0B/AM | UPC 887276657004
- 2TB** MZ-V9P2T0B/AM | UPC 887276657011

Key Features

Performance



Huge speed boost². 40% and 55% faster random read/write speeds than 980 PRO-up to 1400K/1550K IOPS, while sequential read/write speeds up to 7450/6900 MB/s reach near max performance of PCIe® 4.0. Fly high in gaming, video and 3D editing, data analysis, and more.

Thermal Control



Sink that heat. The slim heatsink dissipates heat to prevent performance drops from overheating. Get stable heat control, and minimal fan noise for heavy-graphic gaming. The thin body is compatible with PlayStation® 5, desktops, and laptops meeting the PCI-SIG® D8 standard.

Winning Combination



Best gameplay experience. A more than 65% improvement in random performance enables faster loads for ultimate gaming realism on DirectStorage PC games³.

Samsung Magician Software



Unlock the full power of 990 PRO. Samsung Magician software's user-friendly suite of optimization tools always gets you the best SSD performance. Protect valuable data, monitor drive health, and get important updates. Your personal SSD toolkit.

Power Efficiency



More power-efficient performance. Higher performance usually consumes more power. But, 990 PRO uses less power with up to 50% improved performance per Watt over 980 PRO⁴. This low-power design makes max PCIe® 4.0 performance possible with optimal power efficiency.

¹The NVMe Express™ design mark is a registered trademark of NVMe Express™ Inc. ²Sequential and random write performance was measured with Intelligent Turbo write technology being activated. Intelligent Turbo write operates only within a specific data transfer size. Performance may vary depending on SSD's firmware, system hardware & configuration and other factors. For detailed information please contact your local service center. Test system configuration: AMD Ryzen 7 5800X 8 Core Processor CPU @ 3.80GHz, DDR4 3600MHz 16GBx2 (PC4-25600 Overclock), OS Windows 10 Pro 64bit, Chipset - ASRock-X570 Taich. Results are based on a comparison with Samsung 980 PRO. To maximize performance of the 990 PRO, please check whether your system supports PCIe 4.0® at the intel or AMD website. ³DirectStorage technology from Microsoft loads games faster than before by leveraging the multiple GB/sec speed of modern NVMe SSDs. ⁴980 Pro Sequential Read/Write - 1,129/877 MB/Watt, 990 PRO Sequential Read/Write - 1380/1319 MB/Watt based on internal test result of 1TB capacity model.



Specifications

Source: 2003-Q1.2022 OMDIA data: NAND suppliers' revenue market share

Interface	PCIe® Gen.4 X4, NVMe™ 2.0		
Form Factor	M.2 (2280)		
Hardware	NAND	DRAM	
	V7 V-NAND TLC	1GB LPDDR4 (1TB)	2GB LPDDR4 (2TB)
	Controller	In-House	
Capacity	1TB/2TB		
Sequential Read/Write (MB/s)	Up to 7,450/6,900		
Random Read/Write (IOPS,QD32)	Up to 1,550k		
Device Sleep	5 mW		
Data Encryption	Class 0 (AES 256), TCG/Opal v2.0, MS eDrive (IEEE1667)		
Total Bytes Written	600 TBW (1TB) 1,200 TBW (2TB)		
Warranty	Limited 5-year		

1TB

2TB

990 PRO Gen4 PCIe® NVMe™ M.2 SSD

