

SAMSUNG

980 PRO PCIe Gen4 NVMe M.2 SSD

Next-level SSD performance

Unleash the power of the Samsung 980 PRO PCIe Gen4 NVMe M.2 SSD for next-level computing. 980 PRO delivers 2x the data transfer rate of PCIe 3.0¹, while maintaining compatibility with PCIe 3.0.



- 250GB** MZ-V8P250B/AM | UPC 887276404295
- 500GB** MZ-V8P500B/AM | UPC 887276404271
- 1TB** MZ-V8P1T0B/AM | UPC 887276404288
- 2TB** MZ-V8P2T0B/AM | UPC 887276456430

Key Features



Maximum speed

980 PRO is raising the bar for NVMe SSDs, delivering read speeds up to 7,000 MB/s². With a PCIe 4.0 interface, it is 2x faster than PCIe 3.0 SSDs³ and 12x faster than Samsung SATA SSDs⁴.



A winning combination

Designed for hardcore gamers and tech-savvy users, the 980 PRO offers high-performance bandwidth and throughput for heavy-duty applications in gaming, graphics, data analytics, and more. It's fast at loading games, so you can play more and wait less.



Efficient M.2 SSD

The 980 PRO comes in a compact M.2 2280 form factor, which can be easily plugged into desktops and laptops. Due to its size and thus optimized power efficiency, it's ideal for building high-performance computing systems.



Reliable thermal control

High-performance SSDs usually require high-performance thermal control. To ensure stable performance, the 980 PRO uses nickel coating to help manage the controller's heat level and a heat spreader label to deliver effective thermal control of the NAND chip.



Smart thermal solution

Embedded with Samsung's cutting-edge thermal control algorithm, 980 PRO manages heat on its own to deliver durable and reliable performance, while minimizing performance fluctuations during extended usage.



Samsung Magician Software

Unlock the full potential of 980 PRO with Samsung Magician's advanced, yet intuitive optimization tools. Monitor drive health, optimize performance, protect valuable data, and receive important updates with Magician to ensure you're always getting the best performance out of your SSD.



World's #1 Flash Memory Brand

Experience the performance and reliability from the world's number one brand for flash memory since 2003⁵. All firmware and components, including Samsung's world-renowned DRAM and NAND, are produced in-house, allowing end-to-end integration for quality you can trust.

¹Results are based on a comparison with Samsung PCIe 3.0 NVMe SSDs and SATA SSDs. ²Performance may vary depending on the SSD's firmware version and the system hardware & system configuration. Performance measurements are based on Iometer 1.1.0. The write performances were measured with Intelligent TurboWrite technology being activated. The sequential write performances after Intelligent TurboWrite region are: up to 500MB/s(250GB), 1,000MB/s(500GB), 2,000MB/s(1TB) and 4,000MB/s(2TB). ³Results are based on a comparison with Samsung PCIe 3.0 NVMe SSDs and SATA SSDs. ⁴Test system configuration: AMD Ryzen 9 3900X 12-Core Processor CPU@3.79GHz, DDR4 2666MHz 16GBx2, OS-Windows 10 Pro 64bit, Chipset-ASUS-X570-ROG Crosshair VIII Formula. To maximize the performance of the 980 PRO, please check whether your system supports PCIe 4.0 at the Intel or AMD website. ⁵2003-2019 IHS Markit market share data. The NVM Express® design mark is a registered trademark of NVM Express, Inc.



Specifications

| | | | |
|-------------------------------|--|----------------------|----------------------|
| Interface | PCIe Gen4. x4, NVMe 1.3c | | |
| Form Factor | M.2 (2280) | | |
| Hardware | NAND | DRAM | |
| | v6(12xL) V-NAND 3bit MLC | 512MB LPDDR4 (250GB) | 512MB LPDDR4 (500GB) |
| | Controller | 1GB LPDDR4 (1TB) | |
| | Elpis | 2GB LPDDR4 (2TB) | |
| Capacity | 250GB/500GB/1TB/2TB | | |
| Sequential Read/Write (MB/s) | Up to 7,000/5,100 | | |
| Random Read/Write (IOPS,QD32) | Up to 1,000K | | |
| Device Sleep | 5mW | | |
| Data Encryption | Class 0 (AES 256), TCG/Opal v2.0, MS eDrive (IEEE1667) | | |
| Total Bytes Written | 150 TBW (250GB) | | |
| | 300 TBW (500GB) | | |
| | 600 TBW (1TB) | | |
| | 1200 TBW (2TB) | | |
| Warranty | Limited 5-year | | |

250GB 500GB 1TB 2TB

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