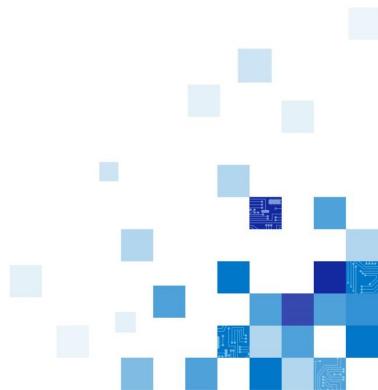
SAMSUNG

980 PRO Heatsink Product Information

September 6th 2021 | Brand Product Marketing Group



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980 PRO Heatsink Summary

1. Low Power & Heat

- Low Power Consumption (up to avg. 6.2W) with 8nm Elpis Controller and power efficient design
- 2) No Thermal Throttling, No System Warning/Shutdown³⁾, Silent Play on PS5 systems even in the rack⁴⁾

2. Advanced Slim Heatsink

- 1) Slim design is compatible for not only PS5 M.2 Heatsink Guide (11.25mm) but also Desktops/Laptops comply PCI-SIG D8 standard spec (8.8mm)
- 2) Proven Samsung's Advanced Heatsink Technology through Datacenter SSDs⁵⁾

3. Unstoppable Speed

- 1) Sustained Performance during long range acitivities²⁾
- 2) Industry Leading 1 million IOPS Random Performance, Low Latency for Game Play without lagging

4. Launching Plan: October 21st Product announcement, October 29th Launch

¹⁾ Internal Test Condition: Based on PlayStation5® System Beta 2.0 Software, 518GB data transfer from PS5 Internal SSD to Expansion SSD with a heatsink @ Room ambient temperature 25°C/30°C & in the rack.

²⁾ Total data transfer time (from PS5 Internal SSD): in case of 980 PRO 460 secs

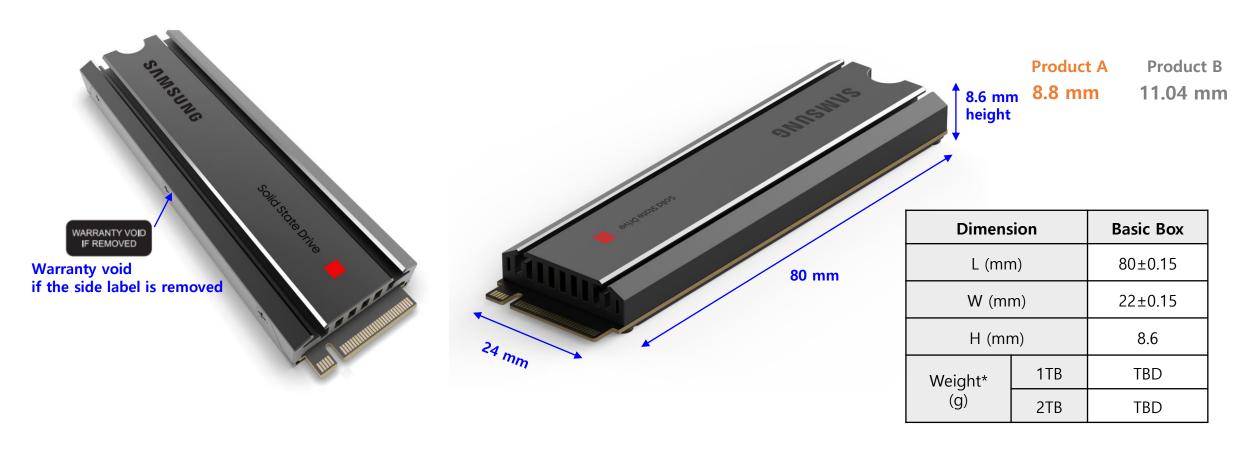
³⁾ Thermal throttling of SSD operates if the temperature of SSD exceeds 82°C. PS5 is shutdown if it exceeds 85°C. Max SSD temperature (composite temperature in S.M.A.R.T.) of 980 PRO was 64°C/67.3°C,

⁴⁾ PS5 Fan speed varies in accordance with SSD temperature. PS5 with 980 PRO maintained low fan speed. Max acoustic noise of PS5 Fan was 28dB (in case of 980 PRO Heatsink,

⁵⁾ PM1725, PM1735, SZ985, PM9A3 E1.S and ETCs.

Product Image & Dimension

- 1. 980 PRO Heatsink is slim with up to 8.6mm height which complies PCI-SIG® D8 Spec(8.8mm) and PlayStation5® M.2 SSD Dimension Requirement (11.25mm)
- 2. Proven Heatsink Technology by Samsung Datacenter SSDs



Package Information

- 1. A package is designed with a hook to hang.
- 2. An internal tray is a pulp tray for environmental friendly with FSC certified.

*Forest Stewardship Council





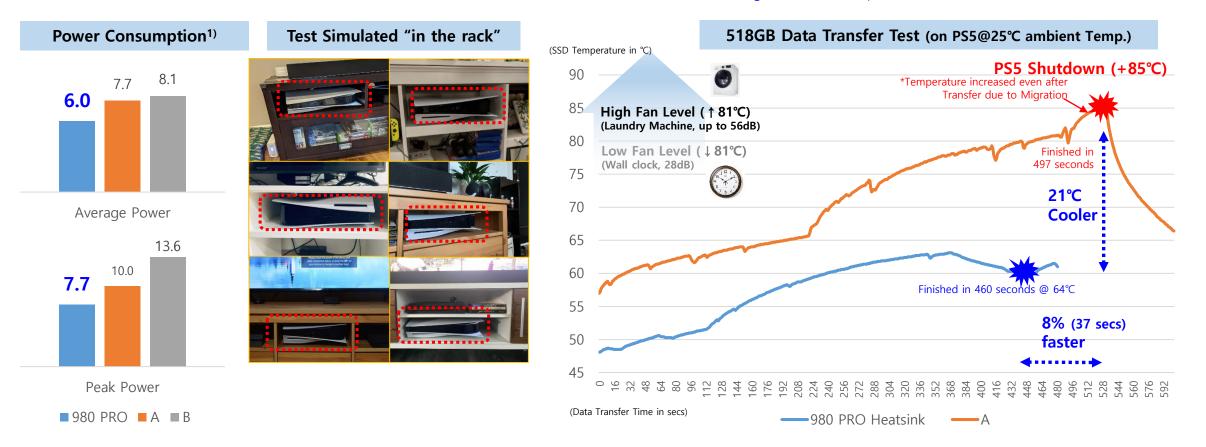
Dimens	Basic Box		
L (mm)		143.4	
W (mm)		98.1	
H (mr	22.1		
Weight* (g)	1TB	TBD	
	2TB	TBD	

*MOQ is 60 pcs per outer box

Low Power & Heat but Faster Sustained Speeds

- 1. 980 PRO is designed power efficient (low power consumption) with 8nm controller and etc.
- 2. 980 PRO Heatsink is Never Throttling, Shutdown and Silent Play on PS5 even in the rack

*maintaining PS5 Fan in low speed & noise (28dB) *closed environment on three sides



¹⁾ Power consumption is measured with IOmeter1.1.0 version with AMD Ryzen 7 3700X 8 Core @3.6GHz, DDR4 8GBx2, OS-Windows 10 Pro 64bit, Chipset-GIGABYTE-X570-AORUS MASTER

²⁾ Based on PlayStation5® System Beta 2.0 Software, 518GB data transfer from PS5 Internal SSD to Expansion SSD with a heatsink @ Room ambient temperature 25°C & in the rack (40 x 40 cm)

Industry-Leading Random Performance

- 1. Game Play/Download are highly consist of many random I/Os.
- 2. 980 PRO is a gaming oriented device with industry-leading 1 million IOPS random performance

*Input Output operation Per Seconds Game Workload (Call Of Duty®:Black Ops Cold War) **Random Performance Comparison** (unit: K IOPS) **Game Download Game Play 1000** 1000 1000 1000 0.5KB Random Read, 0.5KB Rancom Read Data Mnot, Flush 5.1% 1.6% 64KB Random Read **64KB Random Write** 800 98.4% 94.9% 720 Random Read Random Write ■ 980 PRO ■ A ■ B Confidential

SKU Information

1. 980 PRO Heatsink is provided as 1TB and 2TB model

Model	Package	Region	Capacity	Model Code	UPC (12)	EAN/KAN (13)
980 PRO Heatsink	Basic	Worldwide -	1TB	MZ-V8P1T0CW	887276598352	8806092837683
			2TB	MZ-V8P2T0CW	887276598369	8806092837690

Appendix: PlayStation5® M.2 Heatsink Guide

Dimensional Specifications: M.2 SSD Devices for PS5 (with a built-in heatsink)

