

## PRODUCT BRIEF

Intel® Optane™ SSD 800P Series  
PCIe\* (P)

# Get the Performance of Intel® Optane™ Technology in an SSD M.2 Form Factor

**Designed for breakthrough performance, consistent responsiveness, and versatility of use in mobile and desktop PC systems.**



The Intel® Optane™ SSD 800P Series packs the performance of Intel® Optane™ technology in the slim M.2 form factor for storage in mobile and desktop systems. The Intel® Optane™ SSD 800P offers standard PCIe\*/ NVMe\* interfaces and is optimized for use as an exceptional OS drive, in a mobile RAID configuration, or for high-performance specialty uses like application swap files or logging.

### About Intel® Optane™ Technology

Intel® Optane® technology is the unique combination of 3D XPoint™ memory media with Intel's advanced system memory controller, interface hardware, and software. Together, these building blocks unleash vast system performance potential in a range of products which deliver an unparalleled combination of high throughput, low latency, high quality of service, and high endurance.

For PC systems, Intel® Optane™ technology is delivered in two solution types: storage in the form of SSDs, and memory as part of a PC system acceleration solution. The Intel® Optane™ SSD 900P Series and the Intel® Optane™ SSD 800P Series are high performing storage devices that are compatible with desktops, laptops, NUCs, and client workstations. Intel® Optane™ Memory is a smart, adaptable system accelerator for PCs with a 7th Gen Intel® Core™ processor (or newer) and a hard disk drive.

### Intel® Optane™ SSD 800P Series

#### Breakthrough Performance

Gaming enthusiasts, corporate business users, or professionals managing heavy workloads can now get the performance of Intel® Optane™ technology in a low-power, small form-factor client SSD. The Intel® Optane™ SSD 800P is an ideal OS drive, delivering fast boot, application launch, and smooth multi-tasking.

Featuring the low latency that is common across all Intel® Optane™ technology products, the Intel® Optane™ SSD 800P features breakthrough random read and write speeds<sup>1</sup>, especially at low queue depths and under demanding loads.

## Consistent Responsiveness

While traditional NAND-based SSDs can lose performance over time as the drive fills, the Intel® Optane™ SSD 800P continues to deliver high performance under load, over time as the drive fills, and across drive capacities.

## Slim Form Factor Provides Usage Versatility

The M.2 slim form factor and low-power support provide the versatility to use the Intel® Optane™ SSD 800P in mobile devices or desktops. The drive accelerates system boot time and provides quicker access to critical files, while ensuring low power consumption. The small M.2

form factor packs the performance of Intel® Optane™ technology into a solution you can use as a primary storage drive, secondary drive, or as part of a RAID volume for truly demanding workloads.

## Experience Faster Computing Now

The Intel® Optane™ SSD 800P is an ideal OS drive, delivering fast boot, application launch, and smooth multi-tasking for a variety of users. Add an Intel® Optane™ SSD 800P to your PC system today, and experience breakthrough performance and consistent responsiveness.

Features At-a-Glance <sup>1</sup>	
Model Name	Intel® Optane™ SSD 800P Series
Capacity	58GB, 118GB
Memory Media	3D XPoint™ memory media
Sustained Sequential Read/Write	up to 1450 / 640 MB/s
4KB Random Read/Write, Queue Depth 4	up to 250K / 140K IOPs
Read/Write Latency (average sequential)	< 6.75 μs / < 18 μs
Interface	PCIe* 3.0 X2, NVMe*
Form Factor and Weight	M.2 2280 / up to 10 grams
Life Expectancy	1.6 million hours Mean Time Between Failure (MTBF)
Lifetime Endurance	200 GB writes per day
Power Consumption (typical average)	Active Power: 3.75W Deep Sleep/L1.2: 8mW
Operating Temperature	0°C to 85°C
RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives
Warranty	5-year warranty



Learn more at [www.intel.com/ssd](http://www.intel.com/ssd)

<sup>1</sup> Test and System Configuration: Processor: Intel® Core™ i7-7700K, Speed: 4.2 GHz, Chipset: Intel® Z270, Motherboard: ASUS® Prime z270-A, DRAM capacity: 16GB, DRAM Speed: DDR4 2133 MHz, OS: Centos 7.1, firmware version K4110410. Hyper-threading disabled, C-states disabled. Testing completed by Intel.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors.

Benchmark results were obtained prior to implementation of recent software patches and firmware updates intended to address exploits referred to as "Spectre" and "Meltdown". Implementation of these updates may make these results inapplicable to your device or system.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at [intel.com](http://intel.com).

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Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase.

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