(intel®)

Performance for Today's PCs

Intel Inside. Performance that Matters Outside.
Experience a better PC with an Intel® 3D NAND SSD and the fast PCIe* interface.
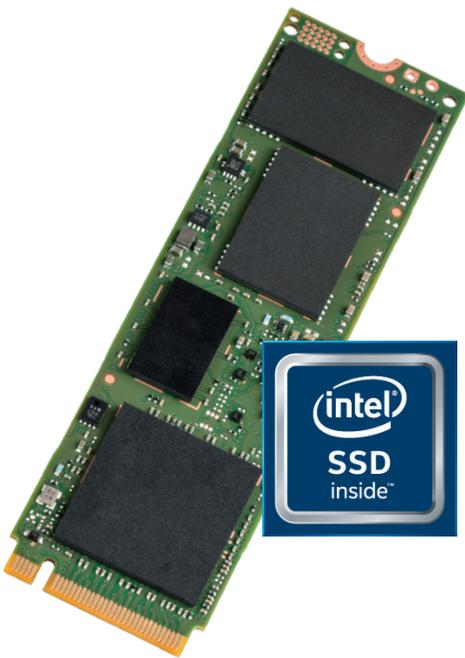
PCIe* for the Mainstream

The Intel® Solid State Drive 600p Series is designed for the M.2 form factor with the PCIe* Gen3 x4, NVMe* interface.

Designed for a range of devices from desktops to laptops, the Intel® SSD 600p Series will effortlessly manage demanding consumer client applications and easily handle intense multi-tasking. The SSD 600p Series will take PCs to a new level of responsiveness with fast application launches and file loading.

Intel® 3D NAND SSDs

The 600p Series is part of the Intel® 3D NAND SSD family of products. Built on breakthrough 3D NAND and delivered by a proven and trusted supplier, Intel® 3D NAND SSDs transform the economics of storage.

The combination of 3D NAND and PCIe enables Intel® SSDs to push the limits of performance and value.

Single-Sided for Design Flexibility

The 600p Series offers all capacity points, including 1TB, in the single-sided M.2 (80 mm) form factor, enabling system designers the flexibility for thinner and lighter systems or more space for other components.

Performance that Matters

The 600p Series accelerates platform performance with sequential reads of up to 1,800 megabytes and sequential writes of up to 560 megabytes per second (MB/s) and random read and write input/output operations (IOPS) of up to 155K and 128K, respectively.[1]

With the SSD 600p Series integrated in the PC system, users will work more efficiently with the applications they care about, with up to 3x better performance than SATA SSDs.[2]

Charge Your Device Less Often

The 600p Series provides extended battery life through low power modes. It reduces idle consumption by >90% compared to a typical hard disk drive, reducing power consumption from watts to milliwatts.[3] When coupled with a 6th generation Intel® Core™ processor-based platform, the advanced power mode settings reduce power consumption by another order of magnitude—from milliwatts to microwatts.

Quality & Reliability You Can Trust

The 600p Series is backed by Intel's five year limited warranty, including Intel's world-class post sales customer support.

Product Spotlight

- Intel quality and reliability
- Performance that matters
- Single-sided capacities up to 1TB
- M.2 (80 mm) form factor
- Low power consumption
- AES 256-bit self-encryption
- Backed by Intel's five year warranty

TECHNICAL SPECIFICATIONS[1]

Model Name	Intel® Solid State Drive 600p Series			
Capacity (GB)	128, 256, 512, 1024 (all single-sided)			
NAND Flash Memory	3D Tri-Level Cell (TLC)			
Bandwidth	Sequential Read (up to) [4]	Sequential Write (up to) [4]	Random Read (up to) [4]	Random Write (up to) [5]
	1800 MB/s	560 MB/s	155K IOPS	128K IOPS
Interface	PCIe* Gen3 x4, NVMe*			
	Form Factor		**Height/Weight**	
Form Factor, Height and Weight	M.2 (80mm)		Up to 1.5mm / up to 40 grams	
Life Expectancy[6]	1.6 million hours Mean Time Between Failure (MTBF)			
Power Consumption	Active: 100mW Typical[7]		Idle: 40 mW Typical[3]	L1.2 Sleep: 5mW Typical[8]
Operating Temperature	0˚C to 70˚C			
RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives			
Software Tools	Intel® Solid State Drive Toolbox with Intel® SSD Optimizer at **www.intel.com/go/ssdtoolbox**[9]			

For more information, visit **www.intel.com/ssd**

1. Based on the Intel® SSD 600p Series Product Specifications: Contact your local Intel sales office or your distributor to obtain the latest specifications.
2. **Performance Tests**: Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such IOMeter, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.
    System Configuration: IOMeter* Test and System Configurations: Intel® Core™ i7-6700K 4.00Ghz (8MB L3 Cache), Gigabyte Z170X-UD5-CF Motherboard, Intel® HD Graphics 530 Driver 20.19.15.4300 . BIOS: American Megatrends F4, Chipset: Intel® INF 10.1.1.9 , Memory: 8GB (2x4GB) Corsair Vengence DDR4-3200, Microsoft Windows 10 Pro v1511 using native NVMe storage driver.
3. Power measured during Windows Idle on system with PCIe ASPM and NVMe low power states.
4. Performance varies by capacity and is measured by Intel using IOMeter* with Queue Depth 32.
5. Random 4KB writes measured using out-of-box SSD.
6. All documented endurance test results are obtained in compliance with JESD218 Standards. See www.jedec.org for detailed definitions of JESD218 Standards.
7. Active power measured during execution of MobileMark* 2014 with PCIe ASPM and NVMe low power states.
8. Power consumption during PCIe L1.2 link state with NVMe PS4 for lowest power consumption.
9. Toolbox available November 2016.

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 www.intel.com/ssd.

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.

IOMeter* Test and System Configurations: Intel® Core™ i7-4790 (8MB L3 Cache, 3.60GHz), ASUS* Deluxe Z97I-PLUS motherboard, Intel® HD Graphics 4600 driver 10.18.10.3920, BIOS: AMI* 2605 5/19/2015, Chipset: Intel® INF 10.1.1.9, Memory: 8GB (2X4GB) Kingston DDR3-1555, Intel® RST driver 13.5, Microsoft* Windows 7 Enterprise 64-bit with SP1.

For more complete information about performance and benchmark results, visit http://www.intel.com/performance

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Intel, the Intel logo, and Intel Core are trademarks of Intel Corporation in the U.S. and/or other countries.

* Other names and brands may be claimed as the property of others.