# **PRODUCT BRIEF**

# Intel® Solid State Drive Pro 6000p Series

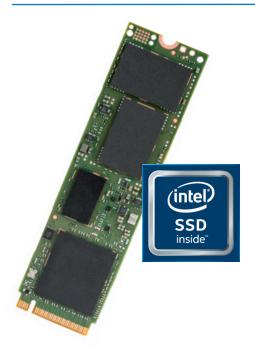
Professional Client, PCIe\*, 3D NAND



# Built for Business. Engineered for IT.

## Intel Inside. Performance that Matters Outside.

The Intel® SSD Pro 6000p Series delivers power-efficient performance with enterprise-ready security and remote manageability capabilities.



#### **Ideal for Corporate IT Users**

The Intel® Solid State Drive Pro 6000p Series is architected for the M.2 form factor with the PCle\* Gen3 x4, NVMe\* interface.

Designed for a range of devices from desktops to laptops, the Intel® SSD Pro 6000p Series will effortlessly manage demanding client applications and easily handle intense multi-tasking.

#### Intel® 3D NAND SSDs

The Intel® SSD Pro 6000p 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, the 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.

#### Intel® Remote Secure Erase

In addition to fast performance and extreme reliability, Intel® Solid State Drive Professional Family of products deliver differentiated security features at a time when data security dominates all IT decisions. Exclusive to the Intel® SSD Professional Family, the Intel® Remote Secure Erase-based solution offers an advanced data security and remote manageability capability for immediate and effective data sanitation when retiring or reusing a PC.¹ IT managers can save time by efficiently "wiping" drives clean using a familiar IT console.

#### **Manage Client and Workstation PCs**

The Pro 6000p 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.<sup>2</sup>

The Pro 6000p Series is designed to enable users efficient access to the most used applications, with up to 3x better performance than SATA SSDs.<sup>3</sup>

#### **Enable Longer Battery Life**

The Pro 6000p 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.⁴ 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 Pro 6000p 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<sup>2</sup>**

Model Name	Intel® Solid State Drive Pro 6000p Series				
Capacity (GB)	128, 256, 512, 1024 (all single-sided)				
NAND Flash Memory	3D Tri-Level Cell (TLC)				
Bandwidth	Sequential Read (up to)⁵	Sequential Write (up to) <sup>5</sup>	Random Read (up to)⁵	Random Write (up to) <sup>6</sup>	
	1800 MB/s	560 MB/s	155K IOPS	128K IOPS	
Interface	PCIe* Gen3x4, NVMe*				
	Form Factor		Height/Weight		
Form Factor, Height and Weight	M.2 (80mm)		Up to 1.5mm / up to 40 grams		
Life Expectancy <sup>7</sup>	1.6 million hours Mean Time Between Failure (MTBF)				
Power Consumption	Active: <100mW Typical <sup>8</sup>		Idle: <40 mW Typical⁴		L1.2 Sleep: <5mW Typical <sup>9</sup>
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/ssdtoolbox10				



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

- 1. Intel® Remote Secure Erase is capable with Intel SSD Professional Family SATA-based SSDs on 6th and 7th Gen Intel® Core-based systems and with Intel SSD Professional Family PCIe®-based SSDs on 7th Gen Intel® Core-based systems.
- $2. \quad \text{Based on the Intel SSD Pro } 6000p \, \text{Series Product Specifications: } Contact \, your \, local \, \text{Intel sales office or your distributor to obtain the latest specifications.}$
- 3. **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: 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.
- ${\bf 4.} \qquad {\bf Power \, measured \, during \, Windows \, Idle \, on \, system \, with \, PCIe \, ASPM \, and \, NVMe \, low \, power \, states.}$
- 5. Performance varies by capacity and is measured by Intel using IOMeter\* with Queue Depth 32.
- 6. Random 4KB writes measured using out-of-box SSD.
- $7. \hspace{0.5cm} \textbf{All documented endurance test results are obtained in compliance with JESD218 Standards. See www.jedec.org for detailed definitions of JESD218 Standards. See which is a substant of the subst$
- 8. Active power measured during execution of MobileMark\* 2014 with PCIe ASPM and NVMe low power state.
- 9. Power consumption during PCIe L1.2 link state with NVMe PS4 for lowest power consumption.
- 10. 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.

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.

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 10.0.16.0, 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.

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