PRODUCT BRIEF

Intel® Solid State Drive Pro 2500 Series

Best for Business

Enterprise-Ready Security and Manageability

Intel® Solid State Drive Professional 2500 Series delivers power-efficient performance with enterprise-ready security and remote manageability.

Best for Business

In today's demanding business environment, there is a growing need for reliable, high-speed storage partnered with manageable, robust security features. The Intel® SSD Pro 2500 Series is designed to meet business needs by enabling blazing fast performance and simultaneously upgrading a system's security and manageability profile. The Intel SSD Pro 2500 Series is available in capacities ranging from 120GB to 480GB in thin 2.5-inch and ultra-sleek M.2 form factors.

Advanced Security and Manageability Features

Unlike software-based encryption solutions which slow down a client drive's performance, the Intel SSD Pro 2500 Series employs a hardware-based 256-bit AES encryption engine which seamlessly and consistently encrypts and decrypts data without sacrificing performance (as compared to software encryption). To enable policy-based control of the encryption, the Intel SSD Pro 2500 Series supports TCG's Opal* version 2.0 features and is Microsoft* eDrive[1] capable. The Intel SSD Pro 2500 is the right solution to deploy in the most demanding business environments. Intel collaborates with the security industry's leading software providers to deliver more stable and reliable security management solutions.

In an environment with Intel® vPro™ Technology, with Intel® Setup & Configuration Software with SSD Toolbox (Intel® SCS with SSD Toolbox) and leading security software, the Intel SSD Pro 2500 Series drives can be managed remotely, allowing IT to monitor and report drive health as well as track assets and remedy faults.

Power Efficient Performance

The Intel SSD Pro 2500 Series is designed to be the perfect blend of performance and power. The Intel Pro 2500 Series helps accelerate platform performance with throughput speeds up to 540 megabytes per second (MB/s) and random input/output operations per second (IOPs) up to 80K. In addition to strong performance, the Intel SSD Pro 2500 Series offers five low-power modes for a long battery life and an enhanced mobile experience. These lower power states can reduce idle power consumption by more than 90% when compared to a typical mobile hard disk drive.[2] When the Intel SSD Pro 2500 Series is coupled with the next generation Intel® Core™ vPro™ Platform, power consumption is reduced by an order of magnitude – from milliwatts to microwatts.

Lower Total Cost of Ownership

Intel® SSDs are known industry wide for their quality and reliability. The Intel SSD Pro 2500 Series is no exception.

The Intel SSD Pro 2500 Series is engineered to reduce employee downtime as a result of storage-related failures.[3] The Intel SSD Pro 2500 Series is designed to meet an Annualized Failure Rate (AFR) of well below 1%, resulting in a significant reduction in Total Cost of Ownership (TCO). For further peace of mind, the Intel SSD Pro 2500 Series is supported with Intel's 5 year limited warranty and customer support.

Extended Management Tool Set

In addition to the Intel® SSD Toolbox, a new Intel® SSD Pro Administrator Tool is introduced. With the ability to manage security features unique to the Intel® SSD Professional Family, such as Microsoft* eDrive enablement and SSD reset, the Intel SSD Pro Administrator Tool can help IT Administrators spend less time worrying and more time enabling productivity when using the Intel SSD Professional family.

TECHNICAL SPECIFICATIONS[4]

Model Name	Intel® Solid State Drive Pro 2500 Series			
Capacity (GB)[6]	**M.2** – 180, 240, 360 **2.5"** – 120, 180, 240, 360, 480			
NAND Flash Memory	20nm NAND Flash Memory Multi-Level Cell (MLC)			
SUSTAINED SEQUENTIAL READS / WRITES				
Bandwidth[6,7]	**M.2**		**2.5"**	
	up to 540 / 490 MB/s		up to 540 / 490 MB/s	
4KB READS / WRITES				
Random I/O Operations per Second[6,7]	**M.2**		**2.5"**	
	up to 45K / 80K IOPs		up to 48K / 80K IOPs	
Interface	SATA 6Gb/s, compatible with SATA 3Gb/s			
Form Factor, Height and Weight	**M.2 (80mm, 60mm)**		2.5"	
	Up to 3.7mm / up to 10 grams		Up to 7mm / up to 78 grams	
Life Expectancy	1.2 million hours Mean Time Between Failures (MTBF)			
	M.2		2.5"	
Power Consumption	Active:	140 mW Typical[8]	Active:	165 mW Typical[8]
	Idle:	55mW Typical[9]	Idle:	55mW Typical[9]
	DevSleep:	200µW	DevSleep:	5mW
Operating Temperature	0° C to 70° C			
RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives			
Product Ordering Information	To order, visit **intel.com/go/ssd**			
Software Tools	Intel® Solid State Drive Toolbox with Intel® SSD Optimizer at **www.intel.com/go/ssdtoolbox** Intel® Data Migration Software at **www.intel.com/go/ssdinstallation**			

Solid State Drive Computing Starts with Intel Inside®. For more information, visit **www.intel.com/ssd**

[1] Microsoft eDrive is turned "OFF" as Out-of-the –box factory default setting
[2] Based on product specification comparison between an Intel® SSD and an HDD
[3] J. Gold Associates White Paper, Investing in Solid State Drive Offers Significant Cost Advantage
[4] Based on the Intel® Solid-State Drive Pro 2500 Series Product Specification.
[5] All capacities and form factors will not be available at launch.
[6] Performance measured using Iometer with Queue Depth 32. Measurements are performed on 8GB of logical block address (LBA) range on a full SSD.
[7] Random 4KB writes measured using out-of-box SSD
[8] Active power measured during execution of MobileMark* 2007 Workload with SATA Link Power Management (LPM) enabled.
[9] Idle power defined as SSD at idle with SATA Link Power Management (LPM) enabled.

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