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 hardwarebased 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* eDrive¹ 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.



(intel)

SSD

inside





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 SPECIFICATIONS⁴

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/ssdtoor	TECHNICAL SPECIFICATIONS"				
Capacity (GB) ⁶ 2.5" – 120, 180, 240, 360, 480 NAND Flash Memory 20nm NAND Flash Memory Multi-Level Cell (MLC) SUSTAINED SEQUENTIAL READS / WRITES M.2 2.5" Bandwidth ^{6,7} M.2 2.5" KB READS / WRITES M.2 2.5" Random I/O Operations per Second ^{6,7} M.2 2.5" Interface SATA 66b/s, compatible with SATA 3Gb/s up to 48K / 80K IOPs Form Factor, Height and Weight M.2 (80mm, 60mm) 2.5" Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) M.2 2.5" Power Consumption M.2 2.5" Idle: 55mW Typical ⁶ Active: 165 mW Typical ⁸ Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ Operating Temperature 0° C to 70° C 5mW RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directive Product Ordering Information To order, visit intel.com/go/ssd Software Tools Intel ⁸ Solid State Drive Toolbox with Intel ⁸ SSD Optimizer at www.intel.com/go/ssd	Model Name	Intel® Solid State Drive Pro 2500 Series			
2.5" - 120, 180, 240, 360, 480 NAND Flash Memory 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" 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 77mm / up to 78 grams Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) Power Consumption M.2 2.5" Power Consumption 0° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv Product Ordering Information To order, visit intel.com/go/ssd Intel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssd Intel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssd	Capacity (GB) ⁶	M.2 – 180, 240, 360			
SUSTAINED SEQUENTIAL READS / WRITES M.2 2.5" gandwidth ^{6,7} M.2 2.5" AKB READS / WRITES Random I/O Operations per Second ^{6,7} M.2 2.5" Qandom I/O Operations per Second ^{6,7} M.2 2.5" Random I/O Operations per Second ^{6,7} M.2 2.5" Pom Factor, Height and Weight M.2 (80mm, 60mm) 2.5" Form Factor, Height and Weight M.2 (80mm, 60mm) 2.5" Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) M.2 2.5" Power Consumption 140 mW Typical [®] Active: 140 mW Typical [®] Active: 165 mW Typical [®] DevSleep: 200µW DevSleep: 5mW Operating Temperature 0° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv Product Ordering Information To order, visit int		2.5 " – 120, 180, 240, 360, 480			
M.2 2.5" up to 540 / 490 MB/s up to 540 / 490 MB/s 4KB READS / WRITES M.2 2.5" Random I/O Operations per Second ^{6.7} M.2 2.5" Interface SATA 6Gb/s, compatible with SATA 3Gb/s up to 48K / 80K IOPs 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 M.2 2.5" Idle: 55mW Typical [®] Active: 165 mW Typical [®] Operating Temperature 0° C to 70° C 5mW 5mW RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv Product Ordering Information To order, visit intel.com/go/ssd Intel [®] Sold State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtow	NAND Flash Memory	20nm NAND Flash Memory Multi-Level Cell (MLC)			
Bandwidth ^{6,7} up to 540 / 490 MB/s up to 540 / 490 MB/s 4KB READS / WRITES AKB READS / WRITES M.2 2.5" Qup 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" Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) Power Consumption 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: 5mW Operating Temperature 0° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv 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/ssdtop	SUSTAINED SEQUENTIAL READS / WRITES				
up to 540 / 490 MB/s up to 540 / 490 MB/s 4KB READS / WRITES M.2 2.5" Random I/O Operations per Second ^{6.7} Inte to 45K / 80K IOPs up to 48K / 80K IOPs Interface SATA 6Gb/s, compatible with SATA 3Gb/s Imp to 48K / 80K IOPs 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 M.2 2.5" Idle: 55mW Typical ⁸ Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ Operating Temperature 0° C to 70° C RoHS Compliance Software Tools Software Tools Intel ⁸ Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtop	Bandwidth ^{6,7}	M.2		2.5"	
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" Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) M.2 2.5" Power Consumption M.2 2.5" Idle: 55mW Typical ⁸ Active: 165 mW Typical ⁸ Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ Operating Temperature 0° C to 70° C To order, visit intel.com/go/ssd Product Ordering Information To order, visit intel.com/go/ssd Intel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtor		up to 540 / 490 MB/s		up to 540 / 490 MB/s	
Random I/O Operations per Second ^{6,7} 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" Life Expectancy 1.2 million hours Mean Time Between Failures (MTBF) M.2 2.5" Power Consumption M.2 2.5" Power Consumption M.2 2.5" Operating Temperature Active: 140 mW Typical ⁸ Active: 165 mW Typical ⁸ Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ Operating Temperature 0° C to 70° C Vest the requirements of European Union (EU) RoHS Compliance Directiv Product Ordering Information To order, visit intel.com/go/ssd Intel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtor	4KB READS / WRITES				
up to 45K / 80K IOPsup to 48K / 80K IOPsInterfaceSATA 6Gb/s, compatible with SATA 3Gb/sForm Factor, Height and WeightM.2 (80mm, 60mm)2.5"Up to 3.7mm / up to 10 gramsUp to 7mm / up to 78 gramsLife Expectancy1.2 million hours Mean Time Between Failures (MTBF)M.22.5"Power ConsumptionM.2Idle:55mW Typical®Active:140 mW Typical®Idle:55mW Typical®Idle:55mW Typical®Idle:55mW Typical®DevSleep:200µWDevSleep:200µWDevSleep:200µWDevSleep:5mWProduct Ordering InformationTo order, visit intel.com/go/ssdIntel® Solid State Drive Toolbox with Intel® SSD Optimizer at www.intel.com/go/ssdtor	Random I/O Operations per Second ^{6,7}	M.2		2.5"	
Form Factor, Height and WeightM.2 (80mm, 60mm)2.5"Life ExpectancyUp to 3.7mm / up to 10 gramsUp to 7mm / up to 78 gramsLife Expectancy1.2 million hours Mean Time Between Failures (MTBF)M.22.5"Power ConsumptionM.2Idle:55mW Typical ⁸ Active:140 mW Typical ⁸ Active:165 mW Typical ⁸ Idle:55mW Typical ⁹ Idle:55mW Typical ⁹ DevSleep:200µWDevSleep:5mWOperating Temperature0° C to 70° CRoHS ComplianceMeets the requirements of European Union (EU) RoHS Compliance DirectivProduct Ordering InformationTo order, visit intel.com/go/ssdSoftware ToolsIntel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtoor		up to 45K / 80K IOPs		up to 48K / 80K IOPs	
Form Factor, Height and Weight 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 M.2 Idle: 55mW Typical ⁸ Active: 140 mW Typical ⁸ Active: 165 mW Typical ⁸ Idle: 55mW Typical ⁹ DevSleep: 200µW Operating Temperature 0° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv 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/ssdtoor	Interface	SATA 6Gb/s, compatible with SATA 3Gb/s			
Up to 3.7mm / up to 10 gramsUp to 7mm / up to 78 gramsLife Expectancy1.2 million hours Mean Time Between Failures (MTBF)M.22.5"Power ConsumptionM.2Idle:55mW Typical ⁸ Active:165 mW Typical ⁸ Idle:55mW Typical ⁹ Idle:55mW Typical ⁹ DevSleep:200µWOperating Temperature0° C to 70° CRoHS ComplianceMeets the requirements of European Union (EU) RoHS Compliance DirectivProduct Ordering InformationTo order, visit intel.com/go/ssdSoftware ToolsIntel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtoor	Form Factor, Height and Weight	M.2 (80mm, 60mm)		2.5"	
M.2 2.5" Active: 140 mW Typical [®] Active: 165 mW Typical [®] Power Consumption Idle: 55mW Typical [®] Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ DevSleep: 200µW DevSleep: 5mW Operating Temperature 0° C to 70° C Environments of European Union (EU) RoHS Compliance Directiv Product Ordering Information To order, visit intel.com/go/ssd Intel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtoor		Up to 3.7mm / up to 10 grams		Up to 7mm / up to 78 grams	
Active: 140 mW Typical [®] Active: 165 mW Typical [®] Power Consumption Idle: 55mW Typical [®] Idle: 55mW Typical [®] DevSleep: 200µW DevSleep: 5mW Operating Temperature 0° C to 70° C To order, visit intel.com/go/ssd Product Ordering Information To order, visit intel.com/go/ssd Intel [®] Solid State Drive Toolbox with Intel [®] SSD Optimizer at www.intel.com/go/ssdtoor	Life Expectancy	1.2 million hours Mean Time Between Failures (MTBF)			
Power Consumption Idle: 55mW Typical ⁹ Idle: 55mW Typical ⁹ DevSleep: 200μW DevSleep: 5mW Operating Temperature 0° C to 70° C 60° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directive 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/ssdtoor		M.2		2.5"	
DevSleep: 200µW DevSleep: 5mW Operating Temperature 0° C to 70° C 0° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv 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/ssdtoor	Power Consumption	Active:	140 mW Typical ⁸	Active:	165 mW Typical ⁸
Operating Temperature 0° C to 70° C RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv 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/ssdtoor		Idle:	55mW Typical ⁹	Idle:	55mW Typical ⁹
RoHS Compliance Meets the requirements of European Union (EU) RoHS Compliance Directiv 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/ssdtoor		DevSleep:	200µW	DevSleep:	5mW
Product Ordering Information To order, visit intel.com/go/ssd Intel® Solid State Drive Toolbox with Intel® SSD Optimizer at www.intel.com/go/ssdtoo	Operating Temperature	0° C to 70° C			
Software Tools	RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives			
Software Tools	Product Ordering Information	To order, visit intel.com/go/ssd			
Intel® Data Migration Software at www.intel.com/go/ssdinstallation	Software Tools	Intel® Solid State Drive Toolbox with Intel® SSD Optimizer at www.intel 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

 $^{\rm 1}$ 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.

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.

"Tote power defined as SSD at fole with SATA Link Power Management (LPM) enabled.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing. For more information on performance tests and on the performance of Intel products, go to: http://www.intel.com/performance/resources/benchmark_limitations.htm.

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. Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting Intel's Web site at www.intel.com.

Copyright © 2015 Intel Corporation. All rights reserved. Intel, the Intel logo, and Intel Inside are trademarks of Intel Corporation in the U.S. and other countries.

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

Printed in the USA

20151204/jm/ ra

⁵ All capacities and form factors will not be available at launch.

Performance measured using Iometer with Queue Depth 32. Measurements are performed on 8GB of logical block address (LBA) range on a full SSD.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Intel: SSDSCJJF240A5





Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.З, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж: moschip.ru moschip.ru_4

moschip.ru_6 moschip.ru_9