



Look Inside.™

Intel® Solid-State Drive 530 Series Non-Volatile Memory Storage Solutions

PRODUCT BRIEF

Lose the Lag. Lose the Limits.

The Next Generation of Consumer Computing

Utilizing its new small form factor, higher performance, and low idle power, the 530 Series is the next evolution of Intel® Solid-State Drives.



Intel Evolving Storage Technology

Intel® Solid-State Drives (Intel® SSDs) continue to evolve with the introduction of the Intel® SSD 530 Series.

Aimed at a wide array of consumer platforms, including Ultrabook™, traditional desktops and laptops, as well as the latest tablets and small form factor mobile systems, Intel® Solid-State Drive 530 Series offers high quality, reliable performance and low power consumption for space conscious computing using M.2, mSATA and 2.5" (7mm) form factors.

New Small Form Factor Introduction

The Intel SSD 530 Series product paves the way for thin and light computing devices by introducing the latest M.2 form factor.

Intel's SSD M.2 form factor shrinks the total storage area significantly versus traditional 2.5" form factor storage devices. Along with the M.2 form factor, Intel SSD 530 Series is also available in mSATA and traditional 2.5" form factors enabling the technology in a variety of solutions.

The Intel SSD 530 series product line comes in a wide range of capacities from 80GB to 480GB.

Latest NAND Technology

Intel® SSD 530 Series uses the latest 20nm Intel NAND technology.

You also benefit from the high quality and reliability you've come to expect from Intel. In addition to the power, space savings, reliability, and peace of mind, the Intel SSD 530 Series is supported with Intel's outstanding warranty and customer support.

A New Generation of Power Efficient Performance

With the Intel SSD 530 Series, your computer will blaze through the most demanding consumer client applications and easily handle intense multi-tasking.

The Intel SSD 530 Series accelerates platform performance with sequential read and write performance up to 540 and 490 megabytes per second (MB/s) Random read and write input/output operations per second (IOPs) reach up to 41K and 80K respectively.

In addition to strong performance gains, Intel SSD 530 Series provides extended battery life through new lower power modes. Idle power consumption of Intel SSD 530 Series is reduced by >90% in comparison to a typical hard disc drive reducing power from watts to milliwatts. When the Intel SSD 530 Series is coupled with a 4th generation Intel® Core based platform, advanced power mode settings reduce power dissipation, another order of magnitude – from milliwatts to microwatts.

Product Spotlight

- High performance for demanding applications
- High quality and reliability
- Low power consumption
- Space-conscious form factors
- Latest 20nm Intel® NAND technology
- Wide range of capacities

Intel® Solid-State Drive 530 Series

Technical Specifications ¹					
Model Name	Intel® Solid-State Drive 530 Series				
Capacity (GB) ²	M.2 – 80, 120, 180, 240, 360 mSATA – 80, 120, 180, 240 2.5" – 80, 120, 180, 240, 360, 480				
NAND Flash Memory	20nm Intel® NAND Flash Memory Multi-Level Cell (MLC)				
Bandwidth ^{2, 3}	Form Factor Capacity Point	Sequential Read (up to)	Sequential Write (up to)	Random Read (up to)	Random Write (up to)
	M.2 80GB, 120GB, 180GB, 240GB, 360GB	540 MB/s	490 MB/s	41K IOPs	80K IOPs
	mSATA 80GB, 120GB, 180GB, 240GB	540 MB/s	490 MB/s	41K IOPs	80K IOPs
	2.5" 80GB, 120GB, 180GB, 240GB, 360GB, 480GB	540 MB/s	490 MB/s	41K IOPs	80K IOPs
Interface	SATA 6Gb/s, compatible with SATA 3Gb/s				
Form Factor, Height and Weight	Form Factor	Height/Weight			
	M.2 (80mm)	Up to 3.7mm / up to 10 grams			
	mSATA	Up to 3.8mm / up to 10 grams			
	2.5"	Up to 7mm / up to 78 grams			
Life Expectancy	1.2 million hours Mean Time Between Failures (MTBF)				
Power Consumption M.2	Active: 140 mW Typical ⁵	Idle: 55 mW Typical ⁶	DevSleep: 200µW		
Power Consumption mSATA	Active: 140 mW Typical ⁵	Idle: 55 mW Typical ⁶	DevSleep: 200µW		
Power Consumption 2.5"	Active: 195 mW Typical ⁵	Idle: 125 mW Typical ⁶	DevSleep: 5mW		
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 Intel® Data Migration Software at www.intel.com/go/ssdinstallation				

¹ Based on the Intel® Solid-State Drive 530 Series Product Specification.

² All capacities and form factors will not be available at launch.

³ Performance varies by capacity and is measured using Iometer* with Queue Depth 32.

⁴ Performance measured using Iometer with Queue Depth 32. Measurements are performed on 8GB of logical block address (LBA) range on a full SSD.

⁵ Active power measured during execution of MobileMark* 2007 Workload with SATA Link Power Management (LPM) enabled.

⁶ Idle power defined as SSD at idle with SATA Link Power Management (LPM) enabled.

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

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.

Ultrabook™ products are offered in multiple models. Some models may not be available in your market. Consult your Ultrabook™ manufacturer. For more information and details, visit <http://www.intel.com/ultrabook>

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, 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.

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 go to: <http://www.intel.com/design/literature.htm>

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

Copyright © 2014 Intel Corporation. All rights reserved. Intel, the Intel logo, and Ultrabook are trademarks of Intel Corporation in the U.S. and other countries.

Mouser Electronics

Authorized Distributor

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

[Intel:](#)

[SSDSC2BW480A401](#) [SSDSC2BW080A401](#) [SSDSCJHW180A4](#)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.