PRODUCT BRIEF

Intel® Optane™ SSD 900P Series
PCIe* (P)

Storage Performance for Demanding Workloads

Intel® Optane™ SSD 900P delivers workstation class performance and industry leading endurance to meet demanding storage requirements.

The Intel® Optane™ SSD 900P Series is designed for the most storage-demanding workloads in client systems, delivering high random read/write performance coupled with low latency and industry-leading endurance. Built with Intel® Optane™ technology, a revolutionary class of non-volatile memory, the Intel® Optane™ SSD 900P sets the precedent and opens up new possibilities for high performance desktops and client workstations, empowering professional users, content creators, and enthusiasts to extract greater platform performance.

Exceptional Performance and Low Latency

The Intel® Optane™ SSD 900P provides exceptional random storage performance of up to 550K/500K IOPs (4K random reads/writes), and is complemented with ultra-low latency of less than 10µs.[1] These attributes make the Intel® Optane™ SSD 900P a highly responsive client storage solution. The SSD 900P also enables software developers to optimize applications to take advantage of the unique attributes of Intel® Optane™ technology: low latency, and high throughput at low queue depth. As an example, game developers can take advantage of the features of the Intel® Optane™ SSD 900P to enable faster game loads, richer features, and smoother game play.

Unlocking More Platform Performance

Today's client computing workloads are more demanding than ever. Higher precision, increased complexity, and ultra-realism have driven the need for larger data sets in the workstation space. The ability for a workload to spill out of the DRAM footprint and page to/from the storage device can create starvation for the processor resulting in inefficiency with platform performance. The performance and responsiveness of the Intel® Optane™ SSD 900P means the processor can spend less time waiting and more time computing, resulting in greatly increased efficiency. Ultimately, this enables more performance to be gleaned from multi-core processors in client systems.

Industry-Leading Endurance

Critical to delivering these new levels of performance is the ability to also deliver the endurance to match. With the ability to read and write data to the storage device with higher rates of speed comes the risk of reaching the endurance limits of traditional storage in a much shorter amount of time. To support these performance attributes, the Intel® Optane™ SSD 900P delivers industry-leading endurance, allowing professionals with the most demanding storage workloads to realize years of performance without the need for frequent drive replacements.

Features At-a-Glance[1]	
Model Name	Intel® Optane™ SSD 900P Series
Capacity	Half Height Half Length (HHHL) Add-in-Card: 280GB and 480GB
	2.5" X 15mm, Small Form Factor U.2: 280GB
Memory Media	3D XPoint™ memory media
Bandwidth: Sustained Sequential Read/Write	Up to 2500 / 2000 MB/s
IOPS: Random 4KB Random Read/Write	Up to 550,000 / 500,000 IOPs
Read /Write Latency	<10 µs /< 10 µs
Interface	PCIe* 3.0 X4, NVMe*
Form Factors, Height and Weight	HHHL AIC 68.9mm / 17.2mm / 168mm up to 230 grams
	2.5" U.2 15mm / 70mm / 101mm / up to 140 grams
Life Expectancy	1.6million hours Mean Time Between Failures (MTBF)
Lifetime Endurance[2]	10 Drive Writes per Day (DWPD)
Power Consumption Typical	*Active Read – Average Power*: 8W *Active Write – Average Power*: 13W *Burst Power:* 14W *Idle*: 5W
Operating Temperature[3]	0° C to 70° C
RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives
Warranty	5-year limited warranty; warranty void if used in a multi-user, multi-CPU data center environment

Learn more now at www.intel.com/ssd

1. System configuration: Motherboard: X299 ASUS* Tiachi ASROCK*; Processor: Intel® Core i9™ 7900X; Graphics Card: ASUS ROS STRIX* GTX1080 with NVIDIA GeFORCE* GTX 1080; Memory: Corsair Vengeance* DDR4 32GB (4x8GB) frequency 3000 MHz CMR32GX4M4C3000C15; BIOS: Version 2.0; OS: Windows* 10 OS(x64), version 16299.309; Benchmark: IOMeter 1.01. Testing by Intel.
2. Based upon the spec sheet of Intel® Optane™ SSD 900P 480GB with an endurance of 8760GB written.
3. Operating temperature is measured by SMART.

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 intel.com.

The benchmark results may need to be revised as additional testing is conducted. The results depend on the specific platform configurations and workloads utilized in the testing, and may not be applicable to any particular user's components, computer system or workloads. The results are not necessarily representative of other benchmarks and other benchmark results may show greater or lesser impact from mitigations.

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.

No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document.

Intel disclaims all express and implied warranties, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, as well as any warranty arising from course of performance, course of dealing, or usage in trade.

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.

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. 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.

Intel, the Intel logo, Intel Optane, and 3D XPoint 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.

Copyright © 2018 Intel Corporation. Printed in the USA. ♻ Please Recycle 0718/NH/JF 336707-004US

Mouser Electronics

Authorized Distributor

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

Intel:
SSDPE21D280GASX SSDPED1D480GASX SSDPE21D280GASM SSDPED1D480GAX1 SSDPED1D280GAX1 SSDPE21D280GAM3 SSDPED1D280GASX SSDPE21D280GAX1

OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

Телефон: 8 (812) 309-75-97 (многоканальный)
Факс: 8 (812) 320-03-32
Электронная почта: ocean@oceanchips.ru
Web: http://oceanchips.ru/
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А