# HP

# HP SSD
# EX900 M.2 PCIe

HP SSD EX900 M.2 is a new generation SSD with ultra-high performance that supports PCIe Gen3x4 interface and new NVMe 1.3 specification. With read and write speed as high as 2100MB/s and 1500MB/s respectively, it is the key for high speed in gaming notebooks and advanced desktops to meet the demand for ultra-high performance and reliability of advanced hardware players, e-gamers and professional media producers.
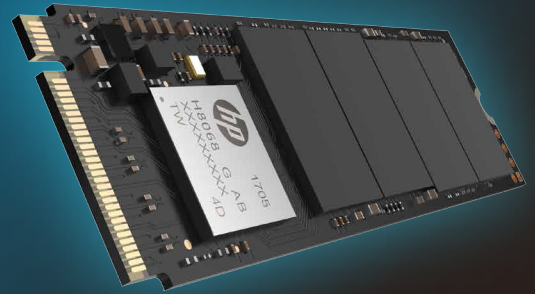
**Interface:**
PCIe Gen3 x 4

**Form Factor:**
M.2 2280

**Capacity:**
120GB/250GB/500GB

## Product Features

### > HP High-end Controller with 4 Channels

Configured with an HP Controller offering 4 flash memory channels, EX900 supports PCIe Gen3(8Gb/s)x4 and new NVMe1.3 specification. The performance of SSD is further improved to bring the potential of PCs into full play and improve system responsiveness.

### > Adopt 3D Nand Flash

EX900 adopts 3D NAND Flash, offering better storage density and reliability than general 2D Flash. With the high performance and reliability, EX900 is applicable as both a system disk and a data storage disk.

### > Excellence in reliability

EX900 series supports NCQ full-speed command queues and TRIM instructions to provide continuous and fast response to notebooks and PCs. The NANDXtend ECC technology of EX900 greatly enhances the durability and data storage ability of NAND, meeting the expectation of workers with high demands.

### > Make the data more secure

HP secure end to end internal firmware and professional-level security key write process can effectively protect against viruses and hacks.HP EX900 series offer a 3-year limited warranty with HP brand quality assurance.

## Applications

With a size of 22x80x2.4mm (2280), EX900 M.2 SSD is a new storage solution with ultra-high performance, lower latency and power consumption. Compatible with Intel and AMD new generation motherboard architecture, EX900 unleashes the potential of computers and is applicable to notebooks and desktops with PCIe M.2 interface.

## HP SSD Advantage

With continuously improved storage technology, HP SSD provides customers with the latest storage solution of high performance in the server and consumer market .HP SSD can improve the performance of your entire system, providing: superior performance, improved start-up time, faster application load times, longer battery life, and better system reliability.As the leader in the PC industry, HP SSD quality assurance begins at the R & D design stage and continues through the whole production process. Quality is designed into every product in accordance with HP's corporate philosophy. HP SSD series fully supports HP computer DST self-test to ensure that the product will seamlessly support all HP branded PC systems. By the same token, since HP computers use the majority of contemporary computer platforms, the HP SSD is a highly compatible drive regardless of PC brand.HP has an excellent global network of service outlets to support users with questions about the product. We also offer a toll-free customer support hotline, and you can find more details from our HP website.

# EX900 M.2 PCIe
## Specifications

| Specifications | HP SSD EX900 M.2 | | |
|---|---|---|---|
| | 120GB | 250GB | 500GB |
| **Interface/Protocol** | | | |
| HP SSD EX900 M.2 2280 | PCIe Gen 3(8Gb/s) x 4, NVMe 1.3 | PCIe Gen 3(8Gb/s) x 4, NVMe 1.3 | PCIe Gen 3(8Gb/s) x 4, NVMe 1.3 |
| **Performance** ( 4KB QD32 ) | | | |
| Max. Sequential Read (MB/s) | 1900 | 2100 | 2100 |
| Max. Sequential Write (MB/s) | 650 | 1300 | 1500 |
| Max. Random Read (IOPS) | 100K | 125K | 100K |
| Max .Random Write (IOPS) | 80K | 110K | 80K |
| **Power Consumption** | | | |
| Power Consumption (Active) (W) | 2.46 | 2.99 | 3.52 |
| Power Consumption (Idle) (W) | 0.68 | 0.68 | 0.68 |
| DEVSLP (mW) | 5 | 5 | 5 |
| **Reliability** | | | |
| MTBF | up to 2.0 Mhours | | |
| **Environmental** | | | |
| Non-Operating Temperature | -40°C to 85°C | | |
| Operating Temperature | 0°C to 70°C | | |
| Max Shock Resistance | 100 G/6 msec | | |
| Max Vibration Resistance | 3.1G RMS (2-500 Hz) | | |
| Certificates | CE、CB、FCC、cTUVus、KCC、BSMI、VCCI、RoHS、RCM | | |
| Limited Warranty | 3 years or 70 TBW | 3 years or 100 TBW | 3 years or 200 TBW |
| **Physical Dimensions** | | | |
| Size | 80 x 22 x 2.4 mm | | |
| Weight | ≤ 5.4 g | | |

Specifications are subject to change without notice.

1、Backward compatible to Gen2 and Gen1.

2、Not all products are sold in all regions of the world.

3、When used to represent storage capacity, 1 megabyte (MB) = 1 million bytes, 1 gigabyte (GB) = 1 billion bytes. Depending on the operating

environment, the total capacity that can be used will vary. Used to indicate buffer or cache when 1 megabyte (MB) = 1,048,576 bytes. Used to

represent the transmission rate or interface, 1 megabyte/s (MB/s) = 1 million bytes per second, 1 gigabytes per second (Gb/s) = 1 billion bytes per second. The maximum valid value for the SATA 6 GB/s transfer rate is calculated based on the serial ATA specification published by the SATA-IO organization prior to the date of publication of this specification. For more information, please visit www.sata-io.org.

4、Measured using the MobileMark ™ 2012 benchmark with DIPM enabled (device-initiated power management).

5、MTBF = Mean Time Between Failures, based on internal tests using the Telcordia stress test.

6、Please visit https://support.hp.com for details on warranty service of specific areas.