

# SSDNow M.2 SATA G2 Drive

KINGSTON.COM/SSD

## Next-generation SSD technology.

Kingston's M.2 SATA G2 SSD is a thin and compact, caseless internal solid-state drive that combines high capacity with low power consumption to serve as a reliable caching device or primary storage for the O/S and applications. Suitable for desktop motherboards utilizing the Intel 9x chipset and popular Small Form Factor (SFF) PCs including ultrabooks, notebooks, and tablets, the M.2 2280 SATA G2 SSD easily integrates into designs with M.2 connectors and is ideal for system builders and DIY end users.

Lighter weight than a cased SSD, the M.2 SATA G2 SSD optimizes performance with advanced garbage collection, wear-leveling and TRIM support to keep performance consistent over the life of the drive.<sup>1</sup> DevSleep, a recent addition to the SATA specification, is an efficient power management option that minimizes power consumption and extends battery life. Firmware-based power loss protection maintains data integrity and ensures data in cache is constantly flushed and hardened to NAND to enable the drive to recover in the event of an unsafe shutdown.

The complimentary Kingston SSD Manager (KSM) monitors warranty status and SSD health via the Kingston website. The M.2 SATA G2 SSD is backed by a limited five-year warranty,<sup>2</sup> free technical support and legendary Kingston® reliability.

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- › Space-saving caseless design fits ultrathin computing applications
  - › Multi-purpose SFF connector replaces small mSATA and mini-PCIe slots
  - › Capacities up to 480GB<sup>3</sup>
  - › M.2 Gen 2 SSDs are backed by a limited five-year warranty<sup>2</sup>



Features/specs on reverse >>

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TECHNOLOGY

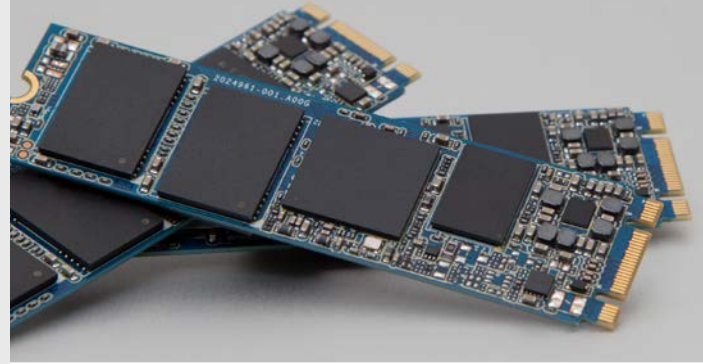
# SSDNow M.2 SATA G2 Drive

## FEATURES/ BENEFITS

- > **M.2 Form Factor** — Multi-purpose SFF connector replaces small mSATA and mini-PCIe slots
- > **Single-sided design (120GB/240GB)** — Integrates easily into designs with M.2 connectors; ideal for thin-and-light systems
- > **High capacity** — Available in capacities up to 480GB
- > **Guaranteed** — 5 year limited warranty and free technical support

## SPECIFICATIONS

- > **Form factor** M.2 2280
- > **Interface** SATA Rev. 3.0 (6Gb/s) – with backward compatibility to SATA Rev. 2.0
- > **Capacities**<sup>3</sup> 120GB, 240GB, 480GB
- > **Baseline performance**<sup>1</sup>
  - Sequential Read/Write SATA Rev. 3.0** 120GB - Up to 550/200MB/s
  - 240GB - Up to 550/330MB/s
  - 480GB - Up to 550/520MB/s
- Max 4k Read/Write** 120GB - up to 90,000/48,000 IOPS
- 240GB - up to 100,000/80,000 IOPS
- 480GB - up to 90,000/85,000 IOPS
- Random 4k Read/Write** 120GB - up to 80,000/48,000 IOPS
- 240GB - up to 79,000/79,000 IOPS
- 480GB - up to 80,000/80,000 IOPS
- Endurance**<sup>4</sup> 120GB: 150TB and 0.56 DWPD
- 240GB: 300TB and 0.70 DWPD
- 480GB: 800TB and 0.93 DWPD
- Power consumption** Max Read: 1.56W
- Max Write: 3.01W
- Idle: 0.06W
- > **Storage temperature** -40°C~85°C
- > **Operating temperature** 0°C~70°C
- > **Dimensions** 80mm x 22mm x 3.5mm
- > **Weight:** 120GB - 5.99 (g)
- 240GB - 5.99 (g)
- 480GB - 7.98 (g)
- > **Vibration operating** 2.17G Peak (7–800Hz)
- > **Vibration non-operating** 20G Peak (10–2000Hz)
- > **Life expectancy** 1 million hours MTBF



## PART NUMBERS

SM2280S3G2/120G  
SM2280S3G2/240G  
SM2280S3G2/480G

<sup>1</sup> Based on "out-of-box performance" using a SATA Rev. 3.0 motherboard. Speed may vary due to host hardware, software, and usage. IOMETER Random 4k Random Read/Write is based on 8GB partition.  
<sup>2</sup> Limited warranty based on five years or SSD "Life Remaining" which can be found using the Kingston SSD Manager (kingston.com/SSDManager). A new, unused product will show a wear indicator value of one hundred (100), whereas a product that has reached its endurance limit of program erase cycles will show a wear indicator value of one (1). See kingston.com/wa for details.  
<sup>3</sup> Some of the listed capacity on a Flash storage device is used for formatting and other functions and thus is not available for data storage. As such, the actual available capacity for data storage is less than what is listed on the products. For more information, go to Kingston's Flash memory Guide at kingston.com/flashguide.  
<sup>4</sup> Drives Writes Per Day (DWPD).

