



SanDisk® Z400s SSD (Solid State Drive)

RELIABILITY AND LOW POWER FOR EMBEDDED PLATFORMS

The SanDisk® Z400s SSD delivers the performance, capacities, and form factors ideal for replacing HDDs in embedded systems. Competitively priced, it can outperform HDDs by a factor of 20 and is 5 times more reliable at 1/20th the power consumption. Companies looking to design sleek, green products will also appreciate its silent, low power, and low heat characteristics.

| | | |
|------|-----|------|
| SATA | SAS | PCIe |
|------|-----|------|

Z400S KEY FEATURES

VERTICALLY INTEGRATED VALIDATION

32GB-256GB CAPACITIES IDEAL FOR EMBEDDED APPLICATIONS

2.5"/7MM CASED, M.2 (2242 & 2280), AND MSATA FORM FACTORS

LOW POWER, LOW HEAT FOR FANLESS AND GREEN DESIGNS

TESTED FOR 20 TBW (32GB), 40 TBW (64GB), AND 72 TBW (128 AND 256GB)

HIGHER RELIABILITY THAN HDDS

SATA REVISION 3.2 6GB/S INTERFACE

WINDOWS® EMBEDDED CERTIFIED



The Z400s is highly versatile and can accommodate a wide range of embedded platforms. It is available in 2.5"/7mm cased, M.2 (2242 & 2280), and mSATA form factors with capacities of 32GB, 64GB, 128GB, and 256GB, which makes it ideal for verticals such as:

- ATMs and interactive kiosks used in a variety of industries, including banking, hotels, and healthcare
- POS systems in the retail, hospitality, and restaurant industries that process numerous daily transactions
- Digital signage used in retail and commercial spaces

(Note: M.2 2242 is only available up to 128GB)

Reliability & TCO

The SanDisk Z400s SSD can improve total cost of ownership (TCO) by reducing downtime and service requests due to hard drive failures. Its solid-state design means there are no moving parts, making it shock-resistant and much more reliable than traditional HDDs.

Endurance

The Z400s is able to sustain a high volume of transactions, which is well-suited for POS systems, ATMs, and other embedded platforms that handle frequent transactions.

Low Power

Its low power characteristics mean it generates very little heat, making the Z400s perfect for green and fanless designs.

Specifications subject to change without notice.

¹ Up to stated speed. Performance is based on the CrystalDiskMark benchmark using a 1000MB LBA range on Gigabyte GA-Z77X-UD5H desktop with Intel Z77 chipset, Intel I7-3770 3.4GHz, 8M, Ivy Bridge, Windows 8 64-bit SPI using Intel IRST version 11.7.0.1013, secondary drive, C-state off. Performance may vary based on host device. 1 megabyte (MB) = 1 million bytes. IOPS = input/output operations per second.

² Endurance of the Z400s SSD is calculated using JEDEC client workload (JESD219). TBW = terabytes written.

³ Power measurements 25°C. Based on FW version with HIPM-enable.

⁴ MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing.

⁵ 3 year warranty in regions not recognizing "limited". See www.sandisk.com/wug for more details.

⁶ As compared to 7200 RPM SATA 2.5" hard drive. Based on published specifications and internal benchmarking tests.

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SanDisk Z400s SSD Product Features and Specifications

Specifications are subject to change

| Device | SanDisk Z400s SSD | | | |
|--|--|--|--------|--------|
| Form Factor | 2.5"/7mm cased, M.2 (2242 & 2280), mSATA | | | |
| Interface | SATA III (6 Gb/s) backward compatible to SATA II and I | | | |
| Size & Weight | 2.5"/7mm cased | 7.00mm x 69.85mm x 100.5mm @ 30 ± 1g | | |
| | M.2 2242: | 3.50mm x 22.00mm x 42.0mm @ 4.1 ± 0.6g | | |
| | M.2 2280: | 2.23mm x 22.00mm x 80.0mm @ 5.5 ± 0.5g | | |
| | mSATA: | 3.82mm x 29.85mm x 50.8mm @ 5 ± 0.5g | | |
| Performance [4KB QD1]¹ | 32GB | 64GB | 128GB | 256GB |
| Seq. Read up to (MB/s) | 279 | 546 | 546 | 546 |
| Seq. Write up to (MB/s) | 48 | 94 | 182 | 342 |
| Rand Read up to (IOPS) | 17,300 | 32,900 | 35,500 | 36,600 |
| Rand Write up to (IOPS) | 10,100 | 21,700 | 43,300 | 69,400 |
| Endurance (TBW)² | 20 | 40 | 72 | 72 |
| Power (Average) | 32GB | 64GB | 128GB | 256GB |
| Average Power (mW)³ | 30 | 30 | 30 | 30 |
| Active Power (W)³ | 1.6 | 1.6 | 1.6 | 1.6 |
| Max Read Operating (mW) | 1,200 | 1,600 | 1,600 | 1,600 |
| Max Write Operating (mW) | 1,300 | 1,500 | 1,900 | 2,600 |
| Slumber (mW) | 14 | 14 | 14 | 14 |
| DEVSLEEP (mW) | ≤3 | ≤3 | ≤3 | ≤3 |
| Reliability | Up to 1,750,000 hours | | | |
| MTTF⁴ | Up to 1,750,000 hours | | | |
| Environmental | Operating Temperatures 0°C to 70°C | | | |
| Operating Temperatures | 0°C to 70°C | | | |
| Non-operating Temperatures | -55°C to 85°C | | | |
| Operating Vibration | 5.0 gRMS, 10 - 2000 Hz | | | |
| Non-operating Vibration | 4.9 gRMS, 7 - 800 Hz | | | |
| Shock | 1,500 G @0.5 msec half sine | | | |
| Certifications | FCC, UL, TUV, KC, BSMI, VCCI | | | |
| Warranty⁵ | 5 Years | | | |

Ordering Information

| Form Factor | Capacity | SKU # |
|----------------|----------|--------------|
| 2.5"/7mm cased | 32GB | SD8SBAT-032G |
| 2.5"/7mm cased | 64GB | SD8SBAT-064G |
| 2.5"/7mm cased | 128GB | SD8SBAT-128G |
| 2.5"/7mm cased | 256GB | SD8SBAT-256G |
| mSATA | 32GB | SD8SFAT-032G |
| mSATA | 64GB | SD8SFAT-064G |
| mSATA | 128GB | SD8SFAT-128G |
| M.2 2242 | 32GB | SD8SMAT-032G |
| M.2 2242 | 64GB | SD8SMAT-064G |
| M.2 2242 | 128GB | SD8SMAT-128G |
| M.2 2280 | 64GB | SD8SNAT-064G |
| M.2 2280 | 128GB | SD8SNAT-128G |
| M.2 2280 | 256GB | SD8SNAT-256G |

Pack-Out Option Use:
-1122 = Individual Package