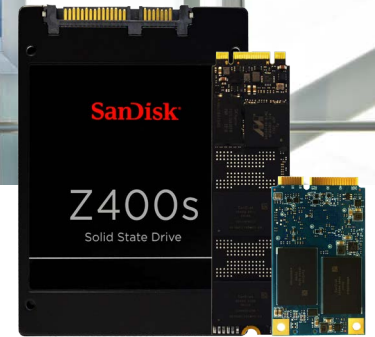




# SanDisk® Z400s SSD (Solid State Drive)

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, 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

## 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.

<sup>1</sup> Up to stated speed. Performance is based on the CrystalDiskMark benchmark using a 1000MB LBA range on Gigabyte GA-Z77X-UD3H 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.

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

<sup>3</sup> Power measurements 25°C. Based on FW version with HIPM-enable.

<sup>4</sup> MTTF = Mean Time To Failure based on internal testing using Teicordia stress part testing.

<sup>5</sup> 3 year warranty in regions not recognizing "limited". See [www.sandisk.com/wug](http://www.sandisk.com/wug) for more details.

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

## Contact information

[businesspartners@sandisk.com](mailto:businesspartners@sandisk.com)

SanDisk is a trademark of SanDisk Corporation, registered in the United States and other countries. Other brand names mentioned herein are for identification purposes only and may be the trademarks of their holder(s).

©2015 SanDisk Corporation. All right reserved.

# SanDisk®

**SOLID STATE FOR BUSINESS**

**Corporate Headquarters:**

951 SanDisk Drive  
Milpitas, CA 95035-7933, USA  
[www.sandisk.com](http://www.sandisk.com)

## SanDisk® Z400s SSD Product Features and Specifications

Specifications are preliminary and subject to change

Device	SanDisk Z400s SSD			
<b>Form Factor</b>	7mm 2.5-inch, M.2 (2242 & 2280), mSATA			
<b>Interface</b>	SATA III (6 Gb/s) backward compatible to SATA II and I			
<b>Size &amp; Weight</b>	2.5":	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		
<b>Performance [4KB QD1]<sup>1</sup></b>	32GB	64GB	128GB	256GB
<b>Seq. Read up to (MB/s)</b>	279	546	546	546
<b>Seq. Write up to (MB/s)</b>	48	94	182	342
<b>Rand Read up to (IOPS)</b>	5,800	5,800	5,800	5,800
<b>Rand Write up to (IOPS)</b>	10,100	20,800	30,500	30,800
<b>Endurance (TBW)<sup>2</sup></b>	20	40	72	72
<b>Power (Average)</b>	32GB	64GB	128GB	256GB
<b>Average Power (mW)<sup>3</sup></b>	30	30	30	30
<b>Active Power (W)<sup>3</sup></b>	1.6	1.6	1.6	1.6
<b>Max Read Operating (mW)</b>	1,200	1,600	1,600	1,600
<b>Max Write Operating (mW)</b>	1,300	1,500	1,900	2,600
<b>Slumber (mW)</b>	14	14	14	14
<b>DEVSLEEP (mW)</b>	≤3	≤3	≤3	≤3
<b>Reliability</b>	Up to 1,750,000 hours			
<b>MTTF<sup>4</sup></b>	Up to 1,750,000 hours			
<b>Environmental</b>	Operating Temperatures 0°C to 70°C			
<b>Operating Temperatures</b>	Non-operating Temperatures -55°C to 85°C			
<b>Non-operating Temperatures</b>	Operating Vibration 5.0 gRMS, 10 - 2000 Hz			
<b>Operating Vibration</b>	Non-operating Vibration 4.9 gRMS, 7 - 800 Hz			
<b>Non-operating Vibration</b>	Shock 1,500 G @0.5 msec half sine			
<b>Shock</b>	Certifications FCC, UL, TUV, KC, BSMI, VCCI			
<b>Certifications</b>				

## Ordering Information

Form Factor	Capacity	SKU #
2.5" 7mm	32GB	SD8SBAT-032G
2.5" 7mm	64GB	SD8SBAT-064G
2.5" 7mm	128GB	SD8SBAT-128G
2.5" 7mm	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