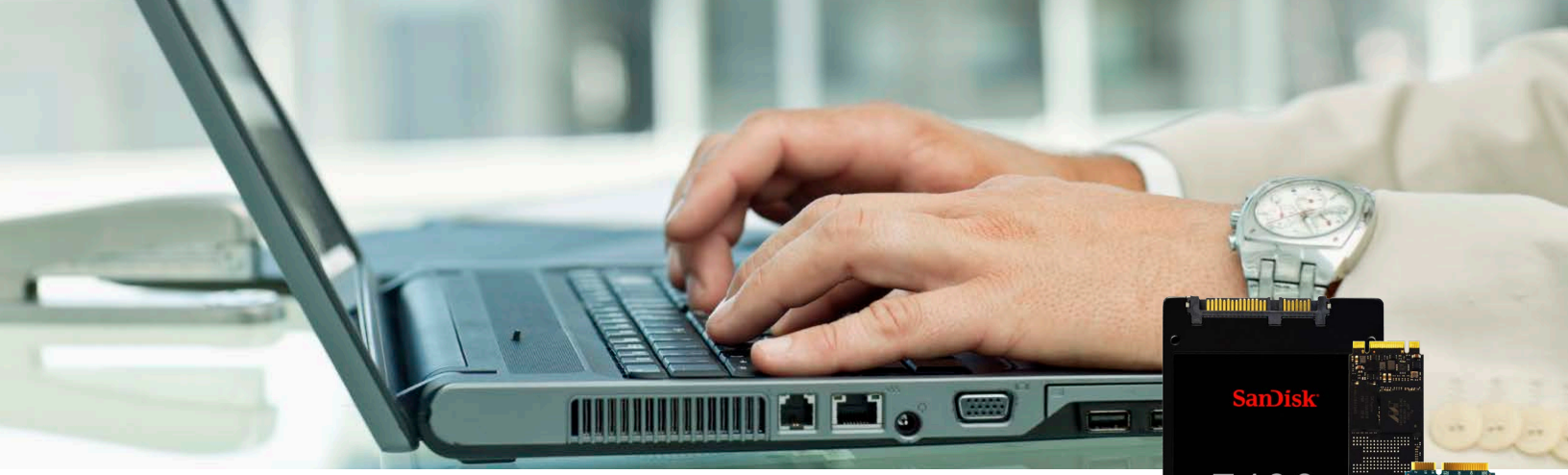
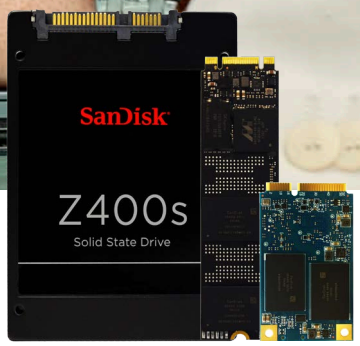




SanDisk® Z400s SSD (Solid State Drive)

COST EFFECTIVE AND RELIABLE HDD REPLACEMENT

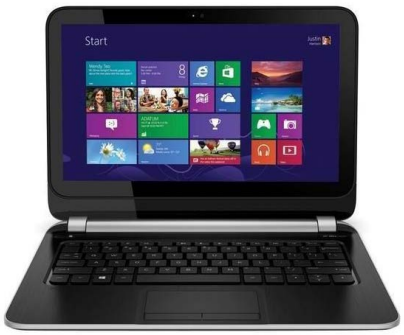
The SanDisk Z400s is a cost effective SSD designed to replace HDDs in computing platforms. On par with HDD pricing, it can outperform HDDs by a factor of 20, while providing 5 times the reliability at 1/20th the power consumption.

The Z400s is highly versatile and can accommodate a wide range of platforms with its variety of form factors and capacities. It is available in 2.5" 7mm cased, M.2 (2242 & 2280), and mSATA form factors with capacities from 32GB up to 256GB.

SATA | **SAS** | **PCIe**

Z400S KEY FEATURES

- VERTICALLY INTEGRATED VALIDATION
- LOW POWER WITH DEVSLP SUPPORT FOR GREEN, FANLESS DESIGNS
- 32GB-256GB CAPACITIES
- 2.5" 7MM, M.2 (2242 & 2280), AND MSATA FORM FACTORS
- TESTED FOR 20 TBW (32GB), 40 TBW (64GB), AND 72 TBW (128 AND 256GB)
- SHOCK-RESISTANT
- HIGHER RELIABILITY THAN HDDs
- EASY MIGRATION
- SATA REVISION 3.2 6GB/S INTERFACE
- WINDOWS® WHCK CERTIFIED



The Z400s has also been validated for use in several of the top OEM platforms in the industry, demonstrating its endurance and ability to sustain high-volume transactions. Its solid-state design means there are no moving parts, making it shock-resistant and much more reliable than traditional HDDs, which translates into lower total cost of ownership (TCO) and a better end-user experience.

Low Power

The Z400s utilizes breakthrough SanDisk technology that optimizes power consumption, making it one of the lowest power consuming SSDs at 30mW for average power. This increases the amount of usable hours per battery charge, which is essential for modern mobile devices.

TCO

SanDisk SSDs are more reliable than HDDs, which can improve total cost of ownership (TCO) by reducing downtime due to hard drive failures. They also offer lower latency and greater read/write speeds over traditional HDDs*, so users may experience a noticeable improvement in responsiveness. IT departments can extend the useful life of their PC inventory by upgrading the HDDs to the Z400s SSD, thus prolonging replacement cycles and maximizing asset value.

SanDisk® Z400s SSD Product Features and Specifications

Specifications are preliminary and subject to change

Device				SanDisk Z400s SSD
Form Factor				7mm 2.5-inch, M.2 (2242 & 2280), mSATA
Interface				SATA III (6 Gb/s) backward compatible to SATA II and I
Size & Weight	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		
Performance [4KB QD32][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)	10,600	21,700	43,300	69,400
Endurance (TBW)[2]	20	40	72	72
Power	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
DEVSLP (mW)	≤3	≤3	≤3	≤3
Reliability				
MTTF[4]		Up to 1,750,000 hours		
Environmental				
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

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 2242	256GB	SD8SMAT-256G
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

Contact information
businesspartners@sandisk.com

Specifications subject to change without notice.
* As compared to 7200 RPM SATA 2.5" hard drive. Based on published specifications and internal benchmarking tests.
[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 SP1 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.

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