

# Spinpoint™ D8X

## Mobile SATA



The Samsung D8X SATA 7200 rpm drive delivers high capacity in a thin design to give customers the ideal solution for external and mobile applications. The 2.5-inch drive is just 9.5mm thin and available in capacities of up to 1TB.

### FEATURES

- Max. 500GB formatted capacity per disk
- SATA Native Command Queuing Feature
- TuMR/PMR head with FOD technology
- Serial ATA 6.0 Gb/s Interface support
- Load/Unload Head Technology
- ATA Security Mode Feature Set
- ATA S.M.A.R.T. Feature Set
- SilentSeek™
- NoiseGuard™

### DRIVE CONFIGURATION

- Capacity<sup>1</sup>: 500GB, 1TB
- Interface: SATA 6.0 Gb/s (3.0, 1.5 Gb/s)
- Rotational Speed: 7200 RPM class

### PERFORMANCE SPECIFICATIONS

- Average Seek Time (typical): 11 ms
- Average Latency: 4.2 ms
- Drive Ready Time (typical)<sup>2</sup>: 4 sec
- Data Transfer Rate
  - Media to/from Buffer (max.): 214 MB/s
  - Buffer to/from Host (max.): 600 MB/s

### RELIABILITY SPECIFICATIONS

- Non-recoverable Read Error: 1 sector in 10<sup>14</sup> bits
- Controlled Ramp Load/Unload: 600,000

### ACOUSTICS

- Idle (max.): 2.8 Bel
- Performance Seek (max.): 3.0 Bel

### POWER REQUIREMENTS

- Voltage: + 5V ± 5%
- Spin-up Current (max.): 1000 mA
- Seek (AVG)<sup>3</sup>: 2.0 W
- Read/Write (AVG)<sup>4</sup>: 3.5 W
- Low Power Idle (AVG): 0.85 W
- Standby (AVG): 0.18 W
- Sleep (AVG): 0.18 W

### ENVIRONMENTAL SPECIFICATIONS

- Temperature
  - Operating: 0 ~ 60°C
  - Nonoperating: -40 ~ 70°C
- Humidity (noncondensing)
  - Operating: 5-90%
  - Nonoperating: 5-95%
- Linear Shock (1/2 sine pulse)
  - Operating (2 ms): 300 G
  - Nonoperating (2 ms): 600 G
- Vibration (10-500 Hz, random)
  - Operating: 1.5 Grms
- Altitude (relative to sea level)
  - Operating: -300 to 3,000 m
  - Nonoperating: -400 to 15,000 m

### PHYSICAL DIMENSIONS

- Height: 9.5 ± 0.2 mm (0.374 ± 0.008 in)
- Width: 69.85 ± 0.25 mm (2.75 ± 0.01 in)
- Length: 100.3 ± 0.4 mm (3.95 ± 0.016 in)
- Weight (max.): 119 g (0.263 lb), 125 g (0.276 lb)

### CAPACITIES SUMMARY

CAPACITY	500GB	1TB
Model	ST500LM027	ST1000LM044

\* Note: Design and specifications are subject to change without prior notice.

1. 1MB = 1,000,000 bytes, 1GB = 1,000,000,000 bytes

Accessible capacity may vary as some OSs use a binary numbering system for reported capacity.

2. Power-on to drive ready

3. 30% duty cycle, random seek

4. Read/write operation at 0D for 32 sectors

Seagate Technology LLC  
10200 South De Anza Boulevard, Cupertino, California 95014  
408-658-1000

©2015 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology and the Wave logo are trademarks or registered trademarks of Seagate Technology LLC or its affiliates in the United States and/or other countries. Samsung and the Samsung logo are trademarks of Samsung Electronics Co., Ltd. All other trademarks or registered trademarks are the properties of their respective owners. When referring to drive capacity, one terabyte, or TB, equals one thousand billion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions and will not be available for data storage.

