



2.5 FLASH-ACCELERATED HARD DRIVE DATA SHEET

## The Fastest PC Hard Drive



Combining flash technology with a hard drive platform, the FireCuda<sup>®</sup> 2.5 flash-accelerated hard drive represents the fastest 2.5-inch hard drive available.



### Best-Fit Applications

- Mainstream PCs upgrades
- High-performance PCs
- PC gaming systems
- Workstations
- Creative professional systems

## Key Advantages

**Flash-accelerated technology** delivers blazing load speeds that allow for nonstop performance, play and productivity up to 5× faster than standard HDDs.

**Enormous 500GB, 1TB and 2TB** options make FireCuda the highest-capacity 2.5-inch hard drive on the market, providing customers a high-performance experience while being able to store massive amounts of data, all within a thin 7mm z-height.

**Green Hybrid™ feature** reduces device power consumption, helping users extend their drive's life and keep their costs down with a power-efficient drive.

**Multi-Tier Caching Technology™ (MTC)** enhances performance by using NAND flash, DRAM and media caching technologies, enabling users to load applications and files even faster.

**Adaptive Memory®** technology identifies frequently accessed data, thereby providing the data faster, consuming less power and extending drive life.

**The cutting edge never felt so safe—5-year limited warranty** is best-in-class for hard drive warranties.



Specifications	2TB	1TB	500GB
Standard Model Numbers	ST2000LX001	ST1000LX015	ST500LX025
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
<b>Performance</b>			
Bytes per Sector (logical/physical)	512/4096	512/4096	512/4096
Data Transfer Rate (MB/s)	Up to 140	Up to 140	Up to 140
Recording Technology	SMR	SMR	SMR
<b>Performance Versus 2.5-in. 5400-RPM/7200-RPM HDD</b>			
Game Load Test <sup>1</sup>	140% Faster/50% Faster	140% Faster/50% Faster	140% Faster/50% Faster
Application Load Test <sup>2</sup>	450% Faster/300% Faster	450% Faster/300% Faster	450% Faster/300% Faster
Windows 7 Boot Time <sup>3</sup>	35% Faster/25% Faster	35% Faster/25% Faster	35% Faster/25% Faster
<b>Special Features</b>			
Halogen Free	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes
<b>Reliability/Data Integrity</b>			
Load/Unload Cycles	600,000	600,000	600,000
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Limited Warranty (years) <sup>4</sup>	5	5	5
<b>Power Management</b>			
Startup Current (+5V, A)	1	1	1
Read/Write Power, Average (W)	1.7/1.8	1.6/1.7	1.6/1.7
Idle Power, Average (W)	0.5	0.45	0.45
<b>Environmental</b>			
Temperature, Operating (°C)	0 to 60	0 to 60	0 to 60
Temperature, Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2ms (Gs)	400	400	400
Shock, Nonoperating: 1ms (Gs)	1000	1000	1000
Acoustics, Idle, Typical (bels—sound power)	2.2	2.0	2.0
Acoustics, Seek, Typical (bels—sound power)	2.4	2.2	2.2
<b>Physical</b>			
Height (mm/in)	7.0mm/0.276in	7.0mm/0.276in	7.00mm/0.276in
Width (mm/in)	69.85mm/2.750in	69.85mm/2.750in	69.85mm/2.750in
Depth (mm/in)	100.35mm/3.95in	100.35mm/3.95in	100.35mm/3.95in
Weight (g/lb, max)	96g/0.212lb	92g/0.203lb	92g/0.203lb
Carton Unit Quantity	50	50	50
Cartons per Pallet/Cartons per Layer	60/10	60/10	60/10

1 Testing conducted by Seagate using PCMark 7 system storage gaming test. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

2 Testing conducted by Seagate using PCMark 7 system storage starting applications test. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

3 Testing conducted by Seagate using Intel Core i5-based with Intel QM77 chipset laptop and configured with 8GB RAM. Tested using Microsoft utility. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

4 Extended warranty products available. Consult your distributor for details.

© 2020 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. Adaptive Memory, FireCuda, Green Hybrid, Multi-Tier Caching Technology and QuietStep are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion 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 thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors. Seagate reserves the right to change, without notice, product offerings or specifications. DS1908.2-2006US June 2020