FIRECUDA COMPUTE

SEAGATE

2.5 FLASH-ACCELERATED HARD DRIVE DATA SHEET

The Fastest PC Hard Drive



Combining flash technology with a hard drive platform, the FireCuda® 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 500 GB, 1 TB and 2 TB 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 7 mm 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.

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Specifications	2TB	1TB	500GB
Standard Model Numbers	ST2000LX001	ST1000LX015	ST500LX025
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Performance			
Bytes per Sector (logical/physical)	512/4,096	512/4,096	512/4,096
Data Transfer Rate (MB/s)	Up to 140	Up to 140	Up to 140
Recording Technology	SMR	SMR	SMR
Performance Versus 2.5-in. 5,400 RPM/7,200 RPM HDD			
Game Load Test[1]	140% Faster/50% Faster	140% Faster/50% Faster	140% Faster/50% Faster
Application Load Test[2]	450% Faster/300% Faster	450% Faster/300% Faster	450% Faster/300% Faster
Windows 7 Boot Time[3]	35% Faster/25% Faster	35% Faster/25% Faster	35% Faster/25% Faster
Special Features			
Halogen-free	Yes	Yes	Yes
RoHS compliance	Yes	Yes	Yes
Reliability/Data Integrity			
Load/Unload Cycles	600,000	600,000	600,000
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Limited Warranty (years)[4]	5	5	5
Power Management			
Startup Current (+5 V, 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
Environmental			
Temperature, Operating (°C)	0 to 60	0 to 60	0 to 60
Temperature, Non-operating (°C)	–40 to 70	–40 to 70	–40 to 70
Shock, Operating: 2 ms (Gs)	400	400	400
Shock, Non-operating: 1 ms (Gs)	1,000	1,000	1,000
Acoustics, Idle, Typical (bels—sound power)	2.2	2	2
Acoustics, Seek, Typical (bels—sound power)	2.4	2.2	2.2
Physical			
Height (mm/in)	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in
Width (mm/in)	69.85 mm/2.75 in	69.85 mm/2.75 in	69.85 mm/2.75 in
Depth (mm/in)	100.35 mm/3.95 in	100.35 mm/3.95 in	100.35 mm/3.95 in
Weight (g/lb, max)	96 g/0.212 lb	92 g/0.203 lb	92 g/0.203 lb
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 8 GB 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.

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