



### 3.5 SSHD DATA SHEET

Ferocious Performance.  
Superior Storage. Tireless Durability.



FireCuda™ 3.5-inch solid state hard drives blend SSD technology with an HDD platform for the instant-on performance and capacity you need.



### Best-Fit Applications

- Desktop PCs
- PC gaming
- Workstations
- High-performance direct-attached storage (DAS) devices

## Key Advantages

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**Smart 1TB and 2TB** capacities with onboard flash memory.

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**Save time** with a drive that boots in seconds, not minutes.<sup>1</sup>

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**A perfect upgrade** for gamers, creative professionals and PC enthusiasts who want it all, now!

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**Game up to 5x faster** than with traditional 7200-RPM hard drives, and eliminate the need to uninstall games in order to make room for new ones. Store up to 40 games per TB (at ~25GB per game).<sup>1</sup>

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**SATA 6Gb/s** interface speed.

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**Installs and operates** like a standard hard drive. No additional drivers or software required.

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

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<sup>1</sup> Performance may vary depending on user's hardware configuration and operating system.



| Specifications                                | 2TB <sup>1</sup> | 1TB <sup>1</sup> |
|-----------------------------------------------|------------------|------------------|
| Standard Model Numbers                        | ST2000DX002      | ST1000DX002      |
| Interface                                     | SATA 6Gb/s NCQ   | SATA 6Gb/s NCQ   |
| Form Factor (in)                              | 3.5              | 3.5              |
| Features and Performance                      |                  |                  |
| NAND Type/Size                                | MLC/8GB          | MLC/8GB          |
| SATA Transfer Rates Supported (Gb/s)          | 6.0/3.0/1.5      | 6.0/3.0/1.5      |
| Seek Average, Read (ms)                       | <9.5             | <8.5             |
| Seek Average, Write (ms)                      | <9.5             | <8.5             |
| Average Data Rate, Read, Avg All Zones (MB/s) | 156              | 156              |
| Average Data Rate From NAND Media (MB/s)      | 190              | 190              |
| Max Sustained Data Rate, OD Read (MB/s)       | 210              | 210              |
| DRAM Cache (MB)                               | 64               | 64               |
| Configuration/Organization                    |                  |                  |
| Heads/Disks                                   | 4/2              | 2/1              |
| Bytes per Sector                              | 4096             | 4096             |
| Reliability/Data Integrity                    |                  |                  |
| Load/Unload Cycles                            | 300,000          | 300,000          |
| Nonrecoverable Read Errors per Bits Read, Max | 1 per 10E14      | 1 per 10E14      |
| Predicted Annualized Failure Rate (AFR)       | <1%              | <1%              |
| Warranty, Limited (years)                     | 5                | 5                |
| Power Management                              |                  |                  |
| Operating Power, Typical (W)                  | 6.7              | 5.9              |
| Idle2 Power, Typical (W)                      | 4.5              | 3.36             |
| Standby Mode/Sleep Mode, Typical (W)          | 0.75/0.75        | 0.63/0.63        |
| Environmental/Temperature                     |                  |                  |
| Operating (°C)                                | 0 to 60          | 0 to 60          |
| Nonoperating (°C)                             | -40 to 70        | -40 to 70        |
| Physical                                      |                  |                  |
| Height (mm/in, max)                           | 26.11/1.028      | 19.87/0.782      |
| Width (mm/in, max)                            | 101.6/4.0        | 101.6/4.0        |
| Depth (mm/in, max)                            | 146.99/5.787     | 146.99/5.787     |
| Weight (g/lb typical)                         | 535/1.18         | 400/0.88         |
| Carton Unit Quantity                          | 20               | 25               |
| Cartons per Pallet/Cartons per Layer          | 40/8             | 40/8             |

<sup>1</sup> One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

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