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**SSD (formerly FFD) SATA 2.5**

Reliable, High Capacity SATA Drive



The SanDisk SSD SATA 2.5<sup>™</sup> (formerly FFD 2.5<sup>™</sup> Serial ATA) is a state-of-the-art solid-state flash disk, based on NAND flash technology, that provides the functionality of a hard disk with no moving parts. SSD SATA 2.5<sup>™</sup> is an ideal, reliable storage solution for mission-critical applications that must operate under harsh environmental conditions, as well as for the telecommunication and blade server industry that must support 99.999% availability.

SSD SATA 2.5<sup>™</sup> delivers outstanding reliability and enhanced endurance thanks to SanDisk TrueFFS technology, which applies dynamic wear-leveling and bad block management. Due to its unique design, SSD SATA 2.5<sup>™</sup> provides high-performance sustained read and write rates up to 150Mbytes/sec and supports Serial ATA 1.0a standard.

SSD SATA 2.5<sup>™</sup> is fully compatible with the SATA 1.0a interface, and has the same mechanical dimensions and mounting holes of traditional mechanical disks. It is a true drop-in replacement for rotating 2.5<sup>™</sup> Serial ATA (SATA) and Serial Attached SCSI (SAS) disks with highest reliability and operating mean time between failure (MTBF) hours.

Specifications

**Capacity**  
Unformatted (Gbytes): 1, 2, 4, 8, 12, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128

**Compatibility**  
Serial ATA: High-speed serialized AT attachment, revision 1.0a, Serial ATA working group

**Performance**  
Burst Read/Write: 150 Mbytes/sec (1.5 Gbits/sec)  
Sustained Read: 44 Mbytes/sec  
Sustained Write: 40 Mbytes/sec  
Access time: <0.04 ms

**Physical**  
Form factor: 2.5<sup>™</sup>  
Case dimensions (mm): 100.2(L) X 69.85(W) X 9.5 to 22.5(H)  
Weight: 0.1 Kg for 16GB; 0.22 Kg for 128GB

**Environmental**  
Operating temperature  
Commercial: 0°C to +70°C  
Enhanced: -25°C to +75°C  
Extended: -40°C to +85°C  
Storage temperature: -55°C to +95°C  
Humidity: 5% to 95% relative, non-condensing  
Operating altitude: Up to 80,000 feet  
Operating shock: 1,500G, MIL-STD-810F  
Operating vibration: 16.3G RMS (random, 10Hz to 2000Hz; 3 vibration axes), MIL-STD-810F

**Reliability**  
MTBF: 1,180,777 operating hours MTBF for 16GB based on Telcordia SR-332, GB, 25°C

EDC/ECC: Embedded EDC/ECC, based on BCH algorithm  
BER (Bit Error Rate): <10<sup>-20</sup>

**Reliability features**  
Built-in power-up self-test (BIT)  
Manual and automatic self-diagnostics  
TrueFFS bad block management  
Data integrity under power-cycling  
S.M.A.R.T (Self-Monitoring, Analysis and Reporting Technology) remote monitoring

**Endurance**  
Unlimited read cycles  
TrueFFS dynamic wear-leveling  
Garbage collection process

**Enhanced Security Erase**  
Entire disk security erase in seconds  
Partial security erase  
Auto-resume security erase/sanitize on power interrupt  
Sanitize complies with NISPOM DoD 5220.22-M, NSA 130-2, Air Force AFSSI 5020, Army 380-19, Navy NAVSO P-5239-26 and IREC (IRIG) 106 NTISSP-9  
Secure erase/sanitize software interrupt, hardware interrupt optional



RoHS Compliant

**Warranty**  
5 years

**Ordering Information**  
SDSTH - CCCC-000000  
SD: Prefix: SanDisk  
S: SATA interface  
T: Operating Temperature Range  
Blank - Commercial: 0°C to +70°C  
N - Enhanced: -25°C to +75°C  
X - Extended: -40°C to +85°C  
H: Case Height  
A - 9.5mm up to 16GB  
B - 14.5mm up to 64GB  
C - 18.5mm up to 112GB  
D - 22.5mm up to 128GB  
CCC: Unformatted Capacity (Gbytes): 001,002, 004, 008, 012, 016, 024, 032, 040, 048, 056, 064, 072, 080, 088, 096, 104, 112, 120, 128  
G: Gbytes

Note: 1 megabyte (MB) = 1 million bytes; 1 gigabyte (GB) = 1 billion bytes. Some of the listed capacity is used for formatting and other functions, and thus is not available for data storage.  
[Read more.](#)

**Additional Info**  
Product Photos  
Product Specifications