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SSD (formerly FFD) SATA 2.5

Reliable, High Capacity SATA Drive



The SanDisk SSD SATA 2.5 (formerly FFD 2.5 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 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 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 provides high-performance sustained read and write rates up to 150Mbytes/sec and supports Serial ATA 1.0a standard.

SSD SATA 2.5 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 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"
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): <10⁻²⁰

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