



SiliconDrive® III

Advanced Solid State Storage



The SiliconDrive III SSD product family offers faster read/write speeds and increased capacities, enabling a wider range of markets and applications to benefit from WD's advanced solid state storage technology.

- High performance
- 24x7 reliability
- Low total cost of ownership

Product Highlights

- True drop-in hard drive replacement
- Multi-year product lifecycle
- Field-proven in thousands of customer applications

Product Features

PowerArmor®

Eliminates drive corruption from power disturbances

SiSMART®

Delivers real-time data on SSD useable life

SolidStor®

Ensures data integrity and multi-year product life

LifeEST™

Methodology forecasts SSD endurance in months or years

Mechanical Scalability

Scalable from a 2.5-inch drive to a smaller 1.8-inch form factor with no compromise in performance or reliability

Markets

- Automotive and transportation
- Data center media streaming appliances
- Industrial automation
- Netcom
- Medical
- Video surveillance

Applications

- Data base or multimedia servers
- Digital graphics
- NAS server and storage arrays
- SAN switches
- Storage appliances
- Telecom and networking infrastructure
- Video on demand
- Wireless infrastructure

PUT YOUR LIFE ON IT®



SiliconDrive III

Specifications ¹	15 GB	30 GB	60 GB	90 GB	120 GB
User sectors per drive	29,323,728	58,626,288	117,231,408	175,836,528	234,441,648
Model numbers (form factor/interface)					
2.5-inch/SATA 3 Gb/s	SSD-D0015S(x ²)-5000	SSD-D0030S(x ²)-5000	SSD-D0060S(x ²)-5000	SSD-D0090S(x ²)-5000	SSD-D0120S(x ²)-5000
2.5-inch/PATA ATA-7	SSD-D0015P(x ²)-5000	SSD-D0030P(x ²)-5000	SSD-D0060P(x ²)-5000	SSD-D0090P(x ²)-5000	SSD-D0120P(x ²)-5000
1.8-inch/Micro SATA	SSD-F0015S(x ²)-5000	SSD-F0030S(x ²)-5000	SSD-F0060S(x ²)-5000		
RoHS compliant ²	RoHS 6/6				
Performance	SATA Drives	PATA Drives			
Target Performance					
Interface Burst Speed	3 Gb/s	133 MB/s			
Sustained Read Speed	100 MB/s	85 MB/s			
Sustained Write Speed	68 MB/s	60 MB/s			
Operational Lifespan					
Read	Unlimited				
Write (service life @ GB/day)					
120 GB capacity	22.9 years @ 1434.4	26.0 years @ 1265.6			
90 GB capacity	17.2 years @ 1434.4	19.5 years @ 1265.6			
60 GB capacity	11.5 years @ 1434.4	13.0 years @ 1265.6			
30 GB capacity	5.7 years @ 1434.4	6.5 years @ 1265.6			
15 GB capacity	2.9 years @ 1434.4	3.2 years @ 1265.6			
Reliability/Data Integrity					
MTBF (hours)	3,000,000				
Non-recoverable read errors per bits read	<1 in 10 ¹⁵				
Latency (Command to DRQ)	250 μs (typical)				
Limited warranty ³	5 years				
Power Management	2.5-inch SATA	2.5-inch PATA	1.8-inch SATA		
DC input voltage	5.0±10%	5.0±10%	5.0±10%		
Sleep (standby watts)	0.7W	0.5W	0.7W		
Read (peak watts)	1.5W	1.0W	1.5W		
Write (peak watts)	2.0W	1.0W	2.0W		
Environmental					
Operating Temperature Standard Temperature (C) ⁴	0°C to 70°C				
Extended Temperature (I) ⁴	-40°C to 85°C				
Non-Operating Temperature	-55°C to 125°C				
Relative Humidity	8% to 95% non-condensing				
Operating Shock	1000G, Half-sine, 0.5 ms Duration, 50g Pk, MIL-STD-810F, Method 516.5, Procedure I				
Vibration	16.3gRMS, MIL-STD-810F, Method 514.5, Procedure I, Category 24				
Altitude	80,000 ft., MIL-STD-810F, Method 500.4, Procedure II				
Physical Dimensions	2.5-inch SATA & PATA	1.8-inch SATA			
Length (in./mm, max)	3.937/100	3.081/8.25			
Width (in./mm, ± .01 in.)	2.75/69.85	2.126/54.00			
Height (in./mm, max)	0.370/9.40	0.197/5.00			
Weight (lb./gm, max)	0.046/100	0.0196/43			

¹As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second. Effective maximum SATA 3.0 Gb/s or SATA 1.5 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.org for details.

²WD complies with the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC of the European Parliament, which is effective in the EU beginning July 1, 2006. RoHS aims to protect human health and the environment by restricting the use of certain hazardous substances in new equipment, and consists of restrictions on lead, mercury, cadmium, and other substances.

³The term of the limited warranty may vary by region. Visit support.wdc.com/warranty for details.

⁴x=C (0-70°C) or I (-40°C-85°C)

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For service and literature:

support.wdc.com

www.westerndigital.com

800.ASK.4WDC
800.832.4778
+800.6008.6008
00800.27549338

+31.880062100

North America
Spanish
Asia Pacific
Europe
(toll free where available)
Europe/Middle East/Africa



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Western Digital
20511 Lake Forest Drive
Lake Forest, California 92630
U.S.A.

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