



SiliconDrive® II

Advanced Solid State Storage

The SiliconDrive II product family is an ideal replacement for hard drives and flash cards in critical storage applications. Advanced solid state storage technologies integrated into every SiliconDrive II increase performance and reliability and deliver a lower total cost of storage ownership.

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



Product Highlights

- Multi-year product lifecycle
- Integrated PowerArmor® and SiSMART® technologies
- 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

SiSecure®

Protects application data and software IP

Mechanical Scalability

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

Markets

- Automotive and transportation
- Industrial automation
- Netcom
- Medical
- Video surveillance

Applications

- Diagnostic equipment
- Digital graphics
- Industrial PCs
- SAN switches
- Storage appliances
- Telecom and networking infrastructure
- Wireless infrastructure

PUT YOUR LIFE ON IT®



SiliconDrive II

Specifications ¹		
Model number	SSD-Cxxx(x)-4300	SSD-Dxxx(x)-4300
Formatted capacity range	1 GB to 16 GB	4 GB to 8 GB
Form factor	CF ATA-5	2.5-inch
Interface	PATA	PATA
RoHS compliant ²	RoHS 6/6	RoHS 6/6
Performance		
Target Performance		
Interface Burst Speed	66 MB/s	
Sustained Read Speed	34 MB/s	
Sustained Write Speed	19 MB/s	
Operational Lifespan		
Read	Unlimited	
Write (service life @ GB/day)	-	
16 GB capacity	108.8 Years @ 402.9	-
8 GB capacity	54.4 Years @ 402.9	54.4 Years @ 402.9
4 GB capacity	27.2 Years @ 402.9	27.2 Years @ 402.9
2 GB capacity	13.6 Years @ 402.9	-
1 GB capacity	6.8 Years @ 402.9	-
Reliability/Data Integrity		
MTBF (hours)	4,000,000	
Non-recoverable read errors per bits read	<1 in 10 ¹⁴	
Latency (Command to DRQ)	2 ms	
Limited warranty ³	5 years	
Power Management		
DC input voltage	3.3V±10% 5.0±10%	5.0±10%
Sleep (standby watts)	0.00165 0.005	0.5
Read (peak watts)	0.33 0.6	0.6
Write (peak watts)	0.33 0.6	0.6
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		
Length (in./mm, max)	1.433/36.4	3.937/100
Width (in./mm, ± .01 in.)	1.685/42.8	2.75/69.85
Height (in./mm, max)	0.130/3.3	0.370/9.40
Weight (lb./gm, max)	0.05/110	0.046/100

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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