# SiliconDrive II Advanced Solid State Storage

High performance 24X7 reliability Low total cost of ownership



#### Form Factor

2.5-inch, CompactFlash

### Interface

**PATA** 

#### Performance

R/W Speed 34/19 MB/s

## Capacity Range

1 GB to 32 GB

#### **Model Numbers**

SSD-Cxxx(x)-4300SSD-Dxxx(x)-4300

*Note:* Not all products may be available in all regions of the world.

#### SiliconDrive II

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.

#### Not All Solid State Storage is Engineered the Same

The SiliconDrive II product family features patented and patent-pending advanced solid state storage technologies engineered to overcome the industry's toughest problems.

- 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<sup>™</sup> methodology forecasts SSD endurance in months or years

## **Mechanical Scalability**

The SiliconDrive II product family delivers mechanical scalability from a 2.5-inch to CompactFlash form factor with no compromise in performance or reliability.

#### **Market and Applications**

Applications for SiliconDrive II products range from enterprise edge routers and servers to rugged wearable computers on the battlefield to casino gaming machines and medical devices. SiliconDrive II products deliver the high performance, high reliability, and low total cost of storage ownership required in rigorous OEM applications.

#### **Vertical Markets**

- Automotive and transportation
- Data center media streaming and specialty appliances
- High performance network devices
- Medical equipment
- Military storage systems
- Video surveillance



## SiliconDrive II **Advanced Solid State Storage**

Drive Specifications<sup>1</sup>

Formatted capacity range 1 GB to 16 GB 4 GB to 32 GB Form factor CF ATA-5 2.5-inch

WD model number SSD-CXXX(x)-4300 SSD-Dxxx(x)-4300

#### **Performance Specifications**

Target Performance Interface Burst Speed 66 MB/s 66 MB/s Sustained Read Speed 34 MB/s 34 MB/s Sustained Write Speed 19 MB/s 19 MB/s Latency (Command to DRQ) 2 ms 2 ms MTBF (Hours) 4,000,000 4,000,000

PATA Drives

PATA Drives

Error rate (non-recoverable) <1 in 1014 bits read <1 in 1014 bits read

Operational Lifespan Read Unlimited Unlimited

Write

32 GB capacity 217.6 Years @ 402.9 GB 16 GB capacity 108.8 Years @ 402.9 GB 108.8 Years @ 402.9 GB @ 402.9 GB 8 GB capacity 54.4 Years @ 402.9 GB 54.4 Years 4 GB capacity 27.2 Years @ 402.9 GB 27.2 Years @ 402.9 GB

2 GB capacity 13.6 Years @ 402 9 GB @ 402 9 GB 1 GB capacity 6.8 Years

#### **Power Management**

PATA PATA DC Input Voltage  $3.3 \pm 10\%$  $5.0 \pm 10\%$  $5.0 \pm 10\%$ Sleep (standby watts) 0.00165 0.005 0.5 Read (peak watts) 0.33 0.6 0.6 Write (peak watts) 0.6 0.6

#### **Environmental Specifications**

Operating Temperature

Standard Temperature (C)  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ Extended Temperature (I) -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

80,000 ft., MIL-STD-810F, Method 500.4, Procedure II

#### **Physical Specifications**

PATA Drives-ATA-5 PATA Drives-2.5-inch 1.433 in. (36.4 mm) 3.937 in. (100 mm) Length (42.8 mm) (69.85 mm) Width 1.685 in. 2.75 in. Height 0.130 in. .370 in. (9.40 mm) (3.3 mm)0.046 lb. (100 gm) Weight 0.05 lb. (110 gm)

#### Limited Warranty

Limited warranty 5 years

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.





#### For service and literature:

#### support.wdc.com www.westerndigital.com

800.ASK.4WDC 800.832.4778 +800.6008.6008 00800.27549338

North America Spanish Asia Pacific Europe

+31.880062100

(toll free where available) Europe/Middle East/ Africa

Western Digital, WD, the WD logo, SiliconDrive, PowerArmor, and SiSMART are registered trademarks; in the U.S. and other countries; and FIT Lab and LifeEST are trademarks of Western Digital Technologies, Inc. Other marks may be mentioned herein that belong to other companies. Product specifications subject to change without notice

© 2009 Western Digital Technologies, Inc. All rights reserved

Western Digital 20511 Lake Forest Drive Lake Forest, California 92630

2879-771329-A00 June 15, 2009



 $<sup>^{2}</sup>x=C (0-70^{\circ}C) \text{ or } I (-40^{\circ}C-85^{\circ}C)$ 

<sup>&</sup>lt;sup>3</sup>WD 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.

<sup>&</sup>lt;sup>4</sup>The term of the limited warranty may vary by region. Visit support.wdc.com/warranty for details.