

## Overview: Deneva Reliability Series

### Key Features:

- SATA 3Gbps
- MLC Flash
- 2.5" Form Factor
- 280 MB/s Read
- 270 MB/s Write
- 50,000 IOPS (4K)
- TRIM support
- ECC Protection
- Power Loss Data Protection
- AES-128 Encryption



### Design & Technology:

Deneva Reliability Solid State Drives are designed to provide the best of both worlds - exceptional performance with the latest cutting-edge technology paired with unparalleled reliability. The Deneva Reliability pushes the limits in both large and small file speeds with up to 280MB/s and 50,000 IOPS (4KB random write). With an emphasis on endurance, the Deneva Reliability is an enterprise-class solution that utilizes MLC NAND flash to deliver outstanding maximized read and write performance. Along with best-in-class reliability and all the benefits of SSD technology including faster access times, lower power consumption, and superior durability compared to conventional hard drives, Deneva Reliability provides advanced ECC protection, encryption, and block management.

### Ordering Information

Deneva Reliability MLC 100GB	DENRSTE251M45-0100
Deneva Reliability MLC 200GB	DENRSTE251M45-0200
Deneva Reliability MLC 400GB	DENRSTE251M45-0400

#### Tier 0 (SLC) and 1: (applicable mission-critical storage)

- Data centers
- Cloud computing
- Web Servers
- Video on demand
- Data warehousing
- Caching of tier 2 storage

#### Tier 2: (reliable storage requiring fast data access)

- General purpose servers (fast tier 2)
- High performance storage networks
- Green storage

#### Tier 3: (speed per dollar requirement)

- Video and audio editing
- CAD, photo editing & 3D rendering
- Scientific computing and research
- Highly complex financial & statistical models
- Programming, engineering, and design



enterprise

# OCZ DENEVA SOLID-STATE DRIVES

## Specifications:

100GB/200GB

400GB

### PERFORMANCE

Max Read <sup>1</sup>	up to 280 MB/s	up to 250 MB/s
Max Write <sup>1</sup>	up to 270 MB/s	up to 225 MB/s
4KB Random Write <sup>2</sup>	50,000 IOPS	17,500 IOPS
Seek Time	0.1 ms	0.1 ms

### PHYSICAL

Usable Capacities (IDEMA)	100GB, 200GB, 400GB
NAND Components	Multi-Level Cell (MLC)
Interface	SATA II / 3Gbps
Form Factor	2.5 Inch
Controller	SandForce 1565
Dimensions (L x W x H)	99.8 x 69.63 x 9.3 mm
Weight	77g (may vary slightly depending on capacity)

### ENVIRONMENTAL

Power Consumption	Idle: 0.5 Watts    Active: 2 Watts
Operating Temperature	0 C ~ +55 C
Storage Temperature	-45 C ~ +85 C
Shock Resistance	1500G
Certifications	RoHS, CE, FCC

### RELIABILITY

MTBF <sup>3</sup>	10 million hours
Power Loss Data Protection	Built in backup power circuitry
ECC Recovery	Up to 24 bytes correctable per 512-byte sector
Unrecoverable Read Errors	Read unrecoverable bit error rate (UBER) 10e-17
Data Encryption	128-bit AES-compliant
Product Health Monitoring	Self-Monitoring, Analysis and Reporting Technology (SMART)

### COMPATIBILITY

Serial ATA (SATA)	Fully compliant with Serial ATA International Organization: Serial ATA Revision 2.6. Fully compliant with ATA/ATAPI-7 Standard Native Command Queuing (NCQ)
Operating System	Windows XP 32-Bit and 64-Bit; Windows Vista 32-Bit & 64 Bit; Windows 7 32-Bit and 64-Bit; Linux
Power Requirements	Standard SATA Power Connector

### ADDITIONAL FEATURES

Performance Optimization	TRIM (requires OS support)
Service & Support	3-Year Warranty, Toll-Free Tech Support, 24 Hour Forum Support, Firmware Updates

<sup>1</sup> Maximum Sequential Speeds are determined using ATTO

<sup>2</sup> Small file I/O performance is measured using Iometer 2008, Queue Depth 32, 4KB Aligned

<sup>3</sup> Specification is based on the MTBF of the SandForce 1565 controller

## Mechanical Specifications

NOTE:

1. THIS DRAWING MUST BE USED TO IDENTIFY CRITICAL DIMENSIONS, TOLERANCES AND REFERENCE.
2. INTERPRET DIMENSION AND TOLERANCE PER ANSI 14.5M-1994
3. UNLESS OTHERWISE SEPCIFIED: DIMENSIONS ARE IN MILLIMETERS

