

## Overview: Deneva Series

### Key Features:

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



### Design & Technology:

Deneva 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 pushes the limits in both large and small file speeds with up to 285MB/s and 50,000 IOPS (4KB random write). With an emphasis on endurance, the Deneva 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 provides advanced ECC protection, encryption, and block management.

#### 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

### Ordering Information

Deneva MLC 115GB	DENCSTE251M2X-0115
Deneva MLC 240GB	DENCSTE251M2X-0240
Deneva MLC 480GB	DENCSTE251M2X-0480



enterprise

# OCZ DENEVA SOLID-STATE DRIVES

## Specifications:

115GB/240GB

480GB

### PERFORMANCE

Max Read <sup>1</sup>	up to 285 MB/s	up to 250 MB/s
Max Write <sup>1</sup>	up to 275 MB/s	up to 225 MB/s
Sustained Write <sup>2</sup>	up to 250 MB/s	up to 150 MB/s
4KB Random Write <sup>3</sup>	50,000 IOPS	15,000 IOPS
Seek Time	0.1 ms	0.1 ms

### PHYSICAL

Usable Capacities (IDEMA)	115GB, 240GB, 480GB	
NAND Components	Multi-Level Cell (MLC)	
Interface	SATA II / 3Gbps	
Form Factor	2.5 Inch	
Controller	SandForce 1222	
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 ~ +70 C	
Storage Temperature	-45 C ~ +85 C	
Shock Resistance	1500G	
Certifications	RoHS, CE, FCC	

### RELIABILITY

MTBF	2 million hours	
ECC Recovery	Up to 24 bytes correctable per 512-byte sector	
Unrecoverable Read Errors	Read unrecoverable bit error rate (UBER) 10e-16	
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> Sustained transfer rate is measured using Iometer 2008, Queue Depth 32, 128KB

<sup>3</sup> Small file I/O performance is measured using Iometer 2008, Queue Depth 32, 4KB Aligned

## 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

