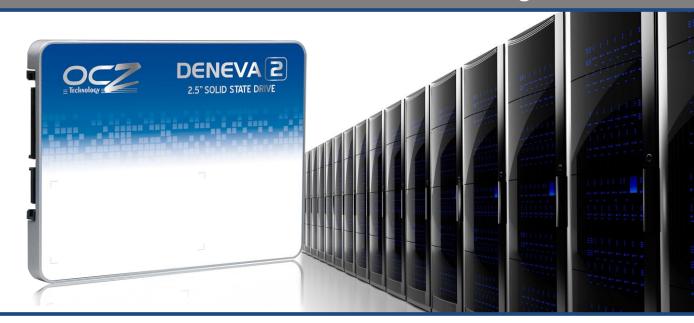# OCZ enterprise

Deneva 2 C Series Storage Solutions

Deneva 2 SATA 3.0 Solid State Drives – 2.5" MLC

C Series at a Glance

- Leading-edge SATA 6Gb/s storage solution designed to dramatically increase productivity & application performance
- Cost-effective MLC-based design with best-in-class endurance & reliability

Raising the Bar in Performance

- Nearly double the speed of the previous generation
- Delivers the performance of hundreds of hard disk drives in a single server
  - *Over 500MB/s of throughput*
  - *Up to 60,000 4K random write IOPS*

Reliable, Longer-Lasting, & Secure

- Data fail recovery ensures superior reliability
- Maximized product lifespan with write amplification as low as 0.2
- Intelligent block management & wear-leveling for increased endurance
- Advanced security with 128-bit AES encryption support
- Strong error correction for enhanced data integrity

Flexible Design with a Wide Array of Configurations

- Deneva 2 comes in an industry-standard 2.5" model; however, its unique architecture can be tailored to fit specific applications

Cost-Savings that Other SSD Lines Cannot Deliver

- Alternative flash options provide a greater spectrum of price per IOPS
- Support for next generation NAND flash geometries

KEY DIFFERENTIATORS:

- Highest performing SSD in its class
- Ultra-high endurance for enterprise applications (increases drive life by up to five times the rated P/E cycles of the NAND flash)
- Unique ability to customize form factor, functionality (i.e. firmware), & components
- Robust feature-set including enterprise-class ECC, data reliability, and data path parity protection

OCZ Deneva 2 SSDs are designed and manufactured to solve today's enterprise storage challenges and address the limitations hard drive technology imposes on IT infrastructures. The Deneva 2 Series delivers the industry's best performance while meeting the stringent reliability, security, and economical needs of enterprise storage environments including cloud storage, web-serving, and data warehousing. Providing a lucrative option for datacenters, Deneva 2 maximizes IOPS per dollar enabling increased data throughput with lower power consumption and a smaller operating footprint.

PHYSICAL	2.5" Deneva 2 C Series (Sync)	2.5" Deneva 2 C Series (Async)
Usable Capacities (IDEMA)	60GB ~ 480GB	60GB ~ 480GB
NAND Components	Synchronous-Mode Multi-Level Cell (MLC)	Asynchronous-Mode Multi-Level Cell (MLC)
Interface	Serial ATA (SATA) 6Gb/s	Serial ATA (SATA) 6Gb/s
Form Factor	2.5 inch	2.5 inch
NAND Controller	SandForce® 2281	SandForce® 2281
Dimensions (L x W x H)	100 x 69.75 x 9.2 mm	100 x 69.75 x 9.2 mm
Weight	83g (may vary slightly due to capacity)	83g (may vary slightly due to capacity)

PERFORMANCE		
Max Read	up to 550 MB/s	up to 525 MB/s
Max Write	up to 520 MB/s	up to 500 MB/s
Random Read Operations (4kB)	40,000 IOPS	35,000 IOPS
Random Write Operations (4kB)	60,000 IOPS	45,000 IOPS

ENVIRONMENTAL		
Power Consumption	Idle: 1.65 Watts Active: 3 Watts	Idle: 1.5 Watts Active: 2.7 Watts
Ambient Temperature	0°C ~ 55°C	0°C ~ 55°C
Operating Temperature	0°C ~ 70°C	0°C ~ 70°C
Storage Temperature	-45°C ~ 85°C	-45°C ~ 85°C
Certifications	RoHS, CE, FCC	RoHS, CE, FCC

RELIABILITY/SECURITY	
MTBF	2 million hours
Data Fail Recovery	Recovers data from up to one NAND flash block (available on 120GB and up)
Data Path Protection	ECC: Up to 55 bits correctable per 512-byte sector
Data Reliability	Read Unrecoverable Bit Error Rate (UBER) 10e-16
Data Encryption	128-bit AES-compliant
Product Health Monitoring	Self-Monitoring, Analysis and Reporting Technology (SMART) Support

COMPATIBILITY	
Serial ATA	Fully compliant with Serial ATA International Organization: Serial ATA Revision 3.0. Fully compliant with ATA/ATAPI-8 Standard Native Command Queuing (NCQ)
Operating Systems	Windows XP 32-bit / 64-bit; Windows Vista 32-bit / 64-bit; Windows 7 32-bit / 64-bit; Linux; Mac OS X
Power Requirements	Standard SATA Power Connector

ADDITIONAL FEATURES	
Performance Optimization	TRIM (requires OS support)
Service & Support	3-Year Warranty; Dedicated FAE/FSE support (includes PM/engineer support through validation cycle)

ASYNC

CAPACITY	PART NUMBER	UPC
64GB/60GB	D2CSTK251A20-0060	842024029908
128GB/120GB	D2CSTK251A20-0120	842024029915
192GB/180GB	D2CSTK251A20-0180	842024030485
256GB/240GB	D2CSTK251A20-0240	842024029922
384GB/360GB	D2CSTK251A20-0360	842024031239
512GB/480GB	D2CSTK251A20-0480	842024029939

SYNC

CAPACITY	PART NUMBER	UPC
64GB/60GB	D2CSTK251M21-0060	842024029861
128GB/120GB	D2CSTK251M21-0120	842024029878
256GB/240GB	D2CSTK251M21-0240	842024029885
512GB/480GB	D2CSTK251M21-0480	842024029892