

Deneva 2 C M3T 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

- Delivers the performance of hundreds of hard disk drives in a single server
 - Up to 550MB/s of throughput
 - Up to 80,000 4k Random Write IOPS

Reliable, Longer-Lasting, & Secure

- Data fail recovery ensures superior reliability
- Intelligent block management & wear-leveling for increased endurance
- Temperature sensor, write protection circuit, and in rush circuit
- Advanced security with 128-bit AES encryption support
- Strong error correction for enhanced data integrity

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.

enterprise



PHYSICAL	2.5" Deneva 2 C M3T Series
Usable Capacities (IDEMA)	120GB, 240GB, 480GB
NAND Components	19nm Multi-Level Cell (MLC)
Interface	Serial ATA (SATA) 6Gb/s
Form Factor	2.5 inch
NAND Controller	SandForce® 2281
Dimensions (L x W x H)	100 x 69.75 x 9.20 mm
Weight	83g (may vary slightly due to capacity)

PERFORMANCE	120GB	240GB	480GB
Max Read ¹	up to 550 MB/s	up to 550 MB/s	up to 540 MB/s
Max Write ¹	up to 520 MB/s	up to 520 MB/s	up to 470 MB/s
4K Random Read Operations (Compressible) ²	26,000 IOPS	45,000 IOPS	38,000 IOPS
4K Random Write Operations (Compressible) ²	27,000 IOPS	34,000 IOPS	22,000 IOPS
4K Random Read Operations (Incompressible) ²	24,000 IOPS	42,000 IOPS	36,000 IOPS
4K Random Write Operations (Incompressible) ²	1,100 IOPS	2,200 IOPS	3,300 IOPS

¹Performance measured using ATTO Disk 2.47
²Drives were preconditioned using IOMeter 2010, QD 32

ENVIRONMENTAL	
Power Consumption	Idle 0.9 Watts Active ~2.35 Watts
Operating* / Storage Temperature	0°C ~ 70°C, -45°C ~ 85°C
Certifications & Compliance	CE, FCC, KCC, C-Tick, BSMI, VCCI, RoHS

* As measured by temperature sensor

RELIABILITY/SECURITY	
MTBF	2 million hours
Data Safe Recovery Technology	Provide data recovery in case of block failure via LSI RAISE technology
Data Path Protection	ECC: Up to 24 bits correctable per 512-byte sector
Data Reliability	Read Unrecoverable Bit Error Rate (UBER) 1 sector per 10 ¹⁶ bits read
Data Encryption	128-bit AES-compliant
Product Health Monitoring	Self-Monitoring, Analysis and Reporting Technology (SMART) Support w/ enterprise attributes

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, 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)
Write Protection Circuit	Protection for data corruption
Temperature Sensor	Temperature Monitoring & Logging
Secure Erase	Enabled via OCZ Toolbox (Windows and Linux versions)
In Rush Current	New OCZ power design with improved in rush current protection

PART NUMBERS	Usable Capacity / Raw Capacity	Write Endurance (4K RW)	Write Endurance (128K SW)
D2CSTK251M3T-0120	120GB / 128GB	20 TBW	340 TBW
D2CSTK251M3T-0240	240GB / 256GB	85 TBW	710 TBW
D2CSTK251M3T-0480	480GB / 512GB	200 TBW	1450 TBW