

## Deneva 2 C Series Storage Solutions



## Deneva 2 SATA 3.0 Solid State Drives – 1.8”

### 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 1.8” 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.

enterprise



PHYSICAL		1.8" Deneva 2 C Series (Sync)	1.8" Deneva 2 C Series (Async)
Usable Capacities (IDEMA)		80GB ~ 360GB	90GB ~ 360GB
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		1.8 inch	1.8 inch
NAND Controller		SandForce® 2281	SandForce® 2281
Dimensions (L x W x H)		54 x 78.5 x 5mm	54 x 78.5 x 5mm
Weight		88g (may vary slightly due to capacity)	88g (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			
Data Fail Recovery		Recovers data from up to one NAND flash block	Recovers data from up to one NAND flash block (available on 160GB 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	
MTBF		2 million hours	
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		Micro 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)	

SYNC	CAPACITY	PART NUMBER	UPC
	96GB /80GB	D2CSTK181M11-0080	842024026860
	192GB /160GB	D2CSTK181M11-0160	842024029090
	192GB /180GB	D2CSTK181M11-0180	842024026877
	384GB /360GB	D2CSTK181M11-0360	842024026884

ASYNC	CAPACITY	PART NUMBER	UPC
	96GB /90GB	D2CSTK181A10-0090	842024026976
	192GB /160GB	D2CSTK181A10-0160	842024026983
	192GB /180GB	D2CSTK181A10-0180	842024029120
	384GB /360GB	D2CSTK181A10-0360	842024028932