

## 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 85,000 4K random write IOPS

### Reliable, Longer-Lasting, & Secure

- Data fail recovery ensures superior reliability
- Maximized product lifespan with write amplification as low as 0.3
- Intelligent block management & wear-leveling for increased endurance
- Advanced security with 256-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 5x 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



<b>PHYSICAL</b>		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)
<b>PERFORMANCE</b>			
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 (up to 85,000 IOPS)	45,000 IOPS (up to 85,000 IOPS)
<b>ENVIRONMENTAL</b>			
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
<b>RELIABILITY/SECURITY</b>			
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 & 256-bit AES-compliant	
Product Health Monitoring		Self-Monitoring, Analysis and Reporting Technology (SMART) Support	
MTBF		2 million hours	
<b>COMPATIBILITY</b>			
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 System		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	
<b>ADDITIONAL FEATURES</b>			
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