



## RETHINK STORAGE PERFORMANCE AND ENDURANCE.

As the fourth generation of the legendary Vertex family, the Vertex 4 Series pushes storage performance to the max and redefines the modern day computing experience. Vertex 4 SSDs are innovatively engineered to deliver industry-leading file transfer rates and superior system responsiveness, all while providing a more durable, reliable, and energy efficient storage solution compared to traditional hard drives. Designed to take full advantage of the SATA III interface, the Vertex 4 unleashes ultimate productivity, gaming, and multimedia applications.

### Excelling in Performance, No Matter the File Type

Mirroring real-world performance scenarios over a broad spectrum of consumer desktop and mobile applications, Vertex 4 SSDs are designed to provide a superior user experience and extreme performance over the other current solutions available on the market. With the cutting-edge Indilinx Everest 2 platform, Vertex 4 is optimized for consistent, high speeds with the complete spectrum of file types and sizes including both compressible and incompressible data for balanced performance like no other drive you've experienced.



#### Industry's highest IOPS performance up to 120,000

Incredible performance in workstation and heavy-duty environments with multiple data threads



#### No compression-related performance limitations

Better performance with "real world" data streams of varying "compressibility" as well as fully incompressible data such as videos and multimedia files, encrypted data, archive files such as .ZIP files and software.



#### Indilinx Infused™ Everest 2 platform

Leading edge dual-ARM controller architecture enables faster performance like nothing else you've experienced.



#### Fast boot times and ultra-low latency

Boot up in as little as 9 seconds, and industry-low latencies of .04 reads and .02 writes enable superior multitasking and flawless performance



#### Ndurance 2.0 Technology

Advanced suite of NAND Flash management to increase durability and reliability to expand the NAND's lifespan



#### Industry-leading 5 year warranty

Backed by OCZ's renowned service for ultimate peace of mind.

## INDUSTRY-LEADING PERFORMANCE

- High Performance SATA 6Gbps
- Best-in-Class Indilinx Controller Technology
- Up to 535 MB/s Sequential Reads
- Up to 95,000 Random Write IOPS
- Up to 120,000 Maximum IOPS
- Available in 128GB to 512GB Capacities
- Access Latency as Low as 0.02ms
- Strong performance at Lower Queue Depths
- TRIM Support
- 3.5" Desktop Adaptor Bracket Included

## The OCZ SSD Advantage.



SSDs are **100x faster** than hard drives  
 SSDs offer more IOPS per dollar for **cost effectiveness**  
 SSDs are virtually silent with **no moving parts**



SSDs are **shock resistant** and **durable**  
 SSDs use **less power** for energy efficiency

Learn more at the [OCZ SSD Zone](#)



## SPECIFICATIONS

### PHYSICAL

|                           |  |
|---------------------------|--|
| Usable Capacities (IDEMA) | 128GB, 256GB, 512GB  |
| NAND Components           | 2Xnm Synchronous Multi-Level Cell (MLC)                      |
| Interface                 | SATA III / 6Gbps (backwards compatible with SATA II / 3Gbps) |
| Form Factor               | 2.5 Inch   |
| NAND Controller           | Indilinx Everest 2   |
| DRAM Cache                | Up to 1GB  |
| Dimensions (L x W x H)    | 99.8 x 69.63 x 9.3 mm  |
| Weight                    | 101g   |

### RELIABILITY/PROTECTION/SECURITY

|                            |  |
|----------------------------|--|
| MTBF                       | 2 million hours  |
| Data Path Protection       | BCH ECC corrects up to 128 random bits/1KB                         |
| Data Encryption            | 256-bit AES-compliant, ATA Security Mode Features                  |
| Product Health Monitoring  | Self-Monitoring, Analysis and Reporting Technology (SMART) Support |
| Flash Endurance Management | Indilinx Ndurance™ 2.0 Technology                                  |

### ENVIRONMENTAL

|                       |                              |
|-----------------------|------------------------------|
| Power Consumption     | Idle: 1.3 W    Active: 2.5 W |
| Operating Temperature | 0 °C ~ 70 °C                 |
| Ambient Temperature   | 0 °C ~ 55 °C                 |
| Storage Temperature   | -45 °C ~ 85 °C               |
| Shock Resistance      | 1500G                        |
| Certifications        | RoHS, CE, FCC, KCC           |

### COMPATIBILITY

|                    |  |
|--------------------|--|
| Serial ATA (SATA)  | Fully compliant with Serial ATA International Organization: Serial ATA Revision 3.0.<br>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;<br>Linux; Mac OS X   |
| Power Requirements | Standard SATA Power Connector  |

### ADDITIONAL FEATURES

|                            |   |
|----------------------------|---|
| Performance Optimization   | TRIM (requires OS support), dynamic and static wear-leveling, background garbage collection   |
| Other Performance Features | Ndurance 2.0 Technology (Reduced Write Amplification without Compression, Advanced Multi-Level ECC, Adaptive NAND Flash Management) |
| Service & Support          | 5-Year Warranty, Toll-Free Tech Support, 24 Hour Forum Support  |



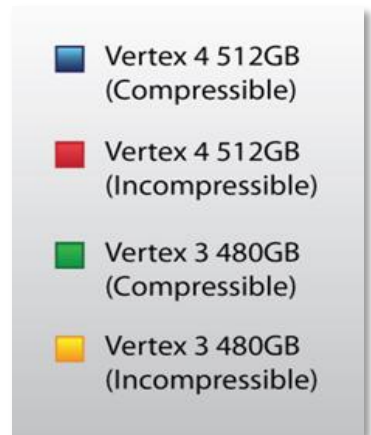
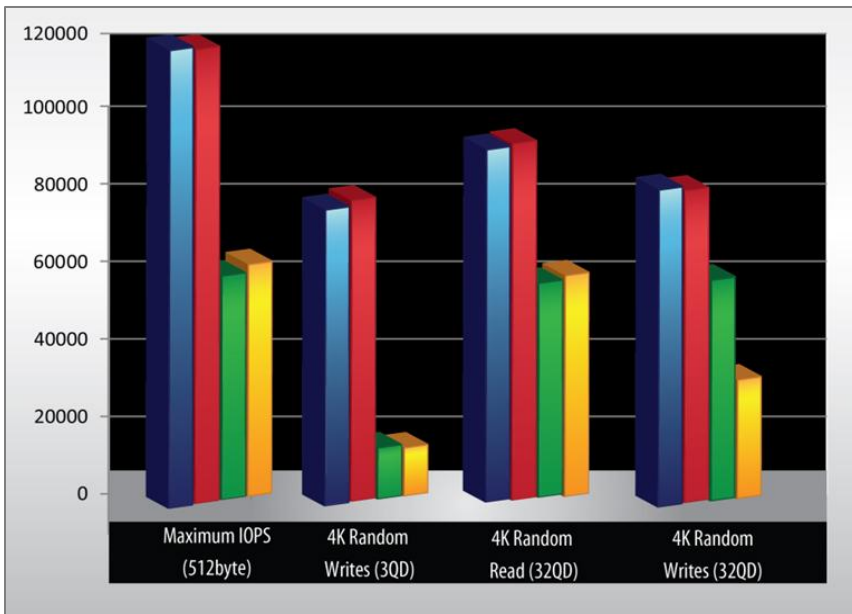
| PERFORMANCE                       | 128GB          | 256GB          | 512GB          |
|-----------------------------------|----------------|----------------|----------------|
| Max Read <sup>1</sup>             | up to 535 MB/s | up to 535 MB/s | up to 535 MB/s |
| Max Write <sup>1</sup>            | up to 200 MB/s | up to 380 MB/s | up to 475 MB/s |
| Max 4KB Random Read <sup>2</sup>  | 90,000 IOPS    | 90,000 IOPS    | 95,000 IOPS    |
| Max 4KB Random Write <sup>2</sup> | 85,000 IOPS    | 85,000 IOPS    | 85,000 IOPS    |
| Maximum IOPS <sup>3</sup>         | 120,000 IOPS   | 120,000 IOPS   | 120,000 IOPS   |

<sup>1</sup> Maximum sequential speeds are determined using ATTO.

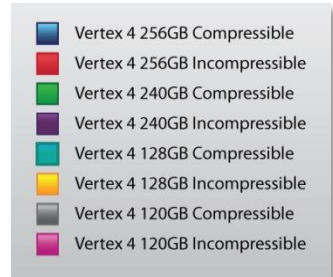
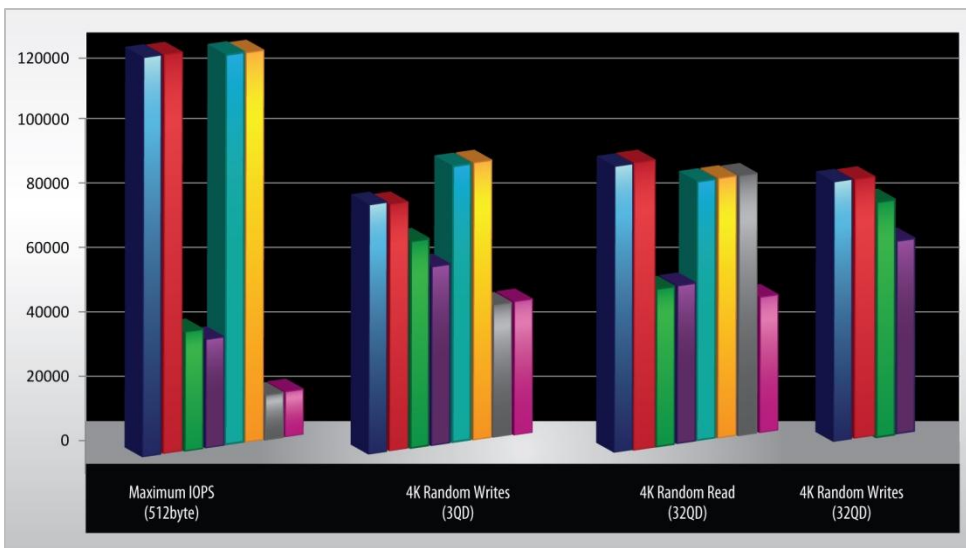
<sup>2</sup> Small file I/O performance is measured using Iometer 2010 (1.1.0 rc1).

<sup>3</sup> Maximum I/O performance is measured using Iometer 2010, 512 bytes Random Read

### Vertex 4 512GB SSD IOMETER 2010 Compressible-Incompressible Performance

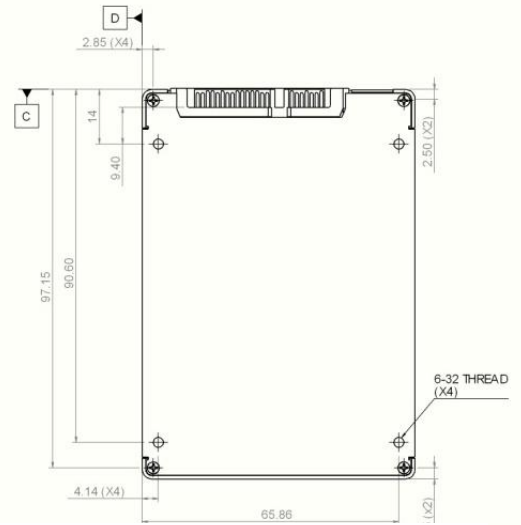
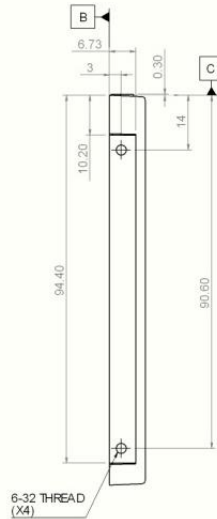
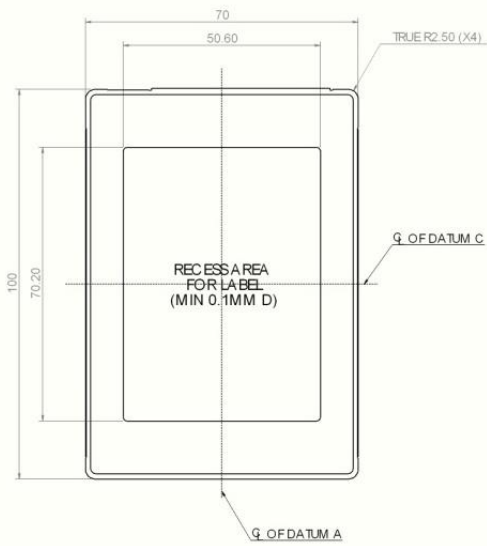


### Vertex 4 128GB-256GB SSD IOMETER 2010 Compressible-Incompressible Performance



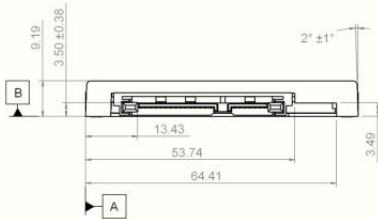


## MECHANICAL SPECIFICATIONS



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



## PACKAGING SPECIFICATIONS

**Dimensions (L x W x H)** 190.5mm x 114.3mm x 19.05mm

**Weight** 120g



## ORDERING INFORMATION

| PRODUCT                 | PART NUMBER      | UPC          |
|-------------------------|------------------|--------------|
| Vertex 4 128GB 2.5" SSD | VTX4-25SAT3-128G | 842024030355 |
| Vertex 4 256GB 2.5" SSD | VTX4-25SAT3-256G | 842024030362 |
| Vertex 4 512GB 2.5" SSD | VTX4-25SAT3-512G | 842024030379 |