

## PRODUCT BRIEF

### Intel® Solid-State Drive 730 Series

Non-Volatile Memory Storage Solutions from Intel

# Performance Unleashed

## Performance optimized 3<sup>rd</sup> Generation Intel controller with Intel Data Center DNA

The Intel® Solid-State Drive 730 Series delivers uncompromised performance by combining factory tuned components with Data Center DNA.

### Optimized for Performance

Maximize your computing experience with the Intel® SSD 730 Series built with a specially qualified 3<sup>rd</sup> generation Intel controller, 20nm NAND and optimized firmware. Intel has taken storage a step further by factory overclocking these components to push the limits of performance with a 50% increase in controller speed and 20% increase in NAND bus speed. Intel SSD 730 Series are optimized for the most demanding tasks including digital content creation, video capture/editing, extreme gaming and other client usages where storage performance improves the user's experience and efficiency. Applications will benefit from the 50µs read latency, up to 550MB/s sequential reads and 89,000 IOPs random reads.

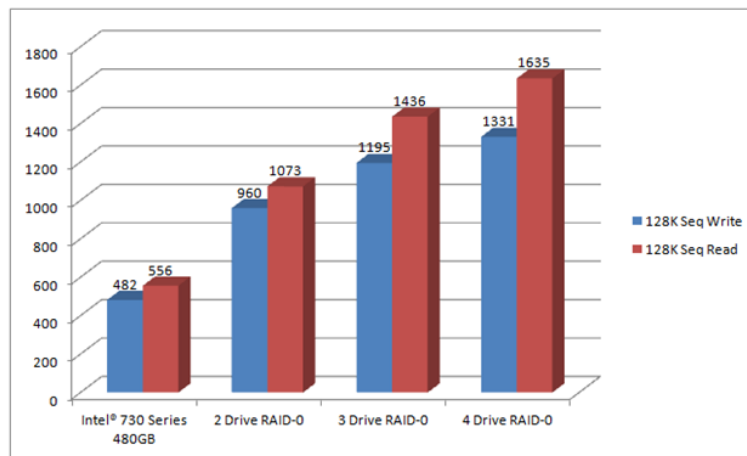
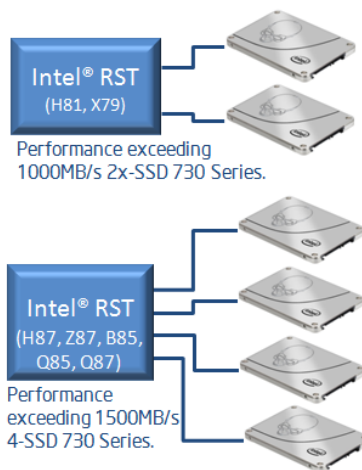
### 730 Series + Intel® Rapid Storage Technology = Amazing Performance

Digital Content Creation experts and PC Enthusiasts know the highest storage performance is achieved with RAID-0 configurations as SSDs saturate the SATA interface. Comparing two 730 Series drives in a RAID-0 array to a single alternative SSD, results in the same capacity and nearly double the performance. As shown below, two 730 Series drives in a RAID-0 configuration can provide throughput numbers exceeding 1000MB/s when coupled with Intel platforms supporting Intel Rapid Storage Technology. Similarly four 730 Series drives in a RAID-0 array with an Intel® chipset based platform can provide performance exceeding 1500MB/s.



### Product Spotlight

- Intel® SSD Architecture designed and optimized for leading client storage performance
- Intel Data Center DNA brings performance consistency for all data types and extreme endurance to client storage
- Intel® Rapid Storage Technology plus 730 Series delivers top performance for the most demanding storage workloads



Internal Intel test results with Iometer 2009. 10/22 on Intel Core i7 4770K, Z87 Chipset, 8GB PC3-10700, RST version 12.8  
For more information go to : <http://www.intel.com/performance>

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#### Intel Data Center DNA = Extreme Endurance & Performance Consistency

Intel® SSD 730 Series also delivers excellent endurance to support the needs of the most demanding client usages. Support for up to 70GB writes per day for five years (compared to the industry typical 20GB) provides peace of mind for digital content creators and PC enthusiasts who demand dependable up-time from their workstations and gaming rigs. The Intel SSD 730 Series drive also brings greater performance consistency to the client market in both single drive and multiple drive RAID arrays. Intel's advanced firmware algorithms allow Intel to deliver client SSDs with "data center" efficiency and dependability throughout the life of the drive.

Solid-State Computing Starts with Intel Inside®. For more information, visit [www.intel.com/go/ssd](http://www.intel.com/go/ssd)

Technical Specifications <sup>1</sup>						
Model Name	Intel® Solid-State Drive 730 Series					
Capacity	2.5": 240GB & 480GB					
NAND Flash Memory	20nm Intel® NAND Flash Memory Multi-Level Cell (MLC) Compute-Quality Components					
Sustained Sequential Reads/Writes						
Bandwidth <sup>2</sup>	<b>Sustained Sequential Reads / Writes</b>	<b>2 Drive RAID-0</b>				
	240GB: up to 550 / 270 MB/s 480GB: up to 550 / 470 MB/s	240GB: up to 1020 / 530 MB/s 480GB: up to 1020 / 910 MB/s				
Read / Write Latency	50 µs / 65 µs					
4KB Reads / Writes						
Random I/O Operations per Second <sup>2</sup>	<b>4KB Reads / Writes</b>	<b>2 Drive RAID-0</b>				
	240GB: up to 86,000 IOPS / 56,000 IOPS 480GB: up to 89,000 IOPS / 74,000 IOPS	240GB: up to 136,000 IOPS / 110,000 IOPS 480GB: up to 168,000 IOPS / 145,000 IOPS				
Interface	SATA 6Gb/s, compatible with SATA 3Gb/s and 1.5Gb/s.					
Form Factor, Height and Weight	<b>Form Factor</b>	<b>Height/Weight</b>				
	2.5"	Up to 7mm / up to 78 grams				
Life Expectancy	1.2 million hours Mean Time Between Failures (MTBF)					
Lifetime Endurance <sup>3</sup>	240GB – 50GB Writes per Day;	480GB – 70GB Writes per Day				
Usage <sup>5</sup>	24/7 operation					
Power Consumption <sup>4</sup>	<b>12V</b>	<b>240GB</b>	<b>480GB</b>	<b>5V</b>	<b>240GB</b>	<b>480GB</b>
	Active: 3.8W 5.5W Idle: 1.5W 1.5W			Active: 3.8W 5.0W Idle: 1.2W 1.3W		
Operating Temperature	0° C to 70° C					
RoHS Compliance	Meets the requirements of European Union (EU) RoHS Compliance Directives					
Product Ordering Information	To order, visit <a href="http://intel.com/go/ssd">intel.com/go/ssd</a>					

<sup>1</sup> Based on the Intel® SSD DC 730 Series Product Specification.

<sup>2</sup> Device measured using Iometer with 4K Random Writes QD=32 across 100% span of the drive. Latency measured using write transfer size of 4KB (4,096 bytes) and queue depth set to 1.

<sup>3</sup> Based on JESD218 standard with JESD219 workload based on JESD SSD standard

<sup>4</sup> Based on JESDEC SSD standard JC64.8

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