

# Consistently Amazing Intel® Solid-State Drive Data Center Family for NVMe\*

Dell\* systems with the Intel® SSD DC P3700 Series or Intel® SSD DC P3600 Series with NVMe technology can dramatically improve performance and efficiency for your enterprise customers.

## Intel® SSDs...



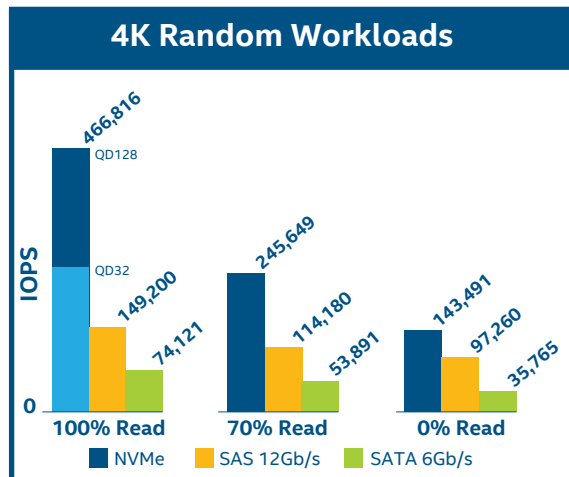
- **Reduce energy and support costs** for a lower total cost of ownership (TCO)



- **Remove performance bottlenecks** in data center applications

### NVMe Performance Gains Over SAS and SATA:

Read performance of NVMe drives exceeds that of SAS and SATA drives by 3x and 6x, respectively. In typical enterprise mixed workloads, NVMe performs 2x faster than SAS and 5x faster than SATA. For write intensive applications, NVMe outperforms SAS by 1.5x and SATA by 4x. NVMe provides this faster performance with lower latency to better meet your enterprise needs.<sup>1</sup>



## Fast, Consistent Performance with Stress-Free Protection

Source: [Intel.com/content/www/us/en/solid-state-drives/intel-ssd-dc-family-for-pcie-brief.html](https://www.intel.com/content/www/us/en/solid-state-drives/intel-ssd-dc-family-for-pcie-brief.html)

	Intel® Solid-State Drive DC P3600 Series	Intel® Solid-State Drive DC P3700 Series	
<b>Fast and Consistent Performance</b>	4K Random read input/output operations per second (IOPS) up to 460K		
	PCIe* 3.0 x 4 NVMe		
	4K random write IOPS up to 56K	4K random write IOPS up to 175K	
	Sequential latency (typ) Read/Write 20/20µs		
	Sequential read/write up to 2600/1700 MB/s	Sequential read/write up to 2800/2000 MB/s	
	<b>Stress-Free Protection</b>	<ul style="list-style-type: none"> <li>▪ End-to-End error detection and correction</li> <li>▪ Low Density Parity Check (LDPC)</li> <li>▪ Cyclic Redundancy Checks (CRC)</li> <li>▪ Logical Block Addressing (LBA) tag validation</li> <li>▪ Out of band management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Endurance indicators</li> <li>▪ Thermal monitoring</li> <li>▪ Power loss protection</li> </ul>
2 million hours Mean Time Between Failures (MTBF), 230 years			
5 year limited warranty			
<b>Power and Cost Efficiency</b>		<ul style="list-style-type: none"> <li>▪ 20nm MLC</li> <li>▪ Up to 25W (Write)/11W (Read) typical operational power</li> <li>▪ 4W standby</li> <li>▪ 3 Drive Writes Per Day</li> <li>▪ Up to 10.95 PBW</li> </ul>	<ul style="list-style-type: none"> <li>▪ 20nm MLC</li> <li>▪ Up to 25W (Write)/11W (Read) typical operational power</li> <li>▪ 4W standby</li> <li>▪ High-Endurance Technology</li> <li>▪ 10 Drive Writes Per Day</li> <li>▪ Up to 36.5 PBW</li> </ul>
<b>High Capacity</b>	<ul style="list-style-type: none"> <li>▪ Up to 2TB capacity options</li> </ul>	<ul style="list-style-type: none"> <li>▪ Up to 2TB capacity options</li> </ul>	

<sup>1</sup> Source: Intel measure on Dell R920, PCIe/NVMe\* @ QD 32 & 128; SAS and SATA @ QD 32

# Which Intel® SSD is the Best Match for your Customer?

## Intel® SSD DC P3600 Series

- Mid-Endurance
- Broad Capacity Range

## Intel® SSD DC P3700 Series

- High Endurance
- High Read/Write Speed for Mixed Workloads

# Dell\* Part Numbers

Series	Density	Intel® PN	MM	Description
DC P3600 Series	800GB	SSDPE2ME800G4DE	940474	2.5-inch PCIe 3.0, 20nm, MLC NAND, Mid-Endurance
	1.6TB	SSDPE2ME016T4DE	940476	2.5-inch PCIe 3.0, 20nm, MLC NAND, Mid-Endurance
	2TB	SSDPE2ME020T4DE	940478	2.5-inch PCIe 3.0, 20nm, MLC NAND, Mid-Endurance
	2TB	SSDPEDME020T4DE	940480	1/2 Height PCIe 3.0, 20nm, MLC NAND, Mid-Endurance
DC P3700 Series	2TB	SSDPEDMD020T4DE	940472	1/2 Height PCIe 3.0, 20nm, MLC NAND, High Endurance

Intel® SSD DC P3700 Series and Intel® SSD DC P3600 Series from Dell available in late Q1'15

# Platform Selection Guide

Intel® SSD DC P3700 Series and Intel® SSD DC P3600 Series are qualified on the following Dell\* server platforms:

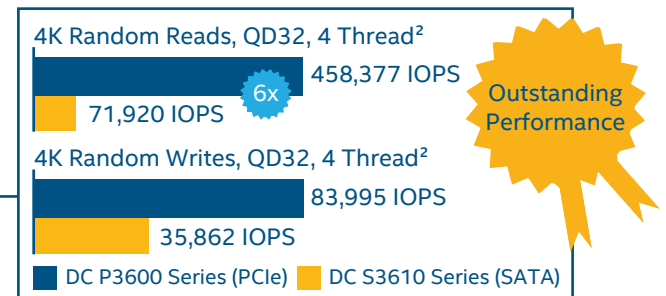


**12th generation rack mount, blade, and tower Dell Poweredge\* servers:**

**Rack Mount Servers**  
R920

**13th generation rack mount, blade, and tower Dell Poweredge\* servers:**

**Rack Mount Servers**      **Tower Servers**  
R630                                  T630  
R730xd



<sup>2</sup>Source: Intel® measure on Dell Poweredge R730xd. Intel NVMe driver with Queue Depth 32 and 4 workers. System Configuration: Processor: Intel® Xeon® E5-2630 v3 @ 2.4GHZ (x2), 32GB RAM; 1.6TB capacity for both tested SSDs, Windows Server 2012 R2 Standard. DC S3610 Series indicates Intel® SSD DC S3610 Series

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. Configurations: Source: IOPS Setup: Intel Core i7-3770K CPU @ 3.50GHZ, 8GB of system memory, Windows\* Server 2012, IOMeter tool were used. Intel® SSD DC P3700 Series system performance is configuration-dependent. Random performance is collected with 4 workers each with 32 QD Intel and the Intel logo are trademarks of Intel Corporation in the U.S and other countries. Copyright © 2015 Intel Corporation. All rights reserved.



# SSDs Are Great For:



High Performance Computing (HPC)



Big Data



Reduce Energy and Cooling Costs



Virtual Machines



E-Commerce



Cloud Computing