INTEL® OPTANE™ SSD DC P4800X
WORLD'S MOST RESPONSIVE DATA CENTER SSD

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Intel® Optane™ SSD DC P4800X Series

Breakthrough Performance

Throughput
(IOPS)

Predictably Fast Service

Quality of Service

Responsive Under Load

Latency

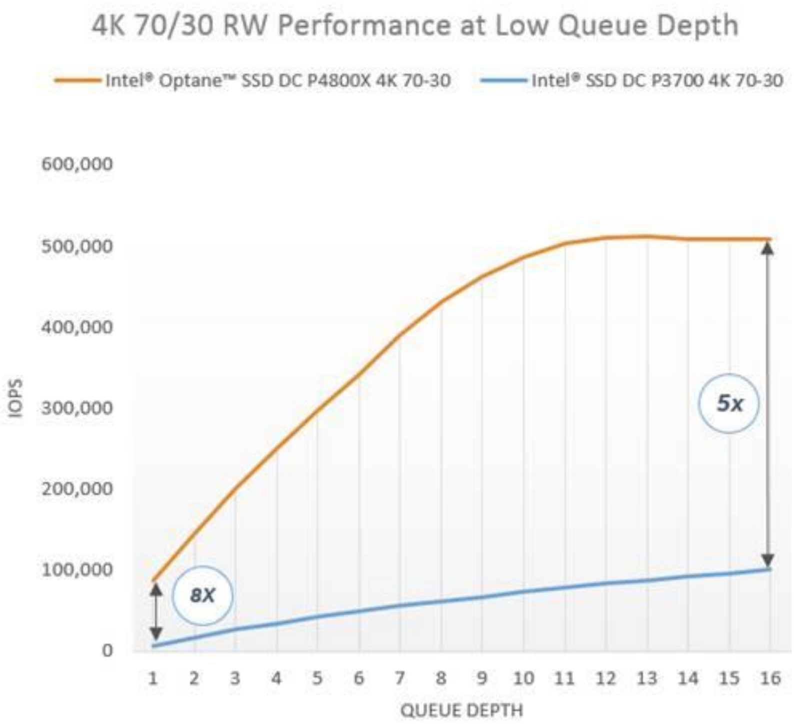
Ultra Endurance

Endurance

World's Most Responsive Data Center SSD[1]

1. Responsiveness defined as average read latency measured at queue depth 1 during 4k random write workload. Measured using FIO 2.15. Common configuration - Intel 2U Server System, OS CentOS 7.2, kernel 3.10.0-327.el7.x86_64, CPU 2 x Intel® Xeon® E5-2699 v4 @ 2.20GHz (22 cores), RAM 396GB DDR @ 2133MHz. Intel drives evaluated - Intel® Optane™ SSD DC P4800X 375GB and Intel® SSD DC P3700 1600GB. Samsung drives evaluated – Samsung* SSD PM1725a, Samsung* SSD PM1725, Samsung* PM963, Samsung* PM953. Micron drive evaluated – Micron* 9100 PCIe* NVMe* SSD. Toshiba drives evaluated – Toshiba* ZD6300. Test – QD1 Random Read 4K latency, QD1 Random RW 4K 70% Read latency, QD1 Random Write 4K latency using fio-2.15.

Breakthrough Performance



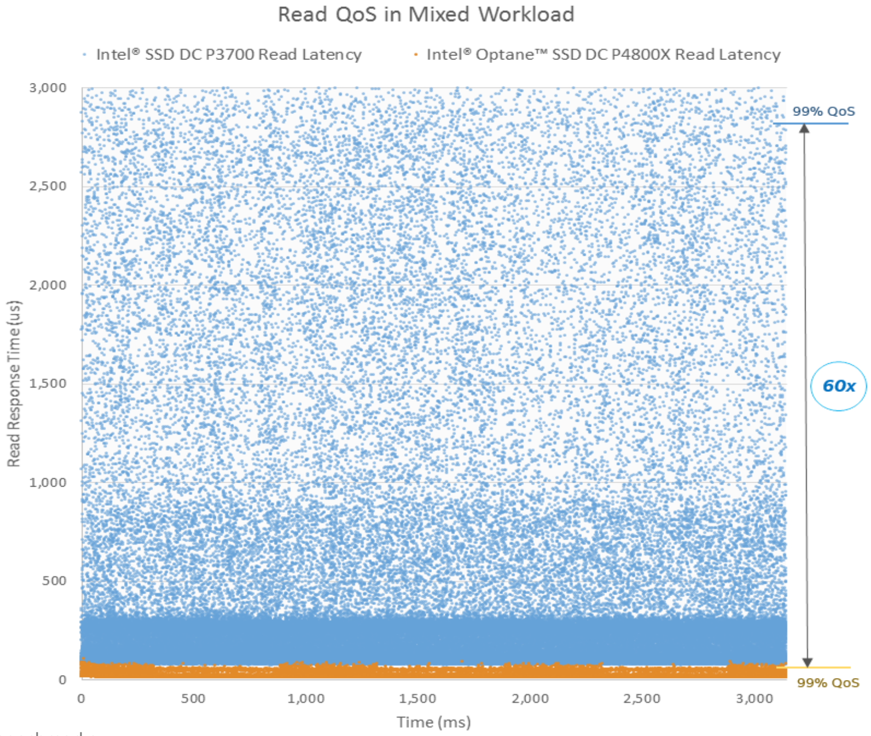
- **5-8x faster** at low Queue Depths[1]
- Vast majority of **applications generate low QD** storage workloads

Not STAC benchmarks

1. Common Configuration - Intel 2U Server System, OS CentOS 7.2, kernel 3.10.0-327.el7.x86_64, CPU 2 x Intel® Xeon® E5-2699 v4 @ 2.20GHz (22 cores), RAM 396GB DDR @ 2133MHz. Configuration – Intel® Optane™ SSD DC P4800X 375GB and Intel® SSD DC P3700 1600GB. Performance – measured under 4K 70-30 workload at QD1-16 using fio-2.15.

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance.

Predictably Fast Service



- up to **60x** better at 99% QoS[1]
- Ideal for critical applications with aggressive latency requirements

Not STAC benchmarks

1. Common Configuration – Intel 2U Server System, OS CentOS 7.2, kernel 3.10.0-327.el7.x86_64, CPU 2 x Intel® Xeon® E5-2699 v4 @ 2.20GHz (22 cores), RAM 396GB DDR @ 2133MHz. Configuration – Intel® Optane™ SSD DC P4800X 375GB and Intel® SSD DC P3700 1600GB. QoS – measures 99% QoS under 4K 70-30 workload at QD1 using fio-2.15.

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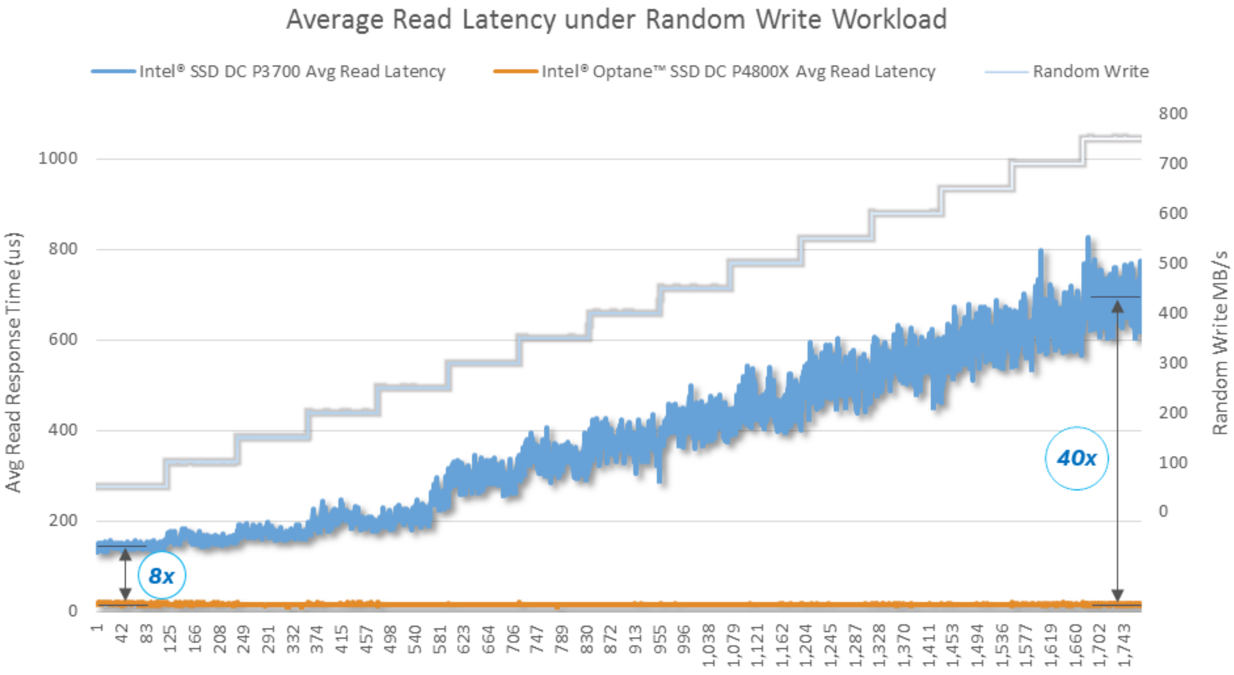
Responsive Under Load



- up to **40x faster response time** under workload[1]
- Consistently **amazing response time under load**

Not STAC benchmarks

1. Responsiveness defined as average read latency measured at queue depth 1 during 4k random write workload. Measured using FIO 2.15. Common Configuration - Intel 2U Server System, OS CentOS 7.2, kernel 3.10.0-327.el7.x86_64, CPU 2 x Intel® Xeon® E5-2699 v4 @ 2.20GHz (22 cores), RAM 396GB DDR @ 2133MHz. Configuration – Intel® Optane™ SSD DC P4800X 375GB and Intel® SSD DC P3700 1600GB. Latency – Average read latency measured at QD1 during 4K Random Write operations using fio-2.15.

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