

# NVMe SSDs

## Value

Compared to SATA SSDs, NVMe offers up to:

- 6x the performance
- Half the latency
- Double the CPU efficiency
- 4x TCO improvement over SATA SSDs
- \$0.004 - \$0.007 / IOP

## Features

- Reduced driver stack
- Direct CPU access via PCIe bus
- Broad driver support
- 2.5" and add-in-card form factors
- No more AHCI (Queue Depth limit of 32)

## Benefits

- Low latency
- High throughput
- Simple to deploy
- Bootable\*
- Flexible deployment options for new and legacy systems
- Supports 64k queues each with QD of 64k

## Summary

NVMe based SSDs offer best in class performance and unsurpassed value for customers looking for lower latency and improved performance. NVMe SSDs are easier to deploy than last generation PCIe SSDs, are bootable and are up to 6x faster than SATA SSDs.

## Top Use Cases

- Private Cloud – Affordable high performance caching enables SDI and hyper convergence
- Virtualization – Improves scalability and VM density lowering TCO
- Database – Consistent, low latency, high bandwidth performance accelerates queries
- Big Data – High performance and low latency provide near real time results for analytics
- HPC – Handles high bandwidth demands of HPC speeding overall workflow



**Intel DC P3500, DC P3600 & DC P3700 Product Families**



**NVMe-Enabled 1U & 2U Servers**