



## Cloud Solutions for Windows-Based Hyper-Converged Infrastructure

With the rise of the cloud paradigm for enterprise data center management, more and more businesses are looking for low-friction ways to transform their existing IT management and deployment infrastructures to align with those of big hyperscale providers. For businesses already heavily invested in Microsoft® Windows™-based technologies, one cloud-based option is a Microsoft Windows Server Software Defined (WSSD) solution. Recently, Hewlett Packard Enterprise® (HPE®) released their own all-flash, all-SATA validated [WSSD Premium solution](#) that, when coupled with high-performance memory and storage components like Micron® enterprise SATA SSDs and DRAM, can be a key enabler for your Windows-based hyper-converged infrastructure (HCI).

Bringing together Micron's storage expertise, HPE's server and networking expertise and Microsoft's leading HCI technology platform, this solution (and its detailed [reference architecture](#)) provides high-performance<sup>1</sup> and scalability to your private or hybrid cloud infrastructure strategy.

### Experience High IOPS and Low Latency + Improved Flexibility

This HCI reference architecture illustrates a simple, single-tiered, all-flash solution that uses Micron's enterprise SATA SSDs and advanced DRAM in HPE's ProLiant DL380 Gen10 server to support Hyper-V® virtual machines at scale. HPE's ProLiant DL380 Gen10 server delivers advanced security, performance and expandability and is setting a new standard for server infrastructure capability and flexibility. It also supports Intel's latest-generation CPU offerings.

The performance test results show that this WSSD solution using Micron's memory and storage can provide high input/output per second (IOPS) at low latencies across a wide range of application and workload I/O profiles. Small block random I/O performance of up to 1.5 million IOPS is possible for read-intensive virtualized solutions<sup>1</sup>.

## Solution Overview

The HPE all-flash, all-SATA Microsoft WSSD validated hyper-converged infrastructure solution with Micron's memory and storage provides an optimized HCI platform for better results and better value.

With direct engineer-to-engineer collaboration, this solution leverages domain expertise across software, flash storage, memory and platforms. Realize the benefits of an all-flash virtual SAN without breaking your budget.

### Server infrastructure:



HPE ProLiant DL380 Gen10 servers

Micron advanced DRAM

HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 adapter

### Operating system:



Windows Server 2016 Enterprise Edition

### Storage:



Micron 5200 enterprise SATA SSDs

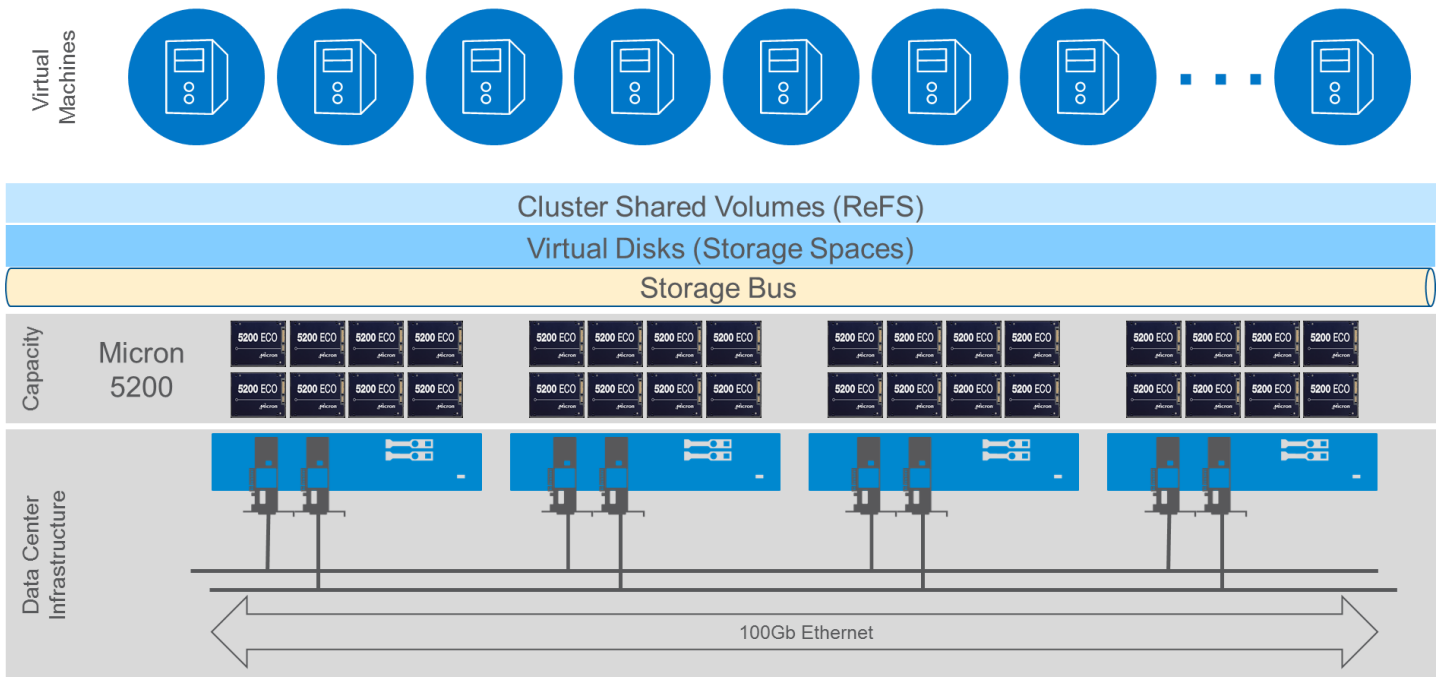
### Network:



HPE SN2700M StoreFabric M-series Ethernet switch (powered by Mellanox® Spectrum®)

<sup>1</sup> Performance is based on configuration documented in the Micron Hyper-Converged Infrastructure Using Microsoft Hyper-V and Storage Spaces Direct reference architecture referenced and linked in this solution brief. Your workload and solution configuration may result in different performance than that documented in this brief.

# Micron® 5200 Enterprise SATA SSDs Fuel HPE® Solution for Microsoft® Hyper-Converged Infrastructure



## Micron Storage Components Validated in HPE WSSD

Item	Description	HPE Part Number	Quantity
Memory	DDR4 8GB RDIMM DDR4 16GB RDIMM DDR4 32GB RDIMM DDR4 64GB LRDIMM DDR4 128GB LRDIMM	Module-dependent	2 to 12 per socket
OS boot drive (M.2)	Micron 5100 240GB PRO Micron 5100 480GB PRO Micron 5200 480GB ECO	871627-002 871627-003 871628-002	2
Capacity SSD (2.5-inch)	Read-intensive SATA SSDs: Micron 5200 960GB ECO Micron 5200 1920GB ECO Micron 5200 3840GB ECO Micron 5200 7680GB ECO	P03483-002 P03483-003 P03483-004 P03483-005	4 to 24
	Mixed-use SATA SSDs: Micron 5200 960GB MAX Micron 5200 1920GB MAX	P07444-002 P07444-003	

### Learn More

Visit [hpe.com/solutions/wssd](https://hpe.com/solutions/wssd) for all-flash SATA SSD solutions to start building with a validated HCI solution today.

Visit the [Micron Accelerated Solutions for Microsoft Hyper-V and Storage Spaces Direct](#) page to learn more.

Visit the [Micron Accelerated Solutions](#) page to learn about all of Micron's Accelerated Solutions.

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