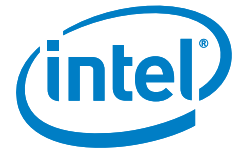


## SOLUTION BRIEF

DataON™ S2D-3000 Series  
Intel® Xeon® Processor E5-2699 v4  
Intel® SSD DC P3700 for PCIe\*  
Intel® SSD DC P3520/DC P3500  
Windows Storage Spaces Direct\* (S2D) Cluster Platform



# DataON and Intel Maximize IOPs Performance for Windows Server\* 2016 Storage Spaces Direct\*

**DataON Next-Generation All Flash-Based Hyper-Converged Storage Cluster Appliances Leverage Intel® Xeon® Processor E5 Family and NVMe-Based SSDs**



Enterprise IT organizations committed to a Windows\* Server environment for their private and hybrid cloud deployments will benefit from Microsoft's new Storage Spaces Direct\* (S2D\*) software defined storage (SDS) technology in Windows Server\* 2016. To optimize Windows Server 2016 and S2D performance, manageability, and scalability, DataON is introducing their S2D-3000 family of purpose-built hyper-converged storage cluster appliance (HCSA) for S2D deployments. Designed for Windows Server enterprise, private, hybrid and Azure\* public cloud workloads, the DataON™ S2D-3000 family is the ideal choice for IT for the following reasons:

"IT Brand Pulse believes DataON's new ClusterBlock Architecture solves key ease-of-use, scalability, and performance challenges in deploying Microsoft environments."

— Frank Berry,  
Senior Analyst and  
Founder of IT Brand Pulse

- **Optimized Deployment**—Automated out-of-box workflow accelerates time to deployment for storage clusters.
- **Expanded Management Services**—Management Utility Software provides greater insight into storage health, capacity inventory, and real-time performance monitoring.
- **Scale-Out and Scale-Up Infrastructure Appliances**—DataON's ClusterBlock Architecture provides easy expansion of incremental compute, network, and storage resources to easily accommodate new capacity.
- **Smart Data Protection Strategies**—The ClusterBlock Architecture is designed to protect data on premises, in the cloud on Azure\*, and operationally, by supporting TPM 2.0 and by providing fully redundant cluster appliances.
- **Windows 2016 Cloud-Ready**—Each S2D cluster appliance supports the latest Windows Server 2016, and Azure Stack features, such as Storage Replica, and expanded use of availability pools.

**Purpose-Built for the Modernized, Windows Server-Based Enterprise Data Center**

**DataON ClusterBlock Architecture**

DataON's ClusterBlock Architecture (CBA) focuses exclusively on providing optimized hyper-converged storage cluster appliances and management systems for deploying Microsoft Storage Spaces Direct on private clouds and Azure. The architecture has three main capabilities:

1. Scale Out—Provide the ability to support Windows Server 2016's cloud-inspired infrastructure and key features, such as S2D's scale-out file system (SoFS). As IT managers deploy each HCSA in the cluster, they

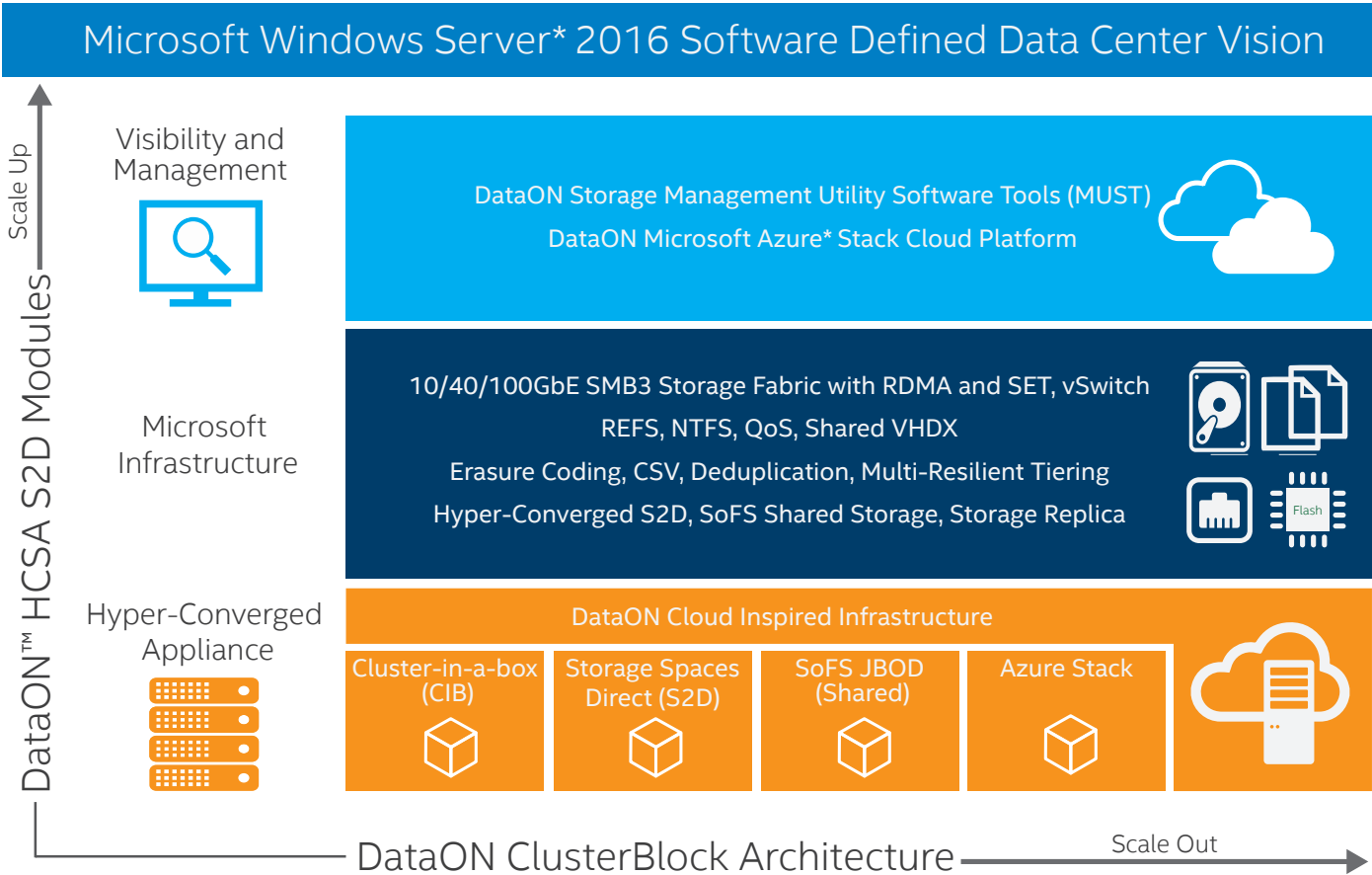
are adding incremental compute, networking, and storage resources that provide near-linear scalability.

2. Scale Up—Provide additional scaling resources to each appliance in the form of 12G SAS expansion JBODs (Just a Bunch of Flash/Disk).
3. Visibility and Management—Deliver advanced monitoring and management capabilities that expand on the services provided by Windows Server 2012 and 2016.

This three-pronged strategy ensures growth can be supported, costs can be managed, and performance can scale with minimal overhead.

**S2D-3110—Optimized for High I/O Performance**

The S2D-3110 is a high-performance platform designed to maximize input/output (I/O) transactions per second (IOPS). The S2D-3110 is ideal for demanding in-memory applications, such as virtualization using Hyper-V\*, Microsoft Hekaton\* for analytics, Microsoft SQL\*, large Exchange\* installations, and other I/O intensive applications. The appliance can easily be combined to expand scale out services on demand with direct linear performance growth.



### Visibility into Your Storage Capabilities and Operations

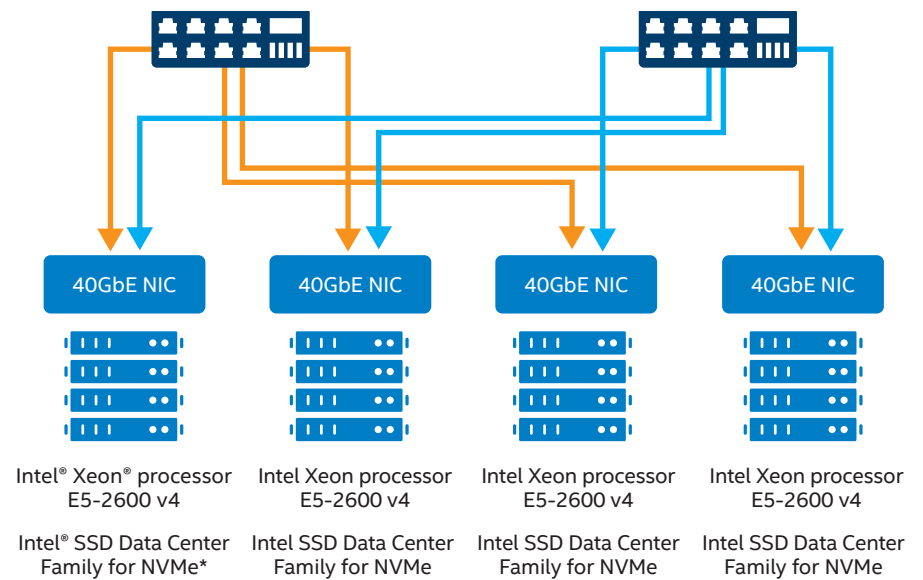
One of the unique capabilities of the ClusterBlock Architecture is DataON's management services. This cloud-based utility will enable you to monitor the health of each HCSA, determine the workload on each unit, and understand exactly how much storage performance you are using and when you need to add another HCSA to scale out capacity.

### Built On Intel® Technologies

#### Intel® Xeon® Processor E5-2600 v4 Family

The Intel Xeon processor E5-2600 v4 family extends the data center class storage features of previous generations. Manufactured using Intel's advanced 14nm processes, it adds updated features to items supported by Windows Server 2016, such as increased memory bandwidth, Intel® Resource Director Technology, Intel® QuickAssist Technology, and Intel® QuickData Technology. When combined with quality storage software, the Intel Xeon processor E5-2600 v4 family enables data centers to run more efficiently and use less power than previous generations.

S2D-3110 SPEC OVERVIEW	
Form Factor	1U 10-bay 2.5"
Appliance Node	1U Server Cluster
Processor	Intel® Xeon® processor E5-2600 v4
Drive Configuration	10 x Intel® SSD Data Center Family for NVMe*
Networking	40 Gb RDMA NIC
Memory Slot	20 x DDR4 DRIMM
Expansion Slot	2x PCIe* Gen.3 x8 per Node



## Intel® Solid State Drive Data Center Family

Intel® SSD Data Center family of drives and PCIe\* storage devices offer full end-to-end data protection, consistent performance with low latencies, high write endurance, and scalability for growing storage needs while helping enterprises and clouds to tackle today's bigger storage challenges. Intel PCIe-based SSDs offer incredible performance and enhanced capabilities, with advanced capacity and performance coming in future Intel® Optane™ SSDs based on 3D XPoint™ Technology.

## DataON—Hyper-Converged Storage Cluster Appliances for Windows Server 2016 and S2D

DataON is a leading provider of Microsoft-optimized storage cluster systems. In pioneering Microsoft clustered storage platforms, DataON delivers resilient, high-performance, and scalable solutions tailored for scale-out software-defined storage. For easy deployment, high performance, flexible scalability, and manageability, the DataON S2D-3000 family of hyper-converged storage cluster appliances will help IT optimize their investments in Windows Server cloud solutions.

To learn more, please visit [www.dataonstorage.com](http://www.dataonstorage.com) or call +1 (714) 441-8820

To learn more about Intel storage solutions, visit [www.intel.com/storage](http://www.intel.com/storage).

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