Datasheet

DataON S2D-5000 Server Nodes

Optimized for traditional IT and hybrid-cloud deployments with industry-leading technology innovations

Windows Server 2019 Certified

S2D-5000 Server Node Features

- **Part of Microsoft-validated solutions –** Get up and running quickly and reliably with Azure Stack HCI solutions that feature the same compute, storage, and networking capabilities as Azure Stack.
- **Verified for performance on Intel® architecture** – Intel® Select solutions provide benchmark-tested configurations to help businesses realize smooth deployments and optimal performance
- **Optimized power and performance at peak efficiency –** Run cooler, save on data center OPEX, and reduce eco-footprint
- **Breakthrough performance and dramatically reduced disk latency –** Intel® Optane™ SSDs deliver lightning fast performance with Intel® 3D NAND technology for superior cache tiering and demanding storage workloads

Delivering a complete hybrid cloud computing infrastructure for modern enterprises, the DataON S2D-5000 family of server nodes is a key foundational building block for Microsoft Azure Stack HCI solutions and business continuity platforms Designed for optimized compute, storage and network server architecture, DataON works closely with key partners to integrate industry-leading technology innovation into its S2D-5000 family of server nodes.

Built with 2nd Generation Intel® Xeon® processors, the DataON S2D-5000 family of server nodes deliver a choice of single or dual-CPU socket performance and flexibility in 1U, 2U and 4U form factors. Supporting up-to 1.5TB of DDR4 memory per server, high-bandwidth 25/50/100GB networking and flexible flash or HDD storage configuration, these innovative designs provide a superior and reliable server for traditional IT, intelligent edge appliances, data center, and hybrid-cloud software-defined applications.

Designed and validated through rigorous testing, DataON S2D-5000 server nodes are the basis for DataON solutions for Microsoft Azure Stack HCI. Azure Stack is an evolution of data center computing that blends Windows Server technologies with new Azure management service integration. These server ready-nodes feature the same Hyper-V based software-defined compute, storage, and networking as Azure Stack and share familiar testing and validation criteria.

DataON S2D-5000 server nodes are also the basis for Intel® Select Solutions for Microsoft Azure Stack HCI and SQL Server from DataON. Powered by 2nd generation Intel® Xeon® Scalable processors and Intel® Optane™ DC SSDs, Intel Select Solutions reduce the time required to evaluate, select, and purchase hardware for today's workloads and applications. These server ready-nodes are vigorously benchmark-tested with today's high-priority workloads, helping businesses realize smooth deployments and optimal performance.

These S2D-5000 server nodes deliver power and performance at peak efficiency, reduce heat and noise, and minimize eco-footprint. With built-in TPM 2.0 security, enterprise users get an extra layer of security, ensuring data stays safe. Integrated with DataON MUST monitoring and visibility software for Microsoft Azure Stack HCI solutions, DataON S2D-5000 server nodes also provides integrated Baseboard Management Controllers (BMC) with an embedded Web server so system administrators can gain location-independent remote access to server hardware.

Features

- Available in mini-tower and 1U, 2U and 4U rack mount sizes
- Single or dual-CPU sockets with 2nd Generation Intel® Xeon® Scalable processors with up to 24 cores
- Up to 24 DIMM slots and 1.5 TB of DDR4 memory per server or up to 6TB Intel® Optane™ DC persistent memory
- Up to 24x U.2 NVMe with 2.5" or 12x 3.5" SAS-3 and SATA-3
- Up to 7 PCIe slots for greater I/O flexibility and on-board M.2 boot-drives
- Integrated data protection with TPM 2.0 trusted attestation for security and business continuity
- Integrated Baseboard Management Controller (BMC) with embedded Web server
- 25/50/100GB High-bandwidth networking with RDMA capability
- Standard three-year DataON warranty

DataON S2D-5000 Server Node Specifications

Compute, storage, and memory (per node)

	DataON S2D-5108i	DataON S2D-5208i	DataON S2D-5212i	DataON S2D-5224i	DataON S2D-5230	DataON S2D-5468
Profile / Optimization	**All-NVMe** Slim & high performance	**All-NVMe / Hybrid** Performance & expansion	**Hybrid** IOPS & capacity	**All-NVMe** IOPS & performance	**Hybrid** High density	**Hybrid** Capacity & high density
Form Factor	1U / 1-Node rack; 8x 2.5"	2U / 1-Node rack; 8x 2.5"	2U / 1-Node rack; 12x 3.5"	2U / 1-Node rack; 24x 2.5"	2U / 1-Node rack; 30 bays	4U / 1-Node rack; 68 bays
Drive Config	8x NVMe U.2	8x NVMe U.2	2x NVMe U.2 + 10x SAS/SATA	24x NVMe U.2	6x 2.5" NVMe + 24x 3.5" SAS/SATA	60x 3.5" + 8x 2.5" SAS/SATA
Processor	2nd Generation Intel® Xeon® Scalable processor					
CPU Cores	Dual socket, 16 to 48 cores					
Memory / Slots	128GB to 1.5TB DDR4 2933MHz DIMMs / 24 slots				128GB to 1TB DDR4 2933MHz per node / 16 slots	
Boot Drive	Dual SATA M.2 480GB					
Cache Tier	Intel® Optane™ persistent memory or SSDs or Intel® Optane™ NVMe SSDs				NVMe U.2 SSDs	SAS SSDs
Capacity Tier	Intel® NVMe SSDs	SAS HDDs (in ext. JBOD)	SATA SSDs & SAS HDDs	Intel® NVMe SSDs	SAS HDDs	SAS HDDs
PCIe 3.0 Slots	2x PCIe 3.0 x16	7x PCIe 3.0 x8	7x PCIe 3.0 x8	7x PCIe 3.0 x8	2x PCIe 3.0 x16	6x PCIe 3.0 x8
Onboard Network Ports	2x 10GbE RJ45 & 2x 10GbE SFP+ mezzanine	2x 10GbE RJ45				2x 1GbE RJ45
Networking	1x 25GbE SFP28 or 40/100GbE QSFP28 RDMA	2x 25GbE SFP28 or 2x 40/100GbE QSFP28 2-port RDMA				
Max. TDP/Power	150W / Dual 1100W	165W / Dual 1300W	150W / Dual 1300W	165W / Dual 1300W	165W / Dual 2000W	165W / Dual 1600W

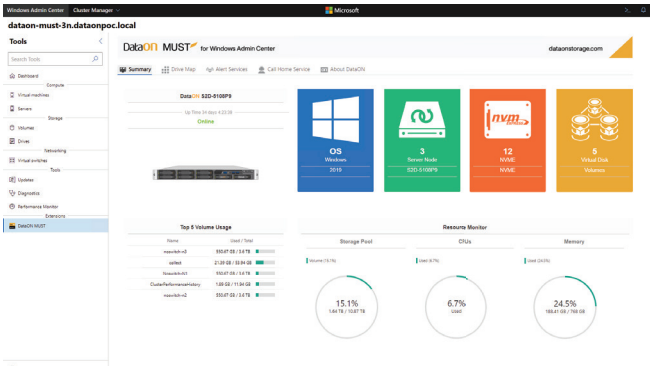
DataON MUST Features:

- **Dashboard level metrics** through a single pane of glass
- **System alerts & automated e-mail notifications** for hard-ware failures, configuration issues, and resource saturation
- **Mobile friendly user interface** allows you to monitor your Windows Storage deployments when you're out of the office
- **Available as an extension for Windows Admin Center,** adding historical data reporting, disk mapping, system alerts, and call home support

Simplified Management with Windows Admin Center and DataON MUST

DataON solutions include DataON's exclusive MUST visibility and management tool that provides SAN-like storage monitoring features for customers deploying Azure Stack HCI. MUST can be used as a standalone console or as an extension within Windows Admin Center for centralized management from a single console. MUST adds to the Windows Admin Center experience, adding historical data reporting, disk mapping, system alerts, alert services, call home support, and a simplified deployment tool.

Managing a hybrid cloud infrastructure has never been easier. In addition to enabling you to centrally manage your on-premises HCI, Windows Admin Center also enables you to take advantage of Microsoft Azure cloud management and security services, including offsite backup, site recovery, and cloud-based monitoring through DataON MUST monitoring agents.



About DataON

DataON is a hybrid-cloud computing company focused on delivering Microsoft Azure Stack HCI, on-premise storage system, intelligent edge appliances, and cloud-based Microsoft Azure Services. Our company is helping enterprises and customers who have made the "Microsoft choice" to modernize their IT with Microsoft applications, virtualizations, and data protection through a complete and turnkey experience. With over 650 HCI clusters and 150PB of storage deployed, DataON enterprise-level solutions are designed to provide the highest level of performance, manageability, and security offered. DataON is a Microsoft Gold Partner, Microsoft Cloud Service Provider (CSP), and an Intel Platinum Partner.

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