



Dell Integrated System for Microsoft Azure Stack HCI

Dell - Microsoft certified and validated HCI Solution with end-to-end support

Dell Integrated System for Microsoft Azure Stack HCI delivers a fully productized, validated and supported hyperconverged (HCI) solution that enables organizations to modernize their infrastructure for improved application uptime and performance, simplified management and operations, and lower total cost of ownership. Azure Stack HCI combines the software-defined compute, storage and networking features of Microsoft Azure Stack HCI OS with AX nodes from Dell to offer the high performance, scalable and secure foundation needed for a software-defined infrastructure. Comprehensive management through Dell OpenManage Integration with Windows Admin Center, rapid time to value with Dell ProDeploy options, and solution-level Dell ProSupport complete this modern portfolio.

Azure Stack HCI OS subscription available through Dell Cloud Solution Provider (CSP) program

New and existing customers can purchase their Azure subscription from Dell (or transfer to Dell) to activate their Azure Stack HCI OS. Additional Azure services will be supported in the future.

Key Features of Azure Stack HCI:

- AX nodes from Dell offer:
 - Flexible configurations for varying application performance, capacity or location needs
 - Cluster scalability from 2 to 16 nodes
 - Single-node clusters for remote, edge or branch projects, very sensitive to costs and that may tolerate the resiliency of a single server
 - Pre-configured and optimized features such as caching and storage tiering
 - Hardware innovations such as RDMA networking and high-performance SSD and NVMe drives
- Azure Stack HCI OS delivers new improved feature set including data deduplication, increased scalability, mirror accelerated parity and cluster sets.
- Dell OpenManage Integration with Microsoft Windows Admin Center (OMIMSWAC) simplifies management, configuration and monitoring.
- Dell Networking 10/25/100GbE switches are fully qualified to enable a complete hyperconverged infrastructure solution.
- Dell ProDeploy and Dell ProSupport services deliver professional onsite deployment and one contact technical support.

“Dell did the work to build their nodes to have the maximum amount of power and storage in a 2U device that conforms and is on catalog for Storage Spaces Direct. It was really an easy design to put forward and to consolidate our existing Hyper-V virtual machines on to.”

Lee Harrison
Microsoft Solutions Architect, Fasthosts

Detailed specifications for the distinct platforms are shown in the tables below:

AX-750				
Storage Configuration	All Flash (All-SSD)	All Flash (All-NVMe)	Hybrid (SSD + HDD)	Hybrid (NVMe + HDD)
Chassis Configurations	24 x 2.5" front bay drives	24 x 2.5" front bay drives (switched)	12 x 3.5" drives	16 drives: 12 x 3.5" HDDs + 4 x 2.5" NVMe (rear)
Processors	Dual socket Intel Xeon Scalable, Ice Lake EP Processors (Silver/Gold/Platinum options)			
Memory	128 GB to 4 TB DDR4			
Storage controller	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)	None	Internal HBA 355i (FH) 12Gbps SAS HBA Controller (NON-RAID)	Internal HBA 355i (LP) 12Gbps SAS HBA Controller (NON-RAID)
Internal Boot Storage	BOSS S2 with Dual M.2 240 GB or 480 GB (RAID 1)			
Storage for Cache Min/Max			Min: 2 x 800 GB = 1.6 TB (SAS MU) Max: 4 x 3.84TB = 15.36 TB (SAS/vSAS MU)	Min: 2 x 1.6TB = 3.2 TB Max: 4 x 6.4TB = 25.6 TB (NVMe MU)
RI = read intensive	-	-		
WI = write intensive				
MU = mixed use				
Storage for Capacity Min/Max	Min: 4 x 800GB = 3.2 TB Max: 24 x 7.68TB = 184.3 TB	Min: 4 x 1.6 TB = 6.4 TB Max: 24 x 15.36 = 368 TB	Min: 4 x 2 TB = 8 TB Max: 8 x 20 TB = 160 TB	Min: 4 x 2 TB = 8 TB Max: 12 x 20 TB = 240 TB
RI = read intensive	- Options for SAS/vSAS			
WI = write intensive	- Both MU and RI devices (RI at >1.92 TB capacities)	- Both MU and RI NVMe devices (RI at >1.92 TB capacities)	- 4 or 8 x 2/4/8/12/16/20 TB SAS/NLSAS 3.5" HDD	- Up to 12 x 2/4/8/12/16/20 TB SAS/NLSAS 3.5" HDD
MU = mixed use	- WI capacity at 800 GB			
Min/Max Raw Storage	3.2 to 184.3 TB	6.4 to 368 TB	8 to 160 TB	8 to 240 TB
Network cards	<ul style="list-style-type: none"> - Integrated LOM: 2 x 1 GbE Base-T Broadcom - Add-in-Card (required): 1-4 <ul style="list-style-type: none"> - Mellanox: Mellanox Connect-X5 Dual Port 10/25 GbE, Mellanox Connect-X6 DX Dual Port 40/100 GbE (RoCE) - OCP NIC 3.0 Card (optional) <ul style="list-style-type: none"> - Intel: X710 Dual Port 10GbE SFP+, X710 Quad Port 10GbE SFP+, X710-T4L Quad Port 10GbE BASE-T, X710-T2L Dual Port 10GbE BASE-T - Broadcom: 57414 Dual Port 10/25GbE SFP28, 57504 Quad Port 10/25GbE SFP28, 57416 Dual Port 10GbE BASE-T, 57412 Dual Port 10GbE SFP+ 			
GPU	GPU capable: up to 2 x DW GPU or 2 x SW GPU <ul style="list-style-type: none"> - NVIDIA Ampere A30 DW, PCIe, 165W, 24GB Passive, Double Wide (FL Riser Config) - NVIDIA Ampere A2 SW, PCIe, 60W, 16GB Passive, Single Wide (HL Riser Config) 		Not supported	Not supported
HCI Software	Microsoft Azure Stack HCI, version 21H2 (factory preinstalled) Microsoft Windows Admin Center (WAC)			
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant Quick Sync2 (Optional)			
Integrations	Dell OpenManage Integration with Windows Admin Center			
Services	ProSupport and ProSupport Plus, ProDeploy, ProDeploy Plus with add-on for Azure Stack HCI Call-routing, phone home, and automated case creation supported with Secure Connect Gateway 5.0 Consulting Services for Azure Stack HCI iDRAC Service Module (iSM)			
Security	Trusted Platform Module 2.0 v3			
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100/1400/2400 W			
Form Factor	2U Rack			

AX-650

Storage Configuration	All Flash (All-SSD)	All Flash (All-NVMe)	Hybrid (SSD + HDD)
Chassis Configurations	10 x 2.5" SAS Chassis Up to 10 SSD front drives (SAS/vSAS)	10 x 2.5" NVMe Chassis Up to 10 NVMe front drives	10 x 2.5" SAS Chassis Up to 10 SAS front drives
Processors	Dual socket Intel Xeon Scalable, Ice Lake EP Processors (Silver/Gold/Platinum options)		
Memory	128 GB to 4 TB DDR4		
Storage controller	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)	None	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)
Internal Boot Storage	BOSS S2 with Dual M.2 240 GB or 480 GB (RAID 1)		
Storage for Cache Min/Max RI = read intensive WI = write intensive MU = mixed use			Minimum: 1.6 TB 2 x 800 GB MU SAS Maximum: 7.68 TB 2 x 3.84TB MU SAS/vSAS
Storage for Capacity Min/max RI = read intensive WI = write intensive MU = mixed use	Minimum: 4 x 800GB = 3.2 TB Maximum: 10 x 7.68TB = 76.8 TB - Options for SAS/vSAS devices - Both MU and RI devices (RI >1.92 TB)	Minimum: 4 x 1.6TB = 6.4 TB Maximum: 10 x 15.36TB = 153.6 TB - Both MU and RI devices (RI >1.92 TB)	Minimum: 4 x 2.4 TB = 9.6 TB Maximum: 8 x 2.4 TB = 19.2 TB - 4/6/8 x 2.4 TB SAS 10K 2.5" HDDs
Min/Max Raw Storage	3.2 to 76.8 TB	6.4 to 153.6 TB	9.6 to 19.2 TB
Network cards	<ul style="list-style-type: none"> - Integrated LOM: <ul style="list-style-type: none"> 2 x 1 GbE Base-T Broadcom - Add-in-Card (required): 1-3 <ul style="list-style-type: none"> - Mellanox: Mellanox Connect-X5 Dual Port 10/25 GbE, Mellanox Connect-X6 DX Dual Port 40/100 GbE (RoCE) - OCP NIC 3.0 Card (optional) <ul style="list-style-type: none"> - Intel: X710 Dual Port 10GbE SFP+, X710 Quad Port 10GbE SFP+, X710-T4L Quad Port 10GbE BASE-T, X710-T2L Dual Port 10GbE BASE-T - Broadcom: 57414 Dual Port 10/25GbE SFP28, 57504 Quad Port 10/25GbE SFP28, 57416 Dual Port 10GbE BASE-T, 57412 Dual Port 10GbE SFP+ 		
GPU	GPU capable: up to 2 x SW GPU - NVIDIA Ampere A2 SW, PCIe, 60W, 16GB Passive, Single Wide (HL Riser Config)		
HCI Software	Microsoft Azure Stack HCI, version 21H2 (factory preinstalled) Microsoft Windows Admin Center (WAC)		
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant Quick Sync2 (Optional)		
Integrations	Dell OpenManage Integration with Windows Admin Center		
Services	ProSupport and ProSupport Plus, ProDeploy, ProDeploy Plus with add-on for Azure Stack HCI Call-routing, phone home, and automated case creation supported with Secure Connect Gateway 5.0 Consulting Services for Azure Stack HCI iDRAC Service Module (iSM)		
Security	Trusted Platform Module 2.0 v3		
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100/1400 W		
Form Factor	1U Rack		

AX-7525

Storage Configuration	All Flash (All-NVMe)	All Flash (NVMe + SSD)
Chassis Configurations	24 x 2.5" front bay drives 16 x 2.5" front bay drives	24 x 2.5" front bay drives
Processors	Dual socket, 2nd/3rd Gen AMD EPYC (Rome/Milan) Processor	
Memory	128 GB to 2 TB	
Storage controller	-	Internal HBA 355i
Internal Boot Storage	BOSS with dual M.2 240GB or 480GB (RAID 1)	BOSS S2 with Dual M.2 240 or 480 GB (RAID 1)
Storage for Cache RI = read intensive WI = write intensive MU = mixed use	-	2, 3, 4 or 8 x PCIe Gen 4 NVMe drives 1.6/3.2/6.4 TB (MU)
Storage for Capacity	4 – 24 x PCIe Gen 4 NVMe drives: 1.6/3.2/6.4 TB (MU) 3.84/7.68/15.36 TB (RI)	4 – 16 x SAS/vSAS/SATA SSDs: 960/1.92/3.84/7.68 TB SAS/vSAS/SATA (RI) 800/1600/3200 SAS (MU) 960/1.92/3.84 TB vSAS/SATA (MU)
Min/Max Raw Storage	6.4 to 368.64 TB	3.2 to 122.88 TB
Network cards	<ul style="list-style-type: none"> - Integrated LOM: <ul style="list-style-type: none"> On-Board Broadcom 5720 Dual Port 1Gb LOM - Add-in-Card (required): 1-4 <ul style="list-style-type: none"> Mellanox: Mellanox Connect-X5 Dual Port 10/25 GbE, Mellanox Connect-X6 DX Dual Port 40/100 GbE (RoCE) - OCP NIC 3.0 Card (optional) <ul style="list-style-type: none"> Intel: X710 Dual Port 10GbE SFP+, X710 Quad Port 10GbE SFP+ Broadcom: 57414 Dual Port 10/25GbE SFP28, 57416 Dual Port 10GbE BASE-T 	
GPU	GPU capable: up to 3 x DW GPU or 3 x SW GPU (No GPU support for All-NVMe 24 drive configurations) <ul style="list-style-type: none"> - NVIDIA Ampere A30 DW, PCIe, 165W, 24GB Passive, Double Wide (FL Riser Config) - NVIDIA Ampere A2 SW, PCIe, 60W, 16GB Passive, Single Wide (HL Riser Config) 	
HCI Software	Microsoft Azure Stack HCI, version 21H2 (factory preinstalled) Microsoft Windows Admin Center (WAC)	
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant Quick Sync2 (Optional)	
Integrations	Dell OpenManage Integration with Windows Admin Center	
Services	ProSupport and ProSupport Plus, ProDeploy, ProDeploy Plus with add-on for Azure Stack HCI Call-routing, phone home, and automated case creation supported with Secure Connect Gateway 5.0 Consulting Services for Azure Stack HCI iDRAC Service Module (iSM)	
Security	Trusted Platform Module 2.0 v3	
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100 W Dual, Hot-plug, Redundant Power Supply (1+1), 1400 W Dual, Hot-plug, Redundant Power Supply (1+1), 2400 W	
Form Factor	2U Rack	

AX-6515

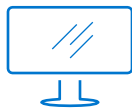
Storage Configuration	All Flash (All-SSD)
Chassis Configurations	8 x 2.5" front bay drives
Processors	Single socket, 2nd/3rd Gen AMD EPYC (Rome/Milan) Processor
Memory	64 GB to 1 TB
Storage controller	Internal HBA330 12Gbps SAS HBA Controller (NON-RAID)
Internal Boot Storage	BOSS with dual M.2 240GB or 480GB (RAID 1)
Storage for Cache WI = write intensive MU = mixed use	-
Storage for Capacity	4 to 8 x up to 7.68 TB SAS/ vSAS/ SATA SSDs
Min/Max Raw Storage	3.2 to 61.44 TB
Network cards	<ul style="list-style-type: none">- Integrated LOM:<ul style="list-style-type: none">On-Board Broadcom 5720 Dual Port 1Gb LOM- Add-in-Card (required): 1<ul style="list-style-type: none">- Mellanox: Mellanox Connect-X5 Dual Port 10/25 GbE, Mellanox Connect-X6 DX Dual Port 40/100 GbE (RoCE)- Qlogic/Marvell QL41262DP 10/25 GbE (iWARP)- Mezz:<ul style="list-style-type: none">- Broadcom: 57414 Dual Port 10/25GbE SFP28, 57416 Dual Port 10 GbE SFP+/Base-T
HCI Software	Microsoft Azure Stack HCI, version 21H2 (factory preinstalled) Microsoft Windows Admin Center (WAC)
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant Quick Sync2 (Optional)
Integrations	Dell OpenManage Integration with Windows Admin Center
Services	ProSupport and ProSupport Plus, ProDeploy, ProDeploy Plus with add-on for Azure Stack HCI Call-routing, phone home, and automated case creation supported with Secure Connect Gateway 5.0 Consulting Services for Azure Stack HCI iDRAC Service Module (iSM)
Security	Trusted Platform Module 2.0
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 550W Dual, Hot-plug, Redundant Power Supply (1+1), 750W
Form Factor	1U Rack

AX-740xd

Storage Configuration	Hybrid (SSD + HDD)		Hybrid (NVMe + HDD)	All flash (NVMe + SSD)	All flash (All-NVMe)	All flash (All-SSD)	
Chassis Configurations	18 x 3.5" drives 12 x 3.5" front bay 4 x 3.5" mid bay 2 x 3.5" rear bay		12 x 3.5" front bay drives	24 x 2.5" front bay drives	24 x 2.5" front bay drives	24 x 2.5" front bay drives with up to 12 x NVMe drives	24 x 2.5" front bay drives
Processors	Dual Intel Xeon Scalable Processors, Cascade Lake/Skylake (CL/CL-R), Select Silver/Gold/Platinum options						
Memory	96 GB to 1.5 TB						
Storage controller	Internal HBA330 12Gbps SAS HBA Controller (NON-RAID)						
Internal Boot Storage	BOSS with dual M.2 240GB or 480GB (RAID 1)						
Storage for Cache <small>WI = write intensive MU = mixed use</small>	Up to 6 x 800 GB to 3.84 TB SAS (WI/MU) / SATA (MU) SSDs	2 or 4 x 800 GB to 3.84 TB SAS (WI/MU) / SATA (MU) SSDs	2 to 4 x 1600 GB to 6400 GB PCIe NVMe (MU) SSDs	2 to 4 x 1600 GB to 6400 GB PCIe NVMe (MU) SSDs	-	-	
Storage for Capacity	Up to 12 x 2/4/8/12/16 TB NL-SAS/ SATA HDDs	4 or 8 x 2/4/8/12/16 TB NL-SAS/ SATA HDDs	4 to 20 x 2 TB SATA or 2.4 TB SAS 10K HDDs	4 to 20 x 960 GB to 7.68 TB SAS/vSAS/SATA (MU) SSDs	4 - 12 x 1.6 to 15.35 TB NVMe	4 to 24 x 800 GB to 3.84 TB SAS or 960 GB to 3.84 TB SATA or 3.84 TB to 7.68 TB vSAS SSDs (WI or MU highly recommended)	
Min/Max Raw Storage	24 to 192 TB	8 to 128 TB	8 to 48 TB	3.84 to 153.6 TB	6.4 to 184.32 TB	3.2 to 184.32 TB	
Network cards	Add-in-cards *QLogic QL41262 (Dual Port 25GbE) *[4x on selected models] or Mellanox ConnectX-4 LX (Dual Port 25GbE) or *Mellanox ConnectX5 (Dual Port 100GbE) *[On selected models] Network daughtercard (NDC) Dual Port Intel X710 (10 GbE) + Dual Port Intel i350 (1 GbE) or Dual Port Broadcom 57412 (10 GbE) + Dual Port Broadcom 5720 (1 GbE) or QLogic FastLinQ 41162 Dual Port 10GbE BASE-T & Dual Port 1GbE BASE-T						
HCI Software	Microsoft Azure Stack HCI, version 21H2 (factory preinstalled) Microsoft Windows Admin Center (WAC)						
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant Quick Sync2 (Optional)						
Integrations	Dell OpenManage Integration with Windows Admin Center						
Services	ProSupport and ProSupport Plus, ProDeploy, ProDeploy Plus with add-on for Azure Stack HCI Call-routing, phone home, and automated case creation supported with Secure Connect Gateway 5.0 Consulting Services for Azure Stack HCI iDRAC Service Module (iSM)						
Security	Trusted Platform Module 2.0						
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100W or 1100W - 48VDC only Dual, Hot-plug, Redundant Power Supply (1+1), 1600W Dual, Hot-plug, Redundant Power Supply (1+1), 2000W Dual, Hot-plug, Redundant Power Supply (1+1), 2400W						
Form Factor	2U Rack						

AX-640

Storage Configuration	Hybrid (SSD + HDD)	Hybrid (NVMe + HDD)	All flash (NVMe + SSD)	All flash (All-NVMe)	All flash (All-SSD)
Chassis Configurations	10 or 12 x 2.5" bay drives (10 x front, 2 x rear)		10 x 2.5" front bay drives		10 or 12 x 2.5" bay drives (10 x front, 2 x rear)
Processors	Dual socket Intel Xeon Scalable Processors, Cascade Lake (CL/CL-R), Select Silver/Gold/Platinum options				
Memory	96 GB to 1.5 TB				
Storage controller	Internal HBA330 12Gbps SAS HBA Controller (NON-RAID)				
Internal Boot Storage	BOSS with dual M.2 240GB or 480GB (RAID 1)				
Storage for Cache WI = write intensive MU = mixed use	10 drives: 2 x 800 GB (WI) SAS or 960 GB to 3.84 TB (MU) SAS/SATA SSDs 12 Drives: 2/3/4 x 800 GB to 3.84 TB SAS (WI/MU)/SATA (MU) SSDs	2 x 1.6/3.2/6.4 TB (MU) NVMe SSDs	2 x 1.6/3.2/6.4 TB (MU) NVMe SSDs	-	-
Storage for Capacity RI = read intensive WI = write intensive MU = mixed use	10 drives: 4/6/8 x 2 TB SATA or 2.4 TB SAS 10K HDDs 12 drives: 4/8/9 x 2 TB SATA or 2.4 TB SAS 10K HDD	4/6/8 x 2 TB SATA or 2.4 TB SAS 10K HDD	4/6/8 x 800GB to 7.68 TB SAS/vSAS/SATA SSD)	4/6/8/10 x 4 TB (RI) or 1.6/3.2/6.4 TB (MU) NVMe	10 drives: 4 to 10 x 800GB to 3.84TB SAS/SATA SSDs or 7.68TB vSAS 12 drives: 4 to 12 x 800GB to 3.84TB SAS/SATA SSDs or 7.68TB vSAS
Min/Max Raw Storage	8 to 19.2 TB	8 to 19.2 TB	3.2 to 61.4 TB	6.4 to 64 TB	3.2 to 92.16 TB
Network cards	Add-in-cards *Qlogic QL41262 (Dual Port 25 GbE) *[2 on select models] or Mellanox ConnectX-4 LX (Dual Port 25GbE) or *Mellanox Connect X5 (Dual Port 100GbE) *[On selected models] Network daughter card (NDC) Dual Port Intel X710 (10 GbE) + Dual Port Intel i350 (1 GbE) or Dual Port Broadcom 57412 (10 GbE) + Dual Port Broadcom 5720 (1 GbE) or QLogic FastLinQ 41162 Dual Port 10GbE BASE-T & Dual Port 1GbE BASE-T				
HCI Software	Microsoft Azure Stack HCI, version 21H2 (factory preinstalled) Windows Admin Center (WAC)				
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant Quick Sync2 (Optional)				
Integrations	Dell OpenManage Integration with Windows Admin Center				
Services	ProSupport and ProSupport Plus, ProDeploy, ProDeploy Plus with add-on for Azure Stack HCI Call-routing, phone home, and automated case creation supported with Secure Connect Gateway 5.0 Consulting Services for Azure Stack HCI iDRAC Service Module (iSM)				
Security	Trusted Platform Module 2.0				
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100W or 1100W - 48VDC only Dual, Hot-plug, Redundant Power Supply (1+1), 1600W				
Form Factor	1U Rack				



[Learn more](#) about Dell Integrated
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HCI



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