

Data sheet for Azure Stack HCI Rack-Series

Dual-AMD Family v4

- Certified hardware for the use of Azure Stack HCI with the software defined storage technology Storage Spaces Direct (S2D)
- Certified for Windows Server 2022 & Azure Stack HCI 23H2
- High available Azure Stack HCI Clusters between 1 and 16 Nodes
- Optional preinstallation of Windows Server or Azure Stack HCI
- Optional configuration of Azure Stack HCI (S2D) with Best-Practices
- TPM 2.0 Module for Security-Features (e.g. Secured-core Server)
- U.2 PCIe 5.0 NVMe technology
- PCIe 5.0 standard



The Dual-AMD Family v4 contains the following solutions:

AzSHCI Series RA2224 v4



AzSHCI Series RA2212 v4



AzSHCI Series RA2224 v4**AzSHCI Series RA2212 v4****Barebone**

Units	2U	2U
Size (LxBxH) in cm	77,0 x 43,8 x 8,7	
Rails	63 - 92 cm	
Operatingtemperature	5 °C - ~25 °C	

Mainboard

Mainboard	Thomas-Krenn.AG - TKEP-DP-A4	
CPU	2x AMD EPYC 9004 4th Generation (Genoa) configurable between 32 – 256 Cores	
RAM	24x DDR5 4800MHz configurable between 128GB – 3TB	
TPM	TPM 2.0 Modul with Secured-Core Server capability	
BMC/IPMI	AMI MegaRAC	

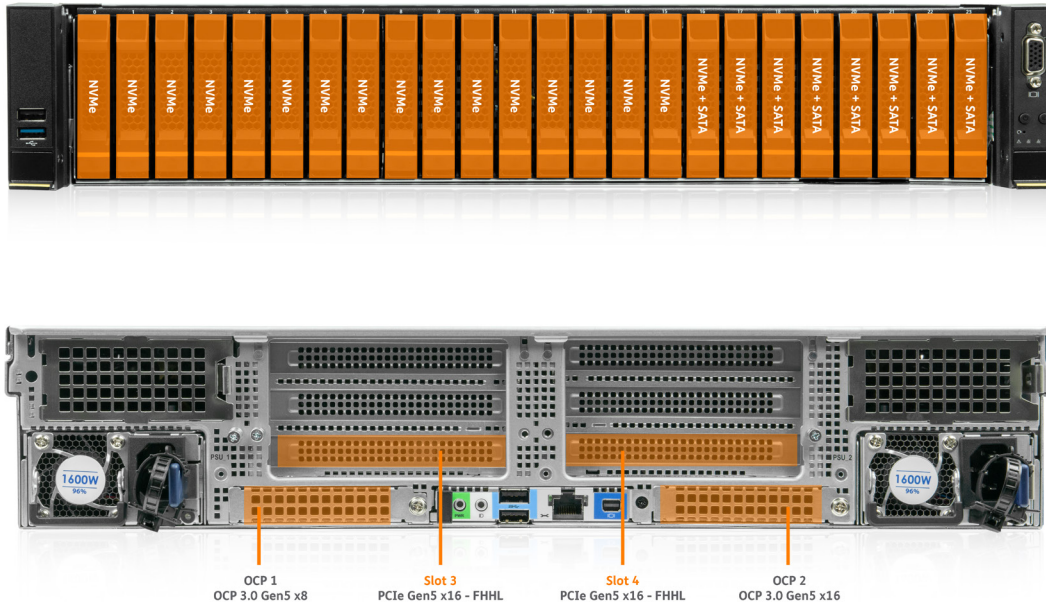
Drives

OS Disk	M.2 Drives (240GB or 480GB) – optional configured in a RAID1	
U.2 NVMe Disk Slots	12x	12x
2,5" SATA Disk Slots	8x	8x
3,5" SATA Disk Slots	-	

PCIe

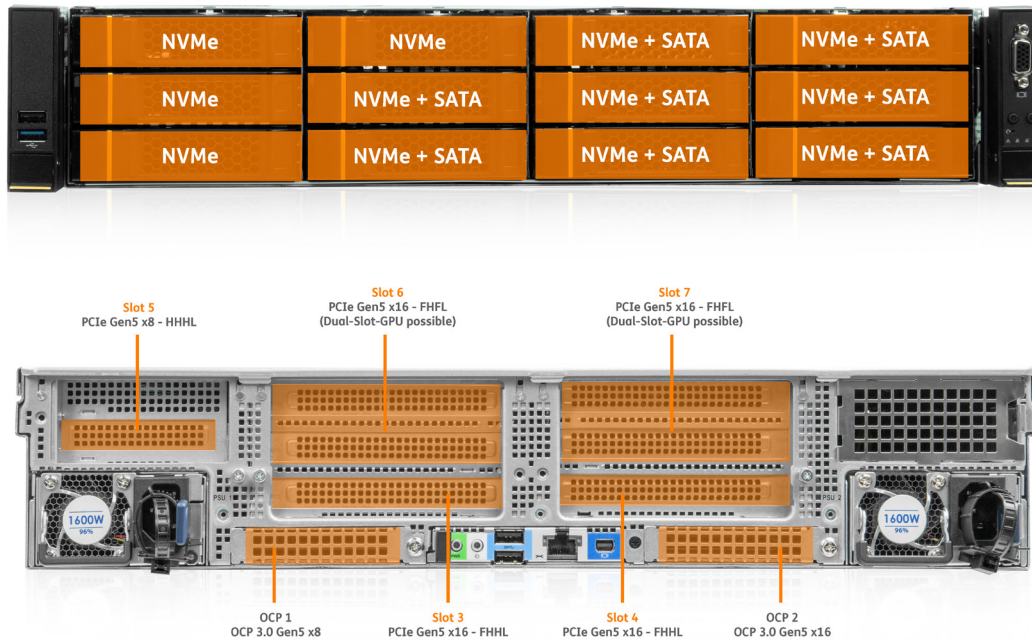
M.2 RAID-Controller	PCIe 5.0 x8	
MGMT NIC	OCP 3.0 Slot – PCIe 5.0 x8	
VMNet NIC	OCP 3.0 Slot – PCIe 5.0 x16	
Storage RDMA NIC	PCIe 5.0 x16	
unused PCIe Slots	-	1x PCIe 5.0 x16 Single-Slot & 2x PCIe 5.0 x16 Dual-Slot

AzSHCI Series RA2224 v4



Slot	PCIe-Lanes	Type	Device
1	x8	OCP 3.0	Management-Network NIC
2	x16	OCP 3.0	VM-Network NIC
3	x16	FHHL Single-Slot	Storage-Network RDMA NIC
4	x16	FHHL Single-Slot	M.2 RAID-Card

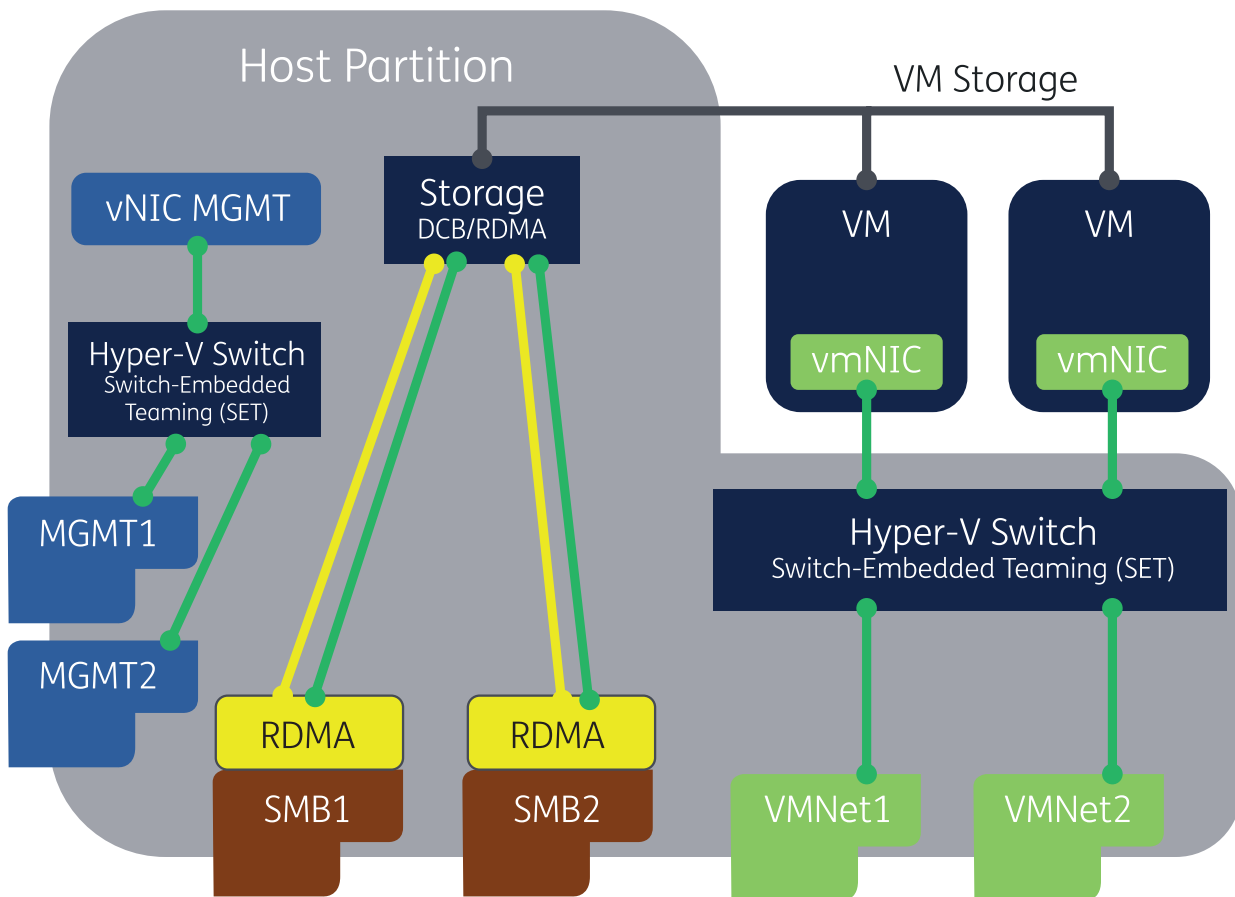
AzSHCI Series RA2212 v4



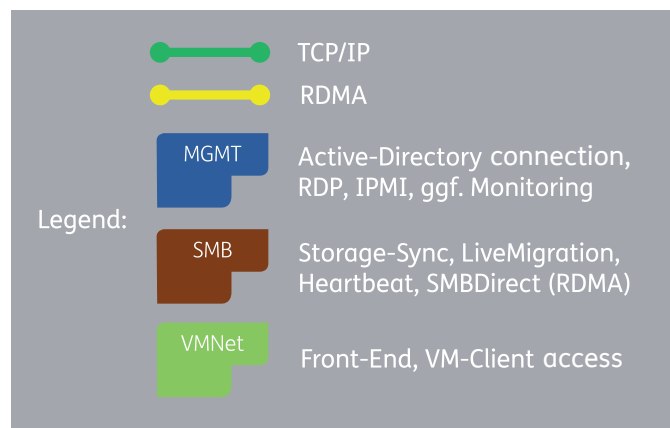
Slot	PCIe-Lanes	Type	Device
1	x8	OCP 3.0	Management-Network NIC
2	x16	OCP 3.0	VM-Network NIC
3	x16	FHHL Single-Slot	Storage-Network RDMA NIC
4	x16	FHHL Single-Slot	Usable for additional NIC or GPU
5	x16	FHFL Dual-Slot	Usable for additional NIC or GPU
6	x16	FHFL Dual-Slot	Usable for additional NIC or GPU
7	x8	HHHL Single-Slot	M.2 RAID-Card

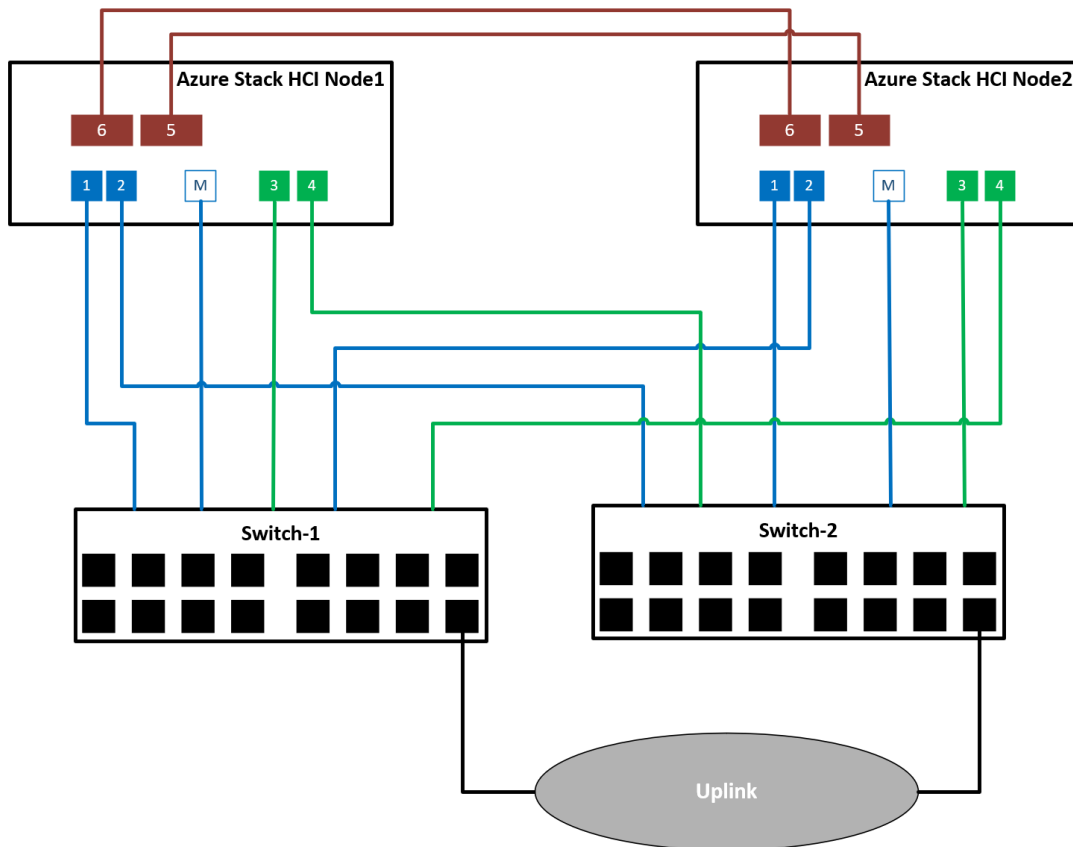
Network recommendation

Thomas-Krenn.AG recommends the following Network setup



Default setup of the networking components in the Azure Stack HCI rack solution.





Example cabling plan of a 2-Node Azure Stack HCI cluster with redundant management switches and direct-attached connection between the storage NICs.

Selectable networking components

connection	count	speed	connector
MGMT			
OCP 3.0 - PCIe 3.0 x8	2	10 GbE	RJ45
OCP 3.0 - PCIe 3.0 x8	2	10/25 GbE	SFP28
VMNet			
OCP 3.0 - PCIe 3.0 x8	2	10 GbE	RJ45
OCP 3.0 - PCIe 3.0 x8	2	10/25 GbE	SFP28
OCP 3.0 - PCIe 4.0 x16	4	10/25 GbE	SFP28
SMB (RDMA – RoCEv2)			
PCIe 4.0 x8	2	25 GbE	SFP28
PCIe 4.0 x16	2	100 GbE	QSFP56
SMB (RDMA – iWarp)			
PCIe 4.0 x8	2	25 GbE	SFP28
PCIe 4.0 x16	2	100 GbE	QSFP28

Selectable components

Processors

- 2x AMD EPYC 9004 4rd Generation (Genoa)
- 32 – 256 Cores

RAM

- 24x DDR5 up to 4800MHz
- 128 GB – 3072 GB RAM

OS-Drives

- 240 GB or 480 GB M.2 as Single-Disk
- 2x 240 GB or 2x 480 GB M.2 in a RAID1

U.2 NVMe-Drives

- PCIe 4.0 NVMe or PCIe 5.0 NVMe
- Capacity: 800 GB, 1,6 TB, 3,2 TB, 6,4 TB or 12,8 TB

SATA SSD-Drives

- Capacity: 480 GB, 960 GB, 1,92 TB or 3,84 TB

SATA HDD-Drives

- Capacity: 4TB, 8 TB, 10 TB, 12 TB, 16 TB, 18 TB or 22 TB

Datacenter GPUs (for GPU-P)

- Single-Slot: NVIDIA A2, NVIDIA L4
- Dual-Slot: NVIDIA A16, NVIDIA A40, NVIDIA L40, NVIDIA L40S