

Data sheet for Azure Stack HCI Rack-Series

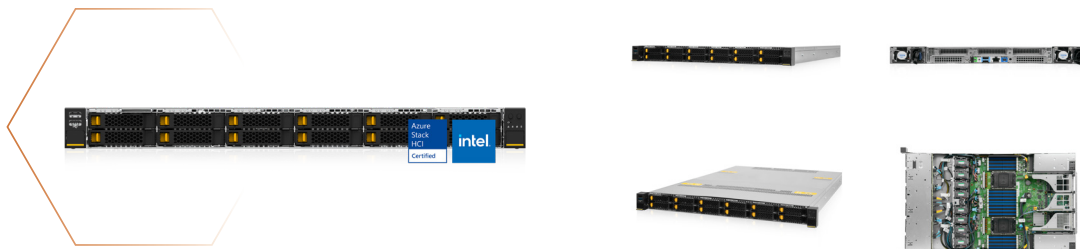
Dual-Intel Family v5

- 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

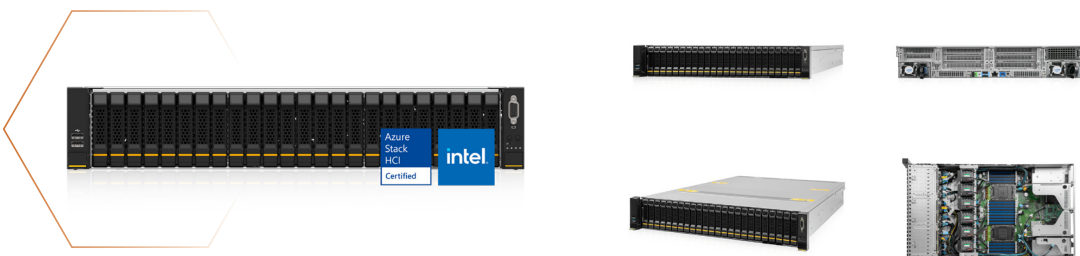


The Dual-Intel Family v5 contains the following solutions:

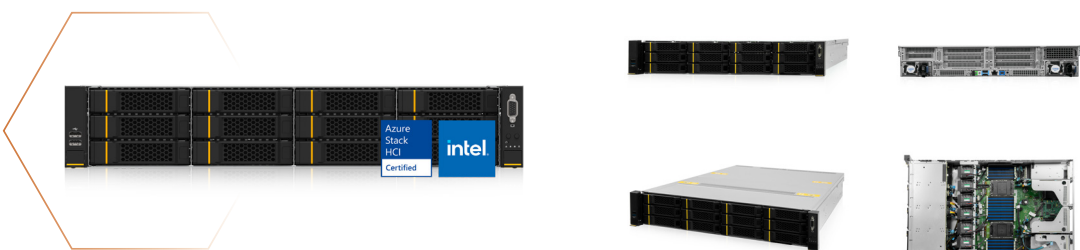
AzSHCI Series RI2112 v5





AzSHCI Series RI2224 v5



AzSHCI Series RI2212 v5



AzSHCI Series RI2112 v5	AzSHCI Series RI2224 v5	AzSHCI Series RI2212 v5
		

Barebone

Units	1U	2U	2U
Size (LxBxH) in cm	77,0 x 43,8 x 4,3	77,0 x 43,8 x 8,7	
Rails	63 - 92 cm		
Operatingtemperature	5 °C - ~25 °C		

Mainboard

Mainboard	Thomas-Krenn.AG - TKXS-DP-I4		
CPU	2x Intel Xeon Scalable 5th Generation (Emerald Rapid) configurable between 16 - 120 Cores		
RAM	32x DDR5 up to 5600 MHz configurable between 128GB - 4TB		
TPM	TPM 2.0 Modul with Secured-Core capability		
BMC/IPMI	AMI MegaRAC		

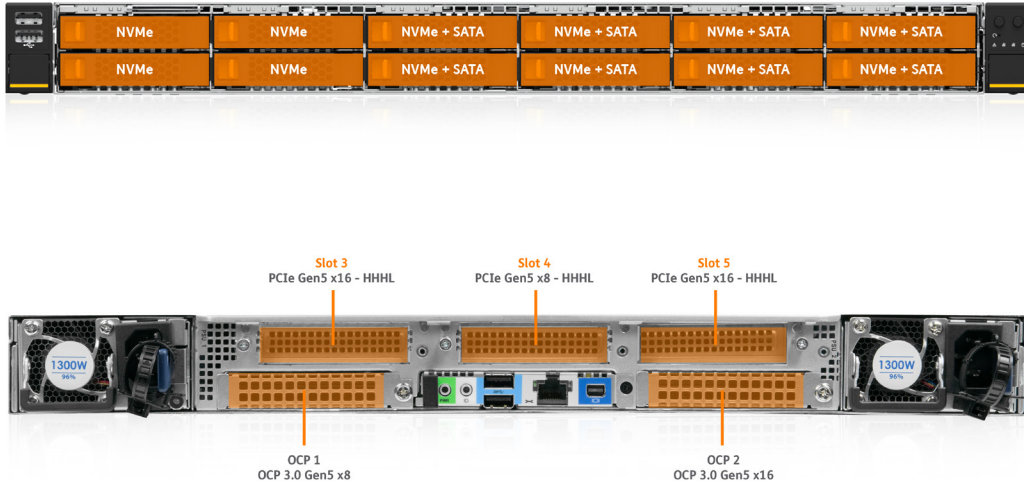
Drives

OS Disk	M.2 Drives (240GB or 480GB) – optional configured in a RAID1		
U.2 NVMe Disk Slots	12x	24x	4x
2,5" SATA Disk Slots	8x	8x	8x
3,5" SATA Disk Slots	-	-	

PCIe

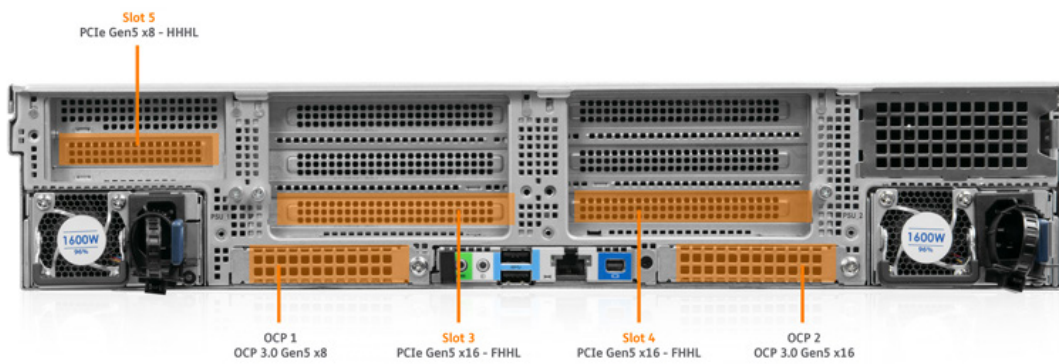
M.2 RAID-Controller	PCIe 5.0 x8		
MGMT NIC	OCP 3.0 Slot – PCIe 5.0 x8		
VMNet NIC	OCP 3.0 Slot – PCIe 5.0 x16		
Storage RDMA NIC	PCIe 5.0 x16		
Unused PCIe Slots	1x PCIe 5.0 x16 Single-Slot		1x PCIe 5.0 x16 Single-Slot & 2x PCIe 5.0 x16 Dual-Slot

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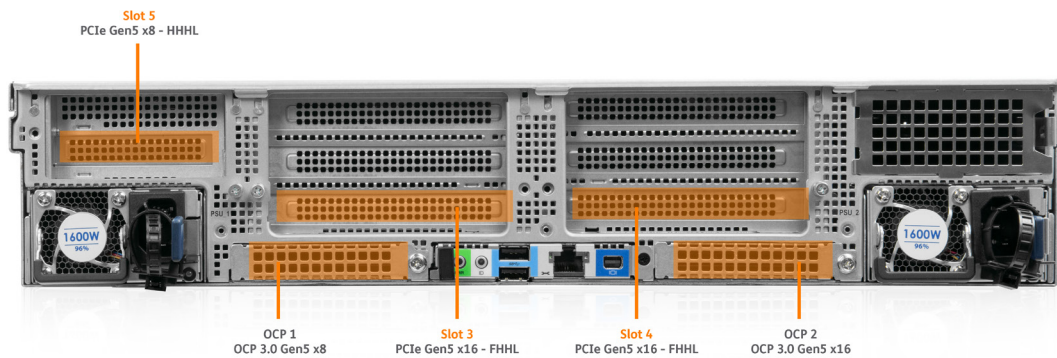
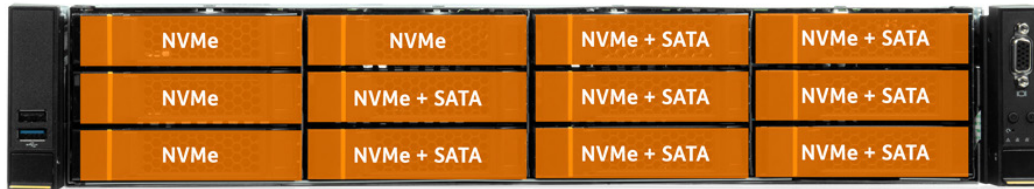
Slot	PCIe-Lanes	Type	Device
1	x8	OCP 3.0	Management-Network NIC
2	x16	OCP 3.0	VM-Network NIC
3	x16	HHHL Single-Slot	Storage-Network RDMA NIC
4	x8	HHHL Single-Slot	M.2 RAID-Card
5	x16	HHHL Single-Slot	Usable for additional NIC or GPU

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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	x8	HHHL Single-Slot	M.2 RAID-Card

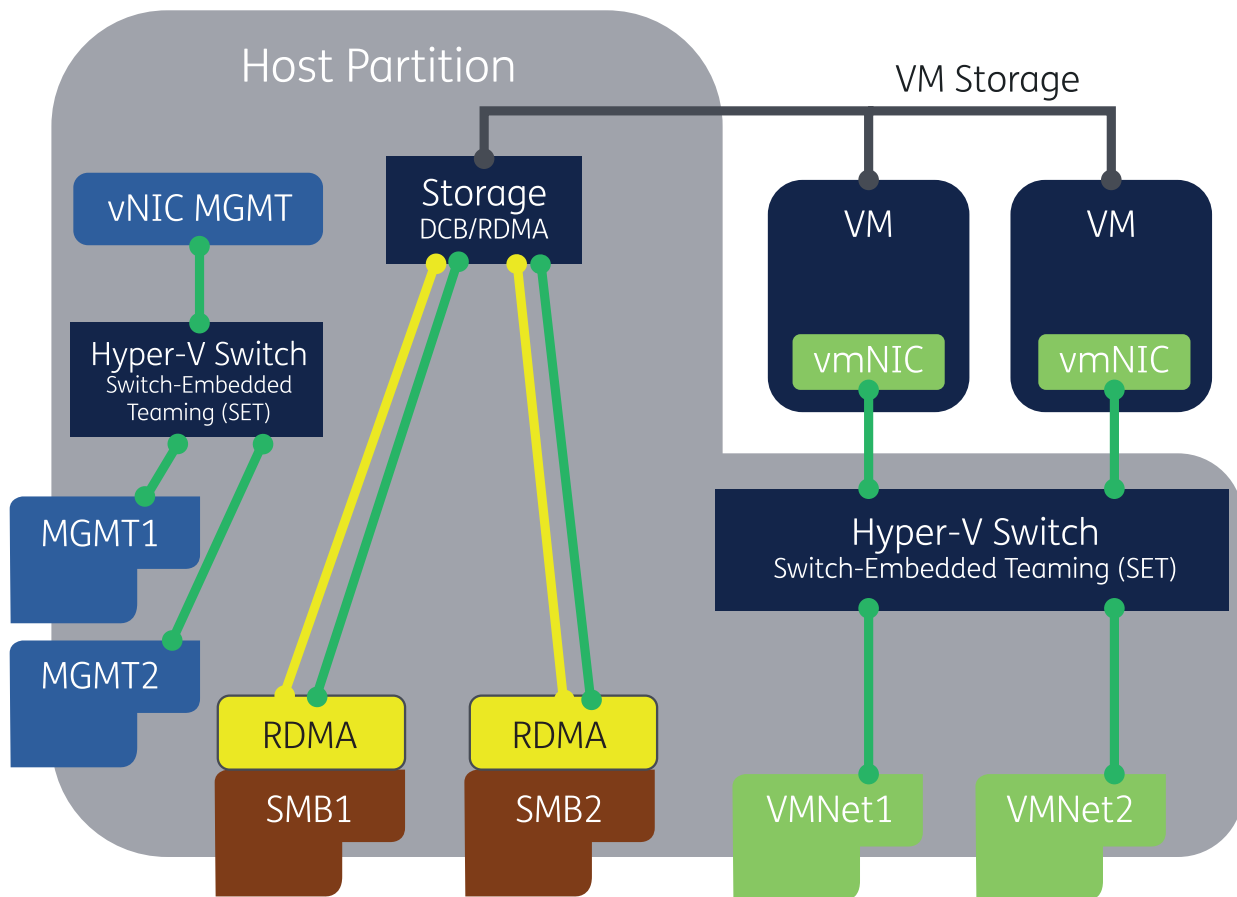
AzSHCI Series RI2212 v5



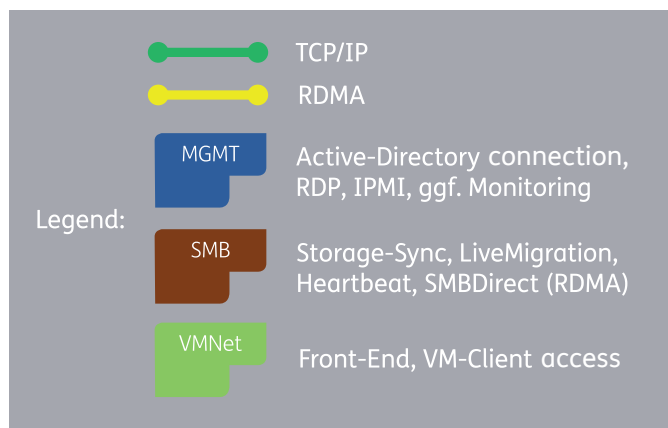
Slot	PCIe-Lanes	Type	Device
1	x8	OCP 3.0	Management-Network NIC
2	x16	OCP 3.0	VM-Network NIC
3	x16	FHHL Single-Slot	Storage-Network RDMA NIC
4	x16	FHHL Single-Slot	Usable for additional NIC or GPU
5	x16	FHFL Dual-Slot	Usable for additional NIC or GPU
6	x16	FHFL Dual-Slot	Usable for additional NIC or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

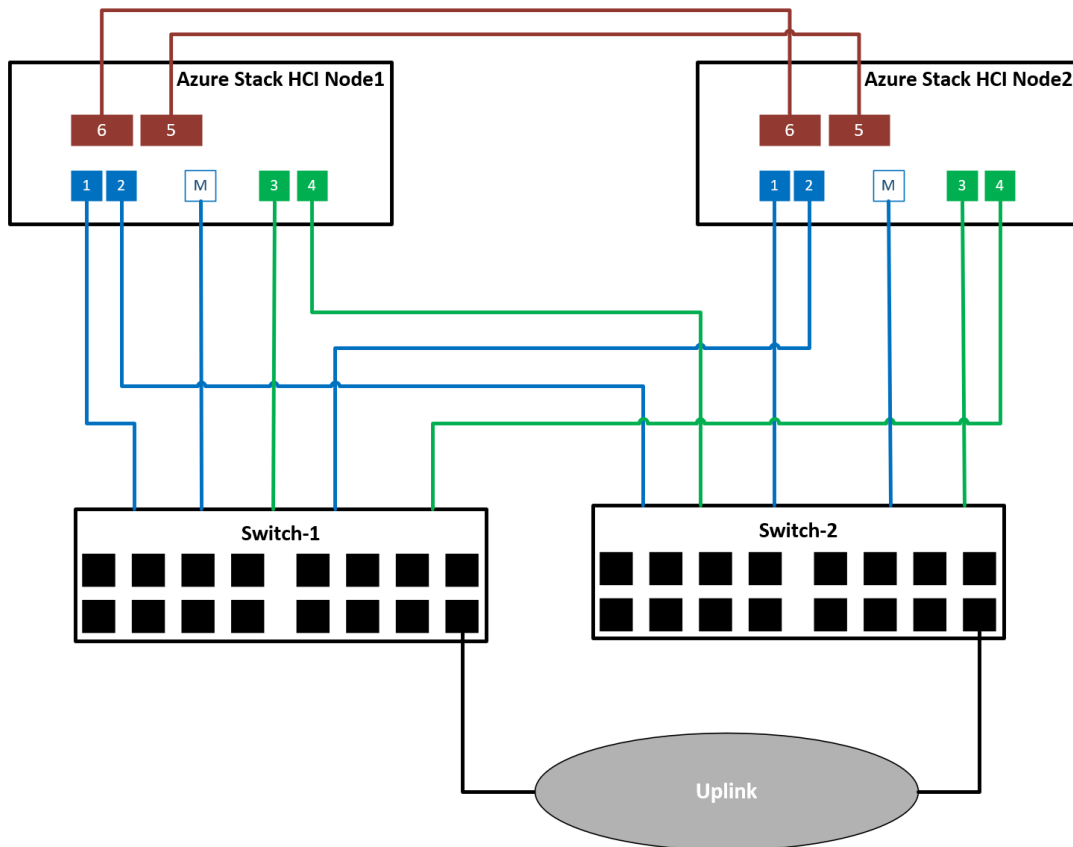
Network recommendation

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 Intel Xeon Scalable 5rd Generation (Emerald Rapid)
- 16 – 120 Cores

RAM

- 32x DDR5 up to 5600MHz
- 128 GB – 4096 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