

## Kerno Server Product Catalogue

H2 2025

# Kerno is a premier IT infrastructure manufacturer in UAE

Bringing world-class competencies to build local vendor of enterprise IT equipment to address AI and digitalization initiatives



### Research & Development

Products designed and created within Intellectual Property rights owned by local entity

OWN IP & DESIGN



#### Manufacturing

Manufacturing FAB under construction. Number of manufacturing operations starting from conveyor assembly, testing of equipment, and warehousing

PRODUCED IN UAE



#### Supply Chain

Procurement team to deliver a worldwide net of hi-tech IT components shipments for FAB manufacturing

IMPORT & EXPORT INCREASE

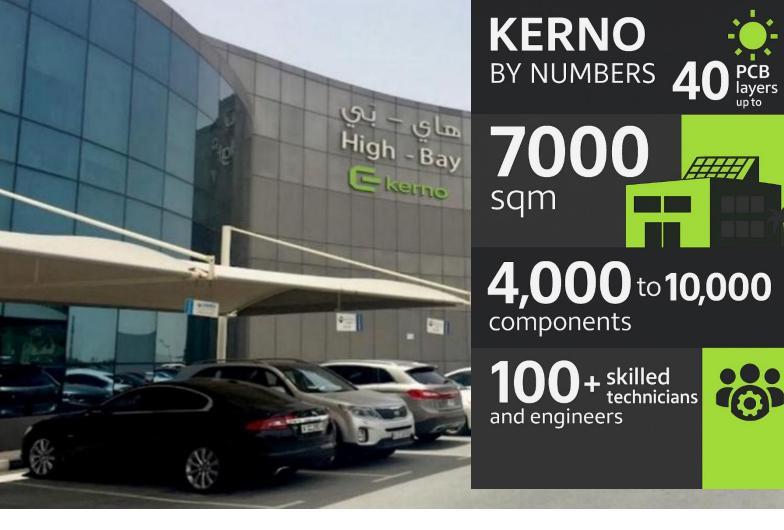


#### Services & Maintenance

End-to-end customer support teams to deliver the best client experience with the new UAE enterprise IT equipment - both GCC and worldwide

LOCAL CENTER OF COMPETENCES





## Kerno FAB: Born in UAE. Built for the World.

**Kerno** established a state-of-the-art microelectronics production facility on 7000 sam in Dubai Silicon Oasis.

The factory's **sustainable building** is certified at the Platinum level according to the world's most widely used **green building** rating system (LEED)

The production line is engineered to handle the most complex designs, producing enterprise server-class motherboards with an astonishing 4,000 to 10,000 components and up to 40 PCB layers

The automated **assembly conveyor system** is optimized to deliver **hundreds** of products within just **24 hours** 

The factory will employ 100+ skilled technicians and engineers when running at capacity



## **Kerno Product Lines**

All products are market-ready, and samples can be delivered to the customers for validation

**OKAM Universal servers** 



1U and 2U rack servers based on latest Intel and AMD chips suitable for vast majority of enterprise use cases

Access control / Application / DNS server, Hyperconverged environments, Virtualization, Big Data analytics

**UQLEAD AI servers** 



Powerful GPU servers in 2U, 4U, 5U form factor with top of the line PCle 5.0 and SXM GPUs

Production deployment of ML/AI applications, AI training and inferencing

**OKAM Edge servers** 





Maximum GPU and CPU compute packed in short depth 2U chassis

Near edge environments, Smart Factory, Worker safety, Safe City, Traffic analytics, camera-based quality inspection, predictive analytics

**OTAON Storage systems** 





Scalable, fast and simple SAN/NAS storage system based on erasure-coding algorithms

Media archives, cold storage for Al clusters, mixed datacenter workloads, Data Lakes



# OKAM Universal servers Accelerate Enterprise and Al Workloads

Kerno's next gen servers help customers take full advantage of new technology with scalable performance using topspeed memory and I/O



#### **More Cores**

Better performance with high bandwidth memory (HBM) and up to 4 UPI links to deliver faster workload performance.



#### **Faster Memory**

60% faster performance using DDR5 memory to fulfill your workload performance needs.



#### **More Bandwidth**

100% faster throughput using PCIe Gen 5 with up to 80 lanes to accommodate different workloads concurrently.



## New Al Capabilities

Next Gen Intel® Deep Learning Boost for AI Deep Learning workloads (AMX – INT8 and BFloat16 support / Intel AVX-512). Integration of accelerator features such as DSA\*, QAT\*, IAX\*, and DLB\* to improve performance across key workloads. Datacentre Refresh of Your 3-4 Year Old Servers with Kerno Means

Reclaimed rack space over your 2-3 year old servers	45%
Better price/ performance over your existing 3- year old servers	85%
More performance per kW versus previous server generation	25%

40% of servers are over 5 years old, only handle 7% of the work while drawing 66% of the power (Beyond PUE: Tackling IT's Wasted Terawatts, Uptime Institute, January 2020)



## **k**erno **OKAM K01-1210**

xeon

Rack Server - 1U DP 4-Bay Gen4 NVMe/SATA/SAS Titanium



#### **Key Features**

- Dual 5th/4th Gen Intel® Xeon® Scalable Processors
- Dual Intel<sup>®</sup> Xeon<sup>®</sup> CPU Max Series
- 8-Channel DDR5 RDIMM, 32 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 4 x 3.5"/2.5" Gen4 NVMe/SATA/SAS hot-swap bays
- 2 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCle Gen5 x16 slots
- Compatible with SupremeRAID<sup>™</sup> by Graid Technology
- 1+1 1600W 80 PLUS Titanium redundant power supplies

#### **Applications**

#### **Networks Server, Servers for Hybrid/Private Cloud**

Dimensions	1U (438 x 43.5 x 815 mm)	PCIe Expansion Slots	2 x FHHL PCIe Gen5 x16 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
СРИ	5th Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable Processors 4th Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable Processors Intel <sup>®</sup> Xeon <sup>®</sup> CPU Max Series Dual processor, TDP up to 350W	I/O Ports	Front: 2 x USB 3.2 Gen1  Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
OS Compatibility	Visit our website for the list of compatible OS		2 x 03b 3.2 defti, i x iviiiii-bi , 2 x 10+3, i x ivilaiv
Chipset	Intel <sup>®</sup> C741	Backplane Board	PCIe Gen4 x4 or SATA 6Gb/s or SAS 12Gb/s
	8-Channel DDR5 RDIMM, 32 x DIMMs [5th Gen Intel Xeon] Up to 5600 MT/s (1DPC), 4400	ТРМ	1 x TPM header (SPI), Optional TPM2.0 kit
Memory	MT/s (2DPC)	Power Supply	1+1 1600W 80 PLUS Titanium redundant power supplies AC Input: 100-240V
		ASPEED® AST2600 management controller	
LAN	2 x 1Gb/s LAN (1 x Intel I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	Management	KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600	System Fans	8 x 40x40x56mm (32,000rpm)
Storage	Front hot-swap: 4 x 3.5"/2.5" Gen4 NVMe/SATA/SAS -SAS card is required to support SAS drives	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
RAID	Intel <sup>®</sup> SATA RAID 0/1/10/5 Onboard VROC key header Optional compatible RAID Cards: NVMe RAID Cards with SupremeRAID™ by Graid Technology Support RAID 0/1/5/6/10	Packaging Content	1 x 1U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit Optional Parts: - 3-Section Rail kit (Supports CMA) - Cable Management Arm

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## **E** kerno

### **OKAM K01-1210**

Rack Server - 1U DP 12-Bay Gen4 NVMe/SATA/SAS Platinum





#### **Key Features**

- Dual 5th/4th Gen Intel® Xeon® Scalable Processors
- Dual Intel<sup>®</sup> Xeon<sup>®</sup> CPU Max Series
- 8-Channel DDR5 RDIMM, 32 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 12 x 2.5" Gen4 NVMe/SATA/SAS hot-swap bays
- 2 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCIe Gen5 x16 slots
- Compatible with SupremeRAID<sup>™</sup> by Graid Technology
- Dual 1600W 80 PLUS Platinum redundant power supply

#### **Applications**

#### Networks Server, Servers for Hybrid/Private Cloud

Dimensions	1U (W438 x H43.5 x D815 mm)	PCIe Expansion Slots	2 x FHHL PCIe Gen5 x16 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
СРИ	5th Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable Processors 4th Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable Processors Intel <sup>®</sup> Xeon <sup>®</sup> CPU Max Series Dual processor, TDP up to 350W	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
OS Compatibility	Visit our website for the list of compatible OS		
Chipset	Intel® C741	Backplane Board	PCIe Gen4 x4 or SATA 6Gb/s or SAS 12Gb/s
	8-Channel DDR5 RDIMM, 32 x DIMMs [5th Gen Intel Xeon] Up to 5600 MT/s (1DPC), 4400	ТРМ	1 x TPM header (SPI), Optional TPM2.0 kit
Memory	MT/s (2DPC) [4th Gen Intel Xeon] Up to 4800 MT/s (1DPC), 4400 MT/s (2DPC) [Intel Xeon Max Series] Up to 4800 MT/s (1DPC), 4400 MT/s (2DPC) 5600 MT/s support under 2DPC configuration requires	Power Supply	Dual 1600W 80 PLUS Platinum redundant power supply AC Input: 100-240V
	verified memory and BIOS setup	System Management	ASPEED® AST2600 management controller
LAN	2 x 1Gb/s LAN (1 x Intel <sup>®</sup> I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN		KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600	System Fans	8 x 40x40x56mm
Storage	- 1 x Mini-DP  Front hot-swap: 12 x 2.5" Gen4 NVMe/SATA/SAS -SAS card is required to support SAS drives	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non- condensing)
RAID	Intel <sup>®</sup> SATA RAID 0/1/10/5 Onboard VROC key header Optional compatible RAID Cards: NVMe RAID Cards with SupremeRAID <sup>™</sup> by Graid Technology Support RAID 0/1/5/6/10	Packaging Content	1 x 1U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit Optional Parts: - 3-Section Rail kit (Supports CMA) - Cable Management Arm

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## **OKAM K01-12A0**

Rack Server - 1U DP 12-Bay Gen5 NVMe/SATA/SAS-4 Titanium



#### **Kev Features**

- Dual AMD EPYC<sup>™</sup> 9005/9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 12 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 3 x M.2 slots with PCle Gen3 x4 and x2 interface
- 2 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCIe Gen5 x16 slots
- Dual 1600W 80 PLUS Titanium redundant power supply

#### **Applications**

#### Networks Server, Servers for Hybrid/Private Cloud

Dimensions	1U (W438 x H43.5 x D815 mm)	PCIe Expansion Slots	2 x FHHL PCle Gen5 x16 2 x OCP NIC 3.0 PCle Gen5 x16, Support NCSI
СРИ	AMD EPYC <sup>™</sup> 9005 Series Processors AMD EPYC <sup>™</sup> 9004 Series Processors Dual processor, cTDP up to 300W - OCP NIC 3.0 ≦ 21W at 30°C ambient, cTDP up to 400W	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
OS Compatibility	Visit our website for the list of compatible OS	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Chipset	System on Chip	ТРМ	1 x TPM header (SPI), Optional TPM2.0
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs [EPYC 9005] Up to 6400 MT/s [EPYC 9004] Up to 4800 MT/s	Power Supply	Dual 1600W 80 PLUS Titanium redundant power supply AC Input: 100-240V
LAN	2 x 1Gb/s LAN (1 x Intel® I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600	System Fans	8 x 40x40x56mm
	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS-4	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
Storage	Internal M.2: 2 x M.2 (2280/22110), PCIe Gen3 x4 1 x M.2 (2280/22110), PCIe Gen3 x2 SAS card is required to support SAS drives	Packaging Content	1 x 1U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit Optional Parts:
RAID	Require RAID add-in cards		<ul><li>- 3-Section Rail kit (Supports CMA)</li><li>- Cable Management Arm</li></ul>

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**Specification** 

### **OKAM K01-12A0**

Rack Server - 1U DP 8-Bay Gen5 NVMe/SATA/SAS-4 Platinum







#### **Key Features**

- Dual AMD EPYC<sup>™</sup> 9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 4 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 4 x 2.5" 9.5mm Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 3 x M.2 slots with PCIe Gen3 x4 and x2 interface
- 2 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCIe Gen5 x16 slots
- Dual 1600W 80 PLUS Platinum redundant power supply

#### **Applications**

#### Networks Server, Servers for Hybrid/Private Cloud

Dimensions	1U (W438 x H43.5 x D815 mm)	PCIe Expansion Slots	2 x FHHL PCIe Gen5 x16 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
СРИ	AMD EPYC <sup>™</sup> 9005 Series Processors  AMD EPYC <sup>™</sup> 9004 Series Processors  Dual processor, cTDP up to 300W  -OCP NIC 3.0 ≦ 21W at 30°C ambient, EPYC 9654 cTDP upto 400W  *cTDP supported up to 400W under limited thermal conditions	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
OS Compatibility	Visit our website for the list of compatible OS	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Chipset	System on Chip	ТРМ	1 x TPM header (SPI), Optional TPM2.0
Memory	12-Channel DDR5 RDIMM 24 x DIMMs Up to 4800 MT/s	Power Supply	Dual 1600W 80 PLUS Platinum redundant power supply AC Input: 100-240V
LAN	2 x 1Gb/s LAN (1 x Intel® I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600	System Fans	8 x 40x40x56mm
Front hot-swap: 4 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)	
Storage	4 x 2.5" 9.5mm Gen5 NVMe/SATA/SAS-4 Internal M.2: 2 x M.2 (2280/22110), PCIe Gen3 x4 1 x M.2 (2280/22110), PCIe Gen3 x2 SAS card is required to support SAS drives	Packaging Content	1 x 1U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit Optional Parts: - 3-Section Rail kit (Supports CMA)
RAID	Require RAID add-in cards		- Cable Management Arm

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## kerno **OKAM K01-1220**

Rack Server - 1U DP 12-Bay Gen5 NVMe/SATA/SAS-4





- Dual Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 32 x DIMMs
- **Dual ROM Architecture**
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 4 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 3 x M.2 slots with PCle Gen5 x4 and x2 interface
- 2 x FHHL PCle Gen5 x16 slots
- 1+1 1600W 80 PLUS Titanium redundant power supplies

#### 2 x OCP NIC 3.0 PCIe Gen5 x16 slots **Applications** Networks Server, Servers for Hybrid/Private Cloud **Specification PCle Expansion** 2 x FHHL PCIe Gen5 x16 **Dimensions** 1U (W438 x H43.5 x D815 mm) Slots 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI Intel® Xeon® 6 Processors Front: - Intel® Xeon® 6700-Series Processors CPU 1 x USB 3.2 Gen1 - Intel® Xeon® 6500-Series Processors I/O Ports Rear: Dual processors, TDP up to 350W 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN **OS Compatibility** Visit our website for the list of compatible OS **Backplane Board** PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s Chipset System on Chin

iihaer	System on Chip		1 x TPM header (SPI), Optional TPM2.0
	8-Channel DDR5 RDIMM/MRDIMM, 32 x DIMMs	TPM	1 x PRoT connector (Enabled on demand)
	[RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s		1+1 1600W 80 PLUS Titanium redundant power

(2Di C) [WittDiWiWi] Op to 0000 Wi1/3		The recover of a Loo manual reduction power
	Power Supply	supplies
MRDIMMs are only supported with Intel® Xeon® 6		AC Input: 100-240V

	System	ASPEED® AST2600 management controller
	System	ASFELD AST2000 management controller
2 x 1Gb/s LAN (1 x Intel® I350-AM2), Support NCSI	Management	KERNO Management Console web interface
1 x 10/100/1000 Mbps Management LAN		

**System Fans** 

Video Integrated in ASPEED® AS12600 - 1 x Mini-DP	Oyotom r uno	O A HOAHOAOOIIIII	
	- I X WIIIII-DF		0 1 1000 1 0500 00/ 1 000/ /
	Front hot-swap:	Operating	Operating: 10°C to 35°C, 8% to 80% (non-condensing)

12 x 2.5" Gen5 NVMe/SATA/SAS-4* Internal M.2:	Properties	condensing)
2 x M.2 (2280/22110), PCIe Gen5 x4 1 x M.2 (2280), PCIe Gen5 x2		1 x 1U Chassis

1 X W.2 (2200), 1 010 00110 X2		1 x Mini-DP to D-Sub cable
* Storage card is required to support SATA and SAS drives	Packaging	1 x 2-Section Rail kit
	Content	Optional Parts:
Require RAID add-in cards		<ul> <li>3-Section Rail kit (Supports CMA)</li> </ul>
Onboard VROC key header		- Cable Management Arm

#### A) - Cable Management Arm

8 x 40x40x56mm

#### Learn more at: https://kernoenterprises.com

Memory

LAN

Storage

**RAID** 

All specifications are subject to change without notice. Please visit our website for the latest information.

Processors with P-cores and in a 1DPC configuration.

Integrated in ASPEED® AST2600

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**Specification** 

## **OKAM K01-1220**

Rack Server - 1U DP 12-Bay Gen5 NVMe/SATA/SAS-4





#### **Key Features**

- Dual Intel<sup>®</sup> Xeon<sup>®</sup> 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 32 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 12 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 3 x M.2 slots with PCIe Gen5 x4 and x2 interface
- 2 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCIe Gen5 x16 slots
- Dual 1600W 80 PLUS Titanium redundant power supply

#### **Applications**

#### **Networks Server, Servers for Hybrid/Private Cloud**

Dimensions	1U (W438 x H43.5 x D815 mm)	PCIe Expansion Slots	2 x FHHL PCIe Gen5 x16 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Dual processors, TDP up to 350W	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear:
OS Compatibility	Visit our website for the list of compatible OS		2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
Chipset	System on Chip	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Memory	8-Channel DDR5 RDIMM/MRDIMM, 32 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s	ТРМ	1 x TPM header (SPI), Optional TPM2.0 1 x PRoT connector (Enabled on demand)
Wellory	MRDIMMs are only supported with Intel® Xeon® 6 Processors with P-cores and in a 1DPC configuration.	Power Supply	Dual 1600W 80 PLUS Titanium redundant power supply AC Input: 100-240V
LAN	2 x 1Gb/s LAN (1 x Intel <sup>®</sup> I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2600 management controller KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600 - 1 x Mini-DP	System Fans	8 x 40x40x56mm
Storage	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS-4* Internal M.2: 2 x M.2 (2280/22110), PCIe Gen5 x4	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
	1 x M.2 (2280), PCIe Gen5 x2  * Storage card is required to support SATA and SAS drives	Packaging	1 x 1U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit
RAID	Require RAID add-in cards Onboard VROC key header	Content	Optional Parts: - 3-Section Rail kit (Supports CMA) - Cable Management Arm

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## Kerno OKAM K01-1120

intel xeon

Rack Server - 1U UP 12-Bay Gen5 NVMe/SATA/SAS-4



**Specification** 

#### **Key Features**

- Single Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 16 x DIMMs
- Dual ROM Architecture
- 1 x 1Gb/s LAN port via Intel<sup>®</sup> I210-AT
- 12 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 1 x M.2 slot with PCle Gen5 x2 interface
- 1 x M.2 slot with PCle Gen5 x2 interface, shared with SATA
- 1 x FHHL PCIe Gen5 x16 slot
- 1 x OCP NIC 3.0 PCle Gen5 x16 slot
- 1+1 1300W 80 PLUS Titanium redundant power supplies

#### **Applications**

#### **Networks Server, Servers for Hybrid/Private Cloud**

Dimensions	1U (W438 x H43.5 x D710 mm)	PCIe Expansion Slots	1 x FHHL PCle Gen5 x16 1 x OCP NIC 3.0 PCle Gen5 x16, Support NCSI
СРИ	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Dual processors, TDP up to 350W	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x RJ45, 1 x MLAN
OS Compatibility	Visit our website for the list of compatible OS	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Chipset	System on Chip		
	8-Channel DDR5 RDIMM/MRDIMM, 16 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC)	TPM	1 x TPM header (SPI), Optional TPM2.0 1 x PRoT connector (Enabled on demand)
Memory	[MRDIMM] Up to 8000 MT/s MRDIMMs are only supported with Intel® Xeon® 6 Processors with P-cores and in a 1DPC configuration.	Power Supply	1+1 1300W 80 PLUS Titanium redundant power supplies AC Input: 100-240V
LAN	1 x 1Gb/s LAN (1 x Intel <sup>®</sup> I210-AT), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2600 management controller KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600 - 1 x Mini-DP	System Fans	4 x 40x40x28mm 4 x 40x40x56mm
Storage	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS-4 Internal M.2: 1 x M.2 (2280/22110), PCIe Gen5 x2	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non- condensing)
	1 x M.2 (2280/22110), PCIe Gen5 x2, shared with SATA * SAS card is required to support SAS drives To enable the M.2 slot, please adjust the switch according to the manual	Packaging	1 x 1U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit
RAID	Require RAID add-in cards Onboard VROC key header	Content	Optional Parts: - 3-Section Rail kit (Supports CMA) - Cable Management Arm

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## **C** kerno **OKAM K01-2120**

Rack Server - 2U UP 12-Bay Gen5 NVMe/SATA/SAS-4







#### **Key Features**

- Single Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 16 x DIMMs
- Dual ROM Architecture
- 1 x 1Gb/s LAN port via Intel<sup>®</sup> I210-AT
- 12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 1 x M.2 slot with PCle Gen5 x2 interface
- 1 x M.2 slot with PCle Gen5 x2 interface, shared with SATA
- 1 x FHHL PCIe Gen5 x16 slot
- 1 x OCP NIC 3.0 PCIe Gen5 x16 slot
- 1+1 1600W 80 PLUS Titanium redundant power supplies

#### **Applications**

Specification		Networking, Hyk	orid/Private Cloud Server
Dimensions	2U (W438 x H87.5 x D710 mm)	TPM	1 x TPM header (SPI), Optional TPM2.0 1 x PRoT connector (only enabled on demand)
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Single processor, TDP up to 350W	PCIe Expansion Slots	1 x FHHL PCle Gen5 x16 1 x OCP NIC 3.0 PCle Gen5 x16, Support NCSI
OS Compatibility	Visit our website for the OS Support List	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear:
Socket	1 x LGA 4710 (Socket E2)		2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x RJ45, 1 x MLAN
Chipset	System on Chip	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Memory	8-Channel DDR5 RDIMM/MRDIMM, 16 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s	Power Supply	1+1 1600W 80 PLUS Titanium redundant power supplies AC Input: 100-240V
	-MRDIMMs are only supported with Intel Xeon 6 Processors with P-cores and in a 1DPC configuration	System Management	ASPEED® AST2600 Baseboard Management Controller Kerno Management Console web interface
LAN	1 x 1Gb/s LAN (1 x Intel $^{\odot}$ I210-AT), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Fans	4 x 80x80x38mm
Video	Integrated in ASPEED AST2600® - 1 x Mini-DP	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-
	Front hot-swap: 12 x 3.5"/2.5" Gen5	Properties	condensing)
Storage	NVMe/SATA/SAS-4 Internal M.2: 1 x M.2 (2280/22110), PCIe Gen5 x2 1 x M.2 (2280/22110), PCIe Gen5 x2, shared with SATA SAS card is required to support SAS drives	Packaging	1 x 2U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit Optional Parts:
RAID	Require RAID add-in cards Onboard VROC key header	Content	- 3-Section Rail kit (Supports CMA) - Cable Management Arm

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## Kerno OKAM K01-2210

Rack Server - 2U DP 24-Bay NVMe/SATA/SAS







- Dual 5th/4th Gen Intel® Xeon® Scalable Processors
- Dual Intel® Xeon® CPU Max Series
- 8-Channel DDR5 RDIMM, 32 x DIMMs
- Dual ROM Architecture supported
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 8 x 2.5" Gen4 NVMe hot-swappable bays
- 16 x 2.5" SATA/SAS hot-swappable bays
- 4 x FHHL PCle Gen5 x16 slots
- 4 x LP PCIe Gen5 x8 slots
- 2 x OCP 3.0 Gen5 x16 slots
- 2 x OCP 3.0 Gens x 16 siots
- 1+1 2000W 80 PLUS Platinum redundant power supplies

#### **Applications**

#### Networking, Hybrid/Private Cloud Server

opcomodition			
Dimensions	2U (W438 x H87.5 x D815 mm)	TPM	1 x TPM header with SPI interface - Optional TPM2.0
CPU	5th Generation Intel® Xeon® Scalable Processors 4th Generation Intel® Xeon® Scalable Processors Intel® Xeon® CPU Max Series Dual processor, TDP up to 350W	Expansion Slots	4 x FHHL PCle Gen5 x16 slots 4 x LP PCle Gen5 x8 slots 2 x OCP 3.0 Gen5 x16 slots - Supports NCSI function
OS Compatibility	Windows Server 2019 / 2022 RHEL 8.7 / 8.8 / 8.9 / 8.10 / 9.0 / 9.1 / 9.2 / 9.3 / 9.4 SLES 15 SP4 / SP5 / SP6 Ubuntu 22.04.2 / 22.04.3 / 22.04.4 / 24.04 LTS VMware ESXi 7.0 U3 / 8.0 U1, U2, Update 3	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN Internal: 1 x TPM header, 1 x VROC connector
Socket	Citrix Hypervisor 8.2 LTSR CU1 2 x LGA 4677 (Socket E)	Backplane Board	Speed and bandwidth: PCIe Gen4 x4 or SATA 6Gb/s or SAS 12Gb/s
Chipset	Intel® C741 Chipset	Power Supply	1+1 2000W 80 PLUS Platinum redundant power supplies AC Input: 100-240V
Memory	32 x DIMM slots, 8-Channel DDR5 memory RDIMM up to 96GB supported 3DS RDIMM up to 256GB supported Memory speed: Up to 5600 MT/s (1DPC), 4400 MT/s (2DPC	System Management	ASPEED® AST2600 management controller KERNO Management Console (AMI MegaRAC SP-X)
LAN	2 x 1Gb/s LAN ports (1 x Intel® I350-AM2) -	System Fans	4 x 80x80x38mm (18,300rpm)
	Supported NCSI 1 x 10/100/1000 management LAN	Operating	Operating temperature: 10°C to 35°C Operating humidity: 8-80% (non-condensing)
Video	ASPEED® AST2600 Integrated 2D Graphic Adapter	Properties	Non-operating temperature: -40°C to 60°C  Non-operating humidity: 20%-95% (non-condensing)
Storage	Front side: 8 x 2.5" Gen4 NVMe hot-swappable bays 16 x 2.5" SATA/SAS hot-swappable bays *SAS card is required for SAS devices support	Packaging Content	1 x 2U Chassis 1 x Mini-DP to D-Sub cable 1 x -Section Rail kit
RAID	Intel® SATA RAID 0/1/10/5		Packaging Dimensions: 1077 x 679 x 300 mm

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## Kerno OKAM K01-2210

Rack Server - 2U DP 2 x PCle Gen5 GPUs 2400W







#### **Key Features**

- Dual 5th/4th Gen Intel® Xeon® Scalable Processors
- Dual Intel® Xeon® CPU Max Series
- Supports up to 2 x Dual slot Gen5 GPUs
- 8-Channel DDR5 RDIMM, 32 x DIMMs
- Dual ROM Architecture supported
- 2 x 1Gb/s LAN ports via Intel<sup>®</sup> I350-AM2
- 4 x 3.5"/2.5" Gen4 NVMe/SATA/SAS hot-swappable bays
- 8 x 3.5"/2.5" SATA/SAS hot-swappable bays
- 2 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x FHHL PCle Gen5 x16 slots
- 4 x LP PCIe Gen5 x8 slots
- 2 x OCP 3.0 Gen5 x16 slots
- Dual 2400W 80 PLUS Platinum redundant power supply

#### **Specification**

Dimensions	2U (W438 x H87.5 x D815 mm)	TPM	1 x TPM header with SPI interface - Optional TPM2.0
СРИ	5th Generation Intel® Xeon® Scalable Processors 4th Generation Intel® Xeon® Scalable Processors Intel® Xeon® CPU Max Series Dual processor, TDP up to 350W	Expansion Slots	2 x FHFL PCIe Gen5 x16 slots for GPUs 2 x FHHL PCIe Gen5 x16 slots 4 x LP PCIe Gen5 x8 slots 2 x OCP 3.0 Gen5 x16 slots - Support NCSI function
Windows Server 2019 / 2022 RHEL 8.7 / 8.8 / 8.9 / 8.10 / 9.0 / 9.1 / 9.2 / 9.3 / 9.4 SLES 15 SP4 / SP5 / SP6 Ubuntu 22.04.2 / 22.04.3 / 22.04.4 / 24.04 LTS VMware ESXi 7.0 U3 / 8.0 U1, U2, Update 3	RHEL 8.7 / 8.8 / 8.9 /8.10 / 9.0 / 9.1 / 9.2 / 9.3 / 9.4 SLES 15 SP4 / SP5 / SP6 Ubuntu 22.04.2 / 22.04.3 / 22.04.4 / 24.04 LTS VMware ESXi 7.0 U3 / 8.0 U1, U2, Update 3	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN Internal: 1 x TPM header, 1 x VROC connector
Socket	Citrix Hypervisor 8.2 LTSR CU1 2 x LGA 4677 (Socket E)	Backplane Board	Speed and bandwidth: PCle Gen4 x4 or SATA 6Gb/s or SAS 12Gb/s
Chipset	Intel® C741 Chipset		Dual 2400W 80 PLUS Platinum redundant power
Memory	32 x DIMM slots, 8-Channel DDR5 memory RDIMM up to 96GB supported 3DS RDIMM up to 256GB supported	Power Supply	supply AC Input: 100-240V *The system power supply requires C19 power cord.
метногу	Memory speed: Up to 5600 MT/s (1DPC), 4400	System Management	ASPEED® AST2600 management controller KERNO Management Console (AMI MegaRAC SP-X)
LAN	2 x 1Gb/s LAN ports (1 x Intel <sup>®</sup> I350-AM2) - Supported NCSI 1 x 10/100/1000 management LAN	System Fans	4 x 80x80x38mm (18,300rpm)
Video	ASPEED® AST2600 Integrated 2D Graphic Adapter	Operating	Operating temperature: 10°C to 35°C Operating humidity: 8-80% (non-condensing)
Storage	4 x 3.5"/2.5" Gen4 NVMe/SATA/SAS hot-swappable bays 8 x 3.5"/2.5" SATA/SAS hot-swappable bays	Properties	Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)
	*SAS card is required for SAS devices support	Packaging	1 x 2U Chassis 1 x Mini-DP to D-Sub cable
RAID	Intel® SATA RAID 0/1/10/5	Content	1 x 2-Section Rail kit Packaging Dimensions: 1077 x 679 x 300 mm

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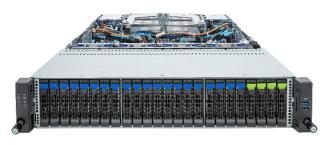
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## Ckerno OKAM K01-22A0

AMD T

Rack Server - 2U DP 24+4-Bay Gen5 NVMe/SATA/SAS-4 with expander Platinum





Specification

#### **Key Features**

- Dual AMD EPYC<sup>™</sup> 9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 4 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 20 x 2.5" SATA/SAS-4 hot-swap bays
- 4 x 2.5" SATA/SAS-4 hot-swap bays on the rear side
- Onboard 24Gb/s SAS-4 expander
- 3 x M.2 slots with PCle Gen3 x4 and x2 interface
- 4 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCle Gen5 x16 slots
- 1+1 2000W 80 PLUS Platinum redundant power supplies

#### **Applications**

#### **Networks Server, Servers for Hybrid/Private Cloud**

Specification			•
Dimensions	2U (W438 x H87.5 x D815 mm)	PCIe Expansion Slots	4 x FHHL PCle Gen5 x16 2 x OCP NIC 3.0 PCle Gen5 x16, Support NCSI
CPU	AMD EPYC™ 9005 Series Processors AMD EPYC™ 9004 Series Processors Dual processor, cTDP up to 300W - EPYC 9654 cTDP up to 400W	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
OS Compatibility	OS Support List		Front: PCle Gen5 x4 or SATA6Gb/s or SAS-4 24Gb/s
Socket	2 x LGA 6096 (Socket SP5)	Backplane Board	Front: PCIe Gen5 x4 or SATAGGb/s or SAS-4 24Gb/s Rear: SATAGGb/s or SAS-4 24Gb/s
Chipset	System on Chip		4 or TDM has demoitly ODI interface
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs Up to 4800 MT/s	TPM	1 x TPM header with SPI interface - Optional TPM2.0
LAN	2 x 1Gb/s LAN (1 x Intel <sup>®</sup> I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	Power Supply	1+1 2000W 80 PLUS Platinum redundant power supplies AC Input: 100-240V
Video	Integrated in ASPEED® AST2600 - 1 x Mini-DP	System Management	ASPEED® AST2600 Baseboard Management Controller
	Front hot-swap: 4 x 2.5" Gen5 NVMe/SATA/SAS-4 20 x 2.5"		KERNO Management Console web interface
	SATA/SAS-4 Rear hot-swap:	System Fans	4 x 80x80x38mm
Storage	4 x 2.5" SATA/SAS-4 Internal M.2: 2 x M.2 (2280/22110), PCIe Gen3 x4	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
	1 x M.2 (2280/22110), PCIe Gen3 x2 Storage card is required to enable SATA and SAS drives Broadcom SAS4x48 expander - Bandwidth: SATA 6Gb/s or SAS-4 24Gb/s per port	Packaging Content	1 x 2U Chassis 1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit
RAID	Require RAID add-in card		Optional Parts: Cable Management Arm

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## C kerno OKAM K01-22A0



Rack Server - 2U DP 12+4-Bay Gen5 NVMe/SATA/SAS-4 2400W





#### **Key Features**

- Supports up to 2 x Dual slot Gen5 GPUs
- Dual AMD EPYC<sup>™</sup> 9005/9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 8 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 4 x 3.5"/2.5" SATA/SAS-4 hot-swap bays
- 4 x 2.5" SATA/SAS-4 hot-swap bays on the rear side
- 2 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x FHHL PCle Gen5 x16 slots
- 2 x OCP NIC 3.0 PCIe Gen5 x16 slots
- Compatible with SupremeRAID™ by Graid Technology
- 1+1 2400W 80 PLUS Platinum redundant power supplies

#### **Specification**

Dimensions	2U (W438 x H87.5 x D815 mm)	PCIe Expansion Slots	2 x FHFL PCIe Gen5 x16, for GPUs 2 x FHHL PCIe Gen5 x16
CPU	AMD EPYC™ 9005 Series Processors  AMD EPYC™ 9004 Series Processors  Dual processor, cTDP up to 240W  -The EPYC 9005 series processors with a cTDP of 240W are supported only under ambient temperatures of 25°C	I/O Ports	2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI  Front: 2 x USB 3.2 Gen1  Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
OS Compatibility	OS Support List		Front: PCIe Gen5 x4 or SATA6Gb/s or SAS-4 24Gb/s
Socket	2 x LGA 6096 (Socket SP5)	Backplane Board	Rear: SATA6Gb/s or SAS-4 24Gb/s
Chipset	System on Chip	ТРМ	1 x TPM header with SPI interface - Optional TPM2.0
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs [EPYC 9005] Up to 6400 MT/s [EPYC 9004] Up to 4800 MT/s	Power Supply	1+1 2400W 80 PLUS Platinum redundant power supplies AC Input: 100-240V *The system power supply requires C19 power cord.
LAN	2 x 1Gb/s LAN (1 x Intel® I350-AM2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System	ASPEED® AST2600 Baseboard Management Controller
Video	Integrated in ASPEED® AST2600	Management	KERNO Management Console web interface
VIGEO	- 1 x Mini-DP	System Fans	4 x 80x80x38mm
Storage	Front hot-swap: 8 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 4 x 3.5"/2.5" SATA/SAS-4 Rear hot-swap:	Operating Properties	Operating: 10°C to 30°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
	4 x 2.5" SATA/SAS-4 SAS card is required to support SAS drives.	Dealersins	1 x 2U Chassis
RAID	Require RAID add-in cards	Packaging Content	1 x Mini-DP to D-Sub cable 1 x 2-Section Rail kit Optional Parts: Cable Management Arm

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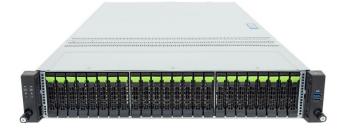


**Specification** 

### **OKAM K01-2220**

Rack Server - 2U DP 2U DP 24+2-Bay NVMe/SATA







- Dual Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MCR DIMM, 32 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 24 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 2 x 2.5" SATA/SAS-4 hot-swappable bays on the rear side
- 2 x M.2 slot with PCle Gen5 x4 interface
- 2 x FHHL Dual-slot PCle Gen5 x16 slots
- 1 x FHHL Single-slot PCle Gen5 x16 slot
- 1 x OCP 3.0 Gen5 x16 slot
- 1+1 2000W 80 PLUS Titanium redundant power supplies

#### **Applications**

#### **Networks Server, Servers for Hybrid/Private Cloud**

Dimensions	2U (W438 x H87.5 x D815 mm)	PCle	2 x FHHL PCIe Gen5 x16, dual-slot
	Intel® Xeon® 6 Processors - Intel® Xeon® 6700E-Series Processors	Expansion Slots	1 x FHHL PCIe Gen5 x16, single-slot 1 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
CPU	- Intel® Xeon® 6700P-Series Processors - Intel® Xeon® 6500P-Series Processors Dual processors, TDP up to 350W	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear:
OS Compatibility	Visit our website for the list of compatible OS		2 x USB 3.2 Gen1, 1 x Mini-DP, 2 x RJ45, 1 x MLAN
Chipset	System on Chip	ТРМ	1 x TPM header (SPI), Optional TPM2.0 1 x PRoT connector
Memory	8-Channel DDR5 RDIMM/MRDIMM, 32 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s	Backplane	Front: PCle Gen5 x4 or SATA6Gb/s or SAS-4 24Gb/s Front: PCle Gen5 x4 or SATA6Gb/s or SAS-4 24Gb/s
	MRDIMMs are only supported with Intel <sup>®</sup> Xeon <sup>®</sup> 6 Processors with P-cores and in a 1DPC configuration	Board	Rear: SATA6Gb/s or SAS-4 24Gb/s
LAN	2 x 1Gb/s LAN ports (1 x Intel® I350-AM2) - supports NCSI function 1 x 10/100/1000 Mbps Management LAN	Power Supply	1+1 2000W 80 PLUS Titanium redundant power supplies AC Input: 100-240V
Video	Integrated in ASPEED® AST2600 - 1 x Mini-DP	System Management	ASPEED® AST2600 management controller KERNO Management Console (AMI MegaRAC SP-X)
	Front hot-swap: 24 x 2.5" Gen5 NVMe/SATA/SAS-4	System Fans	4 x 80x80x38mm
Storage	Rear hot-swap: 2 x 2.5" SATA/SAS-4 Internal M.2: 2 x M.2 (2280/22110), PCIe Gen5 x4	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
	Storage card is required to support SATA and SAS drives. SAS card is required to support SAS drives.	Packaging	1 x 2U Chassis 1 x Mini-DP to D-Sub cable
RAID	Require RAID add-in cards Onboard VROC key header	Content	1 x 2-Section Rail kit

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### **OKAM K01-2220**

Rack Server - 2U DP 4 x PCIe Gen5 GPUs







- Supports 4 x Dual-slot Gen5 GPU cards
- Dual Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 32 x DIMMs
- **Dual ROM Architecture**
- 12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 1 x M.2 slot with PCle Gen5 x4 interface
- 4 x FHFL PCIe Gen5 x16 slots for GPUs
- 1 x FHHL PCle Gen5 x16 slot
- 1 x OCP NIC 3.0 PCle Gen5 x16 slot
- Dual 2700W 80 PLUS Titanium redundant power supply

#### **Applications**

**Backplane** 

Al Inference & Training, Visual Computing, High-Performance Computing, Networking, Hybrid/Private **Cloud Server** 

**CPU** 

Memory

Storage

2U (W438 x H87.5 x D815 mm) **Dimensions** 

Intel® Xeon® 6 Processors

 Intel<sup>®</sup> Xeon<sup>®</sup> 6700E-Series Processors - Intel® Xeon® 6700P-Series Processors

- Intel® Xeon® 6500P-Series Processors

Dual processors, TDP up to 350W

**OS Compatibility** Visit our website for the list of compatible OS

Chipset System on Chip

> 8-Channel DDR5 RDIMM/MRDIMM, 32 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s

(2DPC) [MRDIMM] Up to 8000 MT/s

MRDIMMs are only supported with Intel Xeon 6 Processors

with Pcores and in a 1DPC configuration

LAN 1 x 10/100/1000 Mbps Management LAN

Integrated in ASPEED® AST2600 Video

- 1 x Mini-DP

Front hot-swap:

12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4

Internal M.2:

1 x M.2 (2280/22110), PCIe Gen5 x4

Storage card is required to support SATA and SAS drives.

Require RAID add-in cards **RAID** Onboard VROC key header

PCle	4 x FHFL PCIe Gen5 x16, for GPUs
Expansion	1 x FHHL PCIe Gen5 x16
Slots	1 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI

Front:

2 x USB 3.2 Gen1

I/O Ports Rear:

2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x MLAN

PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s Board 1 x TPM header (SPI), Optional TPM2.0 kit: CTM012 1 x

**TPM** PRoT connector (only enabled on RoT SKU)

Dual 2700W 80 PLUS Titanium redundant power supply AC Input: 100-240V **Power Supply** 

\*The system power supply requires C19 power cord.

ASPEED® AST2600 management controller System Management KERNO Management Console (AMI MegaRAC SP-X)

1 x 40x40x28mm **System Fans** 4 x 80x80x56mm

Operating: 10°C to 30°C, 8% to 80% (non-condensing) Operating Non-operating: -40°C to 60°C, 20% to 95% (non-**Properties** condensing)

1 x 2U Chassis

**Packaging** 1 x Mini-DP to D-Sub cable Content 1 x 2-Section Rail kit

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## C kerno OKAM HD K01-3F20



High Density Server - 3U 4-Node DP 24-Bay Gen5 NVMe/SATA/SAS-4



Specification `

#### Key Features

- 3U 4-node rear access server system
- Dual Intel® Xeon® 6900-Series Processors per node
- 12-Channel DDR5 RDIMM / MRDIMM, 24 x DIMMs per node
- Dual ROM Architecture
- 8 x 1Gb/s LAN ports via Intel® I350-AM2
- 24 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 16 x LP PCIe Gen5 x16 slots
- Onboard 24Gb/s SAS-4 expander
- Triple 3000W 80 PLUS Titanium redundant power supply

#### **Applications**

## High-Performance Computing Server, High Converged Server, Servers for Hybrid/Private Cloud

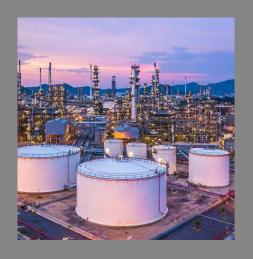
Optomotation			
Dimensions	3U 4-Node - Rear access (W447 x H130.5 x D900 mm)	PCIe Expansion Slots	16 x LP PCle Gen5 x16
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6900-Series Processors Dual processor per node, TDP up to 400W - With 2 x LP cards at 30°C ambient, TDP up to 500W - With 4 x LP cards at 25°C ambient, TDP up to 500W	I/O Ports	Front: 1 x CMC status LED, 1 x CMC reset button Rear: 8 x USB 3.2 Gen1, 4 x Mini-DP, 8 x RJ45, 4 x MLAN
OS Compatibility	OS Support List	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Socket	8 x LGA 7529 (Socket BR)		4 x TPM headers (SPI), Optional TPM2.0
Chipset	System on Chip	TPM	4 x PRoT connectors (On Demand)
Memory	12-Channel DDR5 RDIMM/MRDIMM, 96 x DIMMs [RDIMM] Up to 6400 MT/s [MRDIMM] Up to 8800 MT/s	Power Supply	Triple 3000W 80 PLUS Titanium redundant power supply AC Input: 100-240V *The system power supply requires C19 power cord
	-MRDIMMs are only supported with Intel® Xeon® 6 Processors with P-cores.	System	ASPEED® AST2600 Baseboard Management Controller
LAN	8 x 1Gb/s LAN (4 x Intel® I350-AM2), Support NCSI 4 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2620 Chassis Management Controller KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600 x 4	System Fans	4 x 92x92x76mm
1.000	- 4 x Mini-DP	Operating	Operating: 10°C to 30°C, 8% to 80% (non-condensing)
Storage	Front hot-swap: 24 x 2.5" Gen5 NVMe/SATA/SAS-4	Properties	Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
	Storage card is required to support SATA and SAS drives	Do also also a	1 x 3U Chassis
RAID	Require RAID add-in cards Onboard VROC key header	Packaging Content	1 x Mini-DP to D-Sub cable 1 x L-shape Rail kit Optional Parts: Cable Management Arm

#### Learn more at: https://kernoenterprises.com

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## OKAM Edge product line Industrial Al Focus







### Manufacturing

Industrial / Automotive /F&B /Consumer Goods

- Security management
- Predictive maintenance
- Automated quality inspection
- Asset tracking and management
- Workforce safety and productivity

"Need for speed" – swift reaction to dangerous events with edge processing helps to prevent losses

### **Energy & Utilities**

Extraction /Grids & Pipelines / Refineries / Water Systems

- Predictive maintenance and anomaly detection
- Asset tracking and management
- Worker safety
- Improving customer experience at the filling stations

Guaranteed processing regardless of the connectivity helps maintain high operating standards even in remote locations

#### Government

Public Safety / Municipal / Defence / Agencies

- Traffic analytics and management
- Automatic number plate recognition (ANPR)
- Public safety surveillance
- Infrastructure monitoring

Single edge server per building/district lowers complexity, unlike edge PCs hanging on each light pole





### **OKAM Edge K02-1120**

Edge Server - 1U UP 2-Bay Gen5 NVMe/SATA/SAS-4







#### **Key Features**

- Single Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 16 x DIMMs
- Dual ROM Architecture
- 1 x 1Gb/s LAN port via Intel® I210-AT
- 2 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 1 x M.2 slot with PCle Gen5 x2 interface
- 1 x M.2 slot with PCle Gen5 x2 interface, shared with SATA
- 2 x FHFL PCle Gen5 x16 slots for GPUs
- 2 x OCP NIC 3.0 PCIe Gen5 x16 slots
- Dual 800W 80 PLUS Titanium redundant power supply

#### **Applications**

### Networks Server, Servers for Hybrid/Private Cloud, Edge Server

Specification			
Dimensions	1U (W438 x H43.5 x D520 mm)	PCIe Expansion Slots	2 x FHHL PCIe Gen5 x16 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
СРИ	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Single processor, TDP up to 350W	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear:
OS Compatibility	Visit our website for the list of compatible OS		2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x RJ45, 1 x MLAN
Chipset	System on Chip	ТРМ	1 x TPM header (SPI), Optional TPM2.0 1 x PRoT connector(enabled on demand)
Memory	8-Channel DDR5 RDIMM/MRDIMM, 16 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
	-MRDIMMs are only supported with Intel <sup>®</sup> Xeon <sup>®</sup> 6 Processors with P-cores and in a 1DPC configuration	Power Supply	Dual 800W 80 PLUS Titanium redundant power supply AC Input: 100-240V
LAN	1 x 1Gb/s LAN (1 x Intel® I210-AT), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2600 management controller KERNO Management Console (AMI MegaRAC SP-X)
Video	Integrated in ASPEED® AST2600 - 1 x Mini-DP	Wanagement	KERNO Management Console (Alvii MegaRAC SP-X)
		System Fans	5 x 40x40x56mm
Storage	Rear hot-swap: 2 x 2.5" Gen5 NVMe/SATA/SAS-4 Internal M.2: 1 x M.2 (2280/22110), PCIe Gen5 x2 1 x M.2 (2280/22110), PCIe Gen5 x2, shared with SATA	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
	-SAS card is required to support SAS drives	Packaging	1 x 1U Chassis
RAID	Require RAID add-in cards Onboard VROC key header	Content	1 x Mini-DP to D-Sub cable 2-Section Rail kit

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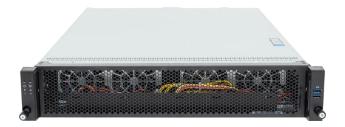
## **E**kerno

### **OKAM Edge K02-2120**

Edge Server - 2U UP 2 x PCle Gen5 GPUs









#### **Key Features**

- Supports 2 x Dual slot Gen5 GPUs
- Single Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 16 x DIMMs
- Dual ROM Architecture
- 1 x 1Gb/s LAN port via Intel<sup>®</sup> I210-AT
- 2 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 1 x M.2 slot with PCle Gen5 x2 interface
- 1 x M.2 slot with PCle Gen5 x2 interface, shared with SATA
- 2 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x OCP NIC 3.0 PCle Gen5 x16 slots
- 1+1 2000W 80 PLUS Titanium redundant power supplies

#### **Applications**

#### Al Platform, Al Training Server, Al Inference Server, Visual Computing, Networks Server, Servers for Hybrid/Private Cloud, Edge Server

•			
Dimensions	2U (W438 x H87.5 x D520 mm)	PCIe Expansion Slots	2 x FHFL PCIe Gen5 x16, for GPUs 2 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Single processor, TDP up to 350W	I/O Ports	Front: 2 x USB 3.2 Gen1 Rear:
OS Compatibility	Visit our website for the list of compatible OS		2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x RJ45, 1 x MLAN
Chipset	System on Chip	TPM	1 x TPM header (SPI), Optional TPM2.0 1 x PRoT connector (enabled on demand)
Mamani	8-Channel DDR5 RDIMM/MRDIMM, 16 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s -MRDIMMs are only supported with Intel® Xeon® 6 Processors with P-cores and in a 1DPC configuration	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Memory		Power Supply	1+1 2000W 80 PLUS Titanium redundant power supplies AC Input: 100-240V
LAN	1 x 1Gb/s LAN (1 x Intel <sup>®</sup> I210-AT), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console web interface
Video	Integrated in ASPEED® AST2600	Management	
	Rear hot-swap:	System Fans	4 x 80x80x38mm
Storage	2 x 2.5" Gen5 NVMe/SATA/SAS-4 Internal M.2: 1 x M.2 (2280/22110), PCIe Gen5 x2 1 x M.2 (2280/22110), PCIe Gen5 x2, shared with SATA		Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
RAID	-SAS card is required to support SAS drives  Require RAID add-in cards Onboard VROC key header	Packaging Content	1 x 2U Chassis 1 x Mini-DP to D-Sub cable 2-Section Rail kit

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### **UQLEAD K03-4210**

#### HPC/AI Server - 4U DP NVIDIA OVX™ 8 x GPUs





#### **Features**

- Optimized for NVIDIA OVX™ L40S Server with 8 GPUs configuration
- Dual 5th/4th Gen Intel® Xeon® Scalable Processors
- Dual Intel® Xeon® CPU Max Series
- 8-Channel DDR5 RDIMM, 32 x DIMMs
- Dual ROM Architecture
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swappable bays
- 1 x M.2 slot with PCle Gen3 x1 interface
- 8 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x FHHL PCle Gen5 x16 slots
- 4 x LP PCIe Gen5 x16 slots
- 1 x LP PCle Gen4 x16 slot on the front side
- 3+1 3000W 80 PLUS Titanium redundant power supplies

#### Specification

Dimensions	4U (W448 x H176 x D880 mm)		8 x PCIe Gen5 x16 FHFL slots for GPUs (with PCIe switches) - NVIDIA OVX Specifications: 8 x NVIDIA L40S
СРИ	5th/4th Generation Intel® Xeon® Scalable Processors Intel® Xeon® CPU Max Series Dual processor, LGA 4677 (Socket E), TDP up to 350W - NVIDIA OVX Specifications: 2 x Intel® Xeon® Gold 8480	Expansion Slots	2 x PCIe Gen5 x16 FHHL slots - NVIDIA OVX Specifications: 1 x BlueField-3 (B3220) 4 x PCIe Gen5 x16 low-profile slots - NVIDIA OVX Specifications: 4 x ConnectX-7 1 x PCIe Gen4 x16 low-profile slot
OS Compatibility	Windows Server, Red Hat Enterprise Linux Server, VMware ESXi, SUSE Linux Enterprise, Ubuntu Server, Citrix Hypervisor	I/O Ports	Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN Internal: 1 x TPM header, 1 x VROC connector
Chipset	Intel® C741 Chipset	TPM	1 x TPM header with SPI interface (Optional TPM2.0)
	8-Channel DDR5 memory, 32 x DIMM slots RDIMM up to 96GB supported; 3DS RDIMM up to 256GB	Backplane Board PCle Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Memory	supported Memory speed: Up to 5600 MT/s (1DPC), 4400 MT/s (2DPC) - NVIDIA OVX Specifications: Min 768GB DDR5 ECC (1 DIMM per slot)	Power Supply	3+1 3000W 80 PLUS Titanium redundant power supplies AC Input: 100-240V (The system PSU requires C19 power cord)
LAN	2 x 10Gb/s LAN ports (1 x Intel® X710-AT2) - Supported NCSI 1 x 10/100/1000 management LAN	System Management	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console (AMI MegaRAC SP-X)
Video	ASPEED® AST2600 Integrated 2D Graphic Adapter	System Fans	12 x 60x60x38mm (23,000rpm)
Storage	12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4* hot-swappable bays *SAS card is required to support SAS drives.  - NVIDIA OVX Specifications: 1 x 1TB NVMe Host Boot Drive - NVIDIA OVX Specifications: 2 x 4TB NVMe Host Storage 1 x M.2 slot (M-key, PCIe Gen3 x1, supports 2280/22110)	Operating Properties	Operating temperature: 10°C to 30°C Operating humidity: 8-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)
RAID	Intel® SATA RAID 0/1/10/5; support optional RAID add-in cards	Packaging Content	1 x 4U Chassis 1 x Mini-DP to D-Sub cable 1 x L-shape Rail kit Packaging Dimensions: 1200 x 800 x 444 mm w/ pallet

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## **E**kerno **UQLEAD K03-42A0**



HPC/Al Server - 4U DP 8 x PCle Gen5 GPUs



**Specification** 

#### **Key Features**

- Supports up to 8 x Dual slot Gen5 GPUs
- Dual AMD EPYC™ 9004 Series Processors
- 12-Channel DDR5 RDIMM, 48 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s LAN ports via Intel® I350-AM2
- 12 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 2 x M.2 slots with PCle Gen3 x4 interface
- 8 x FHFL PCIe Gen5 x16 slots for GPUs
- 10 x LP PCle Gen5 x16 slots
- 3+1 3000W 80 PLUS Titanium power supplies

#### **Applications**

#### Al Training, Al Inference, Visual & High-Performance Computing

Dimensions	4U (W448 x H176 x D880 mm)		8 x FHFL PCle Gen5 x16 slots for GPUs (with PCle	
СРИ	AMD EPYC™ 9005 Series Processors AMD EPYC™ 9004 Series Processors	Expansion Slots	switches) 8 x LP PCle Gen5 x16 slots on the rear side (with PCle switches) 2 x LP PCle Gen5 x16 slots on the front side	
	Dual processor, cTDP up to 400W - At 25°C ambient, cTDP up to 500W		*The system is validated for use with a single GPU model	
OS Compatibility	Windows Server, Red Hat Enterprise Linux server, Ubuntu, SUSE Linux Enterprise server, VMware ESXi, Citrix Hypervisor	I/O Ports	Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN	
		Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s	
Socket	2 x LGA 6096 (Socket SP5)	Security Modules	1 x TPM header with SPI interface (Optional TPM2.0)	
Chipset	System on Chip		2±1 2000M/90 DLUS Titanium radiundant newer cumplica	
Memory	12-Channel DDR5 RDIMM, 48 x DIMMs [EPYC 9005] Up to 5200 MT/s (1DPC), 4400 MT/s (1R 2DPC), 4000 MT/s (2R 2DPC) [EPYC 9004] Up to 4800 MT/s (1DPC), 3600 MT/s	Power Supply	3+1 3000W 80 PLUS Titanium redundant power supplies AC Input: 100-240V	
			*The system power supply requires C19 power cord	
1.451	(2DPC)	System Management	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console web interface	
LAN	2 x 1Gb/s LAN (1 x Intel® l350-AM2) - Support NCSI 1 x 10/100/1000 Mbps Management LAN	J	·	
Video	Integrated in ASPEED® AST2600	System Fans	12 x 60x60x38mm (23,000rpm)	
Video	- 1 x VGA port		Operating temperature: 10°C to 35°C	
Storage	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS-4* *SAS card is required to support SAS drives.	Operating Properties	Operating humidity: 8%-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)	
	Internal M.2: 2 x M.2 (2280/22110), PCIe Gen3 x4	Dooleaging	1 x 4U Chassis	
RAID	Require RAID add-in cards	Packaging Content	8 x GPU Power cables 1 x L-shape Rail kit	

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## kerno UQLEAD K03-42A0







HPC/AI Server - 4U DP NVIDIA HGX™ H200 DLC

- Liquid-cooled NVIDIA HGX<sup>™</sup> H200
- CPU+GPU direct liquid cooling solution with leak detection
- 900GB/s GPU-to-GPU bandwidth with NVIDIA NVLink<sup>™</sup> and NVSwitch<sup>™</sup>
- Dual AMD EPYC<sup>™</sup> 9005/9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- Dual ROM Architecture
- Compatible with NVIDIA® BlueField® -3 DPUs and NVIDIAConnectX®-7 NICs
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 2 x M.2 slots with PCle Gen3 x4 and x1 interface
- 8 x 2.5" Gen5 NVMe hot-swap bays
- 4 x FHHL dual-slot PCle Gen5 x16 slots
- 8 x FHHL single-slot PCle Gen5 x16 slots
- 4+4 3000W 80 PLUS Titanium redundant power supplies

#### **Applications**

## Al Platform, Al Training Server, Al Inference Server, High-Performance Computing Server...

Specification		High-Performance Computing Server		
Dimensions	4U (W447 x H175.5 x D901 mm)	Modular GPU	Liquid-cooled NVIDIA HGX <sup>™</sup> H200 with 8 x SXM GPUs	
CPH	AMD EPYC <sup>™</sup> 9005/9004 Series Processors Dual processor, cTDP up to 500W	PCIe Expansion Slots	4 x FHHL Dual-slot PCIe Gen5 x16 8 x FHHL Single-slot PCIe Gen5 x16	
OS Compatibility	Visit our website for the list of compatible OS	I/O Ports	Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN Rear:	
Socket	2 x LGA 6096 (Socket SP5)	TPM	1 x MLAN 1 x TPM header (SPI), Optional TPM2.0	
Chipset	System on Chip	Backplane Board	PCIe Gen5 x4	
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs [EPYC 9005] Up to 6400 MT/s [EPYC 9004] Up to 4800 MT/s	Power Supply	4+4 3000W 80 PLUS Titanium power supplies AC Input: 115-240V *The system power supply requires C19 power cord	
ΙΔN	Front: 2 x 10Gb/s LAN (1 x Intel® X710-AT2), NCSI 1 x 10/100/1000 Mbps Management LAN Rear: 1 x 10/100/1000 Mbps Management LAN	System Management	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console web interface	
			Motherboard: 2 x 60x60x56mm / 2 x 60x60x76mm PCle slots:	
VIGO	Integrated in ASPEED® AST2600 - 1 x VGA port	System Fans	4 x 80x80x56mm <b>GPU tray:</b> 4 x 60x60x38mm	
Storage	Front hot-swap: 8 x 2.5" Gen5 NVMe/SATA Internal M.2: 1 x M.2 (2280/22110), PCIe Gen3 x4 1 x M.2 (2280/22110), PCIe Gen3 x1	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)	
	N/A	Packaging Content	1 x 4U Chassis 1 x L-shape Rail kit	

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## kerno UQLEAD K03-5210

HPC/AI Server - 5U DP NVIDIA HGX™ H200



#### **Key Features**

- NVIDIA HGX<sup>™</sup> H200
- 900GB/s GPU-to-GPU bandwidth with NVIDIA NVLink<sup>™</sup> and VSwitch<sup>™</sup>
- Dual 5th/4th Gen Intel® Xeon® Scalable Processors
- Dual Intel® Xeon® CPU Max Series
- 8-Channel DDR5 RDIMM, 32 x DIMMs
- Dual ROM Architecture
- Compatible with NVIDIA® BlueField®-3 DPUs/SuperNICs
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 8 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 4 x FHHL PCIe Gen5 x16 slots
- 8 x LP PCIe Gen5 x16 slots
- 4+2 3000W 80 PLUS Titanium redundant power supplies



Specification							
Dimensions	5U (W447 x H219.7 x D945 mm)	Modular GPU	NVIDIA HGX™ H200 with 8 x SXM GPUs				
СРИ	5 <sup>th</sup> Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable Processors 4 <sup>th</sup> Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable Processors Intel <sup>®</sup> Xeon <sup>®</sup> CPU Max Series Dual processor, TDP up to 350W	PCIe Expansion Slots	4 x FHHL PCle Gen5 x16 8 x LP PCle Gen5 x16				
			Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN				
OS Compatibility	Visit our website for the list of compatible OS	I/O Ports	Rear: 1 x MLAN				
Socket	2 x LGA 4677 (Socket E)	ТРМ	1 x TPM header (SPI), Optional TPM2.0				
Chipset	Intel® C741	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s				
	8-Channel DDR5 RDIMM, 32 x DIMMs [5th Gen Intel Xeon] Up to 5600 MT/s (1DPC), 4400 MT/s (2DPC) [4th Gen Intel Xeon] Up to 4800 MT/s (1DPC), 4400 MT/s (2DPC) [Intel Xeon Max Series] Up to 4800 MT/s (1DPC), 4400 MT/s (2DPC)	Backplane Board	Total delic X4 of SATA dob/s of SAS-4 240b/s				
Memory		Power Supply	4+2 3000W 80 PLUS Titanium redundant power supplies AC Input: 115-240V *The system power supply requires C19 power cord				
		System Management	ASPEED® AST2600 Baseboard Management Controller KERNO Management Console web interface				
LAN	Front: 2 x 10Gb/s LAN (1 x Intel® X710-AT2), NCSI 1 x 10/100/1000 Mbps Management LAN Rear: 1 x 10/100/1000 Mbps Management LAN	System Fans	Motherboard: 2 x 40x40x28mm / 4 x 60x60x56mm PCle slots: 4 x 40x40x28mm / 2 x 40x40x56mm				
Video	Integrated in ASPEED® AST2600 - 1 x VGA port		<b>GPU tray:</b> 6 x 60x60x76mm / 11 x 80x80x80mm				
Storage	Front hot-swap: 8 x 2.5" Gen5 NVMe/SATA/SAS-4 -SAS card is required to support SAS drives	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)				
RAID	Intel® SATA RAID 0/1/10/5 Support optional RAID add-in cards	Packaging Content	1 x 5U Chassis 1 x L-shape Rail kit				

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#### Local Support 24x7x365

24/7 technical support in English/Arabic with fixed recovery time options up to 4 hours.

ON-GROUND TEAM

#### Center of Excellence

Training center for customers and partners on products of our own development, individual training on request.

VALUED PARTNERSHIP

#### Vendor Expertise

Expert level of technical specialists across the entire stack of equipment. Personal approach and dedicated support teams.

**DIRECT L3 SUPPORT ACCESS** 

#### Test Lab

Own test labs for testing procedures and developing an optimal solution.

INNOVATIVE SOLUTIONS

<b>Ç</b> kerno	Classic Tier Programs			
	Basic	Optimal	Extended	
Self-Service request registration 24x7	✓	√	✓	
Omnichannel support: Call-center, e-mail, self- service portal	✓	<b>✓</b>	✓	
Real-time request status monitoring	✓	✓	✓	
Spare parts for replacement	$\checkmark$	✓	✓	
Dedicated Service Manager			<b>√</b>	
Reports	-	2 times a year	quarterly	
Updates installation		remote	✓	
Preventive measures & maintenance		2 times a year	quarterly	
Root-cause analysis for critical incidents			✓	
Fixed recovery time option			✓	
Remote monitoring	-		$\checkmark$	
The incident reaction time (maximum priority)	within 4 hours	within 2 hours	within 1 hour	
Support Line Request Resolution	9x5	24x7	24x7	



## Value-added Options

Customise your support with optional services tailored to your business needs. Options are available for separate purchase and complement the selected support program.

#### **Keep Your Drive**

Option to retain defective drives after replacement



#### Extra Field Service

On-site Engineer Visit for CRU Replacement. KERNO service engineer dispatch to perform Customer Replaceable Unit (CRU)replacement at the equipment installation site.

#### Spare Parts Reserve

Critical spare parts are reserved locally. List recommended by the KERNO Service Team based on system configuration and risk assessment.



#### Fixed Delivery Time

Tier support programs.
Convenient choice from basic reactive repair to complex support with the allocation of a personified team of service experts



## Emergency on site visit

4-Hour On-Site Part Replacement

KERNO service engineer arrives at the installation site with the required part within 4 hours of the replacement approval



#### Fixed Recovery Time

In case of critical failure, hardware is restored within a guaranteed timeframe: 8, 24, 48, or 72 hours — based on equipment type and service level.





## Installation Services

Installation services are required to ensure fast and correct equipment setup. Depending on system complexity, the service is provided as standard or extended. For certain products, installation by certified KERNO engineers is mandatory. It can be purchased with the equipment or as a separate paid service

#### Standard Installation

- Quick visit by a certified KERNO engineer
- "Installed and ready to use" approach
- Cabling, labeling, initial startup
- Scheduled on weekdays during business hours
- Included by default or available as an add-on

#### **Extended Installation**

- Full preparation and technical planning
- Installation + configuration of system software
- Tailored to your IT infrastructure
- Scheduled at your convenience even nights or holidays
- Available as a paid service

### **Additional Services**

KERNO Customer Service offers additional professional services designed to maximize the reliability and continuity of your critical IT infrastructure.

#### Installation

Dedicated KERNO specialists deployed at your location to support optimal operation, maintenance, and administration of KERNO products

#### Preventive on-site Inspections

Proactive measures by KERNO Service specialists to extend the equipment lifecycle through physical and logical level checks, minimizing the risk of unplanned downtime

#### **Express Equipment Check**

Fast evaluation of customer-provided diagnostic data to identify critical risks that may significantly impact equipment performance

#### **Equipment Relocation**

KERNO Service engineers ensure proper preparation of equipment for relocation and correct commissioning at the new site, securing a smooth and reliable restart





We use the security development lifecycle (SDL) from the time features are conceived and designed, assuring customers that our products are resilient to cyber and physical threats by design

Design

Our supply chain assurance program implements safeguards across the physical, personnel and cyber security to ensure a resilient manufacturing and delivery process

Manufacture

Security controls, automation and comprehensive management tools enable zero trust deployments using robust layers of security across hardware and firmware

Deploy

Security extends all the way to end of life, enabling components and systems to be taken out of production securely by erasing all system data to avoid confidential data compromise and misuse

Service & decommission

## Let's define the future together

