

KAYTUS

KR2190V3 Series

World's first OCM-based Rack Server



Overview

The KR2190V3, KAYTUS's new-generation 2U single-socket/dual single-socket general-purpose server, pioneers the commercialization of Open Compute Modules (OCM) and leads the industry. Featuring the Intel® Xeon® 6 processor series processor, it supports full decoupling along with on-demand replacement and asynchronous upgrade of compute/management /storage modules. Ideal for container cloud and big data applications, it delivers robust computing power while limiting the data blast radius to enhance system stability for users.

Applicable Model

Product Model	I/O	Cooling
KR2190-X3-A0-R0-00	Rear I/O	Air cooling

Product Features

■ Streamlined design, security and reliability

- > Featuring fewer components on the motherboard: minimizing potential fault points and enhancing motherboard reliability.
- > Offering straightforward cable routing: preserving signal integrity and ensuring accurate, swift data transmission.
- > Incorporating proper cooling airflow design: boosting cooling efficiency and lessening cooling challenges, as well as mitigating the adverse effects of parasitic capacitance and inductance to optimize the motherboard's electrical performance.
- > Employing a reasonable layout: diminishing noise interference from PSUs on other components and reducing signal transmission latency, thereby improving the motherboard's overall performance.

■ High fault tolerance, strong manageability

- > Minimizing data blast radius with single-socket/dual single-socket system design; narrowing the impact range during failures; reducing data migration time; improving system reliability by lessening failure impact; boosting fault tolerance; curbing security vulnerability impact for secure management and repair.

■ Latency optimization, rapid response

- > The single-socket architecture eliminating mutual socket access, UPI interconnection, and cross-NUMA access, resulting in reduced latency, which enhancing user experience, increasing system efficiency, improving interactivity, decreasing package loss rate, and supporting a higher number of concurrent users.

■ Complete decoupling, flexible scalability

- > Modular design for flexible single-socket/dual single-socket configurations to meet varying user needs.
- > Enabling chassis decoupling for adaptable I/O expansion, catering to computing, storage, and GPU application demands.

Product Specifications

Model	Maintenance	Cooling
KR2190-X3-A0-R0-00	Rear I/O	Air cooling
Form Factor	Supports up to 2 half-width single-socket computing nodes, with optional single-socket or dual single-socket systems	
Processor	1 or 2 Intel® Xeon® 6 processors (SRF-AP/GNR-AP), up to 500W TDP	
Memory	Up to 12x DDR5 RDIMMs (6,400MHz) or MCR DIMMs (8,800MHz)	
Storage	12-drive configuration: <ul style="list-style-type: none"> ① 12× 3.5-inch SAS/SATA/NVMe drives (hot-swap and compatible with 2.5-inch drives) ② 12× E3.S SSDs (16.8mm)/E1.S SSD (15mm) (x4, x8, or x16) 24-drive configuration: <ul style="list-style-type: none"> ① 24× 2.5-inch SAS/SATA/NVMe drive (hot-swap) ② 32 × E1.S SSDs (15mm)/16 × E3.S SSDs (16.8mm) (x4, hot-swap) 	
PCIe Expansion	Rear configuration 1: <ul style="list-style-type: none"> ① 6× FH3/4L PCIe 5.0 slots or 4× 3.5-inch SAS/SATA drives (hot-swap) ② 4× HHHL PCIe 5.0 slots or 4× 2.5-inch SAS/SATA/NVMe drives (hot-swap) ③ 1× PCIe 5.0 OCP NICs Rear configuration 2: <ul style="list-style-type: none"> ① 6× FH3/4L PCIe 5.0 slots or 4 × 3.5-inch SAS/SATA drives (hot-swap) ② 2× FH3/4L PCIe 5.0 slots ③ 1× PCIe 5.0 OCP NIC Rear configuration 3: <ul style="list-style-type: none"> 4× FH3/4L 450W DW GPU + 1× 300W DW Smart NIC + 1× FH3/4L PCIe 5.0 card 	
Power Supply	Two 1+1 redundant hot-swap Platinum/Titanium PSUs with an output power of 1,600W/2,000W/2,700W/3,200W	
Operating Temperature	Air cooling: 5°C to 35°C(Refer to the White Paper for details)	