

# KAYTUS

# KR6880V2 Series Servers

## Powered by Intel Processors

## Key application server and database server



## Overview

The KR6880V2 is an eight-socket server powered by the 4<sup>th</sup> Gen Intel® Xeon® Scalable processors (Sapphire Rapids). It provides ultra-high computing performance and comprehensive reliability for customers' key business applications, making it suitable for scenarios such as large transaction databases, SAP HANA, ERP, HPC, high-performance and scientific computing, and virtualization.

## Product Models

Product Model	Maintenance Method	Cooling Mode
KR6880-X2-A0-R0-00	Rear I/O	Air cooling

# Product Features

## ■ Ultimate computing and exceptional performance

- > Built on the 4<sup>th</sup> Gen Intel® Xeon® Scalable processors, the KR6880V2 supports up to 60 cores and 120 threads per CPU with up to 350W TDP and 4 groups of 16GT/s high-speed UPI links per CPU to provide ultra-high speed interconnection for 8 CPUs. This offers high-speed computing experience to customers.
- > Supports 128 DDR5 RDIMMs/3DS RDIMMs, with 4,800MT/s at 1 DPC and 4,400MT/s at 2 DPC. This server is applicable to scenarios such as in-memory database applications and big data analysis that requires memory capacity.
- > Supports heterogeneous computing, with up to 4 dual-width GPUs or 8 single-width GPUs. This server is applicable to scenarios such as machine learning, deep learning, virtualization applications, and high-performance and scientific computing.
- > Excellent I/O balance design comprehensively improves the data access speed and processing efficiency, thus greatly improving the overall data throughput of the system. This server is applicable to fast data transmission and large-scale processing scenarios.

## ■ High stability, reliability, and security

- > Compared with the previous design, full-module design for the whole system helps increase by 50% RAS features and is ideal for critical business applications with high reliability requirements.
- > Multiple power supply protection measures, the power supply with N+M redundancy, and dynamic power-capping technology ensure the uninterrupted running of the system when the power supply in the server room or the PSU is abnormal.
- > PFR secure boot, firmware tamper-proofing, and BIOS/BMC dual-redundancy design ensure stable and secure system operation.
- > The memory MRT technology and memory funnel mechanism optimize the memory performance while improving the reliability and fault tolerance capability of the memory module.

## ■ Ingenious design and easy maintenance

- > The server adopts the modular design to support pull-out maintenance for independent nodes. In addition, a variety of components such as the fan, power supply, OCP card support hot-swap maintenance. This achieves toolless unpacking for the whole system and simplifies the server maintenance.
- > The system supports fast system status diagnostics, and a new load LED is added on the chassis front panel to display the system operation status. In addition, a Bluetooth LCD display can be configured for the system. The app displays fault code information and other information. You can view the server asset information, view and set the management IP address, and monitor the power consumption and ambient temperature of the server by using the app.
- > You can configure BIOS with few clicks, and up to 7 scenarios and 17 application modes are supported. This greatly improves the server configuration and deployment efficiency.

## ■ Low-carbon and efficient noise reduction

- > The system adopts new dual-rotor fan modules to optimize the fan aerofoil structure. This significantly improves the superimposed effect of wind pressure and the air volume of the fan module as well as reduces noise. In addition, the server works with the new-generation EVAC heatsink to provide high-efficient cooling solutions for customers.
- > Our unique intelligent control technology for partitions in the entire system helps adjust the fan speed intelligently based on the power consumption of components in different air ducts. This eliminates temperature transmission delays, realizes energy-saving fan speed regulation and accurate air supply, and improves the cooling efficiency.
- > This server uses innovative fan noise reduction materials that are obtained based on our hundreds of thousands of experiments and research on noise reduction materials. These materials feature efficient sound-absorbing. We are committed to producing server products with less noise for customers.
- > We follow the sustainable environment protection concept. The key components of the product meet the lead-free requirements (RoHS), and all packaging materials are recyclable.

# Product Specifications

Item	Description
Form Factor	6U rack server
Processor	4/8 x 4 <sup>th</sup> Gen Intel® Xeon® Scalable processors Up to 480 cores 4 UPI links per CPU at up to 16GT/s per link Up to 350W TDP
Chipset	Intel C741
Memory	Up to 128 DDR5 RDIMMs with 4,800MT/s at 1 DPC and 4,400MT/s at 2 DPC 16 DIMMs per CPU and 128 DIMMs for 8 CPUs RDIMMs/3DS RDIMMs supported
Storage	<b>Front:</b> Up to 24 x 2.5-inch SAS/SATA/NVMe drives <b>Internal:</b> ICM supports 2 SATA/NVME M.2 SSDs Up to 3 TF cards (PCH x 1 or 2/BMC x 1)
Storage Controller	2 x SAS/RAID/Trimode cards
Network	Up to 4 hot-swap PCIe 5.0 x16 SFF OCP 3.0 cards; compatible with multi-host NIC in the OCP form; NCSI supported
I/O Expansion Slot	16 x FHHL PCIe 5.0 x16 cards/8 x FHHL PCIe 5.0 x16 cards + 4 x dual-width GPUs/8 x single-width GPUs
Port	<b>Front:</b> 1 x USB 2.0 port/LCD port, 1 x USB 3.0 port, and 1 x DB15 VGA port <b>Rear:</b> 2 x USB 3.0 ports, 1 x DB15 VGA port, 1 x COM port (Micro USB), and 1 x RJ45 management network port
Fan	8 hot-swap dual-rotor fans with N+1 redundancy
Power Supply	4 x standard CRPS Platinum/Titanium PSU with the output power of 1,300W/1,600W/2,000W/2,700W; N+M redundancy, M≤N
System Management	Supports IPMI, SNMP, Redfish, and mobile terminal access management provided by an external Bluetooth LCD display
Security Feature	TPM 2.0, BMC/BIOS redundancy, dynamic power-capping, Intel PFR secure boot, and firmware tamper-proofing
Operating System	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, etc.
Dimensions (W x H x D)	482mm x 263.2mm x 870mm (with mounting ears) 448mm x 263.2mm x 820mm (without mounting ears)
Weight	Full configuration: ≤97kg (For details, refer to the White Paper.)
Operating Temperature	5°C to 45°C (For details, refer to the White Paper.)