



# K905G6



2U4N8P

AMD EPYC™ 9004 Series  
Processor-based System

## Highlights

- **Best Virtualization Solution with Optimal TCO and Enhanced Security**
- **Scalability Unleashed by Latest Technologies such as DDR5, PCIe Gen5 and OCP 3.0**
- **Excellent Serviceability and Flexibility Brought by Modular Design**



Virtualization



Hyperconverged  
Storage



Cloud  
Computing



High End  
Enterprise Server

K905G6 is a high-performance 2U server system based on dual socket 5nm AMD EPYC™ 9004 series processor. It is perfect for various applications including virtualization, cloud computing and high density computing. K905G6 also features impressive TCO reduction benefited from the industry leading core density, improved performance, and energy efficiency. In addition to the highly serviceable 2U enclosure, dual processors provide 128 lanes PCIe Gen5 (with x4 xGMI links) and 8 bonus lanes PCIe Gen3 on the MLB for scalability and flexibility. The serviceable hybrid flash array module supports NVMe with storage capacity by the optional advanced next generation SSDs.

### Doubled link speeds, Increasing Performance

The 4th generation AMD EPYC 9004™ series processor is capable of up to 96 cores, 24 DDR5 memory slots and 1DPC supporting 4800MTs memory. It is equipped with high speed PCIe Gen5 interconnect linking the processor and I/O subsystem with bandwidth, gigatransfer and frequency that doubled compared to prior generations. These faster speed transfers are suited for machine learning, artificial intelligence and data uses.

### Overview

K905G6 is powered by the 4th generation dual socket AMD EPYC 9004™ platform series and is optimized for supporting the high processor TDPs for its class. It is equipped with up to 24 DDR5 DIMM @ 1DPC and up to 4 x xGMI3 links per processor (32GT/s per xGMI) ideal for data center and processor intensive workload environments. The chassis is adaptable and equipped with modular drive bays that supports up to 2 x U.2 NVMe SSDs per Node. It is designed not only to reduce TCO but also to accelerate a broad spectrum of workloads – from general purpose to cloud native and big data applications.

## Reliability Accessibility Serviceability (RAS) and Flexibility

K905G6 processor is equipped with extensive enterprise server class RAS capabilities. Memory Data is protected with advanced ECC in addition to the standard DDR5 RAS features. The silicon root of trust is a dedicated security processor embedded in the AMD EPYC system on chip (SoC) manages secure boot, secure virtualization secure memory encryption to minimize potential attack surfaces and enable better protection of software and data. To enhance availability, K905G6 provides highly modular design, supporting tool-less operations of serviceable parts, as well as redundancy for both power and cooling fans. It also provides increased computing density, energy efficiency and security features designed for modern software-defined infrastructure, and robust solution for future generation workloads.



## About Inventec Data Center Solutions (Inventec EBG)

Inventec Data Center Solutions (Inventec EBG) was established in 1998 and has been focusing on the design and manufacturing of server systems in Inventec Corporation. Over decades, Inventec EBG has been the key server system supplier of the global branding clients.

# K905G6 | AMD EPYC™ Server

<b>Positioning</b>	High Density Compute
<b>Form Factor</b>	2U4N8P W x H x D: 448x 875x 916 mm (17.63x 3.44x 38.43 inch)
<b>Processor</b>	AMD SP5 – Genoa (2 CPUs) AMD SP5 Socket(SMLGA 6096) xGMI-4 up to 32Gbps
<b>CPU Process Tech</b>	5 nm
<b>Memory Slot</b>	12 Channels DDR5 per Processor @ 4800MTS (1DPC)(Total: 24DIMMs)
<b>PCIe Lanes</b>	64(w/4-link XGMI) lanes PCIe5, plus 8 bonus lanes PCIe3 (per CPU)
<b>Expansion Slot</b>	2 x PCIe Gen5 x16 GenZ slot (R1, R4) 2 x PCIe Gen5 x16 MCIO slot (R2, R3) 1 x PCIe Gen5 x16 MCIO cable slot (R5) 1 x PCIe Gen3 x4 M.2 Mezz
<b>System I/O</b>	Rear (Per node) • 1 x USB3.0 port • VGA output port • 1xPower button with LED • 1 x UID button with LED • 1 x RJ45 management port • 1 x RJ45 1G port • 1 x Health LED
<b>Network Controller</b>	Intel I210 1Gb single port x16 OCP 3.0 Connector
<b>Storage Controller</b>	Support up to 2 x U.2 NVMe SSDs per Node Support M.2 22110 Front(2U 4Node) • Support 2 x 4SFF U.2 NVMe HDD Bays
<b>System Management</b>	Aspeed AST2600 BMC • 8GB DDR4 • Support 1 management LAN port • VGA
<b>TPM</b>	Embedded TPM2.0
<b>VGA</b>	VGA Video integrated into BMC
<b>Thermal Sensor</b>	TMP468 TMP75
<b>Power Supply</b>	Support CRPS PSU 2400W 200-240Vac/ 1600W 200-277Vac
<b>Fan</b>	Four 4056 Fans per node

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