



# K900G6

2U4N8P

5<sup>th</sup> Generation Intel®  
Xeon® Scalable  
Processor-based System



## Highlights

- **Built-in AI Accelerators such as Intel Advanced Matrix Extension (AMX) for inference and training workloads**
- **Enhanced Security features such as Intel Software Extension (SGX) and Total Memory Encryption (TME) for improved data protection and operational integrity**
- **Improved Power Efficiency for enhanced sustainability**
- **Excellent Serviceability and Flexibility brought by Modular Design**



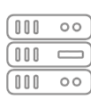
Virtualization



Hyperconverged  
Storage



Cloud  
Computing



High End  
Enterprise Server

K900G6 is powered by a 5th Generation Intel Eagle stream with Intel Emmitsburg chipset and Intel Emerald Rapids dual Intel socket (LGA 4677) series is optimized for supporting high processor TDPs for its class. It is designed with two memory controllers that support 8 channels DDR5 per processor (up to 5600MT/s, 1DPC). The memory capacity is up to 4TB DDR5 at 16 channels when populated with 256GB of DDR5 DIMM modules. It is equipped with high speed PCIe Gen5 interconnect linking the processor I/O and subsystems with bandwidth, Gigatransfer and frequency that doubled compared to prior generations. The improved performance and power efficiency makes it ideal for high performance computing (HPC) cloud native and big data applications.

### Doubled link speeds, Increasing Performance

The 5th Generation Intel® Xeon® Scalable Processors is capable of up to 64 cores, 16 DDR5 memory slots and 1DPC supporting 5600MT/s 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

K900G6 is powered by the 5th Generation Intel® Xeon® Scalable Processor dual socket Intel Xeon Emerald Rapids series and is optimized for supporting the high processor TDPs for its class. It is equipped with up to 16 DDR5 DIMM @ 1DPC and up to 3 x UPI links per processor (20GT/s per UPI) 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.



Inventec Data Center Solutions

### Reliability Availability Serviceability (RAS) and Flexibility

K900G6 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 Intel Xeon 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, K900G6 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.

## K900G6 | Intel Xeon® Server

|                           |                                                                                                                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Positioning</b>        | High Density Compute (AC)                                                                                                                                                                         |
| <b>Form Factor</b>        | 2U4N8P<br>W x H x D: 448x 87.5x 916 mm<br>(17.63x 3.44x 38.43 inch)                                                                                                                               |
| <b>Processor</b>          | 5 <sup>th</sup> Intel® Xeon® Scalable Processors, (LGA 4677)<br>Up to 64Core, 350W TDP<br>UPI up to 20GT/s                                                                                        |
| <b>CPU Process Tech</b>   | Intel 7 process technology                                                                                                                                                                        |
| <b>Memory Slot</b>        | 16 Channels DDR5 Up to 4TB<br>@ 5600MT/s (1DPC)                                                                                                                                                   |
| <b>PCIe Lanes</b>         | 80 lanes PCIe5 per Processor                                                                                                                                                                      |
| <b>Chipset(PCH/BMC)</b>   | PCH: Intel® Emmitsburg<br>BMC: Aspeed AST2600                                                                                                                                                     |
| <b>Expansion Slot</b>     | 2 x PCIe Gen5 x16 LP slot<br>1 x PCIe Gen4 x4 M.2 Mezz                                                                                                                                            |
| <b>System I/O</b>         | Rear (Per node)<br>• 1 x USB3.0 port<br>• 1 x VGA output port<br>• 1 x Power button with LED<br>• 1 x UID button with LED<br>• 1 x RJ45 management port<br>• 1 x RJ45 1G port<br>• 1 x Health LED |
| <b>Network Controller</b> | Intel I210 1Gb single port<br>1x PCIe Gen5 x16 OCP 3.0 slot                                                                                                                                       |
| <b>Storage Controller</b> | Support up to 2 x U.2 NVMe SSDs per 1U Node<br>Support M.2 22110<br>Support RAID Card and Intel VROC                                                                                              |
| <b>System Management</b>  | Aspeed AST2600 BMC<br>• 1GB DDR4<br>• Support 1 management LAN port<br>• VGA                                                                                                                      |
| <b>TPM</b>                | Embedded TPM2.0                                                                                                                                                                                   |
| <b>VGA</b>                | VGA Video integrated into BMC                                                                                                                                                                     |
| <b>Power Supply</b>       | 4x 2400W CRPS PSU (Titanium), 200-240Vac<br>Support N+1 Redundant                                                                                                                                 |
| <b>Cooling</b>            | Air cool support CPU TDP up to 350W                                                                                                                                                               |
| <b>Fan</b>                | 4x 4056 Fans per 1U node                                                                                                                                                                          |

### Inventec Corporation (TAO)

No.88, Dazhi Rd., Taoyuan Dist., Taoyuan City 33068, Taiwan  
Tel: 886-3-390-0000 Fax: 886-3-376-2370  
Email: [TAOproductsupport@inventec.com](mailto:TAOproductsupport@inventec.com)

Learn more at <https://ebg.inventec.com/>

