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Inventec Data Center Solutions

K900G6

2U4N8P 5th 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.

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K900G6 | Intel Xeon ® Server

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

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

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.

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