Inventec

Inventec Data Center Solutions

P9000IG7(LC)

The Core Infrastructure for Tomorrow’s AI

The P9000IG7 (LC) is crafted to accelerate the next wave of AI progress, combining breakthrough compute power, scalability, and efficiency in a compact 5U chassis. Equipped with the newest Intel® Xeon® 6 processors with E-cores and P-cores and the NVIDIA HGX™ B300 GPU system, it delivers the balanced performance required for today’s complex AI and HPC applications. To maintain sustained output under continuous heavy workloads, the system adopts an Inventec-designed liquid cooling solution that efficiently manages thermal loads for both CPUs and GPUs, ensuring consistent performance even under sustained workloads, helping organizations push the boundaries of scientific research, AI model training, and real-time inference with confidence.

Highlights

- **Support dual Intel® Xeon® 6 processor with E-cores and P-cores**
- **Powered by the NVIDIA HGX™ B300 with Inventec-designed liquid cooling solution**
- **Best GPU Communication with NVIDIA NVLink™ Bridge**
- **Support DDR5 DIMM,**
  6400 MT/s @ 1DPC,
  5200 MT/s @ 2DPC
- **Accommodate up to 8 U.2 NVMe SSD**
- **Increase power efficiency and reliability by decoupling 12V and 54V power source**
- **Modular architecture to provide customer the best performance platform**
- **Great serviceability and assembly with the modular design**

Forging the Intelligent Core of Future AI Innovation

The P9000IG7 (LC) brings together the latest Intel® Xeon® 6 processors with E-cores and P-cores and the NVIDIA HGX™ B300 platform, creating a powerful foundation for AI and HPC applications. By integrating CX8 NICs directly onto the same board as the GPUs, the system minimizes data movement bottlenecks and boosts communication efficiency across nodes, ensuring that networking performance scales seamlessly with GPU compute power. Combined with support for up to 8 U.2 NVMe SSDs, which provide fast and reliable local storage, the platform is optimized to keep both compute and data pipelines running at peak performance.

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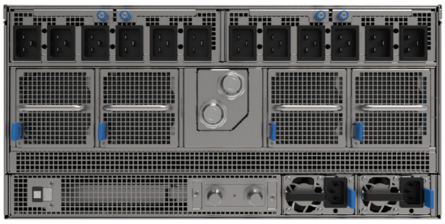
Accelerated Interconnects for Smarter Workflows

To maximize the performance of its CPU and GPU resources, the P9000IG7 (LC) integrates advanced high-bandwidth interconnects. DDR5 RDIMM memory delivers speeds up to 6400 MT/s at 1DPC and 5200 MT/s at 2DPC, ensuring fast response for data-heavy processes. NVIDIA NVLink™ Bridge interconnects the GPUs, enabling them to operate as a unified engine for complex parallel tasks. An Inventec-designed retimer board further boosts signal integrity, minimizing communication delays between CPUs and GPUs and enabling smooth execution of even the most data-intensive AI work

Optimized for Operational Efficiency

Beyond raw performance, the P9000IG7 (LC) is built with practicality in mind. Its modular design provides quick, tool-free access to critical components, reducing downtime and simplifying service operations. The clear separation of host and GPU modules optimizes the liquid cooling system and makes it easier to manage thermals across dense deployments. By combining reliability, cooling efficiency, and ease of maintenance, the P9000IG7 (LC) helps organizations sustain high availability and operational agility as AI workloads continue to expand.



Form Factor	5U Rackmount W x H x D: 448x 219.5x 875 mm (17.63x 8.64x 34.45inch)
Processor	Intel Xeon 6700-series with E-cores Intel Xeon 6700/6500-series with P-cores
GPU Module	NVIDIA HGX™ B300 NVL8 (LC)
PCIe Slot (from MLB)	8x U.2 NVMe SSD bays 4x U.2 NVMe SSD bays (option) 2x M.2 SATA SSD or NVMe SSD
E-W network	8x 800Gb OSFP connectors (NVIDIA ConnectX-8 SuperNICs)
Storage (from MLB)	8x U.2 NVMe SSD bays 4x U.2 NVMe SSD bays (option) 2x M.2 SATA SSD or NVMe SSD
Management Port	1x RJ45 for BMC(AST2600) remote management
Cooling	Liquid cooling
Power Supply	3300W 54V ATS PSU, support 4+1 or 4+2 redundancy 2000W 12V PSU, support 1+1 redundancy Support S5 power and thermal for DPU
Fan	4x 8038 Fan for GPU cooling 6x 6056 Fan for CPU cooling

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.

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

Learn more at **https://ebg.inventec.com/**