



C805DG7



Redefining Density and Efficiency for Scalable AI and HPC Environments

Highlights

- **Support 5th Gen AMD EPYC™ Processor**
- **Support 3DS RDIMM, up to 6400 MT/s**
- **Support 1 FHFL single slot GPU card per node**
- **Support up to 8 E1.s per node**
- **Modular architecture to provide customers with the best performance platform**
- **Maximize serviceability with front IO and front node servicing**

The Inventec C805DG7 is engineered to deliver exceptional compute density and flexibility in a compact 2U dual-node design. Powered by 5th Gen AMD EPYC™ processors, each node operates independently, offering powerful multi-core performance and optimized energy efficiency. This architecture is ideal for organizations seeking to maximize rack utilization and reduce total cost of ownership while maintaining high performance across demanding AI, HPC, and enterprise workloads. With dual-node integration, the C805DG7 enables better fault isolation and resource flexibility, ensuring that workloads can continue seamlessly even when maintenance or failures occur in one node.

High-Performance Architecture with Flexible Expansion

The C805DG7 is designed to deliver balanced performance for compute-intensive workloads with support for 3DS RDIMM memory running up to 6400 MT/s. The enhanced memory bandwidth allows faster data handling and improves overall CPU responsiveness, ensuring smooth coordination between compute and acceleration tasks. Each node supports one FHFL single-slot GPU, providing the flexibility to boost targeted workloads such as AI inference, scientific visualization, or data analytics. With up to eight E1.S drives per node, the system enables fast, low-latency access to critical datasets for demanding applications. Featuring a high-efficiency air-cooling design and optional liquid cooling support, the C805DG7 ensures stable operation and thermal performance even in high-density data center environments.



Inventec Data Center Solutions

Optimized for Space-Constrained, Scalable Deployments

The C805DG7 adopts a 2U 2-node design that maximizes rack density while maintaining outstanding compute efficiency. Its dual-node architecture enables independent operation and fault isolation, making it ideal for microservice and containerized environments where workload flexibility and uptime are critical. This design enhances scalability for horizontally distributed deployments and reduces total cost of ownership through improved power utilization and rack space efficiency. By delivering more compute capacity within a compact footprint, the C805DG7 is particularly suited to space-constrained data centers and edge locations that demand both resilience and cost-efficient scalability.

C805DG7 | Redefining Density and Efficiency for Scalable AI and HPC Environments

Form Factor	2U2N Rackmount W x H x D: 447.6x87x 840 mm (17.63x 3.43x 33.07inch)
Processor	5th Gen AMD EPYC™ Processors, TDP 500W
Memory	12 channel DDR5 with ECC up to 6400 MT/s Support for 2-,4-,6-,8-,10-,12-channel memory interleaving RDIMM, 3DS RDIMM
Storage/ PCIe Card	Configuration For 1 Node Front: Config 1 : 4x 2.5" NVMe/U.2 Config 2 : 8x E1.S Config 3 : FHFL SW PCIe Card+2x U.2 Internal: Support 1x22110/2280 M.2 for boot device
Expansion slots	Support 16x MCIOx8 Connector
Network Controller	Support 1 x PCIe Gen5 x16 x OCP Support NCSI
Management Port	Support Aspeed AST2600 BMC NCSI connect to OCP 3.0, 10M/100M/1G Ethernet MAC controller
Power Supply	DC 12V From 1+1 CRPS
Fan	4x 8056 Fans @35°C ambient temperature with one fan rotor fail condition

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/>



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