

### **Inventec**<sup>®</sup> at core

*Optimize TCO for High Density Datacenter* 

## K800QG4 -2U4P High Density Server

In the past, the amount of data a datacenter could handle was determined by physical space. However, with the rapid growth in data usage demand from cloud, big data IT and new data-intensive workloads, with limitations in power, cooling and spaces, high density datacenter is how you can best utilize the resources and maximize the data capacity. High density datacenters offer greater computing performance to clients, with a much smaller footprint, delivering lower costs in data center operations, greater efficiency, and higher capacities in power, compute and virtualization applications.

K800QG4 server system is designed for high density datacenters. Supporting quad processors of latest Intel<sup>®</sup> Xeon<sup>®</sup> Scalable Family on a single node of 2U rackmount form factor with impressive scalability, K800QG4 not only delivers optimal TCO with lower OPex and CAPex for high density datacenter rack deployments, but also tremendous computing power that is critical for High Performance Computing (HPC) and advancing applications in Artificial Intelligence (AI) cluster. The series presents.

### High Dense Computing Node with Great Scalability

K800QG4 is based on quad Intel<sup>®</sup> Xeon<sup>®</sup> Scalable Processors, TDP per socket up to 205W, providing high density computing power up to 112 cores and up to 24 DDR4 DIMM channels in 2U enclosure. Supported by latest Intel<sup>®</sup> technologies such as Intel<sup>®</sup> Optane<sup>™</sup> Persistent Memory (ready with Cascade Lake platform), and boosted performance,

Highlights -

- Quad Processors of Intel<sup>®</sup> Xeon<sup>®</sup> Scalable Family
- High density computing node that optmize TCO and resource usage
- Best value choice for High Density and High Performance Computing
- Great Scalability; Enhanced Reliability

including 1.5x memory bandwidth and 2x FLOPs capability compared with previous platform, as well as faster socket interconnection through three Intel<sup>®</sup> UPI channels that make balance between energy efficiency and throughput, K800QG4 series is ideal for High Performance Computing applications.

Furthermore, K800QG4 provides excellent scaleout and load sharing capability with up to twelve slimline x8 and three slimline x4 connectors. Together with four 2.5" SAS/SATA/NVMe drives, two onboard M.2 SATA, dual onboard 10G SFP+ NIC ports, as well as expandability from a variety of OCP 2.0 card choices and up to four standard PCIe x8 or two PCIe x16 cards, it offers a flexible high dense computing node that is applicable for deployments demanding tremendous computing power, such as AI clusters.

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#### Optimal TCO choice with Enhanced Reliability

When comparing 2U4P with 1U2P and 2U2P systems, in a 15kW rack, 2U4P system would deliver the same computing performance with less node deployments, and less purchasing costs. Meanwhile, if comparing power consumption per core among the three systems, 2U4P could be the most cost effective – which makes 2U4P solution the optimal TCO choice in high density datacenter deployments. To further increase reliability and reduce downtime, K800QG4 supports five hot-swappable dual rotor fans that are easily serviceable from system front, and tool-less power supplies in 1+1 redundancy at the rear.

K800QG4 optimizes your TCO, bringing the highest efficiency that your high-density datacenter needs. >



Model Name	K800QG4
Positioning	HPC/HDC
Form Factor	2U1N rack mount
Processor	Quad Socket; Intel <sup>®</sup> Xeon <sup>®</sup> Processor Scalable Family
Memory Slot	48x DDR4 DIMM slot
Chipset	Intel <sup>®</sup> C620 series (C622)
Disk Drive Bay	Rear primary bays: 4x 2.5" SAS/SATA/NVMe hot-plug drive Supporting 2x onboard M.2 SATA drive
Expansion Slot	1x PCIe Gen3 OCP 2.0 A+B NIC mezz Option1: 4x PCIe Gen3 x8 (FHHL) Option2: 2x PCIe Gen3 x16 (FHHL) <b>Onboard:</b> 12x slimline x8 connector 3x slimline x4 connector
Network Controller	Onboard: Dual 10G SFP+ Supporting 10GbE/25GbE/100GbE standard PCIe network card Supporting 10GbE/25GbE Mezz card Inventec network OCP mezz card options: Option1: NIC-I350-1GDC (Dual port 1Gb RJ-45) Option2: NIC-I599-10GD (Dual port 10Gb SFP+)
Storage Controller	Onboard: 14x SATA3 6Gb/s port
System Management	IPMI 2.0 compliant+ KVM with Dedicated LAN
Power Supply	1600W Platinum 1+1 redundancy
Fan	5x hot-swap dual rotor fan







#### ABOUT INVENTEC

Inventec Enterprise Business Group (EBG) was established in 1998 and has been focusing on the design and manufacturing of server systems. Inventec EBG is the key server system supplier of the global branding clients.

#### Inventec Corporation (TAO)

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