Horsea

AMD EPYC

PCI EXPRESS 4.0

DDR4

80 PLUS PLATINUM

2U1N2P
AMD EPYC™ 7003 Series Processor-based System

Horsea, the alternative high-performance 2U server system based on dual-socket 7nm AMD EPYC™ 7003 series processors (Milan), is perfect for various applications including virtualization, hyperconverged storage, cloud computing and high-end enterprise server; Horsea also features impressive TCO reduction benefited from the industry-leading core density and jump in performance. In addition to the highly serviceable 2U enclosure, Horsea provides scalability and flexibility including single CPU operation support, up to 6 standard PCIe Gen4 slots (with the option of 2 full height double width add-in cards), an OCP 3.0 slot, the capability of high bandwidth network communications and front-serviceable hybrid flash array module that not only supports all NVMe but also offers tremendous storage capacity by the optional advanced next generation SSDs.

Highlights

- **Best Virtualization Solution with Optimal TCO and Enhanced Security**
- **Scalability Unleashed by Latest Technologies such as PCIe Gen4 and OCP 3.0**
- **Excellent Serviceability and Flexibility Brought by Modular Design**

Virtualization Hyperconverged Storage Cloud Computing High End Enterprise Server

Doubled Core Density, Leading Performance

The latest AMD EPYC™ 7003 series processors are capable of 64 cores, 128 threads, 16 DDR4 memory slots and 1DPC supporting 3200MHz memory, delivering performance significantly increased up to 1.25 times per core and 1.7 times per socket compared with the previous generation, doubled throughput, improved execution pipelines, doubled floating point and bandwidth of load and store unit and half-reduced energy consumption per operation.
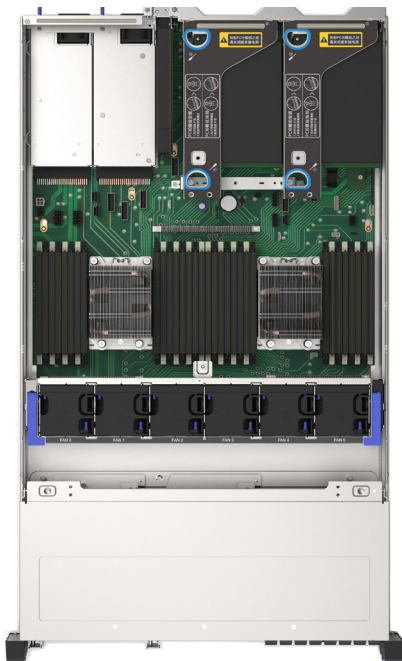
Front View

Rear View

As a dual socket AMD EPYC 7003™ platform allowing single socket operation, TDP up to 280W, NUMA balance in Random Access Memory, Horsea offers VM density with the greatest amount and can significantly reduce TCO for workload requiring virtualization capacity for cloud and telecommunication service deployments.

Hardware-based Security Enhancement

The embedded x86 silicon-level data enables Horsea to offer AMD Infinity Guard features including Secure Root-of-Trust which monitors whether the initial BIOS software is booted without corruption and Secure Memory Encryption, which can minimize potential attack surfaces and enable better protection of software and data.

Scalability Unleashed by Latest Technologies

The PCIe switch-free design enables Horsea to provide scalability in PCIe Gen4 interface, with up to 6 standard PCIe devices, 1 hot-swappable OCP 3.0 SFF card supporting up to 100GbE networking, as well as 9 Slimline x8 slots for storage options, realizing the highspeed connectivity of next-generation workload with unleashed doubled bandwidth.

Horsea offers a variety of hot-pluggable hybrid flash array choices by modular front cage design, ranging from regular SATA/SAS bays to a maximum of 24 U.2 NVMe drives. Together with OS drive supports from two internal M.2 or rear 2x NVMe SSDs / 2x SATA SSDs, Horsea can perfectly address the needs of various scenarios of hyperconverged storage, including content acceleration.

Modular Design with Enhanced Reliability and Serviceability

To increase serviceability and reliability, Horsea provides highly modular design, supporting tool-less operations of serviceable parts, as well as N+1 redundancy for both power and cooling fans. Horsea is designed for modern software-defined infrastructure, offering a visionary yet robust solution for the coming next-generation workload.

Inventec Data Center Solutions

Horsea | AMD EPYC™ Server

Positioning	General Purpose
Form Factor	2U2P W x H x D: 447.6mm x 87mm x 780mm (17.62 x 3.43 x 30.71 inch)
Processor	Dual Socket; AMD EPYCTM 7003/7002 Series Processors; Up to 64 cores/per CPU TDP : Up to 280W
Memory Slot	32x DDR4 DIMM slots 8 channels per CPU and 2DPC DIMM Type: ECC RDIMM, LRDIMM at 1866/2133/2666/2933/3200
Disk Drive Bay	Front HDD Tray: 12x 3.5" SATA/NVMe/SAS(with HBA/Raid) Hot-plug Drive or 24x 2.5" SATA/NVMe/SAS(with HBA/Raid) Hot-plug Drive Rear HDD BP :2x NVMe SSDs or 2x SATA SSDs Internal: 2x SATA M.2
Expansion Slot **SKU A**	4x PCIe Gen4 x16 (HHHL) 1x PCIe Gen4 x16 (FHHL)
SKU B	4x FHHL or 4x FHFL PCIe Gen4 x16 1x PCIe Gen4 x16 (HHHL) 1x PCIe Gen4 x16 (FHHL)
SKU C	2x PCIe Gen4 x16 (FHFLDW) 1x PCIe Gen4 x16 (HHHL) 1x PCIe Gen4 x16 (FHHL)
Network Controller	Support 10GbE/25GbE/100GbE OCP 3.0 Mezz or Standard PCIe card
Storage Controller	Support Raid/HBA standard card
System Management	IPMI 2.0 compliant + KVM with Dedicated LAN
TPM	TPM2.0 (optional)
Power Supply	1+1 redundancy 800W/1300W/1600W/2000W (110-220VAC) Platinum
Fan	N+1 redundancy, 6x 6056 hot-swap fan

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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