vantageo™

Data sheet

Vantageo 25HD-C

Flexible, Scalable, and Secure



2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s

Overview

The Vantageo 25HD-C is a high-performance, dual-socket server motherboard designed by Vantageo, engineered to support Intel's Xeon Scalable processors (1st and 2nd generation). It's tailored for use in demanding enterprise environments, offering robust processing power, extensive memory capacity, and versatile expansion options. The motherboard is ideal for tasks such as virtualization, data analytics, and large-scale database management.

Features

- Intel® C622
- 4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8, 2 PCI-E 3.0 NVMe x4 Internal Port(s) M.2 Interface: PCI-E 3.0 x4 M.2 Form Factor: 2260, 2280, 22110 M.2 Key: M-Key
- 1 VGA port
- Intel® C622 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10
- Dual LAN with 10GBase-T with Intel® X722 + X557

- 90° Rotatable HDD Cage
- Whisper-Quiet (<21dB)
- Kensington Lock Support
- Front I/O Ports: 2x Audio (HD/AC97) &
 2xUSB 3.0 & 2x USB 2.0
- 900W Gold Level Certified High-Efficiency Power Supply
- 1x Optional Front 12cm (1850 RPM) PWM
 Fan

Vantageo 25HD-C

- Mid-Tower Chassis Supports Micro-ATX $\,$ Motherboard, Sizes \square E-ATX/ATX/Micro ATX
- 2x 5.25" External HDD Drive Bays & 4x 3.5" Internal HDD Drive Bays
- 1x Rear 12cm (1850 RPM) PWM Fan

Dual Socket:

Supports Intel Xeon Scalable processors with up to 28 cores per processor, providing significant computational power for intensive workloads.

Memory:

Features 16 DDR4 DIMM slots, capable of accommodating up to 4TB of ECC Registered Memory, ensuring stability and performance in memory-intensive applications.

Expansion

Offers a variety of PCIe slots, including four PCIe 3.0 x16 and three PCIe 3.0 x8 slots, allowing for high-bandwidth peripherals, including GPUs and storage controllers.

Networking:

Integrated dual 10GbE LAN ports via the Intel X550 controller, providing high-speed network connectivity suitable for data-heavy operations.

More Storage

Includes 10 SATA3 ports for traditional storage solutions and 2 NVMe ports for high-speed SSDs, offering flexibility in storage configurations.

Management:

Comes with integrated IPMI 2.0 and a dedicated management LAN port, enabling remote monitoring and management, crucial for maintaining server uptime.

Form Factor:

E-ATX, fitting into standard server chassis, making it versatile for various data center environments.

The Vantageo 25HD-C motherboard has onboard networking capabilities provided by dual 10 Gigabit Ethernet (10GbE) LAN ports. These ports are powered by the Intel X550 controller, which supports high-speed data transfer suitable for demanding network environments. This makes the motherboard well-suited for data-intensive tasks, such as server operations, virtualization, and high-performance computing.

The Vantageo 25HD-C is an ideal choice for businesses and organizations seeking a powerful and reliable server motherboard to handle large-scale, mission-critical applications.



Vantageo 25HD-C		
Features	Technical Specification	
CPU	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors Dual Socket LGA-3647 (Socket P)supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s	
Form Factor	Mid Tower Chassis	
Dimensions	12" x 13" (30.48cm x 33.02cm)	
Memory Capacity	Up to 4TB 3DS ECC RDIMM, DDR4- 2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz	
	Or 2TB DCPMM, DDR4-2666MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	
Memory Voltage	1.2V	
Memory Type	2933/2666/2400/2133MHz ECC 4 RDIMM, LRDIMM	
DIMM Sizes	• RDIMM: 64GB • LRDIMM: 128GB • 3DS LRDIMM: 256GB	
PCI - Express	4 PCI-E 3.0 x16 2 PCI-E 3.0 x8	
M.2	M.2 Interface: PCI-E 3.0 x4 Form Factor: 2260, 2280, 22110 Key: M-Key	
Chipset	Intel® C622 chipset	
Network Controllers	Dual LAN with 10GBase-T with Intel® X722 + X557	
IPMI	ASPEED AST2500	
SATA	Intel® C622 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10	
Graphics	ASPEED AST2500 BMC	
USB	4 USB 2.0 ports (2 rear + 2 via headers) 5 USB 3.2 Gen1 ports (2 rear + 2 via headers + 1 Type A)	
VGA	1 VGA port	
TPM	1 TPM Header	
Serial Port / Header	2 COM Ports (1 rear, 1 header)	
BIOS Type	AMI UEFI	
Software	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctorSoftware ® 5, Watchdog	
Environmental Spec.	Operating Temperature: 10°C - 35°C (50°F - 95°F) Non-operating Temperature: -40°C - 70°C (-40°F - 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)	
Voltage	+12V, +3.3V, +5V, +5V standby, 3.3V standby, Monitors CPU voltages	
FAN	8x 4-pin fan headers (up to 8 fans), PWM fan speed control	
LED	CPU / System Overheat LED, UID/Remote UID, BMC/IPMI Heartbeat LED, Power LED	
Temperature	CPU thermal trip support, Monitoring for CPU and chassis environment, PECI	
Other Features	ACPI power management, ATX Power connector, Chassis intrusion detection, Chassis intrusion header, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, NCSI header, Node Manager Support, RoHS, SDDC, UID	

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Vantageo 25HD-C

Part No	Description
VT 25HD-C	Vantageo 25HD-C
VT 25HD-C-G226R	Intel® Xeon® Gold 6226R Processor 22M Cache, 2.90 GHz
VT 25HD-C-0211	Intel C622 Chipset
VT 25HD-C-20B3	32GB DDR4 2933 MHz
VT 25HD-C-3042	1TB NVME SSD
VT 25HD-C-4192	2TB SATA HDD
VT 25HD-C-0435	Mid Tower
VT 25HD-C-G015	900W Gold Level Certified High-Efficiency Power Supply
VT 25HD-C-7111	Dual LAN with 10GBase-T with Intel® X722 + X557
VT 25HD-C-04A0	CPU Heat Sink
VT 25HD-C-T10008	NVIDIA T1000 8GB
VT 25HD-C-KBM	USB Key Board & Mouse