Vantageo 1240-RG Server

Flexible, Scalable, and Secure

Engineering richer features in a revolutionary platform, Intel has made an incredible jump in processor performance in the business transformation journey. AI and deep learning performance will benefit from the built-in AI acceleration engines, while networking, storage, and analytics leverage other specialized accelerators in the 4th & 5th Gen Intel Xeon Scalable processors. Adding a host of new features to target a wide range of workloads, the new families of Intel Xeon processors will deliver even better CPU performance and performance per watt, and do so on a PCIe 5.0 platform with 2x the prior gen throughput to greatly speed up data movement to and from GPUs and storage. Intel also created the Intel Xeon CPU Max Series with High Bandwidth Memory (HBM) for improvements in memory bound HPC and AI workloads. For this new platform, Vantageo has products ready to get the most out of Intel Xeon CPU-based systems that support fast PCIe Gen5 accelerators and Gen5 NVMe drives, in addition to support for high performant DDR5 memory.

Key Features

- Single 5th/4th Gen Intel® Xeon® Scalable Processors
- Single Intel® Xeon® CPU Max Series
- 8-Channel DDR5 RDIMM, 8 x DIMMs
- Intel® C741 Chipset
- 2 x 1Gb/s LAN ports via Intel® I210-AT
- 3 x SlimSAS connectors for 12 x SATA 6Gb/s
- 1 x M.2 slot with PCIe Gen3 x4 interface
- 7 x PCIe Gen5 x16 and x8 expansion slots

Accelerators

- Increase ROI while improving efficiency and performance

Up to 64 Cores

- More tasks can be done simultaneously and faster with dedicated cores

DDR5 Support

- Increased memory frequency and throughput with DDR5 RDIMM support

64GB HBM

- High bandwidth in-package memory massively speeds up data-intensive workloads

PCIe 5.0 lanes

- Increased I/O throughput achieving 128GB/s bandwidth with support for the latest drives and accelerators

CXL 1.1 Support

- Improve performance via memory coherency and direct accelerator memory access

High CPU Performance

- The best in computational performance relies on a system well designed by our engineers to adequately dissipate heat to achieve peak performance.

Energy Efficiency

- Our engineers have baked in features to achieve higher efficiency from power supplies and server fans. Along with Titanium and Platinum offerings.

Optimal Price

- Vantageo releases multiple product models and configurations to target exactly what users want without paying for extra features that go unused.

Ease of Administration

- Vantageo servers come with Vantageo Management Console for server management. Using a web based browser remotely is key to easing management.

Continuous Operation

- Systems are rigorously designed and tested to ensure downtime will not occur. Customers have come to expect stable performance.

Hardware Security

- For hardware-based authentication, the passwords, encryption keys, and digital certificates are stored in a TPM module to prevent unwanted users from gaining access to your data. Vantageo TPM modules come in either a Serial Peripheral Interface or Low Pin Count bus.

Technical details   Vantageo 1240-RG Details

Form Factor	1U Rack Server
Processor	5th Generation Intel® Xeon® Scalable Processors 4th Generation Intel® Xeon® Scalable Processors Intel® Xeon® CPU Max Series Single processor, TDP up to 350W
Chipset	Intel® C741
Socket	1 x LGA 4677 Socket E
Memory Capacity	8 x DIMM slots DDR5 memory supported only 8-Channel memory architecture RDIMM up to 96GB supported 3DS RDIMM up to 256GB supported 5th Gen Intel® Xeon®: Up to 5600 MT/s 4th Gen Intel® Xeon®: Up to 4800 MT/s Intel® Xeon® Max Series: Up to 4800 MT/s
LAN	2 x 1Gb/s LAN ports (2 x Intel® I210-AT) Supports NCSI function 1 x 10/100/1000 Mbps Management LAN
Video	Integrated in Aspeed® AST2600 - 1 x VGA port
Audio	N/A
Storage Interface	PCH: - 3 x SlimSAS connectors for 12 x SATA 6Gb/s
RAID	Intel® SATA RAID 0/1/10/5
Expansion Slots	Slot_7: PCIe x16 (Gen5 x16) slot, from CPU Slot_6: PCIe x16 (Gen5 x16) slot, from CPU Slot_5: PCIe x16 (Gen5 x16) slot, from CPU Slot_4: PCIe x16 (Gen5 x16 or x8) slot, from CPU, shared with Slot_3 Slot_3: PCIe x16 (Gen5 x8) slot, from CPU Slot_2: PCIe x16 (Gen5 x16 or x8) slot, from CPU, shared with Slot_1 Slot_1: PCIe x16 (Gen5 x8) slot, from CPU 1 x M.2 slot: - M-key - PCIe Gen3 x4, from PCH - Supports 2280 cards
HDD Bays	8 x3.5" hot swap bays hard drive bays
Internal I/O	1 x 24-pin ATX main power connector 2 x 8-pin ATX 12V power connectors 1 x CPU fan header 5 x System fan headers 1 x USB 3.2 Gen1 header 1 x M.2 slot 3 x SlimSAS connectors

1 x VROC connector
1 x Front panel header
1 x Backplane board header
1 x PMBus header
1 x IPMB header
1 x TPM header

Rear I/O	4 x USB 3.2 Gen1 1 x VGA 1 x COM 2 x RJ45 1 x MLAN 1 x ID button with LED
TPM	1 x TPM header with SPI interface – Optional TPM2.0 kit: CTM010
OS Compatibility	Please refer to OS compatibility table in support page
Additional certifications:	Windows Server 2022 (x64)
OS Supported	Aspeed® AST2600 Baseboard Management Controller Vantageo Management Console web interface

- Dashboard
- HTML5 KVM
- Sensor Monitor (Voltage, RPM, Temperature, CPU Status ...etc.)
- Sensor Reading History Data
- FRU Information
- SEL Log in Linear Storage / Circular Storage Policy
- Hardware Inventory
- Fan Profile
- System Firewall
- Power Consumption
- Power Control
- Advanced power capping
- LDAP / AD / RADIUS Support
- Backup & Restore Configuration
- Remote BIOS/BMC/CPLD Update
- Event Log Filter
- User Management
- Media Redirection Settings
- PAM Order Settings
- SSL Settings
- SMTP Settings

Power Supply	800W/1000W/1200W/1600W Redundant Power Supply
PSU Connectors	1 x 24-pin ATX main power connector 2 x 8-pin ATX 12V power connectors
Operating Properties	Operating temperature: 10°C to 40°C Operating humidity: 8-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)

Recommended support

24x7 - 4 hours Response, Next Business Day Call to Resolution CTR

24x7 - 4 hours Response, 24 Hours Call to Resolution CTR

24x7 - 4 Hours Response, 6 Hours Call to Resolution CTR

Default support Next Business Day Consulting and deployment offerings are also available. Contact Vantageo representative for the more information.

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