

Vantage 11A0-RS Server

Flexible, Scalable, and Secure



The Vantage 11A0-RS is a 1U rackmount server designed to deliver high performance and flexibility for a variety of applications, including network security, edge computing, and virtualization. It combines compact dimensions with efficient hardware to meet the needs of space-constrained environments while maintaining strong computational and networking capabilities.

Key Applications

- Network Security Appliance
- Edge Computing Server
- Virtualization Server

Key Specifications

- Intel® Atom® processor C3758, Single socket FCBGA 1310; 8-Core, TDP 25W
- 1x 3.5" or 4x 2.5" internal drive bays
- 1 PCI-E 3.0 x4, 1 M.2 (M key for SSD, 2242/2280, PCI-E 3.0 x2 or SATA3)
- Up to 256GB ECC RDIMM DDR4 2400MHz or 64GB ECC/non-ECC UDIMM in 4 DIMM slots
- 4 1GbE LAN, 1 dedicated IPMI LAN
- 2 USB 2.0, 1 VGA, 1 SuperDOM, TPM
- 2x 40x28mm 4-pin PWM fans, optional 1x 40x28mm 4-pin fan

200W Low-noise AC-DC power supply

• Expansion Slots:

1. One PCI-E 3.0 x4 slot.
2. One M.2 slot as mentioned above

• Input/Output Interfaces:

1. Two USB 2.0 ports (rear).
2. One VGA port.
3. One COM port (header).
4. One SATA DOM (Disk on Module) power connector

• Management:

1. Supports Intelligent Platform Management Interface (IPMI) v2.0.
2. Offers KVM-over-LAN and virtual media over LAN capabilities.

Processor:

Cores: The C3758 is an 8-core processor with providing efficient multi-tasking capabilities.

Clock Speed: It operates at a base frequency of 2.2 GHz, ensuring consistent performance across workloads.

Vantageo 11A0-RS Details

Memory:

- **Maximum Capacity:** Supports up to 256 GB of DDR4 memory, allowing for high-capacity data processing and multitasking.
- **Error Correction (ECC):** ECC memory support ensures system stability by automatically detecting and correcting single-bit memory errors, making it suitable for mission-critical applications.

Storage:

- 1x 3.5" SATA3 (6 Gbps) drives for larger, high-capacity storage.
- 4x 2.5" SATA3 (6 Gbps) drives for more compact and faster drives.

Networking:

- Four Gigabit Ethernet LAN ports are integrated into the system, powered by the Intel® C3000 SoC.
- These ports provide reliable and high-speed connectivity for data-intensive and networking tasks.
- Includes one dedicated IPMI (Intelligent Platform Management Interface) LAN port.

Management:

- Allows for remote monitoring and management of the server hardware.
- Provides access to server health information, including temperature, power status, and system logs.
- Allows administrators to control the server as if they were physically present, including during BIOS setup and troubleshooting.
- Features a dedicated IPMI LAN port for out-of-band management.
- Enables secure and isolated management traffic, separate from the main data network.
- Enables remote mounting of ISO files or other media for operating system installations or software updates.

Power Supplies:

- Includes a single 200W high-efficiency power supply.
- Designed to deliver consistent and stable power to all server components.

Security Features:

- **Trusted Platform Module (TPM) 2.0 (optional):** Provides hardware-based encryption for secure storage of sensitive information such as passwords, encryption keys, and certificates. TPM ensures that the server's hardware remains trustworthy by preventing unauthorized tampering.
- Includes protection mechanisms to ensure that only authorized firmware updates are applied, reducing the risk of firmware-based attacks.

Technical details

Vantageo 11A0-RE Details

Form Factor	1U Rackmount
CPU	Intel® Atom® processor C3758 FCBGA 1310 supported CPU TDP support 25W
Memory Capacity	4x DDR4 DIMM sockets Supports up to 256GB DDR4 ECC RDIMM Supports up to 64GB DDR4 ECC/non-ECC UDIMM
Memory Type	2400/2133/1866/1600MHz ECC DDR4 SDRAM
DIMM Sizes	64GB, 32GB, 16GB, 8GB, 4GB
Memory Voltage	1.2V
Error Detection	Corrects single-bit errors Detects double-bit errors (using ECC memory)
SATA	SoC controller for 4 SATA3 (6Gbps) ports
Network Controllers	Quad Gigabit Ethernet LAN via Intel® C3000 SoC Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1 Realtek RTL8201N PHY (dedicated IPMI)
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	BMC integrated ASPEED AST2400
SATA	4 SATA3 (6Gbps) ports
LAN	4 RJ45 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 2.0 ports (rear)
Serial Port	1 COM port (header)
DOM	1 SATA DOM (Disk on Module) power connector
VGA	1 VGA Port
Others	TPM header
Dimensions and Weight	Height 1.7" (43mm) Width 17.2" (437mm) Depth 9.8" (249mm) Weight Net Weight: 8 lbs (3.62 kg) Gross Weight: 12 lbs (5.44 kg)
Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED Network activity LEDs System Information LED Information LED (temp., status)
PCI-E	1 PCI-E 3.0 x4 slot 1 M.2 PCI-E 3.0 x2, M Key 2242/2280

HDD	1x 3.5" or 4x 2.5" internal hard drive bays (optional) *
Fans	2x 40x28mm 4-PIN PWM Fan, Optional 1x 40x28mm 4-PIN PWM Fan
Power Supply	200W Low Noise AC-DC power supply with PFC
	AC Voltage 100 - 240V, 50-60Hz, 2.6 Amp Max
	+5V 8.0 Amp (max.)
	+5V standby 2.0 Amp (max.)
	+12V 16 Amp (max.)
	-12V 0.5 Amp (max.)
	+3.3V 8.0 Amp (max.)
BIOS Type	AMI UEFI BIOS
BIOS Features	Plug and Play (PnP) DMI 2.3 ACPI 5.0 USB Keyboard support SMBIOS 2.7.1 UEFI
Environment conditions	Operating Temperature: 0°C to 40°C (32°F to 104°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 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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