

### Vantageo 22M1-RA

Flexible, Scalable, and Secure



**AMD EPYC™ 7003 2U dual-socket server that supports up to 32 DIMM, four dual-slot GPUs (GPU SKU), 8 NVMe, nine PCIe 4.0 slots, OCP 3.0, M.2**

#### Key Applications

1. Powered by AMD EPYC 7003 processor with 64 cores, 128 threads and support for a maximum TDP of up to 280 watts per socket
2. GPU-optimized design allows four dual-slot GPUs for AI workloads (GPU SKU)
3. A total of 12 storage bays in combination of NVMe/SATA/SAS drives on front panel to enable extensive storage and high-throughput performance
4. Up to nine PCIe® 4.0 slots to enable higher bandwidth and improved data-transfer rates
5. Flexible onboard LAN-module design to enable four 1 Gb LAN or two 10 Gb LAN options
6. Flexible air and liquid cooling solution achieves lower power-usage effectiveness (PUE) and optimized TCO for data centers
7. Onboard for out-of-band management with ASPEED AST2600 controller
8. Integrated PFR FPGA as the platform Root-of-Trust solution for firmware resiliency High power efficiency with redundant 2400W 80 Plus Titanium and Platinum power supplies

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Features	Technical Specification
Processor	2 x Socket SP3 (LGA 4094) per Node AMD EPYC™ 7003 Series
Memory	<p><b>Total Slots :</b> 32 (8-channel per CPU, 16 DIMM per CPU)</p> <p><b>Capacity :</b> Maximum up to 4096GB per socket</p> <p><b>Memory Type :</b> Dual Channel DDR4 3200/2933 RDIMM Dual Channel DDR4 3200/2933 LRDIMM Dual Channel DDR4 3200/2933 LR-DIMM 3DS non ECC</p> <p><b>Memory Size :</b> 64GB, 32GB, 16GB RDIMM 128GB, 64GB LRDIMM 256GB, 128GB, 64GB LR-DIMM 3DS * Refer to support page for more information</p>
Expansion Slots	<p>Up to 9 x Expansion slots</p> <p>2 x PCIe Gen4 x8 or 1 x PCIe Gen4 x16, FHFL (CPU1 x1) 1 x PCIe Gen4 x8, FHFL (CPU1 x1) 1 x PCIe Gen4 x16, FHFL or OCP 3.0 NIC socket (CPU1 x1) 4 x PCIe Gen4 x8 or 2 x PCIe Gen4 x16, FHFL (CPU2 x2) 1 x PCIe Gen4 x8 or x16, LP (if PCIe M.2 in use, it will operate at x8 link) (CPU2 x1)</p> <p>*Installing GPU cards will occupied expansion slots.</p>
Storage	<p><b>Storage Controller :</b> 8 x SATA3 6Gb/s ports (SATA 6Gb/s &amp; PCIe® Gen4 x4 link) 2 x M.2 connector(2242/2260/2280/22110) both SATA &amp; PCIe mode</p> <p><b>SAS Controller :</b> Vantageo PIKE II 3008-8i 8-port SAS 12G RAID card(Optional) Vantageo PIKE II 3108-8i 8-port SAS 12G HW RAID card(Optional) Broadcom MegaRAID 9560-16i (Optional)</p>
Drive Bays	<p>12 x 3.5" hot-swap drive bays (4x NVMe + 4x NVMe/SATA/SAS* + 4x SATA/SAS*) 2 x 2.5" hot-swap drive bays (2x NVMe)(optional rear bays) 2 x M.2 (support SATA/PCIe M.2) (up to 22110) (CPU2) *must with PIKE/RAID card</p>
System Fan	4
Networking	<p>Option 1 1 x Quad Port Intel I350-AM4 1G LAN Controller + 1 x Mgmt LAN or Option 2 1 x Dual Port Intel X710-AT2 Gigabit 10G LAN Controller + 1 x Mgmt LAN or None x + 1 x Mgmt LAN</p>
Graphic	Aspeed AST2600 with 64MB VRAM
Front I/O Ports	2 x USB 3.2 Gen1 ports
Rear I/O Ports	<p>2 x USB 3.2 Gen1 ports 1 x VGA port 1 x RJ-45 Mgmt LAN port 1 x OCP3.0 port</p>

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Features	Technical Specification
Switch/LED	<p><b>Front Switch/LED:</b>            1 x Power switch (w/LED)            1 x Reset Switch            1 x Location Switch (w/LED)            1 x HDD Access LED            1 x Message LED LAN 1-4 LED (on NIC Module)</p> <p><b>Rear Switch/LED:</b>            1 x Power switch w/LED            1 x Port 80 LED(Q-Code)            1 x Location Switch w/LED            1 x Message LED</p>
Management Solution	On-Board for KVM-over-IP Vantageo Control Center Enterprise (Optional)
Regulatory Compliance	BSMI, CE, FCC(Class A)
Dimensions	840mm x 449mm x 88.1mm (33.07" x 17.68" x 3.47")
Form Factor	2U
Weight	Net Weight : 18.195KG Gross Weight : 23.235KG
Power Supply	1+1 Redundant 1600W 80 PLUS Platinum Power Supply Rating: 100-127/200-240Vac,13A/9.5A (x2) ,50/60Hz Class I (240Vdc, 4.6A Only for China) 200-240Vac,10A (x2) ,50/60Hz Class I (240Vdc, 4.6A Only for China ; 100-127Vac, 12A only for NA) 1+1 Redundant 2400W 80 PLUS Titanium Power Supply *2400W RPSU is required while choosing GPU SKU
Environment	Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 60°C Non operation humidity: 20% ~ 90% (Non condensing)
Optional Items	Standard Cooling Solution or Water Cooling Solution
CPU Heatsink/ Cooler	2
Fan	1 (For supporting GPU SKU, it will have external fan)
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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