

TG781V2

8 GRAPHICS CARDS GPU SERVER

The TG781V2 is a versatile 8-GPU server built on the AMD SP3 platform, supporting the entire range of Rome and Milan CPUs. It accommodates up to eight triple-fan GPUs and delivers exceptional performance, high scalability, and robust reliability. This server is ideal for a wide range of applications, including artificial intelligence, large-scale model inference, rendering, and cloud gaming.



EXCEPTIONAL PERFORMANCE & HIGH COST-EFFECTIVENESS

- Supports 2 x AMD EPYC™ 7002/7003 series processors, with up to 128 cores.
- Supports 8 triple-fan GPUs (TDP up to 450W each); each card utilizes PCIe 4.0 x16, delivering efficient heterogeneous computing power.
- CPU-GPU direct-connect design ensures high efficiency and low latency, significantly improving data transfer efficiency compared to PCIe Switch architectures.

NATIVE SUPPORT FOR TRIPLE-FAN GPUS

- Supports native triple-fan GPU cards with original manufacturer quality assurance, avoiding the risks associated with modified blower-style cards while offering higher cost-effectiveness.

FLEXIBLE CONFIGURATION & ON-DEMAND SELECTION

- Supports up to 11 standard PCIe 4.0 slots; multiple PCIe configurations available.
- Optional 1 x OCP 3.0 NIC (PCIe 4.0 x8) with multiple speed options (4x1GbE / 2x10Gb SFP+ / 2x25Gb SFP28).
- Supports 8 x 3.5"/2.5" SAS/SATA HDDs/SSDs; optionally supports 2/4 x U.2 NVMe SSDs, balancing high capacity and high-performance local storage.
- Includes 1 x onboard M.2 SSD slot (2280/22110 size, PCIe 2.0 x1).

STABLE, RELIABLE & INTELLIGENT MANAGEMENT

- Key system components feature redundant and hot-swappable designs, complemented by tool-less maintenance, enhancing serviceability and system availability.
- Integrated BMC management chip (AST2600) provides an open management platform supporting IPMI 2.0, SOL, KVM, Virtual Media, and other functions.
- Comprehensive remote management capabilities including KVM over IP, Virtual Media, status monitoring of key components, and anomaly alerts.
- Optional TPM/TCM security module and chassis intrusion detection.

TECHNICAL SPECIFICATIONS

Category	Specification Details
Form Factor	Standard 7U Rackmount
CPU	2 x AMD EPYC™ 7002 (Rome) / 7003 (Milan) Series, TDP up to 280W
Memory	32 x DDR4 DIMM slots, 3200MHz, supports RDIMM/LRDIMM
GPU Support	8 x Triple-fan GPUs, TDP up to 450W per card, PCIe 4.0 x16
PCIe Expansion	Up to 11 x standard PCIe 4.0 slots
OCP NIC	Optional OCP 3.0 NIC (PCIe 4.0 x8), options: 4x1GbE / 2x10Gb SFP+ / 2x25Gb SFP28
Storage Bays	8 x 3.5"/2.5" SAS/SATA bays
Onboard Storage	1 x M.2 SSD slot (2280/22110, PCIe 2.0 x1)
RAID Controller	Optional 12Gb/s SAS HBA or 12Gb/s SAS RAID card
I/O Ports Front	2 x USB 3.0, 1 x VGA
I/O Ports Rear	1 x Serial, 2 x USB 3.0, 1 x VGA, 1 x RJ45 Dedicated Management (1Gbps)
System Cooling	Hot-swappable, redundant fans with optimized thermal design
Power Supply	4 x Hot-swappable Platinum-level CRPS power modules (2000W or 2700W), supports N+2 or N+1 redundancy (e.g., 2+2, 3+1)
Management	Integrated BMC (AST2600), supports IPMI 2.0, SOL, KVM, Virtual Media. 1x dedicated 1Gbps RJ45 management port.
Security	Optional TPM/TCM module; Chassis intrusion detection; Lockable, tool-less chassis cover
Dimensions (WxHxD)	448mm x 306mm (7U) x 886mm (924mm including mounting ears)
Operating Temp	5°C to 35°C

Operating Humidity	8% to 90% RH (non-condensing)
OS Support	Microsoft Windows Server, Red Hat Enterprise Linux, CentOS, Ubuntu, and other mainstream operating systems.

DATA CENTER SOLUTIONS BASED ON BUSINESS OBJECTIVES

- Maximize the value of your IT and enterprise solutions with a business-focused approach that helps reduce IT complexity, lower costs, and improve efficiency. While leveraging your existing technologies, we seamlessly integrate innovative, customized solutions designed to meet your specific needs. Based on your business applications, we deliver an efficient, agile, open, and intelligent end-to-end data center solution that simplifies IT, addresses business challenges, and continuously creates value for your organization. For more information, please contact your sales representative.

FOR MORE INFORMATION, PLEASE VISIT WWW.AETHLUMIS.COM

- Other trademarks and trade names that maybe used in this document refer to entities or their products that own these trademarks and names. Aethlumis declares that it does not have any exclusive rights and interests in the trademarks and names of other entities. The content of this article is for reference only. Aethlumis reserves the right to make changes to any of the products described in this article without prior notice. The content of this article is provided as is, without any form of express or implied warranty.