VELASERVER
POWERED BY ADVANTECH

INDUSTRIAL SERVER COMPUTING

Scalable Server Computing for Demanding Applications

Configurable Intel Xeon and AMD EPYC server platforms with the compute, memory, storage and expansion capability required for demanding, always-on workloads. Built around Advantech hardware, configured to your requirements and supported by Impulse Embedded.



Broadcasting • Visualisation • Simulation • Test & Measurement

Available in 1U, 2U and 4U chassis | www.impulse-embedded.co.uk

WHY CHOOSE THIS PLATFORM

Built on a Platform You Can Trust

VELA Server is built around Advantech ASMB-818I and ASMB-831T2 server motherboards, selected for reliability, expansion and long-term platform availability. Supporting AMD EPYC 9005 Series and Intel Xeon processors, the range provides a dependable foundation that can be configured around demanding server workloads.

1

AMD EPYC or Intel Xeon Processing

Choose AMD EPYC 9005 Series or Intel Xeon processing to match your workload, from high core-count compute to applications requiring strong per-core performance.

2

High-Bandwidth Networking

Networking options from 10GbE up to 100GbE support applications where large datasets, video streams or real-time data needs to move quickly and reliably.

3

Expansion for Specialist Applications

Multiple PCIe expansion options support GPUs, video capture, high-speed networking, storage controllers and specialist I/O.

4

Server-Grade Memory Capacity

RDIMM memory support provides the capacity and bandwidth required for demanding workloads including simulation, visualisation, data processing and virtualisation.

5

Resilience & Remote Management

RAID storage and redundant power options provide additional resilience where uptime and data protection matter, while IPMI remote management enables system monitoring, power control and out-of-band access.

Built with in-stock components for quick dispatch and long-term support. Backed by a 3-year return-to-base warranty.

DESIGNED FOR

Suited to Demanding, Continuous Workloads

VELA Server is a configurable industrial server platform for applications where processing performance, expansion and reliability matter around the clock. From broadcast facilities and test laboratories to simulation and industrial data processing, it provides server-class computing that can be configured around the workload.

Broadcasting

Expansion, bandwidth and reliability for demanding video workflows, processing, playout and control-room environments.

Visualisation

Strong computing performance and graphics expansion for engineering, simulation, control rooms and industrial monitoring.

Simulation

Configurable processing, memory and graphics for engineering simulation, training systems and industrial modelling.

Test & Measurement

Specialist PCIe I/O, data acquisition and high-speed networking for continuous test and measurement workloads.

Industrial Control

An always-on platform for supervisory software, process control and equipment communication at scale.

Data Processing

Memory, processing and networking capacity for large volumes of operational, sensor and production data.

Machine Vision

High-throughput processing and expansion for image-based inspection, analysis and automated quality systems.

High-Performance Computing

Server-grade processing and memory capacity for compute-intensive and data-heavy workloads.

CHOOSE YOUR CHASSIS

Configured Around Your Application



1U Rackmount

A compact, low-profile rackmount server for applications where space efficiency is critical.



2U Rackmount

A versatile server with four hot-swap drive bays, balancing compute performance, storage capacity and expansion in a compact footprint.



4U Rackmount

A high-capacity server with four hot-swap drive bays as standard, expandable to 8, with greater room for storage, specialist hardware and additional expansion.

What the platform can support

- AMD EPYC 9005 Series or Intel Xeon 6 processors
- Up to 2TB server-grade DDR5 RDIMM memory
- Up to dual 10GbE onboard networking
- PCIe Gen5 expansion for GPU, networking, storage and specialist I/O
- NVMe, SAS/SATA and configurable RAID storage

Let's Configure Your VELA Server System

Speak to our team about your application, expansion requirements, software setup or customisation needs. We can help you choose a proven configuration or create something more bespoke.

Call: +44 (0)1782 337 800 | Email: sales@impulse-embedded.co.uk