Liquid Cooling That Scales with the Blade

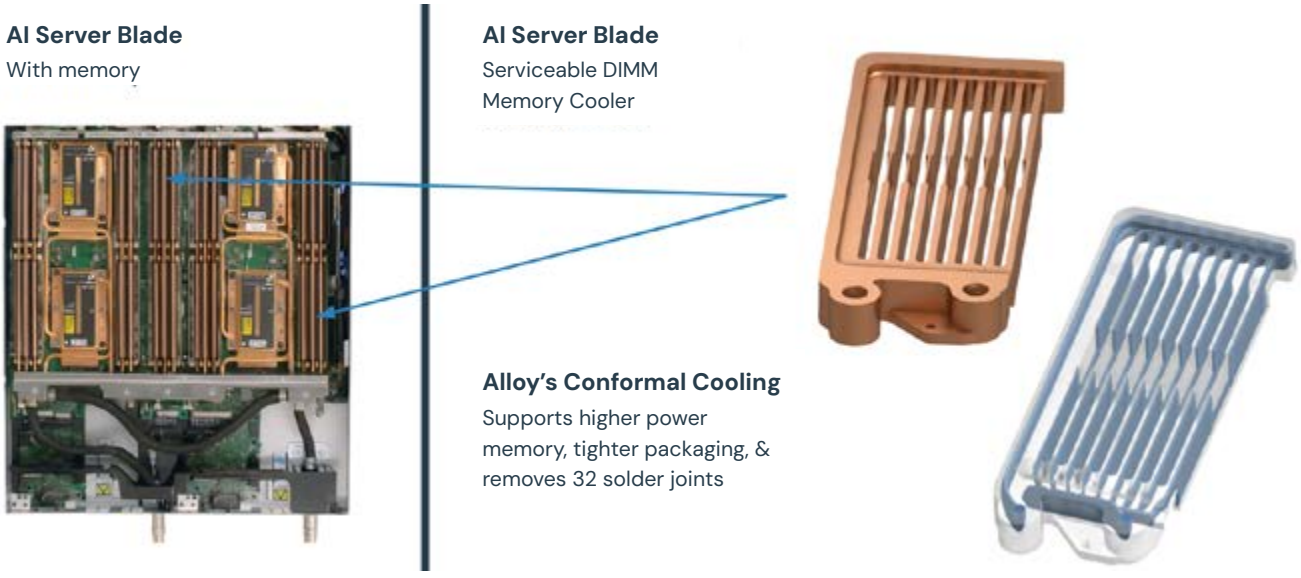


End-to-End Thermal Management Beyond CPUs & GPUs

Liquid Cooling Peripherals

As rack power densities climb and chip TDPs rise, peripherals such as DIMMs, NICs, and QSFPs are becoming thermal bottlenecks. Without liquid cooling, these components cap performance, reduce reliability, and complicate upgrades.

Alloy solves this with monolithic cold plates manufactured via the Stack Forging™ process that extend consistent liquid cooling across the blade, from processors to memory and high-speed interconnects.



AI server blade featuring Alloy's single-piece copper DIMM cooler, completely leak-tight, with no solder or brazed joints.

Key Capabilities

- **Monolithic, Leak-Tight Design**
  Single-piece aluminum or copper cold plates with no soldering or brazed joints for maximum reliability.
- **Double-Sided DIMM Cooling**
  Engineered for high-density 260 pitch DIMM configurations, delivering uniform cooling on both sides of the module.
- **Serviceable Architecture**
  DIMM cold plates enable in-field removal and reinsertion without draining the cooling loop.
- **JEDEC-Ready Performance**
  Designed to cool 35 W per DIMM, meeting next-generation JEDEC specifications.
- **Integrated Peripheral Cooling**
  Built-in support for NICs and QSFPs, eliminating hotspots and ensuring system stability.

The Alloy Advantage

- Proprietary microgeometries for low pressure drop and low thermal resistance.
- Digital Manufacturing + the Stack Forging process enables tailored designs, fast iteration, no tooling
- Single-Piece, Monolithic Components that won't deflect at operating pressures with no brazing, no solder, no weak joints.
- Full-Blade Coverage for CPUs, GPUs, DIMMs, NICs, QSFPs, and beyond.

Learn how we can liquid cool your peripherals.

Reach out to **info@alloyenterprises.co**

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