

Frore Systems introduces LiquidJet: Redefining Coldplates for AI Data Centers



SAN JOSE, California – October 14, 2025 – Frore Systems today announced the launch of **LiquidJet™**, a revolutionary direct-to-chip liquid cooling 3D coldplate solution designed to meet the escalating demands of AI Data Centers. Built with Frore’s unique semiconductor manufacturing process adapted to metal wafers, LiquidJet unlocks higher performance from the world’s most powerful GPUs—starting with NVIDIA Blackwell Ultra—delivering significant reductions in data center total cost of ownership (TCO).

“LiquidJet’s unique 3D architecture, with customized short-loop jet channel microstructures, sets a new bar for coldplate thermal performance,” said Seshu Madhavapeddy, CEO and Founder of Frore Systems. “Just as AirJet redefined active cooling for consumer and edge devices, LiquidJet transforms coldplates into a future-ready platform for the AI Factory.”

Built for Blackwell Ultra Today— and Feynman & Beyond Tomorrow

LiquidJet is already delivering game-changing results with NVIDIA’s 1,400W Blackwell Ultra, outperforming traditional coldplates on every major cooling metric:

- 2x higher hotspot power density (600 W/cm² @ 40°C inlet temp)
- 50% higher KW/lpm
- 4x lower pressure drop

Future-proofed for what's next, LiquidJet is engineered to scale with next-gen SoCs like NVIDIA Rubin, Rubin Ultra, Feynman (>4,000W) and beyond, as well as custom hyperscaler ASIC designs. As AI workloads explode, Frore's LiquidJet architecture is built to keep up.

A New Approach to Coldplate Manufacturing

Legacy coldplates rely on outdated skiving 2D microchannel manufacturing, limiting their ability to adapt to new chip layouts and increasingly non-uniform high power density requirements.

Frore Systems takes a different approach, adapting semiconductor manufacturing to metal wafers, fabricating 3D short-loop jet channel microstructures that are designed precisely to the power map of modern GPUs. This enables:

- Highly customized designs to exactly match any SOC power map
- Far superior cooling performance
- Scalable cost-effective manufacturing
- Easy drop-in upgrade

The result is LiquidJet, a coldplate that evolves as fast as the chips it cools.

With these advances, data centers can achieve:

- Cooler GPUs
- More AI tokens/second
- Lower total cost of ownership (TCO)
- Improved power usage effectiveness (PUE)

LiquidJet - Redefining AI Data Center Liquid Cooling

About Frore Systems

Frore Systems is a pioneer in advanced thermal technologies that unleash performance across data centers, embedded industrial systems, and consumer electronics. The company's flagship solutions include: **LiquidJet™**: A 3D short-loop jet channel coldplate that unlocks higher GPU performance delivering significant reductions in data center total cost of ownership (TCO). **AirJet®**: The world's first solid-state active cooling chip, used in consumer, industrial and edge devices. Frore's patented cooling technologies have been integrated into products from major OEMs and Systems builders worldwide. The company is headquartered in Silicon Valley USA, with manufacturing operations in Taiwan.

For further information contact:

Sue Ryan - VP Marketing Frore Systems

sue@froresystems.com

Cell [+1 314 914 5008](tel:+13149145008)