LiquidJet[™]Coldplate

Cooler GPUs More AI Tokens per second Lower TCO

Introducing our breakthrough LiquidJet coldplate with multistage cooling architecture, 3D hybrid cells, and innovative 3D short-loop jetchannel microstructures, customizable to any GPU power map.

On NVIDIA Blackwell Ultra LiquidJet delivers:

- 7.7°C Cooler GPU
- 75% higher KW/lpm
- 50% less weight
- Easy drop-in upgrade

Performance on Blackwell Ultra

	LiquidJet Coldplate	Best Skived Coldplate
GPU Power	1400 W	1400 W
Max GPU Die Temp (@ 2.1 lpm flow)	67.6°C	75.3°C
PG25 Flow Rate (@ same die temp)	1.2 lpm	2.1 lpm
Coldplate Weight	260 g	550 g
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Note: Max Channel Width 0.1 mm | Inlet Flow Temp: 40C | TIM: PTM7950

Hotspot Cooling with LiquidJet

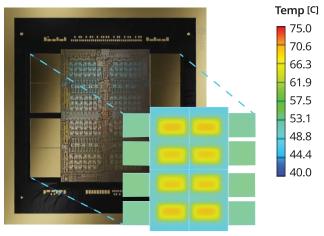
LiquidJet's innovative multistage architecture enables the entire flow to be concentrated to first cool the hotspots, before cooling the other areas of the GPU die.

LiquidJet supports hotspot cooling up to 600 W/cm² @40°C inlet temperature, far beyond the requirements of future GPUs: Rubin, Rubin Ultra, Feynman, and custom ASICs.

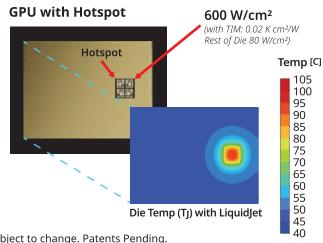




Blackwell Ultra



Die Temp (T_J) with LiquidJet



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Customizable Cooling

Legacy coldplates rely on 2D flow through skived microchannels, 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 multistage cooling architecture, 3D hybrid cell structures, and innovative 3D short-loop jetchannel microstructures, that are designed precisely to the power maps of modern GPUs.

Customizable to match the exact power density of your GPU.

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)
- Higher reliability

LiquidJet - Redefining AI Data Center Liquid Cooling.

As fast Cold inlet Hot exit 3D Short-loop Jetchannel Microstructures

Future-proof supporting NVIDIA Feynman GPU & beyond

