FRORE SYSTEMS

41.25 mm

26.6 mm

AirJet® Mini G2

2.5 mm thin

AirJet® Mini G2

Powerful AI Needs a Thermal Solution That Can Keep Up.

Heat is the biggest bottleneck in computing — and with the rise of advanced AI models, the problem is only growing. AI reasoning tasks demand sustained performance, not just quick bursts. That means more processing, more heat... and the need for next-gen thermal solutions.
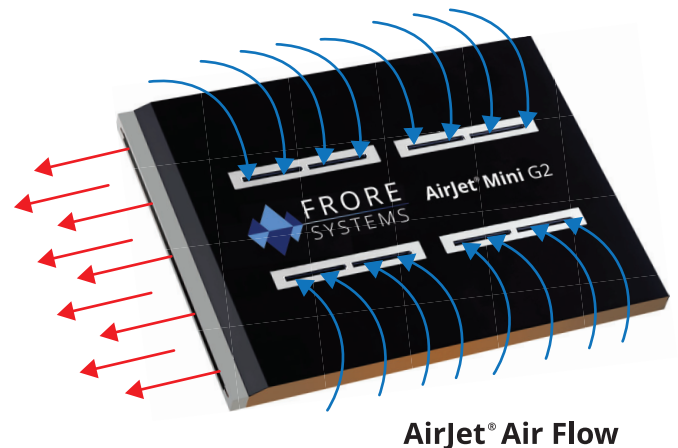
Introducing AirJet® Mini G2 — the world's thinnest and most powerful solid-state active cooling chip. Developed by Frore Systems, AirJet is a revolutionary, fully self-contained active heat sink module. Removing 7.5 W of heat, **AirJet Mini G2** is silent, thin, light, dust resilient, vibration free, water-resistant and outperforms fans.

Built for today's hottest devices — from 2in1 tablets to 5G hotspots — the **AirJet® Mini G2** turns thermal into a strategic advantage.
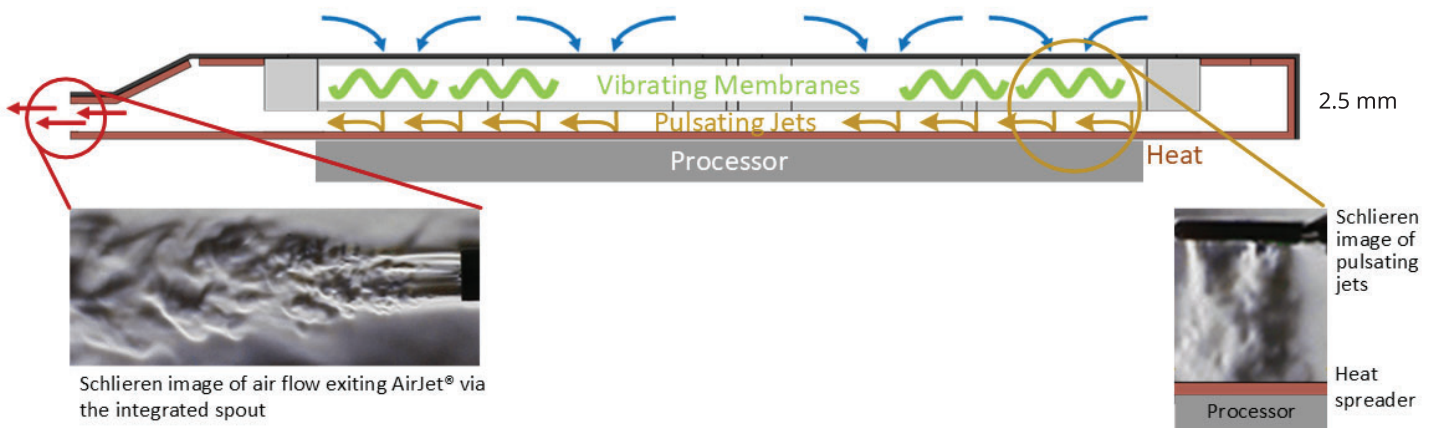
Revolutionary Solid-State Cooling

Unlike fans, AirJet has no moving parts. Inside the chip, ultrasonic MEMS membranes pull in air and create high-velocity pulsating jets of air that saturate with heat. The hot air is then ejected from the host device through an exit vent — all in a module just 2.5 mm thin.

Silent. Dustproof. Vibration-free.

AirJet® Mini G2 delivers performance without compromise.

AirJet® Air Flow

Cross Section of AirJet® Module

Vibrating Membranes

Pulsating Jets

Processor

Heat

2.5 mm

Schlieren image of air flow exiting AirJet® via the integrated spout

Schlieren image of pulsating jets

Heat spreader

Processor

AirJet® Mini G2

Ground Breaking Design

AirJet's multiphysics design converges structural, fluidic, acoustic and electrical resonance. AirJet is manufactured using proprietary techniques that draw from multiple sectors, including semiconductor, flat panel display, aerospace and automotive.

Why It Works

In modern computing, heat limits performance — not the capability of the processor. **AirJet Mini G2** flips that equation, ensuring compact electronic devices can now deliver on the promise full performance.

Tiny Chip. Huge Backpressure.

AirJet Mini G2 generates 1750 Pascals of backpressure — powerful enough to pull air through the most compact enclosures, even in rugged embedded systems.

Dust? Water? No problem.

The **AirJet Mini G2**'s massive 1750 pascals of backpressure, enables air to be pulled into ultra-compact host devices, even devices protected by dustproof and water-resistant filters. The system is also designed to safely eject any particles entering the AirJet without clogging or degrading performance.

Small Design, Huge Possibilities.

The **AirJet Mini G2** is just 2.5mm thick and 7g. This ultra-thin profile unlocks new possibilities for manufacturers demanding more performance in compact designs.

AirJet Mini G2 enhances performance across ultra-thin devices — from notebooks, tablets, and smartphones to SSDs, mini-PCs, and the tsunami of consumer and industrial IoT systems — spanning markets as diverse as datacenter, defense, and automotive.

AirJet® Mini G2 delivers the world's best solid-state active cooling. Here are the numbers — unmatched cooling, ultra-thin footprint:

Metric	AirJet® Mini G2
Total heat dissipation (@ 85C die temperature, 25C ambient)	7.5 W
Maximum noise (inside device at 50cm)	21 dBA
Maximum power consumption	1.2 W
Back pressure	1750 Pa
Dimensions (width x length x thickness)	26.6 x 41.25 x 2.5mm
Weight	7 g

Thin. Silent. Higher Performance

In consumer electronics, a 11.7 mm thick 14" notebook in silent mode has a thermal limit of 12 Watts sustained processor power. The same 11.7 mm thick notebook, upgraded with 4x **AirJet Mini G2** modules, supports a sustained processor power of 24 Watts, still operating in silence, but increasing processor performance by 100%.

Industrial Edge Devices

Similarly in Industrial Edge devices, like machine vision cameras, the **AirJet Mini G2** significantly improves image quality in cameras. Lowering the sensor temperature from 48°C to 15°C enables the faster processing required for quick response time from the AI Reasoning Models.

Frore's Law in Action

Frore Systems is driving thermal innovation forward with Frore's Law — a bold roadmap to double thermal performance every two years.

More performance. No noise. No vibration. No fans. AirJet by Frore Systems. **Do More.**