



**Smarter
technology
for all**

Lenovo



Lenovo Active Flow

A breakthrough solid-state active cooling system
powered by AirJet®

Lenovo Active Flow Thermal Solution *powered by* **AirJet®**

Innovation in Thermal Solutions

Lenovo's Active Flow Thermal Solution is the world's first application of AirJet® designed into a concept notebook, as a part of an innovative new cooling solution, which leverages the full groundbreaking power of solid-state active cooling.

Lenovo's AeroBlade concept notebook showcases the benefits the industry has been anticipating from the Frore Systems and Lenovo partnership, a thinner, lighter and silent, high-performance notebook.

Revolutionary Solid-State Active Air Cooling.

Traditional laptops use fans: spinning blades that create noise, collect dust, demand more space, and require heatsinks to remove any heat, ruling out truly thin, sleek designs.

AirJet replaces fans and heatsinks with a chip just 2.65mm thin. Inside the chip, ultrasonic membranes vibrate beyond human hearing, pulling air through the device, without the large bottom cover intake vents required by traditional fan systems. AirJet forces impinging jets of air onto the internal copper base, destroying the boundary layer, and enabling the ultra efficient transfer of heat into the air. That heat saturated air is then silently ejected out of the notebook.

Powered by AirJet, Lenovo Active Flow enables higher sustained performance in ultra-thin, ultra-quiet form factors. Lenovo's AeroBlade concept brings that to life in a high performing, thin, light, and silent notebook.

AirJet's 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.

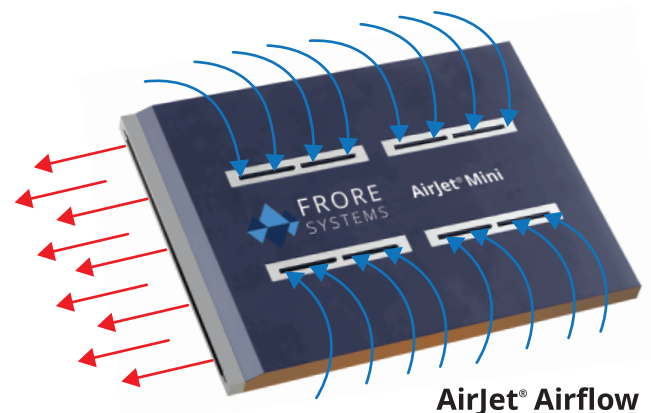
Tiny Chip. Huge Backpressure.

AirJet Mini generates a massive 2000 Pascals of backpressure — 10x the backpressure of a traditional notebook fan, and powerful enough to pull air through ultra-thin, compact enclosures.

Small Design, Huge Possibilities.

The **AirJet Mini** is just 27mm wide, 41.45mm long and 2.65mm thin and weighs just 7g. This compact ultra-thin profile unlocks new possibilities for manufacturers demanding higher performance to support AI applications in compact products without missing a beat.

AirJet Mini enhances performance across ultra-thin devices — from notebooks, tablets, and smartphones, and the tsunami of consumer and industrial IoT systems.



Cross Section of AirJet® Module

