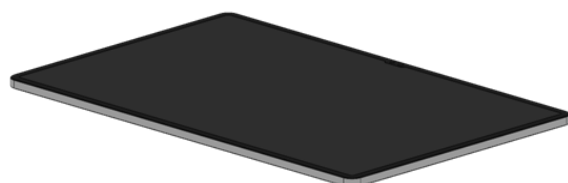
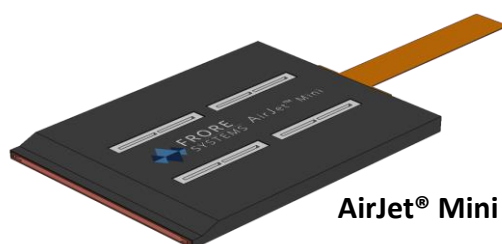


## Wafer Thin 10" Pro Tablets 2 x AirJet® Mini



10" Pro Tablets are known for their wafer thin design, reaching 6 mm thickness. But the downside has always been their thermal limit. Since Tablets are fanless, they only have "Passive" heat removal. In a Tablet, this "Passive" heat removal supports only 5 Watts of sustained processor power. Consequently, the user experiences poor performance due to severe processor throttling. Using AirJet®, the thermal limit can be improved to 10 Watts in the same super slim design while keeping the Tablet silent, thus improving processor performance by 2x.

Frore Systems has developed a revolutionary active cooling chip, AirJet®, the first ever solid state thermal solution. AirJet® is a fully self contained active heat sink module. AirJet® is silent, thin, light and outperforms fans.

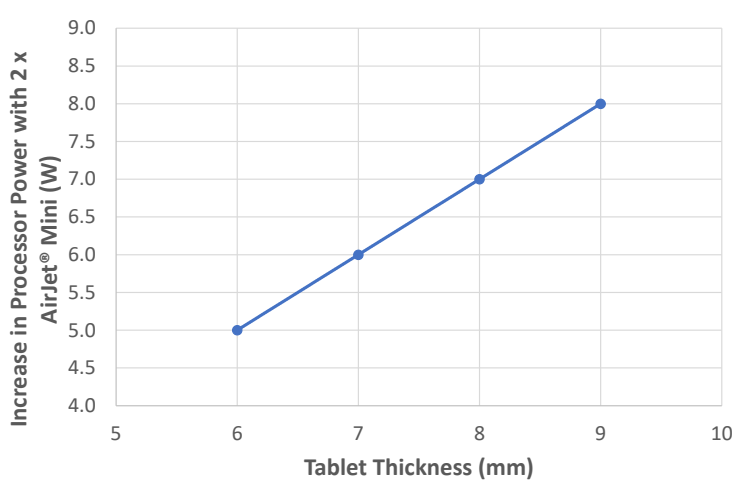


**AirJet® Mini**

AirJet® Mini generates 1750 Pascals of back pressure, ensuring air flow into and out from product enclosures. When integrated into a compute platform with processor die temperature of 85C, AirJet® Mini removes a net 4.25 Watts of heat at a silent 21 dBA noise level, while consuming 1 Watt of power.

Metric	AirJet® Mini
<b>Total heat dissipation (@ 85C die temperature, 25C ambient)</b>	5.25 W (net 4.25 W)
<b>Maximum noise inside device at 50 cm</b>	21 dBA
<b>Maximum power consumption</b>	1 W
<b>Back pressure</b>	1750 Pa
<b>Dimensions (width x length x thickness)</b>	27.5 x 41.5 x 2.8 mm
<b>Weight</b>	11g

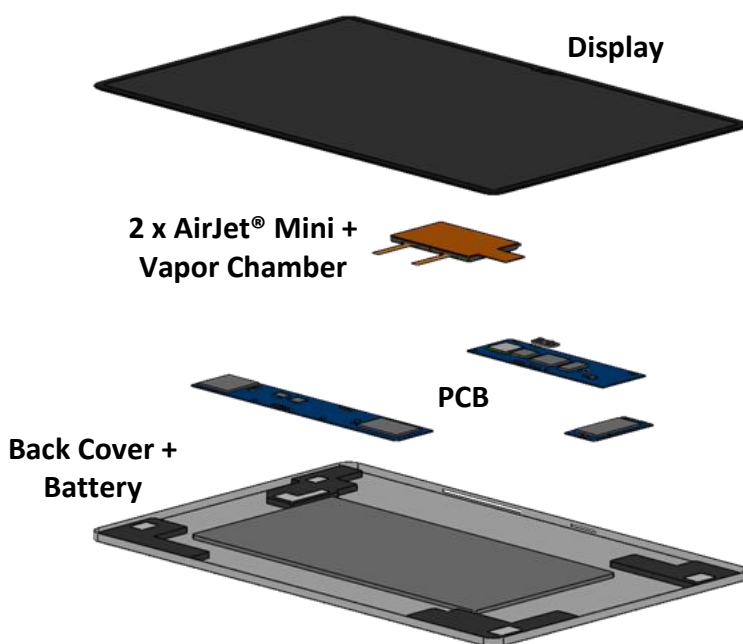
Inside a 6 mm base thickness Tablet, each AirJet® Mini, after discounting for lower processor die temperature and voltage regulator overhead, contributes 2.5 Watts of "Active" heat removal to sustained processor power. 2 x AirJet® Mini equal 5 Watts of "Active" heat removal. An increase in Tablet thickness results in further gains in "Active" heat removal and sustained processor power.



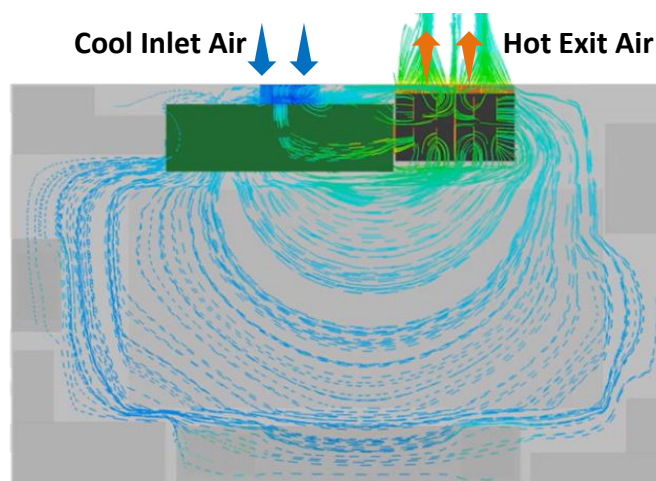
5 Watts of "Active" heat removal combined with 5 Watts of "Passive" heat removal inherent to the Tablet, equals 10 Watts of sustained processor power supported. The 2 x AirJet® Mini solution runs at acoustics of 24 dBA – quieter than a whisper. Thus, with AirJet®, the processor runs 2x faster, without making the Tablet thicker or noisy.

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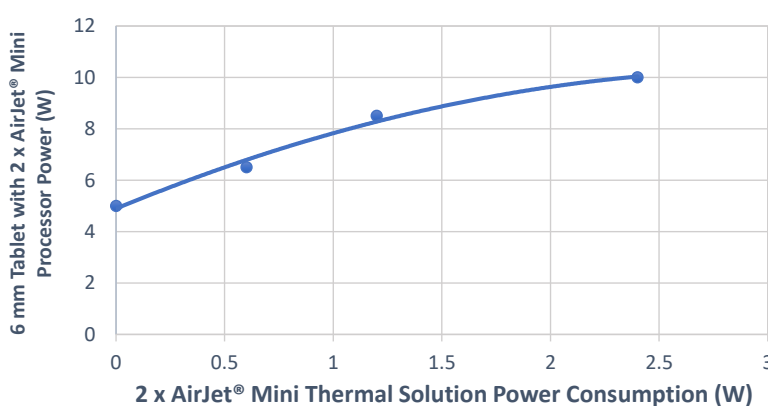
Let's dig deeper into how these 2 x AirJet® Mini are designed into the Tablet. First, a thermal solution subassembly is created with 2 x AirJet® Mini mounted on a vapor chamber. Second, a one-sided PCB is designed while ensuring the vapor chamber handle rests on top of the hot processor. The vapor chamber acts as a super conductor of heat, transporting heat from the processor to the 2 x AirJet® Mini.



The Tablet casing is designed with discrete air vents in the top edge, inlet air vent in the center directly behind the processor for cool ambient air to enter and exit vents directly behind the 2 x AirJet® Mini to facilitate easy ejection of hot air. No other air vents are needed anywhere else in the Tablet casing making for a sleek design. Moreover, thanks to AirJet®'s high back pressure, the inlet vent can be covered with air filter material rendering the Tablet dust-proof. When activated, the 2 x AirJet® Mini generate a strong airflow, pulling ambient air in through the inlet vent, and channeling the air around the PCB before entering the 2 x AirJet® Mini. This movement of air inside the Notebook helps keep the skin temperatures low. Once air enters the 2 x AirJet® Mini, heat is efficiently transferred to the flowing air until saturation. This hot air is then expelled out of the Tablet through the rear exit vent.



The 2 x AirJet® Mini solution increases the thermal limit of the 6mm Tablet to 10 Watts, enabling the processor to run 2x faster, without making the Tablet thicker or noisy.



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