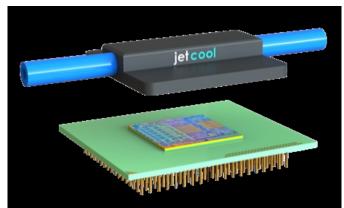
Better PC Cooling With JetCool?

Written by Frederick Douglas 17 July 2019

MIT spinoff JetCool emerges after 5 years in stealth mode to present a different approach to the cooling of PC processors and other electronics appealing to both overclockers and high-power semiconductor vendors-- "microconvective cooling."



"Many of our favorite services run on processors that could do even more, but they get too hot," the startup says. "With better cooling, we hope to break that logjam and help technology companies create a new wave of devices that will power tomorrow's extraordinary innovations."

Presented at the 2019 International Microwave Symposium (IMS), microconvective cooling is described as a "twist on microjet cooling [that] uses small jets of high velocity fluid to cool the device." The company says the system fires cooling liquid directly at the surface of the processor (as opposed to a heatsink or cold plate), making it more efficient at cooling electronics at the chip or device scale. According to a description of the technology, the sub-millimetre fluid jet is so fast it passes through the thermal boundary layer at the surface, "producing very high heat transfer coefficients in the impingement zone."

Currently JetCool offers a tutorial with a downloadable simulation to help enthusiasts or chip designers figure out the max temperature or power of their machines if they switched to microjet cooling.

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