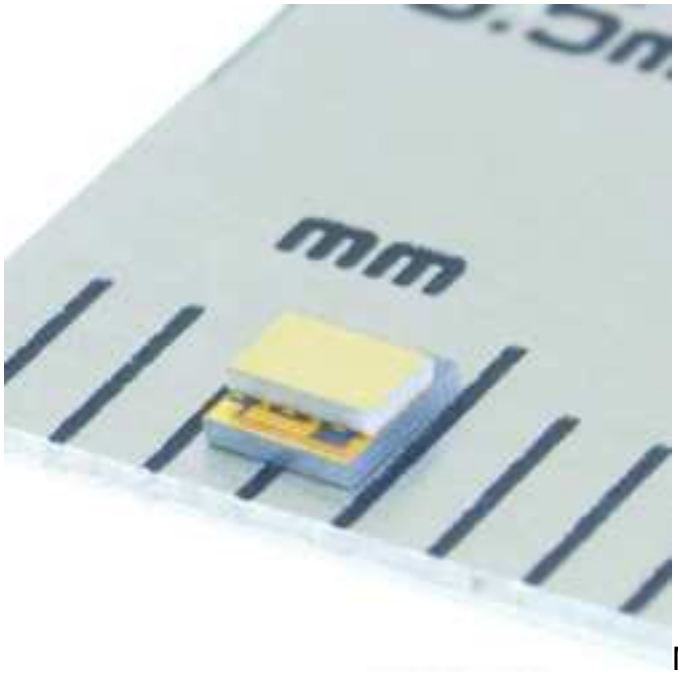
New Milestone in Cooling Performance for Thin-film Thermoelectrics



Nextreme Thermal Solutions, the leader in micro-scale thermal management and power generation solutions, today announced that its thin-film thermoelectric technology has achieved a 60.1°C temperature difference between its cold and hot sides at an ambient temperature of 24.7°C, bringing it on par with the performance of bulk thermoelectric technology. The 60°C temperature milestone, known as the Tmax, reflects the ability of the thermoelectric device to pump heat efficiently.This new level of performance translates to improved cooling efficiency, lower input power requirements, and greater opportunities for solving thermal issues in electronics, photonics, automotive, avionics, and high-speed PCR applications.
The electronic industry's continued trend of smaller form factors, greater circuit density, and highly integrated packaging has translated into significant thermal problems for electronics-related manufacturers. As a result of this technology achievement, Nextreme can now bring its thermal management solutions to additional, substantial markets that require not only the current advantages of its products, but also the performance provided by this new capability. This provides Nextreme the opportunity for significant business growth over time.

The improved performance is the result of new materials development at Nextreme and the use of advanced, state-of-the-art interconnect and contact technology developed at the Center for Solid State Energetics at RTI International.

"Our thin-film technology has now achieved the performance level of standard bulk thermoelectrics," said Dave Koester, vice president of engineering at Nextreme. "Achieving a 60°C ?T at room temperature raises the bar for improved efficiencies and lower operating costs for our customers while opening up new markets for

Nextreme."

Nextreme will be introducing new products with this higher level of cooling performance in 2012.

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[1] http://www.nextreme.com