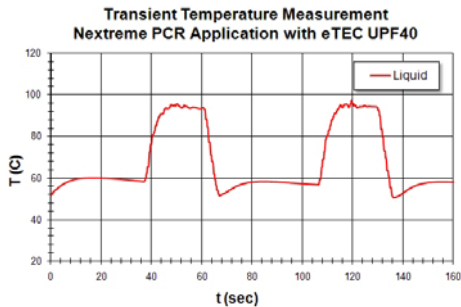


FOR IMMEDIATE RELEASE**January 14, 2009***Nextreme PCR Application using eTEC UPF40***For more information, contact:**

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Thin-film thermoelectrics offers new and differentiated product opportunities for the DNA sequencing equipment marketplace...

NEXTREME CONTROLS POLYMERASE CHAIN REACTION PROCESS WITH MICROSCOPIC PELTIER HEAT PUMP

DURHAM, N.C. (January 14, 2008) — Nextreme Thermal Solutions, the leader in microscale thermal and power management products for the electronics industry, today announced that it has successfully demonstrated the application of thin-film thermoelectric devices for temperature control of the polymerase chain reaction (PCR) process used for DNA amplification. The microscopic size and millisecond response time of Nextreme's thin-film eTEC thermoelectric modules enable significantly shorter throughput times for DNA sequencing equipment. DNA replication represents one of several applications of Nextreme's product line for the test and measurement and healthcare industries.

Nextreme has successfully demonstrated short cycle time temperature control using two eTEC UPF40 thermoelectric modules that perform as microscopic heat pumps. The module uses the thermoelectric effect to heat or cool objects simply by changing the direction of current flow. A UPF40 module can pump a heat flux up to 80 W/cm² at 25°C and is extremely thin, with a 0.650mm profile and a small 2.5mm X 5.1mm footprint. Customers can expect 4.1 watts of cooling and heating from a Nextreme device with less than a 2 msec response time at the device level. In the micro-PCR application, where Nextreme was heating and cooling a plastic vial with water in it, this translated into an ability to heat the water up to 90°C in 15 seconds and cool it back down to 55°C in under 10 seconds.

PCR is a technique widely used in molecular biology to produce millions of copies of a specific DNA sequence in a short period of time. PCR-based testing is used in the diagnosis of hereditary diseases; the identification of genetic fingerprints (used in forensic sciences and paternity testing); and the detection and diagnosis of infectious diseases. The vast majority of PCR methods use thermal cycling, i.e., alternately heating and cooling of the DNA sample based on a predefined series of temperature steps.

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Nextreme Controls PCR Process with Microscopic Heat Pump, Page 2

A thermal cycler is an automated instrument specifically designed for this purpose. A typical device consists of a metal block with holes where plastic vials holding the PCR reaction mixtures are inserted. The instrument has an integrated heating/cooling unit that is used to systematically raise and lower the temperature of the block. Due to their low mass, Nextreme's thermoelectric devices are particularly well suited to achieve fast temperature changes while also achieving a uniform temperature distribution throughout the block. In addition, the microscopic size of the Nextreme eTEC enables different temperatures in different parts of the block – something that cannot be achieved with conventional technology. This is particularly useful when testing suitable annealing temperatures for primers, which are required for initiation of the DNA replication sequence.

According to industry experts, the DNA Sequencing Equipment and Service Market is expected to grow nearly 8% between 2006 and 2012, expanding from a market worth \$335 million to a market worth \$528 million.

"Our technology can enable a new generation of thermal cyclers for equipment manufacturers that lower the barriers-to-entry and increase opportunities for differentiation," said Dr. Paul A. Magill, Nextreme's vice president of marketing and business development.

Nextreme offers several thermoelectric coolers that are capable of cooling and heating in ranges from 0.4 watts to 4 watts in an active footprint as small as 0.55mm². Modules are available for ordering now. Pricing is available upon request.

Nextreme will be demonstrating its cooling and thermal management product family at the Photonics West conference, January 27-29, 2009 in booth #6198A at the San Jose Convention Center, South Hall 1.

More information on the use of thin-film eTEC thermoelectrics in temperature control applications can be found at www.nextreme.com/etec. Contact Nextreme at 3908 Patriot Dr., Suite 140, Durham, NC 27703-8031; call (919)-597-7300; e-mail info@nextreme.com; or go to www.nextreme.com.

About Nextreme Thermal Solutions™, Inc.

Nextreme Thermal Solutions designs and manufactures microscale thermal and power management products for the electronics, telecommunications, semiconductor, consumer, and defense/aerospace industries. The company uses breakthrough thin-film thermoelectric material to embed cooling, temperature control and power generation capabilities into the widely accepted copper pillar bumping process used in high-volume electronic packaging. Nextreme's headquarters and manufacturing facility are based near Research Triangle Park, North Carolina.

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For additional information or to request the electronic image, please email beth.gaddy@btbmarketing.com or call 919-872-8172.