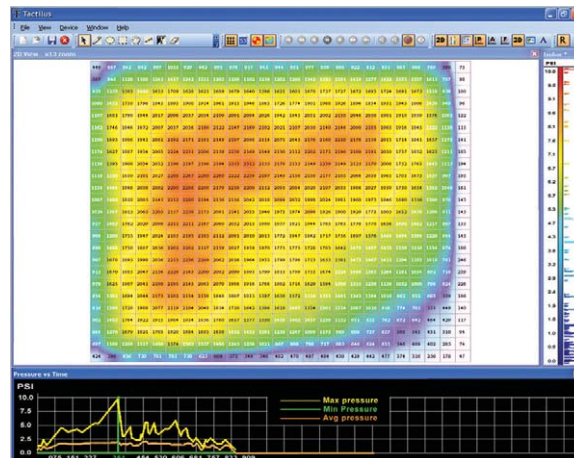


## Tactilus Sensor System Ensures Optimal Heat Sink Efficiency

Allows engineers to map and measure pressure distribution between heat sinks and components in real time.

by DE Editors | Published September 20, 2010

The new Tactilus heat-sink analysis system by Sensor Products Inc. enables research and design engineers to test and correct the surface contact and pressure distribution between the heat sink and its source. Even a slight warping of the heat exchange structure or reduction in surface contact area can have a profound effect on cooling efficacy, according to the company. If the pressure distribution is not uniform, heat conduction will be low, and the electronics may overheat.



With Tactilus, engineers can visualize actual contact forces and pressure distribution data on the circuit board components. As the mounting screws between the CPU and the heat sink are torqued, Tactilus maps and measures the changing pressure distribution between the mating surfaces and displays it through its software. The heat sink interface can be tested, manipulated, and repositioned in real-time. Tactilus also provides the pressure data needed for finite element analysis simulation predictions.

The Tactilus sensor is flexible and 0.015-in. thick (0.38 mm), allowing it to be placed between the CPU and heat sink without affecting the assembly, according to Sensor Products. The sensor pad has 625 resistive sensing points arrayed on a 25 × 25 grid. The total sensing area is 2 in. × 2 in. The scan speed is up to 1,000 Hertz, and the operating pressure range is 0 to 100 psi (0 to 7 kg/cm<sup>2</sup>).

For more information, visit the Sensor Products website at [www.SensorProd.com](http://www.SensorProd.com).