

Measuring Surface Contact and Pressure Distribution Between a Heat Sink and Its Source

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Sensor Products Inc.'s Tactilus heat-sink analysis system uses a flexible sensor and hub to display heat sink data on a PC for heat-generating chips such as a CPU. Since it is flexible and only 0.015-in. thick (0.38 mm), the sensor can be placed between the CPU and heat sink without affecting the assembly. Data can easily be gathered to precisely test and correct the surface contact and pressure distribution between the heat sink and its source.

With a total sensing area of 2 in. \times 2 in., the sensor pad has 625 resistive sensing points arrayed on a 25 \times 25 grid. The scan speed is up to 1,000 Hertz, and the operating pressure range is 0 to 100 psi (0 to 7 kg/cm2). Accuracy is \pm 10%; repeatability is \pm 2%; hysteresis is \pm 5%; and non-linearity is \pm 1.5%.

For more information about Sensor Products Tactilus heat-sink analysis system, click here.

