

# 2009 Temperature Sensors

Optoelectronics, Sensors, Discretes, MEMS Markets – Worldwide



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## Abstract

Thermal management has always played a vital role in electronic design. Improper thermal management or lack of it will cause circuitry to fail prematurely and affect performance in end products. Temperature sensors are products that capture temperature and convert it into a voltage signal that can be used by the application to maintain optimal operating conditions.

The temperature sensors market is expected to contract by 18 percent this year due to a major slowdown in orders during the fourth quarter in 2008 which continued into the first quarter of 2009. The end markets that impact this market dramatically are the PC market, automotive, consumer, and industrial. In 2009, temperature sensor revenue is expected to come in at \$711 million.

Average selling prices for temperatures are continuing to erode which signals increasing competition in this space and higher volumes. Replacing thermistors and RTD in today's application designs is a growing trend, because these devices are more flexible in terms of functionality compared to discrete devices and also they are digital so they can be interfaced with other circuits in the system. Further, temperature ranges are broader and more accurate and there are fewer components required for overall design.

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