

**APRIL 30, 2009**

## **Acceleration/Yaw Sensors May Be Down But Not For Long**

*MEMS-based inertial sensors to set record sales in 2011 thanks to portable applications*

After punching through the \$1 billion barrier in 2008, the market for MEMS-based acceleration and yaw sensors will suffer its first significant decline ever this year, but a recovery is expected to start in the second half of 2009, and sales are forecast to set a new record-high of \$1.3 billion in 2011, according to IC Insights' new 2009 *Optoelectronics, Sensors, and Discretes (O-S-D) Report*.

Like all other semiconductor categories, acceleration and yaw sensors—including accelerometers and gyroscope chips—are feeling the effects of the economic recession that began in 2008.

Sales in the acceleration/yaw sensor category are expected to fall 19% to \$861 million in 2009 after growing 23% in 2008 to a record-high \$1.07 billion. IC Insights' new *O-S-D Report* shows acceleration/yaw sensors became the largest semiconductor sensor category in 2008, surpassing magnetic-field sensors (which totaled \$1.02 billion) for the first time ever due to strong growth in low-cost accelerometers used in cell phones, video-game controllers, and new portable systems.

Between 2008 and 2013, worldwide revenues for acceleration and yaw sensors are projected to increase at a compound annual growth rate (CAGR) of 11.1% compared to 8.0% for the entire semiconductor market, based on the 2009 *O-S-D Report's* five-year forecast. IC Insights expects acceleration/yaw sensor sales to hit \$1.81 billion in 2013 with unit shipments reaching 1.43 billion worldwide (Figure 1).

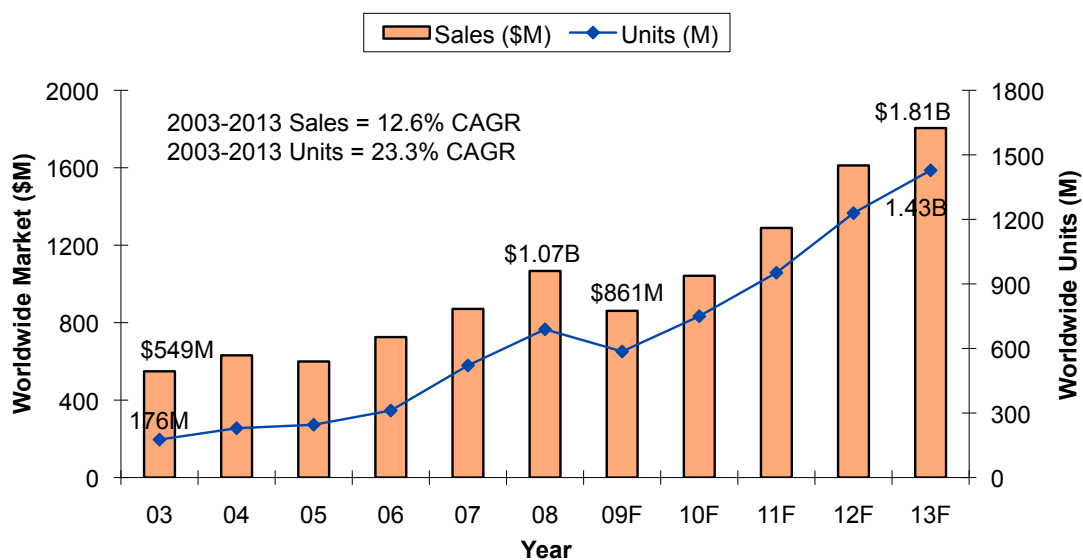
In recent years, the acceleration/yaw sensor business has been transformed from a product category dominated by automotive safety applications to a high-volume chip market now driven by portable systems and consumer electronics. In multimedia smartphones—such as Apple's iPhone and many new look-alike 3G handsets—low-cost 3-axis accelerometers are being used to determine how phones are being held so that touch-screen displays can automatically rotate images into portrait (vertical) or landscape (horizontal) modes. A growing number of accelerometers are being used in new portable "dead-reckoning" navigation systems, which calculate their locations from measurements of movements. Inertial sensors are also providing drop detection/protection in notebook computers, cameras, and other

### **MORE INFORMATION CONTACT**

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portable products, and they are working their way into motion-control and gesture-recognition applications in interactive video games and consumer products.

### Acceleration & Yaw Sensor Market Forecast



**Figure 1**

Overall, worldwide sales of all semiconductor sensors—including pressure and magnetic-field sensors—are expected to rise at a CAGR of 7.6% in the five-year forecast period, reaching \$3.9 billion in 2013, according to the 2009 *O-S-D Report*. Revenues for sensors built with microelectromechanical systems (MEMS) technology—mostly pressure sensors and acceleration/yaw devices—are forecast to reach \$2.4 billion in 2013, representing a CAGR of 9.1% in the 2008-2013 forecast period of the IC Insights report.

### Report Details

The 2009 edition of the *O-S-D Report* extends IC Insights' coverage of the semiconductor industry with detailed analysis of trends and growth rates in the optoelectronics, sensors/actuators, and discrete market segments. The 260-page 2009 report is available for \$2,290 in either a three-ring binder or CD-ROM format. Additional individual copies of the CD-ROM or binder sell for \$495 each. The report is also available under a multi-user corporate license for \$5,590.

#### About IC Insights

IC Insights, Inc., based in Scottsdale, Arizona USA, is dedicated to providing high-quality, cost-effective market research for the semiconductor industry. Founded in 1997, IC Insights offers coverage of global economic trends, the semiconductor market forecast, capital spending and fab capacity trends, product market details, and technology trends, as well as complete IC company profiles and evaluations of end-use applications driving demand for ICs.

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