

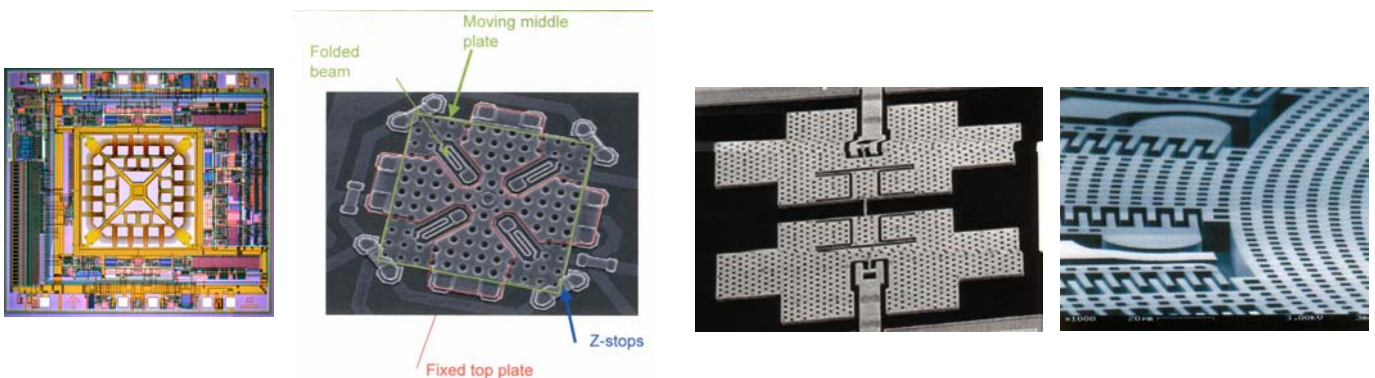
# INERTIAL SENSORS

## Tilt, Acceleration, Yaw Rate and Combined Systems

*This valuable investigation will describe the new technical developments in key components, and subsequently the new and increased market chances for the producing companies, as well the chances for companies applying such improved new devices in their systems.*

The automotive industry is the major driving force for technical developments in the field of silicon micromechanical sensors and related products. The different MEMS technologies allow to reduce the price of tilt sensors, acceleration sensors and yaw rate sensors or gyros considerably. The report analyses the various sensor element production technologies, such as Si-bulk micromachining, surface micromachining and quartz oscillators, and their integration. The trend is in direction of vibrating devices based on Si technology, others such as quartz based ones or optical gyros seems to have difficulties competing with Si-technology.

The report contains the market developments and application trends in the industrial market, robotic markets and automotive markets as well as aeronautic markets. The basic system data are analysed and penetration rates of sensors given under various assumptions. Research and development activities and products from principal manufactures are reviewed.



*Examples of sensor chip images for tilt sensors, acceleration sensors and yaw rate sensors from Memsic, Freescale, SensoNor-Infineon and by Fraunhofer Institute for Silicon Technology - Sensor Dynamics*

More information and the Table of Content of this useful 100 page report can be obtained from **sgt Sensor Consulting Dr. Guido Tschulena**, who has written the report together with Felix Trojer from Netlab GmbH in Düsseldorf. Tel: + 49 6081 56 168, Fax: + 49 6081 57 222, Mail: [info@tschulena.de](mailto:info@tschulena.de)

# **INERTIAL SENSORS**

## **Tilt, Acceleration, Yaw Rate and Combined Systems**

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**Result:** Hard copy report, with a presentation and discussion on the main content at the clients premises, provided the travel expenses are covered.

**Interested Industries:** Automobile and supply companies, robotic companies, machine building companies, aerospace companies, defence companies, electronics industries, sensor companies

## ORDERING FORM

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