

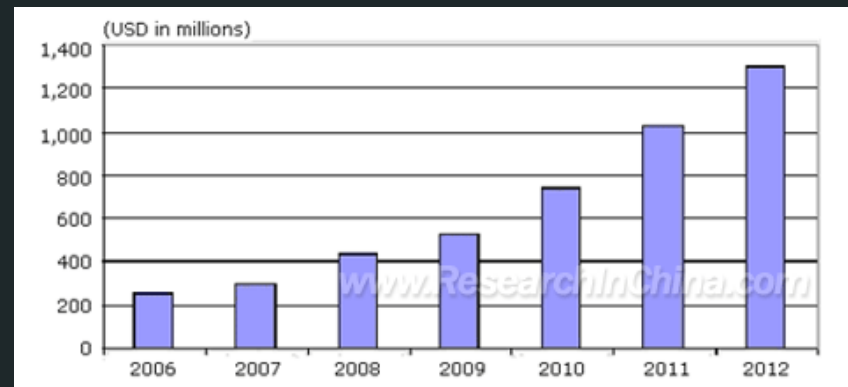
Global and China MEMS Industry Report, 2008-2009



MEMS, abbreviated for Micro Electro Mechanical Systems, is a semiconductor technology integrating mechanics and electronics, which got widely applied for auto airbag preliminarily, and then for all the other auto industries via MEMS sensor. With the further development of MEMS technology, as well as the characteristics of application terminals such as lightness, thinness, shortness and smallness, the demand for small MEMS products with high performance shoots up, and the fields like consumer electronics and medical care also increasingly require large quantity MEMS products.

Apple iPhone series, beyond doubt, has promoted MEMS application in cell phone, and after iPhone, more and more MEMS cell phones will be in prevalence. MEMS in the components of portable devices consist of gyroscope, new-generation triaxial accelerometer, pressure sensor and module design. Besides browsing web pages via touch, scrolling web pages via inclining cell phone, and displaying pictures by the change of cell phone direction and angle, it can also be step counter, guide interface, LBS positioning information service, HDD anti-collision protection from geocentric gravity, individual inertial navigation, intelligence interactive game etc. The cell phones with in-built MEMS function also can be used to measure absolute atmosphere or as the sensing device. In addition, the cell phone MEMS sensor can judge the distance of cell phone to ear skin so that it can close display screen automatically, and the electricity source can be saved.

Market Scale of MEMS Products Application in Cell Phone, 2006-2012E



Source: ResearchInChina

Impacted by global economic downturn in 2008, both global consumer electronics and automobile sale have dropped, which further continues in 2009. The two American auto giants are faced with bankruptcy, which has given a heavy blow to MEMS market application. However, MEMS still has a bright prospect since the rising portion of MEMS application in single products in spite of a decline in consumer electronics shipment. Moreover, the compulsory configuration regulations launched by the countries in Europe and America in auto ESC and TPMS fields have secured the steady supply of MEMS products.

MEMS products are mostly customized, which has higher requirements on wafer fabs. Therefore, Scarcely wafer fabs in Mainland China have entered the field. However, at the end of Oct, 2008, SMIC announced to enter MEMS OEM, and in early 2009 the top visiting group of Founder Microelectronics INC visited many MEMS companies in Taiwan. As it is said that Shanghai and Wuxi are planned to establish MEMS industrial parks, and China's MEMS insiders are also seeking chances to share opportunities that MEMS industry has brought.



Table of Contents

- **1 MEMS Industry Development and Trend**
 - 1.1 MEMS Definition
 - 1.2 Industry Chain
 - 1.3 Market Overview
 - 1.4 MEMS Sensor in Automobile
- **2 MEMS Market Application**
 - 2.1 Influence of Auto Market Environment
 - 2.1.1 China Auto Market, 2008
 - 2.1.2 Influence of Auto Electronics Industry
 - 2.2 MEMS Products in Automobile
 - 2.2.1 Engine Management System
 - 2.2.2 Airbag
 - 2.2.3 Chassis System
 - 2.2.4 Other
 - 2.3 Influence of Consumer Electronics Industry
 - 2.4 MEMS Products in Consumer Electronics Products Market
 - 2.4.1 Printer
 - 2.4.2 Digital TV
 - 2.4.3 Cell Phone
 - 2.4.4 NB
 - 2.4.5 Other
- **3 MEMS Vendors**
 - 3.1 MEMS Wafer Fabs
 - 3.1.1 Colibrys
 - 3.1.2 Neostones
 - 3.1.3 Memscap
 - 3.1.4 IMT
 - 3.1.5 SMI
 - 3.1.6 X-Fab
 - 3.1.7 Tronic's Microsystems
 - 3.2 American MEMS Vendors
 - 3.2.1 TI
 - 3.2.2 ADI
 - 3.2.3 Freescale
 - 3.2.4 Kionix
 - 3.2.5 Akustica
 - 3.2.6 Knowles Acoustics

- 3.3 European MEMS Vendors
 - 3.3.1 Bosch
 - 3.3.2 VTI
 - 3.3.3 Sonion MEMS
 - 3.3.4 HL PLANAR
- 3.4 Japanese MEMS Vendors
 - 3.4.1 DENSO
 - 3.4.2 Omron
 - 3.4.3 MATSUSHITA
 - 3.4.4 OKi
- 3.5 Vendors in Mainland and Taiwan, China
 - 3.5.1 MEMSIC
 - 3.5.2 First MEMS
 - 3.5.3 AMP

Selected Charts

- MEMS Industry Operation Mode
- Top Ten MEMS Vendors, 2008 (US\$ in million)
- Global Auto MEMS Sensor Output and Forecast, 2006-2012E (US\$ in 100 million)
- RF MEMS Sensor Application and Scale Change by Segmented Market, 2004-2009
- MEMS Sensor Application in Auto Key Parts
- Comparison of MEMS Accelerators by Technology
- China's Auto Output, 2001-2008 (Unit: 10,000 vehicle)
- China's Car Output, 2001-2008 (Unit: 10,000 vehicle)
- China's Key Car Manufacturers Output, 2008 (Unit: 10,000 vehicle)
- Top Ten Auto Types by Single Brand Sales, 2007-2008 (Unit: 10,000 vehicle)
- Passenger Car, Truck and Car Output and Sales, Jan-Dec, 2008
- Global Auto MEMS Sensor Shipment and Forecast, 2002-2009
- Global Market Share of MEMS Vendors in Consumer Electronics, 2008
- China's Inkjet Printer Sales, 2004-2008 (Unit: 10,000 sets)
- Global Cell Phone Shipment, 2007-2012E (Unit: 1 million sets)
- Global NB Shipment, 2007-2012E (Unit: 1 million sets)
- Global Digital Family Entertainment System Market, 2004-2009
- Global Digital TV Shipmen Growth and Forecast, 2007-2012E (Unit: 1 million sets)
- Global E-Game Console Market, 2005-2011E
- MEMS Inkjet Print Head Shipment and Sales, 2004-2008 (Unit: 1 million sets, USD1 million)

- Market Share of MEMS Inkjet Head Manufacturers, 2008
- Global Optical MEMS Shipment and Market Scale, 2004-2008
- Global TV Shipment by Application Technology, 2006-2012E (Unit: USD1 billion)
- Cell Phone MEMS Products, 2004-2008
- Market Share of MEMS Products in Cell Phone, 2006-2012E (Unit: USD1 million)
- MEMS Microphone Market Scale, 2005-2010E (Unit: USD1 million)
- Silicon Crystal Microphone Products
- Global Inertia Sensor Market Scale, 2004-2008
- Global Market Share of Inertia Sensor in Cell Phone, 2004-2008
- Global Accelerate Sensor Application by Segmented Market, 2003-2007 (Unit: 1 million)
- Global Shipment and Market Scale of MEMS Acceleration Sensors, 2004-2008
- Cell Phone Image Adjustment via Acceleration Sensor
- Global Gyroscope Market Application Segmentation, 2003-2007 (Unit: 1 million)
- Global MEMS Gyroscope Shipment and Market Scale, 2004-2008
- Average Cell Phone Manufacturing Cost
- Measures for MEMS Industrialization by Region
- MEMS Development and Trial-Production Examples
- MEMS Products of Colibrys
- MEMSCAP Finance, 2007-2008 (Unit: EUR1 million)
- MEMS Products of IMT
- Pressure Sensor Series of SMI
- Microsystems MEMS Market Positioning of TRONICS
- Microsystems MEMS Products of TRONICS

- X-Fab Key MEMS Technology Classifications
- X-Fab Key Non-Customized MEMS Products
- America MEMS Industrialization Road
- TI Performance, 2003-2008 (Unit: USD1 million)
- TI Revenue by Division, 2006-2008 (Unit: USD1 million)
- TI Total Profit by Region, 2006-2008 (Unit: USD1 million)
- TI Key DLP Products
- ADI Sales Revenue and Growth Margin, FY2004-FY2008 (Unit: USD100 million)
- ADI Revenue by Market, FY2008
- ADI Revenue by Product, FY2008
- ADI Revenue by Region, FY2006-FY2008 (Unit: USD100 million)
- ADI Key MEMS Products
- Freescale Sensor Classifications and Some Sensor Products
- Freescale MMA6200Q Acceleration Sensor Application Types
- Freescale Some Products Sales Revenue, 2008 (Unit: USD1 million)
- Freescale Sales Revenue, 2003-2008
- Kionix KXM52 Triaxial Accelerometer
- Kionix Key Accelerometer Product Performance
- Akustica MEMS Technology
- Akustica Microphone Products
- Global MEMS Microphone Shipment, 2003-2008
- Sensata Auto Sensor Products, Function and Typical Application
- MEMS Industrialization in France
- MEMS Industrialization in Germany and Switzerland
- MEMS Pressure Sensor New Technologies
- BOSCH MEMS Landmark
- BOSCH MEMS Products in Automobile
- BOSCH Revenue and Growth, 2004-2008 (Unit: EUR1 million)

- BOSCH Profit by Division, 2007-2008 (Unit: EUR1 billion)
- BOSCH Profit by Region, 2007-2008 (Unit: EUR1 billion)
- VTI 3D-MEMS Technology Characteristics
- VTI 3D-MEMS Structure
- VTI Net Revenue, 2003-2007 (Unit: EUR1 million)
- VTI Sensor Net Revenue, 2003-2007 (Unit: EUR1 million)
- Pulse Key MEMS Microphone Products
- HL PLANAR Key MEMS Sensor Products
- MEMS Industrialization in Asia
- Key Products of Denso
- Denso Net Revenue, FY2004-2008 (Unit: YEN1 billion)
- Denso Revenue by Product, FY2008 (Unit: YEN1 billion)
- Denso Revenue by Region, FY2004-2008 (Unit: YEN1 billion)
- Performance Comparison between Traditional Switch and MEMS Switch
- MEMS FLOW Sensors of Omron
- MEMS Switch Performance of Omron
- Omron Net Revenue, FY2003-2008 (Unit: YEN1 billion)
- Omron Sales Growth in New Technology Field, FY2003-2007 (Unit: YEN1 billion)
- Omron Sales Revenue by Segmentation, FY2007-2008 (Unit: YEN1 billion)
- MATSUSHITA Acceleration Sensor and Pressure Sensor
- MATSUSHITA PIMITES Technology
- MATSUSHITA GS1 Single-axial Sensor
- MATSUSHITA Triaxial Acceleration Sensor
- MATSUSHITA MEMS Relay
- OKI MEMS Technology Process
- Auto Annunciator Structure of MEMSIC
- Key Products of First MEMS
- MEMS OEM Mode of AMP

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