Micro-Electromechanical Systems (MEMs) Devices: Market Research Report



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# Micro-Electromechanical Systems (MEMs) Devices: Market Research Report

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This report analyzes the worldwide markets for Micro-Electromechanical Systems (MEMS) Devices in US\$ Million by the following Product Categories: Accelerometers, Gyroscopes, Inkjet Heads, Wafer Probes & Optical MEMS, Pressure Sensors, and Others.

The End-Use Segments also analyzed in the report include Commercial/Industrial, Medical/Biomedical, Telecommunication, Computers, and Others.

The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Latin America, and Rest of World.

Annual estimates and forecasts are provided for the period 2009 through 2017.

Also, a six-year historic analysis is provided for these markets.

The report profiles 156 companies including many key and niche players such as Analog Devices, Inc., Apogee Technology Inc., Avago Technologies, Inc., Bosch Sensortec GmbH, Canon ANELVA Corporation, Colibrys Ltd., Coventor, Inc., Denso Corporation, Epson Toyocom Corporation, Freescale Semiconductor, Inc., GE Measurement & Control Solutions, Hewlett-Packard Development Company, L.P., Honeywell International, Inc., IMT (Innovative Micro Technology) Inc., IntelliSense Software Corporation, Invensense, Kavlico Corporation, Kistler Instrument Corp., LioniX BV, MEMSCAP S.A., Memsic Inc., MemsTech, Micralyne Inc., NeoPhotonics Corporation, Optiviva Inc., Panasonic Corp, Sensonor Technologies AG, Silicon Microstructures, Inc., STMicroelectronics, Systron Donner Inertial, Texas Instruments Inc., Teledyne DALSA, TowerJazz, and Umachines, Inc.

Market data and analytics are derived from primary and secondary research.

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OMRON Healthcare Selects Silicon Microstructures for Advanced Pressure sensors

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Apogee Technology Inc. (US)

Avago Technologies Inc (USA)

Bosch Sensortec GmbH (Germany)

Canon ANELVA Corporation (Japan)

Colibrys (Switzerland) Ltd, Switzerland

Coventor Inc. (US)

**DENSO Corporation (Japan)** 

Epson Toyocom Corporation (Japan)

Freescale Semiconductor, Inc (USA)

GE Measurement & Control Solutions (USA)

Hewlett-Packard Development Company, L. P. (USA)

Honeywell International Inc (USA)

IMT (Innovative Micro Technology) Inc (US)

IntelliSense Software Corporation (US)

InvenSense Inc (USA)

Kavlico Corporation (US)

Kistler Instrument Corp. (US)

LioniX BV (The Netherlands)

MEMSCAP S. A. (France)

Memsic Inc. (US)

MemsTech (Malaysia)

Micralyne Inc. (Canada)





NeoPhotonics Corporation (US)
Optiviva Inc (China)
Panasonic Corp (Japan)
Sensonor Technologies AG (Norway)
Silicon Microstructures, Inc. (US)
STMicroelectronics (Switzerland)
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**Table 41.** German Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 42.** German Historic Review for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical / BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed With Annual Sales Figures in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 43.** German 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

#### 4C. ITALY

Market Analytics

**Table 44.** Italian Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 45.** Italian Historic Review for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with With Annual Sales Figures in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 46.** Italian 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

## **4D. THE UNITED KINGDOM**

A. Market Analysis

## **MMA**





# B. Market Analytics

**Table 47.** UK Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 48.** UK Historic Review for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical / BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 49.** UK 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

## **4E. SPAIN**

Market Analystics

**Table 50.** Spanish Recent Past, Current & Future Analysis for MEMS Devices by End-UseSegment – Commercial/ Industrial, Medical / BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 51.** Spanish Historic Review for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 52.** Spanish 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

## 4F. RUSSIA

Market Analytics

**Table 53.** Russian Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/ Industrial, Medical/ BioMedical, Telecomm- unication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 54.** Russian Historic Review for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 55.** Russian 15-Year Perspective for MEMS Devices by End-Use Segment –Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

#### **4G. REST OF EUROPE**

Market Analtics



**Table 56.** Rest of Europe Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 57.** Rest of Europe Historic Review for MEMS Devices by End-Use Segment – Commercial / Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 58.** Rest of Europe 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

## 5. ASIA-PACIFIC

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Market Overview
Asia – Picking up the Trail
Asian Market Gains Impetus
The Chinese MEMS Market
The Indian MEMS Market
B. Market Analytics

**Table 59.** Asia-Pacific Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical / BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 60.** Asia-Pacific Historic Review for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 61.** Asia-Pacific 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

# 6. LATIN AMERICA

A. Market Analysis
Brazilian MEMS Market
B. Market Analytics

**Table 62.** Latin American Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes corresponding Graph/Chart)

**Table 63.** Latin American Historic Review for MEMS Devices by End-Use Segment – Commercial / Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed With Annual Sales Figures in US\$ Million for Years 2003 through 2008 (includes corresponding





# Graph/Chart)

**Table 64.** Latin American 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

# 7. REST OF WORLD

Market Analytics

**Table 65.** Rest of World Recent Past, Current & Future Analysis for MEMS Devices by End-Use Segment – Commercial/Industrial, Medical / BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2009 through 2017 (includes correspondingGraph/Chart)

**Table 66.** Rest of World Historic Review for MEMS Devices by End-Use Segment – Commercial / Industrial, Medical/BioMedical, Telecommunication, Computers, and Others Markets Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2003 through 2008 (includes corresponding Graph/Chart)

**Table 67.** Rest of World 15-Year Perspective for MEMS Devices by End-Use Segment – Percentage Breakdown of Dollar Sales for Commercial/ Industrial, Medical/ BioMedical, Telecommunication, Computers, and Others Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

# IV. COMPETITIVE LANDSCAPE

Total Companies Profiled: 156 (including Divisions/Subsidiaries - 163)

Region/CountryPlayers

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Japan

Europe

France

Germany

The United Kingdom

Italy

Rest of Europe

Asia-Pacific (Excluding Japan)

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