

# **Microelectromechanical Systems (MEMS) Market: By Type (Sensors [Inertial, Pressure, Microphone, Environmental, Optical], Actuators [Optical, Inkjet Head, Microfluidics, Radio Frequency]), By Application (Consumer Electronics, Automotive, Aerospace & Defence, Healthcare, Telecommunications, and Industrial), And Region – Global Analysis of Market Size, Share & Trends For 2021–2022 And Forecasts To 2032**

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## **Abstracts**

Microelectromechanical Systems (MEMS) Market: By Type (Sensors [Inertial, Pressure, Microphone, Environmental, Optical], Actuators [Optical, Inkjet Head, Microfluidics, Radi%li%Frequency]), By Application (Consumer Electronics, Automotive, Aerospace & Defence, Healthcare, Telecommunications, and Industrial), And Region – Global Analysis of Market Size, Share & Trends For 2021–2022 And Forecasts T%li%2032

## **PRODUCT OVERVIEW**

Micro-Electro-Mechanical Systems is a process technology that enables the production of minute integrated systems or devices, which combine electrical and mechanical components. MEMS can be made in sizes ranging from a few micrometers t%li%millimeters using integrated circuit batch processing processes. These tools or systems are capable of microscale sensing, control, and actuation as well as macroscale effects generation. The wide variety of applications and industries that use MEMS devices als%li%demonstrate the complexity of the technology. They are used in multiple systems in defense, medical, automotive, electronic, and other fields. MEMS,

one of the most promising technologies for the twenty-first century has the potential to revolutionize both industrial and consumer products by fusing silicon-based microelectronics with micromachining technology.

## MARKET HIGHLIGHTS

The Microelectromechanical Systems (MEMS) Market is expected to project a notable CAGR of 8.2% in 2032.

Microelectromechanical Systems (MEMS) to surpass USD 105.5 billion by 2032 from USD 44.41 billion in 2021 at a CAGR of 8.2% in the coming years, i.e., 2022-32. The widespread use of MEMS in smartphones, the booming portable electronics market, the growing acceptance of the Internet of Things (IoT), and the solid demand in the automation sector all contribute to the Microelectromechanical Systems (MEMS) Market growth. Due to its low power consumption, compact size, and great precision, MEMS technology is used by sensor manufacturing businesses to create a variety of sensors. These manufacturers are creating new MEMS-based sensors for a range of uses in an effort to expand the Microelectromechanical Systems (MEMS) Market globally and also in specific regions.

## MICROELECTROMECHANICAL SYSTEMS (MEMS): SEGMENTS

The Sensors segment is expected to grow with a higher CAGR during 2022-32

Microelectromechanical Systems (MEMS) Market is categorized on the basis of Type into Sensors and Actuators. Sensors are further divided into Inertial, Pressure, Microphone, Environmental, and Optical. Actuators are also further classified as Optical, Inkjet Head, Microfluidics, and Radio Frequency. In terms of revenue, the sensors segment dominated the market in 2021, and it is anticipated to continue throughout the forecast period as well. During the anticipated period, the inertial sensor type is anticipated to account for a large portion of the Microelectromechanical Systems (MEMS) Market. This rise is related to the expanding use of inertial sensors in automotive applications including electronic stability control (ESC), traction control system (TCS), and anti-lock braking system.

The Automotive segment is expected to grow with a higher CAGR during 2022-32

Microelectromechanical Systems (MEMS) Market is categorized on the basis of Application into Consumer Electronics, Automotive, Aerospace & Defence,

Healthcare, Telecommunications, and Industrial. Over the forecast period, the automotive segment is anticipated to hold a higher market share. The car industry has been much more electrified recently, which has greatly increased demand for various electric components. The automotive industry is undergoing a significant shift as a result of the growing demand for electric vehicles, which necessitates reducing the weight and improving the efficiency of new EVs.

## MARKET DYNAMICS

### Growth Drivers

Growing Use of IoT Devices, Higher Proliferation of Smartphones, and SC Packaging

Benefits Offered by MEMS Technology and Growing Applications in Automotive & Medical Industry

### Restraint

Fluctuations in the Prices of Raw Materials and Lack of Standardization in Fabrication Process

..

## MICROELECTROMECHANICAL SYSTEMS (MEMS):

### Key Players

Robert Bosch GmbH

Company Overview, Business Strategy, Key Product Offerings, Financial Performance, Key Performance Indicators, Risk Analysis, Recent Development, Regional Presence, SWOT Analysis

Panasonic Corporation

Canon Inc.

Honeywell International Inc.

TE Connectivity Corporation

Dens%li%Corporation

Taiwan Semiconductor Manufacturing Co. Ltd.

STMicroelectronics N.V.

NXP Semiconductors N.V.

Texas Instruments Inc.

Analog Devices Inc.

Sensata Technologies Holding N.V.

Broadcom Ltd.

InvenSense Inc.

Knowles Corporation

Other Prominent Player

**MICROELECTROMECHANICAL SYSTEMS (MEMS) REPORT ALSO CONTAINS ANALYSIS ON:**

**Microelectromechanical Systems (MEMS) Segments:**

By Type

Sensors

? Inertial

? Pressure

*Microelectromechanical Systems (MEMS) Market: By Type (Sensors [Inertial, Pressure, Microphone, Environmental,...*

? Microphone

? Environmental

? Optical

Actuators

? Optical

? Inkjet Head

? Microfluidics

? Radi%li%Frequency (RF)

By Application

Consumer Electronics

Automotive

Aerospace & Defence

Healthcare

Telecommunications

Industrial

Microelectromechanical Systems (MEMS) Market Dynamics

Microelectromechanical Systems (MEMS) Market Size

Supply & Demand

Current Trends/Issues/Challenges

Competition & Companies Involved in the Market

Value Chain of the Market

Market Drivers and Restraints

Reasons to Purchase this Report

Qualitative and quantitative analysis of the market based on segmentation involving both economic as well as non-economic factors

Provision of market value (USD Billion) data for each segment and sub-segment

Indicates the region and segment that is expected to witness the fastest growth as well as to dominate the market

Analysis by geography highlighting the consumption of the product/service in the region as well as indicating the factors that are affecting the market within each region

Competitive landscape which incorporates the market ranking of the major players, along with new service/product launches, partnerships, business expansions, and acquisitions in the past five years of companies profiled

Extensive company profiles comprising of company overview, company insights, product benchmarking, and SWOT analysis for the major market players

The current as well as the future market outlook of the industry with respect to recent developments which involve growth opportunities and drivers as well as challenges and restraints of both emerging as well as developed regions

Includes in-depth analysis of the market of various perspectives through Porter's five forces analysis

Provides insight into the market through Value Chain

Market dynamics scenario, along with growth opportunities of the market

in the years to come

3-month post-sales analyst support.

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