

Report Information

More information from: <https://www.marketresearchfuture.com/reports/capacitive-sensor-market-1077>

Capacitive Sensor Market Research Report - Global Forecast 2032

Report / Search Code: MRFR/SEM/0571-HCR Publish Date: September, 2024

Request Sample

Price	1-user PDF : \$ 4950.0	Site PDF : \$ 5950.0	Enterprise PDF : \$ 7250.0
-------	------------------------	----------------------	----------------------------

Description:

Global Capacitive Sensor Market Overview

Capacitive Sensor Market Size was valued at USD 22.96 Billion in 2022 and is projected to grow from USD 24.69 Billion in 2023 to USD 38.51 Billion by 2032, exhibiting a compound annual growth rate (CAGR) of 5.71% during the forecast period (2024 - 2032). A capacitive sensor, a kind of proximity sensor, can determine if there are electrically charged components in a substance or not. The electronic driver translates oscillation changes into voltage, an electronic device signals and records the resulting voltage change, and the sensor measures the distance to the target. It is often used in mobile devices, laptops, tablets, trackpads, vehicles, and aerospace components to detect and monitor position, proximity, and acceleration.

Global Capacitive Sensor Market Overview
--

Source: Secondary Research, Primary Research, MRFR Database, and Analyst Review

Capacitive Sensor Market Trends

- Rapid Development of the Automotive Sector

Human-machine interaction technologies have experienced a paradigm shift as a result of the increasing information interchange between social and various systems in autos. The development of human-machine interface (HMI) applications such as interior lighting management and navigation control has led to a surge in the demand for capacitive sensors. The autonomous vehicle has nested position, capacitive, humidity, temperature, and sensor components. The infotainment system, keyless entry, 3D gesture, and interior lighting control all make use of these sensors. As the number of vehicles on the road increases worldwide, the market for different sensors, in particular the capacitive sensor, is expected to grow throughout the forecasted period.

Capacitive Sensor Market Segment Insights

Capacitive Sensor Type Insights

The market segmentation, based on type, includes Touch Sensors, Motion Sensors, Position Sensors, and Proximity Sensors. The touch sensors segment may dominate the market. The demand for touch sensors has increased due to the widespread use of smartphones, laptops, and other touch-enabled devices. The technology behind capacitive touch sensors is user-friendly and offers high accuracy, making it a popular choice for a variety of applications.

Capacitive Sensor End-user Insights

Based on End-user, the global market segmentation includes Consumer Electronics, Automotive, Oil and Gas, Healthcare Food and Beverages, Aerospace and Defense, and Others. The Consumer Electronics segment is expected to dominate the market. As capacitive sensors are widely used in consumer electronics products such as smartphones, tablets, laptops, and other touch-enabled devices, due to their high accuracy and user-friendly nature. With the increasing demand for these types of products, it is expected that the demand for capacitive sensors will also be increased.

Figure 2: Global Capacitive Sensor Market, by Type, 2022 & 2030 (USD Billion)

Global Capacitive Sensor Market, by Type, 2022 & 2030

Source: Secondary Research, Primary Research, MRFR Database, and Analyst Review

Capacitive Sensor Regional Insights

By region, the study provides market insights into North America, Europe, Asia-Pacific, and the Rest of the World. Asia-Pacific will dominate development in the one-dimensional capacitive market. Due to increased demand for portable devices and consumer electronics. Furthermore, increased industrial automation, a booming automotive market, and rising disposable income are fueling the region's growth.

Figure 3: GLOBAL CAPACITIVE SENSOR MARKET SHARE BY REGION 2022 (%)
GLOBAL CAPACITIVE SENSOR MARKET SHARE BY REGION 2022

Source: Secondary Research, Primary Research, MRFR Database, and Analyst Review

Capacitive Sensor Key Market Players & Competitive Insights

The major market players are investing a lot of money in R&D to expand their product lines, which will spur further market growth. With significant market development like new product releases, contractual agreements, mergers and acquisitions, increased investments, and collaboration with other organizations, market participants are also undertaking various strategic activities to expand their global presence. To grow and thrive in a market climate that is becoming more competitive and growing, competitors in the Capacitive Sensor industry must offer affordable products.

Manufacturing locally to cut operating costs is one of the main business tactics manufacturers use in the global Capacitive Sensor industry to benefit customers and expand the market sector. Major market players, including Analog Devices Inc, NXP Semiconductors, STMicroelectronics, Infineon Technologies and Texas Instruments Inc, and others, are attempting to increase market demand by funding R&D initiatives.

Analog Devices is a semiconductor engineering firm that develops, produces, tests, and supplies software, integrated circuits (ICs), and subsystems. It provides analog, mixed-signal, and digital signal processing devices, as well as power management and reference goods such as amplifiers, sensors, actuators, and switches. Aerospace and defense, healthcare, energy, automotive, and other areas are served by the corporation.

NXP Semiconductors offers mixed-signal solutions for products used in radio frequency, analog, power management, interface, security, and digital processing. Additionally, it provides products for two-way secure entry, in-vehicle networking, sensors and microcontrollers, solutions for radar, power management solutions, vision, vehicle-to-vehicle, secure identification solutions, vehicle-to-infrastructure systems, and real-time operating system software. The company also offers secure smart antennae solutions, digital networking processors, interface and system management systems, and semiconductor-based technologies for linked devices.

Key Companies in the Capacitive Sensor market include

- Analog Devices, Inc
- Microchip Technology Inc
- NXP Semiconductors
- STMicroelectronics
- Infineon Technologies
- Texas Instruments Inc
- Synaptics Inc
- Cypress Semiconductor Corp
- Cirque Corp
- Renesas Electronics Corp

Capacitive Sensor Industry Development

November 2022: Infineon Technologies has expanded its sensor range for automotive applications with the introduction of the new XENSIV™ TLE4971 family. The TLI4971 3.3 V devices are the next generation of TLI4971 devices, and they are available in a TISON package with an integrated rail and four distinct pre-programmed current ranges: 25 A, 50 A, 75 A, and 120 A.

November 2021: NXP Semiconductors announced it had expanded its product capacitive sensor by adding touch sensing technology KE1xZ robust 5V MCUs.

Capacitive Sensor Market Segmentation

Capacitive Sensor Type Outlook

- Touch Sensors
- Motion Sensors
- Position Sensors
- Proximity Sensors

Capacitive Sensor End-User Outlook

- Consumer Electronics
- Automotive
- Oil and Gas
- Healthcare Food and Beverages
- Aerospace and Defense
- Others

Capacitive Sensor Regional Outlook

- North America
 - US
 - Canada
- Europe
 - Germany
 - France
 - UK
 - Italy
 - Spain
 - Rest of Europe
- Asia-Pacific
 - China
 - Japan
 - India
 - Australia
 - South Korea
 - Australia
 - Rest of Asia-Pacific
- Rest of the World
 - Middle East
 - Africa
 - Latin America

