

Microcontroller Socket Market Assessment, By Product Type [Dual In-line Package Sockets, Plastic Leaded Chip Carrier Sockets, Pin Grid Array Sockets, Zero Insertion Force Sockets, Land Grid Array Sockets, Others], By End-user Industry [Automotive, Consumer Electronics, Medical Devices, Industrial, Telecommunication, Aerospace and Defense, Others], By Region, Opportunities and Forecast, 2017-2031F

<https://marketpublishers.com/r/M12DD8EA48CFEN.html>

Date: March 2025

Pages: 224

Price: US\$ 4,500.00 (Single User License)

ID: M12DD8EA48CFEN

Abstracts

Microcontroller socket market is projected to witness a CAGR of 5.7% during the forecast period 2024-2031, growing from USD 1.7 billion in 2023 to USD 2.65 billion in 2031. The microcontroller socket market is witnessing substantial growth, attributed to heightened demand across various industries. The rapid proliferation of the Internet of Things (IoT) devices, advancements in automation, and the increasing integration of smart technologies are significant drivers. The automotive sector, characterized by a growing array of electronic components, is a key contributor to this expansion. Additionally, the escalating adoption of smart home applications, medical devices, and wearable technologies further underscores the essential role of microcontroller sockets. The ongoing emphasis on miniaturization and energy efficiency also propels market development. The microcontroller socket market is poised for sustained growth as industries undergo extensive digital transformation, playing a pivotal role in fostering innovation across diverse sectors on a global scale.

The 2022 global semiconductor industry witnessed notable fluctuations, achieving a record annual sales figure of USD 574 billion, but experiencing a slowdown in the latter part of the year. Of particular significance is the substantial role played by the United

States semiconductor companies, contributing USD 275 billion or 48% of the global market. Their unprecedented investment of USD 58.8 billion in research and development (R&D) is noteworthy, signifying a dedication to innovation. The substantial financial backing directed toward R&D endeavors by these companies directly influences the advancement of microcontroller technologies. This, in turn, augments the microcontroller socket market's growth and competitiveness within the semiconductor industry's broader landscape.

For instance, in April 2023, Intel Foundry Services (IFS) and Arm entered a multigeneration agreement to empower chip designers to construct low-power compute SoCs on Intel's 18A process. Primarily targeting mobile SoCs, this collaboration extends to potential designs in automotive, IoT, data center, aerospace, and government applications. Arm's customers stand to benefit from Intel's cutting-edge 18A process technology, featuring enhanced power and performance. The partnership broadens the market for IFS, providing fabless companies access to top-tier CPU IP and an open system foundry with advanced process technology, addressing the growing demand for computing power in various sectors.

Need for Suitable Telecommunication Infrastructure Promoting the Microcontroller Socket Market's Growth

Microcontroller sockets are essential for key functions like signal processing and network control in the telecommunication domain. This necessity is a driving force for the microcontroller socket market. As we witness a growing demand for advanced communication technologies, including the widespread adoption of 5G networks, the importance of microcontroller sockets becomes even more pronounced. These sockets are crucial in managing data processing and ensuring smooth connectivity. With the telecommunications landscape evolving towards high-speed and low-latency networks, ongoing innovations in microcontroller technology becomes imperative. This evolution in technology is pushing for the creation of more sophisticated and high-performance microcontroller sockets, contributing to the continuous growth and competitiveness of the market.

For instance, in April 2023, TE Connectivity, a global connector and sensor manufacturer, introduced a new generation of server processor connections and sockets to enable high-performance computing, artificial intelligence (AI), and other sophisticated applications. The new items include the LGA 4677 CPU sockets, DDR5 DIMM sockets, and PCIe version 5 CEM connections.

Rising Demand For Consumer Electronics Fueling the Growth of Microcontroller Socket Market

Significant improvements in consumer electronics, from smartphones to smart appliances, are crucial in driving the microcontroller socket market. The demand for microcontroller sockets rises as these electronic gadgets become more sophisticated. These sockets are essential components that ensure smooth device operations and handling tasks like control, connectivity, and data processing. With the widespread inclusion of smart features in today's consumer electronics, microcontrollers have become even more vital. Whether it's a smart refrigerator, a connected thermostat, or a high-tech smartphone, microcontroller sockets support these devices' intricate functions. The continual pursuit of advancements in consumer electronics fuels the demand for more advanced and effective microcontroller sockets, thereby contributing to the growth and vibrancy of the market.

For example, in August 2023, Intel launched a new 'LGA1851' socket platform intended to power the microarchitectures 'Meteor Lake-S' and 'Arrow Lake-S.' It has a larger pin count than its predecessor, LGA1700, while maintaining the same physical dimensions. The platform will handle Intel's 14th Generation Core CPUs, providing increased power and performance for future desktop CPU designs. The LGA1851 socket is part of Intel's continued efforts to upgrade CPU technology and deliver improved capabilities for future desktop computer applications.

Proliferation of Wearable Devices Drives the Microcontroller Socket Market

The rising popularity of wearable technologies, like smartwatches and fitness trackers, is a key driver for the microcontroller socket market. These wearables depend on compact and effective microcontroller sockets to power their functions, handle sensors, and process data. As people increasingly use wearables for health monitoring and smart features, the need for advanced microcontroller solutions grows. This demand highlights the crucial role of microcontrollers in improving wearable device capabilities. It also encourages innovation in the microcontroller socket market, pushing manufacturers to create more sophisticated and energy-efficient solutions to meet the changing needs of consumers adopting wearable technologies.

Asia-Pacific Dominates Microcontroller Socket Market

Asia Pacific is asserting dominance in the microcontroller socket market through a combination of manufacturing prowess, technological innovation, and burgeoning

demand. Countries like China, Japan, and South Korea host major semiconductor manufacturers, creating a robust supply chain. The region's focus on industrial automation, smart devices, and IoT applications fuels a substantial market share. Additionally, government initiatives supporting semiconductor development contribute to the region's dominance. The growing automotive sector in countries like China further boosts microcontroller demand. Collaborations between regional companies and global tech leaders enhance expertise. Overall, Asia Pacific's comprehensive ecosystem, strategic investments, and responsiveness to microcontroller socket market trends position it as a key player, driving the flourishing microcontroller socket market in the region.

Prominent Companies such as Hon Hai Precision Industry (Foxconn), Samsung Electronics, and TSMC dominate the microcontroller socket market in Asia Pacific, capitalizing on the region's technological prowess. Foxconn, headquartered in Taiwan, is a manufacturing giant, while Samsung, based in South Korea, leverages its diversified electronics portfolio. TSMC, also based in Taiwan, is a semiconductor manufacturing powerhouse. Intel, with facilities in Asia-Pacific, strategically taps into the region's manufacturing capabilities, while GlobalFoundries, a global player with facilities in Singapore, strengthens its position by contributing to the semiconductor ecosystem's growth in the Asia-Pacific.

Government Initiatives are Fostering Revenue Growth for the Microcontroller Socket Market

Government initiatives are pivotal in fostering revenue growth in the microcontroller socket market. Many governments globally are investing in research and development, offering incentives, and formulating policies that support the semiconductor industry. These initiatives aim to enhance domestic manufacturing capabilities, promote innovation, and create a conducive environment for semiconductor companies. Financial incentives, tax breaks, and grants encourage businesses to invest in microcontroller technologies. Strategic partnerships between governments and industry players further accelerate advancements. Moreover, initiatives focusing on skill development in STEM fields contribute to a skilled workforce. Governments stimulate investments, technological progress, and overall revenue expansion in the microcontroller socket market by fostering an ecosystem conducive to semiconductor growth.

Impact of COVID-19

The COVID-19 pandemic significantly impacted the microcontroller socket market. Initially, disruptions in the supply chain, manufacturing slowdowns, and labor shortages caused a decline in production, leading to reduced availability of microcontrollers. Many projects and installations were delayed or put on hold during the early stages of the pandemic. However, as the world adapted to remote work and increased reliance on technology, the demand for microcontrollers surged. The post-COVID era witnessed a renewed focus on automation, IoT, and smart technologies, driving the need for microcontrollers in various applications. The market rebounded with accelerated digitization efforts, emphasizing the pivotal role microcontrollers play in powering the modern interconnected world, resulting in a resurgence and growth of the microcontroller socket market.

Impact of Russia-Ukraine War

The Russia-Ukraine war has had notable repercussions on the microcontroller socket market. The semiconductor industry faced disruptions in the supply chain as geopolitical tensions escalated, affecting the production and availability of microcontrollers. Both Russia and Ukraine contribute significantly to global semiconductor manufacturing, and the conflict introduced uncertainties and logistical challenges. Increased geopolitical risks and supply chain vulnerabilities led to concerns about the stability of the microcontroller market. Companies sought to diversify supply sources to mitigate potential disruptions, impacting procurement strategies. The ongoing conflict has underscored the importance of resilient and diversified supply chains, prompting a reevaluation of sourcing strategies in the microcontroller socket market to enhance stability and reduce geopolitical dependencies.

Key Players Landscape and Outlook

Key players are shaping the industry landscape in the fiercely competitive microcontroller socket market. Leaders such as Hon Hai Precision Industry Co., Ltd., Intel Corporation, Loranger International Corp., ENPLAS CORPORATION GROUP, and TE Connectivity Ltd. drive innovation, quality, and technological advancements. These companies engage in strategic collaborations, acquisitions, and product developments to maintain a competitive edge. A continual quest for miniaturization, enhanced performance, and connectivity solutions characterize the microcontroller socket market outlook. Growing demand for IoT, smart devices, and automation fuels the competition. As the industry evolves, key players focus on delivering cutting-edge solutions, strengthening their global presence, and adapting to emerging technological trends for sustained growth in the dynamic microcontroller socket market.

Contents

1. RESEARCH METHODOLOGY

2. PROJECT SCOPE & DEFINITIONS

3. IMPACT OF COVID-19 ON THE GLOBAL MICROCONTROLLER SOCKET MARKET

4. IMPACT OF RUSSIA-UKRAINE WAR

5. EXECUTIVE SUMMARY

6. VOICE OF CUSTOMER

6.1. Product and Market Intelligence

6.2. Mode of Brand Awareness

6.3. Factors Considered in Purchase Decisions

6.3.1. Features and other value-added service

6.3.2. IT Infrastructure Compatibility

6.3.3. Efficiency of Solutions

6.3.4. After-Sales Support

6.4. Consideration of Privacy & Safety Regulations

7. GLOBAL MICROCONTROLLER SOCKET MARKET OUTLOOK, 2017-2031F

7.1. Market Size & Forecast

7.1.1. By Value

7.2. By Product Type

7.2.1. Dual In-line Package (DIP) Sockets

7.2.2. Plastic Leaded Chip Carrier (PLCC) Sockets

7.2.3. Pin Grid Array (PGA) Sockets

7.2.4. Zero Insertion Force (ZIF) Sockets

7.2.5. Land Grid Array (LGA) Sockets

7.2.6. Others

7.3. By End-user Industry

7.3.1. Automotive

7.3.2. Consumer Electronics

7.3.3. Medical Devices

- 7.3.4. Industrial
- 7.3.5. Telecommunication
- 7.3.6. Aerospace & Defense
- 7.3.7. Others
- 7.4. By Region
 - 7.4.1. North America
 - 7.4.2. Europe
 - 7.4.3. Asia-Pacific
 - 7.4.4. South America
 - 7.4.5. Middle East and Africa
- 7.5. By Company Market Share (%), 2023

8. GLOBAL MICROCONTROLLER SOCKET MARKET OUTLOOK, BY REGION, 2017-2031F

- 8.1. North America*
 - 8.1.1. Market Size & Forecast
 - 8.1.1.1. By Value
 - 8.1.2. By Product Type
 - 8.1.2.1. Dual In-line Package (DIP) Sockets
 - 8.1.2.2. Plastic Leaded Chip Carrier (PLCC) Sockets
 - 8.1.2.3. Pin Grid Array (PGA) Sockets
 - 8.1.2.4. Zero Insertion Force (ZIF) Sockets
 - 8.1.2.5. Land Grid Array (LGA) Sockets
 - 8.1.2.6. Others
 - 8.1.3. By End-user Industry
 - 8.1.3.1. Automotive
 - 8.1.3.2. Consumer Electronics
 - 8.1.3.3. Medical Devices
 - 8.1.3.4. Industrial
 - 8.1.3.5. Telecommunication
 - 8.1.3.6. Aerospace & Defense
 - 8.1.3.7. Others
 - 8.1.4. United States*
 - 8.1.4.1. Market Size & Forecast
 - 8.1.4.1.1. By Value
 - 8.1.4.2. By Product Type
 - 8.1.4.2.1. Dual In-line Package (DIP) Sockets
 - 8.1.4.2.2. Plastic Leaded Chip Carrier (PLCC) Sockets

- 8.1.4.2.3. Pin Grid Array (PGA) Sockets
- 8.1.4.2.4. Zero Insertion Force (ZIF) Sockets
- 8.1.4.2.5. Land Grid Array (LGA) Sockets
- 8.1.4.2.6. Others

8.1.4.3. By End-user Industry

- 8.1.4.3.1. Automotive
- 8.1.4.3.2. Consumer Electronics
- 8.1.4.3.3. Medical Devices
- 8.1.4.3.4. Industrial
- 8.1.4.3.5. Telecommunication
- 8.1.4.3.6. Aerospace & Defense
- 8.1.4.3.7. Others

8.1.5. Canada

8.1.6. Mexico

*All segments will be provided for all regions and countries covered

8.2. Europe

- 8.2.1. Germany
- 8.2.2. France
- 8.2.3. Italy
- 8.2.4. United Kingdom
- 8.2.5. Russia
- 8.2.6. Netherlands
- 8.2.7. Spain
- 8.2.8. Turkey
- 8.2.9. Poland

8.3. Asia Pacific

- 8.3.1. India
- 8.3.2. China
- 8.3.3. Japan
- 8.3.4. Australia
- 8.3.5. Vietnam
- 8.3.6. South Korea
- 8.3.7. Indonesia
- 8.3.8. Philippines

8.4. South America

- 8.4.1. Brazil
- 8.4.2. Argentina

8.5. Middle East & Africa

- 8.5.1. Saudi Arabia

8.5.2. UAE

8.5.3. South Africa

9. MARKET MAPPING, 2023

9.1. By Product Type

9.2. By End-user Industry

9.3. By Region

10. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

10.1. Value Chain Analysis

10.2. PESTEL Analysis

10.2.1. Political Factors

10.2.2. Economic System

10.2.3. Social Implications

10.2.4. Technological Advancements

10.2.5. Environmental Impacts

10.2.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)

10.3. Porter's Five Forces Analysis

10.3.1. Supplier Power

10.3.2. Buyer Power

10.3.3. Substitution Threat

10.3.4. Threat from New Entrant

10.3.5. Competitive Rivalry

11. MARKET DYNAMICS

11.1. Growth Drivers

11.2. Growth Inhibitors (Challenges and Restraints)

12. KEY PLAYERS LANDSCAPE

12.1. Competition Matrix of Top Five Market Leaders

12.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2023)

12.3. Mergers and Acquisitions/Joint Ventures (If Applicable)

12.4. SWOT Analysis (For Five Market Players)

12.5. Patent Analysis (If Applicable)

13. CASE STUDIES

14. KEY PLAYERS OUTLOOK

14.1. 3M Company

14.1.1. Company Details

14.1.2. Key Management Personnel

14.1.3. Products & Services

14.1.4. Financials (As reported)

14.1.5. Key Market Focus & Geographical Presence

14.1.6. Recent Developments

14.2. Aries Electronics, Inc.

14.3. ENPLAS CORPORATION GROUP

14.4. Hon Hai Precision Industry Co., Ltd.

14.5. Intel Corporation

14.6. Loranger International Corp.

14.7. Mill-Max Mfg. Corp.

14.8. Mouser Electronics, Inc.

14.9. Smiths Interconnect Group Limited

14.10. TE Connectivity Ltd.

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work.

15. STRATEGIC RECOMMENDATIONS

16. ABOUT US & DISCLAIMER

I would like to order

Product name: Microcontroller Socket Market Assessment, By Product Type [Dual In-line Package Sockets, Plastic Leaded Chip Carrier Sockets, Pin Grid Array Sockets, Zero Insertion Force Sockets, Land Grid Array Sockets, Others], By End-user Industry [Automotive, Consumer Electronics, Medical Devices, Industrial, Telecommunication, Aerospace and Defense, Others], By Region, Opportunities and Forecast, 2017-2031F

Product link: <https://marketpublishers.com/r/M12DD8EA48CFEN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/M12DD8EA48CFEN.html>