

NA 8-bit Microcontroller - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

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Report description:

The NA 8-bit Microcontroller Market is expected to register a CAGR of 4.75% during the forecast period.

Key Highlights

- North America is one of the largest automotive manufacturing hubs in the world. The region's economic growth had an impact on the sale of passenger cars and commercial vehicles. According to the American Automotive Policy Council 2022, American Automakers heavily invest in R&D activities, and automotive microcontrollers are shaping the automobile industry with the increase in vehicle production by driving the demand for 8-bit microcontrollers.
- The North American region is one of the leading consumers of microcontrollers due to the strong demand for high-end applications across major end-user industries. For instance, hybrid and self-driven vehicles are driving factors for 8-bit microcontrollers.
- As most of the devices in present-day scenario are turning into IoT enabled and in the technologically savvy regions like United States , Canada with the adoption of these technologies, there is a growing demand for the 8-bit microcontrollers market across many end-user industries like Home Appliances, Automotive, Healthcare Consumer, Manufacturing, Defense, Aerospace, Communications, and Energy).
- The upgradation in technologies like artificial intelligence, IoT and an exponential increase in electronic products that include cameras, laptops, and computers are propelling the demand for the 8-bit microcontrollers market with the developments of the latest products in the communications industry, automation industry, instrumentation and process control, the healthcare industry.
- The COVID-19 pandemic and lockdown restrictions impacted industrial activities globally. The consequences of lockdowns include shipping problems, lack of availability of raw materials used in the manufacturing process, disruptions in the supply chain, and labor shortages has significantly declined the market growth.

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North America 8-Bit Microcontroller Market Trends

Consumer Electronics to Witness Significant Market Share

- The rise in demand for 8-bit microcontrollers can be seen in key industry verticals like Healthcare and Automotive Industry. For instance, the COVID-19 pandemic has affected the health of many individuals related to neuro, cardio such as blood, sugar levels. So, the electronic medical devices demand is very high and subsequently contributed to the growth of microcontroller market.
- Microcontrollers are majorly used in automotive industry. With the advancement of electric cars and electric vehicles the demand for microcontrollers has been increased significantly and is anticipated to boost the market growth.
- Due to the presence of leading semiconductor players, North America is witnessing the significant share in the 8-bit microcontroller market. The 8-bit microcontrollers are cost-effective as they consume less power, and are less complex when compared to 16-bit and 32-bit microcontroller. There are many competitive players in North America manufacturing 8-bit microcontrollers which is boosting the market.
- In multifunctional devices such as Residential Appliances, Medical Devices, Robots, Mobile Radio, Vehicles, with the major focus on adoption of the technologies like artificial intelligence, automation in key industry verticals like Automotive Industry the demand for embedded control systems is increasing rapidly and is also playing a principal role in the growth of the market.

IoT Fueling Growth of Microcontrollers Market

- The innovation in the technological developments like automation, emergence of IoT technologies in consumer electronics such as smartphones, tablets, household appliances, televisions, cameras and computers are creating the lucrative growth of the 8-bit microcontrollers market.
- In United States, the usage of public transportation is increasing on a daily basis. The production of gasoline and electric vehicles are showing tremendous results across the globe. In the field of automation, the evolution of electric vehicles is increasing steadily and demands more growth for the market of 8-bit microcontrollers.
- With the rise in number of diabetic patients, the therapy and diagnostics equipments have considerably increased and these equipment mainly rely on the advanced semiconductor technologies and components which helps in providing the accurate measurements. The medical industry is prominent driver driving the market expansion of 8-bit microcontrollers.
- In the end-use industries such as healthcare, consumer electronics, aerospace & defense, IT & telecommunication, the rate of adoption of Internet of Things (IoT) is high. The embedded solutions combined with the smart sensors is fuelling the growth of the microcontrollers market.

North America 8-Bit Microcontroller Industry Overview

The North America 8-bit microcontrollers market is dominated by partakers like Analog Devices, Silicon Laboratories, Fujitsu over the forecast period. The most in-demand electronic components are the microcontrollers which have a wide range of applications across many key industry verticals Healthcare, IT & Telecommunications, Military & Defense, Automotive, and Consumer.

- December 2021 - Celeno, acquired by Renesas Electronics Corporation, enhances the product development and productivity with the wi-fi technologies in building the microcontrollers, MPU/SoC Processors, and sensors by creating end-to-end connectivity

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solutions for IoT, industrial, infrastructure, and automotive applications.

- September 2021- Silicon Labs expanded its IoT(Internet of Things) portfolio with a triple launch of hardware, software, and services, leading to a home run for the IoT(Internet of Things) industry that needs to solve challenges around the range, and power consumption, security, and long-term support.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions and Market Definition

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET INSIGHTS

4.1 Market Overview

4.2 Industry Attractiveness - Porter's Five Forces Analysis

4.2.1 Bargaining Power of Suppliers

4.2.2 Bargaining Power of Consumers

4.2.3 Threat of New Entrants

4.2.4 Threat of Substitutes

4.2.5 Intensity of Competitive Rivalry

4.3 Assessment of the COVID-19 Impact on the Industry

5 MARKET DYNAMICS

5.1 Market Drivers

5.1.1 The Rise in Demand for Internet of Things (IoT) Enabled Devices

5.1.2 Increasing Demand for Smart Wearable Electronics

5.1.3 Increasing Adoption of Smart Infrastructure Devices, Industrial Automation

5.2 Market Challenges

5.2.1 Global Players Heavy Focus on 16-bit and 32-bit Microcontrollers

5.2.2 Microcontrollers Operational Failure Due to Extreme Climatic Conditions

6 MARKET SEGMENTATION

6.1 By Primary Microcontroller Attributes

6.1.1 Flash Size

6.1.2 RAM Size

6.1.3 Speed

6.1.4 Supply Voltage

6.2 By Application

6.2.1 Medical Devices

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- 6.2.2 Power Tools
- 6.2.3 Toys
- 6.2.4 Office Machines
- 6.2.5 Engine Control Systems
- 6.2.6 Remote Controls
- 6.2.7 Electric Appliances
- 6.2.8 Other Embedded Systems
- 6.3 By End-Users
 - 6.3.1 Automotive
 - 6.3.2 Consumer
 - 6.3.3 Manufacturing
 - 6.3.4 Healthcare
 - 6.3.5 Energy
 - 6.3.6 Others

7 COMPETITIVE LANDSCAPE

- 7.1 Company Profiles
 - 7.1.1 Analog Devices
 - 7.1.2 Renesas Electronics Corporation
 - 7.1.3 STMicroelectronics
 - 7.1.4 Infineon Technologies AG
 - 7.1.5 Silicon Laboratories
 - 7.1.6 Panasonic Holdings Corporation
 - 7.1.7 Microchip
 - 7.1.8 Toshiba
 - 7.1.9 FUJITSU
 - 7.1.10 Sony Corporation
 - 7.1.11 Epson Corporation

8 INVESTMENT ANALYSIS

9 FUTURE OF THE MARKET

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