

# **Application Specific Integrated Circuit Market Size, Share & Trends Analysis Report By Product Type (Full Custom, Semi-custom, Programmable), By Application, By Region, And Segment Forecasts, 2020 - 2027**

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## **Abstracts**

### **Application Specific Integrated Circuit Market Growth & Trends**

The global application specific integrated circuit market size is expected to reach USD 21.0 billion by 2027, registering a CAGR of 5.2% over the forecast period, according to a new report by Grand View Research, Inc. The growing adoption of ASIC in the healthcare sector is expected to drive market over the forecast period. The healthcare sector uses ASIC in various equipment such as digital X-ray, Electrocardiography (ECG) machine, Computer Tomography (CT) machine, and an ultrasound machine.

Application specific integrated circuit (ASIC) is also extensively used in the automotive industry to ensure actuator movements, information handling, and safety-relevant actions. Based on product type, the market is segmented into full custom ASIC, semi-custom ASIC, and programmable ASIC. The demand for semi-custom ASIC in the consumer electronics and automotive industry has increased over the last few years. Features such as inductance and capacitance of semi-custom ASIC offer an improved electrical performance and high density of the component. Also, semi-custom ASIC is partially customized to perform distinct functions within the field. These ASICs are designed to allow some modifications during manufacturing, thereby increasing the demand for such ICs.

Besides consumer electronics, the industrial segment is also witnessing a paradigm shift in terms of increasing usage of ASICs. ASICs are used in the industrial processes

for reducing the number of failures during manufacturing. Additionally, increasing demand for energy-efficient devices along with the rising penetration of smartphones in the Asia Pacific region are key factors contributing to substantial market growth.

North America dominated the market and accounted for largest market share over the forecast period. The growth is attributed to the presence of key market players in the region. In addition, continuous development in healthcare monitoring systems, consumer electronics products, and electric and hybrid vehicles in U.S. is driving the market in the region. The technological advancements in ASICs such as big data analytics, Internet of Things (IoT), blockchain, and machine learning in this region are expected to increase market growth by 2027.

#### Application Specific Integrated Circuit Market Report Highlights

The semi-custom ASIC segment accounted for the highest market share in 2019, owing to the growing demand for low complexity and allowance in the modification of the circuit during the manufacturing process

The consumer electronics industry is expected to register the highest growth rate over the forecast period, owing to the increasing use of ASICs within phones, tablets, and laptops across the globe

Asia Pacific is anticipated to emerge as the fastest-growing region over the forecast period, owing to the presence of a large number of consumer electronics manufacturers in the region

New product development and expansion remains the major strategy adopted by the leading manufacturers in the market.

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