

# Electronic Design Automation Market to Hit USD 22.18 Billion by 2030 due to Shift Towards Cloud-Based EDA Solutions

Electronic Design Automation Market Size, Share, Growth, Trend, Global Industry Overview and Regional Analysis, Forecast 2024 - 2031

AUSTIN, TEXAS, UNITED STATES, March 11, 2024 /EINPresswire.com/ -- Market Report Scope & Overview

The electronic design automation market stands at the forefront of technological innovation, driving the creation of cutting-edge electronic

ELECTRONIC DESIGN
AUTOMATION MARKET
SIZE AND SHARE
2023-2030

Market Revenue

\$ 11.21 Billion
2022
2030

CAGR 8.9%

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Electronic Design Automation (EDA) Market

devices and systems. EDA encompasses a wide range of software tools and solutions tailored to facilitate the design, analysis, and verification of complex electronic systems, integrated circuits (ICs), and printed circuit boards (PCBs). With the ever-increasing demand for smaller, faster, and more power-efficient electronic devices across various sectors.

At its core, the electronic design automation market revolves around enabling engineers and designers to overcome the challenges posed by the escalating complexity of electronic designs. These challenges include stringent performance requirements, shrinking design cycles, and the need to mitigate risks associated with design errors and reliability issues. EDA tools offer a comprehensive suite of functionalities encompassing schematic capture, simulation, synthesis, place and route, and physical verification, empowering designers to conceptualize, simulate, and refine their designs with precision and efficiency.

The <u>Electronic Design Automation (EDA) Market</u> is poised for substantial growth, with a projected valuation of USD 22.18 billion by 2030. In 2022, the market stood at USD 11.21 billion, and it is expected to grow at a commendable Compound Annual Growth Rate (CAGR) of 8.9% during the forecast period from 2023 to 2030.

Top Companies Featured in Electronic Design Automation Market Report:

- · Cadence Design Systems
- Synopsys
- Siemens
- ANSYS
- Vennsa Technologies
- Xilinx
- EInfochips
- Altium Limited
- Zuken
- Silvaco

Rising Complexity and IoT Surge Propel Electronic Design Automation Market Towards Robust Growth

The electronic design automation market is poised for robust growth in the coming years, driven by several key factors. One of the primary growth drivers is the increasing complexity of electronic devices, particularly in industries such as automotive, aerospace, and consumer electronics. As product designs become more intricate, there is a growing demand for advanced EDA tools that can handle tasks such as circuit design, simulation, and verification with greater efficiency and accuracy. Additionally, the proliferation of Internet of Things (IoT) devices and the development of 5G technology are expected to fuel the demand for EDA solutions, as companies seek to innovate and capitalize on emerging opportunities in connectivity and smart technologies.

However, the electronic design automation market also faces certain restraints that could impede its growth trajectory. One significant challenge is the high cost associated with advanced EDA tools and software licenses, which can deter small and medium-sized enterprises (SMEs) from adopting these technologies. Moreover, the complexity of EDA software and the steep learning curve for users may pose barriers to entry, limiting market penetration, particularly in regions with fewer skilled professionals. Despite these challenges, the EDA market presents numerous opportunities for growth and innovation. The increasing adoption of artificial intelligence (AI) and machine learning (ML) techniques in EDA software holds promise for improving design productivity and optimizing performance.

Key Reasons to purchase Electronic Design Automation Market Report

- 1. Market Size and Growth Projections: Access accurate data on the current market size and future growth projections for Electronic Design Automation (EDA), crucial for strategic planning and investment decisions.
- 2. Technology Trends: Stay informed about the latest technological trends and innovations in

EDA, enabling your business to adopt cutting-edge solutions and maintain a competitive edge.

- 3. Competitive Landscape Analysis: Gain insights into the competitive environment, including key players, market shares, and strategic initiatives, facilitating effective competitor analysis and market positioning.
- 4. Industry Applications: Explore the diverse applications of EDA across semiconductor design, PCB design, and electronic systems, allowing for targeted market entry and expansion strategies.
- 5. Market Drivers and Challenges: Understand the key drivers propelling the market growth of EDA, as well as the challenges the industry faces, to make informed decisions and navigate market dynamics effectively.

Electronic Design Automation Market Segmentation as Follows:

# BY PRODUCT

- IC Physical Design & Verification
- Semiconductor IP
- Computer-aided Engineering (CAE)
- PCB & MCM
- Services

# BY DEPLOYMENT MODE

- Cloud-based
- On-premises

# BY APPLICATION

- · Memory Management Units
- Microprocessors & Microcontrollers
- Others

### BY END USER

- Automotive Industry
- · Aerospace & Defense Industry
- Consumer Electronics Industry
- Healthcare Industry
- Telecom and Data Centre Industry
- Industrial Sector
- Others

# Impact of Recession

In the current landscape of the electronic design automation market, the ongoing recession presents a mixed bag of implications. On one hand, the economic downturn tends to tighten corporate budgets, leading to potential reductions in spending on EDA tools and services. This could result in slower growth rates and decreased demand within the industry. However, recessions often drive innovation as companies seek to streamline processes and cut costs, leading to increased adoption of EDA solutions to enhance efficiency and competitiveness. Additionally, the shift towards remote work spurred by the pandemic has accelerated the demand for EDA tools that support collaboration and virtual design environments, potentially offsetting some of the negative impacts of the recession on the market.

# Impact of Russia-Ukraine War

The Russia-Ukraine War has injected uncertainty into global markets, including the electronic design automation market. The conflict has the potential to disrupt the semiconductor supply chain, as Ukraine is a significant producer of raw materials used in chip manufacturing. This disruption could lead to supply shortages and price increases for EDA tools and components, negatively impacting the market. Furthermore, geopolitical tensions may result in trade restrictions and export controls, further complicating the global EDA landscape. However, amidst these challenges, there may be opportunities for EDA companies to diversify their supply chains and explore alternative sourcing options, potentially mitigating some of the negative effects of the conflict on the market.

# Regional Analysis

In terms of regional analysis, the electronic design automation market exhibits varying trends and dynamics across different geographical regions. North America remains a key player in the market, driven by the presence of major semiconductor companies and technological innovation hubs. The region benefits from robust investments in research and development, as well as a strong emphasis on advanced manufacturing technologies. Europe follows suit, with significant contributions from countries like Germany, the UK, and France, leveraging their expertise in automotive and industrial sectors. Meanwhile, the Asia-Pacific region emerges as a frontrunner in the EDA market, fueled by rapid industrialization, burgeoning electronics manufacturing, and increasing adoption of advanced technologies in countries like China, Japan, and South Korea.

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# Conclusion

The latest report from SNS Insider on the electronic design automation market covers a comprehensive analysis of industry trends, market drivers, challenges, and opportunities. The report delves into key segments of the EDA market, including software, hardware, and services, providing insights into market size, growth potential, and competitive landscape.

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