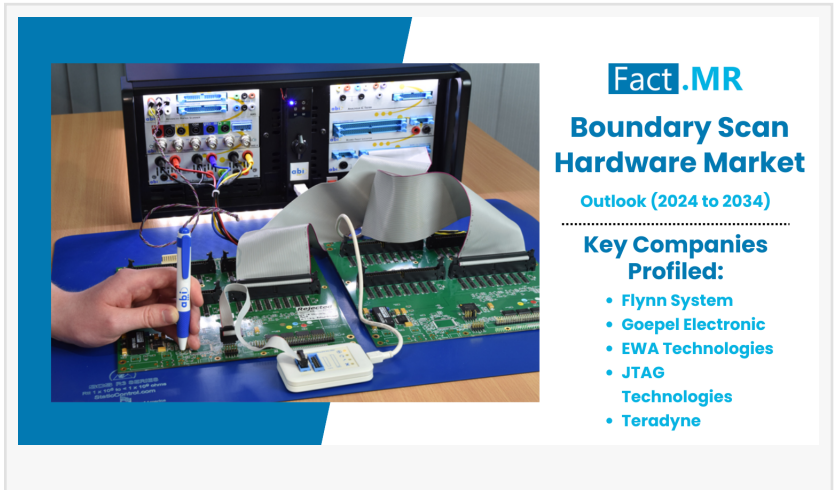# EINPRESSWIRE

Boundary Scan Hardware Market Set to Grow at 6.9% CAGR by 2034, Says Fact.MR

Automotive & aerospace industries drive demand for boundary scan hardware due to the need for reliable testing solutions to meet strict regulations.

ROCKVILLE , MD, UNITED STATES, January 24, 2025 /EINPresswire.com/ -- A new study by Fact.MR reveals that the global boundary scan hardware market is projected to increase from a value of US$ 1.88 billion in 2024 to US$ 3.66 billion by the end of 2034.

Fact.MR

Boundary Scan Hardware Market

Outlook (2024 to 2034)

Key Companies Profiled:

- Flynn System
- Goepel Electronic
- EWA Technologies
- JTAG Technologies
- Teradyne

Continuous development and demand for IoT devices and smart gadgets are the primary driving reasons behind the rapidly expanding market for boundary scan hardware, as is the growing requirement for dependable testing solutions, which are critical for these tools. Boundary scan hardware allows for complete testing and verification of complex IoT devices without having physical access to the circuitry. As a result, it is becoming increasingly popular in this industry.

The East Asia region is projected to lead in the market for boundary scan hardware, backed by the growing automotive, medical, information technology, aerospace & defense, electronic, and other industries that require testing and high-reliability standards. East Asia is also a leader in semiconductor production, which demands advanced technology solutions for several purposes, and will drive target market growth over the coming years.

For More Insights into the Market, Request a Sample of this Report-
https://www.factmr.com/connectus/sample?flag=S&rep_id=10260

Key Takeaways from Market Study

Worldwide demand for boundary scan hardware is projected to rise at 6.9% CAGR from 2024 to 2034.

The North American market is estimated at a value of US$ 429.2 million in 2024.

East Asia is forecasted to hold 36.7% share of the global market by 2034.

Sales of boundary scan hardware in Japan are projected to reach US$ 387.9 million by the end of 2034.

The market in the United States is expected to reach US$ 339.5 million in 2024.

The Canada market is forecasted to expand at 7.9% CAGR through 2034.

Based on components, controllers are expected to hold 32.1% market share in 2024.

Demand for boundary scan hardware in the aerospace & defense industry is projected to increase at 8.9% CAGR from 2024 to 2034.

"Improvements in semiconductor technology, such as the development of complicated microcontrollers and system-on-chips (SoCs), are driving the sales growth of boundary scan hardware, which is widely used for testing purposes," says a Fact.MR analyst

Controllers Playing Crucial Role in Boundary Scan Tests

The controllers segment leads the market in terms of revenue due to their critical role in efficiently planning and carrying out boundary scan tests. These components need to control the communication between the boundary scan hardware and the device under test (DUT) for the testing to be done efficiently and accurately. These enable a variety of pins and circuits that allow a DUT to run test patterns in its conductors while also saving data and assessing outcomes.

Controllers have become increasingly important as electronic devices become smaller and more complex, to undertake extensive testing of printed circuit boards (PCBs) and integrated circuits (ICs) without requiring physical access.

Growth Drivers for Boundary Scan Hardware Market

Rising Complexity in Electronics: The increasing complexity of modern electronics and PCBs (Printed Circuit Boards) is driving demand for efficient testing solutions like boundary scan hardware, which offers non-intrusive, precise diagnostics.

Demand for Time-Efficient Testing: The need for faster and more efficient testing processes in manufacturing environments is encouraging the adoption of boundary scan technology to reduce debugging and validation times.

Growth of IoT and Smart Devices: The expansion of IoT ecosystems and smart devices requires highly reliable and compact hardware, increasing the use of boundary scan tools for testing

connectivity and functionality.

Cost Reduction in Testing and Debugging: Boundary scan hardware minimizes the need for physical test points and reduces costs associated with traditional in-circuit testing methods, making it a cost-effective solution for manufacturers.

Stringent Quality Standards: Growing adherence to global quality standards and certifications in the electronics industry is driving the implementation of boundary scan technology to ensure fault-free hardware production.

Advancements in Chip Technology: Developments in microprocessor and ASIC design with built-in boundary scan features are fostering the market's growth by simplifying testing procedures for complex components.

Adoption in Aerospace and Defense: Increasing demand for highly reliable electronic systems in aerospace and defense applications is accelerating the integration of boundary scan hardware for comprehensive testing and validation.

Support for Legacy and Emerging Technologies: Boundary scan hardware offers flexibility in testing both legacy systems and emerging technologies, making it an essential tool across diverse industry verticals.

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Fact.MR, in its new offering, presents an unbiased analysis of the ambulance cot market, presenting historical demand data (2018 to 2023) and forecast statistics for the period (2024 to 2034).

The study divulges essential insights into the market based on product (emergency cots, transport cots), technology (manual cots, pneumatic cots, electric cots), and end user (EMS service providers, hospitals, ambulatory service centers), across six major regions of the world (North America, Europe, East Asia, Latin America, South Asia & Oceania, and MEA).

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Hardware Acceleration Market: Hardware acceleration is revolutionizing industries by enhancing performance and efficiency in tasks like video processing and advanced computing. Its role in powering machine learning and deep learning applications is driving widespread adoption, making it a cornerstone for innovation and next-generation technological advancements.

[3D Scanner Market](): The 3D scanner market is poised for remarkable growth, fueled by advancements in speed, accuracy, and user-friendly technology. Continuous innovations in software algorithms, sensors, and cameras are enhancing the capabilities of 3D scanners, making them indispensable tools across industries. The rising popularity of 3D printing in sectors like aerospace, automotive, consumer goods, and healthcare further underscores the importance of 3D scanners in creating precise digital models, driving their adoption and shaping the future of design and manufacturing.

About Us:

Fact.MR is a distinguished market research company renowned for its comprehensive market reports and invaluable business insights. As a prominent player in business intelligence, we deliver deep analysis, uncovering market trends, growth paths, and competitive landscapes. Renowned for its commitment to accuracy and reliability, we empower businesses with crucial data and strategic recommendations, facilitating informed decision-making and enhancing market positioning.

With its unwavering dedication to providing reliable market intelligence, FACT.MR continues to assist companies in navigating dynamic market challenges with confidence and achieving long-term success. With a global presence and a team of experienced analysts, FACT.MR ensures its clients receive actionable insights to capitalize on emerging opportunities and stay competitive.

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