

Probe Card Market is anticipated to reach US\$4.912 billion by 2029 at a CAGR of 9.21%

The probe card market is anticipated to grow at a CAGR of 9.21% from US\$2.651 billion in 2022 to US\$4.912 billion by 2029.

NOIDA, UTTAR PARDESH, INDIA, June 20, 2024 /EINPresswire.com/ -- According to a new study



published by Knowledge Sourcing Intelligence, the <u>probe card market</u> is projected to grow at a CAGR of 9.21% between 2022 and 2029 to reach US\$4.912 billion by 2029.

A probe card, also called a DUT (Device Under Test) board, is a pivotal component in

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The probe card market is anticipated to grow at a CAGR of 9.21% from US\$2.651 billion in 2022 to US\$4.912 billion by 2029." *Knowledge Sourcing Intelligence* semiconductor testing, serving as a bridge between the electronic test system and the semiconductor wafer containing integrated circuits (ICs). It is prepared with microscopic probes that make physical contact with assigned points on each IC, permitting the test system to transmit electrical signals and measure its electrical characteristics to assess its usefulness and execution. Probe cards are ordinarily made of a printed circuit board with accurately situated probe needles.

The market of probe cards is developing due to expanding chip complexity, advanced designs, rising innovations, and stringent testing necessities. Traditional probe cards struggle to handle complex gadgets like high-performance processors, integrated graphics, and <u>3D NAND flash</u> <u>memory</u> devices. Advanced packaging techniques, 5G, AI, and IoT applications demand specialized probe cards. Economic factors like the global semiconductor industry and China's chip fabrication facilities create a market for probe cards. Technological advancements and improved materials science ensure reliable and accurate testing.

The market of probe cards is extending with the launch of new products and innovative advancements on a worldwide scale, for instance, in June 2023, Probe Test Solutions Ltd (PTSL) launched its first product in the RF Probe Card market. The PhazorRF product family, targeting next-generation automotive radar, 5 and 6G applications, showcases the highest performance signal integrity RF probe card solution on the market.

Access sample report or view details: <u>https://www.knowledge-sourcing.com/report/probe-card-market</u>

Based on the probe type, the probe card market is categorized into advanced probe cards and standard probe cards. Advanced probe cards are anticipated to rule the probe card market in the future due to variables such as expanding chip complexity, rising advances like 3D NAND, advanced packaging, and memory innovations, and high-frequency testing. Standard probe cards may battle to handle complex chips, whereas progressed probe cards offer specialized examining solutions for these challenges. As chip operating speeds increase, probe cards with superior signal integrity and lower distortion become crucial for accurate high-frequency testing.

Based on technology type, the global market of probe card is classified into vertical, MEMS, cantilever, and specialty. The future of probe cards is expected to see significant growth in two segments: vertical probe cards and MEMS probe cards. Vertical probe cards offer reduced contact resistance, and improved signal integrity, and are suitable for high-speed testing due to increasing chip complexity and high-frequency testing demands. MEMS probe cards offer high density, fine pitch, and flexibility, making them ideal for testing advanced chips with tightly packed features. Growth drivers include miniaturization of semiconductor devices and emerging technologies like 3D NAND flash memory and advanced packaging techniques.

Based on the application, the probe card market is categorized into DRAM, parametric, foundry, and others. The demand for probe cards in foundry and logic applications is driven by increasing chip complexity, increased demand for Application-Specific Integrated Circuits (ASICs), and the demand for DRAM (Dynamic Random-Access Memory) due to cloud computing and AI data storage needs. The rise of 3D NAND flash memory with higher storage densities also requires specialized probe cards for testing these intricate structures. Foundry services and probe cards are essential for these applications to ensure accurate and efficient testing.

Based on Geography, Asia Pacific is anticipated to have a major share of the worldwide market of probe cards in the amid of the expected period owing to several component booming economies of nations like China, India, and South Korea are driving expanded request for electronic devices, driving to a better demand for semiconductor chips and probe cards for testing. Major semiconductor producers within the APAC region have established manufacturing facilities, making probe cards promptly accessible. Government initiatives are moreover supporting the improvement of domestic semiconductor businesses, cultivating expansion in probe card applications. The APAC region is additionally seeing a quick adoption of progressed advances like 5G, AI, and IoT, which require modern chips and progressed probe cards for compelling testing.

As a part of the report, the major players operating in the probe card market that have been covered are Japan Electronic Materials Corporation, Advantest Corporation, Korea Instruments Co. Ltd, FormFactor, Feinmetall, Nidec SV Probe, TSE Co., Ltd., Will Technology, Micronics Japan Co., Ltd., and Suzhou Silicon Test System Co., Ltd.

The market analytics report segments the probe card market on the following basis:

- BY PROBE TYPE
- o Advanced Probe Card
- o Standard Probe Card
- BY TECHNOLOGY TYPE
- o Vertical
- o MEMS
- o Cantilever
- o Specialty
- BY APPLICATION
- o DRAM
- o Parametric
- o Foundry
- o Others
- BY GEOGRAPHY
- o North America
- United States
- Canada
- Mexico
- o South America
- Brazil
- Argentina
- Others
- o Europe
- United Kingdom
- Germany
- France
- Italy

- Spain
- Others
- o Middle East and Africa
- Saudi Arabia
- UAE
- Others
- o Asia Pacific
- Japan
- China
- India
- South Korea
- Taiwan
- Thailand
- Indonesia
- Others

Companies Profiled:

- Japan Electronic Materials Corporation
- Advantest Corporation
- Korea Instruments Co. Ltd
- FormFactor
- Feinmetall
- Nidec SV Probe
- TSE Co., Ltd.
- Willtechnology
- Micronics Japan Co., Ltd.
- Suzhou Silicon Test System Co., Ltd.

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