Silicon Photomultiplier (SiPM) Market Detailed Analysis and Forecast up to 2030

Silicon Photomultiplier Market Expected to Reach $221.0 Million by 2030

Silicon Photomultiplier (SiPM) Market

WILMINGTON, DELAWARE, UNITED STATES, June 3, 2024 /EINPresswire.com/ -- Allied Market Research, titled, "Silicon Photomultiplier Market by Type, Device Type, Application, and Industry Vertical: Global Opportunity Analysis and Industry Forecast, 2021–2030" the global silicon photomultiplier industry size was valued at $113.7 million in 2020, and is projected to reach $221.0 million by 2030, registering a CAGR of 6.8%. Asia-Pacific is expected to be the leading contributor to the global market during the forecast period, followed by North America, and Europe.

□□□□□□□□□ □□□□□□□□□ □□□□□□□ □□□□□□□ & □□□: https://www.alliedmarketresearch.com/request-sample/6088

> The rise in the need for accurate diagnosis in the healthcare industry and the increase in demand for advanced driver assistance systems drive the silicon photomultiplier market growth."
>
> *Allied Market Research*

A silicon photomultiplier (SiPM) is a solid-state electronic sensor, which generates a current pulse in response to the absorption of a photon. Therefore, a SiPM has a gain, which is comparable to that of a photomultiplier tube (PMT). There are a few main parameters such as breakdown voltage, photon detection efficiency, gain versus overvoltage relation, dark count rate, afterpulsing probability, and crosstalk probability characterizing a SiPM. Also, the photodetection efficiency of silicon photomultiplier ranges from 20 to 50%, depending on wavelength & device, which is similar to a traditional silicon PMT.

The global silicon photomultiplier market sales are anticipated to witness significant growth during the forecast period. Factors such as the rise in the need for accurate diagnosis in the

healthcare industry and the increase in demand for advanced driver assistance systems drive the silicon photomultiplier market growth. In addition, silicon photomultipliers are extensively used for a range of applications, including threat detection, recycling, and 3D ranging. However, technological limits such as higher noise in silicon devices is a major restraint to the global silicon photomultiplier industry. In addition, growing application in the healthcare sector is expected to create lucrative opportunities for silicon photomultiplier industry.

Moreover, developing nations tend to witness high penetration of silicon photomultiplier products especially in the healthcare and automotive sectors. Factors such as increase in health awareness among users and a rise in technological advancements fuel the growth of the market.

□□□ □□□□□□□□□□□ □□□□□□□□ □□□□□ □□□'□□ □□□□□□□□□□□□□□□:
https://www.alliedmarketresearch.com/request-for-customization/6088

□□□□□□□□□□□□ □□□□□□□□□:

The Silicon Photomultiplier (SiPM) industry's key market players adopt various strategies such as product launch, product development, collaboration, partnership, and agreements to influence the market. It includes details about the key players in the market's strengths, product portfolio, market size and share analysis, operational results, and market positioning.

□□□□□ □□ □□□□ □□□□□□ □□□□ □□□□□□□□ □□ □□□□ □□□□□□□ □□□□□□□□ □□□□□□□□□□□□□□□□□□ (□□□□□) □□□□□□□ □□□□□□□□,

AdvanSiD
Broadcom Inc.
Cremat Inc
Excelitas technologies corporation
Hamamatsu Photonics K.K.
Ketek GMBH
on semiconductor
Philips
Radiation Monitoring Devices, Inc.
TE connectivity

The global silicon photomultiplier market share is segmented based on type, device type, application, industry vertical, and region. By type, the market is segmented into NUV SiPMs (NUV-HD SiPM technology and NUV-HD Cryo SiPM technology) and RGB SiPMs (high-cell count RGB SiPMs and low-cell count RGB SiPMs). By device type, the market is segmented into analog SiPMs and digital SiPMs. Based on application, the market is divided into LiDAR, medical imaging, high energy physics, hazard & threat detection, and others. By industry vertical, the market is segmented into automotive, healthcare, it & telecommunication, aerospace, oil & gas, and

others

Region-wise, the silicon photomultiplier market trends have been analyzed across North America, Europe, Asia-Pacific, and LAMEA. Asia-Pacific contributed the maximum revenue in 2020. However, between 2020 and 2030, the market in Asia-Pacific is expected to grow at a faster rate as compared to other regions. This is attributed to increasing in demand from emerging economical countries such as India, China, Japan, and South Korea. The overall silicon photomultiplier market analysis is determined to understand the profitable trends to gain a stronger foothold.

□□□□□-□□ □□□□□□ □□□□□□□□

The arrival of COVID-19 has significantly affected the electronic and semiconductor sector. Business and manufacturing units across various countries were closed, owing to an increase in several COVID-19 cases, and are estimated to remain closed in 2021. Furthermore, partial or complete lockdown has disrupted the global supply chain posing challenges for manufacturers to reach customers. The overall production process has been adversely affected; however, the surge in sales of healthcare products, boosts the overall silicon photomultiplier market growth globally.

□□□□□□□ □□□□□□ □□□□□□: https://www.alliedmarketresearch.com/purchase-enquiry/6088

□□□ □□□□□□□□ □□ □□□ □□□□□

- The automotive sector is projected to be the major industry share during the forecast period followed by healthcare. The rising demand for autonomous vehicles is anticipated to drive the demand in the future.
- Asia-Pacific and North America collectively accounted for more than 73% of the silicon photomultiplier market share in 2020.
- India is anticipated to witness the highest growth rate during the forecast period.
- U.S. was the major shareholder in the North America silicon photomultiplier market revenue, accounting for approximately 68% share in 2020.

□□□□□ □□:

Allied Market Research is a top provider of market intelligence that offers reports from leading technology publishers. Our in-depth market assessments in our research reports consider significant technological advancements in the sector. In addition to other areas of expertise, AMR focuses on analyzing high-tech and advanced production systems. We have a team of experts who compile thorough research reports and actively advise leading businesses to enhance their current procedures. Our experts have a wealth of knowledge on the topics they cover. Also, they use a variety of tools and techniques when gathering and analyzing data, including patented data sources.

David Correa
Allied Market Research
+ 18007925285
email us here
Visit us on social media:
Facebook
X
Other
